



**Off-Base Drinking Water Sample Results,
Level 2 Laboratory Report, Level 4 Laboratory Report,
Electronic Data Deliverable, Data Validation Report,
and the Sample Location Figure, SDG J18796-1**

*Naval Air Station Oceana
Virginia Beach, Virginia*

July 2019

TestAmerica

THE LEADER IN ENVIRONMENTAL TESTING

ANALYTICAL REPORT

TestAmerica Laboratories, Inc.

TestAmerica Sacramento

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TestAmerica Job ID: 320-18796-1

Client Project/Site: NAS Oceana, VA - 9000 CTO-WE01


For:

CH2M Hill Constructors, Inc.

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Corvallis, Oregon 97330

Attn: Tiffany Hill



Authorized for release by:

5/27/2016 2:56:02 PM

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The test results in this report meet all 2003 NELAC and 2009 TNI requirements for accredited parameters, exceptions are noted in this report. This report may not be reproduced except in full, and with written approval from the laboratory. For questions please contact the Project Manager at the e-mail address or telephone number listed on this page.

This report has been electronically signed and authorized by the signatory. Electronic signature is intended to be the legally binding equivalent of a traditionally handwritten signature.

Results relate only to the items tested and the sample(s) as received by the laboratory.

1
2
3
4
5
6
7
8
9
10
11
12
13
14
15

Table of Contents

Cover Page	1
Table of Contents	2
Definitions/Glossary	3
Case Narrative	4
Detection Summary	7
Client Sample Results	9
Isotope Dilution Summary	13
QC Sample Results	14
QC Association Summary	17
Lab Chronicle	20
Certification Summary	22
Method Summary	23
Sample Summary	24
Chain of Custody	25
Receipt Checklists	27



Definitions/Glossary

Client: CH2M Hill Constructors, Inc.
Project/Site: NAS Oceana, VA - 9000 CTO-WE01

TestAmerica Job ID: 320-18796-1

Qualifiers

LCMS

Qualifier	Qualifier Description
Q	One or more quality control criteria failed.
U	Undetected at the Limit of Detection.
D	The reported value is from a dilution.
M	Manual integrated compound.
B	Blank contamination: The analyte was detected above one-half the reporting limit in an associated blank.
J	Estimated: The analyte was positively identified; the quantitation is an estimation

Metals

Qualifier	Qualifier Description
J	Estimated: The analyte was positively identified; the quantitation is an estimation
U	Undetected at the Limit of Detection.

General Chemistry

Qualifier	Qualifier Description
U	Undetected at the Limit of Detection.

Glossary

Abbreviation	These commonly used abbreviations may or may not be present in this report.
□	Listed under the "D" column to designate that the result is reported on a dry weight basis
%R	Percent Recovery
CFL	Contains Free Liquid
CNF	Contains no Free Liquid
DER	Duplicate error ratio (normalized absolute difference)
Dil Fac	Dilution Factor
DL, RA, RE, IN	Indicates a Dilution, Re-analysis, Re-extraction, or additional Initial metals/anion analysis of the sample
DLC	Decision level concentration
MDA	Minimum detectable activity
EDL	Estimated Detection Limit
MDC	Minimum detectable concentration
MDL	Method Detection Limit
ML	Minimum Level (Dioxin)
NC	Not Calculated
ND	Not detected at the reporting limit (or MDL or EDL if shown)
PQL	Practical Quantitation Limit
QC	Quality Control
RER	Relative error ratio
RL	Reporting Limit or Requested Limit (Radiochemistry)
RPD	Relative Percent Difference, a measure of the relative difference between two points
TEF	Toxicity Equivalent Factor (Dioxin)
TEQ	Toxicity Equivalent Quotient (Dioxin)

Case Narrative

Client: CH2M Hill Constructors, Inc.
Project/Site: NAS Oceana, VA - 9000 CTO-WE01

TestAmerica Job ID: 320-18796-1

Job ID: 320-18796-1

Laboratory: TestAmerica Sacramento

Narrative

CASE NARRATIVE

Client: CH2M Hill Constructors, Inc.

Project: NAS Oceana, VA - 9000 CTO-WE01

Report Number: 320-18796-1

With the exceptions noted as flags or footnotes, standard analytical protocols were followed in the analysis of the samples and no problems were encountered or anomalies observed. In addition all laboratory quality control samples were within established control limits, with any exceptions noted below. Each sample was analyzed to achieve the lowest possible reporting limit within the constraints of the method. In some cases, due to interference or analytes present at high concentrations, samples were diluted. For diluted samples, the reporting limits are adjusted relative to the dilution required.

TestAmerica West Sacramento attests to the validity of the laboratory data generated by TestAmerica facilities reported herein. All analyses performed by TestAmerica facilities were done using established laboratory SOPs that incorporate QA/QC procedures described in the applicable methods. TestAmerica's operations groups have reviewed the data for compliance with the laboratory QA/QC plan, and data have been found to be compliant with laboratory protocols unless otherwise noted below.

TestAmerica utilizes USEPA approved methods and DOD QSM, where applicable, in all analytical work. The samples presented in this report were analyzed for the parameter(s) listed on the analytical methods summary page in accordance with the method(s) indicated. A summary of QC data for these analyses is included at the back of the report.

All parameters for which TestAmerica West Sacramento has certification were evaluated to the QSM specified reporting convention or to the client specified format if different from QSM. Parameters not certified under QSM, if any, were evaluated to the detection limit (DL) and include qualified results where applicable.

The sample(s) that contain constituents flagged with U are undetected. The result associated with this flag is the limit of detection (LOD).

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

All holding times were met and proper preservation noted for the methods performed on these samples, unless otherwise detailed in the individual sections below.

All solid sample results are reported on an "as received" basis unless otherwise indicated by the presence of a % solids value in the method header.

This laboratory report is confidential and is intended for the sole use of TestAmerica and its client.

RECEIPT

The samples were received on 05/11/2016; the samples arrived in good condition, properly preserved and on ice. The temperature of the coolers at receipt was 0.4 C.

No field filtered container for dissolved Iron was received for samples OF-BACKWASH-0516 and OF-FILTER-0516. The lab took a portion of the sample from the TSS bottle (for OF-BACKWASH-0516) and one of the PFC bottles (for OF-FILTER-0516) and filtered and preserved it after discussing options with the client.

PFC

Samples OF-STORLAG-0516 (320-18796-1), OF-TRMTLAG-0516 (320-18796-2), OF-POLLLAG-0516 (320-18796-3), OF-CLTANK-0516 (320-18796-4), OF-BACKWASH-0516 (320-18796-5) and OF-FILTER-0516 (320-18796-6) were analyzed for PFC in accordance with PFC. The samples were prepared on 05/12/2016 and analyzed on 05/26/2016.

Perfluorooctanesulfonic acid (PFOS) was detected in method blank MB 320-109640/1-A at a level that was above the method detection

Case Narrative

Client: CH2M Hill Constructors, Inc.
Project/Site: NAS Oceana, VA - 9000 CTO-WE01

TestAmerica Job ID: 320-18796-1

Job ID: 320-18796-1 (Continued)

Laboratory: TestAmerica Sacramento (Continued)

limit but below the reporting limit. The value should be considered an estimate, and has been flagged. If the associated sample reported a result above the MDL and/or RL, the result has been flagged. Refer to the QC report for details.

Samples OF-STORLAG-0516 (320-18796-1)[20X], OF-TRMTLAG-0516 (320-18796-2)[10X], OF-POLLLAG-0516 (320-18796-3)[20X], OF-CLTANK-0516 (320-18796-4)[20X], OF-BACKWASH-0516 (320-18796-5)[20X] and OF-FILTER-0516 (320-18796-6)[20X] required dilution prior to analysis. The reporting limits have been adjusted accordingly.

Isotope Dilution Analyte (IDA) recovery is above the method recommended limit for the following samples: OF-STORLAG-0516 (320-18796-1), OF-TRMTLAG-0516 (320-18796-2), OF-POLLLAG-0516 (320-18796-3), OF-CLTANK-0516 (320-18796-4), OF-BACKWASH-0516 (320-18796-5) and OF-FILTER-0516 (320-18796-6). Quantitation by isotope dilution generally precludes any adverse effect on data quality due to elevated IDA recoveries.

The sample extracts for the following samples were darkly colored and had a precipitate. For this reason the samples were run with a dilution. The sample results show that a dilution was also indicated by the detected analyte levels. OF-TRMTLAG-0516 (320-18796-2), OF-POLLLAG-0516 (320-18796-3), OF-CLTANK-0516 (320-18796-4), OF-BACKWASH-0516 (320-18796-5) and OF-FILTER-0516 (320-18796-6)

Insufficient sample volume was available to perform a matrix spike/matrix spike duplicate (MS/MSD) associated with analytical batch 320-109640.

Since the sample was very dark brown and looked like it was dirty, the sample was centrifuged and required a second column. The extracts were combined after elution.
OF-BACKWASH-0516 (320-18796-5)

Samples OF-STORLAG-0516 (320-18796-1), OF-TRMTLAG-0516 (320-18796-2), OF-POLLLAG-0516 (320-18796-3) and OF-CLTANK-0516 (320-18796-4) are green and samples 18796-1 and 18796-2 also contain some plant material.

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

6010C

Samples OF-STORLAG-0516 (320-18796-1), OF-TRMTLAG-0516 (320-18796-2), OF-POLLLAG-0516 (320-18796-3), OF-CLTANK-0516 (320-18796-4), OF-BACKWASH-0516 (320-18796-5) and OF-FILTER-0516 (320-18796-6) were analyzed for 6010C in accordance with 6010C. The samples were prepared on 05/17/2016 and 05/19/2016 and analyzed on 05/17/2016 and 05/20/2016.

Iron was detected in method blank MB 280-325382/1-A at a level that was above the method detection limit but below the reporting limit. The value should be considered an estimate, and has been flagged. If the associated sample reported a result above the MDL and/or RL, the result has been flagged. Refer to the QC report for details.

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

6010C

Samples OF-STORLAG-0516 (320-18796-1), OF-TRMTLAG-0516 (320-18796-2), OF-POLLLAG-0516 (320-18796-3), OF-CLTANK-0516 (320-18796-4), OF-BACKWASH-0516 (320-18796-5) and OF-FILTER-0516 (320-18796-6) were analyzed for 6010C in accordance with 6010C. The samples were prepared on 05/17/2016 and analyzed on 05/18/2016.

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

TOTAL SUSPENDED SOLIDS

Sample OF-BACKWASH-0516 (320-18796-5) was analyzed for total suspended solids in accordance with SM 2540D. The samples were analyzed on 05/16/2016.

The following sample for method 2540D was diluted due to slow filtration and high Total Suspended Solids: OF-BACKWASH-0516 (320-18796-5) Elevated reporting limits (RLs) are provided.

Case Narrative

Client: CH2M Hill Constructors, Inc.
Project/Site: NAS Oceana, VA - 9000 CTO-WE01

TestAmerica Job ID: 320-18796-1

Job ID: 320-18796-1 (Continued)

Laboratory: TestAmerica Sacramento (Continued)

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

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2

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6

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12

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15

Detection Summary

Client: CH2M Hill Constructors, Inc.
Project/Site: NAS Oceana, VA - 9000 CTO-WE01

TestAmerica Job ID: 320-18796-1

Client Sample ID: OF-STORLAG-0516

Lab Sample ID: 320-18796-1

Analyte	Result	Qualifier	LOQ	DL	Unit	Dil Fac	D	Method	Prep Type
Perfluoroheptanoic acid (PFHpA)	0.051	D	0.047	0.015	ug/L	20		WS-LC-0025	Total/NA
Perfluorooctanoic acid (PFOA)	0.45	D M	0.047	0.014	ug/L	20		WS-LC-0025	Total/NA
Perfluorohexanesulfonic acid (PFHxS)	0.29	D M	0.047	0.016	ug/L	20		WS-LC-0025	Total/NA
Perfluorooctanesulfonic acid (PFOS)	1.3	B D M	0.075	0.024	ug/L	20		WS-LC-0025	Total/NA
Iron	1100		100	22	ug/L	1		6010C	Total/NA
Iron	1400		100	22	ug/L	1		6010C	Dissolved

Client Sample ID: OF-TRMTLAG-0516

Lab Sample ID: 320-18796-2

Analyte	Result	Qualifier	LOQ	DL	Unit	Dil Fac	D	Method	Prep Type
Perfluoroheptanoic acid (PFHpA)	0.071	D	0.025	0.0079	ug/L	10		WS-LC-0025	Total/NA
Perfluorooctanoic acid (PFOA)	1.4	D M	0.025	0.0073	ug/L	10		WS-LC-0025	Total/NA
Perfluorononanoic acid (PFNA)	0.0094	J D	0.025	0.0064	ug/L	10		WS-LC-0025	Total/NA
Perfluorobutanesulfonic acid (PFBS)	0.033	D	0.025	0.0090	ug/L	10		WS-LC-0025	Total/NA
Perfluorohexanesulfonic acid (PFHxS)	0.56	D M	0.025	0.0085	ug/L	10		WS-LC-0025	Total/NA
Perfluorooctanesulfonic acid (PFOS)	1.7	B D M	0.039	0.013	ug/L	10		WS-LC-0025	Total/NA
Iron	350		100	22	ug/L	1		6010C	Total/NA
Iron	98	J	100	22	ug/L	1		6010C	Dissolved

Client Sample ID: OF-POLLAG-0516

Lab Sample ID: 320-18796-3

Analyte	Result	Qualifier	LOQ	DL	Unit	Dil Fac	D	Method	Prep Type
Perfluoroheptanoic acid (PFHpA)	0.045	J D	0.049	0.016	ug/L	20		WS-LC-0025	Total/NA
Perfluorooctanoic acid (PFOA)	0.53	D M	0.049	0.015	ug/L	20		WS-LC-0025	Total/NA
Perfluorohexanesulfonic acid (PFHxS)	0.31	D M	0.049	0.017	ug/L	20		WS-LC-0025	Total/NA
Perfluorooctanesulfonic acid (PFOS)	1.2	B D M	0.079	0.025	ug/L	20		WS-LC-0025	Total/NA
Iron	1500		100	22	ug/L	1		6010C	Total/NA
Iron	800		100	22	ug/L	1		6010C	Dissolved

Client Sample ID: OF-CLTANK-0516

Lab Sample ID: 320-18796-4

Analyte	Result	Qualifier	LOQ	DL	Unit	Dil Fac	D	Method	Prep Type
Perfluoroheptanoic acid (PFHpA)	0.049	D	0.047	0.015	ug/L	20		WS-LC-0025	Total/NA
Perfluorooctanoic acid (PFOA)	0.47	D M	0.047	0.014	ug/L	20		WS-LC-0025	Total/NA
Perfluorohexanesulfonic acid (PFHxS)	0.30	D M	0.047	0.017	ug/L	20		WS-LC-0025	Total/NA
Perfluorooctanesulfonic acid (PFOS)	1.1	B D M	0.076	0.024	ug/L	20		WS-LC-0025	Total/NA
Iron	1400		100	22	ug/L	1		6010C	Total/NA
Iron	1500		100	22	ug/L	1		6010C	Dissolved

Client Sample ID: OF-BACKWASH-0516

Lab Sample ID: 320-18796-5

Analyte	Result	Qualifier	LOQ	DL	Unit	Dil Fac	D	Method	Prep Type
Perfluoroheptanoic acid (PFHpA)	0.080	D	0.047	0.015	ug/L	20		WS-LC-0025	Total/NA
Perfluorooctanoic acid (PFOA)	4.1	D M	0.047	0.014	ug/L	20		WS-LC-0025	Total/NA
Perfluorobutanesulfonic acid (PFBS)	0.026	J D	0.047	0.017	ug/L	20		WS-LC-0025	Total/NA
Perfluorohexanesulfonic acid (PFHxS)	0.84	D M	0.047	0.016	ug/L	20		WS-LC-0025	Total/NA
Perfluorooctanesulfonic acid (PFOS)	1.6	B D M	0.075	0.024	ug/L	20		WS-LC-0025	Total/NA
Iron	640000		100	22	ug/L	1		6010C	Total/NA
Iron	580		100	22	ug/L	1		6010C	Dissolved
Total Suspended Solids	4700		500	140	mg/L	1		SM 2540D	Total/NA

This Detection Summary does not include radiochemical test results.

TestAmerica Sacramento

Detection Summary

Client: CH2M Hill Constructors, Inc.
Project/Site: NAS Oceana, VA - 9000 CTO-WE01

TestAmerica Job ID: 320-18796-1

Client Sample ID: OF-FILTER-0516

Lab Sample ID: 320-18796-6

Analyte	Result	Qualifier	LOQ	DL	Unit	Dil Fac	D	Method	Prep Type
Perfluoroheptanoic acid (PFHpA)	0.072	D	0.047	0.015	ug/L	20		WS-LC-0025	Total/NA
Perfluorooctanoic acid (PFOA)	3.6	D M	0.047	0.014	ug/L	20		WS-LC-0025	Total/NA
Perfluorobutanesulfonic acid (PFBS)	0.023	J D	0.047	0.017	ug/L	20		WS-LC-0025	Total/NA
Perfluorohexanesulfonic acid (PFHxS)	0.77	D M	0.047	0.016	ug/L	20		WS-LC-0025	Total/NA
Perfluorooctanesulfonic acid (PFOS)	1.5	B D M	0.074	0.024	ug/L	20		WS-LC-0025	Total/NA
Iron	190		100	22	ug/L	1		6010C	Total/NA

This Detection Summary does not include radiochemical test results.

TestAmerica Sacramento

Client Sample Results

Client: CH2M Hill Constructors, Inc.
Project/Site: NAS Oceana, VA - 9000 CTO-WE01

TestAmerica Job ID: 320-18796-1

Client Sample ID: OF-STORLAG-0516

Lab Sample ID: 320-18796-1

Date Collected: 05/10/16 12:10

Matrix: Water

Date Received: 05/11/16 09:30

Method: WS-LC-0025 - Perfluorinated Hydrocarbons

Analyte	Result	Qualifier	LOQ	DL	Unit	D	Prepared	Analyzed	Dil Fac
Perfluoroheptanoic acid (PFHpA)	0.051	D	0.047	0.015	ug/L		05/12/16 10:01	05/26/16 10:12	20
Perfluorooctanoic acid (PFOA)	0.45	D M	0.047	0.014	ug/L		05/12/16 10:01	05/26/16 10:12	20
Perfluorononanoic acid (PFNA)	0.037	U	0.047	0.012	ug/L		05/12/16 10:01	05/26/16 10:12	20
Perfluorobutanesulfonic acid (PFBS)	0.037	U	0.047	0.017	ug/L		05/12/16 10:01	05/26/16 10:12	20
Perfluorohexanesulfonic acid (PFHxS)	0.29	D M	0.047	0.016	ug/L		05/12/16 10:01	05/26/16 10:12	20
Perfluorooctanesulfonic acid (PFOS)	1.3	B D M	0.075	0.024	ug/L		05/12/16 10:01	05/26/16 10:12	20
Isotope Dilution	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
18O2 PFHxS	178	Q	25 - 150				05/12/16 10:01	05/26/16 10:12	20
13C4 PFOS	115		25 - 150				05/12/16 10:01	05/26/16 10:12	20
13C5 PFNA	145		25 - 150				05/12/16 10:01	05/26/16 10:12	20
13C4 PFOA	154	Q	25 - 150				05/12/16 10:01	05/26/16 10:12	20
13C4-PFHpa	160	Q	25 - 150				05/12/16 10:01	05/26/16 10:12	20

Method: 6010C - Metals (ICP)

Analyte	Result	Qualifier	LOQ	DL	Unit	D	Prepared	Analyzed	Dil Fac
Iron	1100		100	22	ug/L		05/17/16 08:05	05/18/16 16:33	1

Method: 6010C - Metals (ICP) - Dissolved

Analyte	Result	Qualifier	LOQ	DL	Unit	D	Prepared	Analyzed	Dil Fac
Iron	1400		100	22	ug/L		05/17/16 08:05	05/17/16 17:30	1

Client Sample ID: OF-TRMTLAG-0516

Lab Sample ID: 320-18796-2

Date Collected: 05/10/16 11:50

Matrix: Water

Date Received: 05/11/16 09:30

Method: WS-LC-0025 - Perfluorinated Hydrocarbons

Analyte	Result	Qualifier	LOQ	DL	Unit	D	Prepared	Analyzed	Dil Fac
Perfluoroheptanoic acid (PFHpA)	0.071	D	0.025	0.0079	ug/L		05/12/16 10:01	05/26/16 18:11	10
Perfluorooctanoic acid (PFOA)	1.4	D M	0.025	0.0073	ug/L		05/12/16 10:01	05/26/16 18:11	10
Perfluorononanoic acid (PFNA)	0.0094	J D	0.025	0.0064	ug/L		05/12/16 10:01	05/26/16 18:11	10
Perfluorobutanesulfonic acid (PFBS)	0.033	D	0.025	0.0090	ug/L		05/12/16 10:01	05/26/16 18:11	10
Perfluorohexanesulfonic acid (PFHxS)	0.56	D M	0.025	0.0085	ug/L		05/12/16 10:01	05/26/16 18:11	10
Perfluorooctanesulfonic acid (PFOS)	1.7	B D M	0.039	0.013	ug/L		05/12/16 10:01	05/26/16 18:11	10
Isotope Dilution	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
18O2 PFHxS	136		25 - 150				05/12/16 10:01	05/26/16 18:11	10
13C4 PFOS	115		25 - 150				05/12/16 10:01	05/26/16 18:11	10
13C5 PFNA	144		25 - 150				05/12/16 10:01	05/26/16 18:11	10
13C4 PFOA	141		25 - 150				05/12/16 10:01	05/26/16 18:11	10
13C4-PFHpa	140		25 - 150				05/12/16 10:01	05/26/16 18:11	10

Method: 6010C - Metals (ICP)

Analyte	Result	Qualifier	LOQ	DL	Unit	D	Prepared	Analyzed	Dil Fac
Iron	350		100	22	ug/L		05/17/16 08:05	05/18/16 16:36	1

TestAmerica Sacramento

Client Sample Results

Client: CH2M Hill Constructors, Inc.
Project/Site: NAS Oceana, VA - 9000 CTO-WE01

TestAmerica Job ID: 320-18796-1

Client Sample ID: OF-TRMTLAG-0516

Date Collected: 05/10/16 11:50

Date Received: 05/11/16 09:30

Lab Sample ID: 320-18796-2

Matrix: Water

Method: 6010C - Metals (ICP) - Dissolved

Analyte	Result	Qualifier	LOQ	DL	Unit	D	Prepared	Analyzed	Dil Fac
Iron	98	J	100	22	ug/L	-	05/17/16 08:05	05/17/16 17:33	1

Client Sample ID: OF-POLLLAG-0516

Date Collected: 05/10/16 11:25

Date Received: 05/11/16 09:30

Lab Sample ID: 320-18796-3

Matrix: Water

Method: WS-LC-0025 - Perfluorinated Hydrocarbons

Analyte	Result	Qualifier	LOQ	DL	Unit	D	Prepared	Analyzed	Dil Fac
Perfluoroheptanoic acid (PFHpA)	0.045	J D	0.049	0.016	ug/L	-	05/12/16 10:01	05/26/16 10:58	20
Perfluorooctanoic acid (PFOA)	0.53	D M	0.049	0.015	ug/L	-	05/12/16 10:01	05/26/16 10:58	20
Perfluorononanoic acid (PFNA)	0.040	U	0.049	0.013	ug/L	-	05/12/16 10:01	05/26/16 10:58	20
Perfluorobutanesulfonic acid (PFBS)	0.040	U	0.049	0.018	ug/L	-	05/12/16 10:01	05/26/16 10:58	20
Perfluorohexanesulfonic acid (PFHxS)	0.31	D M	0.049	0.017	ug/L	-	05/12/16 10:01	05/26/16 10:58	20
Perfluorooctanesulfonic acid (PFOS)	1.2	B D M	0.079	0.025	ug/L	-	05/12/16 10:01	05/26/16 10:58	20
Isotope Dilution	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
18O2 PFHxS	164	Q	25 - 150				05/12/16 10:01	05/26/16 10:58	20
13C4 PFOS	119		25 - 150				05/12/16 10:01	05/26/16 10:58	20
13C5 PFNA	120		25 - 150				05/12/16 10:01	05/26/16 10:58	20
13C4 PFOA	154	Q	25 - 150				05/12/16 10:01	05/26/16 10:58	20
13C4-PFHpa	157	Q	25 - 150				05/12/16 10:01	05/26/16 10:58	20

Method: 6010C - Metals (ICP)

Analyte	Result	Qualifier	LOQ	DL	Unit	D	Prepared	Analyzed	Dil Fac
Iron	1500		100	22	ug/L	-	05/17/16 08:05	05/18/16 16:38	1

Method: 6010C - Metals (ICP) - Dissolved

Analyte	Result	Qualifier	LOQ	DL	Unit	D	Prepared	Analyzed	Dil Fac
Iron	800		100	22	ug/L	-	05/17/16 08:05	05/17/16 17:35	1

Client Sample ID: OF-CLTANK-0516

Date Collected: 05/10/16 10:48

Date Received: 05/11/16 09:30

Lab Sample ID: 320-18796-4

Matrix: Water

Method: WS-LC-0025 - Perfluorinated Hydrocarbons

Analyte	Result	Qualifier	LOQ	DL	Unit	D	Prepared	Analyzed	Dil Fac
Perfluoroheptanoic acid (PFHpA)	0.049	D	0.047	0.015	ug/L	-	05/12/16 10:01	05/26/16 11:21	20
Perfluorooctanoic acid (PFOA)	0.47	D M	0.047	0.014	ug/L	-	05/12/16 10:01	05/26/16 11:21	20
Perfluorononanoic acid (PFNA)	0.038	U	0.047	0.012	ug/L	-	05/12/16 10:01	05/26/16 11:21	20
Perfluorobutanesulfonic acid (PFBS)	0.038	U	0.047	0.017	ug/L	-	05/12/16 10:01	05/26/16 11:21	20
Perfluorohexanesulfonic acid (PFHxS)	0.30	D M	0.047	0.017	ug/L	-	05/12/16 10:01	05/26/16 11:21	20
Perfluorooctanesulfonic acid (PFOS)	1.1	B D M	0.076	0.024	ug/L	-	05/12/16 10:01	05/26/16 11:21	20
Isotope Dilution	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
18O2 PFHxS	164	Q	25 - 150				05/12/16 10:01	05/26/16 11:21	20
13C4 PFOS	135		25 - 150				05/12/16 10:01	05/26/16 11:21	20
13C5 PFNA	140		25 - 150				05/12/16 10:01	05/26/16 11:21	20
13C4 PFOA	154	Q	25 - 150				05/12/16 10:01	05/26/16 11:21	20
13C4-PFHpa	152	Q	25 - 150				05/12/16 10:01	05/26/16 11:21	20

TestAmerica Sacramento

Client Sample Results

Client: CH2M Hill Constructors, Inc.
Project/Site: NAS Oceana, VA - 9000 CTO-WE01

TestAmerica Job ID: 320-18796-1

Method: 6010C - Metals (ICP)

Analyte	Result	Qualifier	LOQ	DL	Unit	D	Prepared	Analyzed	Dil Fac
Iron	1400		100	22	ug/L	-	05/17/16 08:05	05/18/16 16:41	1

Method: 6010C - Metals (ICP) - Dissolved

Analyte	Result	Qualifier	LOQ	DL	Unit	D	Prepared	Analyzed	Dil Fac
Iron	1500		100	22	ug/L	-	05/17/16 08:05	05/17/16 17:38	1

Client Sample ID: OF-BACKWASH-0516

Lab Sample ID: 320-18796-5

Date Collected: 05/10/16 10:30

Matrix: Water

Date Received: 05/11/16 09:30

Method: WS-LC-0025 - Perfluorinated Hydrocarbons

Analyte	Result	Qualifier	LOQ	DL	Unit	D	Prepared	Analyzed	Dil Fac
Perfluoroheptanoic acid (PFHpA)	0.080	D	0.047	0.015	ug/L	-	05/12/16 10:01	05/26/16 11:42	20
Perfluorooctanoic acid (PFOA)	4.1	D M	0.047	0.014	ug/L	-	05/12/16 10:01	05/26/16 11:42	20
Perfluorononanoic acid (PFNA)	0.037	U	0.047	0.012	ug/L	-	05/12/16 10:01	05/26/16 11:42	20
Perfluorobutanesulfonic acid (PFBS)	0.026	J D	0.047	0.017	ug/L	-	05/12/16 10:01	05/26/16 11:42	20
Perfluorohexanesulfonic acid (PFHxS)	0.84	D M	0.047	0.016	ug/L	-	05/12/16 10:01	05/26/16 11:42	20
Perfluorooctanesulfonic acid (PFOS)	1.6	B D M	0.075	0.024	ug/L	-	05/12/16 10:01	05/26/16 11:42	20
Isotope Dilution	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
18O2 PFHxS	165	Q	25 - 150				05/12/16 10:01	05/26/16 11:42	20
13C4 PFOS	127		25 - 150				05/12/16 10:01	05/26/16 11:42	20
13C5 PFNA	152	Q	25 - 150				05/12/16 10:01	05/26/16 11:42	20
13C4 PFOA	130		25 - 150				05/12/16 10:01	05/26/16 11:42	20
13C4-PFHpA	143		25 - 150				05/12/16 10:01	05/26/16 11:42	20

Method: 6010C - Metals (ICP)

Analyte	Result	Qualifier	LOQ	DL	Unit	D	Prepared	Analyzed	Dil Fac
Iron	640000		100	22	ug/L	-	05/17/16 08:05	05/18/16 16:43	1

Method: 6010C - Metals (ICP) - Dissolved

Analyte	Result	Qualifier	LOQ	DL	Unit	D	Prepared	Analyzed	Dil Fac
Iron	580		100	22	ug/L	-	05/19/16 14:45	05/20/16 22:39	1

General Chemistry

Analyte	Result	Qualifier	LOQ	DL	Unit	D	Prepared	Analyzed	Dil Fac
Total Suspended Solids	4700		500	140	mg/L	-		05/16/16 16:19	1

Client Sample ID: OF-FILTER-0516

Lab Sample ID: 320-18796-6

Date Collected: 05/10/16 10:15

Matrix: Water

Date Received: 05/11/16 09:30

Method: WS-LC-0025 - Perfluorinated Hydrocarbons

Analyte	Result	Qualifier	LOQ	DL	Unit	D	Prepared	Analyzed	Dil Fac
Perfluoroheptanoic acid (PFHpA)	0.072	D	0.047	0.015	ug/L	-	05/12/16 10:01	05/26/16 12:03	20
Perfluorooctanoic acid (PFOA)	3.6	D M	0.047	0.014	ug/L	-	05/12/16 10:01	05/26/16 12:03	20
Perfluorononanoic acid (PFNA)	0.037	U	0.047	0.012	ug/L	-	05/12/16 10:01	05/26/16 12:03	20
Perfluorobutanesulfonic acid (PFBS)	0.023	J D	0.047	0.017	ug/L	-	05/12/16 10:01	05/26/16 12:03	20
Perfluorohexanesulfonic acid (PFHxS)	0.77	D M	0.047	0.016	ug/L	-	05/12/16 10:01	05/26/16 12:03	20
Perfluorooctanesulfonic acid (PFOS)	1.5	B D M	0.074	0.024	ug/L	-	05/12/16 10:01	05/26/16 12:03	20

TestAmerica Sacramento

Client Sample Results

Client: CH2M Hill Constructors, Inc.
Project/Site: NAS Oceana, VA - 9000 CTO-WE01

TestAmerica Job ID: 320-18796-1

Client Sample ID: OF-FILTER-0516

Lab Sample ID: 320-18796-6

Date Collected: 05/10/16 10:15

Matrix: Water

Date Received: 05/11/16 09:30

<i>Isotope Dilution</i>	<i>%Recovery</i>	<i>Qualifier</i>	<i>Limits</i>	<i>Prepared</i>	<i>Analyzed</i>	<i>Dil Fac</i>
18O2 PFHxS	164	Q	25 - 150	05/12/16 10:01	05/26/16 12:03	20
13C4 PFOS	127		25 - 150	05/12/16 10:01	05/26/16 12:03	20
13C5 PFNA	140		25 - 150	05/12/16 10:01	05/26/16 12:03	20
13C4 PFOA	131		25 - 150	05/12/16 10:01	05/26/16 12:03	20
13C4-PFHpA	132		25 - 150	05/12/16 10:01	05/26/16 12:03	20

Method: 6010C - Metals (ICP)

<i>Analyte</i>	<i>Result</i>	<i>Qualifier</i>	<i>LOQ</i>	<i>DL</i>	<i>Unit</i>	<i>D</i>	<i>Prepared</i>	<i>Analyzed</i>	<i>Dil Fac</i>
Iron	190		100	22	ug/L		05/17/16 08:05	05/18/16 16:46	1

Method: 6010C - Metals (ICP) - Dissolved

<i>Analyte</i>	<i>Result</i>	<i>Qualifier</i>	<i>LOQ</i>	<i>DL</i>	<i>Unit</i>	<i>D</i>	<i>Prepared</i>	<i>Analyzed</i>	<i>Dil Fac</i>
Iron	85	U	100	22	ug/L		05/19/16 14:45	05/20/16 22:42	1

Isotope Dilution Summary

Client: CH2M Hill Constructors, Inc.
Project/Site: NAS Oceana, VA - 9000 CTO-WE01

TestAmerica Job ID: 320-18796-1

Method: WS-LC-0025 - Perfluorinated Hydrocarbons

Matrix: Water

Prep Type: Total/NA

Lab Sample ID	Client Sample ID	Percent Isotope Dilution Recovery (Acceptance Limits)				
		18O2 PFHx (25-150)	13C4 PFOS (25-150)	13C5 PFNA (25-150)	13C4 PFOA (25-150)	13C4-PFHp (25-150)
320-18796-1	OF-STORLAG-0516	178 Q	115	145	154 Q	160 Q
320-18796-2	OF-TRMTLAG-0516	136	115	144	141	140
320-18796-3	OF-POLLLAG-0516	164 Q	119	120	154 Q	157 Q
320-18796-4	OF-CLTANK-0516	164 Q	135	140	154 Q	152 Q
320-18796-5	OF-BACKWASH-0516	165 Q	127	152 Q	130	143
320-18796-6	OF-FILTER-0516	164 Q	127	140	131	132
LCS 320-109640/2-A	Lab Control Sample	121		138	132	122
LCSD 320-109640/3-A	Lab Control Sample Dup	114		129	124	125
MB 320-109640/1-A	Method Blank	115		129	142	128

Surrogate Legend

18O2 PFHxS = 18O2 PFHxS
13C4 PFOS = 13C4 PFOS
13C5 PFNA = 13C5 PFNA
13C4 PFOA = 13C4 PFOA
13C4-PFHpA = 13C4-PFHpA

QC Sample Results

Client: CH2M Hill Constructors, Inc.
Project/Site: NAS Oceana, VA - 9000 CTO-WE01

TestAmerica Job ID: 320-18796-1

Method: WS-LC-0025 - Perfluorinated Hydrocarbons

Lab Sample ID: MB 320-109640/1-A

Matrix: Water

Analysis Batch: 111390

Client Sample ID: Method Blank

Prep Type: Total/NA

Prep Batch: 109640

Analyte	MB Result	MB Qualifier	LOQ	DL	Unit	D	Prepared	Analyzed	Dil Fac
Perfluoroheptanoic acid (PFHpA)	0.0020	U	0.0025	0.00080	ug/L		05/12/16 10:01	05/26/16 05:37	1
Perfluorooctanoic acid (PFOA)	0.0020	U	0.0025	0.00075	ug/L		05/12/16 10:01	05/26/16 05:37	1
Perfluorononanoic acid (PFNA)	0.0020	U	0.0025	0.00065	ug/L		05/12/16 10:01	05/26/16 05:37	1
Perfluorobutanesulfonic acid (PFBS)	0.0020	U	0.0025	0.00092	ug/L		05/12/16 10:01	05/26/16 05:37	1
Perfluorohexanesulfonic acid (PFHxS)	0.0020	U	0.0025	0.00087	ug/L		05/12/16 10:01	05/26/16 05:37	1

Isotope Dilution	MB %Recovery	MB Qualifier	Limits	Prepared	Analyzed	Dil Fac
18O2 PFHxS	115		25 - 150	05/12/16 10:01	05/26/16 05:37	1
13C5 PFNA	129		25 - 150	05/12/16 10:01	05/26/16 05:37	1
13C4 PFOA	142		25 - 150	05/12/16 10:01	05/26/16 05:37	1
13C4-PFHpa	128		25 - 150	05/12/16 10:01	05/26/16 05:37	1

Lab Sample ID: LCS 320-109640/2-A

Matrix: Water

Analysis Batch: 111390

Client Sample ID: Lab Control Sample

Prep Type: Total/NA

Prep Batch: 109640

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	Limits
Perfluoroheptanoic acid (PFHpA)	0.0400	0.0393		ug/L		98	60 - 140
Perfluorooctanoic acid (PFOA)	0.0400	0.0334		ug/L		84	60 - 140
Perfluorononanoic acid (PFNA)	0.0400	0.0358		ug/L		90	60 - 140
Perfluorobutanesulfonic acid (PFBS)	0.0354	0.0304		ug/L		86	50 - 150
Perfluorohexanesulfonic acid (PFHxS)	0.0364	0.0376	M	ug/L		103	60 - 140

Isotope Dilution	LCS %Recovery	LCS Qualifier	Limits
18O2 PFHxS	121		25 - 150
13C5 PFNA	138		25 - 150
13C4 PFOA	132		25 - 150
13C4-PFHpa	122		25 - 150

Lab Sample ID: LCSD 320-109640/3-A

Matrix: Water

Analysis Batch: 111390

Client Sample ID: Lab Control Sample Dup

Prep Type: Total/NA

Prep Batch: 109640

Analyte	Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	Limits	RPD	Limit
Perfluoroheptanoic acid (PFHpA)	0.0400	0.0404		ug/L		101	60 - 140	3	30
Perfluorooctanoic acid (PFOA)	0.0400	0.0380		ug/L		95	60 - 140	13	30
Perfluorononanoic acid (PFNA)	0.0400	0.0388		ug/L		97	60 - 140	8	30
Perfluorobutanesulfonic acid (PFBS)	0.0354	0.0311		ug/L		88	50 - 150	2	30
Perfluorohexanesulfonic acid (PFHxS)	0.0364	0.0300		ug/L		82	60 - 140	22	30

Isotope Dilution	LCSD %Recovery	LCSD Qualifier	Limits
18O2 PFHxS	114		25 - 150
13C5 PFNA	129		25 - 150
13C4 PFOA	124		25 - 150
13C4-PFHpa	125		25 - 150

TestAmerica Sacramento

QC Sample Results

Client: CH2M Hill Constructors, Inc.
Project/Site: NAS Oceana, VA - 9000 CTO-WE01

TestAmerica Job ID: 320-18796-1

Method: WS-LC-0025 - Perfluorinated Hydrocarbons - RA

Lab Sample ID: MB 320-109640/1-A

Matrix: Water

Analysis Batch: 111182

Client Sample ID: Method Blank

Prep Type: Total/NA

Prep Batch: 109640

Analyte	MB Result	MB Qualifier	LOQ	DL	Unit	D	Prepared	Analyzed	Dil Fac
Perfluorooctanesulfonic acid (PFOS) - RA	0.00136	J M	0.0040	0.0013	ug/L	-	05/12/16 10:01	05/25/16 06:14	1

Lab Sample ID: LCS 320-109640/2-A

Matrix: Water

Analysis Batch: 111182

Client Sample ID: Lab Control Sample

Prep Type: Total/NA

Prep Batch: 109640

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Perfluoroheptanoic acid (PFHpA) - RA	0.0400	0.0416		ug/L	-	104	60 - 140

Lab Sample ID: LCSD 320-109640/3-A

Matrix: Water

Analysis Batch: 111182

Client Sample ID: Lab Control Sample Dup

Prep Type: Total/NA

Prep Batch: 109640

Analyte	Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Perfluorooctanoic acid (PFOA) - RA	0.0400	0.0432		ug/L	-	108	60 - 140	9	30

Method: 6010C - Metals (ICP)

Lab Sample ID: MB 280-325380/1-A

Matrix: Water

Analysis Batch: 326010

Client Sample ID: Method Blank

Prep Type: Total/NA

Prep Batch: 325380

Analyte	MB Result	MB Qualifier	LOQ	DL	Unit	D	Prepared	Analyzed	Dil Fac
Iron	85	U	100	22	ug/L	-	05/17/16 08:05	05/18/16 16:25	1

Lab Sample ID: LCS 280-325380/2-A

Matrix: Water

Analysis Batch: 326010

Client Sample ID: Lab Control Sample

Prep Type: Total/NA

Prep Batch: 325380

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Iron	1000	992		ug/L	-	99	87 - 115

Lab Sample ID: MB 280-325382/1-A

Matrix: Water

Analysis Batch: 325799

Client Sample ID: Method Blank

Prep Type: Total Recoverable

Prep Batch: 325382

Analyte	MB Result	MB Qualifier	LOQ	DL	Unit	D	Prepared	Analyzed	Dil Fac
Iron	23.7	J	100	22	ug/L	-	05/17/16 08:05	05/17/16 17:25	1

Lab Sample ID: LCS 280-325382/2-A

Matrix: Water

Analysis Batch: 325799

Client Sample ID: Lab Control Sample

Prep Type: Total Recoverable

Prep Batch: 325382

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Iron	1000	970		ug/L	-	97	87 - 115

TestAmerica Sacramento

QC Sample Results

Client: CH2M Hill Constructors, Inc.
Project/Site: NAS Oceana, VA - 9000 CTO-WE01

TestAmerica Job ID: 320-18796-1

Method: 6010C - Metals (ICP) (Continued)

Lab Sample ID: 320-18796-4 MS

Matrix: Water

Analysis Batch: 325799

Client Sample ID: OF-CLTANK-0516

Prep Type: Dissolved

Prep Batch: 325382

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits
Iron	1500		1000	2570		ug/L		110	87 - 115

Lab Sample ID: 320-18796-4 MSD

Matrix: Water

Analysis Batch: 325799

Client Sample ID: OF-CLTANK-0516

Prep Type: Dissolved

Prep Batch: 325382

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Iron	1500		1000	2510		ug/L		104	87 - 115	2	20

Lab Sample ID: MB 280-325709/1-C

Matrix: Water

Analysis Batch: 326363

Client Sample ID: Method Blank

Prep Type: Dissolved

Prep Batch: 325989

Analyte	MB Result	MB Qualifier	LOQ	DL	Unit	D	Prepared	Analyzed	Dil Fac
Iron	85	U	100	22	ug/L		05/19/16 14:45	05/20/16 22:34	1

Lab Sample ID: LCS 280-325709/2-C

Matrix: Water

Analysis Batch: 326363

Client Sample ID: Lab Control Sample

Prep Type: Dissolved

Prep Batch: 325989

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Iron	1000	996		ug/L		100	87 - 115

Method: SM 2540D - Solids, Total Suspended (TSS)

Lab Sample ID: MB 280-325537/2

Matrix: Water

Analysis Batch: 325537

Client Sample ID: Method Blank

Prep Type: Total/NA

Analyte	MB Result	MB Qualifier	LOQ	DL	Unit	D	Prepared	Analyzed	Dil Fac
Total Suspended Solids	2.8	U	4.0	1.1	mg/L			05/16/16 16:19	1

Lab Sample ID: LCS 280-325537/1

Matrix: Water

Analysis Batch: 325537

Client Sample ID: Lab Control Sample

Prep Type: Total/NA

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Total Suspended Solids	100	90.0		mg/L		90	86 - 114

TestAmerica Sacramento

QC Association Summary

Client: CH2M Hill Constructors, Inc.
Project/Site: NAS Oceana, VA - 9000 CTO-WE01

TestAmerica Job ID: 320-18796-1

LCMS

Prep Batch: 109640

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
320-18796-1	OF-STORLAG-0516	Total/NA	Water	3535	
320-18796-2	OF-TRMTLAG-0516	Total/NA	Water	3535	
320-18796-3	OF-POLLLAG-0516	Total/NA	Water	3535	
320-18796-4	OF-CLTANK-0516	Total/NA	Water	3535	
320-18796-5	OF-BACKWASH-0516	Total/NA	Water	3535	
320-18796-6	OF-FILTER-0516	Total/NA	Water	3535	
LCS 320-109640/2-A	Lab Control Sample	Total/NA	Water	3535	
LCS 320-109640/2-A - RA	Lab Control Sample	Total/NA	Water	3535	
LCSD 320-109640/3-A	Lab Control Sample Dup	Total/NA	Water	3535	
LCSD 320-109640/3-A - RA	Lab Control Sample Dup	Total/NA	Water	3535	
MB 320-109640/1-A	Method Blank	Total/NA	Water	3535	
MB 320-109640/1-A - RA	Method Blank	Total/NA	Water	3535	

Analysis Batch: 111182

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
LCS 320-109640/2-A - RA	Lab Control Sample	Total/NA	Water	WS-LC-0025	109640
LCSD 320-109640/3-A - RA	Lab Control Sample Dup	Total/NA	Water	WS-LC-0025	109640
MB 320-109640/1-A - RA	Method Blank	Total/NA	Water	WS-LC-0025	109640

Analysis Batch: 111390

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
320-18796-1	OF-STORLAG-0516	Total/NA	Water	WS-LC-0025	109640
320-18796-2	OF-TRMTLAG-0516	Total/NA	Water	WS-LC-0025	109640
320-18796-3	OF-POLLLAG-0516	Total/NA	Water	WS-LC-0025	109640
320-18796-4	OF-CLTANK-0516	Total/NA	Water	WS-LC-0025	109640
320-18796-5	OF-BACKWASH-0516	Total/NA	Water	WS-LC-0025	109640
320-18796-6	OF-FILTER-0516	Total/NA	Water	WS-LC-0025	109640
LCS 320-109640/2-A	Lab Control Sample	Total/NA	Water	WS-LC-0025	109640
LCSD 320-109640/3-A	Lab Control Sample Dup	Total/NA	Water	WS-LC-0025	109640
MB 320-109640/1-A	Method Blank	Total/NA	Water	WS-LC-0025	109640

Metals

Prep Batch: 325380

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
320-18796-1	OF-STORLAG-0516	Total/NA	Water	3010A	
320-18796-2	OF-TRMTLAG-0516	Total/NA	Water	3010A	
320-18796-3	OF-POLLLAG-0516	Total/NA	Water	3010A	
320-18796-4	OF-CLTANK-0516	Total/NA	Water	3010A	
320-18796-5	OF-BACKWASH-0516	Total/NA	Water	3010A	
320-18796-6	OF-FILTER-0516	Total/NA	Water	3010A	
LCS 280-325380/2-A	Lab Control Sample	Total/NA	Water	3010A	
MB 280-325380/1-A	Method Blank	Total/NA	Water	3010A	

Prep Batch: 325382

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
320-18796-1	OF-STORLAG-0516	Dissolved	Water	3005A	
320-18796-2	OF-TRMTLAG-0516	Dissolved	Water	3005A	
320-18796-3	OF-POLLLAG-0516	Dissolved	Water	3005A	
320-18796-4	OF-CLTANK-0516	Dissolved	Water	3005A	

TestAmerica Sacramento

QC Association Summary

Client: CH2M Hill Constructors, Inc.
Project/Site: NAS Oceana, VA - 9000 CTO-WE01

TestAmerica Job ID: 320-18796-1

Metals (Continued)

Prep Batch: 325382 (Continued)

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
320-18796-4 MS	OF-CLTANK-0516	Dissolved	Water	3005A	
320-18796-4 MSD	OF-CLTANK-0516	Dissolved	Water	3005A	
LCS 280-325382/2-A	Lab Control Sample	Total Recoverable	Water	3005A	
MB 280-325382/1-A	Method Blank	Total Recoverable	Water	3005A	

Filtration Batch: 325709

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
320-18796-5	OF-BACKWASH-0516	Dissolved	Water	FILTRATION	
320-18796-6	OF-FILTER-0516	Dissolved	Water	FILTRATION	
LCS 280-325709/2-C	Lab Control Sample	Dissolved	Water	FILTRATION	
MB 280-325709/1-C	Method Blank	Dissolved	Water	FILTRATION	

Analysis Batch: 325799

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
320-18796-1	OF-STORLAG-0516	Dissolved	Water	6010C	325382
320-18796-2	OF-TRMTLAG-0516	Dissolved	Water	6010C	325382
320-18796-3	OF-POLLLAG-0516	Dissolved	Water	6010C	325382
320-18796-4	OF-CLTANK-0516	Dissolved	Water	6010C	325382
320-18796-4 MS	OF-CLTANK-0516	Dissolved	Water	6010C	325382
320-18796-4 MSD	OF-CLTANK-0516	Dissolved	Water	6010C	325382
LCS 280-325382/2-A	Lab Control Sample	Total Recoverable	Water	6010C	325382
MB 280-325382/1-A	Method Blank	Total Recoverable	Water	6010C	325382

Prep Batch: 325989

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
320-18796-5	OF-BACKWASH-0516	Dissolved	Water	3005A	325709
320-18796-6	OF-FILTER-0516	Dissolved	Water	3005A	325709
LCS 280-325709/2-C	Lab Control Sample	Dissolved	Water	3005A	325709
MB 280-325709/1-C	Method Blank	Dissolved	Water	3005A	325709

Analysis Batch: 326010

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
320-18796-1	OF-STORLAG-0516	Total/NA	Water	6010C	325380
320-18796-2	OF-TRMTLAG-0516	Total/NA	Water	6010C	325380
320-18796-3	OF-POLLLAG-0516	Total/NA	Water	6010C	325380
320-18796-4	OF-CLTANK-0516	Total/NA	Water	6010C	325380
320-18796-5	OF-BACKWASH-0516	Total/NA	Water	6010C	325380
320-18796-6	OF-FILTER-0516	Total/NA	Water	6010C	325380
LCS 280-325380/2-A	Lab Control Sample	Total/NA	Water	6010C	325380
MB 280-325380/1-A	Method Blank	Total/NA	Water	6010C	325380

Analysis Batch: 326363

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
320-18796-5	OF-BACKWASH-0516	Dissolved	Water	6010C	325989
320-18796-6	OF-FILTER-0516	Dissolved	Water	6010C	325989
LCS 280-325709/2-C	Lab Control Sample	Dissolved	Water	6010C	325989
MB 280-325709/1-C	Method Blank	Dissolved	Water	6010C	325989

TestAmerica Sacramento

QC Association Summary

Client: CH2M Hill Constructors, Inc.
Project/Site: NAS Oceana, VA - 9000 CTO-WE01

TestAmerica Job ID: 320-18796-1

General Chemistry

Analysis Batch: 325537

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
320-18796-5	OF-BACKWASH-0516	Total/NA	Water	SM 2540D	
LCS 280-325537/1	Lab Control Sample	Total/NA	Water	SM 2540D	
MB 280-325537/2	Method Blank	Total/NA	Water	SM 2540D	

Lab Chronicle

Client: CH2M Hill Constructors, Inc.
Project/Site: NAS Oceana, VA - 9000 CTO-WE01

TestAmerica Job ID: 320-18796-1

Client Sample ID: OF-STORLAG-0516

Date Collected: 05/10/16 12:10

Date Received: 05/11/16 09:30

Lab Sample ID: 320-18796-1

Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	3535			536.1 mL	1.0 mL	109640	05/12/16 10:01	VPM	TAL SAC
Total/NA	Analysis	WS-LC-0025		20	536.1 mL	1.0 mL	111390	05/26/16 10:12	JRB	TAL SAC
Dissolved	Prep	3005A			50 mL	50 mL	325382	05/17/16 08:05	TEB	TAL DEN
Dissolved	Analysis	6010C		1	50 mL	50 mL	325799	05/17/16 17:30	CRR	TAL DEN
Total/NA	Prep	3010A			50 mL	50 mL	325380	05/17/16 08:05	TEB	TAL DEN
Total/NA	Analysis	6010C		1	50 mL	50 mL	326010	05/18/16 16:33	CRR	TAL DEN

Client Sample ID: OF-TRMTLAG-0516

Date Collected: 05/10/16 11:50

Date Received: 05/11/16 09:30

Lab Sample ID: 320-18796-2

Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	3535			509.9 mL	1.0 mL	109640	05/12/16 10:01	VPM	TAL SAC
Total/NA	Analysis	WS-LC-0025		10	509.9 mL	1.0 mL	111390	05/26/16 18:11	JRB	TAL SAC
Dissolved	Prep	3005A			50 mL	50 mL	325382	05/17/16 08:05	TEB	TAL DEN
Dissolved	Analysis	6010C		1	50 mL	50 mL	325799	05/17/16 17:33	CRR	TAL DEN
Total/NA	Prep	3010A			50 mL	50 mL	325380	05/17/16 08:05	TEB	TAL DEN
Total/NA	Analysis	6010C		1	50 mL	50 mL	326010	05/18/16 16:36	CRR	TAL DEN

Client Sample ID: OF-POLLLAG-0516

Date Collected: 05/10/16 11:25

Date Received: 05/11/16 09:30

Lab Sample ID: 320-18796-3

Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	3535			506.2 mL	1.0 mL	109640	05/12/16 10:01	VPM	TAL SAC
Total/NA	Analysis	WS-LC-0025		20	506.2 mL	1.0 mL	111390	05/26/16 10:58	JRB	TAL SAC
Dissolved	Prep	3005A			50 mL	50 mL	325382	05/17/16 08:05	TEB	TAL DEN
Dissolved	Analysis	6010C		1	50 mL	50 mL	325799	05/17/16 17:35	CRR	TAL DEN
Total/NA	Prep	3010A			50 mL	50 mL	325380	05/17/16 08:05	TEB	TAL DEN
Total/NA	Analysis	6010C		1	50 mL	50 mL	326010	05/18/16 16:38	CRR	TAL DEN

Client Sample ID: OF-CLTANK-0516

Date Collected: 05/10/16 10:48

Date Received: 05/11/16 09:30

Lab Sample ID: 320-18796-4

Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	3535			526.6 mL	1.0 mL	109640	05/12/16 10:01	VPM	TAL SAC
Total/NA	Analysis	WS-LC-0025		20	526.6 mL	1.0 mL	111390	05/26/16 11:21	JRB	TAL SAC
Dissolved	Prep	3005A			50 mL	50 mL	325382	05/17/16 08:05	TEB	TAL DEN
Dissolved	Analysis	6010C		1	50 mL	50 mL	325799	05/17/16 17:38	CRR	TAL DEN
Total/NA	Prep	3010A			50 mL	50 mL	325380	05/17/16 08:05	TEB	TAL DEN
Total/NA	Analysis	6010C		1	50 mL	50 mL	326010	05/18/16 16:41	CRR	TAL DEN

TestAmerica Sacramento

Lab Chronicle

Client: CH2M Hill Constructors, Inc.
Project/Site: NAS Oceana, VA - 9000 CTO-WE01

TestAmerica Job ID: 320-18796-1

Client Sample ID: OF-BACKWASH-0516

Lab Sample ID: 320-18796-5

Date Collected: 05/10/16 10:30

Matrix: Water

Date Received: 05/11/16 09:30

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	3535			534.5 mL	1.0 mL	109640	05/12/16 10:01	VPM	TAL SAC
Total/NA	Analysis	WS-LC-0025		20	534.5 mL	1.0 mL	111390	05/26/16 11:42	JRB	TAL SAC
Dissolved	Filtration	FILTRATION			100 mL	100 mL	325709	05/17/16 11:00	TEB	TAL DEN
Dissolved	Prep	3005A			50 mL	50 mL	325989	05/19/16 14:45	SEJ	TAL DEN
Dissolved	Analysis	6010C		1	50 mL	50 mL	326363	05/20/16 22:39	CMK	TAL DEN
Total/NA	Prep	3010A			50 mL	50 mL	325380	05/17/16 08:05	TEB	TAL DEN
Total/NA	Analysis	6010C		1	50 mL	50 mL	326010	05/18/16 16:43	CRR	TAL DEN
Total/NA	Analysis	SM 2540D		1	2 mL	250 mL	325537	05/16/16 16:19	SVC	TAL DEN

Client Sample ID: OF-FILTER-0516

Lab Sample ID: 320-18796-6

Date Collected: 05/10/16 10:15

Matrix: Water

Date Received: 05/11/16 09:30

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	3535			537.3 mL	1.0 mL	109640	05/12/16 10:01	VPM	TAL SAC
Total/NA	Analysis	WS-LC-0025		20	537.3 mL	1.0 mL	111390	05/26/16 12:03	JRB	TAL SAC
Dissolved	Filtration	FILTRATION			240 mL	240 mL	325709	05/17/16 12:07	TEB	TAL DEN
Dissolved	Prep	3005A			50 mL	50 mL	325989	05/19/16 14:45	SEJ	TAL DEN
Dissolved	Analysis	6010C		1	50 mL	50 mL	326363	05/20/16 22:42	CMK	TAL DEN
Total/NA	Prep	3010A			50 mL	50 mL	325380	05/17/16 08:05	TEB	TAL DEN
Total/NA	Analysis	6010C		1	50 mL	50 mL	326010	05/18/16 16:46	CRR	TAL DEN

Laboratory References:

TAL DEN = TestAmerica Denver, 4955 Yarrow Street, Arvada, CO 80002, TEL (303)736-0100

TAL SAC = TestAmerica Sacramento, 880 Riverside Parkway, West Sacramento, CA 95605, TEL (916)373-5600

TestAmerica Sacramento

Certification Summary

Client: CH2M Hill Constructors, Inc.
Project/Site: NAS Oceana, VA - 9000 CTO-WE01

TestAmerica Job ID: 320-18796-1

Laboratory: TestAmerica Sacramento

The certifications listed below are applicable to this report.

Authority	Program	EPA Region	Certification ID	Expiration Date
A2LA	DoD ELAP		2928-01	01-31-17
Oregon	NELAP	10	4040	01-29-17

Laboratory: TestAmerica Denver

Unless otherwise noted, all analytes for this laboratory were covered under each certification below.

Authority	Program	EPA Region	Certification ID	Expiration Date
A2LA	DoD ELAP		2907.01	10-31-17

Analysis Method	Prep Method	Matrix	Analyte
Oregon	NELAP	10	4025
			01-09-17

The following analytes are included in this report, but certification is not offered by the governing authority:

Analysis Method	Prep Method	Matrix	Analyte
6010C	3005A	Water	Iron
6010C	3010A	Water	Iron

Method Summary

Client: CH2M Hill Constructors, Inc.
Project/Site: NAS Oceana, VA - 9000 CTO-WE01

TestAmerica Job ID: 320-18796-1

Method	Method Description	Protocol	Laboratory
WS-LC-0025	Perfluorinated Hydrocarbons	TAL SOP	TAL SAC
6010C	Metals (ICP)	SW846	TAL DEN
SM 2540D	Solids, Total Suspended (TSS)	SM	TAL DEN

Protocol References:

SM = "Standard Methods For The Examination Of Water And Wastewater",
SW846 = "Test Methods For Evaluating Solid Waste, Physical/Chemical Methods", Third Edition, November 1986 And Its Updates.
TAL SOP = TestAmerica Laboratories, Standard Operating Procedure

Laboratory References:

TAL DEN = TestAmerica Denver, 4955 Yarrow Street, Arvada, CO 80002, TEL (303)736-0100
TAL SAC = TestAmerica Sacramento, 880 Riverside Parkway, West Sacramento, CA 95605, TEL (916)373-5600

Sample Summary

Client: CH2M Hill Constructors, Inc.
Project/Site: NAS Oceana, VA - 9000 CTO-WE01

TestAmerica Job ID: 320-18796-1

Lab Sample ID	Client Sample ID	Matrix	Collected	Received
320-18796-1	OF-STORLAG-0516	Water	05/10/16 12:10	05/11/16 09:30
320-18796-2	OF-TRMTLAG-0516	Water	05/10/16 11:50	05/11/16 09:30
320-18796-3	OF-POLLLAG-0516	Water	05/10/16 11:25	05/11/16 09:30
320-18796-4	OF-CLTANK-0516	Water	05/10/16 10:48	05/11/16 09:30
320-18796-5	OF-BACKWASH-0516	Water	05/10/16 10:30	05/11/16 09:30
320-18796-6	OF-FILTER-0516	Water	05/10/16 10:15	05/11/16 09:30

WEP1

TestAmerica

THE LEADER IN ENVIRONMENTAL TESTING

Temperature on Receipt _____
Drinking Water? Yes ☐ No ☐

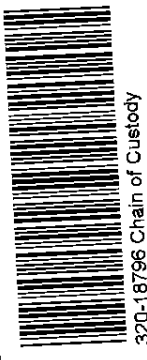
Chain of Custody Record

TAL-4124 (1007)

Client	CH2M Hill	Project Manager	Bill Friedman	Date	05/10/2016	Chain of Custody Number	286037
Address	5701 Cleveland Street	Telephone Number (Area Code)/Fax Number	757-671-6232	Lab Number		Page	1 of 1
City	Virginia Beach	Site Contact		Lab Contact			
State	VA	Carrier/Maybill Number	Fedex				
Zip Code	23462						
Contract/Purchase Order/Quote No.	Fentress PFC Sampling WEP1						

Special Instructions/
Conditions of Receipt

Sample I.D. No. and Description (Containers for each sample may be combined on one line)	Date	Time	Matrix					Containers & Preservatives					Analysis (Attach list if more space is needed)	Special Instructions/ Conditions of Receipt
			Air	Soil	Sed	Soil	Unpres.	H2SO4	HNO3	HCl	NaOH	ZnAc/NaOH		
OF-STORLAG-Ø516	05/10/16	1210	X				2	2	2				Discarded from Field Filtered	
OF-TRMTLAG-Ø516		1150	X				2	2	2				Total Iron	
OF-POLLAG-Ø516		1125	X				2	2	2					
OF-CLTANK-Ø516		1048	X				2	2	2					
OF-BACKWASH-Ø516		1030	X				3	2	2					
OF-FILTER-Ø516		1005	X				2	2	2					



320-18796 Chain of Custody

Possible Hazard Identification	<input type="checkbox"/> Non-Hazard	<input type="checkbox"/> Flammable	<input type="checkbox"/> Skin Irritant	<input type="checkbox"/> Poison B	<input type="checkbox"/> Unknown	Sample Disposal	<input type="checkbox"/> Return To Client	<input type="checkbox"/> Disposal By Lab	<input type="checkbox"/> Archive For	<input type="checkbox"/> Months	(A fee may be assessed if samples are retained longer than 1 month)
Turn Around Time Required	<input type="checkbox"/> 24 Hours	<input type="checkbox"/> 48 Hours	<input type="checkbox"/> 7 Days	<input type="checkbox"/> 14 Days	<input type="checkbox"/> 21 Days	QC Requirements (Specify)					
1. Relinquished By	John Doe	Date	05/10/2016	Time	1600	1. Received By	John Doe	Date	5/11/16	Time	930
2. Relinquished By		Date		Time		2. Received By		Date		Time	
3. Relinquished By		Date		Time		3. Received By		Date		Time	

Comments
OF-STORLAG, OF-TRMTLAG, OF-POLLAG, OF-CLTANK were field filtered for dissolved iron. OF-BACKWASH & OF-FILTER were NOT filtered.
DISTRIBUTION: WHITE - Returned to Client with Report, CANARY - Stays with the Sample, PINK - Field Copy
PFC dissolved iron.

TestAmerica Sacramento

880 Riverside Parkway
West Sacramento, CA 95605
Phone (916) 373-5600 Fax (916) 372-1059

Chain of Custody Record

TestAmerica



Client Information (Sub Contract Lab) Client Contact: _____ Shipping/Receiving: _____ Company: TestAmerica Laboratories, Inc. Address: 4955 Yarrow Street, _____ City: Arvada _____ State, Zip: CO, 80002 _____ Phone: 303-736-0100(Tel) 303-431-7171(Fax) _____ Email: _____ Project Name: NAS Oceana, VA - 9000 CTO-WE01 _____ Site: _____		Sampler: _____ Lab PM: Turpen, Laura _____ Phone: _____ E-Mail: laura.turpen@testamericainc.com		Carrier Tracking No(s): _____ Job #: 320-18796-1 Page: Page 1 of 1 Page: Page 1 of 1																			
Analysis Requested Due Date Requested: 5/22/2016 TAT Requested (days): _____ PO #: _____ WO #: _____ Project #: 28015183 SSOW#: _____																							
Sample Identification - Client ID (Lab ID)		Sample Date		Sample Time		Sample Type (C=Comp, G=grab)		Matrix (W=water, S=solid, O=other, T=tissue, A=air)		Field Filtered Sample (Yes or No)		Perform MS/MSD (Yes or No)		6010C_DOD6/FIELD_FLTRD Dissolved Iron - Field filter		6010C_DOD6/FIELD_FLTRD Dissolved Iron - Lab filter		6010C_DOD6/FIELD_FLTRD Dissolved Iron - Lab filter		Total Number of Containers		Special Instructions/Note:	
OF-STORLAG-0516 (320-18796-1)		5/10/16		12:10 Pacific		Water		Water		X		X		X		2		Q5					
OF-TRMTLAG-0516 (320-18796-2)		5/10/16		11:50 Pacific		Water		Water		X		X		X		2		Q5					
OF-POLLG-0516 (320-18796-3)		5/10/16		11:25 Pacific		Water		Water		X		X		X		2		Q5					
OF-CLTANK-0516 (320-18796-4)		5/10/16		10:48 Pacific		Water		Water		X		X		X		2		Q5					
OF-BACKWASH-0516 (320-18796-5)		5/10/16		10:30 Pacific		Water		Water		X		X		X		3		Q5, please share sample volume with metals for dissolved Fe					
OF-FILTER-0516 (320-18796-6)		5/10/16		10:15 Pacific		Water		Water		X		X		X		2		Q5, Q5; very limited volume					
Possible Hazard Identification Unconfirmed Deliverable Requested: I, II, III, IV, Other (specify) _____																							
Sample Disposal (A fee may be assessed if samples are retained longer than 1 month) <input type="checkbox"/> Return To Client <input type="checkbox"/> Disposal By Lab <input type="checkbox"/> Archive For _____ Months																							
Special Instructions/QC Requirements: _____																							
Empty Kit Relinquished by: _____ Date: _____ Time: _____																							
Relinquished by: <i>Chap</i> Date/Time: 5-22-16 16:00 Company: <i>Wingardoto</i> Date/Time: 5/23/16 9:50 Company: _____																							
Relinquished by: _____ Date/Time: _____ Company: _____																							
Relinquished by: _____ Date/Time: _____ Company: _____																							
Custody Seals Intact: _____ Custody Seal No.: _____ A Yes A No																							
Cooler Temperature(s) °C and Other Remarks: <i>transfer by rms 2.2 DRG 0.1</i>																							

Login Sample Receipt Checklist

Client: CH2M Hill Constructors, Inc.

Job Number: 320-18796-1

Login Number: 18796

List Source: TestAmerica Sacramento

List Number: 1

Creator: Hytrek, Cheryl

Question	Answer	Comment
Radioactivity wasn't checked or is \leq background as measured by a survey meter.	True	
The cooler's custody seal, if present, is intact.	True	
Sample custody seals, if present, are intact.	N/A	
The cooler or samples do not appear to have been compromised or tampered with.	True	
Samples were received on ice.	True	
Cooler Temperature is acceptable.	True	
Cooler Temperature is recorded.	True	
COC is present.	True	
COC is filled out in ink and legible.	True	
COC is filled out with all pertinent information.	True	
Is the Field Sampler's name present on COC?	N/A	
There are no discrepancies between the containers received and the COC.	True	
Samples are received within Holding Time (excluding tests with immediate HTs)	True	
Sample containers have legible labels.	True	
Containers are not broken or leaking.	True	
Sample collection date/times are provided.	True	
Appropriate sample containers are used.	False	Improper containers received.
Sample bottles are completely filled.	True	
Sample Preservation Verified.	N/A	
There is sufficient vol. for all requested analyses, incl. any requested MS/MSDs	True	
Containers requiring zero headspace have no headspace or bubble is $<6\text{mm}$ (1/4").	True	
Multiphasic samples are not present.	True	
Samples do not require splitting or compositing.	True	
Residual Chlorine Checked.	N/A	

Login Sample Receipt Checklist

Client: CH2M Hill Constructors, Inc.

Job Number: 320-18796-1

Login Number: 18796

List Number: 2

Creator: Soto, Mayra A

List Source: TestAmerica Denver

List Creation: 05/13/16 05:05 PM

Question	Answer	Comment
Radioactivity wasn't checked or is \leq background as measured by a survey meter.	N/A	
The cooler's custody seal, if present, is intact.	True	
Sample custody seals, if present, are intact.	True	
The cooler or samples do not appear to have been compromised or tampered with.	True	
Samples were received on ice.	True	
Cooler Temperature is acceptable.	True	
Cooler Temperature is recorded.	True	
COC is present.	True	
COC is filled out in ink and legible.	True	
COC is filled out with all pertinent information.	True	
Is the Field Sampler's name present on COC?	False	Received project as a subcontract.
There are no discrepancies between the containers received and the COC.	True	
Samples are received within Holding Time (excluding tests with immediate HTs)	True	
Sample containers have legible labels.	True	
Containers are not broken or leaking.	True	
Sample collection date/times are provided.	True	
Appropriate sample containers are used.	True	
Sample bottles are completely filled.	True	
Sample Preservation Verified.	True	
There is sufficient vol. for all requested analyses, incl. any requested MS/MSDs	True	
Containers requiring zero headspace have no headspace or bubble is $<6\text{mm}$ (1/4").	N/A	
Multiphasic samples are not present.	True	
Samples do not require splitting or compositing.	True	
Residual Chlorine Checked.	N/A	

ANALYTICAL REPORT

Job Number: 320-18796-1

Job Description: NAS Oceana, VA - 9000 CTO-WE01

For:
CH2M Hill Constructors, Inc.
1100 NE Circle Blvd
Corvallis, OR 97330
Attention: Tiffany Hill



Approved for release.
Laura Turpen
Project Manager I
5/27/2016 2:56 PM

Laura Turpen, Project Manager I
880 Riverside Parkway, West Sacramento, CA, 95605
(916)374-4414
laura.turpen@testamericainc.com
05/27/2016

The test results in this report relate only to the samples in this report and meet all requirements of NELAP, with any exceptions noted. Pursuant to NELAP, this report shall not be reproduced except in full, without the written approval of the laboratory. All questions regarding this report should be directed to the TestAmerica Denver Project Manager.

The Lab Certification ID# is 4025.

Reporting limits are adjusted for sample size used, dilutions and moisture content if applicable.

TestAmerica Laboratories, Inc.

TestAmerica Sacramento 880 Riverside Parkway, West Sacramento, CA 95605

Tel (916) 373-5600 Fax (916) 372-1059 www.testamericainc.com



Table of Contents

Cover Title Page	1
Data Summaries	5
Definitions	5
Case Narrative	6
Detection Summary	8
Client Sample Results	10
Default Detection Limits	14
Isotope Dilution Summary	15
QC Sample Results	16
QC Association	19
Chronicle	22
Certification Summary	24
Method Summary	25
Sample Summary	26
Manual Integration Summary	27
Reagent Traceability	31
COAs	78
Organic Sample Data	533
LCMS	533
Method PFC DOD	533
Method PFC DOD QC Summary	534
Method PFC DOD Sample Data	542
Standards Data	608
Method PFC DOD ICAL Data	608
Method PFC DOD CCAL Data	716
Raw QC Data	772

Table of Contents

Method PFC DOD Blank Data	772
Method PFC DOD LCS/LCSD Data	785
Method PFC DOD Run Logs	814
Method PFC DOD Prep Data	818
Inorganic Sample Data	827
Metals Data	827
Met Cover Page	828
Met Sample Data	829
Met QC Data	841
Met ICV/CCV	841
Met CRQL	860
Met Blanks	862
Met ICSA/ICSAB	869
Met MS/MSD/PDS	877
Met LCS/LCSD	880
Met Serial Dilution	883
Met MDL	884
Met IECF	890
Met Linear Ranges	902
Met Preparation Log	904
Met Analysis Run Log	907
Met Raw Data	920
Met Prep Data	2621
General Chemistry Data	2625
Gen Chem Cover Page	2626
Gen Chem Sample Data	2627

Table of Contents

Gen Chem QC Data	2628
Gen Chem Blanks	2628
Gen Chem LCS/LCSD	2629
Gen Chem MDL	2630
Gen Chem Analysis Run Log	2632
Gen Chem Raw Data	2633
Gen Chem Prep Data	2635
Shipping and Receiving Documents	2637
Client Chain of Custody	2638
Sample Receipt Checklist	2640

Definitions/Glossary

Client: CH2M Hill Constructors, Inc.
Project/Site: NAS Oceana, VA - 9000 CTO-WE01

TestAmerica Job ID: 320-18796-1

Qualifiers

LCMS

Qualifier	Qualifier Description
Q	One or more quality control criteria failed.
U	Undetected at the Limit of Detection.
D	The reported value is from a dilution.
M	Manual integrated compound.
B	Blank contamination: The analyte was detected above one-half the reporting limit in an associated blank.
J	Estimated: The analyte was positively identified; the quantitation is an estimation

Metals

Qualifier	Qualifier Description
J	Estimated: The analyte was positively identified; the quantitation is an estimation
D	The reported value is from a dilution.
U	Undetected at the Limit of Detection.

General Chemistry

Qualifier	Qualifier Description
U	Undetected at the Limit of Detection.

Glossary

Abbreviation	These commonly used abbreviations may or may not be present in this report.
α	Listed under the "D" column to designate that the result is reported on a dry weight basis
%R	Percent Recovery
CFL	Contains Free Liquid
CNF	Contains no Free Liquid
DER	Duplicate error ratio (normalized absolute difference)
Dil Fac	Dilution Factor
DL, RA, RE, IN	Indicates a Dilution, Re-analysis, Re-extraction, or additional Initial metals/anion analysis of the sample
DLC	Decision level concentration
MDA	Minimum detectable activity
EDL	Estimated Detection Limit
MDC	Minimum detectable concentration
MDL	Method Detection Limit
ML	Minimum Level (Dioxin)
NC	Not Calculated
ND	Not detected at the reporting limit (or MDL or EDL if shown)
PQL	Practical Quantitation Limit
QC	Quality Control
RER	Relative error ratio
RL	Reporting Limit or Requested Limit (Radiochemistry)
RPD	Relative Percent Difference, a measure of the relative difference between two points
TEF	Toxicity Equivalent Factor (Dioxin)
TEQ	Toxicity Equivalent Quotient (Dioxin)

CASE NARRATIVE

Client: CH2M Hill Constructors, Inc.

Project: NAS Oceana, VA - 9000 CTO-WE01

Report Number: 320-18796-1

With the exceptions noted as flags or footnotes, standard analytical protocols were followed in the analysis of the samples and no problems were encountered or anomalies observed. In addition all laboratory quality control samples were within established control limits, with any exceptions noted below. Each sample was analyzed to achieve the lowest possible reporting limit within the constraints of the method. In some cases, due to interference or analytes present at high concentrations, samples were diluted. For diluted samples, the reporting limits are adjusted relative to the dilution required.

TestAmerica West Sacramento attests to the validity of the laboratory data generated by TestAmerica facilities reported herein. All analyses performed by TestAmerica facilities were done using established laboratory SOPs that incorporate QA/QC procedures described in the applicable methods. TestAmerica's operations groups have reviewed the data for compliance with the laboratory QA/QC plan, and data have been found to be compliant with laboratory protocols unless otherwise noted below.

TestAmerica utilizes USEPA approved methods and DOD QSM, where applicable, in all analytical work. The samples presented in this report were analyzed for the parameter(s) listed on the analytical methods summary page in accordance with the method(s) indicated. A summary of QC data for these analyses is included at the back of the report.

All parameters for which TestAmerica West Sacramento has certification were evaluated to the QSM specified reporting convention or to the client specified format if different from QSM. Parameters not certified under QSM, if any, were evaluated to the detection limit (DL) and include qualified results where applicable.

The sample(s) that contain constituents flagged with U are undetected. The result associated with this flag is the limit of detection (LOD).

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

All holding times were met and proper preservation noted for the methods performed on these samples, unless otherwise detailed in the individual sections below.

All solid sample results are reported on an "as received" basis unless otherwise indicated by the presence of a % solids value in the method header.

This laboratory report is confidential and is intended for the sole use of TestAmerica and its client.

RECEIPT

The samples were received on 05/11/2016; the samples arrived in good condition, properly preserved and on ice. The temperature of the coolers at receipt was 0.4 C.

No field filtered container for dissolved Iron was received for samples OF-BACKWASH-0516 and OF-FILTER-0516. The lab took a portion of the sample from the TSS bottle (for OF-BACKWASH-0516) and one of the PFC bottles (for OF-FILTER-0516) and filtered and preserved it after discussing options with the client.

PFC

Samples OF-STORLAG-0516 (320-18796-1), OF-TRMTLAG-0516 (320-18796-2), OF-POLLLAG-0516 (320-18796-3), OF-CLTANK-0516 (320-18796-4), OF-BACKWASH-0516 (320-18796-5) and OF-FILTER-0516 (320-18796-6) were analyzed for PFC in accordance with PFC. The samples were prepared on 05/12/2016 and analyzed on 05/26/2016.

Perfluorooctanesulfonic acid (PFOS) was detected in method blank MB 320-109640/1-A at a level that was above the method detection limit but below the reporting limit. The value should be considered an estimate, and has been flagged. If the associated sample reported a result above the MDL and/or RL, the result has been flagged. Refer to the QC report for details.

Samples OF-STORLAG-0516 (320-18796-1)[20X], OF-TRMTLAG-0516 (320-18796-2)[10X], OF-POLLLAG-0516 (320-18796-3)[20X], OF-CLTANK-0516 (320-18796-4)[20X], OF-BACKWASH-0516 (320-18796-5)[20X] and OF-FILTER-0516 (320-18796-6)[20X] required dilution prior to analysis. The reporting limits have been adjusted accordingly.

Isotope Dilution Analyte (IDA) recovery is above the method recommended limit for the following samples: OF-STORLAG-0516 (320-18796-1), OF-TRMTLAG-0516 (320-18796-2), OF-POLLLAG-0516 (320-18796-3), OF-CLTANK-0516 (320-18796-4), OF-BACKWASH-0516 (320-18796-5) and OF-FILTER-0516 (320-18796-6). Quantitation by isotope dilution generally precludes any adverse effect on data quality due to elevated IDA recoveries.

The sample extracts for the following samples were darkly colored and had a precipitate. For this reason the samples were run with a

dilution. The sample results show that a dilution was also indicated by the detected analyte levels. OF-TRMTLAG-0516 (320-18796-2), OF-POLLLAG-0516 (320-18796-3), OF-CLTANK-0516 (320-18796-4), OF-BACKWASH-0516 (320-18796-5) and OF-FILTER-0516 (320-18796-6)

Insufficient sample volume was available to perform a matrix spike/matrix spike duplicate (MS/MSD) associated with analytical batch 320-109640.

Since the sample was very dark brown and looked like it was dirty, the sample was centrifuged and required a second column. The extracts were combined after elution.
OF-BACKWASH-0516 (320-18796-5)

Samples OF-STORLAG-0516 (320-18796-1), OF-TRMTLAG-0516 (320-18796-2), OF-POLLLAG-0516 (320-18796-3) and OF-CLTANK-0516 (320-18796-4) are green and samples 18796-1 and 18796-2 also contain some plant material.

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

6010C

Samples OF-STORLAG-0516 (320-18796-1), OF-TRMTLAG-0516 (320-18796-2), OF-POLLLAG-0516 (320-18796-3), OF-CLTANK-0516 (320-18796-4), OF-BACKWASH-0516 (320-18796-5) and OF-FILTER-0516 (320-18796-6) were analyzed for 6010C in accordance with 6010C. The samples were prepared on 05/17/2016 and 05/19/2016 and analyzed on 05/17/2016 and 05/20/2016.

Iron was detected in method blank MB 280-325382/1-A at a level that was above the method detection limit but below the reporting limit. The value should be considered an estimate, and has been flagged. If the associated sample reported a result above the MDL and/or RL, the result has been flagged. Refer to the QC report for details.

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

6010C

Samples OF-STORLAG-0516 (320-18796-1), OF-TRMTLAG-0516 (320-18796-2), OF-POLLLAG-0516 (320-18796-3), OF-CLTANK-0516 (320-18796-4), OF-BACKWASH-0516 (320-18796-5) and OF-FILTER-0516 (320-18796-6) were analyzed for 6010C in accordance with 6010C. The samples were prepared on 05/17/2016 and analyzed on 05/18/2016.

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

TOTAL SUSPENDED SOLIDS

Sample OF-BACKWASH-0516 (320-18796-5) was analyzed for total suspended solids in accordance with SM 2540D. The samples were analyzed on 05/16/2016.

The following sample for method 2540D was diluted due to slow filtration and high Total Suspended Solids: OF-BACKWASH-0516 (320-18796-5) Elevated reporting limits (RLs) are provided.

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

Detection Summary

Client: CH2M Hill Constructors, Inc.
Project/Site: NAS Oceana, VA - 9000 CTO-WE01

TestAmerica Job ID: 320-18796-1

Client Sample ID: OF-STORLAG-0516

Lab Sample ID: 320-18796-1

Analyte	Result	Qualifier	LOQ	DL	Unit	Dil Fac	D	Method	Prep Type
Perfluoroheptanoic acid (PFHpA)	0.051	D	0.047	0.015	ug/L	20		WS-LC-0025	Total/NA
Perfluorooctanoic acid (PFOA)	0.45	D M	0.047	0.014	ug/L	20		WS-LC-0025	Total/NA
Perfluorohexanesulfonic acid (PFHxS)	0.29	D M	0.047	0.016	ug/L	20		WS-LC-0025	Total/NA
Perfluorooctanesulfonic acid (PFOS)	1.3	B D M	0.075	0.024	ug/L	20		WS-LC-0025	Total/NA
Iron	1100		100	22	ug/L	1		6010C	Total/NA
Iron	1400		100	22	ug/L	1		6010C	Dissolved

Client Sample ID: OF-TRMTLAG-0516

Lab Sample ID: 320-18796-2

Analyte	Result	Qualifier	LOQ	DL	Unit	Dil Fac	D	Method	Prep Type
Perfluoroheptanoic acid (PFHpA)	0.071	D	0.025	0.0079	ug/L	10		WS-LC-0025	Total/NA
Perfluorooctanoic acid (PFOA)	1.4	D M	0.025	0.0073	ug/L	10		WS-LC-0025	Total/NA
Perfluorononanoic acid (PFNA)	0.0094	J D	0.025	0.0064	ug/L	10		WS-LC-0025	Total/NA
Perfluorobutanesulfonic acid (PFBS)	0.033	D	0.025	0.0090	ug/L	10		WS-LC-0025	Total/NA
Perfluorohexanesulfonic acid (PFHxS)	0.56	D M	0.025	0.0085	ug/L	10		WS-LC-0025	Total/NA
Perfluorooctanesulfonic acid (PFOS)	1.7	B D M	0.039	0.013	ug/L	10		WS-LC-0025	Total/NA
Iron	350		100	22	ug/L	1		6010C	Total/NA
Iron	98	J	100	22	ug/L	1		6010C	Dissolved

Client Sample ID: OF-POLLLAG-0516

Lab Sample ID: 320-18796-3

Analyte	Result	Qualifier	LOQ	DL	Unit	Dil Fac	D	Method	Prep Type
Perfluoroheptanoic acid (PFHpA)	0.045	J D	0.049	0.016	ug/L	20		WS-LC-0025	Total/NA
Perfluorooctanoic acid (PFOA)	0.53	D M	0.049	0.015	ug/L	20		WS-LC-0025	Total/NA
Perfluorohexanesulfonic acid (PFHxS)	0.31	D M	0.049	0.017	ug/L	20		WS-LC-0025	Total/NA
Perfluorooctanesulfonic acid (PFOS)	1.2	B D M	0.079	0.025	ug/L	20		WS-LC-0025	Total/NA
Iron	1500		100	22	ug/L	1		6010C	Total/NA
Iron	800		100	22	ug/L	1		6010C	Dissolved

Client Sample ID: OF-CLTANK-0516

Lab Sample ID: 320-18796-4

Analyte	Result	Qualifier	LOQ	DL	Unit	Dil Fac	D	Method	Prep Type
Perfluoroheptanoic acid (PFHpA)	0.049	D	0.047	0.015	ug/L	20		WS-LC-0025	Total/NA
Perfluorooctanoic acid (PFOA)	0.47	D M	0.047	0.014	ug/L	20		WS-LC-0025	Total/NA
Perfluorohexanesulfonic acid (PFHxS)	0.30	D M	0.047	0.017	ug/L	20		WS-LC-0025	Total/NA
Perfluorooctanesulfonic acid (PFOS)	1.1	B D M	0.076	0.024	ug/L	20		WS-LC-0025	Total/NA
Iron	1400		100	22	ug/L	1		6010C	Total/NA
Iron	1500		100	22	ug/L	1		6010C	Dissolved

Client Sample ID: OF-BACKWASH-0516

Lab Sample ID: 320-18796-5

Analyte	Result	Qualifier	LOQ	DL	Unit	Dil Fac	D	Method	Prep Type
Perfluoroheptanoic acid (PFHpA)	0.080	D	0.047	0.015	ug/L	20		WS-LC-0025	Total/NA
Perfluorooctanoic acid (PFOA)	4.1	D M	0.047	0.014	ug/L	20		WS-LC-0025	Total/NA
Perfluorobutanesulfonic acid (PFBS)	0.026	J D	0.047	0.017	ug/L	20		WS-LC-0025	Total/NA
Perfluorohexanesulfonic acid (PFHxS)	0.84	D M	0.047	0.016	ug/L	20		WS-LC-0025	Total/NA
Perfluorooctanesulfonic acid (PFOS)	1.6	B D M	0.075	0.024	ug/L	20		WS-LC-0025	Total/NA
Iron	640000		100	22	ug/L	1		6010C	Total/NA
Iron	580		100	22	ug/L	1		6010C	Dissolved
Total Suspended Solids	4700		500	140	mg/L	1		SM 2540D	Total/NA

This Detection Summary does not include radiochemical test results.

TestAmerica Sacramento

Detection Summary

Client: CH2M Hill Constructors, Inc.
Project/Site: NAS Oceana, VA - 9000 CTO-WE01

TestAmerica Job ID: 320-18796-1

Client Sample ID: OF-FILTER-0516

Lab Sample ID: 320-18796-6

Analyte	Result	Qualifier	LOQ	DL	Unit	Dil Fac	D	Method	Prep Type
Perfluoroheptanoic acid (PFHpA)	0.072	D	0.047	0.015	ug/L	20		WS-LC-0025	Total/NA
Perfluorooctanoic acid (PFOA)	3.6	D M	0.047	0.014	ug/L	20		WS-LC-0025	Total/NA
Perfluorobutanesulfonic acid (PFBS)	0.023	J D	0.047	0.017	ug/L	20		WS-LC-0025	Total/NA
Perfluorohexanesulfonic acid (PFHxS)	0.77	D M	0.047	0.016	ug/L	20		WS-LC-0025	Total/NA
Perfluorooctanesulfonic acid (PFOS)	1.5	B D M	0.074	0.024	ug/L	20		WS-LC-0025	Total/NA
Iron	190		100	22	ug/L	1		6010C	Total/NA

This Detection Summary does not include radiochemical test results.

TestAmerica Sacramento

Client Sample Results

Client: CH2M Hill Constructors, Inc.
Project/Site: NAS Oceana, VA - 9000 CTO-WE01

TestAmerica Job ID: 320-18796-1

Client Sample ID: OF-STORLAG-0516

Lab Sample ID: 320-18796-1

Date Collected: 05/10/16 12:10

Matrix: Water

Date Received: 05/11/16 09:30

Method: WS-LC-0025 - Perfluorinated Hydrocarbons

Analyte	Result	Qualifier	LOQ	DL	Unit	D	Prepared	Analyzed	Dil Fac
Perfluoroheptanoic acid (PFHpA)	0.051	D	0.047	0.015	ug/L	—	05/12/16 10:01	05/26/16 10:12	20
Perfluorooctanoic acid (PFOA)	0.45	D M	0.047	0.014	ug/L	—	05/12/16 10:01	05/26/16 10:12	20
Perfluorononanoic acid (PFNA)	0.037	U	0.047	0.012	ug/L	—	05/12/16 10:01	05/26/16 10:12	20
Perfluorobutanesulfonic acid (PFBS)	0.037	U	0.047	0.017	ug/L	—	05/12/16 10:01	05/26/16 10:12	20
Perfluorohexanesulfonic acid (PFHxS)	0.29	D M	0.047	0.016	ug/L	—	05/12/16 10:01	05/26/16 10:12	20
Perfluorooctanesulfonic acid (PFOS)	1.3	B D M	0.075	0.024	ug/L	—	05/12/16 10:01	05/26/16 10:12	20
Isotope Dilution	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
18O2 PFHxS	178	Q	25 - 150				05/12/16 10:01	05/26/16 10:12	20
13C4 PFOS	115		25 - 150				05/12/16 10:01	05/26/16 10:12	20
13C5 PFNA	145		25 - 150				05/12/16 10:01	05/26/16 10:12	20
13C4 PFOA	154	Q	25 - 150				05/12/16 10:01	05/26/16 10:12	20
13C4-PFHpA	160	Q	25 - 150				05/12/16 10:01	05/26/16 10:12	20

Method: 6010C - Metals (ICP)

Analyte	Result	Qualifier	LOQ	DL	Unit	D	Prepared	Analyzed	Dil Fac
Iron	1100		100	22	ug/L	—	05/17/16 08:05	05/18/16 16:33	1

Method: 6010C - Metals (ICP) - Dissolved

Analyte	Result	Qualifier	LOQ	DL	Unit	D	Prepared	Analyzed	Dil Fac
Iron	1400		100	22	ug/L	—	05/17/16 08:05	05/17/16 17:30	1

Client Sample ID: OF-TRMTLAG-0516

Lab Sample ID: 320-18796-2

Date Collected: 05/10/16 11:50

Matrix: Water

Date Received: 05/11/16 09:30

Method: WS-LC-0025 - Perfluorinated Hydrocarbons

Analyte	Result	Qualifier	LOQ	DL	Unit	D	Prepared	Analyzed	Dil Fac
Perfluoroheptanoic acid (PFHpA)	0.071	D	0.025	0.0079	ug/L	—	05/12/16 10:01	05/26/16 18:11	10
Perfluorooctanoic acid (PFOA)	1.4	D M	0.025	0.0073	ug/L	—	05/12/16 10:01	05/26/16 18:11	10
Perfluorononanoic acid (PFNA)	0.0094	J D	0.025	0.0064	ug/L	—	05/12/16 10:01	05/26/16 18:11	10
Perfluorobutanesulfonic acid (PFBS)	0.033	D	0.025	0.0090	ug/L	—	05/12/16 10:01	05/26/16 18:11	10
Perfluorohexanesulfonic acid (PFHxS)	0.56	D M	0.025	0.0085	ug/L	—	05/12/16 10:01	05/26/16 18:11	10
Perfluorooctanesulfonic acid (PFOS)	1.7	B D M	0.039	0.013	ug/L	—	05/12/16 10:01	05/26/16 18:11	10
Isotope Dilution	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
18O2 PFHxS	136		25 - 150				05/12/16 10:01	05/26/16 18:11	10
13C4 PFOS	115		25 - 150				05/12/16 10:01	05/26/16 18:11	10
13C5 PFNA	144		25 - 150				05/12/16 10:01	05/26/16 18:11	10
13C4 PFOA	141		25 - 150				05/12/16 10:01	05/26/16 18:11	10
13C4-PFHpA	140		25 - 150				05/12/16 10:01	05/26/16 18:11	10

Method: 6010C - Metals (ICP)

Analyte	Result	Qualifier	LOQ	DL	Unit	D	Prepared	Analyzed	Dil Fac
Iron	350		100	22	ug/L	—	05/17/16 08:05	05/18/16 16:36	1

TestAmerica Sacramento

Client Sample Results

Client: CH2M Hill Constructors, Inc.
Project/Site: NAS Oceana, VA - 9000 CTO-WE01

TestAmerica Job ID: 320-18796-1

Client Sample ID: OF-TRMTLAG-0516

Date Collected: 05/10/16 11:50

Date Received: 05/11/16 09:30

Lab Sample ID: 320-18796-2

Matrix: Water

Method: 6010C - Metals (ICP) - Dissolved

Analyte	Result	Qualifier	LOQ	DL	Unit	D	Prepared	Analyzed	Dil Fac
Iron	98	J	100	22	ug/L	-	05/17/16 08:05	05/17/16 17:33	1

Client Sample ID: OF-POLLLAG-0516

Date Collected: 05/10/16 11:25

Date Received: 05/11/16 09:30

Lab Sample ID: 320-18796-3

Matrix: Water

Method: WS-LC-0025 - Perfluorinated Hydrocarbons

Analyte	Result	Qualifier	LOQ	DL	Unit	D	Prepared	Analyzed	Dil Fac
Perfluoroheptanoic acid (PFHpA)	0.045	J D	0.049	0.016	ug/L	-	05/12/16 10:01	05/26/16 10:58	20
Perfluorooctanoic acid (PFOA)	0.53	D M	0.049	0.015	ug/L	-	05/12/16 10:01	05/26/16 10:58	20
Perfluorononanoic acid (PFNA)	0.040	U	0.049	0.013	ug/L	-	05/12/16 10:01	05/26/16 10:58	20
Perfluorobutanesulfonic acid (PFBS)	0.040	U	0.049	0.018	ug/L	-	05/12/16 10:01	05/26/16 10:58	20
Perfluorohexanesulfonic acid (PFHxS)	0.31	D M	0.049	0.017	ug/L	-	05/12/16 10:01	05/26/16 10:58	20
Perfluorooctanesulfonic acid (PFOS)	1.2	B D M	0.079	0.025	ug/L	-	05/12/16 10:01	05/26/16 10:58	20
Isotope Dilution	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
18O2 PFHxS	164	Q	25 - 150				05/12/16 10:01	05/26/16 10:58	20
13C4 PFOS	119		25 - 150				05/12/16 10:01	05/26/16 10:58	20
13C5 PFNA	120		25 - 150				05/12/16 10:01	05/26/16 10:58	20
13C4 PFOA	154	Q	25 - 150				05/12/16 10:01	05/26/16 10:58	20
13C4-PFHpA	157	Q	25 - 150				05/12/16 10:01	05/26/16 10:58	20

Method: 6010C - Metals (ICP)

Analyte	Result	Qualifier	LOQ	DL	Unit	D	Prepared	Analyzed	Dil Fac
Iron	1500		100	22	ug/L	-	05/17/16 08:05	05/18/16 16:38	1

Method: 6010C - Metals (ICP) - Dissolved

Analyte	Result	Qualifier	LOQ	DL	Unit	D	Prepared	Analyzed	Dil Fac
Iron	800		100	22	ug/L	-	05/17/16 08:05	05/17/16 17:35	1

Client Sample ID: OF-CLTANK-0516

Date Collected: 05/10/16 10:48

Date Received: 05/11/16 09:30

Lab Sample ID: 320-18796-4

Matrix: Water

Method: WS-LC-0025 - Perfluorinated Hydrocarbons

Analyte	Result	Qualifier	LOQ	DL	Unit	D	Prepared	Analyzed	Dil Fac
Perfluoroheptanoic acid (PFHpA)	0.049	D	0.047	0.015	ug/L	-	05/12/16 10:01	05/26/16 11:21	20
Perfluorooctanoic acid (PFOA)	0.47	D M	0.047	0.014	ug/L	-	05/12/16 10:01	05/26/16 11:21	20
Perfluorononanoic acid (PFNA)	0.038	U	0.047	0.012	ug/L	-	05/12/16 10:01	05/26/16 11:21	20
Perfluorobutanesulfonic acid (PFBS)	0.038	U	0.047	0.017	ug/L	-	05/12/16 10:01	05/26/16 11:21	20
Perfluorohexanesulfonic acid (PFHxS)	0.30	D M	0.047	0.017	ug/L	-	05/12/16 10:01	05/26/16 11:21	20
Perfluorooctanesulfonic acid (PFOS)	1.1	B D M	0.076	0.024	ug/L	-	05/12/16 10:01	05/26/16 11:21	20
Isotope Dilution	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
18O2 PFHxS	164	Q	25 - 150				05/12/16 10:01	05/26/16 11:21	20
13C4 PFOS	135		25 - 150				05/12/16 10:01	05/26/16 11:21	20
13C5 PFNA	140		25 - 150				05/12/16 10:01	05/26/16 11:21	20
13C4 PFOA	154	Q	25 - 150				05/12/16 10:01	05/26/16 11:21	20
13C4-PFHpA	152	Q	25 - 150				05/12/16 10:01	05/26/16 11:21	20

TestAmerica Sacramento

Client Sample Results

Client: CH2M Hill Constructors, Inc.
Project/Site: NAS Oceana, VA - 9000 CTO-WE01

TestAmerica Job ID: 320-18796-1

Method: 6010C - Metals (ICP)

Analyte	Result	Qualifier	LOQ	DL	Unit	D	Prepared	Analyzed	Dil Fac
Iron	1400		100	22	ug/L	—	05/17/16 08:05	05/18/16 16:41	1

Method: 6010C - Metals (ICP) - Dissolved

Analyte	Result	Qualifier	LOQ	DL	Unit	D	Prepared	Analyzed	Dil Fac
Iron	1500		100	22	ug/L	—	05/17/16 08:05	05/17/16 17:38	1

Client Sample ID: OF-BACKWASH-0516

Date Collected: 05/10/16 10:30

Date Received: 05/11/16 09:30

Lab Sample ID: 320-18796-5

Matrix: Water

Method: WS-LC-0025 - Perfluorinated Hydrocarbons

Analyte	Result	Qualifier	LOQ	DL	Unit	D	Prepared	Analyzed	Dil Fac
Perfluoroheptanoic acid (PFHpA)	0.080	D	0.047	0.015	ug/L	—	05/12/16 10:01	05/26/16 11:42	20
Perfluorooctanoic acid (PFOA)	4.1	D M	0.047	0.014	ug/L	—	05/12/16 10:01	05/26/16 11:42	20
Perfluorononanoic acid (PFNA)	0.037	U	0.047	0.012	ug/L	—	05/12/16 10:01	05/26/16 11:42	20
Perfluorobutanesulfonic acid (PFBS)	0.026	J D	0.047	0.017	ug/L	—	05/12/16 10:01	05/26/16 11:42	20
Perfluorohexanesulfonic acid (PFHxS)	0.84	D M	0.047	0.016	ug/L	—	05/12/16 10:01	05/26/16 11:42	20
Perfluorooctanesulfonic acid (PFOS)	1.6	B D M	0.075	0.024	ug/L	—	05/12/16 10:01	05/26/16 11:42	20
Isotope Dilution	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
18O2 PFHxS	165	Q	25 - 150			—	05/12/16 10:01	05/26/16 11:42	20
13C4 PFOS	127		25 - 150			—	05/12/16 10:01	05/26/16 11:42	20
13C5 PFNA	152	Q	25 - 150			—	05/12/16 10:01	05/26/16 11:42	20
13C4 PFOA	130		25 - 150			—	05/12/16 10:01	05/26/16 11:42	20
13C4-PFHxA	143		25 - 150			—	05/12/16 10:01	05/26/16 11:42	20

Method: 6010C - Metals (ICP)

Analyte	Result	Qualifier	LOQ	DL	Unit	D	Prepared	Analyzed	Dil Fac
Iron	640000		100	22	ug/L	—	05/17/16 08:05	05/18/16 16:43	1

Method: 6010C - Metals (ICP) - Dissolved

Analyte	Result	Qualifier	LOQ	DL	Unit	D	Prepared	Analyzed	Dil Fac
Iron	580		100	22	ug/L	—	05/19/16 14:45	05/20/16 22:39	1

General Chemistry

Analyte	Result	Qualifier	LOQ	DL	Unit	D	Prepared	Analyzed	Dil Fac
Total Suspended Solids	4700		500	140	mg/L	—		05/16/16 16:19	1

Client Sample ID: OF-FILTER-0516

Date Collected: 05/10/16 10:15

Date Received: 05/11/16 09:30

Lab Sample ID: 320-18796-6

Matrix: Water

Method: WS-LC-0025 - Perfluorinated Hydrocarbons

Analyte	Result	Qualifier	LOQ	DL	Unit	D	Prepared	Analyzed	Dil Fac
Perfluoroheptanoic acid (PFHpA)	0.072	D	0.047	0.015	ug/L	—	05/12/16 10:01	05/26/16 12:03	20
Perfluorooctanoic acid (PFOA)	3.6	D M	0.047	0.014	ug/L	—	05/12/16 10:01	05/26/16 12:03	20
Perfluorononanoic acid (PFNA)	0.037	U	0.047	0.012	ug/L	—	05/12/16 10:01	05/26/16 12:03	20
Perfluorobutanesulfonic acid (PFBS)	0.023	J D	0.047	0.017	ug/L	—	05/12/16 10:01	05/26/16 12:03	20
Perfluorohexanesulfonic acid (PFHxS)	0.77	D M	0.047	0.016	ug/L	—	05/12/16 10:01	05/26/16 12:03	20
Perfluorooctanesulfonic acid (PFOS)	1.5	B D M	0.074	0.024	ug/L	—	05/12/16 10:01	05/26/16 12:03	20

TestAmerica Sacramento

Client Sample Results

Client: CH2M Hill Constructors, Inc.
Project/Site: NAS Oceana, VA - 9000 CTO-WE01

TestAmerica Job ID: 320-18796-1

Client Sample ID: OF-FILTER-0516

Date Collected: 05/10/16 10:15

Date Received: 05/11/16 09:30

Lab Sample ID: 320-18796-6

Matrix: Water

<i>Isotope Dilution</i>	<i>%Recovery</i>	<i>Qualifier</i>	<i>Limits</i>	<i>Prepared</i>	<i>Analyzed</i>	<i>Dil Fac</i>
18O2 PFHxS	164	Q	25 - 150	05/12/16 10:01	05/26/16 12:03	20
13C4 PFOS	127		25 - 150	05/12/16 10:01	05/26/16 12:03	20
13C5 PFNA	140		25 - 150	05/12/16 10:01	05/26/16 12:03	20
13C4 PFOA	131		25 - 150	05/12/16 10:01	05/26/16 12:03	20
13C4-PFHpA	132		25 - 150	05/12/16 10:01	05/26/16 12:03	20

Method: 6010C - Metals (ICP)

Analyte	Result	Qualifier	LOQ	DL	Unit	D	Prepared	Analyzed	Dil Fac
Iron	190		100	22	ug/L		05/17/16 08:05	05/18/16 16:46	1

Method: 6010C - Metals (ICP) - Dissolved

Analyte	Result	Qualifier	LOQ	DL	Unit	D	Prepared	Analyzed	Dil Fac
Iron	85	U	100	22	ug/L		05/19/16 14:45	05/20/16 22:42	1

Default Detection Limits

Client: CH2M Hill Constructors, Inc.
Project/Site: NAS Oceana, VA - 9000 CTO-WE01

TestAmerica Job ID: 320-18796-1

Method: WS-LC-0025 - Perfluorinated Hydrocarbons

Prep: 3535

Analyte	LOQ	DL	Units	Method
Perfluorobutanesulfonic acid (PFBS)	0.0025	0.00092	ug/L	WS-LC-0025
Perfluoroheptanoic acid (PFHpA)	0.0025	0.00080	ug/L	WS-LC-0025
Perfluorohexanesulfonic acid (PFHxS)	0.0025	0.00087	ug/L	WS-LC-0025
Perfluorononanoic acid (PFNA)	0.0025	0.00065	ug/L	WS-LC-0025
Perfluorooctanesulfonic acid (PFOS)	0.0040	0.0013	ug/L	WS-LC-0025
Perfluorooctanoic acid (PFOA)	0.0025	0.00075	ug/L	WS-LC-0025

Method: 6010C - Metals (ICP)

Prep: 3010A

Analyte	LOQ	DL	Units	Method
Iron	100	22	ug/L	6010C

Method: 6010C - Metals (ICP) - Dissolved

Prep: 3005A

Analyte	LOQ	DL	Units	Method
Iron	100	22	ug/L	6010C

General Chemistry

Analyte	LOQ	DL	Units	Method
Total Suspended Solids	4.0	1.1	mg/L	SM 2540D

Isotope Dilution Summary

Client: CH2M Hill Constructors, Inc.
Project/Site: NAS Oceana, VA - 9000 CTO-WE01

TestAmerica Job ID: 320-18796-1

Method: WS-LC-0025 - Perfluorinated Hydrocarbons

Matrix: Water

Prep Type: Total/NA

Lab Sample ID	Client Sample ID	Percent Isotope Dilution Recovery (Acceptance Limits)				
		¹⁸ O2 PFHx (25-150)	¹³ C4 PFO (25-150)	¹³ C5 PFNA (25-150)	¹³ C4 PFO (25-150)	¹³ C4-PFHp (25-150)
320-18796-1	OF-STORLAG-0516	178 Q	115	145	154 Q	160 Q
320-18796-2	OF-TRMTLAG-0516	136	115	144	141	140
320-18796-3	OF-POLLLAG-0516	164 Q	119	120	154 Q	157 Q
320-18796-4	OF-CLTANK-0516	164 Q	135	140	154 Q	152 Q
320-18796-5	OF-BACKWASH-0516	165 Q	127	152 Q	130	143
320-18796-6	OF-FILTER-0516	164 Q	127	140	131	132
LCS 320-109640/2-A	Lab Control Sample	121		138	132	122
LCSD 320-109640/3-A	Lab Control Sample Dup	114		129	124	125
MB 320-109640/1-A	Method Blank	115		129	142	128

Surrogate Legend

¹⁸O2 PFHxS = ¹⁸O2 PFHxS

¹³C4 PFOS = ¹³C4 PFOS

¹³C5 PFNA = ¹³C5 PFNA

¹³C4 PFOA = ¹³C4 PFOA

¹³C4-PFHpA = ¹³C4-PFHpA

QC Sample Results

Client: CH2M Hill Constructors, Inc.
Project/Site: NAS Oceana, VA - 9000 CTO-WE01

TestAmerica Job ID: 320-18796-1

Method: WS-LC-0025 - Perfluorinated Hydrocarbons

Lab Sample ID: MB 320-109640/1-A

Matrix: Water

Analysis Batch: 111390

Client Sample ID: Method Blank

Prep Type: Total/NA

Prep Batch: 109640

Analyte	MB Result	MB Qualifier	LOQ	DL	Unit	D	Prepared	Analyzed	Dil Fac
Perfluoroheptanoic acid (PFHpA)	0.0020	U	0.0025	0.00080	ug/L		05/12/16 10:01	05/26/16 05:37	1
Perfluorooctanoic acid (PFOA)	0.0020	U	0.0025	0.00075	ug/L		05/12/16 10:01	05/26/16 05:37	1
Perfluorononanoic acid (PFNA)	0.0020	U	0.0025	0.00065	ug/L		05/12/16 10:01	05/26/16 05:37	1
Perfluorobutanesulfonic acid (PFBS)	0.0020	U	0.0025	0.00092	ug/L		05/12/16 10:01	05/26/16 05:37	1
Perfluorohexanesulfonic acid (PFHxS)	0.0020	U	0.0025	0.00087	ug/L		05/12/16 10:01	05/26/16 05:37	1

Isotope Dilution	MB %Recovery	MB Qualifier	Limits	Prepared	Analyzed	Dil Fac
18O2 PFHxS	115		25 - 150	05/12/16 10:01	05/26/16 05:37	1
13C5 PFNA	129		25 - 150	05/12/16 10:01	05/26/16 05:37	1
13C4 PFOA	142		25 - 150	05/12/16 10:01	05/26/16 05:37	1
13C4-PFHpa	128		25 - 150	05/12/16 10:01	05/26/16 05:37	1

Lab Sample ID: LCS 320-109640/2-A

Matrix: Water

Analysis Batch: 111390

Client Sample ID: Lab Control Sample

Prep Type: Total/NA

Prep Batch: 109640

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	Limits
Perfluoroheptanoic acid (PFHpA)	0.0400	0.0393		ug/L		98	60 - 140
Perfluorooctanoic acid (PFOA)	0.0400	0.0334		ug/L		84	60 - 140
Perfluorononanoic acid (PFNA)	0.0400	0.0358		ug/L		90	60 - 140
Perfluorobutanesulfonic acid (PFBS)	0.0354	0.0304		ug/L		86	50 - 150
Perfluorohexanesulfonic acid (PFHxS)	0.0364	0.0376	M	ug/L		103	60 - 140

Isotope Dilution	LCS %Recovery	LCS Qualifier	Limits
18O2 PFHxS	121		25 - 150
13C5 PFNA	138		25 - 150
13C4 PFOA	132		25 - 150
13C4-PFHpa	122		25 - 150

Lab Sample ID: LCSD 320-109640/3-A

Matrix: Water

Analysis Batch: 111390

Client Sample ID: Lab Control Sample Dup

Prep Type: Total/NA

Prep Batch: 109640

Analyte	Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	Limits	RPD	Limit
Perfluoroheptanoic acid (PFHpA)	0.0400	0.0404		ug/L		101	60 - 140	3	30
Perfluorooctanoic acid (PFOA)	0.0400	0.0380		ug/L		95	60 - 140	13	30
Perfluorononanoic acid (PFNA)	0.0400	0.0388		ug/L		97	60 - 140	8	30
Perfluorobutanesulfonic acid (PFBS)	0.0354	0.0311		ug/L		88	50 - 150	2	30
Perfluorohexanesulfonic acid (PFHxS)	0.0364	0.0300		ug/L		82	60 - 140	22	30

Isotope Dilution	LCSD %Recovery	LCSD Qualifier	Limits
18O2 PFHxS	114		25 - 150
13C5 PFNA	129		25 - 150
13C4 PFOA	124		25 - 150
13C4-PFHpa	125		25 - 150

TestAmerica Sacramento

QC Sample Results

Client: CH2M Hill Constructors, Inc.
Project/Site: NAS Oceana, VA - 9000 CTO-WE01

TestAmerica Job ID: 320-18796-1

Method: WS-LC-0025 - Perfluorinated Hydrocarbons - RA

Lab Sample ID: MB 320-109640/1-A
Matrix: Water
Analysis Batch: 111182

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 109640

Analyte	MB Result	MB Qualifier	LOQ	DL	Unit	D	Prepared	Analyzed	Dil Fac
Perfluorooctanesulfonic acid (PFOS) - RA	0.00136	J M	0.0040	0.0013	ug/L		05/12/16 10:01	05/25/16 06:14	1

Lab Sample ID: LCS 320-109640/2-A
Matrix: Water
Analysis Batch: 111182

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 109640

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Perfluoroheptanoic acid (PFHpA) - RA	0.0400	0.0416		ug/L		104	60 - 140

Lab Sample ID: LCSD 320-109640/3-A
Matrix: Water
Analysis Batch: 111182

Client Sample ID: Lab Control Sample Dup
Prep Type: Total/NA
Prep Batch: 109640

Analyte	Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Perfluorooctanoic acid (PFOA) - RA	0.0400	0.0432		ug/L		108	60 - 140	9	30

Method: 6010C - Metals (ICP)

Lab Sample ID: MB 280-325380/1-A
Matrix: Water
Analysis Batch: 326010

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 325380

Analyte	MB Result	MB Qualifier	LOQ	DL	Unit	D	Prepared	Analyzed	Dil Fac
Iron	85	U	100	22	ug/L		05/17/16 08:05	05/18/16 16:25	1

Lab Sample ID: LCS 280-325380/2-A
Matrix: Water
Analysis Batch: 326010

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 325380

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Iron	1000	992		ug/L		99	87 - 115

Lab Sample ID: MB 280-325382/1-A
Matrix: Water
Analysis Batch: 325799

Client Sample ID: Method Blank
Prep Type: Total Recoverable
Prep Batch: 325382

Analyte	MB Result	MB Qualifier	LOQ	DL	Unit	D	Prepared	Analyzed	Dil Fac
Iron	23.7	J	100	22	ug/L		05/17/16 08:05	05/17/16 17:25	1

Lab Sample ID: LCS 280-325382/2-A
Matrix: Water
Analysis Batch: 325799

Client Sample ID: Lab Control Sample
Prep Type: Total Recoverable
Prep Batch: 325382

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Iron	1000	970		ug/L		97	87 - 115

TestAmerica Sacramento

QC Sample Results

Client: CH2M Hill Constructors, Inc.
Project/Site: NAS Oceana, VA - 9000 CTO-WE01

TestAmerica Job ID: 320-18796-1

Method: 6010C - Metals (ICP) (Continued)

Lab Sample ID: 320-18796-4 MS
Matrix: Water
Analysis Batch: 325799

Client Sample ID: OF-CLTANK-0516
Prep Type: Dissolved
Prep Batch: 325382
%Rec.

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	Limits
Iron	1500		1000	2570		ug/L		110	87 - 115

Lab Sample ID: 320-18796-4 MSD
Matrix: Water
Analysis Batch: 325799

Client Sample ID: OF-CLTANK-0516
Prep Type: Dissolved
Prep Batch: 325382
%Rec.

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	Limits	RPD	Limit
Iron	1500		1000	2510		ug/L		104	87 - 115	2	20

Lab Sample ID: MB 280-325709/1-C
Matrix: Water
Analysis Batch: 326363

Client Sample ID: Method Blank
Prep Type: Dissolved
Prep Batch: 325989

Analyte	MB Result	MB Qualifier	LOQ	DL	Unit	D	Prepared	Analyzed	Dil Fac
Iron	85	U	100	22	ug/L		05/19/16 14:45	05/20/16 22:34	1

Lab Sample ID: LCS 280-325709/2-C
Matrix: Water
Analysis Batch: 326363

Client Sample ID: Lab Control Sample
Prep Type: Dissolved
Prep Batch: 325989
%Rec.

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	Limits
Iron	1000	996		ug/L		100	87 - 115

Method: SM 2540D - Solids, Total Suspended (TSS)

Lab Sample ID: MB 280-325537/2
Matrix: Water
Analysis Batch: 325537

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

Analyte	MB Result	MB Qualifier	LOQ	DL	Unit	D	Prepared	Analyzed	Dil Fac
Total Suspended Solids	2.8	U	4.0	1.1	mg/L			05/16/16 16:19	1

Lab Sample ID: LCS 280-325537/1
Matrix: Water
Analysis Batch: 325537

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
%Rec.

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	Limits
Total Suspended Solids	100	90.0		mg/L		90	86 - 114

QC Association Summary

Client: CH2M Hill Constructors, Inc.
Project/Site: NAS Oceana, VA - 9000 CTO-WE01

TestAmerica Job ID: 320-18796-1

LCMS

Prep Batch: 109640

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
320-18796-1	OF-STORLAG-0516	Total/NA	Water	3535	
320-18796-2	OF-TRMTLAG-0516	Total/NA	Water	3535	
320-18796-3	OF-POLLLAG-0516	Total/NA	Water	3535	
320-18796-4	OF-CLTANK-0516	Total/NA	Water	3535	
320-18796-5	OF-BACKWASH-0516	Total/NA	Water	3535	
320-18796-6	OF-FILTER-0516	Total/NA	Water	3535	
LCS 320-109640/2-A	Lab Control Sample	Total/NA	Water	3535	
LCS 320-109640/2-A - RA	Lab Control Sample	Total/NA	Water	3535	
LCSD 320-109640/3-A	Lab Control Sample Dup	Total/NA	Water	3535	
LCSD 320-109640/3-A - RA	Lab Control Sample Dup	Total/NA	Water	3535	
MB 320-109640/1-A	Method Blank	Total/NA	Water	3535	
MB 320-109640/1-A - RA	Method Blank	Total/NA	Water	3535	

Analysis Batch: 111182

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
LCS 320-109640/2-A - RA	Lab Control Sample	Total/NA	Water	WS-LC-0025	109640
LCSD 320-109640/3-A - RA	Lab Control Sample Dup	Total/NA	Water	WS-LC-0025	109640
MB 320-109640/1-A - RA	Method Blank	Total/NA	Water	WS-LC-0025	109640

Analysis Batch: 111390

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
320-18796-1	OF-STORLAG-0516	Total/NA	Water	WS-LC-0025	109640
320-18796-2	OF-TRMTLAG-0516	Total/NA	Water	WS-LC-0025	109640
320-18796-3	OF-POLLLAG-0516	Total/NA	Water	WS-LC-0025	109640
320-18796-4	OF-CLTANK-0516	Total/NA	Water	WS-LC-0025	109640
320-18796-5	OF-BACKWASH-0516	Total/NA	Water	WS-LC-0025	109640
320-18796-6	OF-FILTER-0516	Total/NA	Water	WS-LC-0025	109640
LCS 320-109640/2-A	Lab Control Sample	Total/NA	Water	WS-LC-0025	109640
LCSD 320-109640/3-A	Lab Control Sample Dup	Total/NA	Water	WS-LC-0025	109640
MB 320-109640/1-A	Method Blank	Total/NA	Water	WS-LC-0025	109640

Metals

Prep Batch: 325380

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
320-18796-1	OF-STORLAG-0516	Total/NA	Water	3010A	
320-18796-2	OF-TRMTLAG-0516	Total/NA	Water	3010A	
320-18796-3	OF-POLLLAG-0516	Total/NA	Water	3010A	
320-18796-4	OF-CLTANK-0516	Total/NA	Water	3010A	
320-18796-5	OF-BACKWASH-0516	Total/NA	Water	3010A	
320-18796-6	OF-FILTER-0516	Total/NA	Water	3010A	
LCS 280-325380/2-A	Lab Control Sample	Total/NA	Water	3010A	
MB 280-325380/1-A	Method Blank	Total/NA	Water	3010A	

Prep Batch: 325382

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
320-18796-1	OF-STORLAG-0516	Dissolved	Water	3005A	
320-18796-2	OF-TRMTLAG-0516	Dissolved	Water	3005A	
320-18796-3	OF-POLLLAG-0516	Dissolved	Water	3005A	
320-18796-4	OF-CLTANK-0516	Dissolved	Water	3005A	

TestAmerica Sacramento

QC Association Summary

Client: CH2M Hill Constructors, Inc.
Project/Site: NAS Oceana, VA - 9000 CTO-WE01

TestAmerica Job ID: 320-18796-1

Metals (Continued)

Prep Batch: 325382 (Continued)

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
320-18796-4 MS	OF-CLTANK-0516	Dissolved	Water	3005A	
320-18796-4 MSD	OF-CLTANK-0516	Dissolved	Water	3005A	
320-18796-4 PDS	OF-CLTANK-0516	Dissolved	Water	3005A	
320-18796-4 SD	OF-CLTANK-0516	Dissolved	Water	3005A	
LCS 280-325382/2-A	Lab Control Sample	Total Recoverable	Water	3005A	
MB 280-325382/1-A	Method Blank	Total Recoverable	Water	3005A	

Filtration Batch: 325709

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
320-18796-5	OF-BACKWASH-0516	Dissolved	Water	FILTRATION	
320-18796-6	OF-FILTER-0516	Dissolved	Water	FILTRATION	
LCS 280-325709/2-C	Lab Control Sample	Dissolved	Water	FILTRATION	
MB 280-325709/1-C	Method Blank	Dissolved	Water	FILTRATION	

Analysis Batch: 325799

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
320-18796-1	OF-STORLAG-0516	Dissolved	Water	6010C	325382
320-18796-2	OF-TRMTLAG-0516	Dissolved	Water	6010C	325382
320-18796-3	OF-POLLLAG-0516	Dissolved	Water	6010C	325382
320-18796-4	OF-CLTANK-0516	Dissolved	Water	6010C	325382
320-18796-4 MS	OF-CLTANK-0516	Dissolved	Water	6010C	325382
320-18796-4 MSD	OF-CLTANK-0516	Dissolved	Water	6010C	325382
320-18796-4 PDS	OF-CLTANK-0516	Dissolved	Water	6010C	325382
320-18796-4 SD	OF-CLTANK-0516	Dissolved	Water	6010C	325382
CRI 280-325799/14	DL		Water	6010C	
ICSA 280-325799/18	ICS		Water	6010C	
ICSAB 280-325799/21	ICS		Water	6010C	
LCS 280-325382/2-A	Lab Control Sample	Total Recoverable	Water	6010C	325382
MB 280-325382/1-A	Method Blank	Total Recoverable	Water	6010C	325382

Prep Batch: 325989

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
320-18796-5	OF-BACKWASH-0516	Dissolved	Water	3005A	325709
320-18796-6	OF-FILTER-0516	Dissolved	Water	3005A	325709
LCS 280-325709/2-C	Lab Control Sample	Dissolved	Water	3005A	325709
MB 280-325709/1-C	Method Blank	Dissolved	Water	3005A	325709

Analysis Batch: 326010

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
320-18796-1	OF-STORLAG-0516	Total/NA	Water	6010C	325380
320-18796-2	OF-TRMTLAG-0516	Total/NA	Water	6010C	325380
320-18796-3	OF-POLLLAG-0516	Total/NA	Water	6010C	325380
320-18796-4	OF-CLTANK-0516	Total/NA	Water	6010C	325380
320-18796-5	OF-BACKWASH-0516	Total/NA	Water	6010C	325380
320-18796-6	OF-FILTER-0516	Total/NA	Water	6010C	325380
CRI 280-326010/17	DL		Water	6010C	
ICSA 280-326010/19	ICS		Water	6010C	
ICSAB 280-326010/20	ICS		Water	6010C	
LCS 280-325380/2-A	Lab Control Sample	Total/NA	Water	6010C	325380
MB 280-325380/1-A	Method Blank	Total/NA	Water	6010C	325380

TestAmerica Sacramento

QC Association Summary

Client: CH2M Hill Constructors, Inc.
Project/Site: NAS Oceana, VA - 9000 CTO-WE01

TestAmerica Job ID: 320-18796-1

Metals (Continued)

Analysis Batch: 326363

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
320-18796-5	OF-BACKWASH-0516	Dissolved	Water	6010C	325989
320-18796-6	OF-FILTER-0516	Dissolved	Water	6010C	325989
CRI 280-326363/12	DL		Water	6010C	
ICSA 280-326363/13	ICS		Water	6010C	
ICSAB 280-326363/14	ICS		Water	6010C	
LCS 280-325709/2-C	Lab Control Sample	Dissolved	Water	6010C	325989
MB 280-325709/1-C	Method Blank	Dissolved	Water	6010C	325989

Analysis Batch: 326681

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
CRI 280-326681/13	DL		Water	6010C	
ICSA 280-326681/14	ICS		Water	6010C	
ICSAB 280-326681/15	ICS		Water	6010C	

General Chemistry

Analysis Batch: 325537

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
320-18796-5	OF-BACKWASH-0516	Total/NA	Water	SM 2540D	
LCS 280-325537/1	Lab Control Sample	Total/NA	Water	SM 2540D	
MB 280-325537/2	Method Blank	Total/NA	Water	SM 2540D	

Lab Chronicle

Client: CH2M Hill Constructors, Inc.
Project/Site: NAS Oceana, VA - 9000 CTO-WE01

TestAmerica Job ID: 320-18796-1

Client Sample ID: OF-STORLAG-0516

Date Collected: 05/10/16 12:10

Date Received: 05/11/16 09:30

Lab Sample ID: 320-18796-1

Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	3535			109640	05/12/16 10:01	VPM	TAL SAC
Total/NA	Analysis	WS-LC-0025		20	111390	05/26/16 10:12	JRB	TAL SAC
Dissolved	Prep	3005A			325382	05/17/16 08:05	TEB	TAL DEN
Dissolved	Analysis	6010C		1	325799	05/17/16 17:30	CRR	TAL DEN
Total/NA	Prep	3010A			325380	05/17/16 08:05	TEB	TAL DEN
Total/NA	Analysis	6010C		1	326010	05/18/16 16:33	CRR	TAL DEN

Client Sample ID: OF-TRMTLAG-0516

Date Collected: 05/10/16 11:50

Date Received: 05/11/16 09:30

Lab Sample ID: 320-18796-2

Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	3535			109640	05/12/16 10:01	VPM	TAL SAC
Total/NA	Analysis	WS-LC-0025		10	111390	05/26/16 18:11	JRB	TAL SAC
Dissolved	Prep	3005A			325382	05/17/16 08:05	TEB	TAL DEN
Dissolved	Analysis	6010C		1	325799	05/17/16 17:33	CRR	TAL DEN
Total/NA	Prep	3010A			325380	05/17/16 08:05	TEB	TAL DEN
Total/NA	Analysis	6010C		1	326010	05/18/16 16:36	CRR	TAL DEN

Client Sample ID: OF-POLLLAG-0516

Date Collected: 05/10/16 11:25

Date Received: 05/11/16 09:30

Lab Sample ID: 320-18796-3

Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	3535			109640	05/12/16 10:01	VPM	TAL SAC
Total/NA	Analysis	WS-LC-0025		20	111390	05/26/16 10:58	JRB	TAL SAC
Dissolved	Prep	3005A			325382	05/17/16 08:05	TEB	TAL DEN
Dissolved	Analysis	6010C		1	325799	05/17/16 17:35	CRR	TAL DEN
Total/NA	Prep	3010A			325380	05/17/16 08:05	TEB	TAL DEN
Total/NA	Analysis	6010C		1	326010	05/18/16 16:38	CRR	TAL DEN

Client Sample ID: OF-CLTANK-0516

Date Collected: 05/10/16 10:48

Date Received: 05/11/16 09:30

Lab Sample ID: 320-18796-4

Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	3535			109640	05/12/16 10:01	VPM	TAL SAC
Total/NA	Analysis	WS-LC-0025		20	111390	05/26/16 11:21	JRB	TAL SAC
Dissolved	Prep	3005A			325382	05/17/16 08:05	TEB	TAL DEN
Dissolved	Analysis	6010C		1	325799	05/17/16 17:38	CRR	TAL DEN
Total/NA	Prep	3010A			325380	05/17/16 08:05	TEB	TAL DEN
Total/NA	Analysis	6010C		1	326010	05/18/16 16:41	CRR	TAL DEN

Lab Chronicle

Client: CH2M Hill Constructors, Inc.
Project/Site: NAS Oceana, VA - 9000 CTO-WE01

TestAmerica Job ID: 320-18796-1

Client Sample ID: OF-BACKWASH-0516

Date Collected: 05/10/16 10:30

Date Received: 05/11/16 09:30

Lab Sample ID: 320-18796-5

Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	3535			109640	05/12/16 10:01	VPM	TAL SAC
Total/NA	Analysis	WS-LC-0025		20	111390	05/26/16 11:42	JRB	TAL SAC
Dissolved	Filtration	FILTRATION			325709	05/17/16 11:00	TEB	TAL DEN
Dissolved	Prep	3005A			325989	05/19/16 14:45	SEJ	TAL DEN
Dissolved	Analysis	6010C		1	326363	05/20/16 22:39	CMK	TAL DEN
Total/NA	Prep	3010A			325380	05/17/16 08:05	TEB	TAL DEN
Total/NA	Analysis	6010C		1	326010	05/18/16 16:43	CRR	TAL DEN
Total/NA	Analysis	SM 2540D		1	325537	05/16/16 16:19	SVC	TAL DEN

Client Sample ID: OF-FILTER-0516

Date Collected: 05/10/16 10:15

Date Received: 05/11/16 09:30

Lab Sample ID: 320-18796-6

Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	3535			109640	05/12/16 10:01	VPM	TAL SAC
Total/NA	Analysis	WS-LC-0025		20	111390	05/26/16 12:03	JRB	TAL SAC
Dissolved	Filtration	FILTRATION			325709	05/17/16 12:07	TEB	TAL DEN
Dissolved	Prep	3005A			325989	05/19/16 14:45	SEJ	TAL DEN
Dissolved	Analysis	6010C		1	326363	05/20/16 22:42	CMK	TAL DEN
Total/NA	Prep	3010A			325380	05/17/16 08:05	TEB	TAL DEN
Total/NA	Analysis	6010C		1	326010	05/18/16 16:46	CRR	TAL DEN

Laboratory References:

TAL DEN = TestAmerica Denver, 4955 Yarrow Street, Arvada, CO 80002, TEL (303)736-0100

TAL SAC = TestAmerica Sacramento, 880 Riverside Parkway, West Sacramento, CA 95605, TEL (916)373-5600

Certification Summary

Client: CH2M Hill Constructors, Inc.
Project/Site: NAS Oceana, VA - 9000 CTO-WE01

TestAmerica Job ID: 320-18796-1

Laboratory: TestAmerica Sacramento

The certifications listed below are applicable to this report.

Authority	Program	EPA Region	Certification ID	Expiration Date
A2LA	DoD ELAP		2928-01	01-31-17
Oregon	NELAP	10	4040	01-29-17

Laboratory: TestAmerica Denver

Unless otherwise noted, all analytes for this laboratory were covered under each certification below.

Authority	Program	EPA Region	Certification ID	Expiration Date
A2LA	DoD ELAP		2907.01	10-31-17

Analysis Method	Prep Method	Matrix	Analyte	
Oregon	NELAP	10	4025	01-09-17

The following analytes are included in this report, but certification is not offered by the governing authority:

Analysis Method	Prep Method	Matrix	Analyte
6010C	3005A	Water	Iron
6010C	3010A	Water	Iron

Method Summary

Client: CH2M Hill Constructors, Inc.
Project/Site: NAS Oceana, VA - 9000 CTO-WE01

TestAmerica Job ID: 320-18796-1

Method	Method Description	Protocol	Laboratory
WS-LC-0025	Perfluorinated Hydrocarbons	TAL SOP	TAL SAC
6010C	Metals (ICP)	SW846	TAL DEN
SM 2540D	Solids, Total Suspended (TSS)	SM	TAL DEN

Protocol References:

SM = "Standard Methods For The Examination Of Water And Wastewater",
SW846 = "Test Methods For Evaluating Solid Waste, Physical/Chemical Methods", Third Edition, November 1986 And Its Updates.
TAL SOP = TestAmerica Laboratories, Standard Operating Procedure

Laboratory References:

TAL DEN = TestAmerica Denver, 4955 Yarrow Street, Arvada, CO 80002, TEL (303)736-0100
TAL SAC = TestAmerica Sacramento, 880 Riverside Parkway, West Sacramento, CA 95605, TEL (916)373-5600

Sample Summary

Client: CH2M Hill Constructors, Inc.
Project/Site: NAS Oceana, VA - 9000 CTO-WE01

TestAmerica Job ID: 320-18796-1

Lab Sample ID	Client Sample ID	Matrix	Collected	Received
320-18796-1	OF-STORLAG-0516	Water	05/10/16 12:10	05/11/16 09:30
320-18796-2	OF-TRMTLAG-0516	Water	05/10/16 11:50	05/11/16 09:30
320-18796-3	OF-POLLLAG-0516	Water	05/10/16 11:25	05/11/16 09:30
320-18796-4	OF-CLTANK-0516	Water	05/10/16 10:48	05/11/16 09:30
320-18796-5	OF-BACKWASH-0516	Water	05/10/16 10:30	05/11/16 09:30
320-18796-6	OF-FILTER-0516	Water	05/10/16 10:15	05/11/16 09:30

LCMS MANUAL INTEGRATION SUMMARY

Lab Name: TestAmerica Sacramento Job No.: 320-18796-1

SDG No.: _____

Instrument ID: A4 Analysis Batch Number: 111390Lab Sample ID: LCS 320-109640/2-A Client Sample ID: _____Date Analyzed: 05/26/16 05:58 Lab File ID: 25MAY2016B4A_042.d GC Column: Acquity ID: 2.1 (mm)

COMPOUND NAME	RETENTION TIME	MANUAL INTEGRATION		
		REASON	ANALYST	DATE
Perfluorohexanesulfonic acid (PFHxS)	9.41	Isomers	westendor fc	05/26/16 09:41

Lab Sample ID: 320-18796-1 Client Sample ID: OF-STORLAG-0516Date Analyzed: 05/26/16 10:12 Lab File ID: 25MAY2016B4A_054.d GC Column: Acquity ID: 2.1 (mm)

COMPOUND NAME	RETENTION TIME	MANUAL INTEGRATION		
		REASON	ANALYST	DATE
Perfluorohexanesulfonic acid (PFHxS)	9.40	Isomers	barnettj	05/26/16 15:05
Perfluorooctanoic acid (PFOA)	10.48	Isomers	barnettj	05/26/16 15:05
Perfluorooctanesulfonic acid (PFOS)	11.44	Isomers	barnettj	05/26/16 15:05

Lab Sample ID: 320-18796-3 Client Sample ID: OF-POLLLAG-0516Date Analyzed: 05/26/16 10:58 Lab File ID: 25MAY2016B4A_056.d GC Column: Acquity ID: 2.1 (mm)

COMPOUND NAME	RETENTION TIME	MANUAL INTEGRATION		
		REASON	ANALYST	DATE
Perfluorohexanesulfonic acid (PFHxS)	9.40	Isomers	barnettj	05/26/16 15:24
Perfluorooctanoic acid (PFOA)	10.49	Isomers	barnettj	05/26/16 15:24
Perfluorooctanesulfonic acid (PFOS)	11.46	Isomers	barnettj	05/26/16 15:24

LCMS MANUAL INTEGRATION SUMMARY

Lab Name: TestAmerica Sacramento Job No.: 320-18796-1

SDG No.: _____

Instrument ID: A4 Analysis Batch Number: 111390Lab Sample ID: 320-18796-4 Client Sample ID: OF-CLTANK-0516Date Analyzed: 05/26/16 11:21 Lab File ID: 25MAY2016B4A_057.d GC Column: Acquity ID: 2.1 (mm)

COMPOUND NAME	RETENTION TIME	MANUAL INTEGRATION		
		REASON	ANALYST	DATE
Perfluorohexanesulfonic acid (PFHxS)	9.40	Isomers	barnettj	05/26/16 15:25
Perfluorooctanoic acid (PFOA)	10.49	Isomers	barnettj	05/26/16 15:25
Perfluorooctanesulfonic acid (PFOS)	11.46	Isomers	barnettj	05/26/16 15:25

Lab Sample ID: 320-18796-5 Client Sample ID: OF-BACKWASH-0516Date Analyzed: 05/26/16 11:42 Lab File ID: 25MAY2016B4A_058.d GC Column: Acquity ID: 2.1 (mm)

COMPOUND NAME	RETENTION TIME	MANUAL INTEGRATION		
		REASON	ANALYST	DATE
Perfluorohexanesulfonic acid (PFHxS)	9.40	Isomers	barnettj	05/26/16 15:28
Perfluorooctanoic acid (PFOA)	10.48	Isomers	barnettj	05/26/16 15:28
Perfluorooctanesulfonic acid (PFOS)	11.45	Isomers	barnettj	05/26/16 15:28

Lab Sample ID: 320-18796-6 Client Sample ID: OF-FILTER-0516Date Analyzed: 05/26/16 12:03 Lab File ID: 25MAY2016B4A_059.d GC Column: Acquity ID: 2.1 (mm)

COMPOUND NAME	RETENTION TIME	MANUAL INTEGRATION		
		REASON	ANALYST	DATE
Perfluorohexanesulfonic acid (PFHxS)	9.40	Isomers	barnettj	05/26/16 15:30
Perfluorooctanoic acid (PFOA)	10.48	Isomers	barnettj	05/26/16 15:30
Perfluorooctanesulfonic acid (PFOS)	11.45	Isomers	barnettj	05/26/16 15:30

LCMS MANUAL INTEGRATION SUMMARY

Lab Name: TestAmerica Sacramento Job No.: 320-18796-1

SDG No.: _____

Instrument ID: A4 Analysis Batch Number: 111390Lab Sample ID: 320-18796-2 Client Sample ID: OF-TRMTLAG-0516Date Analyzed: 05/26/16 18:11 Lab File ID: 25MAY2016B4A_076.d GC Column: Acquity ID: 2.1 (mm)

COMPOUND NAME	RETENTION TIME	MANUAL INTEGRATION		
		REASON	ANALYST	DATE
Perfluorohexanesulfonic acid (PFHxS)	9.40	Isomers	barnettj	05/27/16 09:50
Perfluorooctanoic acid (PFOA)	10.48	Isomers	barnettj	05/27/16 09:50
Perfluorooctanesulfonic acid (PFOS)	11.45	Isomers	barnettj	05/27/16 09:50

LCMS MANUAL INTEGRATION SUMMARY

Lab Name: TestAmerica Sacramento Job No.: 320-18796-1

SDG No.: _____

Instrument ID: A6 Analysis Batch Number: 111182Lab Sample ID: STD 320-111182/4 IC Client Sample ID: _____Date Analyzed: 05/24/16 17:07 Lab File ID: 24MAY2016A6A_004.d GC Column: Acquity ID: 2.1 (mm)

COMPOUND NAME	RETENTION TIME	MANUAL INTEGRATION		
		REASON	ANALYST	DATE
Perfluoropentanoic acid (PFPeA)	6.95	Missed Peak	barnettj	05/24/16 17:44
Perfluorohexanoic acid (PFHxA)	8.21	Missed Peak	barnettj	05/24/16 17:44
Perfluoroheptanoic acid (PFHpA)	9.46	Missed Peak	barnettj	05/24/16 17:44
Perfluorooctanoic acid (PFOA)	10.56	Missed Peak	barnettj	05/24/16 17:44
Perfluorononanoic acid (PFNA)	11.53	Missed Peak	barnettj	05/24/16 17:44
Perfluorooctanesulfonic acid (PFOS)	11.53	Missed Peak	barnettj	05/24/16 17:44
Perfluorodecanoic acid (PFDA)	12.37	Missed Peak	barnettj	05/24/16 17:44

Lab Sample ID: STD 320-111182/5 IC Client Sample ID: _____Date Analyzed: 05/24/16 17:28 Lab File ID: 24MAY2016A6A_005.d GC Column: Acquity ID: 2.1 (mm)

COMPOUND NAME	RETENTION TIME	MANUAL INTEGRATION		
		REASON	ANALYST	DATE
Perfluorobutanoic acid (PFBA)	5.79	Missed Peak	barnettj	05/24/16 18:11
Perfluorohexanoic acid (PFHxA)	8.23	Missed Peak	barnettj	05/24/16 18:11
Perfluorooctanesulfonic acid (PFOS)	11.53	Missed Peak	barnettj	05/24/16 18:11
Perfluorononanoic acid (PFNA)	11.55	Assign Peak	westendor fc	05/25/16 08:46

Lab Sample ID: MB 320-109640/1-A RA Client Sample ID: _____Date Analyzed: 05/25/16 06:14 Lab File ID: 24MAY2016A6A_041.d GC Column: Acquity ID: 2.1 (mm)

COMPOUND NAME	RETENTION TIME	MANUAL INTEGRATION		
		REASON	ANALYST	DATE
Perfluorooctanesulfonic acid (PFOS)	11.51	Isomers	barnettj	05/26/16 16:10

REAGENT TRACEABILITY SUMMARY

Lab Name: TestAmerica Sacramento

Job No.: 320-18796-1

SDG No.: _____

Reagent ID	Exp Date	Prep Date	Dilutant Used	Reagent Final Volume	Parent Reagent		Analyte	Concentration
					Reagent ID	Volume Added		
LCMPFCSU_00039	11/05/16	05/05/16	Methanol, Lot Baker 115935	10000 uL	LCM2PFHxDA_00005	200 uL	13C2-PFHxDA	1 ug/mL
					LCM2PFTeDA_00005	200 uL	13C2-PFTeDA	1 ug/mL
					LCM4PFHFA_00005	200 uL	13C4-PFHpA	1 ug/mL
					LCM5PFPEA_00006	200 uL	13C5-PFPeA	1 ug/mL
					LCM8FOSA_00009	200 uL	13C8_FOSA	1 ug/mL
					LCMPFBA_00006	200 uL	13C4_PFBA	1 ug/mL
					LCMPFDA_00007	200 uL	13C2_PFDA	1 ug/mL
					LCMPFDoA_00006	200 uL	13C2_PFDaA	1 ug/mL
					LCMPFHxA_00008	200 uL	13C2_PFHxA	1 ug/mL
					LCMPFHxS_00006	200 uL	1802_PFHxS	0.946 ug/mL
					LCMPFNA_00005	200 uL	13C5_PFNA	1 ug/mL
					LCMPFOA_00010	200 uL	13C4_PFOA	1 ug/mL
					LCMPFOS_00012	200 uL	13C4_PFOS	0.956 ug/mL
					LCMPFUDa_00007	200 uL	13C2_PFUaA	1 ug/mL
.LCM2PFHxDA_00005	01/07/21	Wellington Laboratories, Lot M2PFHxDA1112			(Purchased Reagent)		13C2-PFHxDA	50 ug/mL
.LCM2PFTeDA_00005	12/07/20	Wellington Laboratories, Lot M2PFTeDA1115			(Purchased Reagent)		13C2-PFTeDA	50 ug/mL
.LCM4PFHFA_00005	05/22/20	Wellington Laboratories, Lot M4PFHFA0515			(Purchased Reagent)		13C4-PFHpA	50 ug/mL
.LCM5PFPEA_00006	05/22/20	Wellington Laboratories, Lot M5PFPeA0515			(Purchased Reagent)		13C5-PFPeA	50 ug/mL
.LCM8FOSA_00009	12/22/17	Wellington Laboratories, Lot M8FOSA1215I			(Purchased Reagent)		13C8_FOSA	50 ug/mL
.LCMPFBA_00006	10/31/19	Wellington Laboratories, Lot MPFBA1014			(Purchased Reagent)		13C4_PFBA	50 ug/mL
.LCMPFDA_00007	08/19/20	Wellington Laboratories, Lot MPFDA0815			(Purchased Reagent)		13C2_PFDA	50 ug/mL
.LCMPFDoA_00006	07/17/19	Wellington Laboratories, Lot MPFDoA0714			(Purchased Reagent)		13C2_PFDaA	50 ug/mL
.LCMPFHxA_00008	04/09/20	Wellington Laboratories, Lot MPFHxA0415			(Purchased Reagent)		13C2_PFHxA	50 ug/mL
.LCMPFHxS_00006	10/23/20	Wellington Laboratories, Lot MPFHxS1015			(Purchased Reagent)		1802_PFHxS	47.3 ug/mL
.LCMPFNA_00005	04/13/19	Wellington Laboratories, Lot MPFNA0414			(Purchased Reagent)		13C5_PFNA	50 ug/mL
.LCMPFOA_00010	01/22/21	Wellington Laboratories, Lot MPFOA0116			(Purchased Reagent)		13C4_PFOA	50 ug/mL
.LCMPFOS_00012	01/22/21	Wellington Laboratories, Lot MPFOS0116			(Purchased Reagent)		13C4_PFOS	47.8 ug/mL
.LCMPFUDa_00007	10/31/19	Wellington Laboratories, Lot MPFUDa1014			(Purchased Reagent)		13C2_PFUaA	50 ug/mL
LCPFC-L1_00018	06/29/16	12/30/15	MeOH/H2O, Lot 90285	5 mL	LCMPFCSU_00024	250 uL	13C2-PFHxDA	50 ng/mL
							13C2-PFTeDA	50 ng/mL
							13C4-PFHpA	50 ng/mL
							13C5-PFPeA	50 ng/mL
							13C8_FOSA	50 ng/mL
							13C4_PFBA	50 ng/mL
							13C2_PFDA	50 ng/mL
							13C2_PFDaA	50 ng/mL
							13C2_PFHxA	50 ng/mL
							1802_PFHxS	47.3 ng/mL
							13C5_PFNA	50 ng/mL
							13C4_PFOA	50 ng/mL
							13C4_PFOS	47.8 ng/mL
							13C2_PFUaA	50 ng/mL
					LCPFCSP_00040	25 uL	Perfluorobutyric acid	0.5 ng/mL
							Perfluorobutanesulfonic acid (PFBS)	0.442 ng/mL
							Perfluorodecanoic acid	0.5 ng/mL

REAGENT TRACEABILITY SUMMARY

Lab Name: TestAmerica Sacramento

Job No.: 320-18796-1

SDG No.: _____

Reagent ID	Exp Date	Prep Date	Dilutant Used	Reagent Final Volume	Parent Reagent		Analyte	Concentration
					Reagent ID	Volume Added		
							Perfluorododecanoic acid	0.5 ng/mL
							Perfluorodecane Sulfonic acid	0.482 ng/mL
							Perfluoroheptanoic acid (PFHpA)	0.5 ng/mL
							Perfluoroheptanesulfonic Acid	0.476 ng/mL
							Perfluorohexanoic acid	0.5 ng/mL
							Perfluorohexadecanoic acid	0.5 ng/mL
							Perfluorohexanesulfonic acid (PFHxS)	0.473 ng/mL
							Perfluorononanoic acid (PFNA)	0.5 ng/mL
							Perfluorooctanoic acid (PFOA)	0.5 ng/mL
							Perfluorooctandecanoic acid	0.5 ng/mL
							Perfluorooctanesulfonic acid (PFOS)	0.478 ng/mL
							Perfluorooctane Sulfonamide	0.5 ng/mL
							Perfluoropentanoic acid	0.5 ng/mL
							Perfluorotetradecanoic acid	0.5 ng/mL
							Perfluorotridecanoic acid	0.5 ng/mL
							Perfluoroundecanoic acid	0.5 ng/mL
.LCMPFCSU_00024	06/29/16	12/29/15	Methanol, Lot Baker 115491	10 mL	LCM2PFHxDA_00003	0.2 mL	13C2-PFHxDA	1 ug/mL
					LCM2PFTeDA_00003	0.2 mL	13C2-PFTeDA	1 ug/mL
					LCM4PFHFA_00003	0.2 mL	13C4-PFHFA	1 ug/mL
					LCM5PFPEA_00004	0.2 mL	13C5-PFPeA	1 ug/mL
					LCM8FOSA_00006	0.2 mL	13C8 FOSA	1 ug/mL
					LCMPFBA_00004	0.2 mL	13C4 PFBA	1 ug/mL
					LCMPFDA_00004	0.2 mL	13C2 PFDA	1 ug/mL
					LCMPFDoA_00004	0.2 mL	13C2 PFDoA	1 ug/mL
					LCMPFHxA_00005	0.2 mL	13C2 PFHxA	1 ug/mL
					LCMPFHxS_00004	0.2 mL	18O2 PFHxS	0.946 ug/mL
					LCMPFNA_00003	0.2 mL	13C5 PFNA	1 ug/mL
					LCMPFOA_00007	0.2 mL	13C4 PFOA	1 ug/mL
					LCMPFOS_00009	0.2 mL	13C4 PFOS	0.956 ug/mL
					LCMPFUDa_00005	0.2 mL	13C2 PFUnA	1 ug/mL
..LCM2PFHxDA_00003	11/29/17	Wellington Laboratories, Lot M2PFHxDA1112			(Purchased Reagent)		13C2-PFHxDA	50 ug/mL
..LCM2PFTeDA_00003	11/29/17	Wellington Laboratories, Lot M2PFTeDA1112			(Purchased Reagent)		13C2-PFTeDA	50 ug/mL
..LCM4PFHFA_00003	05/22/20	Wellington Laboratories, Lot M4PFHFA0515			(Purchased Reagent)		13C4-PFHFA	50 ug/mL
..LCM5PFPEA_00004	05/22/20	Wellington Laboratories, Lot M5PFPeA0515			(Purchased Reagent)		13C5-PFPeA	50 ug/mL
..LCM8FOSA_00006	12/15/16	Wellington Laboratories, Lot M8FOSA1214I			(Purchased Reagent)		13C8 FOSA	50 ug/mL
..LCMPFBA_00004	10/31/19	Wellington Laboratories, Lot MPFBA1014			(Purchased Reagent)		13C4 PFBA	50 ug/mL
..LCMPFDA_00004	04/13/19	Wellington Laboratories, Lot MPFDA0414			(Purchased Reagent)		13C2 PFDA	50 ug/mL
..LCMPFDoA_00004	07/17/19	Wellington Laboratories, Lot MPFDoA0714			(Purchased Reagent)		13C2 PFDoA	50 ug/mL
..LCMPFHxA_00005	04/13/19	Wellington Laboratories, Lot MPFHxA0414			(Purchased Reagent)		13C2 PFHxA	50 ug/mL
..LCMPFHxS_00004	07/25/18	Wellington Laboratories, Lot MPFHxS0713			(Purchased Reagent)		18O2 PFHxS	47.3 ug/mL
..LCMPFNA_00003	04/13/19	Wellington Laboratories, Lot MPFNA0414			(Purchased Reagent)		13C5 PFNA	50 ug/mL
..LCMPFOA_00007	04/10/20	Wellington Laboratories, Lot MPFOA0415			(Purchased Reagent)		13C4 PFOA	50 ug/mL
..LCMPFOS_00009	05/15/20	Wellington Laboratories, Lot MPFOS0515			(Purchased Reagent)		13C4 PFOS	47.8 ug/mL
..LCMPFUDa_00005	10/31/19	Wellington Laboratories, Lot MPFUDa1014			(Purchased Reagent)		13C2 PFUnA	50 ug/mL

REAGENT TRACEABILITY SUMMARY

Lab Name: TestAmerica Sacramento

Job No.: 320-18796-1

SDG No.: _____

Reagent ID	Exp Date	Prep Date	Dilutant Used	Reagent Final Volume	Parent Reagent		Analyte	Concentration
					Reagent ID	Volume Added		
.LCPFCSP_00040	06/30/16	12/30/15	Methanol, Lot 090285	5 mL	LCPFCSP_00039	0.5 mL	Perfluorobutyric acid	0.1 ug/mL
							Perfluorobutanesulfonic acid (PFBS)	0.0884 ug/mL
							Perfluorodecanoic acid	0.1 ug/mL
							Perfluorododecanoic acid	0.1 ug/mL
							Perfluorodecane Sulfonic acid	0.0964 ug/mL
							Perfluoroheptanoic acid (PFHpA)	0.1 ug/mL
							Perfluoroheptanesulfonic Acid	0.0952 ug/mL
							Perfluorohexanoic acid	0.1 ug/mL
							Perfluorohexadecanoic acid	0.1 ug/mL
							Perfluorohexanesulfonic acid (PFHxS)	0.0946 ug/mL
							Perfluorononanoic acid (PFNA)	0.1 ug/mL
							Perfluorooctanoic acid (PFOA)	0.1 ug/mL
							Perfluorooctadecanoic acid	0.1 ug/mL
							Perfluorooctanesulfonic acid (PFOS)	0.0956 ug/mL
							Perfluorooctane Sulfonamide	0.1 ug/mL
							Perfluoropentanoic acid	0.1 ug/mL
							Perfluorotetradecanoic acid	0.1 ug/mL
Perfluorotridecanoic acid	0.1 ug/mL							
Perfluoroundecanoic acid	0.1 ug/mL							
..LCPFCSP_00039	06/30/16	12/30/15	Methanol, Lot 090285	5 mL	LCPFBA_00003	0.1 mL	Perfluorobutyric acid	1 ug/mL
					LCPFBSA_00001	0.1 mL	Perfluorobutanesulfonic acid (PFBS)	0.884 ug/mL
					LCPFDA_00003	0.1 mL	Perfluorodecanoic acid	1 ug/mL
					LCPFDoA_00003	0.1 mL	Perfluorododecanoic acid	1 ug/mL
					LCPFDSA_00001	0.1 mL	Perfluorodecane Sulfonic acid	0.964 ug/mL
					LCPFHpA_00004	0.1 mL	Perfluoroheptanoic acid (PFHpA)	1 ug/mL
					LCPFHpSA_00001	0.1 mL	Perfluoroheptanesulfonic Acid	0.952 ug/mL
					LCPFHxA_00003	0.1 mL	Perfluorohexanoic acid	1 ug/mL
					LCPFHxDA_00004	0.1 mL	Perfluorohexadecanoic acid	1 ug/mL
					LCPFHxSA_00001	0.1 mL	Perfluorohexanesulfonic acid (PFHxS)	0.946 ug/mL
					LCPFNA_00004	0.1 mL	Perfluorononanoic acid (PFNA)	1 ug/mL
					LCPFOA_00004	0.1 mL	Perfluorooctanoic acid (PFOA)	1 ug/mL
					LCPFODA_00004	0.1 mL	Perfluorooctadecanoic acid	1 ug/mL
					LCPFOS_00004	0.1 mL	Perfluorooctanesulfonic acid (PFOS)	0.956 ug/mL
					LCPFOSA_00005	0.1 mL	Perfluorooctane Sulfonamide	1 ug/mL
					LCPFPeA_00003	0.1 mL	Perfluoropentanoic acid	1 ug/mL
					LCPFTeDA_00003	0.1 mL	Perfluorotetradecanoic acid	1 ug/mL
LCPFTrDA_00003	0.1 mL	Perfluorotridecanoic acid	1 ug/mL					
LCPFUdA_00003	0.1 mL	Perfluoroundecanoic acid	1 ug/mL					
...LCPFBA_00003	03/05/18	Wellington Laboratories, Lot PFBA0313			(Purchased Reagent)		Perfluorobutyric acid	50 ug/mL
...LCPFBSA_00001	10/09/19	Wellington Laboratories, Lot LPFBS1014			(Purchased Reagent)		Perfluorobutanesulfonic acid (PFBS)	44.2 ug/mL

REAGENT TRACEABILITY SUMMARY

Lab Name: TestAmerica Sacramento

Job No.: 320-18796-1

SDG No.:

Reagent ID	Exp Date	Prep Date	Dilutant Used	Reagent Final Volume	Parent Reagent		Analyte	Concentration
					Reagent ID	Volume Added		
...LCPFDA_00003	06/18/18		Wellington Laboratories, Lot PFDA0613		(Purchased Reagent)		Perfluorodecanoic acid	50 ug/mL
...LCPFDoA_00003	01/03/18		Wellington Laboratories, Lot PFDoA0113		(Purchased Reagent)		Perfluorododecanoic acid	50 ug/mL
...LCPFDSA_00001	09/13/18		Wellington Laboratories, Lot LPFDS0913		(Purchased Reagent)		Perfluorodecane Sulfonic acid	48.2 ug/mL
...LCPFHpA_00004	05/09/19		Wellington Laboratories, Lot PFHpA0514		(Purchased Reagent)		Perfluoroheptanoic acid (PFHpA)	50 ug/mL
...LCPFHpSA_00001	11/21/17		Wellington Laboratories, Lot LPFHpS1112		(Purchased Reagent)		Perfluoroheptanesulfonic Acid	47.6 ug/mL
...LCPFHxA_00003	05/09/19		Wellington Laboratories, Lot PFHxA0514		(Purchased Reagent)		Perfluorohexanoic acid	50 ug/mL
...LCPFHxDA_00004	11/28/17		Wellington Laboratories, Lot PFHxDA0707		(Purchased Reagent)		Perfluorohexadecanoic acid	50 ug/mL
...LCPFHxSA_00001	05/09/19		Wellington Laboratories, Lot LPFHxS0514		(Purchased Reagent)		Perfluorohexanesulfonic acid (PFHxS)	47.3 ug/mL
...LCPFNA_00004	05/09/19		Wellington Laboratories, Lot PFNA0514		(Purchased Reagent)		Perfluorononanoic acid (PFNA)	50 ug/mL
...LCPFOA_00004	10/11/18		Wellington Laboratories, Lot PFOA1013		(Purchased Reagent)		Perfluorooctanoic acid (PFOA)	50 ug/mL
...LCPFODA_00004	04/25/17		Wellington Laboratories, Lot PFODA0807		(Purchased Reagent)		Perfluorooctandecanoic acid	50 ug/mL
...LCPFOS_00004	06/20/19		Wellington Laboratories, Lot LPFOS0614		(Purchased Reagent)		Perfluorooctanesulfonic acid (PFOS)	47.8 ug/mL
...LCPFOSA_00005	07/31/18		Wellington Laboratories, Lot FOSA0714I		(Purchased Reagent)		Perfluorooctane Sulfonamide	50 ug/mL
...LCPFPeA_00003	01/03/18		Wellington Laboratories, Lot PFPeA0113		(Purchased Reagent)		Perfluoropentanoic acid	50 ug/mL
...LCPFTeDA_00003	06/19/18		Wellington Laboratories, Lot PFTeDA0613		(Purchased Reagent)		Perfluorotetradecanoic acid	50 ug/mL
...LCPFTTrDA_00003	12/10/18		Wellington Laboratories, Lot PFTTrDA1213		(Purchased Reagent)		Perfluorotridecanoic acid	50 ug/mL
...LCPFUdA_00003	06/19/18		Wellington Laboratories, Lot PFUdA0613		(Purchased Reagent)		Perfluoroundecanoic acid	50 ug/mL
LCPFC-L1_00019	09/08/16	04/18/16	MeOH/H2O, Lot 90285	5 mL	LCMPFCSU_00036	250 uL	13C2-PFHxDA	50 ng/mL
							13C2-PFTeDA	50 ng/mL
							13C4-PFHpA	50 ng/mL
							13C5-PFPeA	50 ng/mL
							13C8 FOSA	50 ng/mL
							13C4 PFBA	50 ng/mL
							13C2 PFDA	50 ng/mL
							13C2 PFDoA	50 ng/mL
							13C2 PFHxA	50 ng/mL
							18O2 PFHxS	47.3 ng/mL
							13C5 PFNA	50 ng/mL
							13C4 PFOA	50 ng/mL
							13C4 PFOS	47.8 ng/mL
							13C2 PFUnA	50 ng/mL
					LCPFCSP_00045	25 uL	Perfluorobutyric acid	0.5 ng/mL
							Perfluorobutanesulfonic acid (PFBS)	0.442 ng/mL
							Perfluorodecanoic acid	0.5 ng/mL
							Perfluorododecanoic acid	0.5 ng/mL
							Perfluorodecane Sulfonic acid	0.482 ng/mL
							Perfluoroheptanoic acid (PFHpA)	0.5 ng/mL
							Perfluoroheptanesulfonic Acid	0.476 ng/mL
							Perfluorohexanoic acid	0.5 ng/mL
							Perfluorohexadecanoic acid	0.5 ng/mL
							Perfluorohexanesulfonic acid (PFHxS)	0.473 ng/mL
							Perfluorononanoic acid (PFNA)	0.5 ng/mL

REAGENT TRACEABILITY SUMMARY

Lab Name: TestAmerica Sacramento

Job No.: 320-18796-1

SDG No.:

Reagent ID	Exp Date	Prep Date	Dilutant Used	Reagent Final Volume	Parent Reagent		Analyte	Concentration
					Reagent ID	Volume Added		
							Perfluorooctanoic acid (PFOA)	0.5 ng/mL
							Perfluorooctadecanoic acid	0.5 ng/mL
							Perfluorooctanesulfonic acid (PFOS)	0.478 ng/mL
							Perfluorooctane Sulfonamide	0.5 ng/mL
							Perfluoropentanoic acid	0.5 ng/mL
							Perfluorotetradecanoic acid	0.5 ng/mL
							Perfluorotridecanoic acid	0.5 ng/mL
							Perfluoroundecanoic acid	0.5 ng/mL
.LCMPFCSU_00036	10/07/16	04/07/16	Methanol, Lot Baker 115935	10000 uL	LCM2PFHxDA_00004	200 uL	13C2-PFHxDA	1 ug/mL
					LCM2PFTeDA_00004	200 uL	13C2-PFTeDA	1 ug/mL
					LCM4PFHPA_00004	200 uL	13C4-PFHpA	1 ug/mL
					LCM5PFPEA_00005	200 uL	13C5-PFPeA	1 ug/mL
					LCM8FOSA_00008	200 uL	13C8 FOSA	1 ug/mL
					LCMPFBA_00005	200 uL	13C4 PFBA	1 ug/mL
					LCMPFDA_00007	200 uL	13C2 PFDA	1 ug/mL
					LCMPFDoA_00005	200 uL	13C2 PFDoA	1 ug/mL
					LCMPFHxA_00008	200 uL	13C2 PFHxA	1 ug/mL
					LCMPFHxS_00005	200 uL	1802 PFHxS	0.946 ug/mL
					LCMPFNA_00005	200 uL	13C5 PFNA	1 ug/mL
					LCMPFOA_00009	200 uL	13C4 PFOA	1 ug/mL
					LCMPFOS_00012	200 uL	13C4 PFOS	0.956 ug/mL
					LCMPFUDa_00006	200 uL	13C2 PFUnA	1 ug/mL
..LCM2PFHxDA_00004	01/07/21		Wellington Laboratories, Lot M2PFHxDA1112		(Purchased Reagent)		13C2-PFHxDA	50 ug/mL
..LCM2PFTeDA_00004	12/07/20		Wellington Laboratories, Lot M2PFTeDA1115		(Purchased Reagent)		13C2-PFTeDA	50 ug/mL
..LCM4PFHPA_00004	05/22/20		Wellington Laboratories, Lot M4PFHpA0515		(Purchased Reagent)		13C4-PFHpA	50 ug/mL
..LCM5PFPEA_00005	05/22/20		Wellington Laboratories, Lot M5PFPeA0515		(Purchased Reagent)		13C5-PFPeA	50 ug/mL
..LCM8FOSA_00008	12/22/17		Wellington Laboratories, Lot M8FOSA1215I		(Purchased Reagent)		13C8 FOSA	50 ug/mL
..LCMPFBA_00005	10/31/19		Wellington Laboratories, Lot MPFBA1014		(Purchased Reagent)		13C4 PFBA	50 ug/mL
..LCMPFDA_00007	08/19/20		Wellington Laboratories, Lot MPFDA0815		(Purchased Reagent)		13C2 PFDA	50 ug/mL
..LCMPFDoA_00005	07/17/19		Wellington Laboratories, Lot MPFDoA0714		(Purchased Reagent)		13C2 PFDoA	50 ug/mL
..LCMPFHxA_00008	04/09/20		Wellington Laboratories, Lot MPFHxA0415		(Purchased Reagent)		13C2 PFHxA	50 ug/mL
..LCMPFHxS_00005	08/23/20		Wellington Laboratories, Lot MPFHxS1015		(Purchased Reagent)		1802 PFHxS	47.3 ug/mL
..LCMPFNA_00005	04/13/19		Wellington Laboratories, Lot MPFNA0414		(Purchased Reagent)		13C5 PFNA	50 ug/mL
..LCMPFOA_00009	01/22/21		Wellington Laboratories, Lot MPFOA0116		(Purchased Reagent)		13C4 PFOA	50 ug/mL
..LCMPFOS_00012	01/22/21		Wellington Laboratories, Lot MPFOS0116		(Purchased Reagent)		13C4 PFOS	47.8 ug/mL
..LCMPFUDa_00006	10/31/19		Wellington Laboratories, Lot MPFUDa1014		(Purchased Reagent)		13C2 PFUnA	50 ug/mL
.LCPFCSU_00045	09/08/16	04/18/16	Methanol, Lot 090285	5 mL	LCPFCSU_00044	0.5 mL	Perfluorobutyric acid	0.1 ug/mL
							Perfluorobutanesulfonic acid (PFBS)	0.0884 ug/mL
							Perfluorodecanoic acid	0.1 ug/mL
							Perfluorododecanoic acid	0.1 ug/mL
							Perfluorodecane Sulfonic acid	0.0964 ug/mL
							Perfluoroheptanoic acid (PFHpA)	0.1 ug/mL
							Perfluoroheptanesulfonic Acid	0.0952 ug/mL
							Perfluorohexanoic acid	0.1 ug/mL

REAGENT TRACEABILITY SUMMARY

Lab Name: TestAmerica Sacramento

Job No.: 320-18796-1

SDG No.:

Reagent ID	Exp Date	Prep Date	Dilutant Used	Reagent Final Volume	Parent Reagent		Analyte	Concentration						
					Reagent ID	Volume Added								
							Perfluorohexadecanoic acid	0.1 ug/mL						
							Perfluorohexanesulfonic acid (PFHxS)	0.0946 ug/mL						
							Perfluorononanoic acid (PFNA)	0.1 ug/mL						
							Perfluorooctanoic acid (PFOA)	0.1 ug/mL						
							Perfluorooctadecanoic acid	0.1 ug/mL						
							Perfluorooctanesulfonic acid (PFOS)	0.0956 ug/mL						
							Perfluorooctane Sulfonamide	0.1 ug/mL						
							Perfluoropentanoic acid	0.1 ug/mL						
							Perfluorotetradecanoic acid	0.1 ug/mL						
..LCPFCSP_00044	09/08/16	03/08/16	Methanol, Lot 090285	10000 uL	LCPFBA_00003	200 uL	Perfluorobutyric acid	1 ug/mL						
					LCPFBSA_00001	200 uL	Perfluorobutanesulfonic acid (PFBS)	0.884 ug/mL						
					LCPFDA_00004	200 uL	Perfluorodecanoic acid	1 ug/mL						
					LCPFDoA_00004	200 uL	Perfluorododecanoic acid	1 ug/mL						
					LCPFDSA_00001	200 uL	Perfluorodecane Sulfonic acid	0.964 ug/mL						
					LCPFHpA_00004	200 uL	Perfluoroheptanoic acid (PFHpA)	1 ug/mL						
					LCPFHpSA_00001	200 uL	Perfluoroheptanesulfonic Acid	0.952 ug/mL						
					LCPFHxA_00003	200 uL	Perfluorohexanoic acid	1 ug/mL						
					LCPFHxDA_00004	200 uL	Perfluorohexadecanoic acid	1 ug/mL						
...LCPFBA_00003	03/05/18						(Purchased Reagent)	Perfluorobutyric acid	50 ug/mL					
							(Purchased Reagent)	Perfluorobutanesulfonic acid (PFBS)	44.2 ug/mL					
							(Purchased Reagent)	Perfluorodecanoic acid	50 ug/mL					
							(Purchased Reagent)	Perfluorododecanoic acid	50 ug/mL					
							(Purchased Reagent)	Perfluorodecane Sulfonic acid	48.2 ug/mL					
							(Purchased Reagent)	Perfluoroheptanoic acid (PFHpA)	50 ug/mL					
							(Purchased Reagent)	Perfluoroheptanesulfonic Acid	47.6 ug/mL					
							(Purchased Reagent)	Perfluorohexanoic acid	50 ug/mL					
							(Purchased Reagent)	Perfluorohexadecanoic acid	50 ug/mL					
							(Purchased Reagent)	Perfluorohexanesulfonic acid (PFHxS)	47.3 ug/mL					
							...LCPFBSA_00001	10/09/19	Wellington Laboratories, Lot LFPBS1014					
							...LCPFDA_00004	07/02/20	Wellington Laboratories, Lot PFDA0615					
							...LCPFDoA_00004	01/30/20	Wellington Laboratories, Lot PFDoA0115					
							...LCPFDSA_00001	09/13/18	Wellington Laboratories, Lot LFPDS0913					
							...LCPFHpA_00004	05/09/19	Wellington Laboratories, Lot PFHpA0514					
...LCPFHpSA_00001	11/21/17	Wellington Laboratories, Lot LFPHpS1112												
...LCPFHxA_00003	05/09/19	Wellington Laboratories, Lot PFHxA0514												
...LCPFHxDA_00004	11/28/17	Wellington Laboratories, Lot PFHxDA0707												
...LCPFHxSA_00001	05/09/19	Wellington Laboratories, Lot LFPFHxS0514												

REAGENT TRACEABILITY SUMMARY

Lab Name: TestAmerica Sacramento

Job No.: 320-18796-1

SDG No.: _____

Reagent ID	Exp Date	Prep Date	Dilutant Used	Reagent Final Volume	Parent Reagent		Analyte	Concentration
					Reagent ID	Volume Added		
...LCPFNA 00004	05/09/19		Wellington Laboratories, Lot PFNA0514		(Purchased Reagent)		Perfluorononanoic acid (PFNA)	50 ug/mL
...LCPFOA 00005	11/06/20		Wellington Laboratories, Lot PFOA1115		(Purchased Reagent)		Perfluorooctanoic acid (PFOA)	50 ug/mL
...LCPFODA 00004	04/25/17		Wellington Laboratories, Lot PFODA0807		(Purchased Reagent)		Perfluorooctadecanoic acid	50 ug/mL
...LCPFOS_00004	06/20/19		Wellington Laboratories, Lot LPFOS0614		(Purchased Reagent)		Perfluorooctanesulfonic acid (PFOS)	47.8 ug/mL
...LCPFOSA 00006	09/02/17		Wellington Laboratories, Lot FOSA0815I		(Purchased Reagent)		Perfluorooctane Sulfonamide	50 ug/mL
...LCPFPeA 00004	01/30/20		Wellington Laboratories, Lot PFPeA0115		(Purchased Reagent)		Perfluoropentanoic acid	50 ug/mL
...LCPFTeDA 00003	06/19/18		Wellington Laboratories, Lot PFTeDA0613		(Purchased Reagent)		Perfluorotetradecanoic acid	50 ug/mL
...LCPFTrDA 00003	12/10/18		Wellington Laboratories, Lot PFTTrDA1213		(Purchased Reagent)		Perfluorotridecanoic acid	50 ug/mL
...LCPFUdA 00003	06/19/18		Wellington Laboratories, Lot PFUdA0613		(Purchased Reagent)		Perfluoroundecanoic acid	50 ug/mL
LCPFC-L2_00018	06/29/16	12/30/15	MeOH/H2O, Lot 090285	5 mL	LCMPFCSU_00024	250 uL	13C2-PFHxDA	50 ng/mL
							13C2-PFTeDA	50 ng/mL
							13C4-PFHpA	50 ng/mL
							13C5-PFPeA	50 ng/mL
							13C8 FOSA	50 ng/mL
							13C4 PFBA	50 ng/mL
							13C2 PFDA	50 ng/mL
							13C2 PFDoA	50 ng/mL
							13C2 PFHxA	50 ng/mL
							18O2 PFHxS	47.3 ng/mL
							13C5 PFNA	50 ng/mL
							13C4 PFOA	50 ng/mL
							13C4 PFOS	47.8 ng/mL
							13C2 PFUnA	50 ng/mL
					LCPFCSP_00040	50 uL	Perfluorobutyric acid	1 ng/mL
							Perfluorobutanesulfonic acid (PFBS)	0.884 ng/mL
							Perfluorodecanoic acid	1 ng/mL
							Perfluorododecanoic acid	1 ng/mL
							Perfluorodecane Sulfonic acid	0.964 ng/mL
							Perfluoroheptanoic acid (PFHpA)	1 ng/mL
							Perfluoroheptanesulfonic Acid	0.952 ng/mL
							Perfluorohexanoic acid	1 ng/mL
							Perfluorohexadecanoic acid	1 ng/mL
							Perfluorohexanesulfonic acid (PFHxS)	0.946 ng/mL
							Perfluorononanoic acid (PFNA)	1 ng/mL
							Perfluorooctanoic acid (PFOA)	1 ng/mL
							Perfluorooctadecanoic acid	1 ng/mL
							Perfluorooctanesulfonic acid (PFOS)	0.956 ng/mL
							Perfluorooctane Sulfonamide	1 ng/mL
							Perfluoropentanoic acid	1 ng/mL
							Perfluorotetradecanoic acid	1 ng/mL
							Perfluorotridecanoic acid	1 ng/mL
							Perfluoroundecanoic acid	1 ng/mL

REAGENT TRACEABILITY SUMMARY

Lab Name: TestAmerica Sacramento

Job No.: 320-18796-1

SDG No.: _____

Reagent ID	Exp Date	Prep Date	Dilutant Used	Reagent Final Volume	Parent Reagent		Analyte	Concentration
					Reagent ID	Volume Added		
.LCMPFCSU_00024	06/29/16	12/29/15	Methanol, Lot Baker 115491	10 mL	LCM2PFHxDA_00003	0.2 mL	13C2-PFHxDA	1 ug/mL
					LCM2PFTeDA_00003	0.2 mL	13C2-PFTeDA	1 ug/mL
					LCM4PFHFA_00003	0.2 mL	13C4-PFHpA	1 ug/mL
					LCM5PFPEA_00004	0.2 mL	13C5-PFPeA	1 ug/mL
					LCM8FOSA_00006	0.2 mL	13C8_FOSA	1 ug/mL
					LCMPFBA_00004	0.2 mL	13C4_PFBA	1 ug/mL
					LCMPFDA_00004	0.2 mL	13C2_PFDA	1 ug/mL
					LCMPFDoA_00004	0.2 mL	13C2_PFDoA	1 ug/mL
					LCMPFHxA_00005	0.2 mL	13C2_PFHxA	1 ug/mL
					LCMPFHxS_00004	0.2 mL	18O2_PFHxS	0.946 ug/mL
					LCMPFNA_00003	0.2 mL	13C5_PFNA	1 ug/mL
					LCMPFOA_00007	0.2 mL	13C4_PFOA	1 ug/mL
					LCMPFOS_00009	0.2 mL	13C4_PFOS	0.956 ug/mL
					LCMPFUdA_00005	0.2 mL	13C2_PFUdA	1 ug/mL
..LCM2PFHxDA_00003	11/29/17	Wellington Laboratories, Lot M2PFHxDA1112			(Purchased Reagent)		13C2-PFHxDA	50 ug/mL
..LCM2PFTeDA_00003	11/29/17	Wellington Laboratories, Lot M2PFTeDA1112			(Purchased Reagent)		13C2-PFTeDA	50 ug/mL
..LCM4PFHFA_00003	05/22/20	Wellington Laboratories, Lot M4PFHFA0515			(Purchased Reagent)		13C4-PFHpA	50 ug/mL
..LCM5PFPEA_00004	05/22/20	Wellington Laboratories, Lot M5PFPeA0515			(Purchased Reagent)		13C5-PFPeA	50 ug/mL
..LCM8FOSA_00006	12/15/16	Wellington Laboratories, Lot M8FOSA1214I			(Purchased Reagent)		13C8_FOSA	50 ug/mL
..LCMPFBA_00004	10/31/19	Wellington Laboratories, Lot MPFBA1014			(Purchased Reagent)		13C4_PFBA	50 ug/mL
..LCMPFDA_00004	04/13/19	Wellington Laboratories, Lot MPFDA0414			(Purchased Reagent)		13C2_PFDA	50 ug/mL
..LCMPFDoA_00004	07/17/19	Wellington Laboratories, Lot MPFDoA0714			(Purchased Reagent)		13C2_PFDoA	50 ug/mL
..LCMPFHxA_00005	04/13/19	Wellington Laboratories, Lot MPFHxA0414			(Purchased Reagent)		13C2_PFHxA	50 ug/mL
..LCMPFHxS_00004	07/25/18	Wellington Laboratories, Lot MPFHxS0713			(Purchased Reagent)		18O2_PFHxS	47.3 ug/mL
..LCMPFNA_00003	04/13/19	Wellington Laboratories, Lot MPFNA0414			(Purchased Reagent)		13C5_PFNA	50 ug/mL
..LCMPFOA_00007	04/10/20	Wellington Laboratories, Lot MPFOA0415			(Purchased Reagent)		13C4_PFOA	50 ug/mL
..LCMPFOS_00009	05/15/20	Wellington Laboratories, Lot MPFOS0515			(Purchased Reagent)		13C4_PFOS	47.8 ug/mL
..LCMPFUdA_00005	10/31/19	Wellington Laboratories, Lot MPFUdA1014			(Purchased Reagent)		13C2_PFUdA	50 ug/mL
.LCPFCSU_00040	06/30/16	12/30/15	Methanol, Lot 090285	5 mL	LCPFCSU_00039	0.5 mL	Perfluorobutyric acid	0.1 ug/mL
							Perfluorobutanesulfonic acid (PFBS)	0.0884 ug/mL
							Perfluorodecanoic acid	0.1 ug/mL
							Perfluorododecanoic acid	0.1 ug/mL
							Perfluorodecane Sulfonic acid	0.0964 ug/mL
							Perfluoroheptanoic acid (PFHpA)	0.1 ug/mL
							Perfluoroheptanesulfonic Acid	0.0952 ug/mL
							Perfluorohexanoic acid	0.1 ug/mL
							Perfluorohexadecanoic acid	0.1 ug/mL
							Perfluorohexanesulfonic acid (PFHxS)	0.0946 ug/mL
							Perfluorononanoic acid (PFNA)	0.1 ug/mL
							Perfluorooctanoic acid (PFOA)	0.1 ug/mL
							Perfluorooctadecanoic acid	0.1 ug/mL
							Perfluorooctanesulfonic acid (PFOS)	0.0956 ug/mL
							Perfluorooctane Sulfonamide	0.1 ug/mL

REAGENT TRACEABILITY SUMMARY

Lab Name: TestAmerica Sacramento

Job No.: 320-18796-1

SDG No.: _____

Reagent ID	Exp Date	Prep Date	Dilutant Used	Reagent Final Volume	Parent Reagent		Analyte	Concentration
					Reagent ID	Volume Added		
							Perfluoropentanoic acid	0.1 ug/mL
							Perfluorotetradecanoic acid	0.1 ug/mL
							Perfluorotridecanoic acid	0.1 ug/mL
							Perfluoroundecanoic acid	0.1 ug/mL
..LCPFCSP_00039	06/30/16	12/30/15	Methanol, Lot 090285	5 mL	LCPFBA_00003	0.1 mL	Perfluorobutyric acid	1 ug/mL
					LCPFBSA_00001	0.1 mL	Perfluorobutanesulfonic acid (PFBS)	0.884 ug/mL
					LCPFDA_00003	0.1 mL	Perfluorodecanoic acid	1 ug/mL
					LCPFDoA_00003	0.1 mL	Perfluorododecanoic acid	1 ug/mL
					LCPFDSA_00001	0.1 mL	Perfluorodecane Sulfonic acid	0.964 ug/mL
					LCPFHpA_00004	0.1 mL	Perfluoroheptanoic acid (PFHpA)	1 ug/mL
					LCPFHpSA_00001	0.1 mL	Perfluoroheptanesulfonic Acid	0.952 ug/mL
					LCPFHxA_00003	0.1 mL	Perfluorohexanoic acid	1 ug/mL
					LCPFHxDA_00004	0.1 mL	Perfluorohexadecanoic acid	1 ug/mL
					LCPFHxSA_00001	0.1 mL	Perfluorohexanesulfonic acid (PFHxS)	0.946 ug/mL
					LCPFNA_00004	0.1 mL	Perfluorononanoic acid (PFNA)	1 ug/mL
					LCPFOA_00004	0.1 mL	Perfluorooctanoic acid (PFOA)	1 ug/mL
					LCPFODA_00004	0.1 mL	Perfluorooctandecanoic acid	1 ug/mL
					LCPFOS_00004	0.1 mL	Perfluorooctanesulfonic acid (PFOS)	0.956 ug/mL
					LCPFOSA_00005	0.1 mL	Perfluorooctane Sulfonamide	1 ug/mL
					LCPFPeA_00003	0.1 mL	Perfluoropentanoic acid	1 ug/mL
					LCPFTeDA_00003	0.1 mL	Perfluorotetradecanoic acid	1 ug/mL
					LCPFTTrDA_00003	0.1 mL	Perfluorotridecanoic acid	1 ug/mL
					LCPFUDA_00003	0.1 mL	Perfluoroundecanoic acid	1 ug/mL
...LCPFBA_00003	03/05/18		Wellington Laboratories, Lot PFBA0313		(Purchased Reagent)		Perfluorobutyric acid	50 ug/mL
...LCPFBSA_00001	10/09/19		Wellington Laboratories, Lot LPFBS1014		(Purchased Reagent)		Perfluorobutanesulfonic acid (PFBS)	44.2 ug/mL
...LCPFDA_00003	06/18/18		Wellington Laboratories, Lot PFDA0613		(Purchased Reagent)		Perfluorodecanoic acid	50 ug/mL
...LCPFDoA_00003	01/03/18		Wellington Laboratories, Lot PFDoA0113		(Purchased Reagent)		Perfluorododecanoic acid	50 ug/mL
...LCPFDSA_00001	09/13/18		Wellington Laboratories, Lot LPFDS0913		(Purchased Reagent)		Perfluorodecane Sulfonic acid	48.2 ug/mL
...LCPFHpA_00004	05/09/19		Wellington Laboratories, Lot PFHpA0514		(Purchased Reagent)		Perfluoroheptanoic acid (PFHpA)	50 ug/mL
...LCPFHpSA_00001	11/21/17		Wellington Laboratories, Lot LPFHpS1112		(Purchased Reagent)		Perfluoroheptanesulfonic Acid	47.6 ug/mL
...LCPFHxA_00003	05/09/19		Wellington Laboratories, Lot PFHxA0514		(Purchased Reagent)		Perfluorohexanoic acid	50 ug/mL
...LCPFHxDA_00004	11/28/17		Wellington Laboratories, Lot PFHxDA0707		(Purchased Reagent)		Perfluorohexadecanoic acid	50 ug/mL
...LCPFHxSA_00001	05/09/19		Wellington Laboratories, Lot LPFHxS0514		(Purchased Reagent)		Perfluorohexanesulfonic acid (PFHxS)	47.3 ug/mL
...LCPFNA_00004	05/09/19		Wellington Laboratories, Lot PFNA0514		(Purchased Reagent)		Perfluorononanoic acid (PFNA)	50 ug/mL
...LCPFOA_00004	10/11/18		Wellington Laboratories, Lot PFOA1013		(Purchased Reagent)		Perfluorooctanoic acid (PFOA)	50 ug/mL
...LCPFODA_00004	04/25/17		Wellington Laboratories, Lot PFODA0807		(Purchased Reagent)		Perfluorooctandecanoic acid	50 ug/mL
...LCPFOS_00004	06/20/19		Wellington Laboratories, Lot LPFOS0614		(Purchased Reagent)		Perfluorooctanesulfonic acid (PFOS)	47.8 ug/mL
...LCPFOSA_00005	07/31/18		Wellington Laboratories, Lot FOSA0714I		(Purchased Reagent)		Perfluorooctane Sulfonamide	50 ug/mL
...LCPFPeA_00003	01/03/18		Wellington Laboratories, Lot PFPeA0113		(Purchased Reagent)		Perfluoropentanoic acid	50 ug/mL
...LCPFTeDA_00003	06/19/18		Wellington Laboratories, Lot PFTeDA0613		(Purchased Reagent)		Perfluorotetradecanoic acid	50 ug/mL
...LCPFTTrDA_00003	12/10/18		Wellington Laboratories, Lot PFTTrDA1213		(Purchased Reagent)		Perfluorotridecanoic acid	50 ug/mL

REAGENT TRACEABILITY SUMMARY

Lab Name: TestAmerica Sacramento Job No.: 320-18796-1

SDG No.: _____

Reagent ID	Exp Date	Prep Date	Dilutant Used	Reagent Final Volume	Parent Reagent		Analyte	Concentration
					Reagent ID	Volume Added		
...LCPFUdA_00003	06/19/18		Wellington Laboratories, Lot PFUdA0613		(Purchased Reagent)		Perfluoroundecanoic acid	50 ug/mL
LCPFC-L2_00020	09/08/16	04/18/16	MeOH/H2O, Lot 090285	5 mL	LCMPFCSU_00036	250 uL	13C2-PFHxDA	50 ng/mL
							13C2-PFTEdA	50 ng/mL
							13C4-PFHpA	50 ng/mL
							13C5-PFPeA	50 ng/mL
							13C8 FOSA	50 ng/mL
							13C4 PFBA	50 ng/mL
							13C2 PFDA	50 ng/mL
							13C2 PFDoA	50 ng/mL
							13C2 PFHxA	50 ng/mL
							18O2 PFHxS	47.3 ng/mL
							13C5 PFNA	50 ng/mL
							13C4 PFOA	50 ng/mL
							13C4 PFOS	47.8 ng/mL
							13C2 PFUnA	50 ng/mL
					LCPFCSP_00045	50 uL	Perfluorobutyric acid	1 ng/mL
							Perfluorobutanesulfonic acid (PFBS)	0.884 ng/mL
							Perfluorodecanoic acid	1 ng/mL
							Perfluorododecanoic acid	1 ng/mL
							Perfluorodecane Sulfonic acid	0.964 ng/mL
							Perfluoroheptanoic acid (PFHpA)	1 ng/mL
							Perfluoroheptanesulfonic Acid	0.952 ng/mL
							Perfluorohexanoic acid	1 ng/mL
							Perfluorohexadecanoic acid	1 ng/mL
							Perfluorohexanesulfonic acid (PFHxS)	0.946 ng/mL
							Perfluorononanoic acid (PFNA)	1 ng/mL
							Perfluorooctanoic acid (PFOA)	1 ng/mL
							Perfluorooctadecanoic acid	1 ng/mL
							Perfluorooctanesulfonic acid (PFOS)	0.956 ng/mL
							Perfluorooctane Sulfonamide	1 ng/mL
							Perfluoropentanoic acid	1 ng/mL
							Perfluorotetradecanoic acid	1 ng/mL
							Perfluorotridecanoic acid	1 ng/mL
							Perfluoroundecanoic acid	1 ng/mL
.LCMPFCSU_00036	10/07/16	04/07/16	Methanol, Lot Baker 115935	10000 uL	LCM2PFHxDA_00004	200 uL	13C2-PFHxDA	1 ug/mL
					LCM2PFTEdA_00004	200 uL	13C2-PFTEdA	1 ug/mL
					LCM4PFHPA_00004	200 uL	13C4-PFHpA	1 ug/mL
					LCM5PFPEA_00005	200 uL	13C5-PFPeA	1 ug/mL
					LCM8FOSA_00008	200 uL	13C8 FOSA	1 ug/mL
					LCMPFBA_00005	200 uL	13C4 PFBA	1 ug/mL
					LCMPFDA_00007	200 uL	13C2 PFDA	1 ug/mL
					LCMPFDoA_00005	200 uL	13C2 PFDoA	1 ug/mL
					LCMPFHxA_00008	200 uL	13C2 PFHxA	1 ug/mL

REAGENT TRACEABILITY SUMMARY

Lab Name: TestAmerica Sacramento

Job No.: 320-18796-1

SDG No.: _____

Reagent ID	Exp Date	Prep Date	Dilutant Used	Reagent Final Volume	Parent Reagent		Analyte	Concentration
					Reagent ID	Volume Added		
					LCMPFHxS 00005	200 uL	1802 PFHxS	0.946 ug/mL
					LCMPFNA 00005	200 uL	13C5 PFNA	1 ug/mL
					LCMPFOA 00009	200 uL	13C4 PFOA	1 ug/mL
					LCMPFOS 00012	200 uL	13C4 PFOS	0.956 ug/mL
					LCMPFUDa 00006	200 uL	13C2 PFUnA	1 ug/mL
..LCM2PFHxDA 00004	01/07/21		Wellington Laboratories, Lot M2PFHxDA1112		(Purchased Reagent)		13C2-PFHxDA	50 ug/mL
..LCM2PFTeDA 00004	12/07/20		Wellington Laboratories, Lot M2PFTeDA1115		(Purchased Reagent)		13C2-PFTeDA	50 ug/mL
..LCM4PFHPA 00004	05/22/20		Wellington Laboratories, Lot M4PFHPA0515		(Purchased Reagent)		13C4-PFHpA	50 ug/mL
..LCM5PFPEA 00005	05/22/20		Wellington Laboratories, Lot M5PFPeA0515		(Purchased Reagent)		13C5-PFPeA	50 ug/mL
..LCM8FOSA 00008	12/22/17		Wellington Laboratories, Lot M8FOSA1215I		(Purchased Reagent)		13C8 FOSA	50 ug/mL
..LCMPFBA 00005	10/31/19		Wellington Laboratories, Lot MPFBA1014		(Purchased Reagent)		13C4 PFBA	50 ug/mL
..LCMPFDA 00007	08/19/20		Wellington Laboratories, Lot MPFDA0815		(Purchased Reagent)		13C2 PFDA	50 ug/mL
..LCMPFDoA 00005	07/17/19		Wellington Laboratories, Lot MPFDoA0714		(Purchased Reagent)		13C2 PFDoA	50 ug/mL
..LCMPFHxA 00008	04/09/20		Wellington Laboratories, Lot MPFHxA0415		(Purchased Reagent)		13C2 PFHxA	50 ug/mL
..LCMPFHxS 00005	08/23/20		Wellington Laboratories, Lot MPFHxS1015		(Purchased Reagent)		1802 PFHxS	47.3 ug/mL
..LCMPFNA 00005	04/13/19		Wellington Laboratories, Lot MPFNA0414		(Purchased Reagent)		13C5 PFNA	50 ug/mL
..LCMPFOA 00009	01/22/21		Wellington Laboratories, Lot MPFOA0116		(Purchased Reagent)		13C4 PFOA	50 ug/mL
..LCMPFOS 00012	01/22/21		Wellington Laboratories, Lot MPFOS0116		(Purchased Reagent)		13C4 PFOS	47.8 ug/mL
..LCMPFUDa 00006	10/31/19		Wellington Laboratories, Lot MPFUDa1014		(Purchased Reagent)		13C2 PFUnA	50 ug/mL
..LCPFCSF_00045	09/08/16	04/18/16	Methanol, Lot 090285	5 mL	LCPFCSF_00044	0.5 mL	Perfluorobutyric acid	0.1 ug/mL
							Perfluorobutanesulfonic acid (PFBS)	0.0884 ug/mL
							Perfluorodecanoic acid	0.1 ug/mL
							Perfluorododecanoic acid	0.1 ug/mL
							Perfluorodecane Sulfonic acid	0.0964 ug/mL
							Perfluoroheptanoic acid (PFHpA)	0.1 ug/mL
							Perfluoroheptanesulfonic Acid	0.0952 ug/mL
							Perfluorohexanoic acid	0.1 ug/mL
							Perfluorohexadecanoic acid	0.1 ug/mL
							Perfluorohexanesulfonic acid (PFHxS)	0.0946 ug/mL
							Perfluorononanoic acid (PFNA)	0.1 ug/mL
							Perfluorooctanoic acid (PFOA)	0.1 ug/mL
							Perfluorooctandecanoic acid	0.1 ug/mL
							Perfluorooctanesulfonic acid (PFOS)	0.0956 ug/mL
							Perfluorooctane Sulfonamide	0.1 ug/mL
							Perfluoropentanoic acid	0.1 ug/mL
							Perfluorotetradecanoic acid	0.1 ug/mL
							Perfluorotridecanoic acid	0.1 ug/mL
							Perfluoroundecanoic acid	0.1 ug/mL
..LCPFCSF_00044	09/08/16	03/08/16	Methanol, Lot 090285	10000 uL	LCPFBA 00003	200 uL	Perfluorobutyric acid	1 ug/mL
					LCPFBSA_00001	200 uL	Perfluorobutanesulfonic acid (PFBS)	0.884 ug/mL
					LCPFDA 00004	200 uL	Perfluorodecanoic acid	1 ug/mL
					LCPFDoA 00004	200 uL	Perfluorododecanoic acid	1 ug/mL
					LCPFDSA_00001	200 uL	Perfluorodecane Sulfonic acid	0.964 ug/mL

REAGENT TRACEABILITY SUMMARY

Lab Name: TestAmerica Sacramento

Job No.: 320-18796-1

SDG No.: _____

Reagent ID	Exp Date	Prep Date	Dilutant Used	Reagent Final Volume	Parent Reagent		Analyte	Concentration
					Reagent ID	Volume Added		
					LCPFHpA_00004	200 uL	Perfluoroheptanoic acid (PFHpA)	1 ug/mL
					LCPFHpSA_00001	200 uL	Perfluoroheptanesulfonic Acid	0.952 ug/mL
					LCPFHxA_00003	200 uL	Perfluorohexanoic acid	1 ug/mL
					LCPFHxDA_00004	200 uL	Perfluorohexadecanoic acid	1 ug/mL
					LCPFHxSA_00001	200 uL	Perfluorohexanesulfonic acid (PFHxS)	0.946 ug/mL
					LCPFNA_00004	200 uL	Perfluorononanoic acid (PFNA)	1 ug/mL
					LCPFOA_00005	200 uL	Perfluorooctanoic acid (PFOA)	1 ug/mL
					LCPFODA_00004	200 uL	Perfluorooctandecanoic acid	1 ug/mL
					LCPFOS_00004	200 uL	Perfluorooctanesulfonic acid (PFOS)	0.956 ug/mL
					LCPFOSA_00006	200 uL	Perfluorooctane Sulfonamide	1 ug/mL
					LCPFPeA_00004	200 uL	Perfluoropentanoic acid	1 ug/mL
					LCPFTeDA_00003	200 uL	Perfluorotetradecanoic acid	1 ug/mL
					LCPFTrDA_00003	200 uL	Perfluorotridecanoic acid	1 ug/mL
					LCPFUdA_00003	200 uL	Perfluoroundecanoic acid	1 ug/mL
...LCPFBA_00003	03/05/18	Wellington Laboratories, Lot PFBA0313			(Purchased Reagent)		Perfluorobutyric acid	50 ug/mL
...LCPFBSA_00001	10/09/19	Wellington Laboratories, Lot LPFBS1014			(Purchased Reagent)		Perfluorobutanesulfonic acid (PFBS)	44.2 ug/mL
...LCPFDA_00004	07/02/20	Wellington Laboratories, Lot PFDA0615			(Purchased Reagent)		Perfluorodecanoic acid	50 ug/mL
...LCPFDaA_00004	01/30/20	Wellington Laboratories, Lot PFDoA0115			(Purchased Reagent)		Perfluorododecanoic acid	50 ug/mL
...LCPFDSA_00001	09/13/18	Wellington Laboratories, Lot LPFDS0913			(Purchased Reagent)		Perfluorodecane Sulfonic acid	48.2 ug/mL
...LCPFHpA_00004	05/09/19	Wellington Laboratories, Lot PFHpA0514			(Purchased Reagent)		Perfluoroheptanoic acid (PFHpA)	50 ug/mL
...LCPFHpSA_00001	11/21/17	Wellington Laboratories, Lot LPFHps1112			(Purchased Reagent)		Perfluoroheptanesulfonic Acid	47.6 ug/mL
...LCPFHxA_00003	05/09/19	Wellington Laboratories, Lot PFHxA0514			(Purchased Reagent)		Perfluorohexanoic acid	50 ug/mL
...LCPFHxDA_00004	11/28/17	Wellington Laboratories, Lot PFHxDA0707			(Purchased Reagent)		Perfluorohexadecanoic acid	50 ug/mL
...LCPFHxSA_00001	05/09/19	Wellington Laboratories, Lot LPFHxS0514			(Purchased Reagent)		Perfluorohexanesulfonic acid (PFHxS)	47.3 ug/mL
...LCPFNA_00004	05/09/19	Wellington Laboratories, Lot PFNA0514			(Purchased Reagent)		Perfluorononanoic acid (PFNA)	50 ug/mL
...LCPFOA_00005	11/06/20	Wellington Laboratories, Lot PFOA1115			(Purchased Reagent)		Perfluorooctanoic acid (PFOA)	50 ug/mL
...LCPFODA_00004	04/25/17	Wellington Laboratories, Lot PFODA0807			(Purchased Reagent)		Perfluorooctandecanoic acid	50 ug/mL
...LCPFOS_00004	06/20/19	Wellington Laboratories, Lot LPFOS0614			(Purchased Reagent)		Perfluorooctanesulfonic acid (PFOS)	47.8 ug/mL
...LCPFOSA_00006	09/02/17	Wellington Laboratories, Lot FOSA0815I			(Purchased Reagent)		Perfluorooctane Sulfonamide	50 ug/mL
...LCPFPeA_00004	01/30/20	Wellington Laboratories, Lot PFPeA0115			(Purchased Reagent)		Perfluoropentanoic acid	50 ug/mL
...LCPFTeDA_00003	06/19/18	Wellington Laboratories, Lot PFTeDA0613			(Purchased Reagent)		Perfluorotetradecanoic acid	50 ug/mL
...LCPFTrDA_00003	12/10/18	Wellington Laboratories, Lot PFTTrDA1213			(Purchased Reagent)		Perfluorotridecanoic acid	50 ug/mL
...LCPFUdA_00003	06/19/18	Wellington Laboratories, Lot PFUdA0613			(Purchased Reagent)		Perfluoroundecanoic acid	50 ug/mL
LCPFC-L3_00016	06/29/16	12/30/15	MeOH/H2O, Lot 090285	5 mL	LCMPFCSU_00024	250 uL	13C2-PFHxDA	50 ng/mL
							13C2-PFTeDA	50 ng/mL
							13C4-PFHpA	50 ng/mL
							13C5-PFPeA	50 ng/mL
							13C8 FOSA	50 ng/mL
							13C4 PFBA	50 ng/mL
							13C2 PFDA	50 ng/mL
							13C2 PFDoA	50 ng/mL

REAGENT TRACEABILITY SUMMARY

Lab Name: TestAmerica Sacramento

Job No.: 320-18796-1

SDG No.:

Reagent ID	Exp Date	Prep Date	Dilutant Used	Reagent Final Volume	Parent Reagent		Analyte	Concentration
					Reagent ID	Volume Added		
							13C2 PFHxA	50 ng/mL
							18O2 PFHxS	47.3 ng/mL
							13C5 PFNA	50 ng/mL
							13C4 PFOA	50 ng/mL
							13C4 PFOS	47.8 ng/mL
					LCPFCSU_00040	250 uL	13C2 PFUnA	50 ng/mL
							Perfluorobutyric acid	5 ng/mL
							Perfluorobutanesulfonic acid (PFBS)	4.42 ng/mL
							Perfluorodecanoic acid	5 ng/mL
							Perfluorododecanoic acid	5 ng/mL
							Perfluorodecane Sulfonic acid (PFHpA)	4.82 ng/mL
							Perfluoroheptanoic acid	5 ng/mL
							Perfluoroheptanesulfonic Acid	4.76 ng/mL
							Perfluorohexanoic acid	5 ng/mL
							Perfluorohexadecanoic acid	5 ng/mL
							Perfluorohexanesulfonic acid (PFHxS)	4.73 ng/mL
							Perfluorononanoic acid (PFNA)	5 ng/mL
							Perfluorooctanoic acid (PFOA)	5 ng/mL
							Perfluorooctadecanoic acid	5 ng/mL
							Perfluorooctanesulfonic acid (PFOS)	4.78 ng/mL
							Perfluorooctane Sulfonamide	5 ng/mL
							Perfluoropentanoic acid	5 ng/mL
							Perfluorotetradecanoic acid	5 ng/mL
							Perfluorotridecanoic acid	5 ng/mL
							Perfluoroundecanoic acid	5 ng/mL
.LCMPFCSU_00024	06/29/16	12/29/15	Methanol, Lot Baker 115491	10 mL	LCM2PFHxDA_00003	0.2 mL	13C2-PFHxDA	1 ug/mL
					LCM2PFTeDA_00003	0.2 mL	13C2-PFTeDA	1 ug/mL
					LCM4PFHFA_00003	0.2 mL	13C4-PFHFA	1 ug/mL
					LCM5PFPEA_00004	0.2 mL	13C5-PFPeA	1 ug/mL
					LCM8FOSA_00006	0.2 mL	13C8 FOSA	1 ug/mL
					LCMPFBA_00004	0.2 mL	13C4 PFBA	1 ug/mL
					LCMPFDA_00004	0.2 mL	13C2 PFDA	1 ug/mL
					LCMPFDoA_00004	0.2 mL	13C2 PFDoA	1 ug/mL
					LCMPFHxA_00005	0.2 mL	13C2 PFHxA	1 ug/mL
					LCMPFHxS_00004	0.2 mL	18O2 PFHxS	0.946 ug/mL
					LCMPFNA_00003	0.2 mL	13C5 PFNA	1 ug/mL
					LCMPFOA_00007	0.2 mL	13C4 PFOA	1 ug/mL
					LCMPFOS_00009	0.2 mL	13C4 PFOS	0.956 ug/mL
					LCMPFUdA_00005	0.2 mL	13C2 PFUnA	1 ug/mL
					..LCM2PFHxDA_00003	11/29/17	Wellington Laboratories, Lot M2PFHxDA1112	
..LCM2PFTeDA_00003	11/29/17	Wellington Laboratories, Lot M2PFTeDA1112			(Purchased Reagent)		13C2-PFTeDA	50 ug/mL
..LCM4PFHFA_00003	05/22/20	Wellington Laboratories, Lot M4PFHFA0515			(Purchased Reagent)		13C4-PFHFA	50 ug/mL
..LCM5PFPEA_00004	05/22/20	Wellington Laboratories, Lot M5PFPeA0515			(Purchased Reagent)		13C5-PFPeA	50 ug/mL

REAGENT TRACEABILITY SUMMARY

Lab Name: TestAmerica Sacramento

Job No.: 320-18796-1

SDG No.: _____

Reagent ID	Exp Date	Prep Date	Dilutant Used	Reagent Final Volume	Parent Reagent		Analyte	Concentration
					Reagent ID	Volume Added		
..LCM8FOSA 00006	12/15/16		Wellington Laboratories, Lot M8FOSA1214I		(Purchased Reagent)		13C8 FOSA	50 ug/mL
..LCMPFBA 00004	10/31/19		Wellington Laboratories, Lot MPFBA1014		(Purchased Reagent)		13C4 PFBA	50 ug/mL
..LCMPFDA 00004	04/13/19		Wellington Laboratories, Lot MPFDA0414		(Purchased Reagent)		13C2 PFDA	50 ug/mL
..LCMPFDoA 00004	07/17/19		Wellington Laboratories, Lot MPFDoA0714		(Purchased Reagent)		13C2 PFDoA	50 ug/mL
..LCMPFHxA 00005	04/13/19		Wellington Laboratories, Lot MPFHxA0414		(Purchased Reagent)		13C2 PFHxA	50 ug/mL
..LCMPFHxS 00004	07/25/18		Wellington Laboratories, Lot MPFHxS0713		(Purchased Reagent)		18O2 PFHxS	47.3 ug/mL
..LCMPFNA 00003	04/13/19		Wellington Laboratories, Lot MPFNA0414		(Purchased Reagent)		13C5 PFNA	50 ug/mL
..LCMPFOA 00007	04/10/20		Wellington Laboratories, Lot MPFOA0415		(Purchased Reagent)		13C4 PFOA	50 ug/mL
..LCMPFOS 00009	05/15/20		Wellington Laboratories, Lot MPFOS0515		(Purchased Reagent)		13C4 PFOS	47.8 ug/mL
..LCMPFUDa 00005	10/31/19		Wellington Laboratories, Lot MPFUDa1014		(Purchased Reagent)		13C2 PFUnA	50 ug/mL
.LCPFCSP_00040	06/30/16	12/30/15	Methanol, Lot 090285	5 mL	LCPFCSP_00039	0.5 mL	Perfluorobutyric acid	0.1 ug/mL
							Perfluorobutanesulfonic acid (PFBS)	0.0884 ug/mL
							Perfluorodecanoic acid	0.1 ug/mL
							Perfluorododecanoic acid	0.1 ug/mL
							Perfluorodecane Sulfonic acid (PFHpA)	0.0964 ug/mL
							Perfluoroheptanoic acid (PFHpA)	0.1 ug/mL
							Perfluoroheptanesulfonic Acid	0.0952 ug/mL
							Perfluorohexanoic acid	0.1 ug/mL
							Perfluorohexadecanoic acid	0.1 ug/mL
							Perfluorohexanesulfonic acid (PFHxS)	0.0946 ug/mL
							Perfluorononanoic acid (PFNA)	0.1 ug/mL
							Perfluorooctanoic acid (PFOA)	0.1 ug/mL
							Perfluorooctadecanoic acid	0.1 ug/mL
							Perfluorooctanesulfonic acid (PFOS)	0.0956 ug/mL
							Perfluorooctane Sulfonamide	0.1 ug/mL
							Perfluoropentanoic acid	0.1 ug/mL
							Perfluorotetradecanoic acid	0.1 ug/mL
							Perfluorotridecanoic acid	0.1 ug/mL
							Perfluoroundecanoic acid	0.1 ug/mL
..LCPFCSP_00039	06/30/16	12/30/15	Methanol, Lot 090285	5 mL	LCPFBA 00003	0.1 mL	Perfluorobutyric acid	1 ug/mL
					LCPFBSA_00001	0.1 mL	Perfluorobutanesulfonic acid (PFBS)	0.884 ug/mL
					LCPFDA 00003	0.1 mL	Perfluorodecanoic acid	1 ug/mL
					LCPFDoA 00003	0.1 mL	Perfluorododecanoic acid	1 ug/mL
					LCPFDSA 00001	0.1 mL	Perfluorodecane Sulfonic acid	0.964 ug/mL
					LCPFHpA_00004	0.1 mL	Perfluoroheptanoic acid (PFHpA)	1 ug/mL
					LCPFHpSA 00001	0.1 mL	Perfluoroheptanesulfonic Acid	0.952 ug/mL
					LCPFHxA 00003	0.1 mL	Perfluorohexanoic acid	1 ug/mL
					LCPFHxDA 00004	0.1 mL	Perfluorohexadecanoic acid	1 ug/mL
					LCPFHxSA_00001	0.1 mL	Perfluorohexanesulfonic acid (PFHxS)	0.946 ug/mL
					LCPFNA 00004	0.1 mL	Perfluorononanoic acid (PFNA)	1 ug/mL
					LCPFOA 00004	0.1 mL	Perfluorooctanoic acid (PFOA)	1 ug/mL
					LCPFODA_00004	0.1 mL	Perfluorooctadecanoic acid	1 ug/mL

REAGENT TRACEABILITY SUMMARY

Lab Name: TestAmerica Sacramento

Job No.: 320-18796-1

SDG No.: _____

Reagent ID	Exp Date	Prep Date	Dilutant Used	Reagent Final Volume	Parent Reagent		Analyte	Concentration
					Reagent ID	Volume Added		
					LCPFOS_00004	0.1 mL	Perfluorooctanesulfonic acid (PFOS)	0.956 ug/mL
					LCPFOSA 00005	0.1 mL	Perfluorooctane Sulfonamide	1 ug/mL
					LCPFPeA 00003	0.1 mL	Perfluoropentanoic acid	1 ug/mL
					LCPFTeDA 00003	0.1 mL	Perfluorotetradecanoic acid	1 ug/mL
					LCPFTrDA 00003	0.1 mL	Perfluorotridecanoic acid	1 ug/mL
					LCPFUdA 00003	0.1 mL	Perfluoroundecanoic acid	1 ug/mL
...LCPFBA 00003	03/05/18	Wellington Laboratories, Lot PFBA0313			(Purchased Reagent)		Perfluorobutyric acid	50 ug/mL
...LCPFBSA_00001	10/09/19	Wellington Laboratories, Lot LPFBS1014			(Purchased Reagent)		Perfluorobutanesulfonic acid (PFBS)	44.2 ug/mL
...LCPFFDA 00003	06/18/18	Wellington Laboratories, Lot PFDA0613			(Purchased Reagent)		Perfluorodecanoic acid	50 ug/mL
...LCPFFDoA 00003	01/03/18	Wellington Laboratories, Lot PFDoA0113			(Purchased Reagent)		Perfluorododecanoic acid	50 ug/mL
...LCPFFDSA 00001	09/13/18	Wellington Laboratories, Lot LPFDS0913			(Purchased Reagent)		Perfluorodecane Sulfonic acid	48.2 ug/mL
...LCPFFHpA_00004	05/09/19	Wellington Laboratories, Lot PFHpA0514			(Purchased Reagent)		Perfluoroheptanoic acid (PFHpA)	50 ug/mL
...LCPFFHpSA 00001	11/21/17	Wellington Laboratories, Lot LPFFHpS1112			(Purchased Reagent)		Perfluoroheptanesulfonic Acid	47.6 ug/mL
...LCPFFHxA 00003	05/09/19	Wellington Laboratories, Lot PFHxA0514			(Purchased Reagent)		Perfluorohexanoic acid	50 ug/mL
...LCPFFHxDA 00004	11/28/17	Wellington Laboratories, Lot PFHxDA0707			(Purchased Reagent)		Perfluorohexadecanoic acid	50 ug/mL
...LCPFFHxSA_00001	05/09/19	Wellington Laboratories, Lot LPFHxS0514			(Purchased Reagent)		Perfluorohexanesulfonic acid (PFHxS)	47.3 ug/mL
...LCPFFNA 00004	05/09/19	Wellington Laboratories, Lot PFNA0514			(Purchased Reagent)		Perfluorononanoic acid (PFNA)	50 ug/mL
...LCPFFOA 00004	10/11/18	Wellington Laboratories, Lot PFOA1013			(Purchased Reagent)		Perfluorooctanoic acid (PFOA)	50 ug/mL
...LCPFFODA 00004	04/25/17	Wellington Laboratories, Lot PFODA0807			(Purchased Reagent)		Perfluorooctandecanoic acid	50 ug/mL
...LCPFOS_00004	06/20/19	Wellington Laboratories, Lot LPFOS0614			(Purchased Reagent)		Perfluorooctanesulfonic acid (PFOS)	47.8 ug/mL
...LCPFFOSA 00005	07/31/18	Wellington Laboratories, Lot FOSA0714I			(Purchased Reagent)		Perfluorooctane Sulfonamide	50 ug/mL
...LCPFPeA 00003	01/03/18	Wellington Laboratories, Lot PFPeA0113			(Purchased Reagent)		Perfluoropentanoic acid	50 ug/mL
...LCPFTeDA 00003	06/19/18	Wellington Laboratories, Lot PFTeDA0613			(Purchased Reagent)		Perfluorotetradecanoic acid	50 ug/mL
...LCPFTrDA 00003	12/10/18	Wellington Laboratories, Lot PFTTrDA1213			(Purchased Reagent)		Perfluorotridecanoic acid	50 ug/mL
...LCPFUdA 00003	06/19/18	Wellington Laboratories, Lot PFUdA0613			(Purchased Reagent)		Perfluoroundecanoic acid	50 ug/mL
LCPFC-L3_00017	09/08/16	04/18/16	MeOH/H2O, Lot 090285	5 mL	LCMPFCSU_00036	250 uL	13C2-PFHxDA	50 ng/mL
							13C2-PFTeDA	50 ng/mL
							13C4-PFHpA	50 ng/mL
							13C5-PFPeA	50 ng/mL
							13C8 FOSA	50 ng/mL
							13C4 PFBA	50 ng/mL
							13C2 PFDA	50 ng/mL
							13C2 PFDoA	50 ng/mL
							13C2 PFHxA	50 ng/mL
							18O2 PFHxS	47.3 ng/mL
							13C5 PFNA	50 ng/mL
							13C4 PFOA	50 ng/mL
							13C4 PFOS	47.8 ng/mL
							13C2 PFUnA	50 ng/mL
					LCPFCSP_00045	250 uL	Perfluorobutyric acid	5 ng/mL
							Perfluorobutanesulfonic acid (PFBS)	4.42 ng/mL
							Perfluorodecanoic acid	5 ng/mL

REAGENT TRACEABILITY SUMMARY

Lab Name: TestAmerica Sacramento

Job No.: 320-18796-1

SDG No.: _____

Reagent ID	Exp Date	Prep Date	Dilutant Used	Reagent Final Volume	Parent Reagent		Analyte	Concentration
					Reagent ID	Volume Added		
							Perfluorododecanoic acid	5 ng/mL
							Perfluorodecane Sulfonic acid	4.82 ng/mL
							Perfluoroheptanoic acid (PFHpA)	5 ng/mL
							Perfluoroheptanesulfonic Acid	4.76 ng/mL
							Perfluorohexanoic acid	5 ng/mL
							Perfluorohexadecanoic acid	5 ng/mL
							Perfluorohexanesulfonic acid (PFHxS)	4.73 ng/mL
							Perfluorononanoic acid (PFNA)	5 ng/mL
							Perfluorooctanoic acid (PFOA)	5 ng/mL
							Perfluorooctandecanoic acid	5 ng/mL
							Perfluorooctanesulfonic acid (PFOS)	4.78 ng/mL
							Perfluorooctane Sulfonamide	5 ng/mL
							Perfluoropentanoic acid	5 ng/mL
							Perfluorotetradecanoic acid	5 ng/mL
							Perfluorotridecanoic acid	5 ng/mL
							Perfluoroundecanoic acid	5 ng/mL
.LCMPFCSU_00036	10/07/16	04/07/16	Methanol, Lot Baker 115935	10000 uL	LCM2PFHxDA_00004	200 uL	13C2-PFHxDA	1 ug/mL
					LCM2PFTeDA_00004	200 uL	13C2-PFTeDA	1 ug/mL
					LCM4PFHFA_00004	200 uL	13C4-PFHFA	1 ug/mL
					LCM5PFPEA_00005	200 uL	13C5-PFPeA	1 ug/mL
					LCM8FOSA_00008	200 uL	13C8 FOSA	1 ug/mL
					LCMPFBA_00005	200 uL	13C4 PFBA	1 ug/mL
					LCMPFDA_00007	200 uL	13C2 PFDA	1 ug/mL
					LCMPFDoA_00005	200 uL	13C2 PFDoA	1 ug/mL
					LCMPFHxA_00008	200 uL	13C2 PFHxA	1 ug/mL
					LCMPFHxS_00005	200 uL	18O2 PFHxS	0.946 ug/mL
					LCMPFNA_00005	200 uL	13C5 PFNA	1 ug/mL
					LCMPFOA_00009	200 uL	13C4 PFOA	1 ug/mL
					LCMPFOS_00012	200 uL	13C4 PFOS	0.956 ug/mL
					LCMPFUDa_00006	200 uL	13C2 PFUnA	1 ug/mL
..LCM2PFHxDA_00004	01/07/21	Wellington Laboratories, Lot M2PFHxDA1112			(Purchased Reagent)		13C2-PFHxDA	50 ug/mL
..LCM2PFTeDA_00004	12/07/20	Wellington Laboratories, Lot M2PFTeDA1115			(Purchased Reagent)		13C2-PFTeDA	50 ug/mL
..LCM4PFHFA_00004	05/22/20	Wellington Laboratories, Lot M4PFHFA0515			(Purchased Reagent)		13C4-PFHFA	50 ug/mL
..LCM5PFPEA_00005	05/22/20	Wellington Laboratories, Lot M5PFPeA0515			(Purchased Reagent)		13C5-PFPeA	50 ug/mL
..LCM8FOSA_00008	12/22/17	Wellington Laboratories, Lot M8FOSA1215I			(Purchased Reagent)		13C8 FOSA	50 ug/mL
..LCMPFBA_00005	10/31/19	Wellington Laboratories, Lot MPFBA1014			(Purchased Reagent)		13C4 PFBA	50 ug/mL
..LCMPFDA_00007	08/19/20	Wellington Laboratories, Lot MPFDA0815			(Purchased Reagent)		13C2 PFDA	50 ug/mL
..LCMPFDoA_00005	07/17/19	Wellington Laboratories, Lot MPFDoA0714			(Purchased Reagent)		13C2 PFDoA	50 ug/mL
..LCMPFHxA_00008	04/09/20	Wellington Laboratories, Lot MPFHxA0415			(Purchased Reagent)		13C2 PFHxA	50 ug/mL
..LCMPFHxS_00005	08/23/20	Wellington Laboratories, Lot MPFHxS1015			(Purchased Reagent)		18O2 PFHxS	47.3 ug/mL
..LCMPFNA_00005	04/13/19	Wellington Laboratories, Lot MPFNA0414			(Purchased Reagent)		13C5 PFNA	50 ug/mL
..LCMPFOA_00009	01/22/21	Wellington Laboratories, Lot MPFOA0116			(Purchased Reagent)		13C4 PFOA	50 ug/mL
..LCMPFOS_00012	01/22/21	Wellington Laboratories, Lot MPFOS0116			(Purchased Reagent)		13C4 PFOS	47.8 ug/mL
..LCMPFUDa_00006	10/31/19	Wellington Laboratories, Lot MPFUDa1014			(Purchased Reagent)		13C2 PFUnA	50 ug/mL

REAGENT TRACEABILITY SUMMARY

Lab Name: TestAmerica Sacramento

Job No.: 320-18796-1

SDG No.: _____

Reagent ID	Exp Date	Prep Date	Dilutant Used	Reagent Final Volume	Parent Reagent		Analyte	Concentration
					Reagent ID	Volume Added		
.LCPFCSP_00045	09/08/16	04/18/16	Methanol, Lot 090285	5 mL	LCPFCSP_00044	0.5 mL	Perfluorobutyric acid	0.1 ug/mL
							Perfluorobutanesulfonic acid (PFBS)	0.0884 ug/mL
							Perfluorodecanoic acid	0.1 ug/mL
							Perfluorododecanoic acid	0.1 ug/mL
							Perfluorodecane Sulfonic acid	0.0964 ug/mL
							Perfluoroheptanoic acid (PFHpA)	0.1 ug/mL
							Perfluoroheptanesulfonic Acid	0.0952 ug/mL
							Perfluorohexanoic acid	0.1 ug/mL
							Perfluorohexadecanoic acid	0.1 ug/mL
							Perfluorohexanesulfonic acid (PFHxS)	0.0946 ug/mL
							Perfluorononanoic acid (PFNA)	0.1 ug/mL
							Perfluorooctanoic acid (PFOA)	0.1 ug/mL
							Perfluorooctadecanoic acid	0.1 ug/mL
							Perfluorooctanesulfonic acid (PFOS)	0.0956 ug/mL
							Perfluorooctane Sulfonamide	0.1 ug/mL
							Perfluoropentanoic acid	0.1 ug/mL
							Perfluorotetradecanoic acid	0.1 ug/mL
..LCPFCSP_00044	09/08/16	03/08/16	Methanol, Lot 090285	10000 uL	LCPFBA_00003	200 uL	Perfluorobutyric acid	1 ug/mL
					LCPFBSA_00001	200 uL	Perfluorobutanesulfonic acid (PFBS)	0.884 ug/mL
					LCPFDA_00004	200 uL	Perfluorodecanoic acid	1 ug/mL
					LCPFDoA_00004	200 uL	Perfluorododecanoic acid	1 ug/mL
					LCPFDSA_00001	200 uL	Perfluorodecane Sulfonic acid	0.964 ug/mL
					LCPFHpA_00004	200 uL	Perfluoroheptanoic acid (PFHpA)	1 ug/mL
					LCPFHpSA_00001	200 uL	Perfluoroheptanesulfonic Acid	0.952 ug/mL
					LCPFHxA_00003	200 uL	Perfluorohexanoic acid	1 ug/mL
					LCPFHxDA_00004	200 uL	Perfluorohexadecanoic acid	1 ug/mL
					LCPFHxSA_00001	200 uL	Perfluorohexanesulfonic acid (PFHxS)	0.946 ug/mL
					LCPFNA_00004	200 uL	Perfluorononanoic acid (PFNA)	1 ug/mL
					LCPFOA_00005	200 uL	Perfluorooctanoic acid (PFOA)	1 ug/mL
					LCPFODA_00004	200 uL	Perfluorooctadecanoic acid	1 ug/mL
					LCPFOS_00004	200 uL	Perfluorooctanesulfonic acid (PFOS)	0.956 ug/mL
					LCPFOSA_00006	200 uL	Perfluorooctane Sulfonamide	1 ug/mL
					LCPFPeA_00004	200 uL	Perfluoropentanoic acid	1 ug/mL
					LCPFTeDA_00003	200 uL	Perfluorotetradecanoic acid	1 ug/mL
...LCPFBA_00003	03/05/18	Wellington Laboratories, Lot PFBA0313			(Purchased Reagent)		Perfluorobutyric acid	50 ug/mL
					(Purchased Reagent)		Perfluorobutanesulfonic acid (PFBS)	44.2 ug/mL
...LCPFBSA_00001	10/09/19	Wellington Laboratories, Lot LPFBS1014						

REAGENT TRACEABILITY SUMMARY

Lab Name: TestAmerica Sacramento

Job No.: 320-18796-1

SDG No.:

Reagent ID	Exp Date	Prep Date	Dilutant Used	Reagent Final Volume	Parent Reagent		Analyte	Concentration
					Reagent ID	Volume Added		
...LCPFDA_00004	07/02/20		Wellington Laboratories, Lot PFDA0615		(Purchased Reagent)		Perfluorodecanoic acid	50 ug/mL
...LCPFDoA_00004	01/30/20		Wellington Laboratories, Lot PFDoA0115		(Purchased Reagent)		Perfluorododecanoic acid	50 ug/mL
...LCPFDSA_00001	09/13/18		Wellington Laboratories, Lot LPFDS0913		(Purchased Reagent)		Perfluorodecane Sulfonic acid	48.2 ug/mL
...LCPFHpA_00004	05/09/19		Wellington Laboratories, Lot PFHpA0514		(Purchased Reagent)		Perfluoroheptanoic acid (PFHpA)	50 ug/mL
...LCPFHpSA_00001	11/21/17		Wellington Laboratories, Lot LPFHpS1112		(Purchased Reagent)		Perfluoroheptanesulfonic Acid	47.6 ug/mL
...LCPFHxA_00003	05/09/19		Wellington Laboratories, Lot PFHxA0514		(Purchased Reagent)		Perfluorohexanoic acid	50 ug/mL
...LCPFHxDA_00004	11/28/17		Wellington Laboratories, Lot PFHxDA0707		(Purchased Reagent)		Perfluorohexadecanoic acid	50 ug/mL
...LCPFHxSA_00001	05/09/19		Wellington Laboratories, Lot LPFHxS0514		(Purchased Reagent)		Perfluorohexanesulfonic acid (PFHxS)	47.3 ug/mL
...LCPFNA_00004	05/09/19		Wellington Laboratories, Lot PFNA0514		(Purchased Reagent)		Perfluorononanoic acid (PFNA)	50 ug/mL
...LCPFOA_00005	11/06/20		Wellington Laboratories, Lot PFOA1115		(Purchased Reagent)		Perfluorooctanoic acid (PFOA)	50 ug/mL
...LCPFODA_00004	04/25/17		Wellington Laboratories, Lot PFODA0807		(Purchased Reagent)		Perfluorooctandecanoic acid	50 ug/mL
...LCPFOS_00004	06/20/19		Wellington Laboratories, Lot LPFOS0614		(Purchased Reagent)		Perfluorooctanesulfonic acid (PFOS)	47.8 ug/mL
...LCPFOSA_00006	09/02/17		Wellington Laboratories, Lot FOSA0815I		(Purchased Reagent)		Perfluorooctane Sulfonamide	50 ug/mL
...LCPFPeA_00004	01/30/20		Wellington Laboratories, Lot PFPeA0115		(Purchased Reagent)		Perfluoropentanoic acid	50 ug/mL
...LCPFTeDA_00003	06/19/18		Wellington Laboratories, Lot PFTeDA0613		(Purchased Reagent)		Perfluorotetradecanoic acid	50 ug/mL
...LCPFTrDA_00003	12/10/18		Wellington Laboratories, Lot PFTrDA1213		(Purchased Reagent)		Perfluorotridecanoic acid	50 ug/mL
...LCPFUdA_00003	06/19/18		Wellington Laboratories, Lot PFUdA0613		(Purchased Reagent)		Perfluoroundecanoic acid	50 ug/mL
LCFFC-L4_00018	08/11/16	03/02/16	MeOH/H2O, Lot 090285	5 mL	LCMPFCSU_00029	250 uL	13C2-PFHxDA	50 ng/mL
							13C2-PFTeDA	50 ng/mL
							13C4-PFHpA	50 ng/mL
							13C5-PFPeA	50 ng/mL
							13C8 FOSA	50 ng/mL
							13C4 PFBA	50 ng/mL
							13C2 PFDA	50 ng/mL
							13C2 PFDoA	50 ng/mL
							13C2 PFHxA	50 ng/mL
							18O2 PFHxS	47.3 ng/mL
							13C5 PFNA	50 ng/mL
							13C4 PFOA	50 ng/mL
							13C4 PFOS	47.8 ng/mL
							13C2 PFUnA	50 ng/mL
					LCMPFCSP_00041	100 uL	Perfluorobutyric acid	20 ng/mL
							Perfluorobutanesulfonic acid (PFBS)	17.68 ng/mL
							Perfluorodecanoic acid	20 ng/mL
							Perfluorododecanoic acid	20 ng/mL
							Perfluorodecane Sulfonic acid	19.28 ng/mL
							Perfluoroheptanoic acid (PFHpA)	20 ng/mL
							Perfluoroheptanesulfonic Acid	19.04 ng/mL
							Perfluorohexanoic acid	20 ng/mL
							Perfluorohexadecanoic acid	20 ng/mL
							Perfluorohexanesulfonic acid (PFHxS)	18.92 ng/mL
							Perfluorononanoic acid (PFNA)	20 ng/mL

REAGENT TRACEABILITY SUMMARY

Lab Name: TestAmerica Sacramento

Job No.: 320-18796-1

SDG No.: _____

Reagent ID	Exp Date	Prep Date	Dilutant Used	Reagent Final Volume	Parent Reagent		Analyte	Concentration
					Reagent ID	Volume Added		
							Perfluorooctanoic acid (PFOA)	20 ng/mL
							Perfluorooctadecanoic acid	20 ng/mL
							Perfluorooctanesulfonic acid (PFOS)	19.12 ng/mL
							Perfluorooctane Sulfonamide	20 ng/mL
							Perfluoropentanoic acid	20 ng/mL
							Perfluorotetradecanoic acid	20 ng/mL
							Perfluorotridecanoic acid	20 ng/mL
							Perfluoroundecanoic acid	20 ng/mL
.LCMPFCSU_00029	08/29/16	02/29/16	Methanol, Lot Baker 115491	10000 uL	LCM2PFHxDA_00003	200 uL	13C2-PFHxDA	1 ug/mL
					LCM2PFTeDA_00003	200 uL	13C2-PFTeDA	1 ug/mL
					LCM4PFHFA_00003	200 uL	13C4-PFHFA	1 ug/mL
					LCM5PFPEA_00004	200 uL	13C5-PFPeA	1 ug/mL
					LCM8FOSA_00007	200 uL	13C8 FOSA	1 ug/mL
					LCMPFBA_00004	200 uL	13C4 PFBA	1 ug/mL
					LCMPFDA_00006	200 uL	13C2 PFDA	1 ug/mL
					LCMPFDoA_00004	200 uL	13C2 PFDoA	1 ug/mL
					LCMPFHxA_00007	200 uL	13C2 PFHxA	1 ug/mL
					LCMPFHxS_00004	200 uL	1802 PFHxS	0.946 ug/mL
					LCMPFNA_00004	200 uL	13C5 PFNA	1 ug/mL
					LCMPFOA_00008	200 uL	13C4 PFOA	1 ug/mL
					LCMPFOS_00010	200 uL	13C4 PFOS	0.956 ug/mL
					LCMPFUDa_00005	200 uL	13C2 PFUnA	1 ug/mL
..LCM2PFHxDA_00003	11/29/17		Wellington Laboratories, Lot M2PFHxDA1112		(Purchased Reagent)		13C2-PFHxDA	50 ug/mL
..LCM2PFTeDA_00003	11/29/17		Wellington Laboratories, Lot M2PFTeDA1112		(Purchased Reagent)		13C2-PFTeDA	50 ug/mL
..LCM4PFHFA_00003	05/22/20		Wellington Laboratories, Lot M4PFHFA0515		(Purchased Reagent)		13C4-PFHFA	50 ug/mL
..LCM5PFPEA_00004	05/22/20		Wellington Laboratories, Lot M5PFPeA0515		(Purchased Reagent)		13C5-PFPeA	50 ug/mL
..LCM8FOSA_00007	12/15/16		Wellington Laboratories, Lot M8FOSA1214I		(Purchased Reagent)		13C8 FOSA	50 ug/mL
..LCMPFBA_00004	10/31/19		Wellington Laboratories, Lot MPFBA1014		(Purchased Reagent)		13C4 PFBA	50 ug/mL
..LCMPFDA_00006	08/19/20		Wellington Laboratories, Lot MPFDA0815		(Purchased Reagent)		13C2 PFDA	50 ug/mL
..LCMPFDoA_00004	07/17/19		Wellington Laboratories, Lot MPFDoA0714		(Purchased Reagent)		13C2 PFDoA	50 ug/mL
..LCMPFHxA_00007	04/09/20		Wellington Laboratories, Lot MPFHxA0415		(Purchased Reagent)		13C2 PFHxA	50 ug/mL
..LCMPFHxS_00004	07/25/18		Wellington Laboratories, Lot MPFHxS0713		(Purchased Reagent)		1802 PFHxS	47.3 ug/mL
..LCMPFNA_00004	04/13/19		Wellington Laboratories, Lot MPFNA0414		(Purchased Reagent)		13C5 PFNA	50 ug/mL
..LCMPFOA_00008	04/10/20		Wellington Laboratories, Lot MPFOA0415		(Purchased Reagent)		13C4 PFOA	50 ug/mL
..LCMPFOS_00010	05/15/20		Wellington Laboratories, Lot MPFOS0515		(Purchased Reagent)		13C4 PFOS	47.8 ug/mL
..LCMPFUDa_00005	10/31/19		Wellington Laboratories, Lot MPFUDa1014		(Purchased Reagent)		13C2 PFUnA	50 ug/mL
.LCPFCSP_00041	08/11/16	02/11/16	Methanol, Lot 090285	5 mL	LCPFBA_00003	0.1 mL	Perfluorobutyric acid	1 ug/mL
					LCPFBSA_00001	0.1 mL	Perfluorobutanesulfonic acid (PFBS)	0.884 ug/mL
					LCPFDA_00003	0.1 mL	Perfluorodecanoic acid	1 ug/mL
					LCPFDoA_00003	0.1 mL	Perfluorododecanoic acid	1 ug/mL
					LCPFDSA_00001	0.1 mL	Perfluorodecane Sulfonic acid	0.964 ug/mL
					LCPFHFA_00004	0.1 mL	Perfluoroheptanoic acid (PFHFA)	1 ug/mL
					LCPFHFA_00001	0.1 mL	Perfluoroheptanesulfonic Acid	0.952 ug/mL
					LCPFHxA_00003	0.1 mL	Perfluorohexanoic acid	1 ug/mL

REAGENT TRACEABILITY SUMMARY

Lab Name: TestAmerica Sacramento

Job No.: 320-18796-1

SDG No.: _____

Reagent ID	Exp Date	Prep Date	Dilutant Used	Reagent Final Volume	Parent Reagent		Analyte	Concentration
					Reagent ID	Volume Added		
					LCPFHxDA_00004	0.1 mL	Perfluorohexadecanoic acid	1 ug/mL
					LCPFHxSA_00001	0.1 mL	Perfluorohexanesulfonic acid (PFHxS)	0.946 ug/mL
					LCPFNA_00004	0.1 mL	Perfluorononanoic acid (PFNA)	1 ug/mL
					LCPFOA_00004	0.1 mL	Perfluorooctanoic acid (PFOA)	1 ug/mL
					LCPFODA_00004	0.1 mL	Perfluorooctandecanoic acid	1 ug/mL
					LCPFOS_00004	0.1 mL	Perfluorooctanesulfonic acid (PFOS)	0.956 ug/mL
					LCPFOSA_00005	0.1 mL	Perfluorooctane Sulfonamide	1 ug/mL
					LCPFPeA_00003	0.1 mL	Perfluoropentanoic acid	1 ug/mL
					LCPFTeDA_00003	0.1 mL	Perfluorotetradecanoic acid	1 ug/mL
					LCPFTrDA_00003	0.1 mL	Perfluorotridecanoic acid	1 ug/mL
					LCPFUdA_00003	0.1 mL	Perfluoroundecanoic acid	1 ug/mL
..LCPFBA_00003	03/05/18	Wellington Laboratories, Lot PFBA0313			(Purchased Reagent)		Perfluorobutyric acid	50 ug/mL
..LCPFBSA_00001	10/09/19	Wellington Laboratories, Lot LFPBS1014			(Purchased Reagent)		Perfluorobutanesulfonic acid (PFBS)	44.2 ug/mL
..LCPFDA_00003	06/18/18	Wellington Laboratories, Lot PFDA0613			(Purchased Reagent)		Perfluorodecanoic acid	50 ug/mL
..LCPFDoA_00003	01/03/18	Wellington Laboratories, Lot PFDoA0113			(Purchased Reagent)		Perfluorododecanoic acid	50 ug/mL
..LCPFDSA_00001	09/13/18	Wellington Laboratories, Lot LPFDS0913			(Purchased Reagent)		Perfluorodecane Sulfonic acid	48.2 ug/mL
..LCPFHpA_00004	05/09/19	Wellington Laboratories, Lot PFHpA0514			(Purchased Reagent)		Perfluoroheptanoic acid (PFHpA)	50 ug/mL
..LCPFHpSA_00001	11/21/17	Wellington Laboratories, Lot LPFHpS1112			(Purchased Reagent)		Perfluoroheptanesulfonic Acid	47.6 ug/mL
..LCPFHxA_00003	05/09/19	Wellington Laboratories, Lot PFHxA0514			(Purchased Reagent)		Perfluorohexanoic acid	50 ug/mL
..LCPFHxDA_00004	11/28/17	Wellington Laboratories, Lot PFHxDA0707			(Purchased Reagent)		Perfluorohexadecanoic acid	50 ug/mL
..LCPFHxSA_00001	05/09/19	Wellington Laboratories, Lot LPFHxS0514			(Purchased Reagent)		Perfluorohexanesulfonic acid (PFHxS)	47.3 ug/mL
..LCPFNA_00004	05/09/19	Wellington Laboratories, Lot PFNA0514			(Purchased Reagent)		Perfluorononanoic acid (PFNA)	50 ug/mL
..LCPFOA_00004	10/11/18	Wellington Laboratories, Lot PFOA1013			(Purchased Reagent)		Perfluorooctanoic acid (PFOA)	50 ug/mL
..LCPFODA_00004	04/25/17	Wellington Laboratories, Lot PFODA0807			(Purchased Reagent)		Perfluorooctandecanoic acid	50 ug/mL
..LCPFOS_00004	06/20/19	Wellington Laboratories, Lot LPFOS0614			(Purchased Reagent)		Perfluorooctanesulfonic acid (PFOS)	47.8 ug/mL
..LCPFOSA_00005	07/31/18	Wellington Laboratories, Lot FOSA0714I			(Purchased Reagent)		Perfluorooctane Sulfonamide	50 ug/mL
..LCPFPeA_00003	01/03/18	Wellington Laboratories, Lot PFPeA0113			(Purchased Reagent)		Perfluoropentanoic acid	50 ug/mL
..LCPFTeDA_00003	06/19/18	Wellington Laboratories, Lot PFTeDA0613			(Purchased Reagent)		Perfluorotetradecanoic acid	50 ug/mL
..LCPFTrDA_00003	12/10/18	Wellington Laboratories, Lot PFTTrDA1213			(Purchased Reagent)		Perfluorotridecanoic acid	50 ug/mL
..LCPFUdA_00003	06/19/18	Wellington Laboratories, Lot PFUdA0613			(Purchased Reagent)		Perfluoroundecanoic acid	50 ug/mL
LCPFC-L4_00020	09/08/16	04/18/16	MeOH/H2O, Lot 090285	5 mL	LCMPFCSU_00036	250 uL	13C2-PFHxDA	50 ng/mL
							13C2-PFTeDA	50 ng/mL
							13C4-PFHpA	50 ng/mL
							13C5-PFPeA	50 ng/mL
							13C8 FOSA	50 ng/mL
							13C4 PFBA	50 ng/mL
							13C2 PFDA	50 ng/mL
							13C2 PFDoA	50 ng/mL
							13C2 PFHxA	50 ng/mL
							18O2 PFHxS	47.3 ng/mL
							13C5 PFNA	50 ng/mL
							13C4 PFOA	50 ng/mL

REAGENT TRACEABILITY SUMMARY

Lab Name: TestAmerica Sacramento

Job No.: 320-18796-1

SDG No.: _____

Reagent ID	Exp Date	Prep Date	Dilutant Used	Reagent Final Volume	Parent Reagent		Analyte	Concentration
					Reagent ID	Volume Added		
					LCPFCSU_00044	100 uL	13C4 PFOS	47.8 ng/mL
							13C2 PFUnA	50 ng/mL
							Perfluorobutyric acid	20 ng/mL
							Perfluorobutanesulfonic acid (PFBS)	17.68 ng/mL
							Perfluorodecanoic acid	20 ng/mL
							Perfluorododecanoic acid	20 ng/mL
							Perfluorodecane Sulfonic acid	19.28 ng/mL
							Perfluoroheptanoic acid (PFHpA)	20 ng/mL
							Perfluoroheptanesulfonic Acid	19.04 ng/mL
							Perfluorohexanoic acid	20 ng/mL
							Perfluorohexadecanoic acid	20 ng/mL
							Perfluorohexanesulfonic acid (PFHxS)	18.92 ng/mL
							Perfluorononanoic acid (PFNA)	20 ng/mL
							Perfluorooctanoic acid (PFOA)	20 ng/mL
							Perfluorooctadecanoic acid	20 ng/mL
							Perfluorooctanesulfonic acid (PFOS)	19.12 ng/mL
							Perfluorooctane Sulfonamide	20 ng/mL
							Perfluoropentanoic acid	20 ng/mL
							Perfluorotetradecanoic acid	20 ng/mL
							Perfluorotridecanoic acid	20 ng/mL
Perfluoroundecanoic acid	20 ng/mL							
..LCMPFCSU_00036	10/07/16	04/07/16	Methanol, Lot Baker 115935	10000 uL	LCM2PFHxDA_00004	200 uL	13C2-PFHxDA	1 ug/mL
					LCM2PFTeDA_00004	200 uL	13C2-PFTeDA	1 ug/mL
					LCM4PFHFA_00004	200 uL	13C4-PFHFA	1 ug/mL
					LCM5PFPEA_00005	200 uL	13C5-PFPeA	1 ug/mL
					LCM8FOSA_00008	200 uL	13C8 FOSA	1 ug/mL
					LCMPFBA_00005	200 uL	13C4 PFBA	1 ug/mL
					LCMPFDA_00007	200 uL	13C2 PFDA	1 ug/mL
					LCMPFDoA_00005	200 uL	13C2 PFDoA	1 ug/mL
					LCMPFHxA_00008	200 uL	13C2 PFHxA	1 ug/mL
					LCMPFHxS_00005	200 uL	18O2 PFHxS	0.946 ug/mL
					LCMPFNA_00005	200 uL	13C5 PFNA	1 ug/mL
					LCMPFOA_00009	200 uL	13C4 PFOA	1 ug/mL
					LCMPFOS_00012	200 uL	13C4 PFOS	0.956 ug/mL
					LCMPFUdA_00006	200 uL	13C2 PFUnA	1 ug/mL
					..LCM2PFHxDA_00004	01/07/21	Wellington Laboratories, Lot M2PFHxDA1112	
..LCM2PFTeDA_00004	12/07/20	Wellington Laboratories, Lot M2PFTeDA1115			(Purchased Reagent)		13C2-PFTeDA	50 ug/mL
..LCM4PFHFA_00004	05/22/20	Wellington Laboratories, Lot M4PFHFA0515			(Purchased Reagent)		13C4-PFHFA	50 ug/mL
..LCM5PFPEA_00005	05/22/20	Wellington Laboratories, Lot M5PFPeA0515			(Purchased Reagent)		13C5-PFPeA	50 ug/mL
..LCM8FOSA_00008	12/22/17	Wellington Laboratories, Lot M8FOSA1215I			(Purchased Reagent)		13C8 FOSA	50 ug/mL
..LCMPFBA_00005	10/31/19	Wellington Laboratories, Lot MPFBA1014			(Purchased Reagent)		13C4 PFBA	50 ug/mL
..LCMPFDA_00007	08/19/20	Wellington Laboratories, Lot MPFDA0815			(Purchased Reagent)		13C2 PFDA	50 ug/mL
..LCMPFDoA_00005	07/17/19	Wellington Laboratories, Lot MPFDoA0714			(Purchased Reagent)		13C2 PFDoA	50 ug/mL

REAGENT TRACEABILITY SUMMARY

Lab Name: TestAmerica Sacramento

Job No.: 320-18796-1

SDG No.: _____

Reagent ID	Exp Date	Prep Date	Dilutant Used	Reagent Final Volume	Parent Reagent		Analyte	Concentration
					Reagent ID	Volume Added		
..LCMPFHxA 00008	04/09/20		Wellington Laboratories, Lot MPFHxA0415		(Purchased Reagent)		13C2 PFHxA	50 ug/mL
..LCMPFHxS 00005	08/23/20		Wellington Laboratories, Lot MPFHxS1015		(Purchased Reagent)		1802 PFHxS	47.3 ug/mL
..LCMPFNA 00005	04/13/19		Wellington Laboratories, Lot MPFNA0414		(Purchased Reagent)		13C5 PFNA	50 ug/mL
..LCMPFOA 00009	01/22/21		Wellington Laboratories, Lot MPFOA0116		(Purchased Reagent)		13C4 PFOA	50 ug/mL
..LCMPFOS 00012	01/22/21		Wellington Laboratories, Lot MPFOS0116		(Purchased Reagent)		13C4 PFOS	47.8 ug/mL
..LCMPFUdA 00006	10/31/19		Wellington Laboratories, Lot MPFUdA1014		(Purchased Reagent)		13C2 PFUnA	50 ug/mL
..LCPFCSP_00044	09/08/16	03/08/16	Methanol, Lot 090285	10000 uL	LCPFBA 00003	200 uL	Perfluorobutyric acid	1 ug/mL
					LCPFBSA_00001	200 uL	Perfluorobutanesulfonic acid (PFBS)	0.884 ug/mL
					LCPFDA 00004	200 uL	Perfluorodecanoic acid	1 ug/mL
					LCPFDoA 00004	200 uL	Perfluorododecanoic acid	1 ug/mL
					LCPFDSA 00001	200 uL	Perfluorodecane Sulfonic acid	0.964 ug/mL
					LCPFHpA_00004	200 uL	Perfluoroheptanoic acid (PFHpA)	1 ug/mL
					LCPFHpSA 00001	200 uL	Perfluoroheptanesulfonic Acid	0.952 ug/mL
					LCPFHxA 00003	200 uL	Perfluorohexanoic acid	1 ug/mL
					LCPFHxDA 00004	200 uL	Perfluorohexadecanoic acid	1 ug/mL
					LCPFHxSA_00001	200 uL	Perfluorohexanesulfonic acid (PFHxS)	0.946 ug/mL
					LCPFNA 00004	200 uL	Perfluorononanoic acid (PFNA)	1 ug/mL
					LCPFOA 00005	200 uL	Perfluorooctanoic acid (PFOA)	1 ug/mL
					LCPFODA 00004	200 uL	Perfluorooctandecanoic acid	1 ug/mL
					LCPFOS_00004	200 uL	Perfluorooctanesulfonic acid (PFOS)	0.956 ug/mL
					LCPFOSA 00006	200 uL	Perfluorooctane Sulfonamide	1 ug/mL
					LCPFPeA 00004	200 uL	Perfluoropentanoic acid	1 ug/mL
					LCPFTeDA 00003	200 uL	Perfluorotetradecanoic acid	1 ug/mL
					LCPFTTrDA 00003	200 uL	Perfluorotridecanoic acid	1 ug/mL
					LCPFUdA 00003	200 uL	Perfluoroundecanoic acid	1 ug/mL
..LCPFBA 00003	03/05/18		Wellington Laboratories, Lot PFBA0313		(Purchased Reagent)		Perfluorobutyric acid	50 ug/mL
..LCPFBSA_00001	10/09/19		Wellington Laboratories, Lot LPFBS1014		(Purchased Reagent)		Perfluorobutanesulfonic acid (PFBS)	44.2 ug/mL
..LCPFDA 00004	07/02/20		Wellington Laboratories, Lot PFDA0615		(Purchased Reagent)		Perfluorodecanoic acid	50 ug/mL
..LCPFDoA 00004	01/30/20		Wellington Laboratories, Lot PFDoA0115		(Purchased Reagent)		Perfluorododecanoic acid	50 ug/mL
..LCPFDSA 00001	09/13/18		Wellington Laboratories, Lot LPFDS0913		(Purchased Reagent)		Perfluorodecane Sulfonic acid	48.2 ug/mL
..LCPFHpA_00004	05/09/19		Wellington Laboratories, Lot PFHpA0514		(Purchased Reagent)		Perfluoroheptanoic acid (PFHpA)	50 ug/mL
..LCPFHpSA 00001	11/21/17		Wellington Laboratories, Lot LPFHpS1112		(Purchased Reagent)		Perfluoroheptanesulfonic Acid	47.6 ug/mL
..LCPFHxA 00003	05/09/19		Wellington Laboratories, Lot PFHxA0514		(Purchased Reagent)		Perfluorohexanoic acid	50 ug/mL
..LCPFHxDA 00004	11/28/17		Wellington Laboratories, Lot PFHxDA0707		(Purchased Reagent)		Perfluorohexadecanoic acid	50 ug/mL
..LCPFHxSA_00001	05/09/19		Wellington Laboratories, Lot LPFHxS0514		(Purchased Reagent)		Perfluorohexanesulfonic acid (PFHxS)	47.3 ug/mL
..LCPFNA 00004	05/09/19		Wellington Laboratories, Lot PFNA0514		(Purchased Reagent)		Perfluorononanoic acid (PFNA)	50 ug/mL
..LCPFOA 00005	11/06/20		Wellington Laboratories, Lot PFOA1115		(Purchased Reagent)		Perfluorooctanoic acid (PFOA)	50 ug/mL
..LCPFODA 00004	04/25/17		Wellington Laboratories, Lot PFODA0807		(Purchased Reagent)		Perfluorooctandecanoic acid	50 ug/mL
..LCPFOS_00004	06/20/19		Wellington Laboratories, Lot LPFOS0614		(Purchased Reagent)		Perfluorooctanesulfonic acid (PFOS)	47.8 ug/mL
..LCPFOSA 00006	09/02/17		Wellington Laboratories, Lot FOSA0815I		(Purchased Reagent)		Perfluorooctane Sulfonamide	50 ug/mL
..LCPFPeA_00004	01/30/20		Wellington Laboratories, Lot PFPeA0115		(Purchased Reagent)		Perfluoropentanoic acid	50 ug/mL

REAGENT TRACEABILITY SUMMARY

Lab Name: TestAmerica Sacramento Job No.: 320-18796-1

SDG No.: _____

Reagent ID	Exp Date	Prep Date	Dilutant Used	Reagent Final Volume	Parent Reagent		Analyte	Concentration
					Reagent ID	Volume Added		
..LCPFTeDA_00003	06/19/18		Wellington Laboratories, Lot PFTeDA0613		(Purchased Reagent)		Perfluorotetradecanoic acid	50 ug/mL
..LCPFTrDA_00003	12/10/18		Wellington Laboratories, Lot PFTrDA1213		(Purchased Reagent)		Perfluorotridecanoic acid	50 ug/mL
..LCPFUdA_00003	06/19/18		Wellington Laboratories, Lot PFUdA0613		(Purchased Reagent)		Perfluoroundecanoic acid	50 ug/mL
LCPFC-L5_00017	08/11/16	03/02/16	MeOH/H2O, Lot 090285	5 mL	LCMPFCSU_00029	250 uL	13C2-PFHxDA	50 ng/mL
							13C2-PFTeDA	50 ng/mL
							13C4-PFHpA	50 ng/mL
							13C5-PFPeA	50 ng/mL
							13C8 FOSA	50 ng/mL
							13C4 PFBA	50 ng/mL
							13C2 PFDA	50 ng/mL
							13C2 PFDoA	50 ng/mL
							13C2 PFHxA	50 ng/mL
							18O2 PFHxS	47.3 ng/mL
							13C5 PFNA	50 ng/mL
							13C4 PFOA	50 ng/mL
							13C4 PFOS	47.8 ng/mL
							13C2 PFUnA	50 ng/mL
					LCPFCSP_00041	250 uL	Perfluorobutyric acid	50 ng/mL
							Perfluorobutanesulfonic acid (PFBS)	44.2 ng/mL
							Perfluorodecanoic acid	50 ng/mL
							Perfluorododecanoic acid	50 ng/mL
							Perfluorodecane Sulfonic acid	48.2 ng/mL
							Perfluoroheptanoic acid (PFHpA)	50 ng/mL
							Perfluoroheptanesulfonic Acid	47.6 ng/mL
							Perfluorohexanoic acid	50 ng/mL
							Perfluorohexadecanoic acid	50 ng/mL
							Perfluorohexanesulfonic acid (PFHxS)	47.3 ng/mL
							Perfluorononanoic acid (PFNA)	50 ng/mL
							Perfluorooctanoic acid (PFOA)	50 ng/mL
							Perfluorooctadecanoic acid	50 ng/mL
							Perfluorooctanesulfonic acid (PFOS)	47.8 ng/mL
							Perfluorooctane Sulfonamide	50 ng/mL
							Perfluoropentanoic acid	50 ng/mL
							Perfluorotetradecanoic acid	50 ng/mL
							Perfluorotridecanoic acid	50 ng/mL
							Perfluoroundecanoic acid	50 ng/mL
.LCMPFCSU_00029	08/29/16	02/29/16	Methanol, Lot Baker 115491	10000 uL	LCM2PFHxDA_00003	200 uL	13C2-PFHxDA	1 ug/mL
					LCM2PFTeDA_00003	200 uL	13C2-PFTeDA	1 ug/mL
					LCM4PFHPA_00003	200 uL	13C4-PFHpA	1 ug/mL
					LCM5PFPeA_00004	200 uL	13C5-PFPeA	1 ug/mL
					LCM8FOSA_00007	200 uL	13C8 FOSA	1 ug/mL
					LCMPFBA_00004	200 uL	13C4 PFBA	1 ug/mL
					LCMPFDA_00006	200 uL	13C2 PFDA	1 ug/mL

REAGENT TRACEABILITY SUMMARY

Lab Name: TestAmerica Sacramento

Job No.: 320-18796-1

SDG No.: _____

Reagent ID	Exp Date	Prep Date	Dilutant Used	Reagent Final Volume	Parent Reagent		Analyte	Concentration
					Reagent ID	Volume Added		
					LCMPFDoA_00004	200 uL	13C2 PFDoA	1 ug/mL
					LCMPFHxA_00007	200 uL	13C2 PFHxA	1 ug/mL
					LCMPFHxS_00004	200 uL	18O2 PFHxS	0.946 ug/mL
					LCMPFNA_00004	200 uL	13C5 PFNA	1 ug/mL
					LCMPFOA_00008	200 uL	13C4 PFOA	1 ug/mL
					LCMPFOS_00010	200 uL	13C4 PFOS	0.956 ug/mL
					LCMPFUdA_00005	200 uL	13C2 PFUnA	1 ug/mL
..LCM2PFHxDA_00003	11/29/17	Wellington Laboratories, Lot M2PFHxDA1112			(Purchased Reagent)		13C2-PFHxDA	50 ug/mL
..LCM2PFTeDA_00003	11/29/17	Wellington Laboratories, Lot M2PFTeDA1112			(Purchased Reagent)		13C2-PFTeDA	50 ug/mL
..LCM4PFHPA_00003	05/22/20	Wellington Laboratories, Lot M4PFHPA0515			(Purchased Reagent)		13C4-PFHpA	50 ug/mL
..LCM5PFPEA_00004	05/22/20	Wellington Laboratories, Lot M5PFPeA0515			(Purchased Reagent)		13C5-PFPeA	50 ug/mL
..LCM8FOSA_00007	12/15/16	Wellington Laboratories, Lot M8FOSA1214I			(Purchased Reagent)		13C8 FOSA	50 ug/mL
..LCMPFBA_00004	10/31/19	Wellington Laboratories, Lot MPFBA1014			(Purchased Reagent)		13C4 PFBA	50 ug/mL
..LCMPFDA_00006	08/19/20	Wellington Laboratories, Lot MPFDA0815			(Purchased Reagent)		13C2 PFDA	50 ug/mL
..LCMPFDoA_00004	07/17/19	Wellington Laboratories, Lot MPFDoA0714			(Purchased Reagent)		13C2 PFDoA	50 ug/mL
..LCMPFHxA_00007	04/09/20	Wellington Laboratories, Lot MPFHxA0415			(Purchased Reagent)		13C2 PFHxA	50 ug/mL
..LCMPFHxS_00004	07/25/18	Wellington Laboratories, Lot MPFHxS0713			(Purchased Reagent)		18O2 PFHxS	47.3 ug/mL
..LCMPFNA_00004	04/13/19	Wellington Laboratories, Lot MPFNA0414			(Purchased Reagent)		13C5 PFNA	50 ug/mL
..LCMPFOA_00008	04/10/20	Wellington Laboratories, Lot MPFOA0415			(Purchased Reagent)		13C4 PFOA	50 ug/mL
..LCMPFOS_00010	05/15/20	Wellington Laboratories, Lot MPFOS0515			(Purchased Reagent)		13C4 PFOS	47.8 ug/mL
..LCMPFUdA_00005	10/31/19	Wellington Laboratories, Lot MPFUdA1014			(Purchased Reagent)		13C2 PFUnA	50 ug/mL
..LCPFCSP_00041	08/11/16	02/11/16 Methanol, Lot 090285		5 mL	LCPFBA_00003	0.1 mL	Perfluorobutyric acid	1 ug/mL
					LCPFBSA_00001	0.1 mL	Perfluorobutanesulfonic acid (PFBS)	0.884 ug/mL
					LCPFDA_00003	0.1 mL	Perfluorodecanoic acid	1 ug/mL
					LCPFDoA_00003	0.1 mL	Perfluorododecanoic acid	1 ug/mL
					LCPFDSA_00001	0.1 mL	Perfluorodecane Sulfonic acid	0.964 ug/mL
					LCPFHpA_00004	0.1 mL	Perfluoroheptanoic acid (PFHpA)	1 ug/mL
					LCPFHpSA_00001	0.1 mL	Perfluoroheptanesulfonic Acid	0.952 ug/mL
					LCPFHxA_00003	0.1 mL	Perfluorohexanoic acid	1 ug/mL
					LCPFHxDA_00004	0.1 mL	Perfluorohexadecanoic acid	1 ug/mL
					LCPFHxSA_00001	0.1 mL	Perfluorohexanesulfonic acid (PFHxS)	0.946 ug/mL
					LCPFNA_00004	0.1 mL	Perfluorononanoic acid (PFNA)	1 ug/mL
					LCPFOA_00004	0.1 mL	Perfluorooctanoic acid (PFOA)	1 ug/mL
					LCPFODA_00004	0.1 mL	Perfluorooctandecanoic acid	1 ug/mL
					LCPFOS_00004	0.1 mL	Perfluorooctanesulfonic acid (PFOS)	0.956 ug/mL
					LCPFOSA_00005	0.1 mL	Perfluorooctane Sulfonamide	1 ug/mL
					LCPFPeA_00003	0.1 mL	Perfluoropentanoic acid	1 ug/mL
					LCPFTeDA_00003	0.1 mL	Perfluorotetradecanoic acid	1 ug/mL
					LCPFTrDA_00003	0.1 mL	Perfluorotridecanoic acid	1 ug/mL
					LCPFUdA_00003	0.1 mL	Perfluoroundecanoic acid	1 ug/mL
..LCPFBA_00003	03/05/18	Wellington Laboratories, Lot PFBA0313			(Purchased Reagent)		Perfluorobutyric acid	50 ug/mL
..LCPFBSA_00001	10/09/19	Wellington Laboratories, Lot LPFBS1014			(Purchased Reagent)		Perfluorobutanesulfonic acid (PFBS)	44.2 ug/mL
..LCPFDA_00003	06/18/18	Wellington Laboratories, Lot PFDA0613			(Purchased Reagent)		Perfluorodecanoic acid	50 ug/mL

REAGENT TRACEABILITY SUMMARY

Lab Name: TestAmerica Sacramento

Job No.: 320-18796-1

SDG No.:

Reagent ID	Exp Date	Prep Date	Dilutant Used	Reagent Final Volume	Parent Reagent		Analyte	Concentration
					Reagent ID	Volume Added		
..LCPFDa 00003	01/03/18	Wellington Laboratories, Lot PFDoA0113			(Purchased Reagent)		Perfluorododecanoic acid	50 ug/mL
..LCPFDSA 00001	09/13/18	Wellington Laboratories, Lot LPFDS0913			(Purchased Reagent)		Perfluorodecane Sulfonic acid	48.2 ug/mL
..LCPFHpa_00004	05/09/19	Wellington Laboratories, Lot PFHpA0514			(Purchased Reagent)		Perfluoroheptanoic acid (PFHpA)	50 ug/mL
..LCPFHpSA 00001	11/21/17	Wellington Laboratories, Lot LPFHps1112			(Purchased Reagent)		Perfluoroheptanesulfonic Acid	47.6 ug/mL
..LCPFHxA 00003	05/09/19	Wellington Laboratories, Lot PFHxA0514			(Purchased Reagent)		Perfluorohexanoic acid	50 ug/mL
..LCPFHxDA 00004	11/28/17	Wellington Laboratories, Lot PFHxDA0707			(Purchased Reagent)		Perfluorohexadecanoic acid	50 ug/mL
..LCPFHxSA_00001	05/09/19	Wellington Laboratories, Lot LPFHxS0514			(Purchased Reagent)		Perfluorohexanesulfonic acid (PFHxS)	47.3 ug/mL
..LCPFNA 00004	05/09/19	Wellington Laboratories, Lot PFNA0514			(Purchased Reagent)		Perfluorononanoic acid (PFNA)	50 ug/mL
..LCPFOA 00004	10/11/18	Wellington Laboratories, Lot PFOA1013			(Purchased Reagent)		Perfluorooctanoic acid (PFOA)	50 ug/mL
..LCPFODA 00004	04/25/17	Wellington Laboratories, Lot PFODA0807			(Purchased Reagent)		Perfluorooctandecanoic acid	50 ug/mL
..LCPFOS_00004	06/20/19	Wellington Laboratories, Lot LPFOS0614			(Purchased Reagent)		Perfluorooctanesulfonic acid (PFOS)	47.8 ug/mL
..LCPFOSA 00005	07/31/18	Wellington Laboratories, Lot FOSA0714I			(Purchased Reagent)		Perfluorooctane Sulfonamide	50 ug/mL
..LCPFPeA 00003	01/03/18	Wellington Laboratories, Lot PFPeA0113			(Purchased Reagent)		Perfluoropentanoic acid	50 ug/mL
..LCPFTeDA 00003	06/19/18	Wellington Laboratories, Lot PFTeDA0613			(Purchased Reagent)		Perfluorotetradecanoic acid	50 ug/mL
..LCPFTrDA 00003	12/10/18	Wellington Laboratories, Lot PFTrDA1213			(Purchased Reagent)		Perfluorotridecanoic acid	50 ug/mL
..LCPFUdA_00003	06/19/18	Wellington Laboratories, Lot PFUdA0613			(Purchased Reagent)		Perfluoroundecanoic acid	50 ug/mL
LCPFC-L5_00018	09/08/16	04/18/16	MeOH/H2O, Lot 090285	5 mL	LCMPFCSU_00036	250 uL	13C2-PFHxDA	50 ng/mL
							13C2-PFTeDA	50 ng/mL
							13C4-PFHpa	50 ng/mL
							13C5-PFPeA	50 ng/mL
							13C8 FOSA	50 ng/mL
							13C4 PFBA	50 ng/mL
							13C2 PFDA	50 ng/mL
							13C2 PFDoA	50 ng/mL
							13C2 PFHxA	50 ng/mL
							18O2 PFHxS	47.3 ng/mL
							13C5 PFNA	50 ng/mL
							13C4 PFOA	50 ng/mL
							13C4 PFOS	47.8 ng/mL
							13C2 PFUnA	50 ng/mL
					LCPFCSP_00044	250 uL	Perfluorobutyric acid	50 ng/mL
							Perfluorobutanesulfonic acid (PFBS)	44.2 ng/mL
							Perfluorodecanoic acid	50 ng/mL
							Perfluorododecanoic acid	50 ng/mL
							Perfluorodecane Sulfonic acid	48.2 ng/mL
							Perfluoroheptanoic acid (PFHpA)	50 ng/mL
							Perfluoroheptanesulfonic Acid	47.6 ng/mL
							Perfluorohexanoic acid	50 ng/mL
							Perfluorohexadecanoic acid	50 ng/mL
							Perfluorohexanesulfonic acid (PFHxS)	47.3 ng/mL
							Perfluorononanoic acid (PFNA)	50 ng/mL
							Perfluorooctanoic acid (PFOA)	50 ng/mL

REAGENT TRACEABILITY SUMMARY

Lab Name: TestAmerica Sacramento

Job No.: 320-18796-1

SDG No.: _____

Reagent ID	Exp Date	Prep Date	Dilutant Used	Reagent Final Volume	Parent Reagent		Analyte	Concentration
					Reagent ID	Volume Added		
							Perfluorooctadecanoic acid	50 ng/mL
							Perfluorooctanesulfonic acid (PFOS)	47.8 ng/mL
							Perfluorooctane Sulfonamide	50 ng/mL
							Perfluoropentanoic acid	50 ng/mL
							Perfluorotetradecanoic acid	50 ng/mL
							Perfluorotridecanoic acid	50 ng/mL
							Perfluoroundecanoic acid	50 ng/mL
.LCMPFCSU_00036	10/07/16	04/07/16	Methanol, Lot Baker 115935	10000 uL	LCM2PFHxDA_00004	200 uL	13C2-PFHxDA	1 ug/mL
					LCM2PFTeDA_00004	200 uL	13C2-PFTeDA	1 ug/mL
					LCM4PFHFA_00004	200 uL	13C4-PFHFA	1 ug/mL
					LCM5PFPEA_00005	200 uL	13C5-PFPeA	1 ug/mL
					LCM8FOSA_00008	200 uL	13C8 FOSA	1 ug/mL
					LCMPFBA_00005	200 uL	13C4 PFBA	1 ug/mL
					LCMPFDA_00007	200 uL	13C2 PFDA	1 ug/mL
					LCMPFDoA_00005	200 uL	13C2 PFDoA	1 ug/mL
					LCMPFHxA_00008	200 uL	13C2 PFHxA	1 ug/mL
					LCMPFHxS_00005	200 uL	18O2 PFHxS	0.946 ug/mL
					LCMPFNA_00005	200 uL	13C5 PFNA	1 ug/mL
					LCMPFOA_00009	200 uL	13C4 PFOA	1 ug/mL
					LCMPFOS_00012	200 uL	13C4 PFOS	0.956 ug/mL
					LCMPFUDa_00006	200 uL	13C2 PFUnA	1 ug/mL
..LCM2PFHxDA_00004	01/07/21	Wellington Laboratories, Lot M2PFHxDA1112			(Purchased Reagent)		13C2-PFHxDA	50 ug/mL
..LCM2PFTeDA_00004	12/07/20	Wellington Laboratories, Lot M2PFTeDA1115			(Purchased Reagent)		13C2-PFTeDA	50 ug/mL
..LCM4PFHFA_00004	05/22/20	Wellington Laboratories, Lot M4PFHFA0515			(Purchased Reagent)		13C4-PFHFA	50 ug/mL
..LCM5PFPEA_00005	05/22/20	Wellington Laboratories, Lot M5PFPeA0515			(Purchased Reagent)		13C5-PFPeA	50 ug/mL
..LCM8FOSA_00008	12/22/17	Wellington Laboratories, Lot M8FOSA1215I			(Purchased Reagent)		13C8 FOSA	50 ug/mL
..LCMPFBA_00005	10/31/19	Wellington Laboratories, Lot MPFBA1014			(Purchased Reagent)		13C4 PFBA	50 ug/mL
..LCMPFDA_00007	08/19/20	Wellington Laboratories, Lot MPFDA0815			(Purchased Reagent)		13C2 PFDA	50 ug/mL
..LCMPFDoA_00005	07/17/19	Wellington Laboratories, Lot MPFDoA0714			(Purchased Reagent)		13C2 PFDoA	50 ug/mL
..LCMPFHxA_00008	04/09/20	Wellington Laboratories, Lot MPFHxA0415			(Purchased Reagent)		13C2 PFHxA	50 ug/mL
..LCMPFHxS_00005	08/23/20	Wellington Laboratories, Lot MPFHxS1015			(Purchased Reagent)		18O2 PFHxS	47.3 ug/mL
..LCMPFNA_00005	04/13/19	Wellington Laboratories, Lot MPFNA0414			(Purchased Reagent)		13C5 PFNA	50 ug/mL
..LCMPFOA_00009	01/22/21	Wellington Laboratories, Lot MPFOA0116			(Purchased Reagent)		13C4 PFOA	50 ug/mL
..LCMPFOS_00012	01/22/21	Wellington Laboratories, Lot MPFOS0116			(Purchased Reagent)		13C4 PFOS	47.8 ug/mL
..LCMPFUDa_00006	10/31/19	Wellington Laboratories, Lot MPFUDa1014			(Purchased Reagent)		13C2 PFUnA	50 ug/mL
.LCPFCSP_00044	09/08/16	03/08/16	Methanol, Lot 090285	10000 uL	LCPFBA_00003	200 uL	Perfluorobutyric acid	1 ug/mL
					LCPFBSA_00001	200 uL	Perfluorobutanesulfonic acid (PFBS)	0.884 ug/mL
					LCPFDA_00004	200 uL	Perfluorodecanoic acid	1 ug/mL
					LCPFDoA_00004	200 uL	Perfluorododecanoic acid	1 ug/mL
					LCPFDFA_00001	200 uL	Perfluorodecane Sulfonic acid	0.964 ug/mL
					LCPFHFA_00004	200 uL	Perfluoroheptanoic acid (PFHpA)	1 ug/mL
					LCPFHPSA_00001	200 uL	Perfluoroheptanesulfonic Acid	0.952 ug/mL
					LCPFHxA_00003	200 uL	Perfluorohexanoic acid	1 ug/mL
					LCPFHxDA_00004	200 uL	Perfluorohexadecanoic acid	1 ug/mL

REAGENT TRACEABILITY SUMMARY

Lab Name: TestAmerica Sacramento

Job No.: 320-18796-1

SDG No.: _____

Reagent ID	Exp Date	Prep Date	Dilutant Used	Reagent Final Volume	Parent Reagent		Analyte	Concentration
					Reagent ID	Volume Added		
					LCPFHxSA_00001	200 uL	Perfluorohexanesulfonic acid (PFHxS)	0.946 ug/mL
					LCPFNA_00004	200 uL	Perfluorononanoic acid (PFNA)	1 ug/mL
					LCPFOA_00005	200 uL	Perfluorooctanoic acid (PFOA)	1 ug/mL
					LCPFODA_00004	200 uL	Perfluorooctadecanoic acid	1 ug/mL
					LCPFOS_00004	200 uL	Perfluorooctanesulfonic acid (PFOS)	0.956 ug/mL
					LCPFOSA_00006	200 uL	Perfluorooctane Sulfonamide	1 ug/mL
					LCPFPeA_00004	200 uL	Perfluoropentanoic acid	1 ug/mL
					LCPFTeDA_00003	200 uL	Perfluorotetradecanoic acid	1 ug/mL
					LCPFTrDA_00003	200 uL	Perfluorotridecanoic acid	1 ug/mL
					LCPFUDA_00003	200 uL	Perfluoroundecanoic acid	1 ug/mL
..LCPFBA_00003	03/05/18		Wellington Laboratories, Lot PFBA0313		(Purchased Reagent)		Perfluorobutyric acid	50 ug/mL
..LCPFBSA_00001	10/09/19		Wellington Laboratories, Lot LPFBS1014		(Purchased Reagent)		Perfluorobutanesulfonic acid (PFBS)	44.2 ug/mL
..LCPFDA_00004	07/02/20		Wellington Laboratories, Lot PFDA0615		(Purchased Reagent)		Perfluorodecanoic acid	50 ug/mL
..LCPFDoA_00004	01/30/20		Wellington Laboratories, Lot PFDoA0115		(Purchased Reagent)		Perfluorododecanoic acid	50 ug/mL
..LCPFDSA_00001	09/13/18		Wellington Laboratories, Lot LPFDS0913		(Purchased Reagent)		Perfluorodecane Sulfonic acid	48.2 ug/mL
..LCPFHpA_00004	05/09/19		Wellington Laboratories, Lot PFHpA0514		(Purchased Reagent)		Perfluoroheptanoic acid (PFHpA)	50 ug/mL
..LCPFHpSA_00001	11/21/17		Wellington Laboratories, Lot LPFHpS1112		(Purchased Reagent)		Perfluoroheptanesulfonic Acid	47.6 ug/mL
..LCPFHxA_00003	05/09/19		Wellington Laboratories, Lot PFHxA0514		(Purchased Reagent)		Perfluorohexanoic acid	50 ug/mL
..LCPFHxDA_00004	11/28/17		Wellington Laboratories, Lot PFHxDA0707		(Purchased Reagent)		Perfluorohexadecanoic acid	50 ug/mL
..LCPFHxSA_00001	05/09/19		Wellington Laboratories, Lot LPFHxS0514		(Purchased Reagent)		Perfluorohexanesulfonic acid (PFHxS)	47.3 ug/mL
..LCPFNA_00004	05/09/19		Wellington Laboratories, Lot PFNA0514		(Purchased Reagent)		Perfluorononanoic acid (PFNA)	50 ug/mL
..LCPFOA_00005	11/06/20		Wellington Laboratories, Lot PFOA1115		(Purchased Reagent)		Perfluorooctanoic acid (PFOA)	50 ug/mL
..LCPFODA_00004	04/25/17		Wellington Laboratories, Lot PFODA0807		(Purchased Reagent)		Perfluorooctadecanoic acid	50 ug/mL
..LCPFOS_00004	06/20/19		Wellington Laboratories, Lot LPFOS0614		(Purchased Reagent)		Perfluorooctanesulfonic acid (PFOS)	47.8 ug/mL
..LCPFOSA_00006	09/02/17		Wellington Laboratories, Lot FOSA0815I		(Purchased Reagent)		Perfluorooctane Sulfonamide	50 ug/mL
..LCPFPeA_00004	01/30/20		Wellington Laboratories, Lot PFPeA0115		(Purchased Reagent)		Perfluoropentanoic acid	50 ug/mL
..LCPFTeDA_00003	06/19/18		Wellington Laboratories, Lot PFTeDA0613		(Purchased Reagent)		Perfluorotetradecanoic acid	50 ug/mL
..LCPFTrDA_00003	12/10/18		Wellington Laboratories, Lot PFTrDA1213		(Purchased Reagent)		Perfluorotridecanoic acid	50 ug/mL
..LCPFUDA_00003	06/19/18		Wellington Laboratories, Lot PFUDA0613		(Purchased Reagent)		Perfluoroundecanoic acid	50 ug/mL
LCPFC-L6_00015	06/29/16	12/30/15	MeOH/H2O, Lot 090285	2 mL	LCPMFCSU_00024	100 uL	13C2-PFHxDA	50 ng/mL
							13C2-PFTeDA	50 ng/mL
							13C4-PFHpA	50 ng/mL
							13C5-PFPeA	50 ng/mL
							13C8 FOSA	50 ng/mL
							13C4 PFBA	50 ng/mL
							13C2 PFDA	50 ng/mL
							13C2 PFDoA	50 ng/mL
							13C2 PFHxA	50 ng/mL
							18O2 PFHxS	47.3 ng/mL
							13C5 PFNA	50 ng/mL
							13C4 PFOA	50 ng/mL
							13C4 PFOS	47.8 ng/mL

REAGENT TRACEABILITY SUMMARY

Lab Name: TestAmerica Sacramento

Job No.: 320-18796-1

SDG No.: _____

Reagent ID	Exp Date	Prep Date	Dilutant Used	Reagent Final Volume	Parent Reagent		Analyte	Concentration
					Reagent ID	Volume Added		
					LCPFCSP_00039	400 uL	13C2 PFUnA	50 ng/mL
							Perfluorobutyric acid	200 ng/mL
							Perfluorobutanesulfonic acid (PFBS)	176.8 ng/mL
							Perfluorodecanoic acid	200 ng/mL
							Perfluorododecanoic acid	200 ng/mL
							Perfluorodecane Sulfonic acid	192.8 ng/mL
							Perfluoroheptanoic acid (PFHpA)	200 ng/mL
							Perfluoroheptanesulfonic Acid	190.4 ng/mL
							Perfluorohexanoic acid	200 ng/mL
							Perfluorohexadecanoic acid	200 ng/mL
							Perfluorohexanesulfonic acid (PFHxS)	189.2 ng/mL
							Perfluorononanoic acid (PFNA)	200 ng/mL
							Perfluorooctanoic acid (PFOA)	200 ng/mL
							Perfluorooctadecanoic acid	200 ng/mL
							Perfluorooctanesulfonic acid (PFOS)	191.2 ng/mL
							Perfluorooctane Sulfonamide	200 ng/mL
							Perfluoropentanoic acid	200 ng/mL
							Perfluorotetradecanoic acid	200 ng/mL
							Perfluorotridecanoic acid	200 ng/mL
..LCMPFCSU_00024	06/29/16	12/29/15	Methanol, Lot Baker 115491	10 mL	LCM2PFHxDA_00003	0.2 mL	13C2-PFHxDA	1 ug/mL
					LCM2PFTeDA 00003	0.2 mL	13C2-PFTeDA	1 ug/mL
					LCM4PFHPA 00003	0.2 mL	13C4-PFHpA	1 ug/mL
					LCM5PFPEA 00004	0.2 mL	13C5-PFPeA	1 ug/mL
					LCM8FOSA 00006	0.2 mL	13C8 FOSA	1 ug/mL
					LCMPFBA 00004	0.2 mL	13C4 PFBA	1 ug/mL
					LCMPFDA 00004	0.2 mL	13C2 PFDA	1 ug/mL
					LCMPFDoA 00004	0.2 mL	13C2 PFDoA	1 ug/mL
					LCMPFHxA 00005	0.2 mL	13C2 PFHxA	1 ug/mL
					LCMPFHxS 00004	0.2 mL	1802 PFHxS	0.946 ug/mL
					LCMPFNA 00003	0.2 mL	13C5 PFNA	1 ug/mL
					LCMPFOA 00007	0.2 mL	13C4 PFOA	1 ug/mL
					LCMPFOS 00009	0.2 mL	13C4 PFOS	0.956 ug/mL
					LCMPFUdA 00005	0.2 mL	13C2 PFUnA	1 ug/mL
					(Purchased Reagent)		13C2-PFHxDA	50 ug/mL
					(Purchased Reagent)		13C2-PFTeDA	50 ug/mL
					(Purchased Reagent)		13C4-PFHpA	50 ug/mL
					(Purchased Reagent)		13C5-PFPeA	50 ug/mL
..LCM2PFHxDA 00003	11/29/17	Wellington Laboratories, Lot M2PFHxDA1112			(Purchased Reagent)		13C8 FOSA	50 ug/mL
..LCM2PFTeDA 00003	11/29/17	Wellington Laboratories, Lot M2PFTeDA1112			(Purchased Reagent)		13C4 PFBA	50 ug/mL
..LCM4PFHPA 00003	05/22/20	Wellington Laboratories, Lot M4PFHPA0515			(Purchased Reagent)		13C2 PFDA	50 ug/mL
..LCM5PFPEA 00004	05/22/20	Wellington Laboratories, Lot M5PFPeA0515			(Purchased Reagent)		13C2 PFDoA	50 ug/mL
..LCM8FOSA 00006	12/15/16	Wellington Laboratories, Lot M8FOSA1214I			(Purchased Reagent)		13C2 PFHxA	50 ug/mL
..LCMPFBA 00004	10/31/19	Wellington Laboratories, Lot MPFBA1014			(Purchased Reagent)		13C2 PFDoA	50 ug/mL
..LCMPFDA 00004	04/13/19	Wellington Laboratories, Lot MPFDA0414			(Purchased Reagent)		13C2 PFHxS	50 ug/mL
..LCMPFDoA 00004	07/17/19	Wellington Laboratories, Lot MPFDoA0714			(Purchased Reagent)		13C2 PFUnA	50 ug/mL
..LCMPFHxA 00005	04/13/19	Wellington Laboratories, Lot MPFHxA0414			(Purchased Reagent)			

REAGENT TRACEABILITY SUMMARY

Lab Name: TestAmerica Sacramento

Job No.: 320-18796-1

SDG No.: _____

Reagent ID	Exp Date	Prep Date	Dilutant Used	Reagent Final Volume	Parent Reagent		Analyte	Concentration
					Reagent ID	Volume Added		
..LCMPFHxS_00004	07/25/18		Wellington Laboratories, Lot MPFHxS0713		(Purchased Reagent)		18O2 PFHxS	47.3 ug/mL
..LCMPFNA_00003	04/13/19		Wellington Laboratories, Lot MPFNA0414		(Purchased Reagent)		13C5 PFNA	50 ug/mL
..LCMPFOA_00007	04/10/20		Wellington Laboratories, Lot MPFOA0415		(Purchased Reagent)		13C4 PFOA	50 ug/mL
..LCMPFOS_00009	05/15/20		Wellington Laboratories, Lot MPFOS0515		(Purchased Reagent)		13C4 PFOS	47.8 ug/mL
..LCMPFUdA_00005	10/31/19		Wellington Laboratories, Lot MPFUdA1014		(Purchased Reagent)		13C2 PFUnA	50 ug/mL
..LCPFCSP_00039	06/30/16	12/30/15	Methanol, Lot 090285	5 mL	LCPFBFA_00003	0.1 mL	Perfluorobutyric acid	1 ug/mL
					LCPFBFA_00001	0.1 mL	Perfluorobutanesulfonic acid (PFBS)	0.884 ug/mL
					LCPFDA_00003	0.1 mL	Perfluorodecanoic acid	1 ug/mL
					LCPFDoA_00003	0.1 mL	Perfluorododecanoic acid	1 ug/mL
					LCPFDSA_00001	0.1 mL	Perfluorodecane Sulfonic acid	0.964 ug/mL
					LCPFHpA_00004	0.1 mL	Perfluoroheptanoic acid (PFHpA)	1 ug/mL
					LCPFHpSA_00001	0.1 mL	Perfluoroheptanesulfonic Acid	0.952 ug/mL
					LCPFHxA_00003	0.1 mL	Perfluorohexanoic acid	1 ug/mL
					LCPFHxDA_00004	0.1 mL	Perfluorohexadecanoic acid	1 ug/mL
					LCPFHxSA_00001	0.1 mL	Perfluorohexanesulfonic acid (PFHxS)	0.946 ug/mL
					LCPFNA_00004	0.1 mL	Perfluorononanoic acid (PFNA)	1 ug/mL
					LCPFOA_00004	0.1 mL	Perfluorooctanoic acid (PFOA)	1 ug/mL
					LCPFODA_00004	0.1 mL	Perfluorooctadecanoic acid	1 ug/mL
					LCPFOS_00004	0.1 mL	Perfluorooctanesulfonic acid (PFOS)	0.956 ug/mL
					LCPFOSA_00005	0.1 mL	Perfluorooctane Sulfonamide	1 ug/mL
					LCPFPeA_00003	0.1 mL	Perfluoropentanoic acid	1 ug/mL
					LCPFTeDA_00003	0.1 mL	Perfluorotetradecanoic acid	1 ug/mL
					LCPFTrDA_00003	0.1 mL	Perfluorotridecanoic acid	1 ug/mL
					LCPFUdA_00003	0.1 mL	Perfluoroundecanoic acid	1 ug/mL
..LCPFBFA_00003	03/05/18		Wellington Laboratories, Lot PFBA0313		(Purchased Reagent)		Perfluorobutyric acid	50 ug/mL
..LCPFBFA_00001	10/09/19		Wellington Laboratories, Lot LFFBS1014		(Purchased Reagent)		Perfluorobutanesulfonic acid (PFBS)	44.2 ug/mL
..LCPFDA_00003	06/18/18		Wellington Laboratories, Lot PFDA0613		(Purchased Reagent)		Perfluorodecanoic acid	50 ug/mL
..LCPFDoA_00003	01/03/18		Wellington Laboratories, Lot PFDoA0113		(Purchased Reagent)		Perfluorododecanoic acid	50 ug/mL
..LCPFDSA_00001	09/13/18		Wellington Laboratories, Lot LFFDS0913		(Purchased Reagent)		Perfluorodecane Sulfonic acid	48.2 ug/mL
..LCPFHpA_00004	05/09/19		Wellington Laboratories, Lot PFHpA0514		(Purchased Reagent)		Perfluoroheptanoic acid (PFHpA)	50 ug/mL
..LCPFHpSA_00001	11/21/17		Wellington Laboratories, Lot LFFHpS1112		(Purchased Reagent)		Perfluoroheptanesulfonic Acid	47.6 ug/mL
..LCPFHxA_00003	05/09/19		Wellington Laboratories, Lot PFHxA0514		(Purchased Reagent)		Perfluorohexanoic acid	50 ug/mL
..LCPFHxDA_00004	11/28/17		Wellington Laboratories, Lot PFHxDA0707		(Purchased Reagent)		Perfluorohexadecanoic acid	50 ug/mL
..LCPFHxSA_00001	05/09/19		Wellington Laboratories, Lot LFFHxS0514		(Purchased Reagent)		Perfluorohexanesulfonic acid (PFHxS)	47.3 ug/mL
..LCPFNA_00004	05/09/19		Wellington Laboratories, Lot PFNA0514		(Purchased Reagent)		Perfluorononanoic acid (PFNA)	50 ug/mL
..LCPFOA_00004	10/11/18		Wellington Laboratories, Lot PFOA1013		(Purchased Reagent)		Perfluorooctanoic acid (PFOA)	50 ug/mL
..LCPFODA_00004	04/25/17		Wellington Laboratories, Lot PFODA0807		(Purchased Reagent)		Perfluorooctadecanoic acid	50 ug/mL
..LCPFOS_00004	06/20/19		Wellington Laboratories, Lot LFFOS0614		(Purchased Reagent)		Perfluorooctanesulfonic acid (PFOS)	47.8 ug/mL
..LCPFOSA_00005	07/31/18		Wellington Laboratories, Lot FOSA0714I		(Purchased Reagent)		Perfluorooctane Sulfonamide	50 ug/mL
..LCPFPeA_00003	01/03/18		Wellington Laboratories, Lot PFPeA0113		(Purchased Reagent)		Perfluoropentanoic acid	50 ug/mL
..LCPFTeDA_00003	06/19/18		Wellington Laboratories, Lot PFTeDA0613		(Purchased Reagent)		Perfluorotetradecanoic acid	50 ug/mL

REAGENT TRACEABILITY SUMMARY

Lab Name: TestAmerica Sacramento

Job No.: 320-18796-1

SDG No.:

Reagent ID	Exp Date	Prep Date	Dilutant Used	Reagent Final Volume	Parent Reagent		Analyte	Concentration
					Reagent ID	Volume Added		
..LCPFTrDA_00003	12/10/18		Wellington Laboratories, Lot PFTrDA1213		(Purchased Reagent)		Perfluorotridecanoic acid	50 ug/mL
..LCPFUdA_00003	06/19/18		Wellington Laboratories, Lot PFUdA0613		(Purchased Reagent)		Perfluoroundecanoic acid	50 ug/mL
LCPFC-L6_00017	09/08/16	04/18/16	MeOH/H2O, Lot 090285	5 mL	LCMPFCSU_00036	250 uL	13C2-PFHxDA	50 ng/mL
							13C2-PFTeDA	50 ng/mL
							13C4-PFHpA	50 ng/mL
							13C5-PFPeA	50 ng/mL
							13C8 FOSA	50 ng/mL
							13C4 PFBA	50 ng/mL
							13C2 PFDA	50 ng/mL
							13C2 PFDoA	50 ng/mL
							13C2 PFHxA	50 ng/mL
							18O2 PFHxS	47.3 ng/mL
							13C5 PFNA	50 ng/mL
							13C4 PFOA	50 ng/mL
							13C4 PFOS	47.8 ng/mL
							13C2 PFUnA	50 ng/mL
					LCPFCSP_00044	1000 uL	Perfluorobutyric acid	200 ng/mL
							Perfluorobutanesulfonic acid (PFBS)	176.8 ng/mL
							Perfluorodecanoic acid	200 ng/mL
							Perfluorododecanoic acid	200 ng/mL
							Perfluorodecane Sulfonic acid	192.8 ng/mL
							Perfluoroheptanoic acid (PFHpA)	200 ng/mL
							Perfluoroheptanesulfonic Acid	190.4 ng/mL
							Perfluoroheptanoic acid	200 ng/mL
							Perfluorohexadecanoic acid	200 ng/mL
							Perfluorohexanesulfonic acid (PFHxS)	189.2 ng/mL
							Perfluorononanoic acid (PFNA)	200 ng/mL
							Perfluorooctanoic acid (PFOA)	200 ng/mL
							Perfluorooctandecanoic acid	200 ng/mL
							Perfluorooctanesulfonic acid (PFOS)	191.2 ng/mL
							Perfluorooctane Sulfonamide	200 ng/mL
							Perfluoropentanoic acid	200 ng/mL
							Perfluorotetradecanoic acid	200 ng/mL
							Perfluorotridecanoic acid	200 ng/mL
							Perfluoroundecanoic acid	200 ng/mL
.LCMPFCSU_00036	10/07/16	04/07/16	Methanol, Lot Baker 115935	10000 uL	LCM2PFHxDA_00004	200 uL	13C2-PFHxDA	1 ug/mL
					LCM2PFTeDA_00004	200 uL	13C2-PFTeDA	1 ug/mL
					LCM4PFHFA_00004	200 uL	13C4-PFHpA	1 ug/mL
					LCM5PFPEA_00005	200 uL	13C5-PFPeA	1 ug/mL
					LCM8FOSA_00008	200 uL	13C8 FOSA	1 ug/mL
					LCMPFBA_00005	200 uL	13C4 PFBA	1 ug/mL
					LCMPFDA_00007	200 uL	13C2 PFDA	1 ug/mL
					LCMPFDoA_00005	200 uL	13C2 PFDoA	1 ug/mL

REAGENT TRACEABILITY SUMMARY

Lab Name: TestAmerica Sacramento

Job No.: 320-18796-1

SDG No.: _____

Reagent ID	Exp Date	Prep Date	Dilutant Used	Reagent Final Volume	Parent Reagent		Analyte	Concentration
					Reagent ID	Volume Added		
					LCMPFHxA_00008	200 uL	13C2 PFHxA	1 ug/mL
					LCMPFHxS_00005	200 uL	18O2 PFHxS	0.946 ug/mL
					LCMPFNA_00005	200 uL	13C5 PFNA	1 ug/mL
					LCMPFOA_00009	200 uL	13C4 PFOA	1 ug/mL
					LCMPFOS_00012	200 uL	13C4 PFOS	0.956 ug/mL
					LCMPFUdA_00006	200 uL	13C2 PFUnA	1 ug/mL
..LCM2PFHxDA_00004	01/07/21	Wellington Laboratories, Lot M2PFHxDA1112			(Purchased Reagent)		13C2-PFHxDA	50 ug/mL
..LCM2PFTeDA_00004	12/07/20	Wellington Laboratories, Lot M2PFTeDA1115			(Purchased Reagent)		13C2-PFTeDA	50 ug/mL
..LCM4PFHPA_00004	05/22/20	Wellington Laboratories, Lot M4PFHpa0515			(Purchased Reagent)		13C4-PFHpa	50 ug/mL
..LCM5PFPEA_00005	05/22/20	Wellington Laboratories, Lot M5PFPeA0515			(Purchased Reagent)		13C5-PFPeA	50 ug/mL
..LCM8FOSA_00008	12/22/17	Wellington Laboratories, Lot M8FOSA1215I			(Purchased Reagent)		13C8 FOSA	50 ug/mL
..LCMPFBA_00005	10/31/19	Wellington Laboratories, Lot MPFBA1014			(Purchased Reagent)		13C4 PFBA	50 ug/mL
..LCMPFDA_00007	08/19/20	Wellington Laboratories, Lot MPFDA0815			(Purchased Reagent)		13C2 PFDA	50 ug/mL
..LCMPFDoA_00005	07/17/19	Wellington Laboratories, Lot MPFDoA0714			(Purchased Reagent)		13C2 PFDoA	50 ug/mL
..LCMPFHxA_00008	04/09/20	Wellington Laboratories, Lot MPFHxA0415			(Purchased Reagent)		13C2 PFHxA	50 ug/mL
..LCMPFHxS_00005	08/23/20	Wellington Laboratories, Lot MPFHxS1015			(Purchased Reagent)		18O2 PFHxS	47.3 ug/mL
..LCMPFNA_00005	04/13/19	Wellington Laboratories, Lot MPFNA0414			(Purchased Reagent)		13C5 PFNA	50 ug/mL
..LCMPFOA_00009	01/22/21	Wellington Laboratories, Lot MPFOA0116			(Purchased Reagent)		13C4 PFOA	50 ug/mL
..LCMPFOS_00012	01/22/21	Wellington Laboratories, Lot MPFOS0116			(Purchased Reagent)		13C4 PFOS	47.8 ug/mL
..LCMPFUdA_00006	10/31/19	Wellington Laboratories, Lot MPFUdA1014			(Purchased Reagent)		13C2 PFUnA	50 ug/mL
..LCPFCSP_00044	09/08/16	03/08/16	Methanol, Lot 090285	10000 uL	LCPFBA_00003	200 uL	Perfluorobutyric acid	1 ug/mL
					LCPFBSA_00001	200 uL	Perfluorobutanesulfonic acid (PFBS)	0.884 ug/mL
					LCPFDA_00004	200 uL	Perfluorodecanoic acid	1 ug/mL
					LCPFDoA_00004	200 uL	Perfluorododecanoic acid	1 ug/mL
					LCPFDOSA_00001	200 uL	Perfluorodecane Sulfonic acid	0.964 ug/mL
					LCPFHpa_00004	200 uL	Perfluoroheptanoic acid (PFHpA)	1 ug/mL
					LCPFHpSA_00001	200 uL	Perfluoroheptanesulfonic Acid	0.952 ug/mL
					LCPFHxA_00003	200 uL	Perfluorohexanoic acid	1 ug/mL
					LCPFHxDA_00004	200 uL	Perfluorohexadecanoic acid	1 ug/mL
					LCPFHxSA_00001	200 uL	Perfluorohexanesulfonic acid (PFHxS)	0.946 ug/mL
					LCPFNA_00004	200 uL	Perfluorononanoic acid (PFNA)	1 ug/mL
					LCPFOA_00005	200 uL	Perfluorooctanoic acid (PFOA)	1 ug/mL
					LCPFODA_00004	200 uL	Perfluorooctadecanoic acid	1 ug/mL
					LCPFOS_00004	200 uL	Perfluorooctanesulfonic acid (PFOS)	0.956 ug/mL
					LCPFOSA_00006	200 uL	Perfluorooctane Sulfonamide	1 ug/mL
					LCPFPeA_00004	200 uL	Perfluoropentanoic acid	1 ug/mL
					LCPFTeDA_00003	200 uL	Perfluorotetradecanoic acid	1 ug/mL
					LCPFTrDA_00003	200 uL	Perfluorotridecanoic acid	1 ug/mL
					LCPFUdA_00003	200 uL	Perfluoroundecanoic acid	1 ug/mL
..LCPFBA_00003	03/05/18	Wellington Laboratories, Lot PFBA0313			(Purchased Reagent)		Perfluorobutyric acid	50 ug/mL
..LCPFBSA_00001	10/09/19	Wellington Laboratories, Lot LPFBS1014			(Purchased Reagent)		Perfluorobutanesulfonic acid (PFBS)	44.2 ug/mL
..LCPFDA_00004	07/02/20	Wellington Laboratories, Lot PFDA0615			(Purchased Reagent)		Perfluorodecanoic acid	50 ug/mL
..LCPFDoA_00004	01/30/20	Wellington Laboratories, Lot PFDoA0115			(Purchased Reagent)		Perfluorododecanoic acid	50 ug/mL

REAGENT TRACEABILITY SUMMARY

Lab Name: TestAmerica Sacramento

Job No.: 320-18796-1

SDG No.:

Reagent ID	Exp Date	Prep Date	Dilutant Used	Reagent Final Volume	Parent Reagent		Analyte	Concentration
					Reagent ID	Volume Added		
..LCPFDSA_00001	09/13/18	Wellington Laboratories, Lot LPFDS0913			(Purchased Reagent)		Perfluorodecane Sulfonic acid	48.2 ug/mL
..LCPFHpA_00004	05/09/19	Wellington Laboratories, Lot PFHpA0514			(Purchased Reagent)		Perfluoroheptanoic acid (PFHpA)	50 ug/mL
..LCPFHpSA_00001	11/21/17	Wellington Laboratories, Lot LPFHps1112			(Purchased Reagent)		Perfluoroheptanesulfonic Acid	47.6 ug/mL
..LCPFHxA_00003	05/09/19	Wellington Laboratories, Lot PFHxA0514			(Purchased Reagent)		Perfluorohexanoic acid	50 ug/mL
..LCPFHxDA_00004	11/28/17	Wellington Laboratories, Lot PFHxDA0707			(Purchased Reagent)		Perfluorohexadecanoic acid	50 ug/mL
..LCPFHxSA_00001	05/09/19	Wellington Laboratories, Lot LPFHxS0514			(Purchased Reagent)		Perfluorohexanesulfonic acid (PFHxS)	47.3 ug/mL
..LCPFNA_00004	05/09/19	Wellington Laboratories, Lot PFNA0514			(Purchased Reagent)		Perfluorononanoic acid (PFNA)	50 ug/mL
..LCPFOA_00005	11/06/20	Wellington Laboratories, Lot PFOA1115			(Purchased Reagent)		Perfluorooctanoic acid (PFOA)	50 ug/mL
..LCPFODA_00004	04/25/17	Wellington Laboratories, Lot PFODA0807			(Purchased Reagent)		Perfluorooctandecanoic acid	50 ug/mL
..LCPFOS_00004	06/20/19	Wellington Laboratories, Lot LPFOS0614			(Purchased Reagent)		Perfluorooctanesulfonic acid (PFOS)	47.8 ug/mL
..LCPFOSA_00006	09/02/17	Wellington Laboratories, Lot FOSA0815I			(Purchased Reagent)		Perfluorooctane Sulfonamide	50 ug/mL
..LCPFPeA_00004	01/30/20	Wellington Laboratories, Lot PFPeA0115			(Purchased Reagent)		Perfluoropentanoic acid	50 ug/mL
..LCPFTeDA_00003	06/19/18	Wellington Laboratories, Lot PFTeDA0613			(Purchased Reagent)		Perfluorotetradecanoic acid	50 ug/mL
..LCPFTrDA_00003	12/10/18	Wellington Laboratories, Lot PFTTrDA1213			(Purchased Reagent)		Perfluorotridecanoic acid	50 ug/mL
..LCPFUdA_00003	06/19/18	Wellington Laboratories, Lot PFUdA0613			(Purchased Reagent)		Perfluoroundecanoic acid	50 ug/mL
LCPFC-L7_00015	06/29/16	12/30/15	MeOH/H2O, Lot 090285	2 mL	LCMPFCSU_00024	100 uL	13C2-PFHxDA	50 ng/mL
							13C2-PFTeDA	50 ng/mL
							13C4-PFHpA	50 ng/mL
							13C5-PFPeA	50 ng/mL
							13C8 FOSA	50 ng/mL
							13C4 PFBA	50 ng/mL
							13C2 PFDA	50 ng/mL
							13C2 PFDoA	50 ng/mL
							13C2 PFHxA	50 ng/mL
							18O2 PFHxS	47.3 ng/mL
							13C5 PFNA	50 ng/mL
							13C4 PFOA	50 ng/mL
							13C4 PFOS	47.8 ng/mL
							13C2 PFUnA	50 ng/mL
					LCPFCSP_00039	800 uL	Perfluorobutyric acid	400 ng/mL
							Perfluorobutanesulfonic acid (PFBS)	353.6 ng/mL
							Perfluorodecanoic acid	400 ng/mL
							Perfluorododecanoic acid	400 ng/mL
							Perfluorodecane Sulfonic acid	385.6 ng/mL
							Perfluoroheptanoic acid (PFHpA)	400 ng/mL
							Perfluoroheptanesulfonic Acid	380.8 ng/mL
							Perfluorohexanoic acid	400 ng/mL
							Perfluorohexadecanoic acid	400 ng/mL
							Perfluorohexanesulfonic acid (PFHxS)	378.4 ng/mL
							Perfluorononanoic acid (PFNA)	400 ng/mL
							Perfluorooctanoic acid (PFOA)	400 ng/mL
							Perfluorooctandecanoic acid	400 ng/mL

REAGENT TRACEABILITY SUMMARY

Lab Name: TestAmerica Sacramento

Job No.: 320-18796-1

SDG No.: _____

Reagent ID	Exp Date	Prep Date	Dilutant Used	Reagent Final Volume	Parent Reagent		Analyte	Concentration
					Reagent ID	Volume Added		
							Perfluorooctanesulfonic acid (PFOS)	382.4 ng/mL
							Perfluorooctane Sulfonamide	400 ng/mL
							Perfluoropentanoic acid	400 ng/mL
							Perfluorotetradecanoic acid	400 ng/mL
							Perfluorotridecanoic acid	400 ng/mL
							Perfluoroundecanoic acid	400 ng/mL
.LCMPFCSU_00024	06/29/16	12/29/15	Methanol, Lot Baker 115491	10 mL	LCM2PFHxDA_00003	0.2 mL	13C2-PFHxDA	1 ug/mL
					LCM2PFTeDA_00003	0.2 mL	13C2-PFTeDA	1 ug/mL
					LCM4PFHFA_00003	0.2 mL	13C4-PFHFA	1 ug/mL
					LCM5PFPEA_00004	0.2 mL	13C5-PFPeA	1 ug/mL
					LCM8FOSA_00006	0.2 mL	13C8 FOSA	1 ug/mL
					LCMPFBA_00004	0.2 mL	13C4 PFBA	1 ug/mL
					LCMPFDA_00004	0.2 mL	13C2 PFDA	1 ug/mL
					LCMPFDoA_00004	0.2 mL	13C2 PFDoA	1 ug/mL
					LCMPFHxA_00005	0.2 mL	13C2 PFHxA	1 ug/mL
					LCMPFHxS_00004	0.2 mL	1802 PFHxS	0.946 ug/mL
					LCMPFNA_00003	0.2 mL	13C5 PFNA	1 ug/mL
					LCMPFOA_00007	0.2 mL	13C4 PFOA	1 ug/mL
					LCMPFOS_00009	0.2 mL	13C4 PFOS	0.956 ug/mL
					LCMPFUdA_00005	0.2 mL	13C2 PFUnA	1 ug/mL
..LCM2PFHxDA_00003	11/29/17	Wellington Laboratories, Lot M2PFHxDA1112			(Purchased Reagent)		13C2-PFHxDA	50 ug/mL
..LCM2PFTeDA_00003	11/29/17	Wellington Laboratories, Lot M2PFTeDA1112			(Purchased Reagent)		13C2-PFTeDA	50 ug/mL
..LCM4PFHFA_00003	05/22/20	Wellington Laboratories, Lot M4PFHFA0515			(Purchased Reagent)		13C4-PFHFA	50 ug/mL
..LCM5PFPEA_00004	05/22/20	Wellington Laboratories, Lot M5PFPeA0515			(Purchased Reagent)		13C5-PFPeA	50 ug/mL
..LCM8FOSA_00006	12/15/16	Wellington Laboratories, Lot M8FOSA1214I			(Purchased Reagent)		13C8 FOSA	50 ug/mL
..LCMPFBA_00004	10/31/19	Wellington Laboratories, Lot MPFBA1014			(Purchased Reagent)		13C4 PFBA	50 ug/mL
..LCMPFDA_00004	04/13/19	Wellington Laboratories, Lot MPFDA0414			(Purchased Reagent)		13C2 PFDA	50 ug/mL
..LCMPFDoA_00004	07/17/19	Wellington Laboratories, Lot MPFDoA0714			(Purchased Reagent)		13C2 PFDoA	50 ug/mL
..LCMPFHxA_00005	04/13/19	Wellington Laboratories, Lot MPFHxA0414			(Purchased Reagent)		13C2 PFHxA	50 ug/mL
..LCMPFHxS_00004	07/25/18	Wellington Laboratories, Lot MPFHxS0713			(Purchased Reagent)		1802 PFHxS	47.3 ug/mL
..LCMPFNA_00003	04/13/19	Wellington Laboratories, Lot MPFNA0414			(Purchased Reagent)		13C5 PFNA	50 ug/mL
..LCMPFOA_00007	04/10/20	Wellington Laboratories, Lot MPFOA0415			(Purchased Reagent)		13C4 PFOA	50 ug/mL
..LCMPFOS_00009	05/15/20	Wellington Laboratories, Lot MPFOS0515			(Purchased Reagent)		13C4 PFOS	47.8 ug/mL
..LCMPFUdA_00005	10/31/19	Wellington Laboratories, Lot MPFUdA1014			(Purchased Reagent)		13C2 PFUnA	50 ug/mL
.LCPFCSP_00039	06/30/16	12/30/15	Methanol, Lot 090285	5 mL	LCPFBA_00003	0.1 mL	Perfluorobutyric acid	1 ug/mL
					LCPFBSA_00001	0.1 mL	Perfluorobutanesulfonic acid (PFBS)	0.884 ug/mL
					LCPFDA_00003	0.1 mL	Perfluorodecanoic acid	1 ug/mL
					LCPFDoA_00003	0.1 mL	Perfluorododecanoic acid	1 ug/mL
					LCPFDSA_00001	0.1 mL	Perfluorodecane Sulfonic acid	0.964 ug/mL
					LCPFHFA_00004	0.1 mL	Perfluoroheptanoic acid (PFHFA)	1 ug/mL
					LCPFHFA_00001	0.1 mL	Perfluoroheptanesulfonic Acid	0.952 ug/mL
					LCPFHxA_00003	0.1 mL	Perfluorohexanoic acid	1 ug/mL
					LCPFHxDA_00004	0.1 mL	Perfluorohexadecanoic acid	1 ug/mL

REAGENT TRACEABILITY SUMMARY

Lab Name: TestAmerica Sacramento

Job No.: 320-18796-1

SDG No.: _____

Reagent ID	Exp Date	Prep Date	Dilutant Used	Reagent Final Volume	Parent Reagent		Analyte	Concentration
					Reagent ID	Volume Added		
					LCPFHxSA_00001	0.1 mL	Perfluorohexanesulfonic acid (PFHxS)	0.946 ug/mL
					LCPFNA_00004	0.1 mL	Perfluorononanoic acid (PFNA)	1 ug/mL
					LCPFOA_00004	0.1 mL	Perfluorooctanoic acid (PFOA)	1 ug/mL
					LCPFODA_00004	0.1 mL	Perfluorooctadecanoic acid	1 ug/mL
					LCPFOS_00004	0.1 mL	Perfluorooctanesulfonic acid (PFOS)	0.956 ug/mL
					LCPFOSA_00005	0.1 mL	Perfluorooctane Sulfonamide	1 ug/mL
					LCPFPeA_00003	0.1 mL	Perfluoropentanoic acid	1 ug/mL
					LCPFTeDA_00003	0.1 mL	Perfluorotetradecanoic acid	1 ug/mL
					LCPFTrDA_00003	0.1 mL	Perfluorotridecanoic acid	1 ug/mL
					LCPFUDA_00003	0.1 mL	Perfluoroundecanoic acid	1 ug/mL
..LCPFBA_00003	03/05/18		Wellington Laboratories, Lot PFBA0313		(Purchased Reagent)		Perfluorobutyric acid	50 ug/mL
..LCPFBSA_00001	10/09/19		Wellington Laboratories, Lot LPFBS1014		(Purchased Reagent)		Perfluorobutanesulfonic acid (PFBS)	44.2 ug/mL
..LCPFDA_00003	06/18/18		Wellington Laboratories, Lot PFDA0613		(Purchased Reagent)		Perfluorodecanoic acid	50 ug/mL
..LCPFDoA_00003	01/03/18		Wellington Laboratories, Lot PFDoA0113		(Purchased Reagent)		Perfluorododecanoic acid	50 ug/mL
..LCPFDSA_00001	09/13/18		Wellington Laboratories, Lot LPFDS0913		(Purchased Reagent)		Perfluorodecane Sulfonic acid	48.2 ug/mL
..LCPFHpA_00004	05/09/19		Wellington Laboratories, Lot PFHpA0514		(Purchased Reagent)		Perfluoroheptanoic acid (PFHpA)	50 ug/mL
..LCPFHpSA_00001	11/21/17		Wellington Laboratories, Lot LPFHpS1112		(Purchased Reagent)		Perfluoroheptanesulfonic Acid	47.6 ug/mL
..LCPFHxA_00003	05/09/19		Wellington Laboratories, Lot PFHxA0514		(Purchased Reagent)		Perfluorohexanoic acid	50 ug/mL
..LCPFHxDA_00004	11/28/17		Wellington Laboratories, Lot PFHxDA0707		(Purchased Reagent)		Perfluorohexadecanoic acid	50 ug/mL
..LCPFHxSA_00001	05/09/19		Wellington Laboratories, Lot LPFHxS0514		(Purchased Reagent)		Perfluorohexanesulfonic acid (PFHxS)	47.3 ug/mL
..LCPFNA_00004	05/09/19		Wellington Laboratories, Lot PFNA0514		(Purchased Reagent)		Perfluorononanoic acid (PFNA)	50 ug/mL
..LCPFOA_00004	10/11/18		Wellington Laboratories, Lot PFOA1013		(Purchased Reagent)		Perfluorooctanoic acid (PFOA)	50 ug/mL
..LCPFODA_00004	04/25/17		Wellington Laboratories, Lot PFODA0807		(Purchased Reagent)		Perfluorooctadecanoic acid	50 ug/mL
..LCPFOS_00004	06/20/19		Wellington Laboratories, Lot LPFOS0614		(Purchased Reagent)		Perfluorooctanesulfonic acid (PFOS)	47.8 ug/mL
..LCPFOSA_00005	07/31/18		Wellington Laboratories, Lot FOSA0714I		(Purchased Reagent)		Perfluorooctane Sulfonamide	50 ug/mL
..LCPFPeA_00003	01/03/18		Wellington Laboratories, Lot PFPeA0113		(Purchased Reagent)		Perfluoropentanoic acid	50 ug/mL
..LCPFTeDA_00003	06/19/18		Wellington Laboratories, Lot PFTeDA0613		(Purchased Reagent)		Perfluorotetradecanoic acid	50 ug/mL
..LCPFTrDA_00003	12/10/18		Wellington Laboratories, Lot PFTrDA1213		(Purchased Reagent)		Perfluorotridecanoic acid	50 ug/mL
..LCPFUDA_00003	06/19/18		Wellington Laboratories, Lot PFUDA0613		(Purchased Reagent)		Perfluoroundecanoic acid	50 ug/mL
LCPFC-L7_00017	09/08/16	04/18/16	MeOH/H2O, Lot 090285	5 mL	LCPMFCSU_00036	250 uL	13C2-PFHxDA	50 ng/mL
							13C2-PFTeDA	50 ng/mL
							13C4-PFHpA	50 ng/mL
							13C5-PFPeA	50 ng/mL
							13C8 FOSA	50 ng/mL
							13C4 PFBA	50 ng/mL
							13C2 PFDA	50 ng/mL
							13C2 PFDoA	50 ng/mL
							13C2 PFHxA	50 ng/mL
							18O2 PFHxS	47.3 ng/mL
							13C5 PFNA	50 ng/mL
							13C4 PFOA	50 ng/mL
							13C4 PFOS	47.8 ng/mL

REAGENT TRACEABILITY SUMMARY

Lab Name: TestAmerica Sacramento

Job No.: 320-18796-1

SDG No.: _____

Reagent ID	Exp Date	Prep Date	Dilutant Used	Reagent Final Volume	Parent Reagent		Analyte	Concentration
					Reagent ID	Volume Added		
					LCPFCSP_00044	2000 uL	13C2 PFUnA	50 ng/mL
							Perfluorobutyric acid	400 ng/mL
							Perfluorobutanesulfonic acid (PFBS)	353.6 ng/mL
							Perfluorodecanoic acid	400 ng/mL
							Perfluorododecanoic acid	400 ng/mL
							Perfluorodecane Sulfonic acid	385.6 ng/mL
							Perfluoroheptanoic acid (PFHpA)	400 ng/mL
							Perfluoroheptanesulfonic Acid	380.8 ng/mL
							Perfluorohexanoic acid	400 ng/mL
							Perfluorohexadecanoic acid	400 ng/mL
							Perfluorohexanesulfonic acid (PFHxS)	378.4 ng/mL
							Perfluorononanoic acid (PFNA)	400 ng/mL
							Perfluorooctanoic acid (PFOA)	400 ng/mL
							Perfluorooctadecanoic acid	400 ng/mL
							Perfluorooctanesulfonic acid (PFOS)	382.4 ng/mL
							Perfluorooctane Sulfonamide	400 ng/mL
							Perfluoropentanoic acid	400 ng/mL
							Perfluorotetradecanoic acid	400 ng/mL
							Perfluorotridecanoic acid	400 ng/mL
.LCMPFCSU_00036	10/07/16	04/07/16	Methanol, Lot Baker 115935	10000 uL	LCM2PFHxDA_00004	200 uL	13C2-PFHxDA	1 ug/mL
					LCM2PFTeDA_00004	200 uL	13C2-PFTeDA	1 ug/mL
					LCM4PFHFA_00004	200 uL	13C4-PFHFA	1 ug/mL
					LCM5PFPEA_00005	200 uL	13C5-PFPeA	1 ug/mL
					LCM8FOSA_00008	200 uL	13C8 FOSA	1 ug/mL
					LCMPFBA_00005	200 uL	13C4 PFBA	1 ug/mL
					LCMPFDA_00007	200 uL	13C2 PFDA	1 ug/mL
					LCMPFDoA_00005	200 uL	13C2 PFDoA	1 ug/mL
					LCMPFHxA_00008	200 uL	13C2 PFHxA	1 ug/mL
					LCMPFHxS_00005	200 uL	1802 PFHxS	0.946 ug/mL
					LCMPFNA_00005	200 uL	13C5 PFNA	1 ug/mL
					LCMPFOA_00009	200 uL	13C4 PFOA	1 ug/mL
					LCMPFOS_00012	200 uL	13C4 PFOS	0.956 ug/mL
					LCMPFUDa_00006	200 uL	13C2 PFUnA	1 ug/mL
					(Purchased Reagent)		13C2-PFHxDA	50 ug/mL
					(Purchased Reagent)		13C2-PFTeDA	50 ug/mL
					(Purchased Reagent)		13C4-PFHFA	50 ug/mL
					(Purchased Reagent)		13C5-PFPeA	50 ug/mL
..LCM2PFHxDA_00004	01/07/21	Wellington Laboratories, Lot M2PFHxDA1112			(Purchased Reagent)		13C8 FOSA	50 ug/mL
..LCM2PFTeDA_00004	12/07/20	Wellington Laboratories, Lot M2PFTeDA1115			(Purchased Reagent)		13C4 PFBA	50 ug/mL
..LCM4PFHFA_00004	05/22/20	Wellington Laboratories, Lot M4PFHFA0515			(Purchased Reagent)		13C2 PFDA	50 ug/mL
..LCM5PFPEA_00005	05/22/20	Wellington Laboratories, Lot M5PFPeA0515			(Purchased Reagent)		13C2 PFDoA	50 ug/mL
..LCM8FOSA_00008	12/22/17	Wellington Laboratories, Lot M8FOSA1215I			(Purchased Reagent)		13C2 PFHxA	50 ug/mL
..LCMPFBA_00005	10/31/19	Wellington Laboratories, Lot MPFBA1014			(Purchased Reagent)		13C2 PFDoA	50 ug/mL
..LCMPFDA_00007	08/19/20	Wellington Laboratories, Lot MPFDA0815			(Purchased Reagent)		13C2 PFHxA	50 ug/mL
..LCMPFDoA_00005	07/17/19	Wellington Laboratories, Lot MPFDoA0714			(Purchased Reagent)		13C2 PFHxA	50 ug/mL
..LCMPFHxA_00008	04/09/20	Wellington Laboratories, Lot MPFHxA0415			(Purchased Reagent)		13C2 PFHxA	50 ug/mL

REAGENT TRACEABILITY SUMMARY

Lab Name: TestAmerica Sacramento

Job No.: 320-18796-1

SDG No.: _____

Reagent ID	Exp Date	Prep Date	Dilutant Used	Reagent Final Volume	Parent Reagent		Analyte	Concentration
					Reagent ID	Volume Added		
..LCMPFHxS_00005	08/23/20		Wellington Laboratories, Lot MPFHxS1015		(Purchased Reagent)		1802 PFHxS	47.3 ug/mL
..LCMPFNA_00005	04/13/19		Wellington Laboratories, Lot MPFNA0414		(Purchased Reagent)		13C5 PFNA	50 ug/mL
..LCMPFOA_00009	01/22/21		Wellington Laboratories, Lot MPFOA0116		(Purchased Reagent)		13C4 PFOA	50 ug/mL
..LCMPFOS_00012	01/22/21		Wellington Laboratories, Lot MPFOS0116		(Purchased Reagent)		13C4 PFOS	47.8 ug/mL
..LCMPFUDa_00006	10/31/19		Wellington Laboratories, Lot MPFUDa1014		(Purchased Reagent)		13C2 PFUnA	50 ug/mL
..LCPFCSP_00044	09/08/16	03/08/16	Methanol, Lot 090285	10000 uL	LCPFBA_00003	200 uL	Perfluorobutyric acid	1 ug/mL
					LCPFBFA_00001	200 uL	Perfluorobutanesulfonic acid (PFBS)	0.884 ug/mL
					LCPFDA_00004	200 uL	Perfluorodecanoic acid	1 ug/mL
					LCPFDoA_00004	200 uL	Perfluorododecanoic acid	1 ug/mL
					LCPFDSA_00001	200 uL	Perfluorodecane Sulfonic acid	0.964 ug/mL
					LCPFHpa_00004	200 uL	Perfluoroheptanoic acid (PFHpA)	1 ug/mL
					LCPFHpSA_00001	200 uL	Perfluoroheptanesulfonic Acid	0.952 ug/mL
					LCPFHxA_00003	200 uL	Perfluorohexanoic acid	1 ug/mL
					LCPFHxDA_00004	200 uL	Perfluorohexadecanoic acid	1 ug/mL
					LCPFHxSA_00001	200 uL	Perfluorohexanesulfonic acid (PFHxS)	0.946 ug/mL
					LCPFNA_00004	200 uL	Perfluorononanoic acid (PFNA)	1 ug/mL
					LCPFOA_00005	200 uL	Perfluorooctanoic acid (PFOA)	1 ug/mL
					LCPFODA_00004	200 uL	Perfluorooctadecanoic acid	1 ug/mL
					LCPFOS_00004	200 uL	Perfluorooctanesulfonic acid (PFOS)	0.956 ug/mL
					LCPFOSA_00006	200 uL	Perfluorooctane Sulfonamide	1 ug/mL
					LCPFPeA_00004	200 uL	Perfluoropentanoic acid	1 ug/mL
					LCPFTeDA_00003	200 uL	Perfluorotetradecanoic acid	1 ug/mL
					LCPFTrDA_00003	200 uL	Perfluorotridecanoic acid	1 ug/mL
					LCPFUda_00003	200 uL	Perfluoroundecanoic acid	1 ug/mL
..LCPFBA_00003	03/05/18		Wellington Laboratories, Lot PFBA0313		(Purchased Reagent)		Perfluorobutyric acid	50 ug/mL
..LCPFBFA_00001	10/09/19		Wellington Laboratories, Lot LPFBS1014		(Purchased Reagent)		Perfluorobutanesulfonic acid (PFBS)	44.2 ug/mL
..LCPFDA_00004	07/02/20		Wellington Laboratories, Lot PFDA0615		(Purchased Reagent)		Perfluorodecanoic acid	50 ug/mL
..LCPFDoA_00004	01/30/20		Wellington Laboratories, Lot PFDoA0115		(Purchased Reagent)		Perfluorododecanoic acid	50 ug/mL
..LCPFDSA_00001	09/13/18		Wellington Laboratories, Lot LPFDS0913		(Purchased Reagent)		Perfluorodecane Sulfonic acid	48.2 ug/mL
..LCPFHpa_00004	05/09/19		Wellington Laboratories, Lot PFHpA0514		(Purchased Reagent)		Perfluoroheptanoic acid (PFHpA)	50 ug/mL
..LCPFHpSA_00001	11/21/17		Wellington Laboratories, Lot LPFHpS1112		(Purchased Reagent)		Perfluoroheptanesulfonic Acid	47.6 ug/mL
..LCPFHxA_00003	05/09/19		Wellington Laboratories, Lot PFHxA0514		(Purchased Reagent)		Perfluorohexanoic acid	50 ug/mL
..LCPFHxDA_00004	11/28/17		Wellington Laboratories, Lot PFHxDA0707		(Purchased Reagent)		Perfluorohexadecanoic acid	50 ug/mL
..LCPFHxSA_00001	05/09/19		Wellington Laboratories, Lot LPFHxS0514		(Purchased Reagent)		Perfluorohexanesulfonic acid (PFHxS)	47.3 ug/mL
..LCPFNA_00004	05/09/19		Wellington Laboratories, Lot PFNA0514		(Purchased Reagent)		Perfluorononanoic acid (PFNA)	50 ug/mL
..LCPFOA_00005	11/06/20		Wellington Laboratories, Lot PFOA1115		(Purchased Reagent)		Perfluorooctanoic acid (PFOA)	50 ug/mL
..LCPFODA_00004	04/25/17		Wellington Laboratories, Lot PFODA0807		(Purchased Reagent)		Perfluorooctadecanoic acid	50 ug/mL
..LCPFOS_00004	06/20/19		Wellington Laboratories, Lot LPFOS0614		(Purchased Reagent)		Perfluorooctanesulfonic acid (PFOS)	47.8 ug/mL
..LCPFOSA_00006	09/02/17		Wellington Laboratories, Lot FOSA0815I		(Purchased Reagent)		Perfluorooctane Sulfonamide	50 ug/mL
..LCPFPeA_00004	01/30/20		Wellington Laboratories, Lot PFPeA0115		(Purchased Reagent)		Perfluoropentanoic acid	50 ug/mL
..LCPFTeDA_00003	06/19/18		Wellington Laboratories, Lot PFTeDA0613		(Purchased Reagent)		Perfluorotetradecanoic acid	50 ug/mL

REAGENT TRACEABILITY SUMMARY

Lab Name: TestAmerica Sacramento

Job No.: 320-18796-1

SDG No.: _____

Reagent ID	Exp Date	Prep Date	Dilutant Used	Reagent Final Volume	Parent Reagent		Analyte	Concentration
					Reagent ID	Volume Added		
..LCPFTTrDA_00003	12/10/18		Wellington Laboratories, Lot PFTrDA1213		(Purchased Reagent)		Perfluorotridecanoic acid	50 ug/mL
..LCPFUdA_00003	06/19/18		Wellington Laboratories, Lot PFUdA0613		(Purchased Reagent)		Perfluoroundecanoic acid	50 ug/mL
LCPFCIC_00016	06/16/16	12/22/15	MeOH/H2O, Lot 09285	5 mL	LCMPFCSU_00023	250 uL	13C2-PFHxDA	50 ng/mL
							13C2-PFTeDA	50 ng/mL
							13C4-PFHpA	50 ng/mL
							13C5-PFPeA	50 ng/mL
							13C8 FOSA	50 ng/mL
							13C4 PFBA	50 ng/mL
							13C2 PFDA	50 ng/mL
							13C2 PFDoA	50 ng/mL
							13C2 PFHxA	50 ng/mL
							18O2 PFHxS	47.3 ng/mL
							13C5 PFNA	50 ng/mL
							13C4 PFOA	50 ng/mL
							13C4 PFOS	47.8 ng/mL
							13C2 PFUnA	50 ng/mL
					LCPFACMXB_00008	125 uL	Perfluorobutanesulfonic acid (PFBS)	44.25 ng/mL
							Perfluoroheptanoic acid (PFHpA)	50 ng/mL
							Perfluorohexanesulfonic acid (PFHxS)	47.25 ng/mL
							Perfluorononanoic acid (PFNA)	50 ng/mL
							Perfluorooctanesulfonic acid (PFOS)	47.75 ng/mL
							Perfluorooctanoic acid (PFOA)	50 ng/mL
..LCMPFCSU_00023	06/21/16	12/21/15	Methanol, Lot Baker 115491	5 mL	LCM2PFHxDA_00002	0.1 mL	13C2-PFHxDA	1 ug/mL
							13C2-PFTeDA	1 ug/mL
							13C4-PFHpA	1 ug/mL
							13C5-PFPeA	1 ug/mL
							13C8 FOSA	1 ug/mL
							13C4 PFBA	1 ug/mL
							13C2 PFDA	1 ug/mL
							13C2 PFDoA	1 ug/mL
							13C2 PFHxA	1 ug/mL
							18O2 PFHxS	0.946 ug/mL
							13C5 PFNA	1 ug/mL
							13C4 PFOA	1 ug/mL
							13C4 PFOS	0.956 ug/mL
							13C2 PFUnA	1 ug/mL
							13C2-PFHxDA	50 ug/mL
..LCM2PFTeDA_00003	11/29/17		Wellington Laboratories, Lot M2PFTeDA1112		(Purchased Reagent)		13C2-PFTeDA	50 ug/mL
..LCM4PFHPA_00003	05/22/20		Wellington Laboratories, Lot M4PFHPA0515		(Purchased Reagent)		13C4-PFHpA	50 ug/mL
..LCM5PFPEA_00004	05/22/20		Wellington Laboratories, Lot M5PFPeA0515		(Purchased Reagent)		13C5-PFPeA	50 ug/mL
..LCM8FOSA_00006	12/15/16		Wellington Laboratories, Lot M8FOSA1214I		(Purchased Reagent)		13C8 FOSA	50 ug/mL
..LCMPFBA_00004	10/31/19		Wellington Laboratories, Lot MPFBA1014		(Purchased Reagent)		13C4 PFBA	50 ug/mL
..LCMPFDA_00005	04/13/19		Wellington Laboratories, Lot MPFDA0414		(Purchased Reagent)		13C2 PFDA	50 ug/mL

REAGENT TRACEABILITY SUMMARY

Lab Name: TestAmerica Sacramento Job No.: 320-18796-1

SDG No.: _____

Reagent ID	Exp Date	Prep Date	Dilutant Used	Reagent Final Volume	Parent Reagent		Analyte	Concentration
					Reagent ID	Volume Added		
..LCMPFDoA_00003	07/17/19		Wellington Laboratories, Lot MPFDoA0714		(Purchased Reagent)		13C2 PFDoA	50 ug/mL
..LCMPFHxA_00006	04/13/19		Wellington Laboratories, Lot MPFHxA0414		(Purchased Reagent)		13C2 PFHxA	50 ug/mL
..LCMPFHxS_00004	07/25/18		Wellington Laboratories, Lot MPFHxS0713		(Purchased Reagent)		18O2 PFHxS	47.3 ug/mL
..LCMPFNA_00003	04/13/19		Wellington Laboratories, Lot MPFNA0414		(Purchased Reagent)		13C5 PFNA	50 ug/mL
..LCMPFOA_00007	04/10/20		Wellington Laboratories, Lot MPFOA0415		(Purchased Reagent)		13C4 PFOA	50 ug/mL
..LCMPFOS_00009	05/15/20		Wellington Laboratories, Lot MPFOS0515		(Purchased Reagent)		13C4 PFOS	47.8 ug/mL
..LCMPFUDa_00004	10/31/19		Wellington Laboratories, Lot MPFUDa1014		(Purchased Reagent)		13C2 PFUnA	50 ug/mL
.LCPFACMXB_00008	06/20/19		Wellington Laboratories, Lot PFACMXB0614		(Purchased Reagent)		Perfluorobutanesulfonic acid (PFBS)	1.77 ug/mL
							Perfluoroheptanoic acid (PFHpA)	2 ug/mL
							Perfluorohexanesulfonic acid (PFHxS)	1.89 ug/mL
							Perfluorononanoic acid (PFNA)	2 ug/mL
							Perfluorooctanesulfonic acid (PFOS)	1.91 ug/mL
							Perfluorooctanoic acid (PFOA)	2 ug/mL
LCPFIC_00017	06/16/16	05/14/16	MeOH/H2O, Lot 09285	5 mL	LCMPFCSU_00040	250 uL	13C2-PFHxDA	50 ng/mL
							13C2-PFTeDA	50 ng/mL
							13C4-PFHpA	50 ng/mL
							13C5-PFPeA	50 ng/mL
							13C8 FOSA	50 ng/mL
							13C4 PFBA	50 ng/mL
							13C2 PFDA	50 ng/mL
							13C2 PFDoA	50 ng/mL
							13C2 PFHxA	50 ng/mL
							18O2 PFHxS	47.3 ng/mL
							13C5 PFNA	50 ng/mL
							13C4 PFOA	50 ng/mL
							13C4 PFOS	47.8 ng/mL
							13C2 PFUnA	50 ng/mL
					LCPFACMXB_00007	125 uL	Perfluorobutanesulfonic acid (PFBS)	44.25 ng/mL
							Perfluoroheptanoic acid (PFHpA)	50 ng/mL
							Perfluorohexanesulfonic acid (PFHxS)	47.25 ng/mL
							Perfluorononanoic acid (PFNA)	50 ng/mL
							Perfluorooctanesulfonic acid (PFOS)	47.75 ng/mL
							Perfluorooctanoic acid (PFOA)	50 ng/mL
.LCMPFCSU_00040	11/05/16	05/11/16	Methanol, Lot Baker 115935	10000 uL	LCM2PFHxDA_00005	200 uL	13C2-PFHxDA	1 ug/mL
					LCM2PFTeDA_00005	200 uL	13C2-PFTeDA	1 ug/mL
					LCM4PFHPA_00005	200 uL	13C4-PFHpA	1 ug/mL
					LCM5PFPEA_00006	200 uL	13C5-PFPeA	1 ug/mL
					LCM8FOSA_00009	200 uL	13C8 FOSA	1 ug/mL
					LCMPFBA_00006	200 uL	13C4 PFBA	1 ug/mL

REAGENT TRACEABILITY SUMMARY

Lab Name: TestAmerica Sacramento

Job No.: 320-18796-1

SDG No.: _____

Reagent ID	Exp Date	Prep Date	Dilutant Used	Reagent Final Volume	Parent Reagent		Analyte	Concentration
					Reagent ID	Volume Added		
					LCMPFDA 00007	200 uL	13C2 PFDA	1 ug/mL
					LCMPFDoA 00006	200 uL	13C2 PFDoA	1 ug/mL
					LCMPFHxA 00008	200 uL	13C2 PFHxA	1 ug/mL
					LCMPFHxS 00006	200 uL	18O2 PFHxS	0.946 ug/mL
					LCMPFNA 00005	200 uL	13C5 PFNA	1 ug/mL
					LCMPFOA 00010	200 uL	13C4 PFOA	1 ug/mL
					LCMPFOS 00012	200 uL	13C4 PFOS	0.956 ug/mL
					LCMPFUDa 00007	200 uL	13C2 PFUnA	1 ug/mL
..LCM2PFHxDA 00005	01/07/21	Wellington Laboratories, Lot M2PFHxDA1112			(Purchased Reagent)		13C2-PFHxDA	50 ug/mL
..LCM2PFTeDA 00005	12/07/20	Wellington Laboratories, Lot M2PFTeDA1115			(Purchased Reagent)		13C2-PFTeDA	50 ug/mL
..LCM4PFHPA 00005	05/22/20	Wellington Laboratories, Lot M4PFHPA0515			(Purchased Reagent)		13C4-PFHPa	50 ug/mL
..LCM5PFPEA 00006	05/22/20	Wellington Laboratories, Lot M5PFPeA0515			(Purchased Reagent)		13C5-PFPeA	50 ug/mL
..LCM8FOSA 00009	12/22/17	Wellington Laboratories, Lot M8FOSA1215I			(Purchased Reagent)		13C8 FOSA	50 ug/mL
..LCMPFBA 00006	10/31/19	Wellington Laboratories, Lot MPFBA1014			(Purchased Reagent)		13C4 PFBA	50 ug/mL
..LCMPFDA 00007	08/19/20	Wellington Laboratories, Lot MPFDA0815			(Purchased Reagent)		13C2 PFDA	50 ug/mL
..LCMPFDoA 00006	07/17/19	Wellington Laboratories, Lot MPFDoA0714			(Purchased Reagent)		13C2 PFDoA	50 ug/mL
..LCMPFHxA 00008	04/09/20	Wellington Laboratories, Lot MPFHxA0415			(Purchased Reagent)		13C2 PFHxA	50 ug/mL
..LCMPFHxS 00006	10/23/20	Wellington Laboratories, Lot MPFHxS1015			(Purchased Reagent)		18O2 PFHxS	47.3 ug/mL
..LCMPFNA 00005	04/13/19	Wellington Laboratories, Lot MPFNA0414			(Purchased Reagent)		13C5 PFNA	50 ug/mL
..LCMPFOA 00010	01/22/21	Wellington Laboratories, Lot MPFOA0116			(Purchased Reagent)		13C4 PFOA	50 ug/mL
..LCMPFOS 00012	01/22/21	Wellington Laboratories, Lot MPFOS0116			(Purchased Reagent)		13C4 PFOS	47.8 ug/mL
..LCMPFUDa 00007	10/31/19	Wellington Laboratories, Lot MPFUDa1014			(Purchased Reagent)		13C2 PFUnA	50 ug/mL
.LCPFACMXB_00007	11/06/20	Wellington Laboratories, Lot PFACMXB1115			(Purchased Reagent)		Perfluorobutanesulfonic acid (PFBS)	1.77 ug/mL
							Perfluoroheptanoic acid (PFHpA)	2 ug/mL
							Perfluorohexanesulfonic acid (PFHxS)	1.89 ug/mL
							Perfluorononanoic acid (PFNA)	2 ug/mL
							Perfluorooctanesulfonic acid (PFOS)	1.91 ug/mL
							Perfluorooctanoic acid (PFOA)	2 ug/mL
LCPFCSP_00047	09/08/16	04/26/16	Methanol, Lot 090285	5000 uL	LCPFBA 00004	100 uL	Perfluorobutyric acid	1 ug/mL
					LCPFBS 00003	100 uL	Perfluorobutane Sulfonate	0.884 ug/mL
					LCPFBSA_00001	100 uL	Perfluorobutanesulfonic acid (PFBS)	0.884 ug/mL
					LCPFDA 00004	100 uL	Perfluorodecanoic acid	1 ug/mL
					LCPFDoA 00004	100 uL	Perfluorododecanoic acid	1 ug/mL
					LCPFDoS_00003	100 uL	PFDoS (Perflouro-1-dodecanesulfonate)	0.968 ug/mL
					LCPFDS 00003	100 uL	Perfluorodecane Sulfonate	0.964 ug/mL
					LCPFDSA 00001	100 uL	Perfluorodecane Sulfonic acid	0.964 ug/mL
					LCPFHpa_00004	100 uL	Perfluoroheptanoic acid (PFHpA)	1 ug/mL
					LCPFHps_00005	100 uL	Perfluoroheptane Sulfonate	0.952 ug/mL
					LCPFHpSA 00001	100 uL	Perfluoroheptanesulfonic Acid	0.952 ug/mL
					LCPFHxA_00003	100 uL	Perfluorohexanoic acid	1 ug/mL

REAGENT TRACEABILITY SUMMARY

Lab Name: TestAmerica Sacramento Job No.: 320-18796-1

SDG No.: _____

Reagent ID	Exp Date	Prep Date	Dilutant Used	Reagent Final Volume	Parent Reagent		Analyte	Concentration
					Reagent ID	Volume Added		
					LCPFHxDA_00004	100 uL	Perfluorohexadecanoic acid	1 ug/mL
					LCPFHxS-br_00001	100 uL	Perfluorohexane Sulfonate	0.91 ug/mL
							Perfluorohexanesulfonic acid (PFHxS)	0.91 ug/mL
					LCPFNA_00004	100 uL	Perfluorononanoic acid (PFNA)	1 ug/mL
					LCPFNS_00002	100 uL	PFNS (Perflouro-1-nonanesulfonate)	0.96 ug/mL
					LCPFOA_00005	100 uL	Perfluorooctanoic acid (PFOA)	1 ug/mL
					LCPFODA_00004	100 uL	Perfluorooctadecanoic acid	1 ug/mL
					LCPFOS-br_00001	100 uL	Perfluorooctanesulfonic acid (PFOS)	0.928 ug/mL
					LCPFOSA_00006	100 uL	Perfluorooctane Sulfonamide	1 ug/mL
					LCPFPeA_00004	100 uL	Perfluoropentanoic acid	1 ug/mL
					LCPFPeS_00002	100 uL	PFPeS (Perflouro-1-pentanesulfonate)	0.938 ug/mL
					LCPFTeDA_00003	100 uL	Perfluorotetradecanoic acid	1 ug/mL
					LCPFTrDA_00003	100 uL	Perfluorotridecanoic acid	1 ug/mL
					LCPFUdA_00003	100 uL	Perfluoroundecanoic acid	1 ug/mL
.LCPFBA_00004	01/30/20	Wellington Laboratories, Lot PFBA0115			(Purchased Reagent)		Perfluorobutyric acid	50 ug/mL
.LCPFBS_00003	10/09/19	Wellington Laboratories, Lot LPFBS1014			(Purchased Reagent)		Perfluorobutane Sulfonate	44.2 ug/mL
.LCPFBSA_00001	10/09/19	Wellington Laboratories, Lot LPFBS1014			(Purchased Reagent)		Perfluorobutanesulfonic acid (PFBS)	44.2 ug/mL
.LCPFDA_00004	07/02/20	Wellington Laboratories, Lot PFDA0615			(Purchased Reagent)		Perfluorodecanoic acid	50 ug/mL
.LCPFDoA_00004	01/30/20	Wellington Laboratories, Lot PFDoA0115			(Purchased Reagent)		Perfluorododecanoic acid	50 ug/mL
.LCPFDoS_00003	10/06/16	Wellington Laboratories, Lot LPFDoS1011			(Purchased Reagent)		PFDoS (Perflouro-1-dodecanesulfonate)	48.4 ug/mL
.LCPFDS_00003	09/13/18	Wellington Laboratories, Lot LPFDS0913			(Purchased Reagent)		Perfluorodecane Sulfonate	48.2 ug/mL
.LCPFDSA_00001	09/13/18	Wellington Laboratories, Lot LPFDS0913			(Purchased Reagent)		Perfluorodecane Sulfonic acid	48.2 ug/mL
.LCPFHpa_00004	05/09/19	Wellington Laboratories, Lot PFHpA0514			(Purchased Reagent)		Perfluoroheptanoic acid (PFHpA)	50 ug/mL
.LCPFHps_00005	01/28/19	Wellington Laboratories, Lot LPFHps0114			(Purchased Reagent)		Perfluoroheptane Sulfonate	47.6 ug/mL
.LCPFHpsA_00001	11/21/17	Wellington Laboratories, Lot LPFHps1112			(Purchased Reagent)		Perfluoroheptanesulfonic Acid	47.6 ug/mL
.LCPFHxA_00003	05/09/19	Wellington Laboratories, Lot PFHxA0514			(Purchased Reagent)		Perfluorohexanoic acid	50 ug/mL
.LCPFHxDA_00004	11/28/17	Wellington Laboratories, Lot PFHxDA0707			(Purchased Reagent)		Perfluorohexadecanoic acid	50 ug/mL
.LCPFHxS-br_00001	07/03/20	Wellington Laboratories, Lot brPFHxSK0615			(Purchased Reagent)		Perfluorohexane Sulfonate	45.5 ug/mL
							Perfluorohexanesulfonic acid (PFHxS)	45.5 ug/mL
.LCPFNA_00004	05/09/19	Wellington Laboratories, Lot PFNA0514			(Purchased Reagent)		Perfluorononanoic acid (PFNA)	50 ug/mL
.LCPFNS_00002	07/04/17	Wellington Laboratories, Lot LPFNS0712			(Purchased Reagent)		PFNS (Perflouro-1-nonanesulfonate)	48 ug/mL
.LCPFOA_00005	11/06/20	Wellington Laboratories, Lot PFOA1115			(Purchased Reagent)		Perfluorooctanoic acid (PFOA)	50 ug/mL
.LCPFODA_00004	04/25/17	Wellington Laboratories, Lot PFODA0807			(Purchased Reagent)		Perfluorooctadecanoic acid	50 ug/mL
.LCPFOS-br_00001	10/14/20	Wellington Laboratories, Lot brPFOSK1015			(Purchased Reagent)		Perfluorooctanesulfonic acid (PFOS)	46.4 ug/mL
.LCPFOSA_00006	09/02/17	Wellington Laboratories, Lot FOSA0815I			(Purchased Reagent)		Perfluorooctane Sulfonamide	50 ug/mL
.LCPFPeA_00004	01/30/20	Wellington Laboratories, Lot PFPeA0115			(Purchased Reagent)		Perfluoropentanoic acid	50 ug/mL
.LCPFPeS_00002	07/04/17	Wellington Laboratories, Lot LPFPeS0712			(Purchased Reagent)		PFPeS (Perflouro-1-pentanesulfonate)	46.9 ug/mL

REAGENT TRACEABILITY SUMMARY

Lab Name: TestAmerica Sacramento Job No.: 320-18796-1

SDG No.: _____

Reagent ID	Exp Date	Prep Date	Dilutant Used	Reagent Final Volume	Parent Reagent		Analyte	Concentration
					Reagent ID	Volume Added		
.LCPFTeDA_00003	06/19/18		Wellington Laboratories, Lot PFTeDA0613		(Purchased Reagent)		Perfluorotetradecanoic acid	50 ug/mL
.LCPFTrDA_00003	12/10/18		Wellington Laboratories, Lot PFTrDA1213		(Purchased Reagent)		Perfluorotridecanoic acid	50 ug/mL
.LCPFUdA_00003	06/19/18		Wellington Laboratories, Lot PFUdA0613		(Purchased Reagent)		Perfluoroundecanoic acid	50 ug/mL

REAGENT TRACEABILITY SUMMARY

Lab Name: TestAmerica Denver

Job No.: 320-18796-1

SDG No.: _____

Reagent ID	Exp Date	Prep Date	Dilutant Used	Reagent Final Volume	Parent Reagent		Analyte	Concentration
					Reagent ID	Volume Added		
Alt AsFeSbSe_00001	06/03/16	05/18/16	5%5%HNO3HCL, Lot See Reagent Log	100 mL	10 ppm Fe_00006	1 mL	Iron	0.1 ppm
.10 ppm Fe_00006	10/23/16	02/12/16	5%HNO3/5% HCl, Lot see log book	100 mL	10000 Fe_00014	0.1 mL	Iron	10 mg/L
..10000 Fe 00014	10/23/16		Inorganic Ventures, Lot J2-FE04047		(Purchased Reagent)		Iron	10000 mg/L
ICP CCV_00161	06/01/16	05/13/16	5%/5% HCL/HNO3, Lot SEE LOGBOOK	500 mL	ICP ICAL1A_00626	250 mL	Iron	2.5 mg/L
.ICP ICAL1A_00626	06/01/16	05/13/16	5%/5% HCL/HNO3, Lot SEE LOGBOOK	500 mL	Icp cal std 3_00011	5 mL	Iron	5 mg/L
..Icp cal std 3_00011	06/01/16		Inorganic Ventures, Lot H2-MEB585085		(Purchased Reagent)		Iron	500 mg/L
ICP CCV_00162	06/01/16	05/16/16	5%/5% HCL/HNO3, Lot SEE LOGBOOK	500 mL	ICP ICAL1A_00627	250 mL	Iron	2.5 mg/L
.ICP ICAL1A_00627	06/01/16	05/16/16	5%/5% HCL/HNO3, Lot SEE LOGBOOK	500 mL	Icp cal std 3_00011	5 mL	Iron	5 mg/L
..Icp cal std 3_00011	06/01/16		Inorganic Ventures, Lot H2-MEB585085		(Purchased Reagent)		Iron	500 mg/L
ICP CCV_00164	06/01/16	05/19/16	5%/5% HCL/HNO3, Lot SEE LOGBOOK	500 mL	ICP ICAL1A_00629	250 mL	Iron	2.5 mg/L
.ICP ICAL1A_00629	06/01/16	05/19/16	5%/5% HCL/HNO3, Lot SEE LOGBOOK	500 mL	Icp cal std 3_00011	5 mL	Iron	5 mg/L
..Icp cal std 3_00011	06/01/16		Inorganic Ventures, Lot H2-MEB585085		(Purchased Reagent)		Iron	500 mg/L
ICP CCVH_00464	10/23/16	05/11/16	5%/5% HCL/HNO3, Lot SEE LOGBOOK	500 mL	ICP ICAL2A_00366	250 mL	Iron	50 mg/L
.ICP ICAL2A_00366	10/23/16	05/11/16	5%HCl/5% HNO3, Lot see reagent log	1000 mL	10000 Fe_00014	10 mL	Iron	100 mg/L
..10000 Fe 00014	10/23/16		Inorganic Ventures, Lot J2-FE04047		(Purchased Reagent)		Iron	10000 mg/L
ICP CCVH_00465	10/23/16	05/16/16	5%/5% HCL/HNO3, Lot SEE LOGBOOK	500 mL	ICP ICAL2A_00367	250 mL	Iron	50 mg/L
.ICP ICAL2A_00367	10/23/16	05/16/16	5%HCl/5% HNO3, Lot see reagent log	1000 mL	10000 Fe_00014	10 mL	Iron	100 mg/L
..10000 Fe 00014	10/23/16		Inorganic Ventures, Lot J2-FE04047		(Purchased Reagent)		Iron	10000 mg/L
ICP CCVH_00466	10/23/16	05/19/16	5%/5% HCL/HNO3, Lot SEE LOGBOOK	500 mL	ICP ICAL2A_00368	250 mL	Iron	50 mg/L
.ICP ICAL2A_00368	10/23/16	05/19/16	5%HCl/5% HNO3, Lot see reagent log	1000 mL	10000 Fe_00014	10 mL	Iron	100 mg/L
..10000 Fe 00014	10/23/16		Inorganic Ventures, Lot J2-FE04047		(Purchased Reagent)		Iron	10000 mg/L
ICP CRI_00387	05/18/16	05/17/16	5:HNO3/5%HCl, Lot see reagent log	100 mL	ICP RL STD3A_00010	0.1 mL	Iron	0.03 mg/L
.ICP RL STD3A 00010	09/01/16		Inorganic Ventures, Lot J2-MEB594038		(Purchased Reagent)		Iron	30 mg/L
ICP CRI_00391	05/21/16	05/20/16	5:HNO3/5%HCl, Lot see reagent log	100 mL	ICP RL STD3A_00010	0.1 mL	Iron	0.03 mg/L
.ICP RL STD3A 00010	09/01/16		Inorganic Ventures, Lot J2-MEB594038		(Purchased Reagent)		Iron	30 mg/L
ICP CRI_00394	05/24/16	05/23/16	5:HNO3/5%HCl, Lot see reagent log	100 mL	ICP RL STD3A_00010	0.1 mL	Iron	0.03 mg/L
.ICP RL STD3A 00010	09/01/16		Inorganic Ventures, Lot J2-MEB594038		(Purchased Reagent)		Iron	30 mg/L
ICP ICAL1A_00629	06/01/16	05/19/16	5%/5% HCL/HNO3, Lot SEE LOGBOOK	500 mL	Icp cal std 3_00011	5 mL	Iron	5 mg/L

REAGENT TRACEABILITY SUMMARY

Lab Name: TestAmerica Denver Job No.: 320-18796-1

SDG No.: _____

Reagent ID	Exp Date	Prep Date	Dilutant Used	Reagent Final Volume	Parent Reagent		Analyte	Concentration
					Reagent ID	Volume Added		
.Icp cal std 3 00011	06/01/16		Inorganic Ventures, Lot H2-MEB585085		(Purchased Reagent)		Iron	500 mg/L
ICP ICAL2A_00368	10/23/16	05/19/16	5%HCl/5% HNO3, Lot see reagent log	1000 mL	10000 Fe_00014	10 mL	Iron	100 mg/L
.10000 Fe_00014	10/23/16		Inorganic Ventures, Lot J2-FE04047		(Purchased Reagent)		Iron	10000 mg/L
ICP ICSA_00122	11/18/16	04/29/16	5%/5% HCL/HNO3, Lot SEE LOGBOOK	250 mL	Icp stk ICSA_00015	25 mL	Al	500 mg/L
							Ca	500 mg/L
							Iron	200 mg/L
							Mg	500 mg/L
.Icp stk ICSA_00015	11/18/16		Inorganic Ventures, Lot J2-MEB572053		(Purchased Reagent)		Al	5000 mg/L
							Ca	5000 mg/L
							Iron	2000 mg/L
							Mg	5000 mg/L
ICP ICSA_00123	11/18/16	05/16/16	5%/5% HCL/HNO3, Lot SEE LOGBOOK	250 mL	Icp stk ICSA_00015	25 mL	Al	500 mg/L
							Ca	500 mg/L
							Iron	200 mg/L
							Mg	500 mg/L
.Icp stk ICSA_00015	11/18/16		Inorganic Ventures, Lot J2-MEB572053		(Purchased Reagent)		Al	5000 mg/L
							Ca	5000 mg/L
							Iron	2000 mg/L
							Mg	5000 mg/L
ICP ICSAB_00130	05/20/16	05/04/16	5%/5% HCL/HNO3, Lot SEE LOGBOOK	250 mL	10000 Si_00012	0.25 mL	Si	10 mg/L
							SiO2	21.4 mg/L
					ANALYTES B_00009	2.5 mL	Ag	1 mg/L
							Ba	0.5 mg/L
							Be	0.5 mg/L
							Cd	1 mg/L
							Co	0.5 mg/L
							Cr	0.5 mg/L
							Cu	0.5 mg/L
							Mn	0.5 mg/L
							Ni	1 mg/L
							Pb	1 mg/L
							V	0.5 mg/L
							Zn	1 mg/L
					ICP ISAB 1B_00009	2.5 mL	Tl	10 mg/L
					ICP ISAB STD1_00008	2.5 mL	As	2 mg/L
							B	2 mg/L
							K	50 mg/L
							Li	1 mg/L
							Mo	1 mg/L
							Na	50 mg/L
							P	2 mg/L
							Sb	1 mg/L
							Se	5 mg/L

REAGENT TRACEABILITY SUMMARY

Lab Name: TestAmerica Denver Job No.: 320-18796-1

SDG No.: _____

Reagent ID	Exp Date	Prep Date	Dilutant Used	Reagent Final Volume	Parent Reagent		Analyte	Concentration
					Reagent ID	Volume Added		
					ICP ISAB STD2_00007	2.5 mL	Sr	1 mg/L
							Sn	10 mg/L
							Ti	1 mg/L
					Icp stk ICSA_00016	25 mL	Al	500 mg/L
							Ca	500 mg/L
							Iron	200 mg/L
.10000 Si_00012	12/08/16		Inorganic ventures, Lot J2-SI03056		(Purchased Reagent)		Mg	500 mg/L
							Si	10000 mg/L
.ANALYTES B_00009	05/20/16		SPEX, Lot 9-164ypy		(Purchased Reagent)		SiO2	21400 mg/L
							Ag	100 mg/L
							Ba	50 mg/L
							Be	50 mg/L
							Cd	100 mg/L
							Co	50 mg/L
							Cr	50 mg/L
							Cu	50 mg/L
							Mn	50 mg/L
							Ni	100 mg/L
							Pb	100 mg/L
							V	50 mg/L
							Zn	100 mg/L
							Tl	1000 mg/L
.ICP ISAB 1B_00009	01/27/17		High Purity, Lot 1602230		(Purchased Reagent)		As	200 mg/L
.ICP ISAB STD1_00008	01/27/17		High Purity, Lot 1602229		(Purchased Reagent)		B	200 mg/L
							K	5000 mg/L
							Li	100 mg/L
							Mo	100 mg/L
							Na	5000 mg/L
							P	200 mg/L
							Sb	100 mg/L
							Se	500 mg/L
							Sr	100 mg/L
							Sn	1000 mg/L
.ICP ISAB STD2_00007	09/10/16		High Purity, Lot 1525210		(Purchased Reagent)		Ti	100 mg/L
.Icp stk ICSA_00016	04/29/17		Inorganic Ventures, Lot J2-MEB572053		(Purchased Reagent)		Al	5000 mg/L
							Ca	5000 mg/L
							Iron	2000 mg/L
							Mg	5000 mg/L
ICP ICSAB_00131	09/10/16	05/19/16	5%/5% HCL/HNO3, Lot SEE LOGBOOK	250 mL	10000 Si_00012	0.25 mL	Si	10 mg/L
							Ag	1 mg/L
					ANALYTES B_00010	2.5 mL	Ba	0.5 mg/L
							Be	0.5 mg/L
							Cd	1 mg/L
							Co	0.5 mg/L
							Cr	0.5 mg/L
							Cu	0.5 mg/L
							Mn	0.5 mg/L

REAGENT TRACEABILITY SUMMARY

Lab Name: TestAmerica Denver Job No.: 320-18796-1

SDG No.: _____

Reagent ID	Exp Date	Prep Date	Dilutant Used	Reagent Final Volume	Parent Reagent		Analyte	Concentration			
					Reagent ID	Volume Added					
							Ni	1 mg/L			
							Pb	1 mg/L			
							V	0.5 mg/L			
							Zn	1 mg/L			
					ICP ISAB 1B_00009	2.5 mL	Tl	10 mg/L			
					ICP ISAB STD1_00008	2.5 mL	As	2 mg/L			
							B	2 mg/L			
							K	50 mg/L			
							Li	1 mg/L			
							Mo	1 mg/L			
							Na	50 mg/L			
							P	2 mg/L			
							Sb	1 mg/L			
							Se	5 mg/L			
							Sr	1 mg/L			
					ICP ISAB STD2_00007	2.5 mL	Sn	10 mg/L			
					Icp stk ICSA_00016	25 mL	Ti	1 mg/L			
							Al	500 mg/L			
							Ca	500 mg/L			
							Iron	200 mg/L			
							Mg	500 mg/L			
.10000 Si_00012	12/08/16	Inorganic ventures, Lot J2-SI03056			(Purchased Reagent)		Si	10000 mg/L			
.ANALYTES B_00010	04/30/17	SPEX, Lot 1-75MKBY			(Purchased Reagent)		Ag	100 mg/L			
							Ba	50 mg/L			
							Be	50 mg/L			
							Cd	100 mg/L			
							Co	50 mg/L			
							Cr	50 mg/L			
							Cu	50 mg/L			
							Mn	50 mg/L			
							Ni	100 mg/L			
							Pb	100 mg/L			
							V	50 mg/L			
.ICP ISAB 1B_00009	01/27/17	High Purity, Lot 1602230			(Purchased Reagent)		Zn	100 mg/L			
.ICP ISAB STD1_00008	01/27/17	High Purity, Lot 1602229			(Purchased Reagent)		Tl	1000 mg/L			
							As	200 mg/L			
							B	200 mg/L			
							K	5000 mg/L			
							Li	100 mg/L			
							Mo	100 mg/L			
							Na	5000 mg/L			
							P	200 mg/L			
							Sb	100 mg/L			
							Se	500 mg/L			
.ICP ISAB STD2_00007	09/10/16	High Purity, Lot 1525210			(Purchased Reagent)		Sr	100 mg/L			
.Icp stk ICSA_00016	04/29/17	Inorganic Ventures, Lot J2-MEB572053			(Purchased Reagent)		Sn	1000 mg/L			
							Ti	100 mg/L			
					(Purchased Reagent)		Al	5000 mg/L			

REAGENT TRACEABILITY SUMMARY

Lab Name: TestAmerica Denver Job No.: 320-18796-1

SDG No.: _____

Reagent ID	Exp Date	Prep Date	Dilutant Used	Reagent Final Volume	Parent Reagent		Analyte	Concentration
					Reagent ID	Volume Added		
							Ca	5000 mg/L
							Iron	2000 mg/L
							Mg	5000 mg/L
ICP ICV_00145	02/02/17	05/12/16	5%/5% HCL/HNO3, Lot SEE LOGBOOK	100 mL	Icp ICVL A_00010	1 mL	Iron	0.25 mg/L
.Icp ICVL A 00010	02/02/17		High Purity, Lot 1602809		(Purchased Reagent)		Iron	25 mg/L
ICP ICV_00146	02/02/17	05/18/16	5%/5% HCL/HNO3, Lot SEE LOGBOOK	100 mL	Icp ICVL A_00010	1 mL	Iron	0.25 mg/L
.Icp ICVL A 00010	02/02/17		High Purity, Lot 1602809		(Purchased Reagent)		Iron	25 mg/L
ICP ICV_00148	02/02/17	05/23/16	5%/5% HCL/HNO3, Lot SEE LOGBOOK	100 mL	Icp ICVL A_00010	1 mL	Iron	0.25 mg/L
.Icp ICVL A 00010	02/02/17		High Purity, Lot 1602809		(Purchased Reagent)		Iron	25 mg/L
ICP ICVH_00308	07/06/16	05/12/16	5%/5% HCL/HNO3, Lot SEE LOGBOOK	100 mL	Icp ICVH_00274	1 mL	Iron	80 mg/L
.Icp ICVH 00274	12/14/16		High Purity, Lot 1534512		(Purchased Reagent)		Iron	8000 mg/L
ICP ICVH_00309	07/06/16	05/18/16	5%/5% HCL/HNO3, Lot SEE LOGBOOK	100 mL	Icp ICVH_00274	1 mL	Iron	80 mg/L
.Icp ICVH 00274	12/14/16		High Purity, Lot 1534512		(Purchased Reagent)		Iron	8000 mg/L
ICP LLCCV_01768	05/18/16	05/17/16	5%/5% HCL/HNO3, Lot SEE LOGBOOK	100 mL	ICP LLCCV-1_00034	1 mL	Iron	0.1 mg/L
.ICP LLCCV-1 00034	04/23/17		Inorganic Ventures, Lot K2-MEB631023		(Purchased Reagent)		Iron	10 mg/L
ICP LLCCV_01769	05/19/16	05/18/16	5%/5% HCL/HNO3, Lot SEE LOGBOOK	100 mL	ICP LLCCV-1_00034	1 mL	Iron	0.1 mg/L
.ICP LLCCV-1 00034	04/23/17		Inorganic Ventures, Lot K2-MEB631023		(Purchased Reagent)		Iron	10 mg/L
ICP LLCCV_01771	05/21/16	05/20/16	5%/5% HCL/HNO3, Lot SEE LOGBOOK	100 mL	ICP LLCCV-1_00034	1 mL	Iron	0.1 mg/L
.ICP LLCCV-1 00034	04/23/17		Inorganic Ventures, Lot K2-MEB631023		(Purchased Reagent)		Iron	10 mg/L
ICP LLCCV_01773	05/24/16	05/23/16	5%/5% HCL/HNO3, Lot SEE LOGBOOK	100 mL	ICP LLCCV-1_00034	1 mL	Iron	0.1 mg/L
.ICP LLCCV-1 00034	04/23/17		Inorganic Ventures, Lot K2-MEB631023		(Purchased Reagent)		Iron	10 mg/L
ICP PDS 1_00014	12/01/16		Inorganic Ventures, Lot H2-MEB546062		(Purchased Reagent)		Iron	100 mg/L
ICP SPK 2B_00039	01/01/17		Inorganic Ventures, Lot H2-MEB559076		(Purchased Reagent)		B	100 mg/L
							Mo	100 mg/L
							Sb	50 mg/L
							Si	1000 mg/L
							SiO2	2140 mg/L
							Sn	200 mg/L
							Sulfur	200 mg/L
							Ti	100 mg/L
							Zr	50 mg/L
ICP SPK 2B_00040	01/01/17		Inorganic Ventures, Lot H2-MEB559076		(Purchased Reagent)		B	100 mg/L
							Mo	100 mg/L
							Sb	50 mg/L
							Si	1000 mg/L
							SiO2	2140 mg/L

REAGENT TRACEABILITY SUMMARY

Lab Name: TestAmerica Denver Job No.: 320-18796-1

SDG No.: _____

Reagent ID	Exp Date	Prep Date	Dilutant Used	Reagent Final Volume	Parent Reagent		Analyte	Concentration
					Reagent ID	Volume Added		
							Sn	200 mg/L
							Sulfur	200 mg/L
							Ti	100 mg/L
							Zr	50 mg/L
ICP SPK 3A_00113	04/01/17	Inorganic Ventures, Lot J2-MEB594016			(Purchased Reagent)		Ag	5 mg/L
							Al	200 mg/L
							As	100 mg/L
							Ba	200 mg/L
							Be	5 mg/L
							Bi	200 mg/L
							Ca	5000 mg/L
							Cd	10 mg/L
							Co	50 mg/L
							Cr	20 mg/L
							Cu	25 mg/L
							Iron	100 mg/L
							K	5000 mg/L
							Li	100 mg/L
							Mg	5000 mg/L
							Mn	50 mg/L
							Na	5000 mg/L
							Ni	50 mg/L
							P	1000 mg/L
							Pb	50 mg/L
							Se	200 mg/L
							Sr	100 mg/L
							Th	100 mg/L
							Tl	200 mg/L
							U	200 mg/L
							V	50 mg/L
							Zn	50 mg/L
TSS Daily STD_00456	08/15/16	05/15/16	Di Water, Lot _	1000 mL	TSS STD_00025	0.1 g	Total Suspended Solids	100 mg/L
.TSS STD_00025	09/29/17		AccuStandard, Lot 215095135		(Purchased Reagent)		Total Suspended Solids	1 g/g

Reagent

LCM2PFHxDA_00002

Rec: 8/14/14 SKV



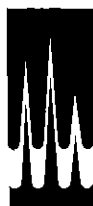
318141

ID: LCM2PFHxDA_00002

Exp: 11/29/17 Prod: SKV

13C2-PFHxDA at 50ug/mL

Scanned: 8/18/14 SKV



WELLINGTON LABORATORIES

CERTIFICATE OF ANALYSIS DOCUMENTATION

PRODUCT CODE:

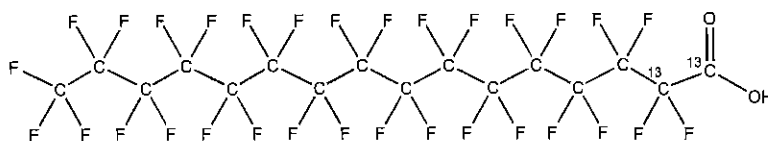
M2PFHxDA

LOT NUMBER:

M2PFHxDA1112

COMPOUND:Perfluoro-n-[1,2-¹³C₂]hexadecanoic acid**STRUCTURE:****CAS #:**

Not available

**MOLECULAR FORMULA:**¹³C₂¹²C₁₄HF₃₁O₂**MOLECULAR WEIGHT:**

816.11

CONCENTRATION:

50 ± 2.5 µg/ml

SOLVENT(S):

Methanol

Water (<1%)

CHEMICAL PURITY:

>98%

ISOTOPIC PURITY:≥99% ¹³C**LAST TESTED:** (mm/dd/yyyy)

11/29/2012

(1,2-¹³C₂)**EXPIRY DATE:** (mm/dd/yyyy)

11/29/2017

RECOMMENDED STORAGE:

Store ampoule in a cool, dark place

DOCUMENTATION/ DATA ATTACHED:

Figure 1: LC/MS Data (TIC and Mass Spectrum)

Figure 2: LC/MS/MS Data (Selected MRM Transitions)

ADDITIONAL INFORMATION:

- See page 2 for further details.
- Contains 4 mole eq. of NaOH to prevent conversion of the carboxylic acid to the methyl ester.
- Contains ~ 0.3% of native perfluoro-n-hexadecanoic acid.

FOR LABORATORY USE ONLY: NOT FOR HUMAN OR DRUG USE

Certified By:

B.G. Chittim

Date: 01/10/2013

(mm/dd/yyyy)

Wellington Laboratories Inc., 345 Southgate Dr. Guelph ON N1G 3M5 CANADA
519-822-2436 • Fax: 519-822-2849 • info@well-labs.com

INTENDED USE:

The products prepared by Wellington Laboratories Inc. are for laboratory use only. They are designed to be used as reference standards for the identification and/or quantification of specific chemical compound(s).

HAZARDS:

This product should only be used by qualified personnel familiar with its potential hazards and trained in the handling of hazardous chemicals. Due care should be exercised to prevent unnecessary human contact or ingestion. All procedures should be carried out in a well-functioning fume hood and suitable gloves, eye protection and clothing should be worn at all times. Waste should be disposed of according to national and regional regulations. Material Safety Data Sheets (MSDSs) are available upon request.

SYNTHESIS / CHARACTERIZATION:

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$$u_c(y(x_1, x_2, \dots, x_n)) = \sqrt{\sum_{i=1}^n u(y, x_i)^2}$$

where x is expressed as a relative standard uncertainty of the individual parameter.

The individual uncertainties taken into account include those associated with weights (calibration of the balance) and volumes (calibration of the volumetric glassware). An expanded maximum combined percent relative uncertainty of $\pm 5\%$ (calculated with a coverage factor of 2 and a level of confidence of 95%) is stated on the Certificate of Analysis for all our products.

TRACEABILITY:

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EXPIRY DATE / PERIOD OF VALIDITY:

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LIMITED WARRANTY:

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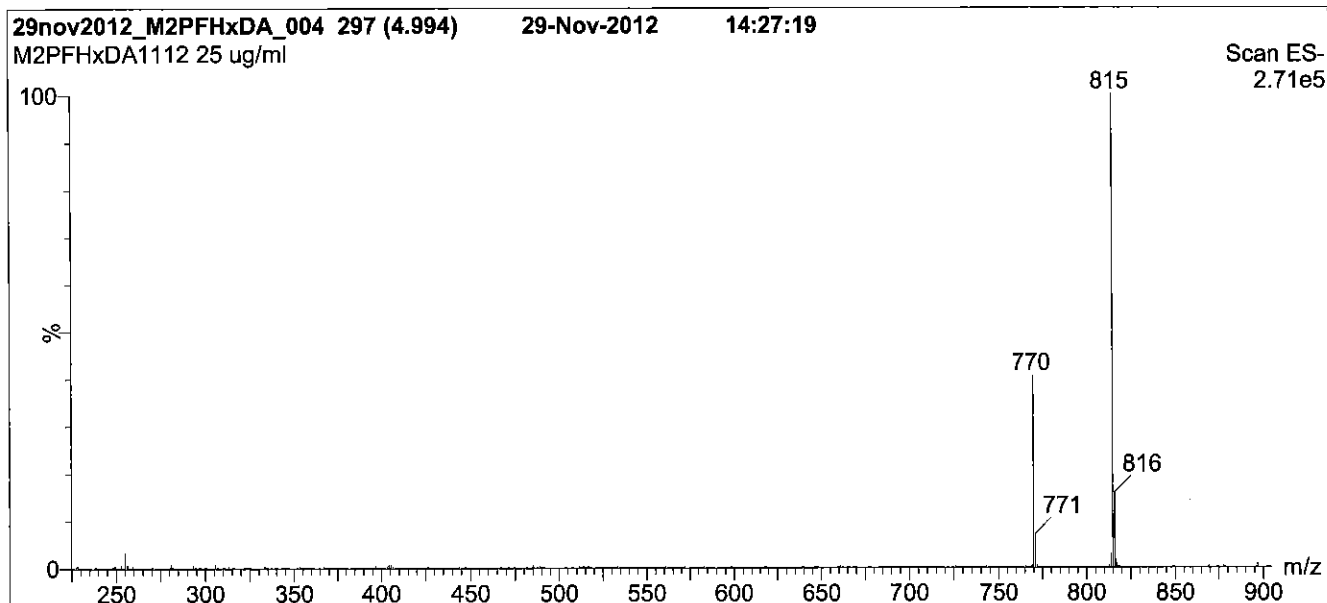
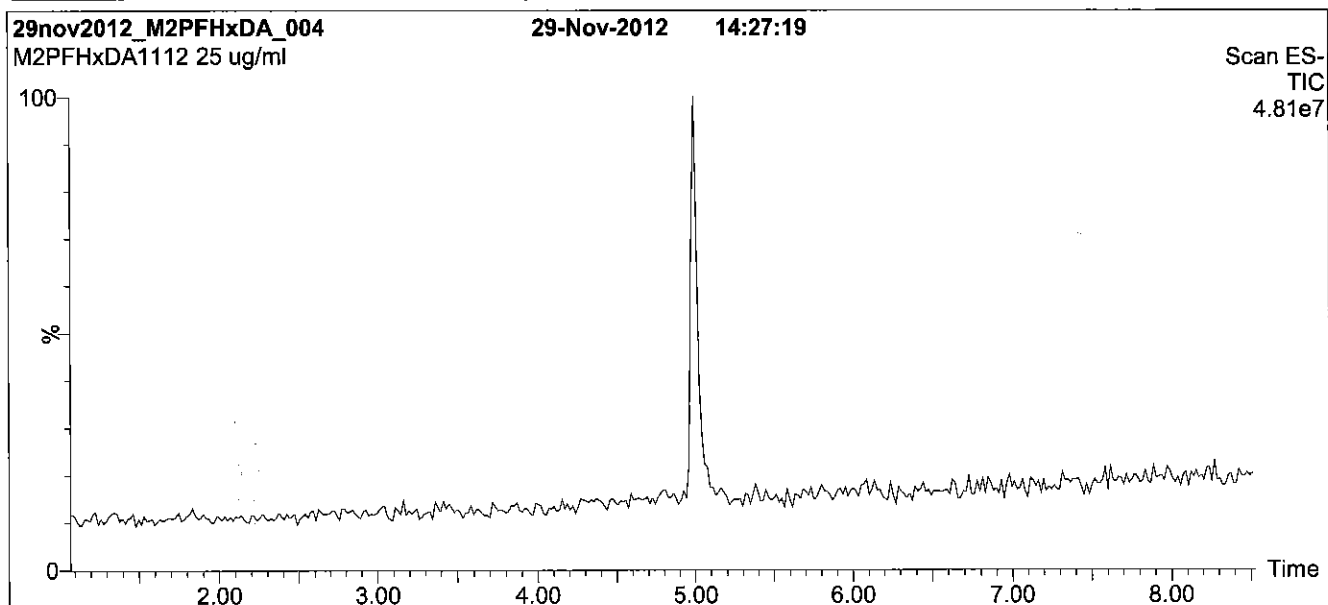
QUALITY MANAGEMENT:

This product was produced using a Quality Management System registered to ISO 9001:2008 by SAI Global, ISO/IEC 17025:2005 by the Canadian Association for Laboratory Accreditation Inc. (CALA; A 1226), and ISO GUIDE 34:2009 by ACLASS (certificate number AR-1523).



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Figure 1: M2PFHxDA; LC/MS Data (TIC and Mass Spectrum)



Conditions for Figure 1:

LC: Waters Acquity Ultra Performance LC
MS: Micromass Quattro micro API MS

Chromatographic Conditions

Column: Acquity UPLC BEH Shield RP₁₈
1.7 μ m, 2.1 x 100 mm

Mobile phase: Gradient
Start: 60% (80:20 MeOH:ACN) / 40% H₂O
(both with 10 mM NH₄OAc buffer)
Ramp to 100% organic over 7 min and hold for 1.5 min
before returning to initial conditions in 0.5 min.
Time: 10 min

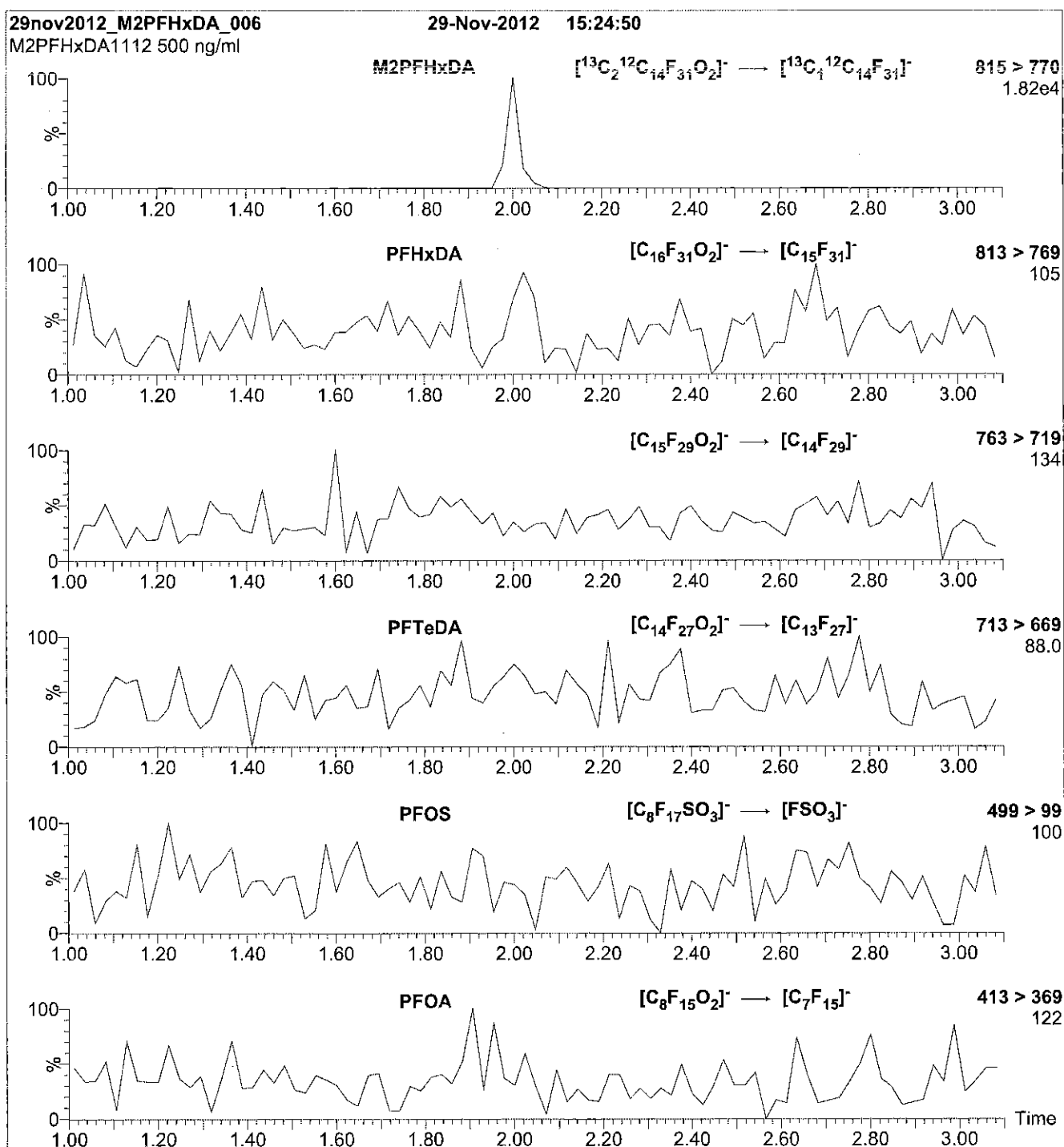
Flow: 300 μ l/min

MS Parameters

Experiment: Full Scan (225 - 1200 amu)

Source: Electrospray (negative)
Capillary Voltage (kV) = 2.00
Cone Voltage (V) = 25.00
Cone Gas Flow (l/hr) = 60
Desolvation Gas Flow (l/hr) = 750

Figure 2: M2PFHxDA; LC/MS/MS Data (Selected MRM Transitions)



Conditions for Figure 2:

Injection: Direct loop injection
10 μl (500 ng/ml M2PFHxDA)

Mobile phase: Isocratic 80% (80:20 MeOH:ACN) / 20% H_2O
(both with 10 mM NH_4OAc buffer)

Flow: 300 $\mu\text{l}/\text{min}$

MS Parameters

Collision Gas (mbar) = 3.39e-3
Collision Energy (eV) = 15

Reagent

LCM2PFHxDA_00003

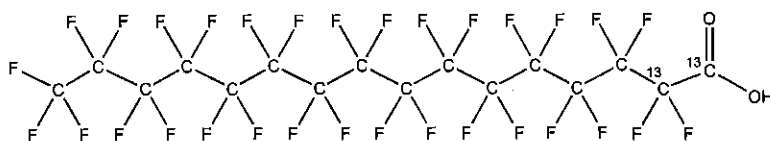


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CERTIFICATE OF ANALYSIS DOCUMENTATION

PRODUCT CODE: M2PFHxDA **LOT NUMBER:** M2PFHxDA1112
COMPOUND: Perfluoro-n-[1,2-¹³C₂]hexadecanoic acid

STRUCTURE: **CAS #:** Not available



MOLECULAR FORMULA: ¹³C₂¹²C₁₄HF₃₁O₂ **MOLECULAR WEIGHT:** 816.11
CONCENTRATION: 50 ± 2.5 µg/ml **SOLVENT(S):** Methanol
CHEMICAL PURITY: >98% **ISOTOPIC PURITY:** ≥99% ¹³C
LAST TESTED: (mm/dd/yyyy) 11/29/2012 (1,2-¹³C₂)
EXPIRY DATE: (mm/dd/yyyy) 11/29/2017
RECOMMENDED STORAGE: Store ampoule in a cool, dark place


DOCUMENTATION/ DATA ATTACHED:

Figure 1: LC/MS Data (TIC and Mass Spectrum)
 Figure 2: LC/MS/MS Data (Selected MRM Transitions)

ADDITIONAL INFORMATION:

- See page 2 for further details.
- Contains 4 mole eq. of NaOH to prevent conversion of the carboxylic acid to the methyl ester.
- Contains ~ 0.3% of native perfluoro-n-hexadecanoic acid.

FOR LABORATORY USE ONLY: NOT FOR HUMAN OR DRUG USE

Certified By: 
 B.G. Chittim **Date:** 04/01/2015
 (mm/dd/yyyy)

Wellington Laboratories Inc., 345 Southgate Dr. Guelph ON N1G 3M5 CANADA
 519-822-2436 • Fax: 519-822-2849 • info@well-labs.com

INTENDED USE:

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HAZARDS:

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LIMITED WARRANTY:

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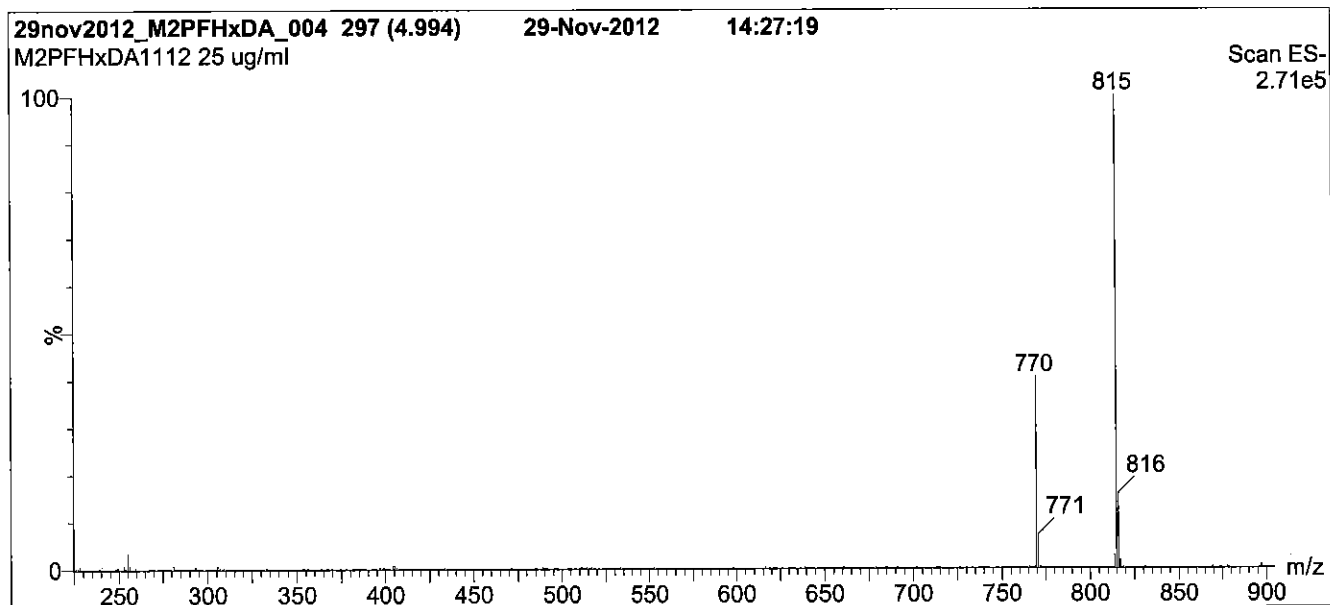
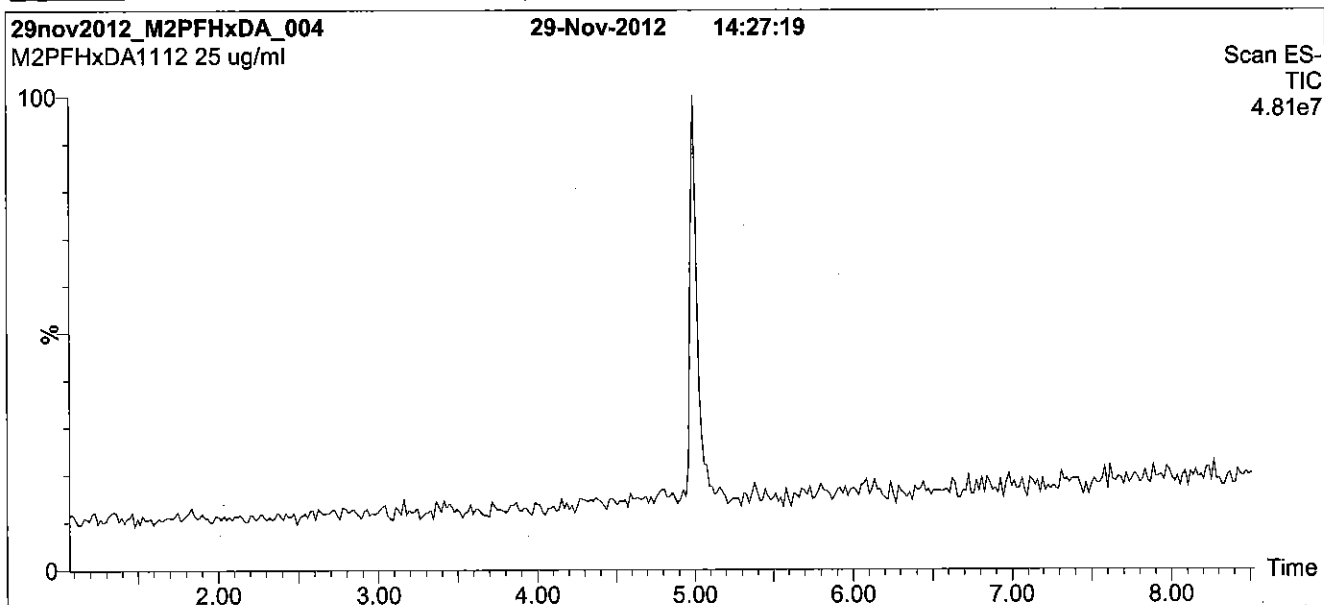
QUALITY MANAGEMENT:

This product was produced using a Quality Management System registered to the latest versions of ISO 9001 by SAI Global, ISO/IEC 17025 by the Canadian Association for Laboratory Accreditation Inc. (CALA; A 1226), and ISO GUIDE 34 by ANSI-ASQ National Accreditation Board (ANAB; AR-1523).



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Figure 1: M2PFHxDA; LC/MS Data (TIC and Mass Spectrum)



Conditions for Figure 1:

LC: Waters Acquity Ultra Performance LC
MS: Micromass Quattro micro API MS

Chromatographic Conditions

Column: Acquity UPLC BEH Shield RP₁₈
1.7 μ m, 2.1 x 100 mm

Mobile phase: Gradient
Start: 60% (80:20 MeOH:ACN) / 40% H₂O
(both with 10 mM NH₄OAc buffer)
Ramp to 100% organic over 7 min and hold for 1.5 min
before returning to initial conditions in 0.5 min.
Time: 10 min

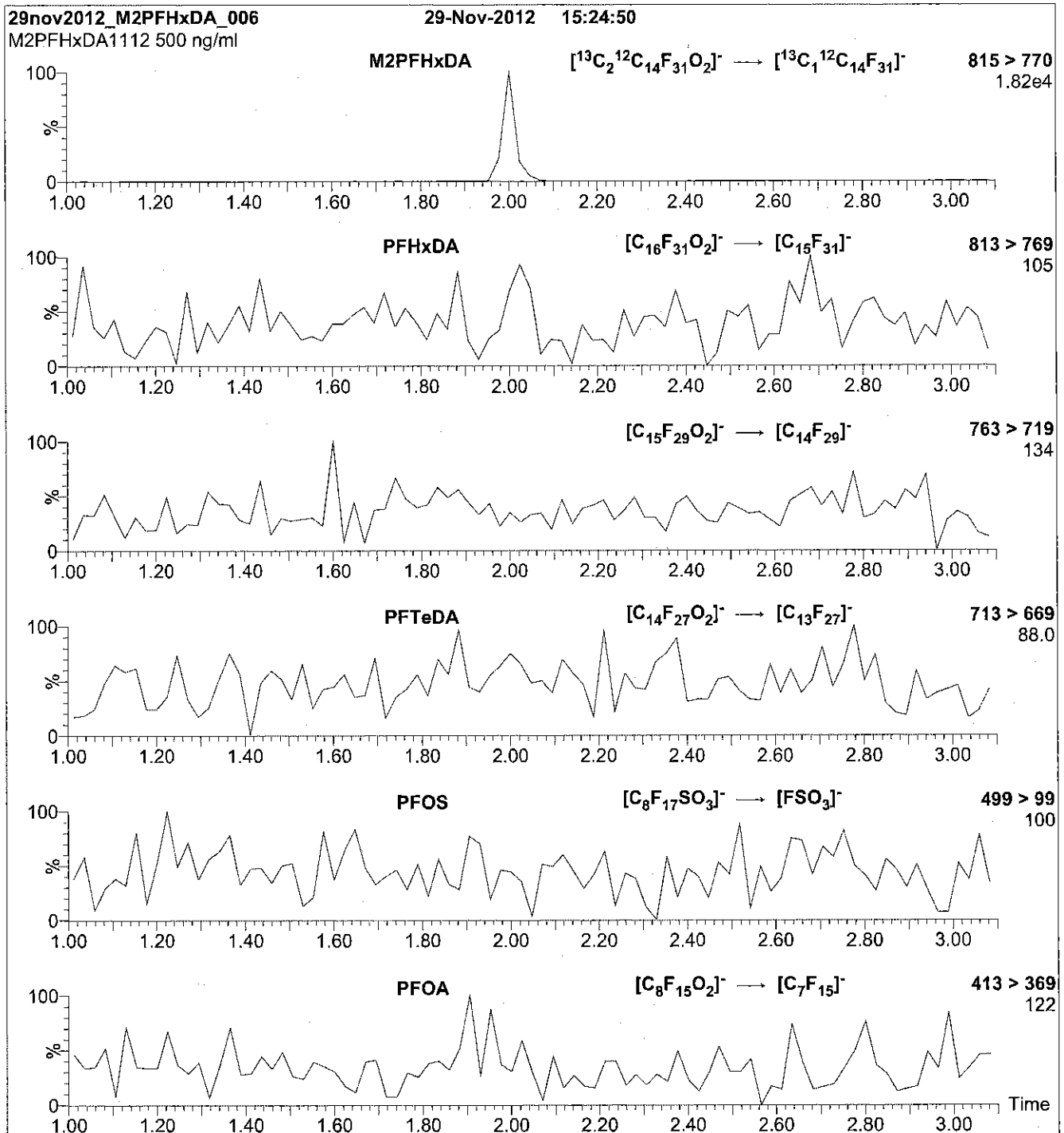
Flow: 300 μ l/min

MS Parameters

Experiment: Full Scan (225 - 1200 amu)

Source: Electrospray (negative)
Capillary Voltage (kV) = 2.00
Cone Voltage (V) = 25.00
Cone Gas Flow (l/hr) = 60
Desolvation Gas Flow (l/hr) = 750

Figure 2: M2PFHxDA; LC/MS/MS Data (Selected MRM Transitions)



Conditions for Figure 2:

Injection: Direct loop injection
10 μl (500 ng/ml M2PFHxDA)

Mobile phase: Isocratic 80% (80:20 MeOH:ACN) / 20% H_2O
(both with 10 mM NH_4OAc buffer)

Flow: 300 $\mu\text{l}/\text{min}$

MS Parameters

Collision Gas (mbar) = 3.39e-3
Collision Energy (eV) = 15

Reagent

LCM2PFHxDA_00004



R: 3/3/16 CBW

591157

ID: LCM2PFHxDA_00004

Exp: 01/07/21 Prep: CBW

13C2-PFHxDA at 50ug/mL



WELLINGTON LABORATORIES

CERTIFICATE OF ANALYSIS DOCUMENTATION

PRODUCT CODE:

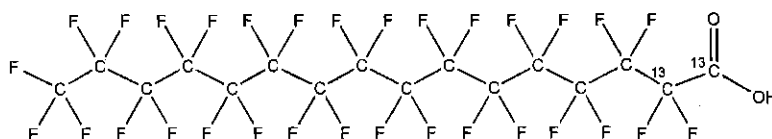
M2PFHxDA

LOT NUMBER:

M2PFHxDA1112

COMPOUND:Perfluoro-n-[1,2-¹³C₂]hexadecanoic acid**STRUCTURE:****CAS #:**

Not available

**MOLECULAR FORMULA:** $^{13}\text{C}_2^{12}\text{C}_{14}\text{HF}_{31}\text{O}_2$ **MOLECULAR WEIGHT:**

816.11

CONCENTRATION:

50 ± 2.5 µg/ml

SOLVENT(S):

Methanol

Water (<1%)

CHEMICAL PURITY:

>98%

ISOTOPIC PURITY:≥99% ¹³C**LAST TESTED:** (mm/dd/yyyy)

01/07/2016

(1,2-¹³C₂)**EXPIRY DATE:** (mm/dd/yyyy)

01/07/2021

RECOMMENDED STORAGE:

Store ampoule in a cool, dark place

DOCUMENTATION/ DATA ATTACHED:

Figure 1: LC/MS Data (TIC and Mass Spectrum)

Figure 2: LC/MS/MS Data (Selected MRM Transitions)

ADDITIONAL INFORMATION:

- See page 2 for further details.
- Contains 4 mole eq. of NaOH to prevent conversion of the carboxylic acid to the methyl ester.
- Contains ~ 0.3% of native perfluoro-n-hexadecanoic acid.

FOR LABORATORY USE ONLY: NOT FOR HUMAN OR DRUG USE

Certified By:

B.G. Chittim

Date: 01/11/2016

(mm/dd/yyyy)

Wellington Laboratories Inc., 345 Southgate Dr. Guelph ON N1G 3M5 CANADA
519-822-2436 • Fax: 519-822-2849 • info@well-labs.com

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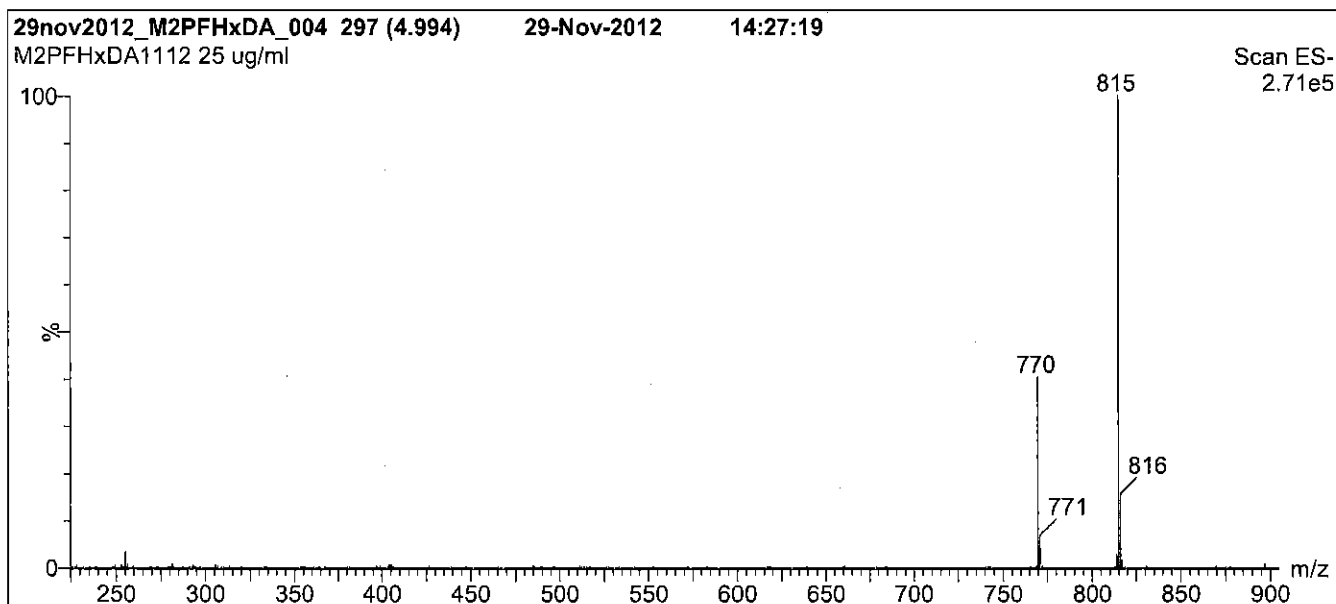
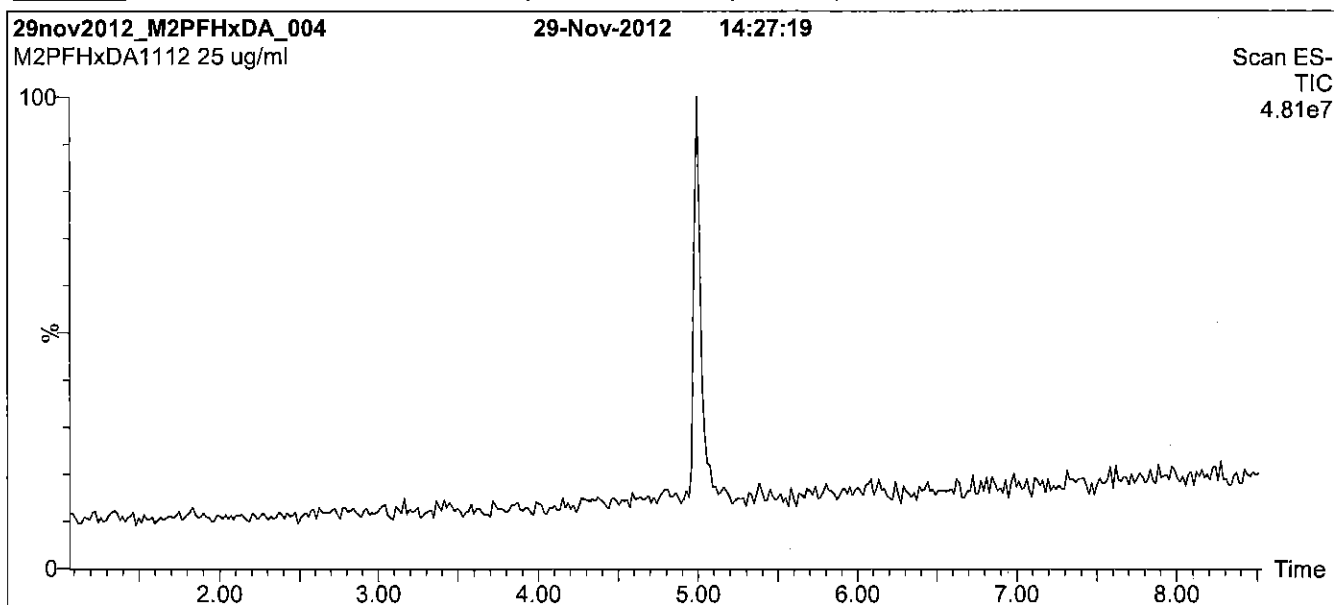
QUALITY MANAGEMENT:

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Figure 1: M2PFHxDA; LC/MS Data (TIC and Mass Spectrum)



Conditions for Figure 1:

LC: Waters Acquity Ultra Performance LC
MS: Micromass Quattro *micro* API MS

Chromatographic Conditions

Column: Acquity UPLC BEH Shield RP₁₈
1.7 μ m, 2.1 x 100 mm

Mobile phase: Gradient
Start: 60% (80:20 MeOH:ACN) / 40% H₂O
(both with 10 mM NH₄OAc buffer)
Ramp to 100% organic over 7 min and hold for 1.5 min
before returning to initial conditions in 0.5 min.
Time: 10 min

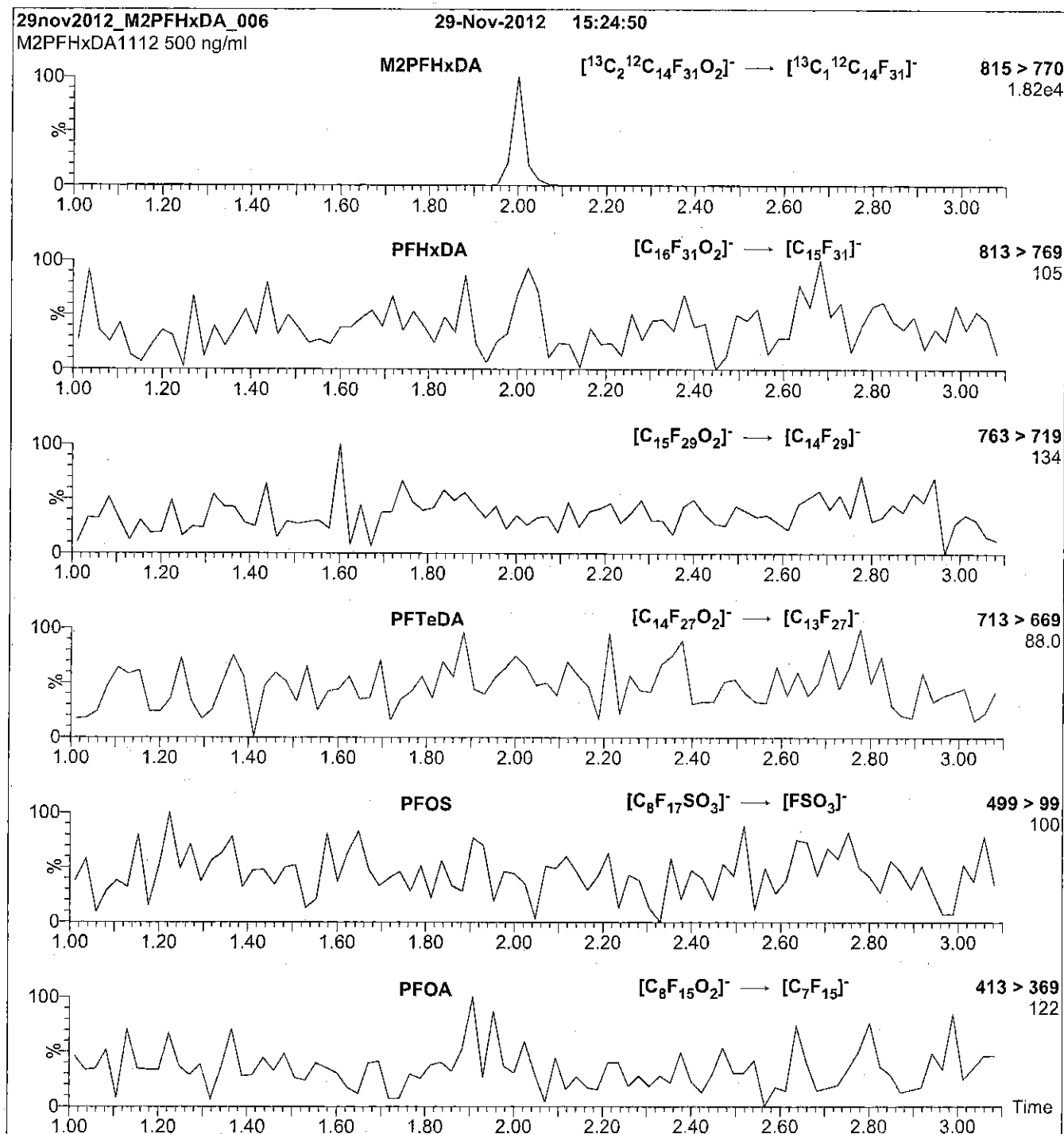
Flow: 300 μ l/min

MS Parameters

Experiment: Full Scan (225 - 1200 amu)

Source: Electrospray (negative)
Capillary Voltage (kV) = 2.00
Cone Voltage (V) = 25.00
Cone Gas Flow (l/hr) = 60
Desolvation Gas Flow (l/hr) = 750

Figure 2: M2PFHxDA; LC/MS/MS Data (Selected MRM Transitions)



Conditions for Figure 2:

Injection: Direct loop injection
10 μl (500 ng/ml M2PFHxDA)

Mobile phase: Isocratic 80% (80:20 MeOH:ACN) / 20% H_2O
(both with 10 mM NH_4OAc buffer)

Flow: 300 $\mu\text{l}/\text{min}$

MS Parameters

Collision Gas (mbar) = 3.39e-3
Collision Energy (eV) = 15

Reagent

LCM2PFHxDA_00005



R-4/7/16 CBW

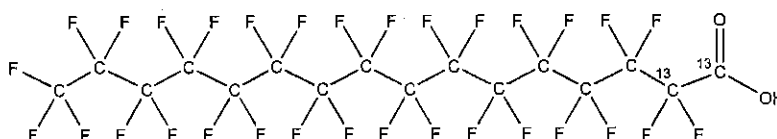
609709
ID: LCM2PFHxDA_00005
Exp: 01/07/21 Prep: CBW
13C2-PFHxDA at 50ug/mL



WELLINGTON LABORATORIES

CERTIFICATE OF ANALYSIS DOCUMENTATION

PRODUCT CODE: M2PFHxDA **LOT NUMBER:** M2PFHxDA1112
COMPOUND: Perfluoro-n-[1,2-¹³C₂]hexadecanoic acid
STRUCTURE: **CAS #:** Not available



MOLECULAR FORMULA: ¹³C₂¹²C₁₄HF₃₁O₂ **MOLECULAR WEIGHT:** 816.11
CONCENTRATION: 50 ± 2.5 µg/ml **SOLVENT(S):** Methanol
Water (<1%)
CHEMICAL PURITY: >98% **ISOTOPIC PURITY:** ≥99% ¹³C
LAST TESTED: (mm/dd/yyyy) 01/07/2016 (1,2-¹³C₂)
EXPIRY DATE: (mm/dd/yyyy) 01/07/2021
RECOMMENDED STORAGE: Store ampoule in a cool, dark place

DOCUMENTATION/ DATA ATTACHED:

Figure 1: LC/MS Data (TIC and Mass Spectrum)
Figure 2: LC/MS/MS Data (Selected MRM Transitions)

ADDITIONAL INFORMATION:

- See page 2 for further details.
- Contains 4 mole eq. of NaOH to prevent conversion of the carboxylic acid to the methyl ester.
- Contains ~ 0.3% of native perfluoro-n-hexadecanoic acid.

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Certified By:

B.G. Chittim

Date: 01/11/2016
(mm/dd/yyyy)

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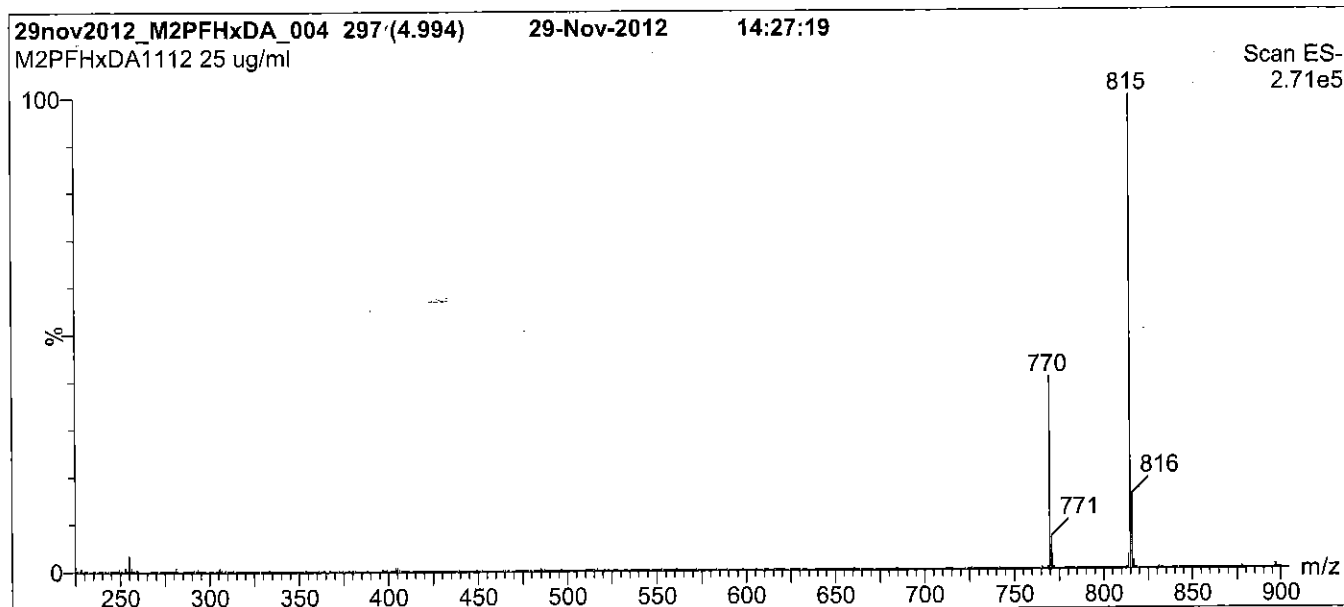
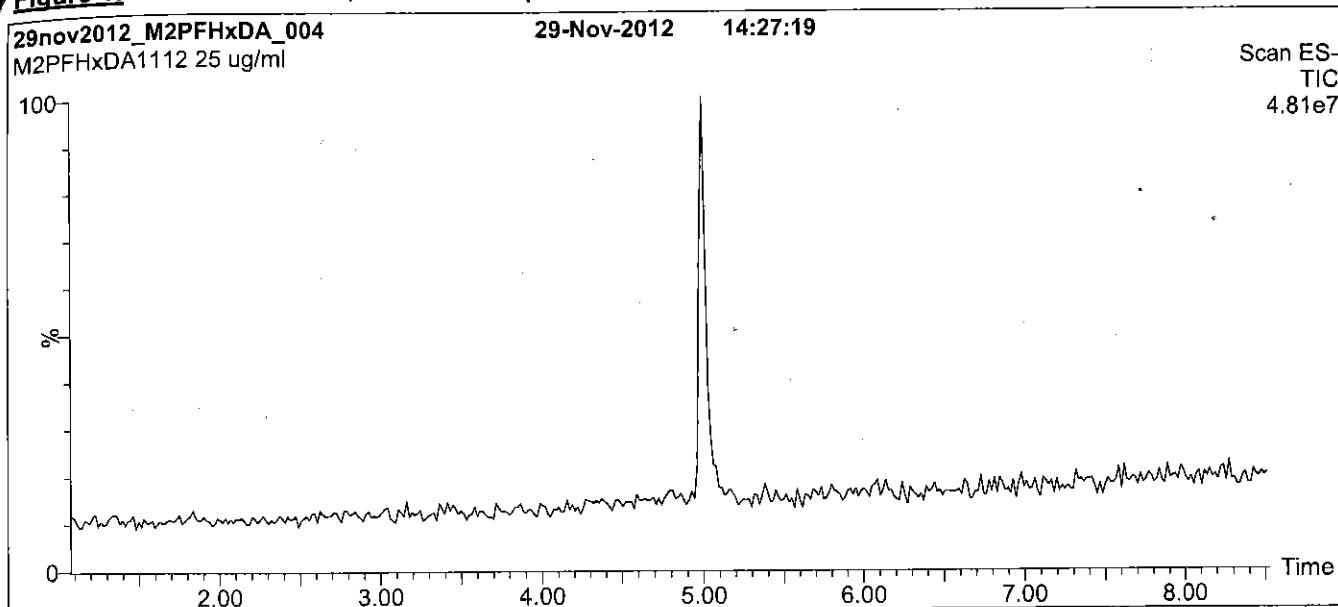
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MS: Micromass Quattro micro API MS

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1.7 μ m, 2.1 x 100 mm

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(both with 10 mM NH₄OAc buffer)
Ramp to 100% organic over 7 min and hold for 1.5 min
before returning to initial conditions in 0.5 min.
Time: 10 min

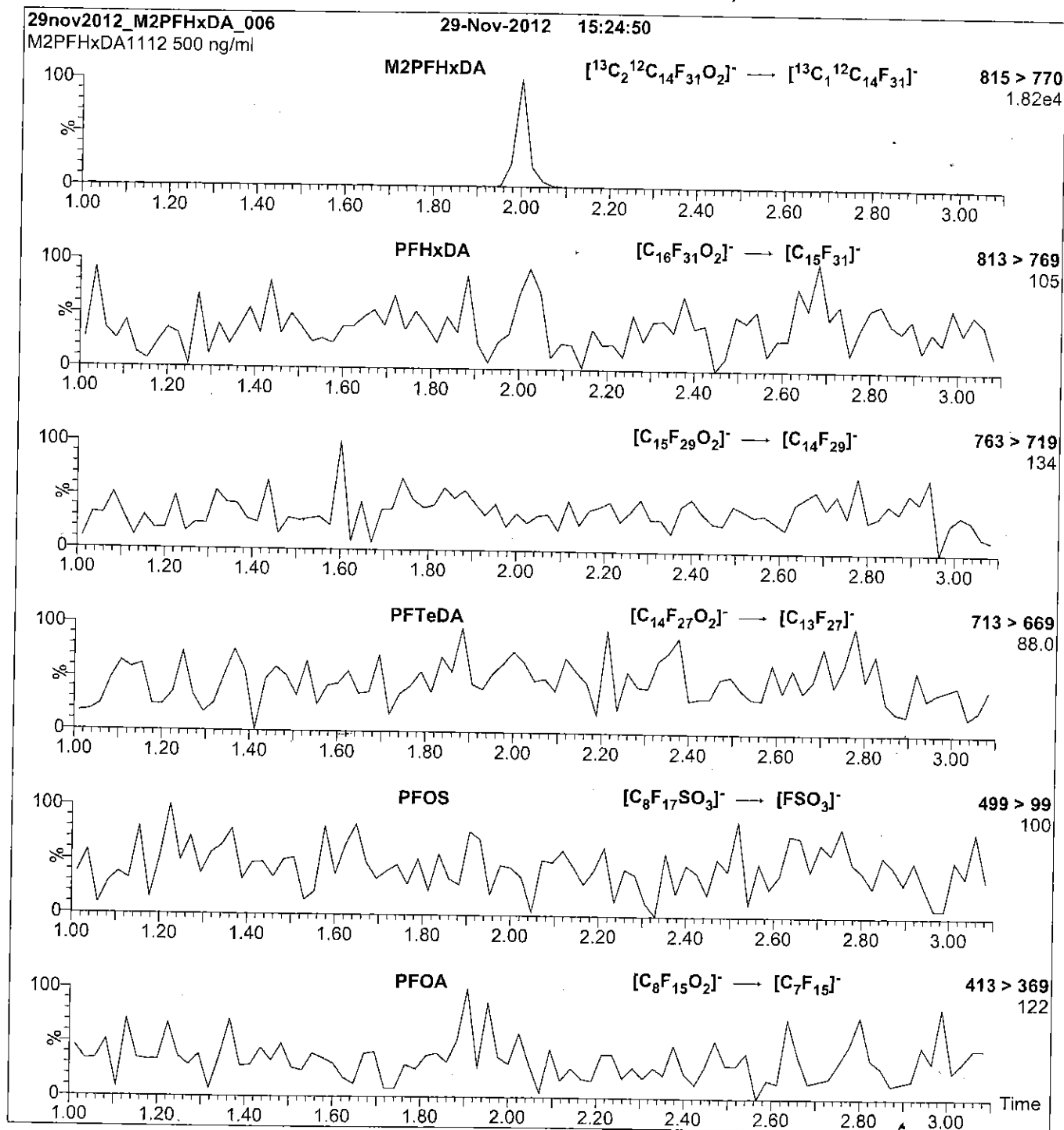
Flow: 300 μ l/min

MS Parameters

Experiment: Full Scan (225 - 1200 amu)

Source: Electrospray (negative)
Capillary Voltage (kV) = 2.00
Cone Voltage (V) = 25.00
Cone Gas Flow (l/hr) = 60
Desolvation Gas Flow (l/hr) = 750

Figure 2: M2PFHxDA; LC/MS/MS Data (Selected MRM Transitions)



Conditions for Figure 2:

Injection: Direct loop injection
10 μl (500 ng/ml M2PFHxDA)

Mobile phase: Isocratic 80% (80:20 MeOH:ACN) / 20% H_2O
(both with 10 mM NH_4OAc buffer)

Flow: 300 $\mu\text{l}/\text{min}$

MS Parameters

Collision Gas (mbar) = 3.39e-3
Collision Energy (eV) = 15

Reagent

LCM2PFTeDA_00003

r: 12/15 Stv



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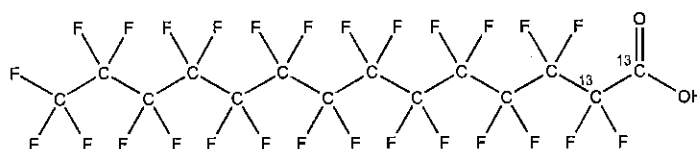
CERTIFICATE OF ANALYSIS DOCUMENTATION

PRODUCT CODE: M2PFTeDA
COMPOUND: Perfluoro-n-[1,2-¹³C₂]tetradecanoic acid

LOT NUMBER: M2PFTeDA1112

STRUCTURE:

CAS #: Not available



MOLECULAR FORMULA: ¹³C₂¹²C₁₂H₂₇O₂
CONCENTRATION: 50 ± 2.5 µg/ml

MOLECULAR WEIGHT: 716.10
SOLVENT(S): Methanol
Water (<1%)

CHEMICAL PURITY: >98%
LAST TESTED: (mm/dd/yyyy) 11/29/2012
EXPIRY DATE: (mm/dd/yyyy) 11/29/2017

ISOTOPIC PURITY: ≥99% ¹³C
(1,2-¹³C₂)

RECOMMENDED STORAGE: Store ampoule in a cool, dark place

DOCUMENTATION/ DATA ATTACHED:

Figure 1: LC/MS Data (TIC and Mass Spectrum)
Figure 2: LC/MS/MS Data (Selected MRM Transitions)

ADDITIONAL INFORMATION:

- See page 2 for further details.
- Contains 4 mole eq. of NaOH to prevent conversion of the carboxylic acid to the methyl ester.

FOR LABORATORY USE ONLY: NOT FOR HUMAN OR DRUG USE

Certified By:

B.G. Chittim

Date: 04/01/2015
(mm/dd/yyyy)

Wellington Laboratories Inc., 345 Southgate Dr. Guelph ON N1G 3M5 CANADA
519-822-2436 • Fax: 519-822-2849 • info@well-labs.com

INTENDED USE:

The products prepared by Wellington Laboratories Inc. are for laboratory use only. This certified reference material (CRM) was designed to be used as a standard for the identification and/or quantification of the specific chemical compound it contains.

HAZARDS:

This product should only be used by qualified personnel familiar with its potential hazards and trained in the handling of hazardous chemicals. Due care should be exercised to prevent unnecessary human contact or ingestion. All procedures should be carried out in a well-functioning fume hood and suitable gloves, eye protection, and clothing should be worn at all times. Waste should be disposed of according to national and regional regulations. Safety Data Sheets (SDSs) are available upon request.

SYNTHESIS / CHARACTERIZATION:

Where possible, all of our products are synthesized using single-product unambiguous routes. They are then characterized, and their structures and purities confirmed, using a combination of the most relevant techniques, such as NMR, GC/MS, LC/MS/MS, SFC/UV/MS/MS, x-ray crystallography, and melting point. Isotopic purities of mass-labelled compounds are also confirmed using HRGC/HRMS and/or LC/MS/MS.

HOMOGENEITY:

Prior to solution preparation, crystalline material is tested for homogeneity using a variety of techniques (as stated above) and its solubility in a given diluent is taken into consideration. Duplicate solutions of a new product are prepared from the same crystalline lot and, after the addition of an appropriate internal standard, they are compared by GC/MS, LC/MS/MS and/or SFC/UV/MS/MS. The relative response factors of the analyte of interest in each solution are required to be <5% RSD. New solution lots of existing products are compared to older lots in the same manner, which further confirms the homogeneity of the crystalline material as well as the stability and homogeneity of the solutions in the storage containers.

UNCERTAINTY:

The maximum combined relative standard uncertainty of our reference standard solutions is calculated using the following equation:

The combined relative standard uncertainty, $u_c(y)$, of a value y and the uncertainty of the independent parameters x_1, x_2, \dots, x_n on which it depends is:

$$u_c(y(x_1, x_2, \dots, x_n)) = \sqrt{\sum_{i=1}^n u(y, x_i)^2}$$

where x is expressed as a relative standard uncertainty of the individual parameter.

The individual uncertainties taken into account include those associated with weights (calibration of the balance) and volumes (calibration of the volumetric glassware). An expanded maximum combined percent relative uncertainty of $\pm 5\%$ (calculated with a coverage factor of 2 and a level of confidence of 95%) is stated on the Certificate of Analysis for all of our products.

TRACEABILITY:

All reference standard solutions are traceable to specific crystalline lots. The microbalances used for solution preparation are regularly tested by an external ISO/IEC 17025 accredited calibration company. In addition, their calibration is verified prior to each weighing using NIST and/or NRC traceable external weights. All volumetric glassware used is of Class A tolerance and has been tested according to the appropriate ASTM procedures, which are ultimately traceable to NIST. For certain products, traceability to international interlaboratory studies has also been established.

EXPIRY DATE / PERIOD OF VALIDITY:

Ongoing stability studies of this product have demonstrated stability in its composition and concentration, until the specified expiry date, in the unopened ampoule. Monitoring for any degradation or change in concentration of the listed analyte(s) is performed on a routine basis.

LIMITED WARRANTY:

At the time of shipment, all products are warranted to be free of defects in material and workmanship and to conform to the stated technical and purity specifications.

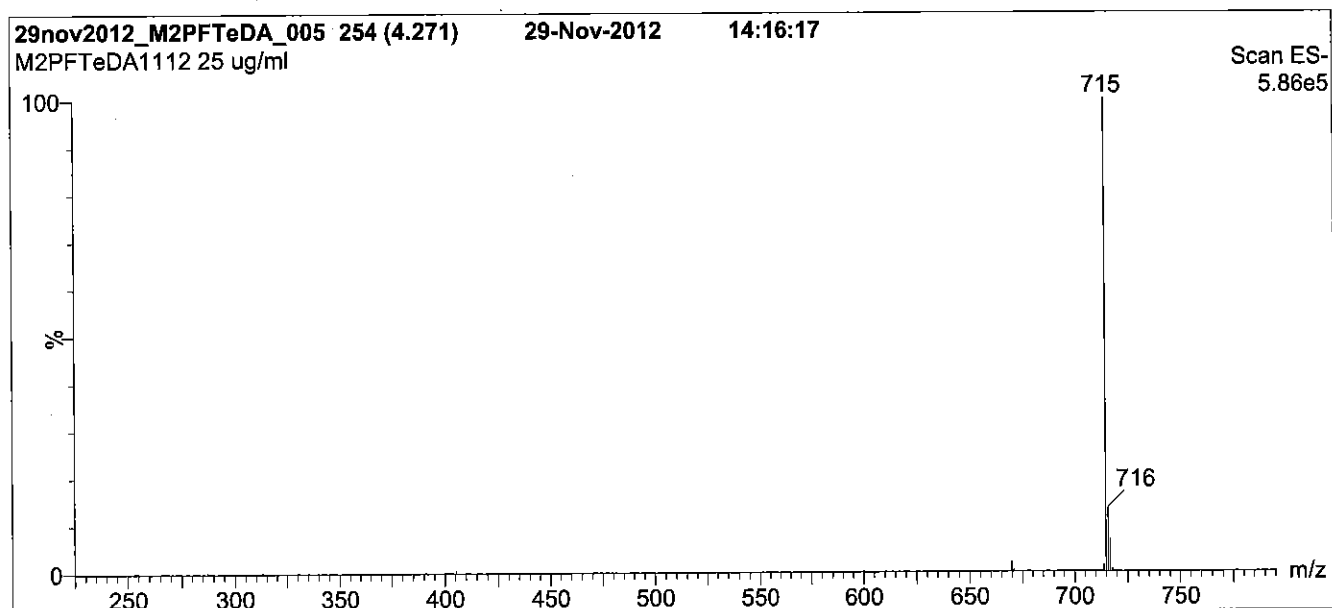
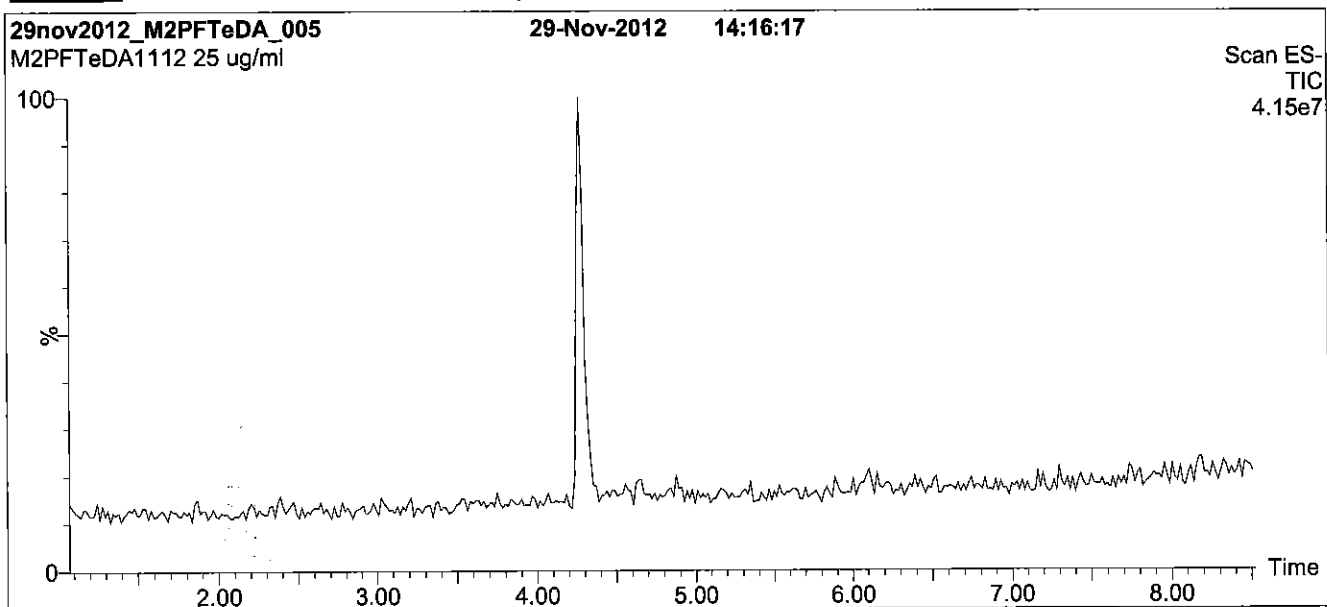
QUALITY MANAGEMENT:

This product was produced using a Quality Management System registered to the latest versions of ISO 9001 by SAI Global, ISO/IEC 17025 by the Canadian Association for Laboratory Accreditation Inc. (CALA; A 1226), and ISO GUIDE 34 by ANSI-ASQ National Accreditation Board (ANAB; AR-1523).



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Figure 1: M2PFTeDA; LC/MS Data (TIC and Mass Spectrum)



Conditions for Figure 1:

LC: Waters Acquity Ultra Performance LC
MS: Micromass Quattro micro API MS

Chromatographic Conditions

Column: Acquity UPLC BEH Shield RP₁₈
1.7 μ m, 2.1 x 100 mm

Mobile phase: Gradient
Start: 60% (80:20 MeOH:ACN) / 40% H₂O
(both with 10 mM NH₄OAc buffer)
Ramp to 100% organic over 7 min and hold for 1.5 min
before returning to initial conditions in 0.5 min.
Time: 10 min

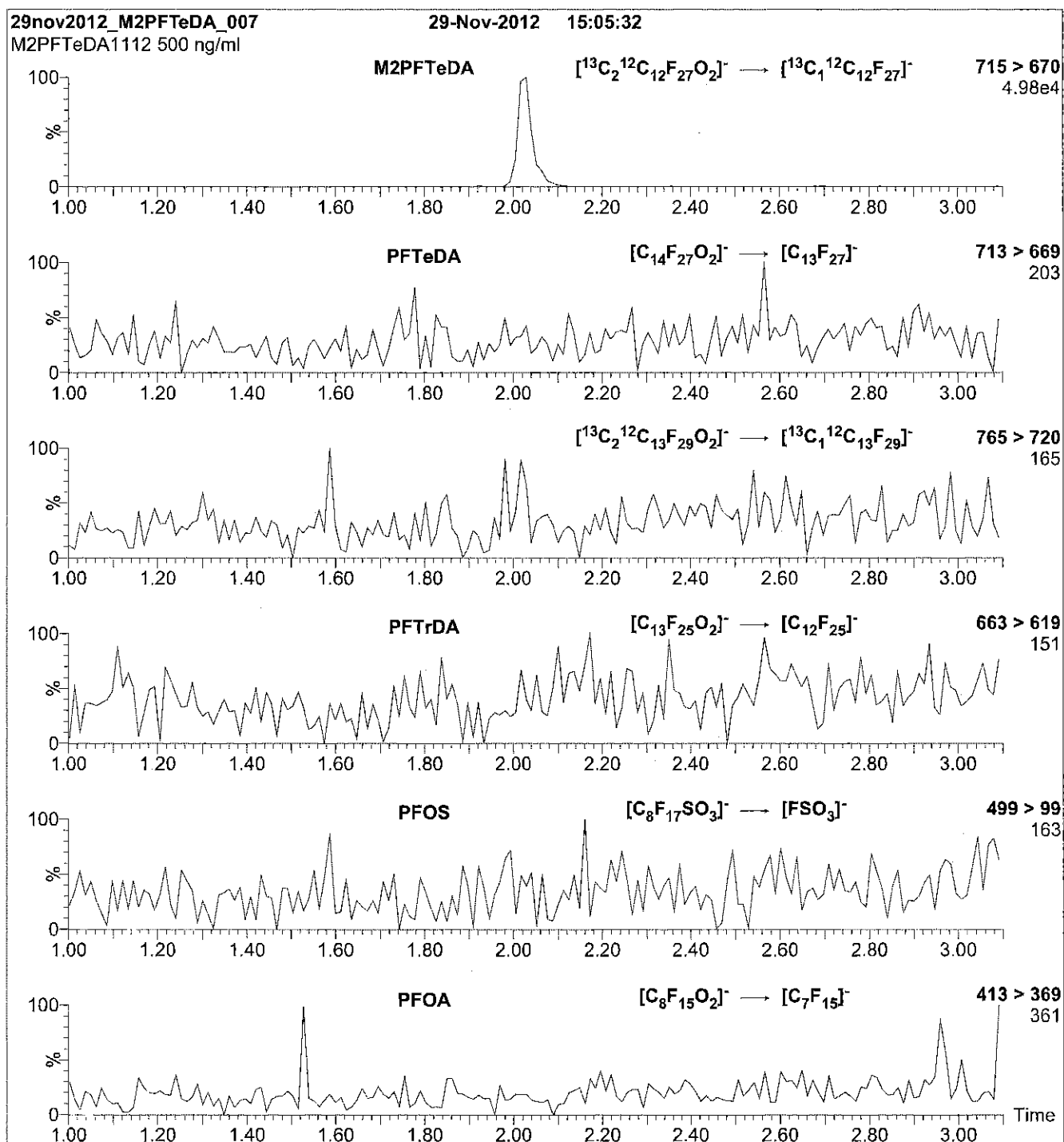
Flow: 300 μ l/min

MS Parameters

Experiment: Full Scan (225 - 1200 amu)

Source: Electrospray (negative)
Capillary Voltage (kV) = 2.00
Cone Voltage (V) = 15.00
Cone Gas Flow (l/hr) = 60
Desolvation Gas Flow (l/hr) = 750

Figure 2: M2PFTeDA; LC/MS/MS Data (Selected MRM Transitions)



Conditions for Figure 2:

Injection: Direct loop injection
10 μl (500 ng/ml M2PFTeDA)

Mobile phase: Isocratic 80% (80:20 MeOH:ACN) / 20% H_2O
(both with 10 mM NH_4OAc buffer)

Flow: 300 $\mu\text{l}/\text{min}$

MS Parameters

Collision Gas (mbar) = $3.66\text{e-}3$
Collision Energy (eV) = 14

Reagent

LCM2PFTeDA_00004



R: 3/3/16 CBW

591158

ID: LCM2PFTeDA_00004

Exp: 12/07/20 Prod: CBW

13C2-PFTeDA at 50ug/mL

**WELLINGTON**
LABORATORIES**CERTIFICATE OF ANALYSIS**
DOCUMENTATION**PRODUCT CODE:**

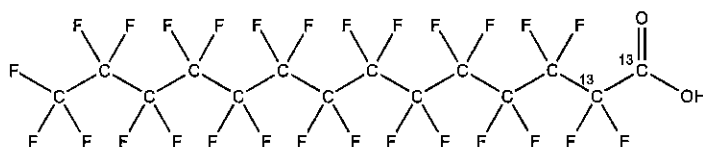
M2PFTeDA

LOT NUMBER:

M2PFTeDA1115

COMPOUND:Perfluoro-n-[1,2-¹³C₂]tetradecanoic acid**STRUCTURE:****CAS #:**

Not available

**MOLECULAR FORMULA:**¹³C₂ ¹²C₁₂ HF₂₇ O₂**CONCENTRATION:**

50 ± 2.5 µg/mL

MOLECULAR WEIGHT:

716.10

SOLVENT(S):

Methanol

Water (<1%)

CHEMICAL PURITY:

>98%

ISOTOPIC PURITY:≥99% ¹³C(1,2-¹³C₂)**LAST TESTED:** (mm/dd/yyyy)

12/07/2015

EXPIRY DATE: (mm/dd/yyyy)

12/07/2020

RECOMMENDED STORAGE:

Store ampoule in a cool, dark place

DOCUMENTATION/ DATA ATTACHED:

Figure 1: LC/MS Data (TIC and Mass Spectrum)

Figure 2: LC/MS/MS Data (Selected MRM Transitions)

ADDITIONAL INFORMATION:

- See page 2 for further details.
- Contains 4 mole eq. of NaOH to prevent conversion of the carboxylic acid to the methyl ester.

FOR LABORATORY USE ONLY: NOT FOR HUMAN OR DRUG USE

Certified By:

B.G. Chittim

Date: 12/08/2015

(mm/dd/yyyy)

Wellington Laboratories Inc., 345 Southgate Dr. Guelph ON N1G 3M5 CANADA
 519-822-2436 • Fax: 519-822-2849 • info@well-labs.com

INTENDED USE:

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TRACEABILITY:

All reference standard solutions are traceable to specific crystalline lots. The microbalances used for solution preparation are regularly tested by an external ISO/IEC 17025 accredited calibration company. In addition, their calibration is verified prior to each weighing using NIST and/or NRC traceable external weights. All volumetric glassware used is of Class A tolerance and has been tested according to the appropriate ASTM procedures, which are ultimately traceable to NIST. For certain products, traceability to international interlaboratory studies has also been established.

EXPIRY DATE / PERIOD OF VALIDITY:

Ongoing stability studies of this product have demonstrated stability in its composition and concentration, until the specified expiry date, in the unopened ampoule. Monitoring for any degradation or change in concentration of the listed analyte(s) is performed on a routine basis.

LIMITED WARRANTY:

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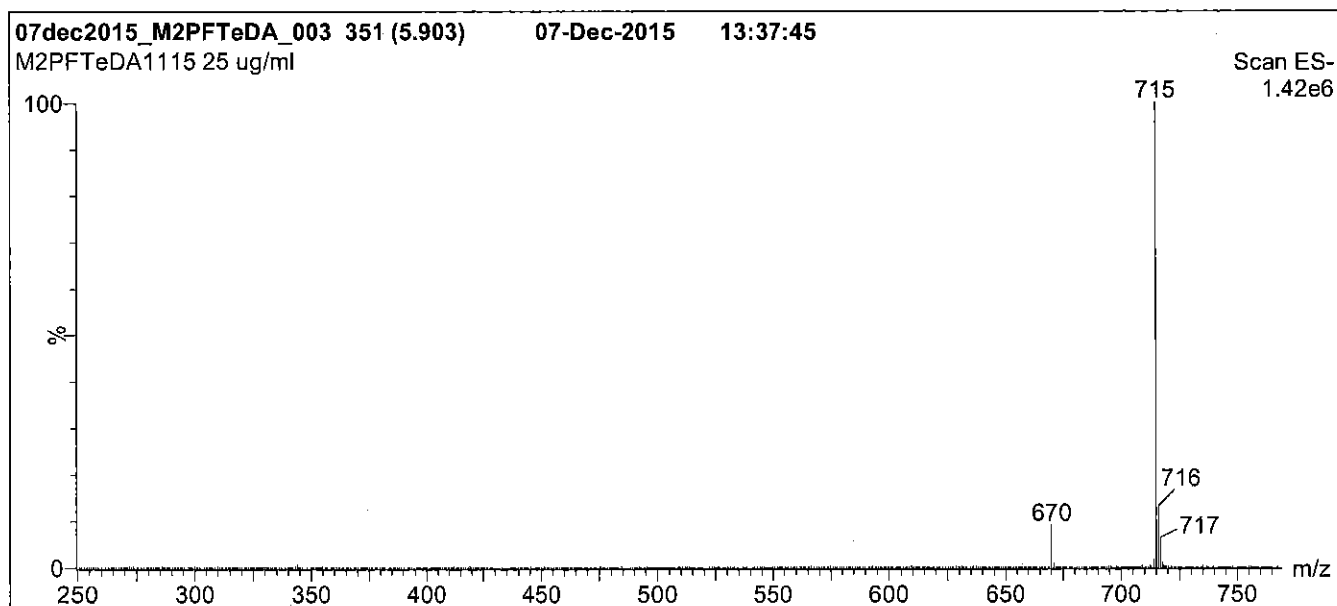
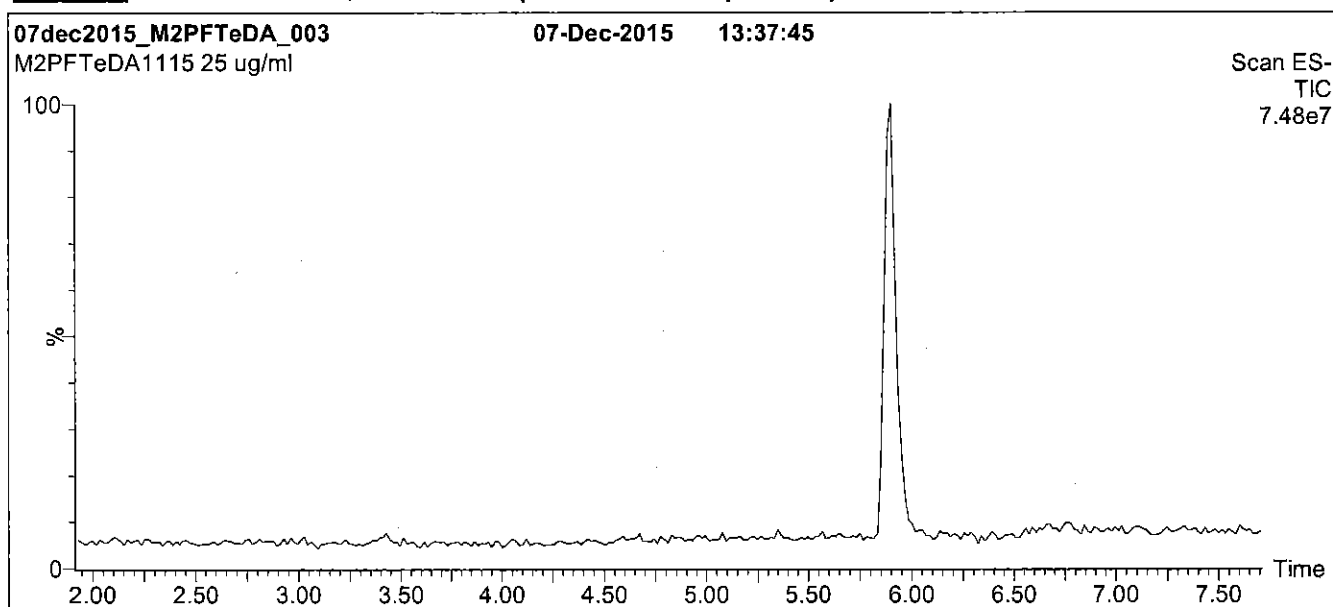
QUALITY MANAGEMENT:

This product was produced using a Quality Management System registered to the latest versions of ISO 9001 by SAI Global, ISO/IEC 17025 by the Canadian Association for Laboratory Accreditation Inc. (CALA; A 1226), and ISO GUIDE 34 by ANSI-ASQ National Accreditation Board (ANAB; AR-1523).



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Figure 1: M2PFTeDA; LC/MS Data (TIC and Mass Spectrum)



Conditions for Figure 1:

LC: Waters Acquity Ultra Performance LC
MS: Micromass Quattro *micro* API MS

Chromatographic Conditions

Column: Acquity UPLC BEH Shield RP₁₈
1.7 μ m, 2.1 x 100 mm

Mobile phase: Gradient
Start: 65% (80:20 MeOH:ACN) / 35% H₂O
(both with 10 mM NH₄OAc buffer)
Ramp to 90% organic over 7 min and hold for 2 min
before returning to initial conditions in 0.5 min.
Time: 10 min

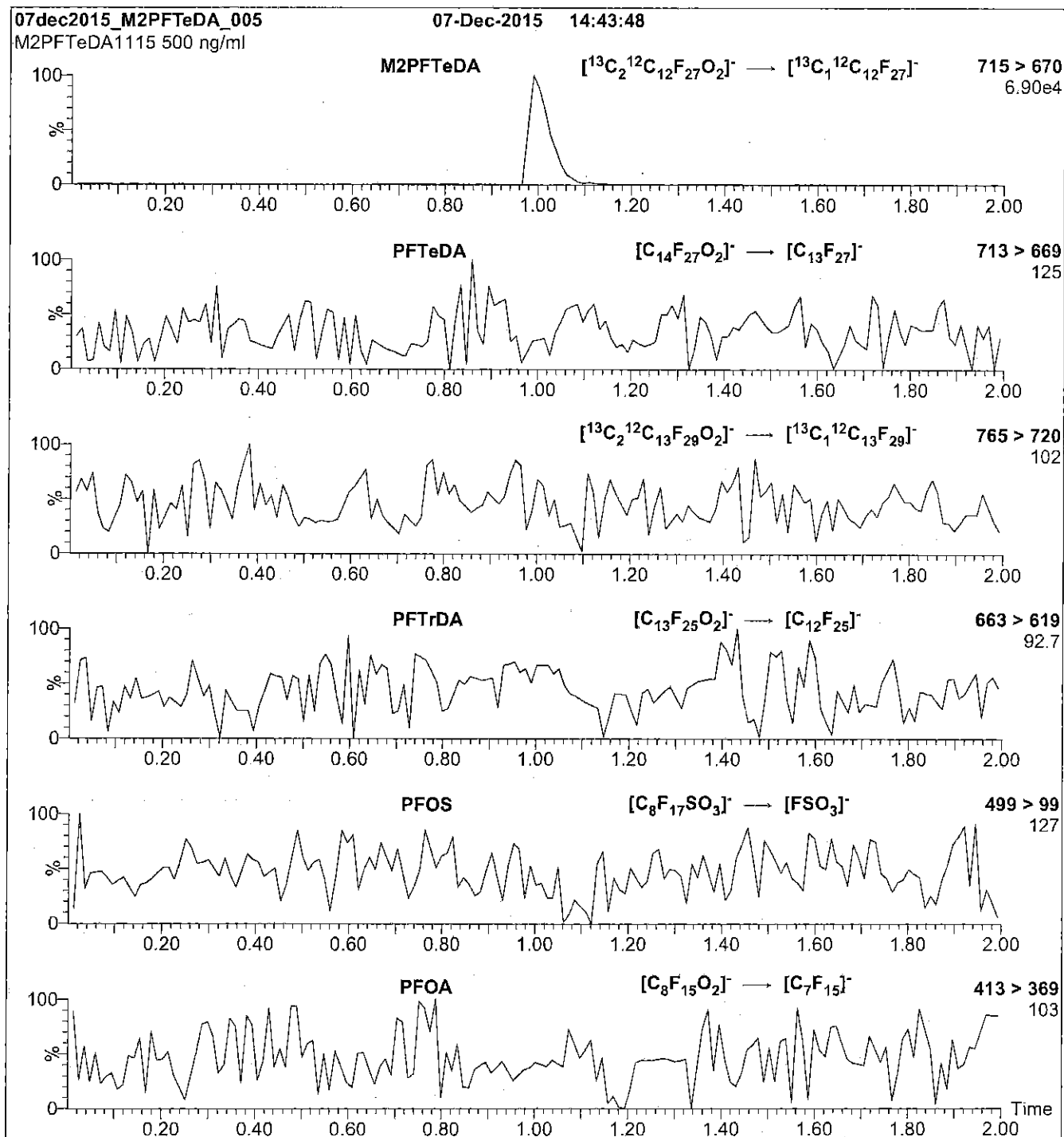
Flow: 300 μ l/min

MS Parameters

Experiment: Full Scan (250 - 1250 amu)

Source: Electrospray (negative)
Capillary Voltage (kV) = 3.00
Cone Voltage (V) = 15.00
Cone Gas Flow (l/hr) = 60
Desolvation Gas Flow (l/hr) = 750

Figure 2: M2PFTeDA; LC/MS/MS Data (Selected MRM Transitions)



Conditions for Figure 2:

Injection: Direct loop injection
10 μl (500 ng/ml M2PFTeDA)

Mobile phase: Isocratic 80% (80:20 MeOH:ACN) / 20% H_2O
(both with 10 mM NH_4OAc buffer)

Flow: 300 $\mu\text{l}/\text{min}$

MS Parameters

Collision Gas (mbar) = 3.28e-3
Collision Energy (eV) = 14

Reagent

LCM2PFTeDA_00005



609710
ID: LCM2PFTeDA_00005
Exp: 12/07/20 Prod: CBW
13C2-PFTeDA at 50ug/mL

R = 4/7/16 CBW



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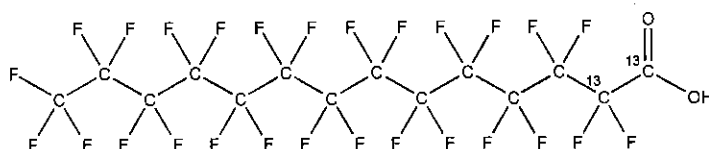
CERTIFICATE OF ANALYSIS DOCUMENTATION

PRODUCT CODE: M2PFTeDA
COMPOUND: Perfluoro-n-[1,2-¹³C₂]tetradecanoic acid

LOT NUMBER: M2PFTeDA1115

STRUCTURE:

CAS #: Not available



MOLECULAR FORMULA: ¹³C₂¹²C₁₂HF₂₇O₂
CONCENTRATION: 50 ± 2.5 µg/ml

MOLECULAR WEIGHT: 716.10
SOLVENT(S): Methanol
Water (<1%)

CHEMICAL PURITY: >98%
LAST TESTED: (mm/dd/yyyy) 12/07/2015
EXPIRY DATE: (mm/dd/yyyy) 12/07/2020
RECOMMENDED STORAGE: Store ampoule in a cool, dark place

ISOTOPIC PURITY: ≥99% ¹³C
(1,2-¹³C₂)

DOCUMENTATION/ DATA ATTACHED:

Figure 1: LC/MS Data (TIC and Mass Spectrum)
Figure 2: LC/MS/MS Data (Selected MRM Transitions)

ADDITIONAL INFORMATION:

- See page 2 for further details.
- Contains 4 mole eq. of NaOH to prevent conversion of the carboxylic acid to the methyl ester.

FOR LABORATORY USE ONLY: NOT FOR HUMAN OR DRUG USE

Certified By:

B.G. Chittim

Date: 12/08/2015
(mm/dd/yyyy)

Wellington Laboratories Inc., 345 Southgate Dr. Guelph ON 'N1G 3M5 CANADA
519-822-2436 • Fax: 519-822-2849 • info@well-labs.com

INTENDED USE:

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SYNTHESIS / CHARACTERIZATION:

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TRACEABILITY:

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EXPIRY DATE / PERIOD OF VALIDITY:

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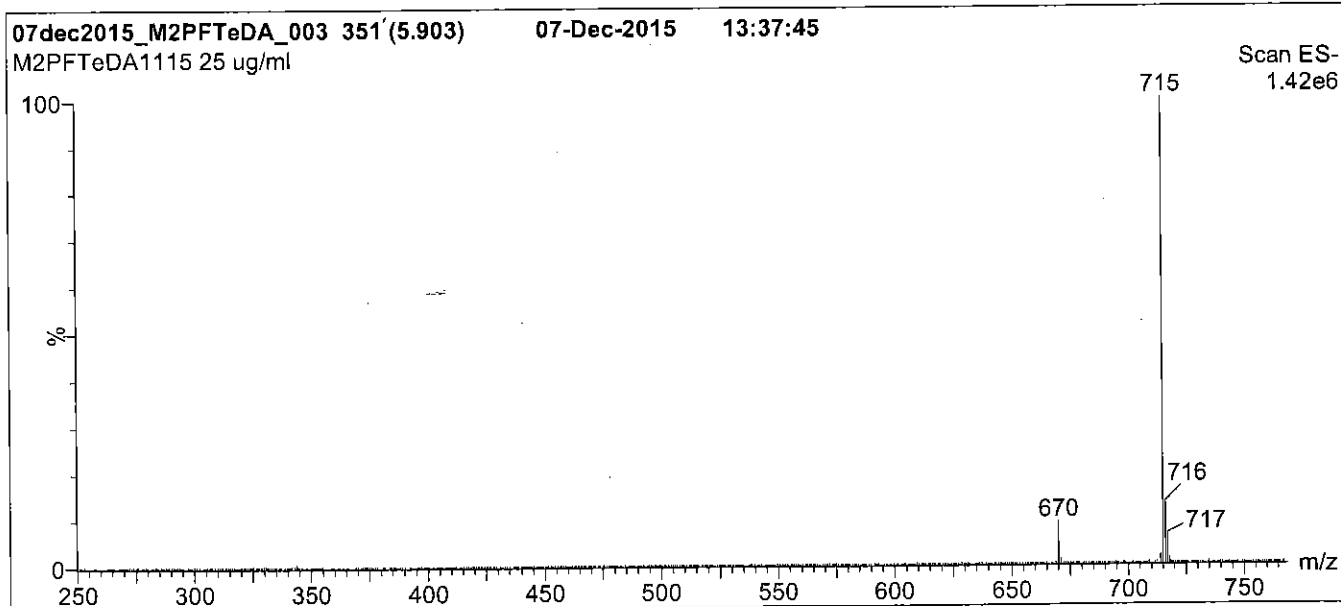
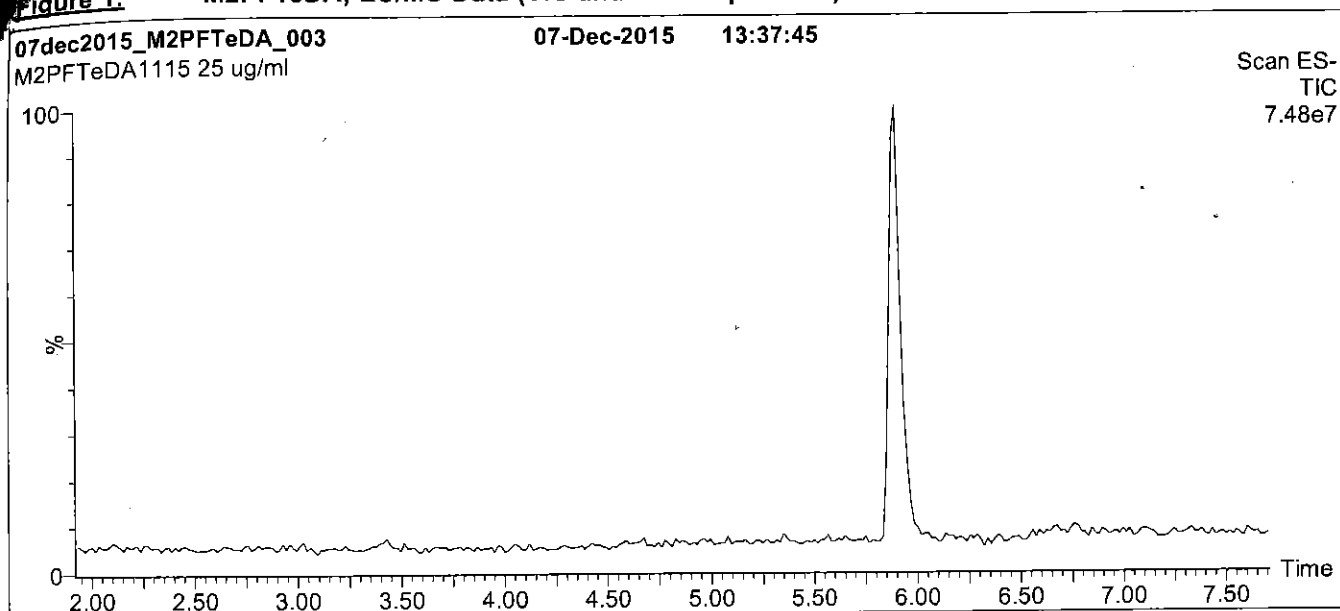
QUALITY MANAGEMENT:

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Figure 1: M2PFTeDA; LC/MS Data (TIC and Mass Spectrum)



Conditions for Figure 1:

LC: Waters Acquity Ultra Performance LC
MS: Micromass Quattro micro API MS

Chromatographic Conditions

Column: Acquity UPLC BEH Shield RP₁₈
1.7 μ m, 2.1 x 100 mm

Mobile phase: Gradient
Start: 65% (80:20 MeOH:ACN) / 35% H₂O
(both with 10 mM NH₄OAc buffer)
Ramp to 90% organic over 7 min and hold for 2 min
before returning to initial conditions in 0.5 min.
Time: 10 min

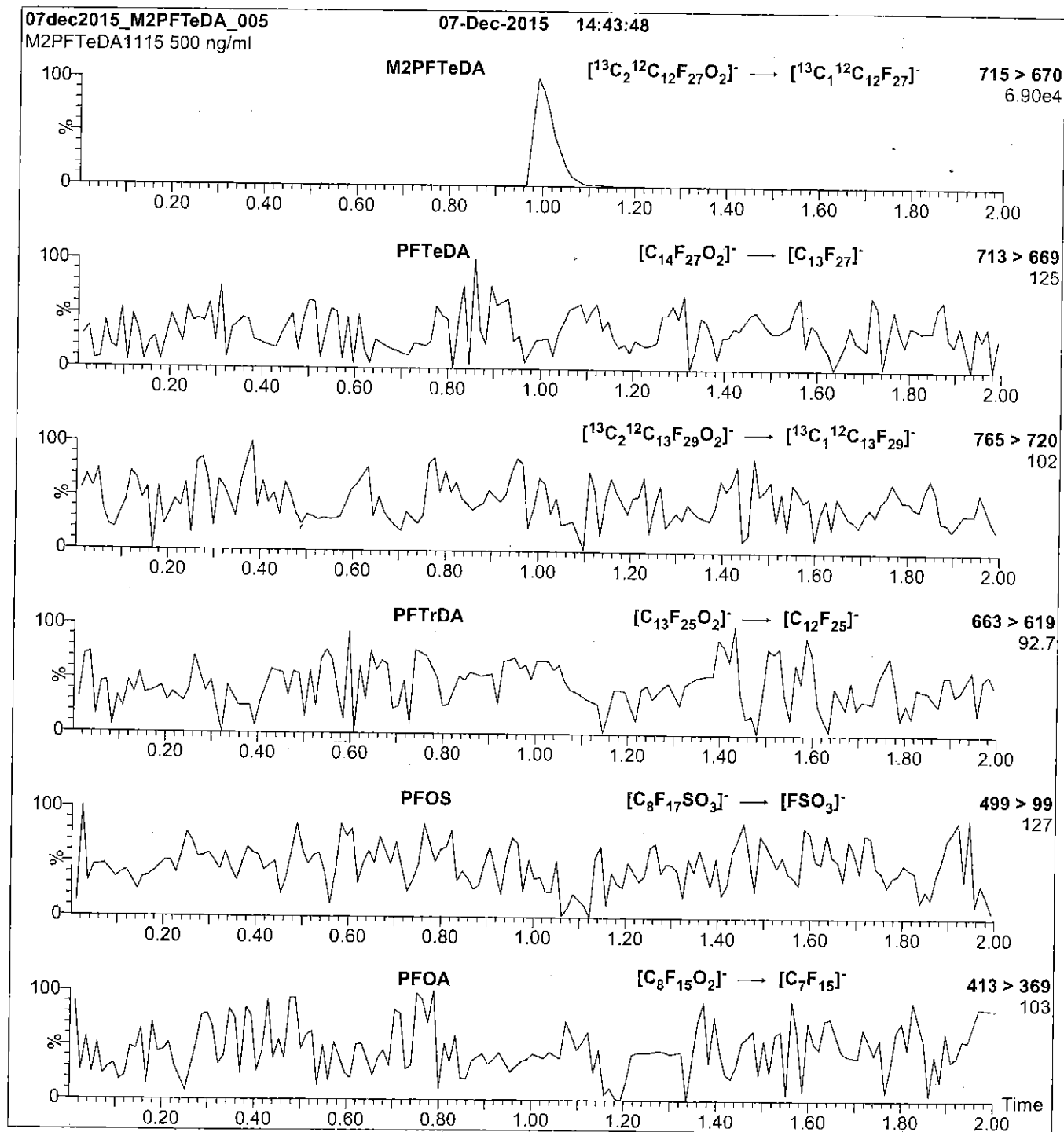
Flow: 300 μ l/min

MS Parameters

Experiment: Full Scan (250 - 1250 amu)

Source: Electrospray (negative)
Capillary Voltage (kV) = 3.00
Cone Voltage (V) = 15.00
Cone Gas Flow (l/hr) = 60
Desolvation Gas Flow (l/hr) = 750

Figure 2: M2PFTeDA; LC/MS/MS Data (Selected MRM Transitions)



Conditions for Figure 2:

Injection: Direct loop injection
10 μl (500 ng/ml M2PFTeDA)

Mobile phase: Isocratic 80% (80:20 MeOH:ACN) / 20% H_2O
(both with 10 mM NH_4OAc buffer)

Flow: 300 $\mu\text{l}/\text{min}$

MS Parameters

Collision Gas (mbar) = $3.28\text{e-}3$
Collision Energy (eV) = 14

Reagent

LCM4PFHPA_00003



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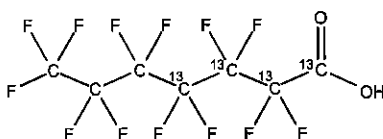
CERTIFICATE OF ANALYSIS DOCUMENTATION

PRODUCT CODE: M4PFHpA
COMPOUND: Perfluoro-n-[1,2,3,4-¹³C₄]heptanoic acid

LOT NUMBER: M4PFHpA0515

STRUCTURE:

CAS #: Not available



MOLECULAR FORMULA: ¹³C₄¹²C₃HF₁₃O₂
CONCENTRATION: 50 ± 2.5 µg/ml

MOLECULAR WEIGHT: 368.03
SOLVENT(S): Methanol
Water (<1%)

CHEMICAL PURITY: >98%

ISOTOPIC PURITY: ≥99%¹³C
(1,2,3,4-¹³C₄)

LAST TESTED: (mm/dd/yyyy) 05/22/2015

EXPIRY DATE: (mm/dd/yyyy) 05/22/2020

RECOMMENDED STORAGE: Store ampoule in a cool, dark place

DOCUMENTATION/ DATA ATTACHED:

Figure 1: LC/MS Data (TIC and Mass Spectrum)
Figure 2: LC/MS/MS Data (Selected MRM Transitions)

ADDITIONAL INFORMATION:

- See page 2 for further details.
- Contains 4 mole eq. of NaOH to prevent conversion of the carboxylic acid to the methyl ester.

FOR LABORATORY USE ONLY: NOT FOR HUMAN OR DRUG USE

Certified By:

B.G. Chittim

Date: 05/25/2015
(mm/dd/yyyy)

Wellington Laboratories Inc., 345 Southgate Dr. Guelph ON N1G 3M5 CANADA
519-822-2436 • Fax: 519-822-2849 • info@well-labs.com

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TRACEABILITY:

All reference standard solutions are traceable to specific crystalline lots. The microbalances used for solution preparation are regularly tested by an external ISO/IEC 17025 accredited calibration company. In addition, their calibration is verified prior to each weighing using NIST and/or NRC traceable external weights. All volumetric glassware used is of Class A tolerance and has been tested according to the appropriate ASTM procedures, which are ultimately traceable to NIST. For certain products, traceability to international interlaboratory studies has also been established.

EXPIRY DATE / PERIOD OF VALIDITY:

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LIMITED WARRANTY:

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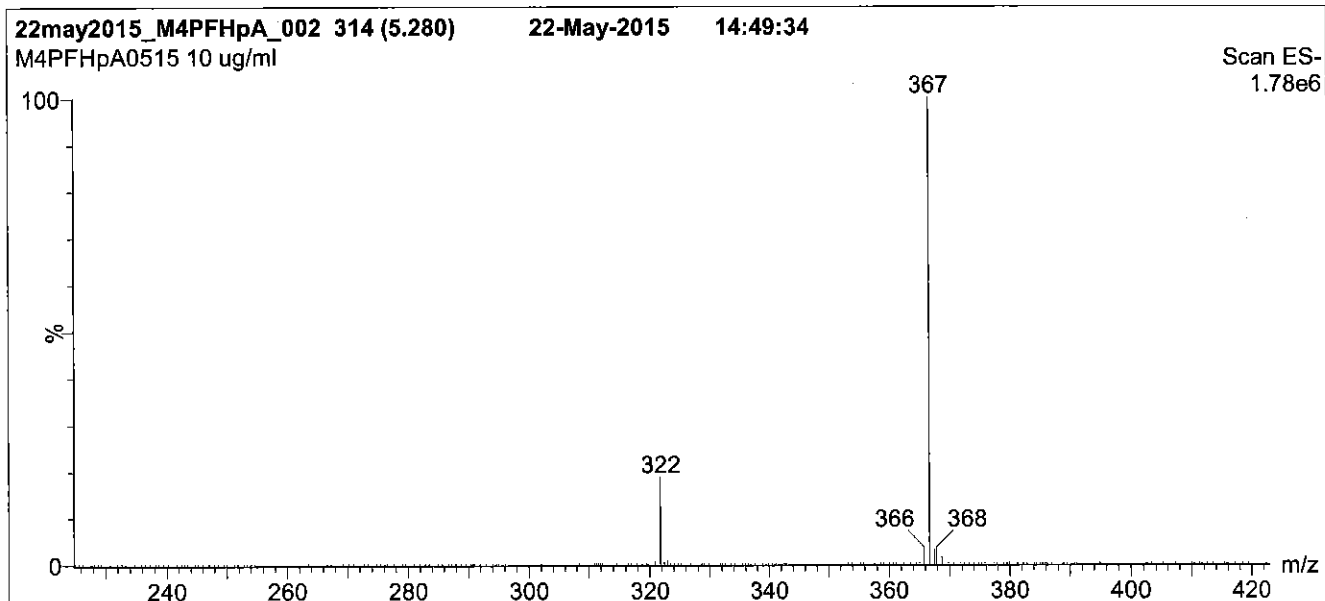
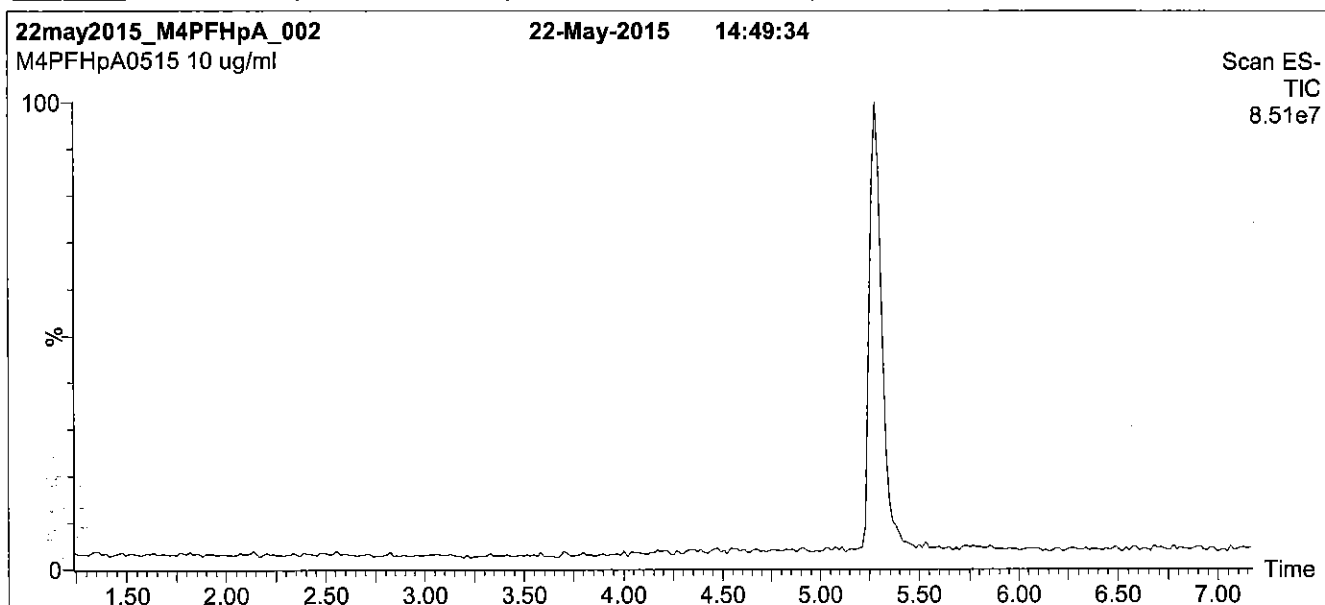
QUALITY MANAGEMENT:

This product was produced using a Quality Management System registered to the latest versions of ISO 9001 by SAI Global, ISO/IEC 17025 by the Canadian Association for Laboratory Accreditation Inc. (CALA; A 1226), and ISO GUIDE 34 by ANSI-ASQ National Accreditation Board (ANAB; AR-1523).



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Figure 1: M4PFHpA; LC/MS Data (TIC and Mass Spectrum)



Conditions for Figure 1:

LC: Waters Acquity Ultra Performance LC
MS: Micromass Quattro micro API MS

Chromatographic Conditions

Column: Acquity UPLC BEH Shield RP₁₈
1.7 μ m, 2.1 x 100 mm

Mobile phase: Gradient
Start: 40% (80:20 MeOH:ACN) / 60% H₂O
(both with 10 mM NH₄OAc buffer)
Ramp to 90% organic over 7 min and hold for 1.5 min
before returning to initial conditions in 0.5 min.
Time: 10 min

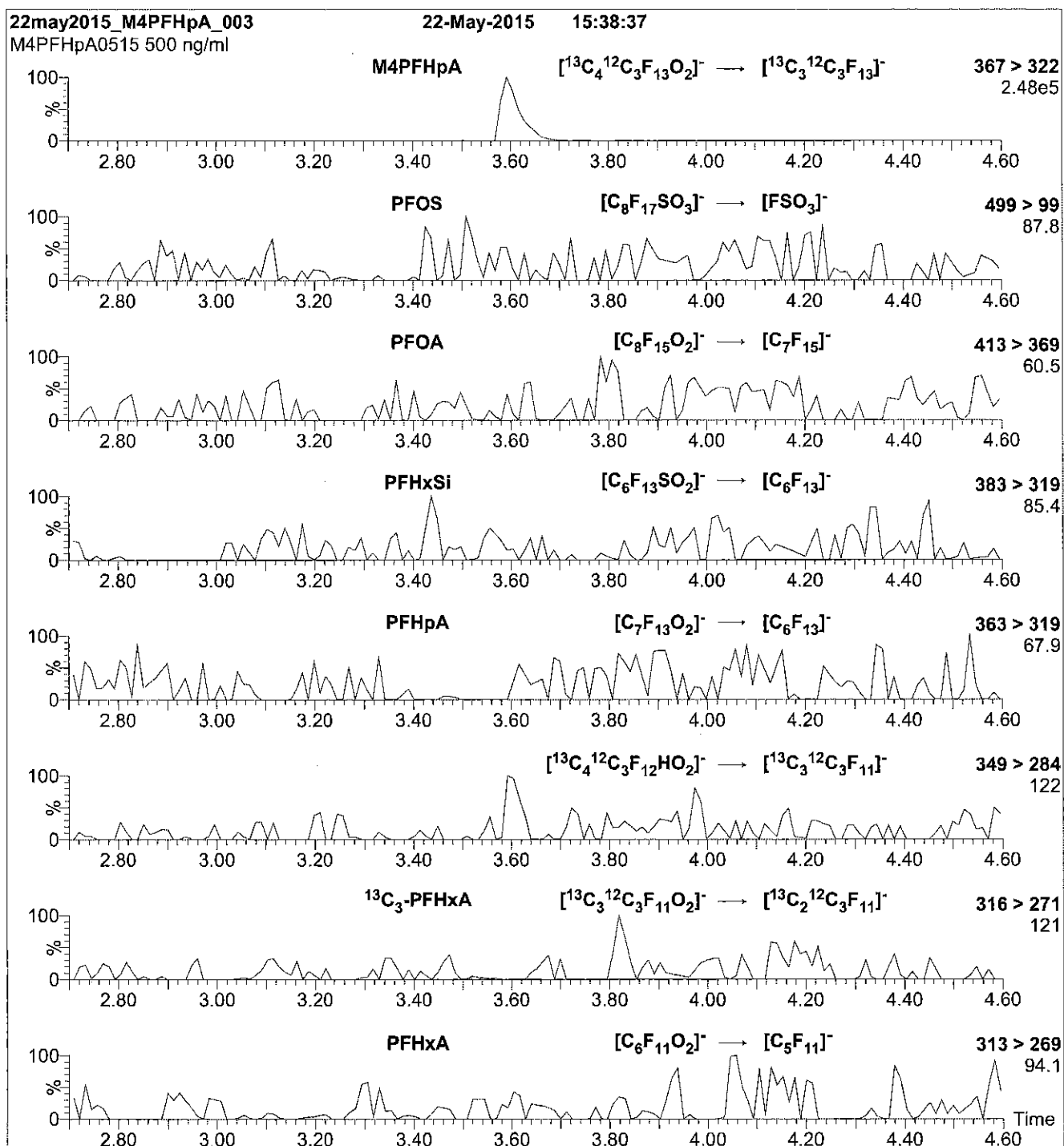
Flow: 300 μ l/min

MS Parameters

Experiment: Full Scan (225 - 850 amu)

Source: Electrospray (negative)
Capillary Voltage (kV) = 2.00
Cone Voltage (V) = 15.00
Cone Gas Flow (l/hr) = 50
Desolvation Gas Flow (l/hr) = 750

Figure 2: M4PFHpA; LC/MS/MS Data (Selected MRM Transitions)



Conditions for Figure 2:

Injection: Direct loop injection
10 μl (500 ng/ml M4PFHpA)

Mobile phase: Isocratic 80% (80:20 MeOH:ACN) / 20% H_2O
(both with 10 mM NH_4OAc buffer)

Flow: 300 $\mu\text{l}/\text{min}$

MS Parameters

Collision Gas (mbar) = 3.35e-3
Collision Energy (eV) = 11

Reagent

LCM4PFHPA_00004



R: 3/3/16 CBW

591159

ID: LCM4PFHPA_00004

Exp: 05/22/20 Prpd: CBW

13C4-Perfluoroheptanoic a



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CERTIFICATE OF ANALYSIS DOCUMENTATION

PRODUCT CODE:

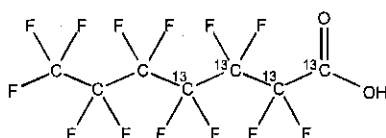
M4PFHpA

LOT NUMBER:

M4PFHpA0515

COMPOUND:Perfluoro-n-[1,2,3,4-¹³C₄]heptanoic acid**STRUCTURE:****CAS #:**

Not available

**MOLECULAR FORMULA:**¹³C₄¹²C₃HF₁₃O₂**MOLECULAR WEIGHT:**

368.03

CONCENTRATION:

50 ± 2.5 µg/ml

SOLVENT(S):

Methanol

CHEMICAL PURITY:

>98%

ISOTOPIC PURITY:≥99%¹³C**LAST TESTED:** (mm/dd/yyyy)

05/22/2015

(1,2,3,4-¹³C₄)**EXPIRY DATE:** (mm/dd/yyyy)

05/22/2020

RECOMMENDED STORAGE:

Store ampoule in a cool, dark place

DOCUMENTATION/ DATA ATTACHED:

Figure 1: LC/MS Data (TIC and Mass Spectrum)

Figure 2: LC/MS/MS Data (Selected MRM Transitions)

ADDITIONAL INFORMATION:

- See page 2 for further details.
- Contains 4 mole eq. of NaOH to prevent conversion of the carboxylic acid to the methyl ester.

FOR LABORATORY USE ONLY: NOT FOR HUMAN OR DRUG USE

Certified By:

B.G. Chittim

Date: 05/25/2015

(mm/dd/yyyy)

Wellington Laboratories Inc., 345 Southgate Dr. Guelph ON N1G 3M5 CANADA
519-822-2436 • Fax: 519-822-2849 • info@well-labs.com

INTENDED USE:

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HAZARDS:

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$$u_c(y(x_1, x_2, \dots, x_n)) = \sqrt{\sum_{i=1}^n u(y, x_i)^2}$$

where x is expressed as a relative standard uncertainty of the individual parameter.

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LIMITED WARRANTY:

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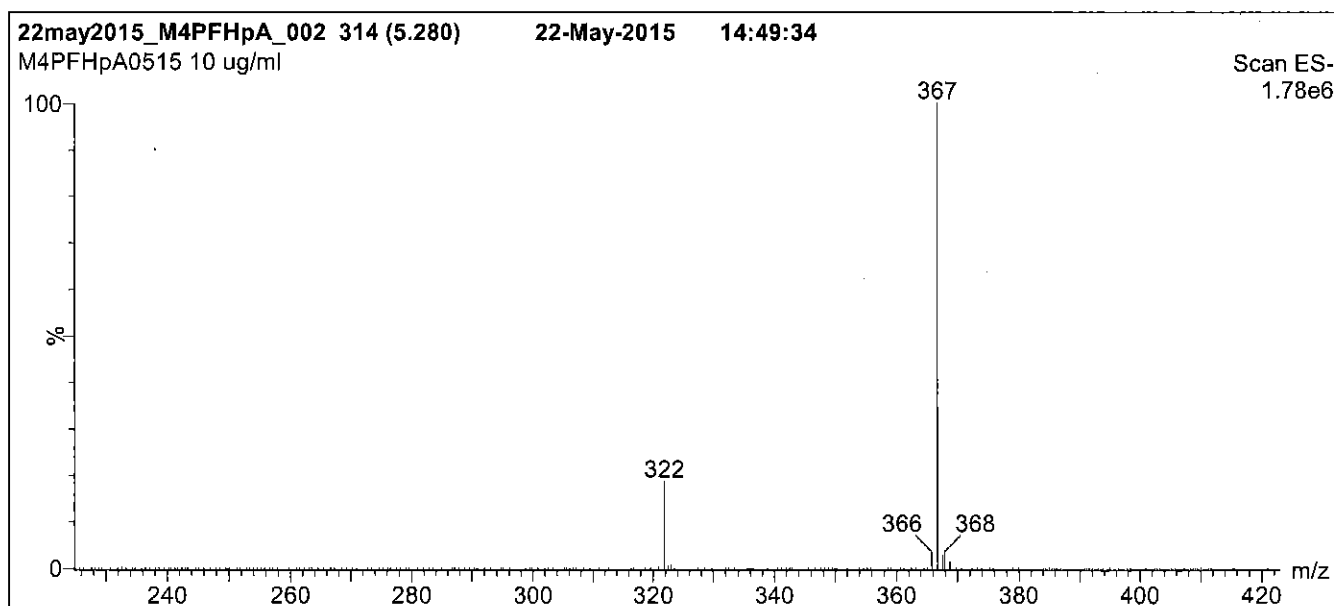
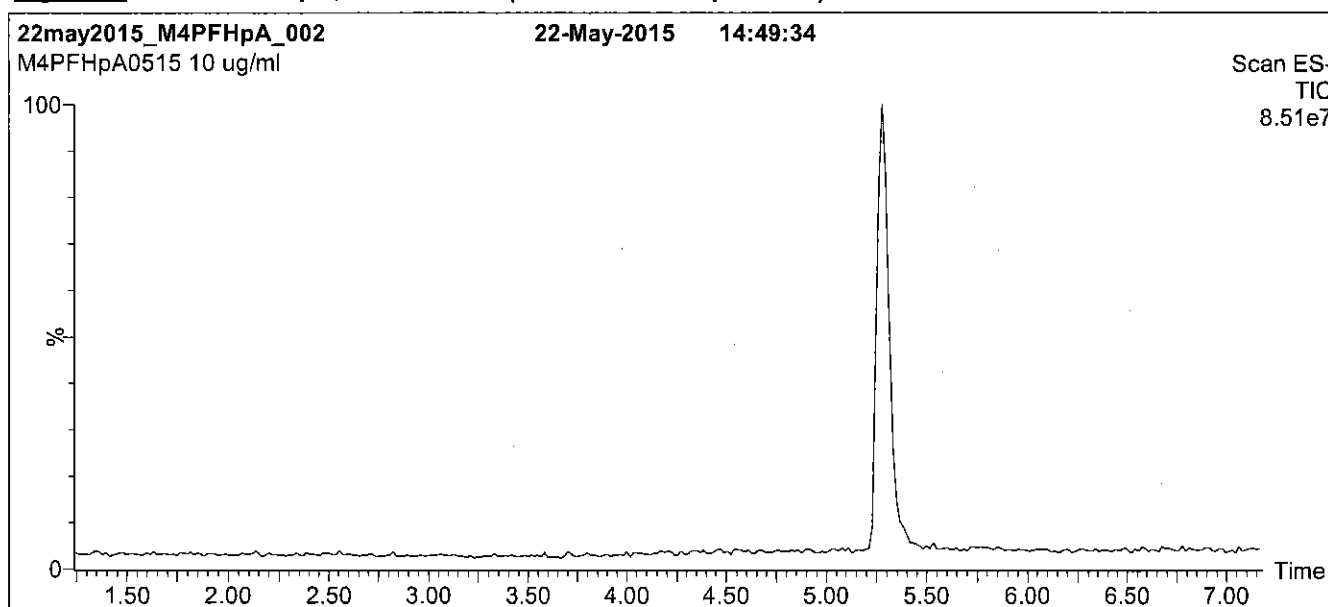
QUALITY MANAGEMENT:

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Figure 1: M4PFHpA; LC/MS Data (TIC and Mass Spectrum)



Conditions for Figure 1:

LC: Waters Acquity Ultra Performance LC
MS: Micromass Quattro *micro* API MS

Chromatographic Conditions

Column: Acquity UPLC BEH Shield RP₁₈
1.7 μ m, 2.1 x 100 mm

Mobile phase: Gradient
Start: 40% (80:20 MeOH:ACN) / 60% H₂O
(both with 10 mM NH₄OAc buffer)
Ramp to 90% organic over 7 min and hold for 1.5 min
before returning to initial conditions in 0.5 min.
Time: 10 min

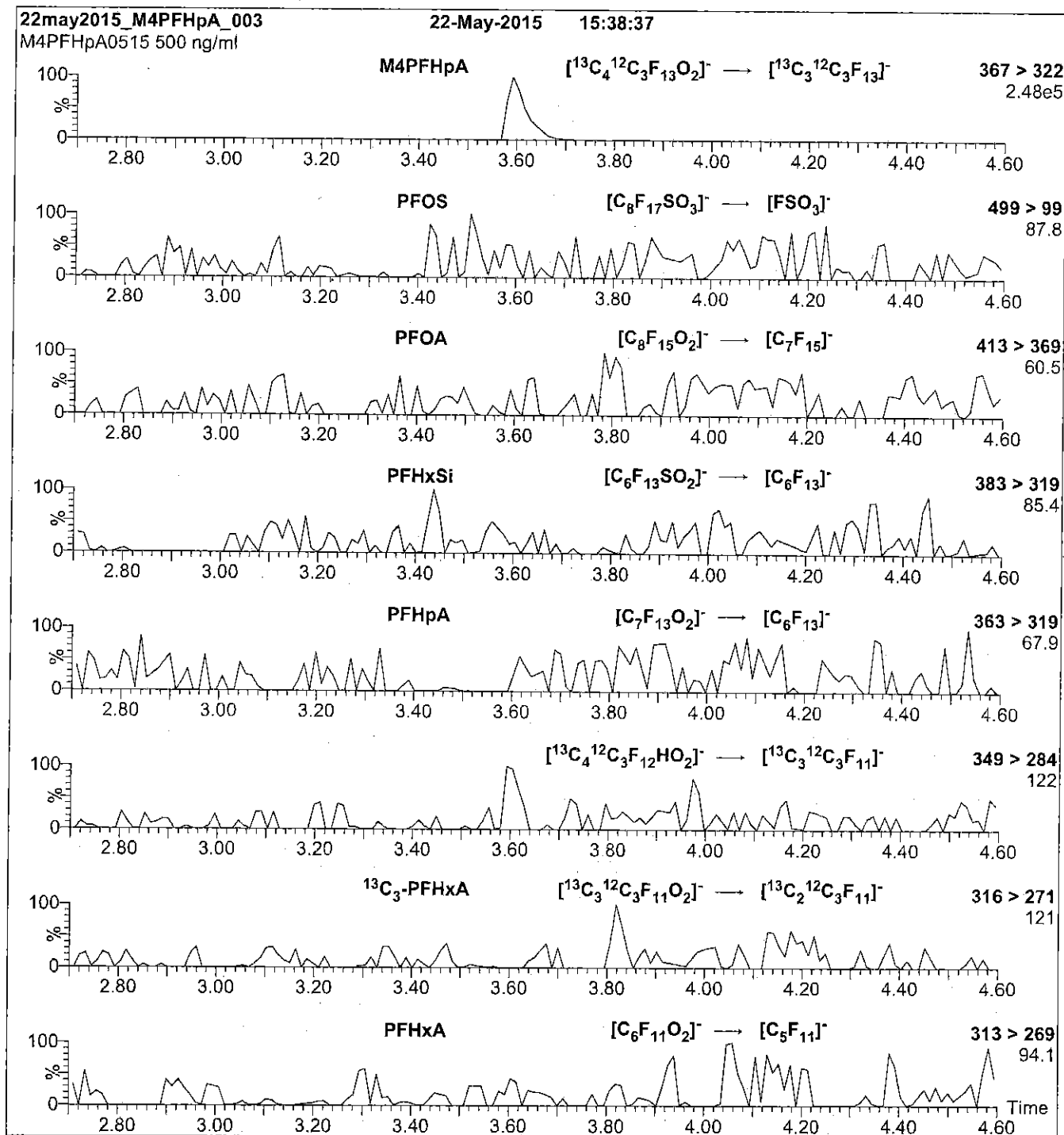
Flow: 300 μ l/min

MS Parameters

Experiment: Full Scan (225 - 850 amu)

Source: Electrospray (negative)
Capillary Voltage (kV) = 2.00
Cone Voltage (V) = 15.00
Cone Gas Flow (l/hr) = 50
Desolvation Gas Flow (l/hr) = 750

Figure 2: M4PFHpA; LC/MS/MS Data (Selected MRM Transitions)



Conditions for Figure 2:

Injection: Direct loop injection
10 μl (500 ng/ml M4PFHpA)

Mobile phase: Isocratic 80% (80:20 MeOH:ACN) / 20% H_2O
(both with 10 mM NH_4OAc buffer)

Flow: 300 $\mu\text{l}/\text{min}$

MS Parameters

Collision Gas (mbar) = 3.35e-3
Collision Energy (eV) = 11

Reagent

LCM4PFHPA_00005



R: 4/7/16 CBW

609711

ID: LCM4PFHPA_00005

Exp: 05/22/20 Prod: CBW

13C4-Perfluoroheptanoic a



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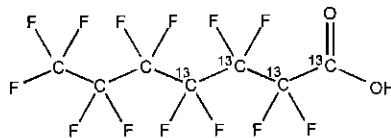
CERTIFICATE OF ANALYSIS DOCUMENTATION

PRODUCT CODE: M4PFHpA
COMPOUND: Perfluoro-n-[1,2,3,4-¹³C₄]heptanoic acid

LOT NUMBER: M4PFHpA0515

STRUCTURE:

CAS #: Not available



MOLECULAR FORMULA: ¹³C₄¹²C₃HF₁₃O₂
CONCENTRATION: 50 ± 2.5 µg/ml

MOLECULAR WEIGHT: 368.03
SOLVENT(S): Methanol
Water (<1%)
ISOTOPIC PURITY: ≥99% ¹³C
(1,2,3,4-¹³C₄)

CHEMICAL PURITY: >98%
LAST TESTED: (mm/dd/yyyy) 05/22/2015
EXPIRY DATE: (mm/dd/yyyy) 05/22/2020
RECOMMENDED STORAGE: Store ampoule in a cool, dark place

DOCUMENTATION/ DATA ATTACHED:

Figure 1: LC/MS Data (TIC and Mass Spectrum)
Figure 2: LC/MS/MS Data (Selected MRM Transitions)

ADDITIONAL INFORMATION:

- See page 2 for further details.
- Contains 4 mole eq. of NaOH to prevent conversion of the carboxylic acid to the methyl ester.

FOR LABORATORY USE ONLY: NOT FOR HUMAN OR DRUG USE

Certified By:

B.G. Chittim

Date: 05/25/2015

(mm/dd/yyyy)

Wellington Laboratories Inc., 345 Southgate Dr. Guelph ON N1G 3M5 CANADA
519-822-2436 • Fax: 519-822-2849 • info@well-labs.com

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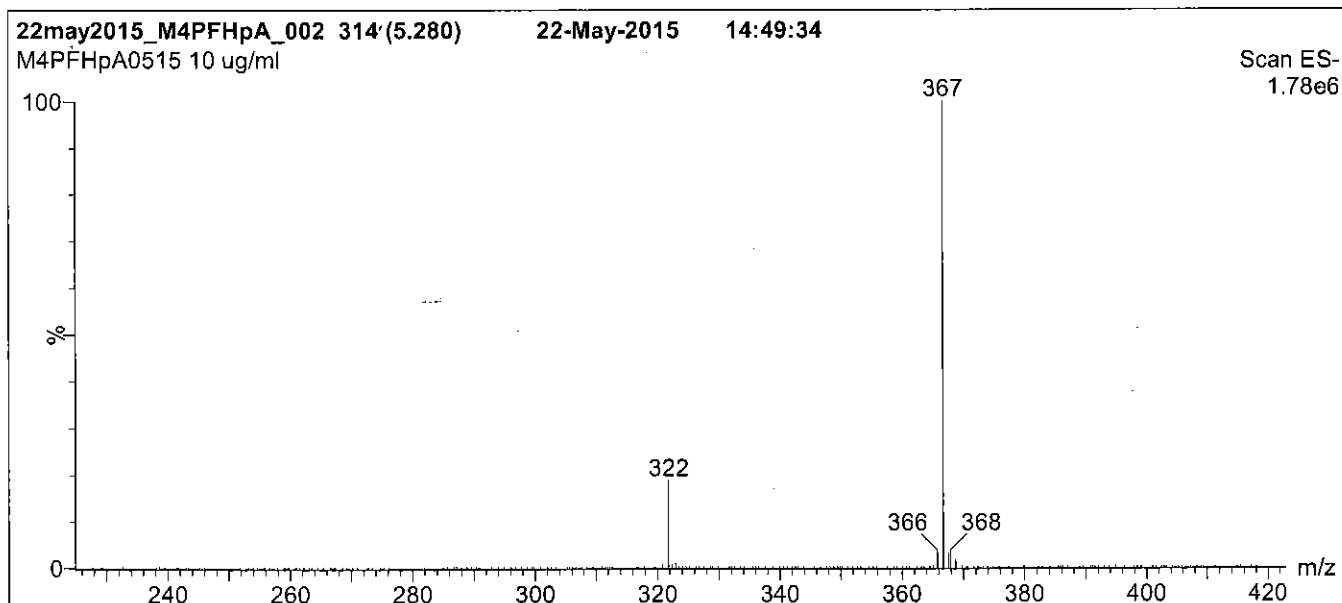
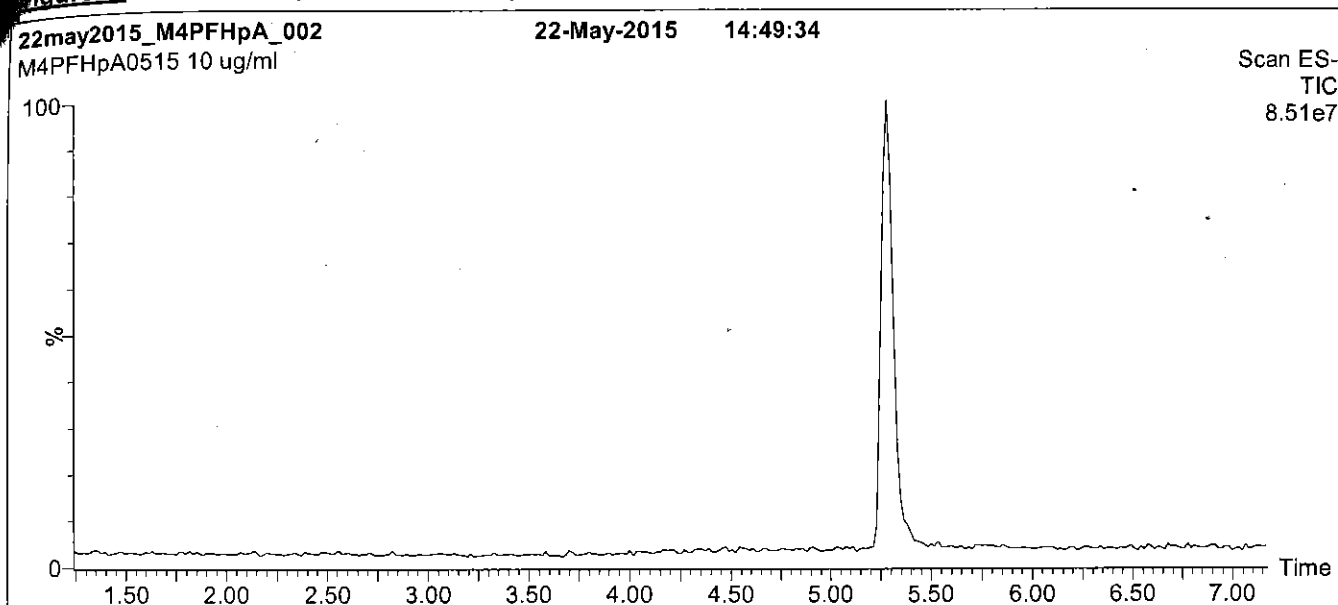
QUALITY MANAGEMENT:

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Figure 1: M4PFHpA; LC/MS Data (TIC and Mass Spectrum)



Conditions for Figure 1:

LC: Waters Acquity Ultra Performance LC
MS: Micromass Quattro micro API MS

Chromatographic Conditions

Column: Acquity UPLC BEH Shield RP₁₈
1.7 μ m, 2.1 x 100 mm

Mobile phase: Gradient
Start: 40% (80:20 MeOH:ACN) / 60% H₂O
(both with 10 mM NH₄OAc buffer)
Ramp to 90% organic over 7 min and hold for 1.5 min
before returning to initial conditions in 0.5 min.
Time: 10 min

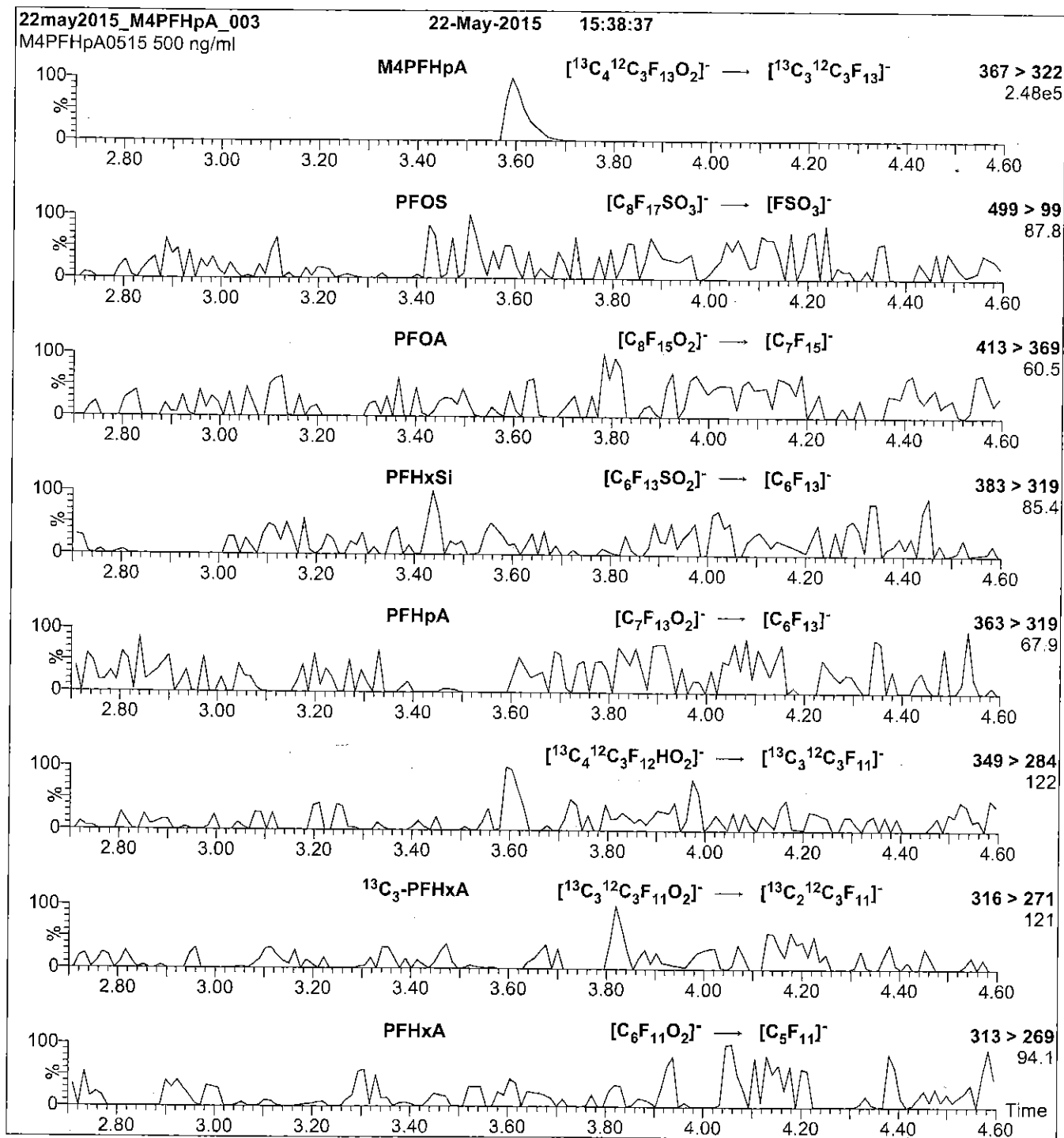
Flow: 300 μ l/min

MS Parameters

Experiment: Full Scan (225 - 850 amu)

Source: Electrospray (negative)
Capillary Voltage (kV) = 2.00
Cone Voltage (V) = 15.00
Cone Gas Flow (l/hr) = 50
Desolvation Gas Flow (l/hr) = 750

Figure 2: M4PFHpA; LC/MS/MS Data (Selected MRM Transitions)



Conditions for Figure 2:

Injection: Direct loop injection
10 μl (500 ng/ml M4PFHpA)

Mobile phase: Isocratic 80% (80:20 MeOH:ACN) / 20% H_2O
(both with 10 mM NH_4OAc buffer)

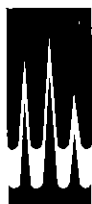
Flow: 300 $\mu\text{l}/\text{min}$

MS Parameters

Collision Gas (mbar) = 3.35e-3
Collision Energy (eV) = 11

Reagent

LCM5PFPEA_00004



WELLINGTON LABORATORIES

CERTIFICATE OF ANALYSIS DOCUMENTATION

PRODUCT CODE:

M5PFPeA

LOT NUMBER:

M5PFPeA0515

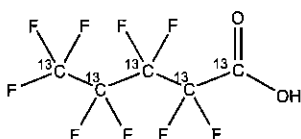
COMPOUND:

Perfluoro-n-[¹³C₅]pentanoic acid

STRUCTURE:

CAS #:

Not available



MOLECULAR FORMULA:

¹³C₅HF₉O₂

MOLECULAR WEIGHT:

269.01

CONCENTRATION:

50 ± 2.5 µg/ml

SOLVENT(S):

Methanol

Water (<1%)

CHEMICAL PURITY:

>98%

ISOTOPIC PURITY:

≥99% ¹³C

LAST TESTED: (mm/dd/yyyy)

05/22/2015

(¹³C₅)

EXPIRY DATE: (mm/dd/yyyy)

05/22/2020

RECOMMENDED STORAGE:

Store ampoule in a cool, dark place

DOCUMENTATION/ DATA ATTACHED:

Figure 1: LC/MS Data (TIC and Mass Spectrum)

Figure 2: LC/MS/MS Data (Selected MRM Transitions)

ADDITIONAL INFORMATION:

- See page 2 for further details.
- Contains 4 mole eq. of NaOH to prevent conversion of the carboxylic acid to the methyl ester.
- Contains < 0.1% of perfluoro-n-pentanoic acid.

FOR LABORATORY USE ONLY: NOT FOR HUMAN OR DRUG USE

Certified By:

B.G. Chittim

Date: 05/25/2015

(mm/dd/yyyy)

Wellington Laboratories Inc., 345 Southgate Dr. Guelph ON N1G 3M5 CANADA
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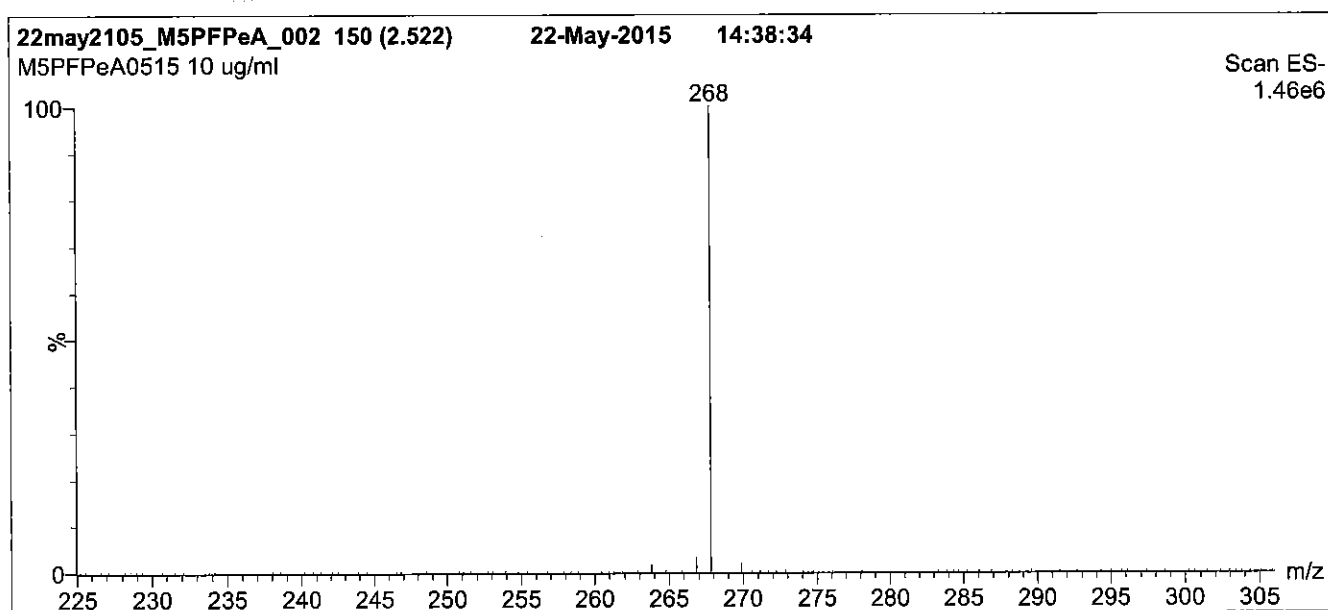
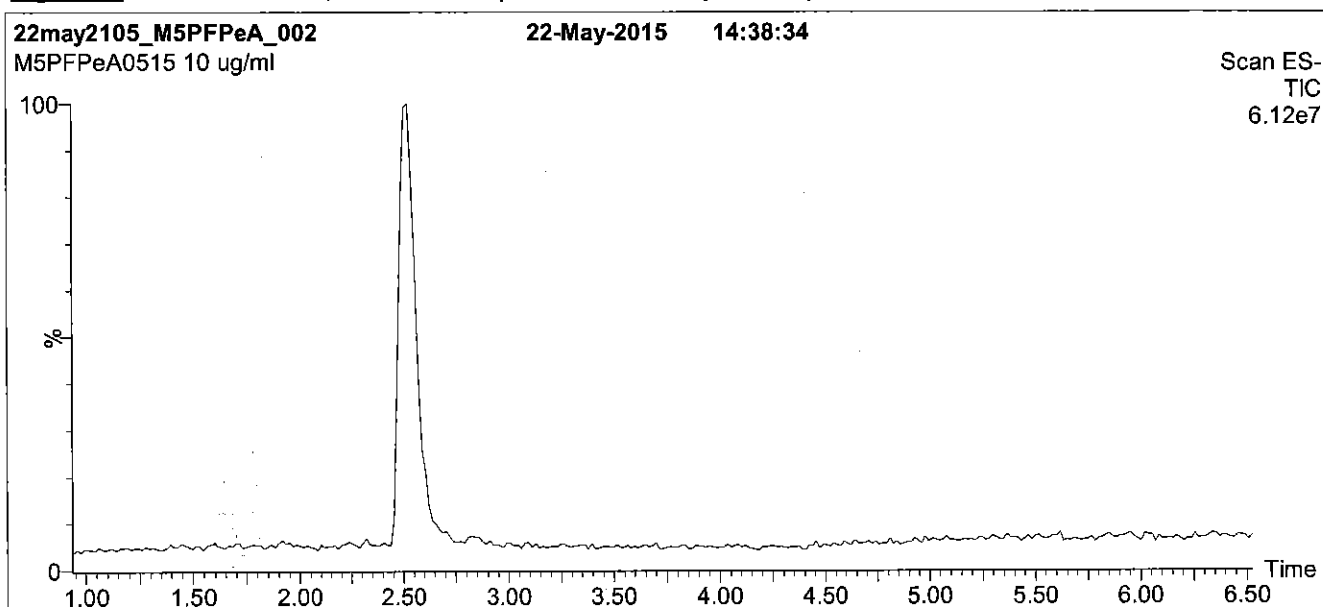
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Figure 1: M5PFPeA; LC/MS Data (TIC and Mass Spectrum)



Conditions for Figure 1:

LC: Waters Acquity Ultra Performance LC
MS: Micromass Quattro micro API MS

Chromatographic Conditions

Column: Acquity UPLC BEH Shield RP₁₈
1.7 μ m, 2.1 x 100 mm

Mobile phase: Gradient
Start: 40% (80:20 MeOH:ACN) / 60% H₂O
(both with 10 mM NH₄OAc buffer)
Ramp to 90% organic over 7 min and hold for
1.5 min before returning to initial conditions in 0.5 min.
Time: 10 min

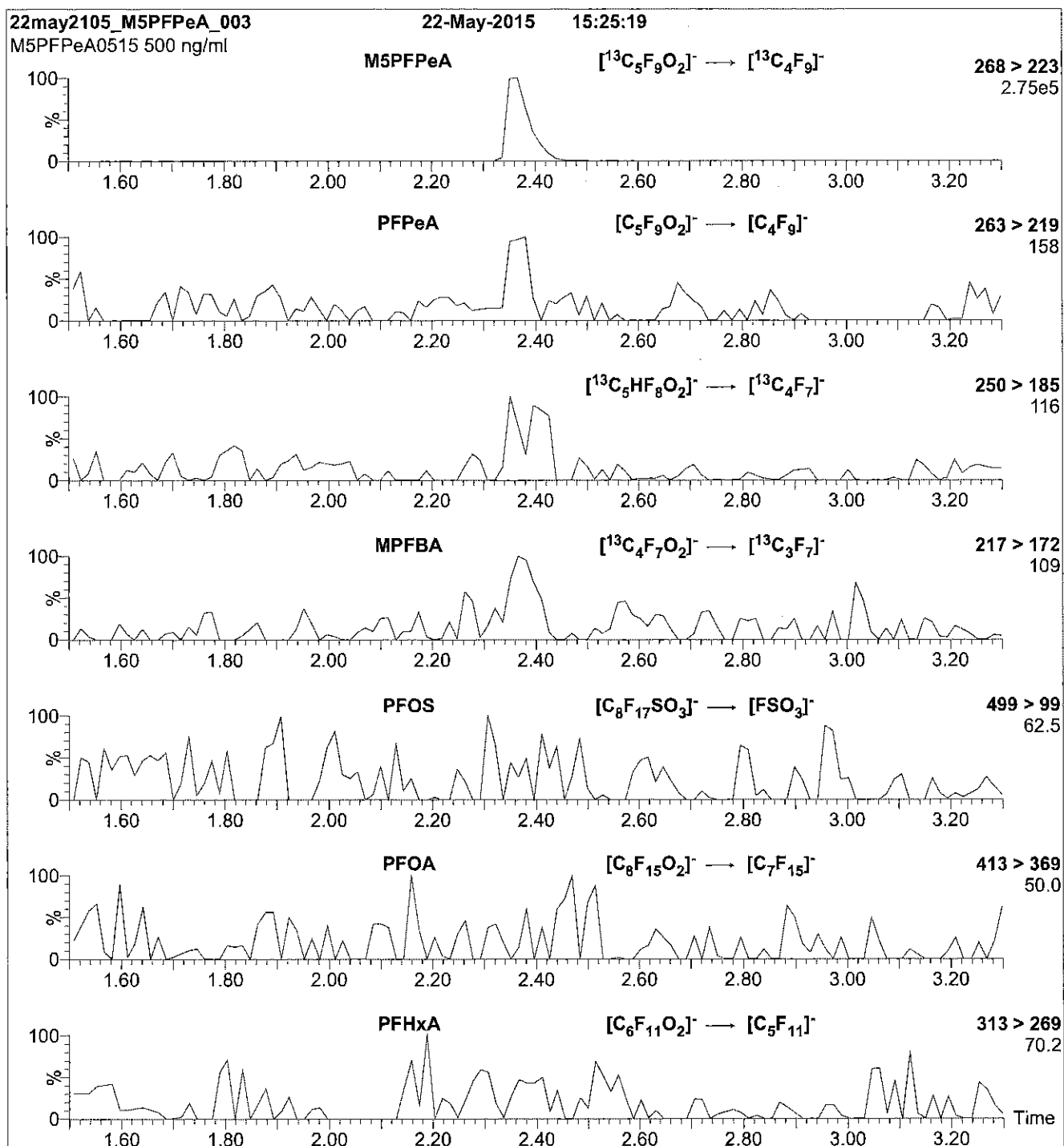
Flow: 300 μ l/min

MS Parameters

Experiment: Full Scan (225 - 850 amu)

Source: Electrospray (negative)
Capillary Voltage (kV) = 2.00
Cone Voltage (V) = 15.00
Cone Gas Flow (l/hr) = 60
Desolvation Gas Flow (l/hr) = 750

Figure 2: M5PFPeA; LC/MS/MS Data (Selected MRM Transitions)



Conditions for Figure 2:

Injection: Direct loop injection
10 μl (500 ng/ml M5PFPeA)

Mobile phase: Isocratic 80% (80:20 MeOH:ACN) / 20% H_2O
(both with 10 mM NH_4OAc buffer)

Flow: 300 $\mu\text{l}/\text{min}$

MS Parameters

Collision Gas (mbar) = 3.35e-3
Collision Energy (eV) = 9

Reagent

LCM5PFPEA_00005



591160

ID: LCM5PFPEA_00005

Exp: 05/22/20 Prod: CBW

13C5-Perfluoropentanoic a

R: 3/3/16 CBW



WELLINGTON LABORATORIES

CERTIFICATE OF ANALYSIS DOCUMENTATION

PRODUCT CODE:

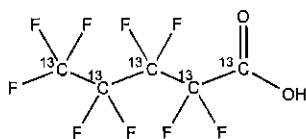
M5PFPeA

LOT NUMBER:

M5PFPeA0515

COMPOUND:Perfluoro-n-[¹³C₅]pentanoic acid**STRUCTURE:****CAS #:**

Not available

**MOLECULAR FORMULA:**¹³C₅HF₉O₂**MOLECULAR WEIGHT:**

269.01

CONCENTRATION:

50 ± 2.5 µg/ml

SOLVENT(S):

Methanol

Water (<1%)

CHEMICAL PURITY:

>98%

ISOTOPIC PURITY:≥99% ¹³C**LAST TESTED:** (mm/dd/yyyy)

05/22/2015

(¹³C₅)**EXPIRY DATE:** (mm/dd/yyyy)

05/22/2020

RECOMMENDED STORAGE:

Store ampoule in a cool, dark place

DOCUMENTATION/ DATA ATTACHED:

Figure 1: LC/MS Data (TIC and Mass Spectrum)

Figure 2: LC/MS/MS Data (Selected MRM Transitions)

ADDITIONAL INFORMATION:

- See page 2 for further details.
- Contains 4 mole eq. of NaOH to prevent conversion of the carboxylic acid to the methyl ester.
- Contains < 0.1% of perfluoro-n-pentanoic acid.

FOR LABORATORY USE ONLY: NOT FOR HUMAN OR DRUG USE

Certified By:

B.G. Chittim

Date:

05/25/2015

(mm/dd/yyyy)

Wellington Laboratories Inc., 345 Southgate Dr. Guelph ON N1G 3M5 CANADA
519-822-2436 • Fax: 519-822-2849 • info@well-labs.com

INTENDED USE:

The products prepared by Wellington Laboratories Inc. are for laboratory use only. This certified reference material (CRM) was designed to be used as a standard for the identification and/or quantification of the specific chemical compound it contains.

HAZARDS:

This product should only be used by qualified personnel familiar with its potential hazards and trained in the handling of hazardous chemicals. Due care should be exercised to prevent unnecessary human contact or ingestion. All procedures should be carried out in a well-functioning fume hood and suitable gloves, eye protection, and clothing should be worn at all times. Waste should be disposed of according to national and regional regulations. Safety Data Sheets (SDSs) are available upon request.

SYNTHESIS / CHARACTERIZATION:

Where possible, all of our products are synthesized using single-product unambiguous routes. They are then characterized, and their structures and purities confirmed, using a combination of the most relevant techniques, such as NMR, GC/MS, LC/MS/MS, SFC/UV/MS/MS, x-ray crystallography, and melting point. Isotopic purities of mass-labelled compounds are also confirmed using HRGC/HRMS and/or LC/MS/MS.

HOMOGENEITY:

Prior to solution preparation, crystalline material is tested for homogeneity using a variety of techniques (as stated above) and its solubility in a given diluent is taken into consideration. Duplicate solutions of a new product are prepared from the same crystalline lot and, after the addition of an appropriate internal standard, they are compared by GC/MS, LC/MS/MS and/or SFC/UV/MS/MS. The relative response factors of the analyte of interest in each solution are required to be <5% RSD. New solution lots of existing products are compared to older lots in the same manner, which further confirms the homogeneity of the crystalline material as well as the stability and homogeneity of the solutions in the storage containers.

UNCERTAINTY:

The maximum combined relative standard uncertainty of our reference standard solutions is calculated using the following equation:

The combined relative standard uncertainty, $u_c(y)$, of a value y and the uncertainty of the independent parameters x_1, x_2, \dots, x_n on which it depends is:

$$u_c(y(x_1, x_2, \dots, x_n)) = \sqrt{\sum_{i=1}^n u(y, x_i)^2}$$

where x is expressed as a relative standard uncertainty of the individual parameter.

The individual uncertainties taken into account include those associated with weights (calibration of the balance) and volumes (calibration of the volumetric glassware). An expanded maximum combined percent relative uncertainty of $\pm 5\%$ (calculated with a coverage factor of 2 and a level of confidence of 95%) is stated on the Certificate of Analysis for all of our products.

TRACEABILITY:

All reference standard solutions are traceable to specific crystalline lots. The microbalances used for solution preparation are regularly tested by an external ISO/IEC 17025 accredited calibration company. In addition, their calibration is verified prior to each weighing using NIST and/or NRC traceable external weights. All volumetric glassware used is of Class A tolerance and has been tested according to the appropriate ASTM procedures, which are ultimately traceable to NIST. For certain products, traceability to international interlaboratory studies has also been established.

EXPIRY DATE / PERIOD OF VALIDITY:

Ongoing stability studies of this product have demonstrated stability in its composition and concentration, until the specified expiry date, in the unopened ampoule. Monitoring for any degradation or change in concentration of the listed analyte(s) is performed on a routine basis.

LIMITED WARRANTY:

At the time of shipment, all products are warranted to be free of defects in material and workmanship and to conform to the stated technical and purity specifications.

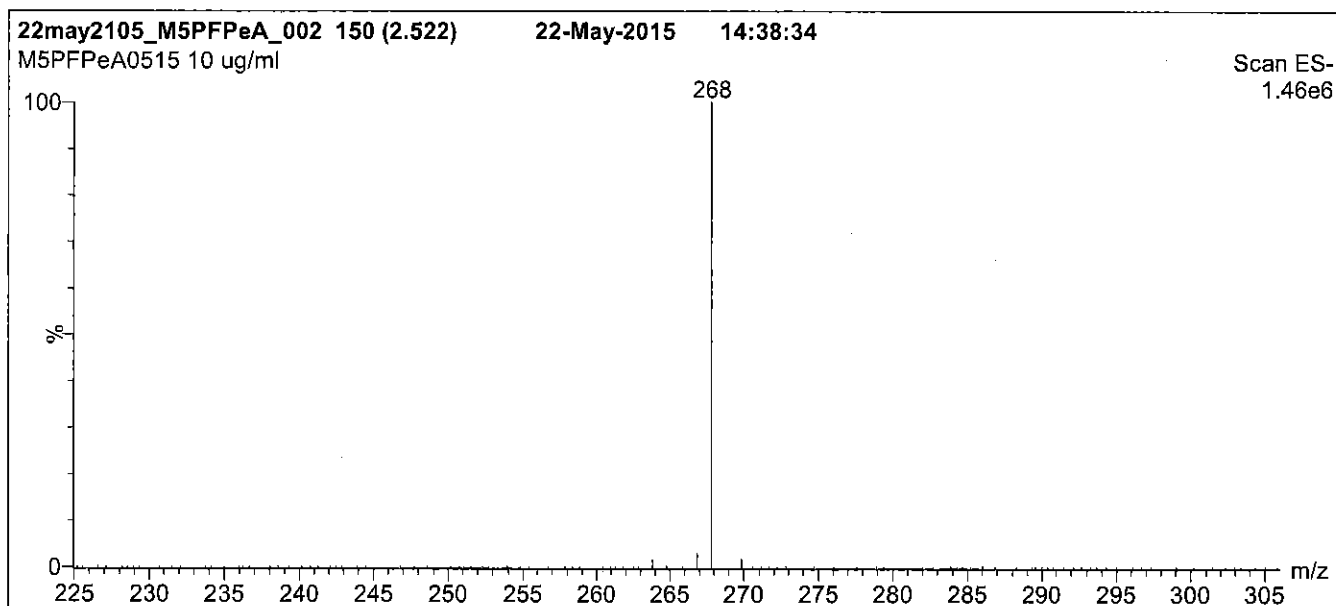
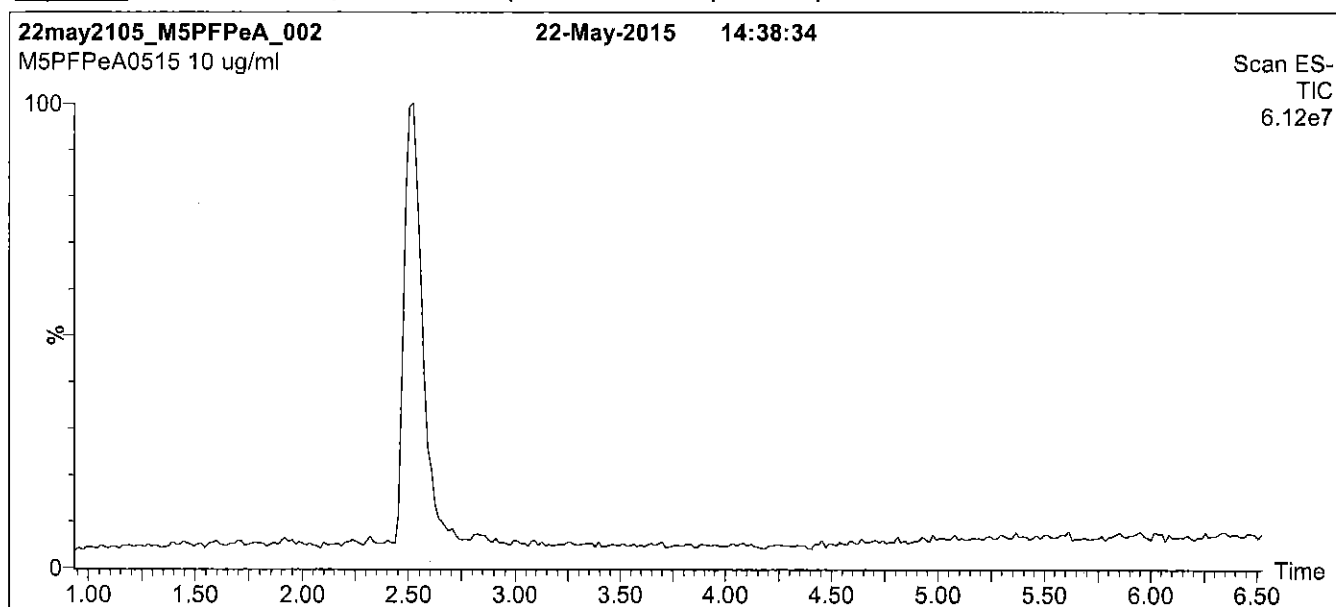
QUALITY MANAGEMENT:

This product was produced using a Quality Management System registered to the latest versions of ISO 9001 by SAI Global, ISO/IEC 17025 by the Canadian Association for Laboratory Accreditation Inc. (CALA; A 1226), and ISO GUIDE 34 by ANSI-ASQ National Accreditation Board (ANAB; AR-1523).



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Figure 1: M5PFPeA; LC/MS Data (TIC and Mass Spectrum)



Conditions for Figure 1:

LC: Waters Acquity Ultra Performance LC
MS: Micromass Quattro *micro* API MS

Chromatographic Conditions

Column: Acquity UPLC BEH Shield RP₁₈
1.7 μ m, 2.1 x 100 mm

Mobile phase: Gradient

Start: 40% (80:20 MeOH:ACN) / 60% H₂O

(both with 10 mM NH₄OAc buffer)

Ramp to 90% organic over 7 min and hold for
1.5 min before returning to initial conditions in 0.5 min.

Time: 10 min

Flow: 300 μ l/min

MS Parameters

Experiment: Full Scan (225 - 850 amu)

Source: Electrospray (negative)

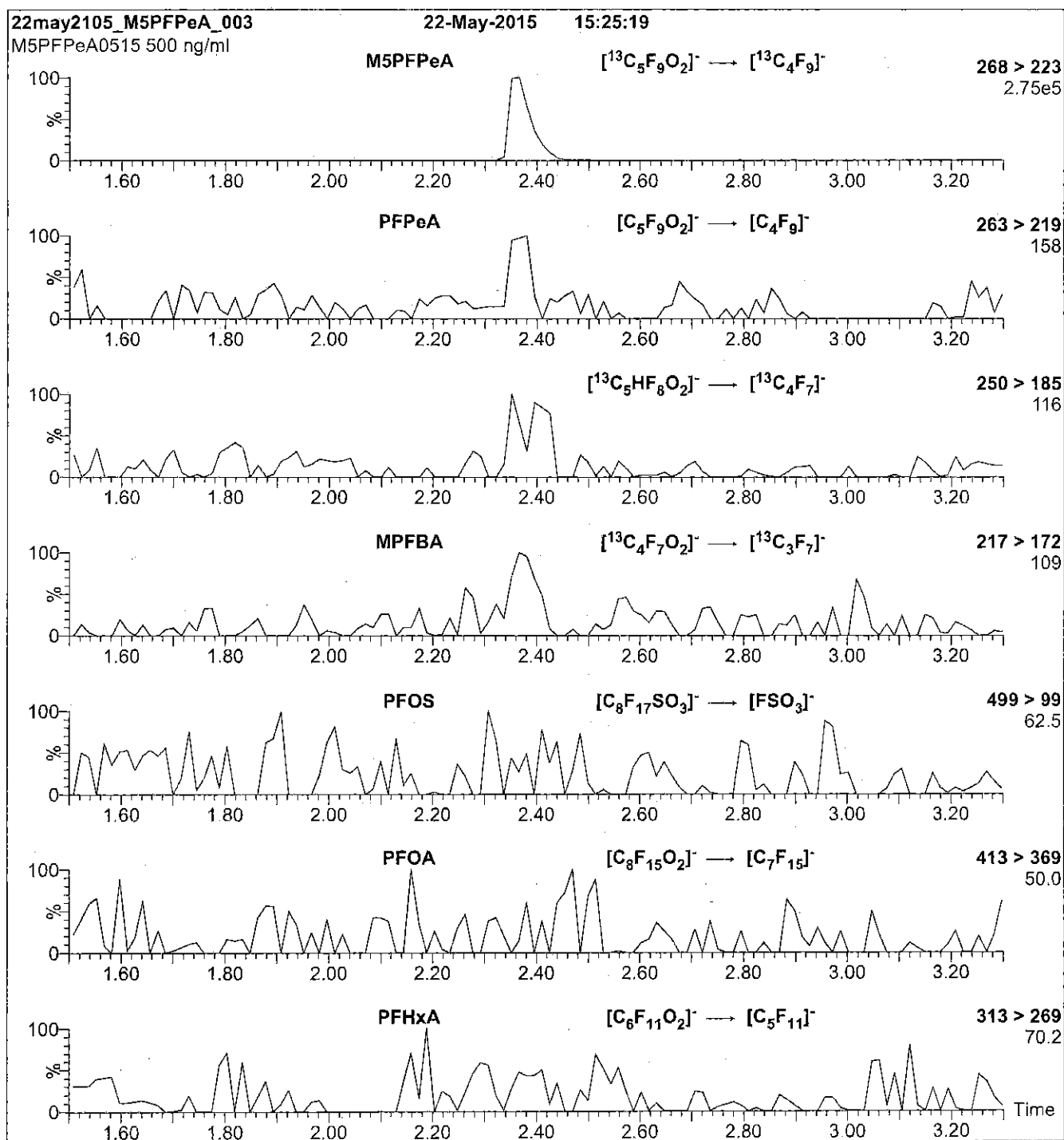
Capillary Voltage (kV) = 2.00

Cone Voltage (V) = 15.00

Cone Gas Flow (l/hr) = 60

Desolvation Gas Flow (l/hr) = 750

Figure 2: M5PFPeA; LC/MS/MS Data (Selected MRM Transitions)



Conditions for Figure 2:

Injection: Direct loop injection
10 μl (500 ng/ml M5PFPeA)

Mobile phase: Isocratic 80% (80:20 MeOH:ACN) / 20% H_2O
(both with 10 mM NH_4OAc buffer)

Flow: 300 $\mu\text{l}/\text{min}$

MS Parameters

Collision Gas (mbar) = 3.35e-3
Collision Energy (eV) = 9

Reagent

LCM5PFPEA_00006



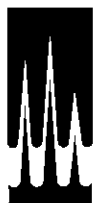
R: 4/7/16 CBW

609706

ID: LCM5PFPEA_00006

Exp: 05/22/20 Prod: CBW

13C5-Perfluoropentanoic a



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CERTIFICATE OF ANALYSIS DOCUMENTATION

PRODUCT CODE:

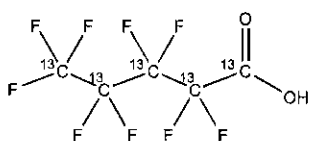
M5PFPeA

LOT NUMBER:

M5PFPeA0515

COMPOUND:Perfluoro-n-[¹³C₅]pentanoic acid**STRUCTURE:****CAS #:**

Not available

**MOLECULAR FORMULA:**¹³C₅HF₉O₂**CONCENTRATION:**

50 ± 2.5 µg/ml

MOLECULAR WEIGHT:

269.01

SOLVENT(S):

Methanol

Water (<1%)

CHEMICAL PURITY:

>98%

ISOTOPIC PURITY:≥99% ¹³C(¹³C₅)**LAST TESTED:** (mm/dd/yyyy)

05/22/2015

EXPIRY DATE: (mm/dd/yyyy)

05/22/2020

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Figure 2: LC/MS/MS Data (Selected MRM Transitions)

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- See page 2 for further details.
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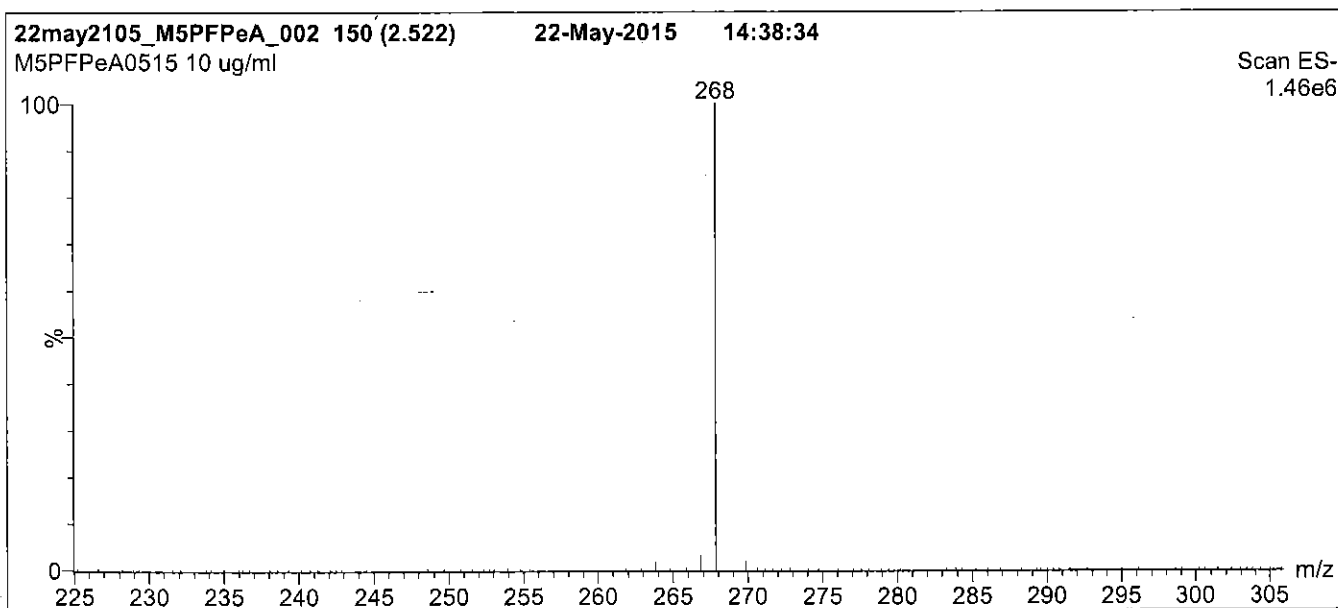
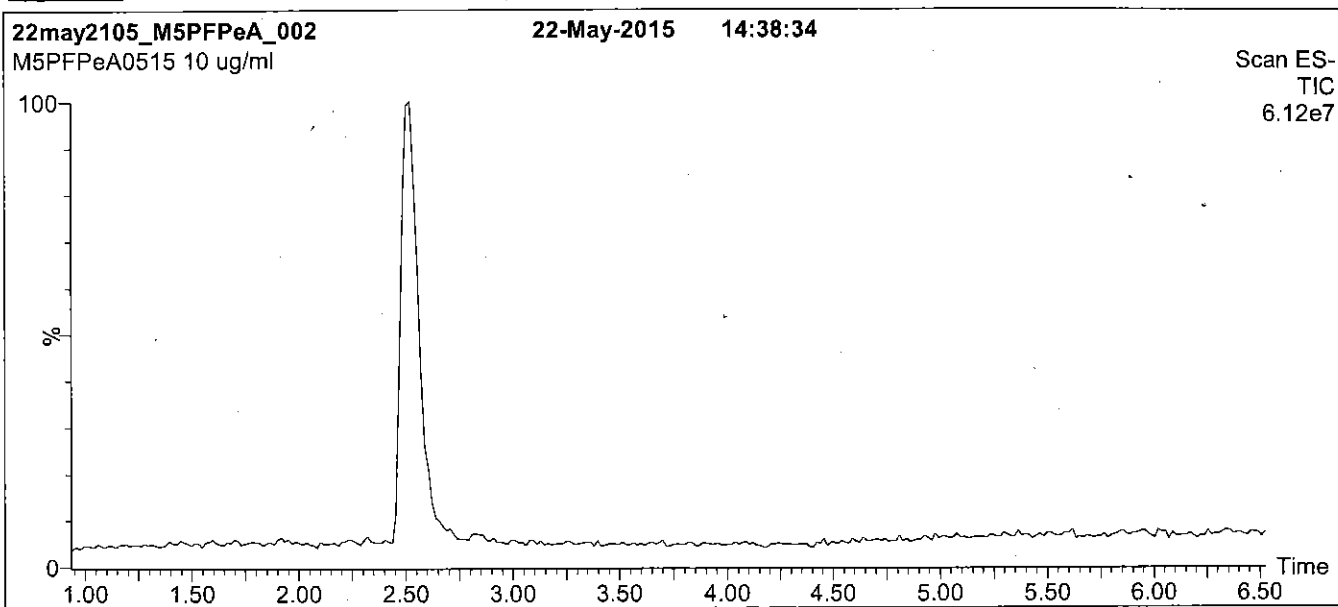
QUALITY MANAGEMENT:

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Figure 1: M5PFPeA; LC/MS Data (TIC and Mass Spectrum)



Conditions for Figure 1:

LC: Waters Acquity Ultra Performance LC
MS: Micromass Quattro *micro* API MS

Chromatographic Conditions

Column: Acquity UPLC BEH Shield RP₁₈
1.7 μ m, 2.1 x 100 mm

Mobile phase: Gradient
Start: 40% (80:20 MeOH:ACN) / 60% H₂O
(both with 10 mM NH₄OAc buffer)
Ramp to 90% organic over 7 min and hold for
1.5 min before returning to initial conditions in 0.5 min.
Time: 10 min

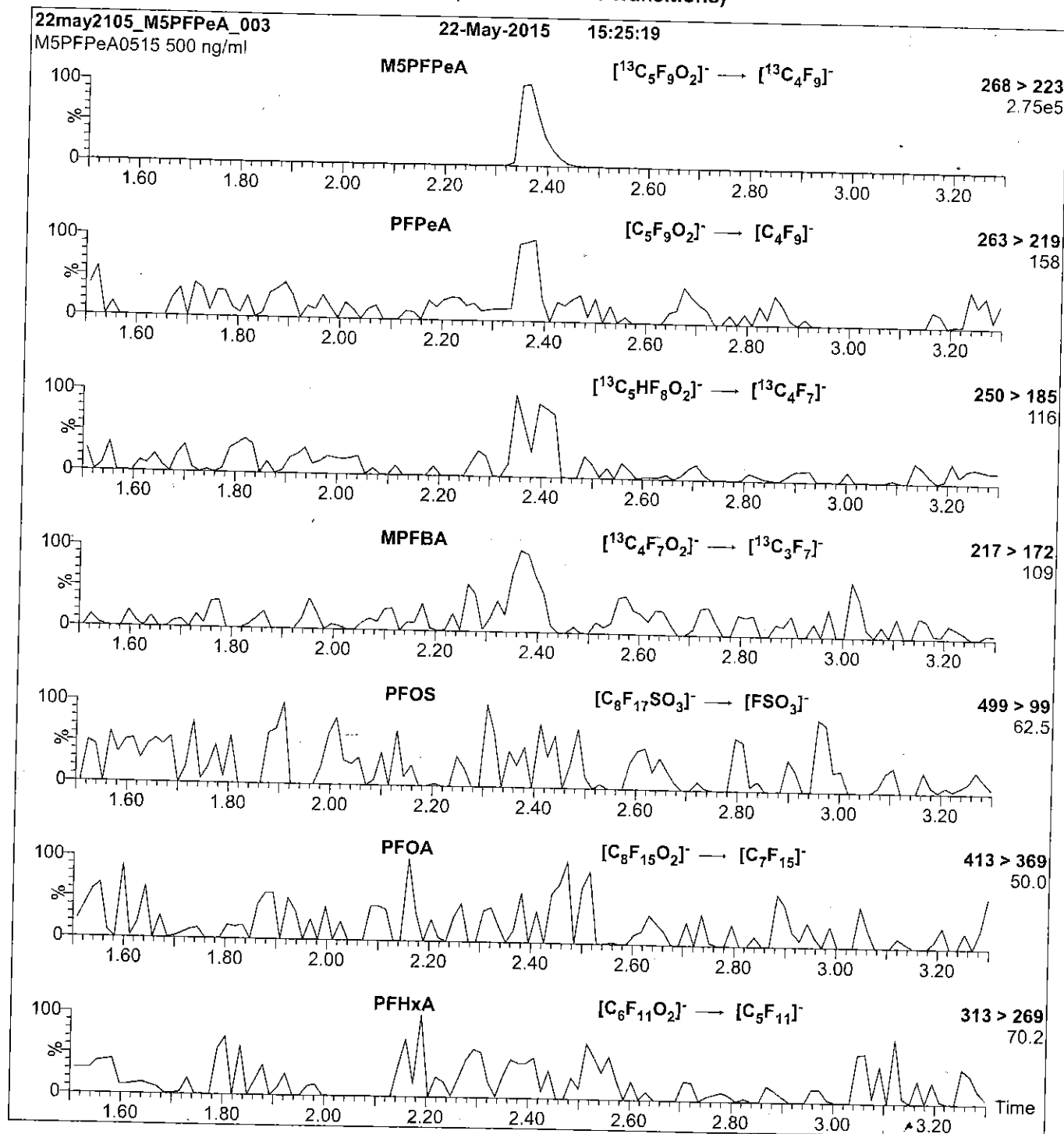
Flow: 300 μ l/min

MS Parameters

Experiment: Full Scan (225 - 850 amu)

Source: Electrospray (negative)
Capillary Voltage (kV) = 2.00
Cone Voltage (V) = 15.00
Cone Gas Flow (l/hr) = 60
Desolvation Gas Flow (l/hr) = 750

Figure 2: M5PFPeA; LC/MS/MS Data (Selected MRM Transitions)



Conditions for Figure 2:

Injection: Direct loop injection
10 μL (500 ng/ml M5PFPeA)

Mobile phase: Isocratic 80% (80:20 MeOH:ACN) / 20% H_2O
(both with 10 mM NH_4OAc buffer)

Flow: 300 $\mu\text{L}/\text{min}$

MS Parameters

Collision Gas (mbar) = 3.35e-3
Collision Energy (eV) = 9

Reagent

LCM8FOSA_00006

rec: 9/15/15 sv



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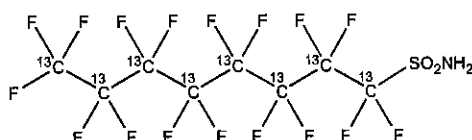
CERTIFICATE OF ANALYSIS DOCUMENTATION

PRODUCT CODE: M8FOSA-I
COMPOUND: Perfluoro-1-[¹³C₈]octanesulfonamide

LOT NUMBER: M8FOSA1214I

STRUCTURE:

CAS #: Not available



MOLECULAR FORMULA: ¹³C₈H₂F₁₇NO₂S
CONCENTRATION: 50 ± 2.5 µg/ml
CHEMICAL PURITY: >98%
LAST TESTED: (mm/dd/yyyy) 12/15/2014
EXPIRY DATE: (mm/dd/yyyy) 12/15/2016
RECOMMENDED STORAGE: Refrigerate ampoule

MOLECULAR WEIGHT: 507.09
SOLVENT(S): Isopropanol
ISOTOPIC PURITY: ≥99% ¹³C
(¹³C₈)

DOCUMENTATION/ DATA ATTACHED:

Figure 1: LC/MS Data (TIC and Mass Spectrum)
Figure 2: LC/MS/MS Data (Selected MRM Transitions)

ADDITIONAL INFORMATION:

- See page 2 for further details.

FOR LABORATORY USE ONLY: NOT FOR HUMAN OR DRUG USE

Certified By:

B.G. Chittim

Date: 04/01/2015
(mm/dd/yyyy)

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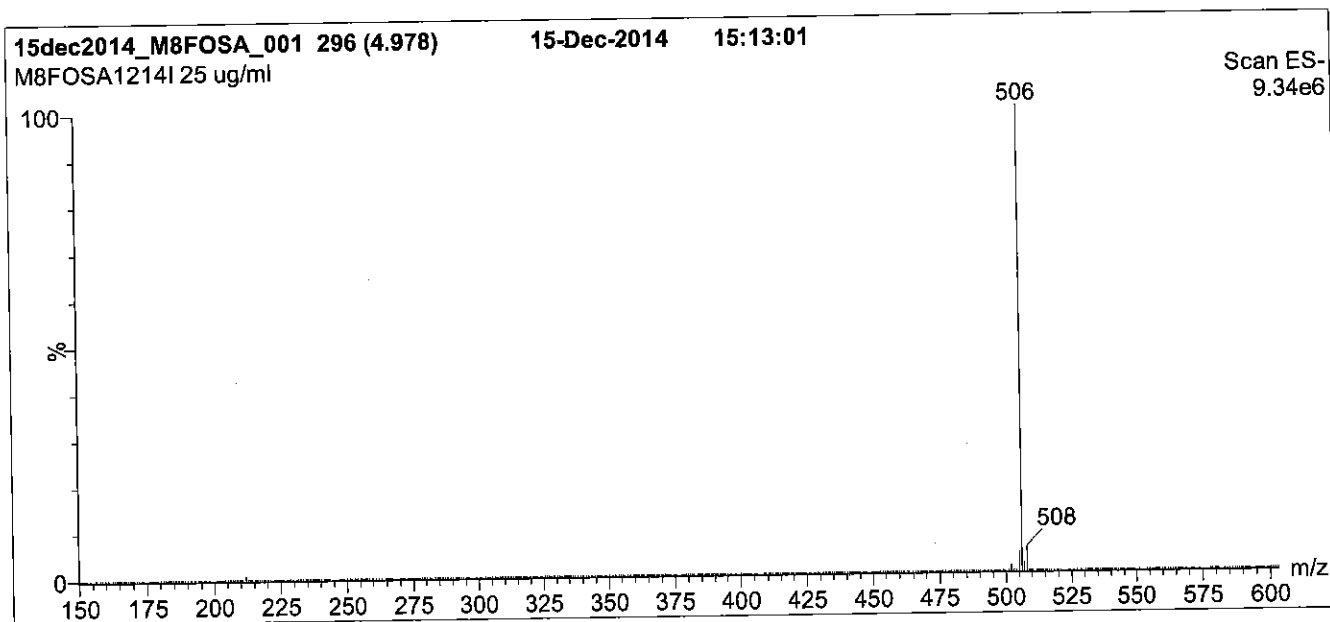
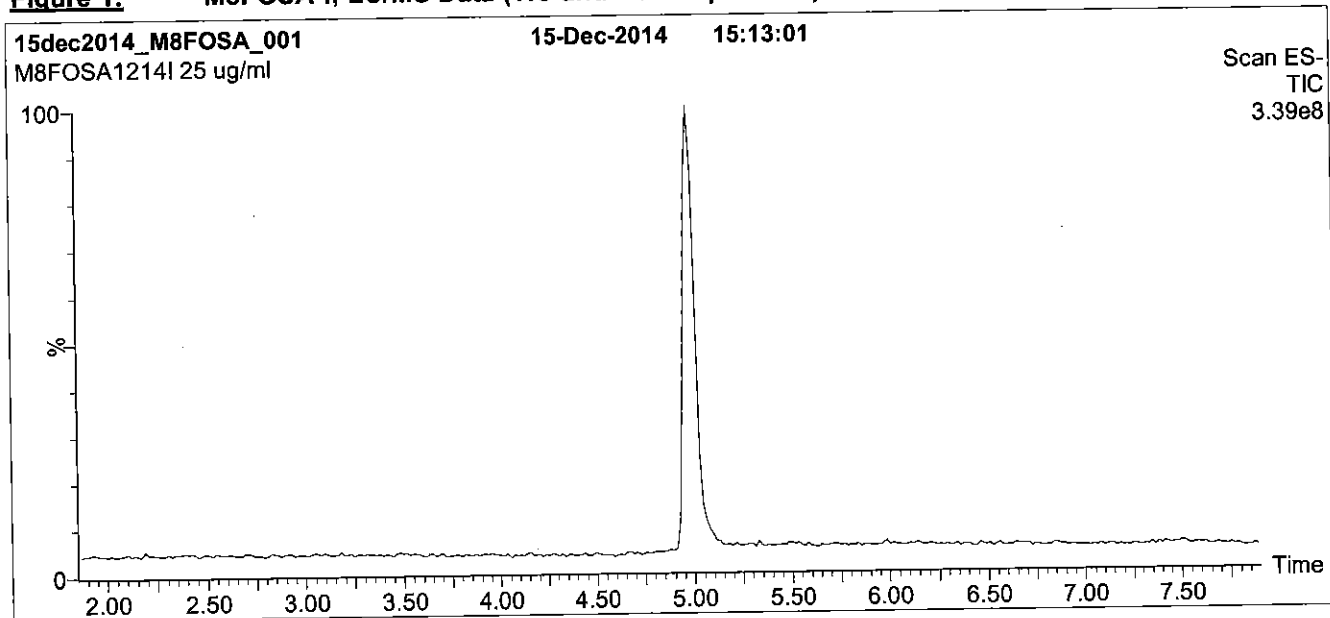
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Figure 1: M8FOSA-I; LC/MS Data (TIC and Mass Spectrum)



Conditions for Figure 1:

LC: Waters Acquity Ultra Performance LC
MS: Micromass Quattro *micro* API MS

Chromatographic Conditions

Column: Acquity UPLC BEH Shield RP₁₈
1.7 μ m, 2.1 x 100 mm

Mobile phase: Gradient

Start: 55% (80:20 MeOH:ACN) / 45% H₂O

(both with 10 mM NH₄OAc buffer)

Ramp to 90% organic over 7.5 min and hold for 1 min
before returning to initial conditions in 0.5 min.

Time: 10 min

Flow: 300 μ l/min

MS Parameters

Experiment: Full Scan (150 - 850 amu)

Source: Electrospray (negative)

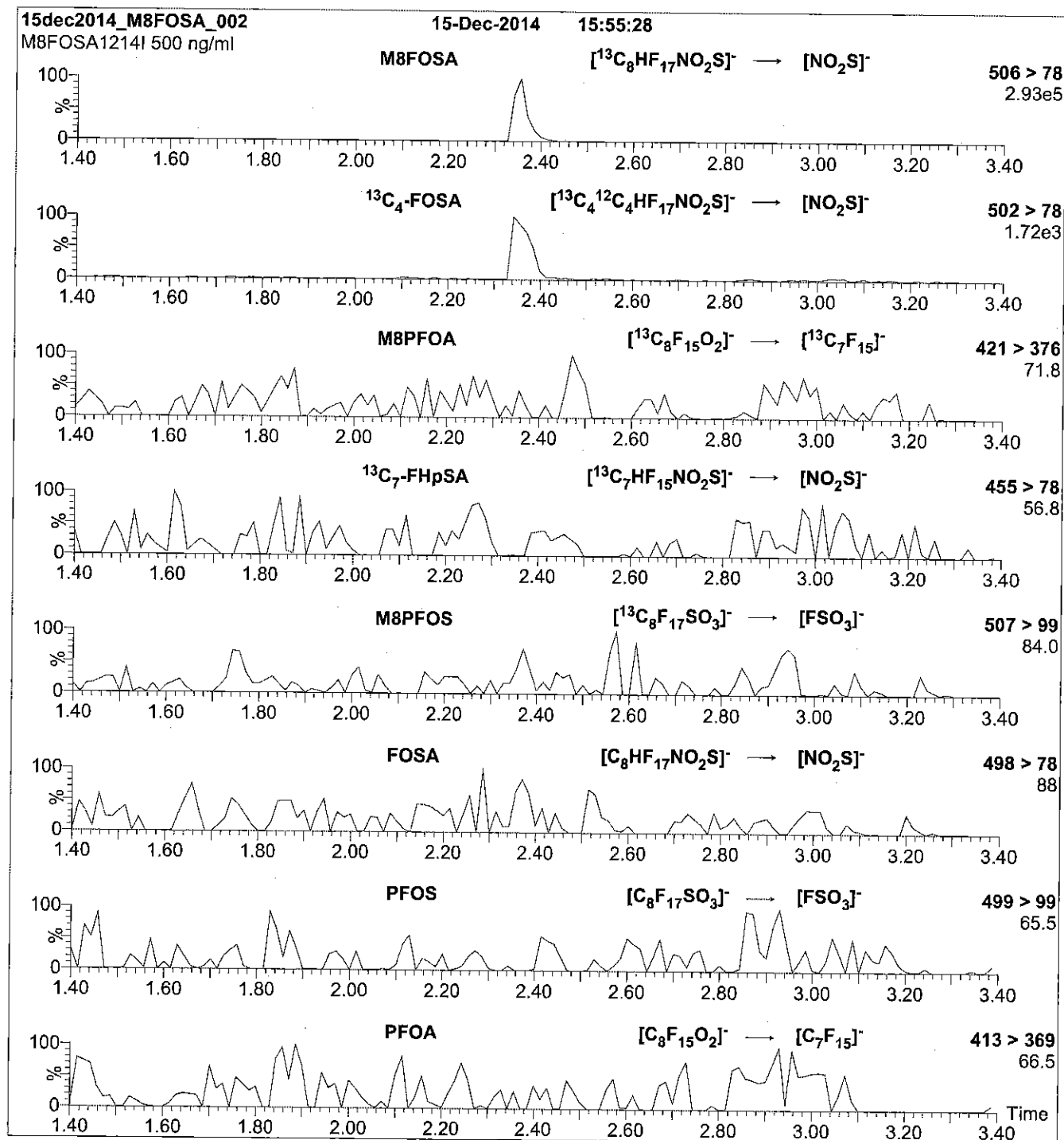
Capillary Voltage (kV) = 2.50

Cone Voltage (V) = 40.00

Cone Gas Flow (l/hr) = 50

Desolvation Gas Flow (l/hr) = 750

Figure 2: M8FOSA-I; LC/MS/MS Data (Selected MRM Transitions)



Conditions for Figure 2:

Injection: Direct loop injection
 10 μl (500 ng/ml M8FOSA-I)

Mobile phase: Isocratic 80% (80:20 MeOH:ACN) / 20% H_2O
 (both with 10 mM NH_4OAc buffer)

Flow: 300 $\mu\text{l}/\text{min}$

MS Parameters

Collision Gas (mbar) = $3.31\text{e-}3$
 Collision Energy (eV) = 30

Reagent

LCM8FOSA_00007



572887

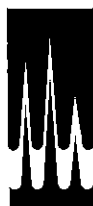
ID: LCM8FOSA_00007

Exp. 12/15/16 Prod: CBW

13C8-Perfluorooctanesulfo

R: 1/25/16

S:



WELLINGTON LABORATORIES

CERTIFICATE OF ANALYSIS DOCUMENTATION

PRODUCT CODE:

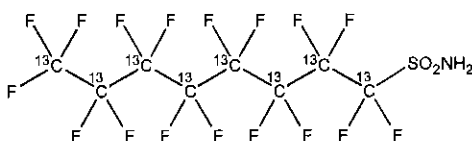
M8FOSA-I

LOT NUMBER:

M8FOSA1214I

COMPOUND:Perfluoro-1- $^{13}\text{C}_8$ octanesulfonamide**STRUCTURE:****CAS #:**

Not available

**MOLECULAR FORMULA:** $^{13}\text{C}_8\text{H}_2\text{F}_{17}\text{NO}_2\text{S}$ **MOLECULAR WEIGHT:**

507.09

CONCENTRATION: $50 \pm 2.5 \mu\text{g/ml}$ **SOLVENT(S):**

Isopropanol

CHEMICAL PURITY:

>98%

ISOTOPIC PURITY: $\geq 99\%$ ^{13}C
($^{13}\text{C}_8$)**LAST TESTED:** (mm/dd/yyyy)

12/15/2014

EXPIRY DATE: (mm/dd/yyyy)

12/15/2016

RECOMMENDED STORAGE:

Refrigerate ampoule

DOCUMENTATION/ DATA ATTACHED:

Figure 1: LC/MS Data (TIC and Mass Spectrum)

Figure 2: LC/MS/MS Data (Selected MRM Transitions)

ADDITIONAL INFORMATION:

• See page 2 for further details.

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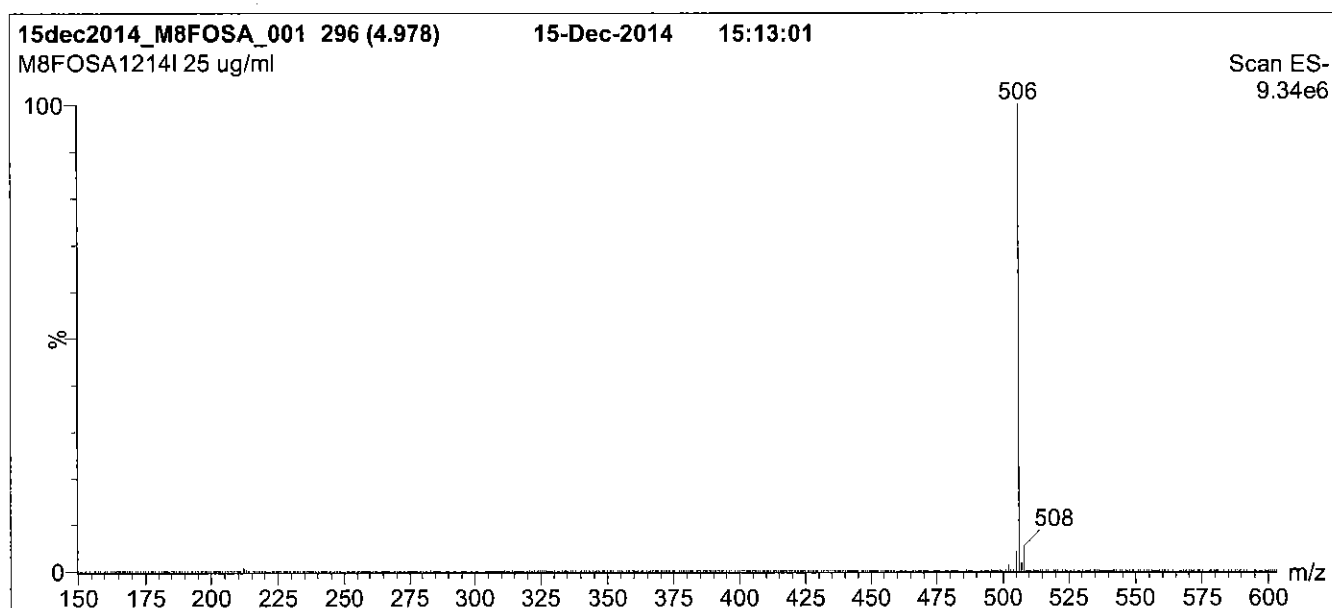
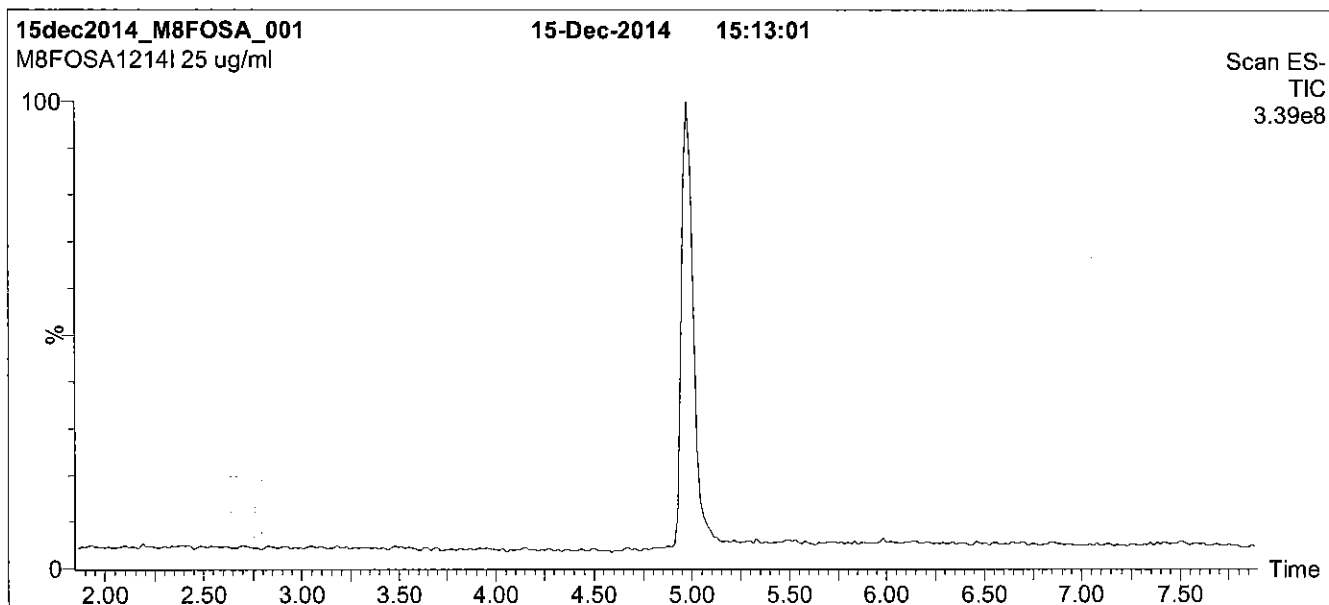
QUALITY MANAGEMENT:

This product was produced using a Quality Management System registered to the latest versions of ISO 9001 by SAI Global, ISO/IEC 17025 by the Canadian Association for Laboratory Accreditation Inc. (CALA; A 1226), and ISO GUIDE 34 by ANSI-ASQ National Accreditation Board (ANAB; AR-1523).



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Figure 1: M8FOSA-I; LC/MS Data (TIC and Mass Spectrum)



Conditions for Figure 1:

LC: Waters Acquity Ultra Performance LC
MS: Micromass Quattro micro API MS

Chromatographic Conditions

Column: Acquity UPLC BEH Shield RP₁₈
1.7 μ m, 2.1 x 100 mm

Mobile phase: Gradient
Start: 55% (80:20 MeOH:ACN) / 45% H₂O
(both with 10 mM NH₄OAc buffer)
Ramp to 90% organic over 7.5 min and hold for 1 min
before returning to initial conditions in 0.5 min.
Time: 10 min

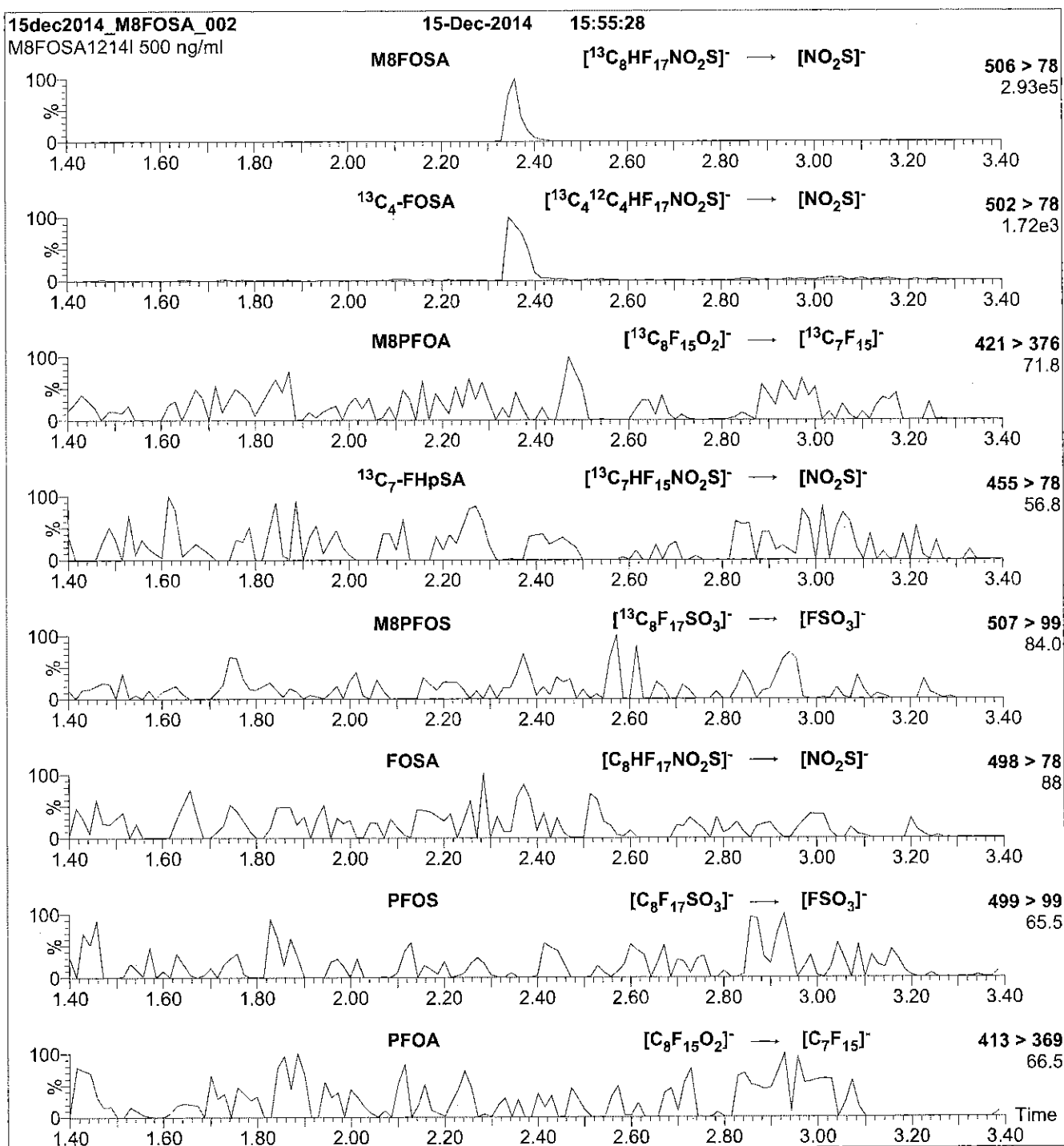
Flow: 300 μ l/min

MS Parameters

Experiment: Full Scan (150 - 850 amu)

Source: Electrospray (negative)
Capillary Voltage (kV) = 2.50
Cone Voltage (V) = 40.00
Cone Gas Flow (l/hr) = 50
Desolvation Gas Flow (l/hr) = 750

Figure 2: M8FOSA-I; LC/MS/MS Data (Selected MRM Transitions)



Conditions for Figure 2:

Injection: Direct loop injection
10 μl (500 ng/ml M8FOSA-I)

Mobile phase: Isocratic 80% (80:20 MeOH:ACN) / 20% H_2O
(both with 10 mM NH_4OAc buffer)

Flow: 300 $\mu\text{l}/\text{min}$

MS Parameters

Collision Gas (mbar) = 3.31e-3
Collision Energy (eV) = 30

Reagent

LCM8FOSA_00008



591143

ID: LCM8FOSA_00008

Exp: 12/22/17 Prod: CBW

13C8-Perfluorooctanesulfo

R: 3/3/16 CBW



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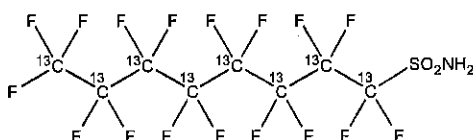
CERTIFICATE OF ANALYSIS DOCUMENTATION

PRODUCT CODE: M8FOSA-I
COMPOUND: Perfluoro-1- $^{13}\text{C}_8$ octanesulfonamide

LOT NUMBER: M8FOSA1215I

STRUCTURE:

CAS #: Not available



MOLECULAR FORMULA: $^{13}\text{C}_8\text{H}_2\text{F}_{17}\text{NO}_2\text{S}$
CONCENTRATION: $50 \pm 2.5 \mu\text{g/ml}$
CHEMICAL PURITY: $>98\%$
LAST TESTED: (mm/dd/yyyy) 12/22/2015
EXPIRY DATE: (mm/dd/yyyy) 12/22/2017
RECOMMENDED STORAGE: Refrigerate ampoule

MOLECULAR WEIGHT: 507.09
SOLVENT(S): Isopropanol
ISOTOPIC PURITY: $\geq 99\%$ ^{13}C
($^{13}\text{C}_8$)

DOCUMENTATION/ DATA ATTACHED:

Figure 1: LC/MS Data (TIC and Mass Spectrum)
Figure 2: LC/MS/MS Data (Selected MRM Transitions)

ADDITIONAL INFORMATION:

- See page 2 for further details.

FOR LABORATORY USE ONLY: NOT FOR HUMAN OR DRUG USE

Certified By:

B.G. Chittim

Date: 01/14/2016
(mm/dd/yyyy)

Wellington Laboratories Inc., 345 Southgate Dr. Guelph ON N1G 3M5 CANADA
519-822-2436 • Fax: 519-822-2849 • info@well-labs.com

INTENDED USE:

The products prepared by Wellington Laboratories Inc. are for laboratory use only. This certified reference material (CRM) was designed to be used as a standard for the identification and/or quantification of the specific chemical compound it contains.

HAZARDS:

This product should only be used by qualified personnel familiar with its potential hazards and trained in the handling of hazardous chemicals. Due care should be exercised to prevent unnecessary human contact or ingestion. All procedures should be carried out in a well-functioning fume hood and suitable gloves, eye protection, and clothing should be worn at all times. Waste should be disposed of according to national and regional regulations. Safety Data Sheets (SDSs) are available upon request.

SYNTHESIS / CHARACTERIZATION:

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HOMOGENEITY:

Prior to solution preparation, crystalline material is tested for homogeneity using a variety of techniques (as stated above) and its solubility in a given diluent is taken into consideration. Duplicate solutions of a new product are prepared from the same crystalline lot and, after the addition of an appropriate internal standard, they are compared by GC/MS, LC/MS/MS and/or SFC/UV/MS/MS. The relative response factors of the analyte of interest in each solution are required to be <5% RSD. New solution lots of existing products are compared to older lots in the same manner, which further confirms the homogeneity of the crystalline material as well as the stability and homogeneity of the solutions in the storage containers.

UNCERTAINTY:

The maximum combined relative standard uncertainty of our reference standard solutions is calculated using the following equation:

The combined relative standard uncertainty, $u_c(y)$, of a value y and the uncertainty of the independent parameters

x_1, x_2, \dots, x_n on which it depends is:

$$u_c(y(x_1, x_2, \dots, x_n)) = \sqrt{\sum_{i=1}^n u(y, x_i)^2}$$

where x is expressed as a relative standard uncertainty of the individual parameter.

The individual uncertainties taken into account include those associated with weights (calibration of the balance) and volumes (calibration of the volumetric glassware). An expanded maximum combined percent relative uncertainty of $\pm 5\%$ (calculated with a coverage factor of 2 and a level of confidence of 95%) is stated on the Certificate of Analysis for all of our products.

TRACEABILITY:

All reference standard solutions are traceable to specific crystalline lots. The microbalances used for solution preparation are regularly tested by an external ISO/IEC 17025 accredited calibration company. In addition, their calibration is verified prior to each weighing using NIST and/or NRC traceable external weights. All volumetric glassware used is of Class A tolerance and has been tested according to the appropriate ASTM procedures, which are ultimately traceable to NIST. For certain products, traceability to international interlaboratory studies has also been established.

EXPIRY DATE / PERIOD OF VALIDITY:

Ongoing stability studies of this product have demonstrated stability in its composition and concentration, until the specified expiry date, in the unopened ampoule. Monitoring for any degradation or change in concentration of the listed analyte(s) is performed on a routine basis.

LIMITED WARRANTY:

At the time of shipment, all products are warranted to be free of defects in material and workmanship and to conform to the stated technical and purity specifications.

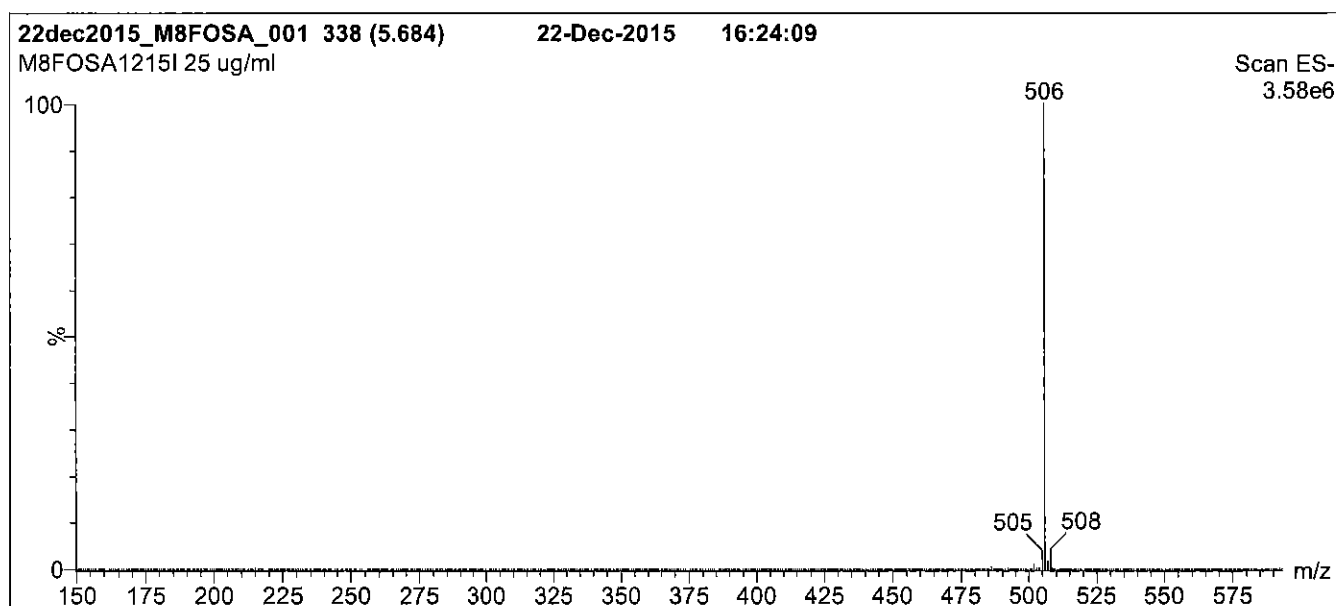
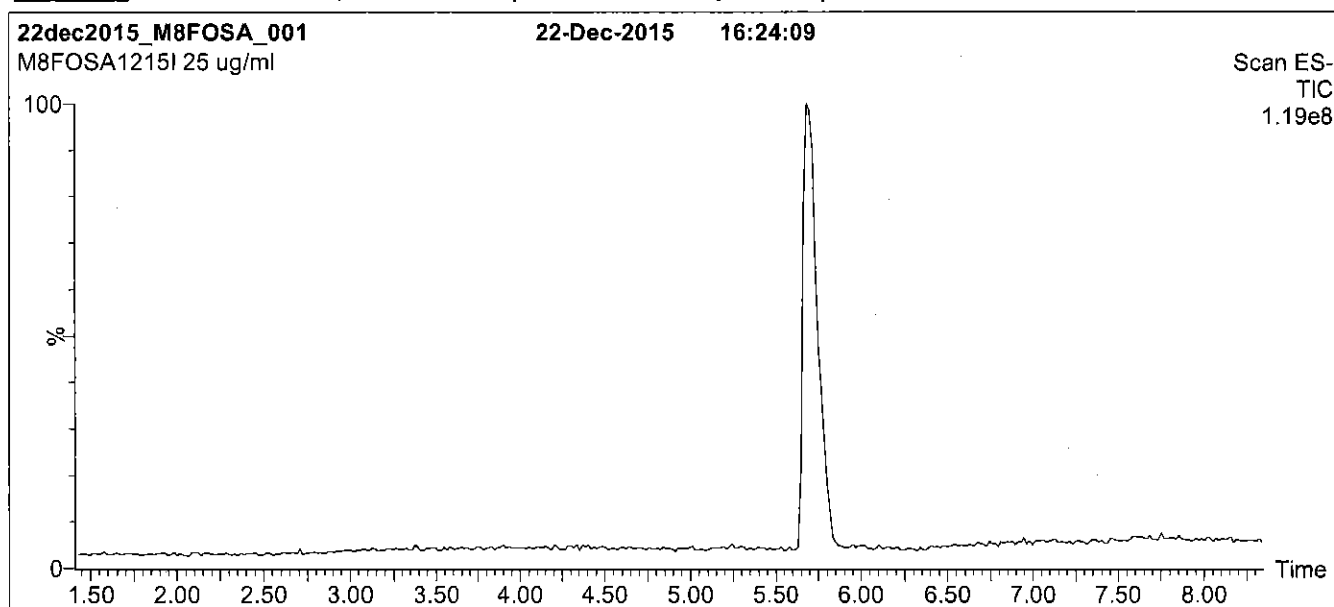
QUALITY MANAGEMENT:

This product was produced using a Quality Management System registered to the latest versions of ISO 9001 by SAI Global, ISO/IEC 17025 by the Canadian Association for Laboratory Accreditation Inc. (CALA; A 1226), and ISO GUIDE 34 by ANSI-ASQ National Accreditation Board (ANAB; AR-1523).



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Figure 1: M8FOSA-I; LC/MS Data (TIC and Mass Spectrum)



Conditions for Figure 1:

LC: Waters Acquity Ultra Performance LC
MS: Micromass Quattro *micro* API MS

Chromatographic Conditions

Column: Acquity UPLC BEH Shield RP₁₈
1.7 μ m, 2.1 x 100 mm

Mobile phase: Gradient
Start: 50% (80:20 MeOH:ACN) / 50% H₂O
(both with 10 mM NH₄OAc buffer)
Ramp to 90% organic over 7 min and hold for 2 min
before returning to initial conditions in 0.5 min.
Time: 10 min

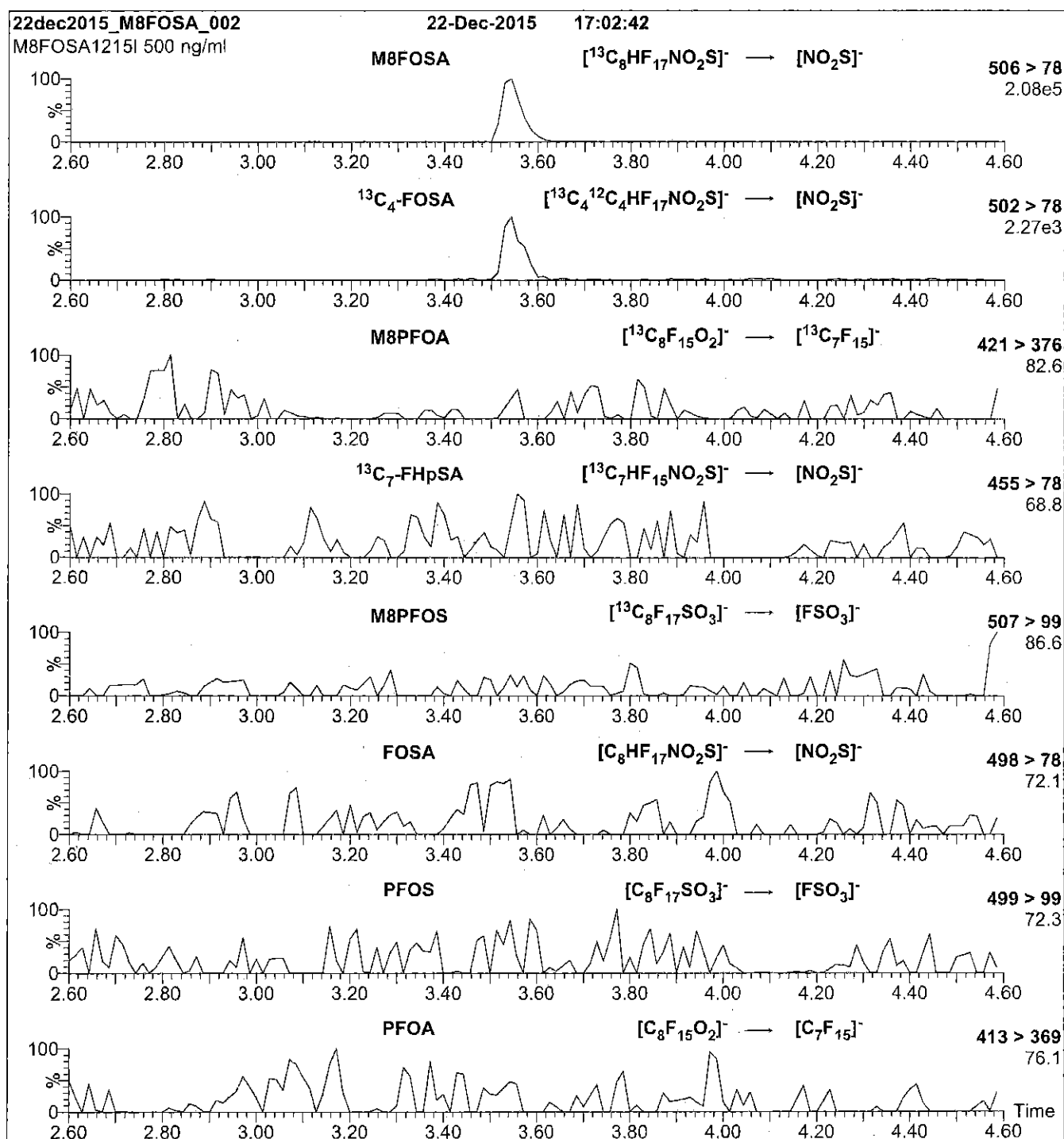
Flow: 300 μ l/min

MS Parameters

Experiment: Full Scan (150 - 850 amu)

Source: Electrospray (negative)
Capillary Voltage (kV) = 2.50
Cone Voltage (V) = 40.00
Cone Gas Flow (l/hr) = 50
Desolvation Gas Flow (l/hr) = 750

Figure 2: M8FOSA-I; LC/MS/MS Data (Selected MRM Transitions)



Conditions for Figure 2:

Injection: Direct loop injection
10 μl (500 ng/ml M8FOSA-I)

Mobile phase: Isocratic 80% (80:20 MeOH:ACN) / 20% H_2O
(both with 10 mM NH_4OAc buffer)

Flow: 300 $\mu\text{l}/\text{min}$

MS Parameters

Collision Gas (mbar) = 3.39e-3
Collision Energy (eV) = 30

Reagent

LCM8FOSA_00009



609714

ID: LCM8FOSA_00009

Exp: 12/22/17 Prpd: CBW

13C8-Perfluorooctanesulfo

R=4/7/16 CBW



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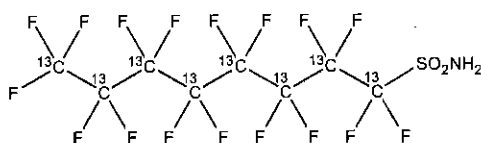
CERTIFICATE OF ANALYSIS DOCUMENTATION

PRODUCT CODE: M8FOSA-I
COMPOUND: Perfluoro-1- $^{13}\text{C}_8$ octanesulfonamide

LOT NUMBER: M8FOSA1215I

STRUCTURE:

CAS #: Not available



MOLECULAR FORMULA: $^{13}\text{C}_8\text{H}_2\text{F}_{17}\text{NO}_2\text{S}$
CONCENTRATION: $50 \pm 2.5 \mu\text{g/ml}$
CHEMICAL PURITY: >98%
LAST TESTED: (mm/dd/yyyy) 12/22/2015
EXPIRY DATE: (mm/dd/yyyy) 12/22/2017
RECOMMENDED STORAGE: Refrigerate ampoule

MOLECULAR WEIGHT: 507.09
SOLVENT(S): Isopropanol
ISOTOPIC PURITY: $\geq 99\%$ ^{13}C
($^{13}\text{C}_8$)

DOCUMENTATION/ DATA ATTACHED:

Figure 1: LC/MS Data (TIC and Mass Spectrum)
Figure 2: LC/MS/MS Data (Selected MRM Transitions)

ADDITIONAL INFORMATION:

- See page 2 for further details.

FOR LABORATORY USE ONLY: NOT FOR HUMAN OR DRUG USE

Certified By:

B.G. Chittim

Date:

01/14/2016
(mm/dd/yyyy)

Wellington Laboratories Inc., 345 Southgate Dr. Guelph ON N1G 3M5 CANADA
519-822-2436 • Fax: 519-822-2849 • info@well-labs.com

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$$u_c(y(x_1, x_2, \dots, x_n)) = \sqrt{\sum_{i=1}^n u(y, x_i)^2}$$

where x is expressed as a relative standard uncertainty of the individual parameter.

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TRACEABILITY:

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EXPIRY DATE / PERIOD OF VALIDITY:

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LIMITED WARRANTY:

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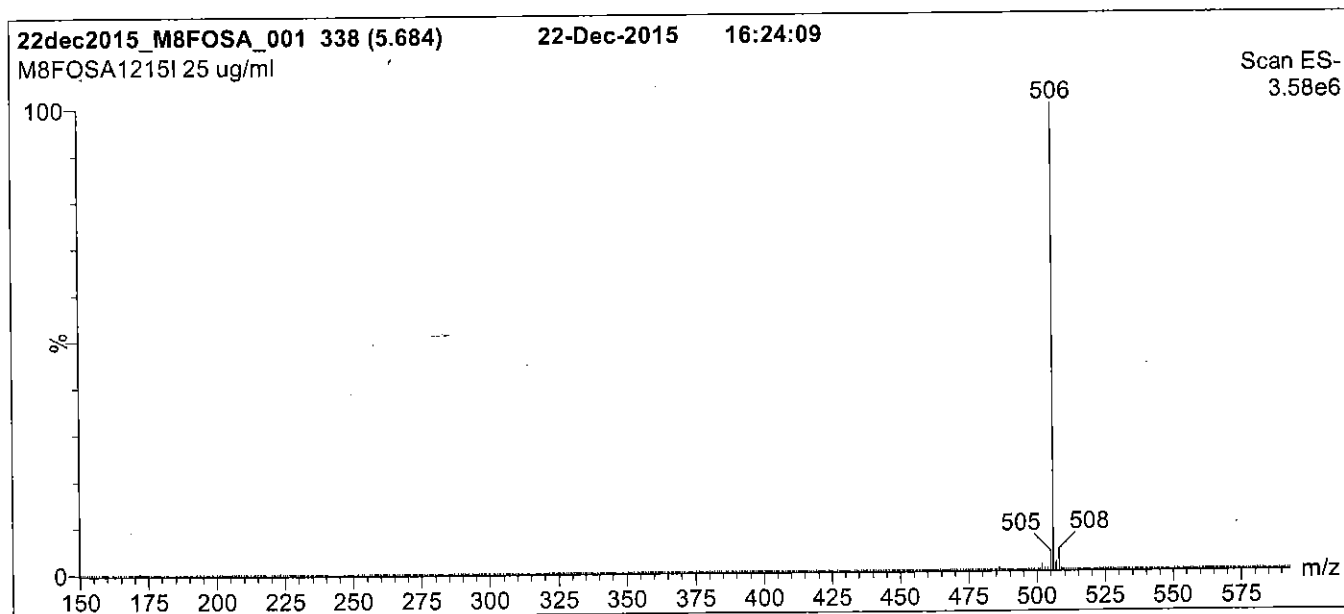
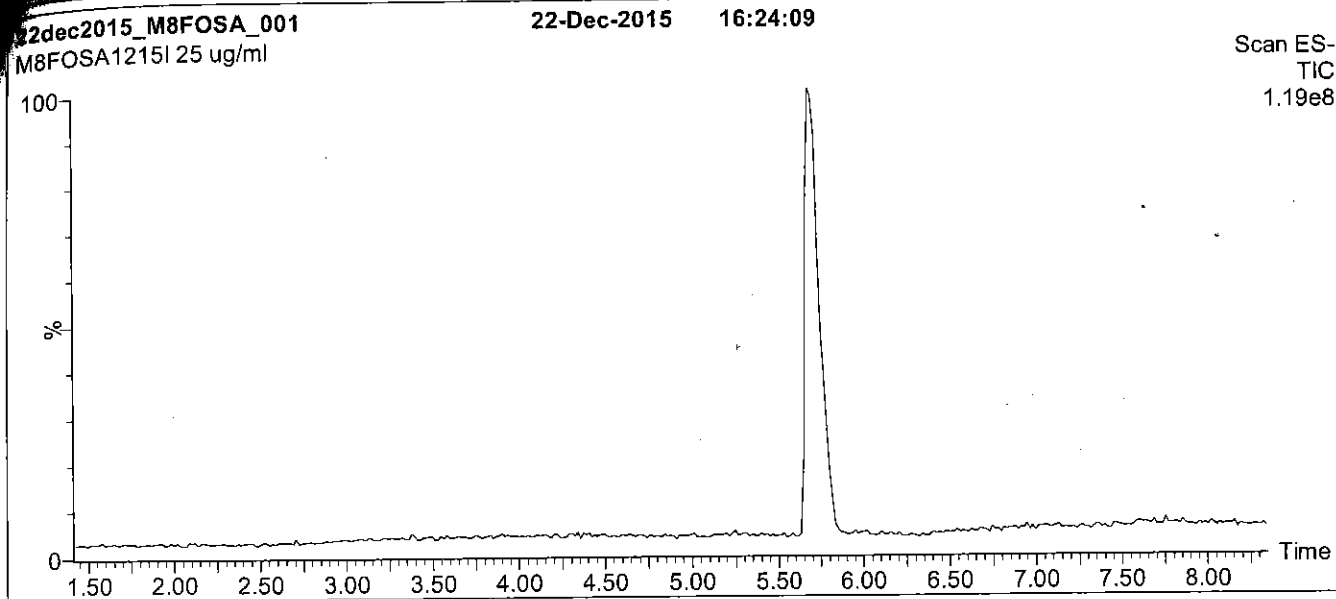
QUALITY MANAGEMENT:

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Figure 1: M8FOSA-I; LC/MS Data (TIC and Mass Spectrum)



Conditions for Figure 1:

LC: Waters Acquity Ultra Performance LC
MS: Micromass Quattro micro API MS

Chromatographic Conditions

Column: Acquity UPLC BEH Shield RP₁₈
1.7 μ m, 2.1 x 100 mm

Mobile phase: Gradient
Start: 50% (80:20 MeOH:ACN) / 50% H₂O
(both with 10 mM NH₄OAc buffer)
Ramp to 90% organic over 7 min and hold for 2 min
before returning to initial conditions in 0.5 min.
Time: 10 min

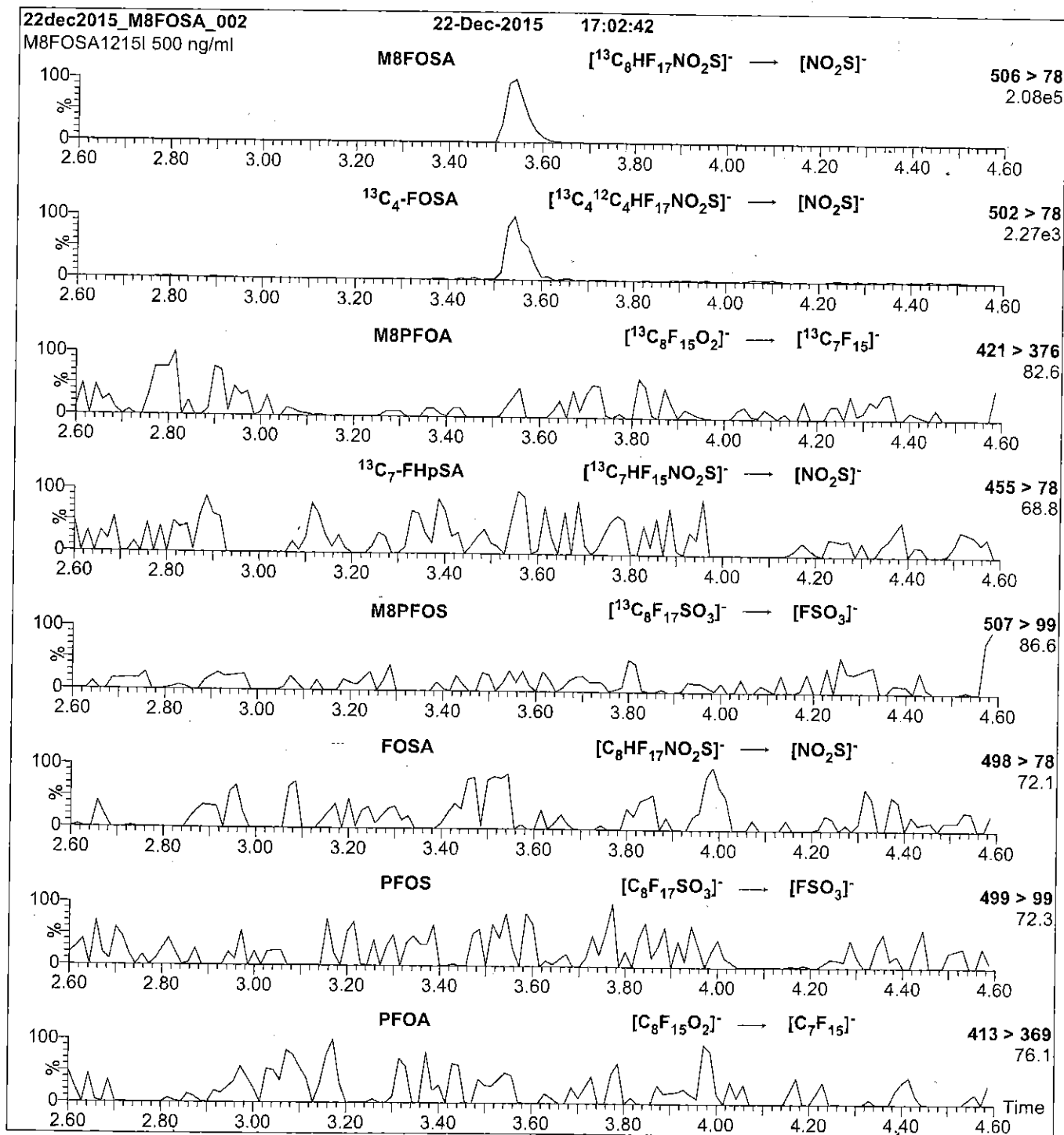
Flow: 300 μ l/min

MS Parameters

Experiment: Full Scan (150 - 850 amu)

Source: Electrospray (negative)
Capillary Voltage (kV) = 2.50
Cone Voltage (V) = 40.00
Cone Gas Flow (l/hr) = 50
Desolvation Gas Flow (l/hr) = 750

Figure 2: M8FOSA-I; LC/MS/MS Data (Selected MRM Transitions)



Conditions for Figure 2:

Injection: Direct loop injection
10 μl (500 ng/ml M8FOSA-I)

Mobile phase: Isocratic 80% (80:20 MeOH:ACN) / 20% H_2O
(both with 10 mM NH_4OAc buffer)

Flow: 300 $\mu\text{l}/\text{min}$

MS Parameters

Collision Gas (mbar) = 3.39e-3
Collision Energy (eV) = 30

Reagent

LCMPFBA_00004

R: 12/15 SW



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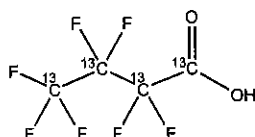
CERTIFICATE OF ANALYSIS DOCUMENTATION

PRODUCT CODE: MPFBA
COMPOUND: Perfluoro-n-[1,2,3,4-¹³C₄]butanoic acid

LOT NUMBER: MPFBA1014

STRUCTURE:

CAS #: Not available



MOLECULAR FORMULA: ¹³C₄HF₇O₂
CONCENTRATION: 50 ± 2.5 µg/ml

MOLECULAR WEIGHT: 218.01
SOLVENT(S): Methanol
Water (<1%)

CHEMICAL PURITY: >98%

ISOTOPIC PURITY: ≥99%¹³C
(1,2,3,4-¹³C₄)

LAST TESTED: (mm/dd/yyyy) 10/31/2014

EXPIRY DATE: (mm/dd/yyyy) 10/31/2019

RECOMMENDED STORAGE: Store ampoule in a cool, dark place

DOCUMENTATION/ DATA ATTACHED:

Figure 1: LC/MS Data (TIC and Mass Spectrum)

Figure 2: LC/MS/MS Data (Selected MRM Transitions)

ADDITIONAL INFORMATION:

- See page 2 for further details.
- Contains 4 mole eq. of NaOH to prevent conversion of the carboxylic acid to the methyl ester.

FOR LABORATORY USE ONLY: NOT FOR HUMAN OR DRUG USE

Certified By:

B.G. Chittim

Date: 03/31/2015
(mm/dd/yyyy)

Wellington Laboratories Inc., 345 Southgate Dr. Guelph ON N1G 3M5 CANADA
519-822-2436 • Fax: 519-822-2849 • info@well-labs.com

INTENDED USE:

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HOMOGENEITY:

Prior to solution preparation, crystalline material is tested for homogeneity using a variety of techniques (as stated above) and its solubility in a given diluent is taken into consideration. Duplicate solutions of a new product are prepared from the same crystalline lot and, after the addition of an appropriate internal standard, they are compared by GC/MS, LC/MS/MS and/or SFC/UV/MS/MS. The relative response factors of the analyte of interest in each solution are required to be <5% RSD. New solution lots of existing products are compared to older lots in the same manner, which further confirms the homogeneity of the crystalline material as well as the stability and homogeneity of the solutions in the storage containers.

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The maximum combined relative standard uncertainty of our reference standard solutions is calculated using the following equation:

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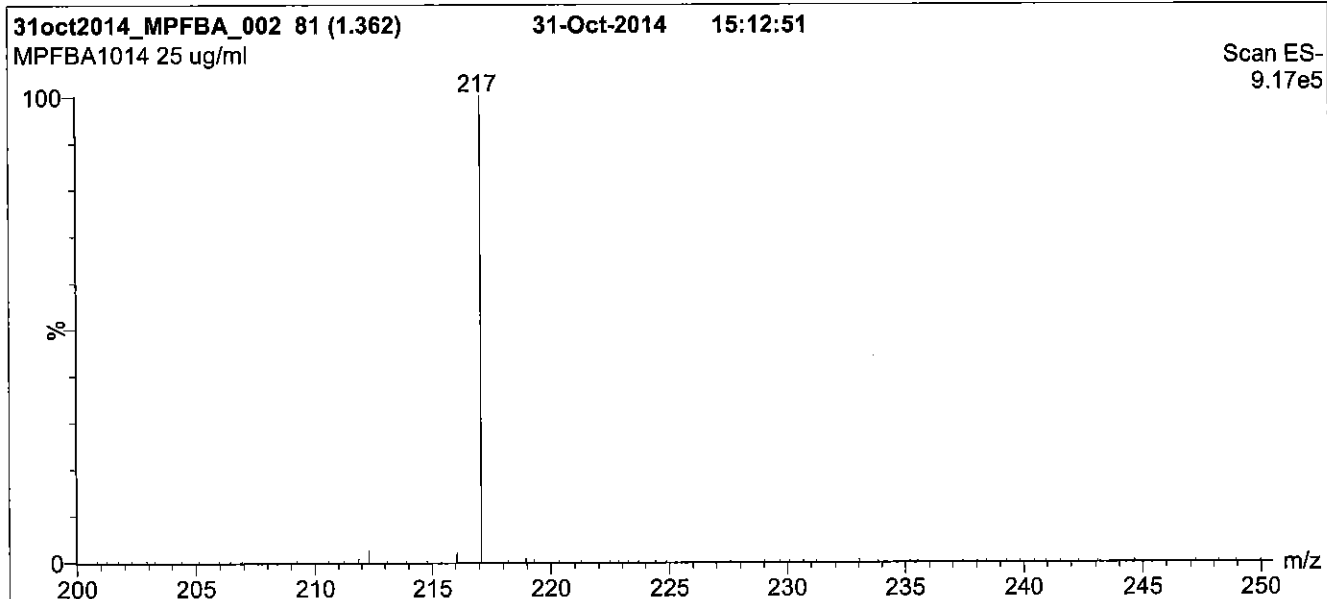
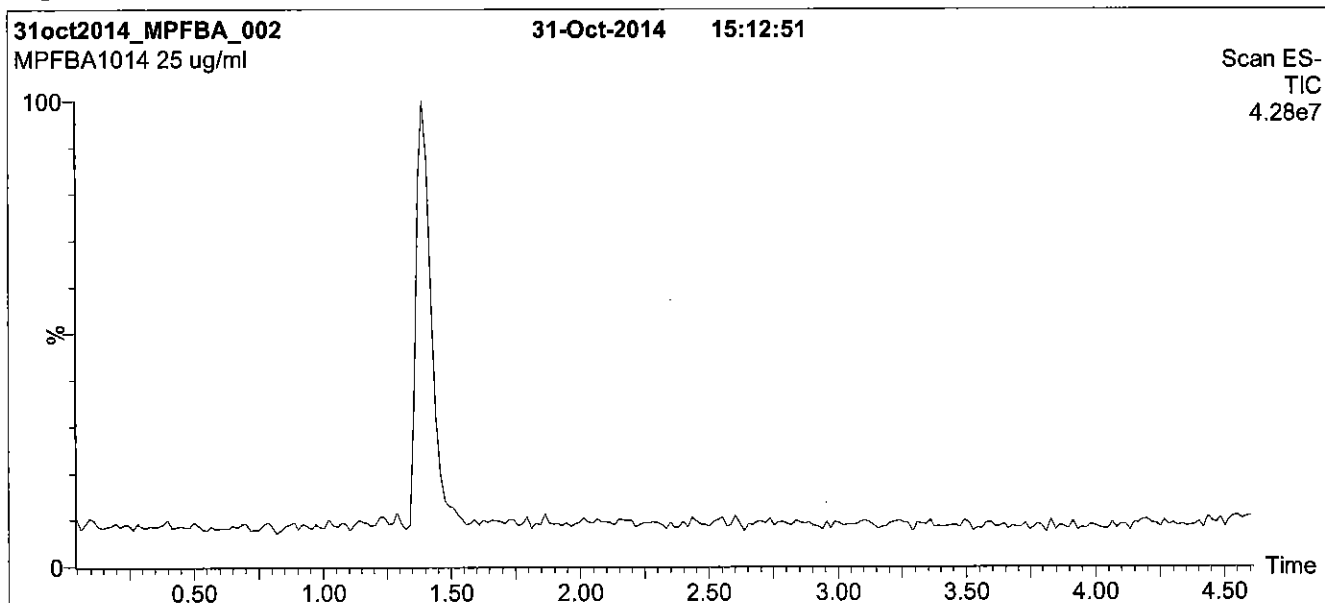
QUALITY MANAGEMENT:

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Figure 1: MPFBA; LC/MS Data (TIC and Mass Spectrum)



Conditions for Figure 1:

LC: Waters Acquity Ultra Performance LC
MS: Micromass Quattro micro API MS

Chromatographic Conditions

Column: Acquity UPLC BEH Shield RP₁₈
1.7 μ m, 2.1 x 100 mm

Mobile phase: Gradient
Start: 40% (80:20 MeOH:ACN) / 60% H₂O
(both with 10 mM NH₄OAc buffer)
Ramp to 90% organic over 5 min and hold for 1.5 min
before returning to initial conditions in 0.5 min.
Time: 10 min

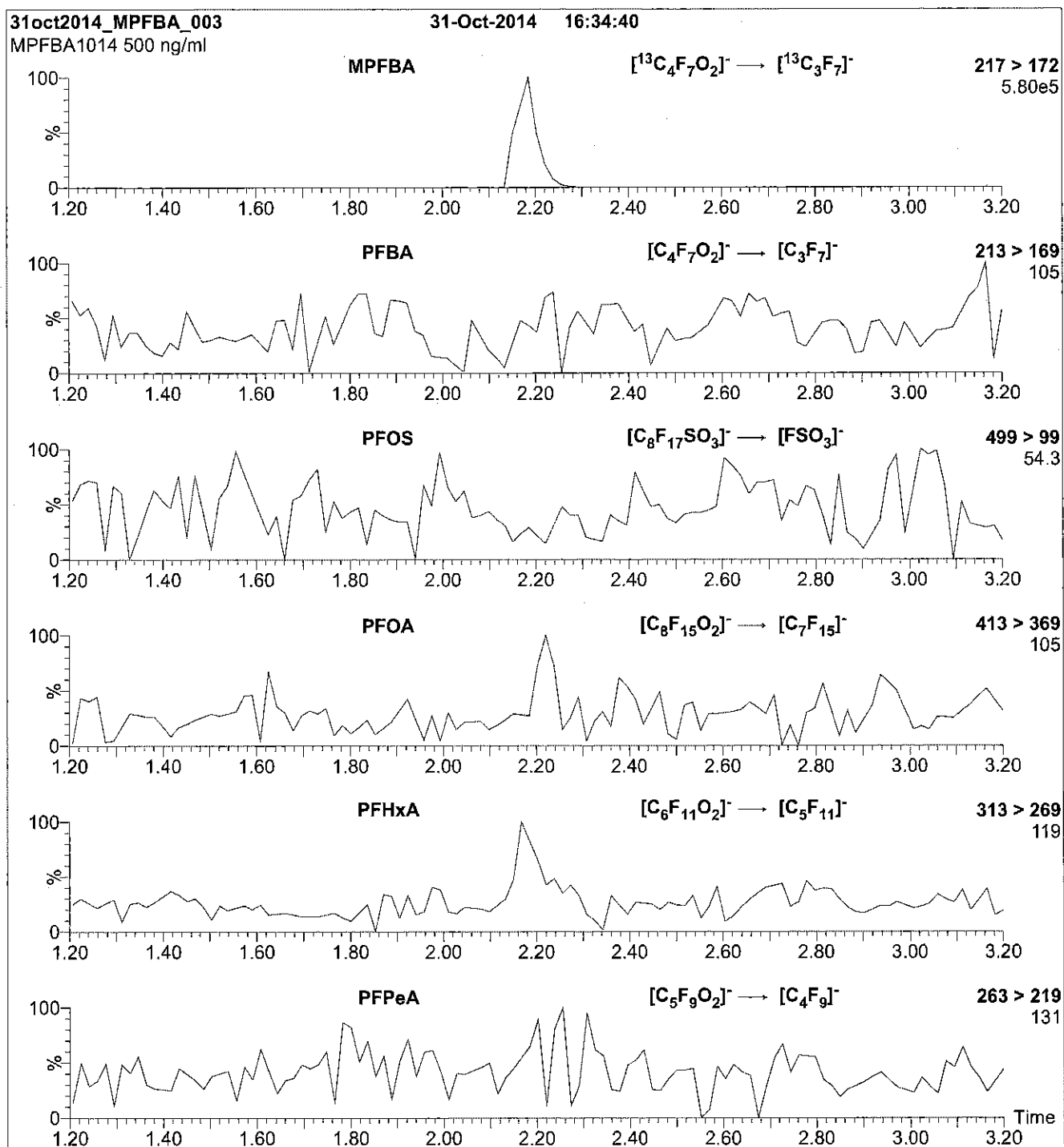
Flow: 300 μ l/min

MS Parameters

Experiment: Full Scan (200 - 850 amu)

Source: Electrospray (negative)
Capillary Voltage (kV) = 2.00
Cone Voltage (V) = 8.00
Cone Gas Flow (l/hr) = 100
Desolvation Gas Flow (l/hr) = 750

Figure 2: MPFBA; LC/MS/MS Data (Selected MRM Transitions)



Conditions for Figure 2:

Injection: Direct loop injection
10 μl (500 ng/ml MPFBA)

Mobile phase: Isocratic 80% (80:20 MeOH:ACN) / 20% H_2O
(both with 10 mM NH_4OAc buffer)

Flow: 300 $\mu\text{l}/\text{min}$

MS Parameters

Collision Gas (mbar) = 3.28e-3
Collision Energy (eV) = 10

Reagent

LCMPFBA_00005



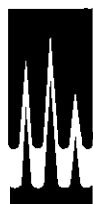
591161

ID: LCMFBA_00005

Exp: 10/31/19 Prod: CBW

13C4-Perfluorobutanoic ac

R: 3/3/16 CBW



WELLINGTON LABORATORIES

CERTIFICATE OF ANALYSIS DOCUMENTATION

PRODUCT CODE:

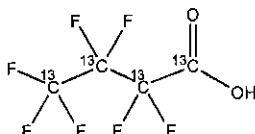
MPFBA

LOT NUMBER:

MPFBA1014

COMPOUND:Perfluoro-n-[1,2,3,4-¹³C₄]butanoic acid**STRUCTURE:****CAS #:**

Not available

**MOLECULAR FORMULA:**¹³C₄HF₇O₂**MOLECULAR WEIGHT:**

218.01

CONCENTRATION:

50 ± 2.5 µg/ml

SOLVENT(S):

Methanol

Water (<1%)

CHEMICAL PURITY:

>98%

ISOTOPIC PURITY:≥99%¹³C**LAST TESTED:** (mm/dd/yyyy)

10/31/2014

(1,2,3,4-¹³C₄)**EXPIRY DATE:** (mm/dd/yyyy)

10/31/2019

RECOMMENDED STORAGE:

Store ampoule in a cool, dark place

DOCUMENTATION/ DATA ATTACHED:

Figure 1: LC/MS Data (TIC and Mass Spectrum)

Figure 2: LC/MS/MS Data (Selected MRM Transitions)

ADDITIONAL INFORMATION:

- See page 2 for further details.
- Contains 4 mole eq. of NaOH to prevent conversion of the carboxylic acid to the methyl ester.

FOR LABORATORY USE ONLY: NOT FOR HUMAN OR DRUG USE

Certified By:

B.G. Chittim

Date: 03/31/2015

(mm/dd/yyyy)

Wellington Laboratories Inc., 345 Southgate Dr. Guelph ON N1G 3M5 CANADA
519-822-2436 • Fax: 519-822-2849 • info@well-labs.com

INTENDED USE:

The products prepared by Wellington Laboratories Inc. are for laboratory use only. This certified reference material (CRM) was designed to be used as a standard for the identification and/or quantification of the specific chemical compound it contains.

HAZARDS:

This product should only be used by qualified personnel familiar with its potential hazards and trained in the handling of hazardous chemicals. Due care should be exercised to prevent unnecessary human contact or ingestion. All procedures should be carried out in a well-functioning fume hood and suitable gloves, eye protection, and clothing should be worn at all times. Waste should be disposed of according to national and regional regulations. Safety Data Sheets (SDSs) are available upon request.

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x_1, x_2, \dots, x_n on which it depends is:

$$u_c(y(x_1, x_2, \dots, x_n)) = \sqrt{\sum_{i=1}^n u(y, x_i)^2}$$

where x is expressed as a relative standard uncertainty of the individual parameter.

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LIMITED WARRANTY:

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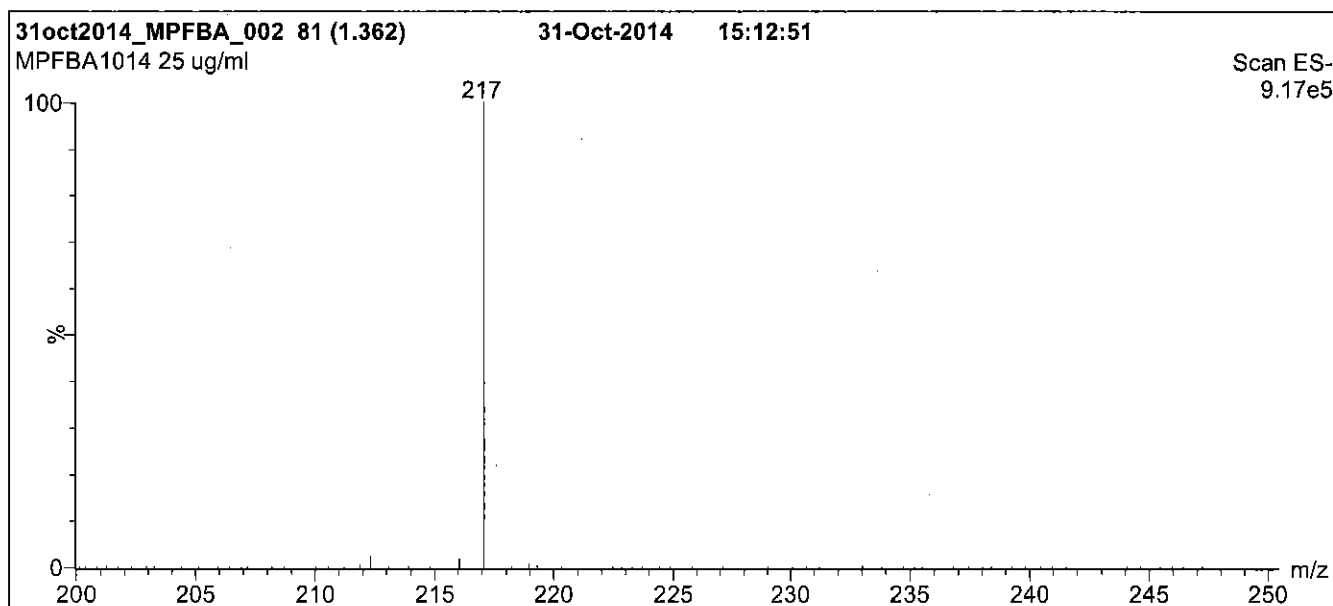
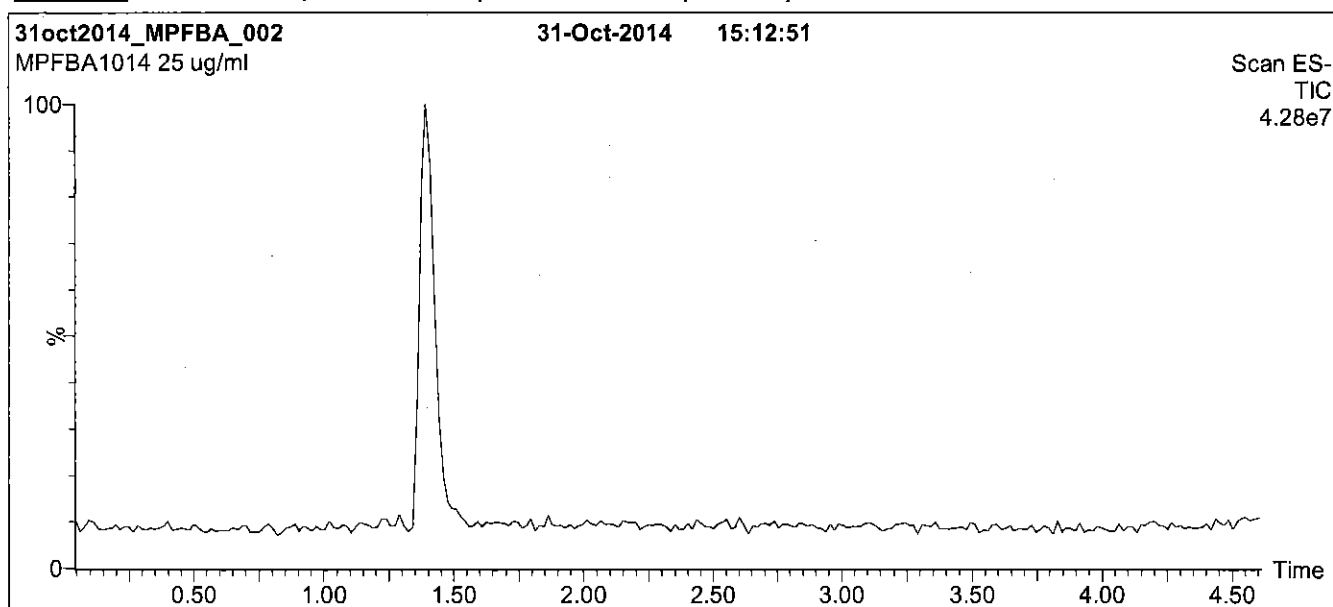
QUALITY MANAGEMENT:

This product was produced using a Quality Management System registered to the latest versions of ISO 9001 by SAI Global, ISO/IEC 17025 by the Canadian Association for Laboratory Accreditation Inc. (CALA; A 1226), and ISO GUIDE 34 by ANSI-ASQ National Accreditation Board (ANAB; AR-1523).



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Figure 1: MPFBA; LC/MS Data (TIC and Mass Spectrum)



Conditions for Figure 1:

LC: Waters Acquity Ultra Performance LC
MS: Micromass Quattro *micro* API MS

Chromatographic Conditions

Column: Acquity UPLC BEH Shield RP₁₈
1.7 μ m, 2.1 x 100 mm

Mobile phase: Gradient
Start: 40% (80:20 MeOH:ACN) / 60% H₂O
(both with 10 mM NH₄OAc buffer)
Ramp to 90% organic over 5 min and hold for 1.5 min
before returning to initial conditions in 0.5 min.
Time: 10 min

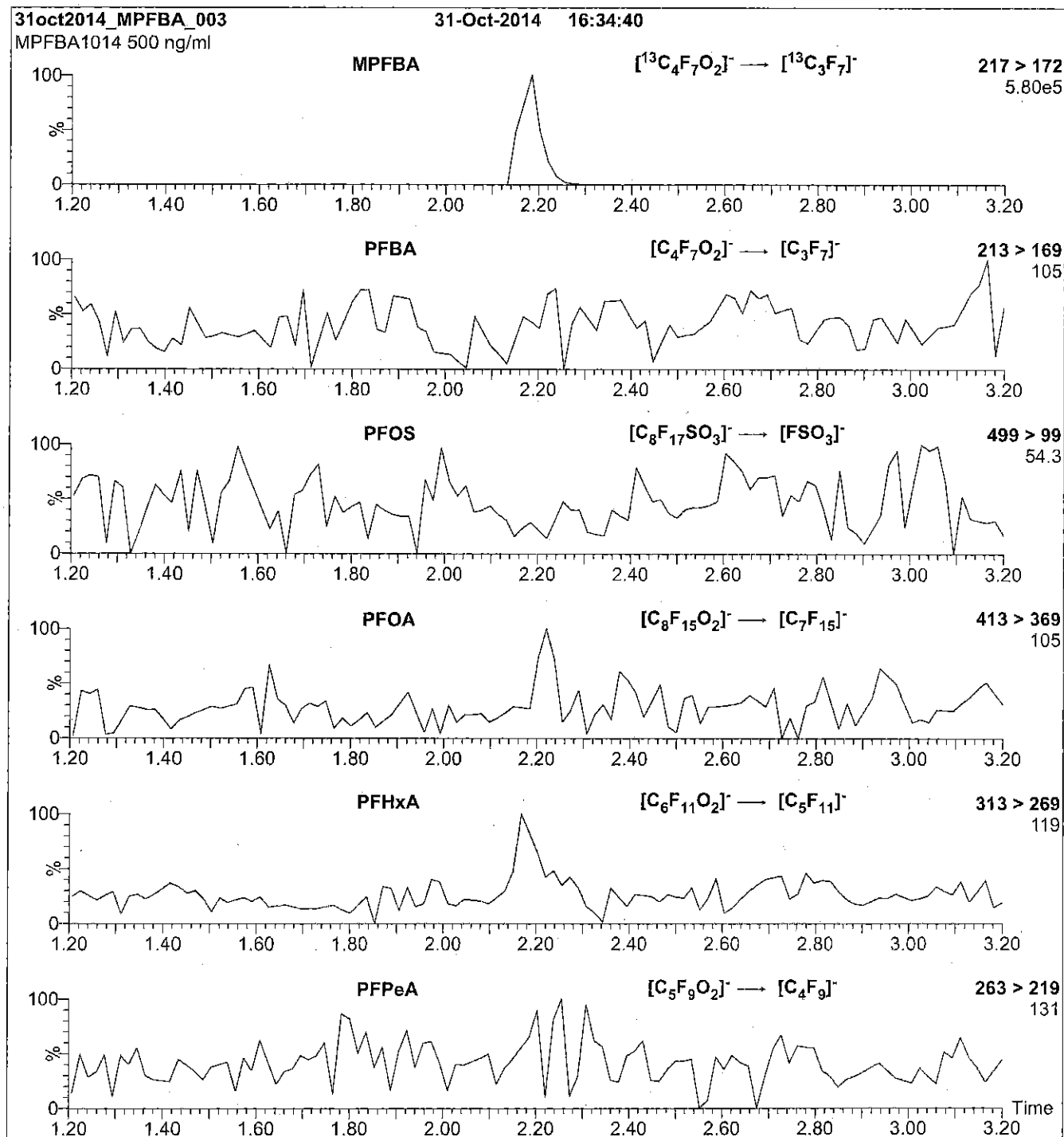
Flow: 300 μ l/min

MS Parameters

Experiment: Full Scan (200 - 850 amu)

Source: Electrospray (negative)
Capillary Voltage (kV) = 2.00
Cone Voltage (V) = 8.00
Cone Gas Flow (l/hr) = 100
Desolvation Gas Flow (l/hr) = 750

Figure 2: MPFBA; LC/MS/MS Data (Selected MRM Transitions)



Conditions for Figure 2:

Injection: Direct loop injection
10 μl (500 ng/ml MPFBA)

Mobile phase: Isocratic 80% (80:20 MeOH:ACN) / 20% H_2O
(both with 10 mM NH_4OAc buffer)

Flow: 300 $\mu\text{l}/\text{min}$

MS Parameters

Collision Gas (mbar) = 3.28e-3
Collision Energy (eV) = 10

Reagent

LCMPFBA_00006



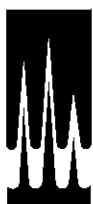
609707

ID: LCMFBA_00006

Exp: 10/31/19 Ppd: CBW

13C4-Perfluorobutanoic ac

R-4/7/16 CBW



WELLINGTON LABORATORIES

CERTIFICATE OF ANALYSIS DOCUMENTATION

PRODUCT CODE:

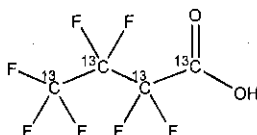
MPFBA

LOT NUMBER:

MPFBA1014

COMPOUND:Perfluoro-n-[1,2,3,4-¹³C₄]butanoic acid**STRUCTURE:****CAS #:**

Not available

**MOLECULAR FORMULA:**¹³C₄HF₇O₂**CONCENTRATION:**

50 ± 2.5 µg/ml

MOLECULAR WEIGHT:

218.01

SOLVENT(S):

Methanol

Water (<1%)

CHEMICAL PURITY:

>98%

ISOTOPIC PURITY:≥99% ¹³C(1,2,3,4-¹³C₄)**LAST TESTED:** (mm/dd/yyyy)

10/31/2014

EXPIRY DATE: (mm/dd/yyyy)

10/31/2019

RECOMMENDED STORAGE:

Store ampoule in a cool, dark place

DOCUMENTATION/ DATA ATTACHED:

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Figure 2: LC/MS/MS Data (Selected MRM Transitions)

ADDITIONAL INFORMATION:

- See page 2 for further details.
- Contains 4 mole eq. of NaOH to prevent conversion of the carboxylic acid to the methyl ester.

FOR LABORATORY USE ONLY: NOT FOR HUMAN OR DRUG USE

Certified By:

B.G. Chittim

Date: 03/31/2015

(mm/dd/yyyy)

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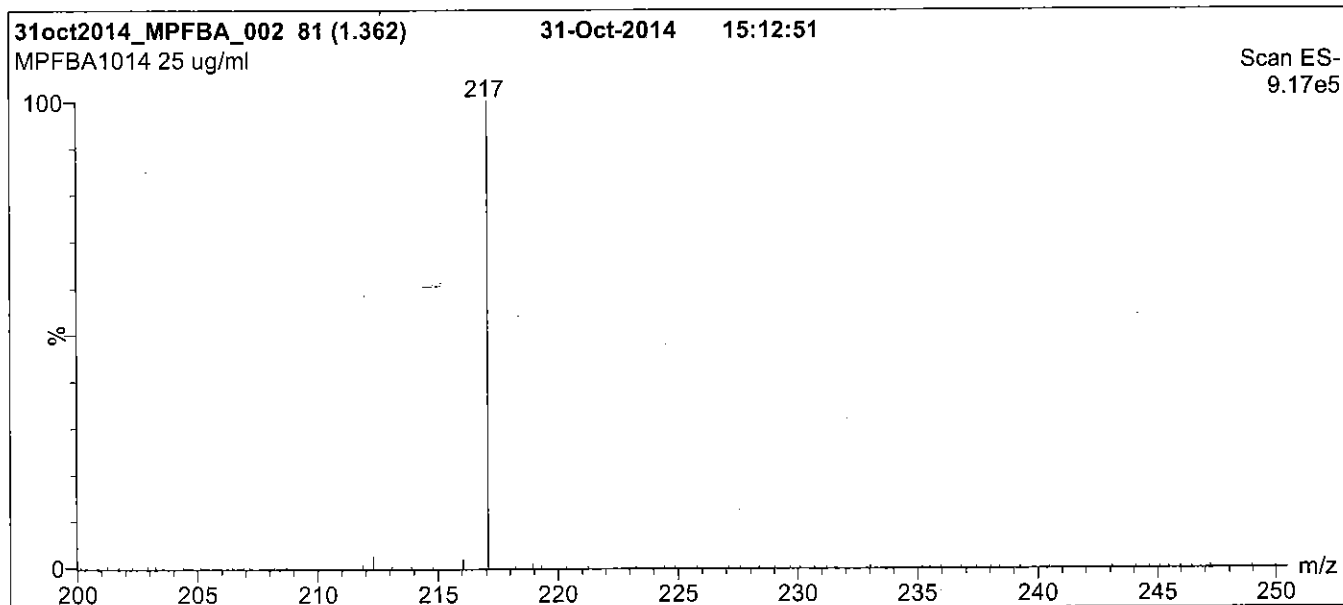
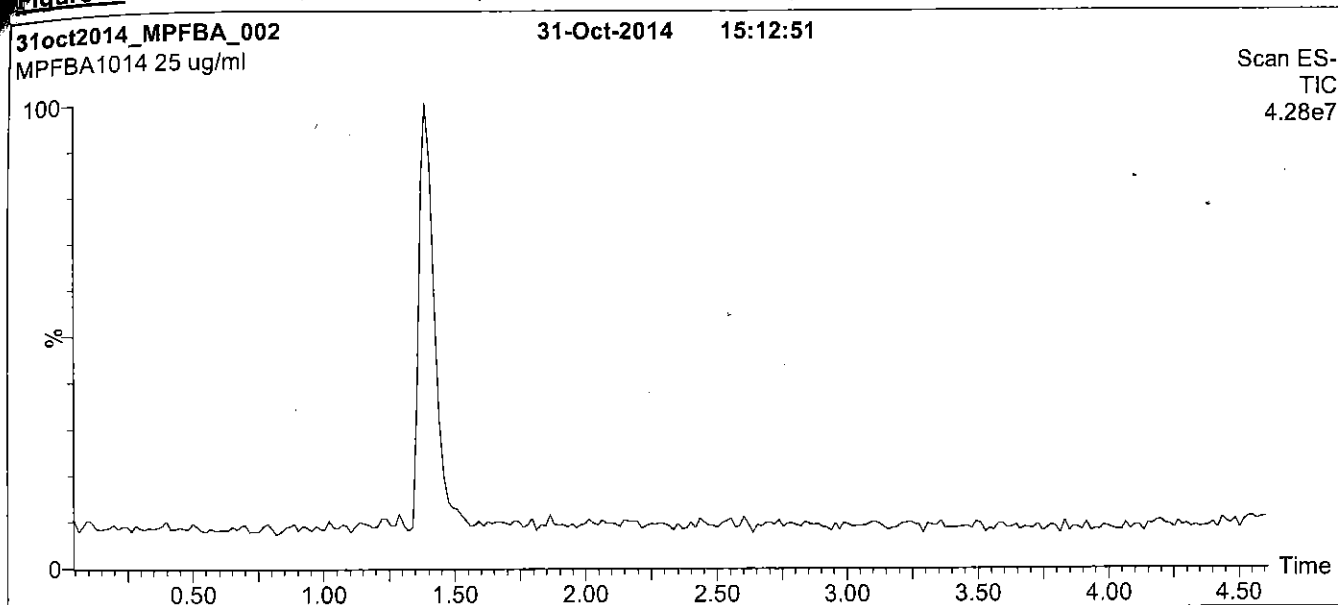
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1.7 μ m, 2.1 x 100 mm

Mobile phase: Gradient
Start: 40% (80:20 MeOH:ACN) / 60% H₂O
(both with 10 mM NH₄OAc buffer)
Ramp to 90% organic over 5 min and hold for 1.5 min
before returning to initial conditions in 0.5 min.
Time: 10 min

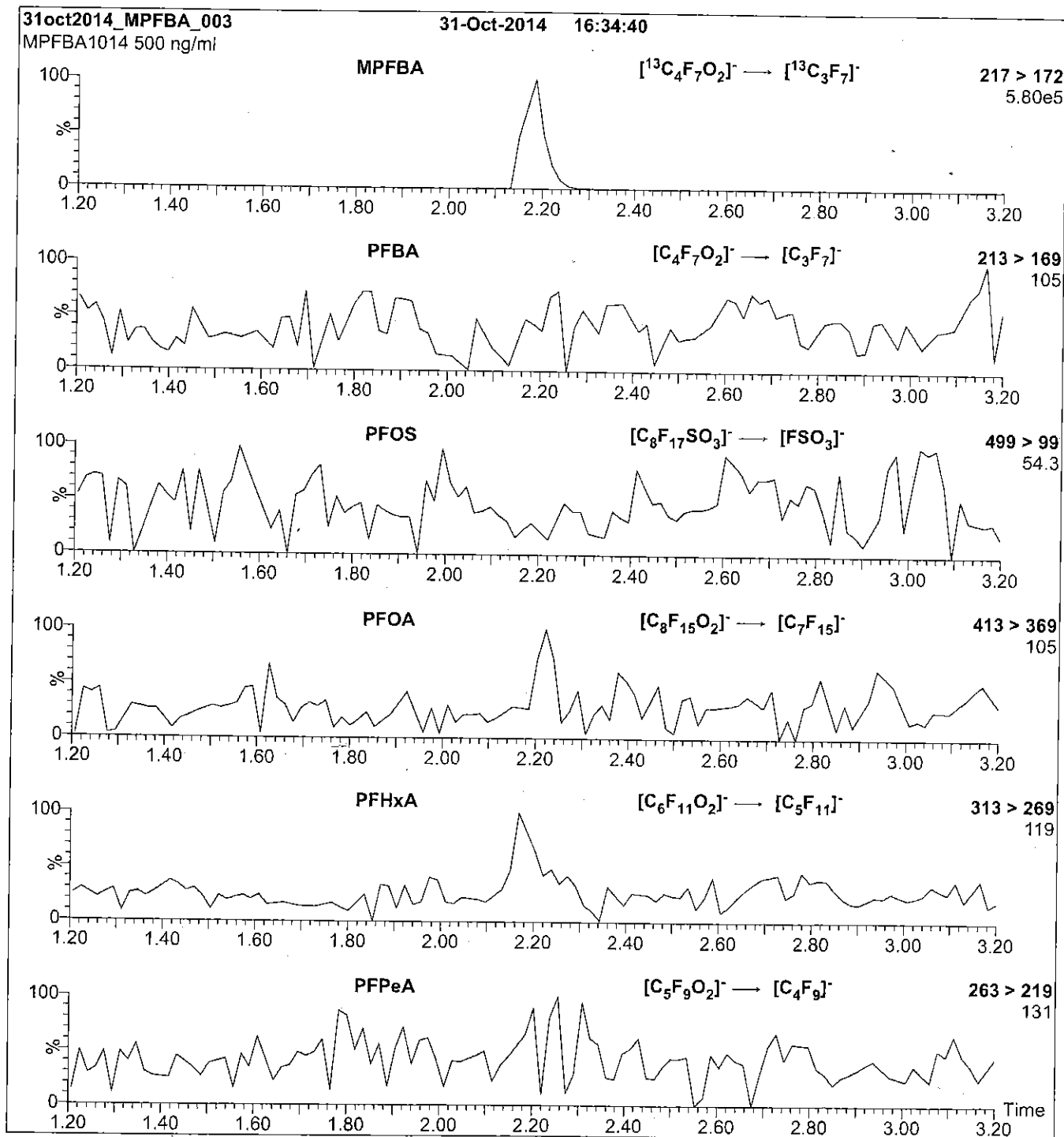
Flow: 300 μ l/min

MS Parameters

Experiment: Full Scan (200 - 850 amu)

Source: Electrospray (negative)
Capillary Voltage (kV) = 2.00
Cone Voltage (V) = 8.00
Cone Gas Flow (l/hr) = 100
Desolvation Gas Flow (l/hr) = 750

Figure 2: MPFBA; LC/MS/MS Data (Selected MRM Transitions)



Conditions for Figure 2:

Injection: Direct loop injection
10 μl (500 ng/ml MPFBA)

Mobile phase: Isocratic 80% (80:20 MeOH:ACN) / 20% H_2O
(both with 10 mM NH_4OAc buffer)

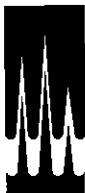
Flow: 300 $\mu\text{l}/\text{min}$

MS Parameters

Collision Gas (mbar) = 3.28e-3
Collision Energy (eV) = 10

Reagent

LCMPFDA_00004



WELLINGTON LABORATORIES

CERTIFICATE OF ANALYSIS DOCUMENTATION

R: 10-20-2011
2011
10-20-2011

12LCMS0262
LCMPFDA-00001

PRODUCT CODE:

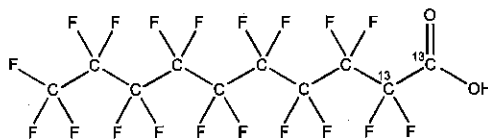
MPFDA

LOT NUMBER:

MPFDA0411

COMPOUND:Perfluoro-n-[1,2-¹³C₂]decanoic acid**STRUCTURE:****CAS #**

Not available

**MOLECULAR FORMULA:**¹³C₂¹²C₈HF₁₉O₂**CONCENTRATION:**

50 ± 2.5 µg/ml

MOLECULAR WEIGHT:

516.07

SOLVENT(S):

Methanol

Water (<1%)

CHEMICAL PURITY:

>98%

ISOTOPIC PURITY:≥99% ¹³C**LAST TESTED:** (mm/dd/yyyy)

04/07/2011

(1,2-¹³C₂)**EXPIRY DATE:** (mm/dd/yyyy)

04/07/2014

RECOMMENDED STORAGE:

Store ampoule in a cool, dark place

DOCUMENTATION/ DATA ATTACHED:

Figure 1: LC/MS Data (TIC and Mass Spectrum)

Figure 2: LC/MS/MS Data (Selected MRM Transitions)

ADDITIONAL INFORMATION:

- See page 2 for further details.
- Contains 4 mole eq. of NaOH to prevent conversion of the carboxylic acid to the methyl ester.
- Contains ~ 0.1% of ¹³C₁-PFNA.

FOR LABORATORY USE ONLY: NOT FOR HUMAN OR DRUG USE

Certified By:

B.G. Chittim

Date: 04/19/2011

(mm/dd/yyyy)

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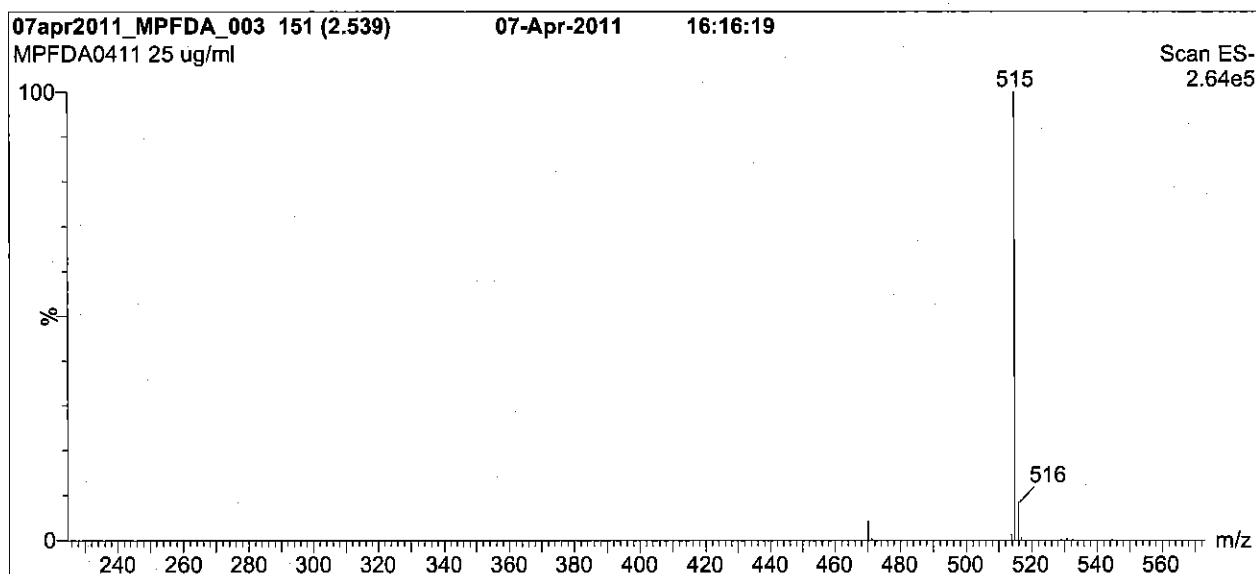
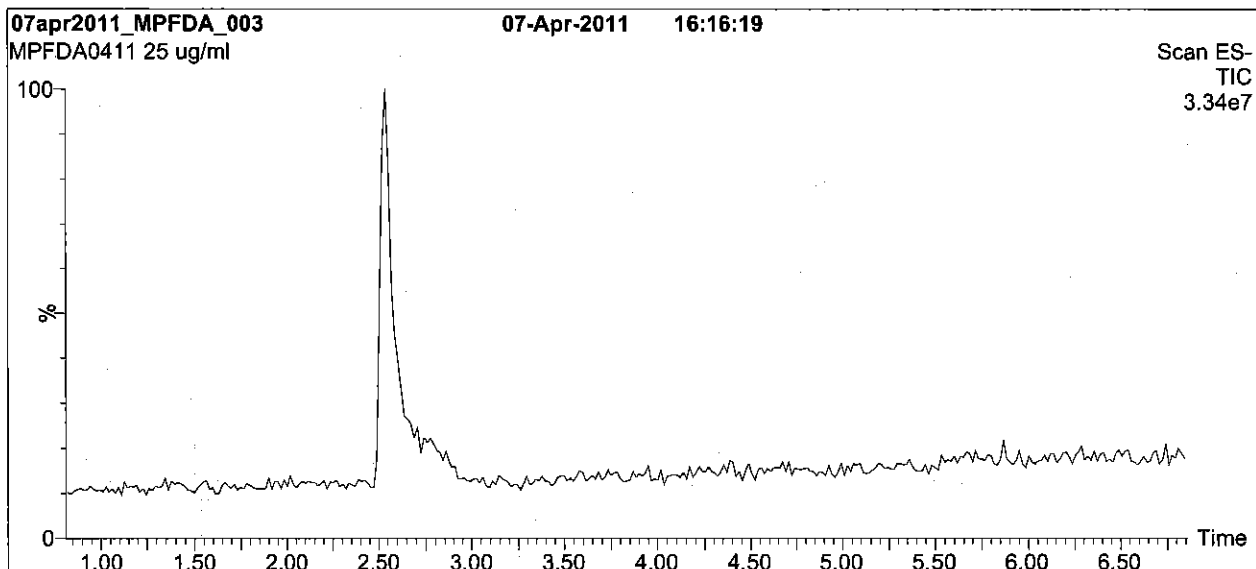
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Conditions for Figure 1:

LC: Waters Acquity Ultra Performance LC
MS: Micromass Quattro micro API MS

Chromatographic Conditions

Column: Acquity UPLC BEH Shield RP₁₈
1.7 μ m, 2.1 x 100 mm

Mobile phase: Gradient
Start: 60% (80:20 MeOH:ACN) / 40% H₂O
(both with 10 mM NH₄OAc buffer)
Ramp to 90% organic over 7 min and hold for 1.5 min
before returning to initial conditions in 0.5 min.
Time: 10 min

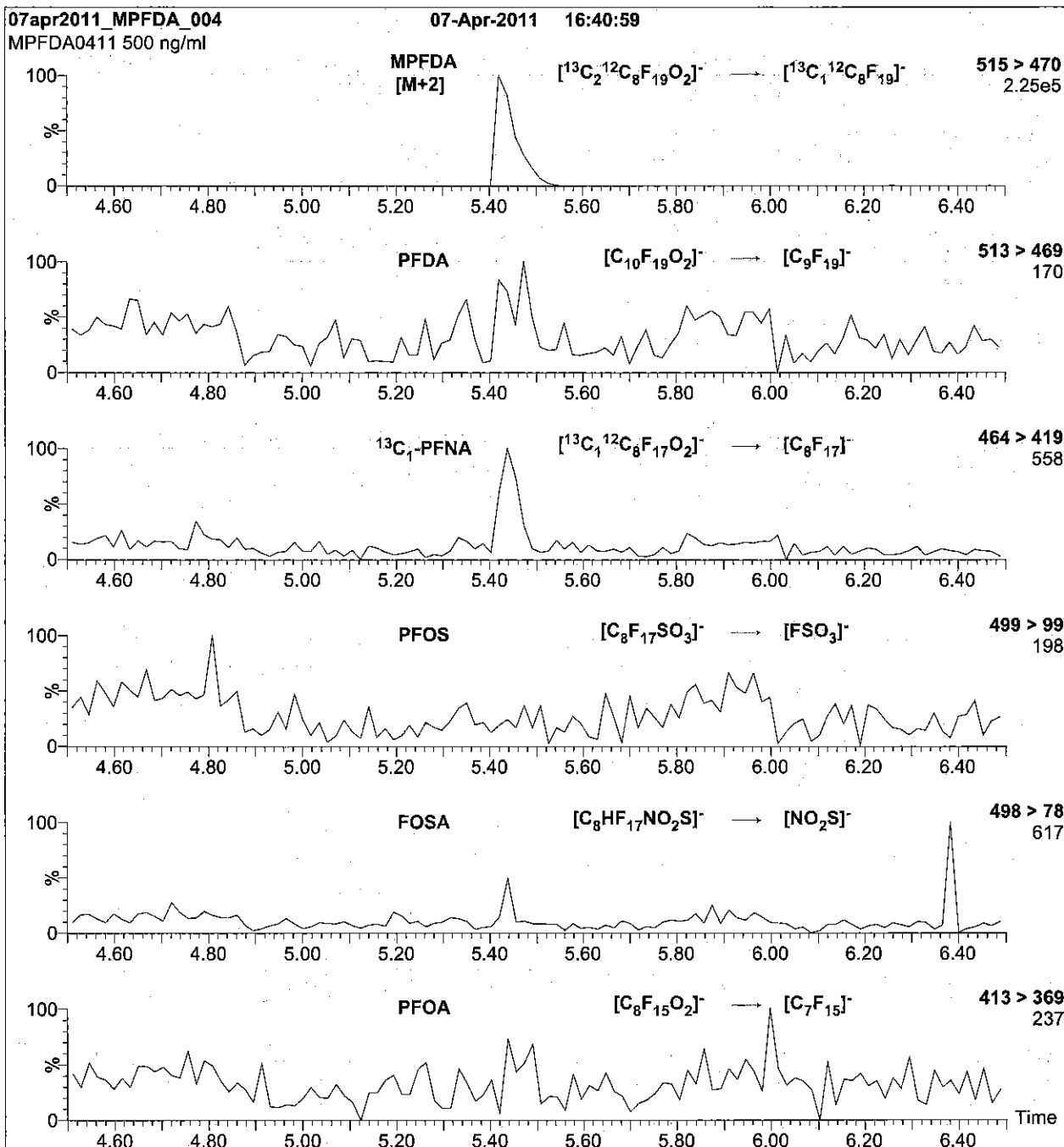
Flow: 300 μ l/min

MS Parameters

Experiment: Full Scan (225 - 850 amu)

Source: Electrospray (negative)
Capillary Voltage (kV) = 2.00
Cone Voltage (V) = 15.00
Cone Gas Flow (l/hr) = 50
Desolvation Gas Flow (l/hr) = 750

Figure 2: MPFDA; LC/MS/MS Data (Selected MRM Transitions)



Conditions for Figure 2:

Injection: Direct loop injection
10 μ l (500 ng/ml MPFDA)

Mobile phase: Isocratic 70% (80:20 MeOH:ACN) / 30% H_2O
(both with 10 mM NH_4OAc buffer)

Flow: 300 μ l/min

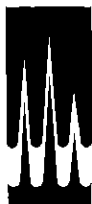
MS Parameters

Collision Gas (mbar) = 3.39e-3
Collision Energy (eV) = 13

Reagent

LCMPFDA_00005

PC 4/15/15 SKV



WELLINGTON LABORATORIES

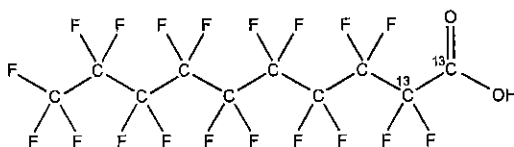
CERTIFICATE OF ANALYSIS DOCUMENTATION

PRODUCT CODE: MPFDA
COMPOUND: Perfluoro-n-[1,2-¹³C₂]decanoic acid

LOT NUMBER: MPFDA0414

STRUCTURE:

CAS #: Not available



MOLECULAR FORMULA: ¹³C₂¹²C₈H₁₉O₂
CONCENTRATION: 50 ± 2.5 µg/ml

MOLECULAR WEIGHT: 516.07
SOLVENT(S): Methanol
Water (<1%)

CHEMICAL PURITY: >98%
LAST TESTED: (mm/dd/yyyy) 04/13/2014
EXPIRY DATE: (mm/dd/yyyy) 04/13/2019

ISOTOPIC PURITY: ≥99% ¹³C
(1,2-¹³C₂)

RECOMMENDED STORAGE: Store ampoule in a cool, dark place

DOCUMENTATION/ DATA ATTACHED:

Figure 1: LC/MS Data (TIC and Mass Spectrum)
Figure 2: LC/MS/MS Data (Selected MRM Transitions)

ADDITIONAL INFORMATION:

- See page 2 for further details.
- Contains 4 mole eq. of NaOH to prevent conversion of the carboxylic acid to the methyl ester.
- Contains ~ 0.1% of ¹³C₁-PFNA.

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Certified By:

B.G. Chittim

Date: 04/15/2014
(mm/dd/yyyy)

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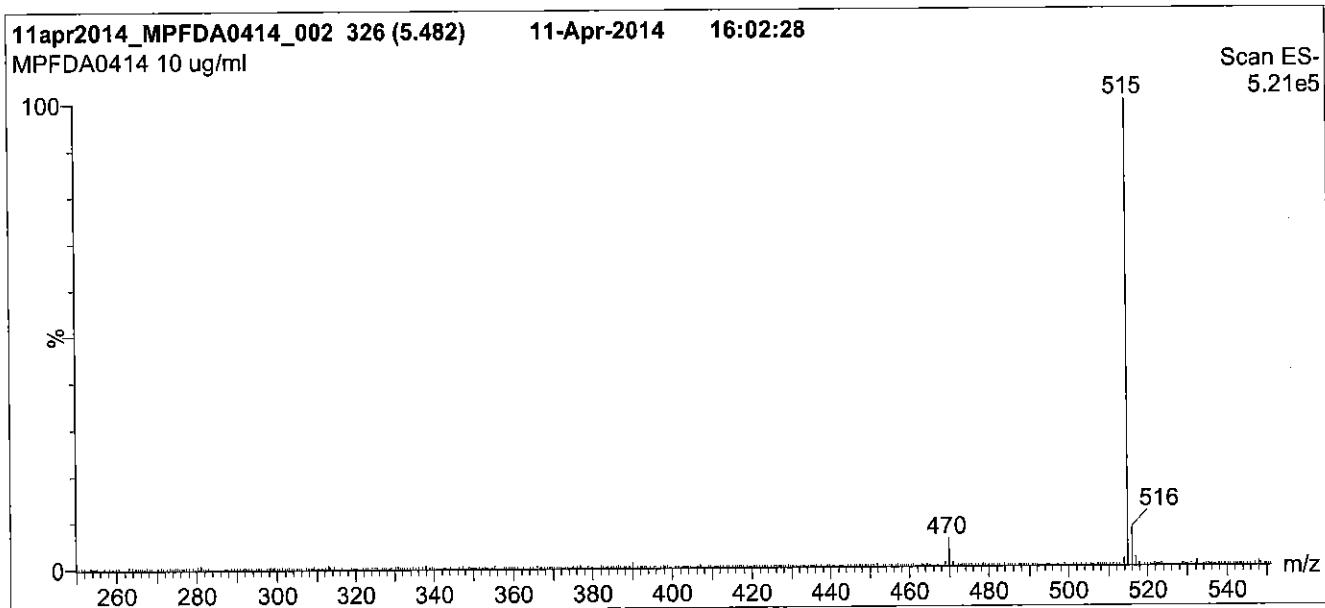
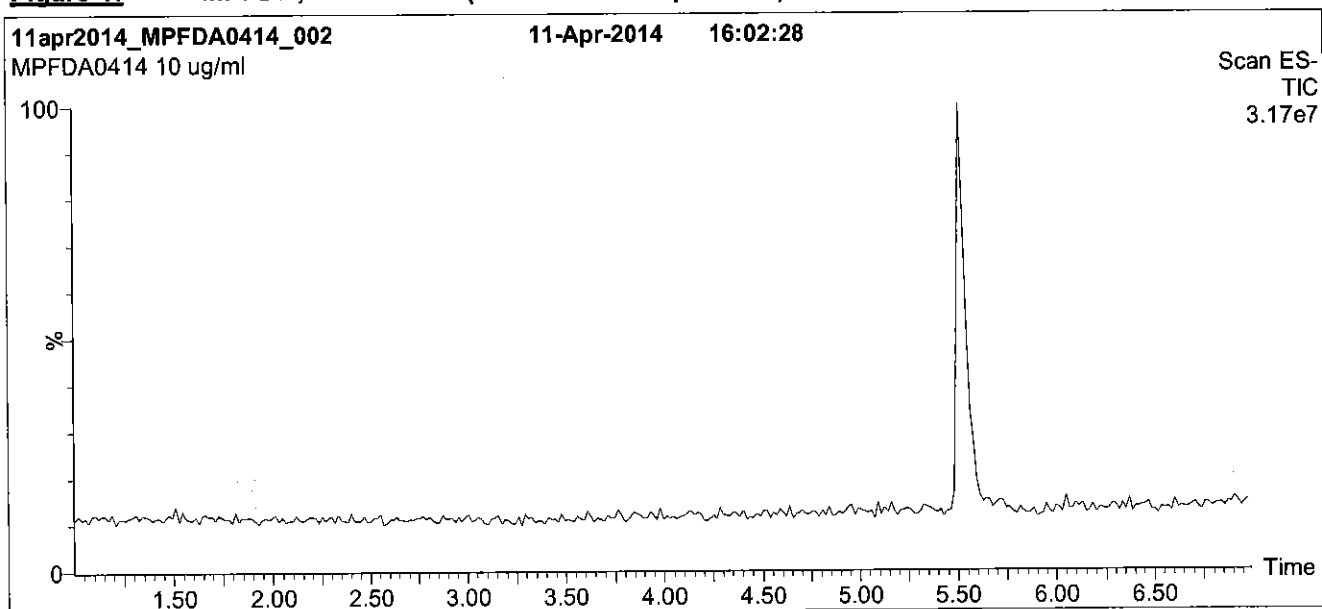
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before returning to initial conditions in 0.5 min.
Time: 10 min

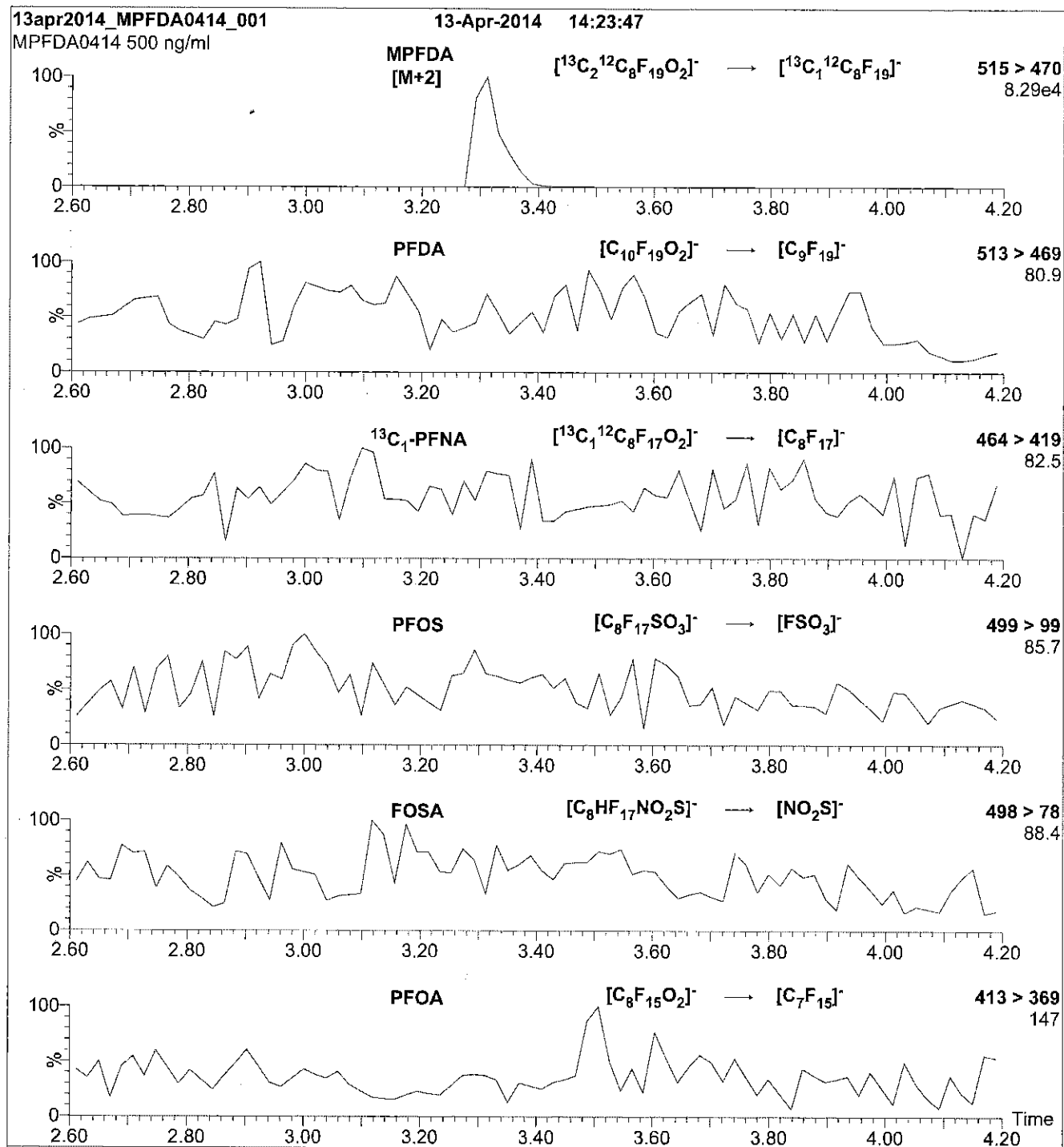
Flow: 300 μ l/min

MS Parameters

Experiment: Full Scan (250 - 850 amu)

Source: Electrospray (negative)
Capillary Voltage (kV) = 2.00
Cone Voltage (V) = 15.00
Cone Gas Flow (l/hr) = 50
Desolvation Gas Flow (l/hr) = 750

Figure 2: MPFDA; LC/MS/MS Data (Selected MRM Transitions)



Conditions for Figure 2:

Injection: Direct loop injection
10 μl (500 ng/ml MPFDA)

Mobile phase: Isocratic 80% (80:20 MeOH:ACN) / 20% H_2O
(both with 10 mM NH_4OAc buffer)

Flow: 300 $\mu\text{l}/\text{min}$

MS Parameters

Collision Gas (mbar) = 3.31e-3
Collision Energy (eV) = 13

Reagent

LCMPFDA_00006



587892

ID: LCMPFDA_00006

Exp: 08/19/20 Prod: CBW Opn: 02/25/16
13C2-Perfluorodecanoic a

R: 2/25/16 CBW



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CERTIFICATE OF ANALYSIS DOCUMENTATION

PRODUCT CODE:

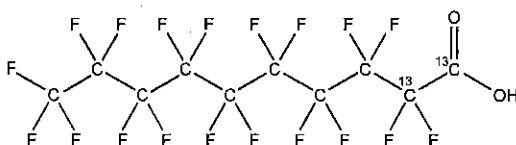
MPFDA

LOT NUMBER:

MPFDA0815

COMPOUND:Perfluoro-n-[1,2-¹³C₂]decanoic acid**STRUCTURE:****CAS #:**

Not available

**MOLECULAR FORMULA:**¹³C₂¹²C₈H₁₈O₂**CONCENTRATION:**

50 ± 2.5 µg/ml

MOLECULAR WEIGHT:

516.07

SOLVENT(S):

Methanol

Water (<1%)

CHEMICAL PURITY:

>98%

ISOTOPIC PURITY:≥99% ¹³C(1,2-¹³C₂)**LAST TESTED:** (mm/dd/yyyy)

08/19/2015

EXPIRY DATE: (mm/dd/yyyy)

08/19/2020

RECOMMENDED STORAGE:

Store ampoule in a cool, dark place

DOCUMENTATION/ DATA ATTACHED:

Figure 1: LC/MS Data (TIC and Mass Spectrum)

Figure 2: LC/MS/MS Data (Selected MRM Transitions)

ADDITIONAL INFORMATION:

- See page 2 for further details.
- Contains 4 mole eq. of NaOH to prevent conversion of the carboxylic acid to the methyl ester.
- Contains < 0.1% of ¹³C₁-PFNA.

FOR LABORATORY USE ONLY: NOT FOR HUMAN OR DRUG USE

Certified By:

B.G. Chittim

Date: 08/21/2015

(mm/dd/yyyy)

Wellington Laboratories Inc., 345 Southgate Dr. Guelph ON N1G 3M5 CANADA
519-822-2436 • Fax: 519-822-2849 • info@well-labs.com

INTENDED USE:

The products prepared by Wellington Laboratories Inc. are for laboratory use only. This certified reference material (CRM) was designed to be used as a standard for the identification and/or quantification of the specific chemical compound it contains.

HAZARDS:

This product should only be used by qualified personnel familiar with its potential hazards and trained in the handling of hazardous chemicals. Due care should be exercised to prevent unnecessary human contact or ingestion. All procedures should be carried out in a well-functioning fume hood and suitable gloves, eye protection, and clothing should be worn at all times. Waste should be disposed of according to national and regional regulations. Safety Data Sheets (SDSs) are available upon request.

SYNTHESIS / CHARACTERIZATION:

Where possible, all of our products are synthesized using single-product unambiguous routes. They are then characterized, and their structures and purities confirmed, using a combination of the most relevant techniques, such as NMR, GC/MS, LC/MS/MS, SFC/UV/MS/MS, x-ray crystallography, and melting point. Isotopic purities of mass-labelled compounds are also confirmed using HRGC/HRMS and/or LC/MS/MS.

HOMOGENEITY:

Prior to solution preparation, crystalline material is tested for homogeneity using a variety of techniques (as stated above) and its solubility in a given diluent is taken into consideration. Duplicate solutions of a new product are prepared from the same crystalline lot and, after the addition of an appropriate internal standard, they are compared by GC/MS, LC/MS/MS and/or SFC/UV/MS/MS. The relative response factors of the analyte of interest in each solution are required to be <5% RSD. New solution lots of existing products are compared to older lots in the same manner, which further confirms the homogeneity of the crystalline material as well as the stability and homogeneity of the solutions in the storage containers.

UNCERTAINTY:

The maximum combined relative standard uncertainty of our reference standard solutions is calculated using the following equation:

The combined relative standard uncertainty, $u_c(y)$, of a value y and the uncertainty of the independent parameters x_1, x_2, \dots, x_n on which it depends is:

$$u_c(y(x_1, x_2, \dots, x_n)) = \sqrt{\sum_{i=1}^n u(y, x_i)^2}$$

where x is expressed as a relative standard uncertainty of the individual parameter.

The individual uncertainties taken into account include those associated with weights (calibration of the balance) and volumes (calibration of the volumetric glassware). An expanded maximum combined percent relative uncertainty of $\pm 5\%$ (calculated with a coverage factor of 2 and a level of confidence of 95%) is stated on the Certificate of Analysis for all of our products.

TRACEABILITY:

All reference standard solutions are traceable to specific crystalline lots. The microbalances used for solution preparation are regularly tested by an external ISO/IEC 17025 accredited calibration company. In addition, their calibration is verified prior to each weighing using NIST and/or NRC traceable external weights. All volumetric glassware used is of Class A tolerance and has been tested according to the appropriate ASTM procedures, which are ultimately traceable to NIST. For certain products, traceability to international interlaboratory studies has also been established.

EXPIRY DATE / PERIOD OF VALIDITY:

Ongoing stability studies of this product have demonstrated stability in its composition and concentration, until the specified expiry date, in the unopened ampoule. Monitoring for any degradation or change in concentration of the listed analyte(s) is performed on a routine basis.

LIMITED WARRANTY:

At the time of shipment, all products are warranted to be free of defects in material and workmanship and to conform to the stated technical and purity specifications.

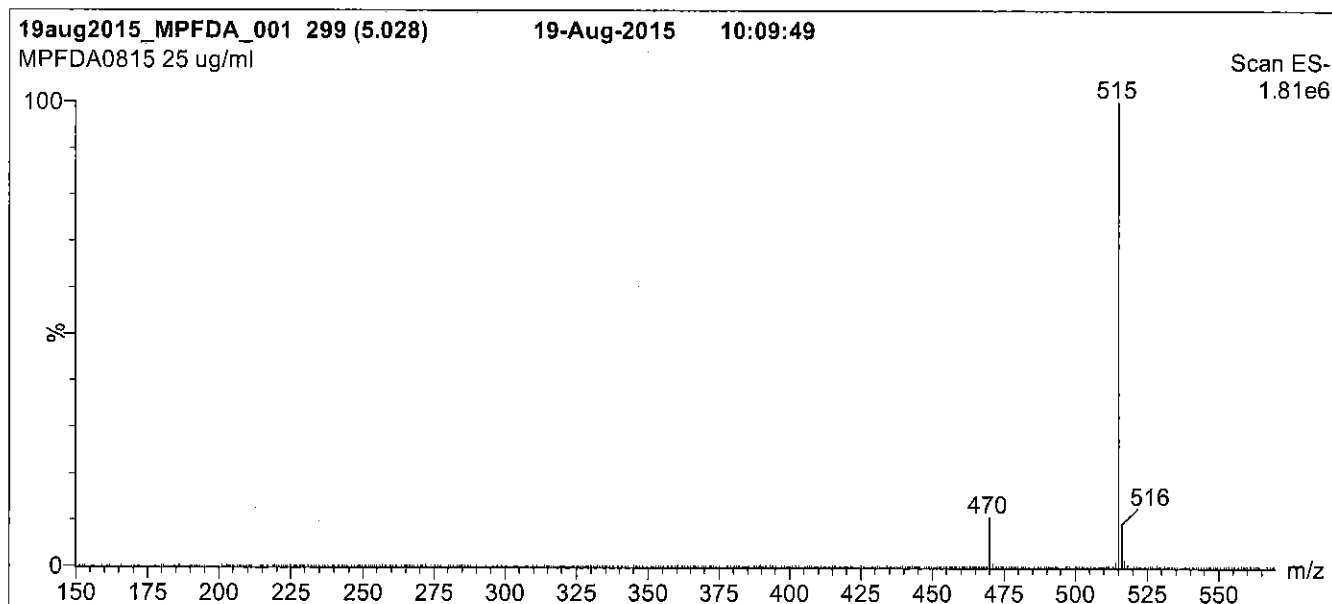
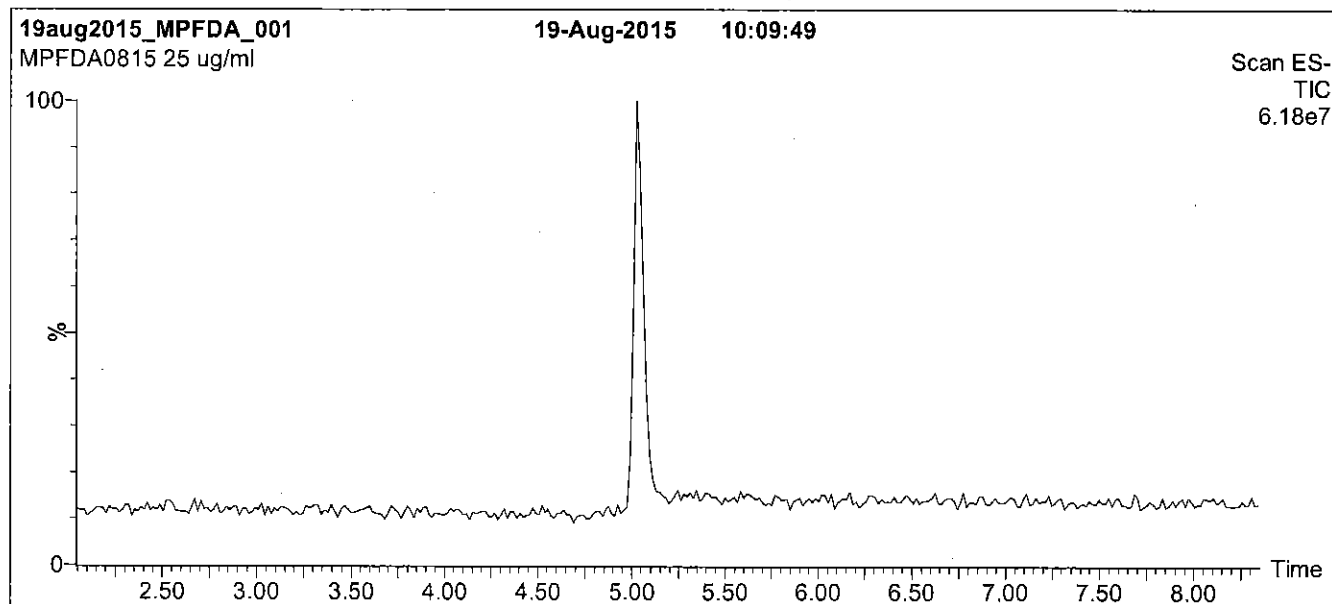
QUALITY MANAGEMENT:

This product was produced using a Quality Management System registered to the latest versions of ISO 9001 by SAI Global, ISO/IEC 17025 by the Canadian Association for Laboratory Accreditation Inc. (CALA; A 1226), and ISO GUIDE 34 by ANSI-ASQ National Accreditation Board (ANAB; AR-1523).



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Figure 1: MPFDA; LC/MS Data (TIC and Mass Spectrum)



Conditions for Figure 1:

LC: Waters Acquity Ultra Performance LC
MS: Micromass Quattro *micro* API MS

Chromatographic Conditions

Column: Acquity UPLC BEH Shield RP₁₈
1.7 μ m, 2.1 x 100 mm

Mobile phase: Gradient

Start: 50% (80:20 MeOH:ACN) / 50% H₂O

(both with 10 mM NH₄OAc buffer)

Ramp to 90% organic over 7 min and hold for 2 min
before returning to initial conditions in 0.5 min.

Time: 10 min

Flow: 300 μ l/min

MS Parameters

Experiment: Full Scan (150 - 850 amu)

Source: Electrospray (negative)

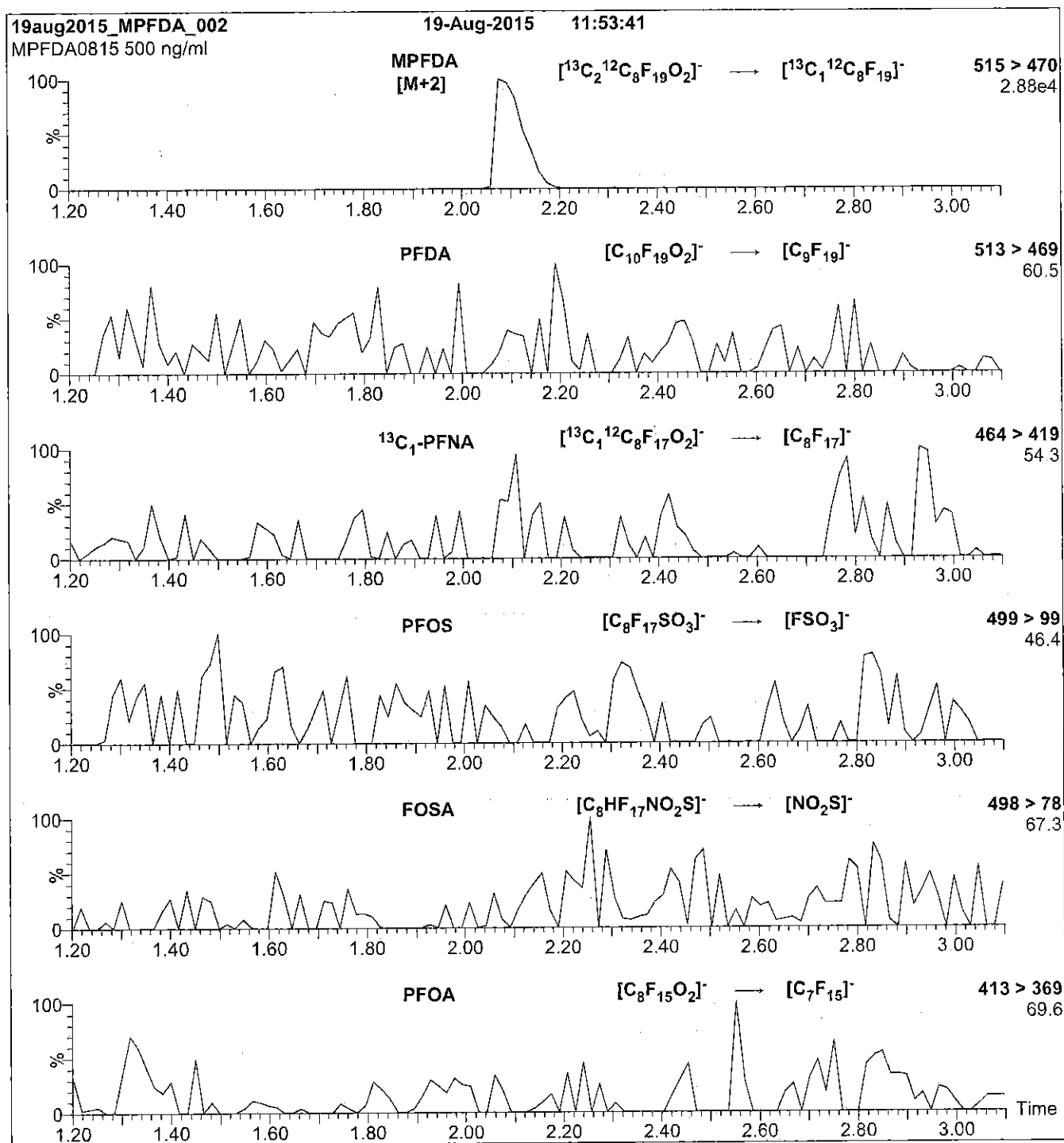
Capillary Voltage (kV) = 2.00

Cone Voltage (V) = 15.00

Cone Gas Flow (l/hr) = 50

Desolvation Gas Flow (l/hr) = 750

Figure 2: MPFDA; LC/MS/MS Data (Selected MRM Transitions)



Conditions for Figure 2:

Injection: Direct loop injection
10 μ l (500 ng/ml MPFDA)

Mobile phase: Isocratic 80% (80:20 MeOH:ACN) / 20% H_2O
(both with 10 mM NH_4OAc buffer)

Flow: 300 μ l/min

MS Parameters

Collision Gas (mbar) = 3.35e-3
Collision Energy (eV) = 13

Reagent

LCMPFDA_00007



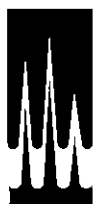
Rec. 3/29/16 JRB ✓

605232

ID: LCMFDA_00007

Exp: 08/19/20 Prpd: CBW

13C2-Perfluorodecanoic a



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CERTIFICATE OF ANALYSIS

DOCUMENTATION

PRODUCT CODE:

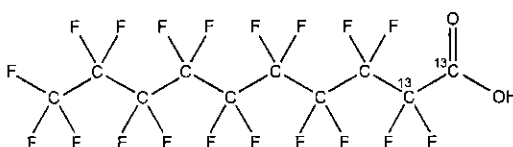
MPFDA

LOT NUMBER:

MPFDA0815

COMPOUND:Perfluoro-n-[1,2-¹³C₂]decanoic acid**STRUCTURE:****CAS #:**

Not available

**MOLECULAR FORMULA:**¹³C₂¹²C₈H₂F₁₈O₂**MOLECULAR WEIGHT:**

516.07

CONCENTRATION:

50 ± 2.5 µg/ml

SOLVENT(S):

Methanol

Water (<1%)

CHEMICAL PURITY:

>98%

ISOTOPIC PURITY:≥99% ¹³C(1,2-¹³C₂)**LAST TESTED:** (mm/dd/yyyy)

08/19/2015

EXPIRY DATE: (mm/dd/yyyy)

08/19/2020

RECOMMENDED STORAGE:

Store ampoule in a cool, dark place

DOCUMENTATION/ DATA ATTACHED:

Figure 1: LC/MS Data (TIC and Mass Spectrum)

Figure 2: LC/MS/MS Data (Selected MRM Transitions)

ADDITIONAL INFORMATION:

- See page 2 for further details.
- Contains 4 mole eq. of NaOH to prevent conversion of the carboxylic acid to the methyl ester.
- Contains < 0.1% of ¹³C₁-PFNA.

FOR LABORATORY USE ONLY: NOT FOR HUMAN OR DRUG USE

Certified By:

B.G. Chittim

Date: 08/21/2015

(mm/dd/yyyy)

Wellington Laboratories Inc., 345 Southgate Dr. Guelph ON N1G 3M5 CANADA
 519-822-2436 • Fax: 519-822-2849 • info@well-labs.com

INTENDED USE:

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SYNTHESIS / CHARACTERIZATION:

Where possible, all of our products are synthesized using single-product unambiguous routes. They are then characterized, and their structures and purities confirmed, using a combination of the most relevant techniques, such as NMR, GC/MS, LC/MS/MS, SFC/UV/MS/MS, x-ray crystallography, and melting point. Isotopic purities of mass-labelled compounds are also confirmed using HRGC/HRMS and/or LC/MS/MS.

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$$u_c(y(x_1, x_2, \dots, x_n)) = \sqrt{\sum_{i=1}^n u(y, x_i)^2}$$

where x is expressed as a relative standard uncertainty of the individual parameter.

The individual uncertainties taken into account include those associated with weights (calibration of the balance) and volumes (calibration of the volumetric glassware). An expanded maximum combined percent relative uncertainty of $\pm 5\%$ (calculated with a coverage factor of 2 and a level of confidence of 95%) is stated on the Certificate of Analysis for all of our products.

TRACEABILITY:

All reference standard solutions are traceable to specific crystalline lots. The microbalances used for solution preparation are regularly tested by an external ISO/IEC 17025 accredited calibration company. In addition, their calibration is verified prior to each weighing using NIST and/or NRC traceable external weights. All volumetric glassware used is of Class A tolerance and has been tested according to the appropriate ASTM procedures, which are ultimately traceable to NIST. For certain products, traceability to international interlaboratory studies has also been established.

EXPIRY DATE / PERIOD OF VALIDITY:

Ongoing stability studies of this product have demonstrated stability in its composition and concentration, until the specified expiry date, in the unopened ampoule. Monitoring for any degradation or change in concentration of the listed analyte(s) is performed on a routine basis.

LIMITED WARRANTY:

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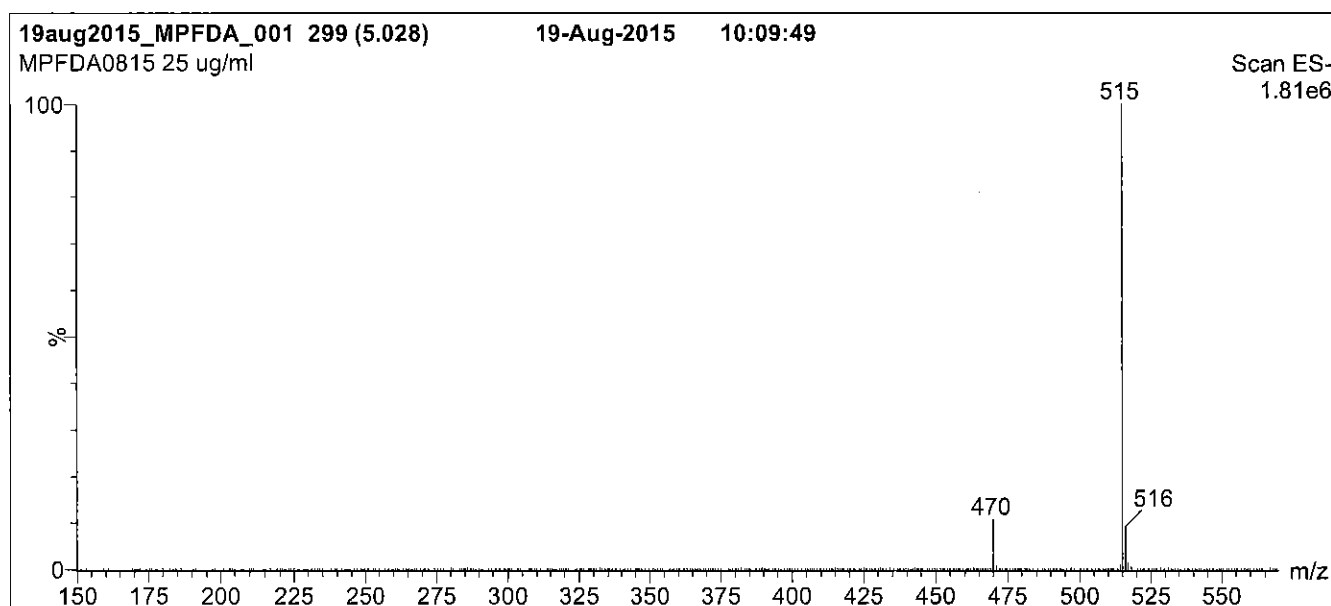
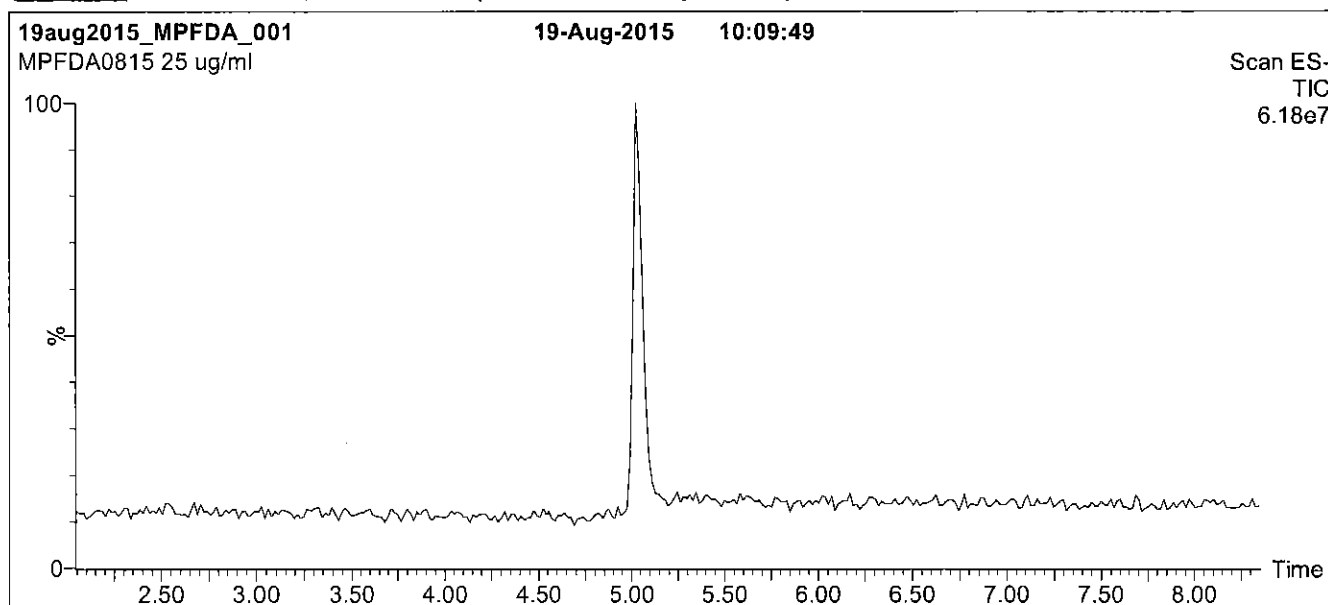
QUALITY MANAGEMENT:

This product was produced using a Quality Management System registered to the latest versions of ISO 9001 by SAI Global, ISO/IEC 17025 by the Canadian Association for Laboratory Accreditation Inc. (CALA; A 1226), and ISO GUIDE 34 by ANSI-ASQ National Accreditation Board (ANAB; AR-1523).



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Figure 1: MPFDA; LC/MS Data (TIC and Mass Spectrum)



Conditions for Figure 1:

LC: Waters Acquity Ultra Performance LC
MS: Micromass Quattro micro API MS

Chromatographic Conditions

Column: Acquity UPLC BEH Shield RP₁₈
1.7 μ m, 2.1 x 100 mm

Mobile phase: Gradient
Start: 50% (80:20 MeOH:ACN) / 50% H₂O
(both with 10 mM NH₄OAc buffer)
Ramp to 90% organic over 7 min and hold for 2 min
before returning to initial conditions in 0.5 min.
Time: 10 min

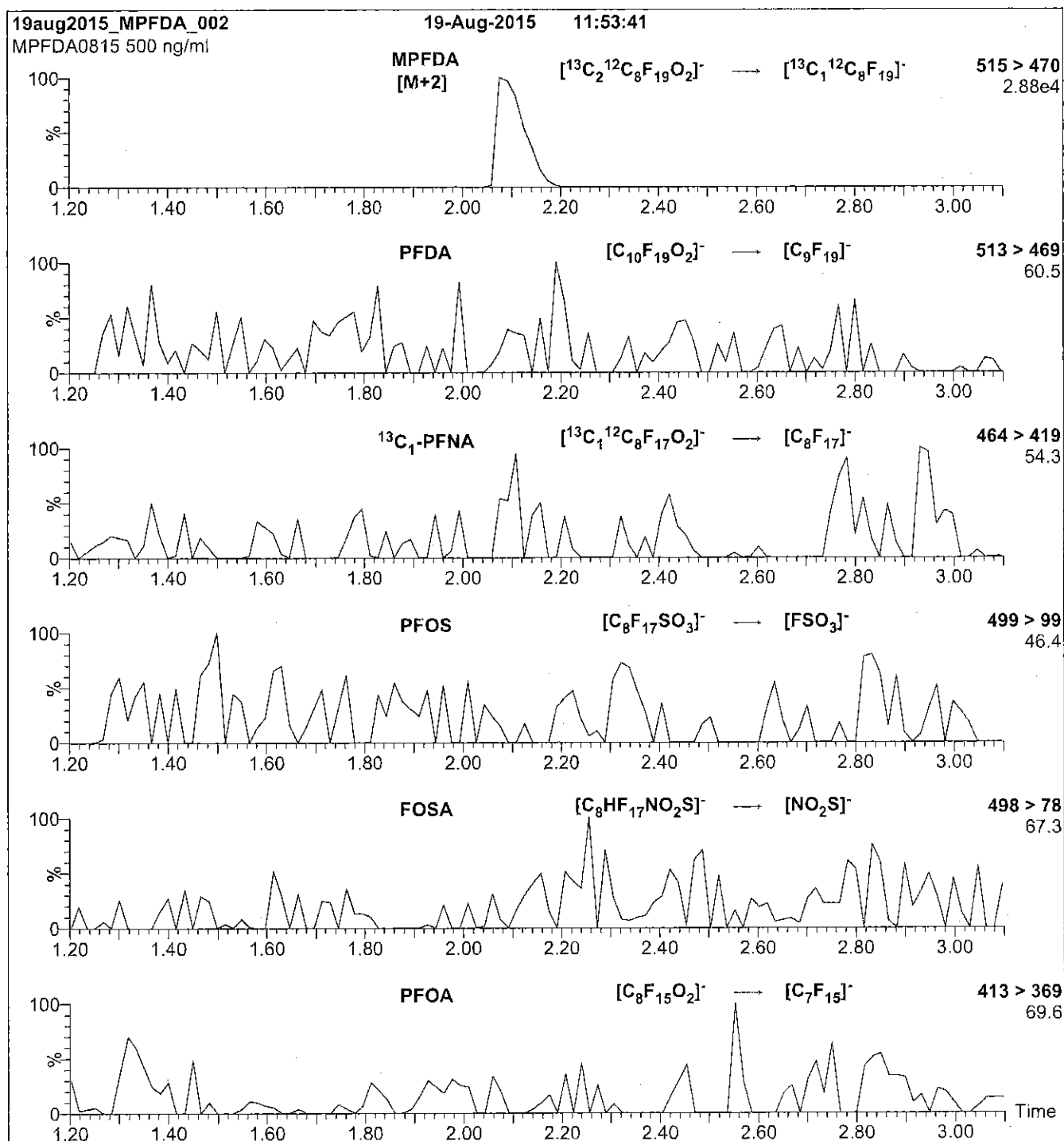
Flow: 300 μ l/min

MS Parameters

Experiment: Full Scan (150 - 850 amu)

Source: Electrospray (negative)
Capillary Voltage (kV) = 2.00
Cone Voltage (V) = 15.00
Cone Gas Flow (l/hr) = 50
Desolvation Gas Flow (l/hr) = 750

Figure 2: MPFDA; LC/MS/MS Data (Selected MRM Transitions)



Conditions for Figure 2:

Injection: Direct loop injection
10 μ l (500 ng/ml MPFDA)

Mobile phase: Isocratic 80% (80:20 MeOH:ACN) / 20% H_2O
(both with 10 mM NH_4OAc buffer)

Flow: 300 μ l/min

MS Parameters

Collision Gas (mbar) = 3.35e-3
Collision Energy (eV) = 13

Reagent

LCMPFD_oA_00003



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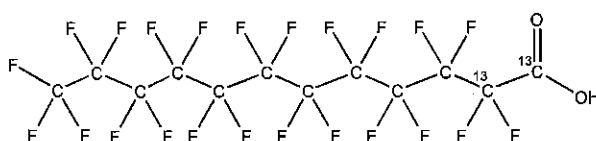
CERTIFICATE OF ANALYSIS DOCUMENTATION

PRODUCT CODE: MPFDoA
COMPOUND: Perfluoro-n-[1,2-¹³C₂]dodecanoic acid

LOT NUMBER: MPFDoA0714

STRUCTURE:

CAS #: Not available



MOLECULAR FORMULA: ¹³C₂¹²C₁₀HF₂₃O₂
CONCENTRATION: 50 ± 2.5 µg/ml

MOLECULAR WEIGHT: 616.08
SOLVENT(S): Methanol
Water (<1%)

CHEMICAL PURITY: >98%
LAST TESTED: (mm/dd/yyyy) 07/17/2014
EXPIRY DATE: (mm/dd/yyyy) 07/17/2019

ISOTOPIC PURITY: ≥99% ¹³C
(1,2-¹³C₂)

RECOMMENDED STORAGE: Store ampoule in a cool, dark place

DOCUMENTATION/ DATA ATTACHED:

Figure 1: LC/MS Data (TIC and Mass Spectrum)
Figure 2: LC/MS/MS Data (Selected MRM Transitions)

ADDITIONAL INFORMATION:

- See page 2 for further details.
- Contains 4 mole eq. of NaOH to prevent conversion of the carboxylic acid to the methyl ester.

FOR LABORATORY USE ONLY: NOT FOR HUMAN OR DRUG USE

Certified By:

B.G. Chittim

Date: 07/21/2014
(mm/dd/yyyy)

Wellington Laboratories Inc., 345 Southgate Dr. Guelph ON N1G 3M5 CANADA
519-822-2436 • Fax: 519-822-2849 • info@well-labs.com

INTENDED USE:

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HAZARDS:

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SYNTHESIS / CHARACTERIZATION:

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EXPIRY DATE / PERIOD OF VALIDITY:

Ongoing stability studies of this product have demonstrated stability in its composition and concentration for the period of time specified by the expiry date in the unopened ampoule. Monitoring for any degradation or change in concentration of the listed analyte(s) is performed on a routine basis.

LIMITED WARRANTY:

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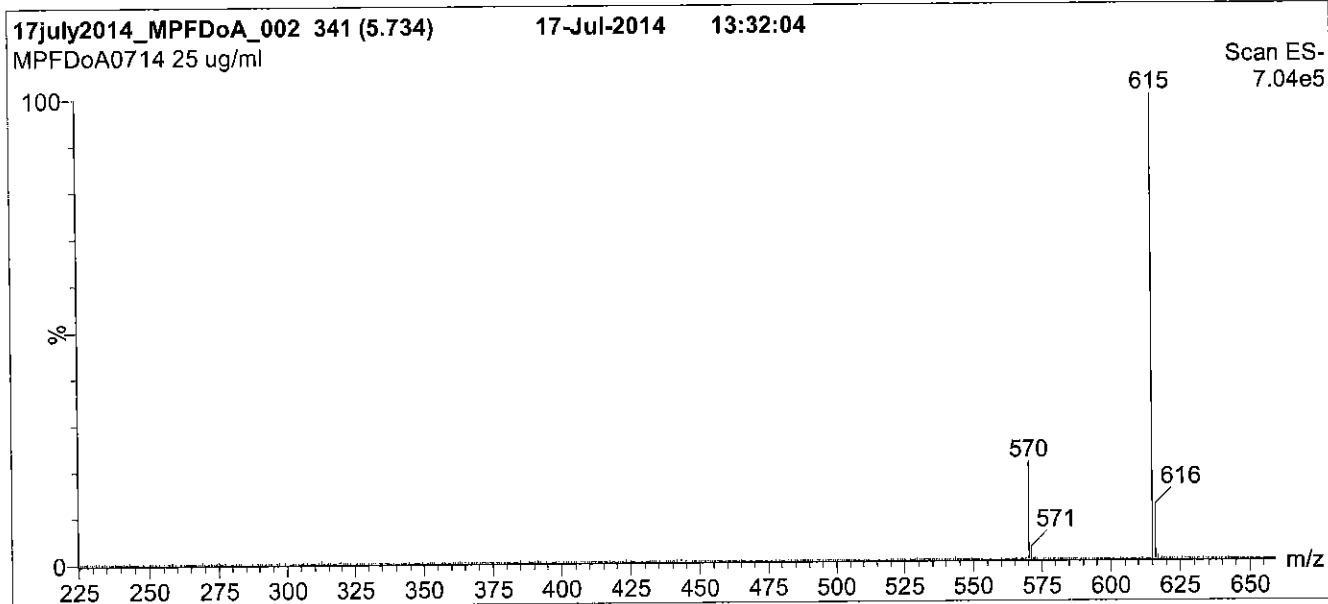
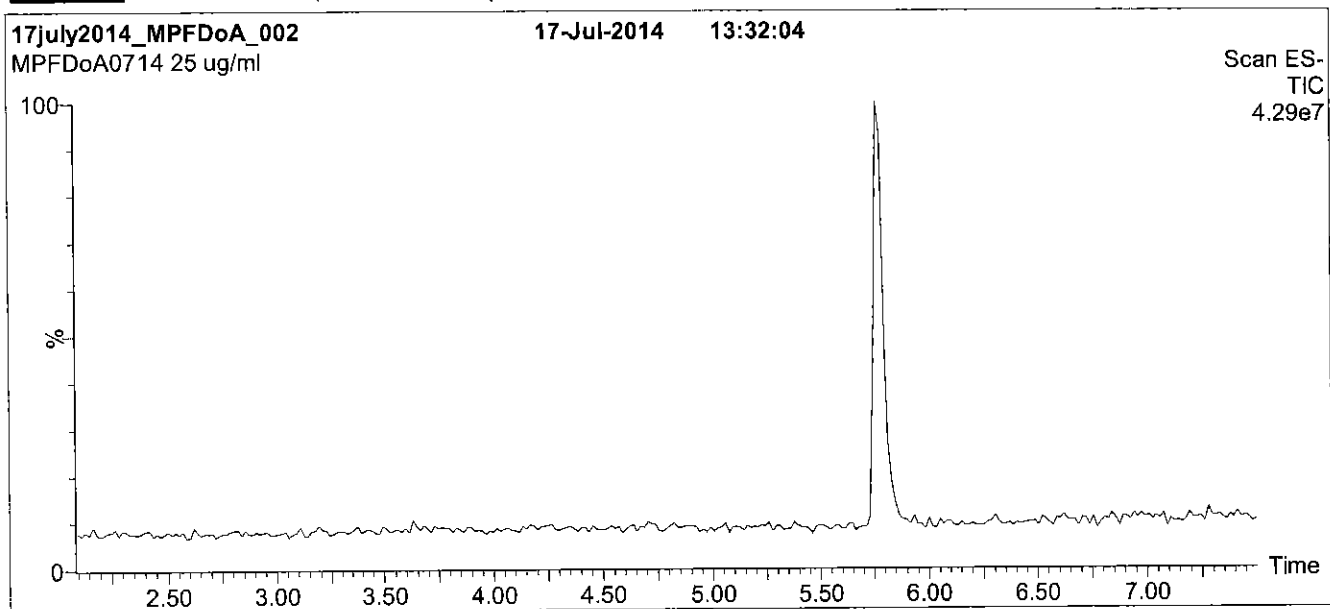
QUALITY MANAGEMENT:

This product was produced using a Quality Management System registered to ISO 9001:2008 by SAI Global, ISO/IEC 17025:2005 by the Canadian Association for Laboratory Accreditation Inc. (CALA; A 1226), and ISO GUIDE 34:2009 by ACLASS (certificate number AR-1523).



For additional information or assistance concerning this or any other products from Wellington Laboratories Inc., please visit our website at www.well-labs.com or contact us directly at info@well-labs.com

Figure 1: MPFDoA; LC/MS Data (TIC and Mass Spectrum)



Conditions for Figure 1:

LC: Waters Acquity Ultra Performance LC
MS: Micromass Quattro micro API MS

Chromatographic Conditions

Column: Acquity UPLC BEH Shield RP₁₈
1.7 μ m, 2.1 x 100 mm

Mobile phase: Gradient
Start: 55% (80:20 MeOH:ACN) / 45% H₂O
(both with 10 mM NH₄OAc buffer)
Ramp to 90% organic over 7 min and hold for 2 min
before returning to initial conditions in 0.5 min.
Time: 10 min

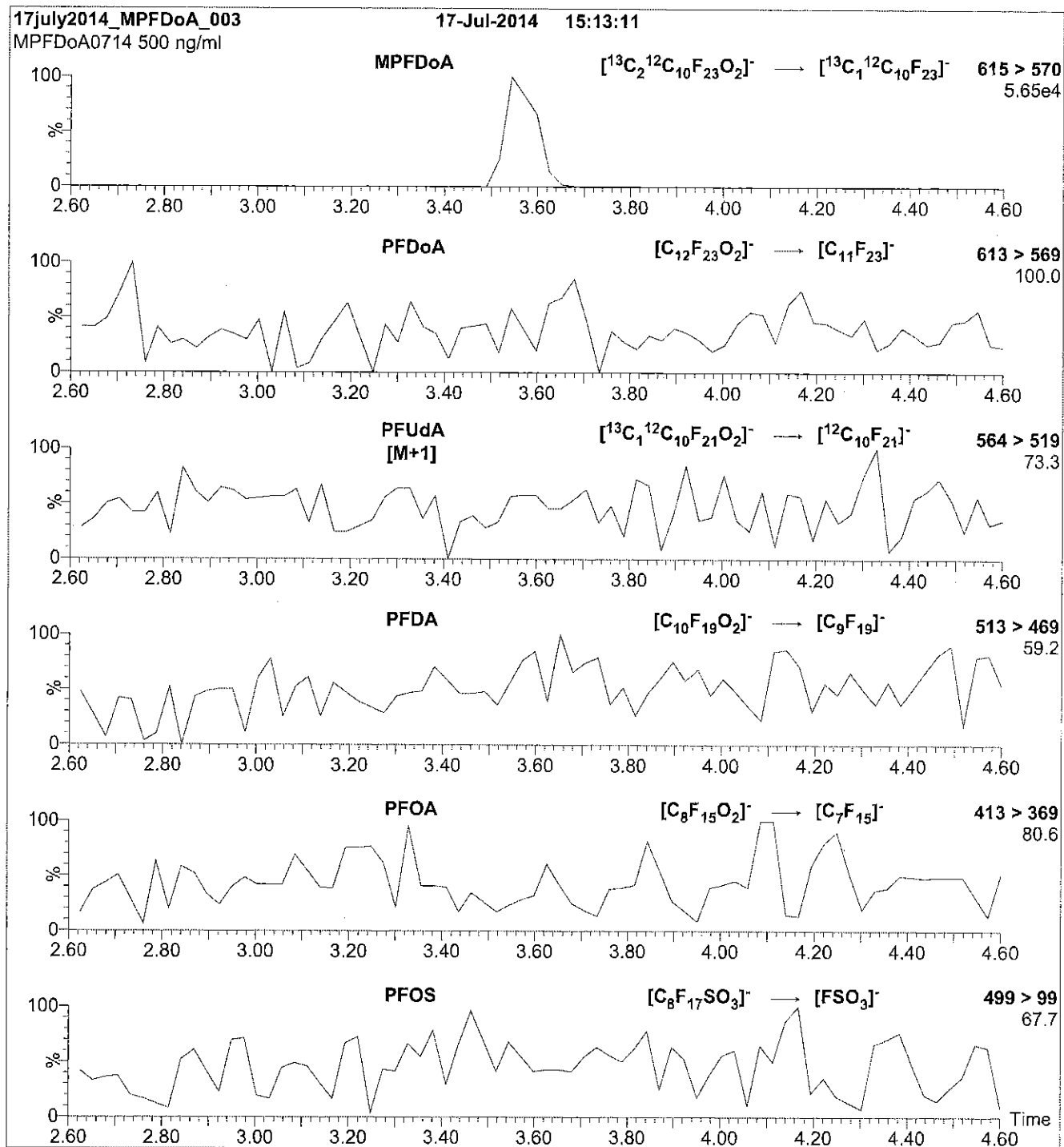
Flow: 300 μ l/min

MS Parameters

Experiment: Full Scan (225 - 950 amu)

Source: Electrospray (negative)
Capillary Voltage (kV) = 2.00
Cone Voltage (V) = 20.00
Cone Gas Flow (l/hr) = 100
Desolvation Gas Flow (l/hr) = 750

Figure 2: MPFDoA; LC/MS/MS Data (Selected MRM Transitions)



Conditions for Figure 2:

Injection: Direct loop injection
10 μl (500 ng/ml MPFDoA)

Mobile phase: Isocratic 80% (80:20 MeOH:ACN) / 20% H_2O
(both with 10 mM NH_4OAc buffer)

Flow: 300 $\mu\text{l}/\text{min}$

MS Parameters

Collision Gas (mbar) = 3.43e-3
Collision Energy (eV) = 13

Reagent

LCMPFD_oA_00004

V: 14/01/15 SK



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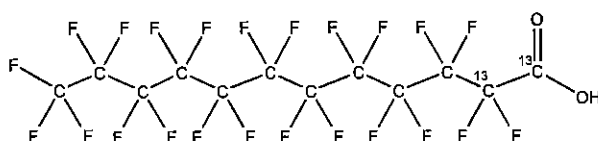
CERTIFICATE OF ANALYSIS DOCUMENTATION

PRODUCT CODE: MPFDoA
COMPOUND: Perfluoro-n-[1,2-¹³C₂]dodecanoic acid

LOT NUMBER: MPFDoA0714

STRUCTURE:

CAS #: Not available



MOLECULAR FORMULA: ¹³C₂¹²C₁₀HF₂₃O₂
CONCENTRATION: 50 ± 2.5 µg/ml

MOLECULAR WEIGHT: 616.08
SOLVENT(S): Methanol
Water (<1%)

CHEMICAL PURITY: >98%
LAST TESTED: (mm/dd/yyyy) 07/17/2014
EXPIRY DATE: (mm/dd/yyyy) 07/17/2019

ISOTOPIC PURITY: ≥99% ¹³C
(1,2-¹³C₂)

RECOMMENDED STORAGE: Store ampoule in a cool, dark place

DOCUMENTATION/ DATA ATTACHED:

Figure 1: LC/MS Data (TIC and Mass Spectrum)
Figure 2: LC/MS/MS Data (Selected MRM Transitions)

ADDITIONAL INFORMATION:

- See page 2 for further details.
- Contains 4 mole eq. of NaOH to prevent conversion of the carboxylic acid to the methyl ester.

FOR LABORATORY USE ONLY: NOT FOR HUMAN OR DRUG USE

Certified By:

B.G. Chittim

Date: 04/01/2015
(mm/dd/yyyy)

Wellington Laboratories Inc., 345 Southgate Dr. Guelph ON N1G 3M5 CANADA
519-822-2436 • Fax: 519-822-2849 • info@well-labs.com

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x_1, x_2, \dots, x_n on which it depends is:

$$u_c(y(x_1, x_2, \dots, x_n)) = \sqrt{\sum_{i=1}^n u(y, x_i)^2}$$

where x is expressed as a relative standard uncertainty of the individual parameter.

The individual uncertainties taken into account include those associated with weights (calibration of the balance) and volumes (calibration of the volumetric glassware). An expanded maximum combined percent relative uncertainty of $\pm 5\%$ (calculated with a coverage factor of 2 and a level of confidence of 95%) is stated on the Certificate of Analysis for all of our products.

TRACEABILITY:

All reference standard solutions are traceable to specific crystalline lots. The microbalances used for solution preparation are regularly tested by an external ISO/IEC 17025 accredited calibration company. In addition, their calibration is verified prior to each weighing using NIST and/or NRC traceable external weights. All volumetric glassware used is of Class A tolerance and has been tested according to the appropriate ASTM procedures, which are ultimately traceable to NIST. For certain products, traceability to international interlaboratory studies has also been established.

EXPIRY DATE / PERIOD OF VALIDITY:

Ongoing stability studies of this product have demonstrated stability in its composition and concentration, until the specified expiry date, in the unopened ampoule. Monitoring for any degradation or change in concentration of the listed analyte(s) is performed on a routine basis.

LIMITED WARRANTY:

At the time of shipment, all products are warranted to be free of defects in material and workmanship and to conform to the stated technical and purity specifications.

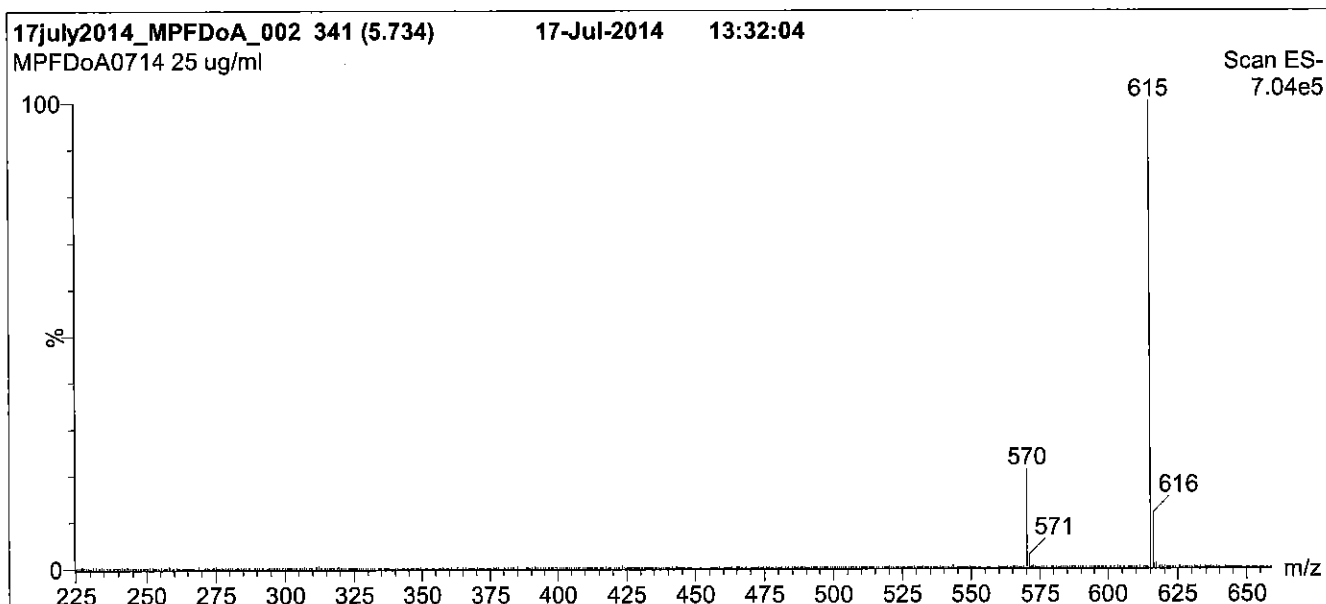
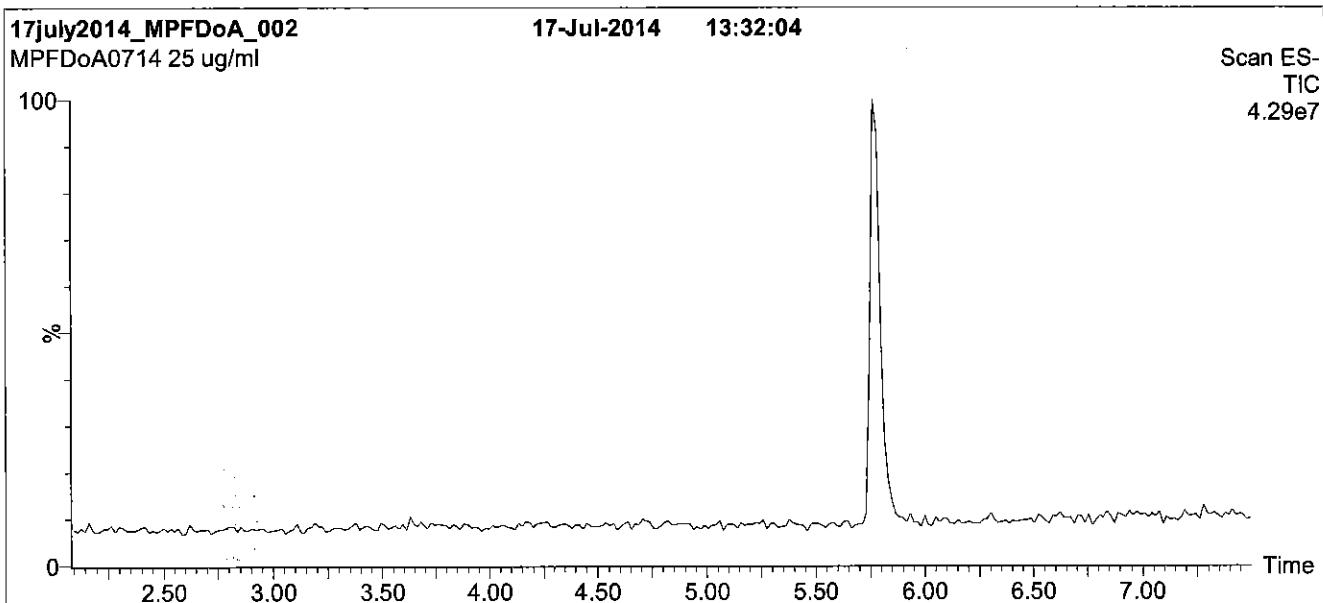
QUALITY MANAGEMENT:

This product was produced using a Quality Management System registered to the latest versions of ISO 9001 by SAI Global, ISO/IEC 17025 by the Canadian Association for Laboratory Accreditation Inc. (CALA; A 1226), and ISO GUIDE 34 by ANSI-ASQ National Accreditation Board (ANAB; AR-1523).



For additional information or assistance concerning this or any other products from Wellington Laboratories Inc., please visit our website at www.well-labs.com or contact us directly at info@well-labs.com

Figure 1: MPFDoA; LC/MS Data (TIC and Mass Spectrum)



Conditions for Figure 1:

LC: Waters Acquity Ultra Performance LC
MS: Micromass Quattro micro API MS

Chromatographic Conditions

Column: Acquity UPLC BEH Shield RP₁₈
1.7 μ m, 2.1 x 100 mm

Mobile phase: Gradient
Start: 55% (80:20 MeOH:ACN) / 45% H₂O
(both with 10 mM NH₄OAc buffer)
Ramp to 90% organic over 7 min and hold for 2 min
before returning to initial conditions in 0.5 min.
Time: 10 min

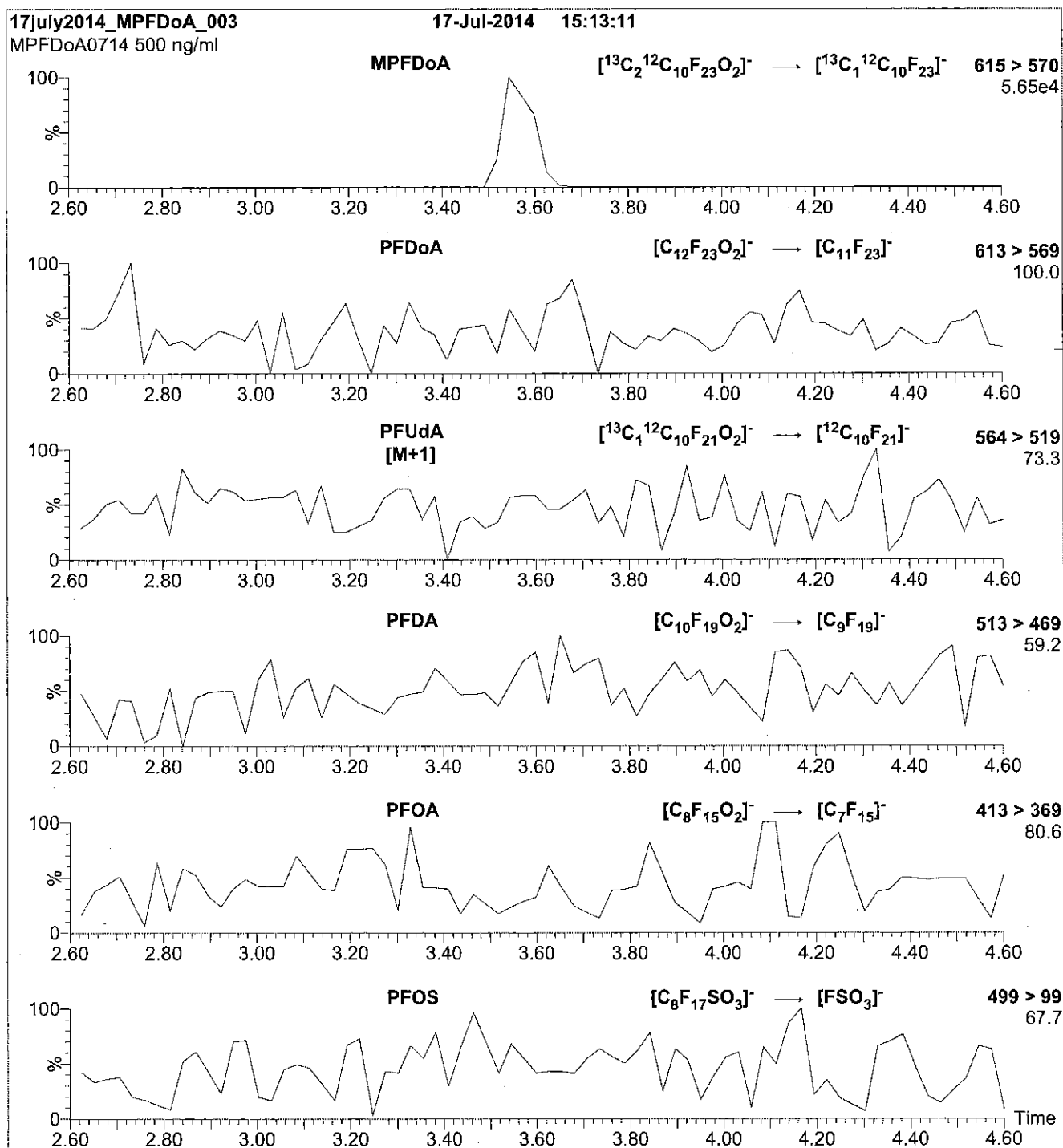
Flow: 300 μ l/min

MS Parameters

Experiment: Full Scan (225 - 950 amu)

Source: Electrospray (negative)
Capillary Voltage (kV) = 2.00
Cone Voltage (V) = 20.00
Cone Gas Flow (l/hr) = 100
Desolvation Gas Flow (l/hr) = 750

Figure 2: MPFDoA; LC/MS/MS Data (Selected MRM Transitions)



Conditions for Figure 2:

Injection: Direct loop injection
10 μl (500 ng/ml MPFDoA)

Mobile phase: Isocratic 80% (80:20 MeOH:ACN) / 20% H_2O
(both with 10 mM NH_4OAc buffer)

Flow: 300 $\mu\text{l}/\text{min}$

MS Parameters

Collision Gas (mbar) = 3.43e-3
Collision Energy (eV) = 13

Reagent

LCMPFD_oA_00005



591162
ID: LCMFDoA_00005
Exp: 07/17/19 Prep: CBW
13C2-Perfluorododecanoic

R:3/3/16 CBW



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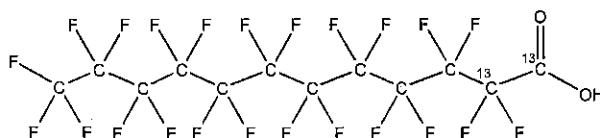
CERTIFICATE OF ANALYSIS DOCUMENTATION

PRODUCT CODE: MPFDoA
COMPOUND: Perfluoro-n-[1,2-¹³C₂]dodecanoic acid

LOT NUMBER: MPFDoA0714

STRUCTURE:

CAS #: Not available



MOLECULAR FORMULA: ¹³C₂¹²C₁₀HF₂₃O₂
CONCENTRATION: 50 ± 2.5 µg/ml

MOLECULAR WEIGHT: 616.08
SOLVENT(S): Methanol
Water (<1%)

CHEMICAL PURITY: >98%
LAST TESTED: (mm/dd/yyyy) 07/17/2014
EXPIRY DATE: (mm/dd/yyyy) 07/17/2019
RECOMMENDED STORAGE: Store ampoule in a cool, dark place

ISOTOPIC PURITY: ≥99% ¹³C
(1,2-¹³C₂)

DOCUMENTATION/ DATA ATTACHED:

Figure 1: LC/MS Data (TIC and Mass Spectrum)
Figure 2: LC/MS/MS Data (Selected MRM Transitions)

ADDITIONAL INFORMATION:

- See page 2 for further details.
- Contains 4 mole eq. of NaOH to prevent conversion of the carboxylic acid to the methyl ester.

FOR LABORATORY USE ONLY: NOT FOR HUMAN OR DRUG USE

Certified By:

B.G. Chittim

Date: 04/01/2015
(mm/dd/yyyy)

Wellington Laboratories Inc., 345 Southgate Dr. Guelph ON N1G 3M5 CANADA
519-822-2436 • Fax: 519-822-2849 • info@well-labs.com

INTENDED USE:

The products prepared by Wellington Laboratories Inc. are for laboratory use only. This certified reference material (CRM) was designed to be used as a standard for the identification and/or quantification of the specific chemical compound it contains.

HAZARDS:

This product should only be used by qualified personnel familiar with its potential hazards and trained in the handling of hazardous chemicals. Due care should be exercised to prevent unnecessary human contact or ingestion. All procedures should be carried out in a well-functioning fume hood and suitable gloves, eye protection, and clothing should be worn at all times. Waste should be disposed of according to national and regional regulations. Safety Data Sheets (SDSs) are available upon request.

SYNTHESIS / CHARACTERIZATION:

Where possible, all of our products are synthesized using single-product unambiguous routes. They are then characterized, and their structures and purities confirmed, using a combination of the most relevant techniques, such as NMR, GC/MS, LC/MS/MS, SFC/UV/MS/MS, x-ray crystallography, and melting point. Isotopic purities of mass-labelled compounds are also confirmed using HRGC/HRMS and/or LC/MS/MS.

HOMOGENEITY:

Prior to solution preparation, crystalline material is tested for homogeneity using a variety of techniques (as stated above) and its solubility in a given diluent is taken into consideration. Duplicate solutions of a new product are prepared from the same crystalline lot and, after the addition of an appropriate internal standard, they are compared by GC/MS, LC/MS/MS and/or SFC/UV/MS/MS. The relative response factors of the analyte of interest in each solution are required to be <5% RSD. New solution lots of existing products are compared to older lots in the same manner, which further confirms the homogeneity of the crystalline material as well as the stability and homogeneity of the solutions in the storage containers.

UNCERTAINTY:

The maximum combined relative standard uncertainty of our reference standard solutions is calculated using the following equation:

The combined relative standard uncertainty, $u_c(y)$, of a value y and the uncertainty of the independent parameters

x_1, x_2, \dots, x_n on which it depends is:

$$u_c(y(x_1, x_2, \dots, x_n)) = \sqrt{\sum_{i=1}^n u(y, x_i)^2}$$

where x is expressed as a relative standard uncertainty of the individual parameter.

The individual uncertainties taken into account include those associated with weights (calibration of the balance) and volumes (calibration of the volumetric glassware). An expanded maximum combined percent relative uncertainty of $\pm 5\%$ (calculated with a coverage factor of 2 and a level of confidence of 95%) is stated on the Certificate of Analysis for all of our products.

TRACEABILITY:

All reference standard solutions are traceable to specific crystalline lots. The microbalances used for solution preparation are regularly tested by an external ISO/IEC 17025 accredited calibration company. In addition, their calibration is verified prior to each weighing using NIST and/or NRC traceable external weights. All volumetric glassware used is of Class A tolerance and has been tested according to the appropriate ASTM procedures, which are ultimately traceable to NIST. For certain products, traceability to international interlaboratory studies has also been established.

EXPIRY DATE / PERIOD OF VALIDITY:

Ongoing stability studies of this product have demonstrated stability in its composition and concentration, until the specified expiry date, in the unopened ampoule. Monitoring for any degradation or change in concentration of the listed analyte(s) is performed on a routine basis.

LIMITED WARRANTY:

At the time of shipment, all products are warranted to be free of defects in material and workmanship and to conform to the stated technical and purity specifications.

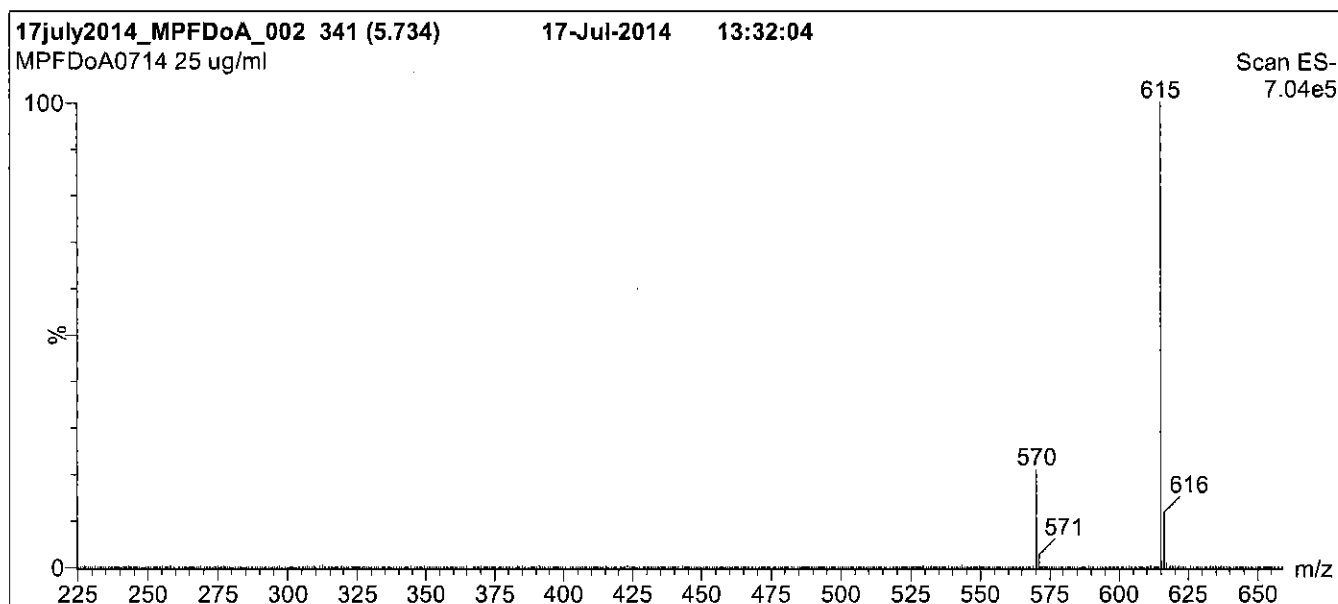
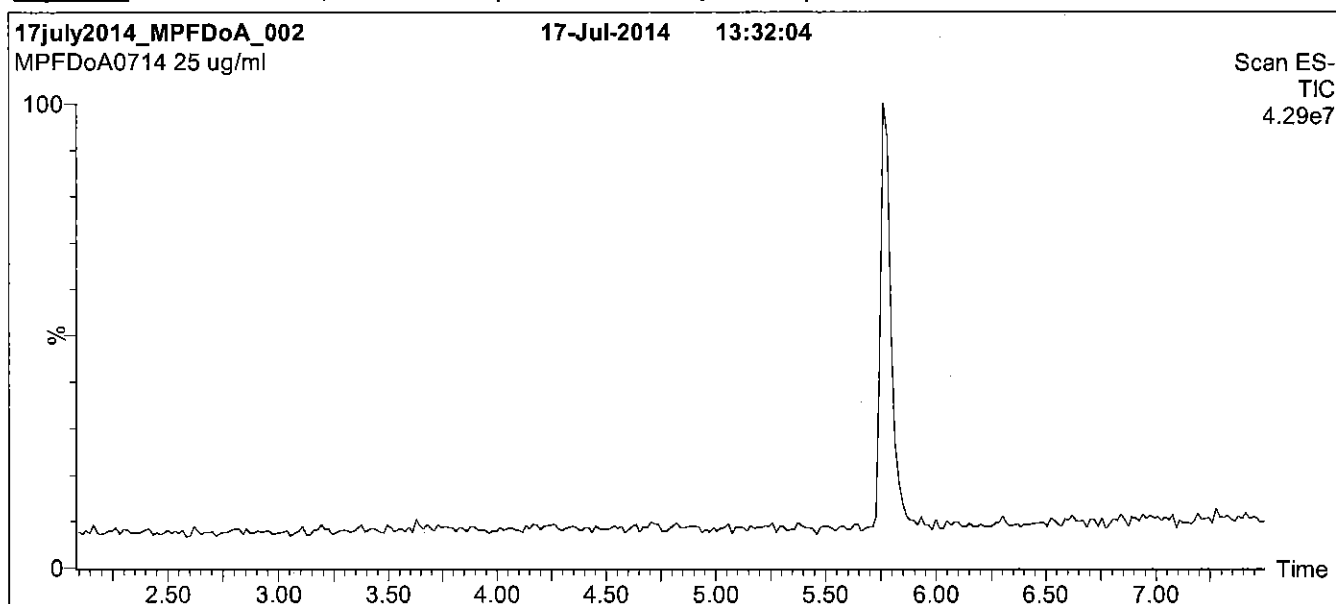
QUALITY MANAGEMENT:

This product was produced using a Quality Management System registered to the latest versions of ISO 9001 by SAI Global, ISO/IEC 17025 by the Canadian Association for Laboratory Accreditation Inc. (CALA; A 1226), and ISO GUIDE 34 by ANSI-ASQ National Accreditation Board (ANAB; AR-1523).



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Figure 1: MPFDoA; LC/MS Data (TIC and Mass Spectrum)



Conditions for Figure 1:

LC: Waters Acquity Ultra Performance LC
MS: Micromass Quattro *micro* API MS

Chromatographic Conditions

Column: Acquity UPLC BEH Shield RP₁₈
1.7 μ m, 2.1 x 100 mm

Mobile phase: Gradient
Start: 55% (80:20 MeOH:ACN) / 45% H₂O
(both with 10 mM NH₄OAc buffer)
Ramp to 90% organic over 7 min and hold for 2 min
before returning to initial conditions in 0.5 min.
Time: 10 min

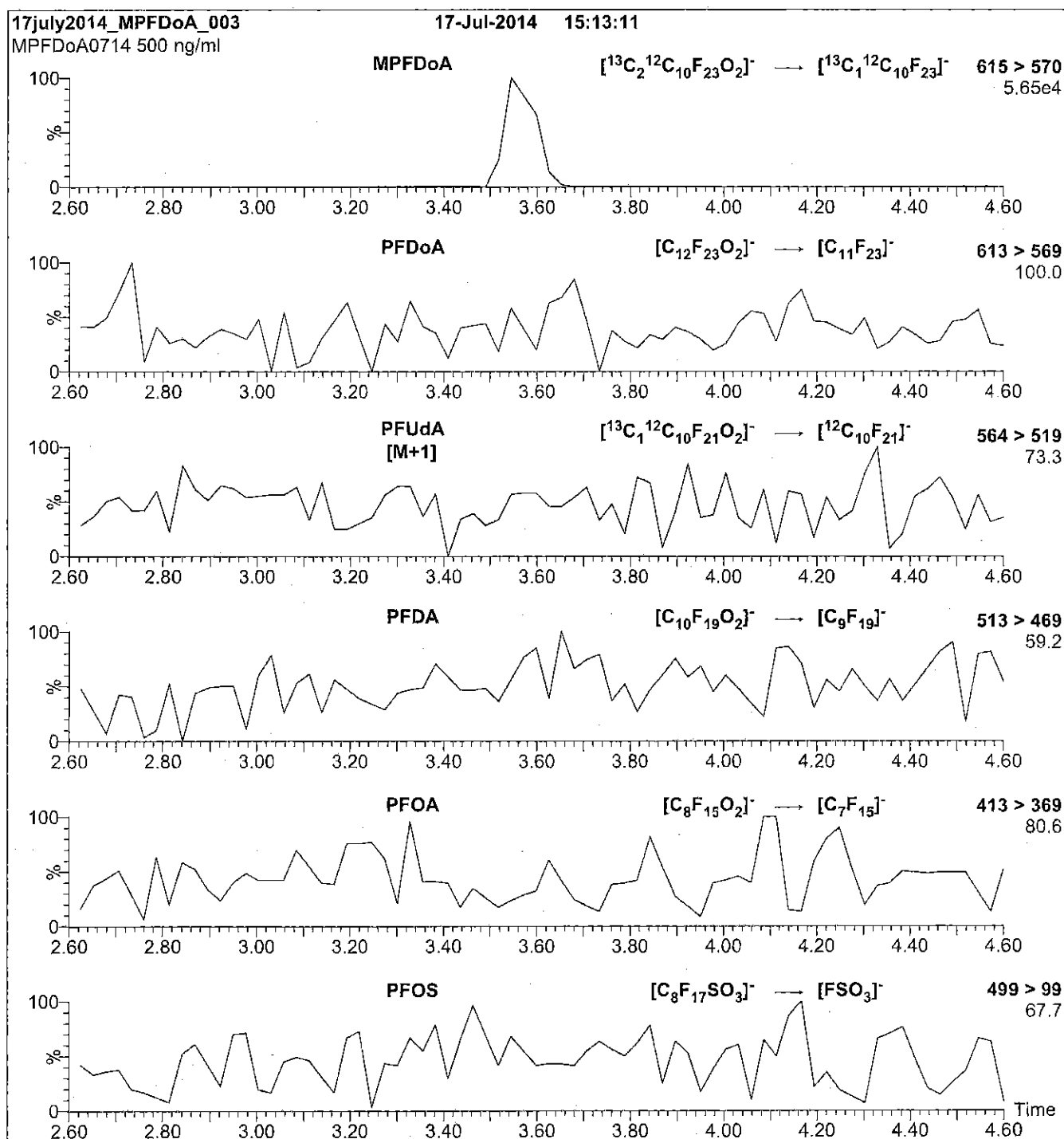
Flow: 300 μ l/min

MS Parameters

Experiment: Full Scan (225 - 950 amu)

Source: Electrospray (negative)
Capillary Voltage (kV) = 2.00
Cone Voltage (V) = 20.00
Cone Gas Flow (l/hr) = 100
Desolvation Gas Flow (l/hr) = 750

Figure 2: MPFDoA; LC/MS/MS Data (Selected MRM Transitions)



Conditions for Figure 2:

Injection: Direct loop injection
10 μl (500 ng/ml MPFD0A)

Mobile phase: Isocratic 80% (80:20 MeOH:ACN) / 20% H_2O
(both with 10 mM NH_4OAc buffer)

Flow: 300 $\mu\text{l}/\text{min}$

MS Parameters

Collision Gas (mbar) = 3.43e-3
Collision Energy (eV) = 13

Reagent

LCMPFD_oA_00006



R: 4/7/16 CBW

609708

ID: LCMPPDoA_00006

Exp: 07/17/19 Ppdt: CBW

13C2-Perfluorododecanoic



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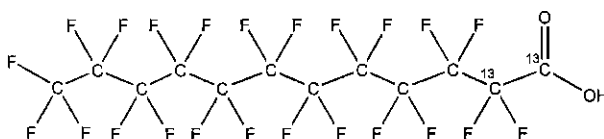
CERTIFICATE OF ANALYSIS DOCUMENTATION

PRODUCT CODE: MPFDoA
COMPOUND: Perfluoro-n-[1,2-¹³C₂]dodecanoic acid

LOT NUMBER: MPFDoA0714

STRUCTURE:

CAS #: Not available



MOLECULAR FORMULA: ¹³C₂¹²C₁₀HF₂₃O₂
CONCENTRATION: 50 ± 2.5 µg/ml

MOLECULAR WEIGHT: 616.08
SOLVENT(S): Methanol
Water (<1%)

CHEMICAL PURITY: >98%

ISOTOPIC PURITY: ≥99% ¹³C
(1,2-¹³C₂)

LAST TESTED: (mm/dd/yyyy) 07/17/2014

EXPIRY DATE: (mm/dd/yyyy) 07/17/2019

RECOMMENDED STORAGE: Store ampoule in a cool, dark place

DOCUMENTATION/ DATA ATTACHED:

Figure 1: LC/MS Data (TIC and Mass Spectrum)

Figure 2: LC/MS/MS Data (Selected MRM Transitions)

ADDITIONAL INFORMATION:

- See page 2 for further details.
- Contains 4 mole eq. of NaOH to prevent conversion of the carboxylic acid to the methyl ester.

FOR LABORATORY USE ONLY: NOT FOR HUMAN OR DRUG USE

Certified By:

B.G. Chittim

Date: 04/01/2015
(mm/dd/yyyy)

Wellington Laboratories Inc., 345 Southgate Dr. Guelph ON N1G 3M5 CANADA
519-822-2436 • Fax: 519-822-2849 • info@well-labs.com

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HAZARDS:

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SYNTHESIS / CHARACTERIZATION:

Where possible, all of our products are synthesized using single-product unambiguous routes. They are then characterized, and their structures and purities confirmed, using a combination of the most relevant techniques, such as NMR, GC/MS, LC/MS/MS, SFC/UV/MS/MS, x-ray crystallography, and melting point. Isotopic purities of mass-labelled compounds are also confirmed using HRGC/HRMS and/or LC/MS/MS.

HOMOGENEITY:

Prior to solution preparation, crystalline material is tested for homogeneity using a variety of techniques (as stated above) and its solubility in a given diluent is taken into consideration. Duplicate solutions of a new product are prepared from the same crystalline lot and, after the addition of an appropriate internal standard, they are compared by GC/MS, LC/MS/MS and/or SFC/UV/MS/MS. The relative response factors of the analyte of interest in each solution are required to be <5% RSD. New solution lots of existing products are compared to older lots in the same manner, which further confirms the homogeneity of the crystalline material as well as the stability and homogeneity of the solutions in the storage containers.

UNCERTAINTY:

The maximum combined relative standard uncertainty of our reference standard solutions is calculated using the following equation:

The combined relative standard uncertainty, $u_c(y)$, of a value y and the uncertainty of the independent parameters x_1, x_2, \dots, x_n on which it depends is:

$$u_c(y(x_1, x_2, \dots, x_n)) = \sqrt{\sum_{i=1}^n u(y, x_i)^2}$$

where x is expressed as a relative standard uncertainty of the individual parameter.

The individual uncertainties taken into account include those associated with weights (calibration of the balance) and volumes (calibration of the volumetric glassware). An expanded maximum combined percent relative uncertainty of $\pm 5\%$ (calculated with a coverage factor of 2 and a level of confidence of 95%) is stated on the Certificate of Analysis for all of our products.

TRACEABILITY:

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EXPIRY DATE / PERIOD OF VALIDITY:

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LIMITED WARRANTY:

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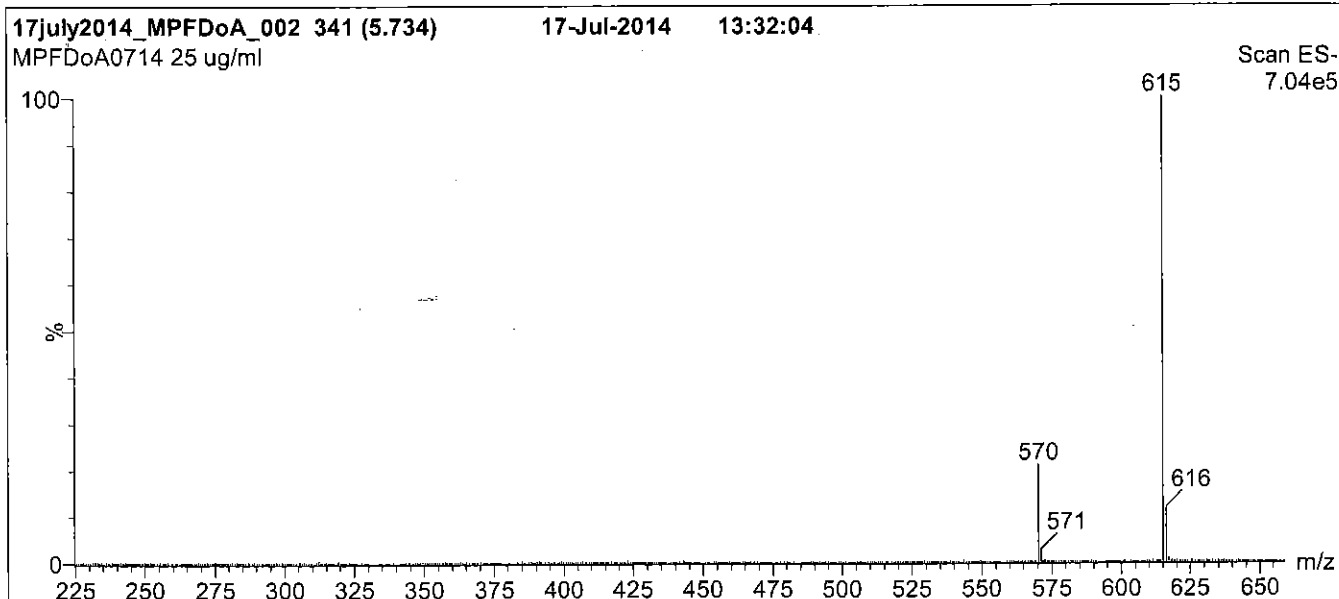
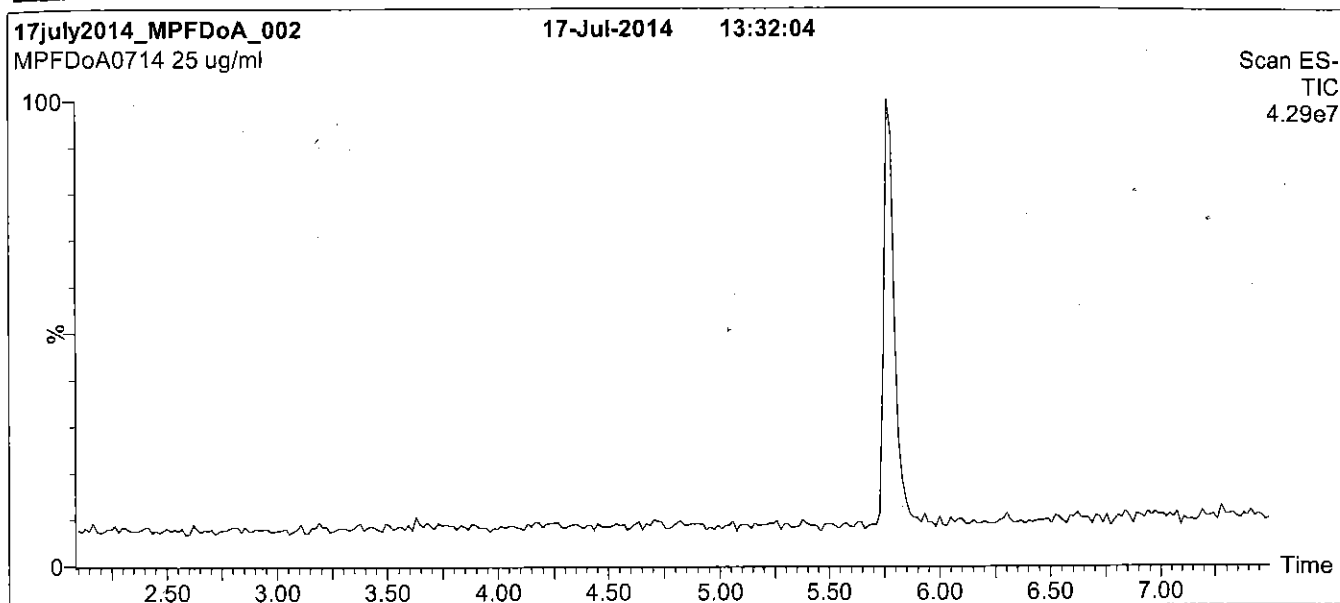
QUALITY MANAGEMENT:

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Figure 1: MPFDoA; LC/MS Data (TIC and Mass Spectrum)



Conditions for Figure 1:

LC: Waters Acquity Ultra Performance LC
MS: Micromass Quattro micro API MS

Chromatographic Conditions

Column: Acquity UPLC BEH Shield RP₁₈
1.7 μ m, 2.1 x 100 mm

Mobile phase: Gradient
Start: 55% (80:20 MeOH:ACN) / 45% H₂O
(both with 10 mM NH₄OAc buffer)
Ramp to 90% organic over 7 min and hold for 2 min
before returning to initial conditions in 0.5 min.
Time: 10 min

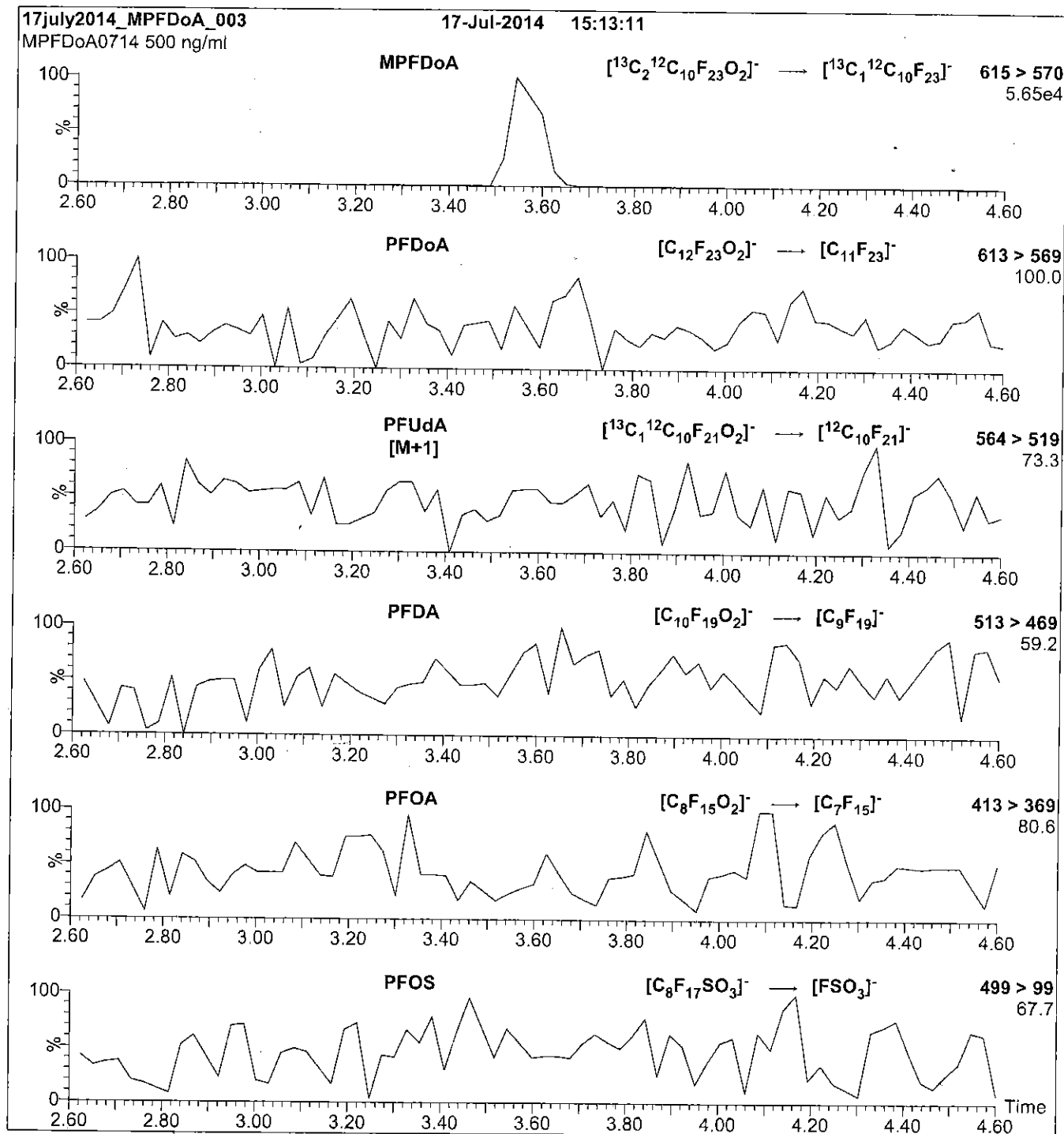
Flow: 300 μ l/min

MS Parameters

Experiment: Full Scan (225 - 950 amu)

Source: Electrospray (negative)
Capillary Voltage (kV) = 2.00
Cone Voltage (V) = 20.00
Cone Gas Flow (l/hr) = 100
Desolvation Gas Flow (l/hr) = 750

Figure 2: MPFDoA; LC/MS/MS Data (Selected MRM Transitions)



Conditions for Figure 2:

Injection: Direct loop injection
10 μl (500 ng/ml MPFDoA)

Mobile phase: Isocratic 80% (80:20 MeOH:ACN) / 20% H_2O
(both with 10 mM NH_4OAc buffer)

Flow: 300 $\mu\text{l}/\text{min}$

MS Parameters

Collision Gas (mbar) = 3.43e-3
Collision Energy (eV) = 13

Reagent

LCMPFHxA_00006



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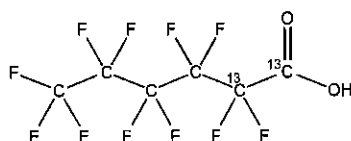
CERTIFICATE OF ANALYSIS DOCUMENTATION

PRODUCT CODE: MPFHxA
COMPOUND: Perfluoro-n-[1,2-¹³C₂]hexanoic acid

LOT NUMBER: MPFHxA0414

STRUCTURE:

CAS #: Not available



MOLECULAR FORMULA: ¹³C₂¹²C₄HF₁₁O₂
CONCENTRATION: 50 ± 2.5 µg/ml

MOLECULAR WEIGHT: 316.04
SOLVENT(S): Methanol
Water (<1%)

CHEMICAL PURITY: >98%
LAST TESTED: (mm/dd/yyyy) 04/13/2014
EXPIRY DATE: (mm/dd/yyyy) 04/13/2019

ISOTOPIC PURITY: ≥99% ¹³C
(1,2-¹³C₂)

RECOMMENDED STORAGE: Store ampoule in a cool, dark place

DOCUMENTATION/ DATA ATTACHED:

Figure 1: LC/MS Data (TIC and Mass Spectrum)
Figure 2: LC/MS/MS Data (Selected MRM Transitions)

ADDITIONAL INFORMATION:

- See page 2 for further details.
- Contains 4 mole eq. of NaOH to prevent conversion of the carboxylic acid to the methyl ester.
- Contains < 0.1% of perfluoro-n-hexanoic acid and ~ 0.3% of perfluoro-n-octanoic acid.

FOR LABORATORY USE ONLY: NOT FOR HUMAN OR DRUG USE

Certified By:

B.G. Chittim

Date: 04/15/2014
(mm/dd/yyyy)

Wellington Laboratories Inc., 345 Southgate Dr. Guelph ON N1G 3M5 CANADA
519-822-2436 • Fax: 519-822-2849 • info@well-labs.com

INTENDED USE:

The products prepared by Wellington Laboratories Inc. are for laboratory use only. They are designed to be used as reference standards for the identification and/or quantification of specific chemical compound(s).

HAZARDS:

This product should only be used by qualified personnel familiar with its potential hazards and trained in the handling of hazardous chemicals. Due care should be exercised to prevent unnecessary human contact or ingestion. All procedures should be carried out in a well-functioning fume hood and suitable gloves, eye protection and clothing should be worn at all times. Waste should be disposed of according to national and regional regulations. Material Safety Data Sheets (MSDSs) are available upon request.

SYNTHESIS / CHARACTERIZATION:

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HOMOGENEITY:

Prior to solution preparation, crystalline material is tested for homogeneity using a variety of techniques (as stated above) and its solubility in a given diluent is taken into consideration. Duplicate solutions of a new product are prepared from the same crystalline lot and, after the addition of an appropriate internal standard, they are compared by GC/MS and/or LC/MS/MS. The relative response factors of the analyte of interest in each solution are required to be <5% RSD. New solution lots of existing products are compared to older lots in the same manner, which further confirms the homogeneity of the crystalline material as well as the stability and homogeneity of the solutions in the storage containers.

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The maximum combined relative standard uncertainty of our reference standard solutions is calculated using the following equation:

The combined relative standard uncertainty, $u_c(y)$, of a value y and the uncertainty of the independent parameters x_1, x_2, \dots, x_n on which it depends is:

$$u_c(y(x_1, x_2, \dots, x_n)) = \sqrt{\sum_{i=1}^n u(y, x_i)^2}$$

where x is expressed as a relative standard uncertainty of the individual parameter.

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TRACEABILITY:

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EXPIRY DATE / PERIOD OF VALIDITY:

Ongoing stability studies of this product have demonstrated stability in its composition and concentration for the period of time specified by the expiry date in the unopened ampoule. Monitoring for any degradation or change in concentration of the listed analyte(s) is performed on a routine basis.

LIMITED WARRANTY:

At the time of shipment, all products are warranted to be free of defects in material and workmanship and to conform to the stated technical and purity specifications.

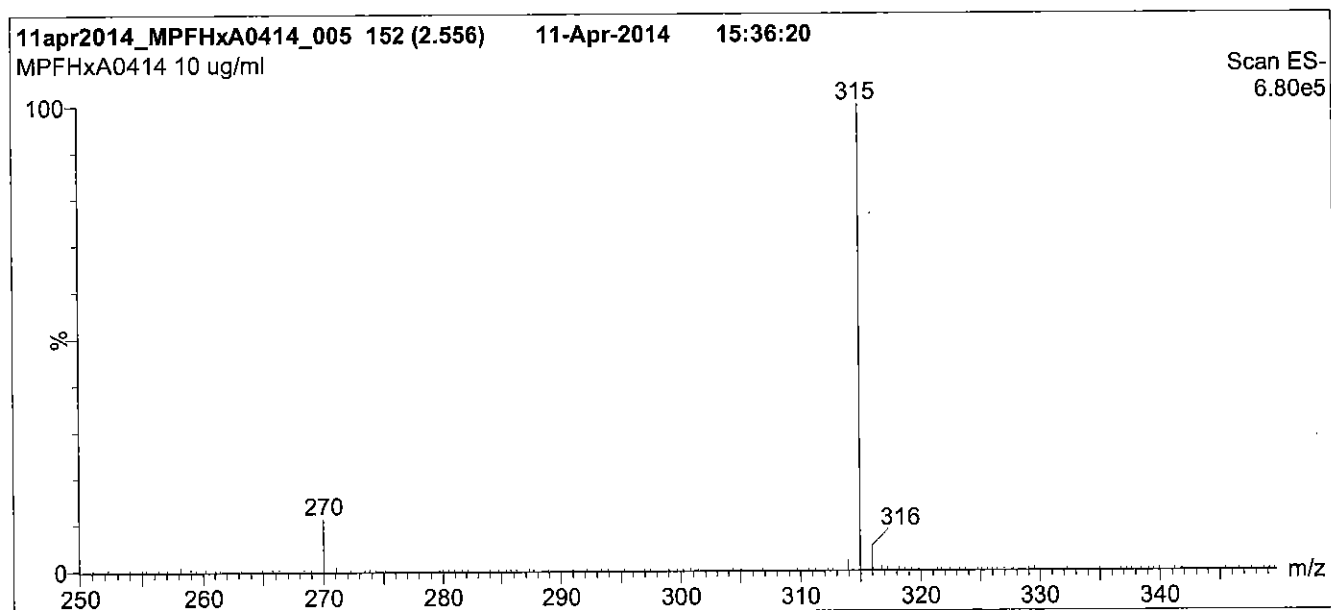
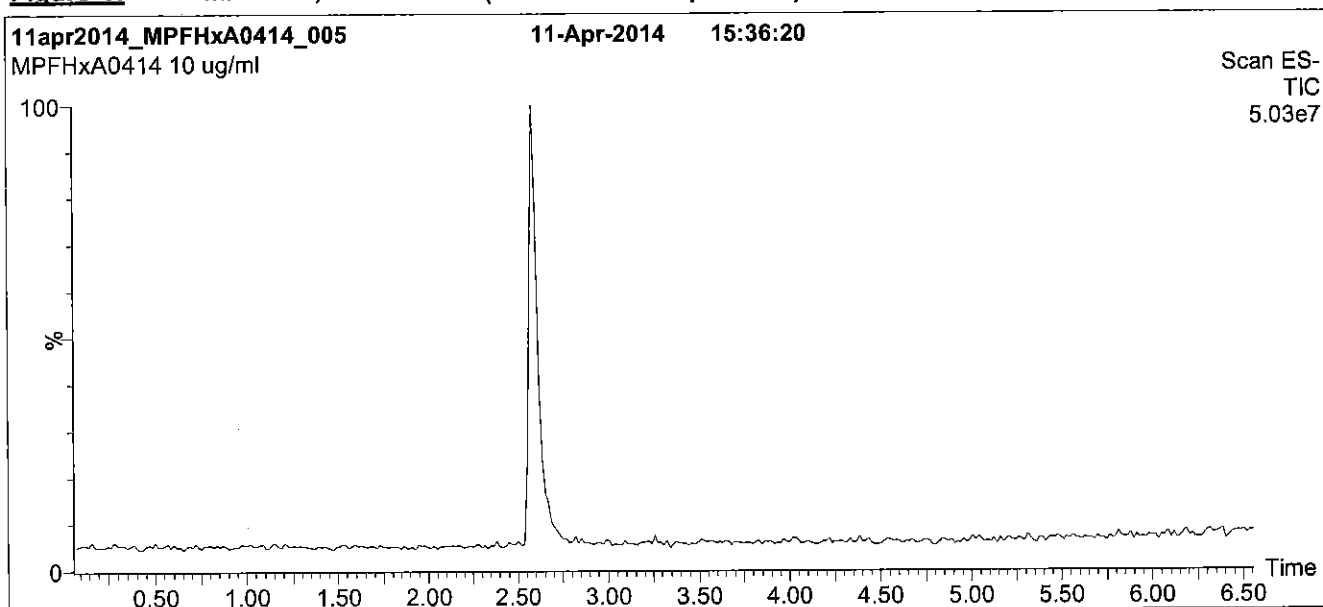
QUALITY MANAGEMENT:

This product was produced using a Quality Management System registered to ISO 9001:2008 by SAI Global, ISO/IEC 17025:2005 by the Canadian Association for Laboratory Accreditation Inc. (CALA; A 1226), and ISO GUIDE 34:2009 by ACLASS (certificate number AR-1523).



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Figure 1: MPFHxA; LC/MS Data (TIC and Mass Spectrum)



Conditions for Figure 1:

LC: Waters Acquity Ultra Performance LC
MS: Micromass Quattro micro API MS

Chromatographic Conditions

Column: Acquity UPLC BEH Shield RP₁₈
1.7 μ m, 2.1 x 100 mm

Mobile phase: Gradient
Start: 50% (80:20 MeOH:ACN) / 50% H₂O
(both with 10 mM NH₄OAc buffer)
Ramp to 90% organic over 7 min and hold for 2 min
before returning to initial conditions over 0.5 min.
Time: 10 min

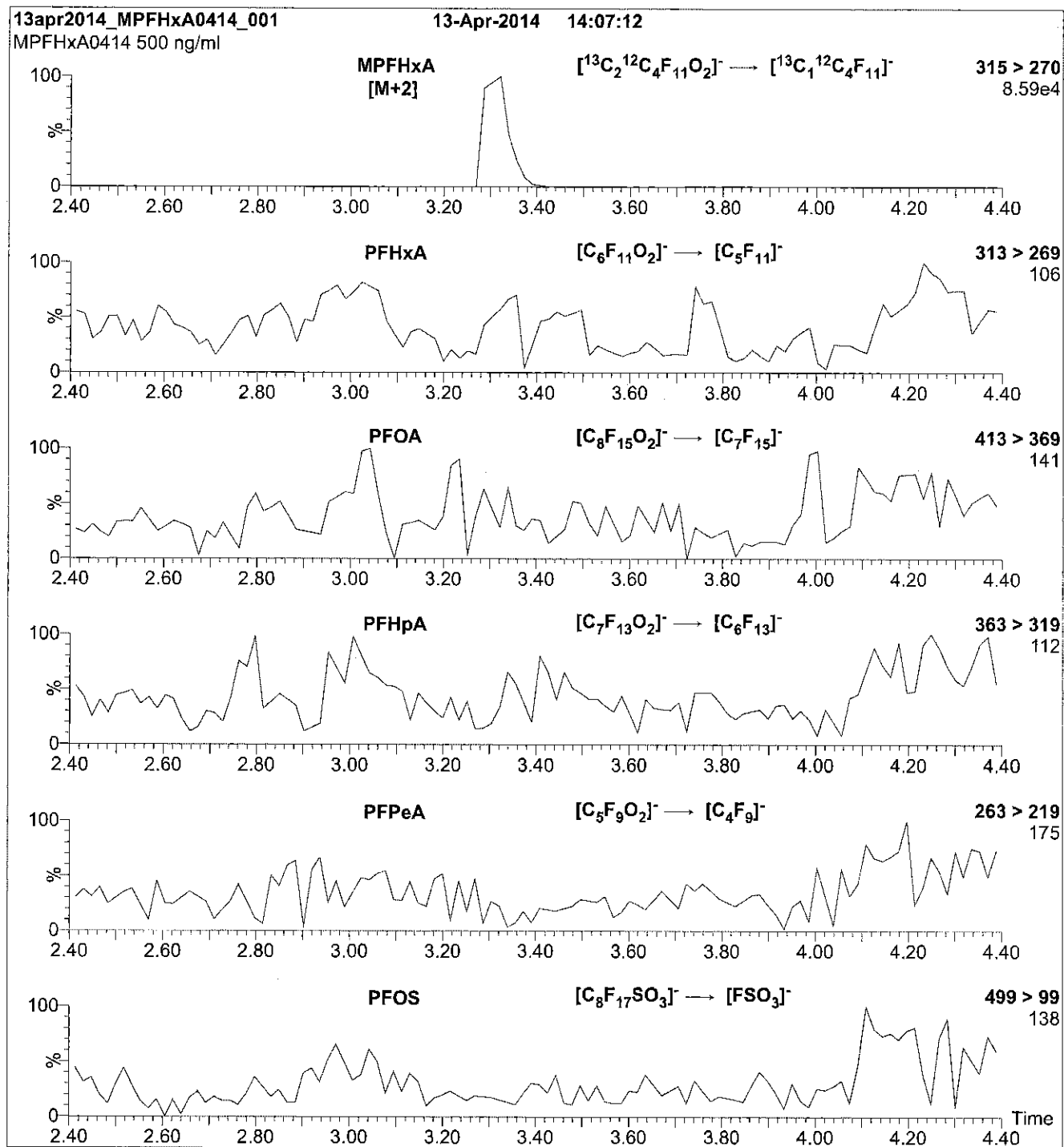
Flow: 300 μ l/min

MS Parameters

Experiment: Full Scan (250 - 850 amu)

Source: Electrospray (negative)
Capillary Voltage (kV) = 2.00
Cone Voltage (V) = 15.00
Cone Gas Flow (l/hr) = 100
Desolvation Gas Flow (l/hr) = 750

Figure 2: MPFHxA; LC/MS/MS Data (Selected MRM Transitions)



Conditions for Figure 2:

Injection: Direct loop injection
10 μ l (500 ng/ml MPFHxA)

Mobile phase: Isocratic 80% (80:20 MeOH:ACN) / 20% H_2O
(both with 10 mM NH_4OAc buffer)

Flow: 300 μ l/min

MS Parameters

Collision Gas (mbar) = 3.43e-3
Collision Energy (eV) = 10

Reagent

LCMPFHxA_00007



587893

ID: LCMPFHxA_00007

Exp: 04/09/20 P: rpt: CBN Opn: 02/25/16

13C2-Perfluorohexanoic ac

R: 2/25/16 CW



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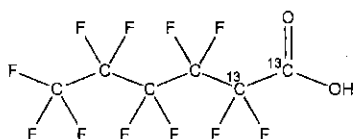
CERTIFICATE OF ANALYSIS DOCUMENTATION

PRODUCT CODE: MPFHxA
COMPOUND: Perfluoro-n-[1,2-¹³C₂]hexanoic acid

LOT NUMBER: MPFHxA0415

STRUCTURE:

CAS #: Not available



MOLECULAR FORMULA: ¹³C₂¹²C₄HF₁₁O₂
CONCENTRATION: 50 ± 2.5 µg/ml

MOLECULAR WEIGHT: 316.04
SOLVENT(S): Methanol
Water (<1%)

CHEMICAL PURITY: >98%
LAST TESTED: (mm/dd/yyyy) 04/09/2015
EXPIRY DATE: (mm/dd/yyyy) 04/09/2020
RECOMMENDED STORAGE: Store ampoule in a cool, dark place

ISOTOPIC PURITY: ≥99%¹³C
(1,2-¹³C₂)

DOCUMENTATION/ DATA ATTACHED:

Figure 1: LC/MS Data (TIC and Mass Spectrum)
Figure 2: LC/MS/MS Data (Selected MRM Transitions)

ADDITIONAL INFORMATION:

- See page 2 for further details.
- Contains 4 mole eq. of NaOH to prevent conversion of the carboxylic acid to the methyl ester.
- Contains < 0.1% of perfluoro-n-hexanoic acid and ~ 0.3% of perfluoro-n-octanoic acid.

FOR LABORATORY USE ONLY: NOT FOR HUMAN OR DRUG USE

Certified By:

B.G. Chittim

Date: 04/14/2015
(mm/dd/yyyy)

Wellington Laboratories Inc., 345 Southgate Dr. Guelph ON N1G 3M5 CANADA
519-822-2436 • Fax: 519-822-2849 • info@well-labs.com

INTENDED USE:

The products prepared by Wellington Laboratories Inc. are for laboratory use only. This certified reference material (CRM) was designed to be used as a standard for the identification and/or quantification of the specific chemical compound it contains.

HAZARDS:

This product should only be used by qualified personnel familiar with its potential hazards and trained in the handling of hazardous chemicals. Due care should be exercised to prevent unnecessary human contact or ingestion. All procedures should be carried out in a well-functioning fume hood and suitable gloves, eye protection, and clothing should be worn at all times. Waste should be disposed of according to national and regional regulations. Safety Data Sheets (SDSs) are available upon request.

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UNCERTAINTY:

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The combined relative standard uncertainty, $u_c(y)$, of a value y and the uncertainty of the independent parameters x_1, x_2, \dots, x_n on which it depends is:

$$u_c(y(x_1, x_2, \dots, x_n)) = \sqrt{\sum_{i=1}^n u(y, x_i)^2}$$

where x is expressed as a relative standard uncertainty of the individual parameter.

The individual uncertainties taken into account include those associated with weights (calibration of the balance) and volumes (calibration of the volumetric glassware). An expanded maximum combined percent relative uncertainty of $\pm 5\%$ (calculated with a coverage factor of 2 and a level of confidence of 95%) is stated on the Certificate of Analysis for all of our products.

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EXPIRY DATE / PERIOD OF VALIDITY:

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LIMITED WARRANTY:

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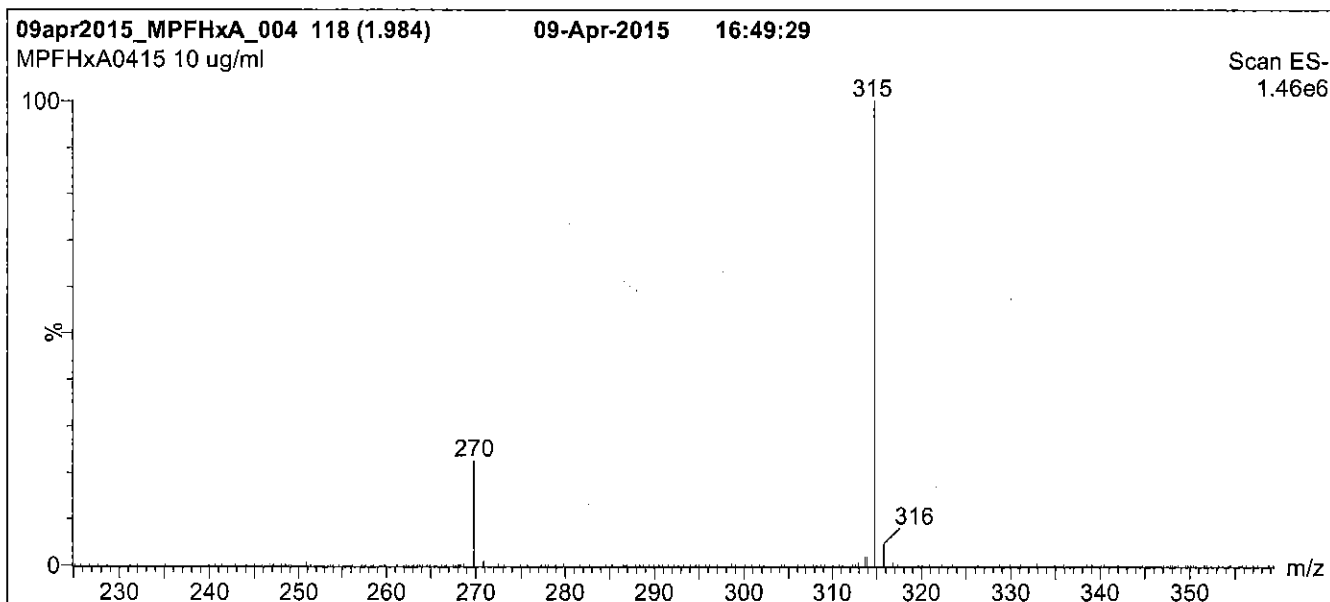
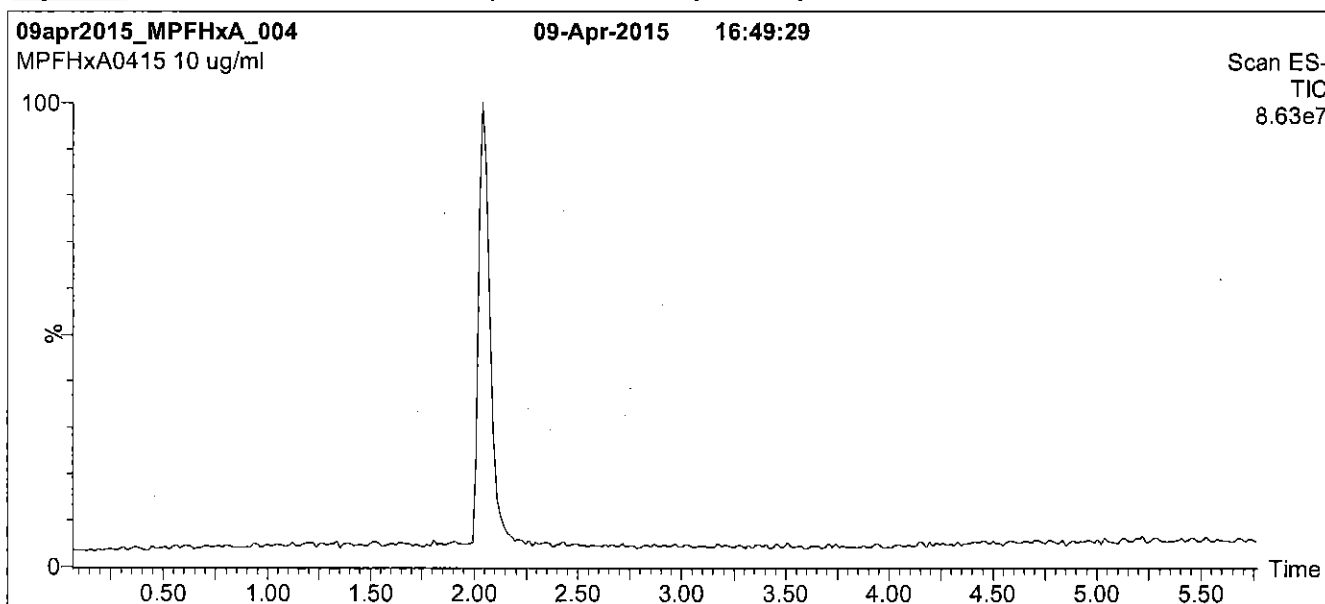
QUALITY MANAGEMENT:

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Figure 1: MPFHxA; LC/MS Data (TIC and Mass Spectrum)



Conditions for Figure 1:

LC: Waters Acquity Ultra Performance LC
MS: Micromass Quattro micro API MS

Chromatographic Conditions

Column: Acquity UPLC BEH Shield RP₁₈
1.7 μ m, 2.1 x 100 mm

Mobile phase: Gradient
Start: 50% (80:20 MeOH:ACN) / 50% H₂O
(both with 10 mM NH₄OAc buffer)
Ramp to 90% organic over 7 min and hold for 2 min
before returning to initial conditions over 0.5 min.
Time: 10 min

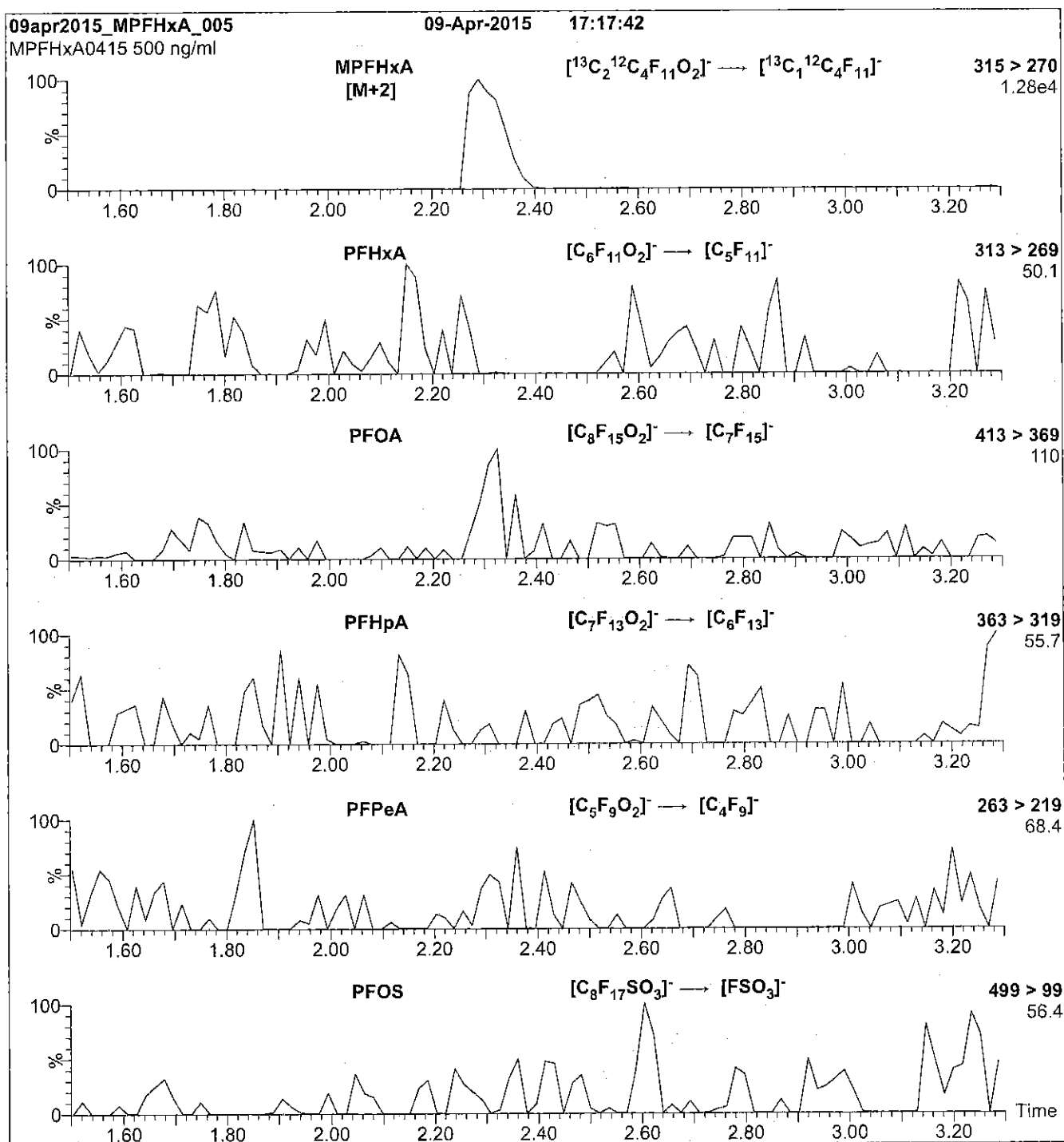
Flow: 300 μ l/min

MS Parameters

Experiment: Full Scan (225 - 850 amu)

Source: Electrospray (negative)
Capillary Voltage (kV) = 2.00
Cone Voltage (V) = 15.00
Cone Gas Flow (l/hr) = 100
Desolvation Gas Flow (l/hr) = 750

Figure 2: MPFHxA; LC/MS/MS Data (Selected MRM Transitions)



Conditions for Figure 2:

Injection: Direct loop injection
10 μ l (500 ng/ml MPFHxA)

Mobile phase: Isocratic 80% (80:20 MeOH:ACN) / 20% H₂O
(both with 10 mM NH₄OAc buffer)

Flow: 300 μ l/min

MS Parameters

Collision Gas (mbar) = 3.20e-3
Collision Energy (eV) = 10

Reagent

LCMPFHxA_00008



605233

ID: LCMPPHxA_00008

Exp: 04/09/20 Prod: CBW

13C2-Perfluorohexanoic acid

Rec. 3/29/16 JRB ✓



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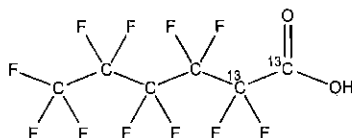
CERTIFICATE OF ANALYSIS DOCUMENTATION

PRODUCT CODE: MPFHxA
COMPOUND: Perfluoro-n-[1,2-¹³C₂]hexanoic acid

LOT NUMBER: MPFHxA0415

STRUCTURE:

CAS #: Not available



MOLECULAR FORMULA: ¹³C₂¹²C₄H₁₁O₂
CONCENTRATION: 50 ± 2.5 µg/ml

MOLECULAR WEIGHT: 316.04
SOLVENT(S): Methanol
Water (<1%)

CHEMICAL PURITY: >98%
LAST TESTED: (mm/dd/yyyy) 04/09/2015
EXPIRY DATE: (mm/dd/yyyy) 04/09/2020
RECOMMENDED STORAGE: Store ampoule in a cool, dark place

ISOTOPIC PURITY: ≥99%¹³C
(1,2-¹³C₂)

DOCUMENTATION/ DATA ATTACHED:

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Figure 2: LC/MS/MS Data (Selected MRM Transitions)

ADDITIONAL INFORMATION:

- See page 2 for further details.
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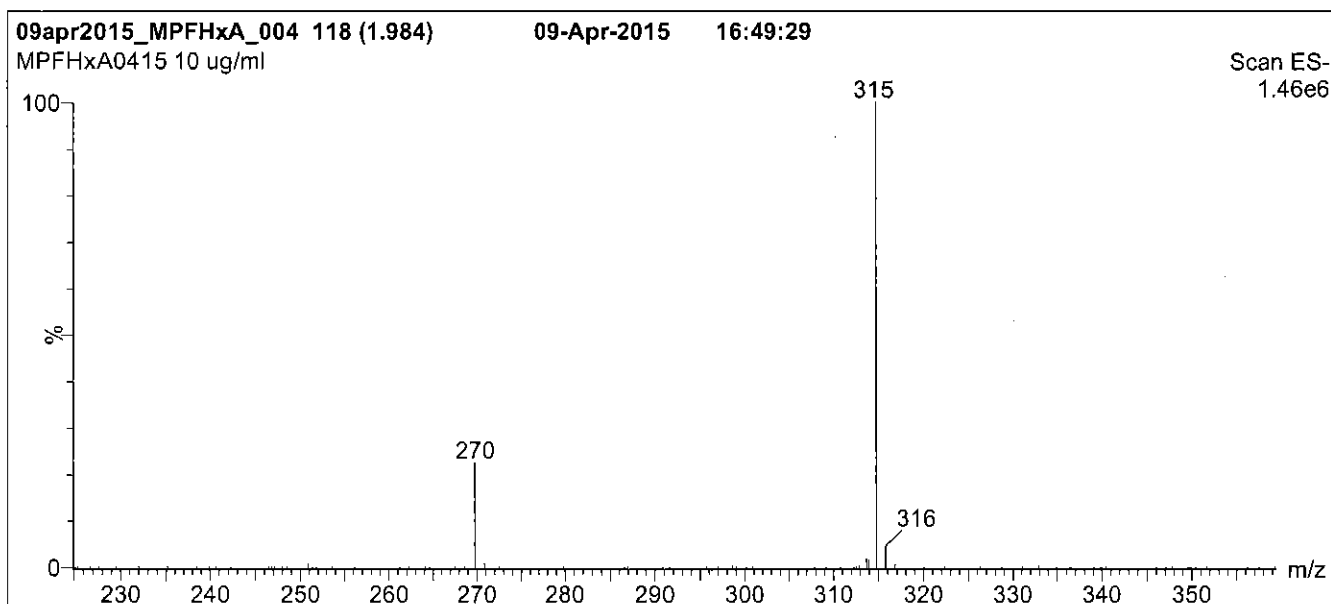
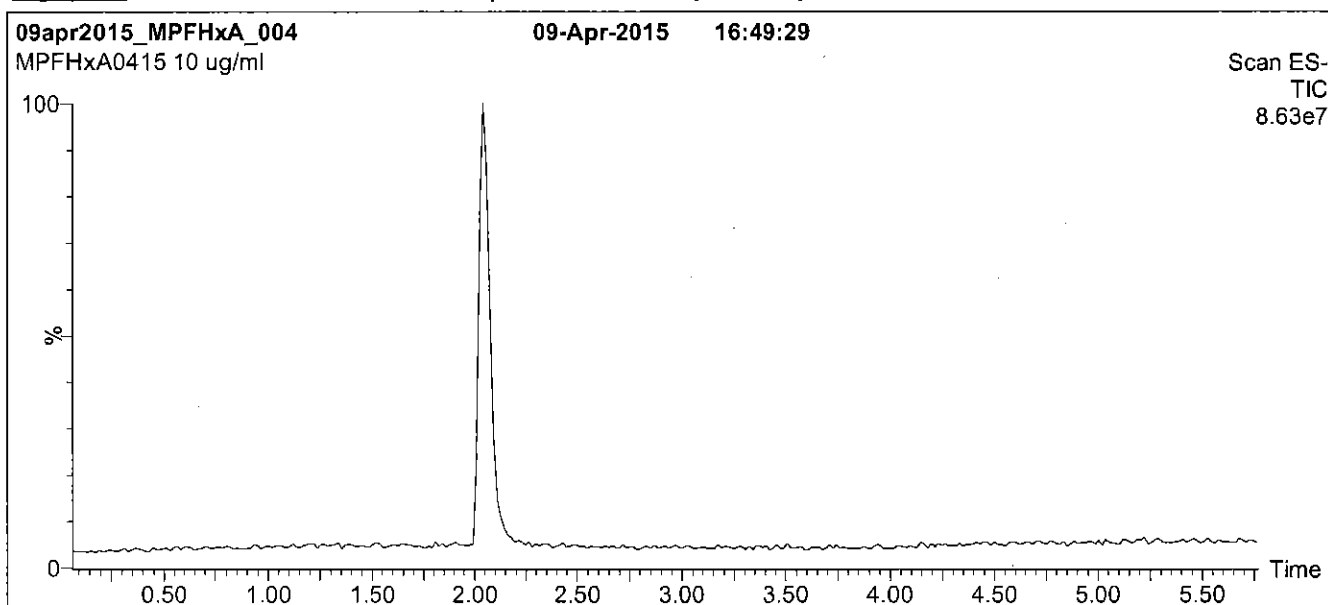
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Figure 1: MPFHxA; LC/MS Data (TIC and Mass Spectrum)



Conditions for Figure 1:

LC: Waters Acquity Ultra Performance LC
MS: Micromass Quattro *micro* API MS

Chromatographic Conditions

Column: Acquity UPLC BEH Shield RP₁₈
1.7 μ m, 2.1 x 100 mm

Mobile phase: Gradient
Start: 50% (80:20 MeOH:ACN) / 50% H₂O
(both with 10 mM NH₄OAc buffer)
Ramp to 90% organic over 7 min and hold for 2 min
before returning to initial conditions over 0.5 min.
Time: 10 min

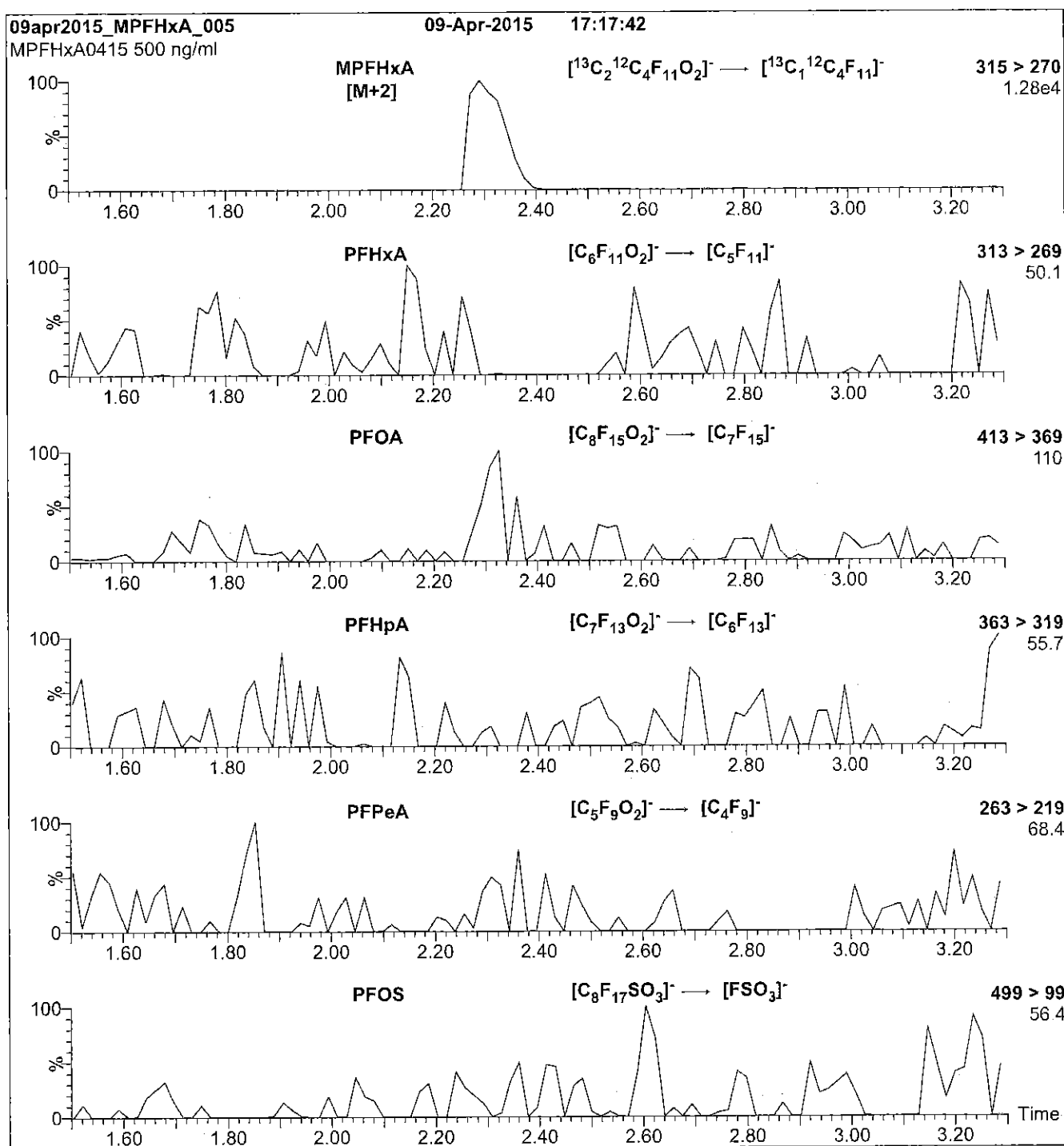
Flow: 300 μ l/min

MS Parameters

Experiment: Full Scan (225 - 850 amu)

Source: Electrospray (negative)
Capillary Voltage (kV) = 2.00
Cone Voltage (V) = 15.00
Cone Gas Flow (l/hr) = 100
Desolvation Gas Flow (l/hr) = 750

Figure 2: MPFHxA; LC/MS/MS Data (Selected MRM Transitions)



Conditions for Figure 2:

Injection: Direct loop injection
10 μl (500 ng/ml MPFHxA)

Mobile phase: Isocratic 80% (80:20 MeOH:ACN) / 20% H_2O
(both with 10 mM NH_4OAc buffer)

Flow: 300 $\mu\text{l}/\text{min}$

MS Parameters

Collision Gas (mbar) = 3.20e-3
Collision Energy (eV) = 10

Reagent

LCMPFHXS_00004



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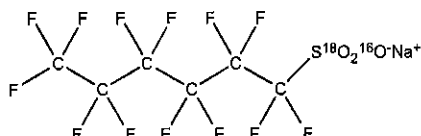
CERTIFICATE OF ANALYSIS DOCUMENTATION

PRODUCT CODE: MPFHxS
COMPOUND: Sodium perfluoro-1-hexane[¹⁸O₂]sulfonate

LOT NUMBER: MPFHxS0713

STRUCTURE:

CAS #: Not available



MOLECULAR FORMULA: C₆F₁₃S¹⁸O₂¹⁶ONa
CONCENTRATION: 50.0 ± 2.5 µg/ml (Na salt)
47.3 ± 2.4 µg/ml (MPFHxS anion)
CHEMICAL PURITY: >98%
LAST TESTED: (mm/dd/yyyy) 07/25/2013
EXPIRY DATE: (mm/dd/yyyy) 07/25/2018
RECOMMENDED STORAGE: Store ampoule in a cool, dark place

MOLECULAR WEIGHT: 426.10
SOLVENT(S): Methanol
ISOTOPIC PURITY: >94% (¹⁸O₂)

DOCUMENTATION/ DATA ATTACHED:

Figure 1: LC/MS Data (TIC and Mass Spectrum)
Figure 2: LC/MS/MS Data (Selected MRM Transitions)

ADDITIONAL INFORMATION:

- See page 2 for further details.
- The response factor for MPFHxS (C₆F₁₃S¹⁸O₂¹⁶O⁻) has been observed to be up to 10% lower than for PFHxS (C₆F₁₃S¹⁶O₃⁻) when both compounds are injected together. This difference may vary between instruments.
- Due to the isotopic purity of the starting material (¹⁸O₂ >94%), MPFHxS contains ~ 0.3% of PFHxS. This value agrees with the theoretical percent relative abundance that is expected based on the stated isotopic purity.

FOR LABORATORY USE ONLY: NOT FOR HUMAN OR DRUG USE

Certified By:

B.G. Chittim

Date: 03/30/2015
(mm/dd/yyyy)

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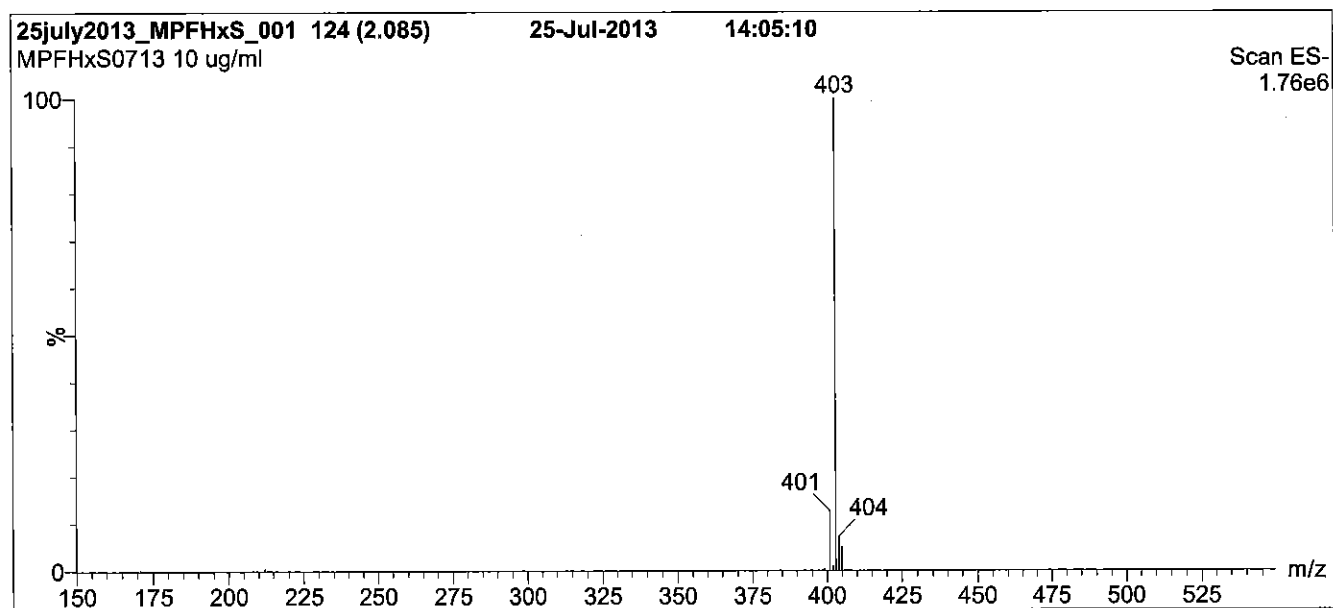
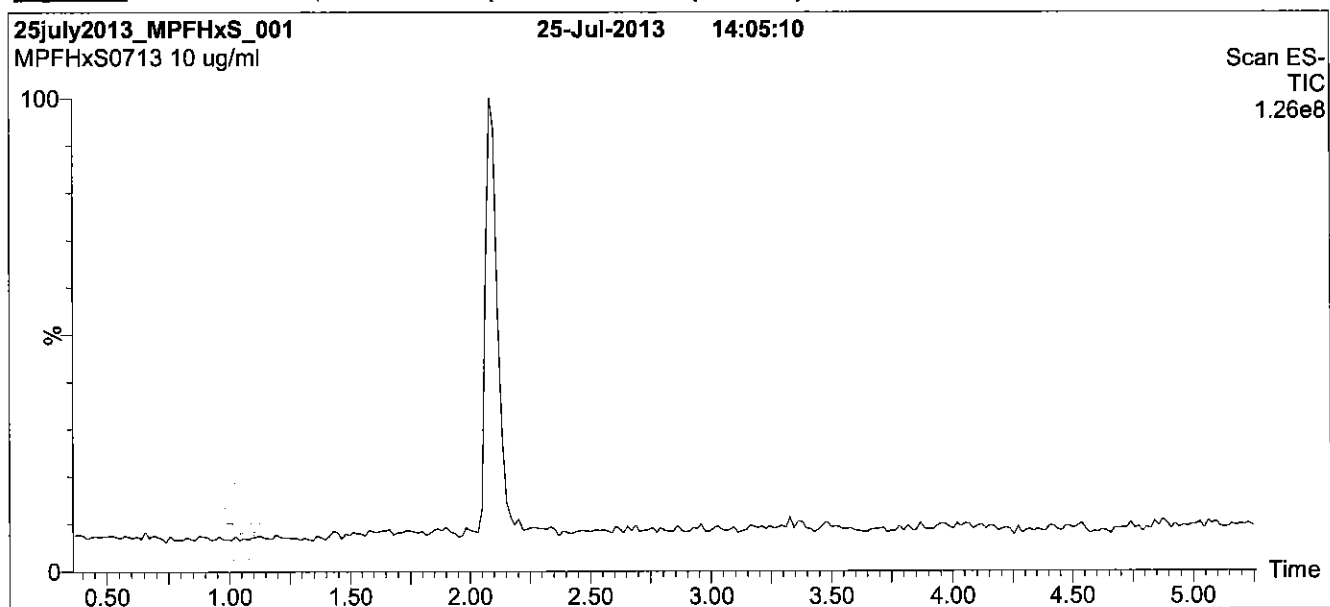
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Figure 1: MPFHxS; LC/MS Data (TIC and Mass Spectrum)



Conditions for Figure 1:

LC: Waters Acquity Ultra Performance LC
MS: Micromass Quattro *micro* API MS

Chromatographic Conditions

Column: Acquity UPLC BEH Shield RP₁₈
1.7 μ m, 2.1 x 100 mm

Mobile phase: Gradient
Start: 50% (80:20 MeOH:ACN) / 50% H₂O
(both with 10 mM NH₄OAc buffer)
Ramp to 90% organic over 7 min and hold for 1.5 min
before returning to initial conditions in 0.5 min.
Time: 10 min

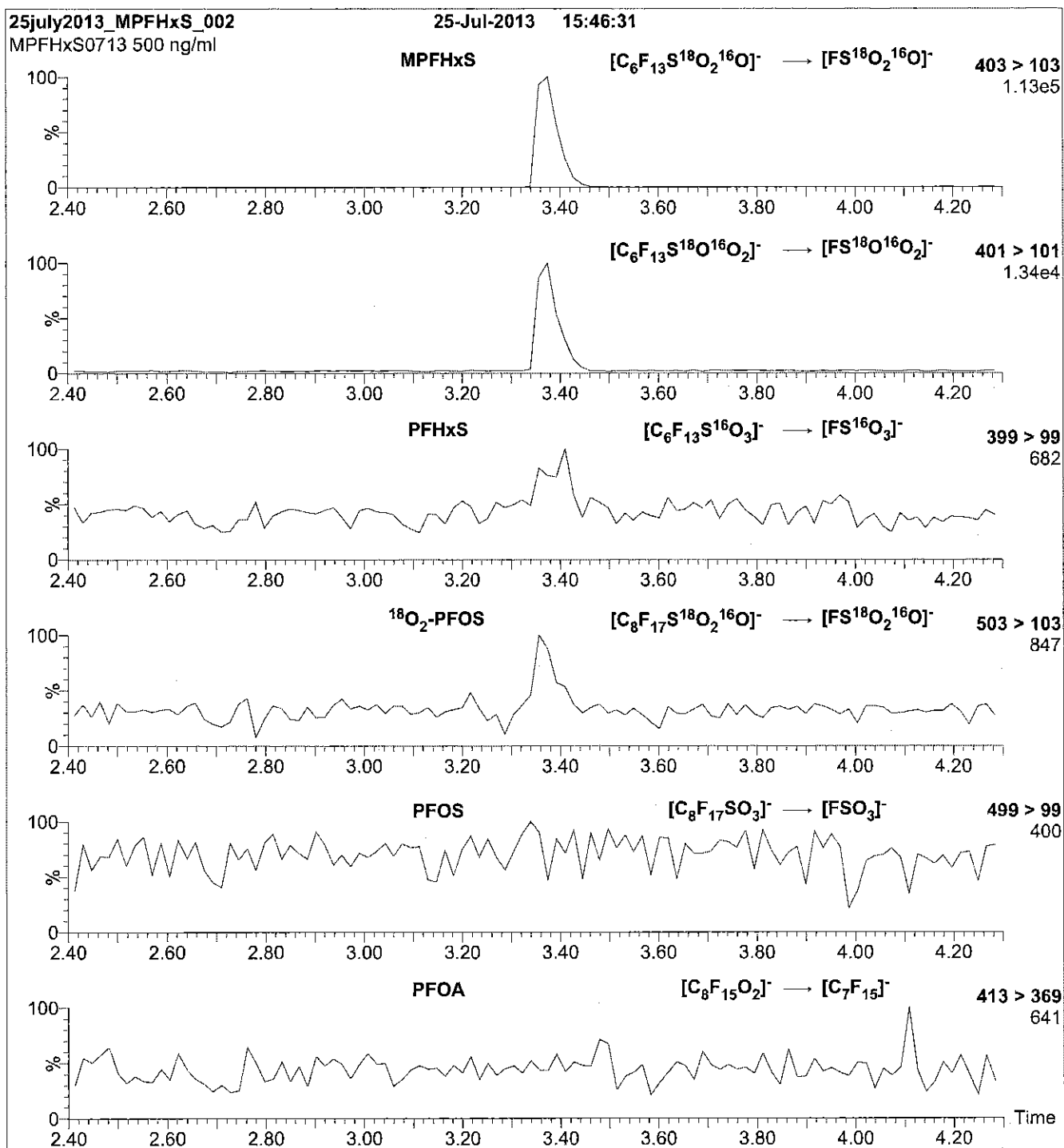
Flow: 300 μ l/min

MS Parameters

Experiment: Full Scan (150 - 850 amu)

Source: Electrospray (negative)
Capillary Voltage (kV) = 2.00
Cone Voltage (V) = 50.00
Cone Gas Flow (l/hr) = 60
Desolvation Gas Flow (l/hr) = 750

Figure 2: MPFHxS; LC/MS/MS Data (Selected MRM Transitions)



Conditions for Figure 2:

Injection: Direct loop injection
10 μ l (500 ng/ml MPFHxS)

Mobile phase: Isocratic 80% (80:20 MeOH:ACN) / 20% H₂O
(both with 10 mM NH₄OAc buffer)

Flow: 300 μ l/min

MS Parameters

Collision Gas (mbar) = 3.58e-3
Collision Energy (eV) = 30

Reagent

LCMPFHXS_00005



R: 3/3/16 CBW

591163

ID: LCMPPHxS_00005

Exp: 08/23/20 Prod: CBW

18O₂-Perfluorohexanesulfo

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CERTIFICATE OF ANALYSIS DOCUMENTATION

PRODUCT CODE:

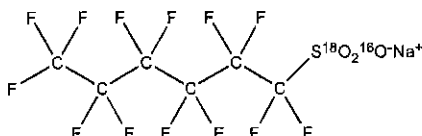
MPFHxS

LOT NUMBER:

MPFHxS1015

COMPOUND:Sodium perfluoro-1-hexane[¹⁸O₂]sulfonate**STRUCTURE:****CAS #:**

Not available

**MOLECULAR FORMULA:**C₆F₁₃S¹⁸O₂¹⁶ONa**MOLECULAR WEIGHT:**

426.10

CONCENTRATION:

50.0 ± 2.5 µg/ml (Na salt)

SOLVENT(S):

Methanol

47.3 ± 2.4 µg/ml (MPFHxS anion)

CHEMICAL PURITY:

>98%

ISOTOPIC PURITY:>94% (¹⁸O₂)**LAST TESTED:** (mm/dd/yyyy)

10/23/2015

EXPIRY DATE: (mm/dd/yyyy)

10/23/2020

RECOMMENDED STORAGE:

Store ampoule in a cool, dark place

DOCUMENTATION/ DATA ATTACHED:

Figure 1: LC/MS Data (TIC and Mass Spectrum)

Figure 2: LC/MS/MS Data (Selected MRM Transitions)

ADDITIONAL INFORMATION:

- See page 2 for further details.
- The response factor for MPFHxS (C₆F₁₃S¹⁸O₂¹⁶O⁻) has been observed to be up to 10% lower than for PFHxS (C₆F₁₃S¹⁸O₃⁻) when both compounds are injected together. This difference may vary between instruments.
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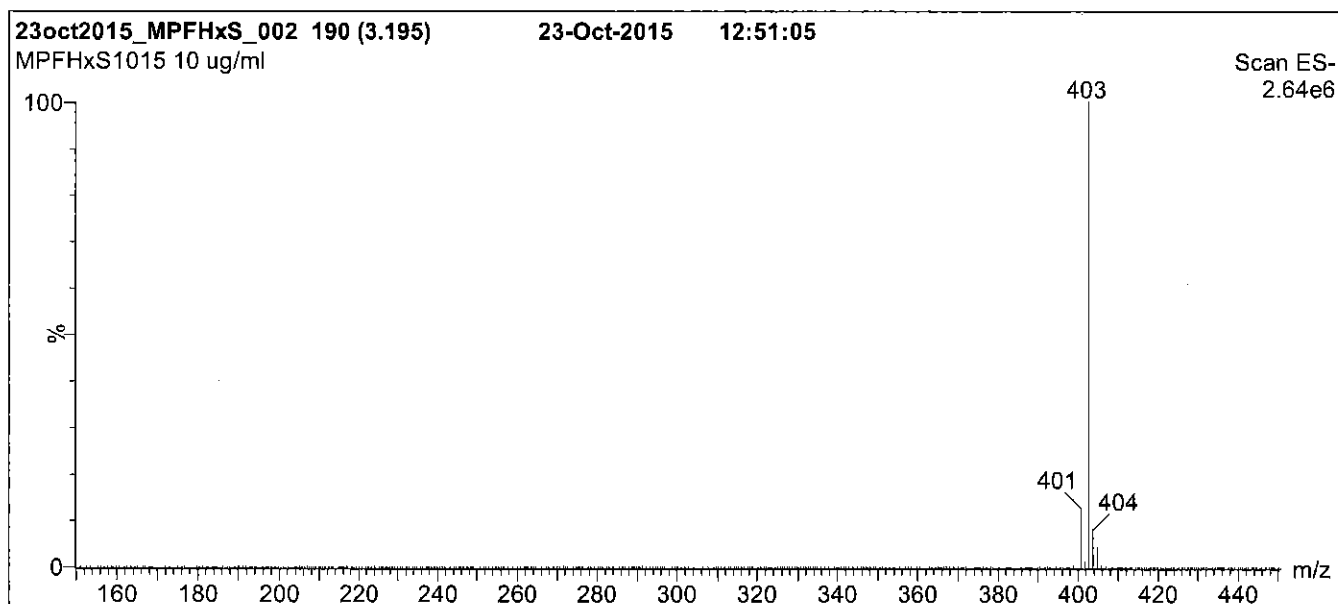
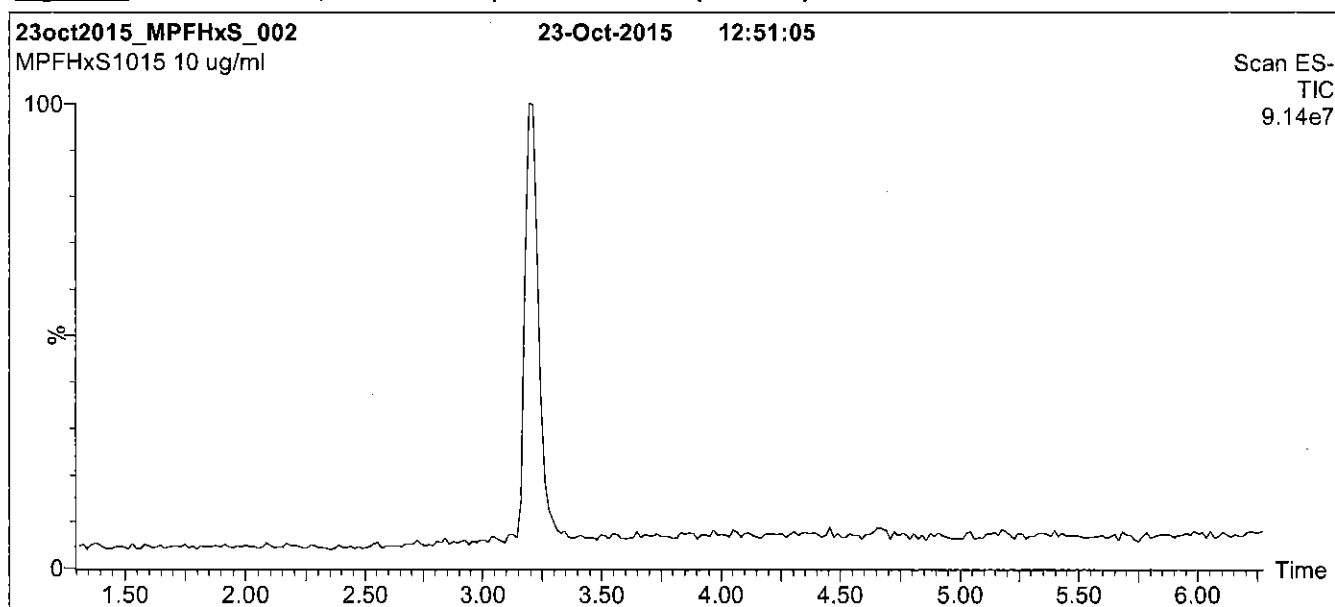
QUALITY MANAGEMENT:

This product was produced using a Quality Management System registered to the latest versions of ISO 9001 by SAI Global, ISO/IEC 17025 by the Canadian Association for Laboratory Accreditation Inc. (CALA; A 1226), and ISO GUIDE 34 by ANSI-ASQ National Accreditation Board (ANAB; AR-1523).



For additional information or assistance concerning this or any other products from Wellington Laboratories Inc., please visit our website at www.well-labs.com or contact us directly at info@well-labs.com

Figure 1: MPFHxS; LC/MS Data (TIC and Mass Spectrum)



Conditions for Figure 1:

LC: Waters Acquity Ultra Performance LC
MS: Micromass Quattro *micro* API MS

Chromatographic Conditions

Column: Acquity UPLC BEH Shield RP₁₈
1.7 μ m, 2.1 x 100 mm

Mobile phase: Gradient
Start: 50% (80:20 MeOH:ACN) / 50% H₂O
(both with 10 mM NH₄OAc buffer)
Ramp to 90% organic over 7 min and hold for 2 min
before returning to initial conditions in 0.5 min.
Time: 10 min

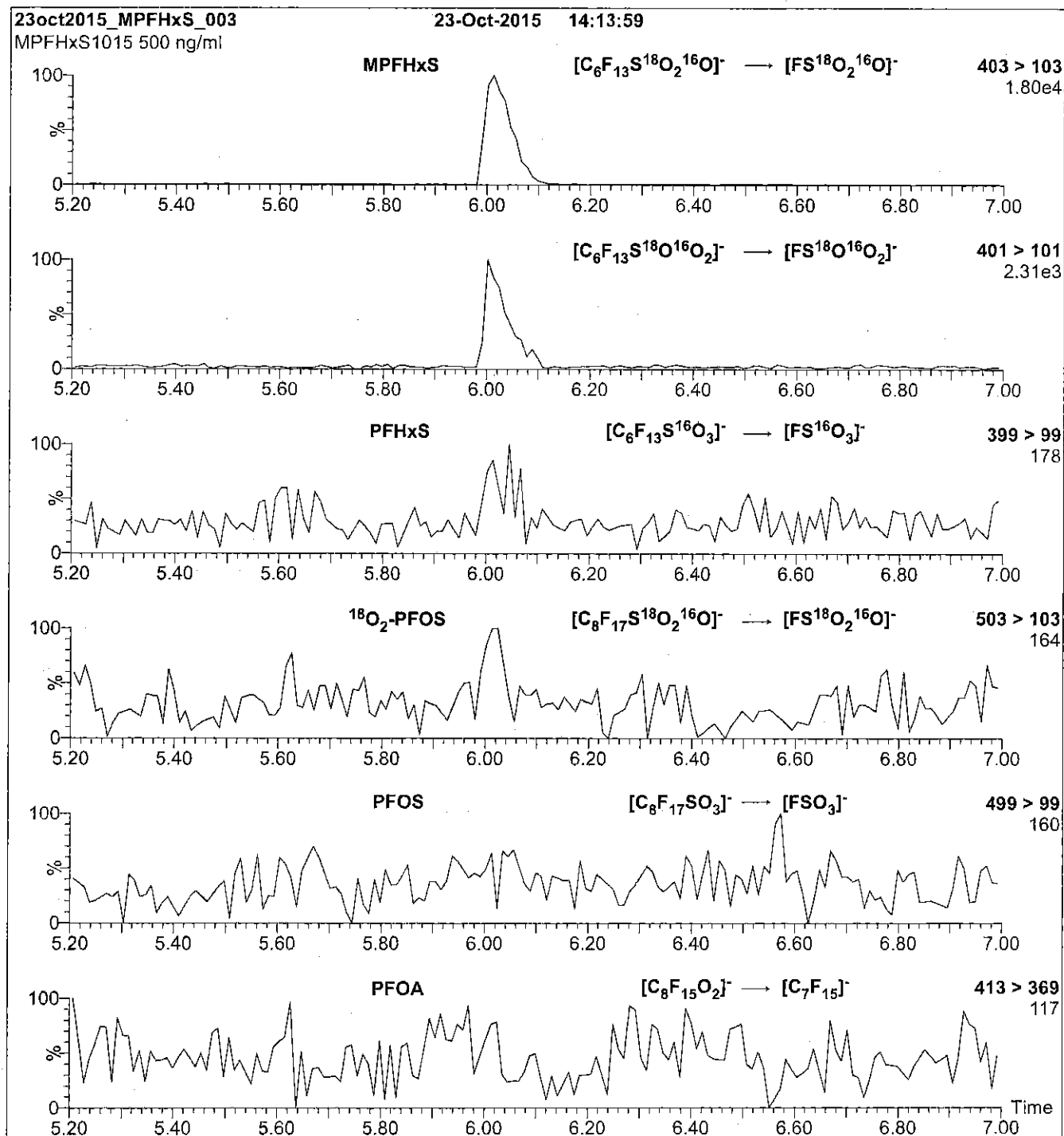
Flow: 300 μ l/min

MS Parameters

Experiment: Full Scan (150 - 850 amu)

Source: Electrospray (negative)
Capillary Voltage (kV) = 3.00
Cone Voltage (V) = 50.00
Cone Gas Flow (l/hr) = 60
Desolvation Gas Flow (l/hr) = 750

Figure 2: MPFHxS; LC/MS/MS Data (Selected MRM Transitions)



Conditions for Figure 2:

Injection: Direct loop injection
10 μ l (500 ng/ml MPFHxS)

Mobile phase: Isocratic 80% (80:20 MeOH:ACN) / 20% H_2O
(both with 10 mM NH_4OAc buffer)

Flow: 300 μ l/min

MS Parameters

Collision Gas (mbar) = 3.35e-3
Collision Energy (eV) = 30

Reagent

LCMPFHxS_00006



609705

ID: LCMFHXs_00006

Exp: 10/23/20 Prpd: CBW

18O2-Perfluorohexanesulfo

R: 417/16 CBW



WELLINGTON LABORATORIES

CERTIFICATE OF ANALYSIS DOCUMENTATION

PRODUCT CODE:

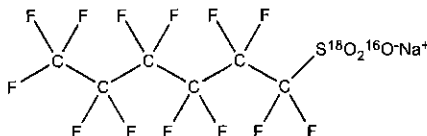
MPFHxS

LOT NUMBER:

MPFHxS1015

COMPOUND:Sodium perfluoro-1-hexane[$^{18}\text{O}_2$]sulfonate**STRUCTURE:****CAS #:**

Not available

**MOLECULAR FORMULA:** $\text{C}_6\text{F}_{13}\text{S}^{18}\text{O}_2^{16}\text{O}^-\text{Na}^+$ **MOLECULAR WEIGHT:**

426.10

CONCENTRATION: $50.0 \pm 2.5 \mu\text{g/ml}$ (Na salt)
 $47.3 \pm 2.4 \mu\text{g/ml}$ (MPFHxS anion)**SOLVENT(S):**

Methanol

CHEMICAL PURITY:

>98%

ISOTOPIC PURITY:>94% ($^{18}\text{O}_2$)**LAST TESTED:** (mm/dd/yyyy)

10/23/2015

EXPIRY DATE: (mm/dd/yyyy)

10/23/2020

RECOMMENDED STORAGE:

Store ampoule in a cool, dark place

DOCUMENTATION/ DATA ATTACHED:

Figure 1: LC/MS Data (TIC and Mass Spectrum)

Figure 2: LC/MS/MS Data (Selected MRM Transitions)

ADDITIONAL INFORMATION:

- See page 2 for further details.
- The response factor for MPFHxS ($\text{C}_6\text{F}_{13}\text{S}^{18}\text{O}_2^{16}\text{O}^-$) has been observed to be up to 10% lower than for PFHxS ($\text{C}_6\text{F}_{13}\text{S}^{18}\text{O}_3^-$) when both compounds are injected together. This difference may vary between instruments.
- Due to the isotopic purity of the starting material ($^{18}\text{O}_2$ >94%), MPFHxS contains ~ 0.3% of PFHxS. This value agrees with the theoretical percent relative abundance that is expected based on the stated isotopic purity.

FOR LABORATORY USE ONLY: NOT FOR HUMAN OR DRUG USE

Certified By:

B.G. Chittim

Date: 10/28/2015

(mm/dd/yyyy)

Wellington Laboratories Inc., 345 Southgate Dr. Guelph ON N1G 3M5 CANADA
519-822-2436 • Fax: 519-822-2849 • info@well-labs.com

INTENDED USE:

The products prepared by Wellington Laboratories Inc. are for laboratory use only. This certified reference material (CRM) was designed to be used as a standard for the identification and/or quantification of the specific chemical compound it contains.

HAZARDS:

This product should only be used by qualified personnel familiar with its potential hazards and trained in the handling of hazardous chemicals. Due care should be exercised to prevent unnecessary human contact or ingestion. All procedures should be carried out in a well-functioning fume hood and suitable gloves, eye protection, and clothing should be worn at all times. Waste should be disposed of according to national and regional regulations. Safety Data Sheets (SDSs) are available upon request.

SYNTHESIS / CHARACTERIZATION:

Where possible, all of our products are synthesized using single-product unambiguous routes. They are then characterized, and their structures and purities confirmed, using a combination of the most relevant techniques, such as NMR, GC/MS, LC/MS/MS, SFC/UV/MS/MS, x-ray crystallography, and melting point. Isotopic purities of mass-labelled compounds are also confirmed using HRGC/HRMS and/or LC/MS/MS.

HOMOGENEITY:

Prior to solution preparation, crystalline material is tested for homogeneity using a variety of techniques (as stated above) and its solubility in a given diluent is taken into consideration. Duplicate solutions of a new product are prepared from the same crystalline lot and, after the addition of an appropriate internal standard, they are compared by GC/MS, LC/MS/MS and/or SFC/UV/MS/MS. The relative response factors of the analyte of interest in each solution are required to be <5% RSD. New solution lots of existing products are compared to older lots in the same manner, which further confirms the homogeneity of the crystalline material as well as the stability and homogeneity of the solutions in the storage containers.

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The combined relative standard uncertainty, $u_c(y)$, of a value y and the uncertainty of the independent parameters x_1, x_2, \dots, x_n on which it depends is:

$$u_c(y(x_1, x_2, \dots, x_n)) = \sqrt{\sum_{i=1}^n u(y, x_i)^2}$$

where x is expressed as a relative standard uncertainty of the individual parameter.

The individual uncertainties taken into account include those associated with weights (calibration of the balance) and volumes (calibration of the volumetric glassware). An expanded maximum combined percent relative uncertainty of $\pm 5\%$ (calculated with a coverage factor of 2 and a level of confidence of 95%) is stated on the Certificate of Analysis for all of our products.

TRACEABILITY:

All reference standard solutions are traceable to specific crystalline lots. The microbalances used for solution preparation are regularly tested by an external ISO/IEC 17025 accredited calibration company. In addition, their calibration is verified prior to each weighing using NIST and/or NRC traceable external weights. All volumetric glassware used is of Class A tolerance and has been tested according to the appropriate ASTM procedures, which are ultimately traceable to NIST. For certain products, traceability to international interlaboratory studies has also been established.

EXPIRY DATE / PERIOD OF VALIDITY:

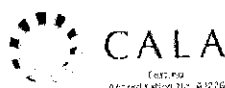
Ongoing stability studies of this product have demonstrated stability in its composition and concentration, until the specified expiry date, in the unopened ampoule. Monitoring for any degradation or change in concentration of the listed analyte(s) is performed on a routine basis.

LIMITED WARRANTY:

At the time of shipment, all products are warranted to be free of defects in material and workmanship and to conform to the stated technical and purity specifications.

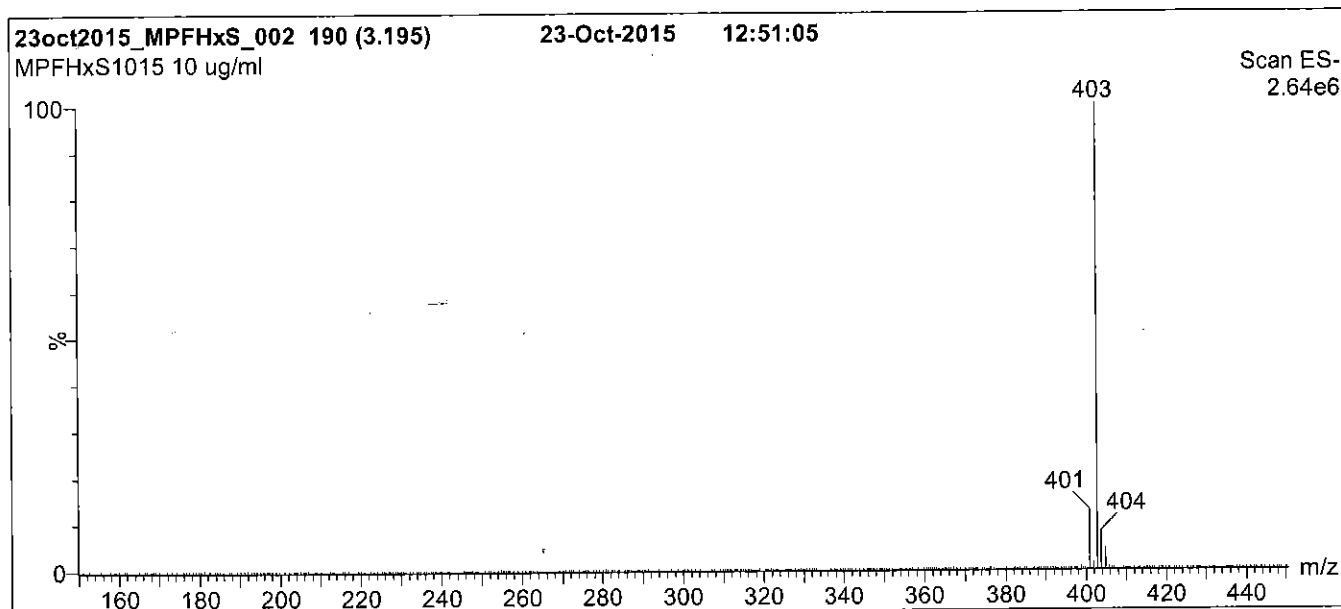
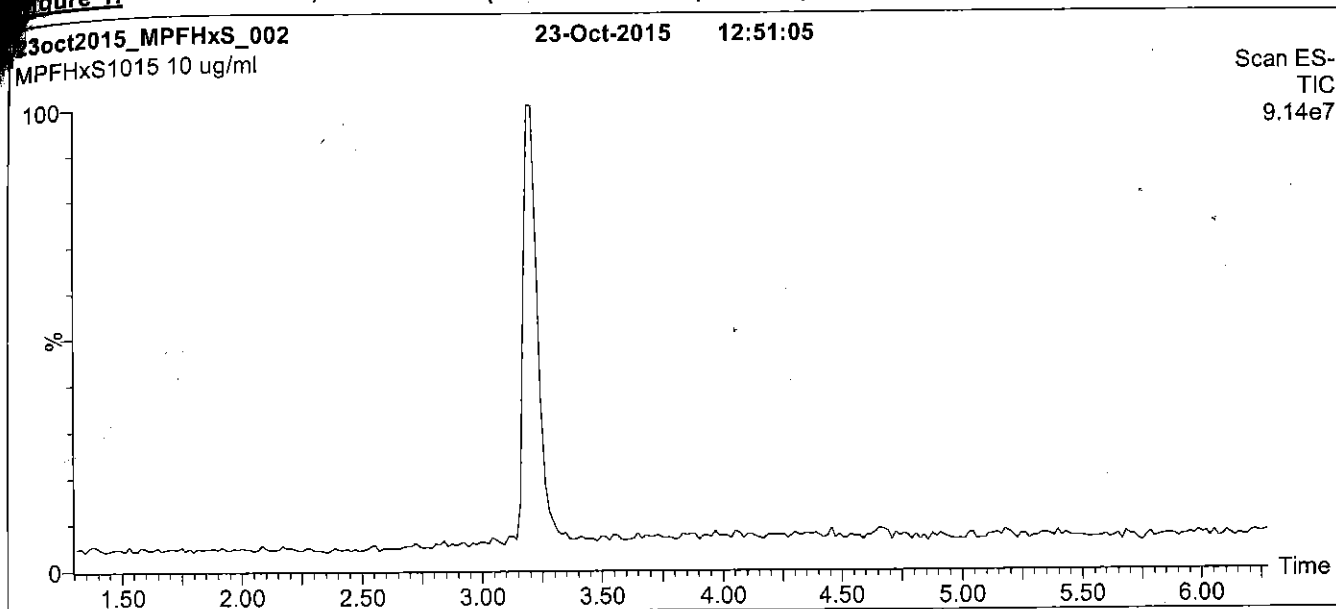
QUALITY MANAGEMENT:

This product was produced using a Quality Management System registered to the latest versions of ISO 9001 by SAI Global, ISO/IEC 17025 by the Canadian Association for Laboratory Accreditation Inc. (CALA; A 1226), and ISO GUIDE 34 by ANSI-ASQ National Accreditation Board (ANAB; AR-1523).



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Figure 1: MPFHxS; LC/MS Data (TIC and Mass Spectrum)



Conditions for Figure 1:

LC: Waters Acquity Ultra Performance LC
MS: Micromass Quattro micro API MS

Chromatographic Conditions

Column: Acquity UPLC BEH Shield RP₁₈
1.7 μ m, 2.1 x 100 mm

Mobile phase: Gradient
Start: 50% (80:20 MeOH:ACN) / 50% H₂O
(both with 10 mM NH₄OAc buffer)
Ramp to 90% organic over 7 min and hold for 2 min
before returning to initial conditions in 0.5 min.
Time: 10 min

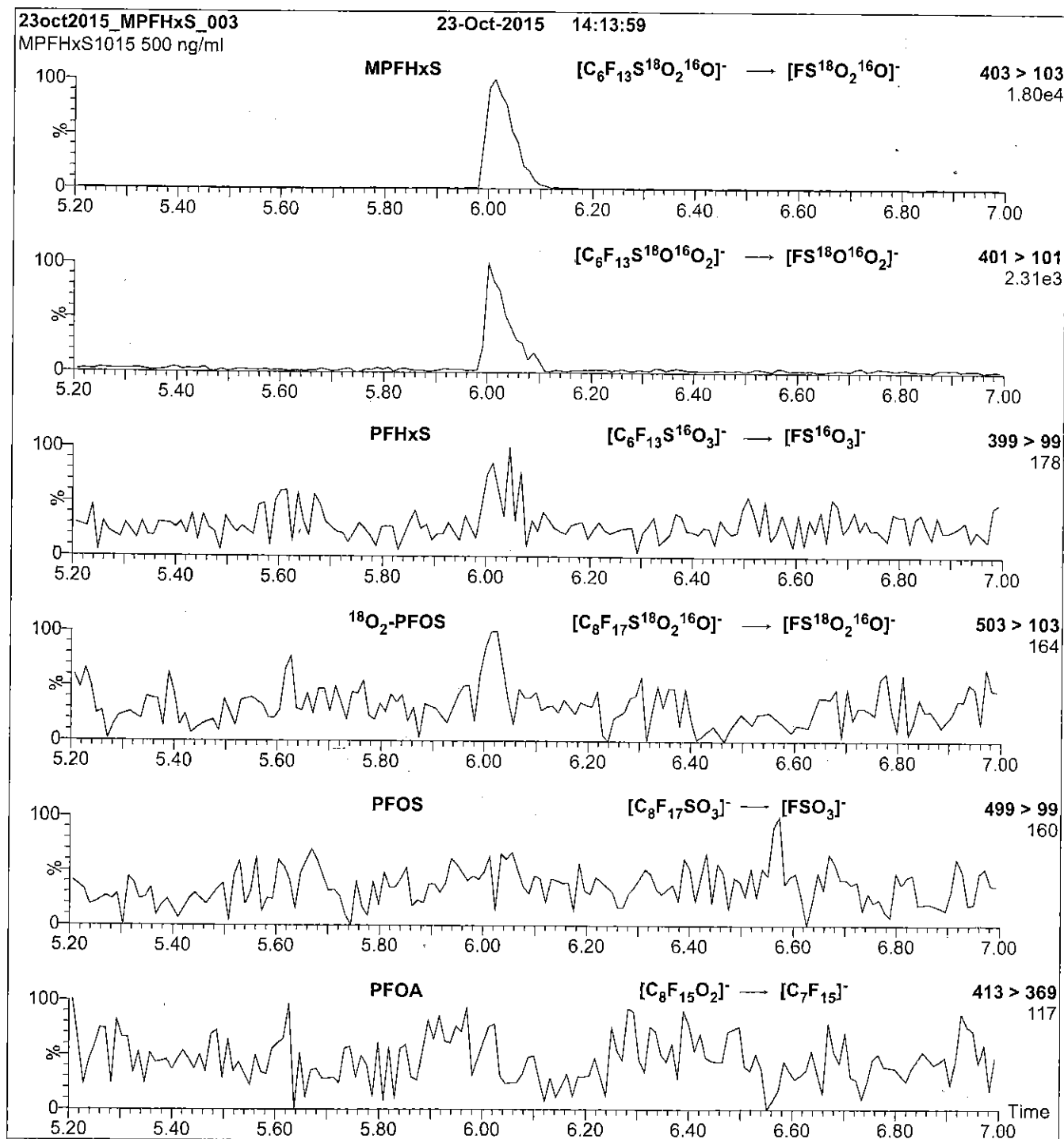
Flow: 300 μ l/min

MS Parameters

Experiment: Full Scan (150 - 850 amu)

Source: Electrospray (negative)
Capillary Voltage (kV) = 3.00
Cone Voltage (V) = 50.00
Cone Gas Flow (l/hr) = 60
Desolvation Gas Flow (l/hr) = 750

Figure 2: MPFHxS; LC/MS/MS Data (Selected MRM Transitions)



Conditions for Figure 2:

Injection: Direct loop injection
10 μ l (500 ng/ml MPFHxS)

Mobile phase: Isocratic 80% (80:20 MeOH:ACN) / 20% H_2O
(both with 10 mM NH_4OAc buffer)

Flow: 300 μ l/min

MS Parameters

Collision Gas (mbar) = 3.35e-3
Collision Energy (eV) = 30

Reagent

LCMPFNA_00003



WELLINGTON LABORATORIES

CERTIFICATE OF ANALYSIS DOCUMENTATION

PRODUCT CODE:

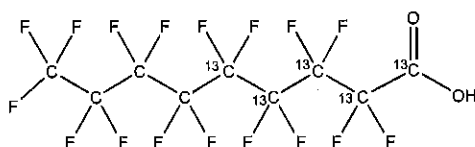
MPFNA

LOT NUMBER:

MPFNA0414

COMPOUND:Perfluoro-n-[1,2,3,4,5-¹³C₅]nonanoic acid**STRUCTURE:****CAS #:**

Not available

**MOLECULAR FORMULA:** $^{13}\text{C}_5^{12}\text{C}_4\text{HF}_{17}\text{O}_2$ **MOLECULAR WEIGHT:**

469.04

CONCENTRATION:

50 ± 2.5 µg/ml

SOLVENT(S):

Methanol

Water (<1%)

CHEMICAL PURITY:

>98%

ISOTOPIC PURITY:≥99%¹³C**LAST TESTED:** (mm/dd/yyyy)

04/13/2014

EXPIRY DATE: (mm/dd/yyyy)

04/13/2019

RECOMMENDED STORAGE:

Store ampoule in a cool, dark place

DOCUMENTATION/ DATA ATTACHED:

Figure 1: LC/MS Data (TIC and Mass Spectrum)

Figure 2: LC/MS/MS Data (Selected MRM Transitions)

ADDITIONAL INFORMATION:

- See page 2 for further details.
- Contains 4 mole eq. of NaOH to prevent conversion of the carboxylic acid to the methyl ester.

FOR LABORATORY USE ONLY: NOT FOR HUMAN OR DRUG USE

Certified By:

B.G. Chittim

Date: 04/13/2014

(mm/dd/yyyy)

Wellington Laboratories Inc., 345 Southgate Dr. Guelph ON N1G 3M5 CANADA
519-822-2436 • Fax: 519-822-2849 • info@well-labs.com

INTENDED USE:

The products prepared by Wellington Laboratories Inc. are for laboratory use only. They are designed to be used as reference standards for the identification and/or quantification of specific chemical compound(s).

HAZARDS:

This product should only be used by qualified personnel familiar with its potential hazards and trained in the handling of hazardous chemicals. Due care should be exercised to prevent unnecessary human contact or ingestion. All procedures should be carried out in a well-functioning fume hood and suitable gloves, eye protection and clothing should be worn at all times. Waste should be disposed of according to national and regional regulations. Material Safety Data Sheets (MSDSs) are available upon request.

SYNTHESIS / CHARACTERIZATION:

Where possible, all of our products are synthesized using single-product, unambiguous routes. They are then characterized, and their structures and purities confirmed, using a combination of the most relevant techniques, such as NMR, GC/MS, LC/MS/MS, x-ray crystallography and melting point. Isotopic purities of mass-labelled compounds are also confirmed using HRGC/HRMS and/or LC/MS/MS.

HOMOGENEITY:

Prior to solution preparation, crystalline material is tested for homogeneity using a variety of techniques (as stated above) and its solubility in a given diluent is taken into consideration. Duplicate solutions of a new product are prepared from the same crystalline lot and, after the addition of an appropriate internal standard, they are compared by GC/MS and/or LC/MS/MS. The relative response factors of the analyte of interest in each solution are required to be <5% RSD. New solution lots of existing products are compared to older lots in the same manner, which further confirms the homogeneity of the crystalline material as well as the stability and homogeneity of the solutions in the storage containers.

UNCERTAINTY:

The maximum combined relative standard uncertainty of our reference standard solutions is calculated using the following equation:

The combined relative standard uncertainty, $u_c(y)$, of a value y and the uncertainty of the independent parameters

x_1, x_2, \dots, x_n on which it depends is:

$$u_c(y(x_1, x_2, \dots, x_n)) = \sqrt{\sum_{i=1}^n u(y, x_i)^2}$$

where x is expressed as a relative standard uncertainty of the individual parameter.

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TRACEABILITY:

All reference standard solutions are traceable to specific crystalline lots. The microbalances used for solution preparation are regularly tested by an external, ISO/IEC 17025:2005 accredited calibration company. In addition, their calibration is verified prior to each weighing using NIST and/or NRC traceable external weights. All volumetric glassware used is of Class A tolerance and has been tested according to the appropriate ASTM procedures, which are ultimately traceable to NIST. For certain products, traceability to international interlaboratory studies has also been established.

EXPIRY DATE / PERIOD OF VALIDITY:

Ongoing stability studies of this product have demonstrated stability in its composition and concentration for the period of time specified by the expiry date in the unopened ampoule. Monitoring for any degradation or change in concentration of the listed analyte(s) is performed on a routine basis.

LIMITED WARRANTY:

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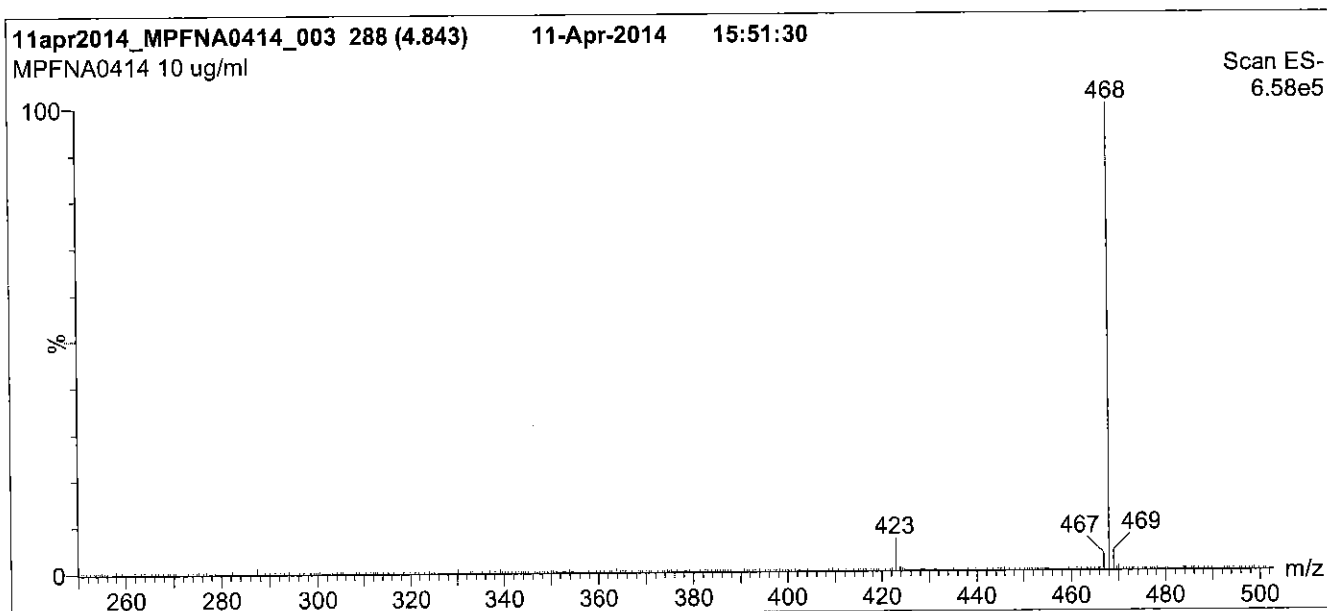
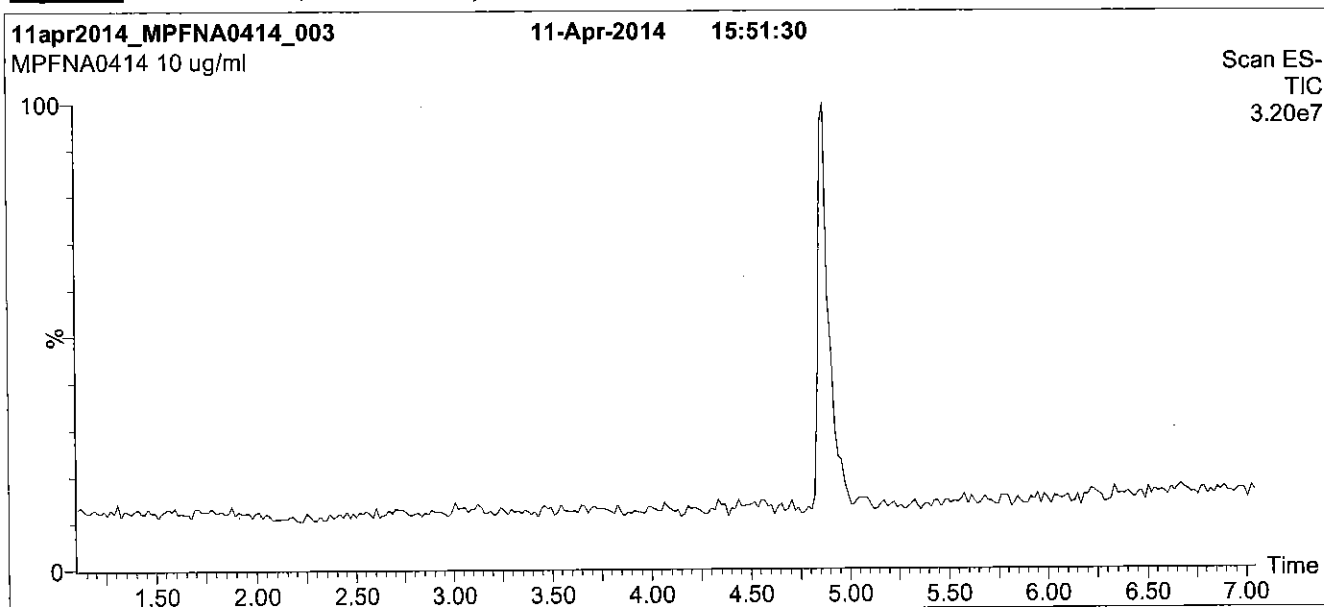
QUALITY MANAGEMENT:

This product was produced using a Quality Management System registered to ISO 9001:2008 by SAI Global, ISO/IEC 17025:2005 by the Canadian Association for Laboratory Accreditation Inc. (CALA; A 1226), and ISO GUIDE 34:2009 by ACLASS (certificate number AR-1523).



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Figure 1: MPFNA; LC/MS Data (TIC and Mass Spectrum)



Conditions for Figure 1:

LC: Waters Acquity Ultra Performance LC
MS: Micromass Quattro *micro* API MS

Chromatographic Conditions

Column: Acquity UPLC BEH Shield RP₁₈
1.7 μ m, 2.1 x 100 mm

Mobile phase: Gradient
Start: 50% (80:20 MeOH:ACN) / 50% H₂O
(both with 10 mM NH₄OAc buffer)
Ramp to 90% organic over 7 min and hold for 2 min
before returning to initial conditions in 0.5 min.
Time: 10 min

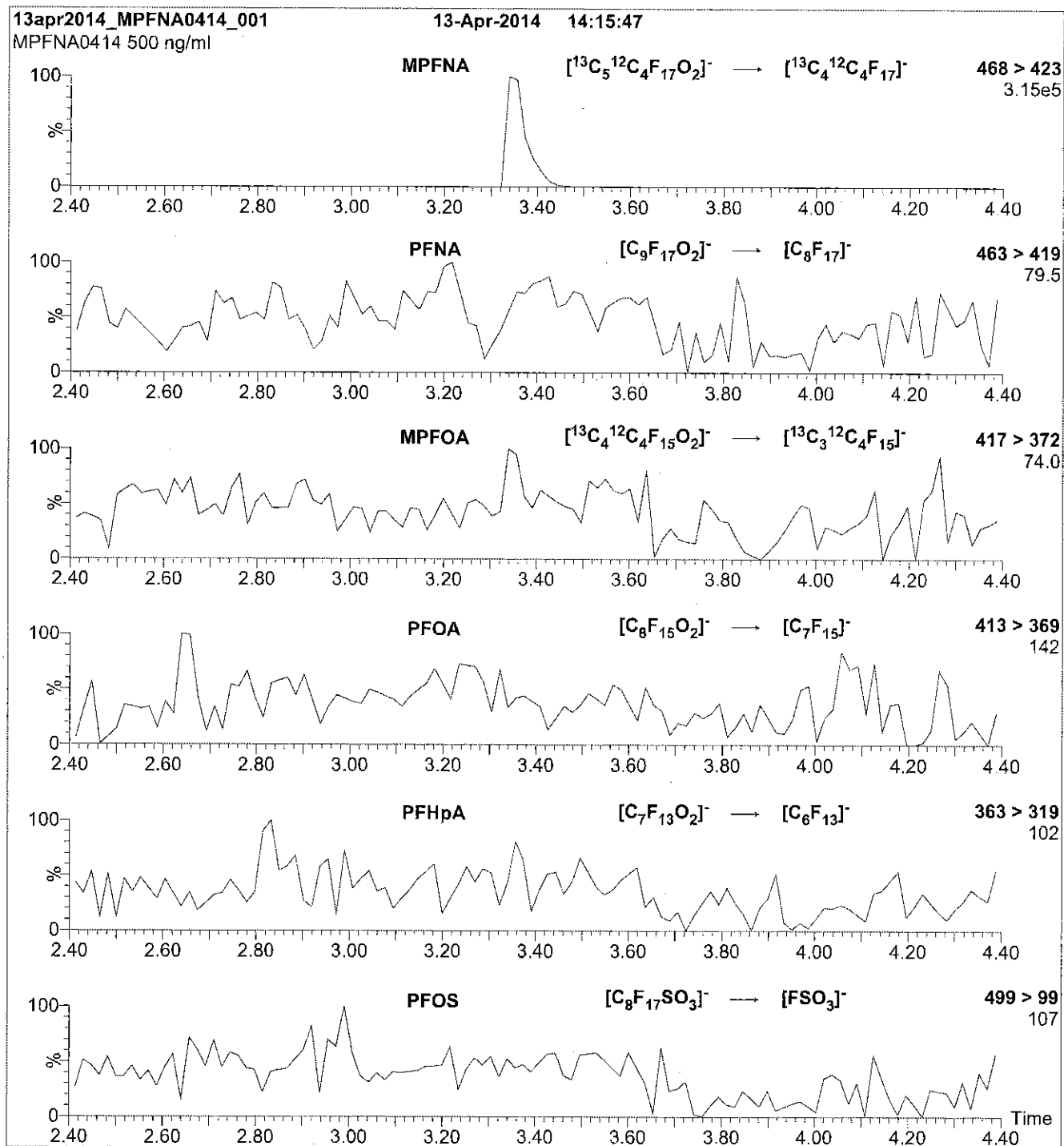
Flow: 300 μ l/min

MS Parameters

Experiment: Full Scan (250 - 850 amu)

Source: Electrospray (negative)
Capillary Voltage (kV) = 2.00
Cone Voltage (V) = 15.00
Cone Gas Flow (l/hr) = 50
Desolvation Gas Flow (l/hr) = 750

Figure 2: MPFNA; LC/MS/MS Data (Selected MRM Transitions)



Conditions for Figure 2:

Injection: Direct loop injection
10 μl (500 ng/ml MPFNA)

Mobile phase: Isocratic 80% (80:20 MeOH:ACN) / 20% H_2O
(both with 10 mM NH_4OAc buffer)

Flow: 300 $\mu\text{l}/\text{min}$

MS Parameters

Collision Gas (mbar) = 3.28e-3
Collision Energy (eV) = 11

Reagent

LCMPFNA_00004



587894

ID: LCMFNA_00004

Exp:04/13/19 Prip:CBW Opn:02/25/15

13C5-Perfluorononanoic aci

R: 2/25/16 CBW



WELLINGTON LABORATORIES

CERTIFICATE OF ANALYSIS DOCUMENTATION

PRODUCT CODE:

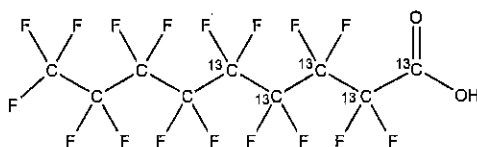
MPFNA

LOT NUMBER:

MPFNA0414

COMPOUND:Perfluoro-n-[1,2,3,4,5- $^{13}\text{C}_5$]nonanoic acid**STRUCTURE:****CAS #:**

Not available

**MOLECULAR FORMULA:** $^{13}\text{C}_5^{12}\text{C}_4\text{HF}_{17}\text{O}_2$ **CONCENTRATION:** $50 \pm 2.5 \mu\text{g/ml}$ **MOLECULAR WEIGHT:**

469.04

SOLVENT(S):

Methanol

Water (<1%)

CHEMICAL PURITY:

>98%

ISOTOPIC PURITY: $\geq 99\%^{13}\text{C}$ **LAST TESTED:** (mm/dd/yyyy)

04/13/2014

(1,2,3,4,5- $^{13}\text{C}_5$)**EXPIRY DATE:** (mm/dd/yyyy)

04/13/2019

RECOMMENDED STORAGE:

Store ampoule in a cool, dark place

DOCUMENTATION/ DATA ATTACHED:

Figure 1: LC/MS Data (TIC and Mass Spectrum)

Figure 2: LC/MS/MS Data (Selected MRM Transitions)

ADDITIONAL INFORMATION:

- See page 2 for further details.
- Contains 4 mole eq. of NaOH to prevent conversion of the carboxylic acid to the methyl ester.

FOR LABORATORY USE ONLY: NOT FOR HUMAN OR DRUG USE

Certified By:

B.G. Chittim

Date: 04/01/2015

(mm/dd/yyyy)

Wellington Laboratories Inc., 345 Southgate Dr. Guelph ON N1G 3M5 CANADA
519-822-2436 • Fax: 519-822-2849 • info@well-labs.com

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EXPIRY DATE / PERIOD OF VALIDITY:

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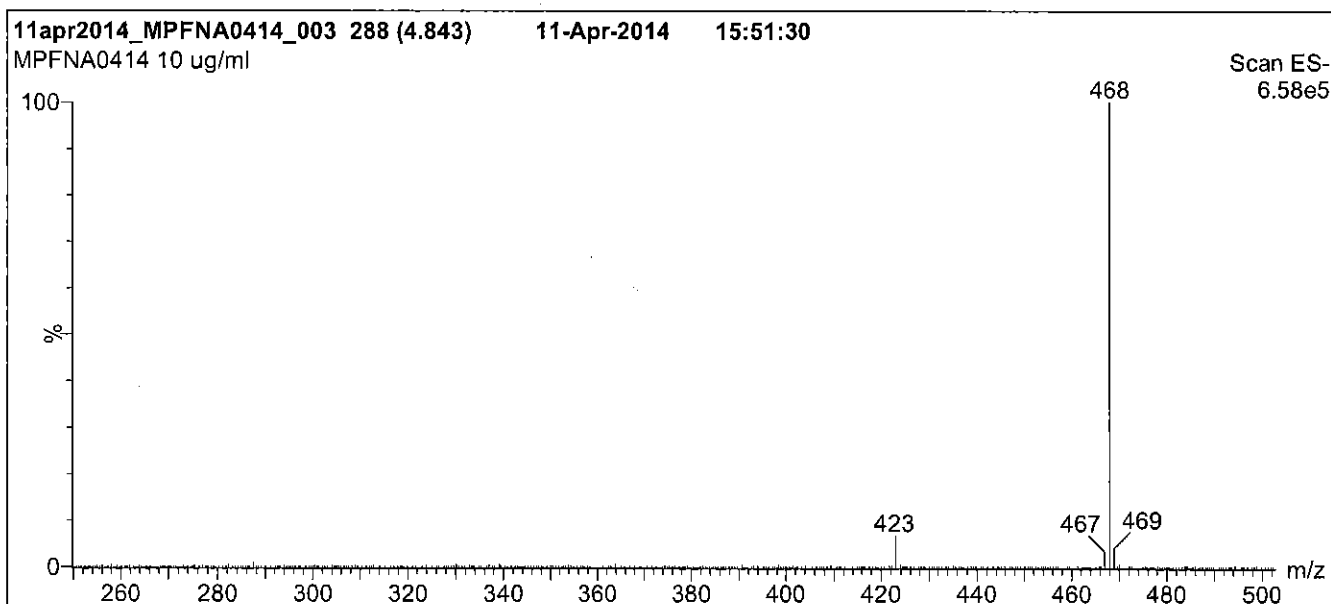
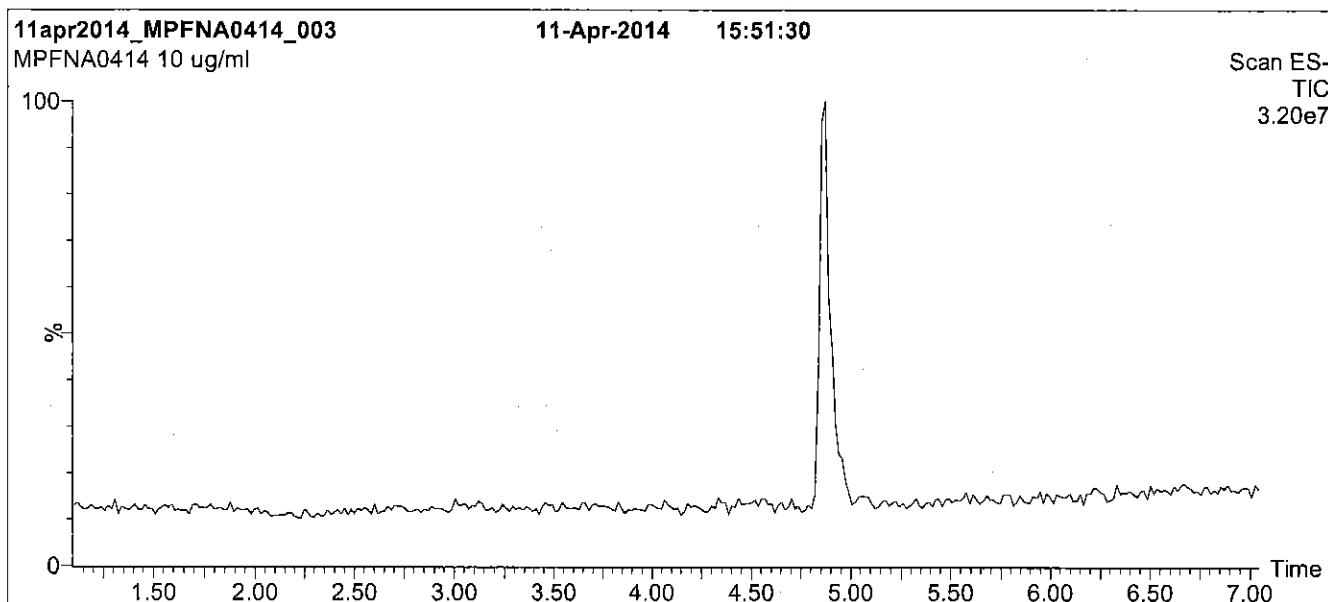
QUALITY MANAGEMENT:

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Figure 1: MPFNA; LC/MS Data (TIC and Mass Spectrum)



Conditions for Figure 1:

LC: Waters Acquity Ultra Performance LC
MS: Micromass Quattro micro API MS

Chromatographic Conditions

Column: Acquity UPLC BEH Shield RP₁₈
1.7 μ m, 2.1 x 100 mm

Mobile phase: Gradient
Start: 50% (80:20 MeOH:ACN) / 50% H₂O
(both with 10 mM NH₄OAc buffer)
Ramp to 90% organic over 7 min and hold for 2 min
before returning to initial conditions in 0.5 min.
Time: 10 min

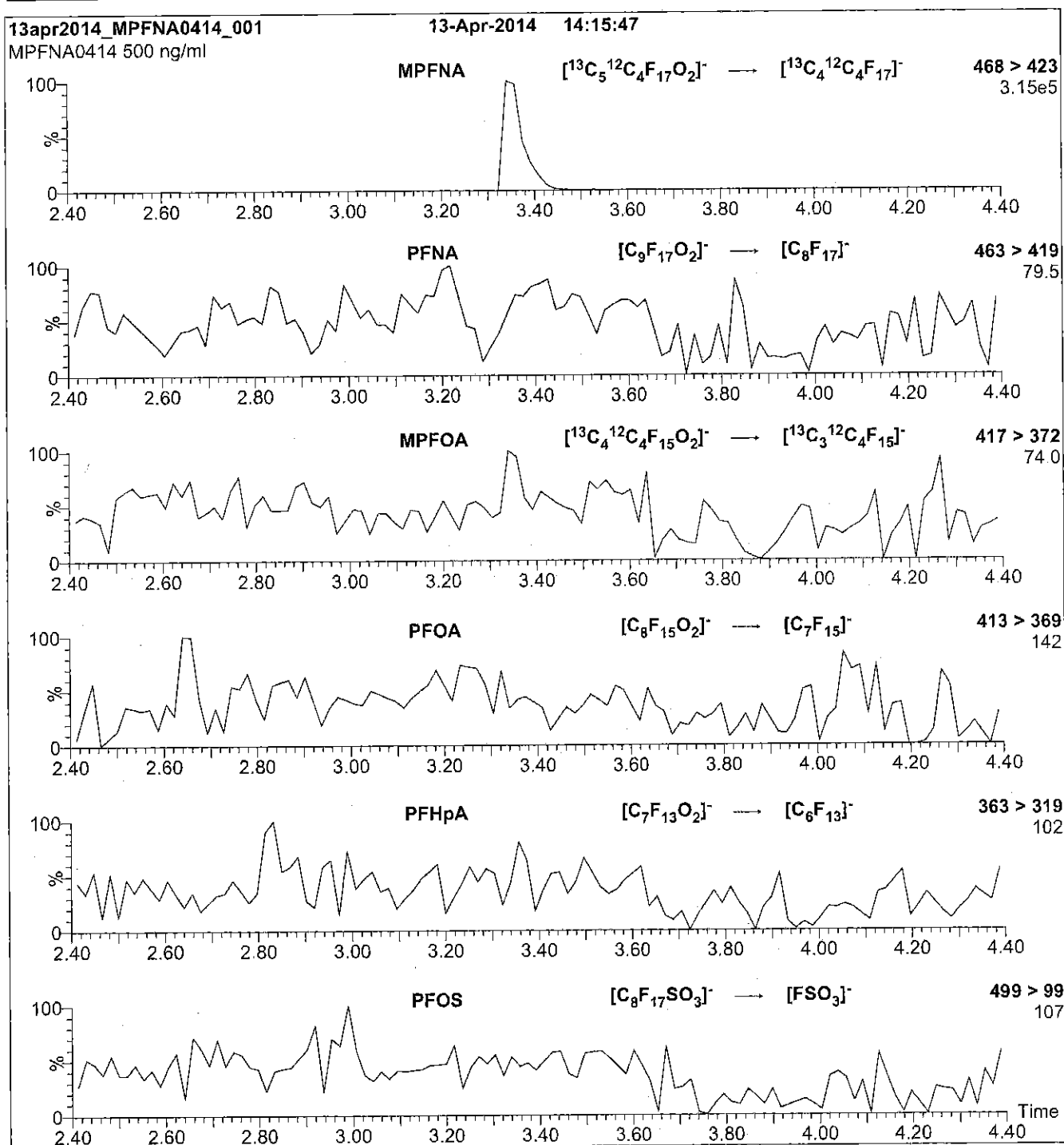
Flow: 300 μ l/min

MS Parameters

Experiment: Full Scan (250 - 850 amu)

Source: Electrospray (negative)
Capillary Voltage (kV) = 2.00
Cone Voltage (V) = 15.00
Cone Gas Flow (l/hr) = 50
Desolvation Gas Flow (l/hr) = 750

Figure 2: MPFNA; LC/MS/MS Data (Selected MRM Transitions)



Conditions for Figure 2:

Injection: Direct loop injection
10 μl (500 ng/ml MPFNA)

Mobile phase: Isocratic 80% (80:20 MeOH:ACN) / 20% H_2O
(both with 10 mM NH_4OAc buffer)

Flow: 300 $\mu\text{l}/\text{min}$

MS Parameters

Collision Gas (mbar) = 3.28e-3
Collision Energy (eV) = 11

Reagent

LCMPFNA_00005



605245

ID: LCMPFNA_00005

Exp: 04/13/19 Prpd: CBW

13C5-Perfluorononanoic aci

Rec. 3/29/16 JES V



WELLINGTON LABORATORIES

CERTIFICATE OF ANALYSIS DOCUMENTATION

PRODUCT CODE:

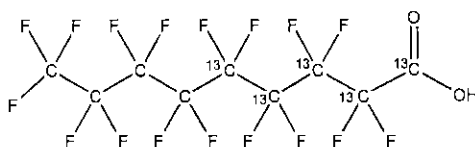
MPFNA

LOT NUMBER:

MPFNA0414

COMPOUND:Perfluoro-n-[1,2,3,4,5-¹³C₅]nonanoic acid**STRUCTURE:****CAS #:**

Not available

**MOLECULAR FORMULA:**¹³C₅¹²C₄HF₁₇O₂**CONCENTRATION:**

50 ± 2.5 µg/ml

MOLECULAR WEIGHT:

469.04

SOLVENT(S):

Methanol

Water (<1%)

CHEMICAL PURITY:

>98%

ISOTOPIC PURITY:≥99%¹³C(1,2,3,4,5-¹³C₅)**LAST TESTED:** (mm/dd/yyyy)

04/13/2014

EXPIRY DATE: (mm/dd/yyyy)

04/13/2019

RECOMMENDED STORAGE:

Store ampoule in a cool, dark place

DOCUMENTATION/ DATA ATTACHED:

Figure 1: LC/MS Data (TIC and Mass Spectrum)

Figure 2: LC/MS/MS Data (Selected MRM Transitions)

ADDITIONAL INFORMATION:

- See page 2 for further details.
- Contains 4 mole eq. of NaOH to prevent conversion of the carboxylic acid to the methyl ester.

FOR LABORATORY USE ONLY: NOT FOR HUMAN OR DRUG USE

Certified By:

B.G. Chittim

Date: 04/01/2015

(mm/dd/yyyy)

Wellington Laboratories Inc., 345 Southgate Dr. Guelph ON N1G 3M5 CANADA
519-822-2436 • Fax: 519-822-2849 • info@well-labs.com

INTENDED USE:

The products prepared by Wellington Laboratories Inc. are for laboratory use only. This certified reference material (CRM) was designed to be used as a standard for the identification and/or quantification of the specific chemical compound it contains.

HAZARDS:

This product should only be used by qualified personnel familiar with its potential hazards and trained in the handling of hazardous chemicals. Due care should be exercised to prevent unnecessary human contact or ingestion. All procedures should be carried out in a well-functioning fume hood and suitable gloves, eye protection, and clothing should be worn at all times. Waste should be disposed of according to national and regional regulations. Safety Data Sheets (SDSs) are available upon request.

SYNTHESIS / CHARACTERIZATION:

Where possible, all of our products are synthesized using single-product unambiguous routes. They are then characterized, and their structures and purities confirmed, using a combination of the most relevant techniques, such as NMR, GC/MS, LC/MS/MS, SFC/UV/MS/MS, x-ray crystallography, and melting point. Isotopic purities of mass-labelled compounds are also confirmed using HRGC/HRMS and/or LC/MS/MS.

HOMOGENEITY:

Prior to solution preparation, crystalline material is tested for homogeneity using a variety of techniques (as stated above) and its solubility in a given diluent is taken into consideration. Duplicate solutions of a new product are prepared from the same crystalline lot and, after the addition of an appropriate internal standard, they are compared by GC/MS, LC/MS/MS and/or SFC/UV/MS/MS. The relative response factors of the analyte of interest in each solution are required to be <5% RSD. New solution lots of existing products are compared to older lots in the same manner, which further confirms the homogeneity of the crystalline material as well as the stability and homogeneity of the solutions in the storage containers.

UNCERTAINTY:

The maximum combined relative standard uncertainty of our reference standard solutions is calculated using the following equation:

The combined relative standard uncertainty, $u_c(y)$, of a value y and the uncertainty of the independent parameters

x_1, x_2, \dots, x_n on which it depends is:

$$u_c(y(x_1, x_2, \dots, x_n)) = \sqrt{\sum_{i=1}^n u(y, x_i)^2}$$

where x is expressed as a relative standard uncertainty of the individual parameter.

The individual uncertainties taken into account include those associated with weights (calibration of the balance) and volumes (calibration of the volumetric glassware). An expanded maximum combined percent relative uncertainty of $\pm 5\%$ (calculated with a coverage factor of 2 and a level of confidence of 95%) is stated on the Certificate of Analysis for all of our products.

TRACEABILITY:

All reference standard solutions are traceable to specific crystalline lots. The microbalances used for solution preparation are regularly tested by an external ISO/IEC 17025 accredited calibration company. In addition, their calibration is verified prior to each weighing using NIST and/or NRC traceable external weights. All volumetric glassware used is of Class A tolerance and has been tested according to the appropriate ASTM procedures, which are ultimately traceable to NIST. For certain products, traceability to international interlaboratory studies has also been established.

EXPIRY DATE / PERIOD OF VALIDITY:

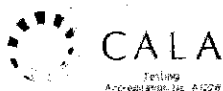
Ongoing stability studies of this product have demonstrated stability in its composition and concentration, until the specified expiry date, in the unopened ampoule. Monitoring for any degradation or change in concentration of the listed analyte(s) is performed on a routine basis.

LIMITED WARRANTY:

At the time of shipment, all products are warranted to be free of defects in material and workmanship and to conform to the stated technical and purity specifications.

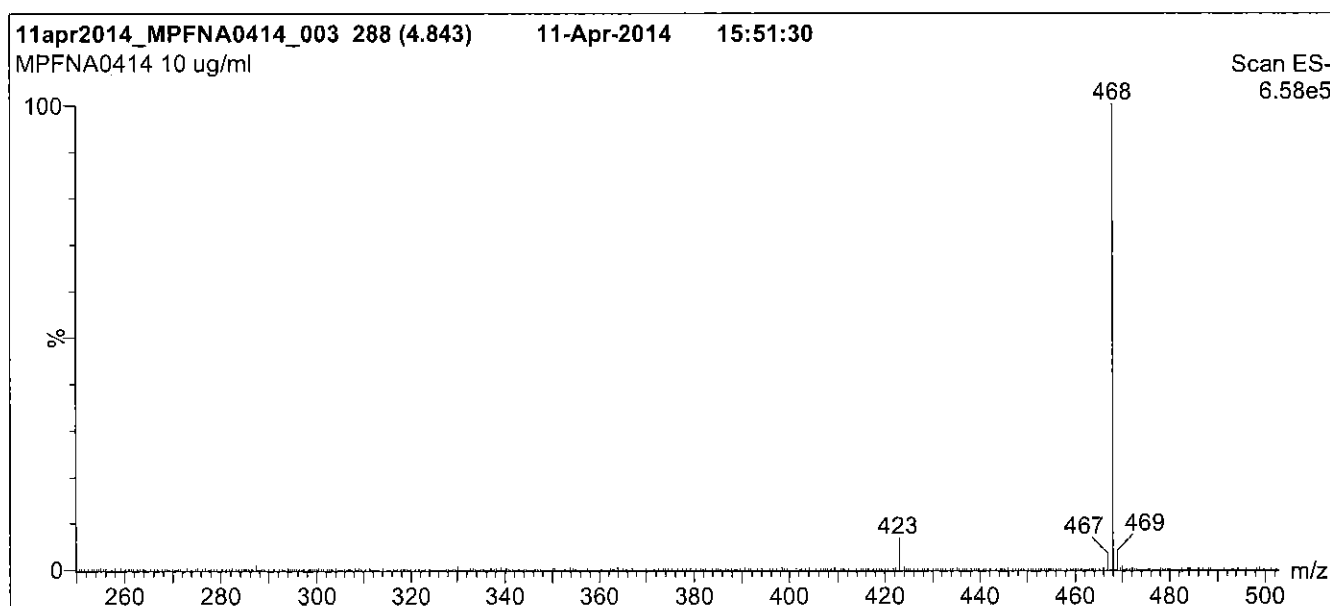
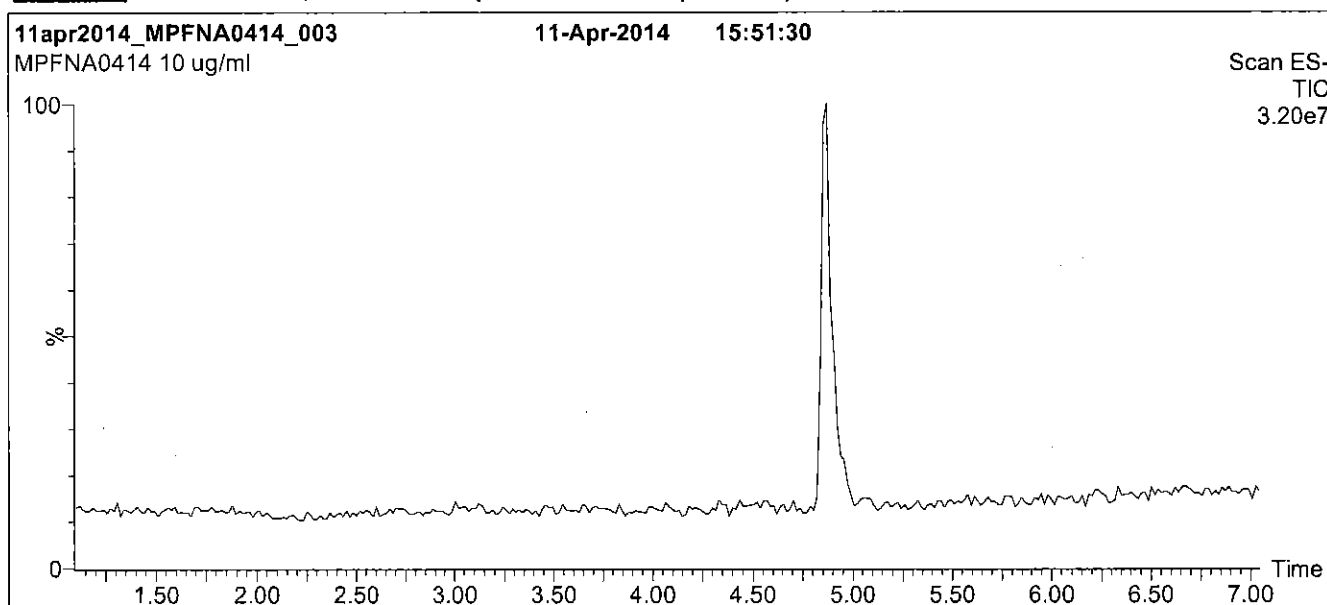
QUALITY MANAGEMENT:

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Figure 1: MPFNA; LC/MS Data (TIC and Mass Spectrum)



Conditions for Figure 1:

LC: Waters Acquity Ultra Performance LC
MS: Micromass Quattro micro API MS

Chromatographic Conditions

Column: Acquity UPLC BEH Shield RP₁₈
1.7 μ m, 2.1 x 100 mm

Mobile phase: Gradient
Start: 50% (80:20 MeOH:ACN) / 50% H₂O
(both with 10 mM NH₄OAc buffer)
Ramp to 90% organic over 7 min and hold for 2 min
before returning to initial conditions in 0.5 min.
Time: 10 min

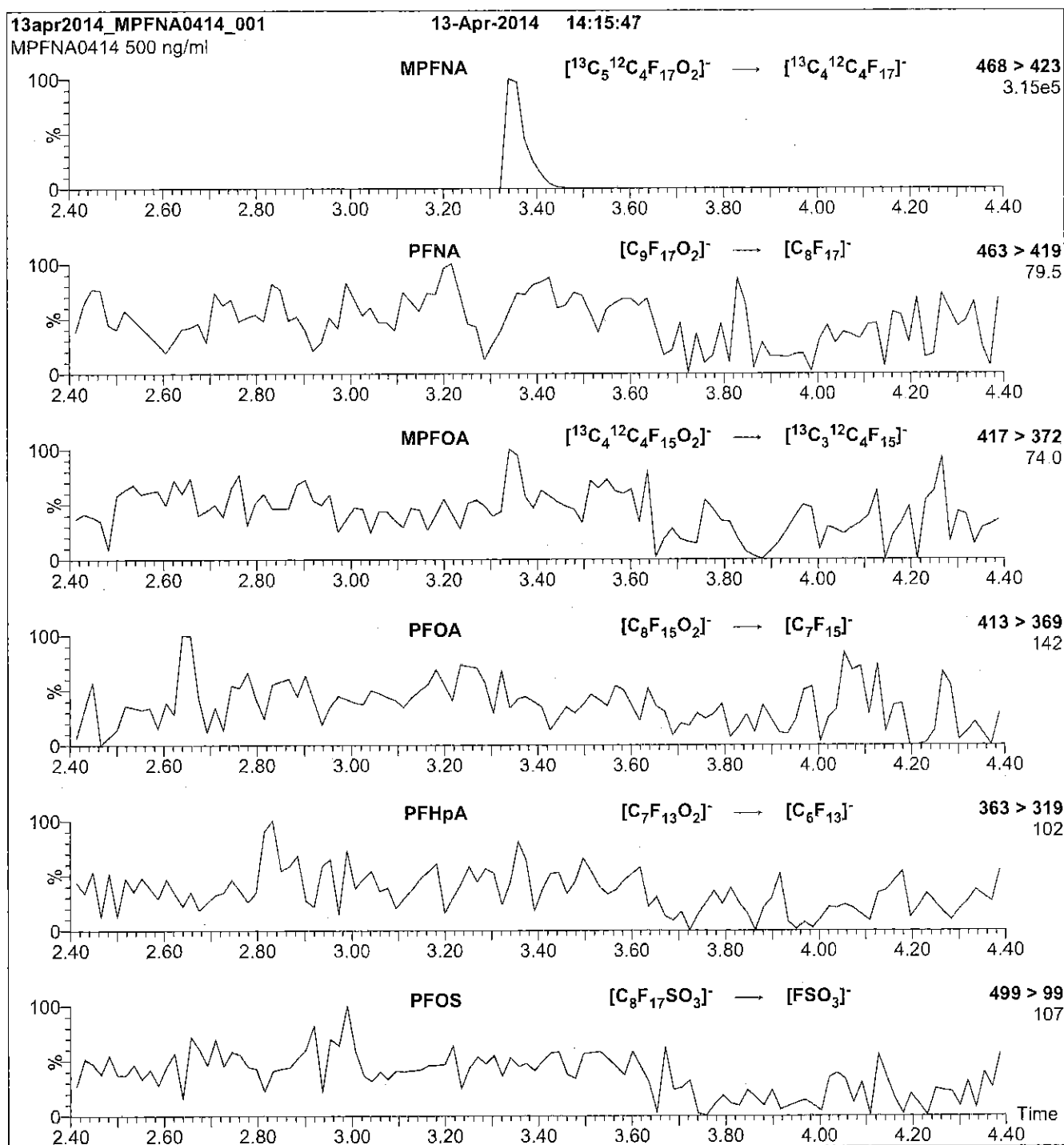
Flow: 300 μ l/min

MS Parameters

Experiment: Full Scan (250 - 850 amu)

Source: Electrospray (negative)
Capillary Voltage (kV) = 2.00
Cone Voltage (V) = 15.00
Cone Gas Flow (l/hr) = 50
Desolvation Gas Flow (l/hr) = 750

Figure 2: MPFNA; LC/MS/MS Data (Selected MRM Transitions)



Conditions for Figure 2:

Injection: Direct loop injection
10 μl (500 ng/ml MPFNA)

Mobile phase: Isocratic 80% (80:20 MeOH:ACN) / 20% H_2O
(both with 10 mM NH_4OAc buffer)

Flow: 300 $\mu\text{l}/\text{min}$

MS Parameters

Collision Gas (mbar) = 3.28e-3
Collision Energy (eV) = 11

Reagent

LCMPFOA_00007

r: 9/5/15 87



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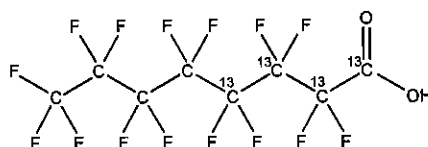
CERTIFICATE OF ANALYSIS DOCUMENTATION

PRODUCT CODE: MPFOA
COMPOUND: Perfluoro-n-[1,2,3,4-¹³C₄]octanoic acid

LOT NUMBER: MPFOA0415

STRUCTURE:

CAS #: Not available



MOLECULAR FORMULA: ¹³C₄¹²C₄HF₁₆O₂
CONCENTRATION: 50 ± 2.5 µg/ml

MOLECULAR WEIGHT: 418.04
SOLVENT(S): Methanol
Water (<1%)
ISOTOPIC PURITY: ≥99% ¹³C
(1,2,3,4-¹³C₄)

CHEMICAL PURITY: >98%
LAST TESTED: (mm/dd/yyyy) 04/10/2015
EXPIRY DATE: (mm/dd/yyyy) 04/10/2020
RECOMMENDED STORAGE: Store ampoule in a cool, dark place

DOCUMENTATION/ DATA ATTACHED:

Figure 1: LC/MS Data (TIC and Mass Spectrum)
Figure 2: LC/MS/MS Data (Selected MRM Transitions)

ADDITIONAL INFORMATION:

- See page 2 for further details.
- Contains 4 mole eq. of NaOH to prevent conversion of the carboxylic acid to the methyl ester.
- Contains ~ 0.1% of native perfluoro-n-octanoic acid (PFOA).

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Certified By:

B.G. Chittim

Date: 04/10/2015
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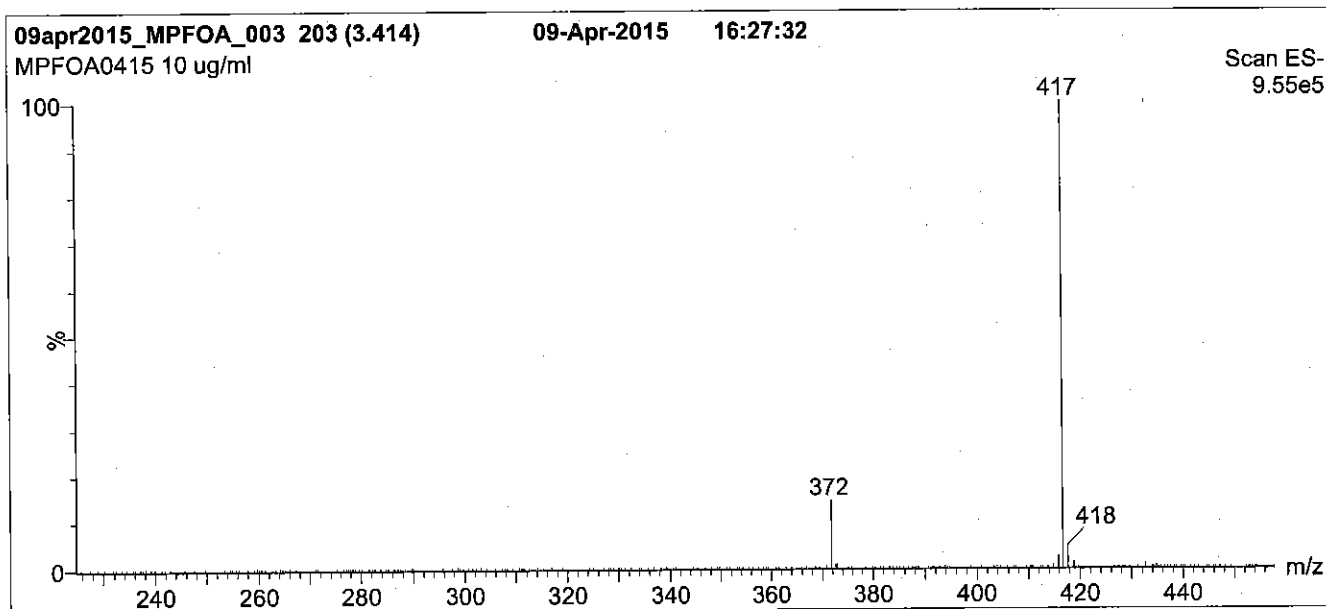
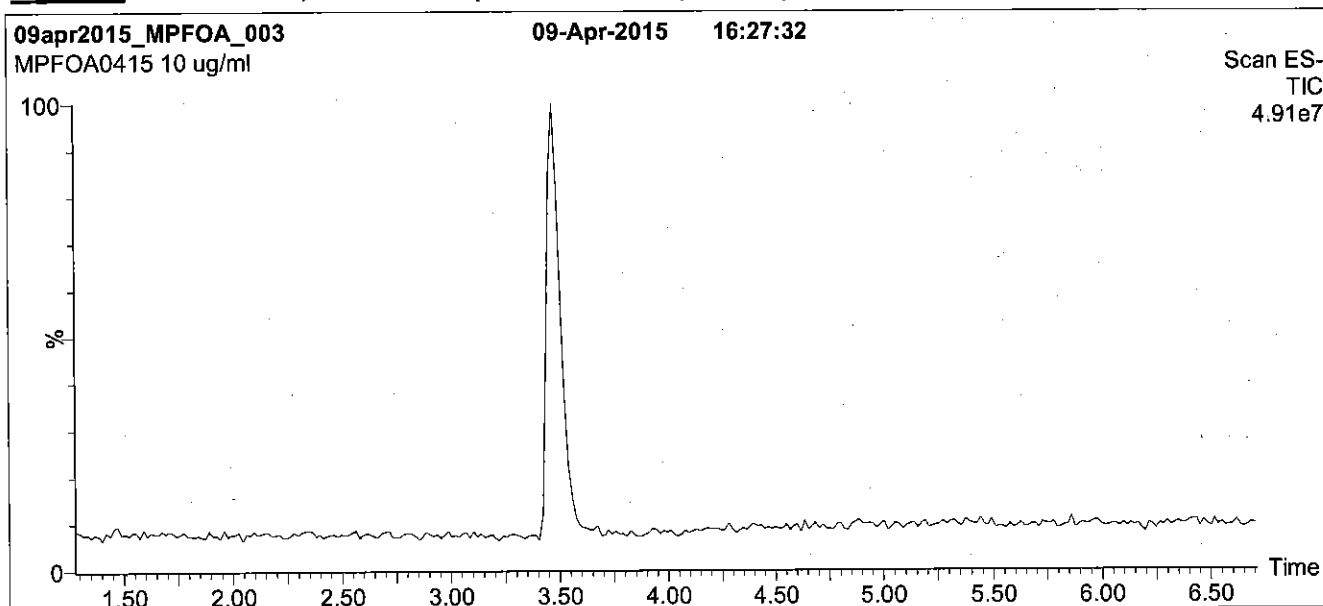
QUALITY MANAGEMENT:

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Figure 1: MPFOA; LC/MS Data (TIC and Mass Spectrum)



Conditions for Figure 1:

LC: Waters Acquity Ultra Performance LC
MS: Micromass Quattro micro API MS

Chromatographic Conditions

Column: Acquity UPLC BEH Shield RP₁₈
1.7 μ m, 2.1 x 100 mm

Mobile phase: Gradient
Start: 50% (80:20 MeOH:ACN) / 50% H₂O
(both with 10 mM NH₄OAc buffer)
Ramp to 90% organic over 7 min and hold for 2 min
before returning to initial conditions in 0.5 min.
Time: 10 min

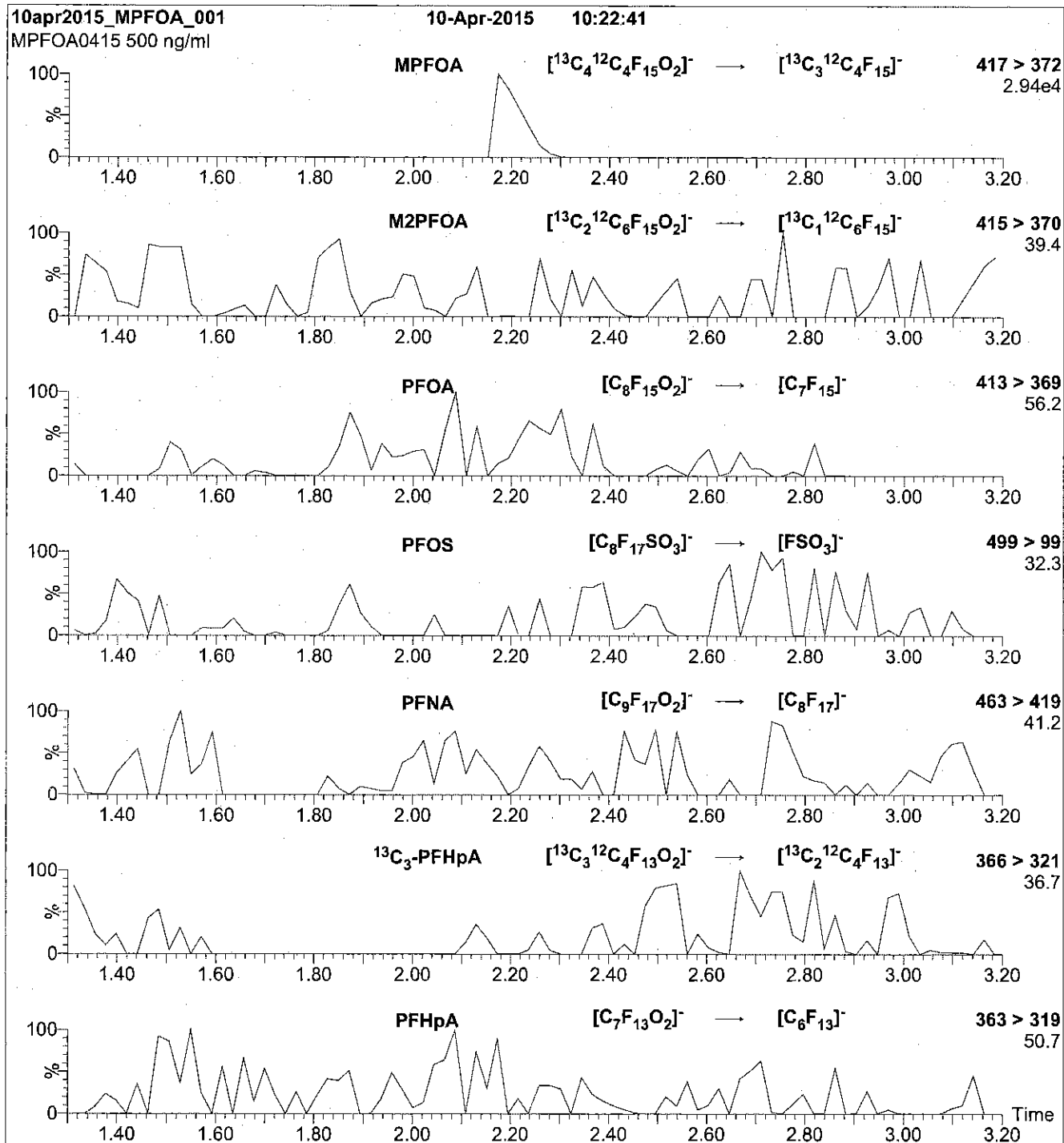
Flow: 300 μ l/min

MS Parameters

Experiment: Full Scan (225 - 850 amu)

Source: Electrospray (negative)
Capillary Voltage (kV) = 2.00
Cone Voltage (V) = 15.00
Cone Gas Flow (l/hr) = 100
Desolvation Gas Flow (l/hr) = 750

Figure 2: MPFOA; LC/MS/MS Data (Selected MRM Transitions)



Conditions for Figure 2:

Injection: Direct loop injection
10 μl (500 ng/ml MPFOA)

Mobile phase: Isocratic 80% (80:20 MeOH:ACN) / 20% H_2O
(both with 10 mM NH_4OAc buffer)

Flow: 300 $\mu\text{l}/\text{min}$

MS Parameters

Collision Gas (mbar) = $3.24\text{e-}3$
Collision Energy (eV) = 11

Reagent

LCMPFOA_00008



572885

ID: LCMPFOA_00008

Exp: 04/10/20 Prip: CBW

13C4-Perfluorooctanoic ac

R: 1/25/16

S:



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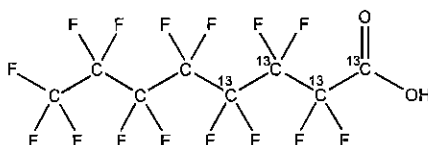
CERTIFICATE OF ANALYSIS DOCUMENTATION

PRODUCT CODE: MPFOA
COMPOUND: Perfluoro-n-[1,2,3,4-¹³C₄]octanoic acid

LOT NUMBER: MPFOA0415

STRUCTURE:

CAS #: Not available



MOLECULAR FORMULA: ¹³C₄¹²C₄HF₁₅O₂
CONCENTRATION: 50 ± 2.5 µg/ml

MOLECULAR WEIGHT: 418.04
SOLVENT(S): Methanol
Water (<1%)
ISOTOPIC PURITY: ≥99% ¹³C
(1,2,3,4-¹³C₄)

CHEMICAL PURITY: >98%
LAST TESTED: (mm/dd/yyyy) 04/10/2015
EXPIRY DATE: (mm/dd/yyyy) 04/10/2020
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ADDITIONAL INFORMATION:

- See page 2 for further details.
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Certified By:

B.G. Chittim

Date: 04/10/2015

(mm/dd/yyyy)

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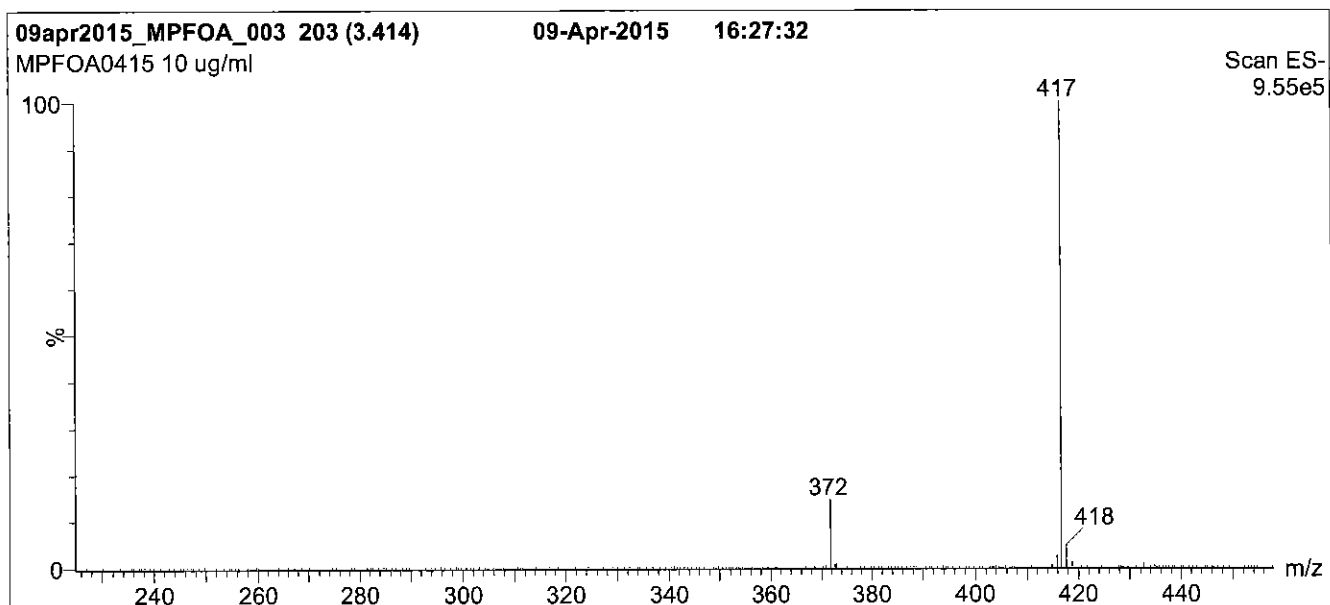
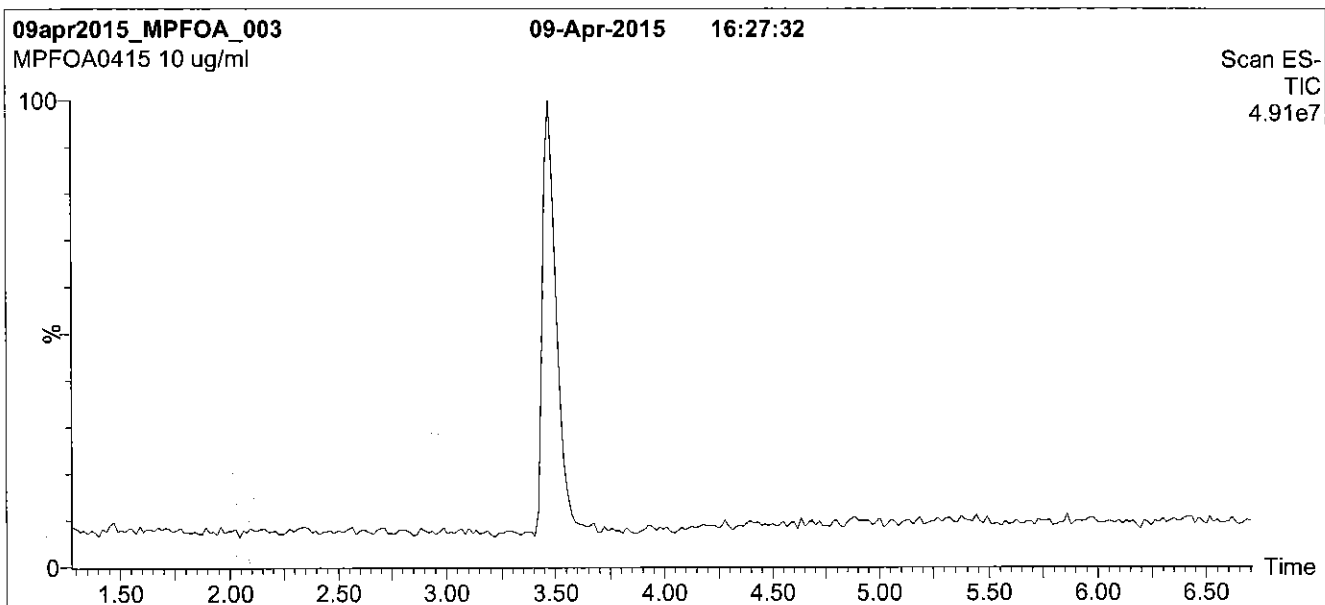
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MS: Micromass Quattro micro API MS

Chromatographic Conditions

Column: Acquity UPLC BEH Shield RP₁₈
1.7 μ m, 2.1 x 100 mm

Mobile phase: Gradient
Start: 50% (80:20 MeOH:ACN) / 50% H₂O
(both with 10 mM NH₄OAc buffer)
Ramp to 90% organic over 7 min and hold for 2 min
before returning to initial conditions in 0.5 min.
Time: 10 min

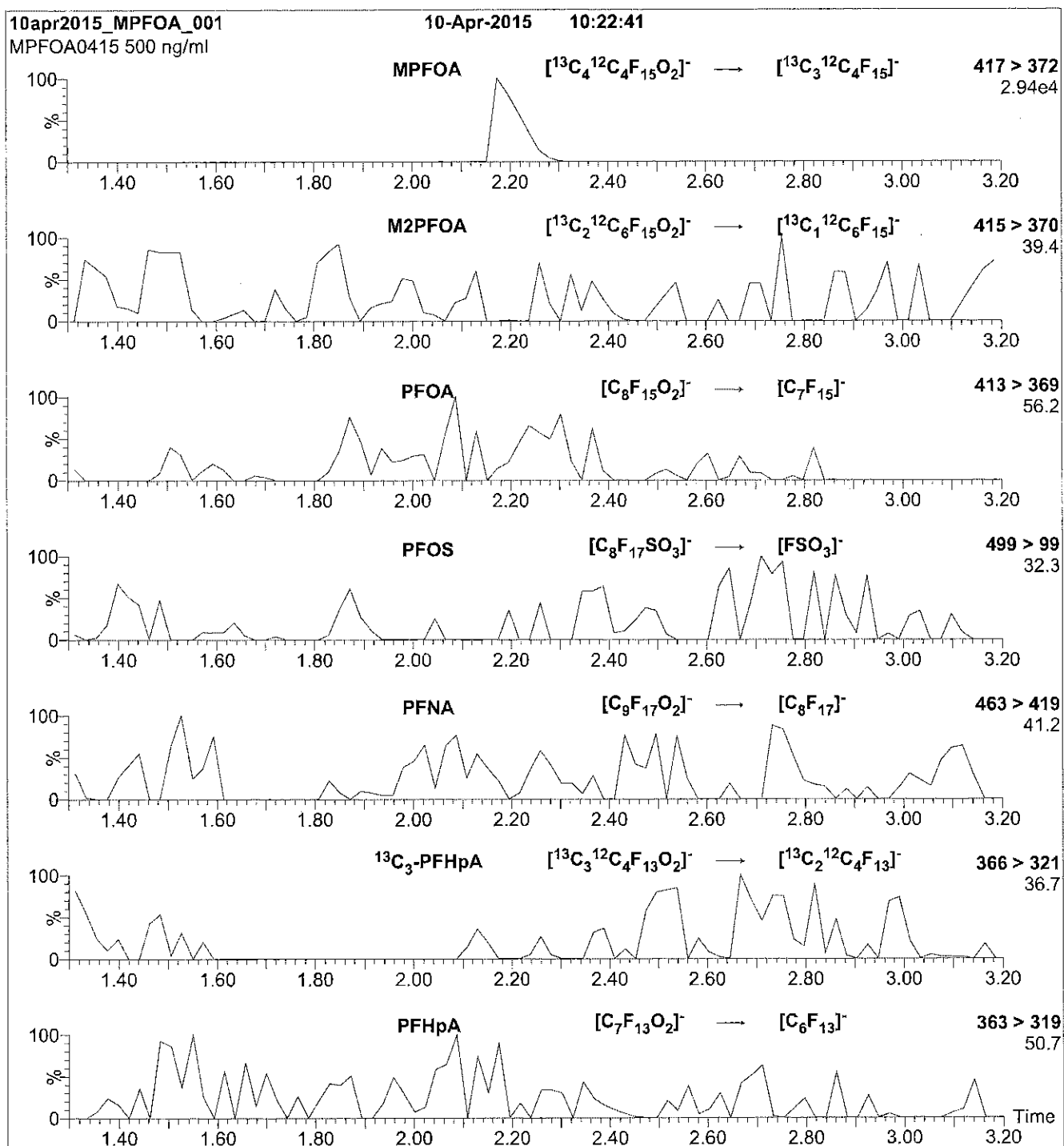
Flow: 300 μ l/min

MS Parameters

Experiment: Full Scan (225 - 850 amu)

Source: Electrospray (negative)
Capillary Voltage (kV) = 2.00
Cone Voltage (V) = 15.00
Cone Gas Flow (l/hr) = 100
Desolvation Gas Flow (l/hr) = 750

Figure 2: MPFOA; LC/MS/MS Data (Selected MRM Transitions)



Conditions for Figure 2:

Injection: Direct loop injection
10 μl (500 ng/ml MPFOA)

Mobile phase: Isocratic 80% (80:20 MeOH:ACN) / 20% H_2O
(both with 10 mM NH_4OAc buffer)

Flow: 300 $\mu\text{l}/\text{min}$

MS Parameters

Collision Gas (mbar) = 3.24e-3
Collision Energy (eV) = 11

Reagent

LCMPFOA_00009



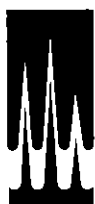
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ID: LCMFOA_00009

Exp: 01/22/21 Prep: CBW

13C4-Perfluorooctanoic ac

R: 3/3/16 CBW



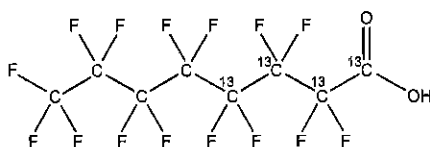
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CERTIFICATE OF ANALYSIS DOCUMENTATION

PRODUCT CODE: MPFOA
COMPOUND: Perfluoro-n-[1,2,3,4-¹³C₄]octanoic acid

LOT NUMBER: MPFOA0116

STRUCTURE:
CAS #: Not available



MOLECULAR FORMULA: ¹³C₄¹²C₄H₁₅O₂
CONCENTRATION: 50 ± 2.5 µg/ml

MOLECULAR WEIGHT: 418.04
SOLVENT(S): Methanol
Water (<1%)
ISOTOPIC PURITY: ≥99% ¹³C
(1,2,3,4-¹³C₄)

CHEMICAL PURITY: >98%
LAST TESTED: (mm/dd/yyyy) 01/22/2016
EXPIRY DATE: (mm/dd/yyyy) 01/22/2021
RECOMMENDED STORAGE: Store ampoule in a cool, dark place

DOCUMENTATION/ DATA ATTACHED:

Figure 1: LC/MS Data (TIC and Mass Spectrum)
Figure 2: LC/MS/MS Data (Selected MRM Transitions)

ADDITIONAL INFORMATION:

- See page 2 for further details.
- Contains 4 mole eq. of NaOH to prevent conversion of the carboxylic acid to the methyl ester.
- Contains ~ 0.1% of native perfluoro-n-octanoic acid (PFOA).

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Certified By:

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Date: 02/01/2016
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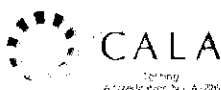
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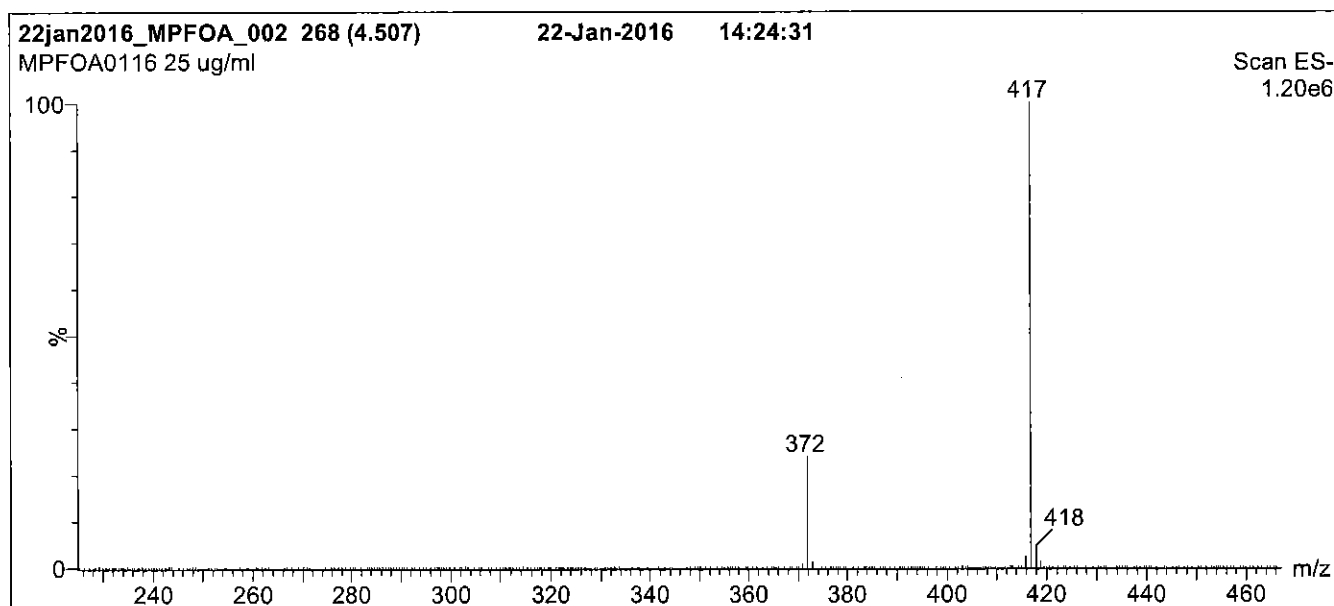
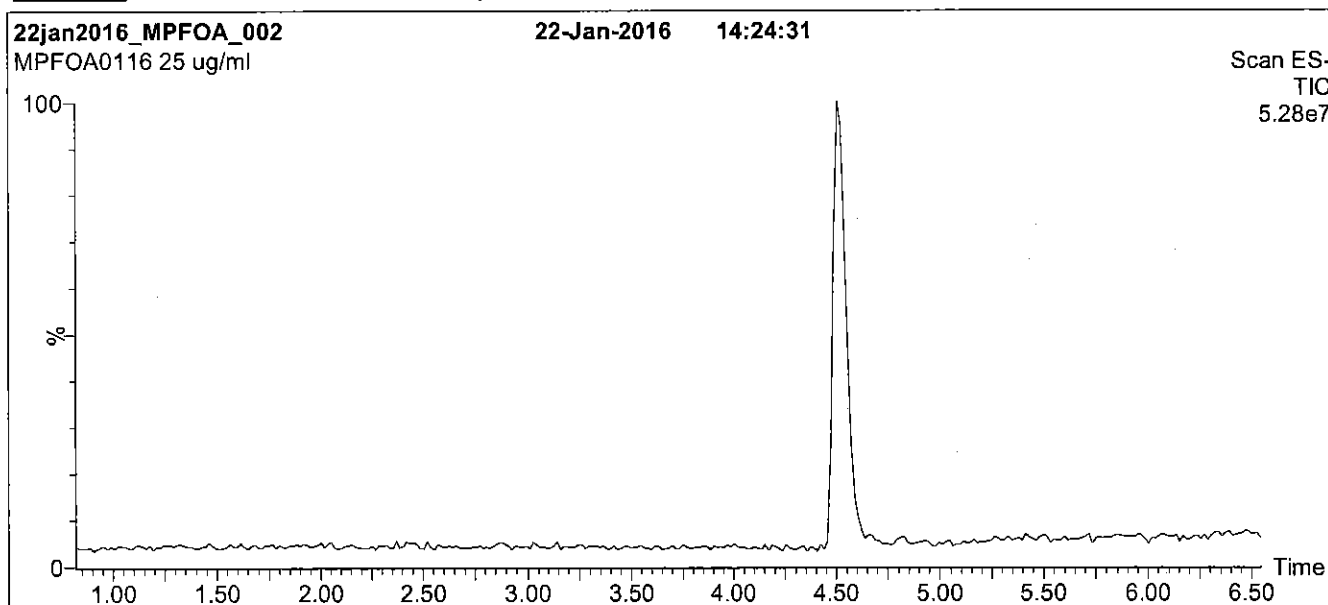
QUALITY MANAGEMENT:

This product was produced using a Quality Management System registered to the latest versions of ISO 9001 by SAI Global, ISO/IEC 17025 by the Canadian Association for Laboratory Accreditation Inc. (CALA; A 1226), and ISO GUIDE 34 by ANSI-ASQ National Accreditation Board (ANAB; AR-1523).



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Figure 1: MPFOA; LC/MS Data (TIC and Mass Spectrum)



Conditions for Figure 1:

LC: Waters Acquity Ultra Performance LC
MS: Micromass Quattro micro API MS

Chromatographic Conditions

Column: Acquity UPLC BEH Shield RP₁₈
1.7 μ m, 2.1 x 100 mm

Mobile phase: Gradient
Start: 55% (80:20 MeOH:ACN) / 45% H₂O
(both with 10 mM NH₄OAc buffer)
Ramp to 90% organic over 7 min and hold for 2 min
before returning to initial conditions in 0.5 min.
Time: 10 min

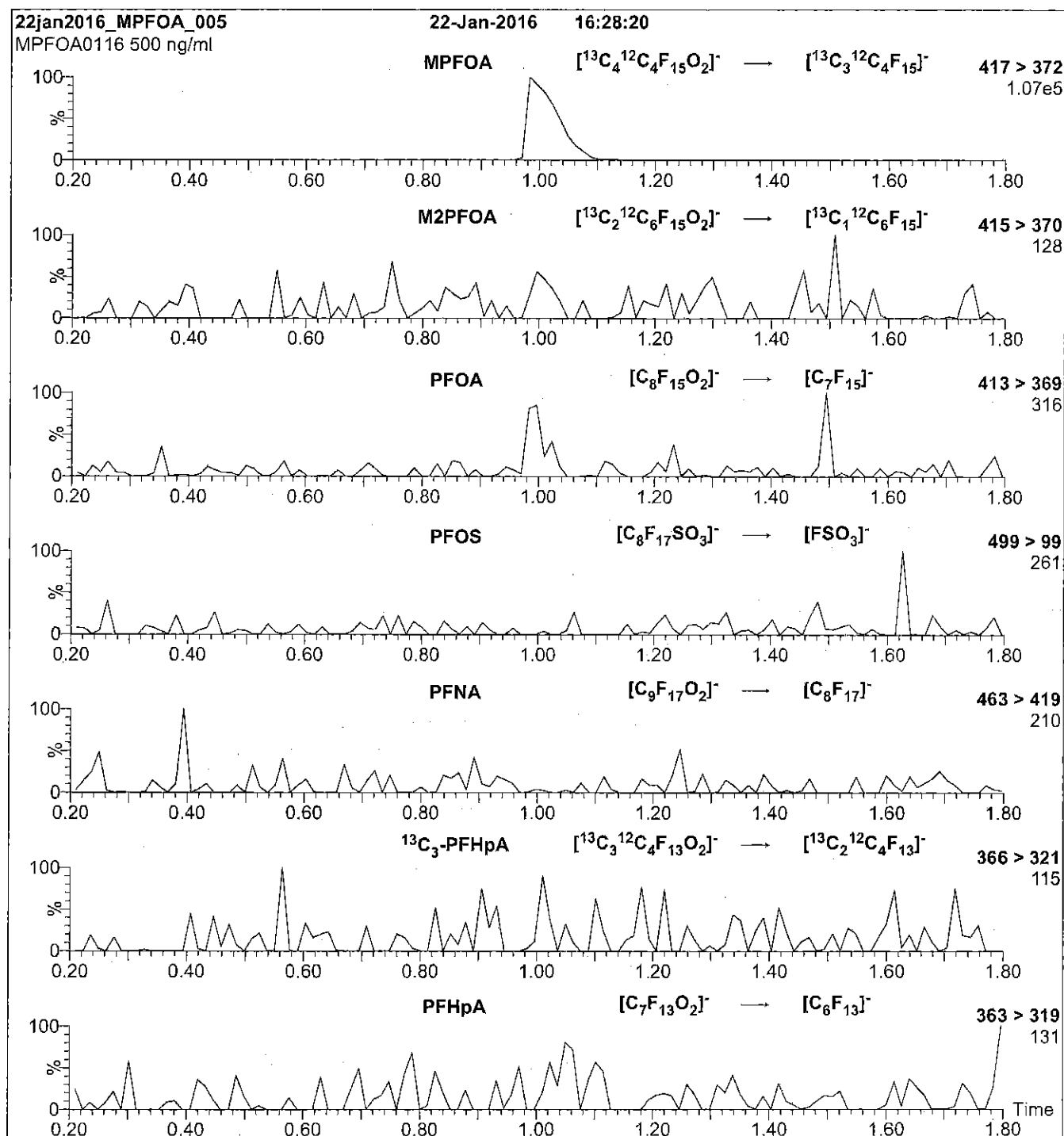
Flow: 300 μ l/min

MS Parameters

Experiment: Full Scan (225 - 850 amu)

Source: Electrospray (negative)
Capillary Voltage (kV) = 3.00
Cone Voltage (V) = 15.00
Cone Gas Flow (l/hr) = 100
Desolvation Gas Flow (l/hr) = 750

Figure 2: MPFOA; LC/MS/MS Data (Selected MRM Transitions)



Conditions for Figure 2:

Injection: Direct loop injection
10 μl (500 ng/ml MPFOA)

Mobile phase: Isocratic 80% (80:20 MeOH:ACN) / 20% H_2O
(both with 10 mM NH_4OAc buffer)

Flow: 300 $\mu\text{l}/\text{min}$

MS Parameters

Collision Gas (mbar) = 3.58e-3
Collision Energy (eV) = 10

Reagent

LCMPFOA_00010



R: 4/7/16 CBW

609713

ID: LCMFPOA_00010

Exp: 01/22/21 Ppd: CBW

13C4-Perfluorooctanoic ac



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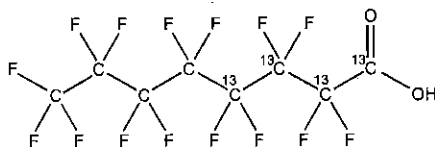
CERTIFICATE OF ANALYSIS DOCUMENTATION

PRODUCT CODE: MPFOA
COMPOUND: Perfluoro-n-[1,2,3,4-¹³C₄]octanoic acid

LOT NUMBER: MPFOA0116

STRUCTURE:

CAS #: Not available



MOLECULAR FORMULA: ¹³C₄¹²C₄HF₁₅O₂
CONCENTRATION: 50 ± 2.5 µg/ml

MOLECULAR WEIGHT: 418.04
SOLVENT(S): Methanol
Water (<1%)
ISOTOPIC PURITY: ≥99% ¹³C
(1,2,3,4-¹³C₄)

CHEMICAL PURITY: >98%
LAST TESTED: (mm/dd/yyyy) 01/22/2016
EXPIRY DATE: (mm/dd/yyyy) 01/22/2021
RECOMMENDED STORAGE: Store ampoule in a cool, dark place

DOCUMENTATION/ DATA ATTACHED:

Figure 1: LC/MS Data (TIC and Mass Spectrum)
Figure 2: LC/MS/MS Data (Selected MRM Transitions)

ADDITIONAL INFORMATION:

- See page 2 for further details.
- Contains 4 mole eq. of NaOH to prevent conversion of the carboxylic acid to the methyl ester.
- Contains ~ 0.1% of native perfluoro-n-octanoic acid (PFOA).

FOR LABORATORY USE ONLY: NOT FOR HUMAN OR DRUG USE

Certified By:

B.G. Chittim

Date: 02/01/2016
(mm/dd/yyyy)

Wellington Laboratories Inc., 345 Southgate Dr. Guelph ON N1G 3M5 CANADA
519-822-2436 • Fax: 519-822-2849 • info@well-labs.com

INTENDED USE:

The products prepared by Wellington Laboratories Inc. are for laboratory use only. This certified reference material (CRM) was designed to be used as a standard for the identification and/or quantification of the specific chemical compound it contains.

HAZARDS:

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HOMOGENEITY:

Prior to solution preparation, crystalline material is tested for homogeneity using a variety of techniques (as stated above) and its solubility in a given diluent is taken into consideration. Duplicate solutions of a new product are prepared from the same crystalline lot and, after the addition of an appropriate internal standard, they are compared by GC/MS, LC/MS/MS and/or SFC/UV/MS/MS. The relative response factors of the analyte of interest in each solution are required to be <5% RSD. New solution lots of existing products are compared to older lots in the same manner, which further confirms the homogeneity of the crystalline material as well as the stability and homogeneity of the solutions in the storage containers.

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The combined relative standard uncertainty, $u_c(y)$, of a value y and the uncertainty of the independent parameters x_1, x_2, \dots, x_n on which it depends is:

$$u_c(y(x_1, x_2, \dots, x_n)) = \sqrt{\sum_{i=1}^n u(y, x_i)^2}$$

where x is expressed as a relative standard uncertainty of the individual parameter.

The individual uncertainties taken into account include those associated with weights (calibration of the balance) and volumes (calibration of the volumetric glassware). An expanded maximum combined percent relative uncertainty of $\pm 5\%$ (calculated with a coverage factor of 2 and a level of confidence of 95%) is stated on the Certificate of Analysis for all of our products.

TRACEABILITY:

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EXPIRY DATE / PERIOD OF VALIDITY:

Ongoing stability studies of this product have demonstrated stability in its composition and concentration, until the specified expiry date, in the unopened ampoule. Monitoring for any degradation or change in concentration of the listed analyte(s) is performed on a routine basis.

LIMITED WARRANTY:

At the time of shipment, all products are warranted to be free of defects in material and workmanship and to conform to the stated technical and purity specifications.

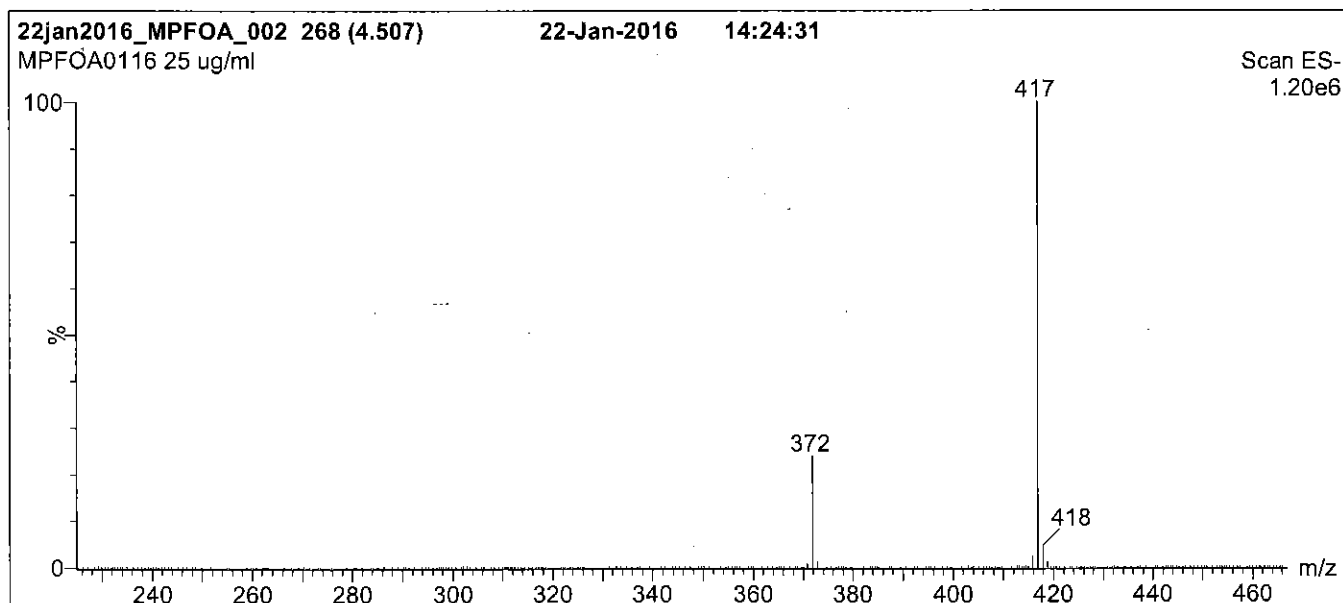
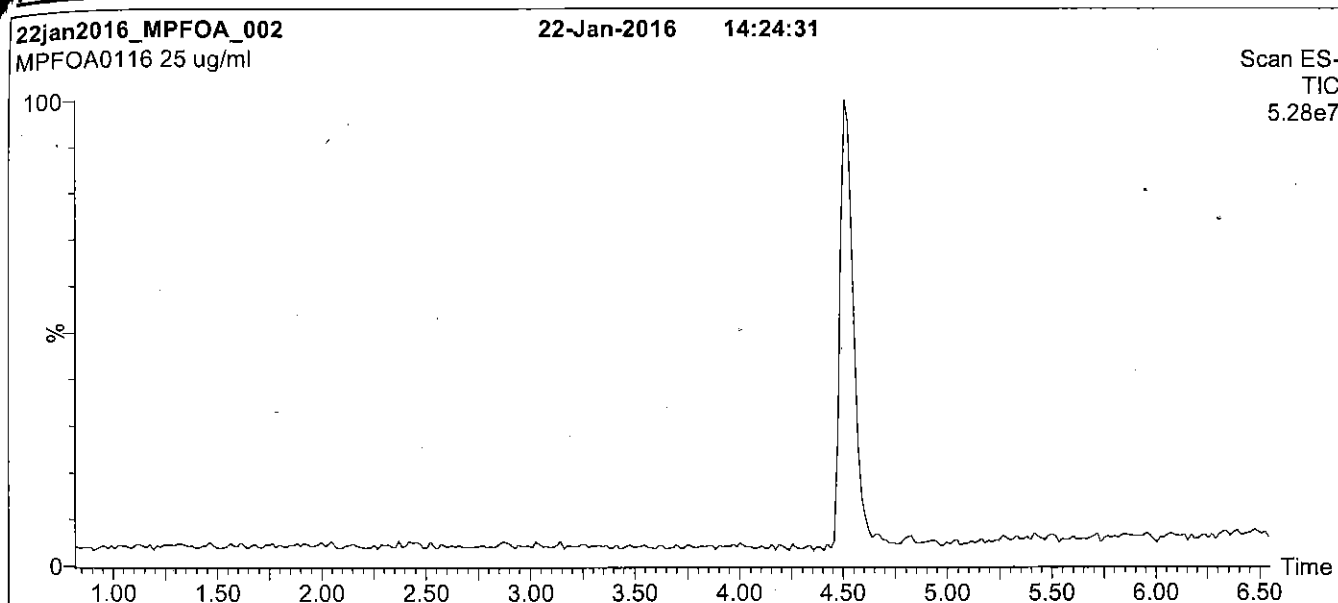
QUALITY MANAGEMENT:

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Figure 1: MPFOA; LC/MS Data (TIC and Mass Spectrum)



Conditions for Figure 1:

LC: Waters Acquity Ultra Performance LC
MS: Micromass Quattro micro API MS

Chromatographic Conditions

Column: Acquity UPLC BEH Shield, RP₁₈
1.7 μ m, 2.1 x 100 mm

Mobile phase: Gradient
Start: 55% (80:20 MeOH:ACN) / 45% H₂O
(both with 10 mM NH₄OAc buffer)
Ramp to 90% organic over 7 min and hold for 2 min
before returning to initial conditions in 0.5 min.
Time: 10 min

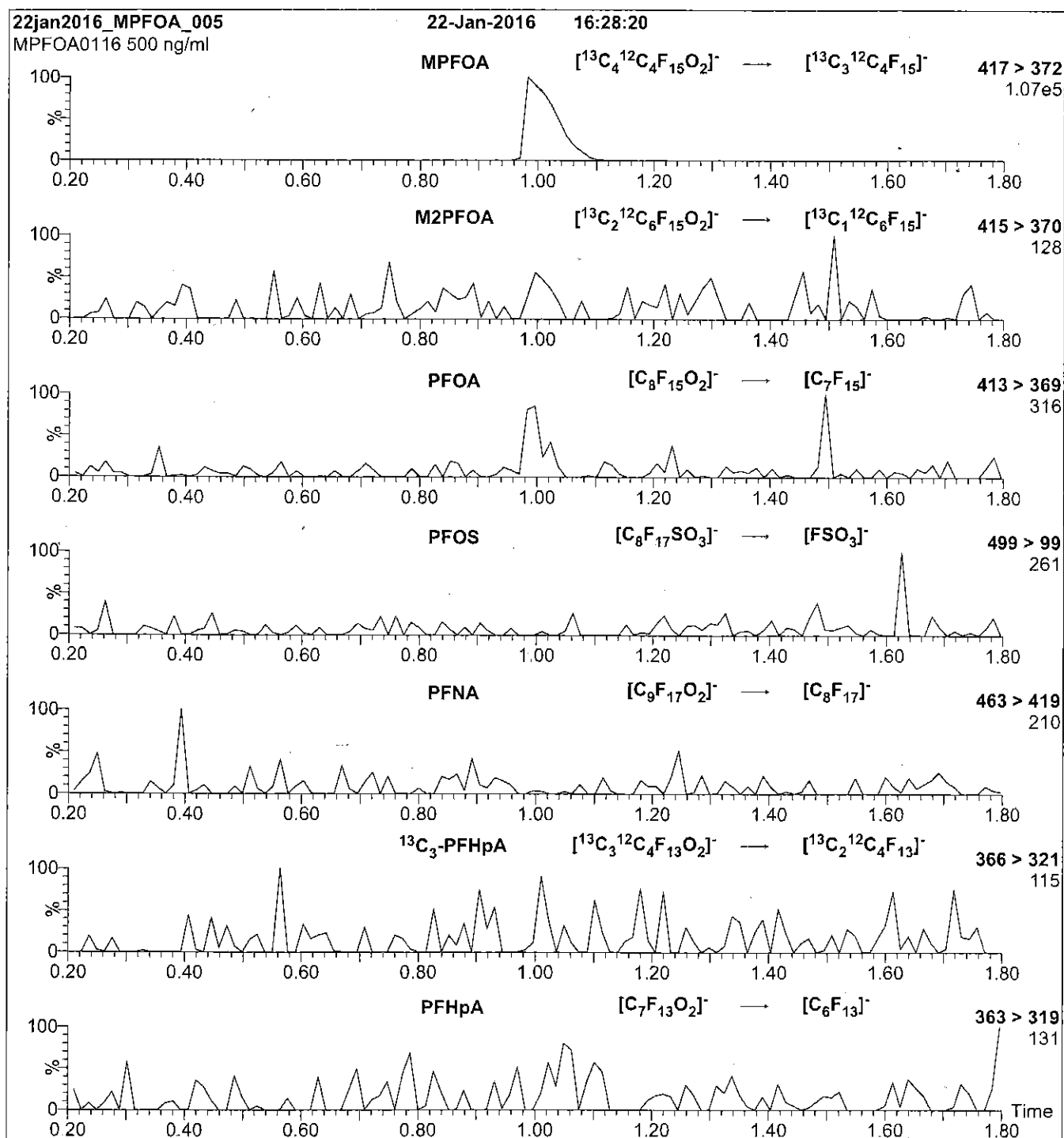
Flow: 300 μ l/min

MS Parameters

Experiment: Full Scan (225 - 850 amu)

Source: Electrospray (negative)
Capillary Voltage (kV) = 3.00
Cone Voltage (V) = 15.00
Cone Gas Flow (l/hr) = 100
Desolvation Gas Flow (l/hr) = 750

Figure 2: MPFOA; LC/MS/MS Data (Selected MRM Transitions)



Conditions for Figure 2:

Injection: Direct loop injection
10 μl (500 ng/ml MPFOA)

Mobile phase: Isocratic 80% (80:20 MeOH:ACN) / 20% H_2O
(both with 10 mM NH_4OAc buffer)

Flow: 300 $\mu\text{l}/\text{min}$

MS Parameters

Collision Gas (mbar) = 3.58e-3
Collision Energy (eV) = 10

Reagent

LCMPFOS_00009

V: 9/15/15



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CERTIFICATE OF ANALYSIS DOCUMENTATION

PRODUCT CODE:

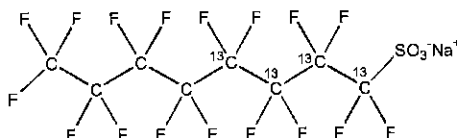
MPFOS

LOT NUMBER:

MPFOS0515

COMPOUND:Sodium perfluoro-1-[1,2,3,4-¹³C₄]octanesulfonate**STRUCTURE:****CAS #:**

Not available

**MOLECULAR FORMULA:**¹³C₄¹²C₄F₁₇SO₃Na**MOLECULAR WEIGHT:**

526.08

CONCENTRATION:50.0 ± 2.5 µg/ml (Na salt)
47.8 ± 2.4 µg/ml (MPFOS anion)**SOLVENT(S):**

Methanol

CHEMICAL PURITY:

>98%

ISOTOPIC PURITY:≥99% ¹³C
(1,2,3,4-¹³C₄)**LAST TESTED:** (mm/dd/yyyy)

05/15/2015

EXPIRY DATE: (mm/dd/yyyy)

05/15/2020

RECOMMENDED STORAGE:

Store ampoule in a cool, dark place

DOCUMENTATION/ DATA ATTACHED:

Figure 1: LC/MS Data (TIC and Mass Spectrum)

Figure 2: LC/MS/MS Data (Selected MRM Transitions)

ADDITIONAL INFORMATION:

- See page 2 for further details.
- Contains ~ 0.8% Sodium perfluoro-1-[1,2,3-¹³C₃]heptanesulfonate.

FOR LABORATORY USE ONLY: NOT FOR HUMAN OR DRUG USE

Certified By:

B.G. Chittim

Date: 05/28/2015

(mm/dd/yyyy)

Wellington Laboratories Inc., 345 Southgate Dr. Guelph ON N1G 3M5 CANADA
519-822-2436 • Fax: 519-822-2849 • info@well-labs.com

INTENDED USE:

The products prepared by Wellington Laboratories Inc. are for laboratory use only. This certified reference material (CRM) was designed to be used as a standard for the identification and/or quantification of the specific chemical compound it contains.

HAZARDS:

This product should only be used by qualified personnel familiar with its potential hazards and trained in the handling of hazardous chemicals. Due care should be exercised to prevent unnecessary human contact or ingestion. All procedures should be carried out in a well-functioning fume hood and suitable gloves, eye protection, and clothing should be worn at all times. Waste should be disposed of according to national and regional regulations. Safety Data Sheets (SDSs) are available upon request.

SYNTHESIS / CHARACTERIZATION:

Where possible, all of our products are synthesized using single-product unambiguous routes. They are then characterized, and their structures and purities confirmed, using a combination of the most relevant techniques, such as NMR, GC/MS, LC/MS/MS, SFC/UV/MS/MS, x-ray crystallography, and melting point. Isotopic purities of mass-labelled compounds are also confirmed using HRGC/HRMS and/or LC/MS/MS.

HOMOGENEITY:

Prior to solution preparation, crystalline material is tested for homogeneity using a variety of techniques (as stated above) and its solubility in a given diluent is taken into consideration. Duplicate solutions of a new product are prepared from the same crystalline lot and, after the addition of an appropriate internal standard, they are compared by GC/MS, LC/MS/MS and/or SFC/UV/MS/MS. The relative response factors of the analyte of interest in each solution are required to be <5% RSD. New solution lots of existing products are compared to older lots in the same manner, which further confirms the homogeneity of the crystalline material as well as the stability and homogeneity of the solutions in the storage containers.

UNCERTAINTY:

The maximum combined relative standard uncertainty of our reference standard solutions is calculated using the following equation:

The combined relative standard uncertainty, $u_c(y)$, of a value y and the uncertainty of the independent parameters

x_1, x_2, \dots, x_n on which it depends is:

$$u_c(y(x_1, x_2, \dots, x_n)) = \sqrt{\sum_{i=1}^n u(y, x_i)^2}$$

where x is expressed as a relative standard uncertainty of the individual parameter.

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TRACEABILITY:

All reference standard solutions are traceable to specific crystalline lots. The microbalances used for solution preparation are regularly tested by an external ISO/IEC 17025 accredited calibration company. In addition, their calibration is verified prior to each weighing using NIST and/or NRC traceable external weights. All volumetric glassware used is of Class A tolerance and has been tested according to the appropriate ASTM procedures, which are ultimately traceable to NIST. For certain products, traceability to international interlaboratory studies has also been established.

EXPIRY DATE / PERIOD OF VALIDITY:

Ongoing stability studies of this product have demonstrated stability in its composition and concentration, until the specified expiry date, in the unopened ampoule. Monitoring for any degradation or change in concentration of the listed analyte(s) is performed on a routine basis.

LIMITED WARRANTY:

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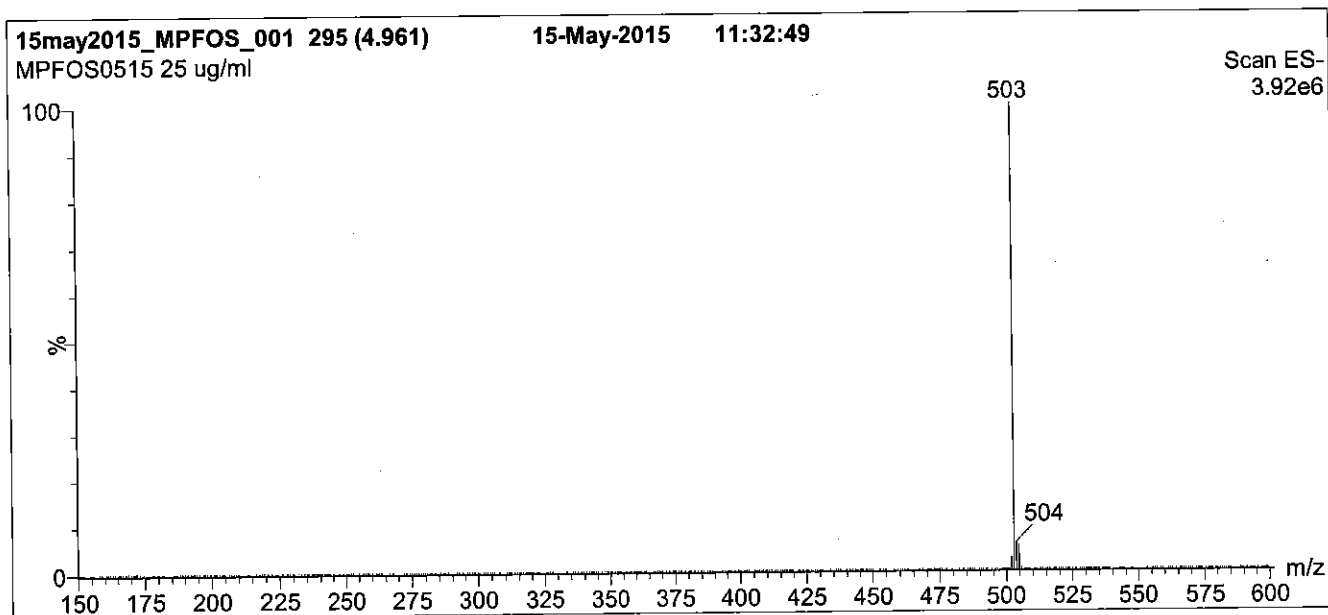
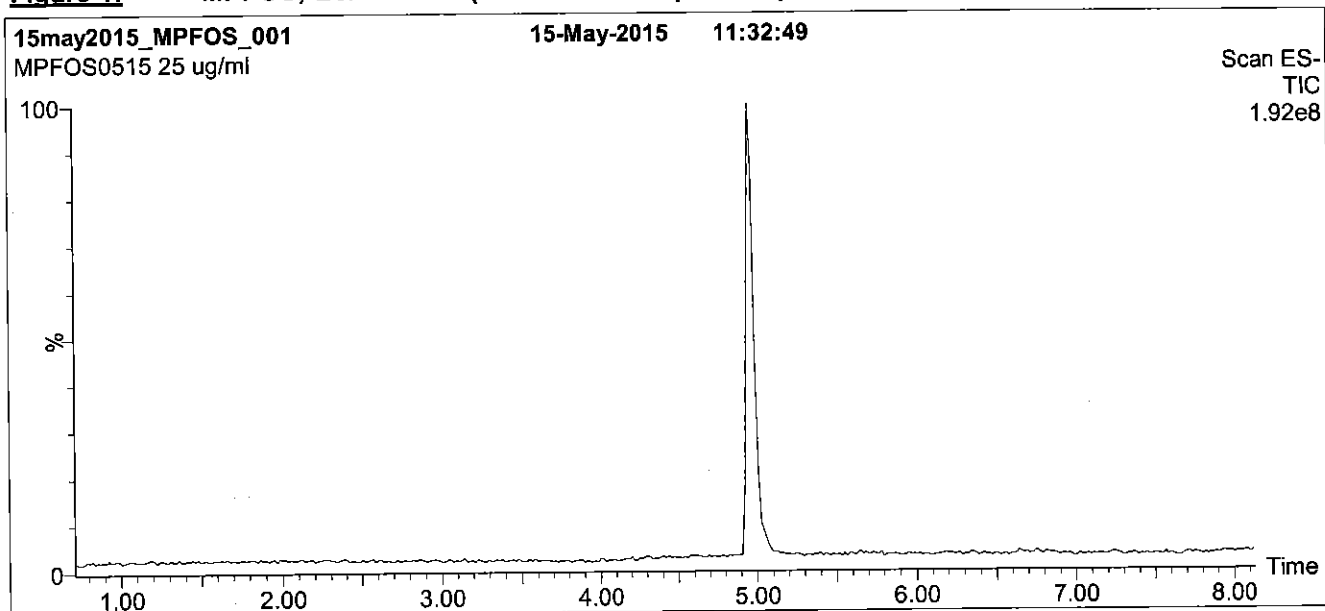
QUALITY MANAGEMENT:

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Figure 1: MPFOS; LC/MS Data (TIC and Mass Spectrum)



Conditions for Figure 1:

LC: Waters Acquity Ultra Performance LC
MS: Micromass Quattro *micro* API MS

Chromatographic Conditions

Column: Acquity UPLC BEH Shield RP₁₈
1.7 μ m, 2.1 x 100 mm

Mobile phase: Gradient
Start: 45% (80:20 MeOH:ACN) / 55% H₂O
(both with 10 mM NH₄OAc buffer)
Ramp to 90% organic over 7 min and hold for 1.5 min
before returning to initial conditions in 0.5 min.
Time: 10 min

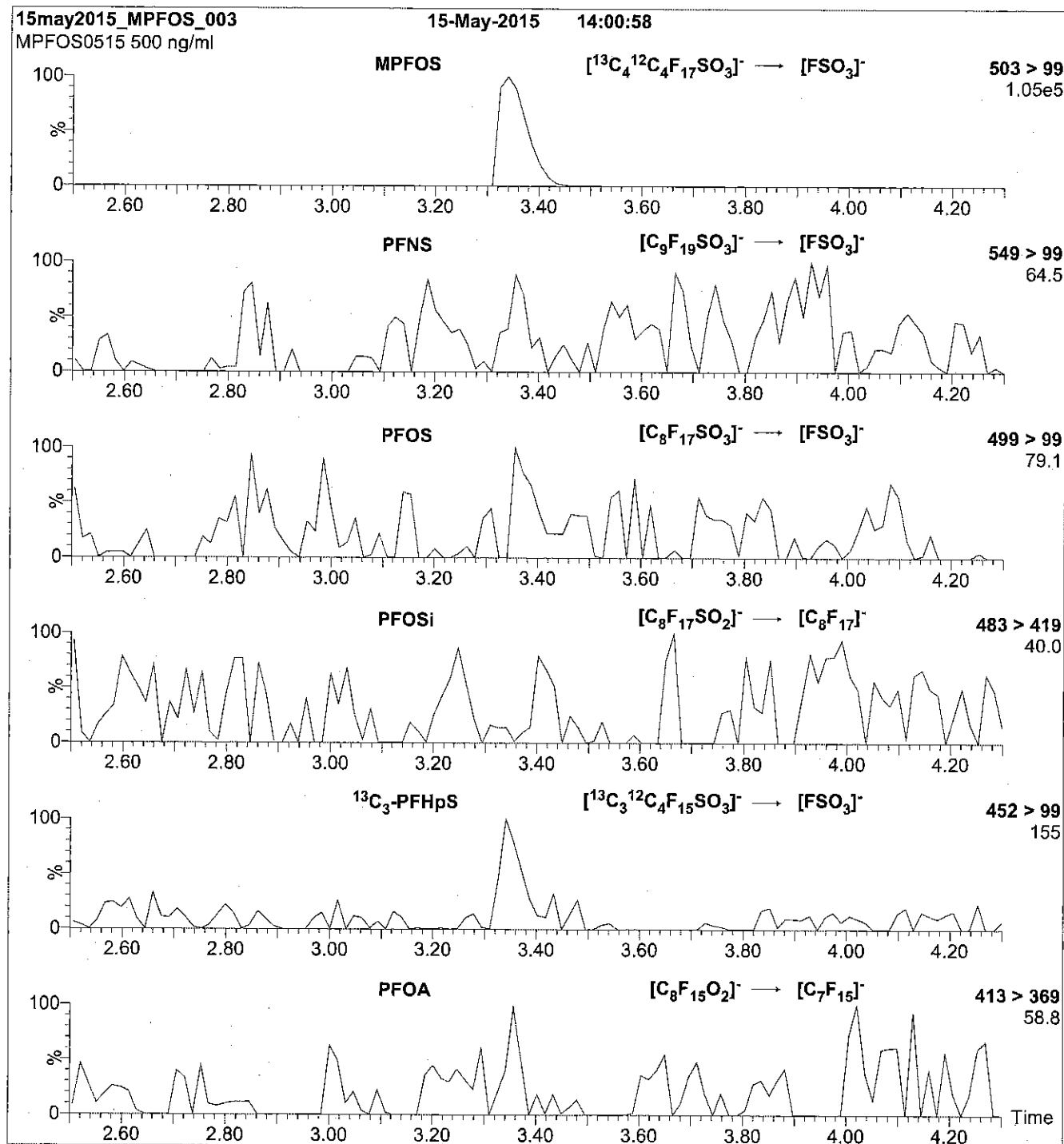
Flow: 300 μ l/min

MS Parameters

Experiment: Full Scan (150 - 850 amu)

Source: Electrospray (negative)
Capillary Voltage (kV) = 2.00
Cone Voltage (V) = 60.00
Cone Gas Flow (l/hr) = 50
Desolvation Gas Flow (l/hr) = 750

Figure 2: MPFOS; LC/MS/MS Data (Selected MRM Transitions)



Conditions for Figure 2:

Injection: Direct loop injection
10 μl (500 ng/ml MPFOS)

Mobile phase: Isocratic 80% (80:20 MeOH:ACN) / 20% H_2O
(both with 10 mM NH_4OAc buffer)

Flow: 300 $\mu\text{l}/\text{min}$

MS Parameters

Collision Gas (mbar) = $3.35\text{e-}3$
Collision Energy (eV) = 40

Reagent

LCMPFOS_00010



572886

ID: LCMFOS_00010

Exp: 05/15/20 Prd: CBW

13C4-Perfluorooctanesulfo

R: 1/25/16

S:



WELLINGTON LABORATORIES

CERTIFICATE OF ANALYSIS DOCUMENTATION

PRODUCT CODE:

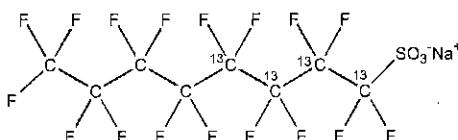
MPFOS

LOT NUMBER:

MPFOS0515

COMPOUND:Sodium perfluoro-1-[1,2,3,4-¹³C₄]octanesulfonate**STRUCTURE:****CAS #:**

Not available

**MOLECULAR FORMULA:**¹³C₄¹²C₄F₁₇SO₃Na**CONCENTRATION:**

50.0 ± 2.5 µg/ml (Na salt)
47.8 ± 2.4 µg/ml (MPFOS anion)

MOLECULAR WEIGHT:

526.08

SOLVENT(S):

Methanol

CHEMICAL PURITY:

>98%

ISOTOPIC PURITY:

≥99% ¹³C
(1,2,3,4-¹³C₄)

LAST TESTED: (mm/dd/yyyy)

05/15/2015

EXPIRY DATE: (mm/dd/yyyy)

05/15/2020

RECOMMENDED STORAGE:

Store ampoule in a cool, dark place

DOCUMENTATION/ DATA ATTACHED:

Figure 1: LC/MS Data (TIC and Mass Spectrum)

Figure 2: LC/MS/MS Data (Selected MRM Transitions)

ADDITIONAL INFORMATION:

- See page 2 for further details.
- Contains ~ 0.8% Sodium perfluoro-1-[1,2,3-¹³C₃]heptanesulfonate.

FOR LABORATORY USE ONLY: NOT FOR HUMAN OR DRUG USE

Certified By:

B.G. Chittim

Date: 05/28/2015

(mm/dd/yyyy)

Wellington Laboratories Inc., 345 Southgate Dr. Guelph ON N1G 3M5 CANADA
519-822-2436 • Fax: 519-822-2849 • info@well-labs.com

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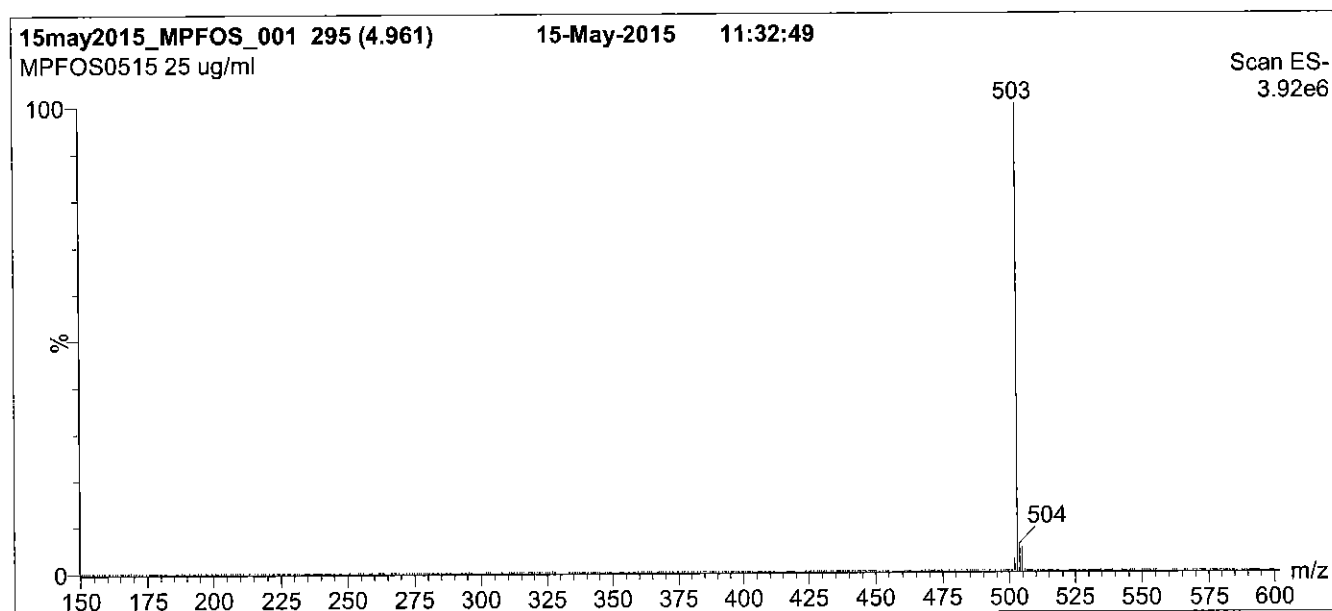
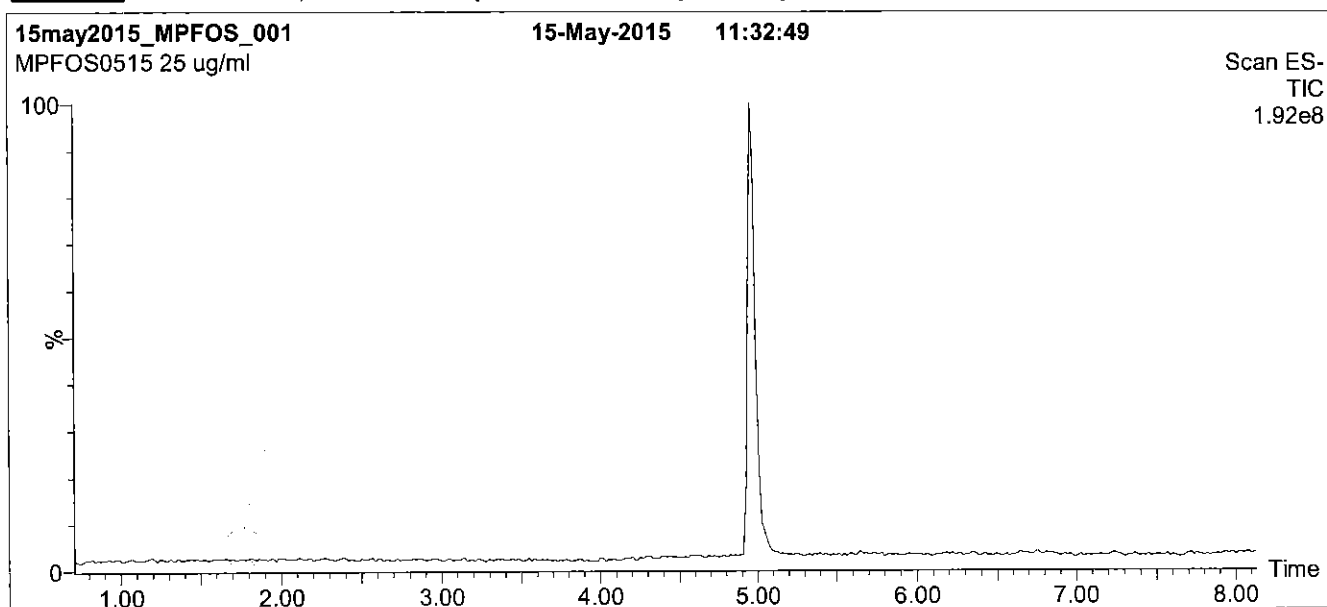
QUALITY MANAGEMENT:

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Figure 1: MPFOS; LC/MS Data (TIC and Mass Spectrum)



Conditions for Figure 1:

LC: Waters Acquity Ultra Performance LC
MS: Micromass Quattro micro API MS

Chromatographic Conditions

Column: Acquity UPLC BEH Shield RP₁₈
1.7 μ m, 2.1 x 100 mm

Mobile phase: Gradient
Start: 45% (80:20 MeOH:ACN) / 55% H₂O
(both with 10 mM NH₄OAc buffer)
Ramp to 90% organic over 7 min and hold for 1.5 min
before returning to initial conditions in 0.5 min.
Time: 10 min

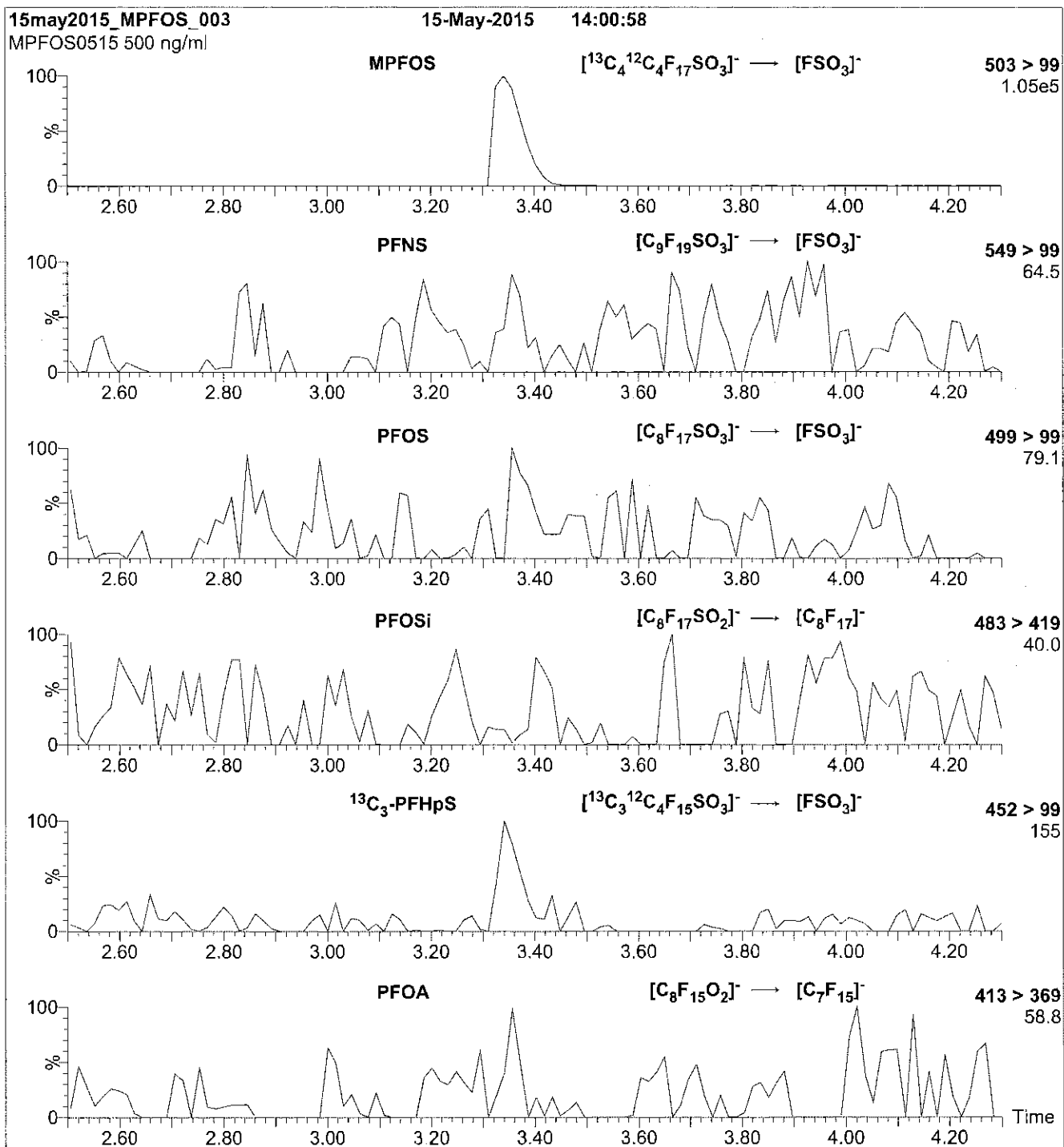
Flow: 300 μ l/min

MS Parameters

Experiment: Full Scan (150 - 850 amu)

Source: Electrospray (negative)
Capillary Voltage (kV) = 2.00
Cone Voltage (V) = 60.00
Cone Gas Flow (l/hr) = 50
Desolvation Gas Flow (l/hr) = 750

Figure 2: MPFOS; LC/MS/MS Data (Selected MRM Transitions)



Conditions for Figure 2:

Injection: Direct loop injection
10 μl (500 ng/ml MPFOS)

Mobile phase: Isocratic 80% (80:20 MeOH:ACN) / 20% H_2O
(both with 10 mM NH_4OAc buffer)

Flow: 300 $\mu\text{l}/\text{min}$

MS Parameters

Collision Gas (mbar) = $3.35\text{e-}3$
Collision Energy (eV) = 40

Reagent

LCMPFOS_00012



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LABORATORIES

605227
ID: LCMFOS_00012
Exp: 01/22/21 Prpd: CBW
13C4-Perfluorooctanesulfo

Rec 3/29/16 JRB ✓

606228
ID: LCMFOS_00013
Exp: 01/22/21 Prpd: CBW
13C4-Perfluorooctanesulfo

CERTIFICATE OF ANALYSIS
DOCUMENTATION

PRODUCT CODE:

MPFOS

LOT NUMBER:

MPFOS0116

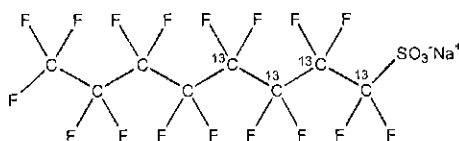
COMPOUND:

Sodium perfluoro-1-[1,2,3,4-¹³C₄]octanesulfonate

STRUCTURE:

CAS #:

Not available



MOLECULAR FORMULA:

¹³C₄¹²C₄F₁₇SO₃Na

CONCENTRATION:

50.0 ± 2.5 µg/ml (Na salt)
47.8 ± 2.4 µg/ml (MPFOS anion)

MOLECULAR WEIGHT:

526.08

SOLVENT(S):

Methanol

CHEMICAL PURITY:

>98%

ISOTOPIC PURITY:

≥99% ¹³C
(1,2,3,4-¹³C₄)

LAST TESTED: (mm/dd/yyyy)

01/22/2016

EXPIRY DATE: (mm/dd/yyyy)

01/22/2021

RECOMMENDED STORAGE:

Store ampoule in a cool, dark place

DOCUMENTATION/ DATA ATTACHED:

Figure 1: LC/MS Data (TIC and Mass Spectrum)

Figure 2: LC/MS/MS Data (Selected MRM Transitions)

ADDITIONAL INFORMATION:

- See page 2 for further details.
- Contains ~ 0.8% Sodium perfluoro-1-[1,2,3-¹³C₃]heptanesulfonate.

FOR LABORATORY USE ONLY: NOT FOR HUMAN OR DRUG USE

Certified By:

B.G. Chittim

Date: 02/01/2016

(mm/dd/yyyy)

Wellington Laboratories Inc., 345 Southgate Dr. Guelph ON N1G 3M5 CANADA
519-822-2436 • Fax: 519-822-2849 • info@well-labs.com

INTENDED USE:

The products prepared by Wellington Laboratories Inc. are for laboratory use only. This certified reference material (CRM) was designed to be used as a standard for the identification and/or quantification of the specific chemical compound it contains.

HAZARDS:

This product should only be used by qualified personnel familiar with its potential hazards and trained in the handling of hazardous chemicals. Due care should be exercised to prevent unnecessary human contact or ingestion. All procedures should be carried out in a well-functioning fume hood and suitable gloves, eye protection, and clothing should be worn at all times. Waste should be disposed of according to national and regional regulations. Safety Data Sheets (SDSs) are available upon request.

SYNTHESIS / CHARACTERIZATION:

Where possible, all of our products are synthesized using single-product unambiguous routes. They are then characterized, and their structures and purities confirmed, using a combination of the most relevant techniques, such as NMR, GC/MS, LC/MS/MS, SFC/UV/MS/MS, x-ray crystallography, and melting point. Isotopic purities of mass-labelled compounds are also confirmed using HRGC/HRMS and/or LC/MS/MS.

HOMOGENEITY:

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UNCERTAINTY:

The maximum combined relative standard uncertainty of our reference standard solutions is calculated using the following equation:

The combined relative standard uncertainty, $u_c(y)$, of a value y and the uncertainty of the independent parameters x_1, x_2, \dots, x_n on which it depends is:

$$u_c(y(x_1, x_2, \dots, x_n)) = \sqrt{\sum_{i=1}^n u(y, x_i)^2}$$

where x is expressed as a relative standard uncertainty of the individual parameter.

The individual uncertainties taken into account include those associated with weights (calibration of the balance) and volumes (calibration of the volumetric glassware). An expanded maximum combined percent relative uncertainty of $\pm 5\%$ (calculated with a coverage factor of 2 and a level of confidence of 95%) is stated on the Certificate of Analysis for all of our products.

TRACEABILITY:

All reference standard solutions are traceable to specific crystalline lots. The microbalances used for solution preparation are regularly tested by an external ISO/IEC 17025 accredited calibration company. In addition, their calibration is verified prior to each weighing using NIST and/or NRC traceable external weights. All volumetric glassware used is of Class A tolerance and has been tested according to the appropriate ASTM procedures, which are ultimately traceable to NIST. For certain products, traceability to international interlaboratory studies has also been established.

EXPIRY DATE / PERIOD OF VALIDITY:

Ongoing stability studies of this product have demonstrated stability in its composition and concentration, until the specified expiry date, in the unopened ampoule. Monitoring for any degradation or change in concentration of the listed analyte(s) is performed on a routine basis.

LIMITED WARRANTY:

At the time of shipment, all products are warranted to be free of defects in material and workmanship and to conform to the stated technical and purity specifications.

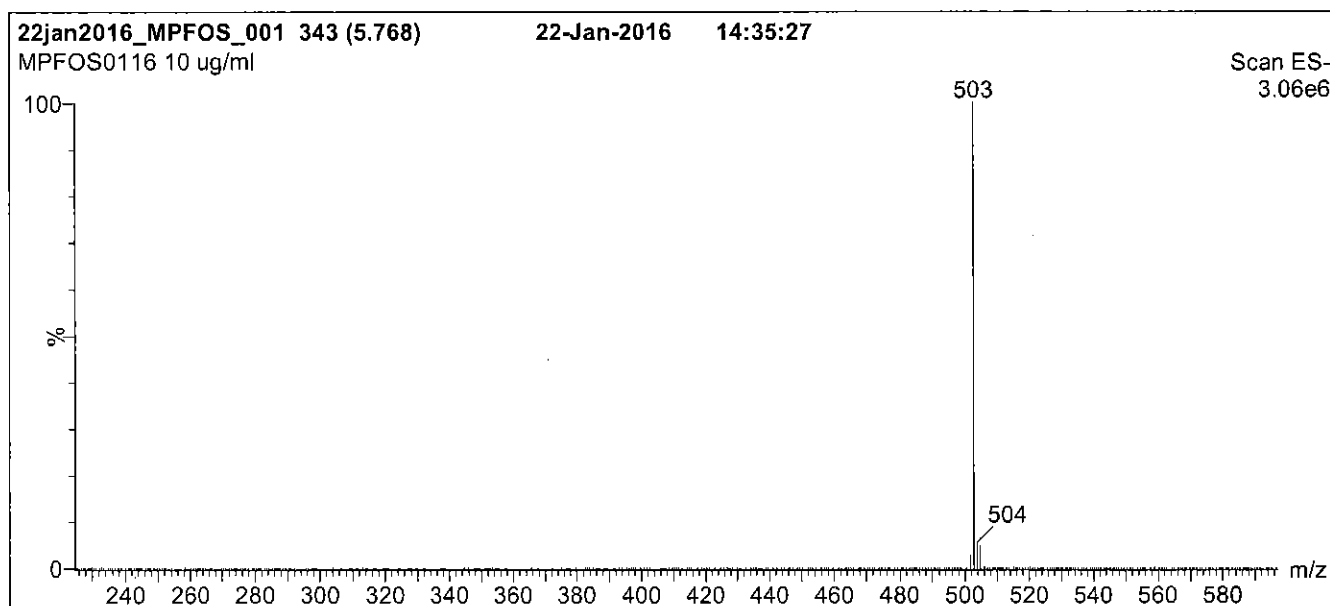
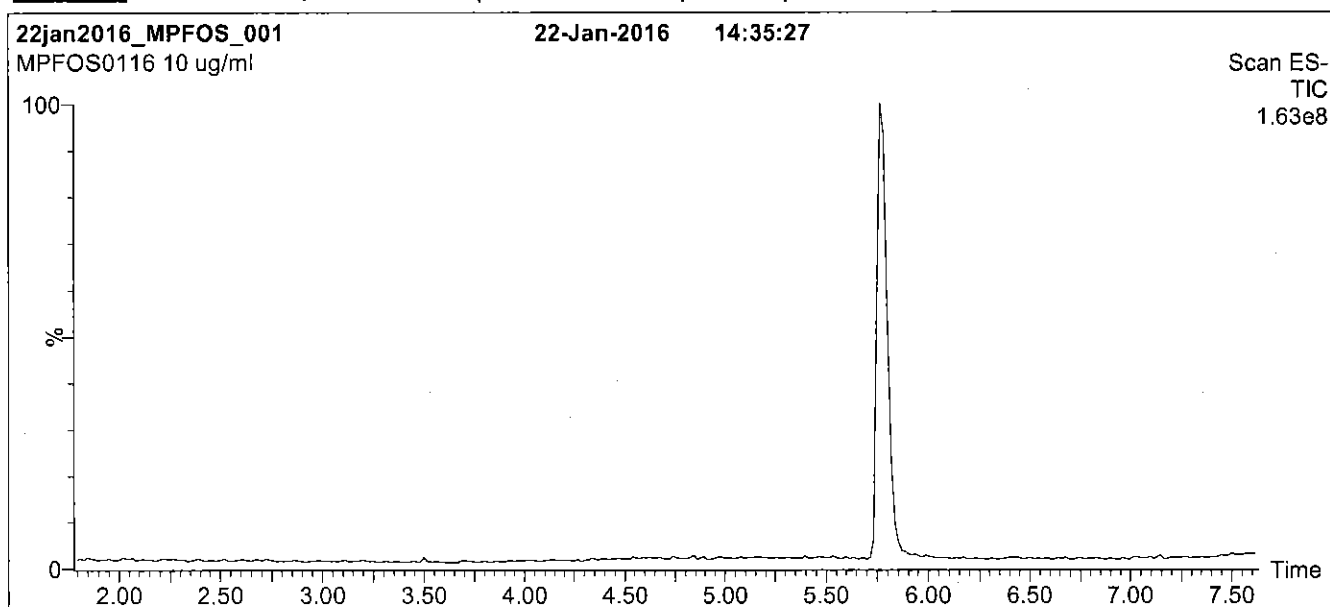
QUALITY MANAGEMENT:

This product was produced using a Quality Management System registered to the latest versions of ISO 9001 by SAI Global, ISO/IEC 17025 by the Canadian Association for Laboratory Accreditation Inc. (CALA; A 1226), and ISO GUIDE 34 by ANSI-ASQ National Accreditation Board (ANAB; AR-1523).



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Figure 1: MPFOS; LC/MS Data (TIC and Mass Spectrum)



Conditions for Figure 1:

LC: Waters Acquity Ultra Performance LC
MS: Micromass Quattro *micro* API MS

Chromatographic Conditions

Column: Acquity UPLC BEH Shield RP₁₈
1.7 μ m, 2.1 x 100 mm

Mobile phase: Gradient
Start: 55% (80:20 MeOH:ACN) / 45% H₂O
(both with 10 mM NH₄OAc buffer)
Ramp to 90% organic over 7 min and hold for 2 min
before returning to initial conditions in 0.5 min.
Time: 10 min

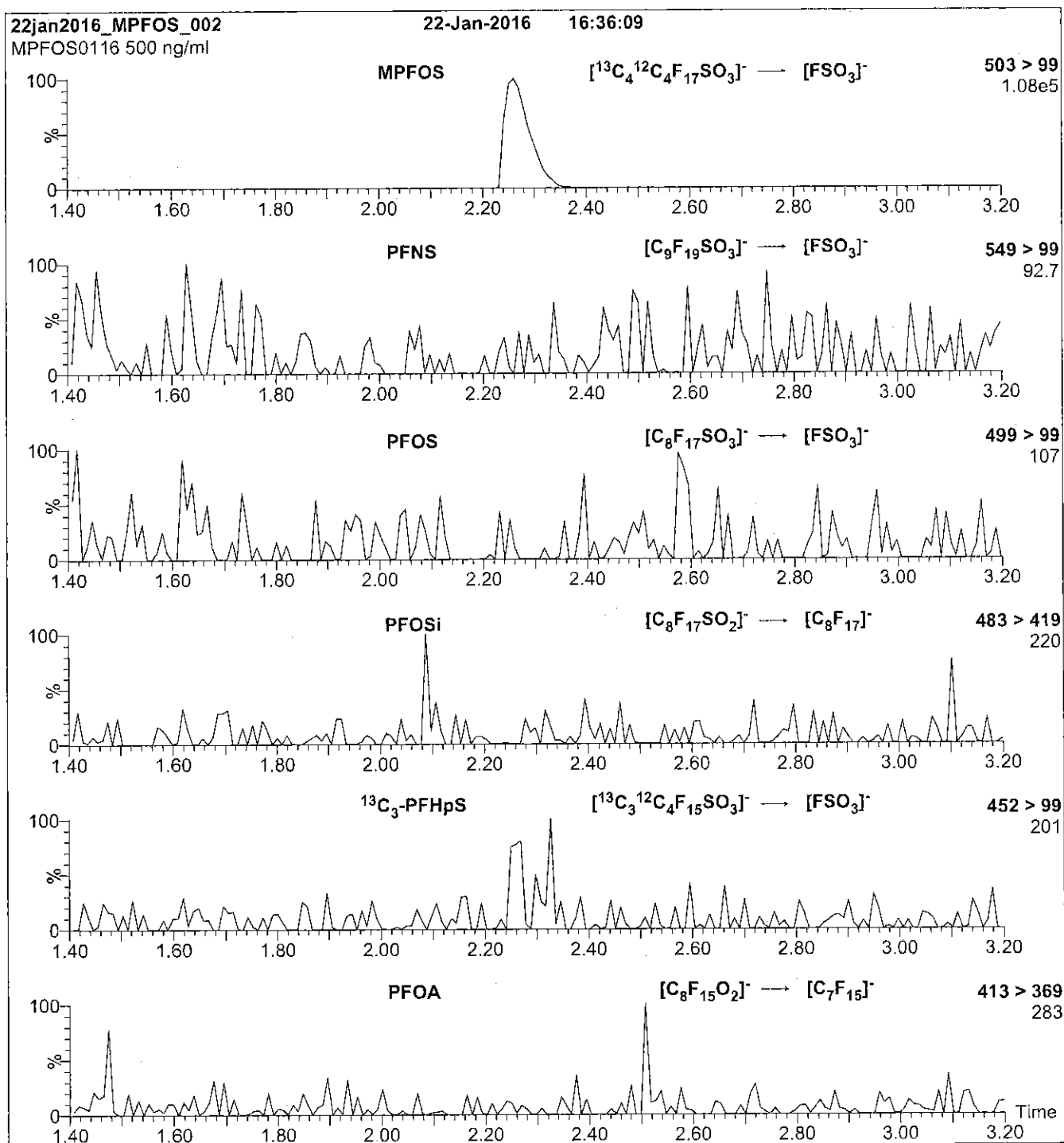
Flow: 300 μ l/min

MS Parameters

Experiment: Full Scan (225 - 850 amu)

Source: Electrospray (negative)
Capillary Voltage (kV) = 2.00
Cone Voltage (V) = 60.00
Cone Gas Flow (l/hr) = 50
Desolvation Gas Flow (l/hr) = 750

Figure 2: MPFOS; LC/MS/MS Data (Selected MRM Transitions)



Conditions for Figure 2:

Injection: Direct loop injection
10 μl (500 ng/ml MPFOS)

Mobile phase: Isocratic 80% (80:20 MeOH:ACN) / 20% H_2O
(both with 10 mM NH_4OAc buffer)

Flow: 300 $\mu\text{l}/\text{min}$

MS Parameters

Collision Gas (mbar) = 3.70e-3
Collision Energy (eV) = 40

Reagent

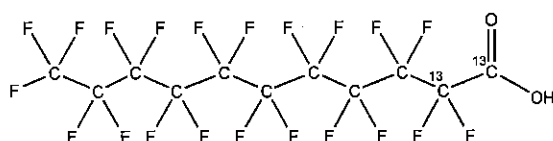
LCMPFUdA_00004



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CERTIFICATE OF ANALYSIS DOCUMENTATION

PRODUCT CODE: MPFUDa **LOT NUMBER:** MPFUDa1014
COMPOUND: Perfluoro-n-[1,2-¹³C₂]undecanoic acid
STRUCTURE: **CAS #:** Not available



MOLECULAR FORMULA: ¹³C₂¹²C₉HF₂₁O₂ **MOLECULAR WEIGHT:** 566.08
CONCENTRATION: 50 ± 2.5 µg/ml **SOLVENT(S):** Methanol
 Water (<1%)
CHEMICAL PURITY: >98% **ISOTOPIC PURITY:** ≥99% ¹³C
LAST TESTED: (mm/dd/yyyy) 10/31/2014 (1,2-¹³C₂)
EXPIRY DATE: (mm/dd/yyyy) 10/31/2019
RECOMMENDED STORAGE: Store ampoule in a cool, dark place


DOCUMENTATION/ DATA ATTACHED:

Figure 1: LC/MS Data (TIC and Mass Spectrum)
 Figure 2: LC/MS/MS Data (Selected MRM Transitions)

ADDITIONAL INFORMATION:

- See page 2 for further details.
- Contains 4 mole eq. of NaOH to prevent conversion of the carboxylic acid to the methyl ester.
- Presence of 1-¹³C₁-PFUDa (~1%; see Figure 2), 2-¹³C₁-PFUDa (~1%), and PFUDa (~0.2%; see Figure 2) are due to the isotopic purity of the ¹³C-precursor.

FOR LABORATORY USE ONLY: NOT FOR HUMAN OR DRUG USE

Certified By: 
 B.G. Chittim **Date:** 11/03/2014
 (mm/dd/yyyy)

Wellington Laboratories Inc., 345 Southgate Dr. Guelph ON N1G 3M5 CANADA
 519-822-2436 • Fax: 519-822-2849 • info@well-labs.com

INTENDED USE:

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HAZARDS:

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TRACEABILITY:

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EXPIRY DATE / PERIOD OF VALIDITY:

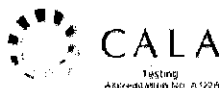
Ongoing stability studies of this product have demonstrated stability in its composition and concentration for the period of time specified by the expiry date in the unopened ampoule. Monitoring for any degradation or change in concentration of the listed analyte(s) is performed on a routine basis.

LIMITED WARRANTY:

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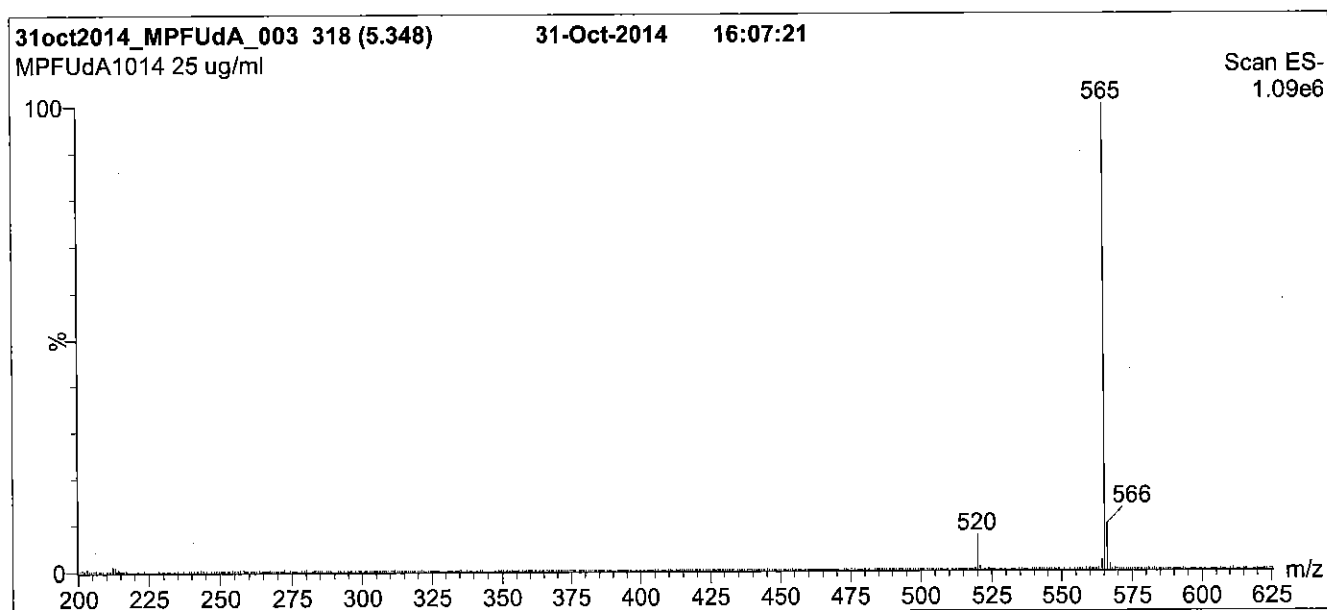
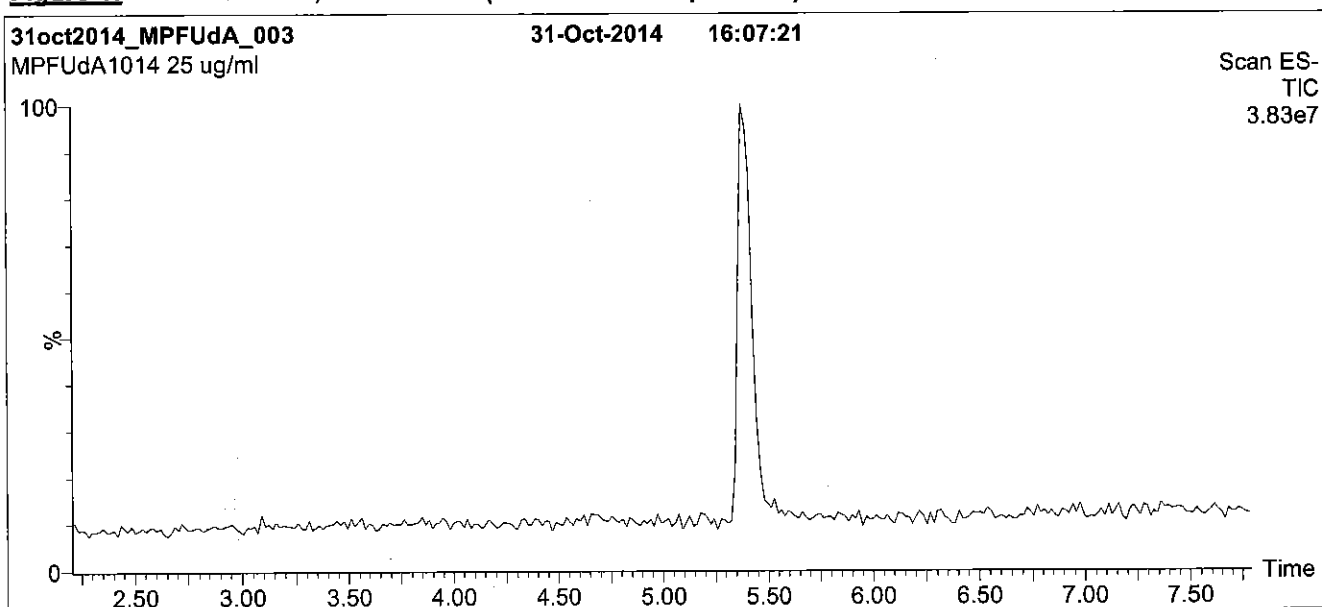
QUALITY MANAGEMENT:

This product was produced using a Quality Management System registered to ISO 9001:2008 by SAI Global, ISO/IEC 17025:2005 by the Canadian Association for Laboratory Accreditation Inc. (CALA; A 1226), and ISO GUIDE 34:2009 by ACLASS (certificate number AR-1523).



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Figure 1: MPFUdA; LC/MS Data (TIC and Mass Spectrum)



Conditions for Figure 1:

LC: Waters Acquity Ultra Performance LC
MS: Micromass Quattro micro API MS

Chromatographic Conditions

Column: Acquity UPLC BEH Shield RP₁₈
1.7 μ m, 2.1 x 100 mm

Mobile phase: Gradient
Start: 50% (80:20 MeOH:ACN) / 50% H₂O
(both with 10 mM NH₄OAc buffer)
Ramp to 90% organic over 7 min and hold for
2 min before returning to initial conditions in 0.5 min.
Time: 10 min

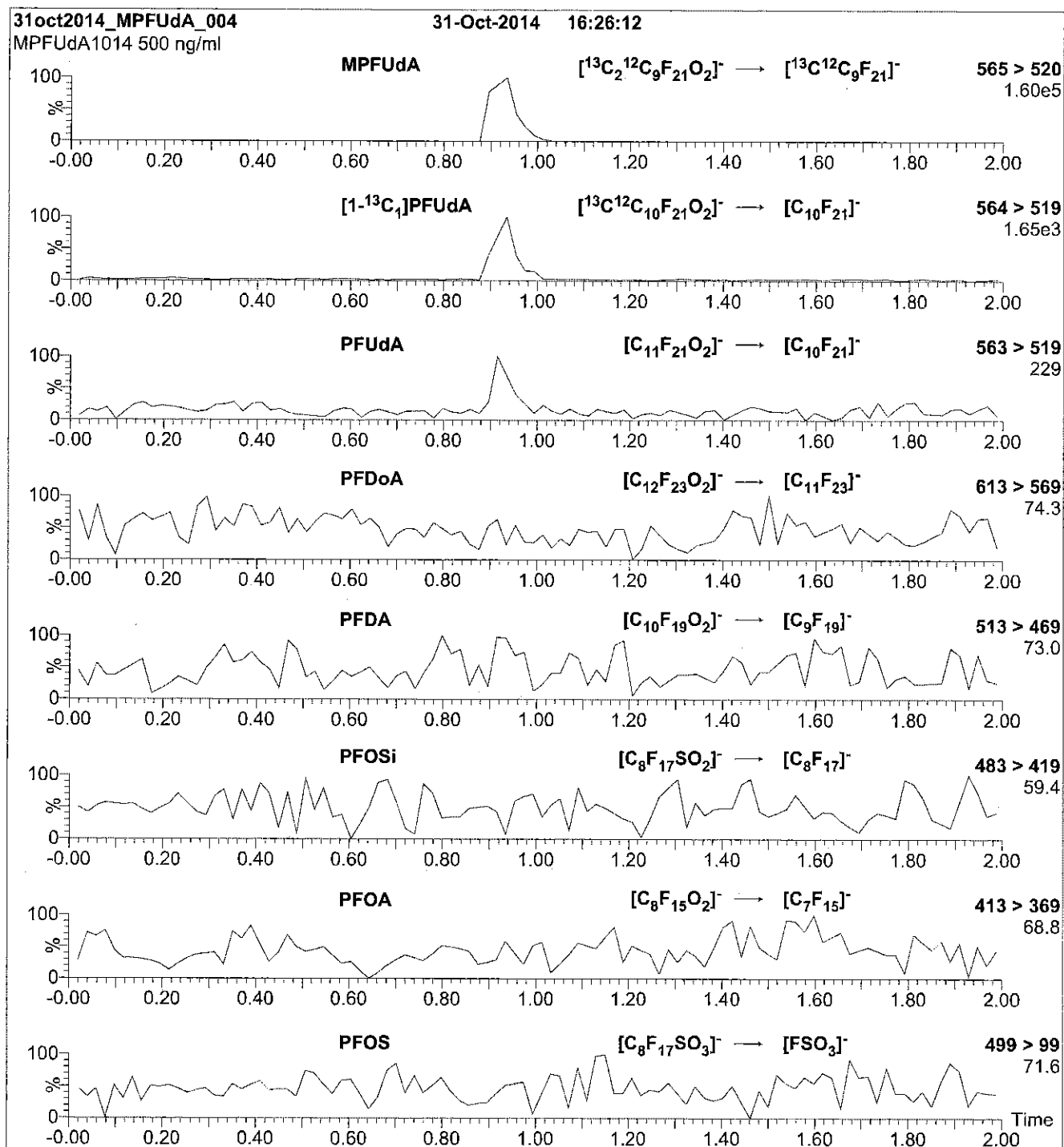
Flow: 300 μ l/min

MS Parameters

Experiment: Full Scan (200 - 850 amu)

Source: Electrospray (negative)
Capillary Voltage (kV) = 3.00
Cone Voltage (V) = 15.00
Cone Gas Flow (l/hr) = 65
Desolvation Gas Flow (l/hr) = 750

Figure 2: MPFUDa; LC/MS/MS Data (Selected MRM Transitions)



Conditions for Figure 2:

Injection: Direct loop injection
10 μl (500 ng/ml MPFUDa)

Mobile phase: Isocratic 80% (80:20 MeOH:ACN) / 20% H_2O
(both with 10 mM NH_4OAc buffer)

Flow: 300 $\mu\text{l}/\text{min}$

MS Parameters

Collision Gas (mbar) = 3.46e-3
Collision Energy (eV) = 11

Reagent

LCMPFUdA_00005



WELLINGTON LABORATORIES

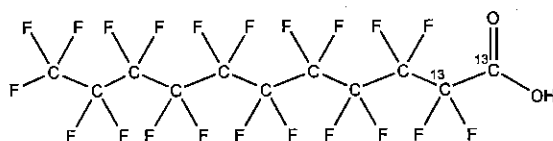
CERTIFICATE OF ANALYSIS DOCUMENTATION

PRODUCT CODE: MPFUdA
COMPOUND: Perfluoro-n-[1,2-¹³C₂]undecanoic acid

LOT NUMBER: MPFUdA1014

STRUCTURE:

CAS #: Not available



MOLECULAR FORMULA: ¹³C₂¹²C₉HF₂₁O₂
CONCENTRATION: 50 ± 2.5 µg/ml

MOLECULAR WEIGHT: 566.08
SOLVENT(S): Methanol
Water (<1%)

CHEMICAL PURITY: >98%
LAST TESTED: (mm/dd/yyyy) 10/31/2014
EXPIRY DATE: (mm/dd/yyyy) 10/31/2019

ISOTOPIC PURITY: ≥99% ¹³C
(1,2-¹³C₂)

RECOMMENDED STORAGE: Store ampoule in a cool, dark place

DOCUMENTATION/ DATA ATTACHED:

Figure 1: LC/MS Data (TIC and Mass Spectrum)
Figure 2: LC/MS/MS Data (Selected MRM Transitions)

ADDITIONAL INFORMATION:

- See page 2 for further details.
- Contains 4 mole eq. of NaOH to prevent conversion of the carboxylic acid to the methyl ester.
- Presence of 1-¹³C₁-PFUdA (~1%; see Figure 2), 2-¹³C₁-PFUdA (~1%), and PFUdA (~0.2%; see Figure 2) are due to the isotopic purity of the ¹³C-precursor.

FOR LABORATORY USE ONLY: NOT FOR HUMAN OR DRUG USE

Certified By:

B.G. Chittim

Date: 04/01/2015
(mm/dd/yyyy)

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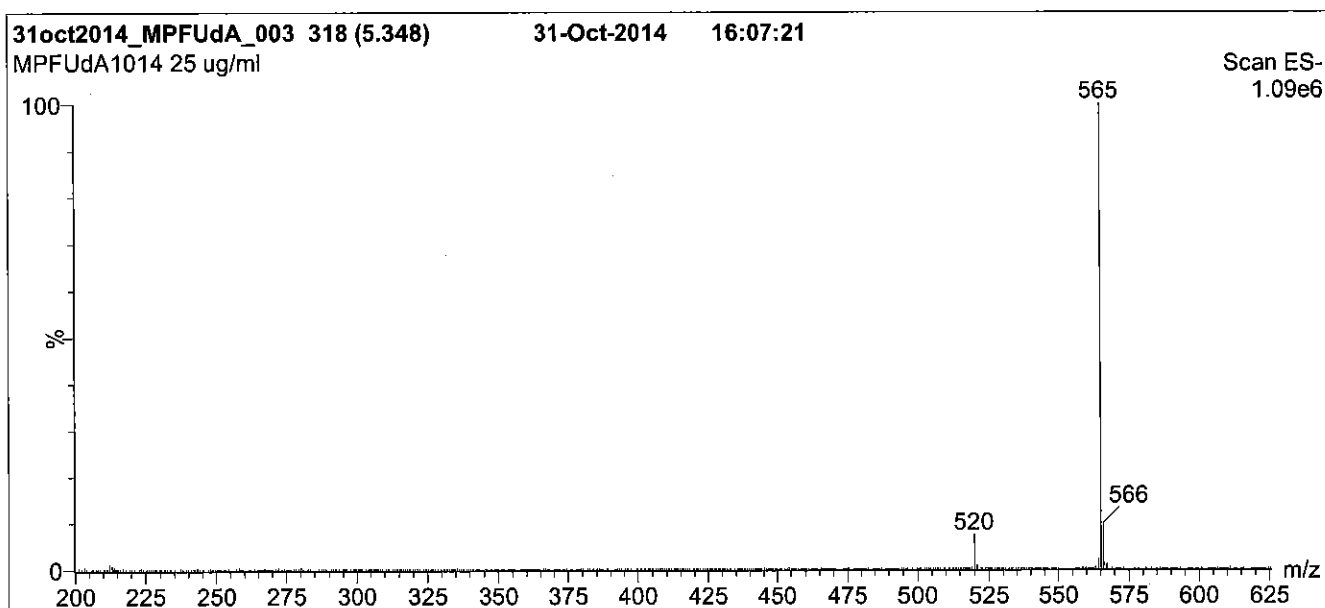
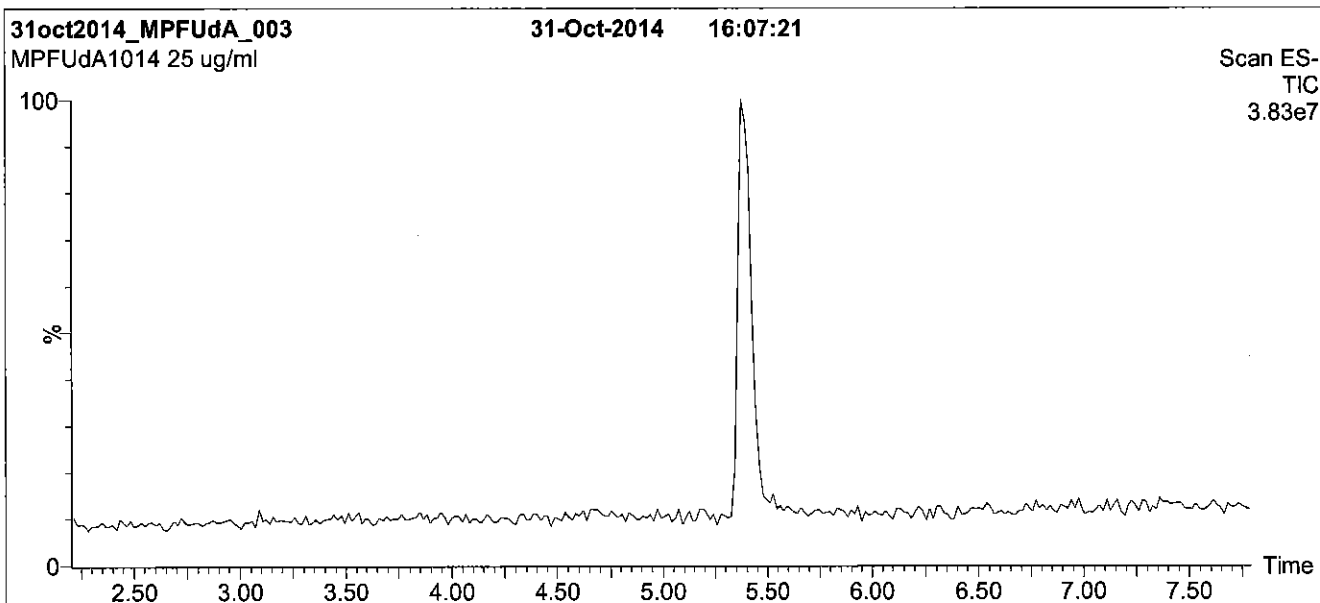
QUALITY MANAGEMENT:

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Figure 1: MPFUdA; LC/MS Data (TIC and Mass Spectrum)



Conditions for Figure 1:

LC: Waters Acquity Ultra Performance LC
MS: Micromass Quattro micro API MS

Chromatographic Conditions

Column: Acquity UPLC BEH Shield RP₁₈
1.7 μ m, 2.1 x 100 mm

Mobile phase: Gradient
Start: 50% (80:20 MeOH:ACN) / 50% H₂O
(both with 10 mM NH₄OAc buffer)
Ramp to 90% organic over 7 min and hold for
2 min before returning to initial conditions in 0.5 min.
Time: 10 min

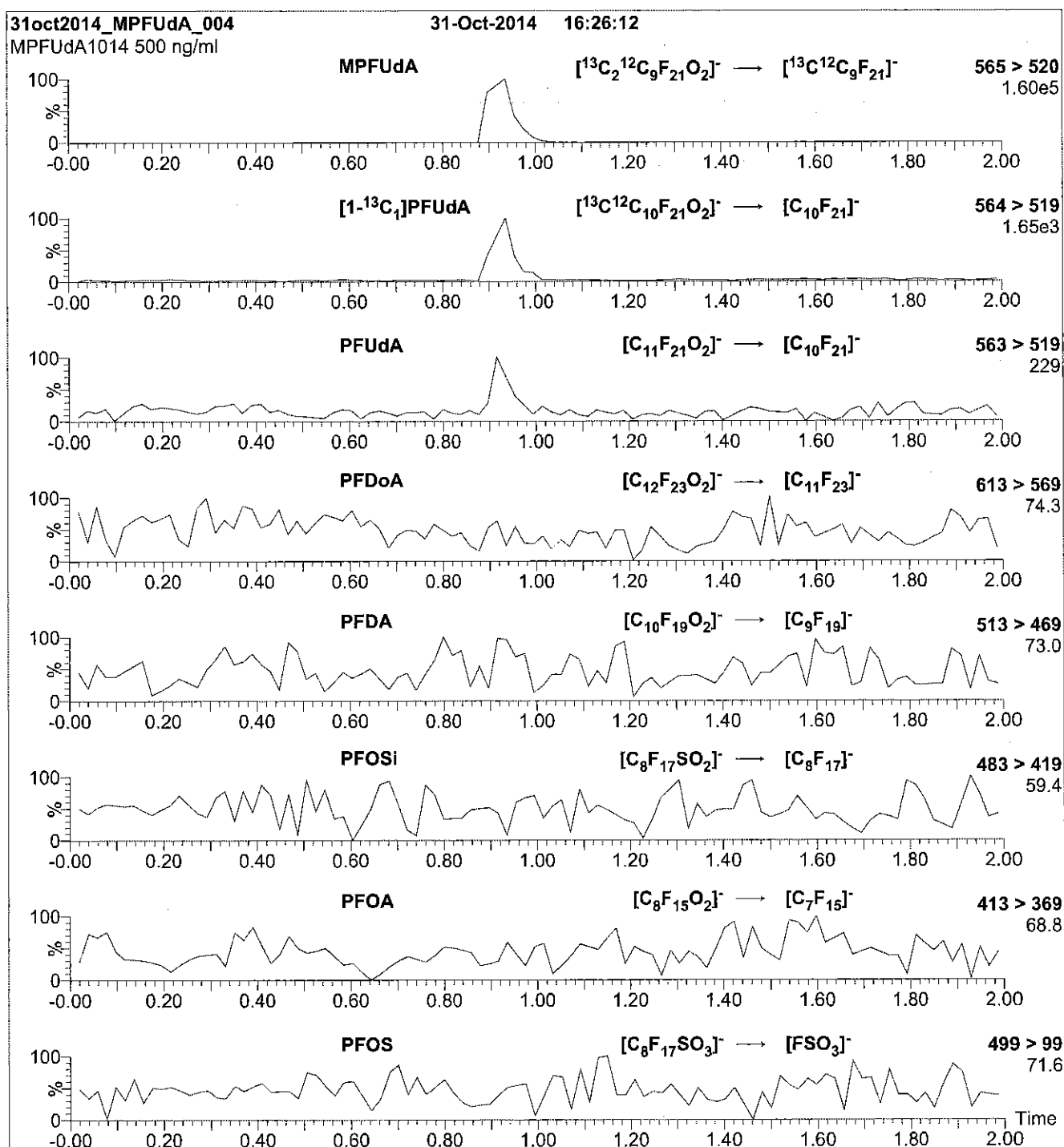
Flow: 300 μ l/min

MS Parameters

Experiment: Full Scan (200 - 850 amu)

Source: Electrospray (negative)
Capillary Voltage (kV) = 3.00
Cone Voltage (V) = 15.00
Cone Gas Flow (l/hr) = 65
Desolvation Gas Flow (l/hr) = 750

Figure 2: MPFUDa; LC/MS/MS Data (Selected MRM Transitions)



Conditions for Figure 2:

Injection: Direct loop injection
10 μl (500 ng/ml MPFUDa)

Mobile phase: Isocratic 80% (80:20 MeOH:ACN) / 20% H_2O
(both with 10 mM NH_4OAc buffer)

Flow: 300 $\mu\text{l}/\text{min}$

MS Parameters

Collision Gas (mbar) = 3.46e-3
Collision Energy (eV) = 11

Reagent

LCMPFUdA_00006



591165

ID: LCMFUDa_00006

Exp: 10/31/19 Prpd: CBW

13C2-Perfluoroundecanoic

R: 3/3/16 CBW



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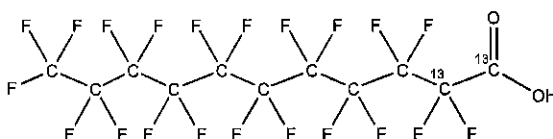
CERTIFICATE OF ANALYSIS DOCUMENTATION

PRODUCT CODE: MPFUdA
COMPOUND: Perfluoro-n-[1,2-¹³C₂]undecanoic acid

LOT NUMBER: MPFUdA1014

STRUCTURE:

CAS #: Not available



MOLECULAR FORMULA: ¹³C₂¹²C₉HF₂₁O₂
CONCENTRATION: 50 ± 2.5 µg/ml

MOLECULAR WEIGHT: 566.08
SOLVENT(S): Methanol
Water (<1%)

CHEMICAL PURITY: >98%

ISOTOPIC PURITY: ≥99% ¹³C
(1,2-¹³C₂)

LAST TESTED: (mm/dd/yyyy) 10/31/2014

EXPIRY DATE: (mm/dd/yyyy) 10/31/2019

RECOMMENDED STORAGE: Store ampoule in a cool, dark place

DOCUMENTATION/ DATA ATTACHED:

Figure 1: LC/MS Data (TIC and Mass Spectrum)

Figure 2: LC/MS/MS Data (Selected MRM Transitions)

ADDITIONAL INFORMATION:

- See page 2 for further details.
- Contains 4 mole eq. of NaOH to prevent conversion of the carboxylic acid to the methyl ester.
- Presence of 1-¹³C₁-PFUdA (~1%; see Figure 2), 2-¹³C₁-PFUdA (~1%), and PFUdA (~0.2%; see Figure 2) are due to the isotopic purity of the ¹³C-precursor.

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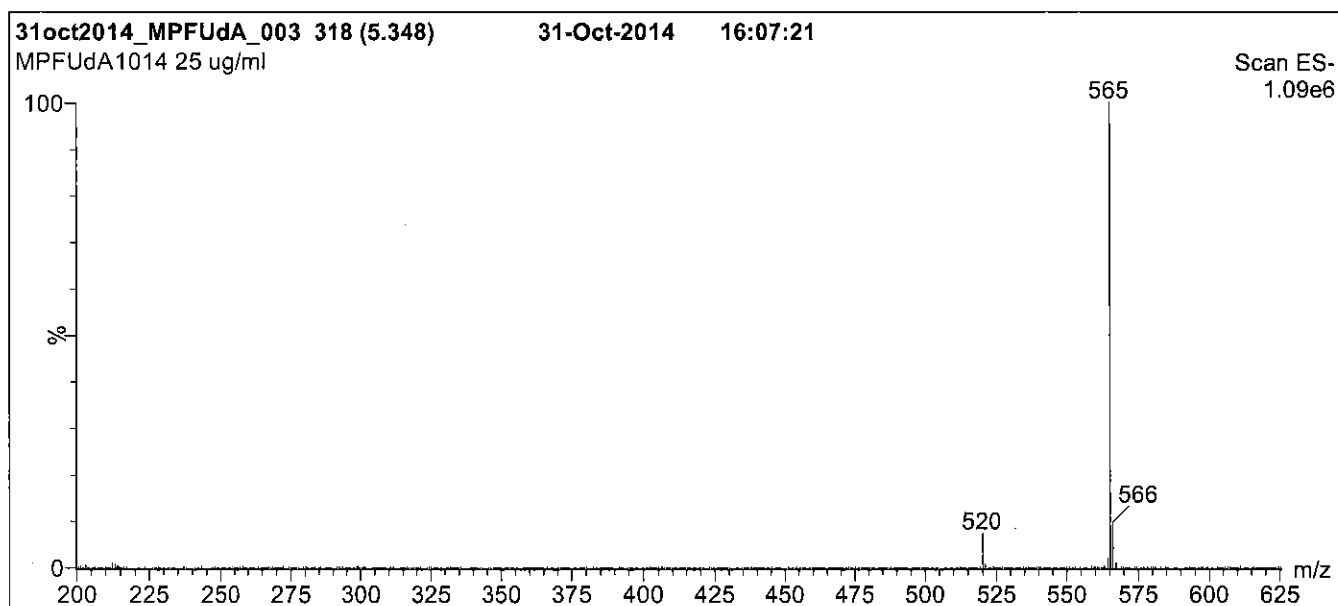
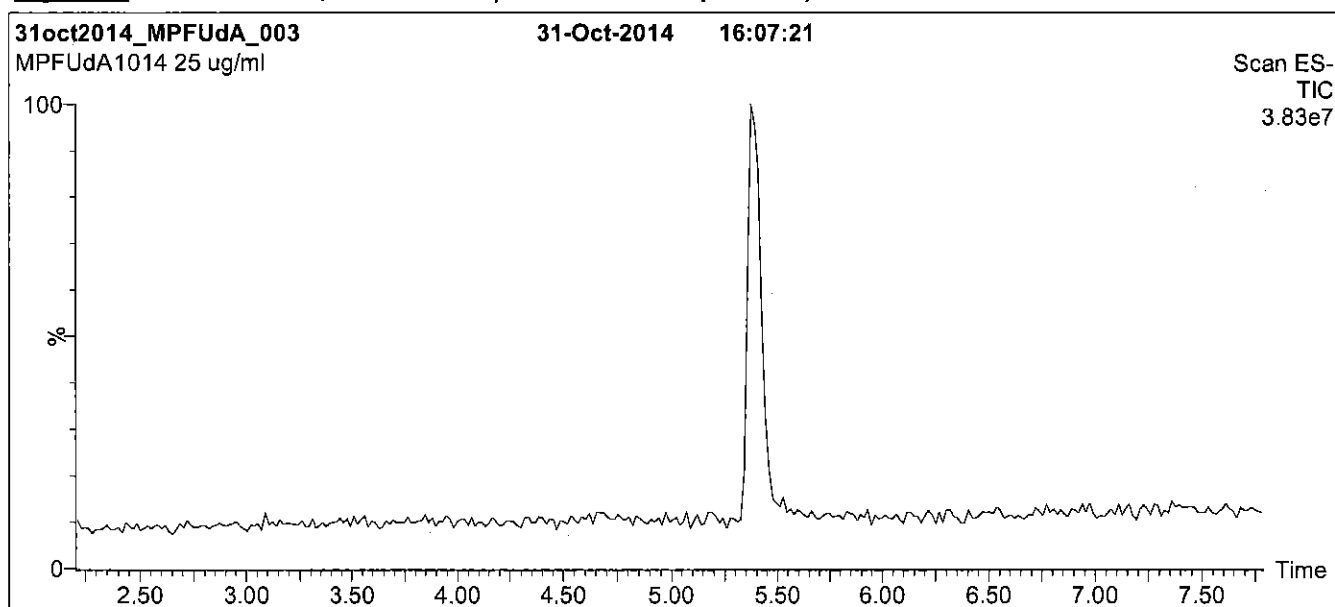
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Figure 1: MPFUdA; LC/MS Data (TIC and Mass Spectrum)



Conditions for Figure 1:

LC: Waters Acquity Ultra Performance LC
MS: Micromass Quattro *micro* API MS

Chromatographic Conditions

Column: Acquity UPLC BEH Shield RP₁₈
1.7 μ m, 2.1 x 100 mm

Mobile phase: Gradient
Start: 50% (80:20 MeOH:ACN) / 50% H₂O
(both with 10 mM NH₄OAc buffer)
Ramp to 90% organic over 7 min and hold for
2 min before returning to initial conditions in 0.5 min.
Time: 10 min

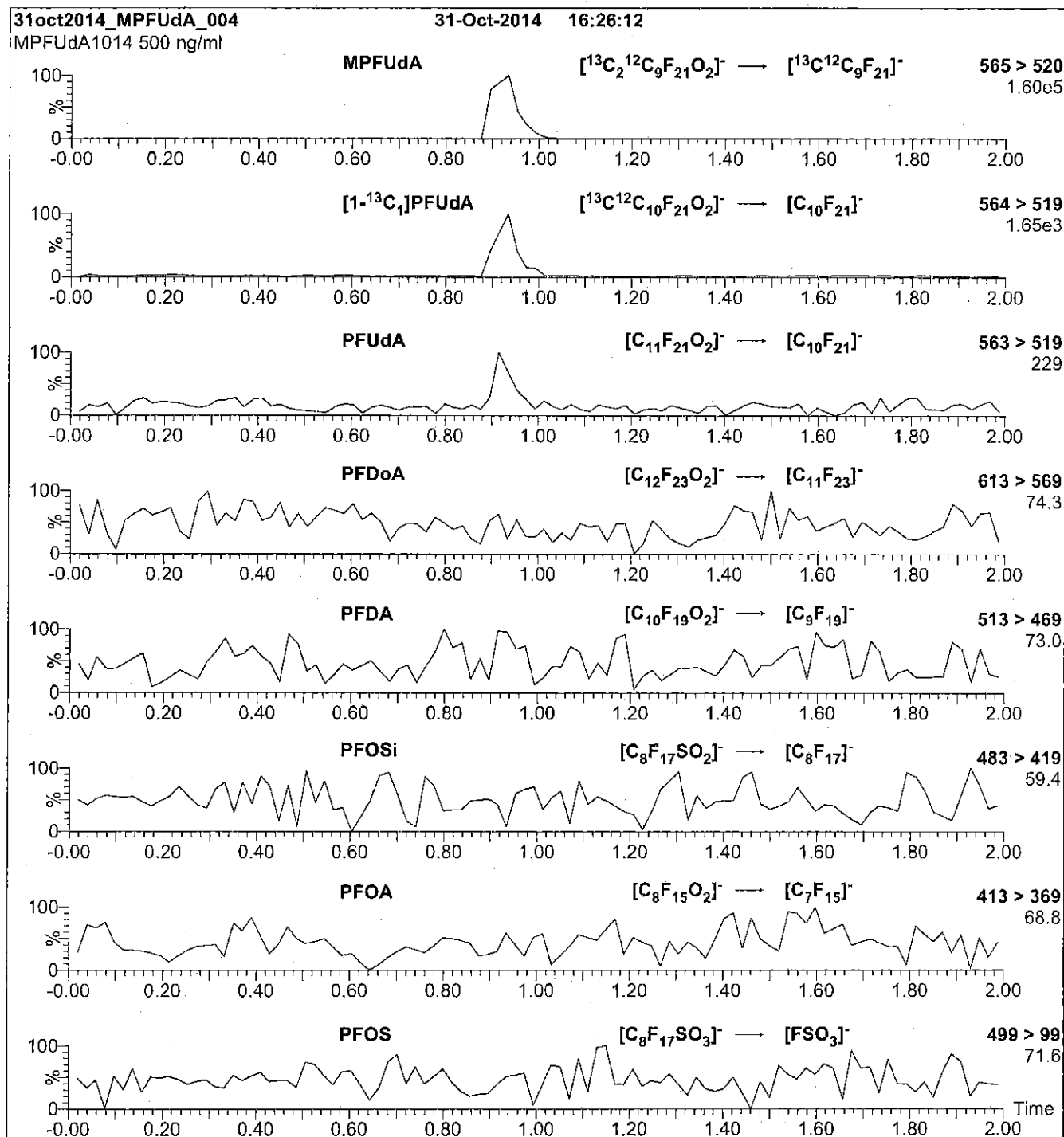
Flow: 300 μ l/min

MS Parameters

Experiment: Full Scan (200 - 850 amu)

Source: Electrospray (negative)
Capillary Voltage (kV) = 3.00
Cone Voltage (V) = 15.00
Cone Gas Flow (l/hr) = 65
Desolvation Gas Flow (l/hr) = 750

Figure 2: MPFUDa; LC/MS/MS Data (Selected MRM Transitions)



Conditions for Figure 2:

Injection: Direct loop injection
10 μl (500 ng/ml MPFUDa)

Mobile phase: Isocratic 80% (80:20 MeOH:ACN) / 20% H_2O
(both with 10 mM NH_4OAc buffer)

Flow: 300 $\mu\text{l}/\text{min}$

MS Parameters

Collision Gas (mbar) = 3.46e-3
Collision Energy (eV) = 11

Reagent

LCMPFUdA_00007



609704

ID: LCMFUDA_00007

Exp: 10/31/19 Prod: CBW

¹³C2-Perfluoroundecanoic

R: 4/7/16 CBW



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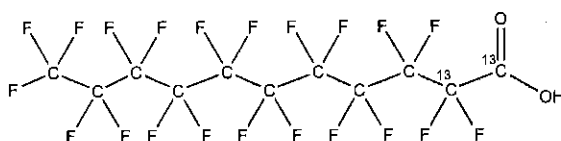
CERTIFICATE OF ANALYSIS DOCUMENTATION

PRODUCT CODE: MPFUdA
COMPOUND: Perfluoro-n-[1,2-¹³C₂]undecanoic acid

LOT NUMBER: MPFUdA1014

STRUCTURE:

CAS #: Not available



MOLECULAR FORMULA: ¹³C₂¹²C₉HF₂₁O₂
CONCENTRATION: 50 ± 2.5 µg/ml

MOLECULAR WEIGHT: 566.08
SOLVENT(S): Methanol
Water (<1%)

CHEMICAL PURITY: >98%
LAST TESTED: (mm/dd/yyyy) 10/31/2014
EXPIRY DATE: (mm/dd/yyyy) 10/31/2019

ISOTOPIC PURITY: ≥99% ¹³C
(1,2-¹³C₂)

RECOMMENDED STORAGE: Store ampoule in a cool, dark place

DOCUMENTATION/ DATA ATTACHED:

Figure 1: LC/MS Data (TIC and Mass Spectrum)
Figure 2: LC/MS/MS Data (Selected MRM Transitions)

ADDITIONAL INFORMATION:

- See page 2 for further details.
- Contains 4 mole eq. of NaOH to prevent conversion of the carboxylic acid to the methyl ester.
- Presence of 1-¹³C₁-PFUdA (~1%; see Figure 2), 2-¹³C₁-PFUdA (~1%), and PFUdA (~0.2%; see Figure 2) are due to the isotopic purity of the ¹³C-precursor.

FOR LABORATORY USE ONLY: NOT FOR HUMAN OR DRUG USE

Certified By:

B.G. Chittim

Date:

04/01/2015
(mm/dd/yyyy)

Wellington Laboratories Inc., 345 Southgate Dr. Guelph ON 'N1G 3M5 CANADA
519-822-2436 • Fax: 519-822-2849 • info@well-labs.com

INTENDED USE:

The products prepared by Wellington Laboratories Inc. are for laboratory use only. This certified reference material (CRM) was designed to be used as a standard for the identification and/or quantification of the specific chemical compound it contains.

HAZARDS:

This product should only be used by qualified personnel familiar with its potential hazards and trained in the handling of hazardous chemicals. Due care should be exercised to prevent unnecessary human contact or ingestion. All procedures should be carried out in a well-functioning fume hood and suitable gloves, eye protection, and clothing should be worn at all times. Waste should be disposed of according to national and regional regulations. Safety Data Sheets (SDSs) are available upon request.

SYNTHESIS / CHARACTERIZATION:

Where possible, all of our products are synthesized using single-product unambiguous routes. They are then characterized, and their structures and purities confirmed, using a combination of the most relevant techniques, such as NMR, GC/MS, LC/MS/MS, SFC/UV/MS/MS, x-ray crystallography, and melting point. Isotopic purities of mass-labelled compounds are also confirmed using HRGC/HRMS and/or LC/MS/MS.

HOMOGENEITY:

Prior to solution preparation, crystalline material is tested for homogeneity using a variety of techniques (as stated above) and its solubility in a given diluent is taken into consideration. Duplicate solutions of a new product are prepared from the same crystalline lot and, after the addition of an appropriate internal standard, they are compared by GC/MS, LC/MS/MS and/or SFC/UV/MS/MS. The relative response factors of the analyte of interest in each solution are required to be <5% RSD. New solution lots of existing products are compared to older lots in the same manner, which further confirms the homogeneity of the crystalline material as well as the stability and homogeneity of the solutions in the storage containers.

UNCERTAINTY:

The maximum combined relative standard uncertainty of our reference standard solutions is calculated using the following equation:

The combined relative standard uncertainty, $u_c(y)$, of a value y and the uncertainty of the independent parameters x_1, x_2, \dots, x_n on which it depends is:

$$u_c(y(x_1, x_2, \dots, x_n)) = \sqrt{\sum_{i=1}^n u(y, x_i)^2}$$

where x is expressed as a relative standard uncertainty of the individual parameter.

The individual uncertainties taken into account include those associated with weights (calibration of the balance) and volumes (calibration of the volumetric glassware). An expanded maximum combined percent relative uncertainty of $\pm 5\%$ (calculated with a coverage factor of 2 and a level of confidence of 95%) is stated on the Certificate of Analysis for all of our products.

TRACEABILITY:

All reference standard solutions are traceable to specific crystalline lots. The microbalances used for solution preparation are regularly tested by an external ISO/IEC 17025 accredited calibration company. In addition, their calibration is verified prior to each weighing using NIST and/or NRC traceable external weights. All volumetric glassware used is of Class A tolerance and has been tested according to the appropriate ASTM procedures, which are ultimately traceable to NIST. For certain products, traceability to international interlaboratory studies has also been established.

EXPIRY DATE / PERIOD OF VALIDITY:

Ongoing stability studies of this product have demonstrated stability in its composition and concentration, until the specified expiry date, in the unopened ampoule. Monitoring for any degradation or change in concentration of the listed analyte(s) is performed on a routine basis.

LIMITED WARRANTY:

At the time of shipment, all products are warranted to be free of defects in material and workmanship and to conform to the stated technical and purity specifications.

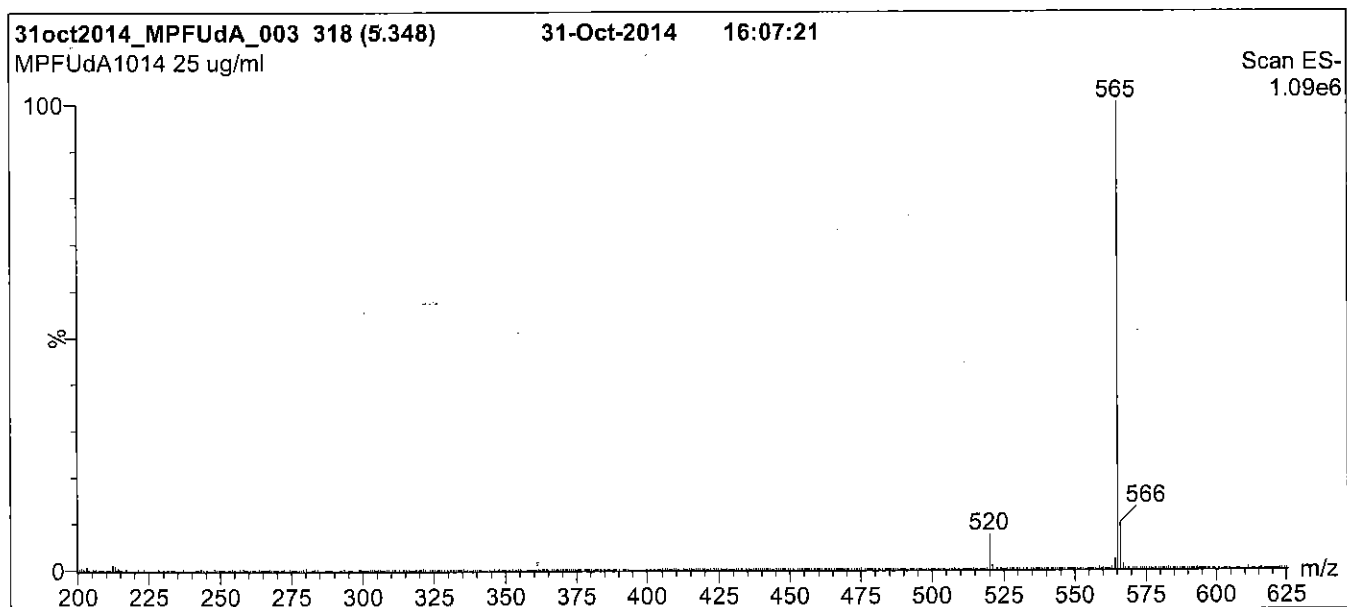
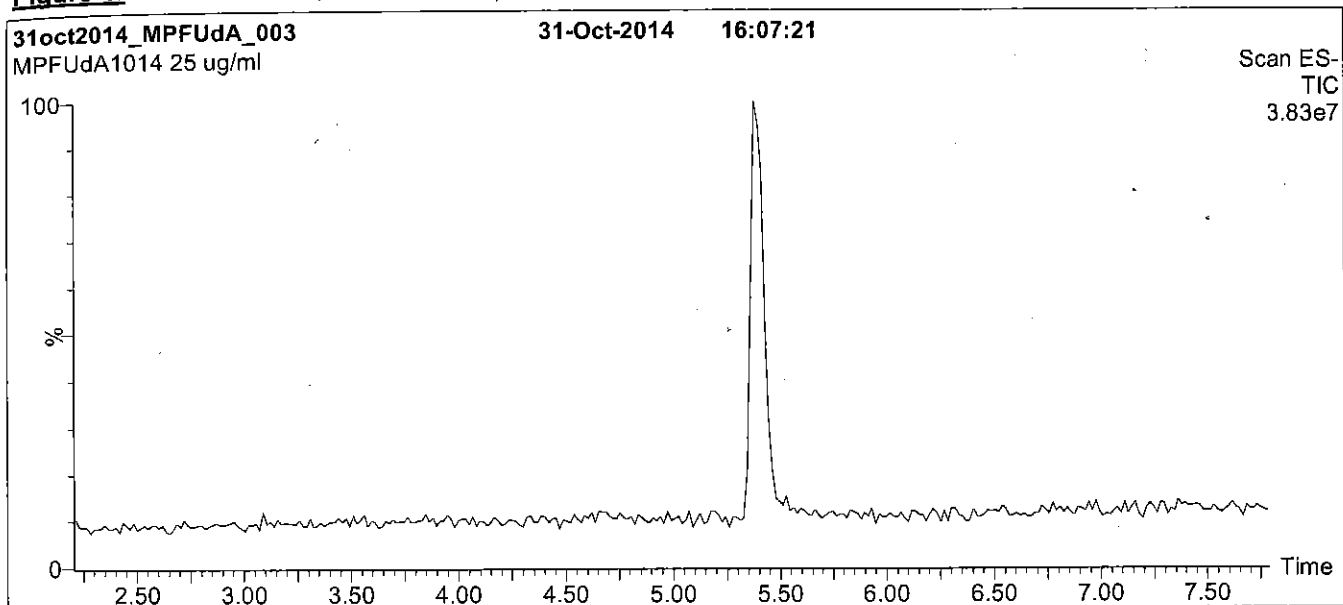
QUALITY MANAGEMENT:

This product was produced using a Quality Management System registered to the latest versions of ISO 9001 by SAI Global, ISO/IEC 17025 by the Canadian Association for Laboratory Accreditation Inc. (CALA; A 1226), and ISO GUIDE 34 by ANSI-ASQ National Accreditation Board (ANAB; AR-1523).



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Figure 1: MPFUdA; LC/MS Data (TIC and Mass Spectrum)



Conditions for Figure 1:

LC: Waters Acquity Ultra Performance LC
MS: Micromass Quattro *micro* API MS

Chromatographic Conditions

Column: Acquity UPLC BEH Shield RP₁₈
1.7 μ m, 2.1 x 100 mm

Mobile phase: Gradient
Start: 50% (80:20 MeOH:ACN) / 50% H₂O
(both with 10 mM NH₄OAc buffer)
Ramp to 90% organic over 7 min and hold for
2 min before returning to initial conditions in 0.5 min.
Time: 10 min

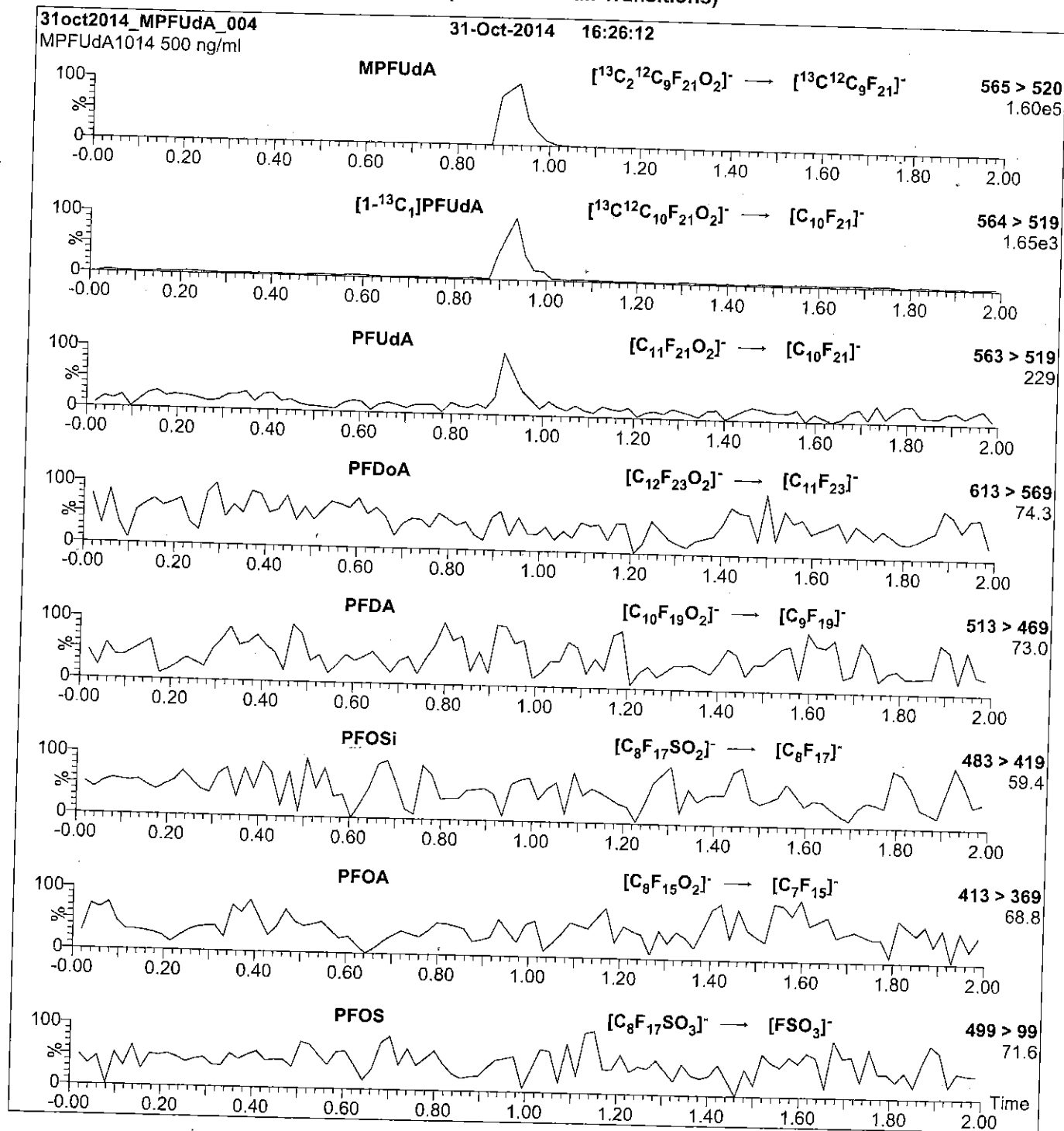
Flow: 300 μ l/min

MS Parameters

Experiment: Full Scan (200 - 850 amu)

Source: Electrospray (negative)
Capillary Voltage (kV) = 3.00
Cone Voltage (V) = 15.00
Cone Gas Flow (l/hr) = 65
Desolvation Gas Flow (l/hr) = 750

Figure 2: MPFUDa; LC/MS/MS Data (Selected MRM Transitions)



Conditions for Figure 2:

Injection: Direct loop injection
10 μl (500 ng/ml MPFUDa)

Mobile phase: Isocratic 80% (80:20 MeOH:ACN) / 20% H_2O
(both with 10 mM NH_4OAc buffer)

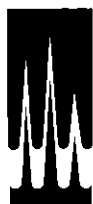
Flow: 300 $\mu\text{l}/\text{min}$

MS Parameters

Collision Gas (mbar) = 3.46e-3
Collision Energy (eV) = 11

Reagent

LCPFACMXB_00007



WELLINGTON LABORATORIES

CERTIFICATE OF ANALYSIS DOCUMENTATION

PFAC-MXB

**Solution/Mixture of Native
Perfluoroalkylcarboxylic Acids and
Native Perfluoroalkylsulfonates**

PRODUCT CODE: PFAC-MXB
LOT NUMBER: PFACMXB1115
SOLVENT(S): Methanol / Water (<1%)
DATE PREPARED: (mm/dd/yyyy) 11/04/2015
LAST TESTED: (mm/dd/yyyy) 11/06/2015
EXPIRY DATE: (mm/dd/yyyy) 11/06/2020
RECOMMENDED STORAGE: Store ampoule in a cool, dark place

DESCRIPTION:

PFAC-MXB is a solution/mixture of thirteen native perfluoroalkylcarboxylic acids (C₄-C₁₄, C₁₆, and C₁₈) and four native perfluoroalkylsulfonates (C₄, C₆, C₈ and C₁₀). The full name, abbreviation and concentration for each of the components are given in Table A.

The individual perfluoroalkylcarboxylic acids and perfluoroalkylsulfonates all have chemical purities of >98%.

DOCUMENTATION/ DATA ATTACHED:

Table A: Components and Concentrations of the Solution/Mixture
 Figure 1: LC/MS Data (SiR)
 Figure 2: LC/MS/MS Data (Selected MRM Transitions)
 Figure 3: LC/MS/MS Data (Selected MRM Transitions)

ADDITIONAL INFORMATION:

- See page 2 for further details.
- Contains 4 mole eq. of NaOH to prevent conversion of the carboxylic acids to their respective methyl esters.

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**Wellington Laboratories Inc., 345 Southgate Dr. Guelph ON N1G 3M5 CANADA
 519-822-2436 • Fax: 519-822-2849 • info@well-labs.com**

INTENDED USE:

The products prepared by Wellington Laboratories Inc. are for laboratory use only. This certified reference material (CRM) was designed to be used as a standard for the identification and/or quantification of the specific chemical compounds it contains.

HAZARDS:

This product should only be used by qualified personnel familiar with its potential hazards and trained in the handling of hazardous chemicals. Due care should be exercised to prevent unnecessary human contact or ingestion. All procedures should be carried out in a well-functioning fume hood and suitable gloves, eye protection, and clothing should be worn at all times. Waste should be disposed of according to national and regional regulations. Safety Data Sheets (SDSs) are available upon request.

SYNTHESIS / CHARACTERIZATION:

Where possible, all of our products are synthesized using single-product unambiguous routes. They are then characterized, and their structures and purities confirmed, using a combination of the most relevant techniques, such as NMR, GC/MS, LC/MS/MS, SFC/UV/MS/MS, x-ray crystallography, and melting point. Isotopic purities of mass-labelled compounds are also confirmed using HRGC/HRMS and/or LC/MS/MS.

HOMOGENEITY:

Prior to solution preparation, crystalline material is tested for homogeneity using a variety of techniques (as stated above) and its solubility in a given diluent is taken into consideration. Duplicate solutions of a new product are prepared from the same crystalline lot and, after the addition of an appropriate internal standard, they are compared by GC/MS, LC/MS/MS and/or SFC/UV/MS/MS. The relative response factors of the analyte of interest in each solution are required to be <5% RSD. New solution lots of existing products are compared to older lots in the same manner, which further confirms the homogeneity of the crystalline material as well as the stability and homogeneity of the solutions in the storage containers.

UNCERTAINTY:

The maximum combined relative standard uncertainty of our reference standard solutions is calculated using the following equation:

The combined relative standard uncertainty, $u_c(y)$, of a value y and the uncertainty of the independent parameters x_1, x_2, \dots, x_n on which it depends is:

$$u_c(y(x_1, x_2, \dots, x_n)) = \sqrt{\sum_{i=1}^n u(y, x_i)^2}$$

where x is expressed as a relative standard uncertainty of the individual parameter.

The individual uncertainties taken into account include those associated with weights (calibration of the balance) and volumes (calibration of the volumetric glassware). An expanded maximum combined percent relative uncertainty of $\pm 5\%$ (calculated with a coverage factor of 2 and a level of confidence of 95%) is stated on the Certificate of Analysis for all of our products.

TRACEABILITY:

All reference standard solutions are traceable to specific crystalline lots. The microbalances used for solution preparation are regularly tested by an external ISO/IEC 17025 accredited calibration company. In addition, their calibration is verified prior to each weighing using NIST and/or NRC traceable external weights. All volumetric glassware used is of Class A tolerance and has been tested according to the appropriate ASTM procedures, which are ultimately traceable to NIST. For certain products, traceability to international interlaboratory studies has also been established.

EXPIRY DATE / PERIOD OF VALIDITY:

Ongoing stability studies of this product have demonstrated stability in its composition and concentration, until the specified expiry date, in the unopened ampoule. Monitoring for any degradation or change in concentration of the listed analyte(s) is performed on a routine basis.

LIMITED WARRANTY:

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QUALITY MANAGEMENT:

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Table A: PFAC-MXB; Components and Concentrations (ng/ml, \pm 5% in Methanol / Water (<1%))

Name	Abbreviation	Concentration (ng/ml)		Peak Assignment In Figure 1
Perfluoro-n-butanoic acid	PFBA	2000		A
Perfluoro-n-pentanoic acid	PFPeA	2000		B
Perfluoro-n-hexanoic acid	PFHxA	2000		D
Perfluoro-n-heptanoic acid	PFHpA	2000		E
Perfluoro-n-octanoic acid	PFOA	2000		G
Perfluoro-n-nonanoic acid	PFNA	2000		H
Perfluoro-n-decanoic acid	PFDA	2000		J
Perfluoro-n-undecanoic acid	PFUdA	2000		K
Perfluoro-n-dodecanoic acid	PFDoA	2000		M
Perfluoro-n-tridecanoic acid	PFTrDA	2000		N
Perfluoro-n-tetradecanoic acid	PFTeDA	2000		O
Perfluoro-n-hexadecanoic acid	PFHxDA	2000		P
Perfluoro-n-octadecanoic acid	PFODA	2000		Q
Name	Abbreviation	Concentration (ng/ml)		Peak Assignment In Figure 1
		as the salt	as the anion	
Potassium perfluoro-1-butanedisulfonate	L-PFBS	2000	1770	C
Sodium perfluoro-1-hexanedisulfonate	L-PFHxS	2000	1890	F
Sodium perfluoro-1-octanedisulfonate	L-PFOS	2000	1910	I
Sodium perfluoro-1-decanedisulfonate	L-PFDS	2000	1930	L

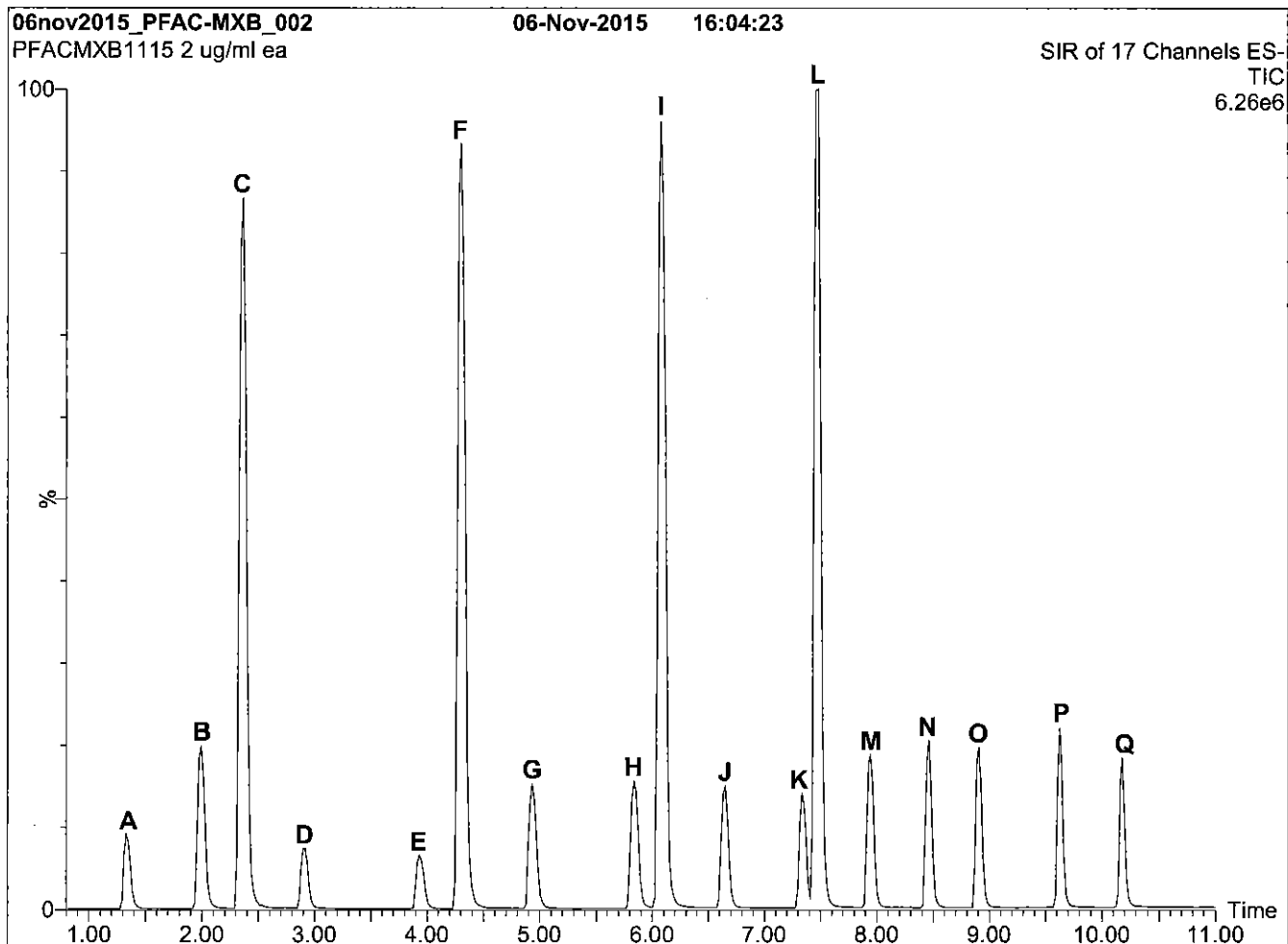
Certified By:


B.G. Chittim

Date: 11/11/2015

(mm/dd/yyyy)

Figure 1: PFAC-MXB; LC/MS Data (Total Ion Current Chromatogram; SIR)



Conditions for Figure 1:

LC: Waters Acquity Ultra Performance LC
MS: Micromass Quattro *micro* API MS

Chromatographic Conditions

Column: Acquity UPLC BEH Shield RP₁₈
1.7 μ m, 2.1 x 100 mm

Mobile phase: Gradient

Start: 55% H₂O / 45% (80:20 MeOH:ACN)
(both with 10 mM NH₄OAc buffer)
Ramp to 95% organic over 10 min and hold for 1 min
before returning to initial conditions in 0.5 min.

Time: 12 min

Flow: 300 μ l/min

MS Parameters

Experiment: SIR of 17 Channels

Source: Electrospray (negative)
Capillary Voltage (kV) = 3.00
Cone Voltage (V) = variable (10-70)
Cone Gas Flow (l/hr) = 50
Desolvation Gas Flow (l/hr) = 750

Figure 2: PFAC-MXB; LC/MS/MS Data (Selected MRM Transitions)

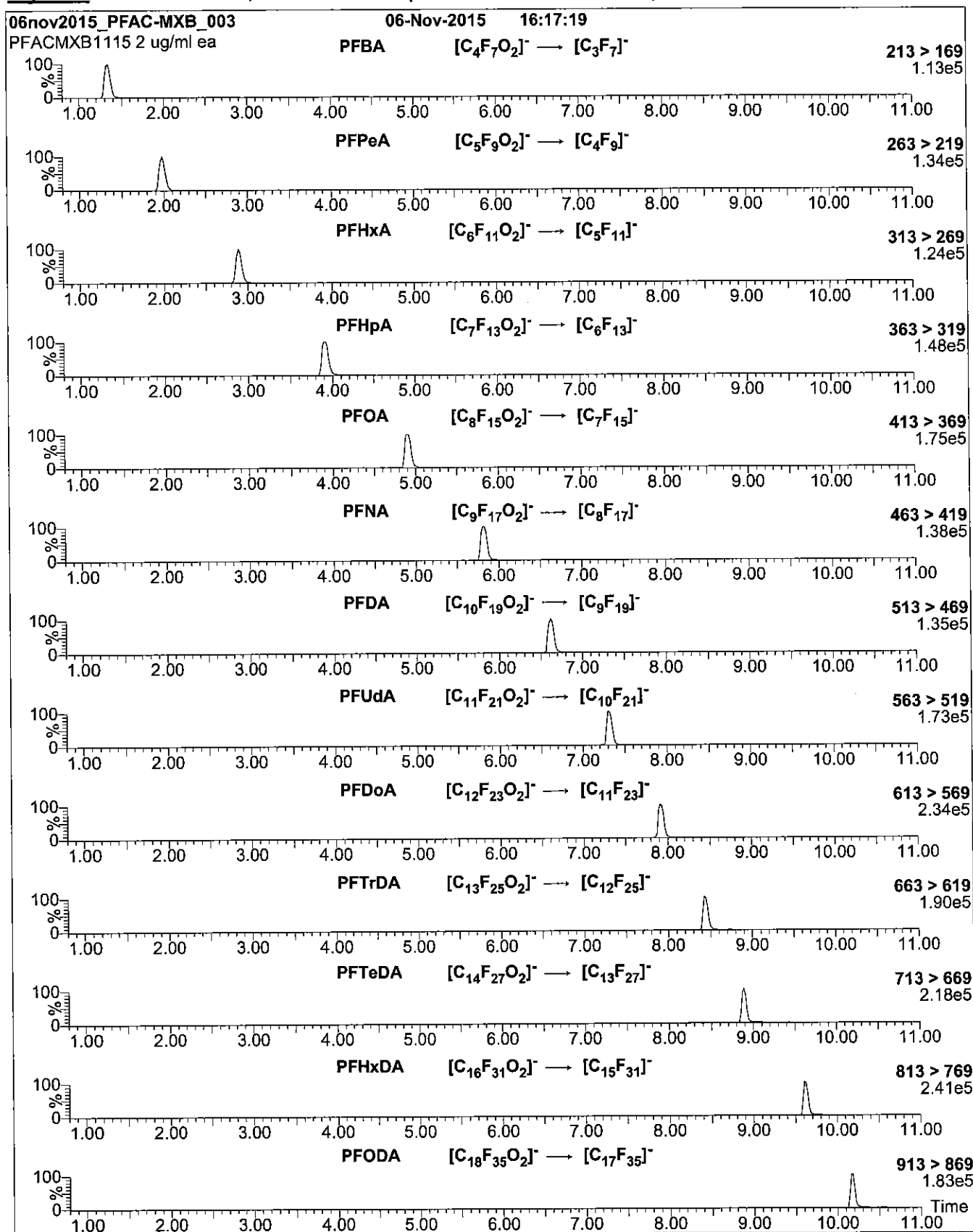
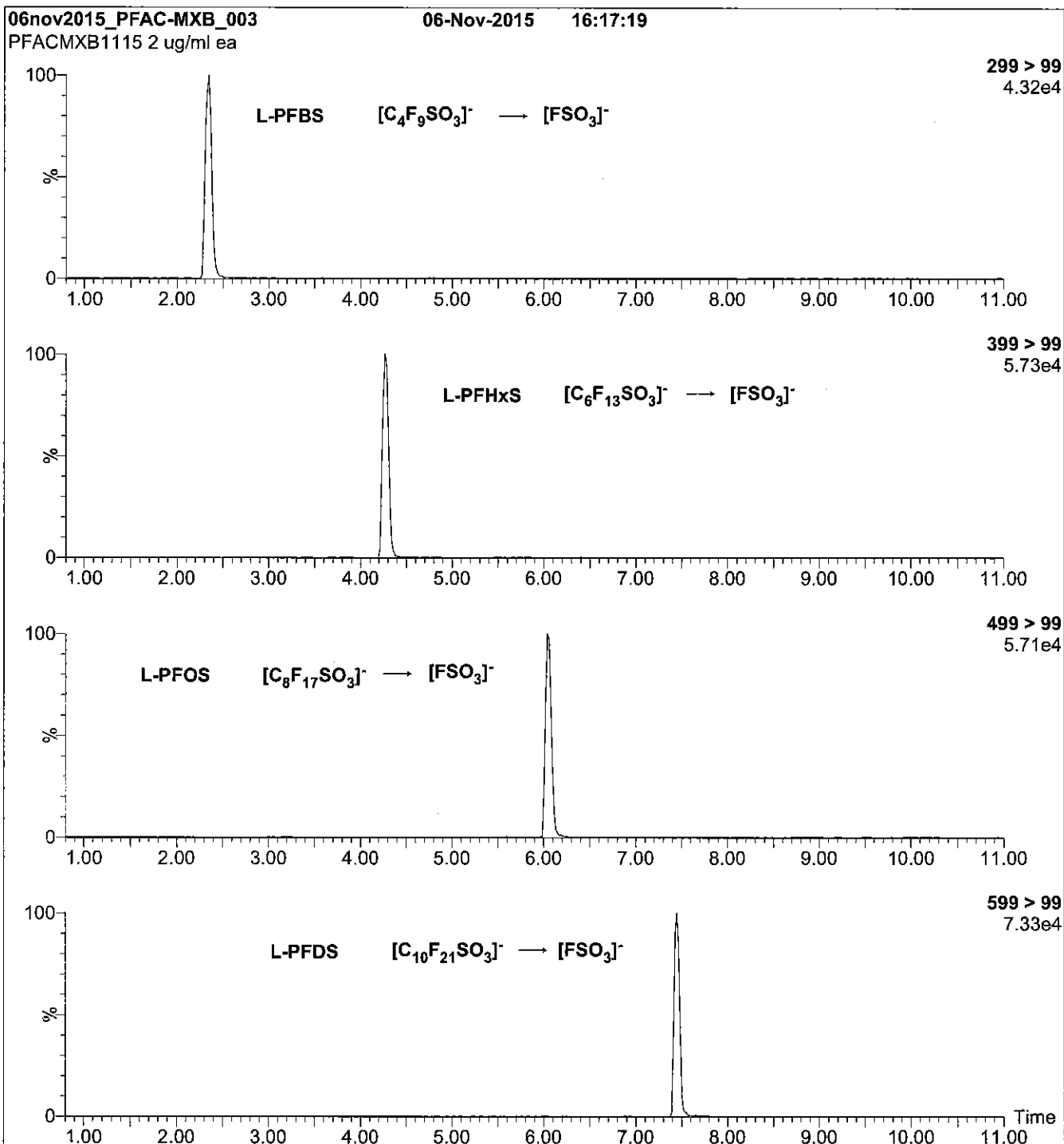


Figure 3: PFAC-MXB; LC/MS/MS Data (Selected MRM Transitions)



Conditions for Figures 2 and 3:

Injection: on-column (PFAC-MXB)

Mobile phase: Same as Figure 1

Flow: 300 μ /min

MS Parameters

Collision Gas (mbar) = 3.24e-3

Collision Energy (eV) = 8-50 (variable)

Reagent

LCPFBA_00003



WELLINGTON LABORATORIES

CERTIFICATE OF ANALYSIS DOCUMENTATION

rec 7/15/14

PRODUCT CODE:

PFBA

LOT NUMBER:

PFBA0313

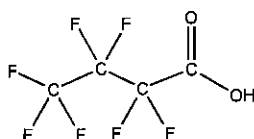
COMPOUND:

Perfluoro-n-butanoic acid

STRUCTURE:

CAS #:

375-22-4



MOLECULAR FORMULA:

C₄HF₇O₂

MOLECULAR WEIGHT:

214.04

CONCENTRATION:

50 ± 2.5 µg/ml

SOLVENT(S):

Methanol

Water (<1%)

CHEMICAL PURITY:

>98%

LAST TESTED: (mm/dd/yyyy)

03/05/2013

EXPIRY DATE: (mm/dd/yyyy)

03/05/2018

RECOMMENDED STORAGE:

Store ampoule in a cool, dark place

DOCUMENTATION/ DATA ATTACHED:

Figure 1: LC/MS Data (TIC and Mass Spectrum)

Figure 2: LC/MS/MS Data (Selected MRM Transitions)

ADDITIONAL INFORMATION:

- See page 2 for further details.
- Contains 4 mole eq. of NaOH to prevent conversion of the carboxylic acid to the methyl ester.

FOR LABORATORY USE ONLY: NOT FOR HUMAN OR DRUG USE

Certified By:

B.G. Chittim

Date: 03/06/2013

(mm/dd/yyyy)

Wellington Laboratories Inc., 345 Southgate Dr. Guelph ON N1G 3M5 CANADA
519-822-2436 • Fax: 519-822-2849 • info@well-labs.com

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$$u_c(v(x_1, x_2, \dots, x_n)) = \sqrt{\sum_{i=1}^n u(y, x_i)^2}$$

where x is expressed as a relative standard uncertainty of the individual parameter.

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EXPIRY DATE / PERIOD OF VALIDITY:

Ongoing stability studies of this product have demonstrated stability in its composition and concentration for the period of time specified by the expiry date in the unopened ampoule. Monitoring for any degradation or change in concentration of the listed analyte(s) is performed on a routine basis.

LIMITED WARRANTY:

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QUALITY MANAGEMENT:

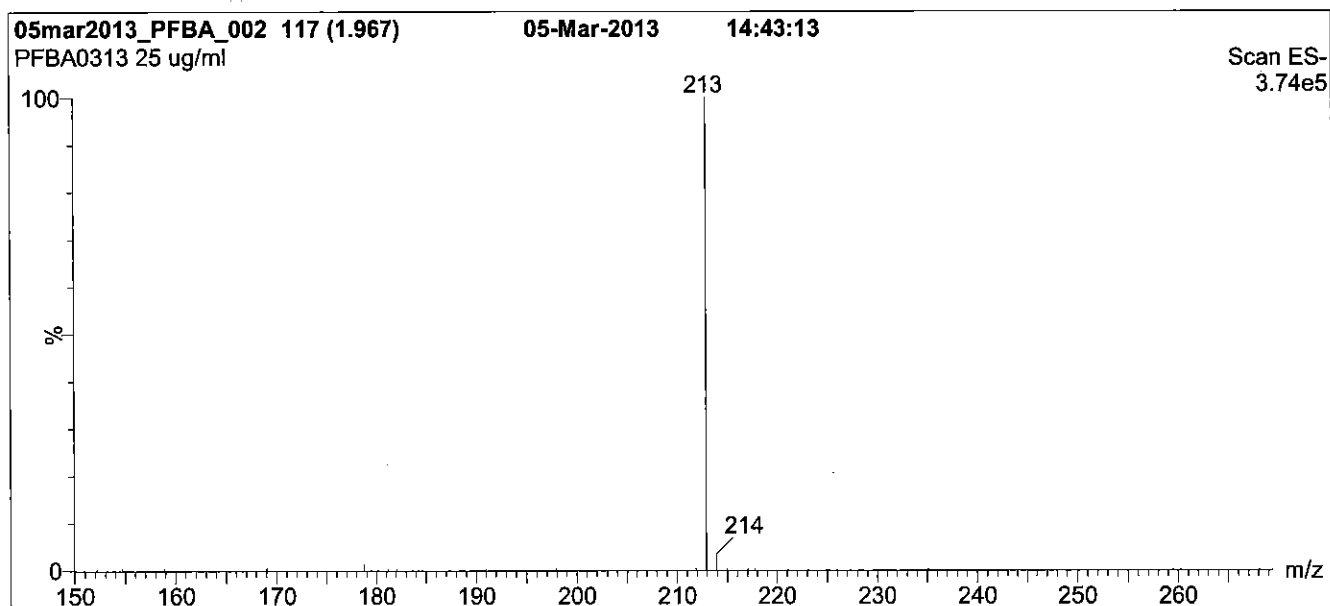
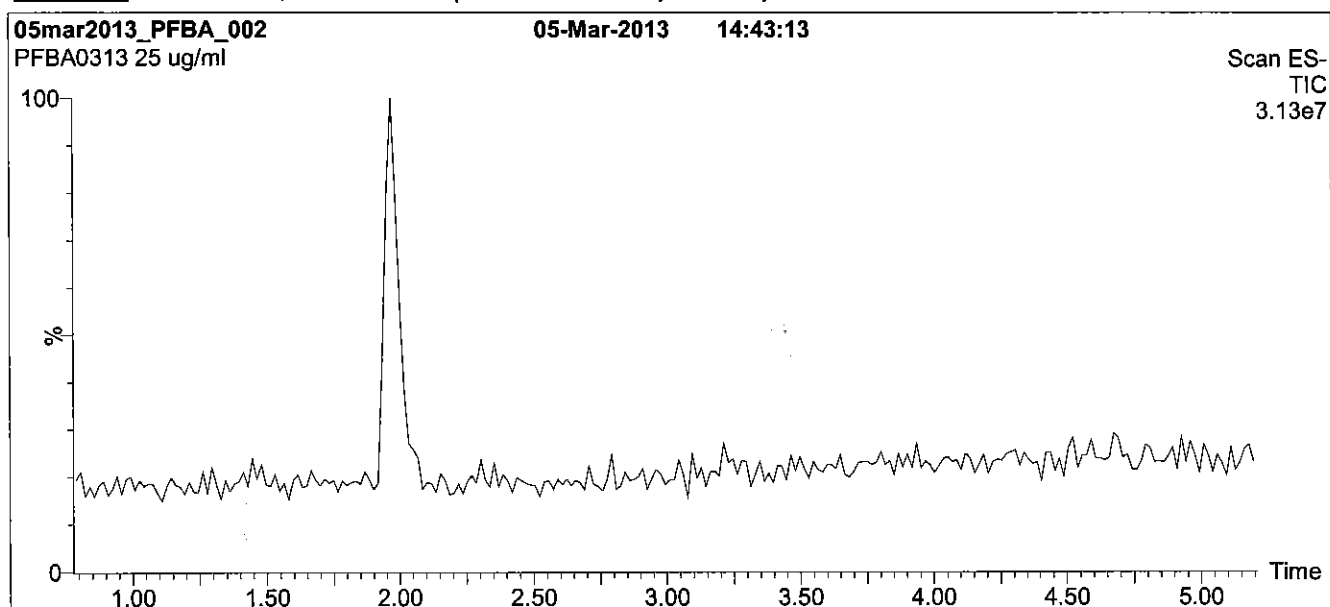
This product was produced using a Quality Management System registered to ISO 9001:2008 by SAI Global, ISO/IEC 17025:2005 by the Canadian Association for Laboratory Accreditation Inc. (CALA; A 1226), and ISO GUIDE 34:2009 by ACLASS (certificate number AR-1523).



REFERENCE MATERIAL PRODUCER

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Figure 1: PFBA; LC/MS Data (TIC and Mass Spectrum)



Conditions for Figure 1:

LC: Waters Acquity Ultra Performance LC
MS: Micromass Quattro micro API MS

Chromatographic Conditions

Column: Acquity UPLC BEH Shield RP₁₈
1.7 μ m, 2.1 x 100 mm

Mobile phase: Gradient
Start: 25% (80:20 MeOH:ACN) / 75% H₂O
(both with 10 mM NH₄OAc buffer)
Ramp to 90% organic over 7.5 min and hold for 1.5 min
before returning to initial conditions in 0.5 min.
Time: 10 min

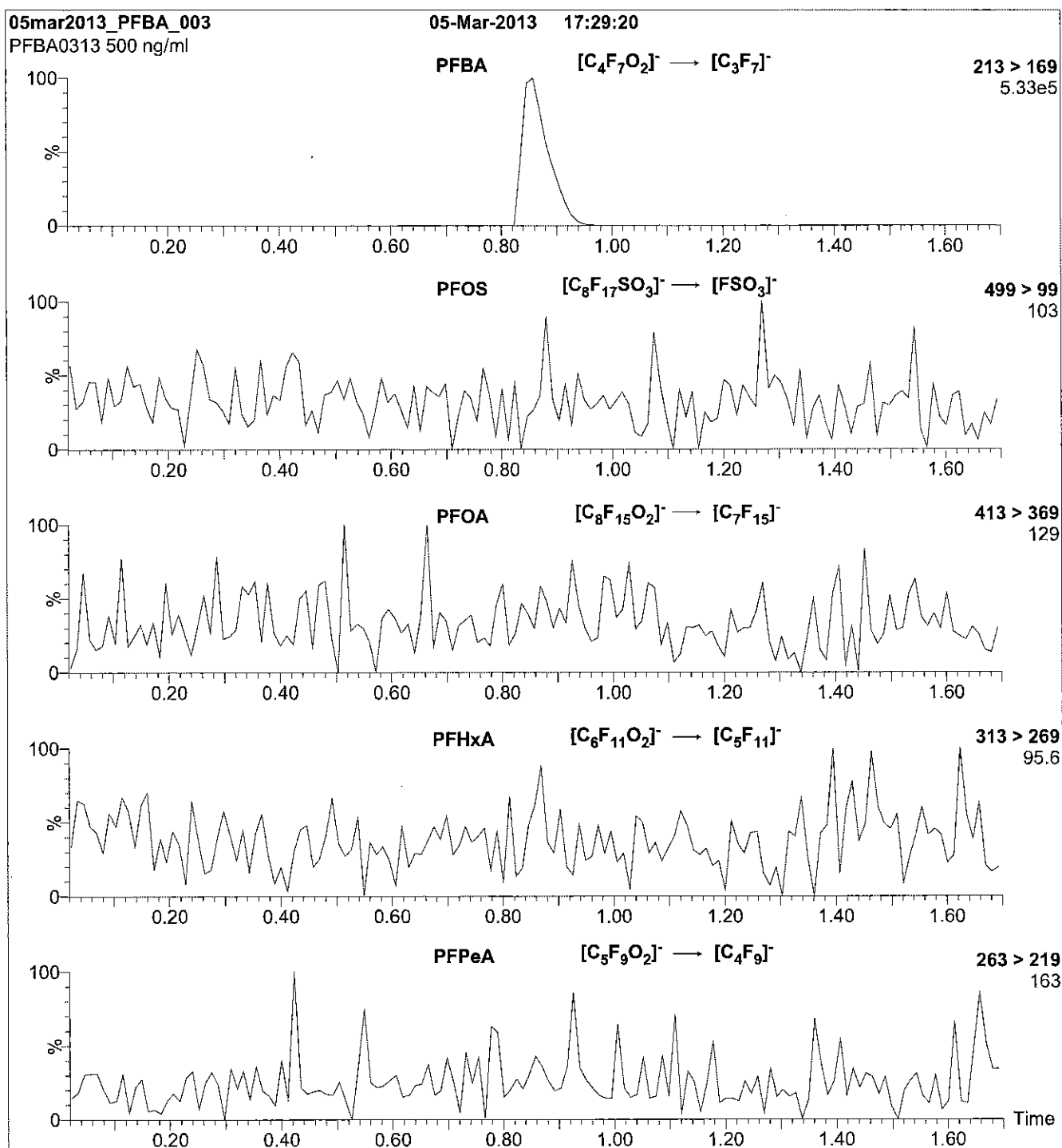
Flow: 300 μ l/min

MS Parameters

Experiment: Full Scan (150 - 850 amu)

Source: Electrospray (negative)
Capillary Voltage (kV) = 2.00
Cone Voltage (V) = 8.00
Cone Gas Flow (l/hr) = 100
Desolvation Gas Flow (l/hr) = 750

Figure 2: PFBA; LC/MS/MS Data (Selected MRM Transitions)



Conditions for Figure 2:

Injection: Direct loop injection
10 μ l (500 ng/ml PFBA)

Mobile phase: Isocratic 80% (80:20 MeOH:ACN) / 20% H₂O
(both with 10 mM NH₄OAc buffer)

Flow: 300 μ l/min

MS Parameters

Collision Gas (mbar) = 3.70e-3
Collision Energy (eV) = 10

Reagent

LCPFBA_00004



587895

ID: LCPFBA_00004

Exp: 01/30/20 Prod: CBW

PF-n-butanoic acid

R: 2/25/16 CBW



WELLINGTON LABORATORIES

CERTIFICATE OF ANALYSIS DOCUMENTATION

PRODUCT CODE:

PFBA

LOT NUMBER:

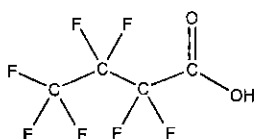
PFBA0115

COMPOUND:

Perfluoro-n-butanoic acid

STRUCTURE:**CAS #:**

375-22-4

**MOLECULAR FORMULA:** $C_4HF_7O_2$ **MOLECULAR WEIGHT:**

214.04

CONCENTRATION: $50 \pm 2.5 \mu\text{g/ml}$ **SOLVENT(S):**

Methanol

Water (<1%)

CHEMICAL PURITY:

>98%

LAST TESTED: (mm/dd/yyyy)

01/30/2015

EXPIRY DATE: (mm/dd/yyyy)

01/30/2020

RECOMMENDED STORAGE:

Store ampoule in a cool, dark place

DOCUMENTATION/ DATA ATTACHED:

Figure 1: LC/MS Data (TIC and Mass Spectrum)

Figure 2: LC/MS/MS Data (Selected MRM Transitions)

ADDITIONAL INFORMATION:

- See page 2 for further details.
- Contains 4 mole eq. of NaOH to prevent conversion of the carboxylic acid to the methyl ester.

FOR LABORATORY USE ONLY: NOT FOR HUMAN OR DRUG USE

Certified By:

B.G. Chittim

Date: 03/25/2015

(mm/dd/yyyy)

Wellington Laboratories Inc., 345 Southgate Dr. Guelph ON N1G 3M5 CANADA
519-822-2436 • Fax: 519-822-2849 • info@well-labs.com

INTENDED USE:

The products prepared by Wellington Laboratories Inc. are for laboratory use only. This certified reference material (CRM) was designed to be used as a standard for the identification and/or quantification of the specific chemical compound it contains.

HAZARDS:

This product should only be used by qualified personnel familiar with its potential hazards and trained in the handling of hazardous chemicals. Due care should be exercised to prevent unnecessary human contact or ingestion. All procedures should be carried out in a well-functioning fume hood and suitable gloves, eye protection, and clothing should be worn at all times. Waste should be disposed of according to national and regional regulations. Safety Data Sheets (SDSs) are available upon request.

SYNTHESIS / CHARACTERIZATION:

Where possible, all of our products are synthesized using single-product unambiguous routes. They are then characterized, and their structures and purities confirmed, using a combination of the most relevant techniques, such as NMR, GC/MS, LC/MS/MS, SFC/UV/MS/MS, x-ray crystallography, and melting point. Isotopic purities of mass-labelled compounds are also confirmed using HRGC/HRMS and/or LC/MS/MS.

HOMOGENEITY:

Prior to solution preparation, crystalline material is tested for homogeneity using a variety of techniques (as stated above) and its solubility in a given diluent is taken into consideration. Duplicate solutions of a new product are prepared from the same crystalline lot and, after the addition of an appropriate internal standard, they are compared by GC/MS, LC/MS/MS and/or SFC/UV/MS/MS. The relative response factors of the analyte of interest in each solution are required to be <5% RSD. New solution lots of existing products are compared to older lots in the same manner, which further confirms the homogeneity of the crystalline material as well as the stability and homogeneity of the solutions in the storage containers.

UNCERTAINTY:

The maximum combined relative standard uncertainty of our reference standard solutions is calculated using the following equation:

The combined relative standard uncertainty, $u_c(y)$, of a value y and the uncertainty of the independent parameters x_1, x_2, \dots, x_n on which it depends is:

$$u_c(y(x_1, x_2, \dots, x_n)) = \sqrt{\sum_{i=1}^n u(y, x_i)^2}$$

where x is expressed as a relative standard uncertainty of the individual parameter.

The individual uncertainties taken into account include those associated with weights (calibration of the balance) and volumes (calibration of the volumetric glassware). An expanded maximum combined percent relative uncertainty of $\pm 5\%$ (calculated with a coverage factor of 2 and a level of confidence of 95%) is stated on the Certificate of Analysis for all of our products.

TRACEABILITY:

All reference standard solutions are traceable to specific crystalline lots. The microbalances used for solution preparation are regularly tested by an external ISO/IEC 17025 accredited calibration company. In addition, their calibration is verified prior to each weighing using NIST and/or NRC traceable external weights. All volumetric glassware used is of Class A tolerance and has been tested according to the appropriate ASTM procedures, which are ultimately traceable to NIST. For certain products, traceability to international interlaboratory studies has also been established.

EXPIRY DATE / PERIOD OF VALIDITY:

Ongoing stability studies of this product have demonstrated stability in its composition and concentration, until the specified expiry date, in the unopened ampoule. Monitoring for any degradation or change in concentration of the listed analyte(s) is performed on a routine basis.

LIMITED WARRANTY:

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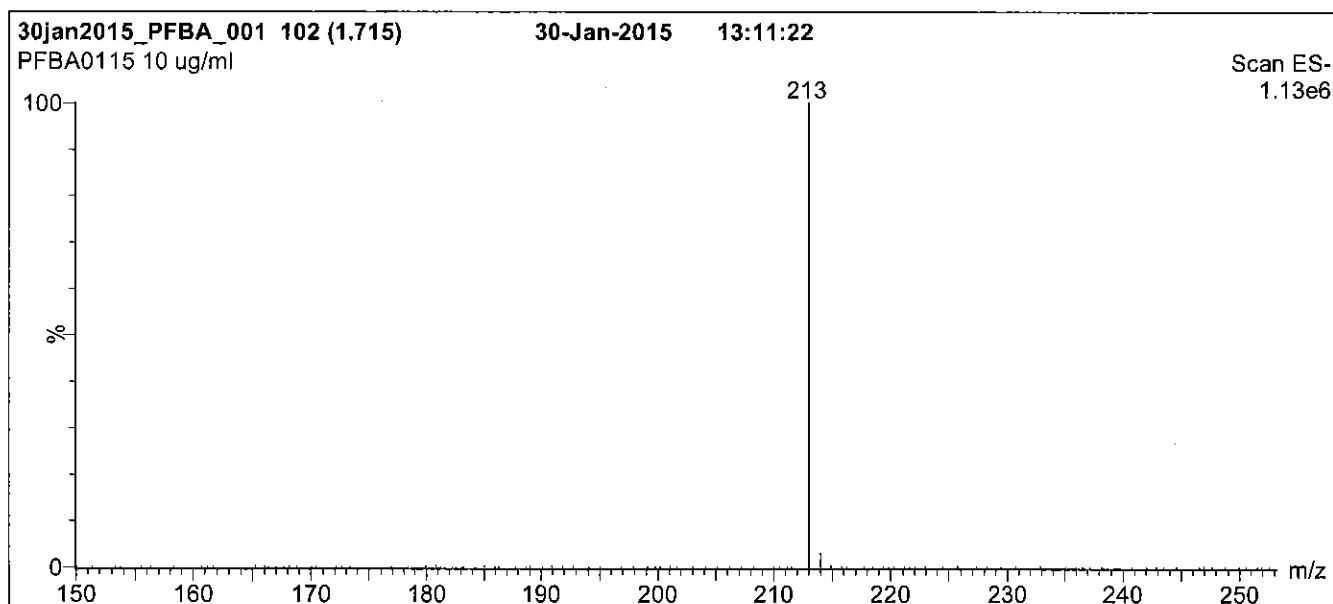
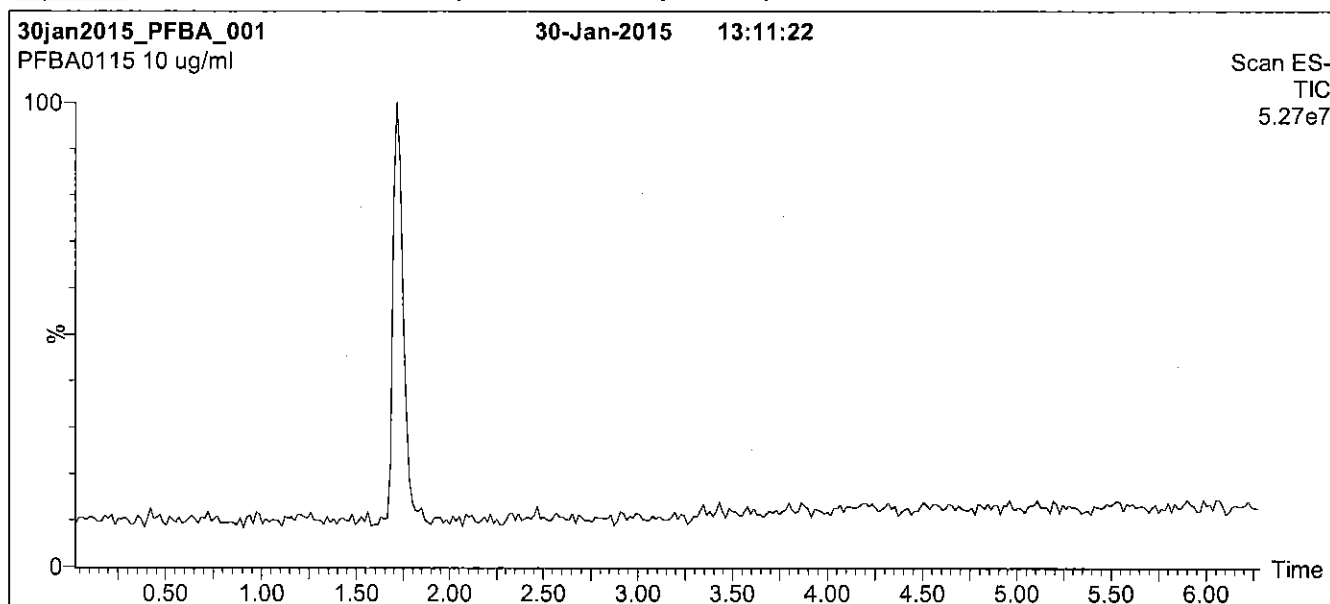
QUALITY MANAGEMENT:

This product was produced using a Quality Management System registered to the latest versions of ISO 9001 by SAI Global, ISO/IEC 17025 by the Canadian Association for Laboratory Accreditation Inc. (CALA; A 1226), and ISO GUIDE 34 by ANSI-ASQ National Accreditation Board (ANAB; AR-1523).



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Figure 1: PFBA; LC/MS Data (TIC and Mass Spectrum)



Conditions for Figure 1:

LC: Waters Acquity Ultra Performance LC
MS: Micromass Quattro *micro* API MS

Chromatographic Conditions

Column: Acquity UPLC BEH Shield RP₁₈
1.7 μ m, 2.1 x 100 mm

Mobile phase: Gradient
Start: 30% (80:20 MeOH:ACN) / 70% H₂O
(both with 10 mM NH₄OAc buffer)
Ramp to 90% organic over 7.5 min and hold for 1 min
before returning to initial conditions in 0.5 min.
Time: 10 min

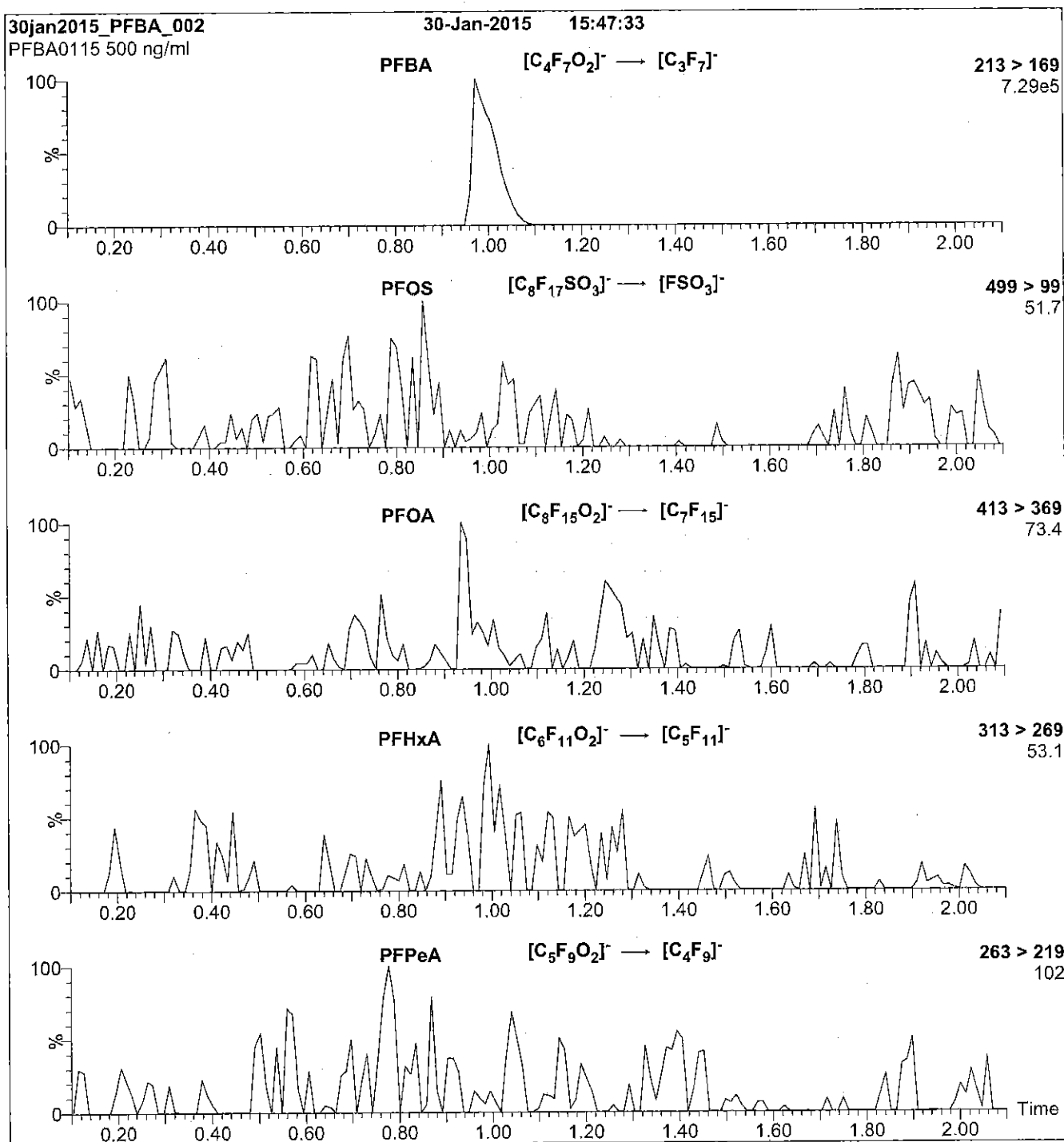
Flow: 300 μ l/min

MS Parameters

Experiment: Full Scan (150 - 850 amu)

Source: Electrospray (negative)
Capillary Voltage (kV) = 2.00
Cone Voltage (V) = 8.00
Cone Gas Flow (l/hr) = 100
Desolvation Gas Flow (l/hr) = 750

Figure 2: PFBA; LC/MS/MS Data (Selected MRM Transitions)



Conditions for Figure 2:

Injection: Direct loop injection
10 μ l (500 ng/ml PFBA)

Mobile phase: Isocratic 80% (80:20 MeOH:ACN) / 20% H_2O
(both with 10 mM NH_4OAc buffer)

Flow: 300 μ l/min

MS Parameters

Collision Gas (mbar) = 3.35e-3
Collision Energy (eV) = 10

Reagent

LCPFBS_00003



WELLINGTON LABORATORIES

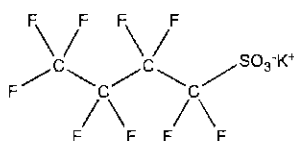
CERTIFICATE OF ANALYSIS DOCUMENTATION

PRODUCT CODE: L-PFBS
COMPOUND: Potassium perfluoro-1-butanesulfonate

LOT NUMBER: LPFBS1014

STRUCTURE:

CAS #: 29420-49-3



MOLECULAR FORMULA: $C_4F_9SO_3K$
CONCENTRATION: $50.0 \pm 2.5 \mu\text{g/ml}$ (K salt)
 $44.2 \pm 2.2 \mu\text{g/ml}$ (PFBS anion)
CHEMICAL PURITY: >98%
LAST TESTED: (mm/dd/yyyy) 10/09/2014
EXPIRY DATE: (mm/dd/yyyy) 10/09/2019
RECOMMENDED STORAGE: Store ampoule in a cool, dark place

MOLECULAR WEIGHT: 338.19
SOLVENT(S): Methanol

DOCUMENTATION/ DATA ATTACHED:

Figure 1: LC/MS Data (TIC and Mass Spectrum)
Figure 2: LC/MS/MS Data (Selected MRM Transitions)

ADDITIONAL INFORMATION:

- See page 2 for further details.

FOR LABORATORY USE ONLY: NOT FOR HUMAN OR DRUG USE

Certified By:

B.G. Chittim

Date: 10/17/2014
(mm/dd/yyyy)

Wellington Laboratories Inc., 345 Southgate Dr. Guelph ON N1G 3M5 CANADA
519-822-2436 • Fax: 519-822-2849 • info@well-labs.com

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where x is expressed as a relative standard uncertainty of the individual parameter.

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TRACEABILITY:

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EXPIRY DATE / PERIOD OF VALIDITY:

Ongoing stability studies of this product have demonstrated stability in its composition and concentration for the period of time specified by the expiry date in the unopened ampoule. Monitoring for any degradation or change in concentration of the listed analyte(s) is performed on a routine basis.

LIMITED WARRANTY:

At the time of shipment, all products are warranted to be free of defects in material and workmanship and to conform to the stated technical and purity specifications.

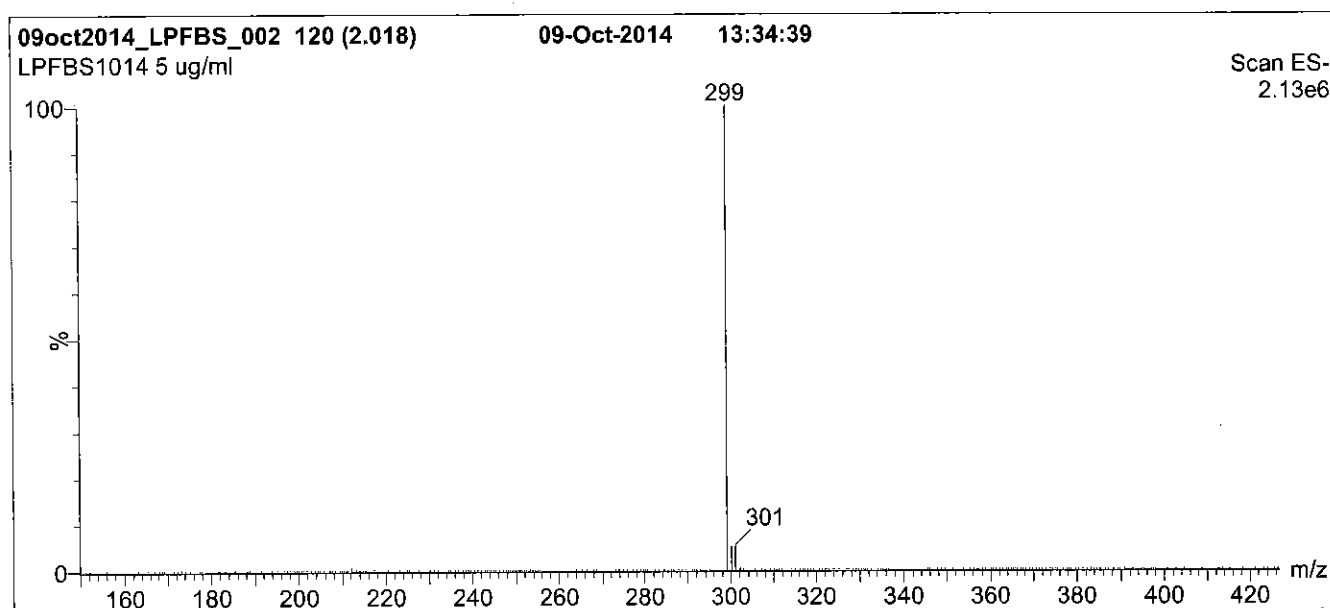
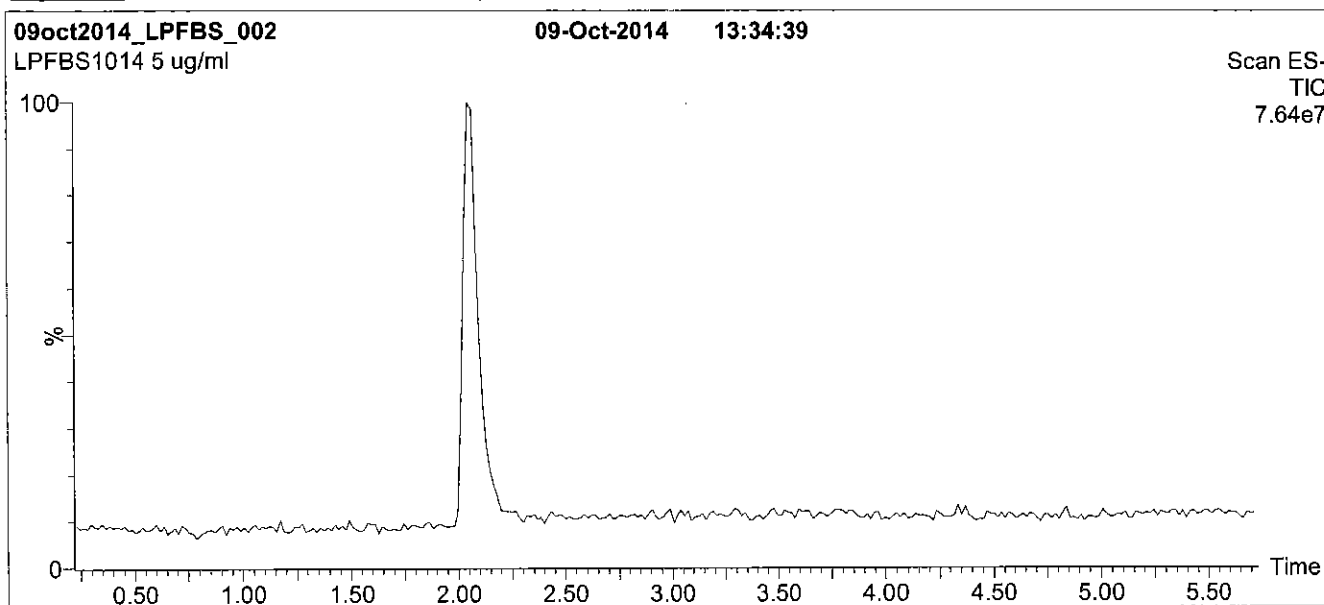
QUALITY MANAGEMENT:

This product was produced using a Quality Management System registered to ISO 9001:2008 by SAI Global, ISO/IEC 17025:2005 by the Canadian Association for Laboratory Accreditation Inc. (CALA; A 1226), and ISO GUIDE 34:2009 by ACLASS (certificate number AR-1523).



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Figure 1: L-PFBS; LC/MS Data (TIC and Mass Spectrum)



Conditions for Figure 1:

LC: Waters Acquity Ultra Performance LC
MS: Micromass Quattro *micro* API MS

Chromatographic Conditions

Column: Acquity UPLC BEH Shield RP₁₈
1.7 μ m, 2.1 x 100 mm

Mobile phase: Gradient

Start: 40% (80:20 MeOH:ACN) / 60% H₂O
(both with 10 mM NH₄OAc buffer)
Ramp to 90% organic over 7 min and hold for 1.5 min
before returning to initial conditions in 0.5 min.
Time: 10 min

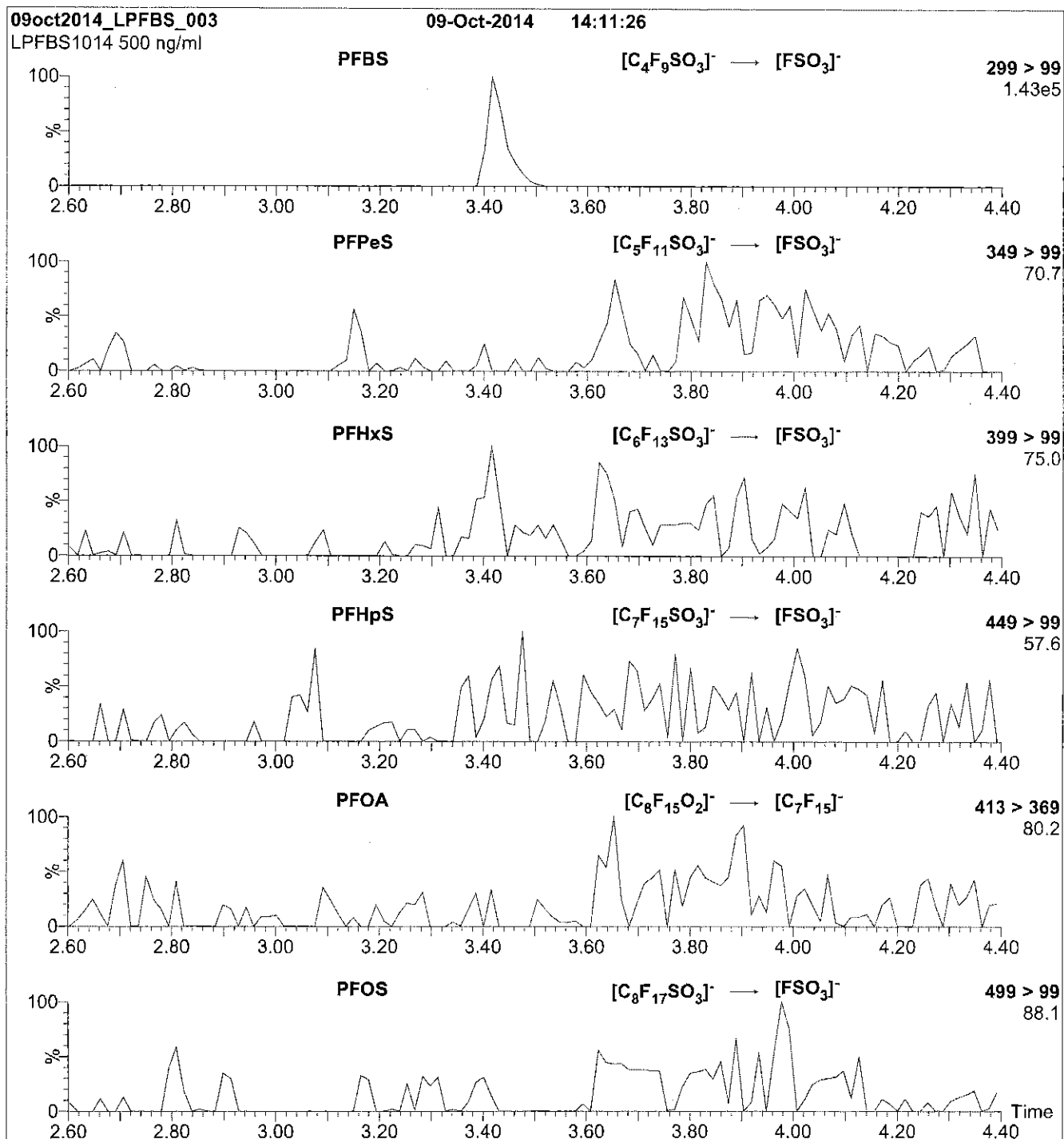
Flow: 300 μ l/min

MS Parameters

Experiment: Full Scan (150 - 850 amu)

Source: Electrospray (negative)
Capillary Voltage (kV) = 2.00
Cone Voltage (V) = 40.00
Cone Gas Flow (l/hr) = 50
Desolvation Gas Flow (l/hr) = 750

Figure 2: L-PFBS; LC/MS/MS Data (Selected MRM Transitions)



Conditions for Figure 2:

Injection: Direct loop injection
10 μ l (500 ng/ml L-PFBS)

Mobile phase: Isocratic 80% (80:20 MeOH:ACN) / 20% H₂O
(both with 10 mM NH₄OAc buffer)

Flow: 300 μ l/min

MS Parameters

Collision Gas (mbar) = 3.43e-3
Collision Energy (eV) = 25

Reagent

LCPFDA_00003



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CERTIFICATE OF ANALYSIS DOCUMENTATION

rec 7/15/14

PRODUCT CODE:

PFDA

LOT NUMBER:

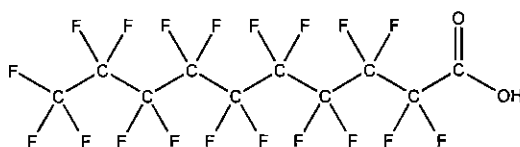
PFDA0613

COMPOUND:

Perfluoro-n-decanoic acid

STRUCTURE:**CAS #:**

335-76-2

**MOLECULAR FORMULA:** $C_{10}H_{18}O_2$ **MOLECULAR WEIGHT:**

514.08

CONCENTRATION: $50 \pm 2.5 \mu\text{g/ml}$ **SOLVENT(S):**

Methanol

Water (<1%)

CHEMICAL PURITY:

>98%

LAST TESTED: (mm/dd/yyyy)

06/19/2013

EXPIRY DATE: (mm/dd/yyyy)

06/19/2018

RECOMMENDED STORAGE:

Store ampoule in a cool, dark place

DOCUMENTATION/ DATA ATTACHED:

Figure 1: LC/MS Data (TIC and Mass Spectrum)

Figure 2: LC/MS/MS Data (Selected MRM Transitions)

ADDITIONAL INFORMATION:

- See page 2 for further details.
- Contains 4 mole eq. of NaOH to prevent conversion of the carboxylic acid to the methyl ester.
- Contains ~ 0.4% PFNA and ~ 0.1% PFOA.

FOR LABORATORY USE ONLY: NOT FOR HUMAN OR DRUG USE

Certified By:

B.G. Chittim

Date: 07/03/2013

(mm/dd/yyyy)

Wellington Laboratories Inc., 345 Southgate Dr. Guelph ON N1G 3M5 CANADA
519-822-2436 • Fax: 519-822-2849 • info@well-labs.com

INTENDED USE:

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SYNTHESIS / CHARACTERIZATION:

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HOMOGENEITY:

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TRACEABILITY:

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EXPIRY DATE / PERIOD OF VALIDITY:

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LIMITED WARRANTY:

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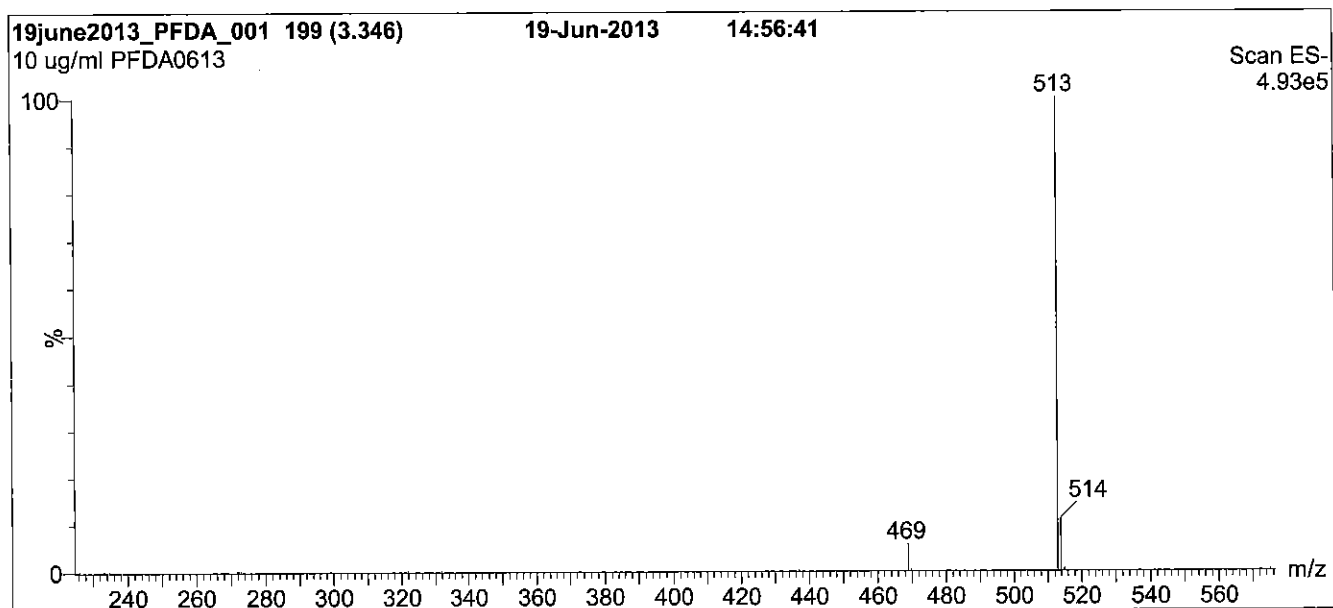
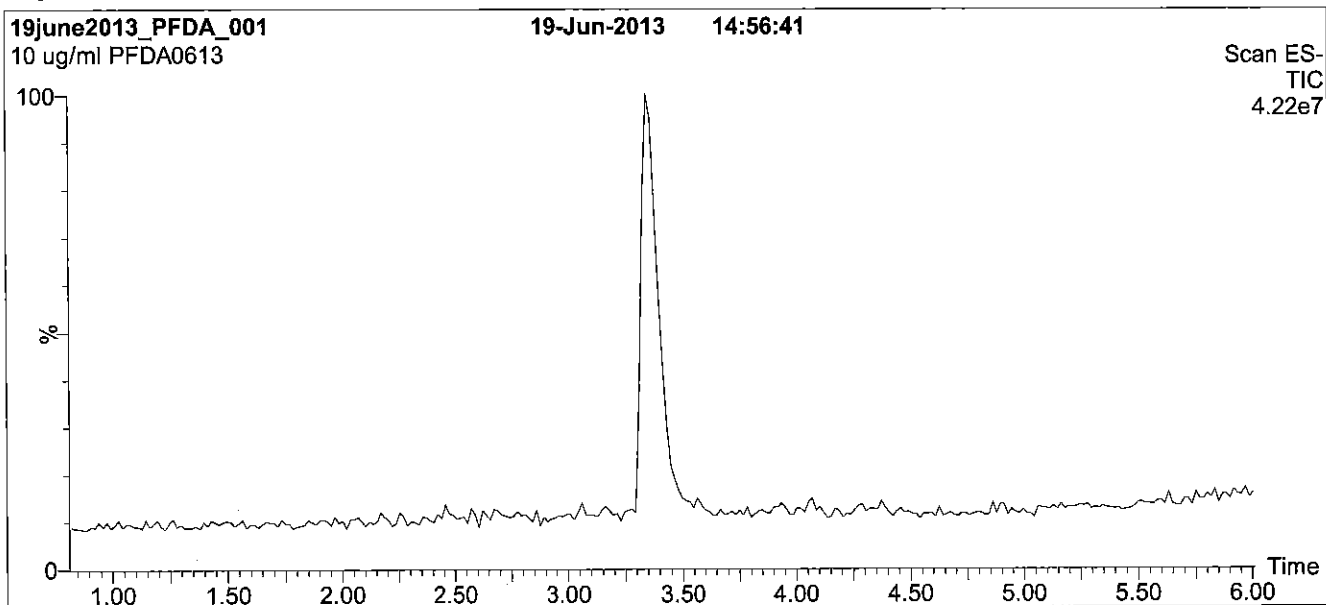
QUALITY MANAGEMENT:

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Figure 1: PFDA; LC/MS Data (TIC and Mass Spectrum)



Conditions for Figure 1:

LC: Waters Acquity Ultra Performance LC
MS: Micromass Quattro micro API MS

Chromatographic Conditions

Column: Acquity UPLC BEH Shield RP₁₈,
1.7 μ m, 2.1 x 100 mm

Mobile phase: Gradient
Start: 60% (80:20 MeOH:ACN) / 40% H₂O
(both with 10 mM NH₄OAc buffer)
Ramp to 90% organic over 7 min and hold for
1.5 min before returning to initial conditions in 0.5 min.
Time: 10 min

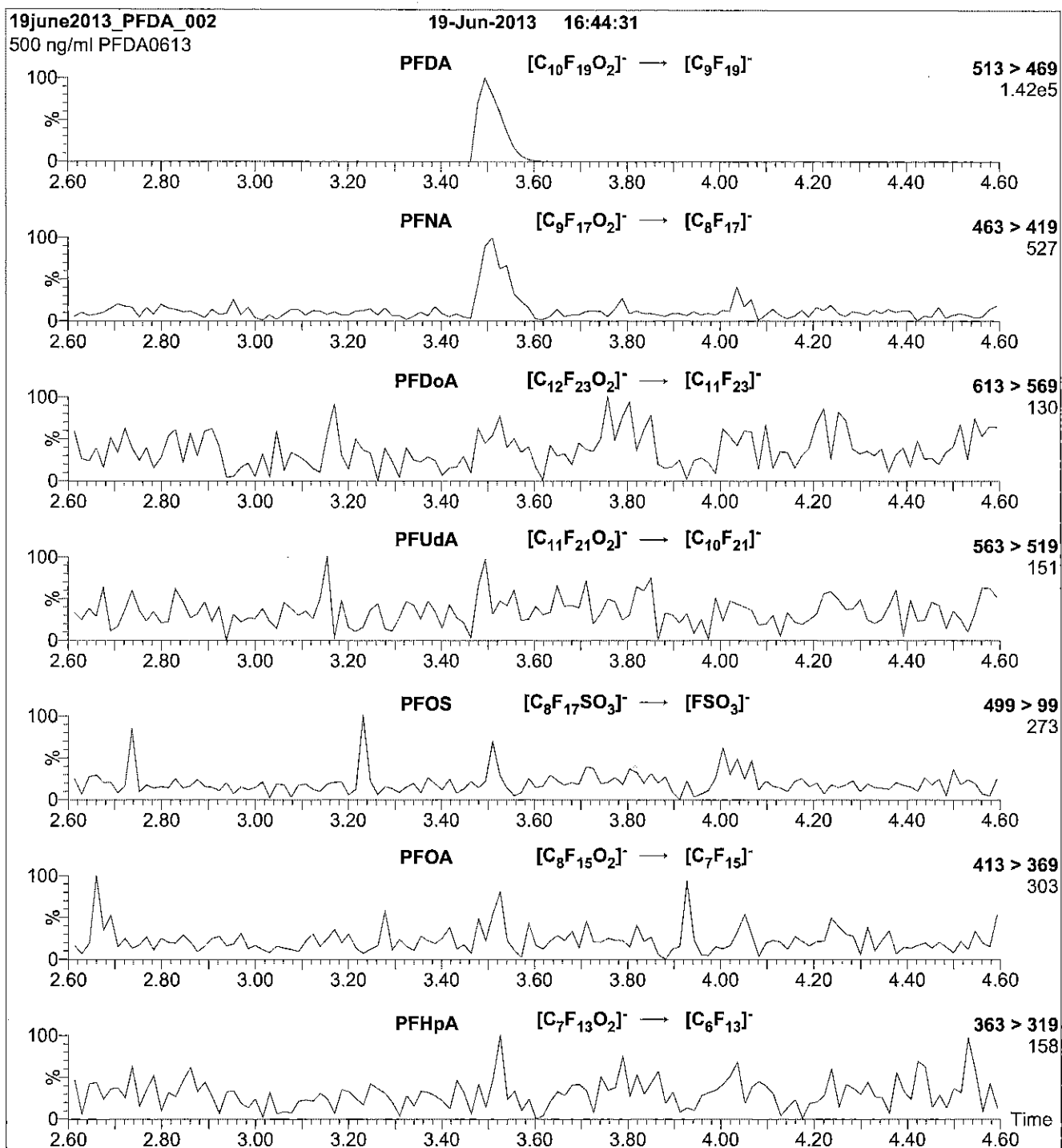
Flow: 300 μ l/min

MS Parameters

Experiment: Full Scan (225 - 850 amu)

Source: Electrospray (negative)
Capillary Voltage (kV) = 2.00
Cone Voltage (V) = 15.00
Cone Gas Flow (l/hr) = 50
Desolvation Gas Flow (l/hr) = 750

Figure 2: PFDA; LC/MS/MS Data (Selected MRM Transitions)



Conditions for Figure 2:

Injection: Direct loop injection
10 μ l (500 ng/ml PFDA)

Mobile phase: Isocratic 80% (80:20 MeOH:ACN) / 20% H₂O
(both with 10 mM NH₄OAc buffer)

Flow: 300 μ l/min

MS Parameters

Collision Gas (mbar) = 3.58e-3
Collision Energy (eV) = 13

Reagent

LCPFDA_00004



WELLINGTON LABORATORIES

CERTIFICATE OF ANALYSIS DOCUMENTATION

PRODUCT CODE:

PFDA

LOT NUMBER:

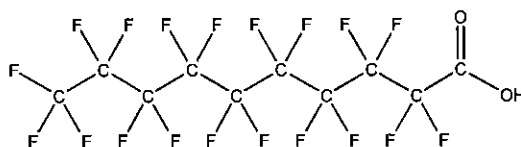
PFDA0615

COMPOUND:

Perfluoro-n-decanoic acid

STRUCTURE:**CAS #:**

335-76-2

**MOLECULAR FORMULA:** $C_{10}H_2F_{18}O_2$ **MOLECULAR WEIGHT:**

514.08

CONCENTRATION: $50 \pm 2.5 \mu\text{g/ml}$ **SOLVENT(S):**

Methanol

Water (<1%)

CHEMICAL PURITY:

>98%

LAST TESTED: (mm/dd/yyyy)

07/02/2015

EXPIRY DATE: (mm/dd/yyyy)

07/02/2020

RECOMMENDED STORAGE:

Store ampoule in a cool, dark place

DOCUMENTATION/ DATA ATTACHED:

Figure 1: LC/MS Data (TIC and Mass Spectrum)

Figure 2: LC/MS/MS Data (Selected MRM Transitions)

ADDITIONAL INFORMATION:

- See page 2 for further details.
- Contains 4 mole eq. of NaOH to prevent conversion of the carboxylic acid to the methyl ester.
- Contains ~ 0.6% PFNA and ~ 0.3% PFOA.

FOR LABORATORY USE ONLY: NOT FOR HUMAN OR DRUG USE

Certified By:

B.G. Chittim

Date:

07/24/2015
(mm/dd/yyyy)

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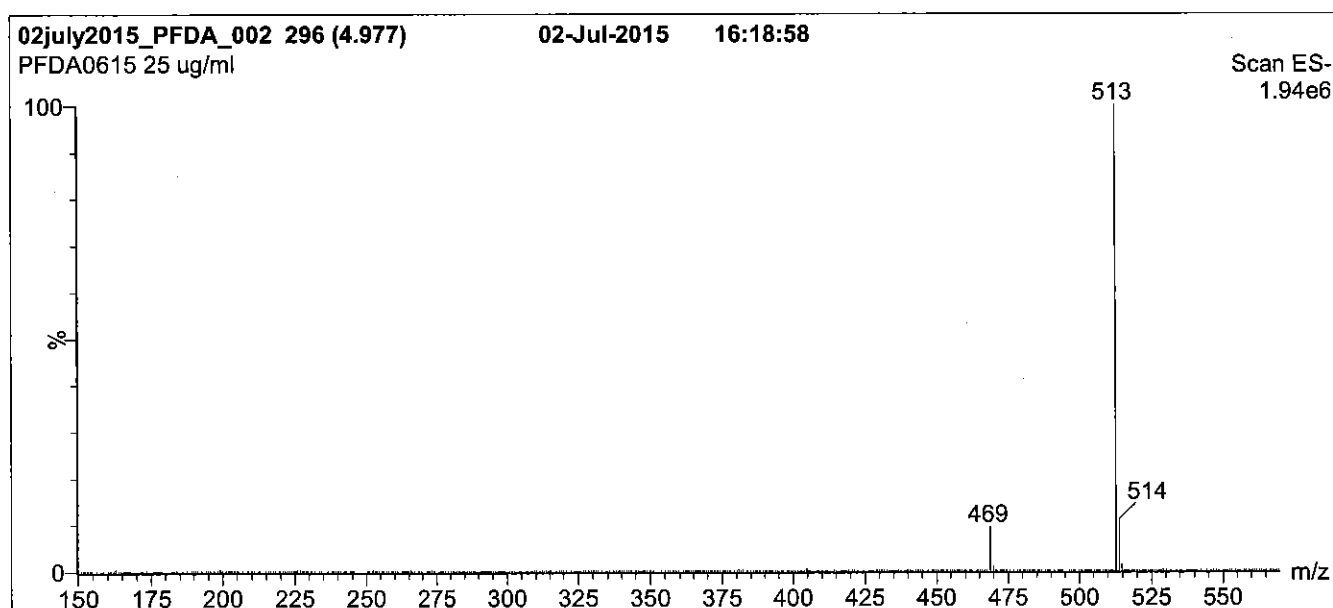
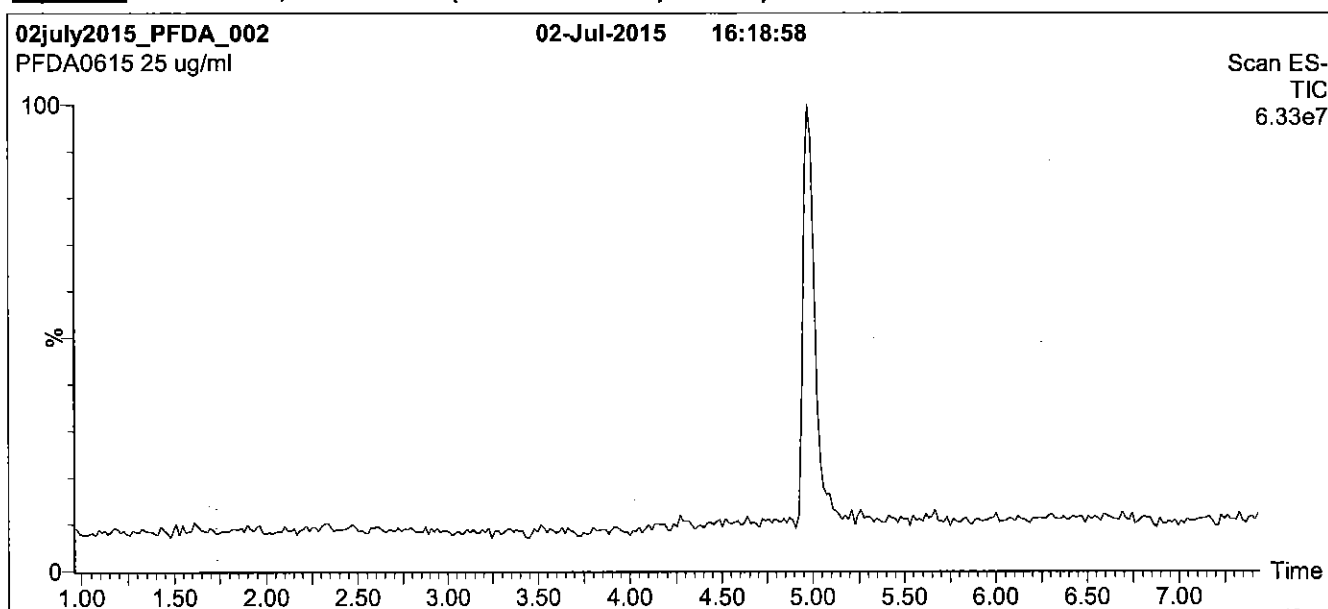
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MS: Micromass Quattro *micro* API MS

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(both with 10 mM NH₄OAc buffer)
Ramp to 90% organic over 7 min and hold for
2 min before returning to initial conditions in 0.5 min.
Time: 10 min

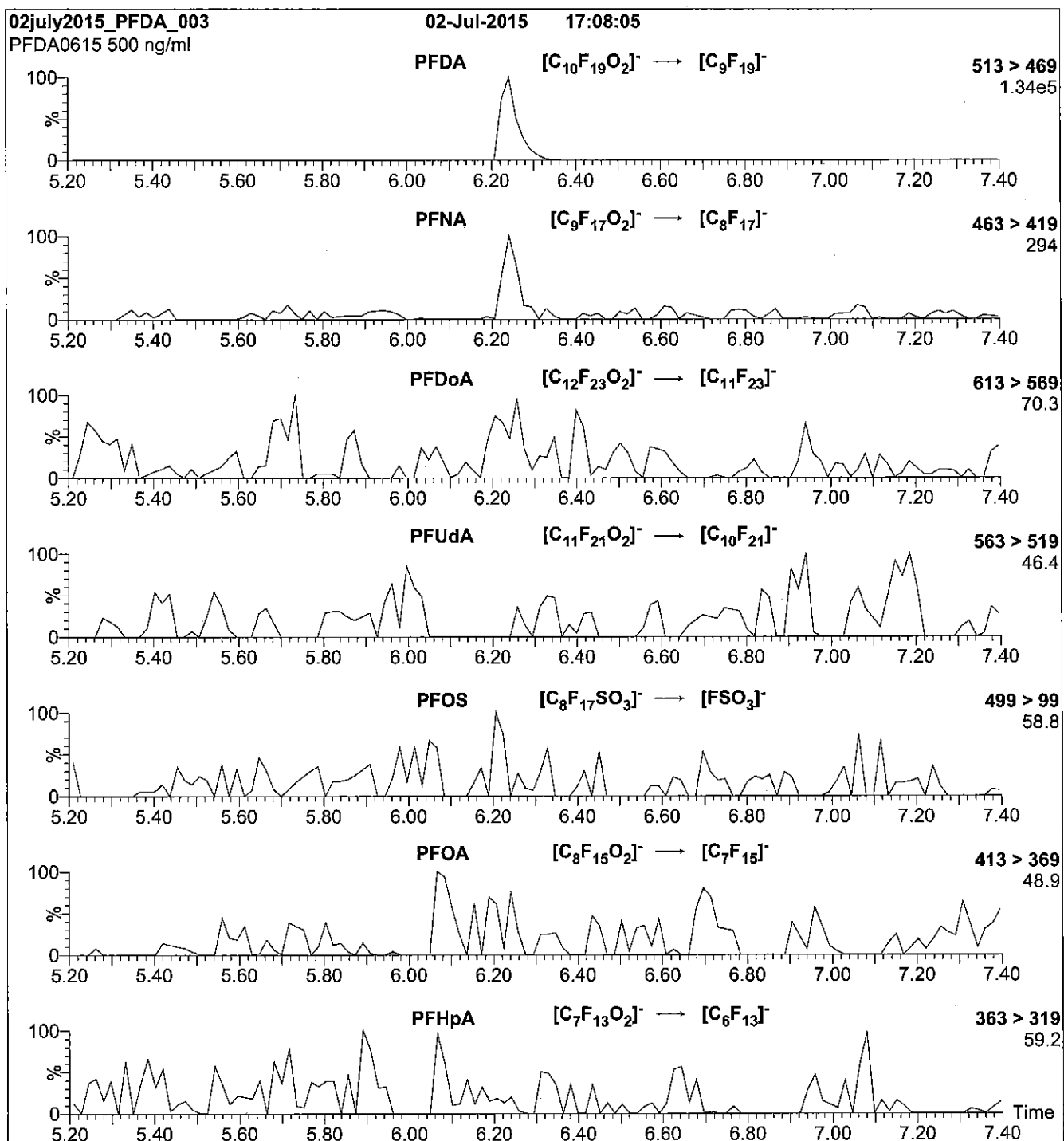
Flow: 300 μ l/min

MS Parameters

Experiment: Full Scan (150 - 850 amu)

Source: Electrospray (negative)
Capillary Voltage (kV) = 2.00
Cone Voltage (V) = 15.00
Cone Gas Flow (l/hr) = 50
Desolvation Gas Flow (l/hr) = 750

Figure 2: PFDA; LC/MS/MS Data (Selected MRM Transitions)



Conditions for Figure 2:

Injection: Direct loop injection
10 μ l (500 ng/ml PFDA)

Mobile phase: Isocratic 80% (80:20 MeOH:ACN) / 20% H₂O
(both with 10 mM NH₄OAc buffer)

Flow: 300 μ l/min

MS Parameters

Collision Gas (mbar) = 3.62e-3
Collision Energy (eV) = 13

Reagent

LCPFDoA_00003

Rec 7/15



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CERTIFICATE OF ANALYSIS DOCUMENTATION

PRODUCT CODE:

PFD0A

LOT NUMBER:

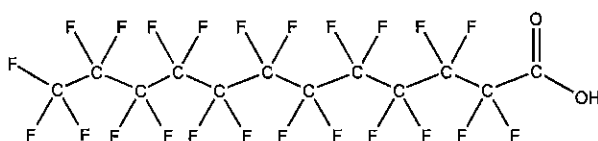
PFD0A0113

COMPOUND:

Perfluoro-n-dodecanoic acid

STRUCTURE:**CAS #:**

307-55-1

**MOLECULAR FORMULA:** $C_{12}H_2F_{23}O_2$ **MOLECULAR WEIGHT:**

614.10

CONCENTRATION: $50 \pm 2.5 \mu\text{g/ml}$ **SOLVENT(S):**

Methanol

Water (<1%)

CHEMICAL PURITY:

>98%

LAST TESTED: (mm/dd/yyyy)

01/03/2013

EXPIRY DATE: (mm/dd/yyyy)

01/03/2018

RECOMMENDED STORAGE:

Store ampoule in a cool, dark place

DOCUMENTATION/ DATA ATTACHED:

Figure 1: LC/MS Data (TIC and Mass Spectrum)

Figure 2: LC/MS/MS Data (Selected MRM Transitions)

ADDITIONAL INFORMATION:

- See page 2 for further details.
- Contains 4 mole eq. of NaOH to prevent conversion of the carboxylic acid to the methyl ester.

FOR LABORATORY USE ONLY: NOT FOR HUMAN OR DRUG USE

Certified By:

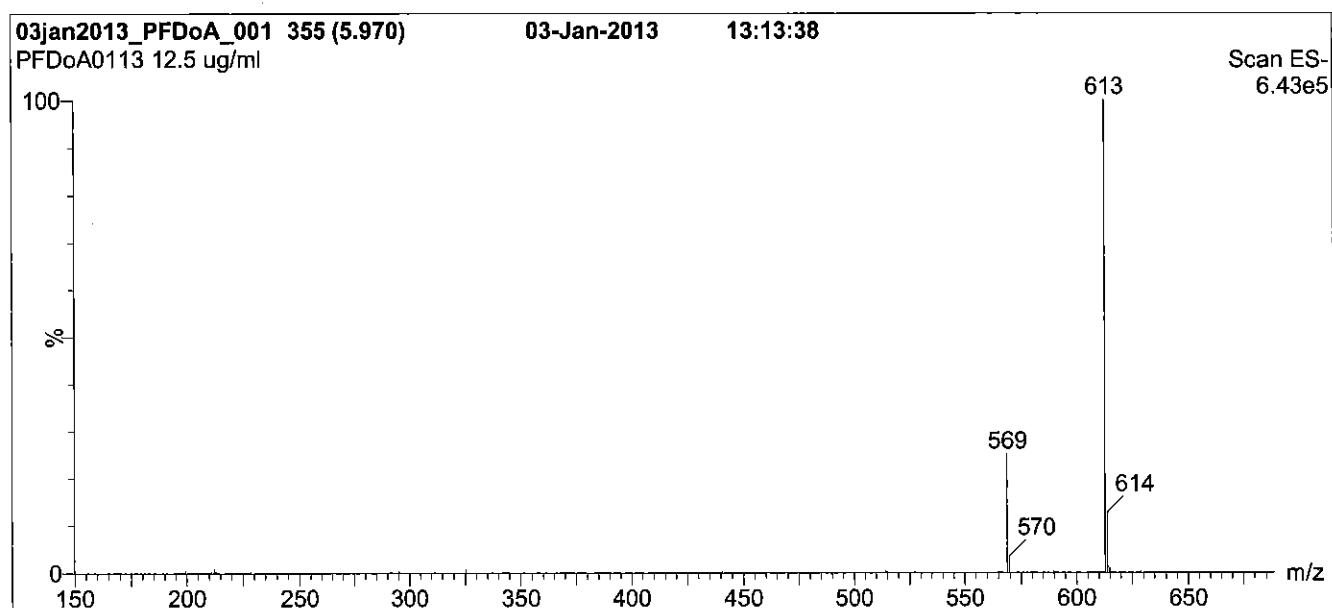
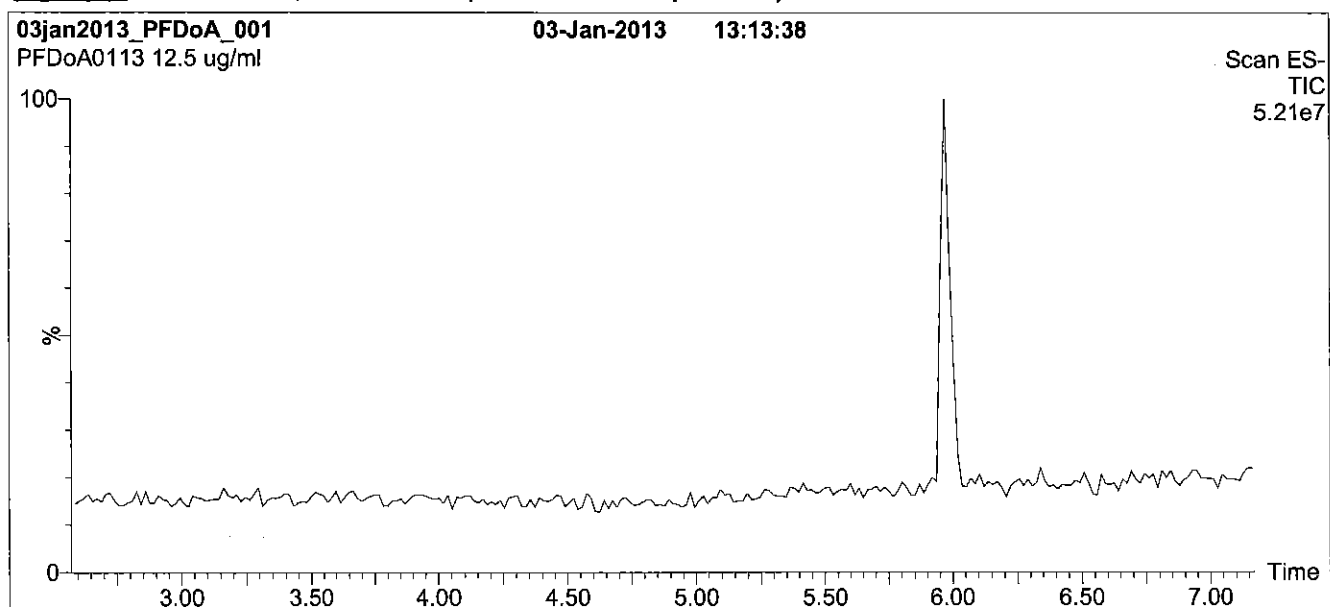
B.G. Chittim

Date: 02/01/2013

(mm/dd/yyyy)

Wellington Laboratories Inc., 345 Southgate Dr. Guelph ON N1G 3M5 CANADA
519-822-2436 • Fax: 519-822-2849 • info@well-labs.com

Figure 1: PFD_oA; LC/MS Data (TIC and Mass Spectrum)



Conditions for Figure 1:

LC: Waters Acquity Ultra Performance LC
MS: Micromass Quattro *micro* API MS

Chromatographic Conditions

Column: Acquity UPLC BEH Shield RP₁₈
1.7 μ m, 2.1 x 100 mm

Mobile phase: Gradient
Start: 40% (80:20 MeOH:ACN) / 60% H₂O
(both with 10 mM NH₄OAc buffer)
Ramp to 90% organic over 7 min and hold for 2 min.
Return to initial conditions in 0.5 min.
Time: 10 min

Flow: 300 μ l/min

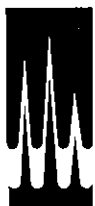
MS Parameters

Experiment: Full Scan (150 - 850 amu)

Source: Electrospray (negative)
Capillary Voltage (kV) = 2.00
Cone Voltage (V) = 20.00
Cone Gas Flow (l/hr) = 100
Desolvation Gas Flow (l/hr) = 750

Reagent

LCPFDoA_00004



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CERTIFICATE OF ANALYSIS DOCUMENTATION

PRODUCT CODE:

PFD0A

LOT NUMBER:

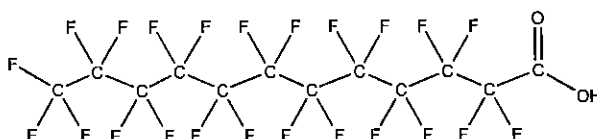
PFD0A0115

COMPOUND:

Perfluoro-n-dodecanoic acid

STRUCTURE:**CAS #:**

307-55-1

**MOLECULAR FORMULA:** $C_{12}H_{23}O_2$ **MOLECULAR WEIGHT:**

614.10

CONCENTRATION: $50 \pm 2.5 \mu\text{g/ml}$ **SOLVENT(S):**

Methanol

Water (<1%)

CHEMICAL PURITY:

>98%

LAST TESTED: (mm/dd/yyyy)

01/30/2015

EXPIRY DATE: (mm/dd/yyyy)

01/30/2020

RECOMMENDED STORAGE:

Store ampoule in a cool, dark place

DOCUMENTATION/ DATA ATTACHED:

Figure 1: LC/MS Data (TIC and Mass Spectrum)

Figure 2: LC/MS/MS Data (Selected MRM Transitions)

ADDITIONAL INFORMATION:

- See page 2 for further details.
- Contains 4 mole eq. of NaOH to prevent conversion of the carboxylic acid to the methyl ester.

FOR LABORATORY USE ONLY: NOT FOR HUMAN OR DRUG USE

Certified By:

B.G. Chittim

Date: 03/25/2015

(mm/dd/yyyy)

Wellington Laboratories Inc., 345 Southgate Dr. Guelph ON N1G 3M5 CANADA
519-822-2436 • Fax: 519-822-2849 • info@well-labs.com

INTENDED USE:

The products prepared by Wellington Laboratories Inc. are for laboratory use only. This certified reference material (CRM) was designed to be used as a standard for the identification and/or quantification of the specific chemical compound it contains.

HAZARDS:

This product should only be used by qualified personnel familiar with its potential hazards and trained in the handling of hazardous chemicals. Due care should be exercised to prevent unnecessary human contact or ingestion. All procedures should be carried out in a well-functioning fume hood and suitable gloves, eye protection, and clothing should be worn at all times. Waste should be disposed of according to national and regional regulations. Safety Data Sheets (SDSs) are available upon request.

SYNTHESIS / CHARACTERIZATION:

Where possible, all of our products are synthesized using single-product unambiguous routes. They are then characterized, and their structures and purities confirmed, using a combination of the most relevant techniques, such as NMR, GC/MS, LC/MS/MS, SFC/UV/MS/MS, x-ray crystallography, and melting point. Isotopic purities of mass-labelled compounds are also confirmed using HRGC/HRMS and/or LC/MS/MS.

HOMOGENEITY:

Prior to solution preparation, crystalline material is tested for homogeneity using a variety of techniques (as stated above) and its solubility in a given diluent is taken into consideration. Duplicate solutions of a new product are prepared from the same crystalline lot and, after the addition of an appropriate internal standard, they are compared by GC/MS, LC/MS/MS and/or SFC/UV/MS/MS. The relative response factors of the analyte of interest in each solution are required to be <5% RSD. New solution lots of existing products are compared to older lots in the same manner, which further confirms the homogeneity of the crystalline material as well as the stability and homogeneity of the solutions in the storage containers.

UNCERTAINTY:

The maximum combined relative standard uncertainty of our reference standard solutions is calculated using the following equation:

The combined relative standard uncertainty, $u_c(y)$, of a value y and the uncertainty of the independent parameters x_1, x_2, \dots, x_n on which it depends is:

$$u_c(y(x_1, x_2, \dots, x_n)) = \sqrt{\sum_{i=1}^n u(y, x_i)^2}$$

where x is expressed as a relative standard uncertainty of the individual parameter.

The individual uncertainties taken into account include those associated with weights (calibration of the balance) and volumes (calibration of the volumetric glassware). An expanded maximum combined percent relative uncertainty of $\pm 5\%$ (calculated with a coverage factor of 2 and a level of confidence of 95%) is stated on the Certificate of Analysis for all of our products.

TRACEABILITY:

All reference standard solutions are traceable to specific crystalline lots. The microbalances used for solution preparation are regularly tested by an external ISO/IEC 17025 accredited calibration company. In addition, their calibration is verified prior to each weighing using NIST and/or NRC traceable external weights. All volumetric glassware used is of Class A tolerance and has been tested according to the appropriate ASTM procedures, which are ultimately traceable to NIST. For certain products, traceability to international interlaboratory studies has also been established.

EXPIRY DATE / PERIOD OF VALIDITY:

Ongoing stability studies of this product have demonstrated stability in its composition and concentration, until the specified expiry date, in the unopened ampoule. Monitoring for any degradation or change in concentration of the listed analyte(s) is performed on a routine basis.

LIMITED WARRANTY:

At the time of shipment, all products are warranted to be free of defects in material and workmanship and to conform to the stated technical and purity specifications.

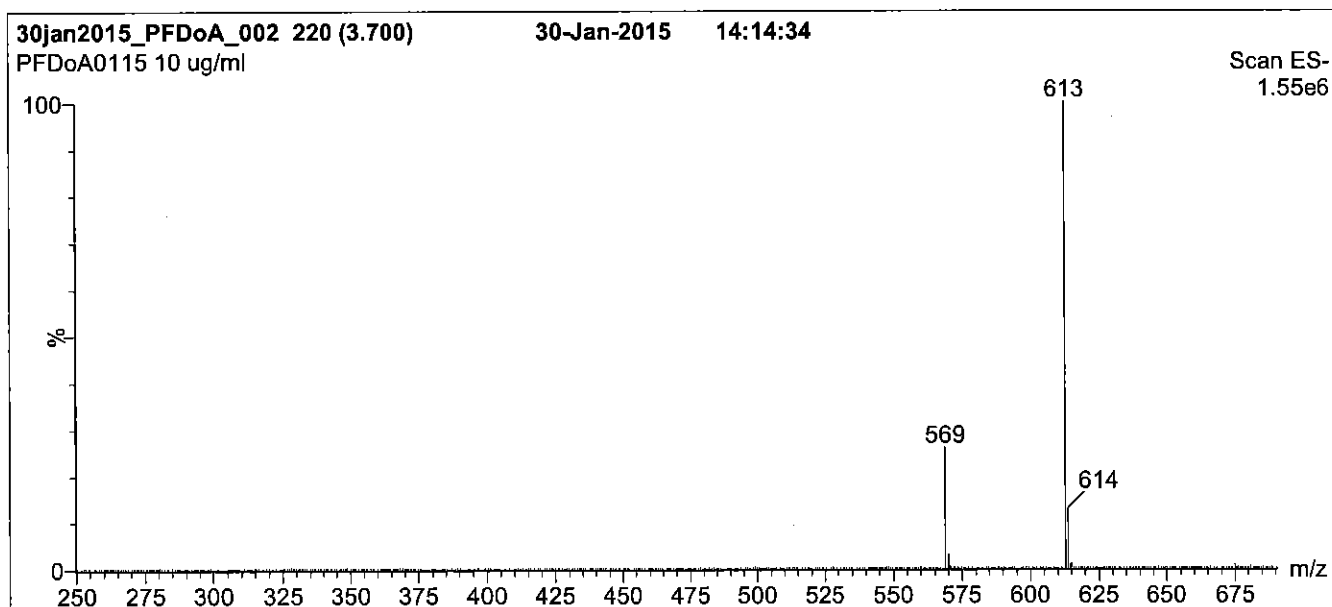
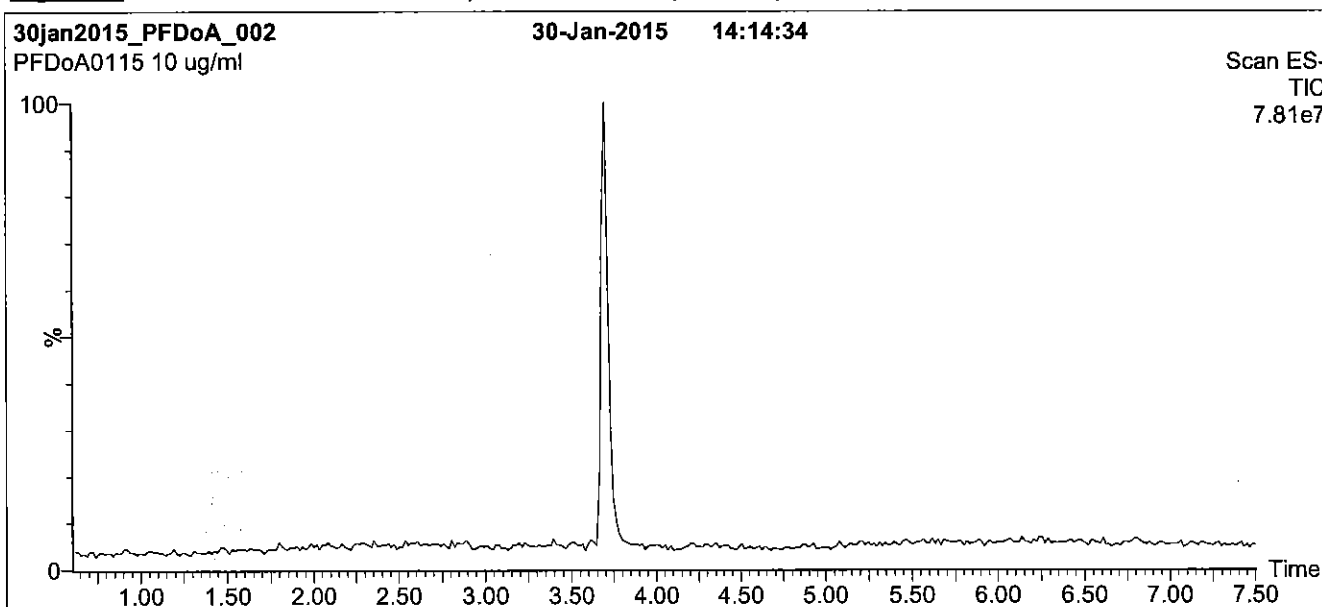
QUALITY MANAGEMENT:

This product was produced using a Quality Management System registered to the latest versions of ISO 9001 by SAI Global, ISO/IEC 17025 by the Canadian Association for Laboratory Accreditation Inc. (CALA; A 1226), and ISO GUIDE 34 by ANSI-ASQ National Accreditation Board (ANAB; AR-1523).



****For additional information or assistance concerning this or any other products from Wellington Laboratories Inc., please visit our website at www.well-labs.com or contact us directly at info@well-labs.com****

Figure 1: PFD_oA; LC/MS Data (TIC and Mass Spectrum)



Conditions for Figure 1:

LC: Waters Acquity Ultra Performance LC
MS: Micromass Quattro *micro* API MS

Chromatographic Conditions

Column: Acquity UPLC BEH Shield RP₁₈
1.7 μ m, 2.1 x 100 mm

Mobile phase: Gradient
Start: 60% (80:20 MeOH:ACN) / 40% H₂O
(both with 10 mM NH₄OAc buffer)
Ramp to 90% organic over 7 min and hold for 1.5 min
before returning to initial conditions in 0.5 min.
Time: 10 min

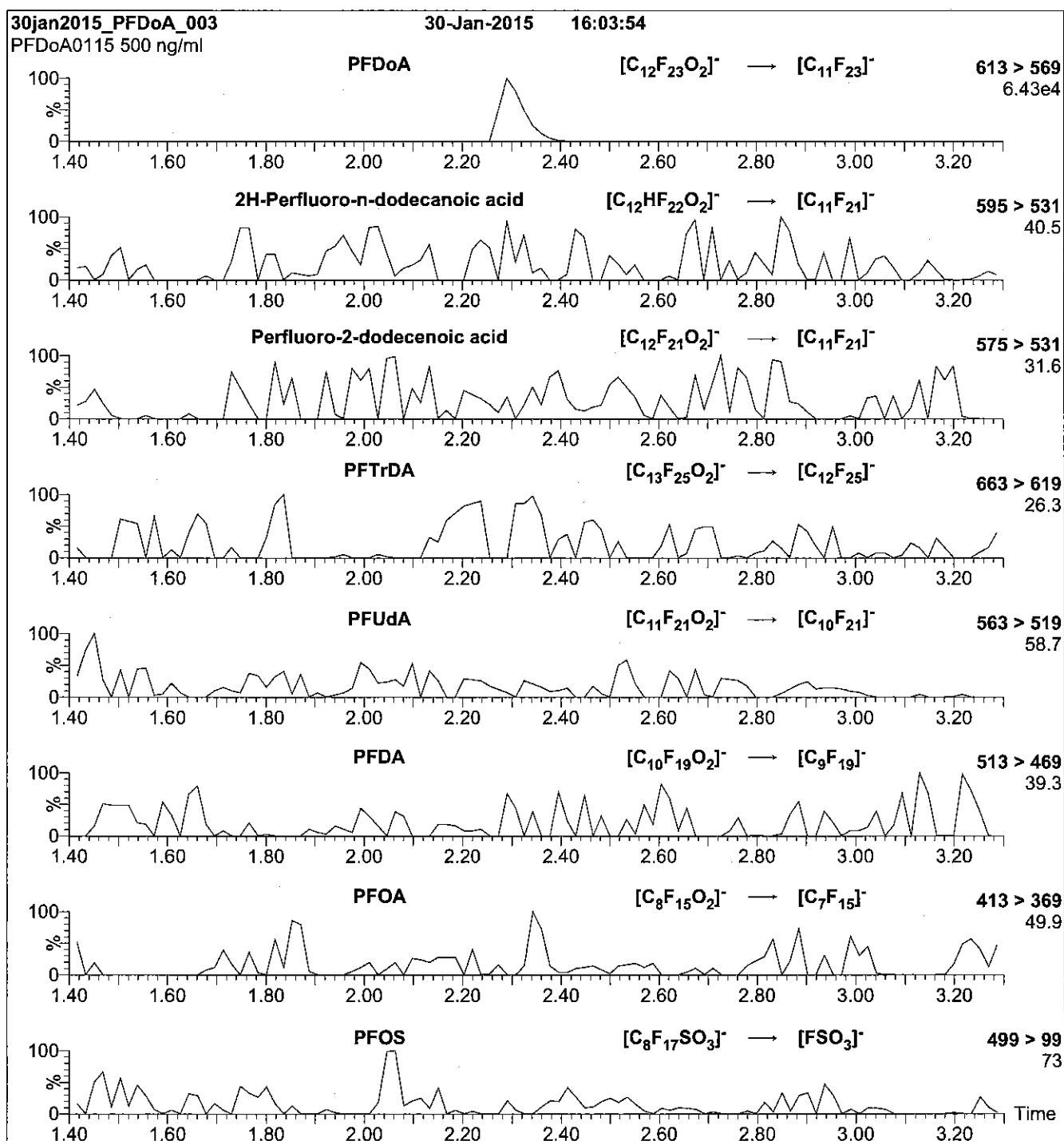
Flow: 300 μ l/min

MS Parameters

Experiment: Full Scan (250 - 1000 amu)

Source: Electrospray (negative)
Capillary Voltage (kV) = 2.00
Cone Voltage (V) = 20.00
Cone Gas Flow (l/hr) = 100
Desolvation Gas Flow (l/hr) = 750

Figure 2: PFDoA; LC/MS/MS Data (Selected MRM Transitions)



Conditions for Figure 2:

Injection: Direct loop injection
10 μ l (500 ng/ml PFDoA)

MS Parameters

Mobile phase: Isocratic 80% (80:20 MeOH:ACN) / 20% H₂O
(both with 10 mM NH₄OAc buffer)

Collision Gas (mbar) = 3.28e-3
Collision Energy (eV) = 13

Flow: 300 μ l/min

Reagent

LCPFDoS_00003



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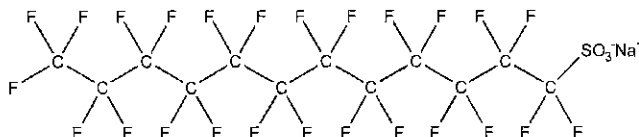
CERTIFICATE OF ANALYSIS DOCUMENTATION

PRODUCT CODE: L-PFDoS
COMPOUND: Sodium perfluoro-1-dodecanesulfonate

LOT NUMBER: LPFDoS1011

STRUCTURE:

CAS #: Not available



MOLECULAR FORMULA: $C_{12}F_{25}SO_3Na$
CONCENTRATION: $50.0 \pm 2.5 \mu\text{g/ml}$ (Na salt)
 $48.4 \pm 2.4 \mu\text{g/ml}$ (PFDoS anion)
CHEMICAL PURITY: >98%
LAST TESTED: (mm/dd/yyyy) 10/06/2011
EXPIRY DATE: (mm/dd/yyyy) 10/06/2016
RECOMMENDED STORAGE: Store ampoule in a cool, dark place

MOLECULAR WEIGHT: 722.14
SOLVENT(S): Methanol

DOCUMENTATION/ DATA ATTACHED:

Figure 1: LC/MS Data (TIC and Mass Spectrum)
Figure 2: LC/MS/MS Data (Selected MRM Transitions)

ADDITIONAL INFORMATION:

- See page 2 for further details.
- Contains ~ 0.3% of sodium perfluoro-1-tetradecanesulfonate and ~ 0.8% of perfluoro-n-dodecanoic acid (PFDoA).

FOR LABORATORY USE ONLY: NOT FOR HUMAN OR DRUG USE

Certified By:

B.G. Chittim

Date: 01/15/2013
(mm/dd/yyyy)

Wellington Laboratories Inc., 345 Southgate Dr. Guelph ON N1G 3M5 CANADA
519-822-2436 • Fax: 519-822-2849 • info@well-labs.com

INTENDED USE:

The products prepared by Wellington Laboratories Inc. are for laboratory use only. They are designed to be used as reference standards for the identification and/or quantification of specific chemical compound(s).

HAZARDS:

This product should only be used by qualified personnel familiar with its potential hazards and trained in the handling of hazardous chemicals. Due care should be exercised to prevent unnecessary human contact or ingestion. All procedures should be carried out in a well-functioning fume hood and suitable gloves, eye protection and clothing should be worn at all times. Waste should be disposed of according to national and regional regulations. Material Safety Data Sheets (MSDSs) are available upon request.

SYNTHESIS / CHARACTERIZATION:

Where possible, all of our products are synthesized using single-product, unambiguous routes. They are then characterized, and their structures and purities confirmed, using a combination of the most relevant techniques, such as NMR, GC/MS, LC/MS/MS, x-ray crystallography and melting point. Isotopic purities of mass-labelled compounds are also confirmed using HRGC/HRMS and/or LC/MS/MS.

HOMOGENEITY:

Prior to solution preparation, crystalline material is tested for homogeneity using a variety of techniques (as stated above) and its solubility in a given diluent is taken into consideration. Duplicate solutions of a new product are prepared from the same crystalline lot and, after the addition of an appropriate internal standard, they are compared by GC/MS and/or LC/MS/MS. The relative response factors of the analyte of interest in each solution are required to be <5% RSD. New solution lots of existing products are compared to older lots in the same manner, which further confirms the homogeneity of the crystalline material as well as the stability and homogeneity of the solutions in the storage containers.

UNCERTAINTY:

The maximum combined relative standard uncertainty of our reference standard solutions is calculated using the following equation:

The combined relative standard uncertainty, $u_c(y)$, of a value y and the uncertainty of the independent parameters

x_1, x_2, \dots, x_n on which it depends is:

$$u_c(y(x_1, x_2, \dots, x_n)) = \sqrt{\sum_{i=1}^n u(y, x_i)^2}$$

where x is expressed as a relative standard uncertainty of the individual parameter.

The individual uncertainties taken into account include those associated with weights (calibration of the balance) and volumes (calibration of the volumetric glassware). An expanded maximum combined percent relative uncertainty of $\pm 5\%$ (calculated with a coverage factor of 2 and a level of confidence of 95%) is stated on the Certificate of Analysis for all our products.

TRACEABILITY:

All reference standard solutions are traceable to specific crystalline lots. The microbalances used for solution preparation are regularly tested by an external, ISO/IEC 17025:2005 accredited calibration company. In addition, their calibration is verified prior to each weighing using NIST and/or NRC traceable external weights. All volumetric glassware used is of Class A tolerance and has been tested according to the appropriate ASTM procedures, which are ultimately traceable to NIST. For certain products, traceability to international interlaboratory studies has also been established.

EXPIRY DATE / PERIOD OF VALIDITY:

Ongoing stability studies of this product have demonstrated stability in its composition and concentration for the period of time specified by the expiry date in the unopened ampoule. Monitoring for any degradation or change in concentration of the listed analyte(s) is performed on a routine basis.

LIMITED WARRANTY:

At the time of shipment, all products are warranted to be free of defects in material and workmanship and to conform to the stated technical and purity specifications.

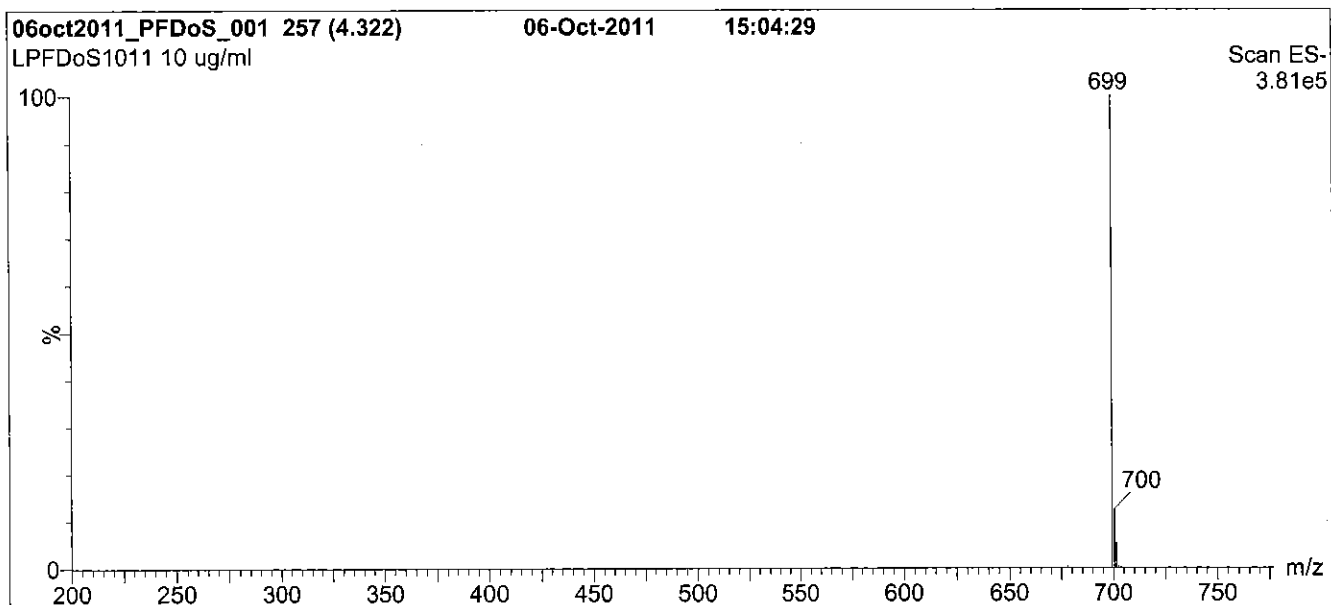
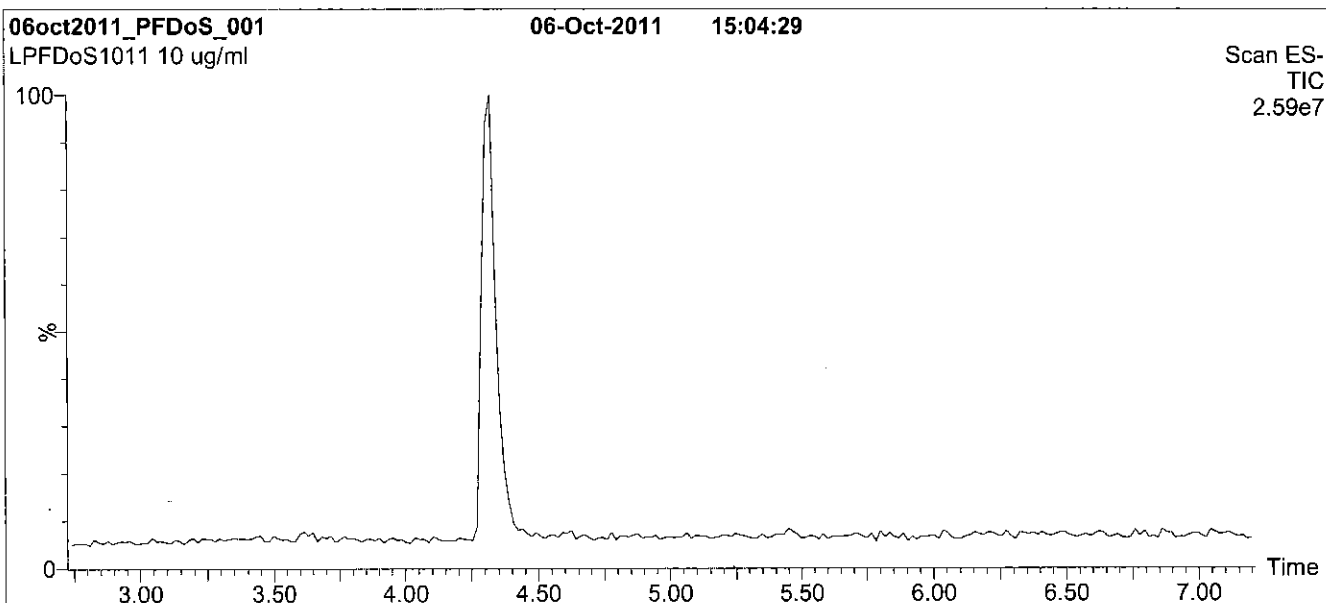
QUALITY MANAGEMENT:

This product was produced using a Quality Management System registered to ISO 9001:2008 by SAI Global, ISO/IEC 17025:2005 by the Canadian Association for Laboratory Accreditation Inc. (CALA; A 1226), and ISO GUIDE 34:2009 by ACLASS (certificate number AR-1523).



For additional information or assistance concerning this or any other products from Wellington Laboratories Inc., please visit our website at www.well-labs.com or contact us directly at info@well-labs.com

Figure 1: L-PFDoS; LC/MS Data (TIC and Mass Spectrum)



Conditions for Figure 1:

LC: Waters Acquity Ultra Performance LC
MS: Micromass Quattro *micro* API MS

Chromatographic Conditions

Column: Acquity UPLC BEH Shield RP₁₈
1.7 μ m, 2.1 x 100 mm

Mobile phase: Gradient
Start: 65% (80:20 MeOH:ACN) / 35% H₂O
(both with 10 mM NH₄OAc buffer)
Ramp to 90% organic over 7 min and hold for 2 min
before returning to initial conditions in 0.5 min.
Time: 10 min

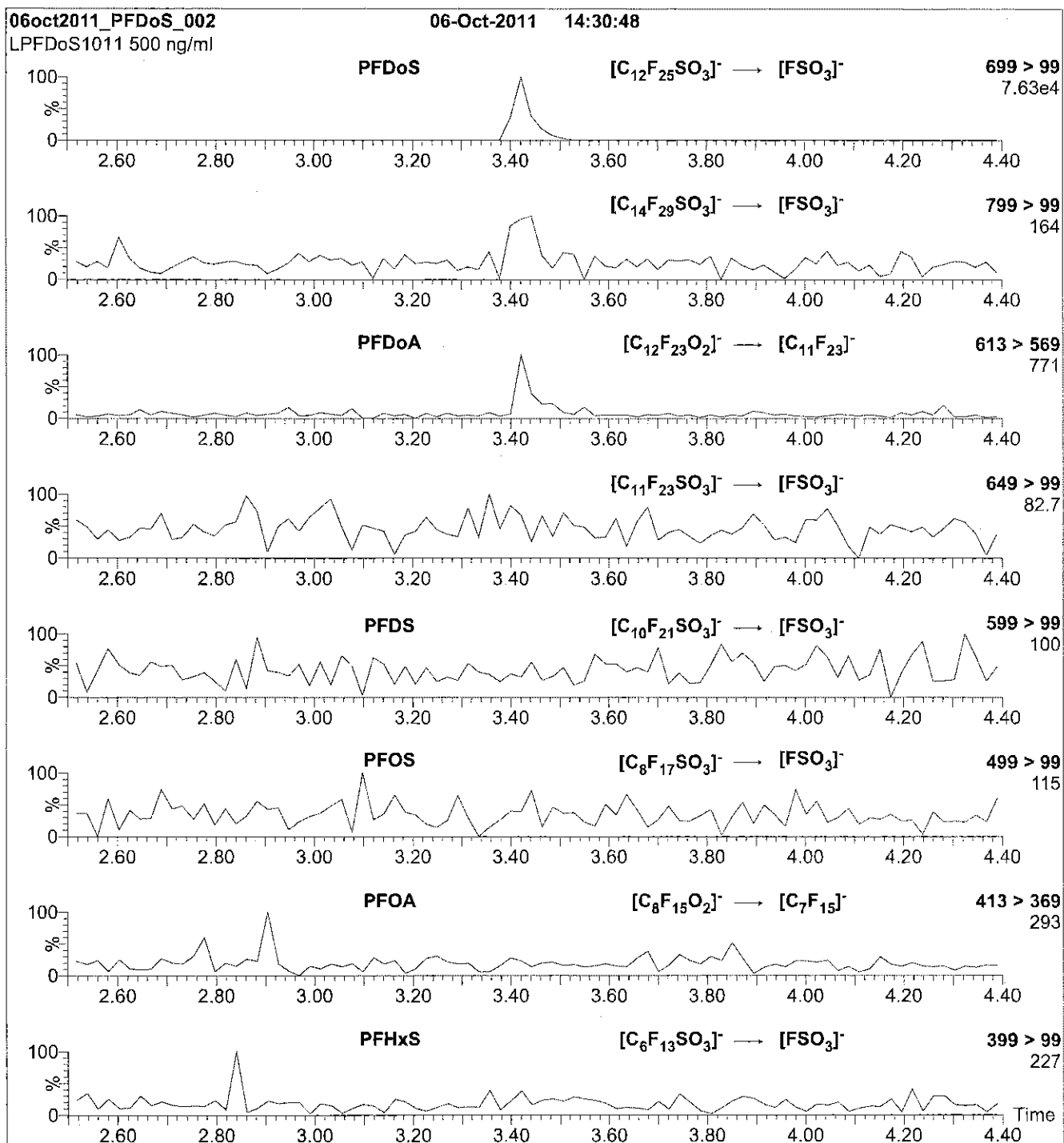
Flow: 300 μ l/min

MS Parameters

Experiment: Full Scan (200 - 850 amu)

Source: Electrospray (negative)
Capillary Voltage (kV) = 3.00
Cone Voltage (V) = 80.00
Cone Gas Flow (l/hr) = 50
Desolvation Gas Flow (l/hr) = 750

Figure 2: L-PFDoS; LC/MS/MS Data (Selected MRM Transitions)



Conditions for Figure 2:

Injection: Direct loop injection
10 μ l (500 ng/ml L-PFDoS)

Mobile phase: Isocratic 65% (80:20 MeOH:ACN) / 35% H_2O
(both with 10 mM NH_4OAc buffer)

Flow: 300 μ l/min

MS Parameters

Collision Gas (mbar) = 3.54e-3
Collision Energy (eV) = 50

Reagent

LCPFDS_00003

P: 21/15 87



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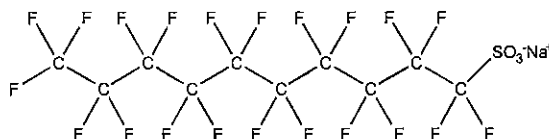
CERTIFICATE OF ANALYSIS DOCUMENTATION

PRODUCT CODE: L-PFDS
COMPOUND: Sodium perfluoro-1-decanesulfonate

LOT NUMBER: LPFDS0913

STRUCTURE:

CAS #: Not available



MOLECULAR FORMULA: $C_{10}F_{21}SO_3Na$
CONCENTRATION: $50.0 \pm 2.5 \mu\text{g/ml}$ (Na salt)
 $48.2 \pm 2.4 \mu\text{g/ml}$ (PFDS anion)
CHEMICAL PURITY: >98%
LAST TESTED: (mm/dd/yyyy) 09/13/2013
EXPIRY DATE: (mm/dd/yyyy) 09/13/2018
RECOMMENDED STORAGE: Store ampoule in a cool, dark place

MOLECULAR WEIGHT: 622.13
SOLVENT(S): Methanol

DOCUMENTATION/ DATA ATTACHED:

Figure 1: LC/MS Data (TIC and Mass Spectrum)
Figure 2: LC/MS/MS Data (Selected MRM Transitions)

ADDITIONAL INFORMATION:

- See page 2 for further details.

FOR LABORATORY USE ONLY: NOT FOR HUMAN OR DRUG USE

Certified By:

B.G. Chittim

Date: 09/23/2013
(mm/dd/yyyy)

Wellington Laboratories Inc., 345 Southgate Dr. Guelph ON N1G 3M5 CANADA
519-822-2436 • Fax: 519-822-2849 • info@well-labs.com

INTENDED USE:

The products prepared by Wellington Laboratories Inc. are for laboratory use only. They are designed to be used as reference standards for the identification and/or quantification of specific chemical compound(s).

HAZARDS:

This product should only be used by qualified personnel familiar with its potential hazards and trained in the handling of hazardous chemicals. Due care should be exercised to prevent unnecessary human contact or ingestion. All procedures should be carried out in a well-functioning fume hood and suitable gloves, eye protection and clothing should be worn at all times. Waste should be disposed of according to national and regional regulations. Material Safety Data Sheets (MSDSs) are available upon request.

SYNTHESIS / CHARACTERIZATION:

Where possible, all of our products are synthesized using single-product, unambiguous routes. They are then characterized, and their structures and purities confirmed, using a combination of the most relevant techniques, such as NMR, GC/MS, LC/MS/MS, x-ray crystallography and melting point. Isotopic purities of mass-labelled compounds are also confirmed using HRGC/HRMS and/or LC/MS/MS.

HOMOGENEITY:

Prior to solution preparation, crystalline material is tested for homogeneity using a variety of techniques (as stated above) and its solubility in a given diluent is taken into consideration. Duplicate solutions of a new product are prepared from the same crystalline lot and, after the addition of an appropriate internal standard, they are compared by GC/MS and/or LC/MS/MS. The relative response factors of the analyte of interest in each solution are required to be <5% RSD. New solution lots of existing products are compared to older lots in the same manner, which further confirms the homogeneity of the crystalline material as well as the stability and homogeneity of the solutions in the storage containers.

UNCERTAINTY:

The maximum combined relative standard uncertainty of our reference standard solutions is calculated using the following equation:

The combined relative standard uncertainty, $u_c(y)$, of a value y and the uncertainty of the independent parameters x_1, x_2, \dots, x_n on which it depends is:

$$u_c(y(x_1, x_2, \dots, x_n)) = \sqrt{\sum_{i=1}^n u(y, x_i)^2}$$

where x is expressed as a relative standard uncertainty of the individual parameter.

The individual uncertainties taken into account include those associated with weights (calibration of the balance) and volumes (calibration of the volumetric glassware). An expanded maximum combined percent relative uncertainty of $\pm 5\%$ (calculated with a coverage factor of 2 and a level of confidence of 95%) is stated on the Certificate of Analysis for all our products.

TRACEABILITY:

All reference standard solutions are traceable to specific crystalline lots. The microbalances used for solution preparation are regularly tested by an external, ISO/IEC 17025:2005 accredited calibration company. In addition, their calibration is verified prior to each weighing using NIST and/or NRC traceable external weights. All volumetric glassware used is of Class A tolerance and has been tested according to the appropriate ASTM procedures, which are ultimately traceable to NIST. For certain products, traceability to international interlaboratory studies has also been established.

EXPIRY DATE / PERIOD OF VALIDITY:

Ongoing stability studies of this product have demonstrated stability in its composition and concentration for the period of time specified by the expiry date in the unopened ampoule. Monitoring for any degradation or change in concentration of the listed analyte(s) is performed on a routine basis.

LIMITED WARRANTY:

At the time of shipment, all products are warranted to be free of defects in material and workmanship and to conform to the stated technical and purity specifications.

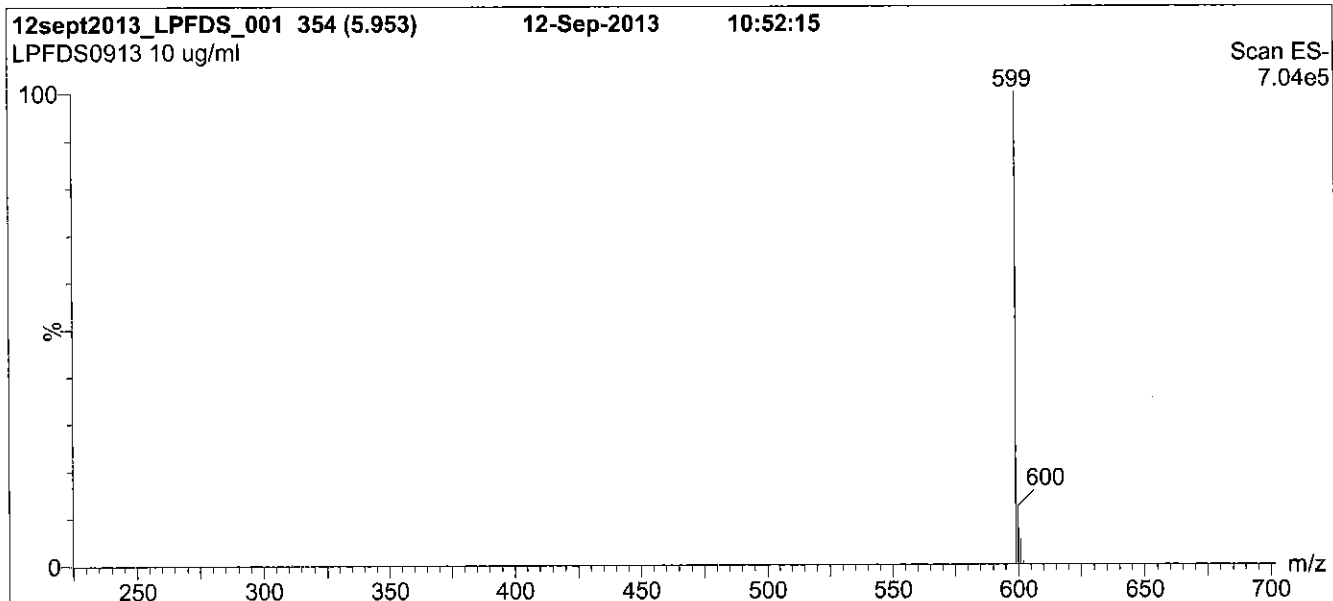
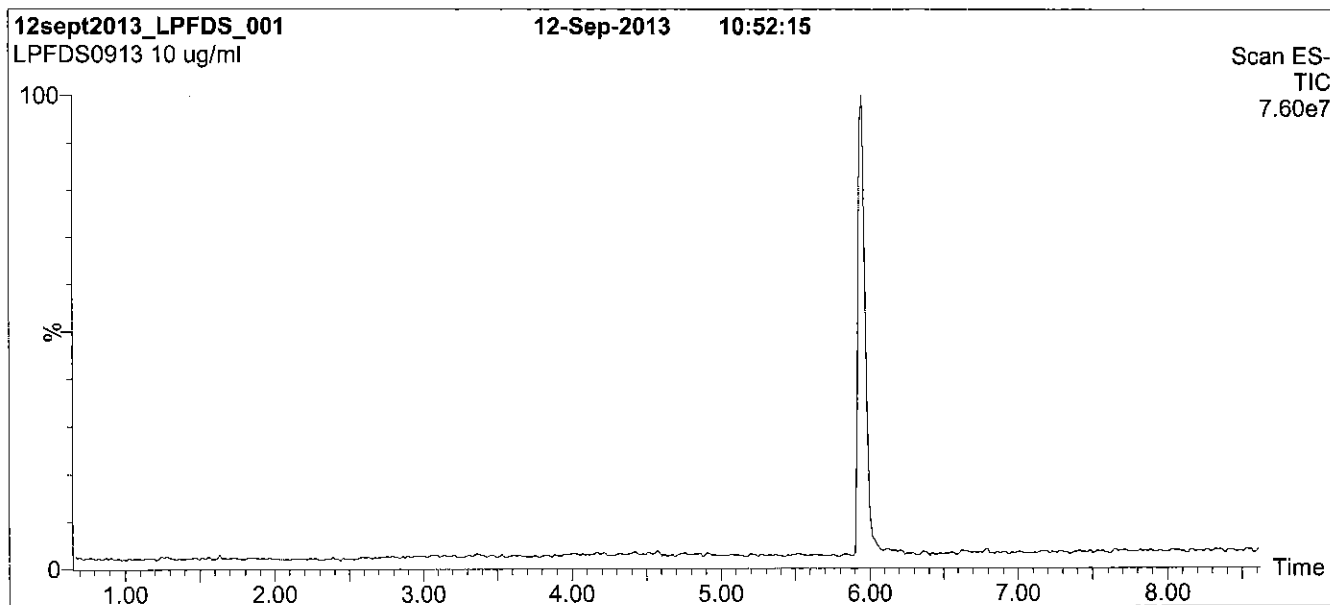
QUALITY MANAGEMENT:

This product was produced using a Quality Management System registered to ISO 9001:2008 by SAI Global, ISO/IEC 17025:2005 by the Canadian Association for Laboratory Accreditation Inc. (CALA; A 1226), and ISO GUIDE 34:2009 by ACLASS (certificate number AR-1523).



For additional information or assistance concerning this or any other products from Wellington Laboratories Inc., please visit our website at www.well-labs.com or contact us directly at info@well-labs.com

Figure 1: L-PFDS; LC/MS Data (TIC and Mass Spectrum)



Conditions for Figure 1:

LC: Waters Acquity Ultra Performance LC
MS: Micromass Quattro *micro* API MS

Chromatographic Conditions

Column: Acquity UPLC BEH Shield RP₁₈
1.7 μ m, 2.1 x 100 mm

Mobile phase: Gradient

Start: 45% (80:20 MeOH:ACN) / 55% H₂O
(both with 10 mM NH₄OAc buffer)
Ramp to 90% organic over 7 min and hold for
1.5 min before returning to initial conditions in 0.5 min.
Time: 11 min

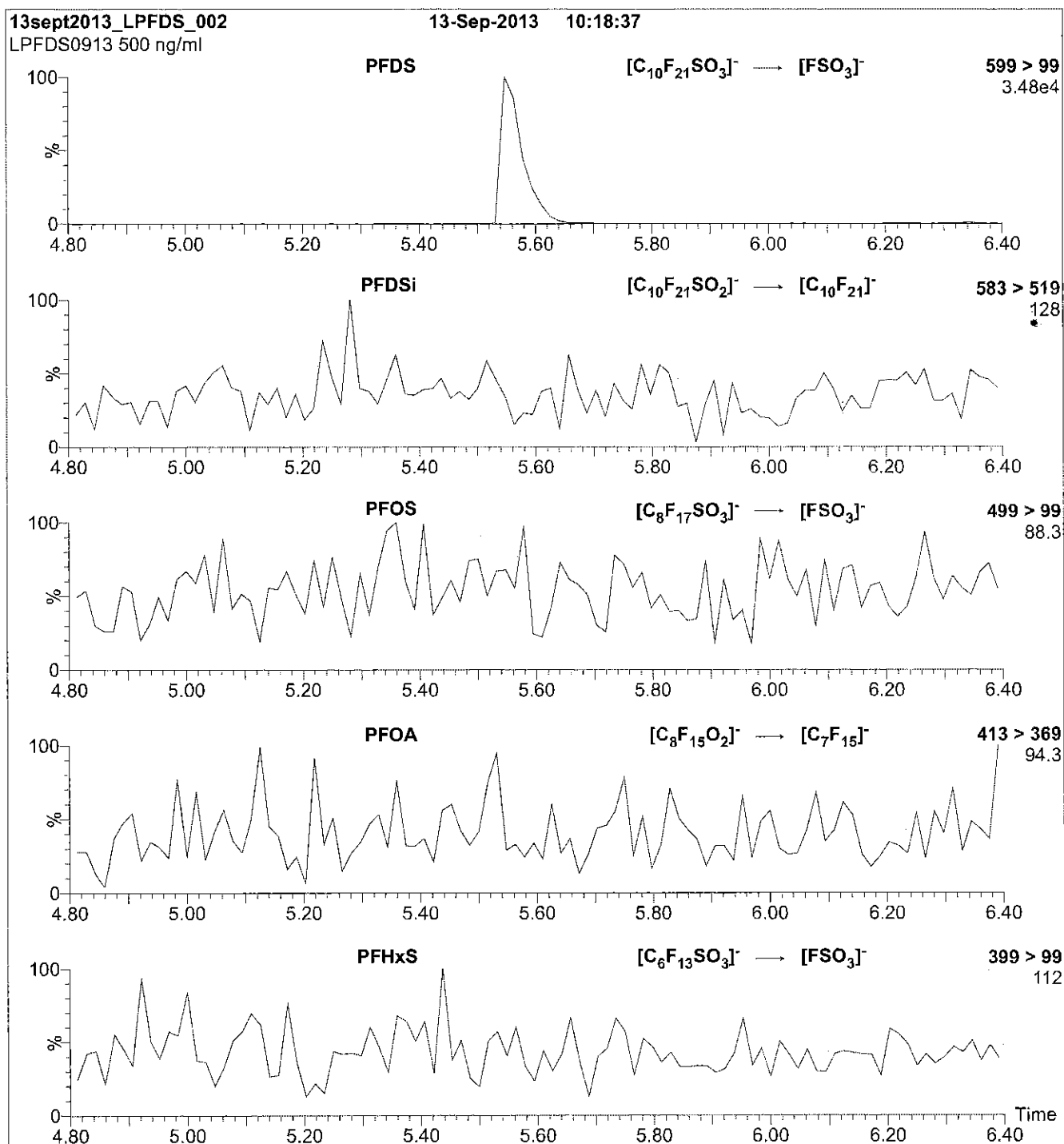
Flow: 300 μ l/min

MS Parameters

Experiment: Full Scan (225 - 850 amu)

Source: Electrospray (negative)
Capillary Voltage (kV) = 2.00
Cone Voltage (V) = 70.00
Cone Gas Flow (l/hr) = 60
Desolvation Gas Flow (l/hr) = 650

Figure 2: L-PFDS; LC/MS/MS Data (Selected MRM Transitions)



Conditions for Figure 2:

Injection: Direct loop injection
10 μ l (500 ng/ml L-PFDS)

Mobile phase: Isocratic 80% (80:20 MeOH:ACN) / 20% H₂O
(both with 10 mM NH₄OAc buffer)

Flow: 300 μ l/min

MS Parameters

Collision Gas (mbar) = 3.78e-3
Collision Energy (eV) = 50

Reagent

LCPFHpA_00004



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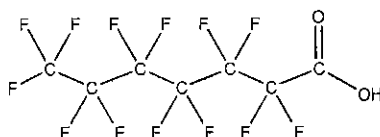
CERTIFICATE OF ANALYSIS DOCUMENTATION

PRODUCT CODE: PFHpA
COMPOUND: Perfluoro-n-heptanoic acid

LOT NUMBER: PFHpA0514

STRUCTURE:

CAS #: 375-85-9



MOLECULAR FORMULA: $C_7H_7F_{13}O_2$
CONCENTRATION: $50 \pm 2.5 \mu\text{g/ml}$

MOLECULAR WEIGHT: 364.06
SOLVENT(S): Methanol
Water (<1%)

CHEMICAL PURITY: >98%
LAST TESTED: (mm/dd/yyyy) 05/09/2014
EXPIRY DATE: (mm/dd/yyyy) 05/09/2019
RECOMMENDED STORAGE: Store ampoule in a cool, dark place

DOCUMENTATION/ DATA ATTACHED:

Figure 1: LC/MS Data (TIC and Mass Spectrum)
Figure 2: LC/MS/MS Data (Selected MRM Transitions)

ADDITIONAL INFORMATION:

- See page 2 for further details.
- Contains 4 mole eq. of NaOH to prevent conversion of the carboxylic acid to the methyl ester.

FOR LABORATORY USE ONLY: NOT FOR HUMAN OR DRUG USE

Certified By:

B.G. Chittim

Date: 05/22/2014
(mm/dd/yyyy)

Wellington Laboratories Inc., 345 Southgate Dr. Guelph ON N1G 3M5 CANADA
519-822-2436 • Fax: 519-822-2849 • info@well-labs.com

INTENDED USE:

The products prepared by Wellington Laboratories Inc. are for laboratory use only. They are designed to be used as reference standards for the identification and/or quantification of specific chemical compound(s).

HAZARDS:

This product should only be used by qualified personnel familiar with its potential hazards and trained in the handling of hazardous chemicals. Due care should be exercised to prevent unnecessary human contact or ingestion. All procedures should be carried out in a well-functioning fume hood and suitable gloves, eye protection and clothing should be worn at all times. Waste should be disposed of according to national and regional regulations. Material Safety Data Sheets (MSDSs) are available upon request.

SYNTHESIS / CHARACTERIZATION:

Where possible, all of our products are synthesized using single-product, unambiguous routes. They are then characterized, and their structures and purities confirmed, using a combination of the most relevant techniques, such as NMR, GC/MS, LC/MS/MS, x-ray crystallography and melting point. Isotopic purities of mass-labelled compounds are also confirmed using HRGC/HRMS and/or LC/MS/MS.

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UNCERTAINTY:

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The combined relative standard uncertainty, $u_c(y)$, of a value y and the uncertainty of the independent parameters x_1, x_2, \dots, x_n on which it depends is:

$$u_c(y(x_1, x_2, \dots, x_n)) = \sqrt{\sum_{i=1}^n u(y, x_i)^2}$$

where x is expressed as a relative standard uncertainty of the individual parameter.

The individual uncertainties taken into account include those associated with weights (calibration of the balance) and volumes (calibration of the volumetric glassware). An expanded maximum combined percent relative uncertainty of $\pm 5\%$ (calculated with a coverage factor of 2 and a level of confidence of 95%) is stated on the Certificate of Analysis for all our products.

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EXPIRY DATE / PERIOD OF VALIDITY:

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LIMITED WARRANTY:

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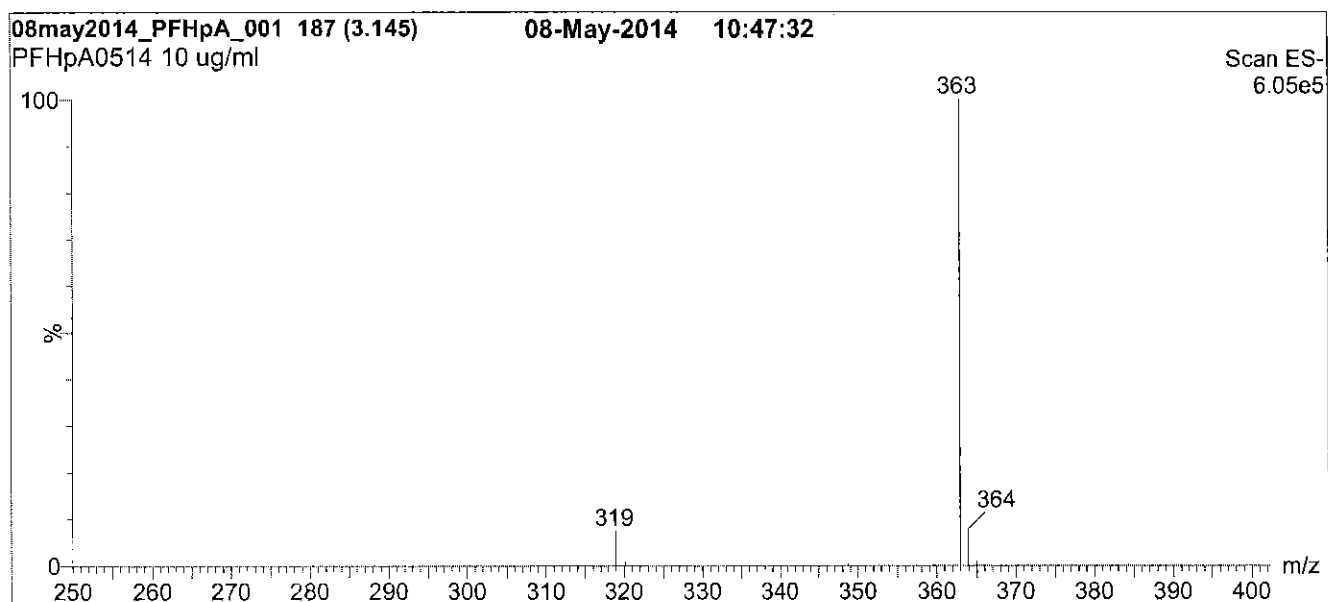
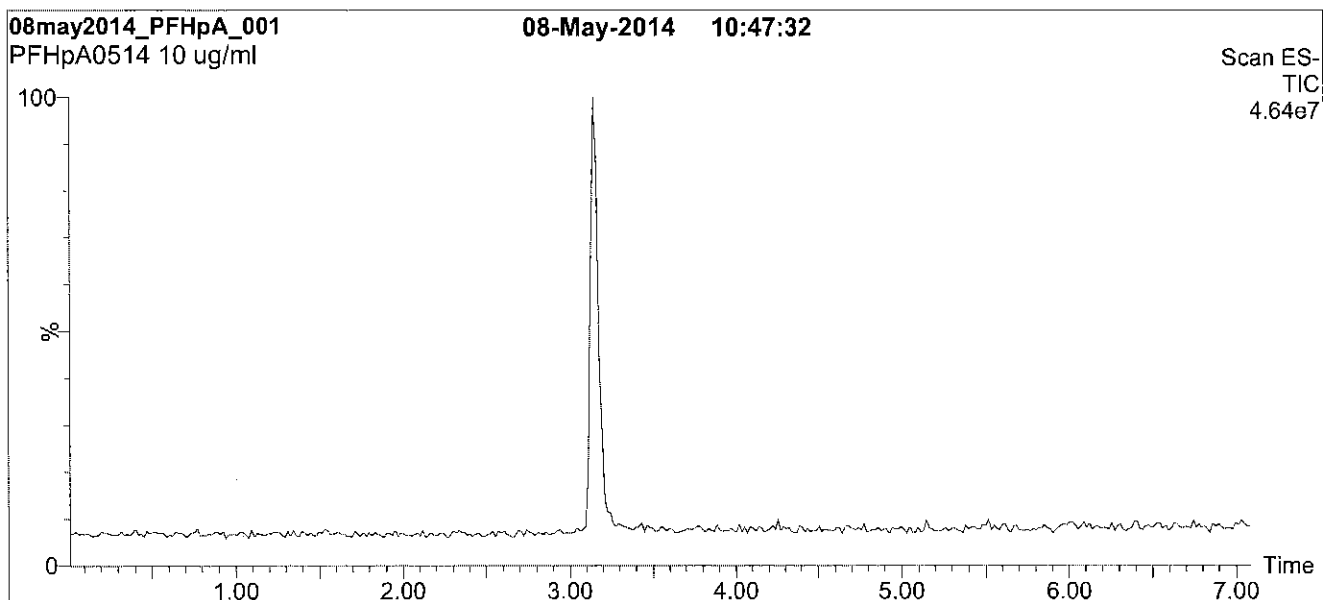
QUALITY MANAGEMENT:

This product was produced using a Quality Management System registered to ISO 9001:2008 by SAI Global, ISO/IEC 17025:2005 by the Canadian Association for Laboratory Accreditation Inc. (CALA; A 1226), and ISO GUIDE 34:2009 by ACLASS (certificate number AR-1523).



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Figure 1: PFHpA; LC/MS Data (TIC and Mass Spectrum)



Conditions for Figure 1:

LC: Waters Acquity Ultra Performance LC
MS: Micromass Quattro *micro* API MS

Chromatographic Conditions

Column: Acquity UPLC BEH C₁₈
1.7 μ m, 2.1 x 100 mm

Mobile phase: Gradient
Start: 50% (80:20 MeOH:ACN) / 50% H₂O
(both with 10 mM NH₄OAc buffer)
Ramp to 90% organic over 7 min and hold for
2 min before returning to initial conditions in 0.5 min.
Time: 10 min

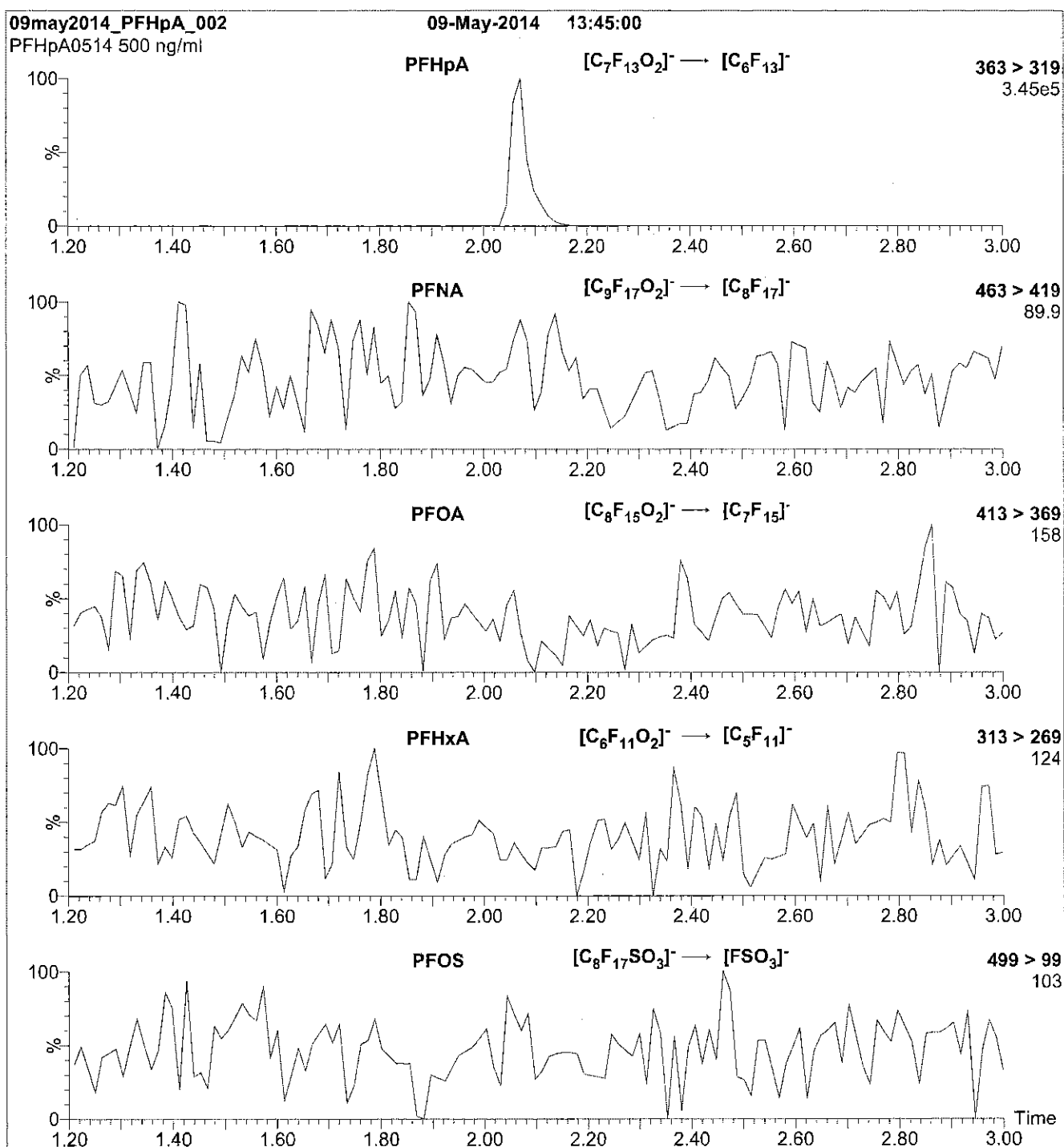
Flow: 300 μ l/min

MS Parameters

Experiment: Full Scan (250 - 950 amu)

Source: Electrospray (negative)
Capillary Voltage (kV) = 2.00
Cone Voltage (V) = 15.00
Cone Gas Flow (l/hr) = 50
Desolvation Gas Flow (l/hr) = 750

Figure 2: PFHpA; LC/MS/MS Data (Selected MRM Transitions)



Conditions for Figure 2:

Injection: Direct loop injection
10 μ l (500 ng/ml PFHpA)

Mobile phase: Isocratic 80% (80:20 MeOH:ACN) / 20% H₂O
(both with 10 mM NH₄OAc buffer)

Flow: 300 μ l/min

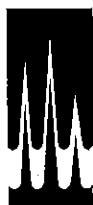
MS Parameters

Collision Gas (mbar) = 3.24e-3
Collision Energy (eV) = 11

Reagent

LCPFHpS_00005

P. 4/15/15 SW



WELLINGTON LABORATORIES

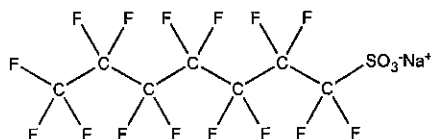
CERTIFICATE OF ANALYSIS DOCUMENTATION

PRODUCT CODE: L-PFHpS
COMPOUND: Sodium perfluoro-1-heptanesulfonate

LOT NUMBER: LPFHpS0114

STRUCTURE:

CAS #: Not available



MOLECULAR FORMULA: $C_7F_{15}SO_3Na$
CONCENTRATION: $50.0 \pm 2.5 \mu\text{g/ml}$ (Na salt)
 $47.6 \pm 2.4 \mu\text{g/ml}$ (PFHpS anion)
CHEMICAL PURITY: >98%
LAST TESTED: (mm/dd/yyyy) 01/28/2014
EXPIRY DATE: (mm/dd/yyyy) 01/28/2019
RECOMMENDED STORAGE: Store ampoule in a cool, dark place

MOLECULAR WEIGHT: 472.10
SOLVENT(S): Methanol

DOCUMENTATION/ DATA ATTACHED:

Figure 1: LC/MS Data (TIC and Mass Spectrum)
Figure 2: LC/MS/MS Data (Selected MRM Transitions)

ADDITIONAL INFORMATION:

- See page 2 for further details.
- Contains ~ 0.1% of L-PFHxS ($C_6F_{13}SO_3Na$) and ~ 0.2% of L-PFOS ($C_8F_{17}SO_3Na$).

FOR LABORATORY USE ONLY: NOT FOR HUMAN OR DRUG USE

Certified By:

B.G. Chittim

Date: 03/27/2015

(mm/dd/yyyy)

Wellington Laboratories Inc., 345 Southgate Dr. Guelph ON N1G 3M5 CANADA
519-822-2436 • Fax: 519-822-2849 • info@well-labs.com

INTENDED USE:

The products prepared by Wellington Laboratories Inc. are for laboratory use only. This certified reference material (CRM) was designed to be used as a standard for the identification and/or quantification of the specific chemical compound it contains.

HAZARDS:

This product should only be used by qualified personnel familiar with its potential hazards and trained in the handling of hazardous chemicals. Due care should be exercised to prevent unnecessary human contact or ingestion. All procedures should be carried out in a well-functioning fume hood and suitable gloves, eye protection, and clothing should be worn at all times. Waste should be disposed of according to national and regional regulations. Safety Data Sheets (SDSs) are available upon request.

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where x is expressed as a relative standard uncertainty of the individual parameter.

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TRACEABILITY:

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EXPIRY DATE / PERIOD OF VALIDITY:

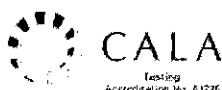
Ongoing stability studies of this product have demonstrated stability in its composition and concentration, until the specified expiry date, in the unopened ampoule. Monitoring for any degradation or change in concentration of the listed analyte(s) is performed on a routine basis.

LIMITED WARRANTY:

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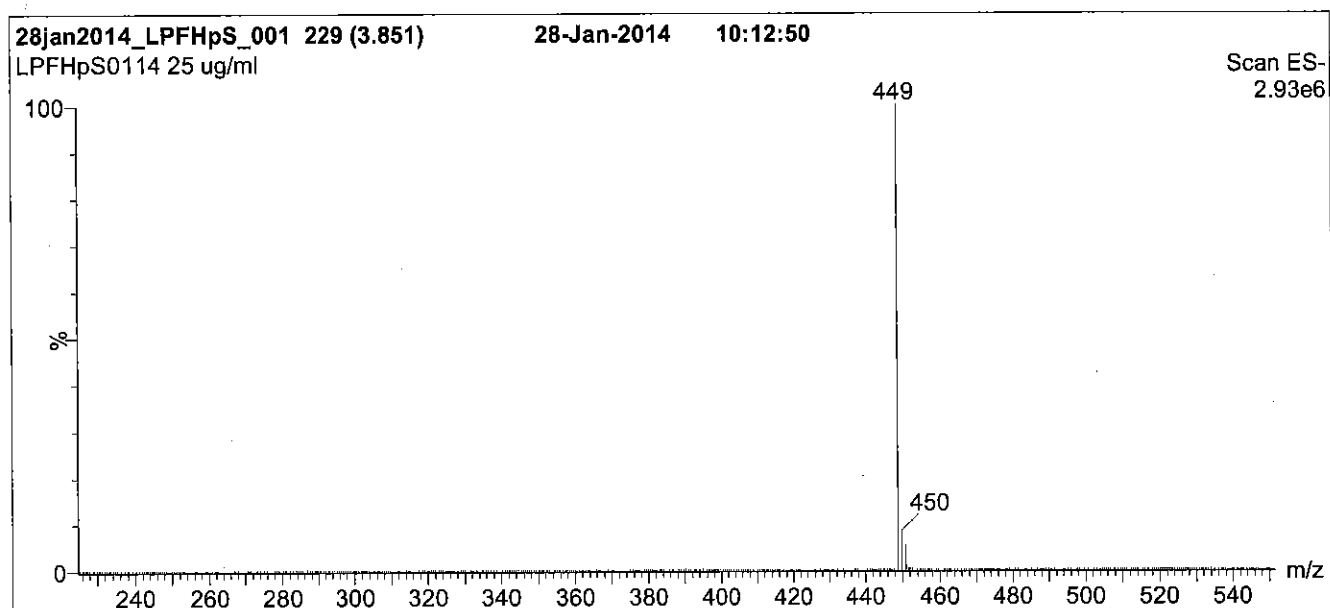
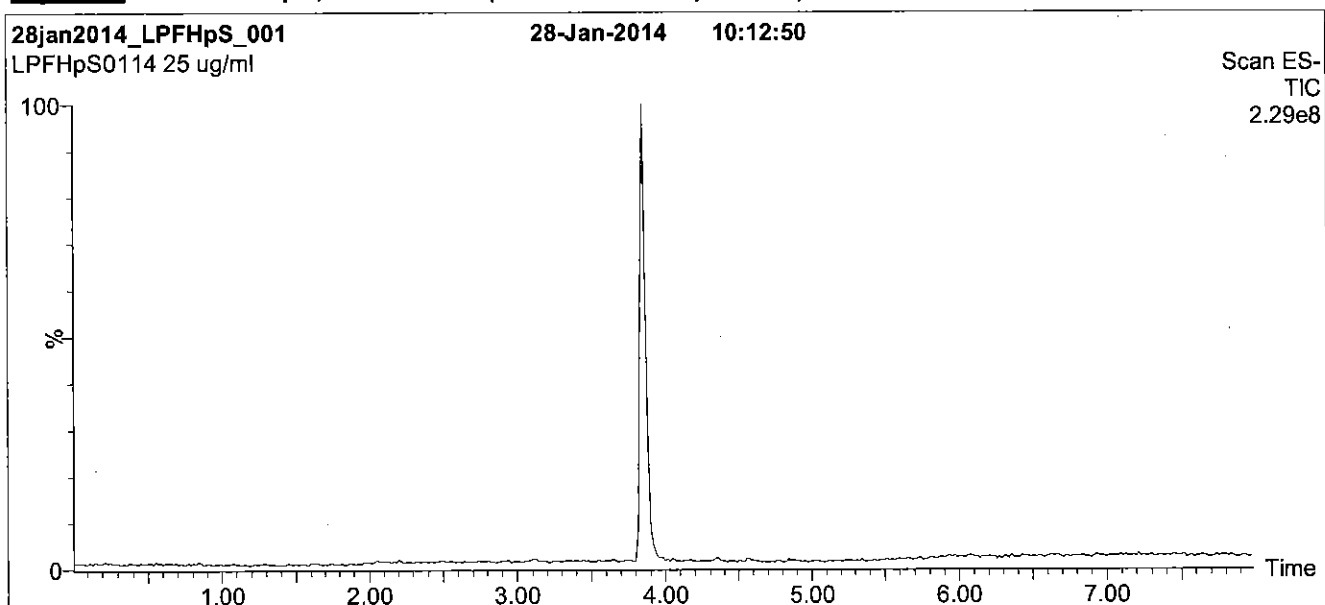
QUALITY MANAGEMENT:

This product was produced using a Quality Management System registered to the latest versions of ISO 9001 by SAI Global, ISO/IEC 17025 by the Canadian Association for Laboratory Accreditation Inc. (CALA; A 1226), and ISO GUIDE 34 by ANSI-ASQ National Accreditation Board (ANAB; AR-1523).



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Figure 1: L-PFHpS; LC/MS Data (TIC and Mass Spectrum)



Conditions for Figure 1:

LC: Waters Acquity Ultra Performance LC
MS: Micromass Quattro micro API MS

Chromatographic Conditions

Column: Acquity UPLC BEH Shield RP₁₈
1.7 μ m, 2.1 x 100 mm

Mobile phase: Gradient
Start: 50% (80:20 MeOH:ACN) / 50% H₂O
(both with 10 mM NH₄OAc buffer)
Ramp to 90% organic over 7 min and hold for
1.5 min before returning to initial conditions in 0.5 min.
Time: 10 min

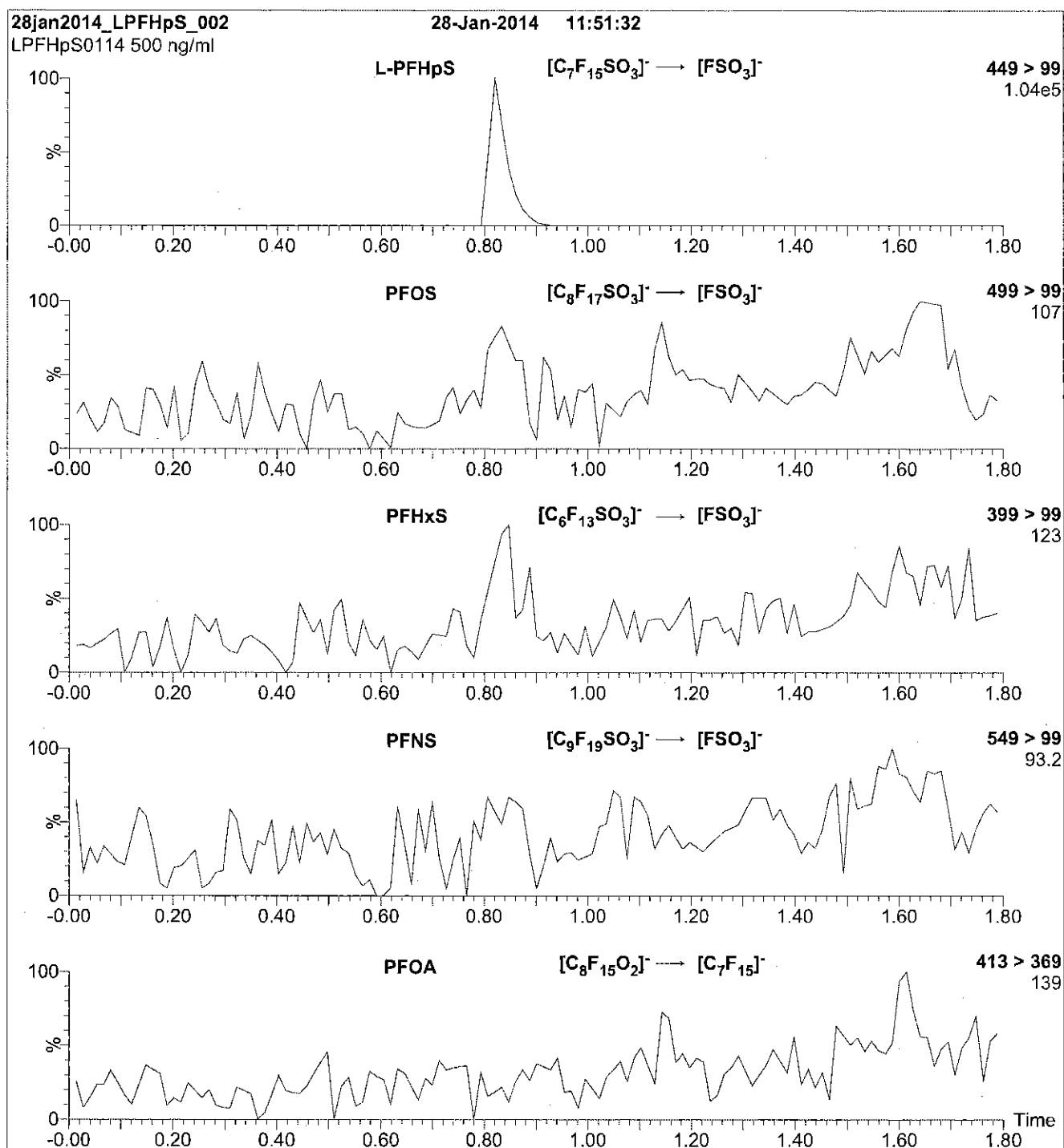
Flow: 300 μ l/min

MS Parameters

Experiment: Full Scan (225 - 850 amu)

Source: Electrospray (negative)
Capillary Voltage (kV) = 2.00
Cone Voltage (V) = 60.00
Cone Gas Flow (l/hr) = 60
Desolvation Gas Flow (l/hr) = 750

Figure 2: L-PFHpS; LC/MS/MS Data (Selected MRM Transitions)



Conditions for Figure 2:

Injection: Direct loop injection
10 μ l (500 ng/ml L-PFHpS)

Mobile phase: Isocratic 80% (80:20 MeOH:ACN) / 20% H₂O
(both with 10 mM NH₄OAc buffer)

Flow: 300 μ l/min

MS Parameters

Collision Gas (mbar) = 3.66e-3
Collision Energy (eV) = 35

Reagent

LCPFHxA_00003



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CERTIFICATE OF ANALYSIS DOCUMENTATION

PRODUCT CODE:

PFHxA

LOT NUMBER:

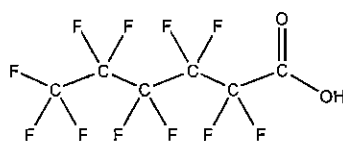
PFHxA0514

COMPOUND:

Perfluoro-n-hexanoic acid

STRUCTURE:**CAS #:**

307-24-4

**MOLECULAR FORMULA:** $C_6H_{11}O_2$ **MOLECULAR WEIGHT:**

314.05

CONCENTRATION: $50 \pm 2.5 \mu\text{g/ml}$ **SOLVENT(S):**Methanol
Water (<1%)**CHEMICAL PURITY:**

>98%

LAST TESTED: (mm/dd/yyyy)

05/09/2014

EXPIRY DATE: (mm/dd/yyyy)

05/09/2019

RECOMMENDED STORAGE:

Store ampoule in a cool, dark place

DOCUMENTATION/ DATA ATTACHED:

Figure 1: LC/MS Data (TIC and Mass Spectrum)

Figure 2: LC/MS/MS Data (Selected MRM Transitions)

ADDITIONAL INFORMATION:

- See page 2 for further details.
- Contains 4 mole eq. of NaOH to prevent conversion of the carboxylic acid to the methyl ester.

FOR LABORATORY USE ONLY: NOT FOR HUMAN OR DRUG USE

Certified By:

B.G. Chittim

Date: 05/22/2014

(mm/dd/yyyy)

Wellington Laboratories Inc., 345 Southgate Dr. Guelph ON N1G 3M5 CANADA
519-822-2436 • Fax: 519-822-2849 • info@well-labs.com

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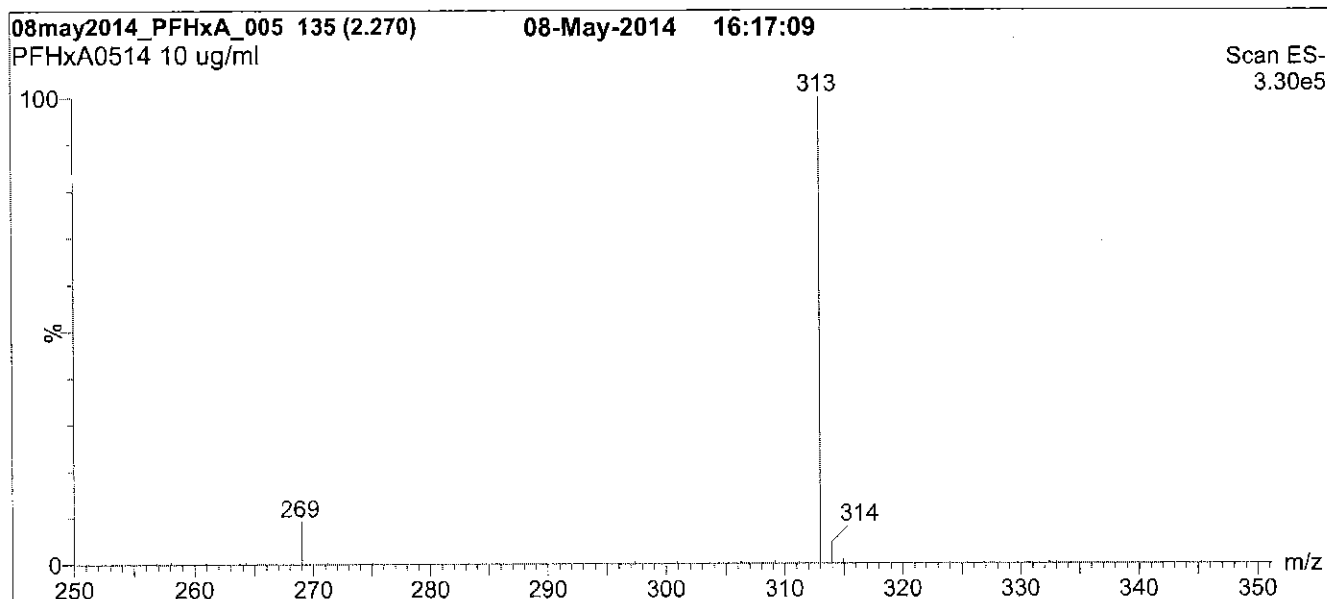
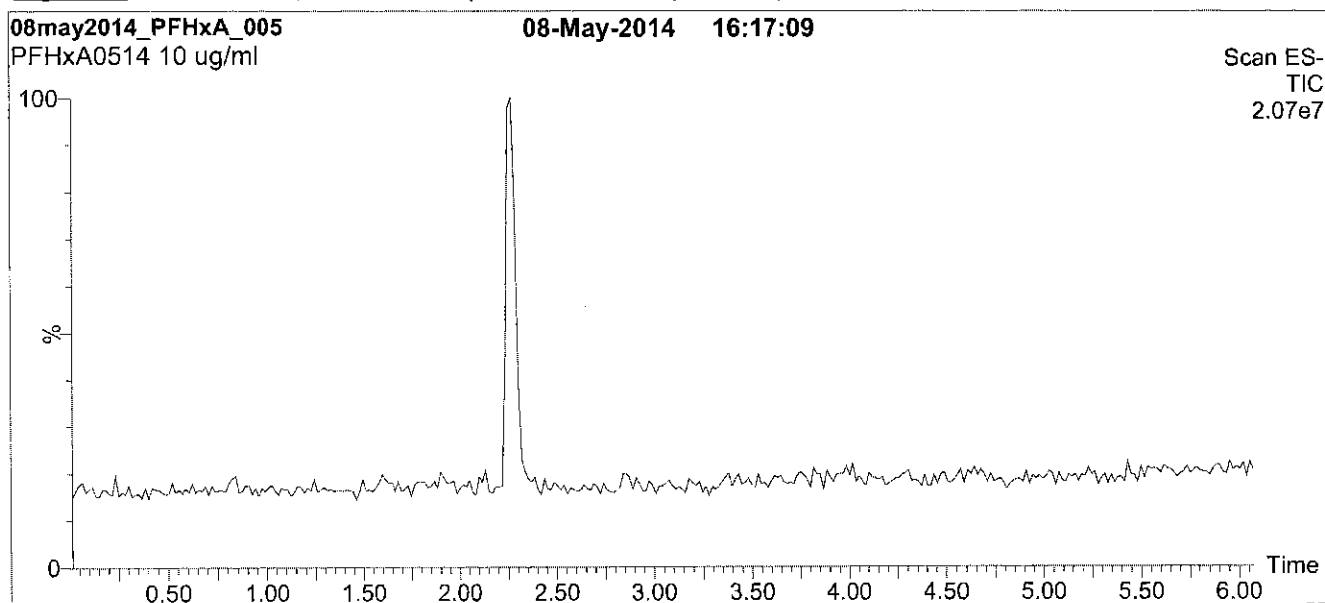
QUALITY MANAGEMENT:

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Figure 1: PFHxA; LC/MS Data (TIC and Mass Spectrum)



Conditions for Figure 1:

LC: Waters Acquity Ultra Performance LC
MS: Micromass Quattro *micro* API MS

Chromatographic Conditions

Column: Acquity UPLC BEH C₁₈
1.7 μ m, 2.1 x 100 mm

Mobile phase: Gradient
Start: 50% (80:20 MeOH:ACN) / 50% H₂O
(both with 10 mM NH₄OAc buffer)
Ramp to 90% organic over 7 min and hold for 2 min
before returning to initial conditions in 0.5 min.
Time: 10 min

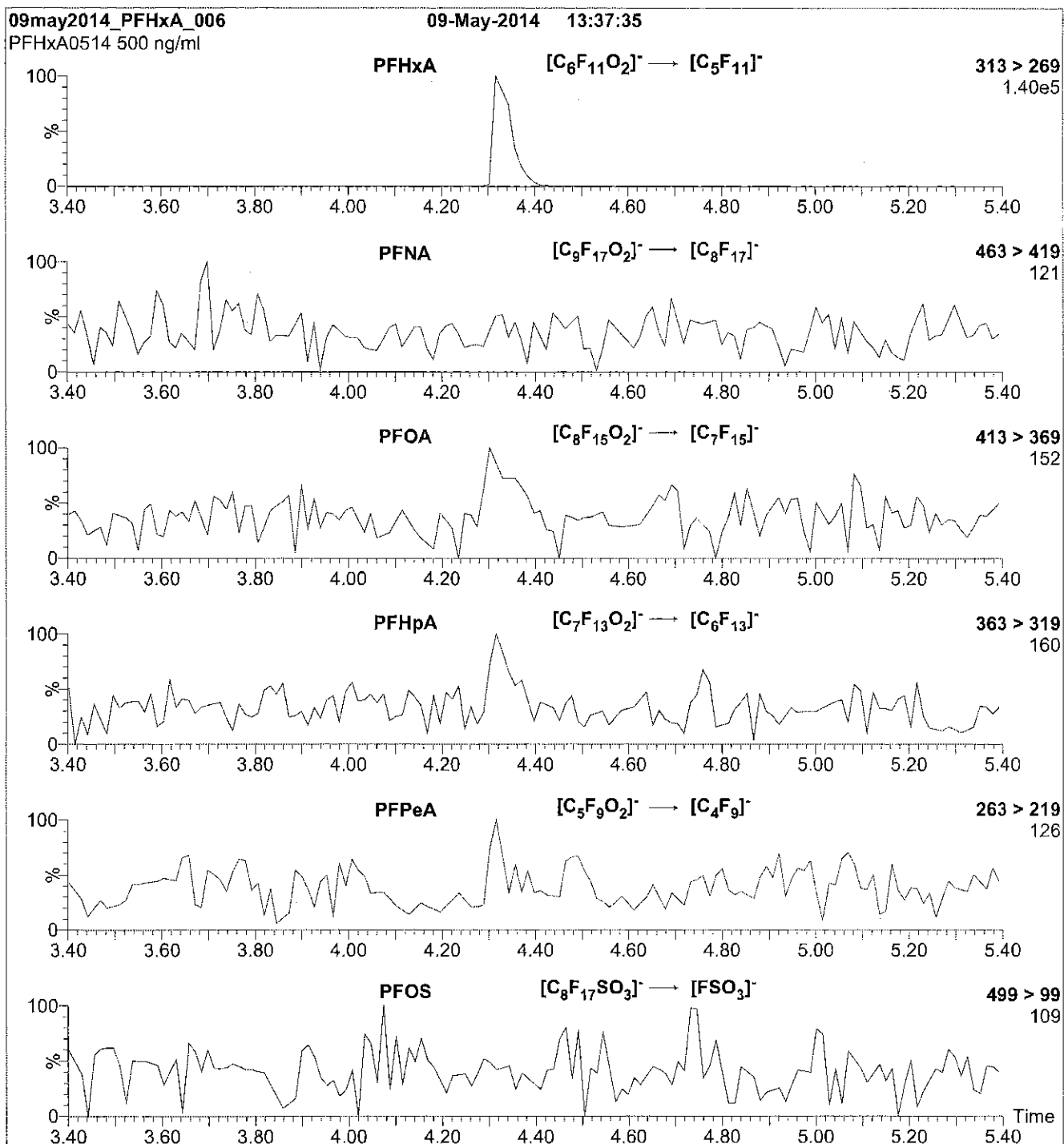
Flow: 300 μ l/min

MS Parameters

Experiment: Full Scan (250 - 950 amu)

Source: Electrospray (negative)
Capillary Voltage (kV) = 2.00
Cone Voltage (V) = 15.00
Cone Gas Flow (l/hr) = 100
Desolvation Gas Flow (l/hr) = 750

Figure 2: PFHxA; LC/MS/MS Data (Selected MRM Transitions)



Conditions for Figure 2:

Injection: Direct loop injection
10 μ l (500 ng/ml PFHxA)

Mobile phase: Isocratic 80% (80:20 MeOH:ACN) / 20% H₂O
(both with 10 mM NH₄OAc buffer)

Flow: 300 μ l/min

MS Parameters

Collision Gas (mbar) = 3.24e-3
Collision Energy (eV) = 10

Reagent

LCPFHxS-br_00001



566007

ID: LCPFHxS-br_00001

Exp: 07/03/20 Ppdt: CBW

Potassium Perfluorohexane

P: 12/9/15 SW

**WELLINGTON**
LABORATORIES**CERTIFICATE OF ANALYSIS**
DOCUMENTATION**br-PFHxSK****Potassium Perfluorohexanesulfonate**
Solution/Mixture of Linear and
Branched Isomers

PRODUCT CODE: br-PFHxSK
LOT NUMBER: brPFHxSK0615
CONCENTRATION: 50.0 ± 2.5 µg/ml (total potassium salt)
45.5 ± 2.3 µg/ml (total PFHxS anion)
SOLVENT(S): Methanol
DATE PREPARED: (mm/dd/yyyy) 06/29/2015
LAST TESTED: (mm/dd/yyyy) 07/03/2015
EXPIRY DATE: (mm/dd/yyyy) 07/03/2020
RECOMMENDED STORAGE: Store ampoule in a cool, dark place

DESCRIPTION:

The chemical purity has been determined to be ≥98% perfluorohexanesulfonate linear and branched isomers. The full name, structure and percent composition for each of the identified isomeric components are given in Table A.

DOCUMENTATION/ DATA ATTACHED:

Table A: Isomeric Components and Percent Composition by ¹⁹F-NMR
Figure 1: LC/MS Data (TIC and Mass Spectrum)
Figure 2: LC/MS Data
Figure 3: LC/MS/MS Data (Selected MRM Transitions)

ADDITIONAL INFORMATION:

- See page 2 for further details.
- Contains ~ 0.5% of perfluoro-1-pentanesulfonate and ~ 0.2% of perfluoro-1-octanesulfonate.
- CAS#: 3871-99-6 (for linear isomer; potassium salt).

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Table A: br-PFHxSK; Isomeric Components and Percent Composition (by ^{19}F -NMR)*

Isomer	Name	Structure	Percent Composition by ¹⁹ F-NMR
1	Potassium perfluoro-1-hexanesulfonate	CF ₃ CF ₂ CF ₂ CF ₂ CF ₂ CF ₂ SO ₃ ⁻ K ⁺	81.1
2	Potassium 1-trifluoromethylperfluoropentanesulfonate**	$\begin{array}{c} \text{CF}_3\text{CF}_2\text{CF}_2\text{CF}_2\text{CF}_2\text{SO}_3^-\text{K}^+ \\ \\ \text{CF}_3 \end{array}$	2.9
3	Potassium 2-trifluoromethylperfluoropentanesulfonate	$\begin{array}{c} \text{CF}_3\text{CF}_2\text{CF}_2\text{CF}_2\text{CF}_2\text{SO}_3^-\text{K}^+ \\ \\ \text{CF}_3 \end{array}$	1.4
4	Potassium 3-trifluoromethylperfluoropentanesulfonate	$\begin{array}{c} \text{CF}_3\text{CF}_2\text{CF}_2\text{CF}_2\text{CF}_2\text{SO}_3^-\text{K}^+ \\ \\ \text{CF}_3 \end{array}$	5.0
5	Potassium 4-trifluoromethylperfluoropentanesulfonate	$\begin{array}{c} \text{CF}_3\text{CF}_2\text{CF}_2\text{CF}_2\text{CF}_2\text{SO}_3^-\text{K}^+ \\ \\ \text{CF}_3 \end{array}$	8.9
6	Potassium 3,3-di(trifluoromethyl)perfluorobutanesulfonate	$\begin{array}{c} \text{CF}_3 \\ \\ \text{CF}_3\text{CCF}_2\text{CF}_2\text{SO}_3^-\text{K}^+ \\ \\ \text{CF}_3 \end{array}$	0.2
7	Other Unidentified Isomers		0.5

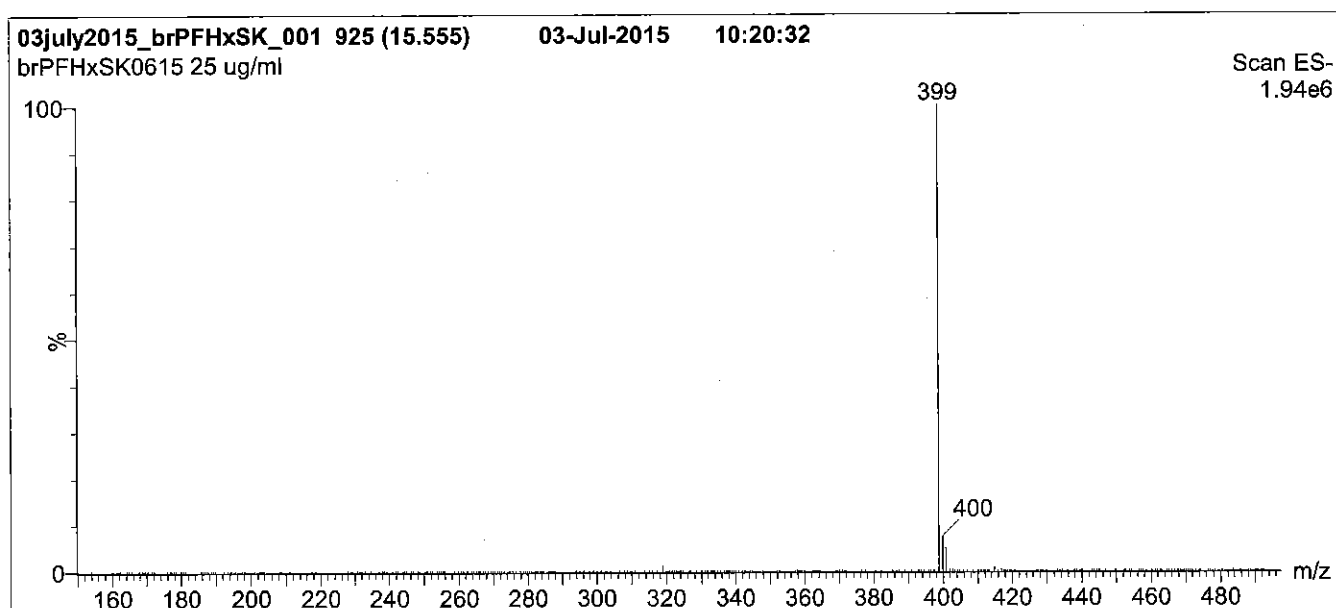
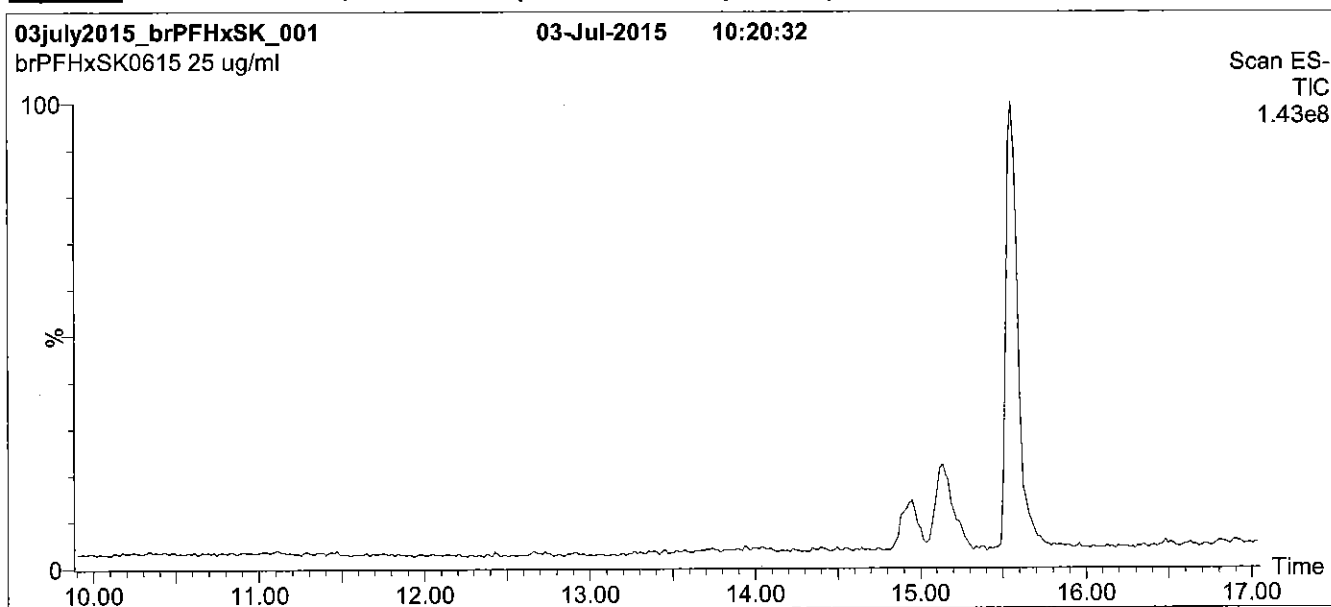
* Percent of total perfluorohexanesulfonate isomers only.
** Systematic Name: Potassium perfluorohexane-2-sulfonate.

Certified By:


B.G. Chittim

Date: 07/15/2015
(mm/dd/yyyy)

Figure 1: br-PFHxSK; LC/MS Data (TIC and Mass Spectrum)



Conditions for Figure 1:

LC: Waters Acquity Ultra Performance LC
MS: Micromass Quattro *micro* API MS

Chromatographic Conditions

Column: Acquity UPLC BEH Shield RP₁₈
1.7 μ m, 2.1 x 100 mm

Mobile phase: Gradient

Start: 20% (80:20 MeOH:ACN) / 80% H₂O
(both with 10 mM NH₄OAc buffer)
Ramp to 50% organic over 14 min. Ramp to
90% organic over 3 min and hold for 1.5 min
before returning to initial conditions in 0.5 min.
Time: 20 min

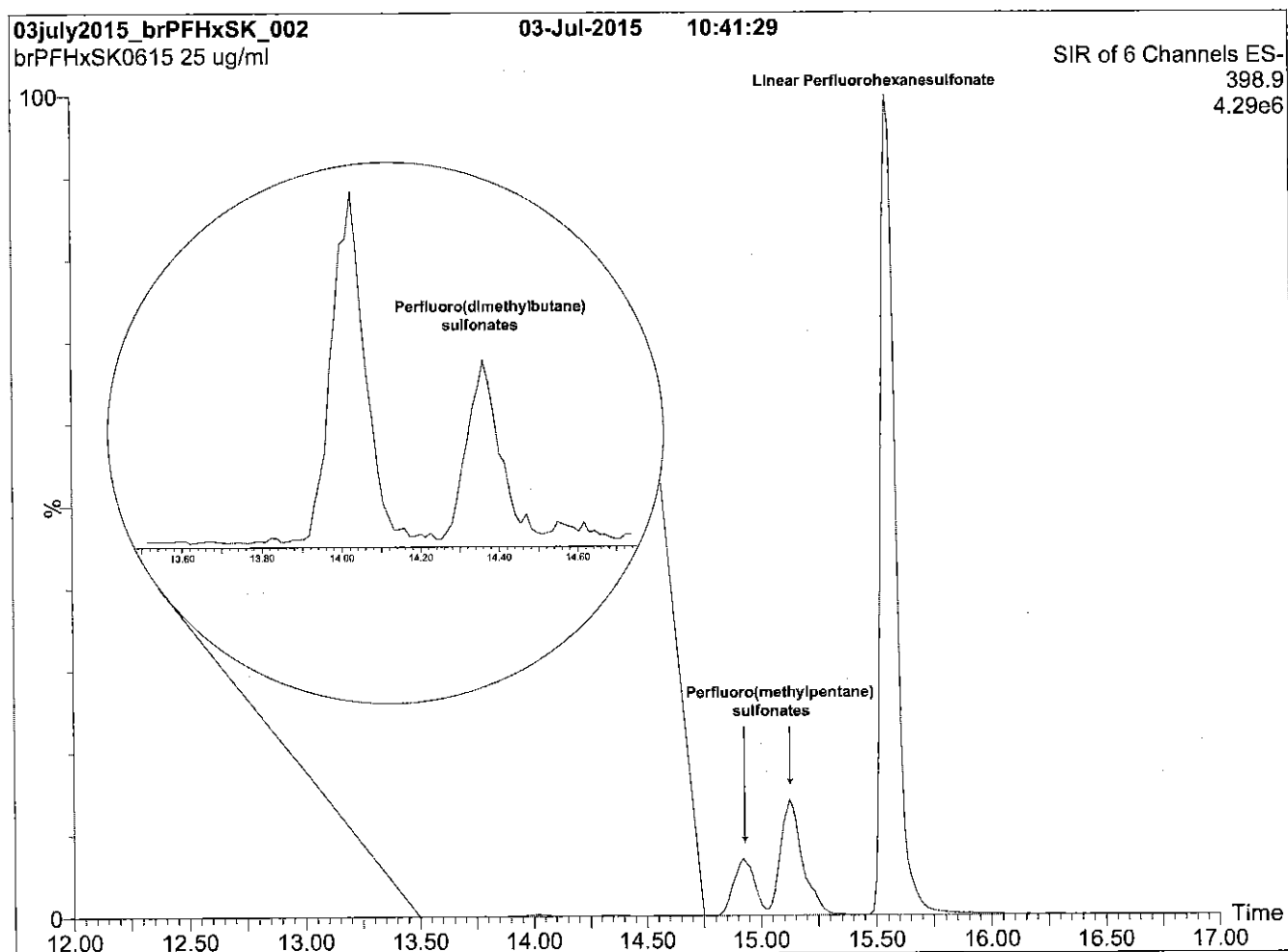
Flow: 300 μ l/min

MS Parameters

Experiment: Full Scan (150 - 850 amu)

Source: Electrospray (negative)
Capillary Voltage (kV) = 3.00
Cone Voltage (V) = 50.00
Cone Gas Flow (l/hr) = 60
Desolvation Gas Flow (l/hr) = 750

Figure 2: br-PFHxSK; LC/MS Data



Conditions for Figure 2:

LC: Waters Acquity Ultra Performance LC
MS: Micromass Quattro micro API MS

Chromatographic Conditions

Column: Acquity UPLC BEH Shield RP₁₈
1.7 μ m, 2.1 x 100 mm

Mobile phase: Gradient
Start: 20% (80:20 MeOH:ACN) / 80% H₂O
(both with 10 mM NH₄OAc buffer)
Ramp to 50% organic over 14 min. Ramp to
90% organic over 3 min and hold for 1.5 min
before returning to initial conditions in 0.5 min.
Time: 20 min

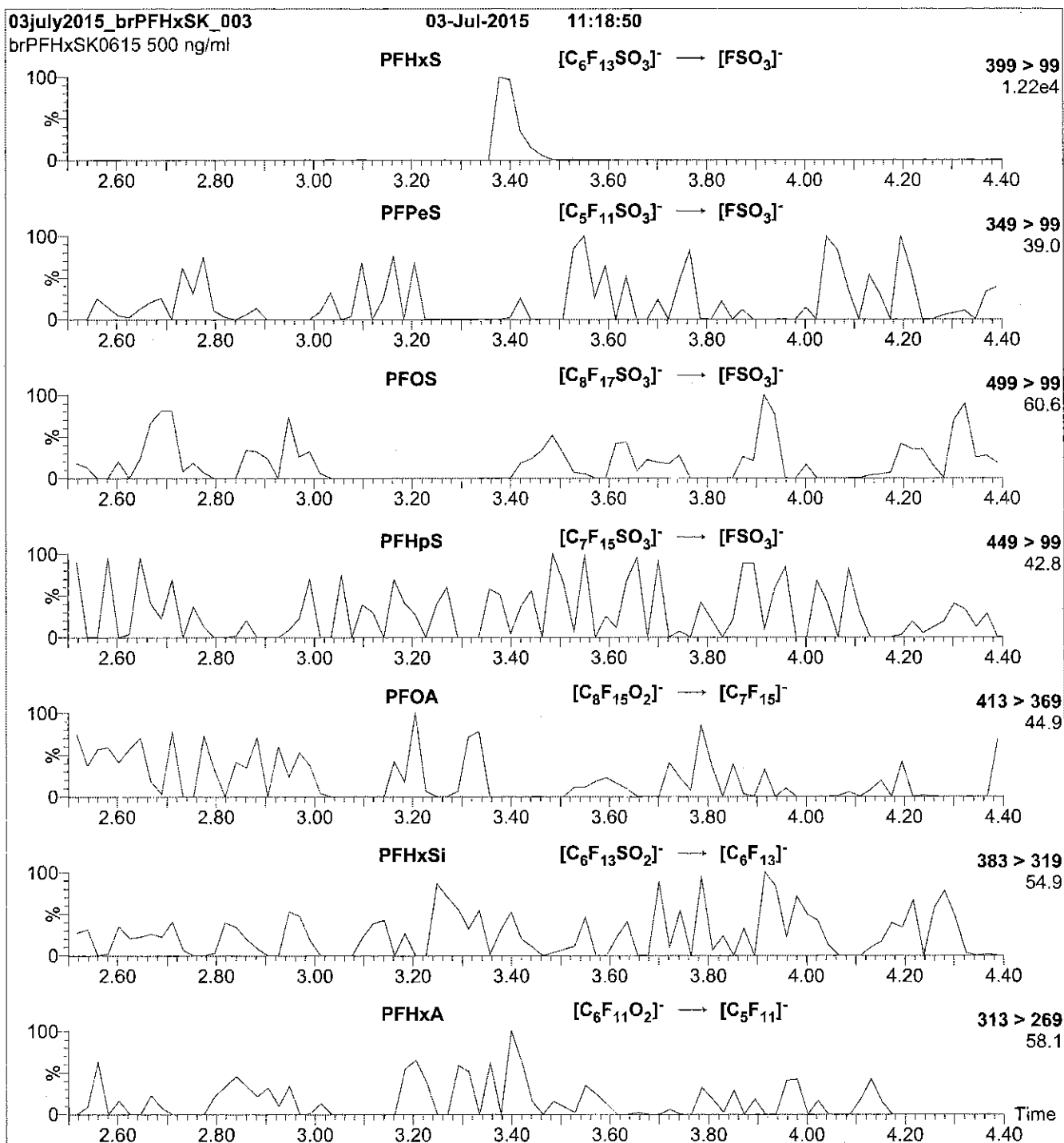
Flow: 300 μ l/min

MS Parameters

Experiment: SIR (6 channels)

Source: Electrospray (negative)
Capillary Voltage (kV) = 3.00
Cone Voltage (V) = 50.00
Cone Gas Flow (l/hr) = 60
Desolvation Gas Flow (l/hr) = 750

Figure 3: br-PFHxSK; LC/MS/MS Data (Selected MRM Transitions)



Conditions for Figure 3:

Injection: Direct loop injection
10 μ l (500 ng/ml br-PFHxSK)

Mobile phase: Isocratic 80% (80:20 MeOH:ACN) / 20% H₂O
(both with 10 mM NH₄OAc buffer)

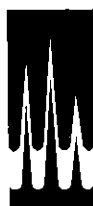
Flow: 300 μ l/min

MS Parameters

Collision Gas (mbar) = 3.54e-3
Collision Energy (eV) = 30

Reagent

LCPFNA_00004



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CERTIFICATE OF ANALYSIS DOCUMENTATION

PRODUCT CODE:

PFNA

LOT NUMBER:

PFNA0514

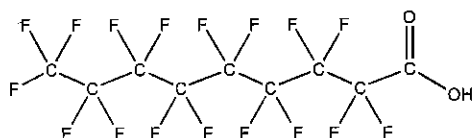
COMPOUND:

Perfluoro-n-nonanoic acid

STRUCTURE:

CAS #:

375-95-1



MOLECULAR FORMULA:

C₉H₁₇O₂

MOLECULAR WEIGHT:

464.08

CONCENTRATION:

50 ± 2.5 µg/ml

SOLVENT(S):

Methanol

Water (<1%)

CHEMICAL PURITY:

>98%

LAST TESTED: (mm/dd/yyyy)

05/09/2014

EXPIRY DATE: (mm/dd/yyyy)

05/09/2019

RECOMMENDED STORAGE:

Store ampoule in a cool, dark place

DOCUMENTATION/ DATA ATTACHED:

Figure 1: LC/MS Data (TIC and Mass Spectrum)

Figure 2: LC/MS/MS Data (Selected MRM Transitions)

ADDITIONAL INFORMATION:

- See page 2 for further details.
- Contains 4 mole eq. of NaOH to prevent conversion of the carboxylic acid to the methyl ester.
- Contains ~ 0.1% of perfluoro-n-octanoic acid (PFOA) and < 0.1% of perfluoro-n-heptanoic acid (PFHpA).

FOR LABORATORY USE ONLY: NOT FOR HUMAN OR DRUG USE

Certified By:

B.G. Chittim

Date: 05/22/2014

(mm/dd/yyyy)

Wellington Laboratories Inc., 345 Southgate Dr. Guelph ON N1G 3M5 CANADA
519-822-2436 • Fax: 519-822-2849 • info@well-labs.com

INTENDED USE:

The products prepared by Wellington Laboratories Inc. are for laboratory use only. They are designed to be used as reference standards for the identification and/or quantification of specific chemical compound(s).

HAZARDS:

This product should only be used by qualified personnel familiar with its potential hazards and trained in the handling of hazardous chemicals. Due care should be exercised to prevent unnecessary human contact or ingestion. All procedures should be carried out in a well-functioning fume hood and suitable gloves, eye protection and clothing should be worn at all times. Waste should be disposed of according to national and regional regulations. Material Safety Data Sheets (MSDSs) are available upon request.

SYNTHESIS / CHARACTERIZATION:

Where possible, all of our products are synthesized using single-product, unambiguous routes. They are then characterized, and their structures and purities confirmed, using a combination of the most relevant techniques, such as NMR, GC/MS, LC/MS/MS, x-ray crystallography and melting point. Isotopic purities of mass-labelled compounds are also confirmed using HRGC/HRMS and/or LC/MS/MS.

HOMOGENEITY:

Prior to solution preparation, crystalline material is tested for homogeneity using a variety of techniques (as stated above) and its solubility in a given diluent is taken into consideration. Duplicate solutions of a new product are prepared from the same crystalline lot and, after the addition of an appropriate internal standard, they are compared by GC/MS and/or LC/MS/MS. The relative response factors of the analyte of interest in each solution are required to be <5% RSD. New solution lots of existing products are compared to older lots in the same manner, which further confirms the homogeneity of the crystalline material as well as the stability and homogeneity of the solutions in the storage containers.

UNCERTAINTY:

The maximum combined relative standard uncertainty of our reference standard solutions is calculated using the following equation:

The combined relative standard uncertainty, $u_c(y)$, of a value y and the uncertainty of the independent parameters x_1, x_2, \dots, x_n on which it depends is:

$$u_c(y(x_1, x_2, \dots, x_n)) = \sqrt{\sum_{i=1}^n u(y, x_i)^2}$$

where x is expressed as a relative standard uncertainty of the individual parameter.

The individual uncertainties taken into account include those associated with weights (calibration of the balance) and volumes (calibration of the volumetric glassware). An expanded maximum combined percent relative uncertainty of $\pm 5\%$ (calculated with a coverage factor of 2 and a level of confidence of 95%) is stated on the Certificate of Analysis for all our products.

TRACEABILITY:

All reference standard solutions are traceable to specific crystalline lots. The microbalances used for solution preparation are regularly tested by an external, ISO/IEC 17025:2005 accredited calibration company. In addition, their calibration is verified prior to each weighing using NIST and/or NRC traceable external weights. All volumetric glassware used is of Class A tolerance and has been tested according to the appropriate ASTM procedures, which are ultimately traceable to NIST. For certain products, traceability to international interlaboratory studies has also been established.

EXPIRY DATE / PERIOD OF VALIDITY:

Ongoing stability studies of this product have demonstrated stability in its composition and concentration for the period of time specified by the expiry date in the unopened ampoule. Monitoring for any degradation or change in concentration of the listed analyte(s) is performed on a routine basis.

LIMITED WARRANTY:

At the time of shipment, all products are warranted to be free of defects in material and workmanship and to conform to the stated technical and purity specifications.

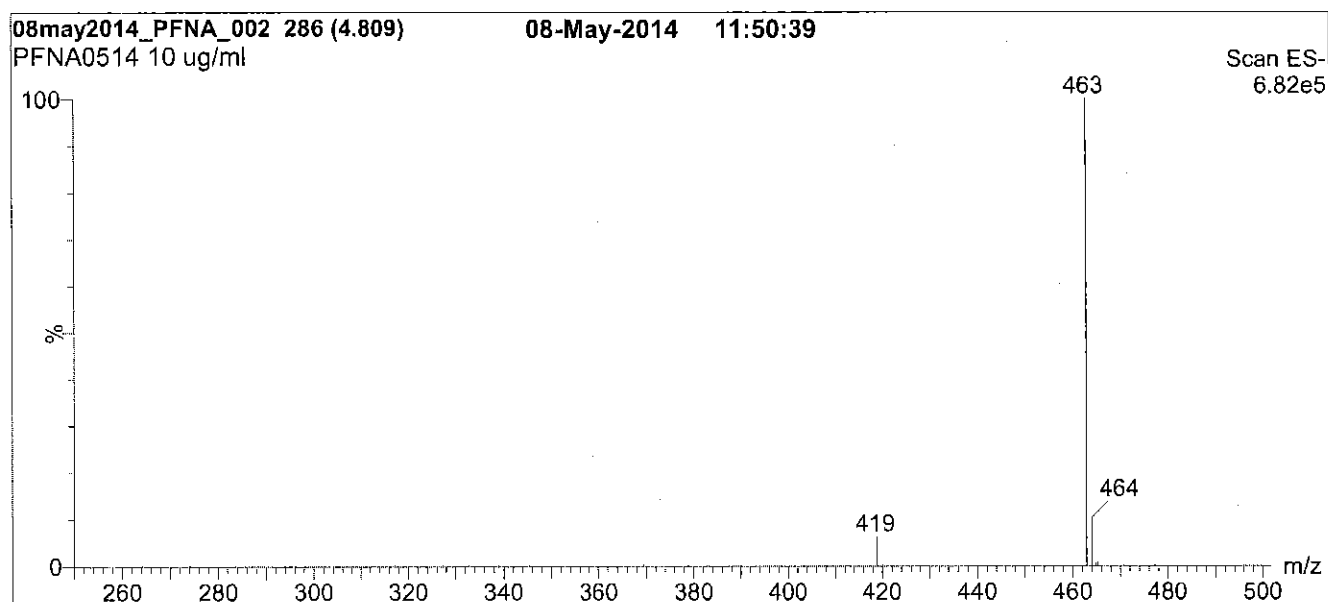
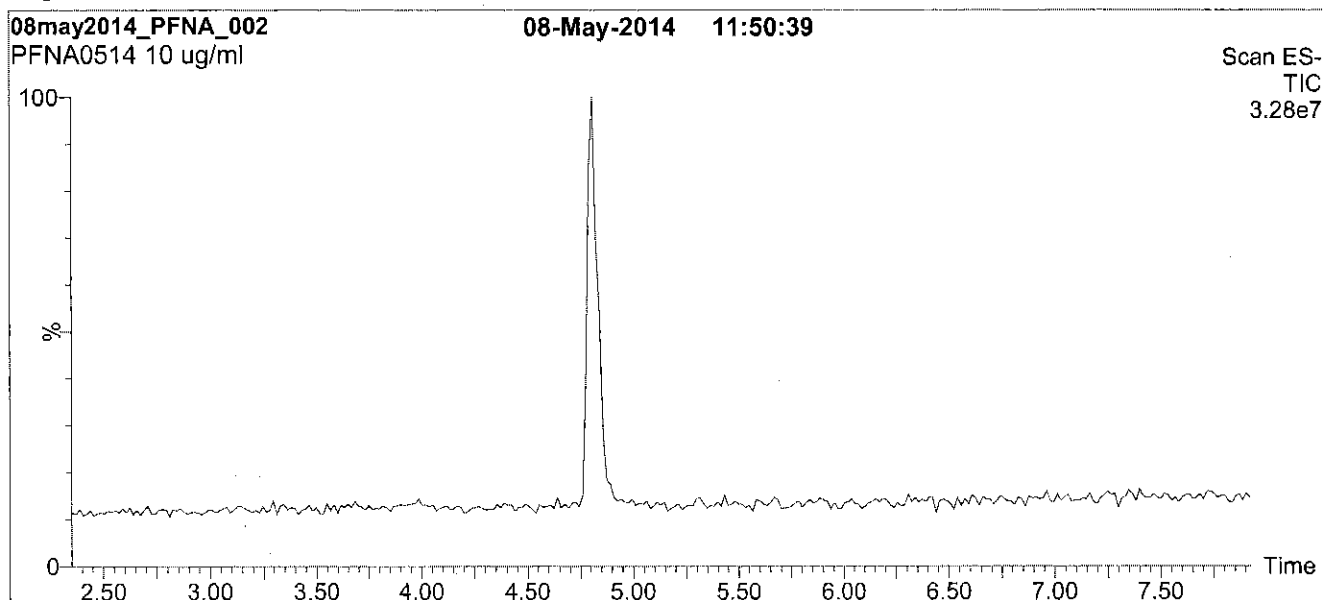
QUALITY MANAGEMENT:

This product was produced using a Quality Management System registered to ISO 9001:2008 by SAI Global, ISO/IEC 17025:2005 by the Canadian Association for Laboratory Accreditation Inc. (CALA; A 1226), and ISO GUIDE 34:2009 by ACLASS (certificate number AR-1523).



****For additional information or assistance concerning this or any other products from Wellington Laboratories Inc., please visit our website at www.well-labs.com or contact us directly at info@well-labs.com****

Figure 1: PFNA; LC/MS Data (TIC and Mass Spectrum)



Conditions for Figure 1:

LC: Waters Acquity Ultra Performance LC
MS: Micromass Quattro micro API MS

Chromatographic Conditions

Column: Acquity UPLC BEH C₁₈
1.7 μ m, 2.1 x 100 mm

Mobile phase: Gradient
Start: 50% (80:20 MeOH:ACN) / 50% H₂O
(both with 10 mM NH₄OAc buffer)
Ramp to 90% organic over 7 min and hold for 2 min
before returning to initial conditions in 0.5 min.
Time: 10 min

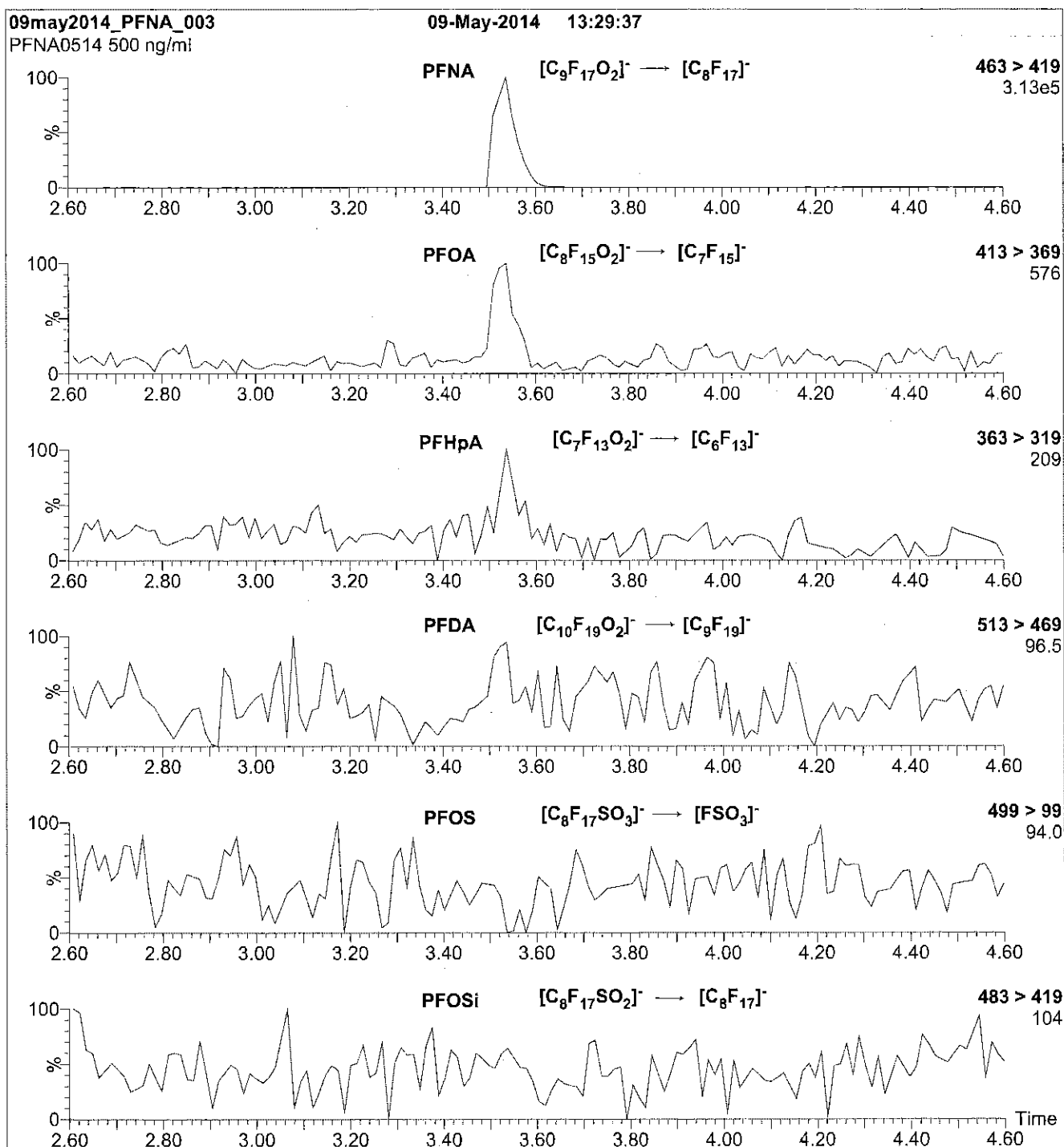
Flow: 300 μ l/min

MS Parameters

Experiment: Full Scan (250 - 950 amu)

Source: Electrospray (negative)
Capillary Voltage (kV) = 2.00
Cone Voltage (V) = 15.00
Cone Gas Flow (l/hr) = 50
Desolvation Gas Flow (l/hr) = 750

Figure 2: PFNA; LC/MS/MS Data (Selected MRM Transitions)



Conditions for Figure 2:

Injection: Direct loop injection
10 μ l (500 ng/ml PFNA)

Mobile phase: Isocratic 80% (80:20 MeOH:ACN) / 20% H₂O
(both with 10 mM NH₄OAc buffer)

Flow: 300 μ l/min

MS Parameters

Collision Gas (mbar) = 3.17e-3
Collision Energy (eV) = 11

Reagent

LCPFNS_00002



WELLINGTON LABORATORIES

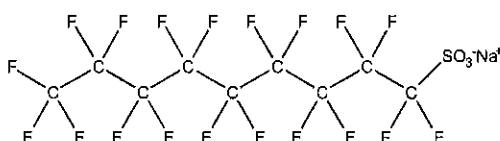
CERTIFICATE OF ANALYSIS DOCUMENTATION

PRODUCT CODE: L-PFNS
COMPOUND: Sodium perfluoro-1-nonanesulfonate

LOT NUMBER: LPFNS0712

STRUCTURE:

CAS #: 98789-57-2



MOLECULAR FORMULA: $C_9F_{19}SO_3Na$
CONCENTRATION: $50.0 \pm 2.5 \mu\text{g/ml}$ (Na salt)
 $48.0 \pm 2.4 \mu\text{g/ml}$ (PFNS anion)
CHEMICAL PURITY: >98%
LAST TESTED: (mm/dd/yyyy) 07/04/2012
EXPIRY DATE: (mm/dd/yyyy) 07/04/2017
RECOMMENDED STORAGE: Store ampoule in a cool, dark place

MOLECULAR WEIGHT: 572.12
SOLVENT(S): Methanol

DOCUMENTATION/ DATA ATTACHED:

Figure 1: LC/MS Data (TIC and Mass Spectrum)
Figure 2: LC/MS/MS Data (Selected MRM Transitions)

ADDITIONAL INFORMATION:

- See page 2 for further details.

FOR LABORATORY USE ONLY: NOT FOR HUMAN OR DRUG USE

Certified By:

B.G. Chittim

Date: 01/15/2013
(mm/dd/yyyy)

Wellington Laboratories Inc., 345 Southgate Dr. Guelph ON N1G 3M5 CANADA
519-822-2436 • Fax: 519-822-2849 • info@well-labs.com

INTENDED USE:

The products prepared by Wellington Laboratories Inc. are for laboratory use only. They are designed to be used as reference standards for the identification and/or quantification of specific chemical compound(s).

HAZARDS:

This product should only be used by qualified personnel familiar with its potential hazards and trained in the handling of hazardous chemicals. Due care should be exercised to prevent unnecessary human contact or ingestion. All procedures should be carried out in a well-functioning fume hood and suitable gloves, eye protection and clothing should be worn at all times. Waste should be disposed of according to national and regional regulations. Material Safety Data Sheets (MSDSs) are available upon request.

SYNTHESIS / CHARACTERIZATION:

Where possible, all of our products are synthesized using single-product, unambiguous routes. They are then characterized, and their structures and purities confirmed, using a combination of the most relevant techniques, such as NMR, GC/MS, LC/MS/MS, x-ray crystallography and melting point. Isotopic purities of mass-labelled compounds are also confirmed using HRGC/HRMS and/or LC/MS/MS.

HOMOGENEITY:

Prior to solution preparation, crystalline material is tested for homogeneity using a variety of techniques (as stated above) and its solubility in a given diluent is taken into consideration. Duplicate solutions of a new product are prepared from the same crystalline lot and, after the addition of an appropriate internal standard, they are compared by GC/MS and/or LC/MS/MS. The relative response factors of the analyte of interest in each solution are required to be <5% RSD. New solution lots of existing products are compared to older lots in the same manner, which further confirms the homogeneity of the crystalline material as well as the stability and homogeneity of the solutions in the storage containers.

UNCERTAINTY:

The maximum combined relative standard uncertainty of our reference standard solutions is calculated using the following equation:

The combined relative standard uncertainty, $u_c(y)$, of a value y and the uncertainty of the independent parameters x_1, x_2, \dots, x_n on which it depends is:

$$u_c(y(x_1, x_2, \dots, x_n)) = \sqrt{\sum_{i=1}^n u(y, x_i)^2}$$

where x is expressed as a relative standard uncertainty of the individual parameter.

The individual uncertainties taken into account include those associated with weights (calibration of the balance) and volumes (calibration of the volumetric glassware). An expanded maximum combined percent relative uncertainty of $\pm 5\%$ (calculated with a coverage factor of 2 and a level of confidence of 95%) is stated on the Certificate of Analysis for all our products.

TRACEABILITY:

All reference standard solutions are traceable to specific crystalline lots. The microbalances used for solution preparation are regularly tested by an external, ISO/IEC 17025:2005 accredited calibration company. In addition, their calibration is verified prior to each weighing using NIST and/or NRC traceable external weights. All volumetric glassware used is of Class A tolerance and has been tested according to the appropriate ASTM procedures, which are ultimately traceable to NIST. For certain products, traceability to international interlaboratory studies has also been established.

EXPIRY DATE / PERIOD OF VALIDITY:

Ongoing stability studies of this product have demonstrated stability in its composition and concentration for the period of time specified by the expiry date in the unopened ampoule. Monitoring for any degradation or change in concentration of the listed analyte(s) is performed on a routine basis.

LIMITED WARRANTY:

At the time of shipment, all products are warranted to be free of defects in material and workmanship and to conform to the stated technical and purity specifications.

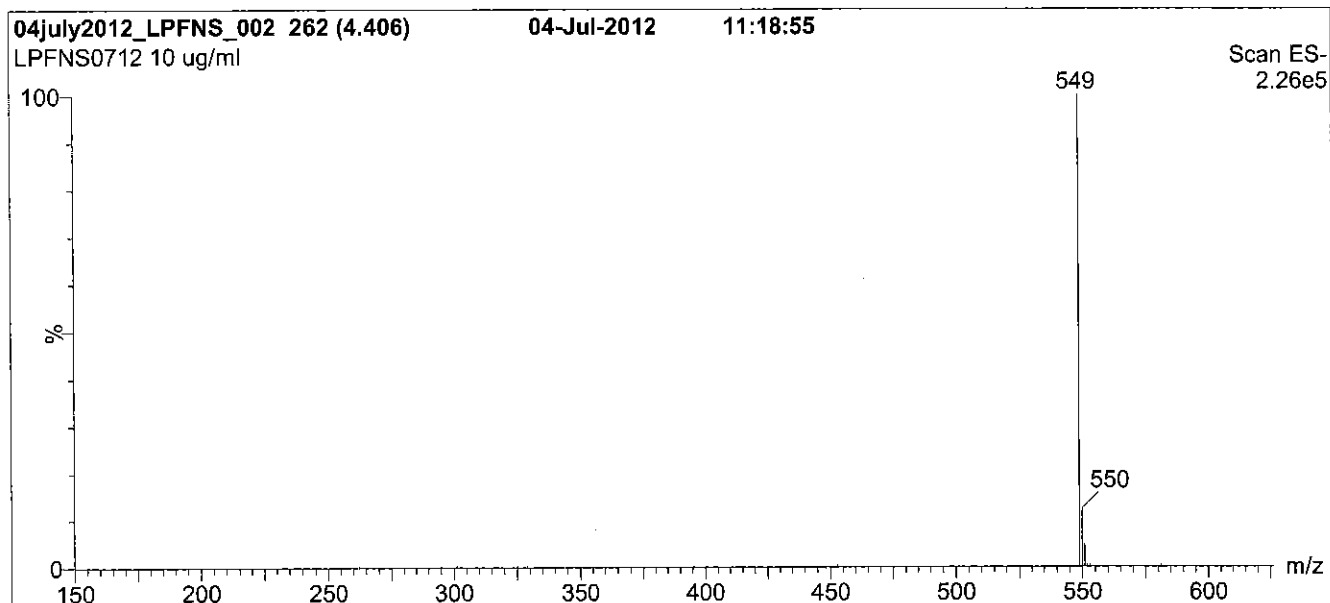
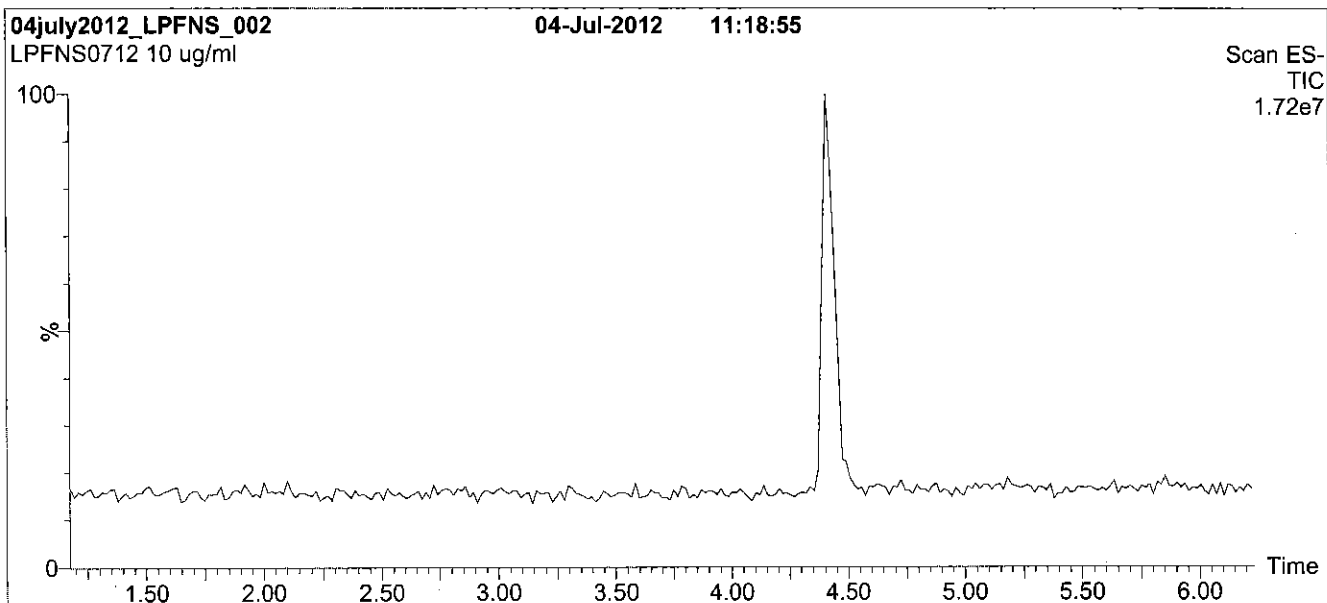
QUALITY MANAGEMENT:

This product was produced using a Quality Management System registered to ISO 9001:2008 by SAI Global, ISO/IEC 17025:2005 by the Canadian Association for Laboratory Accreditation Inc. (CALA; A 1226), and ISO GUIDE 34:2009 by ACLASS (certificate number AR-1523).



For additional information or assistance concerning this or any other products from Wellington Laboratories Inc., please visit our website at www.well-labs.com or contact us directly at info@well-labs.com

Figure 1: L-PFNS; LC/MS Data (TIC and Mass Spectrum)



Conditions for Figure 1:

LC: Waters Acquity Ultra Performance LC
MS: Micromass Quattro *micro* API MS

Chromatographic Conditions

Column: Acquity UPLC BEH Shield RP₁₈
1.7 μ m, 2.1 x 100 mm

Mobile phase: Gradient
Start: 55% (80:20 MeOH:ACN) / 45% H₂O
(both with 10 mM NH₄OAc buffer)
Ramp to 90% organic over 7 min and hold for 1.5 min
before returning to initial conditions in 0.5 min.
Time: 10 min

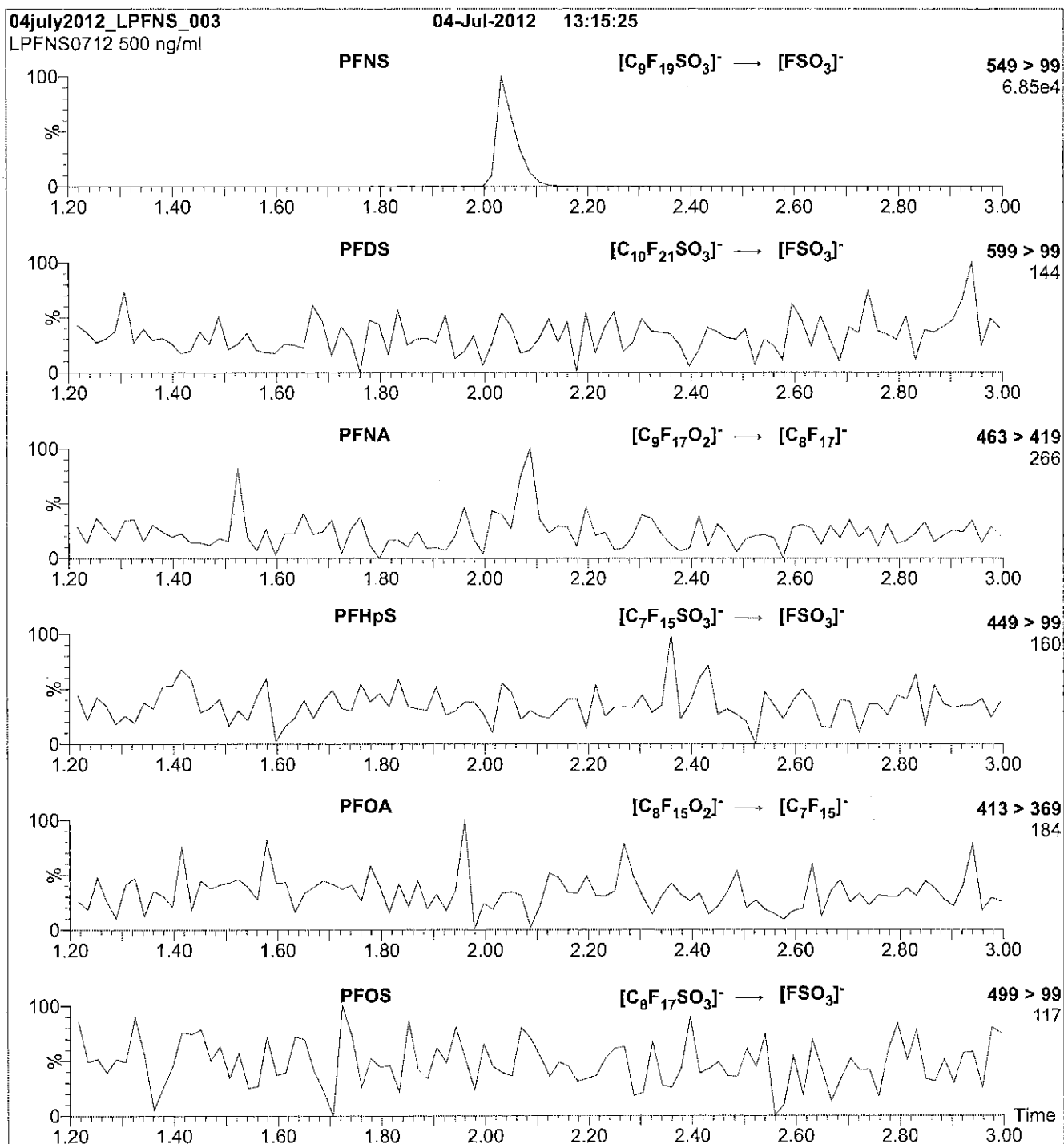
Flow: 300 μ l/min

MS Parameters

Experiment: Full Scan (150 - 850 amu)

Source: Electrospray (negative)
Capillary Voltage (kV) = 2.00
Cone Voltage (V) = 65.00
Cone Gas Flow (l/hr) = 50
Desolvation Gas Flow (l/hr) = 750

Figure 2: L-PFNS; LC/MS/MS Data (Selected MRM Transitions)



Conditions for Figure 2:

Injection: Direct loop injection
10 μ l (500 ng/ml L-PFNS)

Mobile phase: Isocratic 80% (80:20 MeOH:ACN) / 20% H_2O
(both with 10 mM NH_4OAc buffer)

Flow: 300 μ l/min

MS Parameters

Collision Gas (mbar) = $3.54e-3$
Collision Energy (eV) = 45

Reagent

LCPFOA_00004



WELLINGTON LABORATORIES

CERTIFICATE OF ANALYSIS DOCUMENTATION

Rec 7/15/14

PRODUCT CODE:

PFOA

LOT NUMBER:

PFOA1013

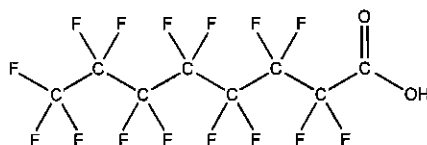
COMPOUND:

Perfluoro-n-octanoic acid

STRUCTURE:

CAS #:

335-67-1



MOLECULAR FORMULA:

$C_8H_{15}O_2$

MOLECULAR WEIGHT:

414.07

CONCENTRATION:

$50 \pm 2.5 \mu\text{g/ml}$

SOLVENT(S):

Methanol

Water (<1%)

CHEMICAL PURITY:

>98%

LAST TESTED: (mm/dd/yyyy)

10/11/2013

EXPIRY DATE: (mm/dd/yyyy)

10/11/2018

RECOMMENDED STORAGE:

Store ampoule in a cool, dark place

DOCUMENTATION/ DATA ATTACHED:

Figure 1: LC/MS Data (TIC and Mass Spectrum)

Figure 2: LC/MS/MS Data (Selected MRM Transitions)

ADDITIONAL INFORMATION:

- See page 2 for further details.
- Contains 4 mole eq. of NaOH to prevent conversion of the carboxylic acid to the methyl ester.

FOR LABORATORY USE ONLY: NOT FOR HUMAN OR DRUG USE

Certified By:

B.G. Chittim

Date: 10/18/2013

(mm/dd/yyyy)

Wellington Laboratories Inc., 345 Southgate Dr. Guelph ON N1G 3M5 CANADA
519-822-2436 • Fax: 519-822-2849 • info@well-labs.com

INTENDED USE:

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HAZARDS:

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SYNTHESIS / CHARACTERIZATION:

Where possible, all of our products are synthesized using single-product, unambiguous routes. They are then characterized, and their structures and purities confirmed, using a combination of the most relevant techniques, such as NMR, GC/MS, LC/MS/MS, x-ray crystallography and melting point. Isotopic purities of mass-labelled compounds are also confirmed using HRGC/HRMS and/or LC/MS/MS.

HOMOGENEITY:

Prior to solution preparation, crystalline material is tested for homogeneity using a variety of techniques (as stated above) and its solubility in a given diluent is taken into consideration. Duplicate solutions of a new product are prepared from the same crystalline lot and, after the addition of an appropriate internal standard, they are compared by GC/MS and/or LC/MS/MS. The relative response factors of the analyte of interest in each solution are required to be <5% RSD. New solution lots of existing products are compared to older lots in the same manner, which further confirms the homogeneity of the crystalline material as well as the stability and homogeneity of the solutions in the storage containers.

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where x is expressed as a relative standard uncertainty of the individual parameter.

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EXPIRY DATE / PERIOD OF VALIDITY:

Ongoing stability studies of this product have demonstrated stability in its composition and concentration for the period of time specified by the expiry date in the unopened ampoule. Monitoring for any degradation or change in concentration of the listed analyte(s) is performed on a routine basis.

LIMITED WARRANTY:

At the time of shipment, all products are warranted to be free of defects in material and workmanship and to conform to the stated technical and purity specifications.

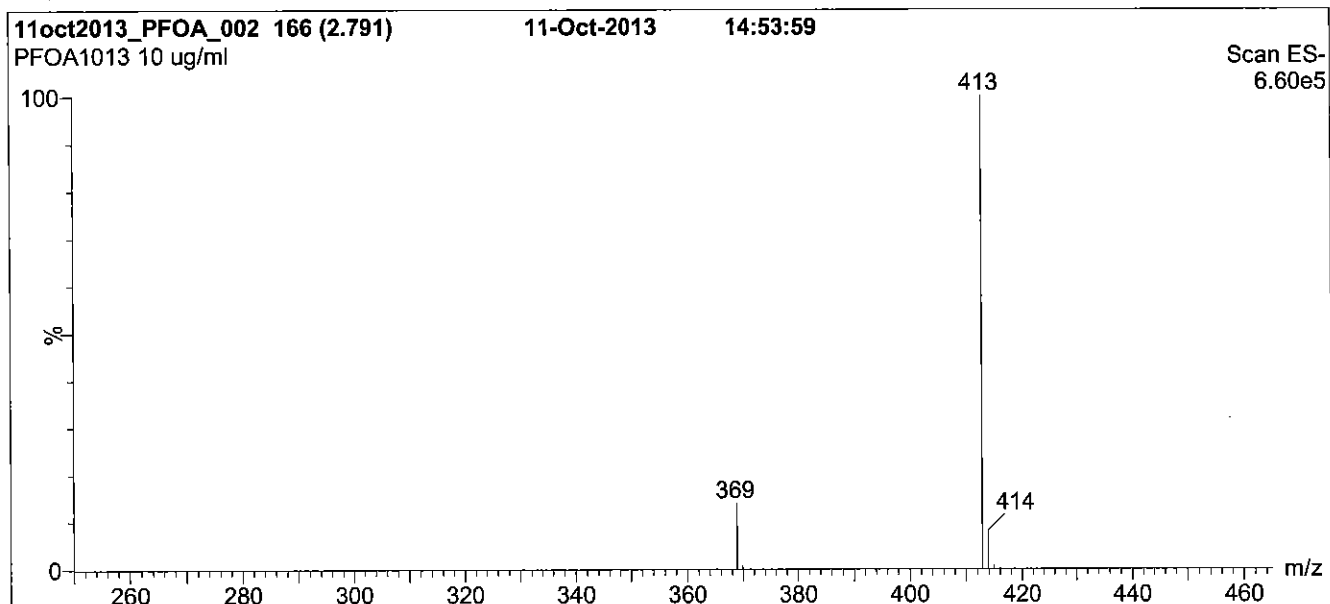
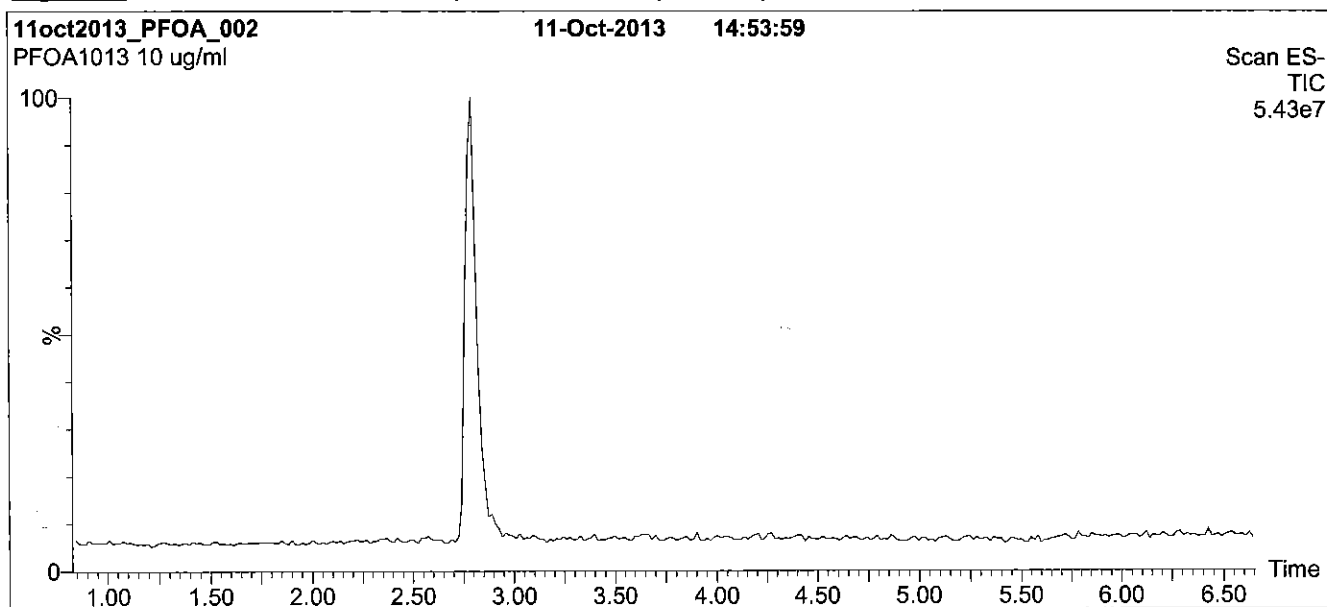
QUALITY MANAGEMENT:

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Figure 1: PFOA; LC/MS Data (TIC and Mass Spectrum)



Conditions for Figure 1:

LC: Waters Acquity Ultra Performance LC
MS: Micromass Quattro *micro* API MS

Chromatographic Conditions

Column: Acquity UPLC BEH Shield RP₁₈
1.7 μ m, 2.1 x 100 mm

Mobile phase: Gradient
Start: 55% (80:20 MeOH:ACN) / 45% H₂O
(both with 10 mM NH₄OAc buffer)
Ramp to 90% organic over 7.5 min and hold for
1 min before returning to initial conditions in 0.5 min.
Time: 10 min

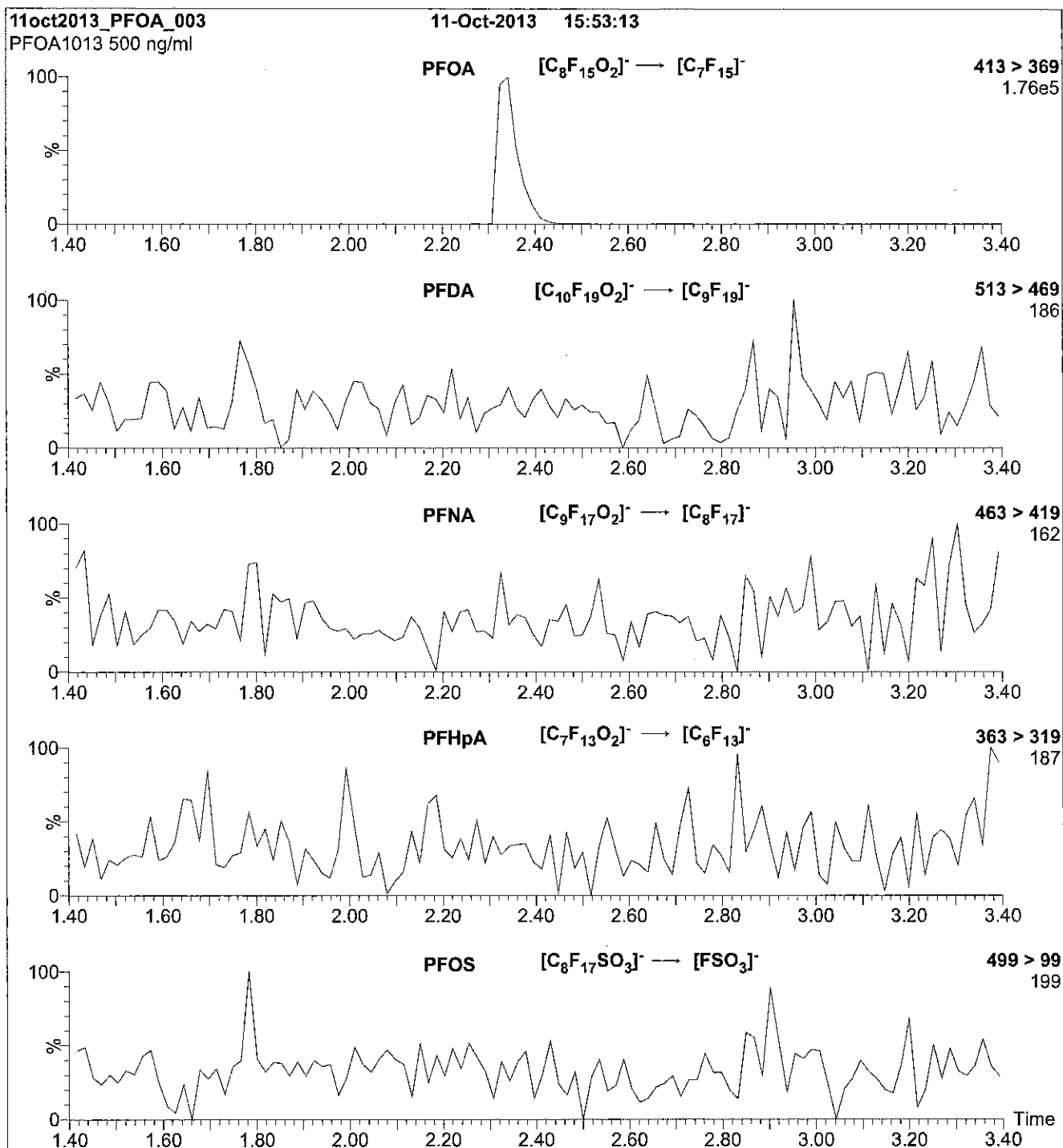
Flow: 300 μ l/min

MS Parameters

Experiment: Full Scan (250 - 850 amu)

Source: Electrospray (negative)
Capillary Voltage (kV) = 2.00
Cone Voltage (V) = 15.00
Cone Gas Flow (l/hr) = 100
Desolvation Gas Flow (l/hr) = 750

Figure 2: PFOA; LC/MS/MS Data (Selected MRM Transitions)



Conditions for Figure 2:

Injection: Direct loop injection
10 μ l (500 ng/ml PFOA)

Mobile phase: Isocratic 80% (80:20 MeOH:ACN) / 20% H₂O
(both with 10 mM NH₄OAc buffer)

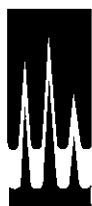
Flow: 300 μ l/min

MS Parameters

Collision Gas (mbar) = 3.28e-3
Collision Energy (eV) = 11

Reagent

LCPFOA_00005



WELLINGTON LABORATORIES

CERTIFICATE OF ANALYSIS DOCUMENTATION

PRODUCT CODE:

PFOA

LOT NUMBER:

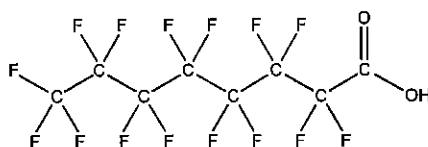
PFOA1115

COMPOUND:

Perfluoro-n-octanoic acid

STRUCTURE:**CAS #:**

335-67-1

**MOLECULAR FORMULA:** $C_8H_{16}O_2$ **MOLECULAR WEIGHT:**

414.07

CONCENTRATION: $50 \pm 2.5 \mu\text{g/ml}$ **SOLVENT(S):**

Methanol

Water (<1%)

CHEMICAL PURITY:

>98%

LAST TESTED: (mm/dd/yyyy)

11/06/2015

EXPIRY DATE: (mm/dd/yyyy)

11/06/2020

RECOMMENDED STORAGE:

Store ampoule in a cool, dark place

DOCUMENTATION/ DATA ATTACHED:

Figure 1: LC/MS Data (TIC and Mass Spectrum)

Figure 2: LC/MS/MS Data (Selected MRM Transitions)

ADDITIONAL INFORMATION:

- See page 2 for further details.
- Contains 4 mole eq. of NaOH to prevent conversion of the carboxylic acid to the methyl ester.

FOR LABORATORY USE ONLY: NOT FOR HUMAN OR DRUG USE

Certified By:

B.G. Chittim

Date: 11/11/2015

(mm/dd/yyyy)

Wellington Laboratories Inc., 345 Southgate Dr. Guelph ON N1G 3M5 CANADA
519-822-2436 • Fax: 519-822-2849 • info@well-labs.com

INTENDED USE:

The products prepared by Wellington Laboratories Inc. are for laboratory use only. This certified reference material (CRM) was designed to be used as a standard for the identification and/or quantification of the specific chemical compound it contains.

HAZARDS:

This product should only be used by qualified personnel familiar with its potential hazards and trained in the handling of hazardous chemicals. Due care should be exercised to prevent unnecessary human contact or ingestion. All procedures should be carried out in a well-functioning fume hood and suitable gloves, eye protection, and clothing should be worn at all times. Waste should be disposed of according to national and regional regulations. Safety Data Sheets (SDSs) are available upon request.

SYNTHESIS / CHARACTERIZATION:

Where possible, all of our products are synthesized using single-product unambiguous routes. They are then characterized, and their structures and purities confirmed, using a combination of the most relevant techniques, such as NMR, GC/MS, LC/MS/MS, SFC/UV/MS/MS, x-ray crystallography, and melting point. Isotopic purities of mass-labelled compounds are also confirmed using HRGC/HRMS and/or LC/MS/MS.

HOMOGENEITY:

Prior to solution preparation, crystalline material is tested for homogeneity using a variety of techniques (as stated above) and its solubility in a given diluent is taken into consideration. Duplicate solutions of a new product are prepared from the same crystalline lot and, after the addition of an appropriate internal standard, they are compared by GC/MS, LC/MS/MS and/or SFC/UV/MS/MS. The relative response factors of the analyte of interest in each solution are required to be <5% RSD. New solution lots of existing products are compared to older lots in the same manner, which further confirms the homogeneity of the crystalline material as well as the stability and homogeneity of the solutions in the storage containers.

UNCERTAINTY:

The maximum combined relative standard uncertainty of our reference standard solutions is calculated using the following equation:

The combined relative standard uncertainty, $u_c(y)$, of a value y and the uncertainty of the independent parameters x_1, x_2, \dots, x_n on which it depends is:

$$u_c(y(x_1, x_2, \dots, x_n)) = \sqrt{\sum_{i=1}^n u(y, x_i)^2}$$

where x is expressed as a relative standard uncertainty of the individual parameter.

The individual uncertainties taken into account include those associated with weights (calibration of the balance) and volumes (calibration of the volumetric glassware). An expanded maximum combined percent relative uncertainty of $\pm 5\%$ (calculated with a coverage factor of 2 and a level of confidence of 95%) is stated on the Certificate of Analysis for all of our products.

TRACEABILITY:

All reference standard solutions are traceable to specific crystalline lots. The microbalances used for solution preparation are regularly tested by an external ISO/IEC 17025 accredited calibration company. In addition, their calibration is verified prior to each weighing using NIST and/or NRC traceable external weights. All volumetric glassware used is of Class A tolerance and has been tested according to the appropriate ASTM procedures, which are ultimately traceable to NIST. For certain products, traceability to international interlaboratory studies has also been established.

EXPIRY DATE / PERIOD OF VALIDITY:

Ongoing stability studies of this product have demonstrated stability in its composition and concentration, until the specified expiry date, in the unopened ampoule. Monitoring for any degradation or change in concentration of the listed analyte(s) is performed on a routine basis.

LIMITED WARRANTY:

At the time of shipment, all products are warranted to be free of defects in material and workmanship and to conform to the stated technical and purity specifications.

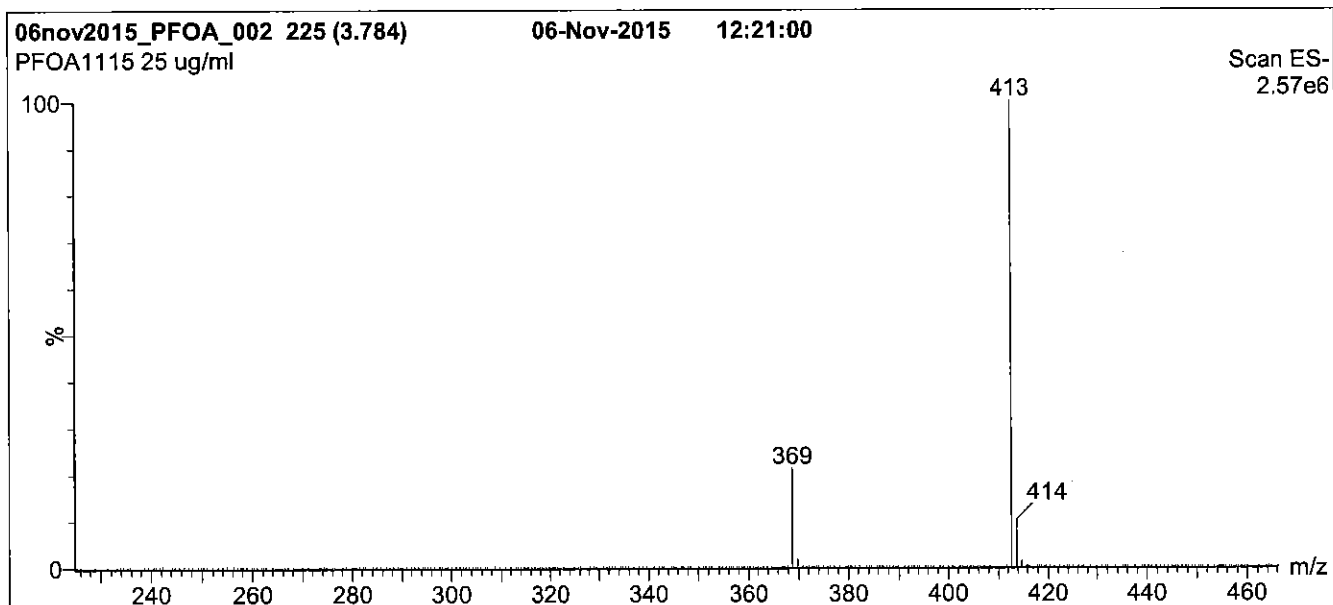
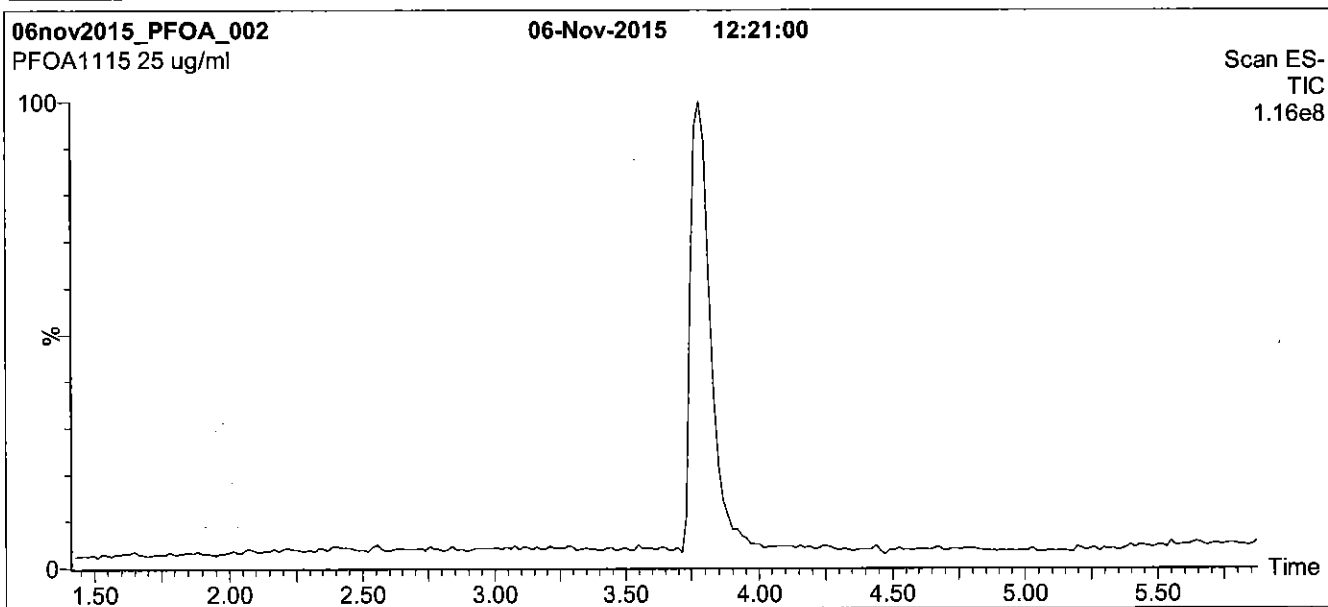
QUALITY MANAGEMENT:

This product was produced using a Quality Management System registered to the latest versions of ISO 9001 by SAI Global, ISO/IEC 17025 by the Canadian Association for Laboratory Accreditation Inc. (CALA; A 1226), and ISO GUIDE 34 by ANSI-ASQ National Accreditation Board (ANAB; AR-1523).



For additional information or assistance concerning this or any other products from Wellington Laboratories Inc., please visit our website at www.well-labs.com or contact us directly at info@well-labs.com

Figure 1: PFOA; LC/MS Data (TIC and Mass Spectrum)



Conditions for Figure 1:

LC: Waters Acquity Ultra Performance LC
MS: Micromass Quattro micro API MS

Chromatographic Conditions

Column: Acquity UPLC BEH Shield RP₁₈
1.7 μ m, 2.1 x 100 mm

Mobile phase: Gradient
Start: 50% (80:20 MeOH:ACN) / 50% H₂O
(both with 10 mM NH₄OAc buffer)
Ramp to 90% organic over 7 min and hold for
2 min before returning to initial conditions in 0.5 min.
Time: 10 min

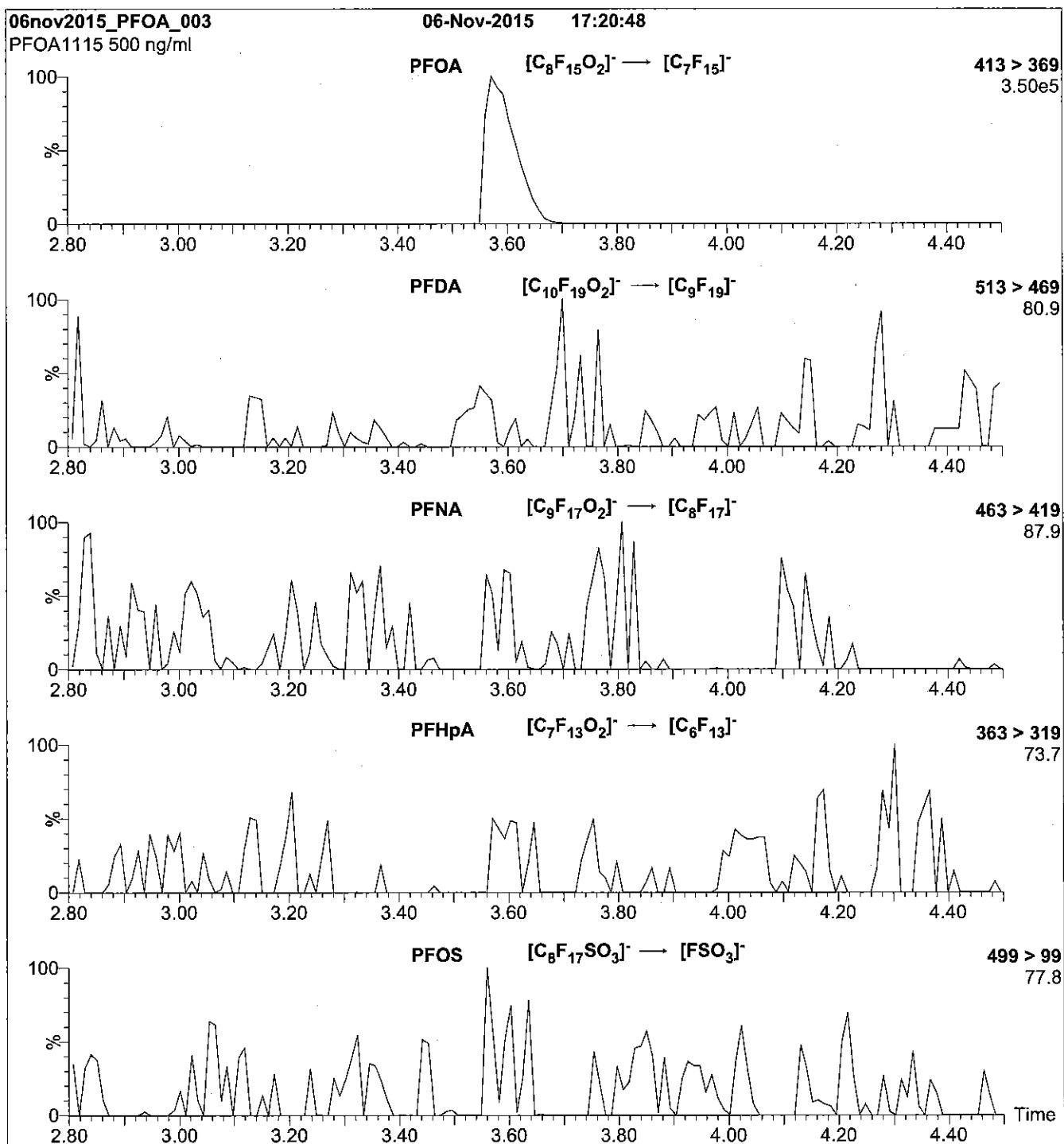
Flow: 300 μ l/min

MS Parameters

Experiment: Full Scan (225 - 850 amu)

Source: Electrospray (negative)
Capillary Voltage (kV) = 3.00
Cone Voltage (V) = 15.00
Cone Gas Flow (l/hr) = 100
Desolvation Gas Flow (l/hr) = 750

Figure 2: PFOA; LC/MS/MS Data (Selected MRM Transitions)



Conditions for Figure 2:

Injection: Direct loop injection
10 μ l (500 ng/ml PFOA)

Mobile phase: Isocratic 80% (80:20 MeOH:ACN) / 20% H₂O
(both with 10 mM NH₄OAc buffer)

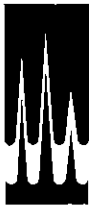
Flow: 300 μ l/min

MS Parameters

Collision Gas (mbar) = 3.17e-3
Collision Energy (eV) = 10

Reagent

LCPFODA_00004



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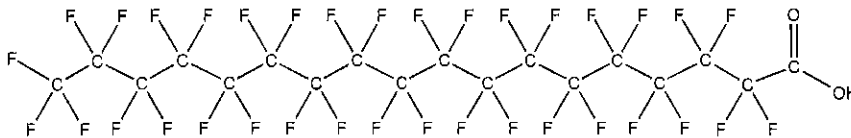
CERTIFICATE OF ANALYSIS DOCUMENTATION

PRODUCT CODE: PFODA
COMPOUND: Perfluoro-n-octadecanoic acid

LOT NUMBER: PFODA0807

STRUCTURE:

CAS #: 16517-11-6



MOLECULAR FORMULA: $C_{18}H_{35}O_2$
CONCENTRATION: $50 \pm 2.5 \mu\text{g/ml}$

MOLECULAR WEIGHT: 914.15
SOLVENT(S): Methanol
Water (4%)

CHEMICAL PURITY: >98%
LAST TESTED: (mm/dd/yyyy) 04/25/2014
EXPIRY DATE: (mm/dd/yyyy) 04/25/2017
RECOMMENDED STORAGE: Store ampoule in a cool, dark place

DOCUMENTATION/ DATA ATTACHED:

Figure 1: LC/MS Data (TIC and Mass Spectrum)
Figure 2: LC/MS/MS Data (Selected MRM Transitions)

ADDITIONAL INFORMATION:

- See page 2 for further details.
- Contains 4 mole eq. of NaOH to prevent conversion of the carboxylic acid to the methyl ester.

FOR LABORATORY USE ONLY: NOT FOR HUMAN OR DRUG USE

Certified By:
B.G. Chittim

Date: 04/28/2014
(mm/dd/yyyy)

Wellington Laboratories Inc., 345 Southgate Dr. Guelph ON N1G 3M5 CANADA
519-822-2436 • Fax: 519-822-2849 • info@well-labs.com

INTENDED USE:

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HAZARDS:

This product should only be used by qualified personnel familiar with its potential hazards and trained in the handling of hazardous chemicals. Due care should be exercised to prevent unnecessary human contact or ingestion. All procedures should be carried out in a well-functioning fume hood and suitable gloves, eye protection and clothing should be worn at all times. Waste should be disposed of according to national and regional regulations. Material Safety Data Sheets (MSDSs) are available upon request.

SYNTHESIS / CHARACTERIZATION:

Where possible, all of our products are synthesized using single-product, unambiguous routes. They are then characterized, and their structures and purities confirmed, using a combination of the most relevant techniques, such as NMR, GC/MS, LC/MS/MS, x-ray crystallography and melting point. Isotopic purities of mass-labelled compounds are also confirmed using HRGC/HRMS and/or LC/MS/MS.

HOMOGENEITY:

Prior to solution preparation, crystalline material is tested for homogeneity using a variety of techniques (as stated above) and its solubility in a given diluent is taken into consideration. Duplicate solutions of a new product are prepared from the same crystalline lot and, after the addition of an appropriate internal standard, they are compared by GC/MS and/or LC/MS/MS. The relative response factors of the analyte of interest in each solution are required to be <5% RSD. New solution lots of existing products are compared to older lots in the same manner, which further confirms the homogeneity of the crystalline material as well as the stability and homogeneity of the solutions in the storage containers.

UNCERTAINTY:

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The combined relative standard uncertainty, $u_c(y)$, of a value y and the uncertainty of the independent parameters x_1, x_2, \dots, x_n on which it depends is:

$$u_c(y(x_1, x_2, \dots, x_n)) = \sqrt{\sum_{i=1}^n u(y, x_i)^2}$$

where x is expressed as a relative standard uncertainty of the individual parameter.

The individual uncertainties taken into account include those associated with weights (calibration of the balance) and volumes (calibration of the volumetric glassware). An expanded maximum combined percent relative uncertainty of $\pm 5\%$ (calculated with a coverage factor of 2 and a level of confidence of 95%) is stated on the Certificate of Analysis for all our products.

TRACEABILITY:

All reference standard solutions are traceable to specific crystalline lots. The microbalances used for solution preparation are regularly tested by an external, ISO/IEC 17025:2005 accredited calibration company. In addition, their calibration is verified prior to each weighing using NIST and/or NRC traceable external weights. All volumetric glassware used is of Class A tolerance and has been tested according to the appropriate ASTM procedures, which are ultimately traceable to NIST. For certain products, traceability to international interlaboratory studies has also been established.

EXPIRY DATE / PERIOD OF VALIDITY:

Ongoing stability studies of this product have demonstrated stability in its composition and concentration for the period of time specified by the expiry date in the unopened ampoule. Monitoring for any degradation or change in concentration of the listed analyte(s) is performed on a routine basis.

LIMITED WARRANTY:

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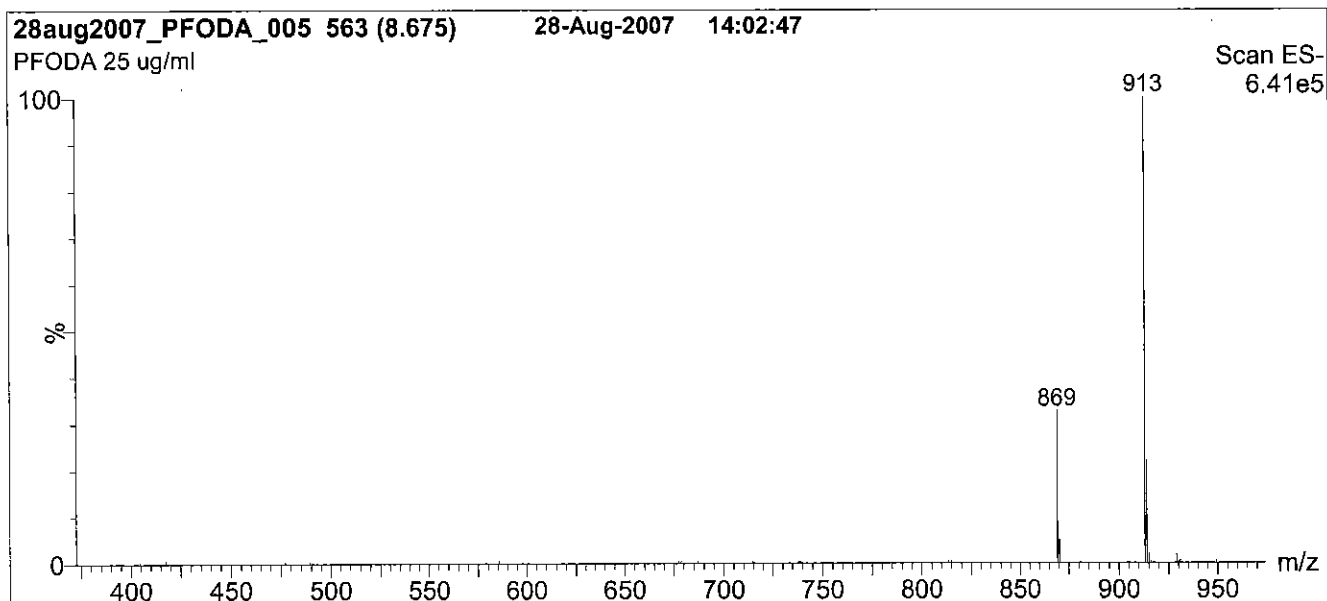
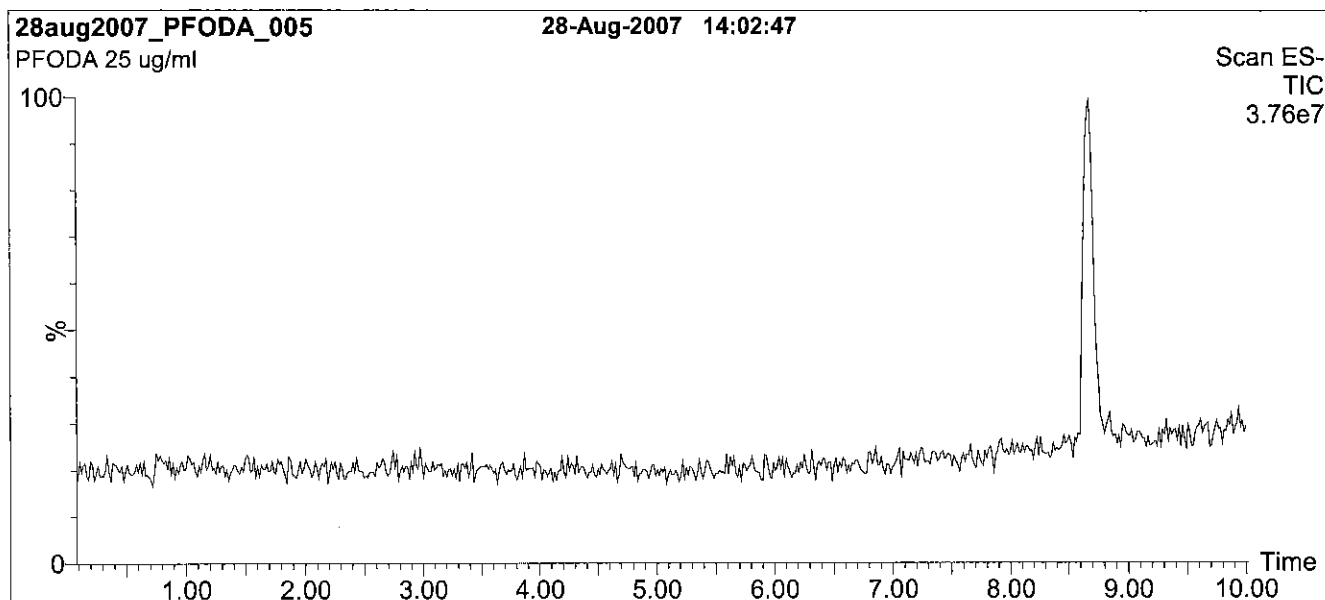
QUALITY MANAGEMENT:

This product was produced using a Quality Management System registered to ISO 9001:2008 by SAI Global, ISO/IEC 17025:2005 by the Canadian Association for Laboratory Accreditation Inc. (CALA; A 1226), and ISO GUIDE 34:2009 by ACLASS (certificate number AR-1523).



****For additional information or assistance concerning this or any other products from Wellington Laboratories Inc., please visit our website at www.well-labs.com or contact us directly at info@well-labs.com****

Figure 1: PFODA; LC/MS Data (TIC and Mass Spectrum)



Conditions for Figure 1:

LC: Waters Acquity Ultra Performance LC
MS: Micromass Quattro micro API MS

Chromatographic Conditions

Column: Acquity UPLC BEH Shield RP₁₈
1.7 μ m, 2.1 x 100 mm

Mobile phase: Gradient
Start: 75% (80:20 MeOH:ACN) / 25% H₂O
(both with 10 mM NH₄OAc buffer)
Hold 5 min. Ramp to 100% organic over 6 min.
Hold 3 min before returning to initial conditions.
Time: 16 min

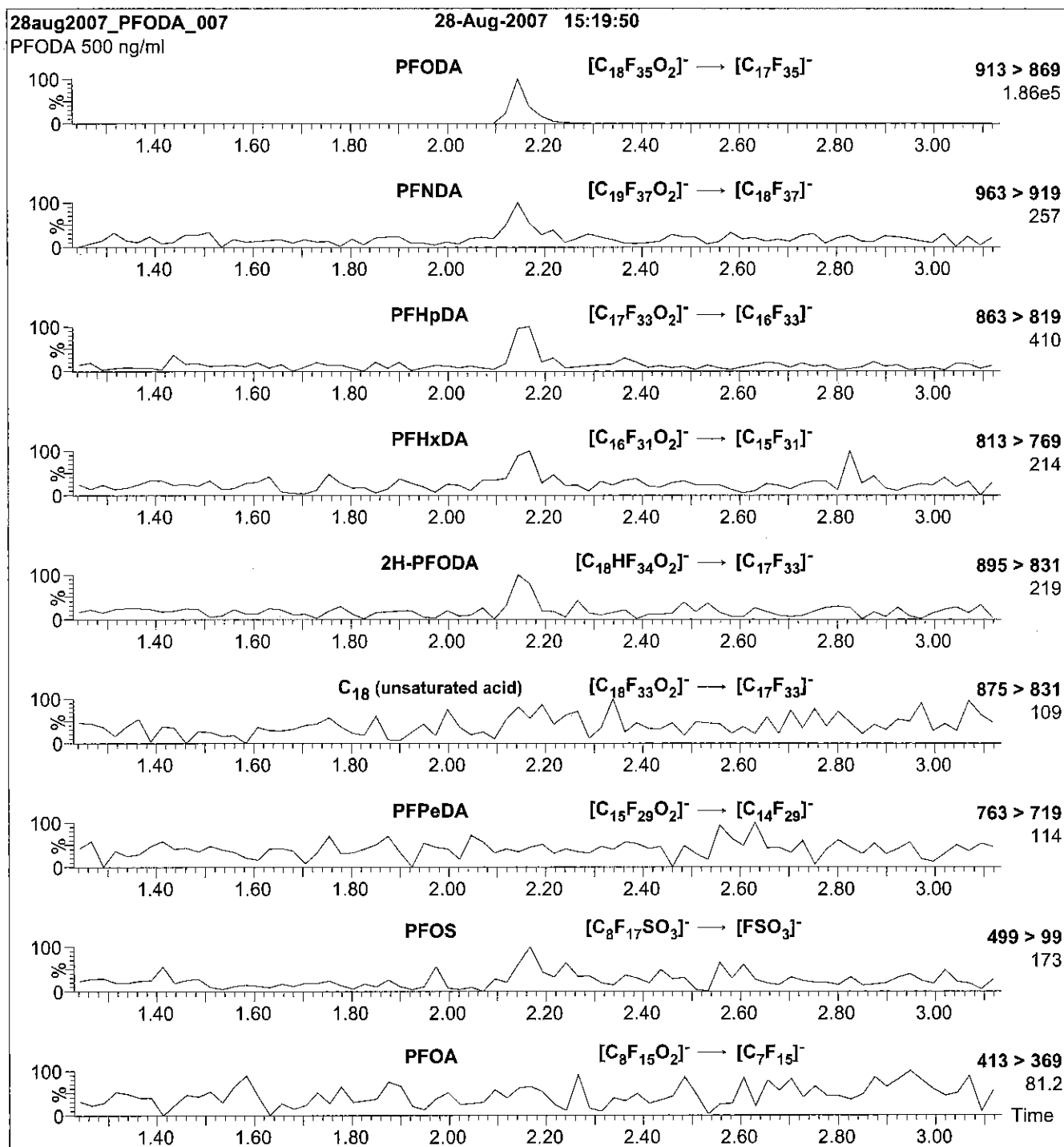
Flow: 300 μ l/min

MS Parameters

Experiment: Full Scan (225 - 1100 amu)

Source: Electrospray (negative)
Capillary Voltage (kV) = 2.00
Cone Voltage (V) = 25.00
Cone Gas Flow (l/hr) = 50
Desolvation Gas Flow (l/hr) = 650

Figure 2: PFODA; LC/MS/MS Data (Selected MRM Transitions)



Conditions for Figure 2:

Injection: Direct loop injection
10 μ l (500 ng/ml PFODA)

Mobile phase: Isocratic 75% (80:20 MeOH:ACN) / 25% H₂O
(both with 10 mM NH₄OAc buffer)

Flow: 300 μ l/min

MS Parameters

Collision Gas (mbar) = 3.58e-3
Collision Energy (eV) = 15

Reagent

LCPFOS-br_00001



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CERTIFICATE OF ANALYSIS DOCUMENTATION

br-PFOSK

Potassium Perfluorooctanesulfonate
Solution/Mixture of Linear and
Branched Isomers

PRODUCT CODE: br-PFOSK
LOT NUMBER: brPFOSK1015
CONCENTRATION: 50 ± 2.5 µg/ml (total potassium salt)
46.4 ± 2.3 µg/ml (total PFOS anion)
SOLVENT(S): Methanol
DATE PREPARED: (mm/dd/yyyy) 10/13/2015
LAST TESTED: (mm/dd/yyyy) 10/14/2015
EXPIRY DATE: (mm/dd/yyyy) 10/14/2020
RECOMMENDED STORAGE: Store ampoule in a cool, dark place

DESCRIPTION:

The chemical purity has been determined to be ≥98% perfluorooctanesulfonate linear and branched isomers.
The full name, structure and percent composition for each of the isomeric components are given in Table A.

DOCUMENTATION/ DATA ATTACHED:

Table A: Isomeric Components and Percent Composition by ¹⁹F-NMR
Figure 1: LC/MS Data (TIC and Mass Spectrum)
Figure 2: LC/MS Data (SIR)
Figure 3: LC/MS/MS Data (Selected MRM Transitions)

ADDITIONAL INFORMATION:

- See page 2 for further details.
- A 5-point calibration curve was generated using linear PFOS (potassium salt) and mass-labelled PFOS as an internal standard to enable quantitation of br-PFOSK using isotopic dilution.
- CAS#: 2795-39-3 (for linear isomer; potassium salt).

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Table A: br-PFOSK; Isomeric Components and Percent Composition (by ¹⁹F-NMR)*

Isomer	Name	Structure	Percent Composition by ¹⁹ F-NMR
1	Potassium perfluoro-1-octanesulfonate	CF ₃ CF ₂ CF ₂ CF ₂ CF ₂ CF ₂ CF ₂ SO ₃ K ⁺	78.8
2	Potassium 1-trifluoromethylperfluoroheptanesulfonate**	$\begin{array}{c} \text{CF}_3\text{CF}_2\text{CF}_2\text{CF}_2\text{CF}_2\text{CF}_2\text{CFSO}_3\text{K}^+ \\ \\ \text{CF}_3 \end{array}$	1.2
3	Potassium 2-trifluoromethylperfluoroheptanesulfonate	$\begin{array}{c} \text{CF}_3\text{CF}_2\text{CF}_2\text{CF}_2\text{CF}_2\text{CFCF}_2\text{SO}_3\text{K}^+ \\ \\ \text{CF}_3 \end{array}$	0.6
4	Potassium 3-trifluoromethylperfluoroheptanesulfonate	$\begin{array}{c} \text{CF}_3\text{CF}_2\text{CF}_2\text{CF}_2\text{CFCF}_2\text{CF}_2\text{SO}_3\text{K}^+ \\ \\ \text{CF}_3 \end{array}$	1.9
5	Potassium 4-trifluoromethylperfluoroheptanesulfonate	$\begin{array}{c} \text{CF}_3\text{CF}_2\text{CF}_2\text{CFCF}_2\text{CF}_2\text{CF}_2\text{SO}_3\text{K}^+ \\ \\ \text{CF}_3 \end{array}$	2.2
6	Potassium 5-trifluoromethylperfluoroheptanesulfonate	$\begin{array}{c} \text{CF}_3\text{CF}_2\text{CFCF}_2\text{CF}_2\text{CF}_2\text{CF}_2\text{SO}_3\text{K}^+ \\ \\ \text{CF}_3 \end{array}$	4.5
7	Potassium 6-trifluoromethylperfluoroheptanesulfonate	$\begin{array}{c} \text{CF}_3\text{CFCF}_2\text{CF}_2\text{CF}_2\text{CF}_2\text{CF}_2\text{SO}_3\text{K}^+ \\ \\ \text{CF}_3 \end{array}$	10.0
8	Potassium 5,5-di(trifluoromethyl)perfluorohexanesulfonate	$\begin{array}{c} \text{CF}_3 \\ \\ \text{CF}_3-\text{CCF}_2\text{CF}_2\text{CF}_2\text{CF}_2\text{SO}_3\text{K}^+ \\ \\ \text{CF}_3 \end{array}$	0.2
9	Potassium 4,4-di(trifluoromethyl)perfluorohexanesulfonate	$\begin{array}{c} \text{CF}_3 \\ \\ \text{CF}_3\text{CF}_2-\text{C}-\text{CF}_2\text{CF}_2\text{CF}_2\text{SO}_3\text{K}^+ \\ \\ \text{CF}_3 \end{array}$	0.03
10	Potassium 4,5-di(trifluoromethyl)perfluorohexanesulfonate	$\begin{array}{c} \text{CF}_3-\text{CF}-\text{CF}-\text{CF}_2\text{CF}_2\text{CF}_2\text{SO}_3\text{K}^+ \\ \quad \\ \text{CF}_3 \quad \text{CF}_3 \end{array}$	0.4
11	Potassium 3,5-di(trifluoromethyl)perfluorohexanesulfonate	$\begin{array}{c} \text{CF}_3-\text{CF}-\text{CF}_2-\text{CF}-\text{CF}_2\text{CF}_2\text{SO}_3\text{K}^+ \\ \quad \\ \text{CF}_3 \quad \text{CF}_3 \end{array}$	0.07

* Percent of total perfluorooctanesulfonate isomers only. Isomers are labelled in Figure 2.

** Systematic Name: Potassium perfluorooctane-2-sulfonate.

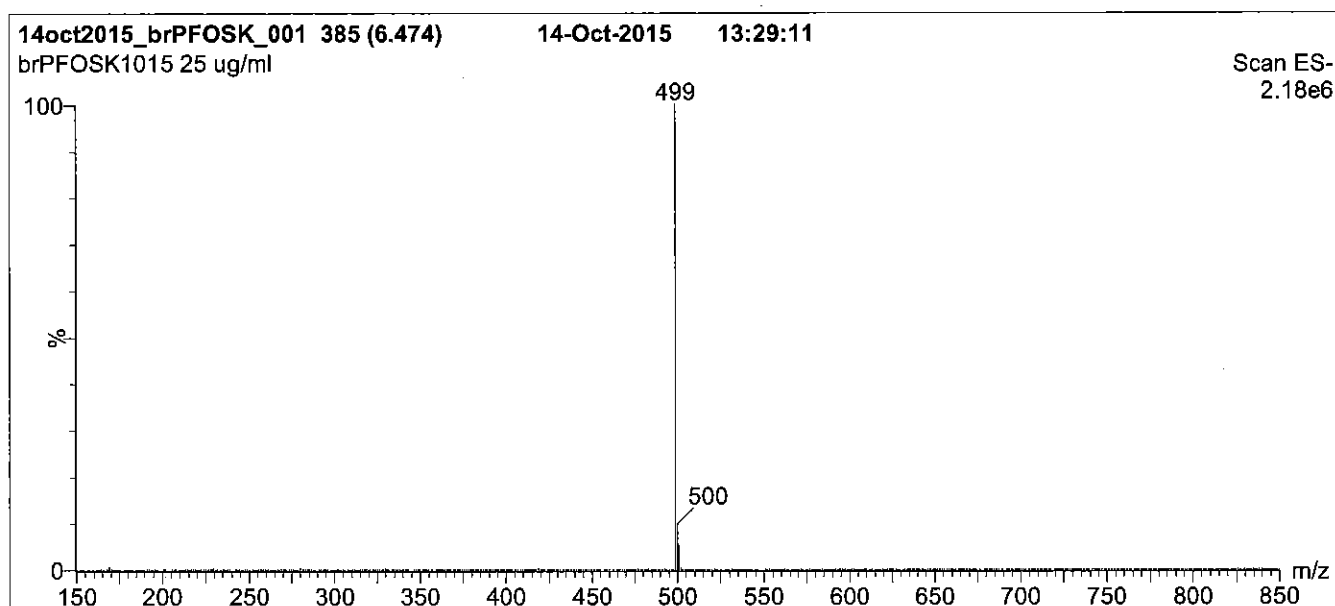
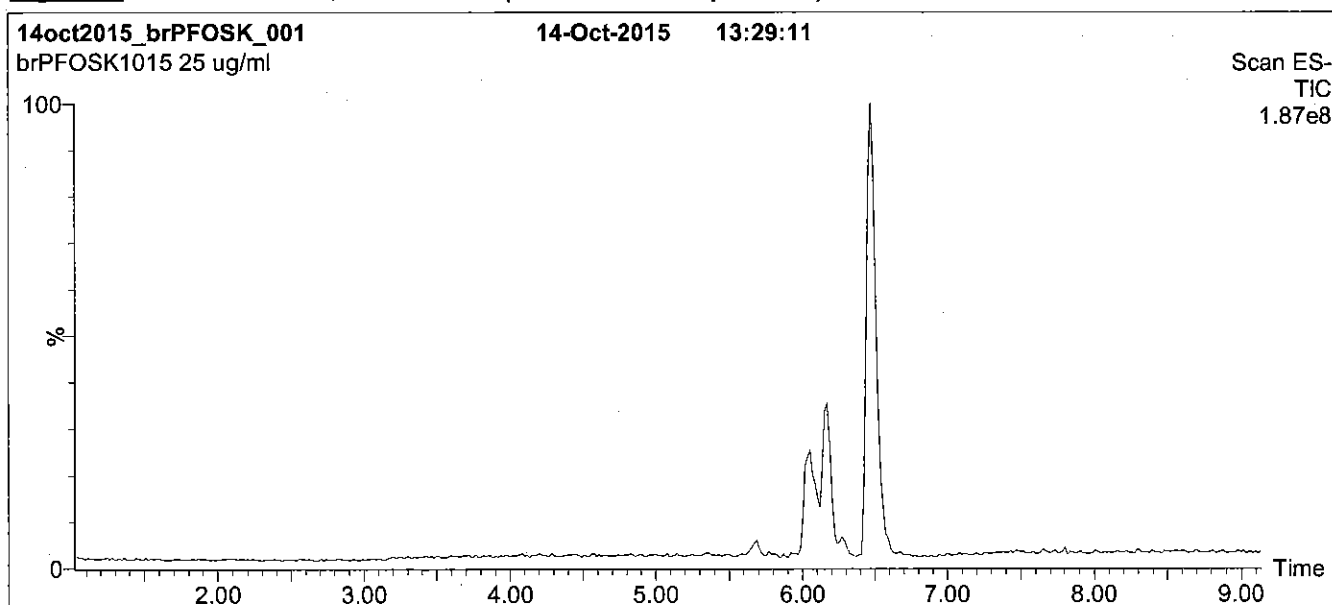
Certified By:


 B.G. Chittim

Date: 10/15/2015

(mm/dd/yyyy)

Figure 1: br-PFOSK; LC/MS Data (TIC and Mass Spectrum)



Conditions for Figure 1:

LC: Waters Acquity Ultra Performance LC
MS: Micromass Quattro *micro* API MS

Chromatographic Conditions

Column: Acquity UPLC BEH Shield RP₁₈
1.7 μ m, 2.1 x 100 mm

Mobile phase: Gradient
Start: 45% (80:20 MeOH:ACN) / 55% H₂O
(both with 10 mM NH₄OAc buffer)
Ramp to 90% organic over 12 min and hold for 2 min.
Return to initial conditions over 0.5 min.
Time: 16 min

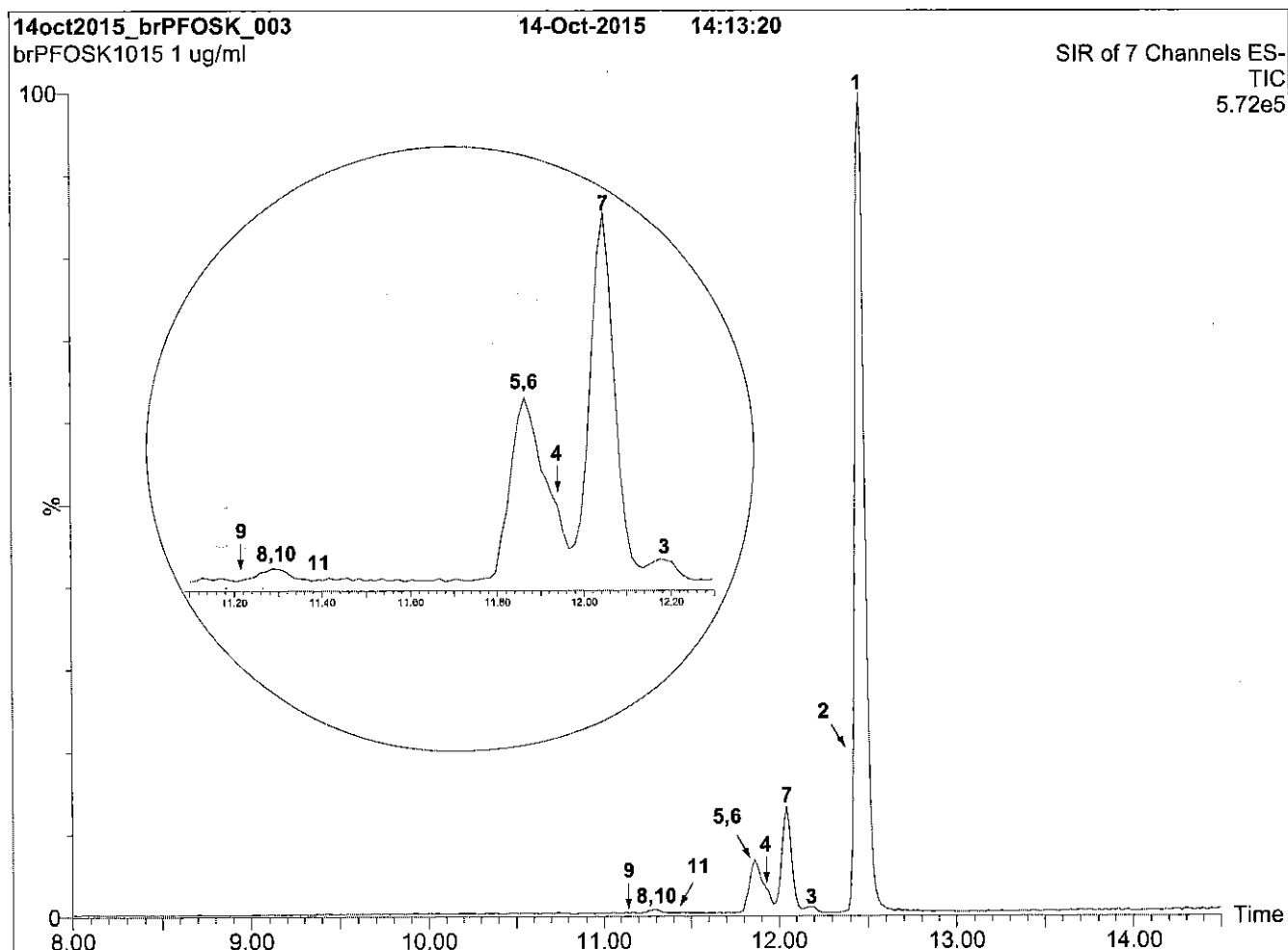
Flow: 300 μ l/min

MS Parameters

Experiment: Full Scan (150 - 850 amu)

Source: Electrospray (negative)
Capillary Voltage (kV) = 2.00
Cone Voltage (V) = 60.00
Cone Gas Flow (l/hr) = 50
Desolvation Gas Flow (l/hr) = 750

Figure 2: br-PFOSK; LC/MS Data (SIR)



Conditions for Figure 2:

LC: Waters Acquity Ultra Performance LC
MS: Micromass Quattro *micro* API MS

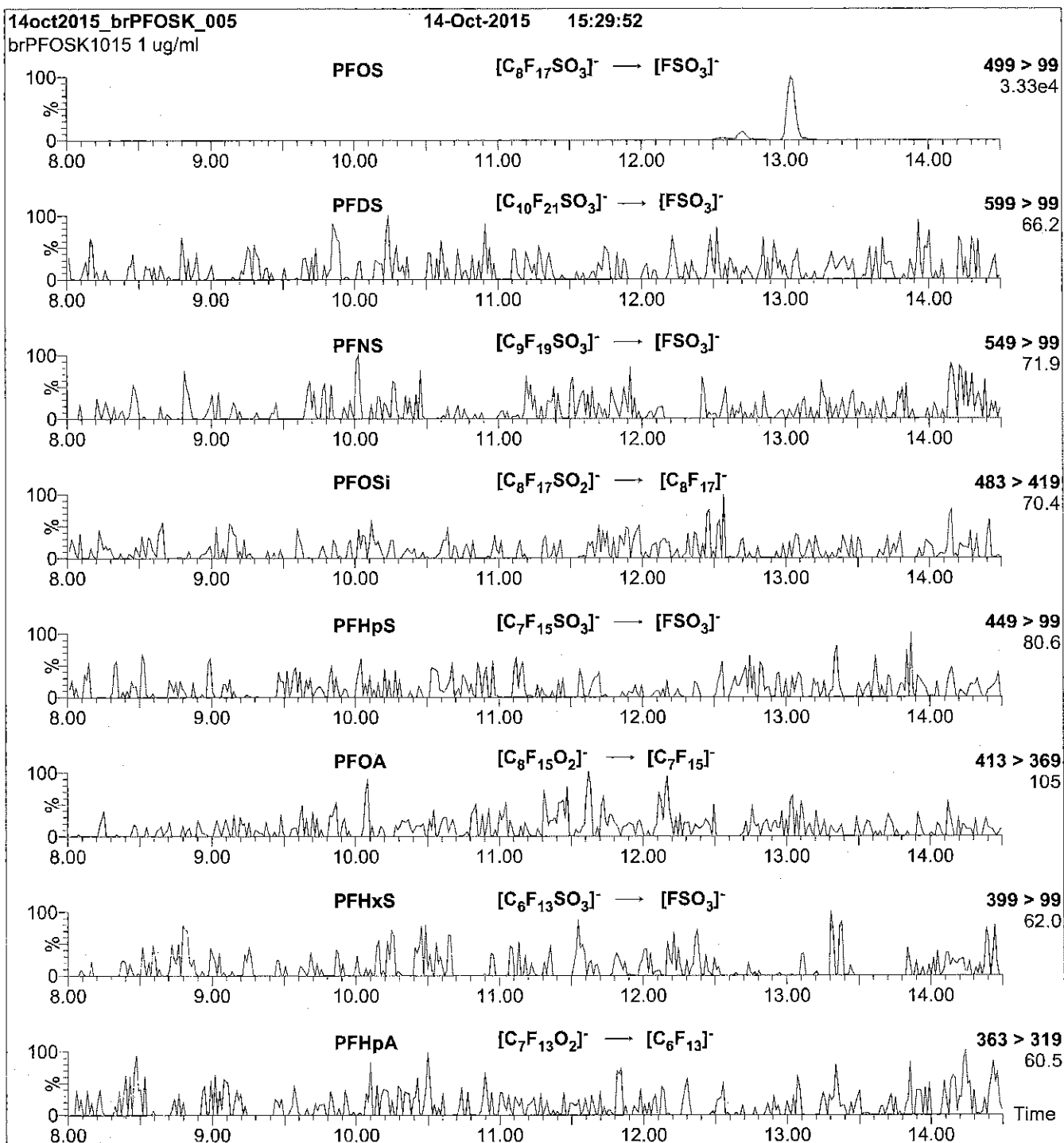
Chromatographic Conditions:

Column: Acquity UPLC BEH Shield RP₁₈ (1.7 μ m, 2.1 x 100 mm)
Injection: 1.0 μ g/ml of br-PFOSK
Mobile Phase: Gradient
45% (80:20 MeOH:ACN) / 55% H₂O (both with 10 mM NH₄OAc buffer)
Ramp to 90% organic over 15 min and hold for 3 min.
Return to initial conditions over 1 min.
Time: 20 min
Flow: 300 μ l/min

MS Conditions:

SIR (ES)
Source = 110 $^{\circ}$ C
Desolvation = 325 $^{\circ}$ C
Cone Voltage = 60V

Figure 3: br-PFOSK; LC/MS/MS Data (Selected MRM Transitions)



Conditions for Figure 3:

Injection: On-column

Mobile phase: Same as Figure 2

Flow: 300 μ l/min

MS Parameters

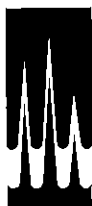
Collision Gas (mbar) = 3.06e-3

Collision Energy (eV) = 11-50 (variable)

Reagent

LCPFOS_00004

3/17/15 SV



WELLINGTON LABORATORIES

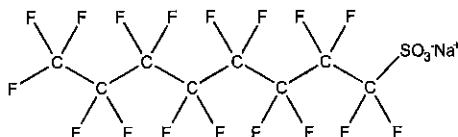
CERTIFICATE OF ANALYSIS DOCUMENTATION

PRODUCT CODE: L-PFOS
COMPOUND: Sodium perfluoro-1-octanesulfonate

LOT NUMBER: LPFOS0614

STRUCTURE:

CAS #: 4021-47-0



MOLECULAR FORMULA: $C_8F_{17}SO_3Na$
CONCENTRATION: $50.0 \pm 2.5 \mu\text{g/ml}$ (Na salt)
 $47.8 \pm 2.4 \mu\text{g/ml}$ (PFOS anion)
CHEMICAL PURITY: >98%
LAST TESTED: (mm/dd/yyyy) 06/20/2014
EXPIRY DATE: (mm/dd/yyyy) 06/20/2019
RECOMMENDED STORAGE: Store ampoule in a cool, dark place

MOLECULAR WEIGHT: 522.11
SOLVENT(S): Methanol

DOCUMENTATION/ DATA ATTACHED:

Figure 1: LC/MS Data (TIC and Mass Spectrum)
Figure 2: LC/MS/MS Data (Selected MRM Transitions)

ADDITIONAL INFORMATION:

- See page 2 for further details.

FOR LABORATORY USE ONLY: NOT FOR HUMAN OR DRUG USE

Certified By:

B.G. Chittim

Date: 10/27/2014
(mm/dd/yyyy)

Wellington Laboratories Inc., 345 Southgate Dr. Guelph ON N1G 3M5 CANADA
519-822-2436 • Fax: 519-822-2849 • info@well-labs.com

INTENDED USE:

The products prepared by Wellington Laboratories Inc. are for laboratory use only. They are designed to be used as reference standards for the identification and/or quantification of specific chemical compound(s).

HAZARDS:

This product should only be used by qualified personnel familiar with its potential hazards and trained in the handling of hazardous chemicals. Due care should be exercised to prevent unnecessary human contact or ingestion. All procedures should be carried out in a well-functioning fume hood and suitable gloves, eye protection and clothing should be worn at all times. Waste should be disposed of according to national and regional regulations. Material Safety Data Sheets (MSDSs) are available upon request.

SYNTHESIS / CHARACTERIZATION:

Where possible, all of our products are synthesized using single-product, unambiguous routes. They are then characterized, and their structures and purities confirmed, using a combination of the most relevant techniques, such as NMR, GC/MS, LC/MS/MS, x-ray crystallography and melting point. Isotopic purities of mass-labelled compounds are also confirmed using HRGC/HRMS and/or LC/MS/MS.

HOMOGENEITY:

Prior to solution preparation, crystalline material is tested for homogeneity using a variety of techniques (as stated above) and its solubility in a given diluent is taken into consideration. Duplicate solutions of a new product are prepared from the same crystalline lot and, after the addition of an appropriate internal standard, they are compared by GC/MS and/or LC/MS/MS. The relative response factors of the analyte of interest in each solution are required to be <5% RSD. New solution lots of existing products are compared to older lots in the same manner, which further confirms the homogeneity of the crystalline material as well as the stability and homogeneity of the solutions in the storage containers.

UNCERTAINTY:

The maximum combined relative standard uncertainty of our reference standard solutions is calculated using the following equation:

The combined relative standard uncertainty, $u_c(y)$, of a value y and the uncertainty of the independent parameters x_1, x_2, \dots, x_n on which it depends is:

$$u_c(y(x_1, x_2, \dots, x_n)) = \sqrt{\sum_{i=1}^n u(y, x_i)^2}$$

where x is expressed as a relative standard uncertainty of the individual parameter.

The individual uncertainties taken into account include those associated with weights (calibration of the balance) and volumes (calibration of the volumetric glassware). An expanded maximum combined percent relative uncertainty of $\pm 5\%$ (calculated with a coverage factor of 2 and a level of confidence of 95%) is stated on the Certificate of Analysis for all our products.

TRACEABILITY:

All reference standard solutions are traceable to specific crystalline lots. The microbalances used for solution preparation are regularly tested by an external, ISO/IEC 17025:2005 accredited calibration company. In addition, their calibration is verified prior to each weighing using NIST and/or NRC traceable external weights. All volumetric glassware used is of Class A tolerance and has been tested according to the appropriate ASTM procedures, which are ultimately traceable to NIST. For certain products, traceability to international interlaboratory studies has also been established.

EXPIRY DATE / PERIOD OF VALIDITY:

Ongoing stability studies of this product have demonstrated stability in its composition and concentration for the period of time specified by the expiry date in the unopened ampoule. Monitoring for any degradation or change in concentration of the listed analyte(s) is performed on a routine basis.

LIMITED WARRANTY:

At the time of shipment, all products are warranted to be free of defects in material and workmanship and to conform to the stated technical and purity specifications.

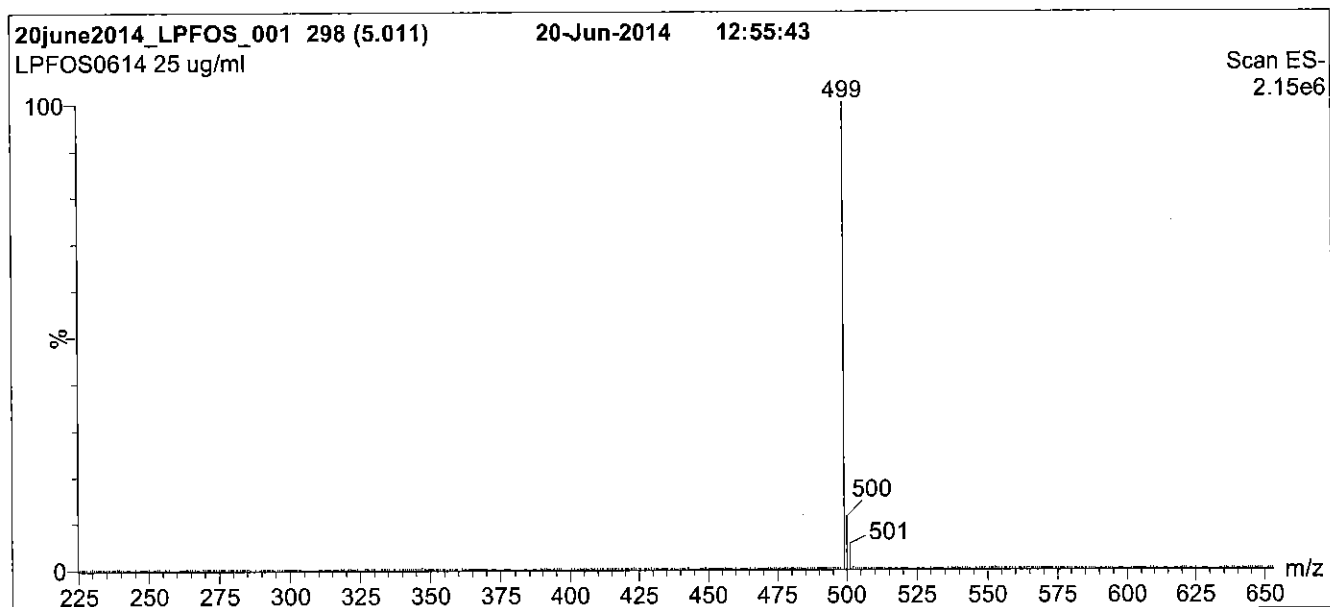
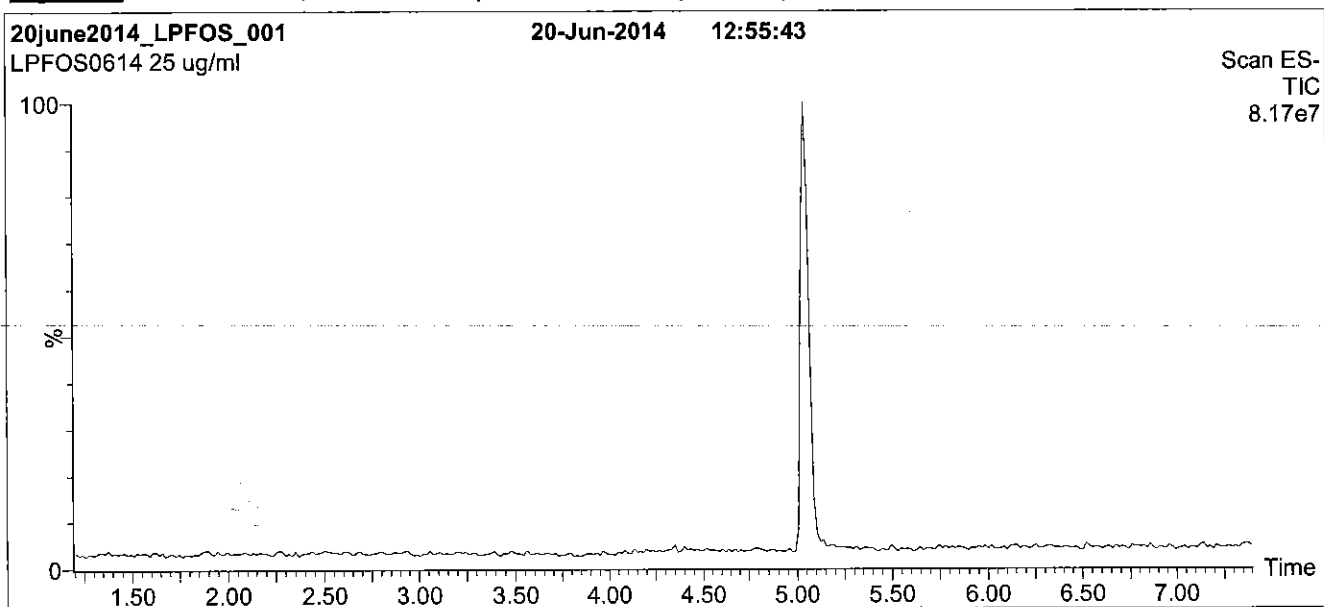
QUALITY MANAGEMENT:

This product was produced using a Quality Management System registered to ISO 9001:2008 by SAI Global, ISO/IEC 17025:2005 by the Canadian Association for Laboratory Accreditation Inc. (CALA; A 1226), and ISO GUIDE 34:2009 by ACLASS (certificate number AR-1523).



****For additional information or assistance concerning this or any other products from Wellington Laboratories Inc., please visit our website at www.well-labs.com or contact us directly at info@well-labs.com****

Figure 1: L-PFOS; LC/MS Data (TIC and Mass Spectrum)



Conditions for Figure 1:

LC: Waters Acquity Ultra Performance LC
MS: Micromass Quattro micro API MS

Chromatographic Conditions

Column: Acquity UPLC BEH Shield RP₁₈
1.7 μ m, 2.1 x 100 mm

Mobile phase: Gradient
Start: 45% (80:20 MeOH:ACN) / 55% H₂O
(both with 10 mM NH₄OAc buffer)
Ramp to 90% organic over 7 min and hold for 1.5 min
before returning to initial conditions in 0.5 min.
Time: 10 min

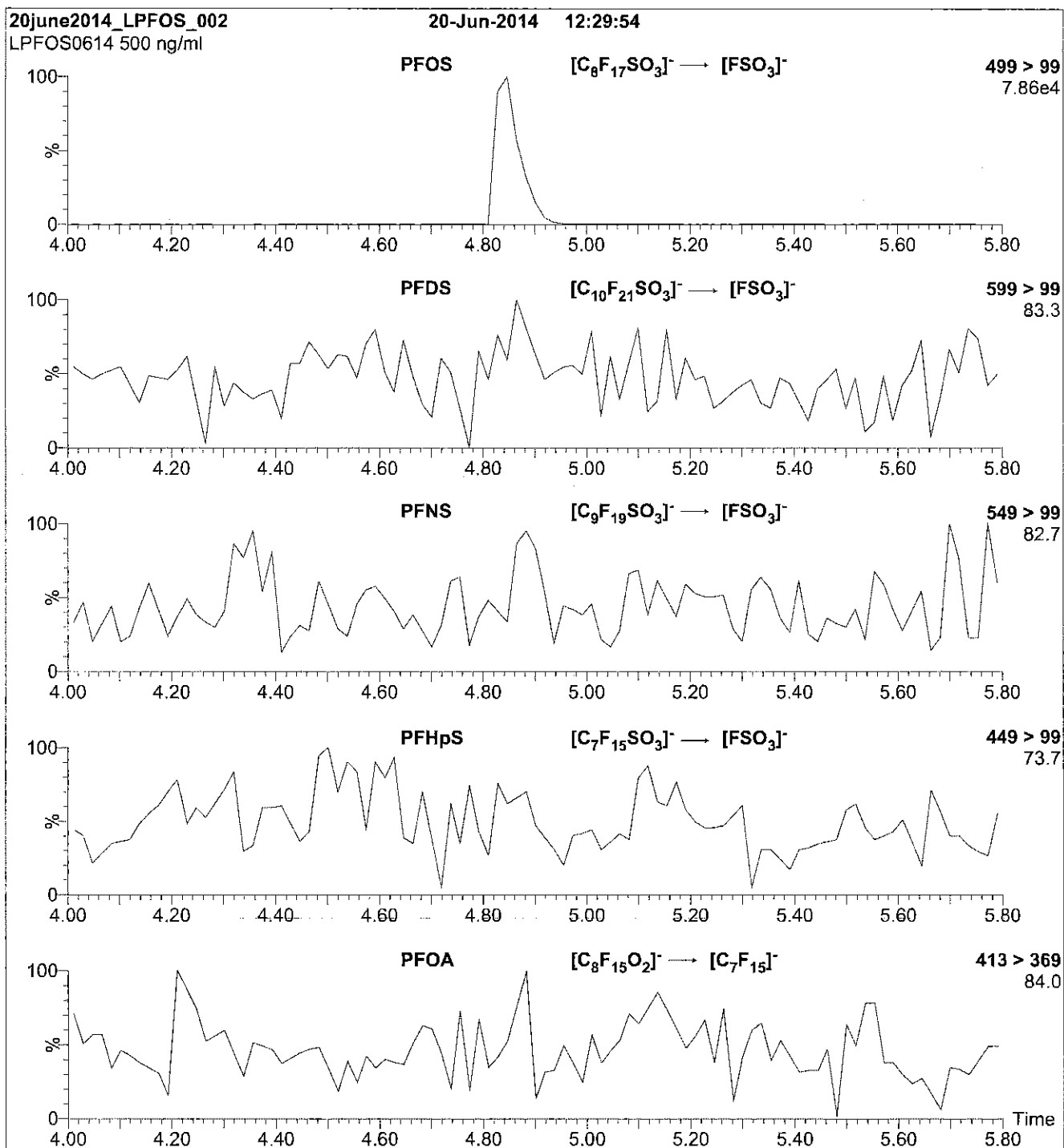
Flow: 300 μ l/min

MS Parameters

Experiment: Full Scan (225 - 950 amu)

Source: Electrospray (negative)
Capillary Voltage (kV) = 2.00
Cone Voltage (V) = 60.00
Cone Gas Flow (l/hr) = 50
Desolvation Gas Flow (l/hr) = 750

Figure 2: L-PFOS; LC/MS/MS Data (Selected MRM Transitions)



Conditions for Figure 2:

Injection: Direct loop injection
10 μ l (500 ng/ml L-PFOS)

Mobile phase: Isocratic 80% (80:20 MeOH:ACN) / 20% H₂O
(both with 10 mM NH₄OAc buffer)

Flow: 300 μ l/min

MS Parameters

Collision Gas (mbar) = 3.43e-3
Collision Energy (eV) = 40

Reagent

LCPFOSA_00005

01/21/15 87



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CERTIFICATE OF ANALYSIS DOCUMENTATION

PRODUCT CODE:

FOSA-I

LOT NUMBER:

FOSA0714I

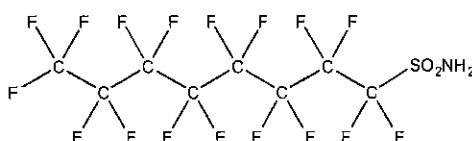
COMPOUND:

Perfluoro-1-octanesulfonamide

STRUCTURE:

CAS #:

754-91-6



MOLECULAR FORMULA:

C₈H₂F₁₇NO₂S

MOLECULAR WEIGHT:

499.14

CONCENTRATION:

50 ± 2.5 µg/ml

SOLVENT(S):

Isopropanol

CHEMICAL PURITY:

>98%

LAST TESTED: (mm/dd/yyyy)

07/31/2014

EXPIRY DATE: (mm/dd/yyyy)

Stability studies ongoing

RECOMMENDED STORAGE:

Refrigerate ampoule

DOCUMENTATION/ DATA ATTACHED:

Figure 1: LC/MS Data (TIC and Mass Spectrum)

Figure 2: LC/MS/MS Data (Selected MRM Transitions)

ADDITIONAL INFORMATION:

- See page 2 for further details.

FOR LABORATORY USE ONLY: NOT FOR HUMAN OR DRUG USE

Certified By:

B.G. Chittim

Date: 08/05/2014

(mm/dd/yyyy)

Wellington Laboratories Inc., 345 Southgate Dr. Guelph ON N1G 3M5 CANADA
519-822-2436 • Fax: 519-822-2849 • info@well-labs.com

INTENDED USE:

The products prepared by Wellington Laboratories Inc. are for laboratory use only. They are designed to be used as reference standards for the identification and/or quantification of specific chemical compound(s).

HAZARDS:

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SYNTHESIS / CHARACTERIZATION:

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x_1, x_2, \dots, x_n on which it depends is:

$$u_c(y(x_1, x_2, \dots, x_n)) = \sqrt{\sum_{i=1}^n u(y, x_i)^2}$$

where x is expressed as a relative standard uncertainty of the individual parameter.

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TRACEABILITY:

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EXPIRY DATE / PERIOD OF VALIDITY:

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LIMITED WARRANTY:

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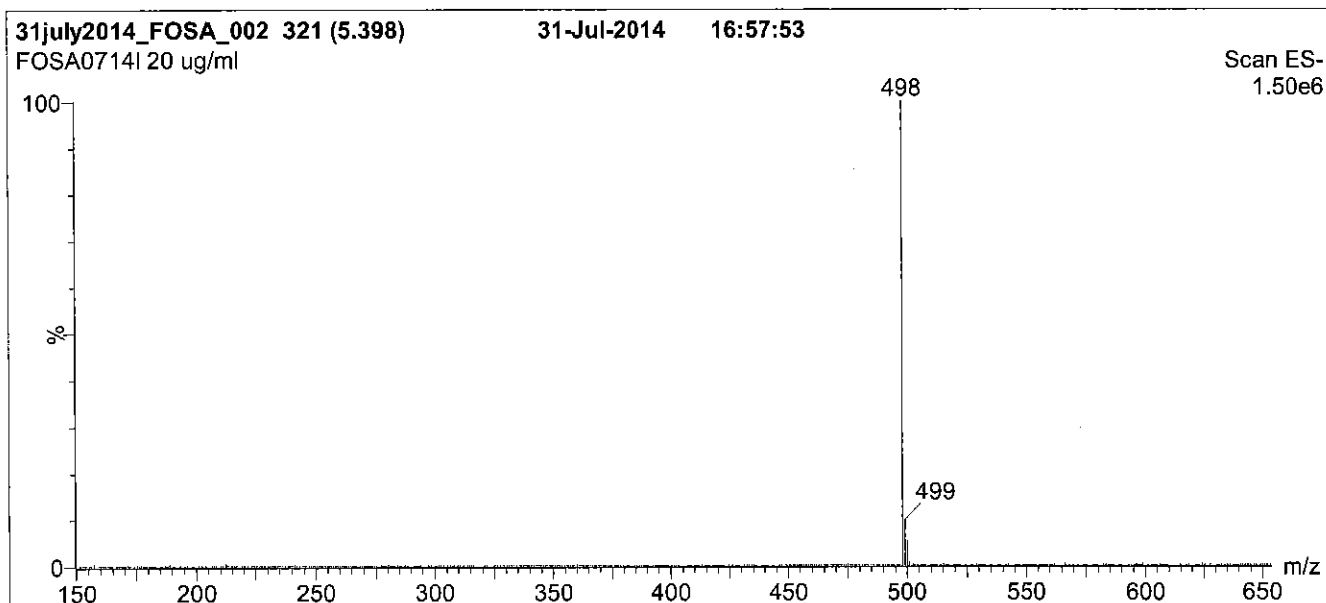
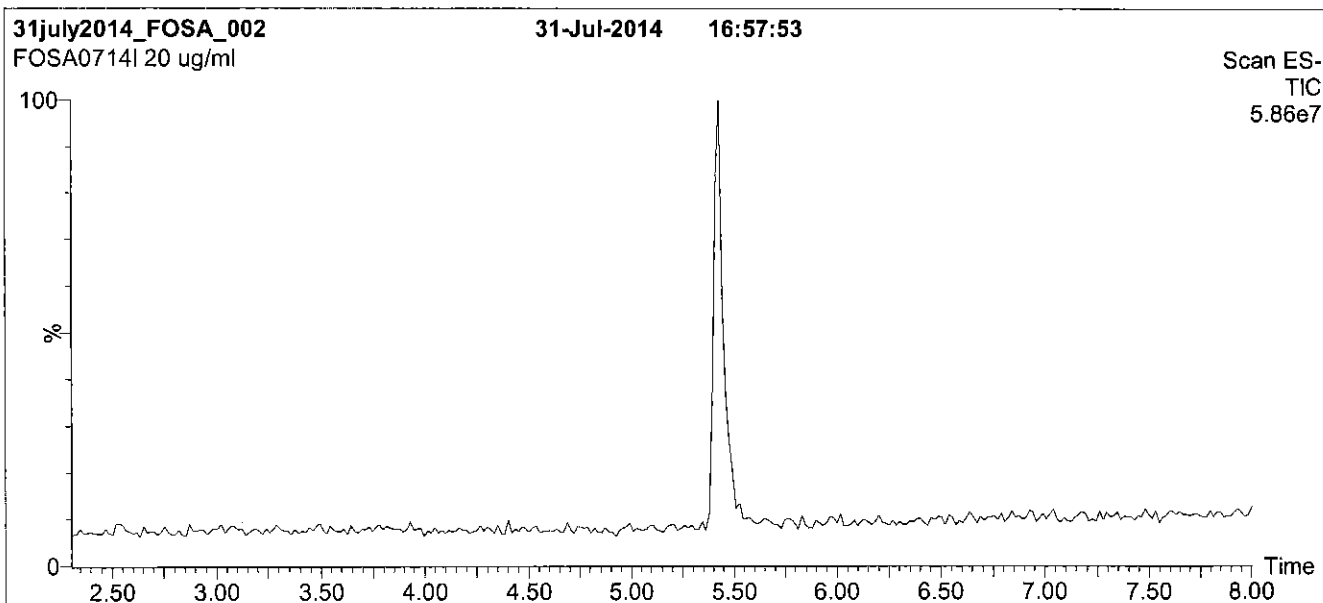
QUALITY MANAGEMENT:

This product was produced using a Quality Management System registered to ISO 9001:2008 by SAI Global, ISO/IEC 17025:2005 by the Canadian Association for Laboratory Accreditation Inc. (CALA; A 1226), and ISO GUIDE 34:2009 by ACLASS (certificate number AR-1523).



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Figure 1: FOSA-I; LC/MS Data (TIC and Mass Spectrum)



Conditions for Figure 1:

LC: Waters Acquity Ultra Performance LC
MS: Micromass Quattro *micro* API MS

Chromatographic Conditions

Column: Acquity UPLC BEH C₁₈
1.7 μ m, 2.1 x 100 mm

Mobile phase: Gradient

Start: 55% (80:20 MeOH:ACN) / 45% H₂O
(both with 10 mM NH₄OAc buffer)
Ramp to 90% organic over 7 min and hold for 2 min
before returning to initial conditions in 0.5 min.
Time: 10 min

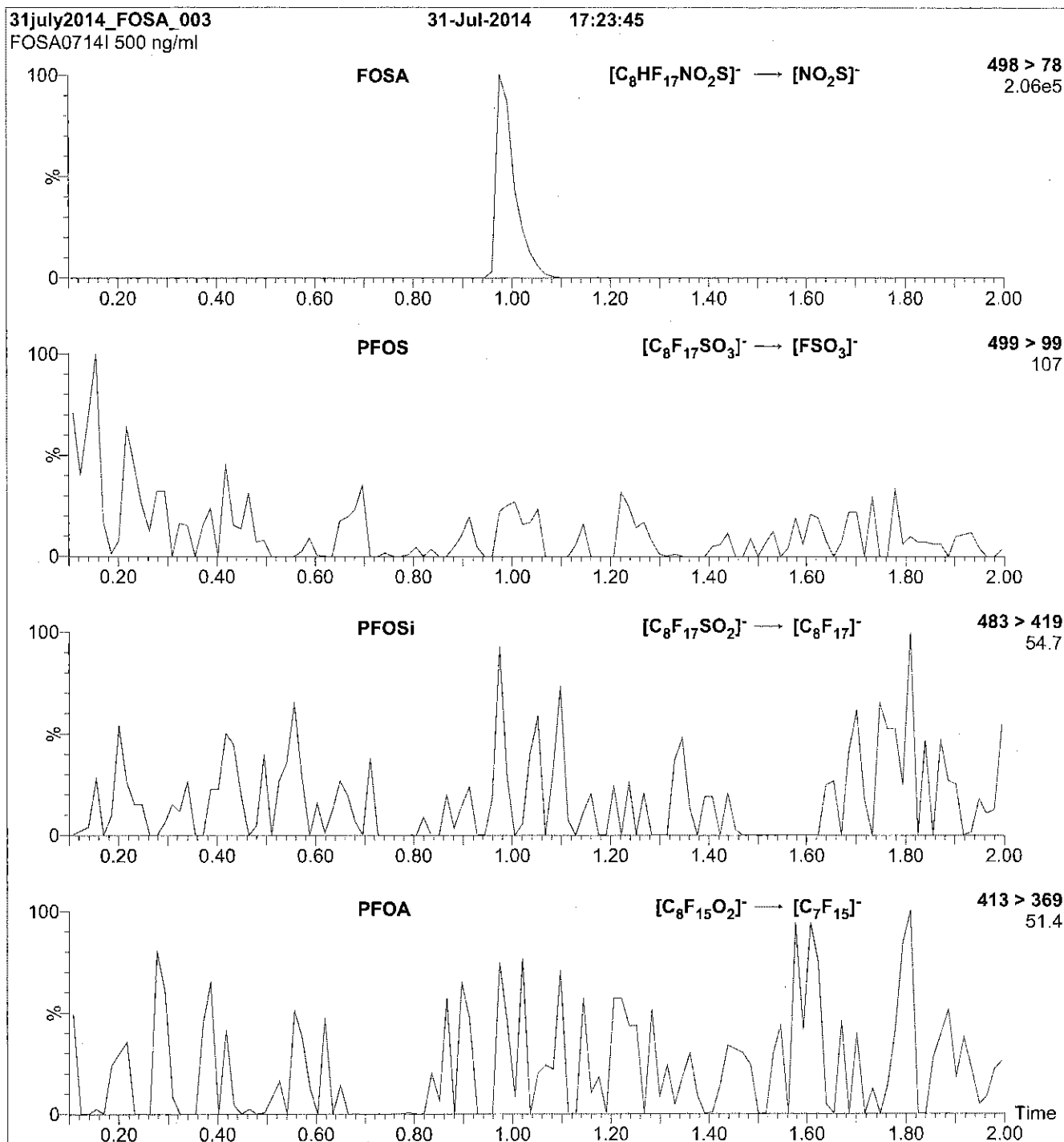
Flow: 300 μ l/min

MS Parameters

Experiment: Full Scan (150 - 950 amu)

Source: Electrospray (negative)
Capillary Voltage (kV) = 2.50
Cone Voltage (V) = 40.00
Cone Gas Flow (l/hr) = 50
Desolvation Gas Flow (l/hr) = 750

Figure 2: FOSA-I; LC/MS/MS Data (Selected MRM Transitions)



Conditions for Figure 2:

Injection: Direct loop injection
10 μ l (500 ng/ml FOSA-I)

Mobile phase: Isocratic 80% (80:20 MeOH:ACN) / 20% H_2O
(both with 10 mM NH_4OAc buffer)

Flow: 300 μ l/min

MS Parameters

Collision Gas (mbar) = 3.58e-3
Collision Energy (eV) = 30

Reagent

LCPFOSA_00006



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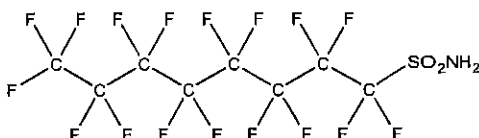
CERTIFICATE OF ANALYSIS DOCUMENTATION

PRODUCT CODE: FOSA-I
COMPOUND: Perfluoro-1-octanesulfonamide

LOT NUMBER: FOSA0815I

STRUCTURE:

CAS #: 754-91-6



MOLECULAR FORMULA: $C_8H_2F_{17}NO_2S$
CONCENTRATION: $50 \pm 2.5 \mu\text{g/ml}$
CHEMICAL PURITY: >98%
LAST TESTED: (mm/dd/yyyy) 09/02/2015
EXPIRY DATE: (mm/dd/yyyy) 09/02/2017
RECOMMENDED STORAGE: Refrigerate ampoule

MOLECULAR WEIGHT: 499.14
SOLVENT(S): Isopropanol

DOCUMENTATION/ DATA ATTACHED:

Figure 1: LC/MS Data (TIC and Mass Spectrum)
Figure 2: LC/MS/MS Data (Selected MRM Transitions)

ADDITIONAL INFORMATION:

- See page 2 for further details.

FOR LABORATORY USE ONLY: NOT FOR HUMAN OR DRUG USE

Certified By:

B.G. Chittim

Date: 09/11/2015
(mm/dd/yyyy)

Wellington Laboratories Inc., 345 Southgate Dr. Guelph ON N1G 3M5 CANADA
519-822-2436 • Fax: 519-822-2849 • info@well-labs.com

INTENDED USE:

The products prepared by Wellington Laboratories Inc. are for laboratory use only. This certified reference material (CRM) was designed to be used as a standard for the identification and/or quantification of the specific chemical compound it contains.

HAZARDS:

This product should only be used by qualified personnel familiar with its potential hazards and trained in the handling of hazardous chemicals. Due care should be exercised to prevent unnecessary human contact or ingestion. All procedures should be carried out in a well-functioning fume hood and suitable gloves, eye protection, and clothing should be worn at all times. Waste should be disposed of according to national and regional regulations. Safety Data Sheets (SDSs) are available upon request.

SYNTHESIS / CHARACTERIZATION:

Where possible, all of our products are synthesized using single-product unambiguous routes. They are then characterized, and their structures and purities confirmed, using a combination of the most relevant techniques, such as NMR, GC/MS, LC/MS/MS, SFC/UV/MS/MS, x-ray crystallography, and melting point. Isotopic purities of mass-labelled compounds are also confirmed using HRGC/HRMS and/or LC/MS/MS.

HOMOGENEITY:

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UNCERTAINTY:

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where x is expressed as a relative standard uncertainty of the individual parameter.

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EXPIRY DATE / PERIOD OF VALIDITY:

Ongoing stability studies of this product have demonstrated stability in its composition and concentration, until the specified expiry date, in the unopened ampoule. Monitoring for any degradation or change in concentration of the listed analyte(s) is performed on a routine basis.

LIMITED WARRANTY:

At the time of shipment, all products are warranted to be free of defects in material and workmanship and to conform to the stated technical and purity specifications.

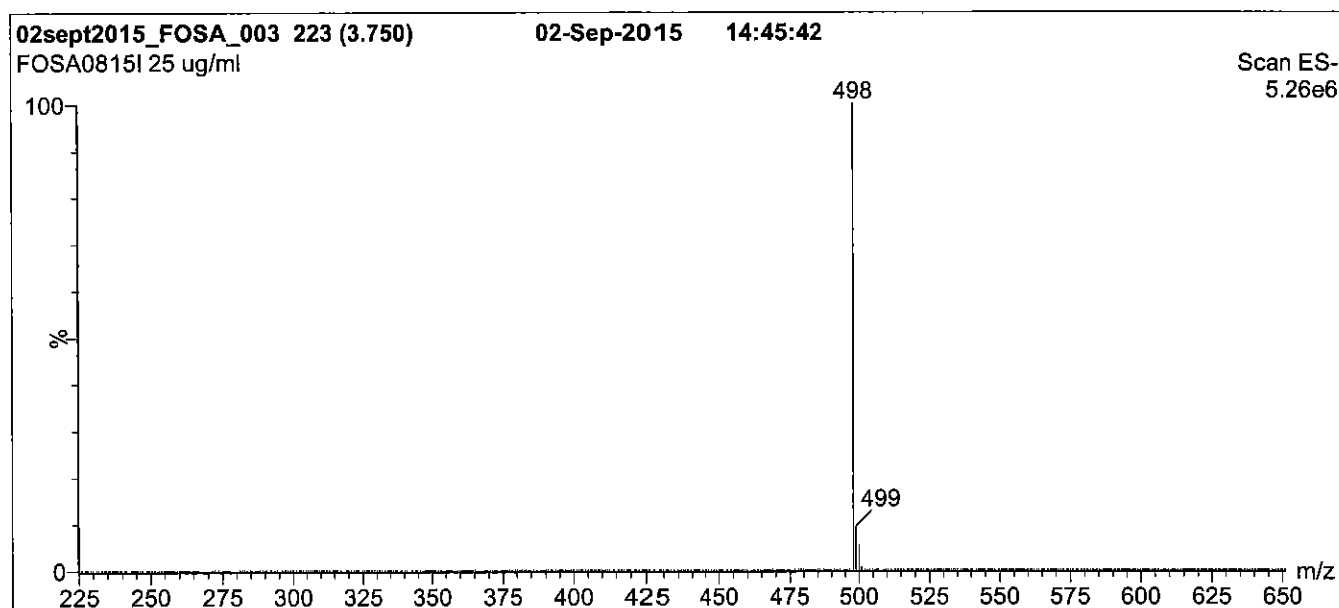
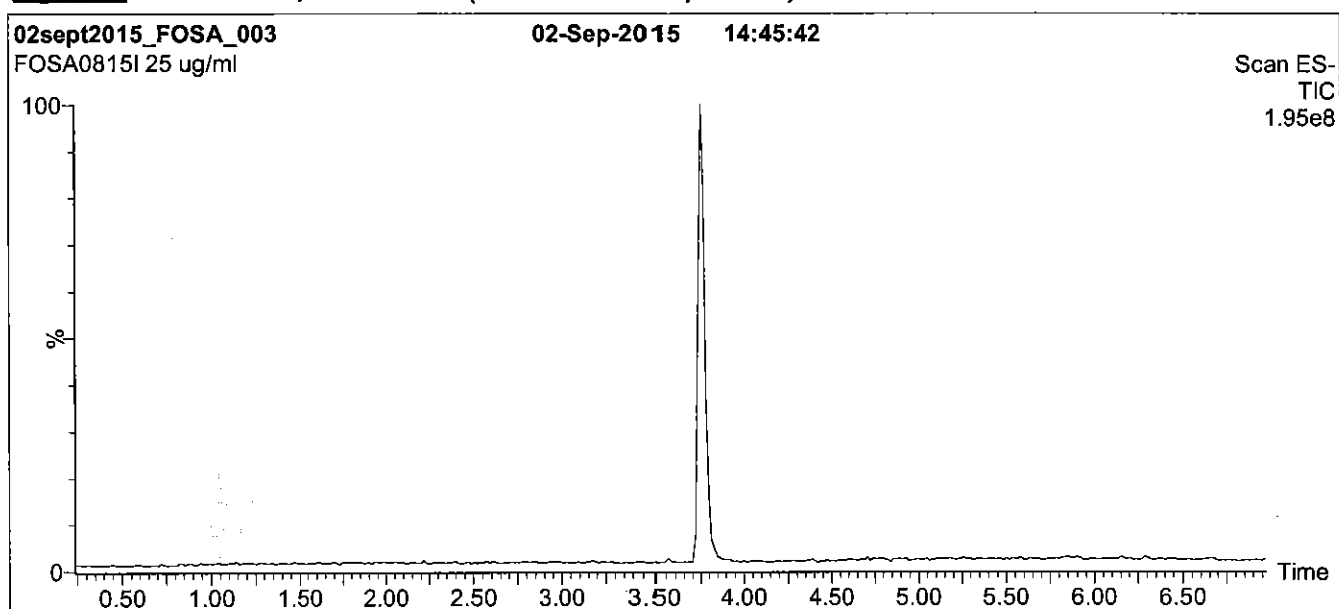
QUALITY MANAGEMENT:

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Figure 1: FOSA-I; LC/MS Data (TIC and Mass Spectrum)



Conditions for Figure 1:

LC: Waters Acquity Ultra Performance LC
MS: Micromass Quattro *micro* API MS

Chromatographic Conditions

Column: Acquity UPLC BEH Shield RP₁₈
1.7 μ m, 2.1 x 100 mm

Mobile phase: Gradient
Start: 60% (80:20 MeOH:ACN) / 40% H₂O
(both with 10 mM NH₄OAc buffer)
Ramp to 90% organic over 7 min and hold for 1.5 min
before returning to initial conditions in 0.5 min.
Time: 10 min

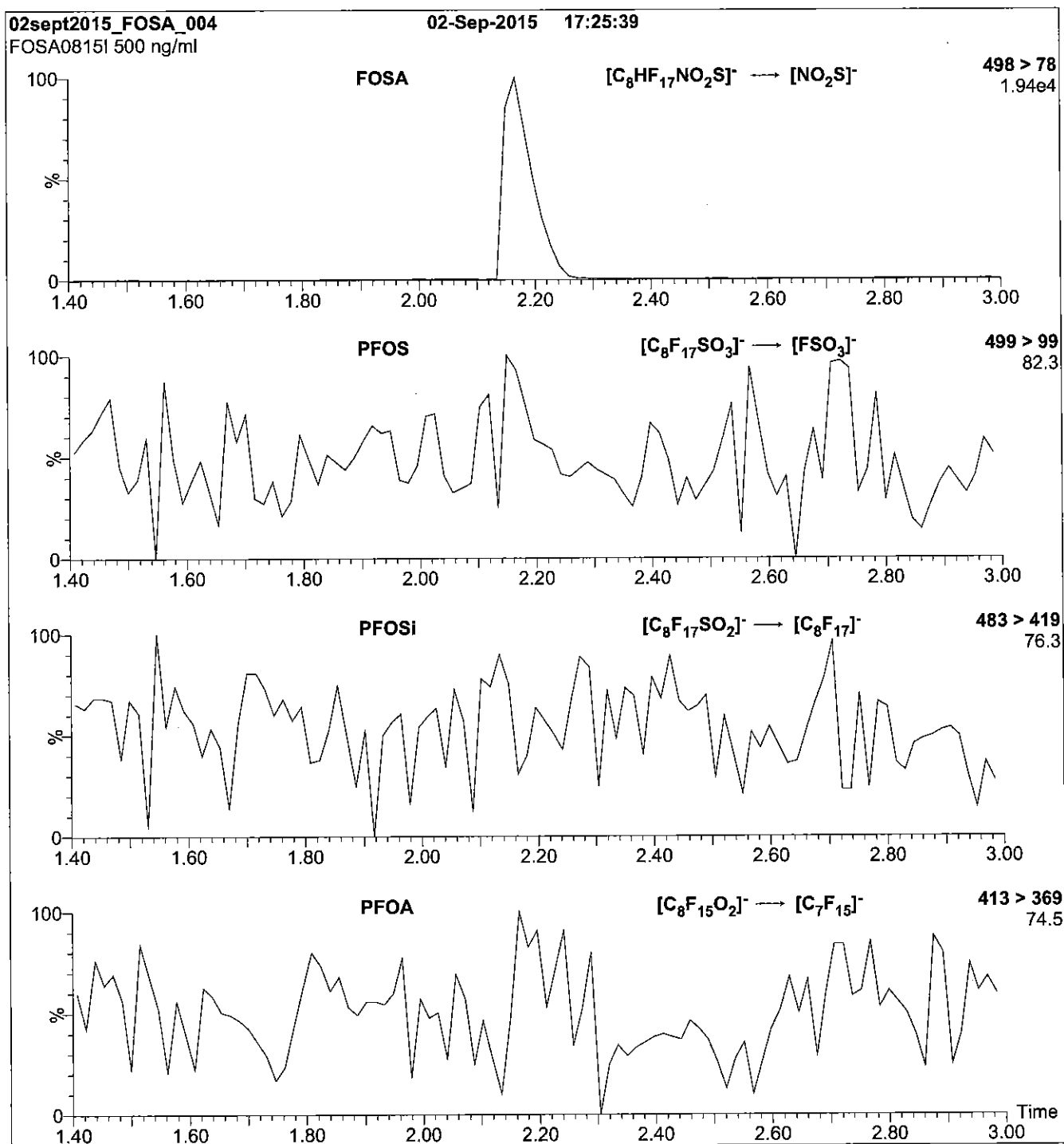
Flow: 300 μ l/min

MS Parameters

Experiment: Full Scan (225 - 850 amu)

Source: Electrospray (negative)
Capillary Voltage (kV) = 2.50
Cone Voltage (V) = 40.00
Cone Gas Flow (l/hr) = 50
Desolvation Gas Flow (l/hr) = 750

Figure 2: FOSA-I; LC/MS/MS Data (Selected MRM Transitions)



Conditions for Figure 2:

Injection: Direct loop injection
10 μ l (500 ng/ml FOSA-I)

Mobile phase: Isocratic 80% (80:20 MeOH:ACN) / 20% H_2O
(both with 10 mM NH_4OAc buffer)

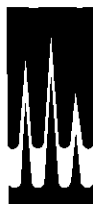
Flow: 300 μ l/min

MS Parameters

Collision Gas (mbar) = 3.54e-3
Collision Energy (eV) = 30

Reagent

LCPFPeA_00003



WELLINGTON LABORATORIES

CERTIFICATE OF ANALYSIS DOCUMENTATION

Rec 7/15/14

PRODUCT CODE:

PFPeA

LOT NUMBER:

PFPeA0113

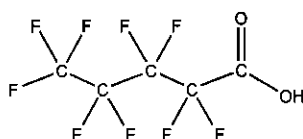
COMPOUND:

Perfluoro-n-pentanoic acid

STRUCTURE:

CAS #:

2706-90-3



MOLECULAR FORMULA:

$C_5H_2F_8O_2$

MOLECULAR WEIGHT:

264.05

CONCENTRATION:

$50 \pm 2.5 \mu\text{g/ml}$

SOLVENT(S):

Methanol

Water (<1%)

CHEMICAL PURITY:

>98%

LAST TESTED: (mm/dd/yyyy)

01/03/2013

EXPIRY DATE: (mm/dd/yyyy)

01/03/2018

RECOMMENDED STORAGE:

Store ampoule in a cool, dark place

DOCUMENTATION/ DATA ATTACHED:

Figure 1: LC/MS Data (TIC and Mass Spectrum)

Figure 2: LC/MS/MS Data (Selected MRM Transitions)

ADDITIONAL INFORMATION:

- See page 2 for further details.
- Contains 4 mole eq. of NaOH to prevent conversion of the carboxylic acid to the methyl ester.
- Contains ~ 0.3% of Perfluoro-n-heptanoic acid (PFHpA) and ~ 0.2% of $C_5H_2F_8O_2$ (hydrido - derivative) as measured by ^{19}F NMR.

FOR LABORATORY USE ONLY: NOT FOR HUMAN OR DRUG USE

Certified By:

B.G. Chittim

Date: 01/14/2013

(mm/dd/yyyy)

Wellington Laboratories Inc., 345 Southgate Dr. Guelph ON N1G 3M5 CANADA
519-822-2436 • Fax: 519-822-2849 • info@well-labs.com

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LIMITED WARRANTY:

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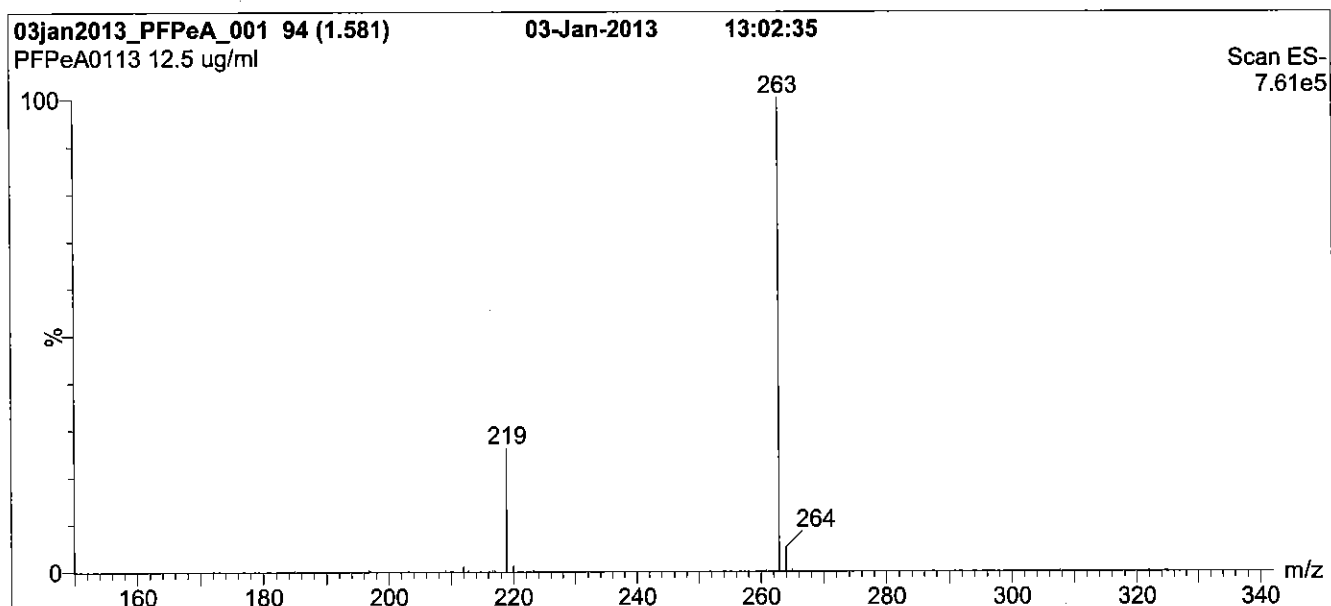
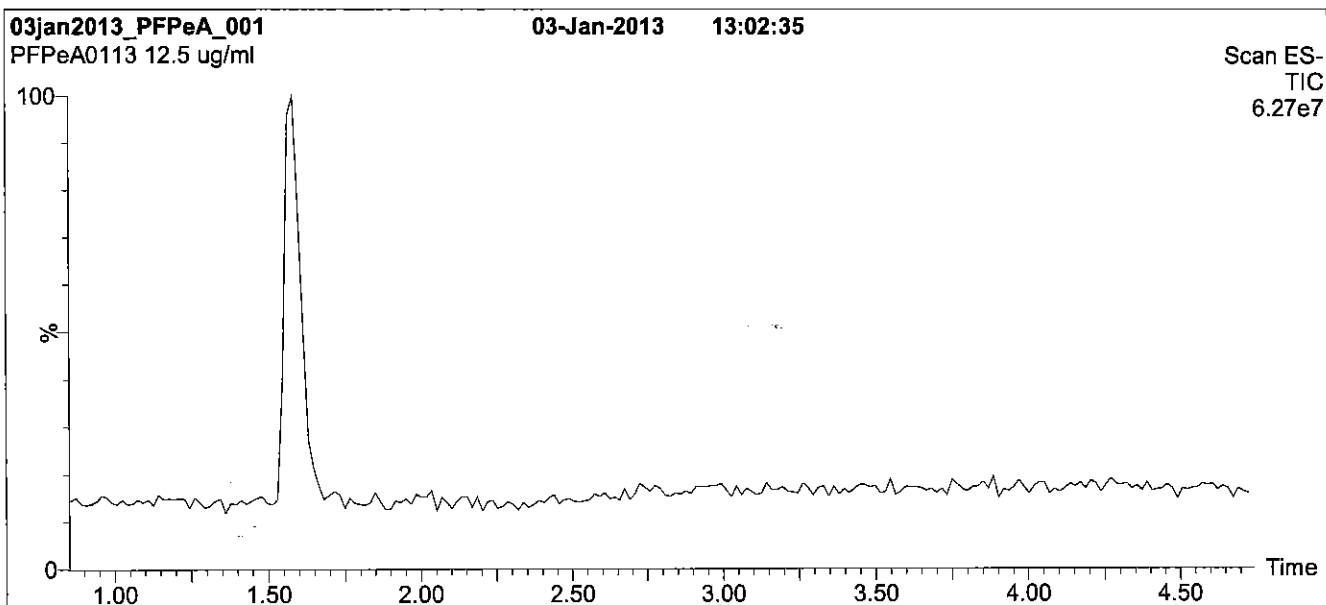
QUALITY MANAGEMENT:

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Figure 1: PFPeA; LC/MS Data (TIC and Mass Spectrum)



Conditions for Figure 1:

LC: Waters Acquity Ultra Performance LC
MS: Micromass Quattro micro API MS

Chromatographic Conditions

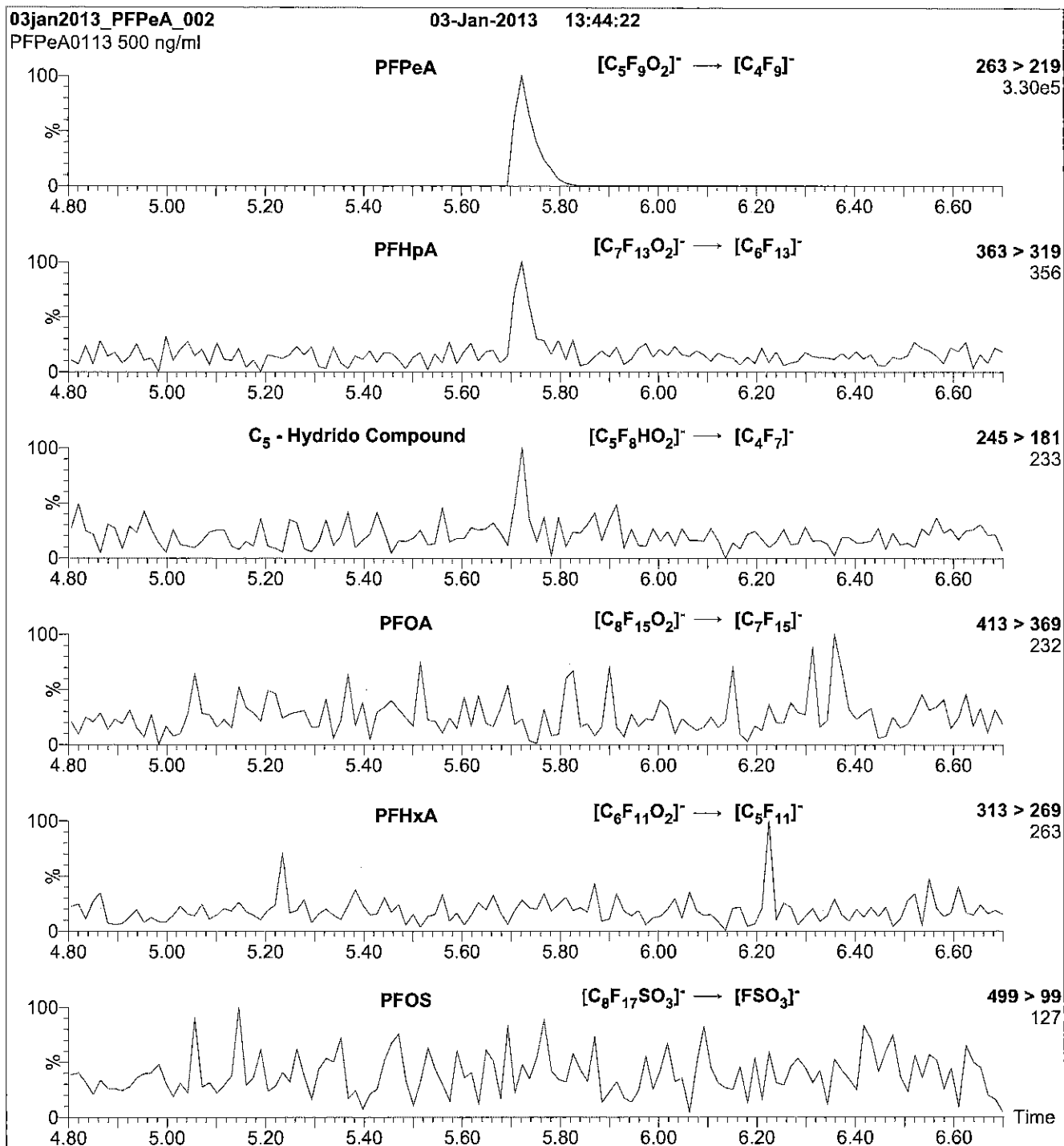
Column: Acquity UPLC BEH Shield RP₁₈
1.7 μ m, 2.1 x 100 mm

Mobile phase: Gradient
Start: 40% (80:20 MeOH:ACN) / 60% H₂O
(both with 10 mM NH₄OAc buffer)
Ramp to 90% organic over 7 min and hold for 2 min
before returning to initial conditions in 0.5 min.
Time: 10 min
Flow: 300 μ l/min

MS Parameters

Experiment: Full Scan (150 - 850 amu)
Source: Electrospray (negative)
Capillary Voltage (kV) = 2.00
Cone Voltage (V) = 15.00
Cone Gas Flow (l/hr) = 60
Desolvation Gas Flow (l/hr) = 750

Figure 2: PFPeA; LC/MS/MS Data (Selected MRM Transitions)



Conditions for Figure 2:

Injection: Direct loop injection
10 μ l (500 ng/ml PFPeA)

Mobile phase: Isocratic 70% (80:20 MeOH:ACN) / 30% H₂O
(both with 10 mM NH₄OAc buffer)

Flow: 300 μ l/min

MS Parameters

Collision Gas (mbar) = 3.35e-3
Collision Energy (eV) = 9

Reagent

LCPFPeA_00004



WELLINGTON LABORATORIES

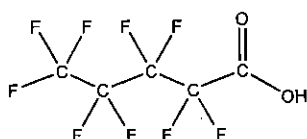
CERTIFICATE OF ANALYSIS DOCUMENTATION

PRODUCT CODE: PFPeA
COMPOUND: Perfluoro-n-pentanoic acid

LOT NUMBER: PFPeA0115

STRUCTURE:

CAS #: 2706-90-3



MOLECULAR FORMULA: $C_5H_2F_8O_2$
CONCENTRATION: $50 \pm 2.5 \mu\text{g/ml}$

MOLECULAR WEIGHT: 264.05
SOLVENT(S): Methanol
Water (<1%)

CHEMICAL PURITY: >98%
LAST TESTED: (mm/dd/yyyy) 01/30/2015
EXPIRY DATE: (mm/dd/yyyy) 01/30/2020
RECOMMENDED STORAGE: Store ampoule in a cool, dark place

DOCUMENTATION/ DATA ATTACHED:

Figure 1: LC/MS Data (TIC and Mass Spectrum)
Figure 2: LC/MS/MS Data (Selected MRM Transitions)

ADDITIONAL INFORMATION:

- See page 2 for further details.
- Contains 4 mole eq. of NaOH to prevent conversion of the carboxylic acid to the methyl ester.
- Contains ~ 0.3% of Perfluoro-n-heptanoic acid (PFHpA) and ~ 0.2% of $C_5H_2F_8O_2$ (hydrido - derivative) as measured by ^{19}F NMR.

FOR LABORATORY USE ONLY: NOT FOR HUMAN OR DRUG USE

Certified By:


B.G. Chittim

Date: 03/26/2015
(mm/dd/yyyy)

Wellington Laboratories Inc., 345 Southgate Dr. Guelph ON N1G 3M5 CANADA
519-822-2436 • Fax: 519-822-2849 • info@well-labs.com

INTENDED USE:

The products prepared by Wellington Laboratories Inc. are for laboratory use only. This certified reference material (CRM) was designed to be used as a standard for the identification and/or quantification of the specific chemical compound it contains.

HAZARDS:

This product should only be used by qualified personnel familiar with its potential hazards and trained in the handling of hazardous chemicals. Due care should be exercised to prevent unnecessary human contact or ingestion. All procedures should be carried out in a well-functioning fume hood and suitable gloves, eye protection, and clothing should be worn at all times. Waste should be disposed of according to national and regional regulations. Safety Data Sheets (SDSs) are available upon request.

SYNTHESIS / CHARACTERIZATION:

Where possible, all of our products are synthesized using single-product unambiguous routes. They are then characterized, and their structures and purities confirmed, using a combination of the most relevant techniques, such as NMR, GC/MS, LC/MS/MS, SFC/UV/MS/MS, x-ray crystallography, and melting point. Isotopic purities of mass-labelled compounds are also confirmed using HRGC/HRMS and/or LC/MS/MS.

HOMOGENEITY:

Prior to solution preparation, crystalline material is tested for homogeneity using a variety of techniques (as stated above) and its solubility in a given diluent is taken into consideration. Duplicate solutions of a new product are prepared from the same crystalline lot and, after the addition of an appropriate internal standard, they are compared by GC/MS, LC/MS/MS and/or SFC/UV/MS/MS. The relative response factors of the analyte of interest in each solution are required to be <5% RSD. New solution lots of existing products are compared to older lots in the same manner, which further confirms the homogeneity of the crystalline material as well as the stability and homogeneity of the solutions in the storage containers.

UNCERTAINTY:

The maximum combined relative standard uncertainty of our reference standard solutions is calculated using the following equation:

The combined relative standard uncertainty, $u_c(y)$, of a value y and the uncertainty of the independent parameters

x_1, x_2, \dots, x_n on which it depends is:

$$u_c(y(x_1, x_2, \dots, x_n)) = \sqrt{\sum_{i=1}^n u(y, x_i)^2}$$

where x is expressed as a relative standard uncertainty of the individual parameter.

The individual uncertainties taken into account include those associated with weights (calibration of the balance) and volumes (calibration of the volumetric glassware). An expanded maximum combined percent relative uncertainty of $\pm 5\%$ (calculated with a coverage factor of 2 and a level of confidence of 95%) is stated on the Certificate of Analysis for all of our products.

TRACEABILITY:

All reference standard solutions are traceable to specific crystalline lots. The microbalances used for solution preparation are regularly tested by an external ISO/IEC 17025 accredited calibration company. In addition, their calibration is verified prior to each weighing using NIST and/or NRC traceable external weights. All volumetric glassware used is of Class A tolerance and has been tested according to the appropriate ASTM procedures, which are ultimately traceable to NIST. For certain products, traceability to international interlaboratory studies has also been established.

EXPIRY DATE / PERIOD OF VALIDITY:

Ongoing stability studies of this product have demonstrated stability in its composition and concentration, until the specified expiry date, in the unopened ampoule. Monitoring for any degradation or change in concentration of the listed analyte(s) is performed on a routine basis.

LIMITED WARRANTY:

At the time of shipment, all products are warranted to be free of defects in material and workmanship and to conform to the stated technical and purity specifications.

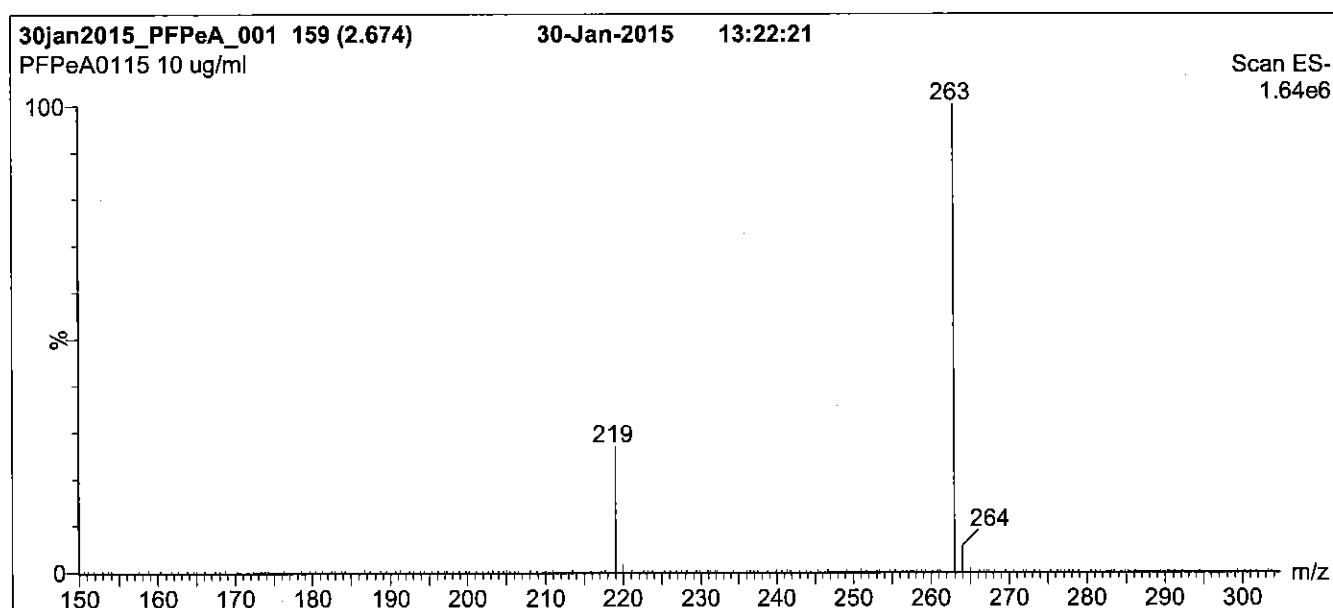
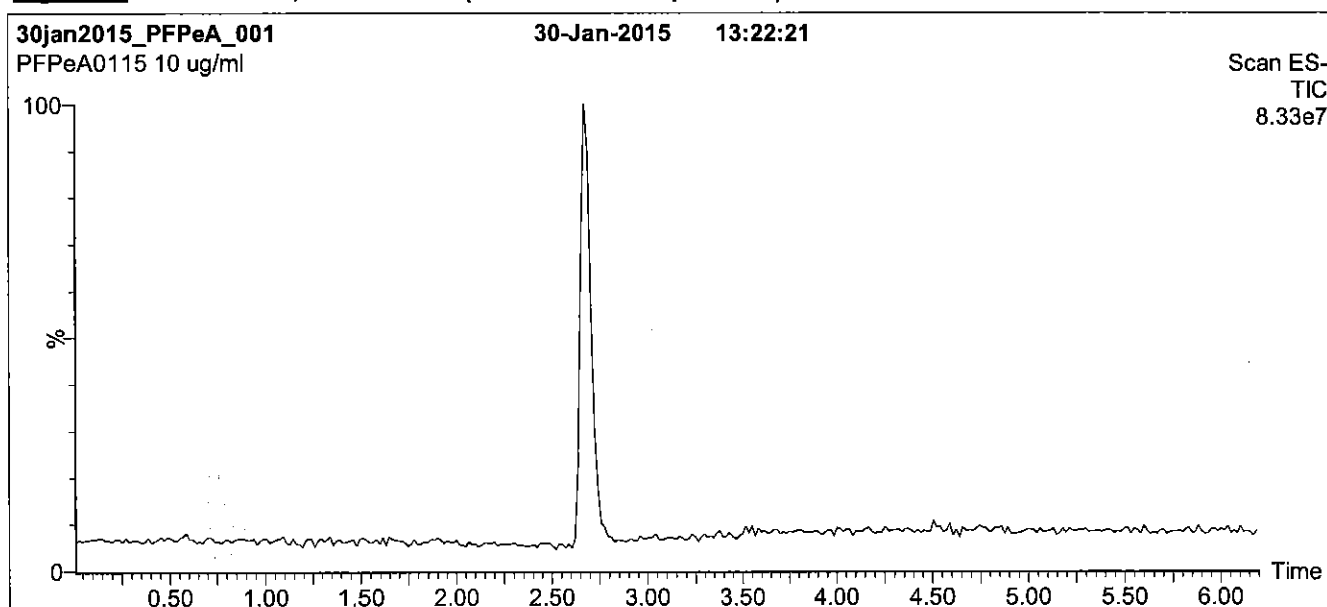
QUALITY MANAGEMENT:

This product was produced using a Quality Management System registered to the latest versions of ISO 9001 by SAI Global, ISO/IEC 17025 by the Canadian Association for Laboratory Accreditation Inc. (CALA; A 1226), and ISO GUIDE 34 by ANSI-ASQ National Accreditation Board (ANAB; AR-1523).



****For additional information or assistance concerning this or any other products from Wellington Laboratories Inc., please visit our website at www.well-labs.com or contact us directly at info@well-labs.com****

Figure 1: PFPeA; LC/MS Data (TIC and Mass Spectrum)



Conditions for Figure 1:

LC: Waters Acquity Ultra Performance LC
MS: Micromass Quattro *micro* API MS

Chromatographic Conditions

Column: Acquity UPLC BEH Shield RP₁₈
1.7 μ m, 2.1 x 100 mm

Mobile phase: Gradient
Start: 30% (80:20 MeOH:ACN) / 70% H₂O
(both with 10 mM NH₄OAc buffer)
Ramp to 90% organic over 7.5 min and hold for 1 min
before returning to initial conditions in 0.5 min.
Time: 10 min

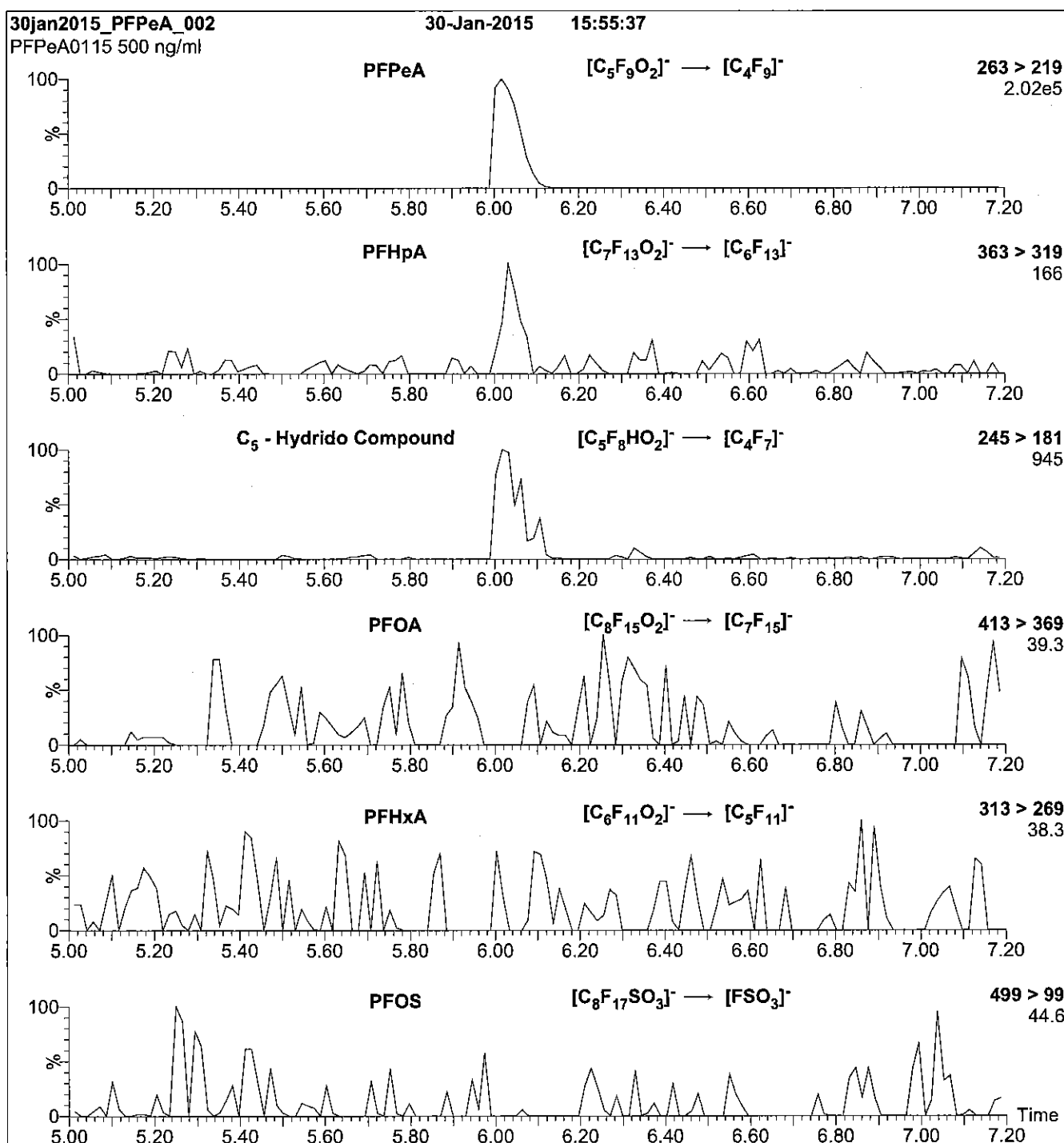
Flow: 300 μ l/min

MS Parameters

Experiment: Full Scan (150 - 850 amu)

Source: Electrospray (negative)
Capillary Voltage (kV) = 2.00
Cone Voltage (V) = 15.00
Cone Gas Flow (l/hr) = 60
Desolvation Gas Flow (l/hr) = 750

Figure 2: PFPeA; LC/MS/MS Data (Selected MRM Transitions)



Conditions for Figure 2:

Injection: Direct loop injection
10 μ l (500 ng/ml PFPeA)

Mobile phase: Isocratic 80% (80:20 MeOH:ACN) / 20% H₂O
(both with 10 mM NH₄OAc buffer)

Flow: 300 μ l/min

MS Parameters

Collision Gas (mbar) = 3.35e-3
Collision Energy (eV) = 9

Reagent

LCFPeS_00002



WELLINGTON LABORATORIES

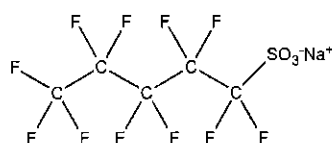
CERTIFICATE OF ANALYSIS DOCUMENTATION

PRODUCT CODE: L-PFPeS
COMPOUND: Sodium perfluoro-1-pentanesulfonate

LOT NUMBER: LPFPeS0712

STRUCTURE:

CAS #: Not available



MOLECULAR FORMULA: $C_5F_{11}SO_3Na$
CONCENTRATION: $50.0 \pm 2.5 \mu\text{g/ml}$ (Na salt)
 $46.9 \pm 2.3 \mu\text{g/ml}$ (PFPeS anion)
CHEMICAL PURITY: >98%
LAST TESTED: (mm/dd/yyyy) 07/04/2012
EXPIRY DATE: (mm/dd/yyyy) 07/04/2017
RECOMMENDED STORAGE: Store ampoule in a cool, dark place

MOLECULAR WEIGHT: 372.09
SOLVENT(S): Methanol

DOCUMENTATION/ DATA ATTACHED:

Figure 1: LC/MS Data (TIC and Mass Spectrum)
Figure 2: LC/MS/MS Data (Selected MRM Transitions)

ADDITIONAL INFORMATION:

- See page 2 for further details.

FOR LABORATORY USE ONLY: NOT FOR HUMAN OR DRUG USE

Certified By:

B.G. Chittim

Date: 01/15/2013

(mm/dd/yyyy)

Wellington Laboratories Inc., 345 Southgate Dr. Guelph ON N1G 3M5 CANADA
519-822-2436 • Fax: 519-822-2849 • info@well-labs.com

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LIMITED WARRANTY:

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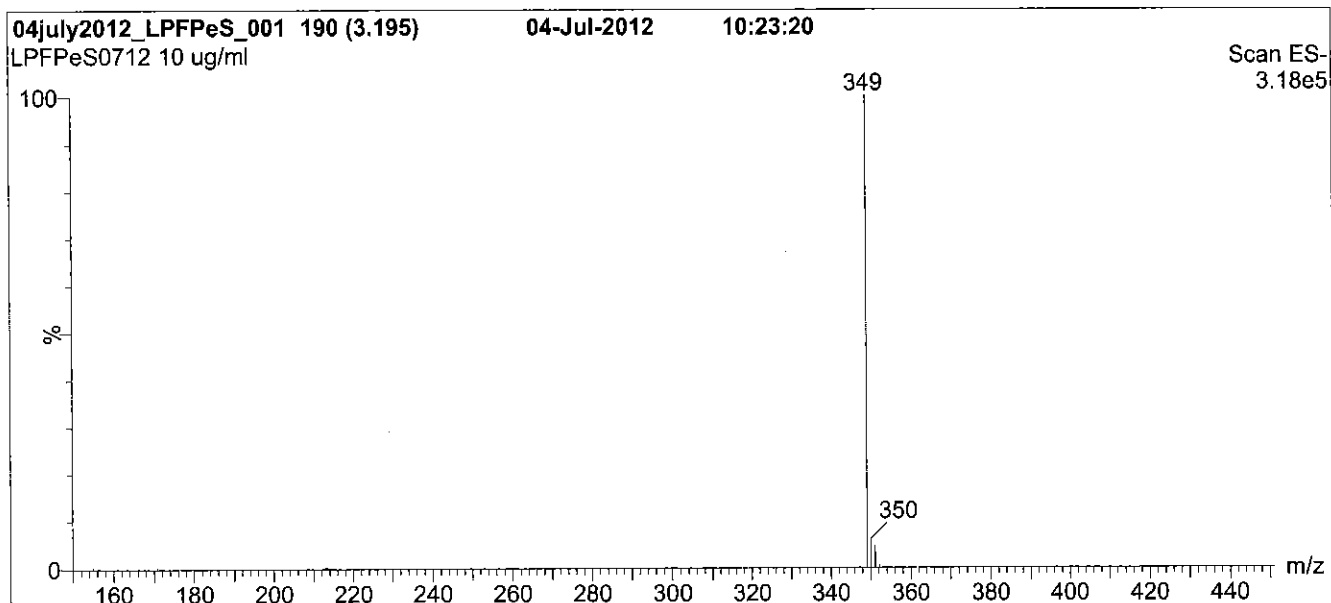
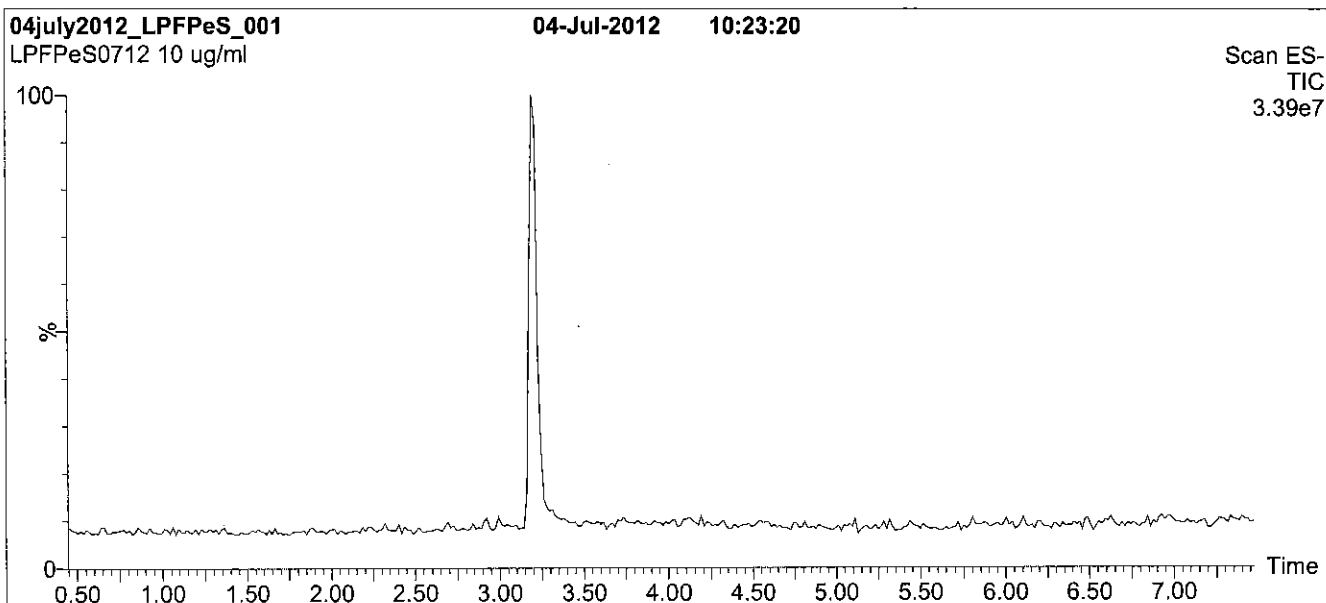
QUALITY MANAGEMENT:

This product was produced using a Quality Management System registered to ISO 9001:2008 by SAI Global, ISO/IEC 17025:2005 by the Canadian Association for Laboratory Accreditation Inc. (CALA; A 1226), and ISO GUIDE 34:2009 by ACLASS (certificate number AR-1523).



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Figure 1: L-PFPeS; LC/MS Data (TIC and Mass Spectrum)



Conditions for Figure 1:

LC: Waters Acquity Ultra Performance LC
MS: Micromass Quattro *micro* API MS

Chromatographic Conditions

Column: Acquity UPLC BEH Shield RP₁₈
1.7 μ m, 2.1 x 100 mm

Mobile phase: Gradient
Start: 40% (80:20 MeOH:ACN) / 60% H₂O
(both with 10 mM NH₄OAc buffer)
Ramp to 90% organic over 7 min and hold for 1.5 min
before returning to initial conditions over 0.5 min.
Time: 10 min

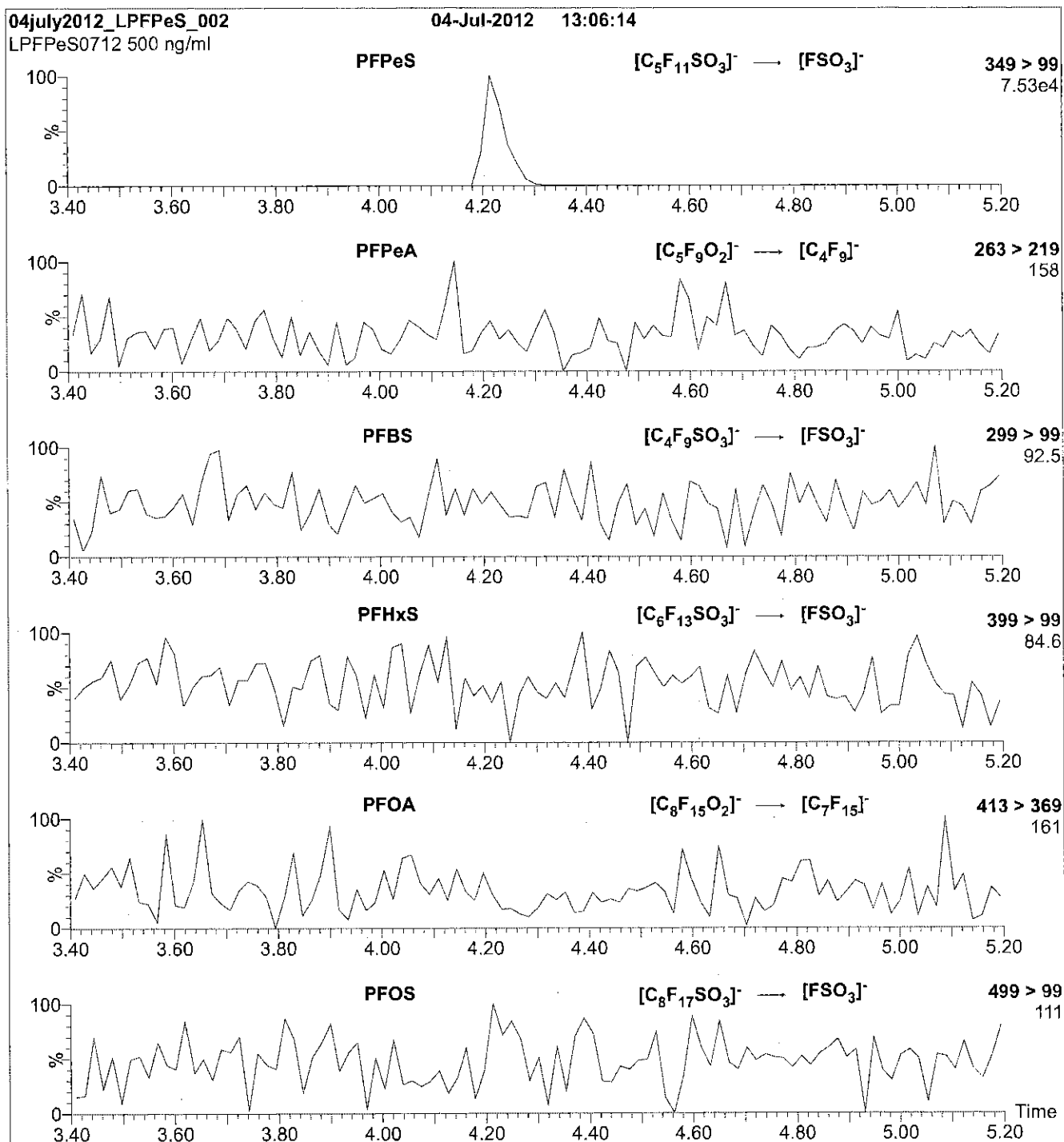
Flow: 300 μ l/min

MS Parameters

Experiment: Full Scan (150 - 850 amu)

Source: Electrospray (negative)
Capillary Voltage (kV) = 3.00
Cone Voltage (V) = 50.00
Cone Gas Flow (l/hr) = 60
Desolvation Gas Flow (l/hr) = 750

Figure 2: L-PFPeS; LC/MS/MS Data (Selected MRM Transitions)



Conditions for Figure 2:

Injection: Direct loop injection
10 μ l (500 ng/ml L-PFPeS)

Mobile phase: Isocratic 80% (80:20 MeOH:ACN) / 20% H₂O
(both with 10 mM NH₄OAc buffer)

Flow: 300 μ l/min

MS Parameters

Collision Gas (mbar) = 3.66e-3
Collision Energy (eV) = 30

Reagent

LCPFTeDA_00003

vs 2/11/15 srw

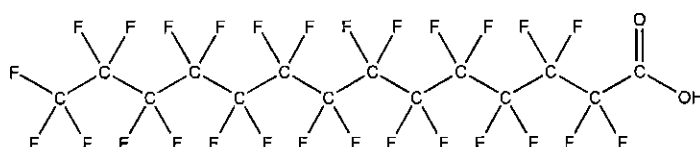


WELLINGTON LABORATORIES

CERTIFICATE OF ANALYSIS DOCUMENTATION

PRODUCT CODE: PFTeDA **LOT NUMBER:** PFTeDA0613
COMPOUND: Perfluoro-n-tetradecanoic acid

STRUCTURE: **CAS #:** 376-06-7



MOLECULAR FORMULA: $C_{14}HF_{27}O_2$ **MOLECULAR WEIGHT:** 714.11
CONCENTRATION: $50 \pm 2.5 \mu\text{g/ml}$ **SOLVENT(S):** Methanol
Water (<1%)
CHEMICAL PURITY: >98%
LAST TESTED: (mm/dd/yyyy) 06/19/2013
EXPIRY DATE: (mm/dd/yyyy) 06/19/2018
RECOMMENDED STORAGE: Store ampoule in a cool, dark place

DOCUMENTATION/ DATA ATTACHED:

Figure 1: LC/MS Data (TIC and Mass Spectrum)
Figure 2: LC/MS/MS Data (Selected MRM Transitions)

ADDITIONAL INFORMATION:

- See page 2 for further details.
- Contains 4 mole eq. of NaOH to prevent conversion of the carboxylic acid to the methyl ester.
- Contains ~ 0.2% of PFDoA ($C_{12}HF_{23}O_2$) and ~ 0.2% of PFPeDA ($C_{15}HF_{29}O_2$).

FOR LABORATORY USE ONLY: NOT FOR HUMAN OR DRUG USE

Certified By:

B.G. Chittim

Date: 07/17/2013

(mm/dd/yyyy)

Wellington Laboratories Inc., 345 Southgate Dr. Guelph ON N1G 3M5 CANADA
519-822-2436 • Fax: 519-822-2849 • info@well-labs.com

INTENDED USE:

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HAZARDS:

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SYNTHESIS / CHARACTERIZATION:

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TRACEABILITY:

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EXPIRY DATE / PERIOD OF VALIDITY:

Ongoing stability studies of this product have demonstrated stability in its composition and concentration for the period of time specified by the expiry date in the unopened ampoule. Monitoring for any degradation or change in concentration of the listed analyte(s) is performed on a routine basis.

LIMITED WARRANTY:

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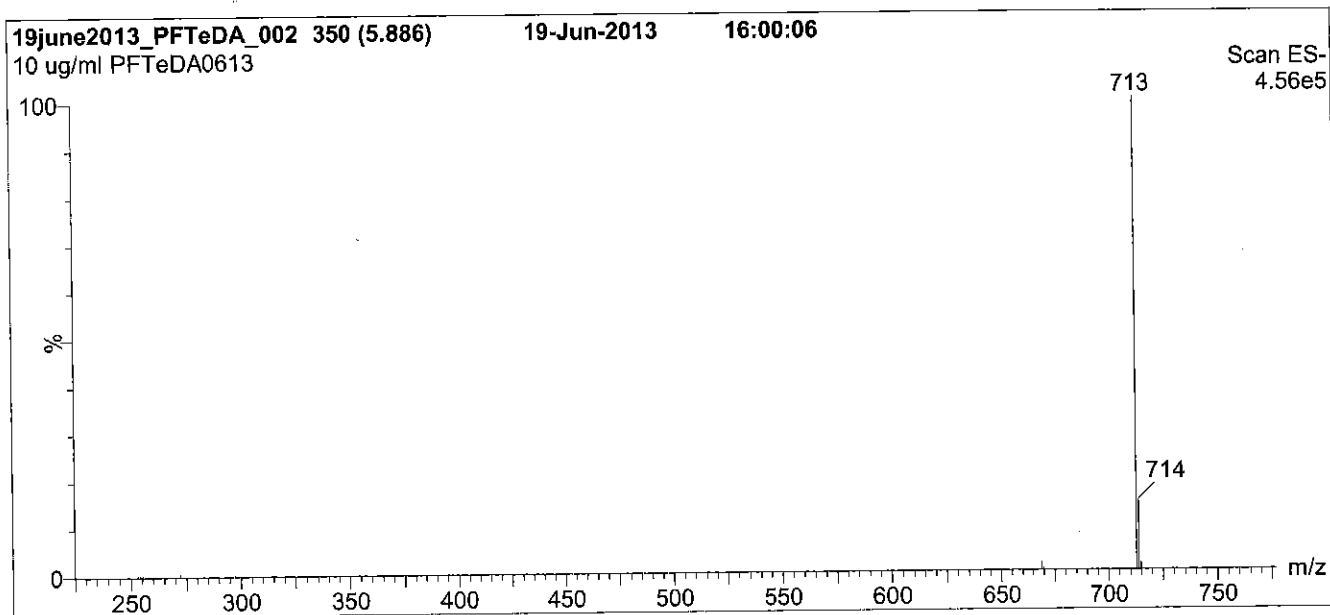
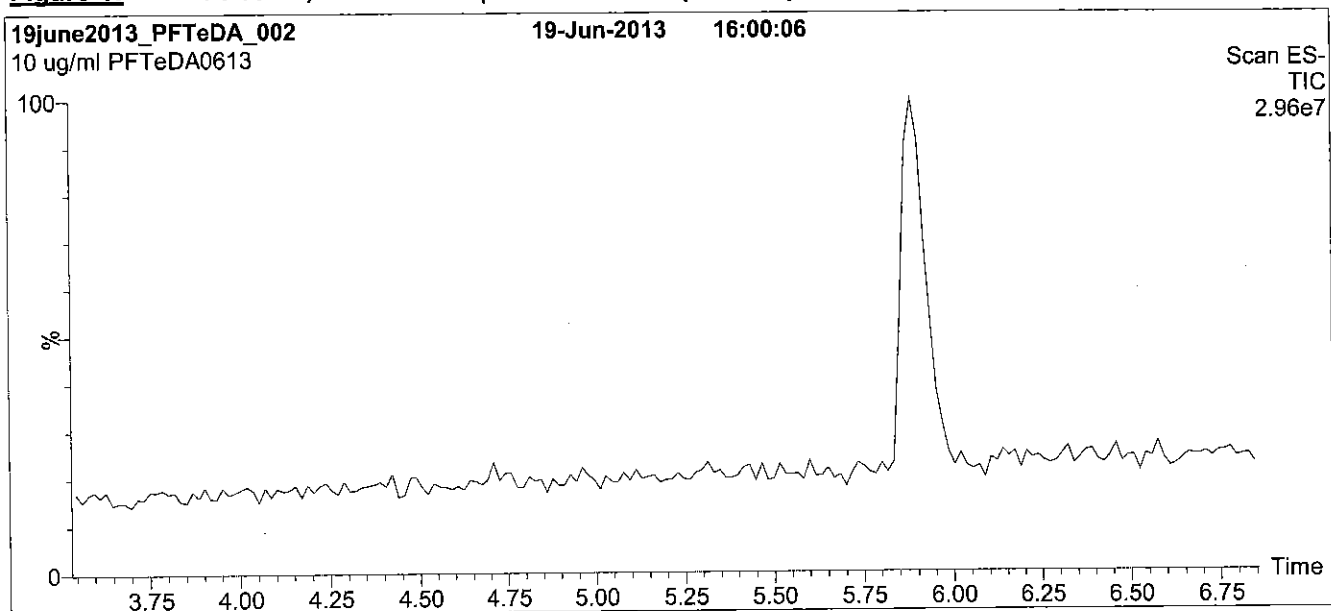
QUALITY MANAGEMENT:

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Figure 1: PFTeDA; LC/MS Data (TIC and Mass Spectrum)



Conditions for Figure 1:

LC: Waters Acquity Ultra Performance LC
MS: Micromass Quattro micro API MS

Chromatographic Conditions

Column: Acquity UPLC BEH Shield RP₁₈
1.7 μ m, 2.1 x 100 mm

Mobile phase: Gradient
Start: 60% (80:20 MeOH:ACN) / 40% H₂O
(both with 10 mM NH₄OAc buffer)
Ramp to 90% organic over 7 min and hold for 1.5 min
before returning to initial conditions in 0.50 min.
Time: 10 min

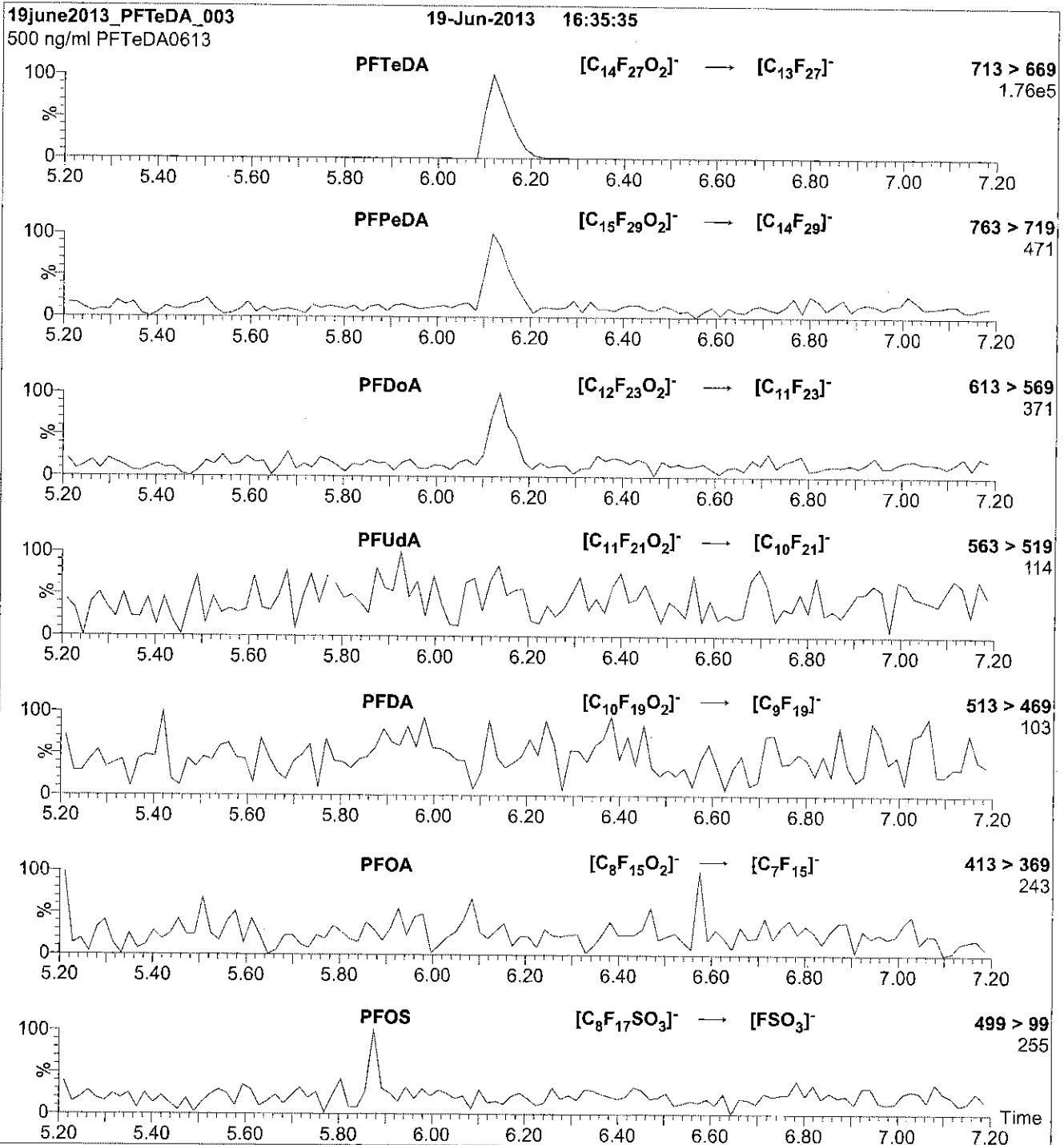
Flow: 300 μ l/min

MS Parameters

Experiment: Full Scan (225 - 850 amu)

Source: Electrospray (negative)
Capillary Voltage (kV) = 2.00
Cone Voltage (V) = 15.00
Cone Gas Flow (l/hr) = 60
Desolvation Gas Flow (l/hr) = 750

Figure 2: PFTeDA; LC/MS/MS Data (Selected MRM Transitions)



Conditions for Figure 2:

Injection: Direct loop injection
10 μ l (500 ng/ml PFTeDA)

Mobile phase: Isocratic 80% (80:20 MeOH:ACN) / 20% H_2O
(both with 10 mM NH_4OAc buffer)

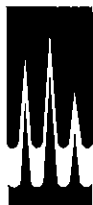
Flow: 300 μ l/min

MS Parameters

Collision Gas (mbar) = 3.50e-3
Collision Energy (eV) = 14

Reagent

LCPFT_rDA_00003



WELLINGTON LABORATORIES

CERTIFICATE OF ANALYSIS DOCUMENTATION

PRODUCT CODE:

PFTTrDA

LOT NUMBER:

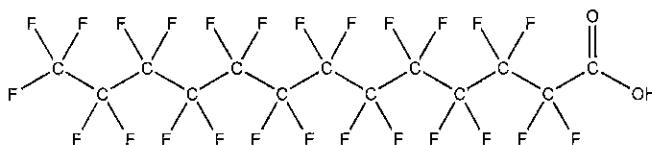
PFTTrDA1213

COMPOUND:

Perfluoro-n-tridecanoic acid

STRUCTURE:**CAS #:**

72629-94-8

**MOLECULAR FORMULA:** $C_{13}H_{26}O_2$ **MOLECULAR WEIGHT:**

664.11

CONCENTRATION: $50 \pm 2.5 \mu\text{g/ml}$ **SOLVENT(S):**

Methanol

Water (<1%)

CHEMICAL PURITY:

>98%

LAST TESTED: (mm/dd/yyyy)

12/10/2013

EXPIRY DATE: (mm/dd/yyyy)

12/10/2018

RECOMMENDED STORAGE:

Store ampoule in a cool, dark place

DOCUMENTATION/ DATA ATTACHED:

Figure 1: LC/MS Data (TIC and Mass Spectrum)

Figure 2: LC/MS/MS Data (Selected MRM Transitions)

ADDITIONAL INFORMATION:

- See page 2 for further details.
- Contains 4 mole eq. of NaOH to prevent conversion of the carboxylic acid to the methyl ester.
- Contains ~ 0.1% of PFUDA ($C_{11}H_{21}O_2$), ~ 0.4% of PFDa ($C_{12}H_{23}O_2$), and ~ 0.1% of PFTeDA ($C_{14}H_{27}O_2$).

FOR LABORATORY USE ONLY: NOT FOR HUMAN OR DRUG USE

Certified By:

B.G. Chittim

Date: 12/11/2013

(mm/dd/yyyy)

Wellington Laboratories Inc., 345 Southgate Dr. Guelph ON N1G 3M5 CANADA
519-822-2436 • Fax: 519-822-2849 • info@well-labs.com

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QUALITY MANAGEMENT:

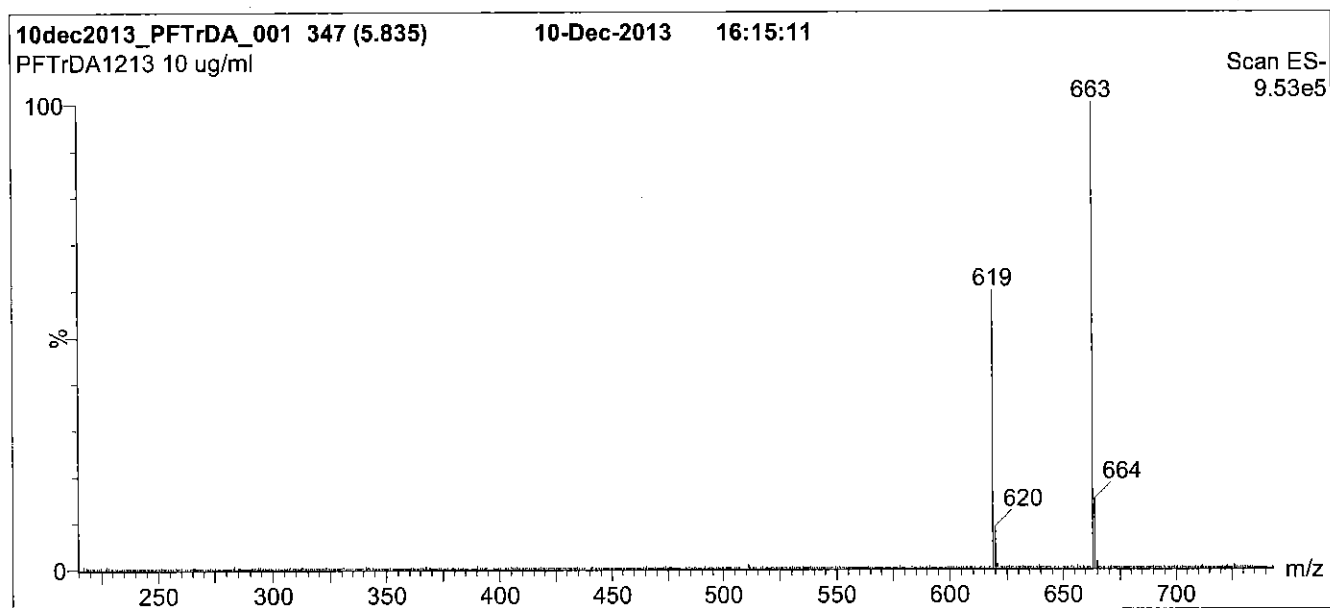
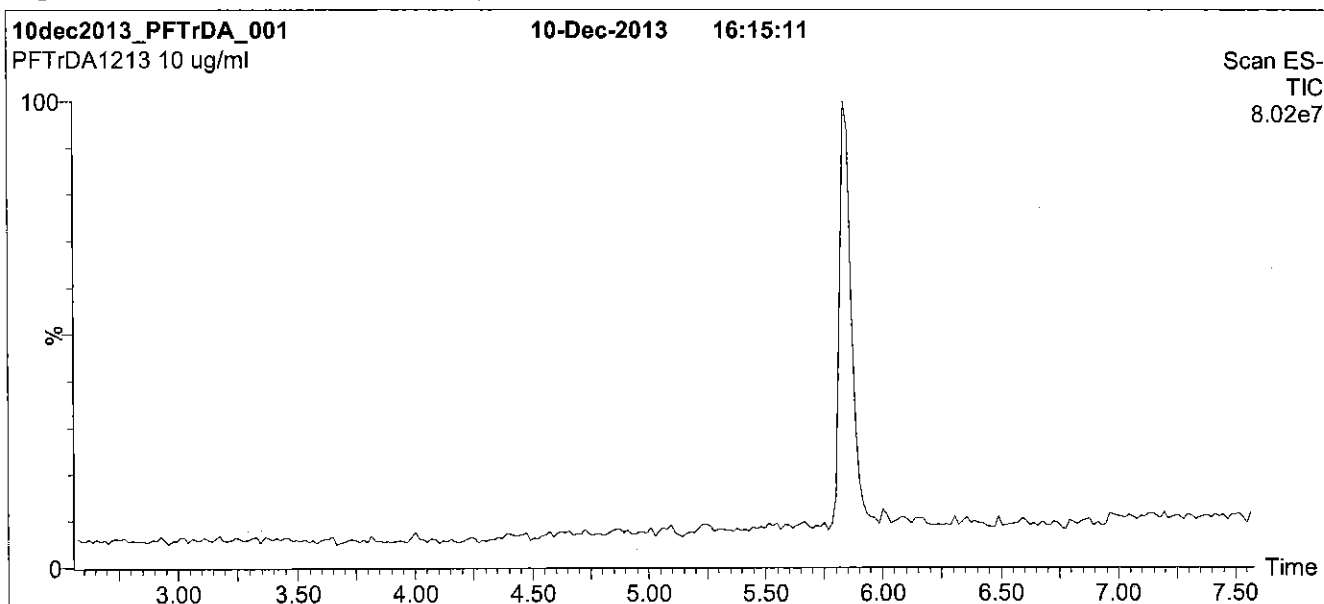
This product was produced using a Quality Management System registered to ISO 9001:2008 by SAI Global, ISO/IEC 17025:2005 by the Canadian Association for Laboratory Accreditation Inc. (CALA; A 1226), and ISO GUIDE 34:2009 by ACLASS (certificate number AR-1523).



REFERENCE MATERIAL PRODUCER

For additional information or assistance concerning this or any other products from Wellington Laboratories Inc., please visit our website at www.well-labs.com or contact us directly at info@well-labs.com

Figure 1: PFTrDA; LC/MS Data (TIC and Mass Spectrum)



Conditions for Figure 1:

LC: Waters Acquity Ultra Performance LC
MS: Micromass Quattro micro API MS

Chromatographic Conditions

Column: Acquity UPLC BEH Shield RP₁₈
1.7 μ m, 2.1 x 100 mm

Mobile phase: Gradient
Start: 60% (80:20 MeOH:ACN) / 40% H₂O
(both with 10 mM NH₄OAc buffer)
Ramp to 90% organic over 7 min and hold for 1.5 min
before returning to initial conditions in 0.5 min.
Time: 10 min

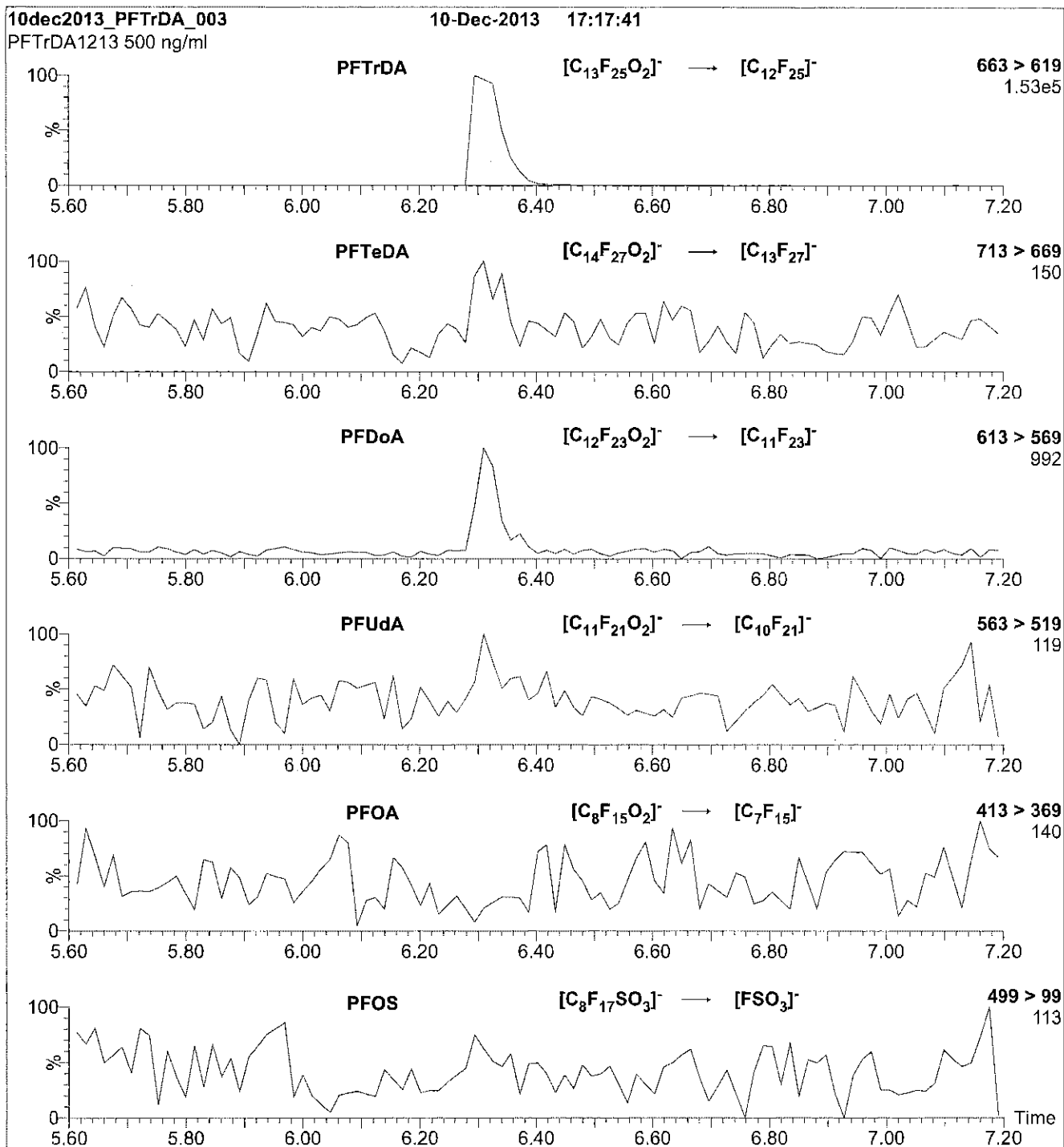
Flow: 300 μ l/min

MS Parameters

Experiment: Full Scan (215 - 850 amu)

Source: Electrospray (negative)
Capillary Voltage (kV) = 2.00
Cone Voltage (V) = 22.00
Cone Gas Flow (l/hr) = 60
Desolvation Gas Flow (l/hr) = 650

Figure 2: PFTrDA; LC/MS/MS Data (Selected MRM Transitions)



Conditions for Figure 2:

Injection: Direct loop injection
10 μ l (500 ng/ml PFTTrDA)

Mobile phase: Isocratic 80% (80:20 MeOH:ACN) / 20% H_2O
(both with 10 mM NH_4OAc buffer)

Flow: 300 μ l/min

MS Parameters

Collision Gas (mbar) = 3.28e-3
Collision Energy (eV) = 15

Reagent

LCPFUdA_00003

PC 2/11/15 SFV



WELLINGTON LABORATORIES

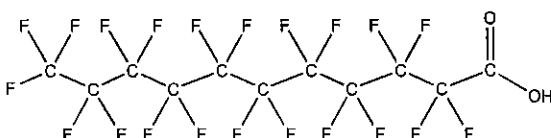
CERTIFICATE OF ANALYSIS DOCUMENTATION

PRODUCT CODE: PFUdA
COMPOUND: Perfluoro-n-undecanoic acid

LOT NUMBER: PFUdA0613

STRUCTURE:

CAS #: 2058-94-8



MOLECULAR FORMULA: $C_{11}HF_{21}O_2$
CONCENTRATION: $50 \pm 2.5 \mu\text{g/ml}$

MOLECULAR WEIGHT: 564.09
SOLVENT(S): Methanol
Water (<1%)

CHEMICAL PURITY: >98%
LAST TESTED: (mm/dd/yyyy) 06/19/2013
EXPIRY DATE: (mm/dd/yyyy) 06/19/2018
RECOMMENDED STORAGE: Store ampoule in a cool, dark place

DOCUMENTATION/ DATA ATTACHED:

Figure 1: LC/MS Data (TIC and Mass Spectrum)
Figure 2: LC/MS/MS Data (Selected MRM Transitions)

ADDITIONAL INFORMATION:

- See page 2 for further details.
- Contains 4 mole eq. of NaOH to prevent conversion of the carboxylic acid to the methyl ester.

FOR LABORATORY USE ONLY: NOT FOR HUMAN OR DRUG USE

Certified By:

B.G. Chittim

Date: 07/03/2013
(mm/dd/yyyy)

Wellington Laboratories Inc., 345 Southgate Dr. Guelph ON N1G 3M5 CANADA
519-822-2436 • Fax: 519-822-2849 • info@well-labs.com

INTENDED USE:

The products prepared by Wellington Laboratories Inc. are for laboratory use only. They are designed to be used as reference standards for the identification and/or quantification of specific chemical compound(s).

HAZARDS:

This product should only be used by qualified personnel familiar with its potential hazards and trained in the handling of hazardous chemicals. Due care should be exercised to prevent unnecessary human contact or ingestion. All procedures should be carried out in a well-functioning fume hood and suitable gloves, eye protection and clothing should be worn at all times. Waste should be disposed of according to national and regional regulations. Material Safety Data Sheets (MSDSs) are available upon request.

SYNTHESIS / CHARACTERIZATION:

Where possible, all of our products are synthesized using single-product, unambiguous routes. They are then characterized, and their structures and purities confirmed, using a combination of the most relevant techniques, such as NMR, GC/MS, LC/MS/MS, x-ray crystallography and melting point. Isotopic purities of mass-labelled compounds are also confirmed using HRGC/HRMS and/or LC/MS/MS.

HOMOGENEITY:

Prior to solution preparation, crystalline material is tested for homogeneity using a variety of techniques (as stated above) and its solubility in a given diluent is taken into consideration. Duplicate solutions of a new product are prepared from the same crystalline lot and, after the addition of an appropriate internal standard, they are compared by GC/MS and/or LC/MS/MS. The relative response factors of the analyte of interest in each solution are required to be <5% RSD. New solution lots of existing products are compared to older lots in the same manner, which further confirms the homogeneity of the crystalline material as well as the stability and homogeneity of the solutions in the storage containers.

UNCERTAINTY:

The maximum combined relative standard uncertainty of our reference standard solutions is calculated using the following equation:

The combined relative standard uncertainty, $u_c(y)$, of a value y and the uncertainty of the independent parameters

x_1, x_2, \dots, x_n on which it depends is:

$$u_c(y(x_1, x_2, \dots, x_n)) = \sqrt{\sum_{i=1}^n u(y, x_i)^2}$$

where x is expressed as a relative standard uncertainty of the individual parameter.

The individual uncertainties taken into account include those associated with weights (calibration of the balance) and volumes (calibration of the volumetric glassware). An expanded maximum combined percent relative uncertainty of $\pm 5\%$ (calculated with a coverage factor of 2 and a level of confidence of 95%) is stated on the Certificate of Analysis for all our products.

TRACEABILITY:

All reference standard solutions are traceable to specific crystalline lots. The microbalances used for solution preparation are regularly tested by an external, ISO/IEC 17025:2005 accredited calibration company. In addition, their calibration is verified prior to each weighing using NIST and/or NRC traceable external weights. All volumetric glassware used is of Class A tolerance and has been tested according to the appropriate ASTM procedures, which are ultimately traceable to NIST. For certain products, traceability to international interlaboratory studies has also been established.

EXPIRY DATE / PERIOD OF VALIDITY:

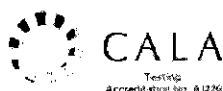
Ongoing stability studies of this product have demonstrated stability in its composition and concentration for the period of time specified by the expiry date in the unopened ampoule. Monitoring for any degradation or change in concentration of the listed analyte(s) is performed on a routine basis.

LIMITED WARRANTY:

At the time of shipment, all products are warranted to be free of defects in material and workmanship and to conform to the stated technical and purity specifications.

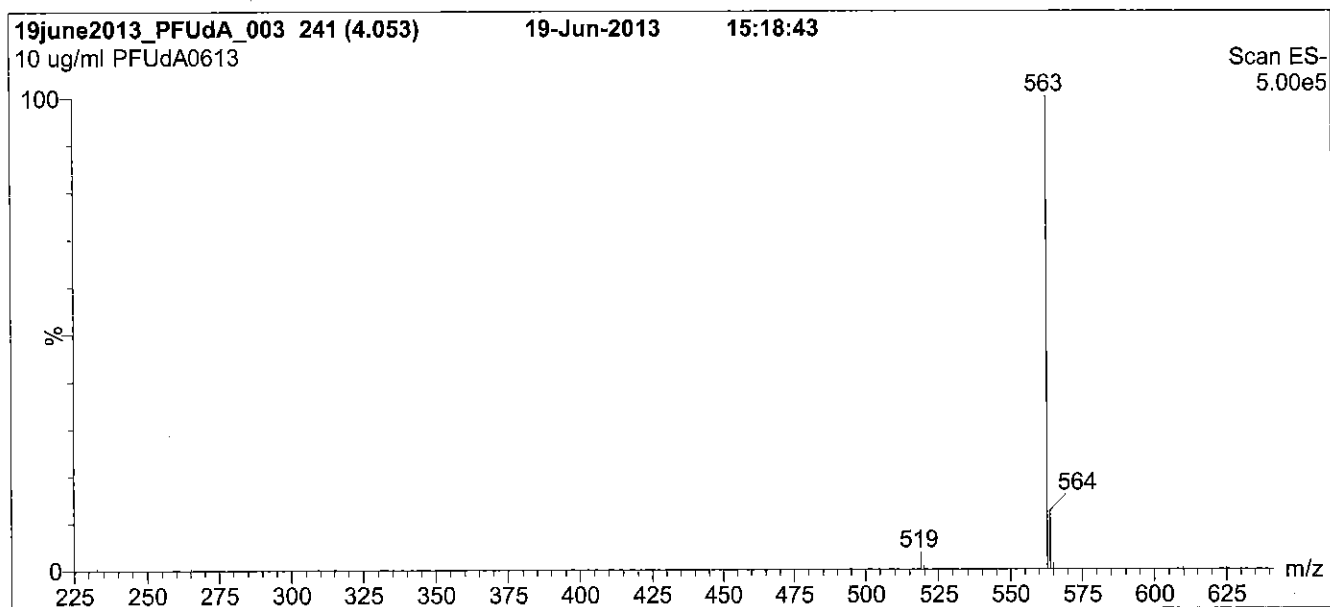
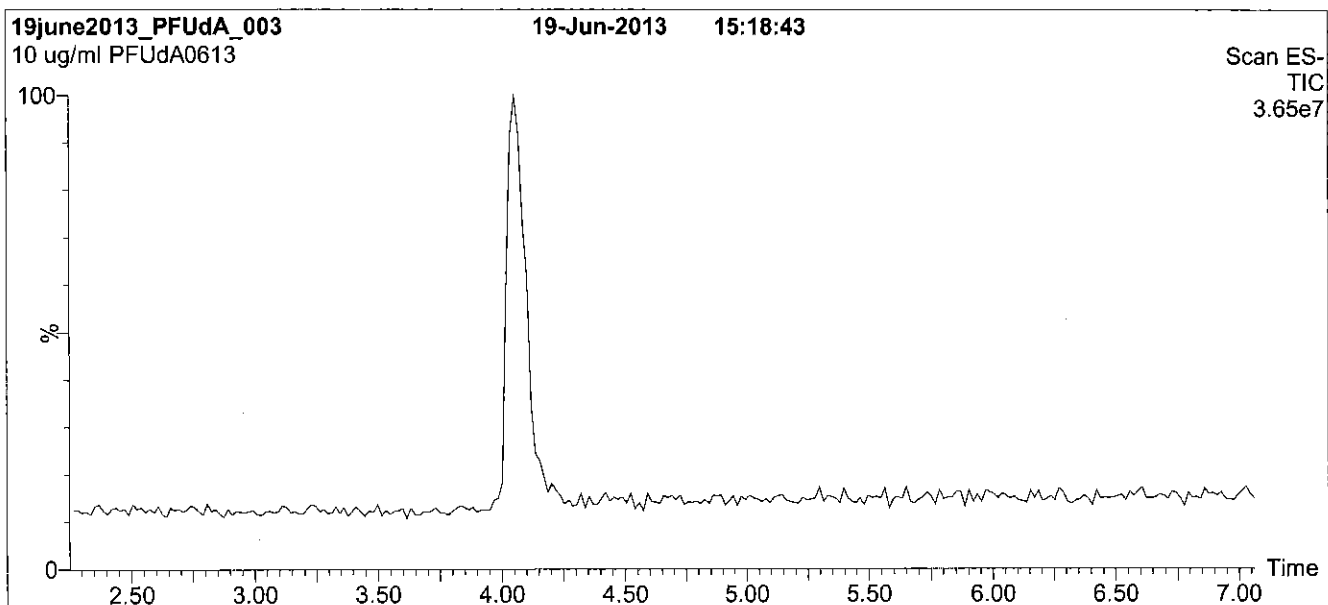
QUALITY MANAGEMENT:

This product was produced using a Quality Management System registered to ISO 9001:2008 by SAI Global, ISO/IEC 17025:2005 by the Canadian Association for Laboratory Accreditation Inc. (CALA; A 1226), and ISO GUIDE 34:2009 by ACLASS (certificate number AR-1523).



****For additional information or assistance concerning this or any other products from Wellington Laboratories Inc., please visit our website at www.well-labs.com or contact us directly at info@well-labs.com****

Figure 1: PFUdA; LC/MS Data (TIC and Mass Spectrum)



Conditions for Figure 1:

LC: Waters Acquity Ultra Performance LC
MS: Micromass Quattro *micro* API MS

Chromatographic Conditions

Column: Acquity UPLC BEH Shield RP₁₈
1.7 μ m, 2.1 x 100 mm

Mobile phase: Gradient
Start: 60% (80:20 MeOH:ACN) / 40% H₂O
(both with 10 mM NH₄OAc buffer)
Ramp to 90% organic over 7 min and hold for 1.5 min
before returning to initial conditions in 0.5 min.
Time: 10 min

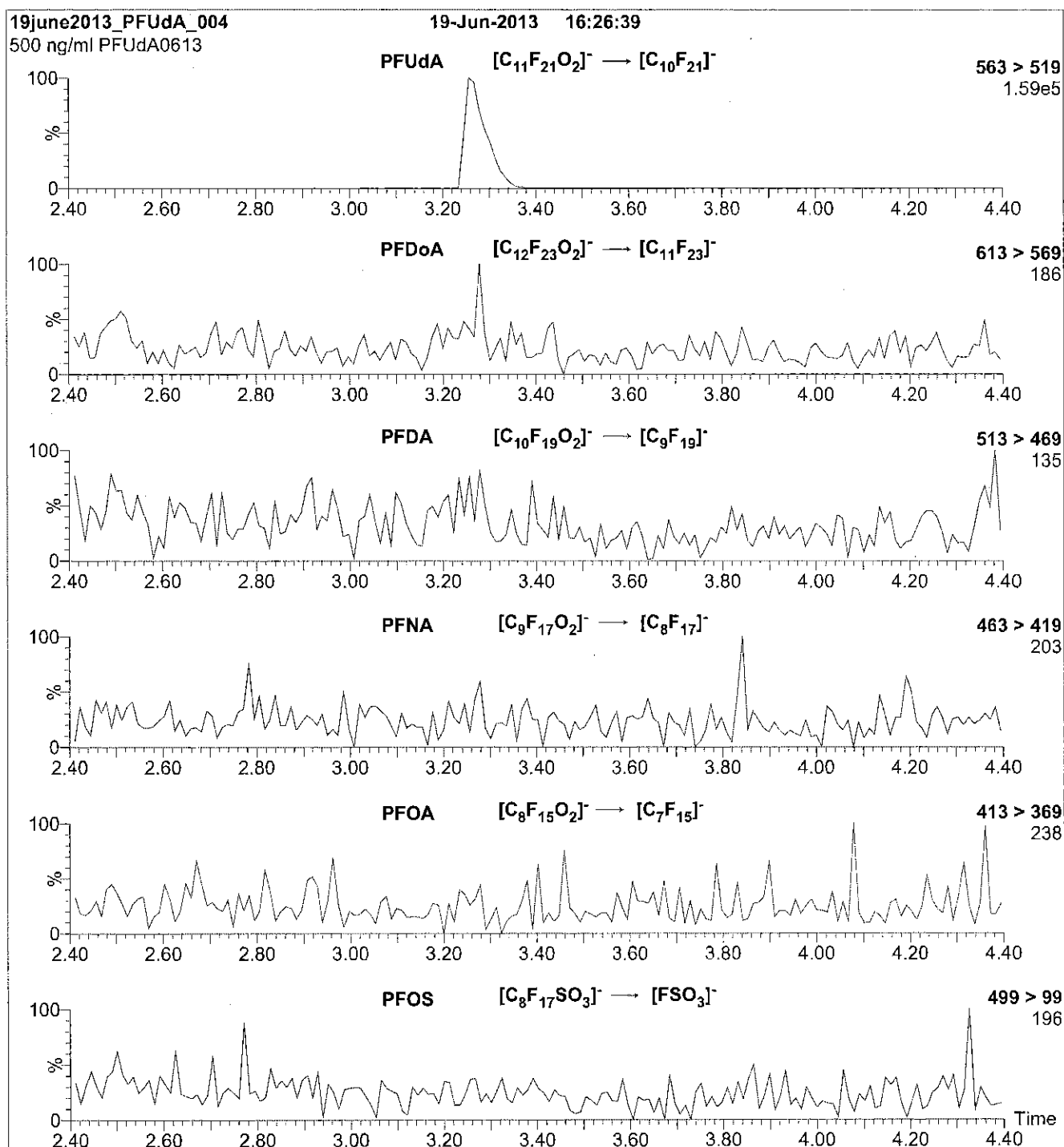
Flow: 300 μ l/min

MS Parameters

Experiment: Full Scan (225 - 850 amu)

Source: Electrospray (negative)
Capillary Voltage (kV) = 3.00
Cone Voltage (V) = 15.00
Cone Gas Flow (l/hr) = 65
Desolvation Gas Flow (l/hr) = 750

Figure 2: PFUdA; LC/MS/MS Data (Selected MRM Transitions)



Conditions for Figure 2:

Injection: Direct loop injection
10 μ l (500 ng/ml PFUdA)

Mobile phase: Isocratic 80% (80:20 MeOH:ACN) / 20% H₂O
(both with 10 mM NH₄OAc buffer)

Flow: 300 μ l/min

MS Parameters

Collision Gas (mbar) = 3.46e-3
Collision Energy (eV) = 11

Reagent

10000 Fe_00014

10.4 ISO/IEC Guide 17025 "General Requirements for the Competence of Testing and Calibration Laboratories"

- Chemical Testing - Accredited / A2LA Certificate Number 883.01

10.5 ISO/IEC Guide 34 "General Requirements for the Competence of Reference Material Producers"

- Reference Material Producer - Accredited / A2LA Certificate Number 883.02

11.0 CERTIFICATION, LOT EXPIRATION AND PERIOD OF VALIDITY

11.1 Certification Issue Date

February 13, 2015

- The certification is valid within the measurement uncertainty specified provided the CRM/RM is stored and handled in accordance with instructions given in Sec 7.1. This certification is nullified if instructions in Sec 7.1 are not followed or if the CRM/RM is damaged, contaminated, or otherwise modified.

11.2 Lot Expiration Date

- February 13, 2018

- The date after which this CRM/RM should not be used.

- The lot expiration date reflects the period of time that the stability of a CRM/RM can be supported by long term stability studies conducted on properly stored and handled CRM/RMs. Lot expiration is limited primarily by transpiration (loss of water from the solution) and infrequently by chemical stability.

11.3 Period of Validity

- Sealed TCT Bag Open Date: _____

- This CRM/RM should not be used longer than one year from the date of removal from the aluminized bag or after the date given in Sec. 11.2, whichever comes first. This is contingent upon the CRM/RM being handled and stored in accordance with the instructions given in Sec 7.1.

12.0 NAMES AND SIGNATURES OF CERTIFYING OFFICERS

Certificate Prepared By:

Donna Senn
Product Documentation Technician

Donna Senn

Certificate Approved By:

Brian Alexander
PhD., Technical Process Director

Brian Alexander

Certifying Officer:

Paul Gaines
PhD., Senior Technical Director

Paul R. Gaines

1.0 ACCREDITATION / REGISTRATION

INORGANIC VENTURES is accredited to ISO Guide 34, "General Requirements for the Competence of Reference Material Producers" and ISO/IEC 17025, "General Requirements for the Competence of Testing and Calibration Laboratories". Inorganic Ventures is also an ISO 9001 registered manufacturer (SAI Global File Number 010105).



2.0 PRODUCT DESCRIPTION

Product Code: Single Analyte Custom Grade Solution
Catalog Number: CGFE10
Lot Number: J2-FE04047
Matrix: 5% (v/v) HNO3
Value / Analyte(s): 10 000 µg/mL ea:
Fe



Starting Material: Fe pieces
Starting Material Lot#: 1820
Starting Material Purity: 99.9965%

3.0 CERTIFIED VALUES AND UNCERTAINTIES

Certified Value: 10 008 ± 23 µg/mL - weighted mean
Certified Density: 1.045 g/mL (measured at 20 ± 1 °C)

Assay Information:

Assay Method #1	9992 ± 31 µg/mL ICP Assay NIST SRM 3126a Lot Number: 140812
Assay Method #2	10 020 ± 26 µg/mL EDTA NIST SRM 928 Lot Number: 928

- The Calculated Value is a value calculated from the weight of a starting material that has been certified directly vs. a National Institute of Standards and Technology (NIST) SRM/RM. See Sec 4.2 for balance traceability.

The following equations are used in the calculation of the certified value and the uncertainty. Reported uncertainties represent expanded uncertainties expressed at approximately the 95% confidence level using a coverage factor of k = 2.

Characterization of CRM by two independent methods

Characterization of CRM/RM by Two Methods

Certified Value, $X_{CRM/RM}$, where two methods of characterization are used is the weighted mean of the two results:

$$X_{CRM/RM} = [(w_a)(X_a) + (w_b)(X_b)]$$

X_a = mean of Assay Method A with standard uncertainty $u_{char a}$

X_b = mean of Assay Method B with standard uncertainty $u_{char b}$

w_a and w_b = the weighting factors for each method calculated using the inverse square of the variance:

$$w_a = (1/u_{char a})^2 / ((1/u_{char a})^2 + (1/u_{char b})^2)$$

$$w_b = (1/u_{char b})^2 / ((1/u_{char a})^2 + (1/u_{char b})^2)$$

$$CRM/RM \text{ Expanded Uncertainty } (\pm) = U_{CRM/RM} = k (u_{char a}^2 + u_{bb}^2 + u_{its}^2 + u_{sts}^2)^{1/2}$$

k = coverage factor = 2 in all cases at Inorganic Ventures

$u_{char a \& b} = [(w_a)^2 (u_{char a})^2 + (w_b)^2 (u_{char b})^2]^{1/2}$ where $u_{char a}$ and $u_{char b}$ are the square root of the sum of the squares of errors from characterization which include instrument measurement, density, NIST SRM uncertainty, weighing, and volume

u_{bb} = bottle to bottle homogeneity standard uncertainty

u_{its} = long term stability standard uncertainty (storage)

u_{sts} = short term stability standard uncertainty (transportation)

Characterization of CRM by one method

Characterization of CRM/RM by One Method

Certified Value, $X_{CRM/RM}$, where one method of characterization is used is the mean of individual results:

$$X_{CRM/RM} = \text{mean of Assay Method A with standard uncertainty } u_{char a}$$

$$CRM/RM \text{ Expanded Uncertainty } (\pm) = U_{CRM/RM} = k (u_{char a}^2 + u_{bb}^2 + u_{its}^2 + u_{sts}^2)^{1/2}$$

k = coverage factor = 2 in all cases at Inorganic Ventures

$u_{char a}$ = square root of the sum of the squares of the errors from characterization which include instrumental measurement, density, NIST SRM uncertainty, weighing, and volume

u_{bb} = bottle to bottle homogeneity standard uncertainty

u_{its} = long term stability standard uncertainty (storage)

u_{sts} = short term stability standard uncertainty (transportation)

4.0 TRACEABILITY TO NIST

- This product is traceable to NIST via an unbroken chain of comparisons. The uncertainties for each certified value are reported, taking into account the SRM/RM uncertainty error and the measurement, weighing and volume dilution errors. In rare cases where no NIST SRM/RM are available, the term 'in-house std.' is specified.

4.1 Thermometer Calibration

- All thermometers are NIST traceable through thermometers that are calibrated by an accredited calibration laboratory.

4.2 Balance Calibration

- All analytical balances are calibrated by an accredited calibration laboratory and procedure. The weights used for testing are annually compared to master weights and are traceable to NIST.

4.3 Glassware Calibration

- An in-house procedure is used to calibrate all Class A glassware used in the manufacturing and quality control of CRM/RMs.

5.0 TRACE METALLIC IMPURITIES (TMI) DETERMINED BY ICP-MS AND ICP-OES (µg/mL)

CRM/RMs are tested for trace metallic impurities by Axial ICP-OES and ICP-MS. The result from the most sensitive method for each element, is reported below. Solutions tested by ICP-MS were analyzed in an ULPA-Filtered Clean Room. An ULPA-Filter is 99.9985% efficient for the removal of particles down to 0.3 µm.

M Ag < 0.003345	M Eu < 0.000669	O Na 0.010415	M Se < 0.020072	M Zn 0.053570
M Al 0.038176	s Fe <	M Nb < 0.013382	O Si 0.054441	M Zr < 0.006691
M As < 0.053526	M Ga < 0.033454	M Nd < 0.000669	M Sm < 0.006691	
M Au < 0.000669	M Gd < 0.000669	M Ni 0.032758	M Sn < 0.006691	
O B < 0.012860	i Ge <	n Os <	O Sr < 0.001286	
O Ba < 0.003858	M Hf < 0.003345	i P <	M Ta < 0.000669	
O Be < 0.000257	O Hg < 0.007716	M Pb < 0.003345	M Tb < 0.000669	
M Bi < 0.001338	M Ho < 0.000669	M Pd < 0.000669	M Te < 0.033454	
O Ca 0.017989	M In < 0.026763	M Pr < 0.000669	M Th < 0.000669	
M Cd < 0.000669	M Ir < 0.000669	M Pt < 0.001338	O Ti < 0.002572	
M Ce < 0.001338	O K 0.006628	M Rb < 0.000669	M Tl < 0.000669	
M Co 0.018103	M La < 0.000669	M Re < 0.000669	M Tm < 0.000669	
O Cr 0.023670	O Li < 0.000077	M Rh < 0.000669	M U < 0.000669	
M Cs < 0.006691	M Lu < 0.000669	M Ru < 0.000669	M V < 0.006691	
M Cu 0.019950	O Mg 0.001183	O S 0.035505	M W < 0.020072	
M Dy < 0.000669	O Mn 0.085212	M Sb 0.033250	M Y < 0.000669	
M Er < 0.000669	M Mo < 0.066908	M Sc < 0.001338	M Yb < 0.000669	

M - Checked by ICP-MS O - Checked by ICP-OES i - Spectral Interference
n - Not Checked For s - Solution Standard Element

6.0 INTENDED USE

- For the calibration of analytical instruments and validation of analytical methods as appropriate.

7.0 INSTRUCTIONS FOR THE CORRECT USE OF THIS REFERENCE MATERIAL

7.1 Storage and Handling Recommendations

- Store between approximately 4° - 30° C while in sealed TCT bag.

- While stored in the sealed TCT bag, transpiration of this CRM/RM is negligible. After opening the sealed TCT bag transpiration of the CRM/RM will occur, resulting in a gradual increase in the analyte concentration(s). It is the responsibility of the user to account for this effect. When the bottle is weighed both before and after being placed in storage, the mass difference observed will be a measure of transpiration mass loss.

- After opening the sealed TCT bag keep cap tightly sealed when not in use. Store and use at 20° ± 4° C. Do not pipette from the container. Do not return removed aliquots to container.

- For more information, visit www.inorganicventures.com/TCT

Atomic Weight; Valence; Coordination Number; Chemical Form in Solution - 55.85 +3 6 Fe(H₂O)₆3+

Chemical Compatibility -Stable in HCl, HNO₃, H₂SO₄, HF and H₃PO₄. Avoid basic media. Stable with most metals and inorganic anions in acidic media.

Stability - 2-100 ppb levels stable for months in 1% HNO₃ / LDPE container. 1-10,000 ppm solutions chemically stable for years in 1-5% HNO₃ / LDPE container.

Fe Containing Samples (Preparation and Solution) - Metal (Soluble in HCl); Oxides (If the oxide has been at a high temperature then Na₂CO₃ fusion in Pt0 followed by HCl dissolution otherwise dissolve in dilute HCl); Ores (See Oxides above using only the fusion approach).

Atomic Spectroscopic Information (ICP-OES D.L.s are given as radial/axial view):

Technique/Line	Estimated D.L.	Order	Interferences (underlined indicates severe)
ICP-MS 56 amu	970 ppt	N/A	40Ar15N1H, 40Ar16O, 36Ar17O1H , 38Ar18O, 37Cl18O1H, 40Ca16O
ICP-OES 238.204 nm	0.005/0.001 µg/mL	1	Ru, Co
ICP-OES 239.562 nm	0.005/0.001 µg/mL	1	Co, W, Cr
ICP-OES 259.940 nm	0.006/0.001 µg/mL	1	Hf, Nb

8.0 HAZARDOUS INFORMATION

- Please refer to the Safety Data Sheet for information regarding this CRM/RM.

9.0 HOMOGENEITY

- This solution was mixed according to an in-house procedure and is guaranteed to be homogeneous. Homogeneity data indicate that the end user should take a minimum sample size of 0.2 mL to assure homogeneity.

10.0 QUALITY STANDARD DOCUMENTATION

10.1 10CFR50 Appendix B - Nuclear Regulatory Commission

- Domestic Licensing of Production and Utilization Facilities

10.2 10CFR21 - Nuclear Regulatory Commission

- Reporting defects and Non-Compliance

10.3 ISO 9001 Quality Management System Registration

- SAI Global File Number 010105

Reagent

10000 Si_00012

1.0 ACCREDITATION / REGISTRATION

INORGANIC VENTURES is accredited to ISO Guide 34, "General Requirements for the Competence of Reference Material Producers" and ISO/IEC 17025, "General Requirements for the Competence of Testing and Calibration Laboratories". Inorganic Ventures is also an ISO 9001 registered manufacturer (SAI Global File Number 010105).



2.0 PRODUCT DESCRIPTION

Product Code: Single Analyte Custom Grade Solution
Catalog Number: CGSI10
Lot Number: J2-SI03056
Matrix: 1% (v/v) HNO3
1.4% (v/v) HF
Value / Analyte(s): 10 000 µg/mL ea:
Si
Starting Material: Fumed Silica
Starting Material Lot#: 1771
Starting Material Purity: 99.9931%

3650842
ID: 10000 SI_00012
Exp:06/26/18 Prep:JUS Opn:12/08/16
10000 Si IV

3.0 CERTIFIED VALUES AND UNCERTAINTIES

Certified Value: 9992 ± 53 µg/mL
Certified Density: 1.046 g/mL (measured at 20 ± 1 °C)

Assay Information:

Assay Method #1 9990 ± 60 µg/mL
ICP Assay NIST SRM 3150 Lot Number: 071204
Assay Method #2 9994 ± 66 µg/mL
Calculated NIST SRM Lot Number: See Sec. 4.2

- The Calculated Value is a value calculated from the weight of a starting material that has been certified directly vs. a National Institute of Standards and Technology (NIST) SRM/RM. See Sec 4.2 for balance traceability.

The following equations are used in the calculation of the certified value and the uncertainty. Reported uncertainties represent expanded uncertainties expressed at approximately the 95% confidence level using a coverage factor of k = 2.

Characterization of CRM/RM by Two Methods

Certified Value, $X_{CRM/RM}$, where two methods of characterization are used is the weighted mean of the two results:

$$X_{CRM/RM} = [(w_a)(X_a) + (w_b)(X_b)]$$

X_a = mean of Assay Method A with standard uncertainty $u_{char\ a}$
 X_b = mean of Assay Method B with standard uncertainty $u_{char\ b}$
 w_a and w_b = the weighting factors for each method calculated using the inverse square of the variance:
$$w_a = (1/u_{char\ a})^2 / ((1/u_{char\ a})^2 + (1/u_{char\ b})^2)$$

$$w_b = (1/u_{char\ b})^2 / ((1/u_{char\ a})^2 + (1/u_{char\ b})^2)$$

$$CRM/RM\ Expanded\ Uncertainty\ (\pm) = U_{CRM/RM} = k(u_{char\ a\&b}^2 + u_{bb}^2 + u_{lts}^2 + u_{sts}^2)^{1/2}$$

k = coverage factor = 2 in all cases at Inorganic Ventures
 $u_{char\ a\&b} = [(w_a)^2(u_{char\ a})^2 + (w_b)^2(u_{char\ b})^2]^{1/2}$ where $u_{char\ a}$ and $u_{char\ b}$ are the square root of the sum of the squares of errors from characterization which include instrument measurement, density, NIST SRM uncertainty, weighing, and volume
 u_{bb} = bottle to bottle homogeneity standard uncertainty
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k = coverage factor = 2 in all cases at Inorganic Ventures
 $u_{char\ a}$ = square root of the sum of the squares of the errors from characterization which include instrumental measurement, density, NIST SRM uncertainty, weighing, and volume
 u_{bb} = bottle to bottle homogeneity standard uncertainty
 u_{lts} = long term stability standard uncertainty (storage)
 u_{sts} = short term stability standard uncertainty (transportation)

4.0 TRACEABILITY TO NIST

- This product is traceable to NIST via an unbroken chain of comparisons. The uncertainties for each certified value are reported, taking into account the SRM/RM uncertainty error and the measurement, weighing and volume dilution errors. In rare cases where no NIST SRM/RM are available, the term 'in-house std.' is specified.

4.1 Thermometer Calibration

- All thermometers are NIST traceable through thermometers that are calibrated by an accredited calibration laboratory.

4.2 Balance Calibration

- All analytical balances are calibrated by an accredited calibration laboratory and procedure. The weights used for testing are annually compared to master weights and are traceable to NIST.

4.3 Glassware Calibration

- An in-house procedure is used to calibrate all Class A glassware used in the manufacturing and quality control of CRM/RMs.

5.0 TRACE METALLIC IMPURITIES (TMI) DETERMINED BY ICP-MS AND ICP-OES (µg/mL)

CRM/RMs are tested for trace metallic impurities by Axial ICP-OES and ICP-MS. The result from the most sensitive method for each element, is reported below. Solutions tested by ICP-MS were analyzed in an ULPA-Filtered Clean Room. An ULPA-Filter is 99.9985% efficient for the removal of particles down to 0.3 µm.

M	Ag	<	0.000504	M	Eu	<	0.000252	O	Na	<	0.009659	M	Se	<	0.025180	O	Zn	<	0.022280
O	Al	<	0.067136	i	Fe	<		M	Nb	<	0.001007	s	Si	<		O	Zr	<	0.001114
O	As	<	0.222800	M	Ga	<	0.000252	M	Nd	<	0.002014	M	Sm	<	0.000252				
M	Au	<	0.000252	M	Gd	<	0.000252	O	Ni	<	0.005570	M	Sn	<	0.003777				
O	B	<	0.123710	O	Ge	<		n	Os	<		O	Sr	<	0.000334				
O	Ba	<	0.000719	M	Hf	<	0.001259	O	P	<	0.111400	M	Ta	<	0.005036				
O	Be	<	0.000045	i	Hg	<		M	Pb	<	0.000252	M	Tb	<	0.000252				
M	Bi	<	0.000252	M	Ho	<	0.000252	M	Pd	<	0.000252	M	Te	<	0.003777				
O	Ca	<	0.017415	M	In	<	0.000252	M	Pr	<	0.000252	M	Th	<	0.002518				
M	Cd	<	0.000252	M	Ir	<	0.000252	M	Pt	<	0.000252	O	Ti	<	0.002199				
M	Ce	<	0.001259	O	K	<	0.045202	M	Rb	<	0.050360	M	Tl	<	0.000252				
M	Co	<	0.000755	M	La	<	0.000252	M	Re	<	0.000252	M	Tm	<	0.000252				
M	Cr	<	0.003777	O	Li	<	0.000111	M	Rh	<	0.000252	M	U	<	0.000252				
M	Cs	<	0.002014	M	Lu	<	0.000252	M	Ru	<	0.000252	O	V	<	0.001114				
O	Cu	<	0.001114	O	Mg	<	0.001727	O	S	<	1.317984	M	W	<	0.000252				
M	Dy	<	0.000252	M	Mn	<	0.007554	M	Sb	<	0.000252	M	Y	<	0.000252				
M	Er	<	0.000252	M	Mo	<	0.001259	O	Sc	<	0.000111	M	Yb	<	0.000252				

M - Checked by ICP-MS O - Checked by ICP-OES i - Spectral Interference
n - Not Checked For s - Solution Standard Element

6.0 INTENDED USE

- For the calibration of analytical instruments and validation of analytical methods as appropriate.

7.0 INSTRUCTIONS FOR THE CORRECT USE OF THIS REFERENCE MATERIAL

7.1 Storage and Handling Recommendations

- Store between approximately 4° - 30° C while in sealed TCT bag.
- While stored in the sealed TCT bag, transpiration of this CRM/RM is negligible. After opening the sealed TCT bag transpiration of the CRM/RM will occur, resulting in a gradual increase in the analyte concentration(s). It is the responsibility of the user to account for this effect. When the bottle is weighed both before and after being placed in storage, the mass difference observed will be a measure of transpiration mass loss.
- After opening the sealed TCT bag keep cap tightly sealed when not in use. Store and use at 20° ± 4° C. Do not pipette from the container. Do not return removed aliquots to container.
- For more information, visit www.inorganicventures.com/TCT

Atomic Weight; Valence; Coordination Number; Chemical Form in Solution - 28.09 +4 6 Si(OH)x(F)y2-
Chemical Compatibility -Soluble in HCl, HF, H3PO4 H2SO4 and HNO3 as the Si(OH)x(F)y2-. Avoid neutral to basic media. Unstable at ppm levels with metals that would pull F- away (i.e. Do not mix with Alkaline or Rare Earths, or high levels of transition elements unless they are fluorinated. Stable with most inorganic anions with a tendency to hydrolyze forming silicic acid (silicic acid is soluble up to ∼100 ppm in water) in all dilute acids except HF.
Stability - 2-100 ppb levels - stability unknown - (alone or mixed with all other metals) as the Si(OH)x(F)y2-. 1-10,000 ppm single element solutions as the Si(OH)x(F)y2- chemically stable for years in 2-5 % HNO3 / trace HF in a LDPE container.
Si Containing Samples (Preparation and Solution) -Metal (Soluble in 1:1:1 H2O / HF / HNO3); Oxide - SiO2, amorphous (dissolve by heating in 1:1:1 H2O / HF / HNO3); Oxide - quartz (fuse in Pt0 with Na2CO3); Geological Samples(fuse in Pt0with Na2CO3 followed by HCl solution of the fuseate); Organic Matrices containing silicates and non volatile silicon compounds (dry ash at 4500C in Pt0 and dissolve by gently warming with 1:1:1 H2O / HF / H2SO4 or fuse / ash with Na2CO3 and dissolve fuseate with HCl / H2O); Silicone Oils - dimethyl silicones depolymerize to form volatile monomer units when heated (Measure directly in alcoholic KOH / xylene mixture where sample is treated first with the KOH at 60-1000C to "unzip" the Si-O-Si polymeric structure or digest with conc. H2SO4 / H2O2 followed by cooling and dissolution of the dehydrated silica with HF.) Note that the direct analysis of silicone oils in an organic solvent will result in false high results due to high vapor pressure of volatile monomer units like hexamethylcyclotrisiloxane. The KOH forms the K2+Si(CH3)2O= salt which is not volatile at room temperature.

Atomic Spectroscopic Information (ICP-OES D.L.s are given as radial/axial view):

Technique/Line	Estimated D.L.	Order	Interferences (underlined indicates severe)
ICP-MS 28 amu	4000 - 8000 ppt	N/A	N2, 12C16O
ICP-OES 212.412 nm	0.02/0.01 µg/mL	1	Hf, Os, Mo, Ta
ICP-OES 251.611 nm	0.012/0.003 µg/mL	1	Ta, U, Zn, Th
ICP-OES 288.158 nm	0.03/0.004 µg/mL	1	Ta, Ce, Cr, Cd, Th

HF Note: This standard should not be prepared or stored in glass.

8.0 HAZARDOUS INFORMATION

- Please refer to the Safety Data Sheet for information regarding this CRM/RM.

9.0 HOMOGENEITY

- This solution was mixed according to an in-house procedure and is guaranteed to be homogeneous. Homogeneity data indicate that the end user should take a minimum sample size of 0.2 mL to assure homogeneity.

10.0 QUALITY STANDARD DOCUMENTATION

10.1 10CFR50 Appendix B - Nuclear Regulatory Commission

- Domestic Licensing of Production and Utilization Facilities

10.2 10CFR21 - Nuclear Regulatory Commission

- Reporting defects and Non-Compliance

10.3 ISO 9001 Quality Management System Registration

- SAI Global File Number 010105

10.4 ISO/IEC Guide 17025 "General Requirements for the Competence of Testing and Calibration Laboratories"

- Chemical Testing - Accredited / A2LA Certificate Number 883.01

10.5 ISO/IEC Guide 34 "General Requirements for the Competence of Reference Material Producers"

- Reference Material Producer - Accredited / A2LA Certificate Number 883.02

11.0 CERTIFICATION, LOT EXPIRATION AND PERIOD OF VALIDITY

11.1 Certification Issue Date

June 26, 2015

- The certification is valid within the measurement uncertainty specified provided the CRM/RM is stored and handled in accordance with instructions given in Sec 7.1. This certification is nullified if instructions in Sec 7.1 are not followed or if the CRM/RM is damaged, contaminated, or otherwise modified.

11.2 Lot Expiration Date

- June 26, 2018

- The date after which this CRM/RM should not be used.
- The lot expiration date reflects the period of time that the stability of a CRM/RM can be supported by long term stability studies conducted on properly stored and handled CRM/RMs. Lot expiration is limited primarily by transpiration (loss of water from the solution) and infrequently by chemical stability.

11.3 Period of Validity

- Sealed TCT Bag Open Date: _____
- This CRM/RM should not be used longer than one year from the date of removal from the aluminized bag or after the date given in Sec. 11.2, whichever comes first. This is contingent upon the CRM/RM being handled and stored in accordance with the instructions given in Sec 7.1.

12.0 NAMES AND SIGNATURES OF CERTIFYING OFFICERS

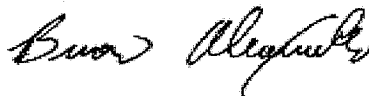
Certificate Prepared By:

Brenda Francis
Product Documentation Technician



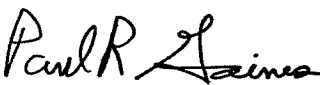
Certificate Approved By:

Brian Alexander
PhD., Technical Process Director



Certifying Officer:

Paul Gaines
PhD., Senior Technical Director



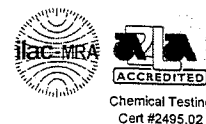
Reagent

ANALYTES B_00009



SPEXertificate®

Certificate of Reference Material



Catalog Number: INT-B1

Lot No. 12-03YPY

Description: Analytes B

Matrix: 5% HNO₃

This **ASSURANCE®** Certified Reference Material, CRM, is intended primarily for use as a calibration standard or quality control standard for inorganic spectroscopic instrumentation such as ICP-OES, DCP, AA, ICP-MS, and XRF. It can be employed in USEPA, ASTM and other methods relevant to the certified properties listed below.

The CRM is prepared from high purity single element concentrates of individual elements using Class A laboratory ware to give precise concentrations. See side 2 for details of certification.

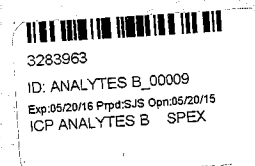
Instrumental Analysis by ICP Spectrometer:

Analyte	Labeled	Certified	Uncertainty	SRM	Analyte	Labeled	Certified	Uncertainty	SRM
Ag	100 µg/mL	99.9 µg/mL	±0.5 µg/mL	3151*	Be	50 µg/mL	49.9 µg/mL	±0.3 µg/mL	3105a*
Cd	100 µg/mL	99.2 µg/mL	±0.5 µg/mL	3108*	Co	50 µg/mL	50.0 µg/mL	±0.3 µg/mL	3113*
Ni	100 µg/mL	99.6 µg/mL	±0.5 µg/mL	3136*	Cr	50 µg/mL	50.1 µg/mL	±0.3 µg/mL	3112a*
Pb	100 µg/mL	101 µg/mL	±0.5 µg/mL	3128*	Cu	50 µg/mL	49.9 µg/mL	±0.3 µg/mL	3114*
Zn	100 µg/mL	99.2 µg/mL	±0.5 µg/mL	3168a*	Mn	50 µg/mL	49.9 µg/mL	±0.3 µg/mL	3132*
Ba	50 µg/mL	49.3 µg/mL	±0.3 µg/mL	3104a*	V	50 µg/mL	49.6 µg/mL	±0.3 µg/mL	3165*

* - indicates NIST SRM

† - indicates SPEX CertiPrep CRM (when NIST SRM is not available)

SPEX CertiPrep Reference Multi: Lot# 9-164YP



Balances are calibrated regularly with weight sets traceable to NIST#s 32856, 32867 and others. This CRM is guaranteed stable and accurate to ±0.5% of the certified (measured) value. This includes uncertainty components due to preparation, measurement, homogeneity, short-term and long-term stability as well as transpiration loss. No measured concentration of any individual component exceeds ±2% of the labeled value. This guarantee is valid for a period of one year from the date of certification only when the material is unopened and stored under ambient laboratory conditions.

Date of Certification:

MAY - - 2015

Certifying Officer:

Reagent

ANALYTES B_00010



Reference Materials Producer
Cert #2495.01

SPEXertificate®

Certificate of Reference Material



Chemical Testing
Cert #2495.02

Catalog Number: INT-B1

Lot No. 1-75MKBY

Description: Analytes B

Matrix: 5% HNO₃

This **ASSURANCE®** Certified Reference Material, CRM, is intended primarily for use as a calibration standard or quality control standard for inorganic spectroscopic instrumentation such as ICP-OES, DCP, AA, ICP-MS, and XRF. It can be employed in USEPA, ASTM and other methods relevant to the certified properties listed below.

The CRM is prepared from high purity single element concentrates of individual elements using Class A laboratory ware to give precise concentrations. See side 2 for details of certification.

Instrumental Analysis by ICP Spectrometer:

Analyte	Labeled	Certified	Uncertainty	SRM	Analyte	Labeled	Certified	Uncertainty	SRM
Ag	100 µg/mL	99.9 µg/mL	±0.5 µg/mL	3151*	Be	50 µg/mL	49.9 µg/mL	±0.3 µg/mL	3105a*
Cd	100 µg/mL	99.2 µg/mL	±0.5 µg/mL	3108*	Co	50 µg/mL	50.0 µg/mL	±0.3 µg/mL	3113*
Ni	100 µg/mL	99.6 µg/mL	±0.5 µg/mL	3136*	Cr	50 µg/mL	50.1 µg/mL	±0.3 µg/mL	3112a*
Pb	100 µg/mL	101 µg/mL	±0.5 µg/mL	3128*	Cu	50 µg/mL	49.9 µg/mL	±0.3 µg/mL	3114*
Zn	100 µg/mL	99.2 µg/mL	±0.5 µg/mL	3168a*	Mn	50 µg/mL	49.9 µg/mL	±0.3 µg/mL	3132*
Ba	50 µg/mL	49.3 µg/mL	±0.3 µg/mL	3104a*	V	50 µg/mL	49.6 µg/mL	±0.3 µg/mL	3165*

* - indicates NIST SRM

† - indicates SPEX CertiPrep CRM (when NIST SRM is not available)

SPEX CertiPrep Reference Multi: Lot# 9-164YP

Balances are calibrated regularly with weight sets traceable to NIST#s 32856, 32867 and others. This CRM is guaranteed stable and accurate to ±0.5% of the certified (measured) value. This includes uncertainty components due to preparation, measurement, homogeneity, and short-term and long-term stability. No measured concentration of any individual component exceeds ±2% of the labeled value. This guarantee is valid for a period of one year from the date of certification only when the material is unopened and stored under ambient laboratory conditions.

Date of Certification: **APR -- 2016**

Certifying Officer:

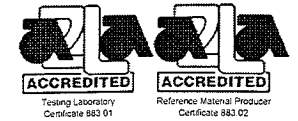
[Signature]

Reagent

Icp cal std 3_00011

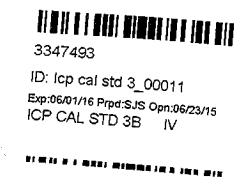
1.0 ACCREDITATION / REGISTRATION

INORGANIC VENTURES is accredited to ISO Guide 34, "General Requirements for the Competence of Reference Material Producers" and ISO/IEC 17025, "General Requirements for the Competence of Testing and Calibration Laboratories". Inorganic Ventures is also an ISO 9001 registered manufacturer (SAI Global File Number 010105).



2.0 PRODUCT DESCRIPTION

Product Code: Multi Analyte Custom Grade Solution
Catalog Number: STLDEN-STD-3B
Lot Number: J2-MEB585085
Matrix: 5% (v/v) HNO₃
Value / Analyte(s): 10 000 µg/mL ea:
K,
4 000 µg/mL ea:
Mg,
1 000 µg/mL ea:
Ca, Na,
500 µg/mL ea:
Fe,
200 µg/mL ea:
Li, P,
100 µg/mL ea:
Ag, Al, B,
Ba, Be, Cd,
Co, Cr₃, Cu,
Mn, Ni, Sr,
V, Zn



3.0 CERTIFIED VALUES AND UNCERTAINTIES

ANALYTE	CERTIFIED VALUE	ANALYTE	CERTIFIED VALUE
Aluminum, Al	100.0 ± 0.6 µg/mL	Barium, Ba	100.0 ± 0.6 µg/mL
Beryllium, Be	100.0 ± 0.7 µg/mL	Boron, B	100.0 ± 0.7 µg/mL
Cadmium, Cd	100.0 ± 0.6 µg/mL	Calcium, Ca	1 000 ± 4 µg/mL
Chromium+3, Cr3	100.0 ± 0.5 µg/mL	Cobalt, Co	100.0 ± 0.5 µg/mL
Copper, Cu	100.0 ± 0.5 µg/mL	Iron, Fe	500.0 ± 2.3 µg/mL
Lithium, Li	200.0 ± 1.2 µg/mL	Magnesium, Mg	4 000 ± 19 µg/mL
Manganese, Mn	100.0 ± 0.5 µg/mL	Nickel, Ni	100.0 ± 0.5 µg/mL
Phosphorus, P	200.0 ± 1.0 µg/mL	Potassium, K	10 000.0 ± 40.0 µg/mL
Silver, Ag	100.0 ± 0.6 µg/mL	Sodium, Na	1 000 ± 4 µg/mL
Strontium, Sr	100.0 ± 0.5 µg/mL	Vanadium, V	100.0 ± 0.5 µg/mL
Zinc, Zn	100.0 ± 0.5 µg/mL		

Certified Density: 1.074 g/mL (measured at 20 ± 1 °C)

Assay Information:

11.1 Certification Issue Date

June 16, 2015

11.2 Expiration Date

EXPIRES

12/2016

11.3 Period of Validity

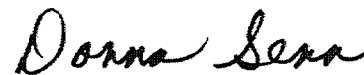
- The certification is valid within the measurement uncertainty specified provided the CRM/RM is handled and stored in accordance with instructions given in Sec 7.0 and used prior to the date given in Sec 11.2. This certification is nullified if the CRM/RM is damaged, contaminated, or otherwise modified.

12.0

NAMES AND SIGNATURES OF CERTIFYING OFFICERS


Certificate Prepared By:

Donna Senn
Product Documentation Technician



Certificate Approved By:

Brian Alexander
PhD., Technical Process Director



Certifying Officer:

Paul Gaines
PhD., Senior Technical Director



ANALYTE	METHOD	NIST SRM#	SRM LOT#
Ag	ICP Assay	3151	992212
Ag	Volhard	999b	999b
Al	ICP Assay	3101a	060502
Al	EDTA	928	928
B	ICP Assay	3107	070514
Ba	Gravimetric		See Sec. 4.2
Ba	ICP Assay	3104a	070222
Be	Calculated		See Sec. 4.2
Be	ICP Assay	3105a	090514
Ca	ICP Assay	3109a	050825
Ca	EDTA	928	928
Cd	ICP Assay	3108	060531
Cd	EDTA	928	928
Co	ICP Assay	3181	000630
Co	EDTA	928	928
Cr3	Calculated		See Sec. 4.2
Cr3	ICP Assay	3112a	030730
Cu	ICP Assay	3114	011017
Cu	EDTA	928	928
Fe	ICP Assay	3126a	051031
Fe	EDTA	928	928
K	Gravimetric		See Sec. 4.2
K	ICP Assay	3141a	051220
Li	ICP Assay	3129a	100714
Mg	ICP Assay	3131a	050302
Mg	EDTA	928	928
Mn	ICP Assay	3132	050429
Mn	EDTA	928	928
Na	Gravimetric		See Sec. 4.2
Na	ICP Assay	3152a	120715
Ni	ICP Assay	3136	120619
Ni	EDTA	928	928
P	ICP Assay	3139a	060717
P	Acidimetric	84L	84L
Sr	ICP Assay	3153a	990906
Sr	EDTA	928	928
V	ICP Assay	3165	992706
V	EDTA	928	928
Zn	ICP Assay	3168a	120629
Zn	EDTA	928	928

The following equations are used in the calculation of the certified value and the uncertainty. Reported uncertainties represent expanded uncertainties expressed at approximately the 95% confidence level using a coverage factor of k = 2.

Certified Value $\overline{(x)} = \frac{\sum x_i}{n}$

$\overline{(x)}$ = mean
 x_i = individual results
n = number of measurements

Uncertainty $(\pm) = 2 [\sum (s_i)^2]^{1/2}$

2 = the coverage factor.
 $[\sum (s_i)^2]^{1/2}$ = The square root of the sum of the squares of the most common errors (where 's' stands for the standard deviation) from instrumental measurement, density, NIST SRM uncertainty, weighing, dilution to volume, homogeneity, long term stability and short term stability.

4.0 TRACEABILITY TO NIST

- This product is traceable to NIST via an unbroken chain of comparisons. The uncertainties for each certified value are reported, taking into account the SRM/RM uncertainty error and the measurement, weighing and volume dilution errors. In rare cases where no NIST SRM/RM are available, the term 'in-house std.' is specified.

Reagent

Icp ICVH_00274

Certificate of Analysis

3670535
ID: Icp ICVH_00274
Exp:12/14/16 Prpd:SJS Opn:12/21/16
ICP ICVH HP

Product Description:

Name: ICVH
Part Number: SM-606-125
Lot Number: 1534512
Matrix: 5% HNO₃
Purity: 99.99% - 99.999%

Certified Values:

Element	($\mu\text{g/mL}$)	SRM ID	SRM Lot#	Element	($\mu\text{g/mL}$)	SRM ID	SRM Lot#
Al	4000 \pm 20	3101a	140903	Th	300.0 \pm 1.8	*	
Fe	8000 \pm 40	3126a	140812	U	500.0 \pm 2.5	3164	080521
Na	4000 \pm 20	3152a	120715				

The Certified values are based on gravimetric and volumetric preparation, and verified against SRM 3100 series developed by National Institute of Standards and Technology (NIST) via either inductively coupled plasma optical emission spectrometry (ICP-OES) or inductively coupled plasma mass spectrometry (ICP-MS) using an internal laboratory developed method. The uncertainty in the certified value is calculated for a 95% confidence interval and coverage factor k is about 2

* Refer to Traceability Information, Section d

Preparation Information:

The standard is generally prepared from single element standard solutions that are ISO Guide 34 certified reference materials. Highest purity source materials were purchased from qualified vendors per ISO 9001:2008 guidelines and assayed for conformity prior to use. Sub-boiling distilled high-purity acid has been used to place the materials in solution and to stabilize the standard. The matrix is as noted above in 18 megaohm deionized water.

Traceability Information:

The traceability of this standard is maintained through an unbroken chain of comparisons to appropriate standards with suitable procedure and measurement uncertainties. The maintenance of the base and derived units of International System of Units (SI) with traceability of measurement results (contemporary metrology) to SI ensures their comparability over time as follows.

a. Standard Weight and Analytical Balance

The standard weights (NBS weights Inventory No 20231A) are calibrated every two years by South Carolina Metrology Laboratory that is a participant in "NIST Weights and Measures Measurement Assurance Program" with a certificate of measurement traceability to NIST primary standards.

The balances are calibrated yearly by the ISO 17025 accredited metrology service, and are verified weekly by an in-house method using standard weights.

b. Volumetric Device

The calibration of volumetric vessels is checked annually using the ASTM method E542

Lot No.: 1534512

Rev. No.: 3.3.0

Page 1 of 2

High-Purity Standards is certified to ISO 9001:2008 and accredited to ISO/IEC 17025:2005 and ISO Guide 34:2009.

Page 485 of 2641

05/27/2016

3166811

c. **Thermometer**

The standard thermometers are calibrated every year by the ISO 17025 accredited metrology service. The thermometers used in-house are verified against the standard thermometers yearly.

d. **Calibration Standards**

The Calibration Standards are traceable to SRM 3100 Series Spectrometric Standard Solutions or second sources.

Packaging and Storage Conditions:

The standard is packaged in a pre-cleaned polyethylene bottle. To maintain the integrity of this product, the solution should be kept tightly capped and stored under normal laboratory conditions.

Refer to Material Safety Datasheet (MSDS) for hazardous information.

Expiration Information:

The expiry date is guaranteed to be valid for twelve months from the shipping date provided. For this reason, standards from the same lot may have different expiration dates.

Preparation Date: December 11, 2015

Shipped Date: December 14, 2015

Expiration Date: December 14, 2016

Certificate Issue Date: December 11, 2015

Quality Information:



ISO/IEC 17025:2005 Accreditation
Certificate Number AT-1529

A handwritten signature in cursive script, appearing to read "Angel Sellers".

Angel Sellers
Quality Manager

NOTICE: HPS products are intended for laboratory use only. All products should be handled and used by trained professional personnel. The responsibility for the safe handling and use of these products rests solely with the buyer and/or user. The data and information as stated was furnished by the manufacturer of the product. The information provided in this certificate pertains only to the lot number specified. None of the information provided in this certificate may be used, reproduced or transmitted in any form or by any means without written approval from High Purity Standards.

Lot No.: **1534512**

Rev. No.: 3.3.0

Page 2 of 2

High-Purity Standards is certified to ISO 9001:2008 and accredited to ISO/IEC 17025:2005 and ISO Guide 34:2009.

Reagent

Icp ICVL A_00010

Certificate of Analysis

Product Description:

Name: Intrepid ICVL
Part Number: **SM-606-062**
Solution A
Lot Number: **1602809**
Matrix: 5% HNO₃
Purity: 99.98% - 99.9999%

3723273
ID: Icp ICVL A_00010
Exp: 02/02/17 Prpt: SJS
ICP ICVL SOLUTION A H

Certified Values:

Element	(mg/L)	SRM ID	SRM Lot#	Element	(mg/L)	SRM ID	SRM Lot#
Al	25.00 ± 0.13	3101a	140903	Li	25.00 ± 0.15	3129a	100714
As	25.00 ± 0.25	3103a	100818	Mg	1000 ± 5	3131a	140110
Ba	25.00 ± 0.15	*		Mn	25.00 ± 0.25	3132	050429
Be	25.00 ± 0.25	3105a	090514	Ni	25.00 ± 0.13	3136	120619
B	25.00 ± 0.13	3107	110830	K	2000 ± 10	3141a	140813
Cd	25.00 ± 0.13	3108	130116	Se	50.0 ± 0.5	3149	100901
Ca	200 ± 1	3109a	130213	Na	200 ± 1	3152a	120715
Cr	25.00 ± 0.13	3112a	030730	Sr	25.00 ± 0.13	3153a	990906
Co	25.00 ± 0.13	3113	000630	Tl	50.00 ± 0.25	3158	993012
Cu	25.00 ± 0.13	3114	121207	V	25.00 ± 0.15	3165	992706
Fe	25.00 ± 0.13	3126a	140812	Zn	25.00 ± 0.13	3168a	120629
Pb	25.00 ± 0.15	3128	101026				

The Certified values are based on gravimetric and volumetric preparation, and verified against SRM 3100 series developed by National Institute of Standards and Technology (NIST) via either inductively coupled plasma optical emission spectrometry (ICP-OES) or inductively coupled plasma mass spectrometry (ICP-MS) using an internal laboratory developed method. The uncertainty in the certified value is calculated for a 95% confidence interval and coverage factor *k* is about 2

* Refer to Traceability Information, Section d

Preparation Information:

The standard is generally prepared from single element standard solutions that are ISO Guide 34 certified reference materials. Highest purity source materials were purchased from qualified vendors per ISO 9001:2008 guidelines and assayed for conformity prior to use. Sub-boiling distilled high-purity acid has been used to place the materials in solution and to stabilize the standard. The matrix is as noted above in 18 megaohm deionized water.

Traceability Information:

The traceability of this standard is maintained through an unbroken chain of comparisons to appropriate standards with suitable procedure and measurement uncertainties. The maintenance of the base and derived

Lot No.: **1602809**

Rev. No.: 3.3.0

Page 1 of 2

High-Purity Standards is certified to ISO 9001:2008 and accredited to ISO/IEC 17025:2005 and ISO Guide 34:2009.

units of International System of Units (SI) with traceability of measurement results (contemporary metrology) to SI ensures their comparability over time as follows.

a. **Standard Weight and Analytical Balance**

The standard weights (NBS weights Inventory No 20231A) are calibrated every two years by South Carolina Metrology Laboratory that is a participant in "NIST Weights and Measures Measurement Assurance Program" with a certificate of measurement traceability to NIST primary standards.

The balances are calibrated yearly by the ISO 17025 accredited metrology service, and are verified weekly by an in-house method using standard weights.

b. **Volumetric Device**

The calibration of volumetric vessels is checked annually using the ASTM method E542

c. **Thermometer**

The standard thermometers are calibrated every year by the ISO 17025 accredited metrology service. The thermometers used in-house are verified against the standard thermometers yearly.

d. **Calibration Standards**

The Calibration Standards are traceable to SRM 3100 Series Spectrometric Standard Solutions or second sources.

Packaging and Storage Conditions:

The standard is packaged in a pre-cleaned polyethylene bottle. To maintain the integrity of this product, the solution should be kept tightly capped and stored under normal laboratory conditions.

Refer to Material Safety Datasheet (MSDS) for hazardous information.

Expiration Information:

The expiry date is guaranteed to be valid for twelve months from the shipping date provided. For this reason, standards from the same lot may have different expiration dates.

Preparation Date: January 28, 2016

Shipped Date: February 2, 2016

Expiration Date: February 2, 2017

Certificate Issue Date: January 29, 2016

Quality Information:



ISO/IEC 17025:2005 Accreditation
Certificate Number AT-1529

Moven Mututuvvari

Moven T. Mututuvvari, Ph.D.
Laboratory Manager

NOTICE: HPS products are intended for laboratory use only. All products should be handled and used by trained professional personnel. The responsibility for the safe handling and use of these products rests solely with the buyer and/or user. The data and information as stated was furnished by the manufacturer of the product. The information provided in this certificate pertains only to the lot number specified. None of the information provided in this certificate may be used, reproduced or transmitted in any form or by any means without written approval from High Purity Standards.

Lot No.: 1602809

Rev. No.: 3.3.0

Page 2 of 2

High-Purity Standards is certified to ISO 9001:2008 and accredited to ISO/IEC 17025:2005 and ISO Guide 34:2009.

Reagent

ICP ISAB 1B_00009

Certificate of Analysis



3718769

ID: ICP ISAB 1B_00009

Exp: 01/27/17 Prd: SJS Opn: 02/03/16

ICP ICSAB STD 1 SOL B H

Product Description:

Name: ICS-AB STD #1
Part Number: SM-606-037
Solution B
Lot Number: 1602230
Matrix: 2% HNO₃
Purity: 99.99%

Certified Values:

Element	(mg/L)	SRM ID	SRM Lot#
Tl	1000 ± 5	3158	993012

The Certified values are based on gravimetric and volumetric preparation, and verified against SRM 3100 series developed by National Institute of Standards and Technology (NIST) via either inductively coupled plasma optical emission spectrometry (ICP-OES) or inductively coupled plasma mass spectrometry (ICP-MS) using an internal laboratory developed method. The uncertainty in the certified value is calculated for a 95% confidence interval and coverage factor *k* is about 2

* Refer to Traceability Information, Section d

Preparation Information:

The standard is generally prepared from single element standard solutions that are ISO Guide 34 certified reference materials. Highest purity source materials were purchased from qualified vendors per ISO 9001:2008 guidelines and assayed for conformity prior to use. Sub-boiling distilled high-purity acid has been used to place the materials in solution and to stabilize the standard. The matrix is as noted above in 18 megaohm deionized water.

Traceability Information:

The traceability of this standard is maintained through an unbroken chain of comparisons to appropriate standards with suitable procedure and measurement uncertainties. The maintenance of the base and derived units of International System of Units (SI) with traceability of measurement results (contemporary metrology) to SI ensures their comparability over time as follows.

a. Standard Weight and Analytical Balance

The standard weights (NBS weights Inventory No 20231A) are calibrated every two years by South Carolina Metrology Laboratory that is a participant in "NIST Weights and Measures Measurement Assurance Program" with a certificate of measurement traceability to NIST primary standards.

The balances are calibrated yearly by the ISO 17025 accredited metrology service, and are verified weekly by an in-house method using standard weights.

b. Volumetric Device

The calibration of volumetric vessels is checked annually using the ASTM method E542

Lot No.: 1602230

Rev. No.: 3.3.0

Page 1 of 2

High-Purity Standards is certified to ISO 9001:2008 and accredited to ISO/IEC 17025:2005 and ISO Guide 34:2009.

3498736

c. **Thermometer**

The standard thermometers are calibrated every year by the ISO 17025 accredited metrology service. The thermometers used in-house are verified against the standard thermometers yearly.

d. **Calibration Standards**

The Calibration Standards are traceable to SRM 3100 Series Spectrometric Standard Solutions or second sources.

Packaging and Storage Conditions:

The standard is packaged in a pre-cleaned polyethylene bottle. To maintain the integrity of this product, the solution should be kept tightly capped and stored under normal laboratory conditions.

Refer to Material Safety Datasheet (MSDS) for hazardous information.

Expiration Information:

The expiry date is guaranteed to be valid for twelve months from the shipping date provided. For this reason, standards from the same lot may have different expiration dates.

Preparation Date: January 22, 2016

Shipped Date: January 27, 2016

Expiration Date: January 27, 2017

Certificate Issue Date: January 25, 2016

Quality Information:



ISO/IEC 17025:2005 Accreditation
Certificate Number AT-1529

Moven Mututuvvari

Moven T. Mututuvvari, Ph.D.
Laboratory Manager

NOTICE: HPS products are intended for laboratory use only. All products should be handled and used by trained professional personnel. The responsibility for the safe handling and use of these products rests solely with the buyer and/or user. The data and information as stated was furnished by the manufacturer of the product. The information provided in this certificate pertains only to the lot number specified. None of the information provided in this certificate may be used, reproduced or transmitted in any form or by any means without written approval from High Purity Standards.

Lot No.: 1602230

Rev. No.: 3.3.0

Page 2 of 2

High-Purity Standards is certified to ISO 9001:2008 and accredited to ISO/IEC 17025:2005 and ISO Guide 34:2009.

Reagent

ICP ISAB STD1_00008

Certificate of Analysis

Product Description:

Name: ICS-AB STD#1
Part Number: **SM-606-037**
Solution A
Lot Number: **1602229**
Matrix: 20% HCl
Purity: 99.95% - 99.9999%

3718774
ID: ICP ISAB STD1_00008
Exp: 01/27/17 Ppd: SJS Opi: 02/03/16
ICAP ICSAB STD 1 SOL A

Certified Values:

Element	(mg/L)	SRM ID	SRM Lot#	Element	(mg/L)	SRM ID	SRM Lot#
Sb	100.0 ± 0.6	*		P	200.0 ± 1.2	3139a	060717
As	200 ± 2	3103a	100818	K	5000 ± 25	3141a	140813
B	200.0 ± 1.2	3107	110830	Se	500 ± 5	3149	100901
Li	100.0 ± 0.6	3129a	100714	Na	5000 ± 25	3152a	120715
Mo	100.0 ± 0.6	3134	891307	Sr	100.0 ± 0.5	3153a	990906

The Certified values are based on gravimetric and volumetric preparation, and verified against SRM 3100 series developed by National Institute of Standards and Technology (NIST) via either inductively coupled plasma optical emission spectrometry (ICP-OES) or inductively coupled plasma mass spectrometry (ICP-MS) using an internal laboratory developed method. The uncertainty in the certified value is calculated for a 95% confidence interval and coverage factor *k* is about 2

* Refer to Traceability Information, Section d

Preparation Information:

The standard is generally prepared from single element standard solutions that are ISO Guide 34 certified reference materials. Highest purity source materials were purchased from qualified vendors per ISO 9001:2008 guidelines and assayed for conformity prior to use. Sub-boiling distilled high-purity acid has been used to place the materials in solution and to stabilize the standard. The matrix is as noted above in 18 megaohm deionized water.

Traceability Information:

The traceability of this standard is maintained through an unbroken chain of comparisons to appropriate standards with suitable procedure and measurement uncertainties. The maintenance of the base and derived units of International System of Units (SI) with traceability of measurement results (contemporary metrology) to SI ensures their comparability over time as follows.

a. Standard Weight and Analytical Balance

The standard weights (NBS weights Inventory No 20231A) are calibrated every two years by South Carolina Metrology Laboratory that is a participant in "NIST Weights and Measures Measurement Assurance Program" with a certificate of measurement traceability to NIST primary standards.

The balances are calibrated yearly by the ISO 17025 accredited metrology service, and are verified weekly by an in-house method using standard weights.

Lot No.: **1602229**

Rev. No.: 3.3.0

Page 1 of 2

High-Purity Standards is certified to ISO 9001:2008 and accredited to ISO/IEC 17025:2005 and ISO Guide 34:2009.

- b. **Volumetric Device**
The calibration of volumetric vessels is checked annually using the ASTM method E542
- c. **Thermometer**
The standard thermometers are calibrated every year by the ISO 17025 accredited metrology service. The thermometers used in-house are verified against the standard thermometers yearly.
- d. **Calibration Standards**
The Calibration Standards are traceable to SRM 3100 Series Spectrometric Standard Solutions or second sources.

Packaging and Storage Conditions:

The standard is packaged in a pre-cleaned polyethylene bottle. To maintain the integrity of this product, the solution should be kept tightly capped and stored under normal laboratory conditions.

Refer to Material Safety Datasheet (MSDS) for hazardous information,

Expiration Information:

The expiry date is guaranteed to be valid for twelve months from the shipping date provided. For this reason, standards from the same lot may have different expiration dates.

Preparation Date: January 22, 2016
Shipped Date: January 27, 2016
Expiration Date: January 27, 2017
Certificate Issue Date: January 25, 2016

Quality Information:



ISO/IEC 17025:2005 Accreditation
Certificate Number AT-1529

Moven Mututuvvari
Moven T. Mututuvvari, Ph.D.
Laboratory Manager

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Lot No.: 1602229

Rev. No.: 3.3.0

Page 2 of 2

High-Purity Standards is certified to ISO 9001:2008 and accredited to ISO/IEC 17025:2005 and ISO Guide 34:2009.

3498732

Reagent

ICP ISAB STD2_00007

Certificate of Analysis

Product Description:

Name: ICS-AB STD #2
Part Number: **SM-606-038**
Lot Number: **1525210**
Matrix: 20% HCl
Purity: 99.98% - 99.999%

Certified Values:

Element	(mg/L)	SRM ID	SRM Lot#	Element	(mg/L)	SRM ID	SRM Lot#
Sn	1000 ± 6	*		Ti	100.0 ± 0.6	3162a	130925

The Certified values are based on gravimetric and volumetric preparation, and verified against SRM 3100 series developed by National Institute of Standards and Technology (NIST) via either inductively coupled plasma optical emission spectrometry (ICP-OES) or inductively coupled plasma mass spectrometry (ICP-MS) using an internal laboratory developed method. The uncertainty in the certified value is calculated for a 95% confidence interval and coverage factor k is about 2

* Refer to Traceability Information, Section d

Preparation Information:

The standard is generally prepared from single element standard solutions that are ISO Guide 34 certified reference materials. Highest purity source materials were purchased from qualified vendors per ISO 9001:2008 guidelines and assayed for conformity prior to use. Sub-boiling distilled high-purity acid has been used to place the materials in solution and to stabilize the standard. The matrix is as noted above in 18 megaohm deionized water.

Traceability Information:

The traceability of this standard is maintained through an unbroken chain of comparisons to appropriate standards with suitable procedure and measurement uncertainties. The maintenance of the base and derived units of International System of Units (SI) with traceability of measurement results (contemporary metrology) to SI ensures their comparability over time as follows.

a. Standard Weight and Analytical Balance

The standard weights (NBS weights Inventory No 20231A) are calibrated every two years by South Carolina Metrology Laboratory that is a participant in "NIST Weights and Measures Measurement Assurance Program" with a certificate of measurement traceability to NIST primary standards.

The balances are calibrated yearly by the ISO 17025 accredited metrology service, and are verified weekly by an in-house method using standard weights.

b. Volumetric Device

The calibration of volumetric vessels is checked annually using the ASTM method E542

c. Thermometer

The standard thermometers are calibrated every year by the ISO 17025 accredited metrology service. The thermometers used in-house are verified against the standard thermometers yearly.

Lot No.: **1525210**

Rev. No.: 3.3.0

Page 1 of 2

High-Purity Standards is certified to ISO 9001:2008 and accredited to ISO/IEC 17025:2005 and ISO Guide 34:2009.

Standard Verification Form

00007

Verification (New vendor or problematic Standard)	<input checked="" type="checkbox"/>	Re-Verification	<input type="checkbox"/>
TALS Reagent Record			
New	<input checked="" type="checkbox"/>	Copied	<input type="checkbox"/>
COA Reviewed against formulary report			<input type="checkbox"/>

Document instrument verification if need (Initial or re-verification):		
Department	Acceptance Criteria	
	Standard Analytes	Poor Performers* and Esterified Analytes
GC/HPLC	≤ 15 %D	≤ 35 %D or ≤ 50 %D for dinoseb
GCMS/LCMS	≤ 35 %D	≤ 55 %D
MSVOA	≤ 25 %D	≤ 55 %D
Metals	≤ 8 %D	NA
Wet Chemistry	≤ 5 %D	NA

Standard Name	ICS-AB5TD#2	Standard ID	00007	
Verified by	SP	Instrument ID		
Verification Date	9/23/18	Method Reference		
Reference Standard ID		Batch #		
Analyte/Mix	Prepared Concentration	Verification Concentration	% Diff	Pass/Fail
SEE COA				
New Expiration Date:		New TALS ID		
New expiration date can be no greater than 1/2 the designated standards shelf life from the date of re-verification. Standards can only be re-verified one time.				
Comment:				

1st Level Review

SP

Date:

9/23/18

2nd Level Review

Date:

QA Review (Re-verification only)		Date:
----------------------------------	--	-------

Attach form, supporting documentation and original CoA to new verified or re-verified standard record in TALS.

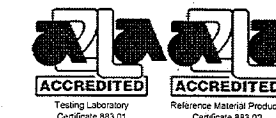
*See analytical SOP for details on poor performing analytes.

Reagent

ICP LLCCV-1_00034

1.0 ACCREDITATION / REGISTRATION

INORGANIC VENTURES is accredited to ISO Guide 34, "General Requirements for the Competence of Reference Material Producers" and ISO/IEC 17025, "General Requirements for the Competence of Testing and Calibration Laboratories". Inorganic Ventures is also an ISO 9001 registered manufacturer (SAI Global File Number 010105).



2.0 PRODUCT DESCRIPTION

Product Code:	Multi Analyte Custom Grade Solution		
Catalog Number:	ICP-LLCCV-1		
Lot Number:	K2-MEB631023		
Matrix:	5% (v/v) HNO ₃		
Value / Analyte(s):	300 µg/mL ea: Potassium, 100 µg/mL ea: Sodium, 20 µg/mL ea: Calcium, Magnesium, 10 µg/mL ea: Aluminum, Bismuth, Iron, 6 µg/mL ea: Uranium, 4 µg/mL ea: Nickel, 2 µg/mL ea: Zinc, 1.5 µg/mL ea: Arsenic, Copper, Selenium, Thorium, Thallium, 1 µg/mL ea: Silver, Barium, Cobalt, Chromium+3, Lithium, Manganese, Strontium, Vanadium, 0.9 µg/mL ea: Lead, 0.5 µg/mL ea: Cadmium, 0.1 µg/mL ea: Beryllium		

3.0 CERTIFIED VALUES AND UNCERTAINTIES

ANALYTE	CERTIFIED VALUE	ANALYTE	CERTIFIED VALUE
Aluminum, Al	10.00 ± 0.06 µg/mL	Arsenic, As	1.500 ± 0.011 µg/mL
Barium, Ba	1.000 ± 0.006 µg/mL	Beryllium, Be	0.1000 ± 0.0007 µg/mL
Bismuth, Bi	10.00 ± 0.06 µg/mL	Cadmium, Cd	0.5000 ± 0.0036 µg/mL
Calcium, Ca	20.00 ± 0.11 µg/mL	Chromium+3, Cr3	1.000 ± 0.006 µg/mL
Cobalt, Co	1.000 ± 0.007 µg/mL	Copper, Cu	1.500 ± 0.011 µg/mL
Iron, Fe	10.00 ± 0.06 µg/mL	Lead, Pb	0.900 ± 0.005 µg/mL
Lithium, Li	1.000 ± 0.006 µg/mL	Magnesium, Mg	20.00 ± 0.15 µg/mL
Manganese, Mn	1.000 ± 0.006 µg/mL	Nickel, Ni	4.001 ± 0.029 µg/mL
Potassium, K	300.0 ± 1.6 µg/mL	Selenium, Se	1.500 ± 0.010 µg/mL
Silver, Ag	1.000 ± 0.008 µg/mL	Sodium, Na	100.0 ± 0.5 µg/mL
Strontium, Sr	1.000 ± 0.007 µg/mL	Thallium, Tl	1.500 ± 0.011 µg/mL
Thorium, Th	1.500 ± 0.010 µg/mL	Uranium, U	5.999 ± 0.047 µg/mL
Vanadium, V	1.000 ± 0.007 µg/mL	Zinc, Zn	2.000 ± 0.013 µg/mL

Certified Density: 1.026 g/mL (measured at 20 ± 1 °C)

Assay Information:

Zn	ICP Assay	3168a	120629
Zn	EDTA	928	928

The following equations are used in the calculation of the certified value and the uncertainty. Reported uncertainties represent expanded uncertainties expressed at approximately the 95% confidence level using a coverage factor of k = 2.

Characterization of CRM by two independent methods

Characterization of CRM by one method

Characterization of CRM/RM by Two Methods

Certified Value, $X_{CRM/RM}$, where two methods of characterization are used is the weighted mean of the two results:

$$X_{CRM/RM} = [(w_a)(X_a) + (w_b)(X_b)]$$

$$X_a = \text{mean of Assay Method A with standard uncertainty } u_{char\ a}$$
$$X_b = \text{mean of Assay Method B with standard uncertainty } u_{char\ b}$$
$$w_a \text{ and } w_b = \text{the weighting factors for each method calculated using the inverse square of the variance:}$$
$$w_a = (1/u_{char\ a})^2 / ((1/u_{char\ a})^2 + (1/u_{char\ b})^2)$$
$$w_b = (1/u_{char\ b})^2 / ((1/u_{char\ a})^2 + (1/u_{char\ b})^2)$$

$$CRM/RM \text{ Expanded Uncertainty } (\pm) = U_{CRM/RM} = k(u^2_{char\ a\&\ b} + u^2_{bb} + u^2_{lts} + u^2_{sts})^{1/2}$$
$$k = \text{coverage factor} = 2 \text{ in all cases at Inorganic Ventures}$$

$$u_{char\ a\&\ b} = [(w_a)^2(u_{char\ a})^2 + (w_b)^2(u_{char\ b})^2]^{1/2}$$
 where $u_{char\ a}$ and $u_{char\ b}$ are the square root of the sum of the squares of errors from characterization which include instrument measurement, density, NIST SRM uncertainty, weighing, and volume
 u_{bb} = bottle to bottle homogeneity standard uncertainty
 u_{lts} = long term stability standard uncertainty (storage)
 u_{sts} = short term stability standard uncertainty (transportation)

Certified Abundance:

IV's Certified Abundance

Isotope	Atom %
Uranium 238U	99.8 ± 0.1
Uranium 235U	0.21 ± 0.05

Characterization of CRM/RM by One Method

Certified Value, $X_{CRM/RM}$, where one method of characterization is used is the mean of individual results:

$$X_{CRM/RM} = \text{mean of Assay Method A with standard uncertainty } u_{char\ a}$$

$$CRM/RM \text{ Expanded Uncertainty } (\pm) = U_{CRM/RM} = k(u^2_{char\ a} + u^2_{bb} + u^2_{lts} + u^2_{sts})^{1/2}$$
$$k = \text{coverage factor} = 2 \text{ in all cases at Inorganic Ventures}$$

$$u_{char\ a} = \text{square root of the sum of the squares of the errors from characterization which include instrumental measurement, density, NIST SRM uncertainty, weighing, and volume}$$
$$u_{bb} = \text{bottle to bottle homogeneity standard uncertainty}$$
$$u_{lts} = \text{long term stability standard uncertainty (storage)}$$
$$u_{sts} = \text{short term stability standard uncertainty (transportation)}$$

4.0 TRACEABILITY TO NIST

- This product is traceable to NIST via an unbroken chain of comparisons. The uncertainties for each certified value are reported, taking into account the SRM/RM uncertainty error and the measurement, weighing and volume dilution errors. In rare cases where no NIST SRM/RM are available, the term 'in-house std.' is specified.

4.1 Thermometer Calibration

- All thermometers are NIST traceable through thermometers that are calibrated by an accredited calibration laboratory.

4.2 Balance Calibration

- All analytical balances are calibrated by an accredited calibration laboratory and procedure. The weights used for testing are annually compared to master weights and are traceable to NIST.

4.3 Glassware Calibration

- An in-house procedure is used to calibrate all Class A glassware used in the manufacturing and quality control of CRM/RMs.

5.0 TRACE METALLIC IMPURITIES (TMI) DETERMINED BY ICP-MS AND ICP-OES (µg/mL)

N/A

6.0 INTENDED USE

- For the calibration of analytical instruments and validation of analytical methods as appropriate.

7.0 INSTRUCTIONS FOR THE CORRECT USE OF THIS REFERENCE MATERIAL

7.1 Storage and Handling Recommendations

- Store between approximately 4° - 30° C while in sealed TCT bag.

- While stored in the sealed TCT bag, transpiration of this CRM/RM is negligible. After opening the sealed TCT bag transpiration of the CRM/RM will occur, resulting in a gradual increase in the analyte concentration(s). It is the responsibility of the user to account for this effect. When the bottle is weighed both before and after being placed in storage, the mass difference observed will be a measure of transpiration mass loss.

- After opening the sealed TCT bag keep cap tightly sealed when not in use. Store and use at 20° ± 4° C. Do not pipette from the container. Do not return removed aliquots to container.

- For more information, visit www.inorganicventures.com/TCT

Low Silver Note: This solution contains "LOW" levels of Silver. Please store this entire bottle inside a sealed glass jar.

Uranium Note: If uranium is present in this standard, it is natural abundance unless specified in Section 3.0

8.0 HAZARDOUS INFORMATION

- Please refer to the Safety Data Sheet for information regarding this CRM/RM.

9.0 HOMOGENEITY

- This solution was mixed according to an in-house procedure and is guaranteed to be homogeneous. Homogeneity data indicate that the end user should take a minimum sample size of 0.2 mL to assure homogeneity.

10.0 QUALITY STANDARD DOCUMENTATION

10.1 10CFR50 Appendix B - Nuclear Regulatory Commission

- Domestic Licensing of Production and Utilization Facilities

10.2 10CFR21 - Nuclear Regulatory Commission

- Reporting defects and Non-Compliance

10.3 ISO 9001 Quality Management System Registration

- SAI Global File Number 010105

10.4 ISO/IEC Guide 17025 "General Requirements for the Competence of Testing and Calibration Laboratories"

- Chemical Testing - Accredited / A2LA Certificate Number 883.01

10.5 ISO Guide 34 "General Requirements for the Competence of Reference Material Producers"

- Reference Material Producer - Accredited / A2LA Certificate Number 883.02

Inorganic Ventures, 300 Technology Drive, Christiansburg, Va. 24073, USA; Telephone: 800.669.6799; 540.585.3030, Fax: 540.585.3012; info@inorganicventures.com; www.inorganicventures.com

11.0 CERTIFICATION, LOT EXPIRATION AND PERIOD OF VALIDITY

11.1 Certification Issue Date

April 07, 2016

- The certification is valid within the measurement uncertainty specified provided the CRM/RM is stored and handled in accordance with instructions given in Sec 7.1. This certification is nullified if instructions in Sec 7.1 are not followed or if the CRM/RM is damaged, contaminated, or otherwise modified.

11.2 Lot Expiration Date

- April 07, 2019

- The date after which this CRM/RM should not be used.

- The lot expiration date reflects the period of time that the stability of a CRM/RM can be supported by long term stability studies conducted on properly stored and handled CRM/RMs. Lot expiration is limited primarily by transpiration (loss of water from the solution) and infrequently by chemical stability.

11.3 Period of Validity

- Sealed TCT Bag Open Date: _____

- This CRM/RM should not be used longer than one year from the date of removal from the aluminized bag or after the date given in Sec. 11.2, whichever comes first. This is contingent upon the CRM/RM being handled and stored in accordance with the instructions given in Sec 7.1.

12.0 NAMES AND SIGNATURES OF CERTIFYING OFFICERS

Certificate Prepared By:

Maurice Harris
Product Documentation Technician



Certificate Approved By:

Michael Booth
QC Supervisor



Certifying Officer:

Paul Gaines
PhD., Senior Technical Director



ANALYTE	METHOD	NIST SRM#	SRM LOT#
Ag	ICP Assay	3151	992212
Ag	Volhard	999b	999b
Al	ICP Assay	3101a	060502
Al	Calculated		See Sec. 4.2
As	ICP Assay	3103a	100818
As	Calculated		See Sec. 4.2
Ba	ICP Assay	3104a	070222
Ba	Gravimetric		See Sec. 4.2
Be	ICP Assay	3105a	090514
Be	Calculated		See Sec. 4.2
Bi	ICP Assay	3106	991212
Bi	Calculated		See Sec. 4.2
Ca	ICP Assay	3109a	050825
Ca	EDTA	928	928
Cd	ICP Assay	3108	060531
Cd	EDTA	928	928
Co	ICP Assay	3113	00630
Co	EDTA	928	928
Cr3	ICP Assay	3112a	030730
Cr3	Calculated		See Sec. 4.2
Cu	ICP Assay	3114	011017
Cu	EDTA	928	928
Fe	ICP Assay	3126a	051031
K	ICP Assay	3141a	051220
K	Gravimetric		See Sec. 4.2
Li	ICP Assay	3129a	100714
Li	Gravimetric		See Sec. 4.2
Mg	ICP Assay	3131a	050302
Mg	EDTA	928	928
Mn	ICP Assay	3132	050429
Mn	EDTA	928	928
Na	ICP Assay	3152a	120715
Na	Gravimetric		See Sec. 4.2
Ni	ICP Assay	3136	000612
Ni	EDTA	928	928
Pb	ICP Assay	3128	101026
Pb	EDTA	928	928
Se	ICP Assay	3149	100901
Se	Calculated		See Sec. 4.2
Sr	EDTA	928	928
Sr	ICP Assay	3153a	990906
Th	EDTA	928	928
Th	ICP Assay	Traceable to SRM 3159	992912
Ti	ICP Assay	3158	993012
Ti	Calculated		See Sec. 4.2
U	ICP Assay	3164	080521
U	Calculated		See Sec. 4.2
V	EDTA	928	928
V	ICP Assay	3165	992706

Reagent

ICP PDS 1_00014



300 Technology Drive
Christiansburg, VA 24073 · USA
inorganicventures.com

CERTIFICATE OF ANALYSIS

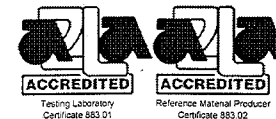
tel: 800.669.6799 · 540.585.3030

fax: 540.585.3012

info@inorganicventures.com

1.0 ACCREDITATION / REGISTRATION

INORGANIC VENTURES is accredited to ISO Guide 34, "General Requirements for the Competence of Reference Material Producers" and ISO/IEC 17025, "General Requirements for the Competence of Testing and Calibration Laboratories". Inorganic Ventures is also an ISO 9001 registered manufacturer (SAI Global File Number 010105).



2.0 PRODUCT DESCRIPTION

Product Code: Multi Analyte Custom Grade Solution

Catalog Number: STLDEN-PDS-1

Lot Number: H2-MEB546062

Matrix: 3% (v/v) HNO₃

Value / Analyte(s): 2 000 µg/mL ea:

Ca, K, Mg, Na,

200 µg/mL ea:

P,
100 µg/mL ea:
Al, Fe,

50 µg/mL ea:

U,

20 µg/mL ea:

As, Se, Th, Tl,

Zn,

10 µg/mL ea:

Ba, Li, Pb,

5 µg/mL ea:

Ag, Be, Cd, Co,

Cr₃, Cu, Mn, Ni,

Sr, V

3628357
ID: ICP PDS 1_00013
Exp: 12/01/16 Pptd: SJS Opp: 11/20/15
ICP PDS 1 IV

3.0 CERTIFIED VALUES AND UNCERTAINTIES

ANALYTE	CERTIFIED VALUE	ANALYTE	CERTIFIED VALUE
Aluminum, Al	100.0 ± 0.5 µg/mL	Arsenic, As	20.00 ± 0.13 µg/mL
Barium, Ba	10.00 ± 0.06 µg/mL	Beryllium, Be	5.000 ± 0.028 µg/mL
Cadmium, Cd	5.001 ± 0.032 µg/mL	Calcium, Ca	2 000 ± 9 µg/mL
Chromium+3, Cr3	5.000 ± 0.028 µg/mL	Cobalt, Co	5.001 ± 0.032 µg/mL
Copper, Cu	5.001 ± 0.032 µg/mL	Iron, Fe	100.0 ± 0.5 µg/mL
Lead, Pb	10.00 ± 0.05 µg/mL	Lithium, Li	10.00 ± 0.05 µg/mL
Magnesium, Mg	2 000 ± 9 µg/mL	Manganese, Mn	5.001 ± 0.028 µg/mL
Nickel, Ni	5.001 ± 0.028 µg/mL	Phosphorus, P	200.0 ± 1.0 µg/mL
Potassium, K	2 000 ± 9 µg/mL	Selenium, Se	20.00 ± 0.11 µg/mL
Silver, Ag	5.001 ± 0.036 µg/mL	Sodium, Na	2 000 ± 9 µg/mL
Strontium, Sr	4.999 ± 0.032 µg/mL	Thallium, Tl	20.00 ± 0.13 µg/mL
Thorium, Th	20.00 ± 0.11 µg/mL	Uranium, U	50.00 ± 0.36 µg/mL
Vanadium, V	4.999 ± 0.032 µg/mL	Zinc, Zn	20.00 ± 0.11 µg/mL

Certified Density: 1.041 g/mL (measured at 20 ± 1 °C)

Assay Information:

Certified Value $(\bar{x}) = \frac{\sum x_i}{n}$ (\bar{x}) = mean
 x_i = individual results
 n = number of measurements
Uncertainty $(\pm) = 2 [\sum (s_i)^2]^{1/2}$
 2 = the coverage factor.
 $[\sum (s_i)^2]^{1/2}$ = The square root of the sum of the squares of the most common errors (where 's' stands for the standard deviation) from instrumental measurement, density, NIST SRM uncertainty, weighing, dilution to volume, homogeneity, long term stability and short term stability.

Certified Abundance:

IV's Certified Abundance	
Isotope	Atom %
Uranium 238U	99.8 ± 0.1
Uranium 235U	0.21 ± 0.05

4.0 TRACEABILITY TO NIST

- This product is traceable to NIST via an unbroken chain of comparisons. The uncertainties for each certified value are reported, taking into account the SRM/RM uncertainty error and the measurement, weighing and volume dilution errors. In rare cases where no NIST SRM/RM are available, the term 'in-house std.' is specified.

4.1 Thermometer Calibration

- All thermometers are NIST traceable through thermometers that are calibrated by an accredited calibration laboratory.

4.2 Balance Calibration

- All analytical balances are calibrated by an accredited calibration laboratory and procedure. The weights used for testing are annually compared to master weights and are traceable to NIST.

4.3 Glassware Calibration

- An in-house procedure is used to calibrate all Class A glassware used in the manufacturing and quality control of CRM/RMs.

5.0 TRACE METALLIC IMPURITIES (TMI) DETERMINED BY ICP-MS AND ICP-OES (µg/mL)

N/A

6.0 INTENDED USE

- For the calibration of analytical instruments and validation of analytical methods as appropriate.

7.0 INSTRUCTIONS FOR THE CORRECT USE OF THIS REFERENCE MATERIAL

7.1 Storage and Handling Recommendations

- Keep cap tightly sealed when not in use. Store and use at 20 ± 4° C. Do not pipette from the container. Do not return removed aliquots to container.

Low Silver Note: This solution contains "LOW" levels of Silver. Please store this entire bottle inside a sealed glass jar.

Uranium Note: If uranium is present in this standard, it is natural abundance unless specified in Section 3.0

8.0 HAZARDOUS INFORMATION

- Please refer to the Safety Data Sheet for information regarding this CRM/RM.

9.0 HOMOGENEITY

- This solution was mixed according to an in-house procedure and is guaranteed to be homogeneous. Homogeneity data indicate that the end user should take a minimum sample size of 0.2 mL to assure homogeneity.

10.0 QUALITY STANDARD DOCUMENTATION

10.1 10CFR50 Appendix B - Nuclear Regulatory Commission

- Domestic Licensing of Production and Utilization Facilities

10.2 10CFR21 - Nuclear Regulatory Commission

- Reporting defects and Non-Compliance

10.3 ISO 9001 Quality Management System Registration

- SAI Global File Number 010105

10.4 ISO/IEC Guide 17025 "General Requirements for the Competence of Testing and Calibration Laboratories"

- Chemical Testing - Accredited / A2LA Certificate Number 883.01

10.5 ISO/IEC Guide 34 "General Requirements for the Competence of Reference Material Producers"

- Reference Material Producer - Accredited / A2LA Certificate Number 883.02

11.0 CERTIFICATION, EXPIRATION AND PERIOD OF VALIDITY

11.1 Certification Issue Date

September 22, 2014

11.2 Expiration Date

EXPIRES
12/2016

11.3 Period of Validity

- The certification is valid within the measurement uncertainty specified provided the CRM/RM is handled and stored in accordance with instructions given in Sec 7.0 and used prior to the date given in Sec 11.2. This certification is nullified if the CRM/RM is damaged, contaminated, or otherwise modified.

12.0 NAMES AND SIGNATURES OF CERTIFYING OFFICERS

Certificate Prepared By:

Zach Saunders
Product Documentation Technician

Zachary Saunders

Certificate Approved By:

Brian Alexander
PhD., Technical Process Director

Brian Alexander

Certifying Officer:

Paul Gaines
PhD., Senior Technical Director

Paul R. Gaines

ANALYTE	METHOD	NIST SRM#	SRM LOT#
Ag	ICP Assay	3151	992212
Ag	Volhard	999b	999b
Al	Calculated		See Sec. 4.2
Al	ICP Assay	3101a	060502
As	Calculated		See Sec. 4.2
As	ICP Assay	3103a	100818
Ba	Gravimetric		See Sec. 4.2
Ba	ICP Assay	3104a	070222
Be	Calculated		See Sec. 4.2
Be	ICP Assay	3105a	090514
Ca	ICP Assay	3109a	050825
Ca	EDTA	928	928
Cd	ICP Assay	3108	060531
Cd	EDTA	928	928
Co	ICP Assay	3113	00630
Co	EDTA	928	928
Cr3	Calculated		See Sec. 4.2
Cr3	ICP Assay	3112a	030730
Cu	ICP Assay	3114	011017
Cu	EDTA	928	928
Fe	ICP Assay	3126a	051031
Fe	EDTA	928	928
K	Gravimetric		See Sec. 4.2
K	ICP Assay	3141a	051220
Li	Gravimetric		See Sec. 4.2
Li	ICP Assay	3129a	100714
Mg	ICP Assay	3131a	050302
Mg	EDTA	928	928
Mn	ICP Assay	3132	050429
Mn	EDTA	928	928
Na	Gravimetric		See Sec. 4.2
Na	ICP Assay	3152a	120715
Ni	ICP Assay	3136	000612
Ni	EDTA	928	928
P	ICP Assay	3139a	060717
P	Acidimetric	84L	84L
Pb	ICP Assay	3128	101026
Pb	EDTA	928	928
Se	Calculated		See Sec. 4.2
Se	ICP Assay	3149	100901
Sr	ICP Assay	3153a	990906
Sr	EDTA	928	928
Th	ICP Assay	3159	992912
Th	EDTA	928	928
Ti	Calculated		See Sec. 4.2
Ti	ICP Assay	3158	993012
U	Calculated		See Sec. 4.2
U	ICP Assay	3164	080521
V	ICP Assay	3165	992706
V	EDTA	928	928
Zn	ICP Assay	3168a	120629
Zn	EDTA	928	928

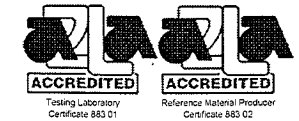
The following equations are used in the calculation of the certified value and the uncertainty. Reported uncertainties represent expanded uncertainties expressed at approximately the 95% confidence level using a coverage factor of $k = 2$.

Reagent

ICP RL STD3A_00010

1.0 ACCREDITATION / REGISTRATION

INORGANIC VENTURES is accredited to ISO Guide 34, "General Requirements for the Competence of Reference Material Producers" and ISO/IEC 17025, "General Requirements for the Competence of Testing and Calibration Laboratories". Inorganic Ventures is also an ISO 9001 registered manufacturer (SAI Global File Number 010105).



2.0 PRODUCT DESCRIPTION

Product Code:	Multi Analyte Custom Grade Solution		
Catalog Number:	STLDEN-RL-3A		
Lot Number:	J2-MEB594038		
Matrix:	1.4% (v/v) HNO3		
Value / Analyte(s):	1 000 µg/mL ea:		
	K,	Na,	P,
	200 µg/mL ea:		
	Ca,	Mg,	
	100 µg/mL ea:		
	Al,	B,	
	60 µg/mL ea:		
	U,		
	30 µg/mL ea:		
	Fe,		
	10 µg/mL ea:		
	Ag,	Cr3,	Cu,
	Li,	Ni,	Th,
	V,	Zn,	
	5 µg/mL ea:		
	Ba,	Cd,	Co,
	Sr,		
	3 µg/mL ea:		
	Mn,		
	1 µg/mL ea:		
	Be		

3436569
ID: ICP RL STD3A_00010
Exp:09/01/16 Prep:SJS Opn:08/17/15
ICP RL STD 3A

3.0 CERTIFIED VALUES AND UNCERTAINTIES

ANALYTE	CERTIFIED VALUE	ANALYTE	CERTIFIED VALUE
Aluminum, Al	100.0 ± 0.5 µg/mL	Barium, Ba	5.001 ± 0.029 µg/mL
Beryllium, Be	1.000 ± 0.006 µg/mL	Boron, B	100.0 ± 0.8 µg/mL
Cadmium, Cd	5.001 ± 0.033 µg/mL	Calcium, Ca	200.0 ± 0.9 µg/mL
Chromium+3, Cr3	10.00 ± 0.06 µg/mL	Cobalt, Co	5.000 ± 0.026 µg/mL
Copper, Cu	10.00 ± 0.06 µg/mL	Iron, Fe	30.00 ± 0.16 µg/mL
Lithium, Li	10.00 ± 0.05 µg/mL	Magnesium, Mg	200.0 ± 0.9 µg/mL
Manganese, Mn	2.999 ± 0.018 µg/mL	Nickel, Ni	10.00 ± 0.06 µg/mL
Phosphorus, P	1 000 ± 5 µg/mL	Potassium, K	1 000 ± 4 µg/mL
Silver, Ag	10.00 ± 0.07 µg/mL	Sodium, Na	1 000 ± 4 µg/mL
Strontium, Sr	5.001 ± 0.033 µg/mL	Thorium, Th	10.00 ± 0.06 µg/mL
Uranium, U	60.00 ± 0.34 µg/mL	Vanadium, V	10.00 ± 0.06 µg/mL
Zinc, Zn	10.00 ± 0.06 µg/mL		

Certified Density: 1.016 g/mL (measured at 20 ± 1 °C)

Assay Information:

ANALYTE	METHOD	NIST SRM#	SRM LOT#
Ag	ICP Assay	3151	992212
Ag	Volhard	999b	999b
Al	Calculated		See Sec. 4.2
Al	ICP Assay	3101a	060502
B	ICP Assay	3107	110830
Ba	Gravimetric		See Sec. 4.2
Ba	ICP Assay	3104a	070222
Be	Calculated		See Sec. 4.2
Be	ICP Assay	3105a	090514
Ca	ICP Assay	3109a	050825
Ca	EDTA	928	928
Cd	ICP Assay	3108	060531
Cd	EDTA	928	928
Co	ICP Assay	3113	000630 Co
Co	EDTA	928	928
Cr3	Calculated		See Sec. 4.2
Cr3	ICP Assay	3112a	030730
Cu	ICP Assay	3114	121207
Cu	EDTA	928	928
Fe	ICP Assay	3126a	051031
Fe	EDTA	928	928
K	Gravimetric		See Sec. 4.2
K	ICP Assay	3141a	051220
Li	Gravimetric		See Sec. 4.2
Li	ICP Assay	3129a	100714
Mg	ICP Assay	3131a	050302
Mg	EDTA	928	928
Mn	ICP Assay	3132	050429
Mn	EDTA	928	928
Na	Gravimetric		See Sec. 4.2
Na	ICP Assay	3152a	120715
Ni	ICP Assay	3136	120619
Ni	EDTA	928	928
P	ICP Assay	3139a	060717
P	Acidimetric	84L	84L
Sr	ICP Assay	3153a	990906
Sr	EDTA	928	928
Th	ICP Assay	3159	992912
Th	EDTA	928	928
U	Calculated		See Sec. 4.2
U	ICP Assay	3164	080521
V	ICP Assay	3165	992706
V	EDTA	928	928
Zn	ICP Assay	3168a	120629
Zn	EDTA	928	928

The following equations are used in the calculation of the certified value and the uncertainty. Reported uncertainties represent expanded uncertainties expressed at approximately the 95% confidence level using a coverage factor of k = 2.

Certified Value $(\bar{x}) = \frac{\sum x_i}{n}$

(\bar{x}) = mean
 x_i = individual results
 n = number of measurements

Uncertainty $(\pm) = 2 [\sum (s_i)^2]^{1/2}$

2 = the coverage factor.
 $[\sum (s_i)^2]^{1/2}$ = The square root of the sum of the squares of the most common errors (where s stands for the standard deviation) from instrumental measurement, density, NIST SRM uncertainty, weighing, dilution to volume, homogeneity, long term stability and short term stability.

Certified Abundance:

IV's Certified Abundance	
Isotope	Atom %
Uranium 238U	99.6 ± 0.1
Uranium 235U	0.37 ± 0.05

4.0 TRACEABILITY TO NIST

- This product is traceable to NIST via an unbroken chain of comparisons. The uncertainties for each certified value are reported, taking into account the SRM/RM uncertainty error and the measurement, weighing and volume dilution errors. In rare cases where no NIST SRM/RM are available, the term 'in-house std.' is specified.

4.1 Thermometer Calibration

- All thermometers are NIST traceable through thermometers that are calibrated by an accredited calibration laboratory.

4.2 Balance Calibration

- All analytical balances are calibrated by an accredited calibration laboratory and procedure. The weights used for testing are annually compared to master weights and are traceable to NIST.

4.3 Glassware Calibration

- An in-house procedure is used to calibrate all Class A glassware used in the manufacturing and quality control of CRM/RMs.

5.0 TRACE METALLIC IMPURITIES (TMI) DETERMINED BY ICP-MS AND ICP-OES (µg/mL)

N/A

6.0 INTENDED USE

- For the calibration of analytical instruments and validation of analytical methods as appropriate.

7.0 INSTRUCTIONS FOR THE CORRECT USE OF THIS REFERENCE MATERIAL

7.1 Storage and Handling Recommendations

- Keep cap tightly sealed when not in use. Store and use at 20 ± 4° C. Do not pipette from the container. Do not return removed aliquots to container.

Low Silver Note: This solution contains "LOW" levels of Silver. Please store this entire bottle inside a sealed glass jar.

Uranium Note: If uranium is present in this standard, it is natural abundance unless specified in Section 3.0

8.0 HAZARDOUS INFORMATION

- Please refer to the Safety Data Sheet for information regarding this CRM/RM.

9.0 HOMOGENEITY

- This solution was mixed according to an in-house procedure and is guaranteed to be homogeneous. Homogeneity data indicate that the end user should take a minimum sample size of 0.2 mL to assure homogeneity.

10.0 QUALITY STANDARD DOCUMENTATION

10.1 10CFR50 Appendix B - Nuclear Regulatory Commission

- Domestic Licensing of Production and Utilization Facilities

10.2 10CFR21 - Nuclear Regulatory Commission

- Reporting defects and Non-Compliance

10.3 ISO 9001 Quality Management System Registration

- SAI Global File Number 010105

10.4 ISO/IEC Guide 17025 "General Requirements for the Competence of Testing and Calibration Laboratories"

- Chemical Testing - Accredited / A2LA Certificate Number 883.01

10.5 ISO/IEC Guide 34 "General Requirements for the Competence of Reference Material Producers"

- Reference Material Producer - Accredited / A2LA Certificate Number 883.02

11.0 CERTIFICATION, EXPIRATION AND PERIOD OF VALIDITY

11.1 Certification Issue Date

August 04, 2015

11.2 Expiration Date

EXPIRES
01st 2016

11.3 Period of Validity

- The certification is valid within the measurement uncertainty specified provided the CRM/RM is handled and stored in accordance with instructions given in Sec 7.0 and used prior to the date given in Sec 11.2. This certification is nullified if the CRM/RM is damaged, contaminated, or otherwise modified.

12.0 NAMES AND SIGNATURES OF CERTIFYING OFFICERS

Certificate Prepared By:

Donna Senn
Product Documentation Technician

Donna Senn

Certificate Approved By:

Brian Alexander
PhD., Technical Process Director

Brian Alexander

Certifying Officer:

Paul Gaines
PhD., Senior Technical Director

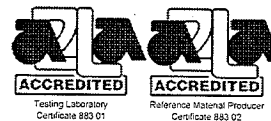
Paul R. Gaines

Reagent

ICP SPK 2B_00039

1.0 ACCREDITATION / REGISTRATION

INORGANIC VENTURES is accredited to ISO Guide 34, "General Requirements for the Competence of Reference Material Producers" and ISO/IEC 17025, "General Requirements for the Competence of Testing and Calibration Laboratories". Inorganic Ventures is also an ISO 9001 registered manufacturer (SAI Global File Number 010105).



2.0 PRODUCT DESCRIPTION

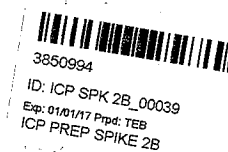
Product Code: Multi Analyte Custom Grade Solution

Catalog Number: TA-ICP-SPK-2B

Lot Number: H2-MEB559076

Matrix: 5% (v/v) HNO₃
0.5% (v/v) HF

Value / Analyte(s): 1 000 µg/mL ea:
Si,
200 µg/mL ea:
S, Sn,
100 µg/mL ea:
B, Mo, Ti,
50 µg/mL ea:
Sb, Zr



3.0 CERTIFIED VALUES AND UNCERTAINTIES

ANALYTE	CERTIFIED VALUE	ANALYTE	CERTIFIED VALUE
Antimony, Sb	50.05 ± 0.38 µg/mL	Boron, B	100.1 ± 0.7 µg/mL
Molybdenum, Mo	100.1 ± 0.6 µg/mL	Silicon, Si	1 001 ± 8 µg/mL
Sulfur, S	200.2 ± 1.1 µg/mL	Tin, Sn	200.2 ± 0.9 µg/mL
Titanium, Ti	100.1 ± 0.6 µg/mL	Zirconium, Zr	50.04 ± 0.37 µg/mL

Certified Density: 1.031 g/mL (measured at 20 ± 1 °C)

Assay Information:

ANALYTE	METHOD	NIST SRM#	SRM LOT#
B	ICP Assay	3107	070514
Mo	ICP Assay	3134	891307
S	ICP Assay	3154	892205
S	Acidimetric	84L	84L
Sb	Calculated		See Sec. 4.2
Sb	ICP Assay	3102A	061229
Si	Calculated		See Sec. 4.2
Si	ICP Assay	3150	071204
Sn	Calculated		See Sec. 4.2
Sn	ICP Assay	3161a	070330
Ti	Calculated		See Sec. 4.2
Ti	ICP Assay	3162a	060808
Zr	Calculated		See Sec. 4.2
Zr	ICP Assay	3169	071226

The following equations are used in the calculation of the certified value and the uncertainty. Reported uncertainties represent expanded uncertainties expressed at approximately the 95% confidence level using a coverage factor of $k = 2$.

$$\text{Certified Value } (\bar{x}) = \frac{\sum x_i}{n}$$

(\bar{x}) = mean

x_i = individual results

n = number of measurements

$$\text{Uncertainty } (\pm) = 2 [\sum (s_i)^2]^{1/2}$$

2 = the coverage factor.

$[\sum (s_i)^2]^{1/2}$ = The square root of the sum of the squares of the most common errors (where 's' stands for the standard deviation) from instrumental measurement, density, NIST SRM uncertainty, weighing, dilution to volume, homogeneity, long term stability and short term stability.

4.0 TRACEABILITY TO NIST

- This product is traceable to NIST via an unbroken chain of comparisons. The uncertainties for each certified value are reported, taking into account the SRM/RM uncertainty error and the measurement, weighing and volume dilution errors. In rare cases where no NIST SRM/RM are available, the term 'in-house std.' is specified.

4.1 Thermometer Calibration

- All thermometers are NIST traceable through thermometers that are calibrated by an accredited calibration laboratory.

4.2 Balance Calibration

- All analytical balances are calibrated by an accredited calibration laboratory and procedure. The weights used for testing are annually compared to master weights and are traceable to NIST.

4.3 Glassware Calibration

- An in-house procedure is used to calibrate all Class A glassware used in the manufacturing and quality control of CRM/RMs.

5.0 TRACE METALLIC IMPURITIES (TMI) DETERMINED BY ICP-MS AND ICP-OES ($\mu\text{g/mL}$)

N/A

6.0 INTENDED USE

- For the calibration of analytical instruments and validation of analytical methods as appropriate.

7.0 INSTRUCTIONS FOR THE CORRECT USE OF THIS REFERENCE MATERIAL

7.1 Storage and Handling Recommendations

- Keep cap tightly sealed when not in use. Store and use at $20 \pm 4^\circ \text{C}$. Do not pipette from the container. Do not return removed aliquots to container.

HF Note: This standard should not be prepared or stored in glass.

8.0 HAZARDOUS INFORMATION

- Please refer to the Safety Data Sheet for information regarding this CRM/RM.

9.0 HOMOGENEITY

- This solution was mixed according to an in-house procedure and is guaranteed to be homogeneous. Homogeneity data indicate that the end user should take a minimum sample size of 0.2 mL to assure homogeneity.

10.0 QUALITY STANDARD DOCUMENTATION

10.1 10CFR50 Appendix B - Nuclear Regulatory Commission

- Domestic Licensing of Production and Utilization Facilities

10.2 10CFR21 - Nuclear Regulatory Commission

- Reporting defects and Non-Compliance

10.3 ISO 9001 Quality Management System Registration

- SAI Global File Number 010105

10.4 ISO/IEC Guide 17025 "General Requirements for the Competence of Testing and Calibration Laboratories"

- Chemical Testing - Accredited / A2LA Certificate Number 883.01

10.5 ISO/IEC Guide 34 "General Requirements for the Competence of Reference Material Producers"

- Reference Material Producer - Accredited / A2LA Certificate Number 883.02

11.0 CERTIFICATION, EXPIRATION AND PERIOD OF VALIDITY

11.1 Certification Issue Date

December 31, 2014

11.2 Expiration Date

EXPIRES
1 **2017**

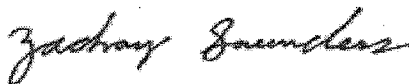
11.3 Period of Validity

- The certification is valid within the measurement uncertainty specified provided the CRM/RM is handled and stored in accordance with instructions given in Sec 7.0 and used prior to the date given in Sec 11.2. This certification is nullified if the CRM/RM is damaged, contaminated, or otherwise modified.

12.0 NAMES AND SIGNATURES OF CERTIFYING OFFICERS


Certificate Prepared By:

Zach Saunders
Product Documentation Technician



Certificate Approved By:

Brian Alexander
PhD., Technical Process Director



Certifying Officer:

Paul Gaines
PhD., Senior Technical Director

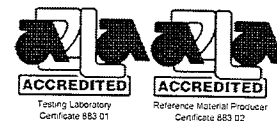


Reagent

ICP SPK 2B_00040

1.0 ACCREDITATION / REGISTRATION

INORGANIC VENTURES is accredited to ISO Guide 34, "General Requirements for the Competence of Reference Material Producers" and ISO/IEC 17025, "General Requirements for the Competence of Testing and Calibration Laboratories". Inorganic Ventures is also an ISO 9001 registered manufacturer (SAI Global File Number 010105).


2.0 PRODUCT DESCRIPTION

Product Code: Multi Analyte Custom Grade Solution

Catalog Number: TA-ICP-SPK-2B

Lot Number: H2-MEB559076

Matrix: 5% (v/v) HNO₃
0.5% (v/v) HF

Value / Analyte(s): 1 000 µg/mL ea:
Si,
200 µg/mL ea:
S, Sn,
100 µg/mL ea:
B, Mo, Ti,
50 µg/mL ea:
Sb, Zr


3885549
ID: ICP SPK 2B_00040
Exp: 01/01/17 Prpd: SUR
ICP PREP SPIKE 2B

3.0 CERTIFIED VALUES AND UNCERTAINTIES

ANALYTE	CERTIFIED VALUE	ANALYTE	CERTIFIED VALUE
Antimony, Sb	50.05 ± 0.38 µg/mL	Boron, B	100.1 ± 0.7 µg/mL
Molybdenum, Mo	100.1 ± 0.6 µg/mL	Silicon, Si	1 001 ± 8 µg/mL
Sulfur, S	200.2 ± 1.1 µg/mL	Tin, Sn	200.2 ± 0.9 µg/mL
Titanium, Ti	100.1 ± 0.6 µg/mL	Zirconium, Zr	50.04 ± 0.37 µg/mL

Certified Density: 1.031 g/mL (measured at 20 ± 1 °C)

Assay Information:

ANALYTE	METHOD	NIST SRM#	SRM LOT#
B	ICP Assay	3107	070514
Mo	ICP Assay	3134	891307
S	ICP Assay	3154	892205
S	Acidimetric	84L	84L
Sb	Calculated		See Sec. 4.2
Sb	ICP Assay	3102A	061229
Si	Calculated		See Sec. 4.2
Si	ICP Assay	3150	071204
Sn	Calculated		See Sec. 4.2
Sn	ICP Assay	3161a	070330
Ti	Calculated		See Sec. 4.2
Ti	ICP Assay	3162a	060808
Zr	Calculated		See Sec. 4.2
Zr	ICP Assay	3169	071226

The following equations are used in the calculation of the certified value and the uncertainty. Reported uncertainties represent expanded uncertainties expressed at approximately the 95% confidence level using a coverage factor of $k = 2$.

$$\text{Certified Value } (\bar{x}) = \frac{\sum x_i}{n}$$

(\bar{x}) = mean
 x_i = individual results
 n = number of measurements

$$\text{Uncertainty } (\pm) = 2 \left[\sum (s_i)^2 \right]^{1/2}$$

2 = the coverage factor.
 $\left[\sum (s_i)^2 \right]^{1/2}$ = The square root of the sum of the squares of the most common errors (where 's' stands for the standard deviation) from instrumental measurement, density, NIST SRM uncertainty, weighing, dilution to volume, homogeneity, long term stability and short term stability.

4.0 TRACEABILITY TO NIST

- This product is traceable to NIST via an unbroken chain of comparisons. The uncertainties for each certified value are reported, taking into account the SRM/RM uncertainty error and the measurement, weighing and volume dilution errors. In rare cases where no NIST SRM/RM are available, the term 'in-house std.' is specified.

4.1 Thermometer Calibration

- All thermometers are NIST traceable through thermometers that are calibrated by an accredited calibration laboratory.

4.2 Balance Calibration

- All analytical balances are calibrated by an accredited calibration laboratory and procedure. The weights used for testing are annually compared to master weights and are traceable to NIST.

4.3 Glassware Calibration

- An in-house procedure is used to calibrate all Class A glassware used in the manufacturing and quality control of CRM/RMs.

5.0 TRACE METALLIC IMPURITIES (TMI) DETERMINED BY ICP-MS AND ICP-OES (µg/mL)

N/A

6.0 INTENDED USE

- For the calibration of analytical instruments and validation of analytical methods as appropriate.

7.0 INSTRUCTIONS FOR THE CORRECT USE OF THIS REFERENCE MATERIAL

7.1 Storage and Handling Recommendations

- Keep cap tightly sealed when not in use. Store and use at $20 \pm 4^\circ \text{C}$. Do not pipette from the container. Do not return removed aliquots to container.

HF Note: This standard should not be prepared or stored in glass.

8.0 HAZARDOUS INFORMATION

- Please refer to the Safety Data Sheet for information regarding this CRM/RM.

9.0 HOMOGENEITY

- This solution was mixed according to an in-house procedure and is guaranteed to be homogeneous. Homogeneity data indicate that the end user should take a minimum sample size of 0.2 mL to assure homogeneity.

10.0 QUALITY STANDARD DOCUMENTATION

10.1 10CFR50 Appendix B - Nuclear Regulatory Commission

- Domestic Licensing of Production and Utilization Facilities

10.2 10CFR21 - Nuclear Regulatory Commission

- Reporting defects and Non-Compliance

10.3 ISO 9001 Quality Management System Registration

- SAI Global File Number 010105

10.4 ISO/IEC Guide 17025 "General Requirements for the Competence of Testing and Calibration Laboratories"

- Chemical Testing - Accredited / A2LA Certificate Number 883.01

10.5 ISO/IEC Guide 34 "General Requirements for the Competence of Reference Material Producers"

- Reference Material Producer - Accredited / A2LA Certificate Number 883.02

11.0 CERTIFICATION, EXPIRATION AND PERIOD OF VALIDITY

11.1 Certification Issue Date

December 31, 2014

11.2 Expiration Date

EXPIRES

12/2017

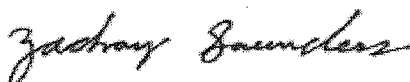
11.3 Period of Validity

- The certification is valid within the measurement uncertainty specified provided the CRM/RM is handled and stored in accordance with instructions given in Sec 7.0 and used prior to the date given in Sec 11.2. This certification is nullified if the CRM/RM is damaged, contaminated, or otherwise modified.

12.0 NAMES AND SIGNATURES OF CERTIFYING OFFICERS

Certificate Prepared By:

Zach Saunders
Product Documentation Technician



Certificate Approved By:

Brian Alexander
PhD., Technical Process Director



Certifying Officer:

Paul Gaines
PhD., Senior Technical Director



Reagent

Icp stk ICSA_00015



3540887

ID: Icp stk ICSA_00014

Exp: 04/02/18 Prpd: LRD

ICP stock ICSA solution

1.0 ACCREDITATION / REGISTRATION

INORGANIC VENTURES is accredited to ISO Guide 34, "General Requirements for the Competence of Reference Material Producers" and ISO/IEC 17025, "General Requirements for the Competence of Testing and Calibration Laboratories". Inorganic Ventures is also an ISO 9001 registered manufacturer (SAI Global File Number 010105).



2.0 PRODUCT DESCRIPTION

Product Code: Multi Analyte Custom Grade Solution

Catalog Number: CLPP-ICS-A

Lot Number: J2-MEB572053

Matrix: 2% (v/v) HNO₃

Value / Analyte(s): 5 000 µg/mL ea:
Al, Ca, Mg,
2 000 µg/mL ea:
Fe

3.0 CERTIFIED VALUES AND UNCERTAINTIES

ANALYTE	CERTIFIED VALUE	ANALYTE	CERTIFIED VALUE
Aluminum, Al	5 000 ± 25 µg/mL	Calcium, Ca	5 000 ± 23 µg/mL
Iron, Fe	2 000 ± 9 µg/mL	Magnesium, Mg	5 000 ± 23 µg/mL

Certified Density: 1.085 g/mL (measured at 20 ± 1 °C)

Assay Information:

ANALYTE	METHOD	NIST SRM#	SRM LOT#
Al	ICP Assay	3101a	060502
Al	EDTA	928	928
Ca	ICP Assay	3109a	050825
Ca	EDTA	928	928
Fe	ICP Assay	3126a	051031
Fe	EDTA	928	928
Mg	ICP Assay	3131a	050302
Mg	EDTA	928	928

The following equations are used in the calculation of the certified value and the uncertainty. Reported uncertainties represent expanded uncertainties expressed at approximately the 95% confidence level using a coverage factor of k = 2.

$$\text{Certified Value } (\bar{x}) = \frac{\sum x_i}{n}$$

(\bar{x}) = mean

x_i = individual results

n = number of measurements

$$\text{Uncertainty } (\pm) = 2 [\sum (s_i)^2]^{1/2}$$

2 = the coverage factor.

$[\sum (s_i)^2]^{1/2}$ = The square root of the sum of the squares of the most common errors (where 's' stands for the standard deviation) from instrumental measurement, density, NIST SRM uncertainty, weighing, dilution to volume, homogeneity, long term stability and short term stability.

4.0 TRACEABILITY TO NIST

- This product is traceable to NIST via an unbroken chain of comparisons. The uncertainties for each certified value are reported, taking into account the SRM/RM uncertainty error and the measurement, weighing and volume dilution errors. In rare cases where no NIST SRM/RM are available, the term 'in-house std.' is specified.

4.1 Thermometer Calibration

- All thermometers are NIST traceable through thermometers that are calibrated by an accredited calibration laboratory.

4.2 Balance Calibration

- All analytical balances are calibrated by an accredited calibration laboratory and procedure. The weights used for testing are annually compared to master weights and are traceable to NIST.

4.3 Glassware Calibration

- An in-house procedure is used to calibrate all Class A glassware used in the manufacturing and quality control of CRM/RMs.

5.0 TRACE METALLIC IMPURITIES (TMI) DETERMINED BY ICP-MS AND ICP-OES (µg/mL)

CRM/RMs are tested for trace metallic impurities by Axial ICP-OES and ICP-MS. The result from the most sensitive method for each element, is reported below. Solutions tested by ICP-MS were analyzed in an ULPA-Filtered Clean Room. An ULPA-Filter is 99.9985% efficient for the removal of particles down to 0.3 µm.

M	Ag	<	0.000870	M	Eu	<	0.000108	O	Na		0.040145	M	Se	<	0.003263	M	Zn		0.024800
s	Al	<		s	Fe	<		M	Nb	<	0.000435	O	Si		0.108500	M	Zr	<	0.001522
M	As	<	0.003915	M	Ga	<	0.000108	M	Nd	<	0.001087	M	Sm	<	0.000108				
M	Au	<	0.000108	M	Gd	<	0.000108	O	Ni	<	0.010850	M	Sn	<	0.000217				
O	B	<	0.021700	O	Ge	<	0.032550	M	Os	<	0.000108	O	Sr		0.024955				
M	Ba	<	0.001305	M	Hf	<	0.000217	O	P	<	0.108500	M	Ta	<	0.000108				
M	Be	<	0.000326	M	Hg	<	0.000651	M	Pb		0.002936	M	Tb	<	0.000108				
M	Bi	<	0.000217	M	Ho	<	0.000108	M	Pd	<	0.000217	M	Te	<	0.001305				
s	Ca	<		M	In	<	0.000435	M	Pr	<	0.000435	M	Th	<	0.000108				
M	Cd	<	0.000217	M	Ir	<	0.000108	M	Pt	<	0.000108	O	Ti	<	0.001627				
M	Ce	<	0.001740	O	K		0.014105	M	Rb	<	0.001522	M	Tl	<	0.000108				
O	Co	<	0.010850	M	La	<	0.001305	M	Re	<	0.000435	M	Tm	<	0.000108				
M	Cr		0.022842	O	Li		0.005533	M	Rh	<	0.000652	M	U	<	0.000108				
M	Cs	<	0.001305	M	Lu	<	0.000435	M	Ru	<	0.000108	M	V	<	0.001087				
O	Cu	<	0.006835	s	Mg	<		O	S		0.455700	M	W	<	0.000108				
M	Dy	<	0.000108	M	Mn		0.009898	M	Sb	<	0.000435	M	Y	<	0.000108				
M	Er	<	0.000108	M	Mo	<	0.003915	O	Sc	<	0.000868	M	Yb	<	0.000108				

M - Checked by ICP-MS O - Checked by ICP-OES i - Spectral Interference
n - Not Checked For s - Solution Standard Element

6.0 INTENDED USE

- For the calibration of analytical instruments and validation of analytical methods as appropriate.

7.0 INSTRUCTIONS FOR THE CORRECT USE OF THIS REFERENCE MATERIAL

7.1 Storage and Handling Recommendations

- Store between approximately 4° - 30° C while in sealed TCT bag.

- While stored in the sealed TCT bag, transpiration of this CRM/RM is negligible. After opening the sealed TCT bag transpiration of the CRM/RM will occur, resulting in a gradual increase in the analyte concentration(s). It is the responsibility of the user to account for this effect. When the bottle is weighed both before and after being placed in storage, the mass difference observed will be a measure of transpiration mass loss.

- After opening the sealed TCT bag keep cap tightly sealed when not in use. Store and use at 20° ± 4° C. Do not pipette from the container. Do not return removed aliquots to container.

- For more information, visit www.inorganicventures.com/TCT

8.0 HAZARDOUS INFORMATION

- Please refer to the Safety Data Sheet for information regarding this CRM/RM.

9.0 HOMOGENEITY

- This solution was mixed according to an in-house procedure and is guaranteed to be homogeneous. Homogeneity data indicate that the end user should take a minimum sample size of 0.2 mL to assure homogeneity.

10.0 QUALITY STANDARD DOCUMENTATION

10.1 10CFR50 Appendix B - Nuclear Regulatory Commission

- Domestic Licensing of Production and Utilization Facilities

10.2 10CFR21 - Nuclear Regulatory Commission

- Reporting defects and Non-Compliance

10.3 ISO 9001 Quality Management System Registration

- SAI Global File Number 010105

10.4 ISO/IEC Guide 17025 "General Requirements for the Competence of Testing and Calibration Laboratories"

- Chemical Testing - Accredited / A2LA Certificate Number 883.01

10.5 ISO/IEC Guide 34 "General Requirements for the Competence of Reference Material Producers"

- Reference Material Producer - Accredited / A2LA Certificate Number 883.02

11.0 CERTIFICATION, LOT EXPIRATION AND PERIOD OF VALIDITY

11.1 Certification Issue Date

April 02, 2015

- The certification is valid within the measurement uncertainty specified provided the CRM/RM is stored and handled in accordance with instructions given in Sec 7.1. This certification is nullified if instructions in Sec 7.1 are not followed or if the CRM/RM is damaged, contaminated, or otherwise modified.

11.2 Lot Expiration Date

- April 02, 2018

- The date after which this CRM/RM should not be used.

- The lot expiration date reflects the period of time that the stability of a CRM/RM can be supported by long term stability studies conducted on properly stored and handled CRM/RMs. Lot expiration is limited primarily by transpiration (loss of water from the solution) and infrequently by chemical stability.

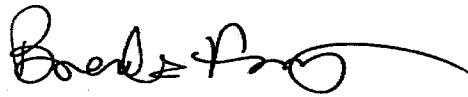
11.3 Period of Validity

- Sealed TCT Bag Open Date: _____

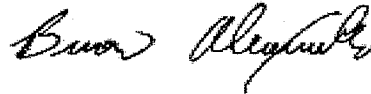
- This CRM/RM should not be used longer than one year from the date of removal from the aluminized bag or after the date given in Sec. 11.2, whichever comes first. This is contingent upon the CRM/RM being handled and stored in accordance with the instructions given in Sec 7.1.

Certificate Prepared By:


Brenda Francis
Product Documentation Technician

**Certificate Approved By:**

Brian Alexander
PhD., Technical Process Director

**Certifying Officer:**

Paul Gaines
PhD., Senior Technical Director



Reagent

Icp stk ICSA_00016

12.0 NAMES AND SIGNATURES OF CERTIFYING OFFICERS

Certificate Prepared By:

Brenda Francis
Product Documentation Technician

Brenda Francis

Certificate Approved By:

Brian Alexander
PhD., Technical Process Director

Brian Alexander

Certifying Officer:

Paul Gaines
PhD., Senior Technical Director

Paul R. Gaines

3 3474 93

INORGANIC
VENTURES
300 Technology Drive
Christiansburg, VA 24073 · USA
inorganicventures.com

CERTIFICATE OF ANALYSIS

tel: 800.669.6799 · 540.585.3030
fax: 540.585.3012
info@inorganicventures.com

1.0 ACCREDITATION / REGISTRATION

INORGANIC VENTURES is accredited to ISO Guide 34, "General Requirements for the Competence of Reference Material Producers" and ISO/IEC 17025, "General Requirements for the Competence of Testing and Calibration Laboratories". Inorganic Ventures is also an ISO 9001 registered manufacturer (SAI Global File Number 010105).



2.0 PRODUCT DESCRIPTION

Product Code: Multi Analyte Custom Grade Solution
Catalog Number: CLPP-ICS-A
Lot Number: J2-MEB572053
Matrix: 2% (v/v) HNO3
Value / Analyte(s): 5 000 µg/mL ea:
Al, Ca, Mg,
2 000 µg/mL ea:
Fe

3770250
ID: Icp stk ICSA_00016
Exp: 04/02/18 Prpd: SJS
ICP stock ICSA solution

3.0 CERTIFIED VALUES AND UNCERTAINTIES

ANALYTE	CERTIFIED VALUE	ANALYTE	CERTIFIED VALUE
Aluminum, Al	5 000 ± 25 µg/mL	Calcium, Ca	5 000 ± 23 µg/mL
Iron, Fe	2 000 ± 9 µg/mL	Magnesium, Mg	5 000 ± 23 µg/mL

Certified Density: 1.085 g/mL (measured at 20 ± 1 °C)

Assay Information:

ANALYTE	METHOD	NIST SRM#	SRM LOT#
Al	ICP Assay	3101a	060502
Al	EDTA	928	928
Ca	ICP Assay	3109a	050825
Ca	EDTA	928	928
Fe	ICP Assay	3126a	051031
Fe	EDTA	928	928
Mg	ICP Assay	3131a	050302
Mg	EDTA	928	928

The following equations are used in the calculation of the certified value and the uncertainty. Reported uncertainties represent expanded uncertainties expressed at approximately the 95% confidence level using a coverage factor of k = 2.

Certified Value $(\bar{x}) = \frac{\sum x_i}{n}$
Uncertainty $(\pm) = 2 [\sum (s_i)^2]^{1/2}$
 (\bar{x}) = mean
 x_i = individual results
 n = number of measurements
 2 = the coverage factor.
 $[\sum (s_i)^2]^{1/2}$ = The square root of the sum of the squares of the most common errors (where 's' stands for the standard deviation) from instrumental measurement, density, NIST SRM uncertainty, weighing, dilution to volume, homogeneity, long term stability and short term stability.

4.0 TRACEABILITY TO NIST

- This product is traceable to NIST via an unbroken chain of comparisons. The uncertainties for each certified value are reported, taking into account the SRM/RM uncertainty error and the measurement, weighing and volume dilution errors. In rare cases where no NIST SRM/RM are available, the term 'in-house std.' is specified.

4.1 Thermometer Calibration

- All thermometers are NIST traceable through thermometers that are calibrated by an accredited calibration laboratory.

4.2 Balance Calibration

- All analytical balances are calibrated by an accredited calibration laboratory and procedure. The weights used for testing are annually compared to master weights and are traceable to NIST.

4.3 Glassware Calibration

- An in-house procedure is used to calibrate all Class A glassware used in the manufacturing and quality control of CRM/RMs.

5.0 TRACE METALLIC IMPURITIES (TMI) DETERMINED BY ICP-MS AND ICP-OES (µg/mL)

CRM/RMs are tested for trace metallic impurities by Axial ICP-OES and ICP-MS. The result from the most sensitive method for each element, is reported below. Solutions tested by ICP-MS were analyzed in an ULPA-Filtered Clean Room. An ULPA-Filter is 99.9985% efficient for the removal of particles down to 0.3 µm.

M Ag < 0.000870	M Eu < 0.000108	O Na < 0.040145	M Se < 0.003263	M Zn < 0.024800
s Al < 0.003915	s Fe < 0.000108	M Nb < 0.000435	O Si < 0.108500	M Zr < 0.001522
M As < 0.003915	M Ga < 0.000108	M Nd < 0.001087	M Sm < 0.000108	
M Au < 0.000108	M Gd < 0.000108	O Ni < 0.010850	M Sn < 0.000217	
O B < 0.021700	O Ge < 0.032550	M Os < 0.000108	O Sr < 0.024955	
M Ba < 0.001305	M Hf < 0.000217	O P < 0.108500	M Ta < 0.000108	
M Be < 0.000326	M Hg < 0.000651	M Pb < 0.002936	M Tb < 0.000108	
M Bi < 0.000217	M Ho < 0.000108	M Pd < 0.000217	M Te < 0.001305	
s Ca < 0.000217	M In < 0.000435	M Pr < 0.000435	M Th < 0.000108	
M Cd < 0.000217	M Ir < 0.000108	M Pt < 0.000108	O Ti < 0.001627	
M Ce < 0.001740	O K < 0.014105	M Rb < 0.001522	M Tl < 0.000108	
O Co < 0.010850	M La < 0.001305	M Re < 0.000435	M Tm < 0.000108	
M Cr < 0.022842	O Li < 0.005533	M Rh < 0.000652	M U < 0.000108	
M Cs < 0.001305	M Lu < 0.000435	M Ru < 0.000108	M V < 0.001087	
O Cu < 0.006835	s Mg < 0.009898	O S < 0.455700	M W < 0.000108	
M Dy < 0.000108	M Mn < 0.009898	M Sb < 0.000435	M Y < 0.000108	
M Er < 0.000108	M Mo < 0.003915	O Sc < 0.000868	M Yb < 0.000108	

M - Checked by ICP-MS O - Checked by ICP-OES i - Spectral Interference
n - Not Checked For s - Solution Standard Element

6.0 INTENDED USE

- For the calibration of analytical instruments and validation of analytical methods as appropriate.

7.0 INSTRUCTIONS FOR THE CORRECT USE OF THIS REFERENCE MATERIAL

7.1 Storage and Handling Recommendations

- Store between approximately 4° - 30° C while in sealed TCT bag.

- While stored in the sealed TCT bag, transpiration of this CRM/RM is negligible. After opening the sealed TCT bag transpiration of the CRM/RM will occur, resulting in a gradual increase in the analyte concentration(s). It is the responsibility of the user to account for this effect. When the bottle is weighed both before and after being placed in storage, the mass difference observed will be a measure of transpiration mass loss.

- After opening the sealed TCT bag keep cap tightly sealed when not in use. Store and use at 20° ± 4° C. Do not pipette from the container. Do not return removed aliquots to container.

- For more information, visit www.inorganicventures.com/TCT

8.0 HAZARDOUS INFORMATION

- Please refer to the Safety Data Sheet for information regarding this CRM/RM.

9.0 HOMOGENEITY

- This solution was mixed according to an in-house procedure and is guaranteed to be homogeneous. Homogeneity data indicate that the end user should take a minimum sample size of 0.2 mL to assure homogeneity.

10.0 QUALITY STANDARD DOCUMENTATION

10.1 10CFR50 Appendix B - Nuclear Regulatory Commission

- Domestic Licensing of Production and Utilization Facilities

10.2 10CFR21 - Nuclear Regulatory Commission

- Reporting defects and Non-Compliance

10.3 ISO 9001 Quality Management System Registration

- SAI Global File Number 010105

10.4 ISO/IEC Guide 17025 "General Requirements for the Competence of Testing and Calibration Laboratories"

- Chemical Testing - Accredited / A2LA Certificate Number 883.01

10.5 ISO/IEC Guide 34 "General Requirements for the Competence of Reference Material Producers"

- Reference Material Producer - Accredited / A2LA Certificate Number 883.02

11.0 CERTIFICATION, LOT EXPIRATION AND PERIOD OF VALIDITY

11.1 Certification Issue Date

April 02, 2015

- The certification is valid within the measurement uncertainty specified provided the CRM/RM is stored and handled in accordance with instructions given in Sec 7.1. This certification is nullified if instructions in Sec 7.1 are not followed or if the CRM/RM is damaged, contaminated, or otherwise modified.

11.2 Lot Expiration Date

- April 02, 2018

- The date after which this CRM/RM should not be used.

- The lot expiration date reflects the period of time that the stability of a CRM/RM can be supported by long term stability studies conducted on properly stored and handled CRM/RMs. Lot expiration is limited primarily by transpiration (loss of water from the solution) and infrequently by chemical stability.

11.3 Period of Validity

- Sealed TCT Bag Open Date: _____

- This CRM/RM should not be used longer than one year from the date of removal from the aluminized bag or after the date given in Sec. 11.2, whichever comes first. This is contingent upon the CRM/RM being handled and stored in accordance with the instructions given in Sec 7.1.

Reagent

TSS STD_00025



CERTIFICATE OF ANALYSIS

Wet Chemistry Reference Standard

Catalog No: WC-SOL

Description: Solids Standard

Lot: 215095135

Matrix: N/A

Hazards: HARMFUL - Refer to SDS for safety info

Date Certified: Sep 29, 2015

Expiration: Sep 29, 2017

Sample Size: 1 unit

Components: 3

Storage Condition: Ambient (>5 °C)

Included on ISO/IEC 17025 Scope of Accreditation: No

Included on ISO Guide 34 Scope of Accreditation: No



Danger 1

Component		SRM #	Prepared Concentration (µg/mL)
TS	Total Solids	N/A	2000
TDS	Total Dissolved Solids		1000
TSS	Total Suspended Solids		1000

The gravimetric uncertainty for this product is $\pm 0.24\%$. The CRM uncertainty is $\pm 5\%$. See reverse side for details.

Vial may contain either solid material or a combination of solid material with liquid. Empty contents of vial into 100 ml volumetric flask. Rinse vial and cap several times and pour into flask. Dilute to volume. Perform analysis according to currently accepted methodology.

All weights are traceable through NIST, Test No. 822-275872-11

All glassware used in preparation is Class A and calibrated regularly.

Use good laboratory procedure when diluting this product. Use only cleaned Class A volumetric glassware.

We certify the accuracy of this standard to be $\pm 0.5\%$ of the stated value until its expiration date provided it is kept tightly capped and stored under the conditions stated above.

Certified By:

Lydia Snyder

Lydia Snyder, Inorganic QC Manager

CERTIFICATION REPORT

1. **Quality Documentation:** This certificate is designed in accordance with ISO Guide 31 (Reference Materials - Contents of Certificates and Labels) and ISO Guide 35 (Reference Materials – General and Statistical Principles for Certification).

2. **Quality Standards:**

ISO Guide 34 - General Requirements for the Competence of
Reference Material Producers ACLASS Certificate Number AR-1463



ISO/IEC 17025:2005 - General Requirements for the Competence of
Testing and Calibration Laboratories ACLASS Certificate Number AT-1339



ISO 9001:2008 Quality Management System - Requirements
Eagle Registrations Certificate Number 3774

3. **Intended Use:** The product covered by this certificate is designed for calibration or for use in quality control procedures for the specified chemical compounds listed on the reverse side. This product can be used for quantification and/or identification. This product can also be used as a reference material to validate analytical procedures, subject to the conditions under Section 11. If dilution is required, use only Class A glassware and diluent compatible with all certified analytes in this preparation. All solutions should be thoroughly mixed prior to use.
4. **Raw Materials:** Reference standards are prepared from the highest quality starting materials with defined purities. All analytes and solvents are obtained from pre-qualified vendors and then analyzed or evaluated prior to use.
5. **Manufacturing:** All balances are calibrated daily using an in-house procedure with weights that are compared annually to master weights and traceable to NIST. The balances are also calibrated annually by an ISO/IEC 17025 accredited calibration laboratory. Please refer to the NIST test number listed on the front of this certificate. Class A glassware is used in the manufacture and quality control of all standards and calibrated using an in-house procedure. Good Laboratory Practices have been used throughout the preparation of this CRM.
6. **Homogeneity Assessment:** Homogeneity of the finished product is assessed by analyzing sample batches or by other methods consistent with the intended use of the product and by procedures that comply with the appropriate Quality System requirements, and ISO Guide 35.
7. **Stability Assessment:** The manufacturer guarantees the stability of this solution through the expiration date stated on the label, when handled and stored according to the conditions stated on the label. To ensure a uniform solution, mix the contents of the sealed container thoroughly prior to use. Care should be taken not to contaminate the contents of the original container.
8. **Analytical Quality Control:** Products are tested by validated analytical methods specified in the manufacturer's quality system.
9. **Uncertainty Statistics and Confidence Limits:** The uncertainty values as stated on the face of this certificate have been determined using the EURACHEM/CITAC Guide (Quantifying Uncertainty in Analytical Measurement). We have evaluated both Type A (based on a series of observations) and Type B (manufacturers specifications and calibration data) factors and report a combined expanded uncertainty equal to the positive square root of the total variance of the uncertainty of the components using the following formula: $u_m = \sqrt{(u(P))^2 + (u(m))^2 + (u(V))^2}$. The expanded uncertainty, U, assumes a normal distribution and a coverage factor of k=2 is chosen using approximately a 95% confidence level. Laboratories accredited to ISO/IEC 17025 and ISO Guide 34 are required to estimate uncertainty budgets associated with the measurements they make. However, for analysis, the certified value should be used as the actual value.
10. **Warranties:** The manufacturer warrants that its products shall conform to the description of such products as provided in its catalog or on the specific product label. This warranty is exclusive, and the manufacturer makes no other warranty, express or implied, including any implied warranty of merchantability or fitness for any particular purpose.
11. **Legal Notice and Limit of Liability:** This product is for routine laboratory analysis and research purposes only. Due to the hazardous nature, only trained personnel should handle this product. The company's liability will be limited to replacement of product or refund of purchase price. Notice of claims must be made within thirty (30) days from date of delivery.

Method PFC DOD

Perfluronated Hydrocarbons (LC/MS)
by Method PFC_DOD

FORM II
LCMS SURROGATE RECOVERY

Lab Name: TestAmerica Sacramento Job No.: 320-18796-1

SDG No.: _____

Matrix: Water Level: Low

GC Column (1): Acquity ID: 2.1 (mm)

Client Sample ID	Lab Sample ID	13CHpA #	PFHxS #	PFOA #	PFNA #
	MB 320-109640/1-A	128	115	142	129
	LCS 320-109640/2-A	122	121	132	138
	LCSD 320-109640/3-A	125	114	124	129

13CHpA = 13C4-PFHpA
PFHxS = 18O2 PFHxS
PFOA = 13C4 PFOA
PFNA = 13C5 PFNA

QC LIMITS
25-150
25-150
25-150
25-150

Column to be used to flag recovery values

FORM II WS-LC-0025

FORM II
LCMS SURROGATE RECOVERY

Lab Name: TestAmerica Sacramento Job No.: 320-18796-1

SDG No.: _____

Matrix: Water Level: Low

GC Column (1): Acquity ID: 2.1 (mm)

Client Sample ID	Lab Sample ID	13CHpA #	PFHxS #	PFOA #	PFOS #	PFNA #
OF-STORLAG-0516	320-18796-1	160 Q	178 Q	154 Q	115	145
OF-TRMTLAG-0516	320-18796-2	140	136	141	115	144
OF-POLLLAG-0516	320-18796-3	157 Q	164 Q	154 Q	119	120
OF-CLTANK-0516	320-18796-4	152 Q	164 Q	154 Q	135	140
OF-BACKWASH-0516	320-18796-5	143	165 Q	130	127	152 Q
OF-FILTER-0516	320-18796-6	132	164 Q	131	127	140

13CHpA = 13C4-PFHpA
 PFHxS = 1802 PFHxS
 PFOA = 13C4 PFOA
 PFOS = 13C4 PFOS
 PFNA = 13C5 PFNA

QC LIMITS
 25-150
 25-150
 25-150
 25-150
 25-150

Column to be used to flag recovery values

FORM II WS-LC-0025

FORM III
LCMS LAB CONTROL SAMPLE RECOVERY

Lab Name: TestAmerica Sacramento Job No.: 320-18796-1
SDG No.: _____
Matrix: Water Level: Low Lab File ID: 24MAY2016A6A_042.d
Lab ID: LCS 320-109640/2-A RA Client ID: _____

COMPOUND	SPIKE ADDED (ug/L)	LCS CONCENTRATION (ug/L)	LCS % REC	QC LIMITS REC	#
Perfluoroheptanoic acid (PFHpA)	0.0400	0.0416	104	60-140	

Column to be used to flag recovery and RPD values

FORM III
LCMS LAB CONTROL SAMPLE RECOVERY

Lab Name: TestAmerica Sacramento Job No.: 320-18796-1
 SDG No.: _____
 Matrix: Water Level: Low Lab File ID: 25MAY2016B4A_042.d
 Lab ID: LCS 320-109640/2-A Client ID: _____

COMPOUND	SPIKE ADDED (ug/L)	LCS CONCENTRATION (ug/L)	LCS % REC	QC LIMITS REC	#
Perfluoroheptanoic acid (PFHpA)	0.0400	0.0393	98	60-140	
Perfluorooctanoic acid (PFOA)	0.0400	0.0334	84	60-140	
Perfluorononanoic acid (PFNA)	0.0400	0.0358	90	60-140	
Perfluorobutanesulfonic acid (PFBS)	0.0354	0.0304	86	50-150	
Perfluorohexanesulfonic acid (PFHxS)	0.0364	0.0376	103	60-140	M
18O2 PFHxS	0.0946	0.114	121	25-150	
13C5 PFNA	0.100	0.138	138	25-150	
13C4 PFOA	0.100	0.132	132	25-150	
13C4-PFHpA	0.100	0.122	122	25-150	

Column to be used to flag recovery and RPD values

FORM III
LCMS LAB CONTROL SAMPLE DUPLICATE RECOVERY

Lab Name: TestAmerica Sacramento Job No.: 320-18796-1
SDG No.: _____
Matrix: Water Level: Low Lab File ID: 24MAY2016A6A_043.d
Lab ID: LCSD 320-109640/3-A RA Client ID: _____

COMPOUND	SPIKE ADDED (ug/L)	LCSD CONCENTRATION (ug/L)	LCSD % REC	% RPD	QC LIMITS		#
					RPD	REC	
Perfluorooctanoic acid (PFOA)	0.0400	0.0432	108	9	30	60-140	

Column to be used to flag recovery and RPD values

FORM III
LCMS LAB CONTROL SAMPLE DUPLICATE RECOVERY

Lab Name: TestAmerica Sacramento Job No.: 320-18796-1
 SDG No.: _____
 Matrix: Water Level: Low Lab File ID: 25MAY2016B4A_043.d
 Lab ID: LCSD 320-109640/3-A Client ID: _____

COMPOUND	SPIKE ADDED (ug/L)	LCSD CONCENTRATION (ug/L)	LCSD % REC	% RPD	QC LIMITS		#
					RPD	REC	
Perfluoroheptanoic acid (PFHpA)	0.0400	0.0404	101	3	30	60-140	
Perfluorooctanoic acid (PFOA)	0.0400	0.0380	95	13	30	60-140	
Perfluorononanoic acid (PFNA)	0.0400	0.0388	97	8	30	60-140	
Perfluorobutanesulfonic acid (PFBS)	0.0354	0.0311	88	2	30	50-150	
Perfluorohexanesulfonic acid (PFHxS)	0.0364	0.0300	82	22	30	60-140	
18O2 PFHxS	0.0946	0.108	114			25-150	
13C5 PFNA	0.100	0.129	129			25-150	
13C4 PFOA	0.100	0.124	124			25-150	
13C4-PFHpA	0.100	0.125	125			25-150	

Column to be used to flag recovery and RPD values

FORM IV
LCMS METHOD BLANK SUMMARY

Lab Name: TestAmerica Sacramento Job No.: 320-18796-1
 SDG No.: _____
 Lab File ID: 25MAY2016B4A_041.d Lab Sample ID: MB 320-109640/1-A
 Matrix: Water Date Extracted: 05/12/2016 10:01
 Instrument ID: A4 Date Analyzed: 05/26/2016 05:37
 Level: (Low/Med) Low

THIS METHOD BLANK APPLIES TO THE FOLLOWING SAMPLES:

CLIENT SAMPLE ID	LAB SAMPLE ID	LAB FILE ID	DATE ANALYZED
	LCS 320-109640/2-A	25MAY2016B4 A 042.d	05/26/2016 05:58
	LCSD 320-109640/3-A	25MAY2016B4 A 043.d	05/26/2016 06:19
OF-STORLAG-0516	320-18796-1	25MAY2016B4 A 054.d	05/26/2016 10:12
OF-POLLLAG-0516	320-18796-3	25MAY2016B4 A 056.d	05/26/2016 10:58
OF-CLTANK-0516	320-18796-4	25MAY2016B4 A 057.d	05/26/2016 11:21
OF-BACKWASH-0516	320-18796-5	25MAY2016B4 A 058.d	05/26/2016 11:42
OF-FILTER-0516	320-18796-6	25MAY2016B4 A 059.d	05/26/2016 12:03
OF-TRMTLAG-0516	320-18796-2	25MAY2016B4 A 076.d	05/26/2016 18:11

FORM IV
LCMS METHOD BLANK SUMMARY

Lab Name: TestAmerica Sacramento Job No.: 320-18796-1
SDG No.: _____
Lab File ID: 24MAY2016A6A_041.d Lab Sample ID: MB 320-109640/1-A
Matrix: Water Date Extracted: 05/12/2016 10:01
Instrument ID: A6 Date Analyzed: 05/25/2016 06:14
Level: (Low/Med) Low

THIS METHOD BLANK APPLIES TO THE FOLLOWING SAMPLES:

CLIENT SAMPLE ID	LAB SAMPLE ID	LAB FILE ID	DATE ANALYZED
	LCS 320-109640/2-A RA	24MAY2016A6 A 042.d	05/25/2016 06:35
	LCSD 320-109640/3-A RA	24MAY2016A6 A 043.d	05/25/2016 06:56

FORM I
LCMS ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Sacramento Job No.: 320-18796-1
 SDG No.: _____
 Client Sample ID: OF-STORLAG-0516 Lab Sample ID: 320-18796-1
 Matrix: Water Lab File ID: 25MAY2016B4A_054.d
 Analysis Method: WS-LC-0025 Date Collected: 05/10/2016 12:10
 Extraction Method: 3535 Date Extracted: 05/12/2016 10:01
 Sample wt/vol: 536.1 (mL) Date Analyzed: 05/26/2016 10:12
 Con. Extract Vol.: 1.0 (mL) Dilution Factor: 20
 Injection Volume: 15 (uL) GC Column: Acquity ID: 2.1 (mm)
 % Moisture: _____ GPC Cleanup: (Y/N) N
 Analysis Batch No.: 111390 Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	LOQ	LOD	DL
375-85-9	Perfluoroheptanoic acid (PFHpA)	0.051	D	0.047	0.037	0.015
335-67-1	Perfluorooctanoic acid (PFOA)	0.45	D M	0.047	0.037	0.014
375-95-1	Perfluorononanoic acid (PFNA)	0.037	U	0.047	0.037	0.012
375-73-5	Perfluorobutanesulfonic acid (PFBS)	0.037	U	0.047	0.037	0.017
355-46-4	Perfluorohexanesulfonic acid (PFHxS)	0.29	D M	0.047	0.037	0.016
1763-23-1	Perfluorooctanesulfonic acid (PFOS)	1.3	B D M	0.075	0.056	0.024

CAS NO.	ISOTOPE DILUTION	%REC	Q	LIMITS
STL00994	18O2 PFHxS	178	Q	25-150
STL00991	13C4 PFOS	115		25-150
STL00995	13C5 PFNA	145		25-150
STL00990	13C4 PFOA	154	Q	25-150
STL01892	13C4-PFHpA	160	Q	25-150

TestAmerica Sacramento
Target Compound Quantitation Report

Data File: \\ChromNA\Sacramento\ChromData\A4\20160525-31065.b\25MAY2016B4A_054.d
 Lims ID: 320-18796-A-1-A
 Client ID: OF-STORLAG-0516
 Sample Type: Client
 Inject. Date: 26-May-2016 10:12:22 ALS Bottle#: 31 Worklist Smp#: 54
 Injection Vol: 15.0 ul Dil. Factor: 20.0000
 Sample Info: 320-18796-a-1-a 20X
 Misc. Info.: Acquity BEH C18,1.7u, 3X150mm,T=35C
 Operator ID: JRB Instrument ID: A4
 Method: \\ChromNA\Sacramento\ChromData\A4\20160525-31065.b\PFAC_A4.m
 Limit Group: LC PFC_DOD ICAL
 Last Update: 26-May-2016 16:03:28 Calib Date: 25-May-2016 19:01:43
 Integrator: Picker
 Quant Method: Isotopic Dilution Quant By: Initial Calibration
 Last ICal File: \\ChromNA\Sacramento\ChromData\A4\20160525-31065.b\25MAY2016B4A_011.d
 Column 1 : Det: F1:MRM
 Process Host: XAWRK003

First Level Reviewer: barnettj

Date: 26-May-2016 15:05:09

Signal	RT	EXP RT	DLT RT	REL RT	Response	Amount ng/ml	Ratio(Limits)	%Rec	S/N	Flags
51 Perfluorobutanesulfonic acid										
298.8 > 79.6	7.014	7.024	-0.010	1.000	13073	0.1645				
D 8 13C4-PFHpA										
366.6 > 321.6	9.357	9.387	-0.030		341416	3.99		8.0	1701	
9 Perfluoroheptanoic acid										
362.8 > 318.7	9.357	9.388	-0.031	1.000	115884	1.36			107	
58 Perfluorohexanesulfonic acid										M
398.3 > 79.2	9.396	9.421	-0.025	1.000	698101	7.71				M
D 11 18O2 PFHxS										
402.5 > 83.6	9.388	9.422	-0.034		125287	4.22		8.9	459	
D 12 13C4 PFOA										
416.5 > 371.6	10.483	10.503	-0.020		343862	3.86		7.7	1319	
13 Perfluorooctanoic acid										M
412.8 > 368.8	10.483	10.504	-0.021	1.000	761443	12.2			683	M
412.8 > 168.7	10.483	10.504	-0.021	1.000	247516		3.08(0.00-0.00)		436	M
D 16 13C4 PFOS										
502.4 > 79.7	11.441	11.465	-0.024		18607	2.76		5.8	81.5	
15 Perfluorooctane sulfonic acid										M
498.3 > 79.2	11.441	11.466	-0.025	1.000	3608857	33.8			4677	M
498.3 > 98.2	11.441	11.466	-0.025	1.000	1662317		2.17(0.00-0.00)		2379	M
D 17 13C5 PFNA										
467.5 > 422.6	11.460	11.484	-0.024		283929	3.62		7.2	1345	
18 Perfluorononanoic acid										
462.5 > 418.6	11.469	11.486	-0.017	1.000	26266	0.1861			33.4	

QC Flag Legend

Review Flags

M - Manually Integrated

TestAmerica Sacramento

Data File: \\ChromNA\Sacramento\ChromData\A4\20160525-31065.b\25MAY2016B4A_054.d

Injection Date: 26-May-2016 10:12:22

Instrument ID: A4

Lims ID: 320-18796-A-1-A

Lab Sample ID: 320-18796-1

Client ID: OF-STORLAG-0516

Operator ID: JRB

ALS Bottle#: 31

Worklist Smp#: 54

Injection Vol: 15.0 ul

Dil. Factor: 20.0000

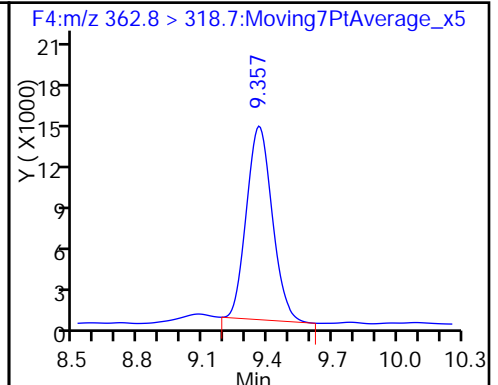
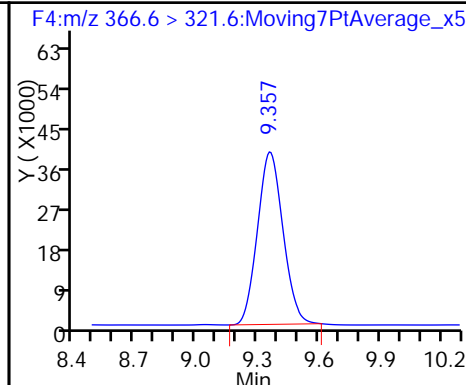
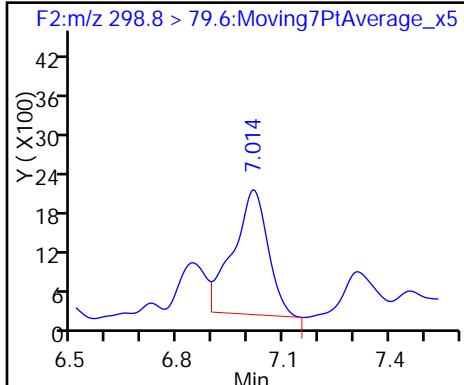
Method: PFAC_A4

Limit Group: LC PFC_DOD ICAL

51 Perfluorobutanesulfonic acid

D 8 13C4-PFHpA

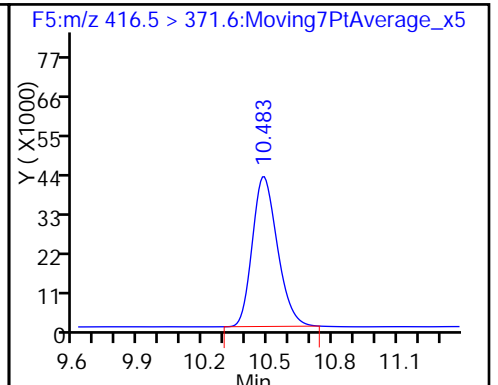
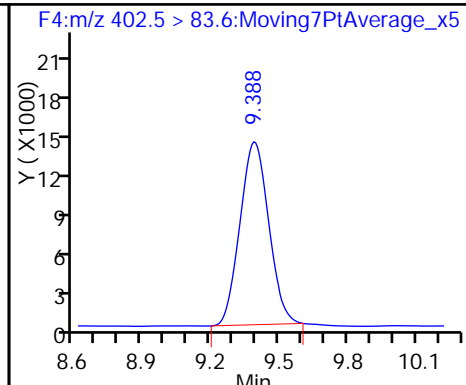
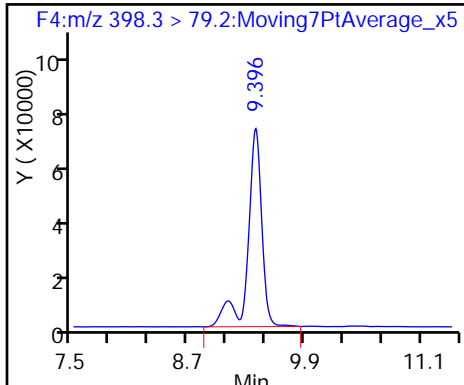
9 Perfluoroheptanoic acid



58 Perfluorohexanesulfonic acid (M)

D 11 18O2 PFHxS

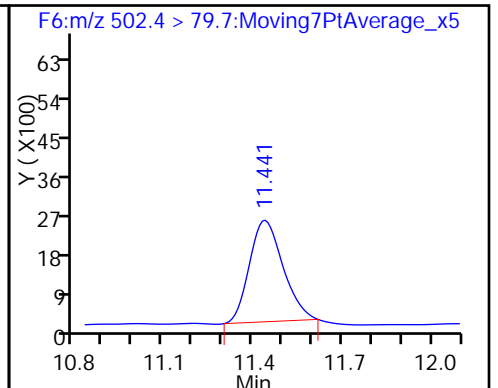
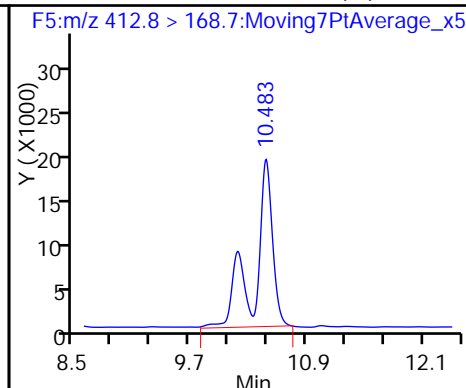
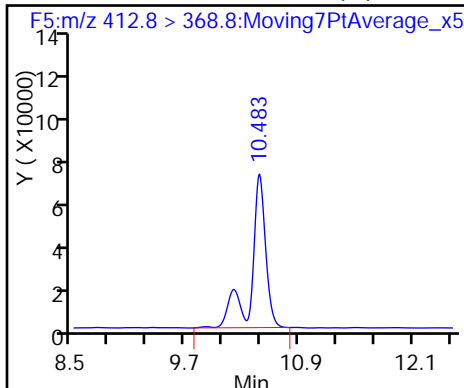
D 12 13C4 PFOA



13 Perfluorooctanoic acid (M)

13 Perfluorooctanoic acid (M)

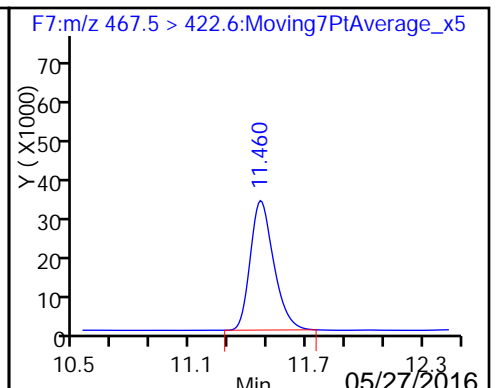
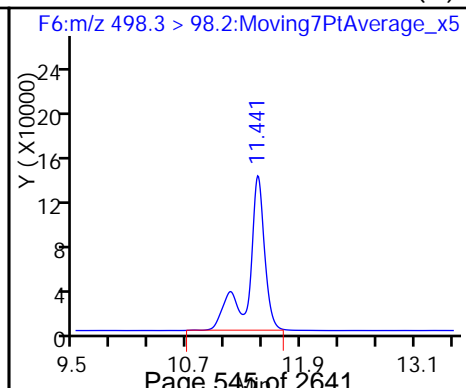
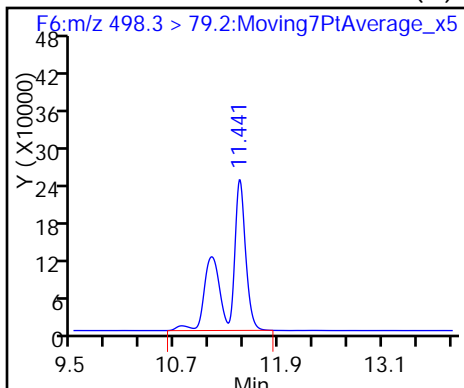
D 16 13C4 PFOS



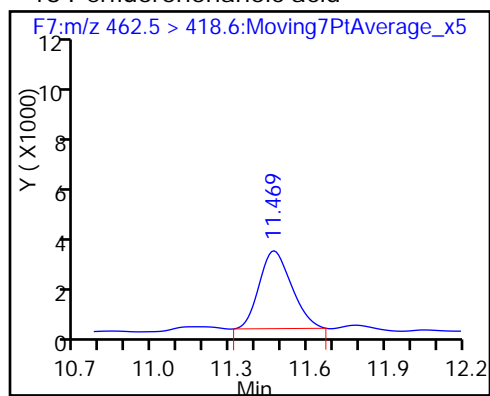
15 Perfluorooctane sulfonic acid (M)

15 Perfluorooctane sulfonic acid (M)

D 17 13C5 PFNA



18 Perfluorononanoic acid



TestAmerica Sacramento

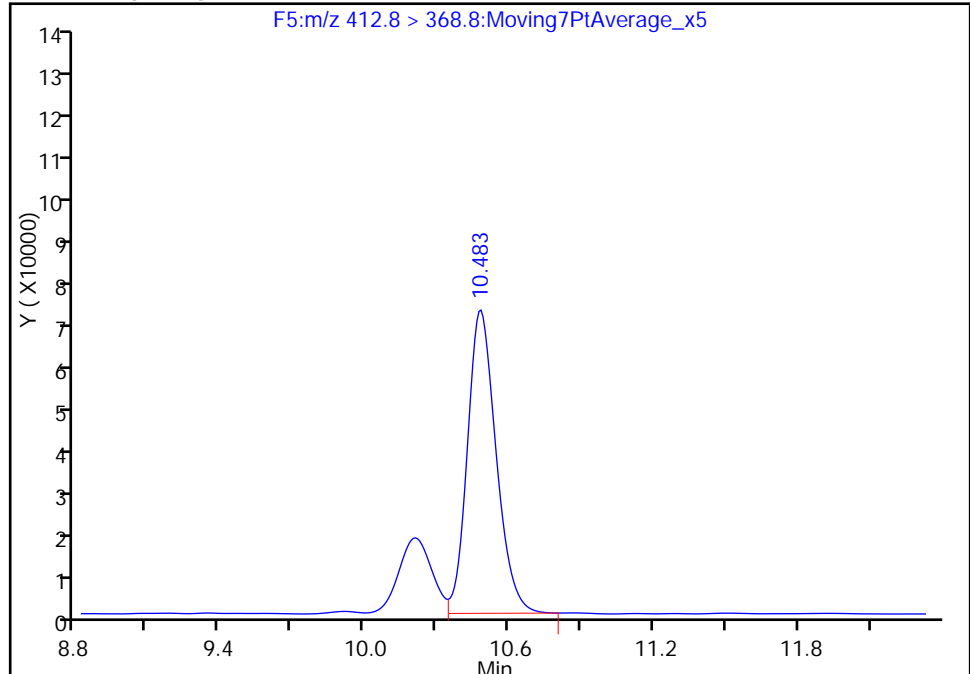
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Injection Date:	26-May-2016 10:12:22	Instrument ID:	A4		
Lims ID:	320-18796-A-1-A	Lab Sample ID:	320-18796-1		
Client ID:	OF-STORLAG-0516				
Operator ID:	JRB	ALS Bottle#:	31	Worklist Smp#:	54
Injection Vol:	15.0 ul	Dil. Factor:	20.0000		
Method:	PFAC_A4	Limit Group:	LC PFC_DOD ICAL		
Column:		Detector	F5:MRM		

13 Perfluorooctanoic acid, CAS: 335-67-1

Signal: 1

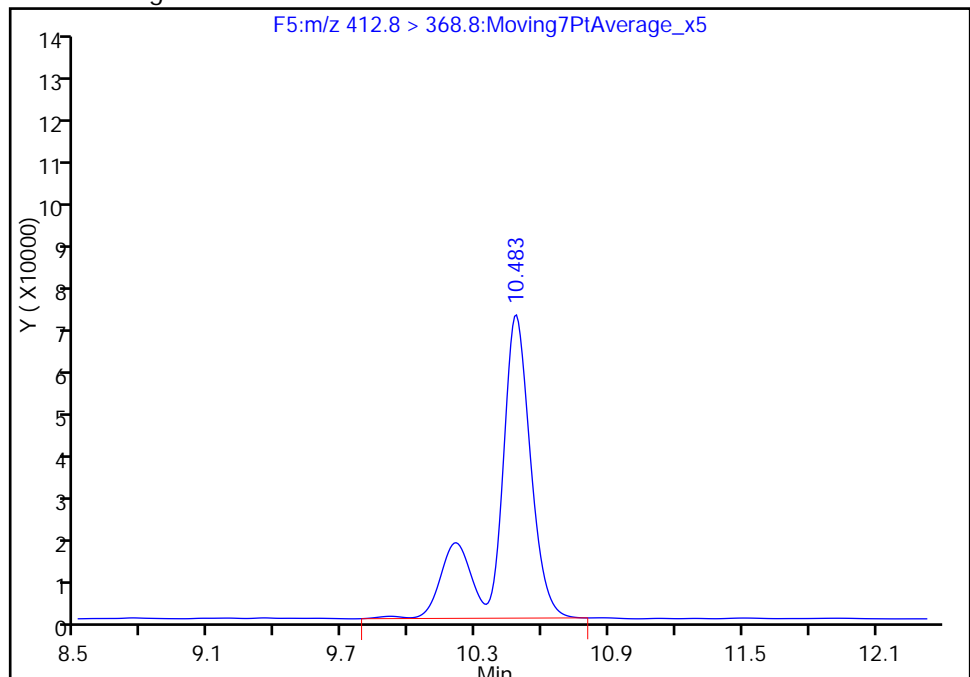
RT: 10.48
Area: 589245
Amount: 9.402290
Amount Units: ng/ml

Processing Integration Results



RT: 10.48
Area: 761443
Amount: 12.170749
Amount Units: ng/ml

Manual Integration Results



Reviewer: barnettj, 26-May-2016 15:05:09
Audit Action: Manually Integrated

Audit Reason: Isomers

TestAmerica Sacramento

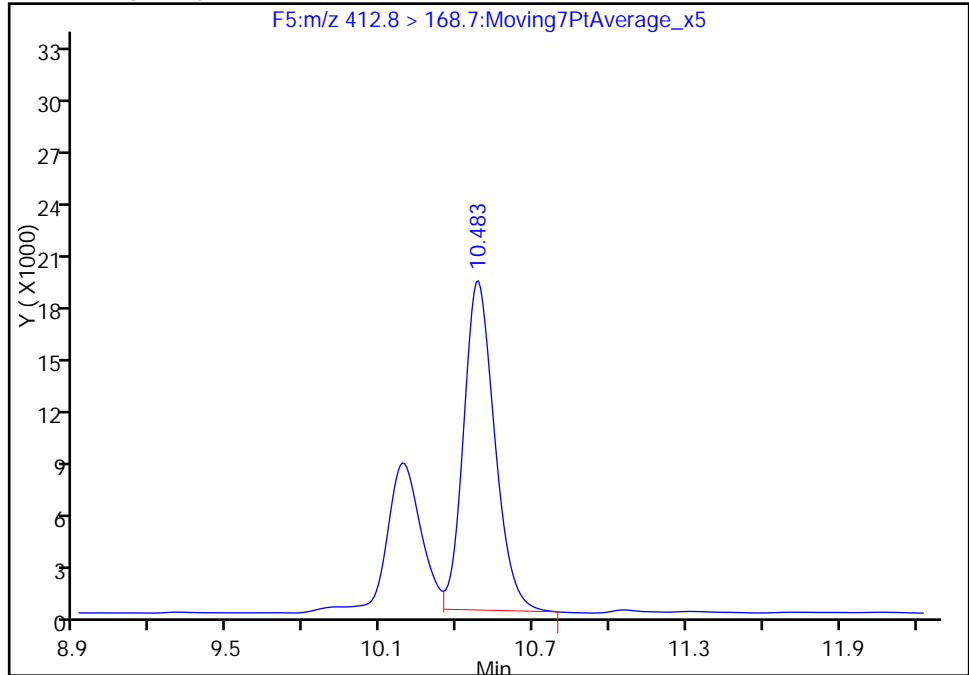
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Injection Date: 26-May-2016 10:12:22 Instrument ID: A4
Lims ID: 320-18796-A-1-A Lab Sample ID: 320-18796-1
Client ID: OF-STORLAG-0516
Operator ID: JRB ALS Bottle#: 31 Worklist Smp#: 54
Injection Vol: 15.0 ul Dil. Factor: 20.0000
Method: PFAC_A4 Limit Group: LC PFC_DOD ICAL
Column: Detector F5:MRM

13 Perfluorooctanoic acid, CAS: 335-67-1

Signal: 2

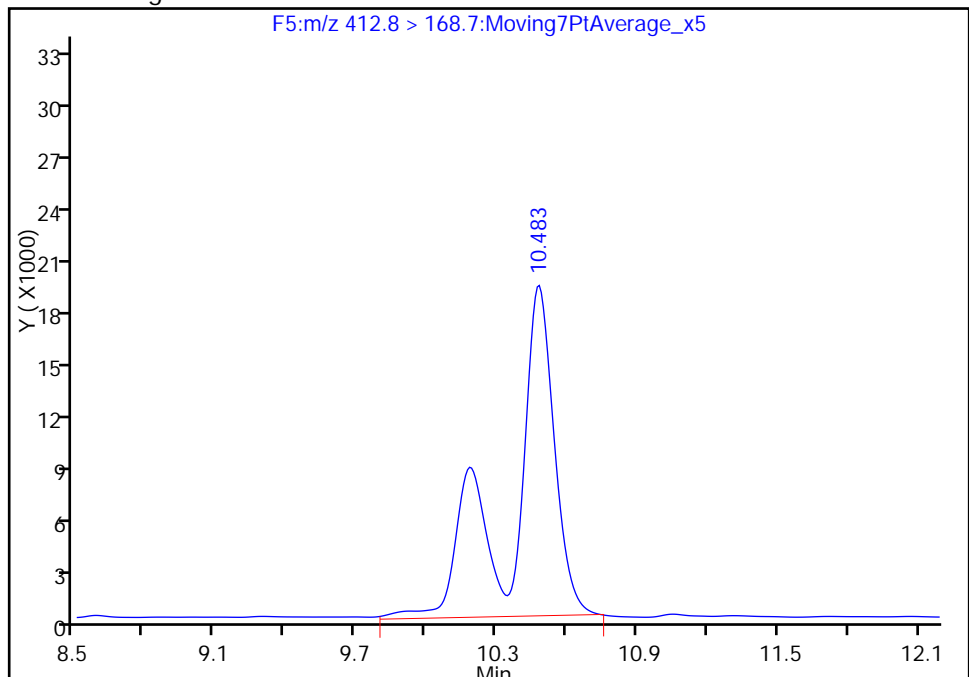
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Area: 161814
Amount: 9.402290
Amount Units: ng/ml

Processing Integration Results



RT: 10.48
Area: 247516
Amount: 12.170749
Amount Units: ng/ml

Manual Integration Results



Reviewer: barnettj, 26-May-2016 15:05:09

Audit Action: Manually Integrated

Audit Reason: Isomers

TestAmerica Sacramento

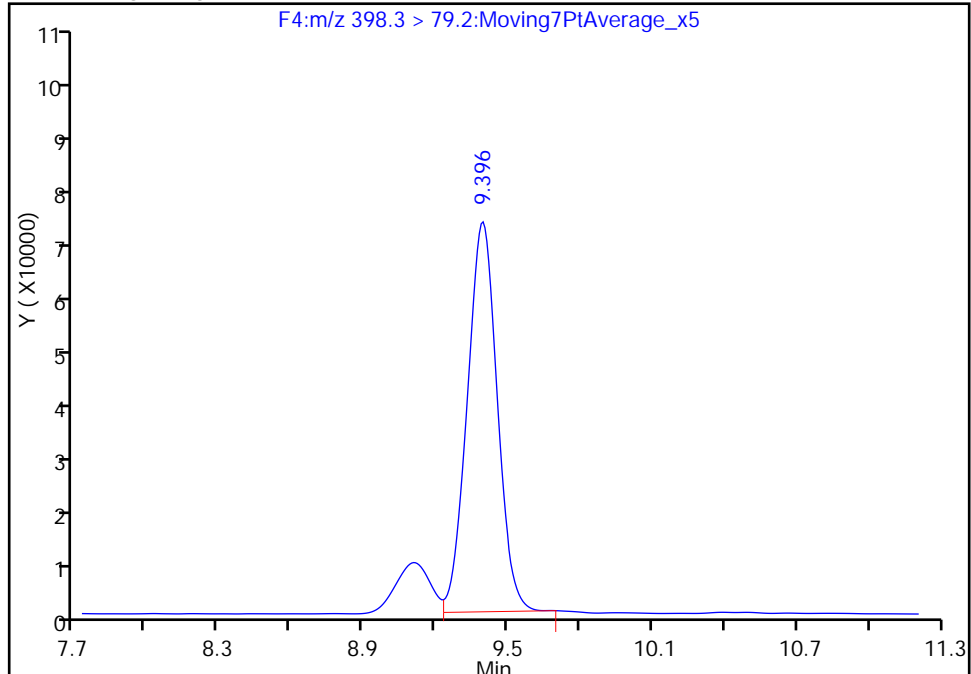
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Lims ID:	320-18796-A-1-A	Lab Sample ID:	320-18796-1		
Client ID:	OF-STORLAG-0516				
Operator ID:	JRB	ALS Bottle#:	31	Worklist Smp#:	54
Injection Vol:	15.0 ul	Dil. Factor:	20.0000		
Method:	PFAC_A4	Limit Group:	LC PFC_DOD ICAL		
Column:		Detector	F4:MRM		

58 Perfluorohexanesulfonic acid, CAS: 355-46-4

Signal: 1

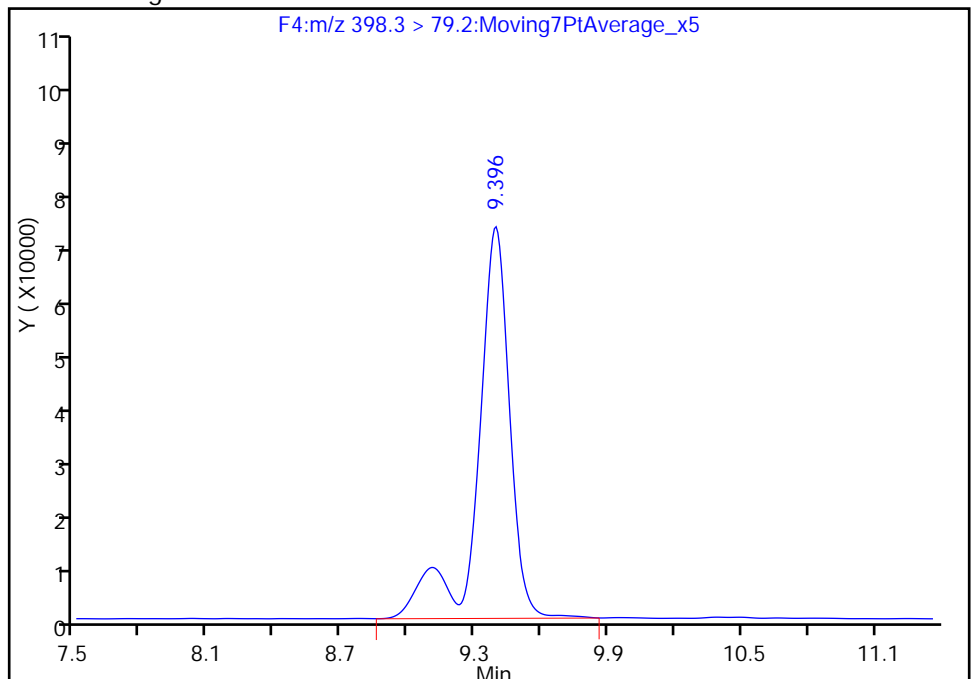
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Area: 595514
Amount: 6.578736
Amount Units: ng/ml

Processing Integration Results



RT: 9.40
Area: 698101
Amount: 7.712030
Amount Units: ng/ml

Manual Integration Results



Reviewer: barnettj, 26-May-2016 15:05:09
Audit Action: Assigned Compound ID

Audit Reason: Isomers

TestAmerica Sacramento

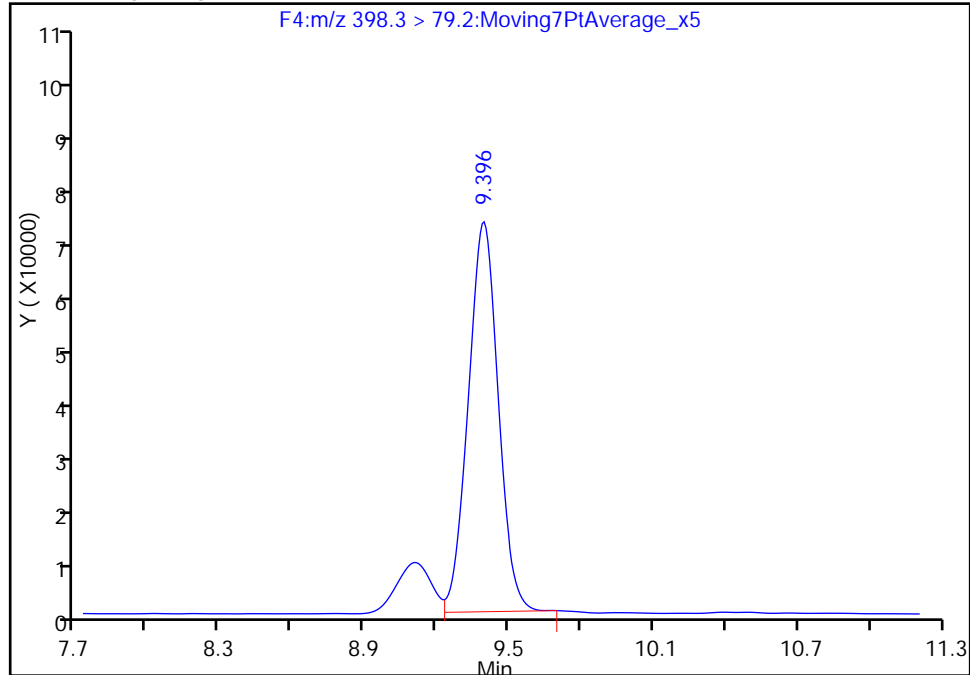
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Injection Date: 26-May-2016 10:12:22 Instrument ID: A4
Lims ID: 320-18796-A-1-A Lab Sample ID: 320-18796-1
Client ID: OF-STORLAG-0516
Operator ID: JRB ALS Bottle#: 31 Worklist Smp#: 54
Injection Vol: 15.0 ul Dil. Factor: 20.0000
Method: PFAC_A4 Limit Group: LC PFC_DOD ICAL
Column: Detector F4:MRM

58 Perfluorohexanesulfonic acid, CAS: 355-46-4

Signal: 1

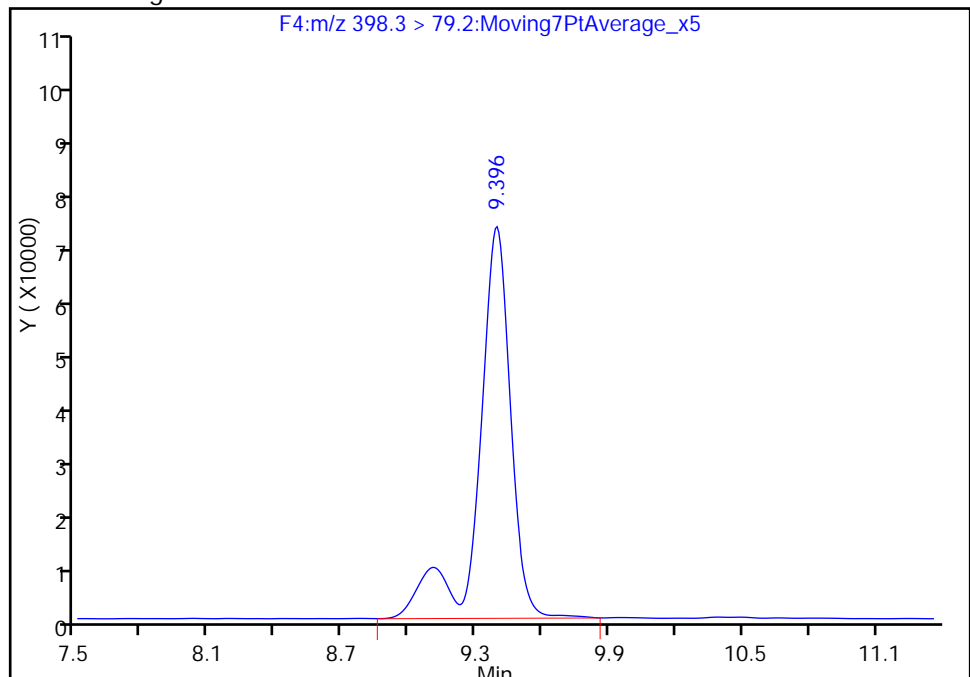
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Amount: 6.578736
Amount Units: ng/ml

Processing Integration Results



RT: 9.40
Area: 698101
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Amount Units: ng/ml

Manual Integration Results



Reviewer: barnettj, 26-May-2016 15:05:09

Audit Action: Manually Integrated

Audit Reason: Isomers

TestAmerica Sacramento

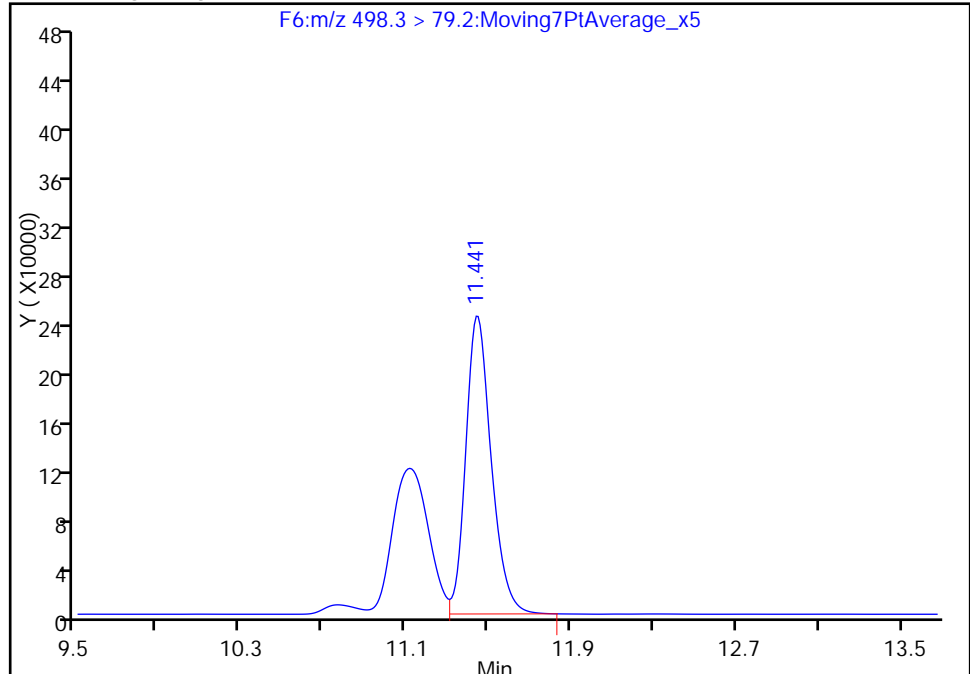
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Lims ID:	320-18796-A-1-A	Lab Sample ID:	320-18796-1		
Client ID:	OF-STORLAG-0516				
Operator ID:	JRB	ALS Bottle#:	31	Worklist Smp#:	54
Injection Vol:	15.0 ul	Dil. Factor:	20.0000		
Method:	PFAC_A4	Limit Group:	LC PFC_DOD ICAL		
Column:		Detector	F6:MRM		

15 Perfluorooctane sulfonic acid, CAS: 1763-23-1

Signal: 1

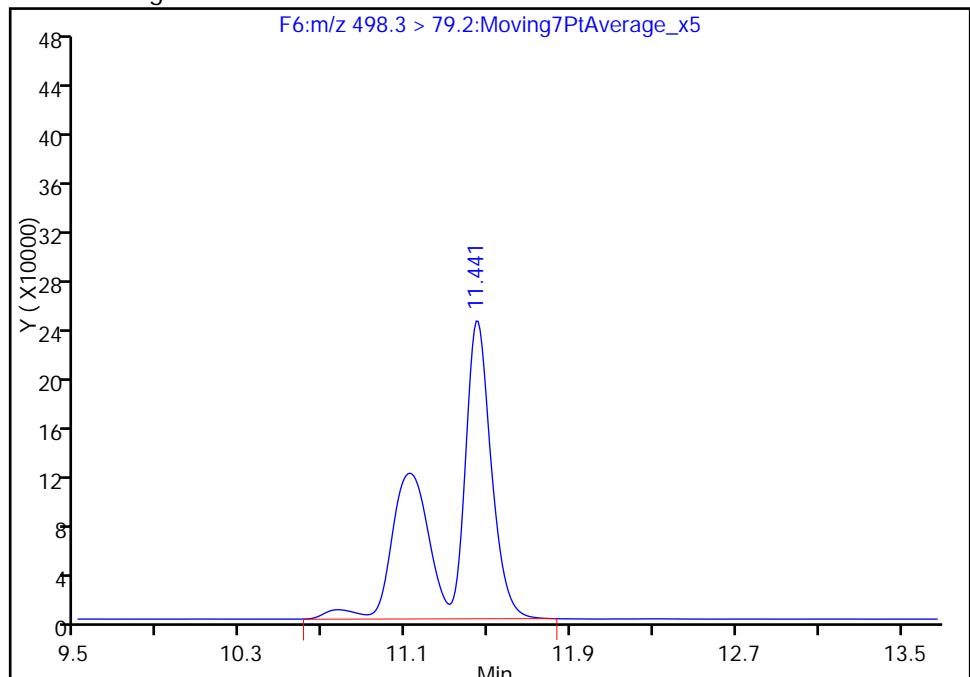
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Area: 2087681
Amount: 19.824525
Amount Units: ng/ml

Processing Integration Results



RT: 11.44
Area: 3608857
Amount: 33.788032
Amount Units: ng/ml

Manual Integration Results



Reviewer: barnettj, 26-May-2016 15:05:09

Audit Action: Manually Integrated

Audit Reason: Isomers

TestAmerica Sacramento

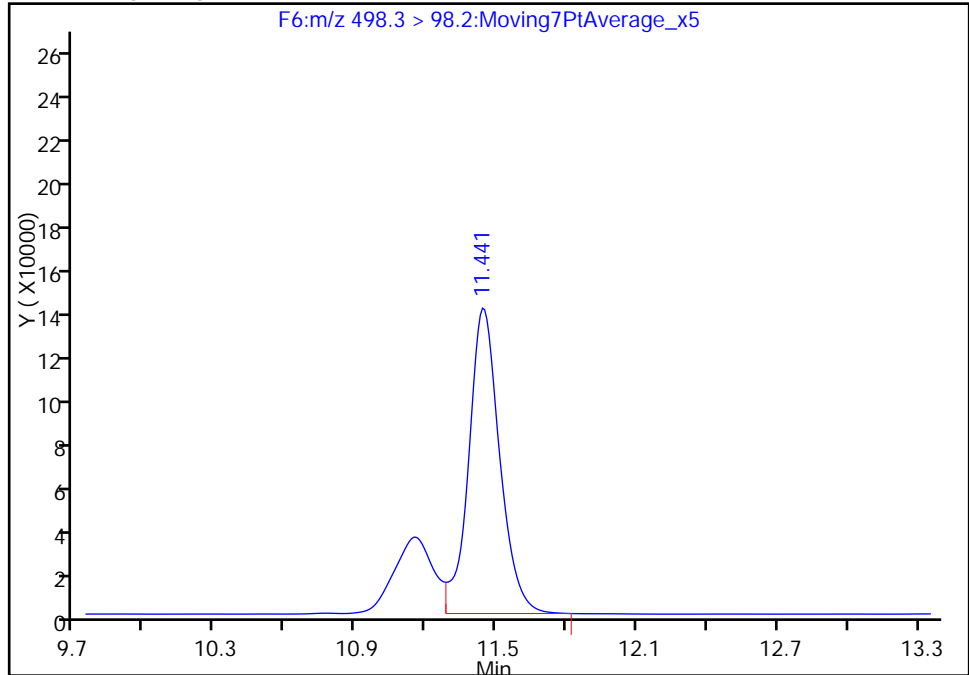
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Injection Date: 26-May-2016 10:12:22 Instrument ID: A4
Lims ID: 320-18796-A-1-A Lab Sample ID: 320-18796-1
Client ID: OF-STORLAG-0516
Operator ID: JRB ALS Bottle#: 31 Worklist Smp#: 54
Injection Vol: 15.0 ul Dil. Factor: 20.0000
Method: PFAC_A4 Limit Group: LC PFC_DOD ICAL
Column: Detector F6:MRM

15 Perfluorooctane sulfonic acid, CAS: 1763-23-1

Signal: 2

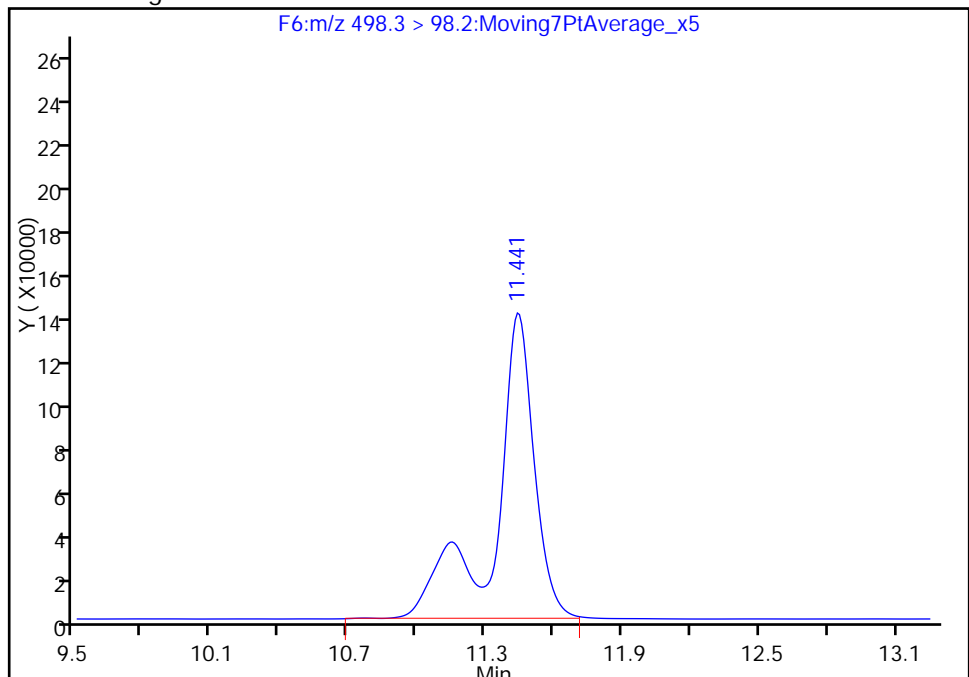
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Amount: 19.824525
Amount Units: ng/ml

Processing Integration Results



RT: 11.44
Area: 1662317
Amount: 33.788032
Amount Units: ng/ml

Manual Integration Results



Reviewer: barnettj, 26-May-2016 15:05:09

Audit Action: Manually Integrated

Audit Reason: Isomers

FORM I
LCMS ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Sacramento Job No.: 320-18796-1
 SDG No.: _____
 Client Sample ID: OF-TRMTLAG-0516 Lab Sample ID: 320-18796-2
 Matrix: Water Lab File ID: 25MAY2016B4A_076.d
 Analysis Method: WS-LC-0025 Date Collected: 05/10/2016 11:50
 Extraction Method: 3535 Date Extracted: 05/12/2016 10:01
 Sample wt/vol: 509.9(mL) Date Analyzed: 05/26/2016 18:11
 Con. Extract Vol.: 1.0(mL) Dilution Factor: 10
 Injection Volume: 15(uL) GC Column: Acquity ID: 2.1(mm)
 % Moisture: _____ GPC Cleanup: (Y/N) N
 Analysis Batch No.: 111390 Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	LOQ	LOD	DL
375-85-9	Perfluoroheptanoic acid (PFHpA)	0.071	D	0.025	0.020	0.0079
335-67-1	Perfluorooctanoic acid (PFOA)	1.4	D M	0.025	0.020	0.0073
375-95-1	Perfluorononanoic acid (PFNA)	0.0094	J D	0.025	0.020	0.0064
375-73-5	Perfluorobutanesulfonic acid (PFBS)	0.033	D	0.025	0.020	0.0090
355-46-4	Perfluorohexanesulfonic acid (PFHxS)	0.56	D M	0.025	0.020	0.0085
1763-23-1	Perfluorooctanesulfonic acid (PFOS)	1.7	B D M	0.039	0.029	0.013

CAS NO.	ISOTOPE DILUTION	%REC	Q	LIMITS
STL00994	18O2 PFHxS	136		25-150
STL00991	13C4 PFOS	115		25-150
STL00995	13C5 PFNA	144		25-150
STL00990	13C4 PFOA	141		25-150
STL01892	13C4-PFHpA	140		25-150

TestAmerica Sacramento
Target Compound Quantitation Report

Data File: \\ChromNA\Sacramento\ChromData\A4\20160525-31065.b\25MAY2016B4A_076.d
 Lims ID: 320-18796-A-2-A
 Client ID: OF-TRMTLAG-0516
 Sample Type: Client
 Inject. Date: 26-May-2016 18:11:14 ALS Bottle#: 27 Worklist Smp#: 76
 Injection Vol: 15.0 ul Dil. Factor: 10.0000
 Sample Info: 320-18796-a-2-a 100X
 Misc. Info.: Acquity BEH C18,1.7u, 3X150mm,T=35C
 Operator ID: JRB Instrument ID: A4
 Method: \\ChromNA\Sacramento\ChromData\A4\20160525-31065.b\PFAC_A4.m
 Limit Group: LC PFC_DOD ICAL
 Last Update: 27-May-2016 09:57:28 Calib Date: 25-May-2016 19:01:43
 Integrator: Picker
 Quant Method: Isotopic Dilution Quant By: Initial Calibration
 Last ICal File: \\ChromNA\Sacramento\ChromData\A4\20160525-31065.b\25MAY2016B4A_011.d
 Column 1 : Det: F1:MRM
 Process Host: XAWRK014

First Level Reviewer: barnettj

Date: 27-May-2016 09:50:33

Signal	RT	EXP RT	DLT RT	REL RT	Response	Amount ng/ml	Ratio(Limits)	%Rec	S/N	Flags
51 Perfluorobutanesulfonic acid										
298.8 > 79.6	7.010	7.024	-0.014	1.000	54420	1.67				
D 8 13C4-PFHpA										
366.6 > 321.6	9.365	9.387	-0.022		600250	7.02		14.0	1758	
9 Perfluoroheptanoic acid										
362.8 > 318.7	9.365	9.388	-0.023	1.000	231962	3.62			104	
58 Perfluorohexanesulfonic acid										M
398.3 > 79.2	9.396	9.421	-0.025	1.000	1988273	28.8				M
D 11 18O2 PFHxS										
402.5 > 83.6	9.396	9.422	-0.026		191193	6.44		13.6	508	
D 12 13C4 PFOA										
416.5 > 371.6	10.482	10.503	-0.021		628675	7.05		14.1	2636	
13 Perfluorooctanoic acid										M
412.8 > 368.8	10.482	10.504	-0.022	1.000	3996714	70.2			2482	M
412.8 > 168.7	10.482	10.504	-0.022	1.000	1453309		2.75(0.00-0.00)		1964	M
D 16 13C4 PFOS										
502.4 > 79.7	11.440	11.465	-0.025		37165	5.51		11.5	109	
15 Perfluorooctane sulfonic acid										M
498.3 > 79.2	11.449	11.466	-0.017	1.000	9631400	89.2			3113	M
498.3 > 98.2	11.449	11.466	-0.017	1.000	4737045		2.03(0.00-0.00)		2830	M
D 17 13C5 PFNA										
467.5 > 422.6	11.469	11.484	-0.015		562836	7.18		14.4	1342	
18 Perfluorononanoic acid										
462.5 > 418.6	11.469	11.486	-0.017	1.000	66743	0.4800			50.4	

QC Flag Legend

Review Flags

M - Manually Integrated

TestAmerica Sacramento

Data File: \\ChromNA\Sacramento\ChromData\A4\20160525-31065.b\25MAY2016B4A_076.d

Injection Date: 26-May-2016 18:11:14

Instrument ID: A4

Lims ID: 320-18796-A-2-A

Lab Sample ID: 320-18796-2

Client ID: OF-TRMTLAG-0516

Operator ID: JRB

ALS Bottle#: 27

Worklist Smp#: 76

Injection Vol: 15.0 ul

Dil. Factor: 10.0000

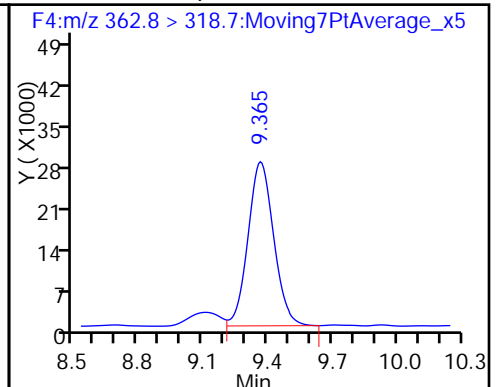
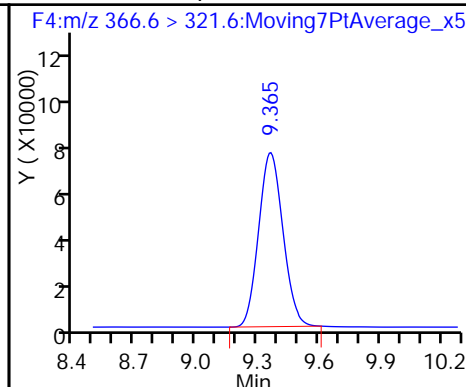
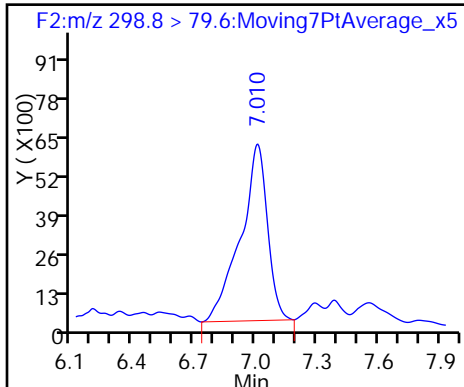
Method: PFAC_A4

Limit Group: LC PFC_DOD ICAL

51 Perfluorobutanesulfonic acid

D 8 13C4-PFHpA

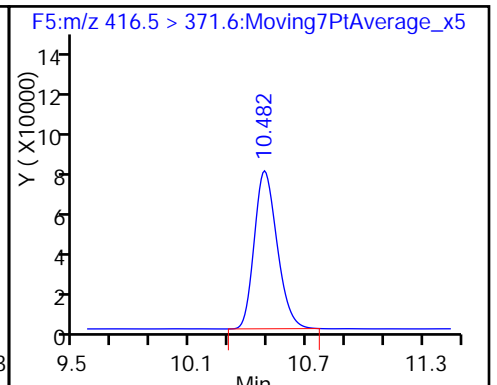
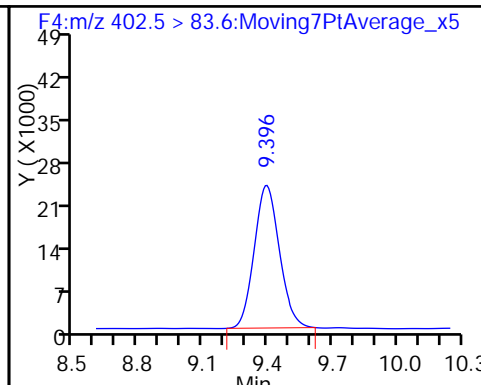
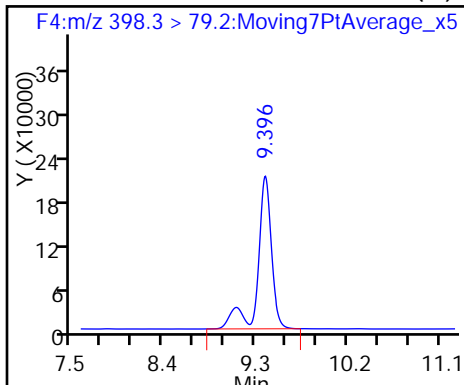
9 Perfluoroheptanoic acid



58 Perfluorohexanesulfonic acid (M)

D 11 18O2 PFHxS

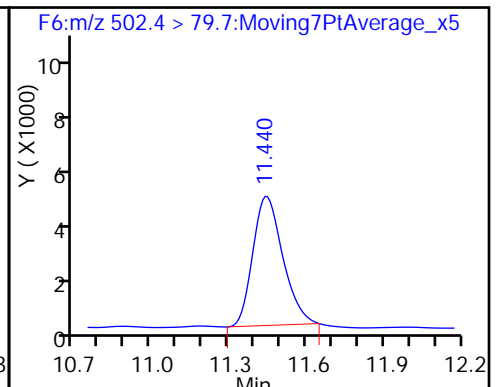
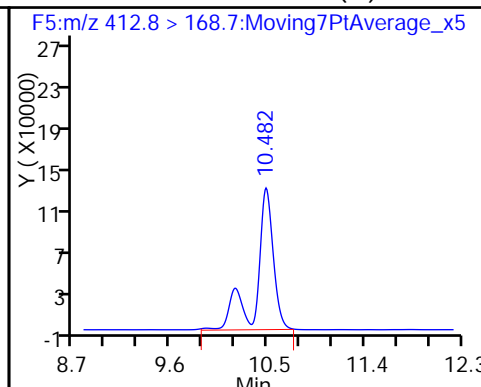
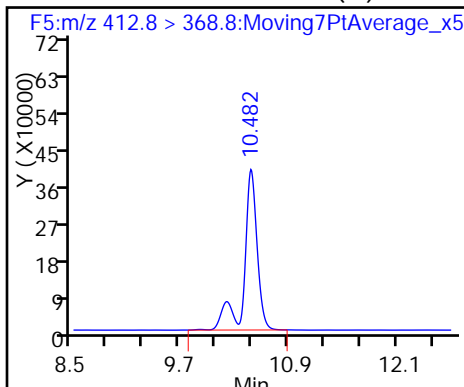
D 12 13C4 PFOA



13 Perfluorooctanoic acid (M)

13 Perfluorooctanoic acid (M)

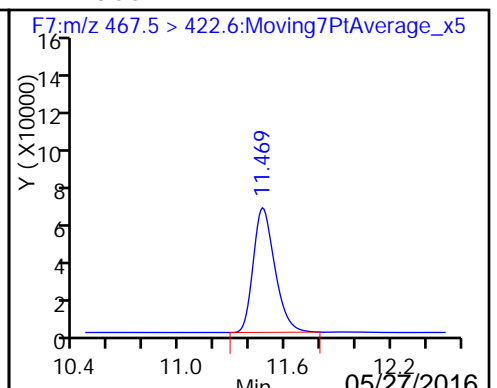
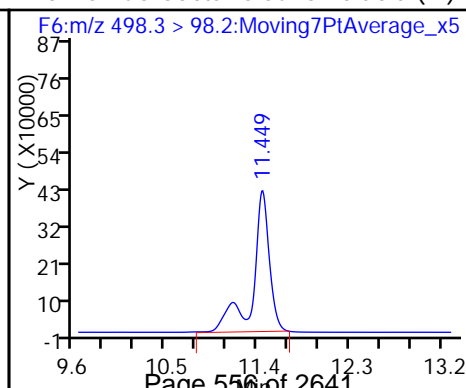
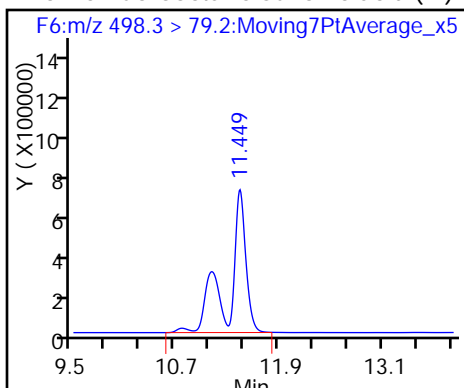
D 16 13C4 PFOS



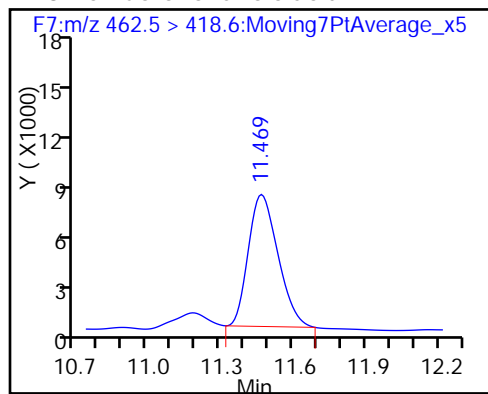
15 Perfluorooctane sulfonic acid (M)

15 Perfluorooctane sulfonic acid (M)

D 17 13C5 PFNA



18 Perfluorononanoic acid



TestAmerica Sacramento

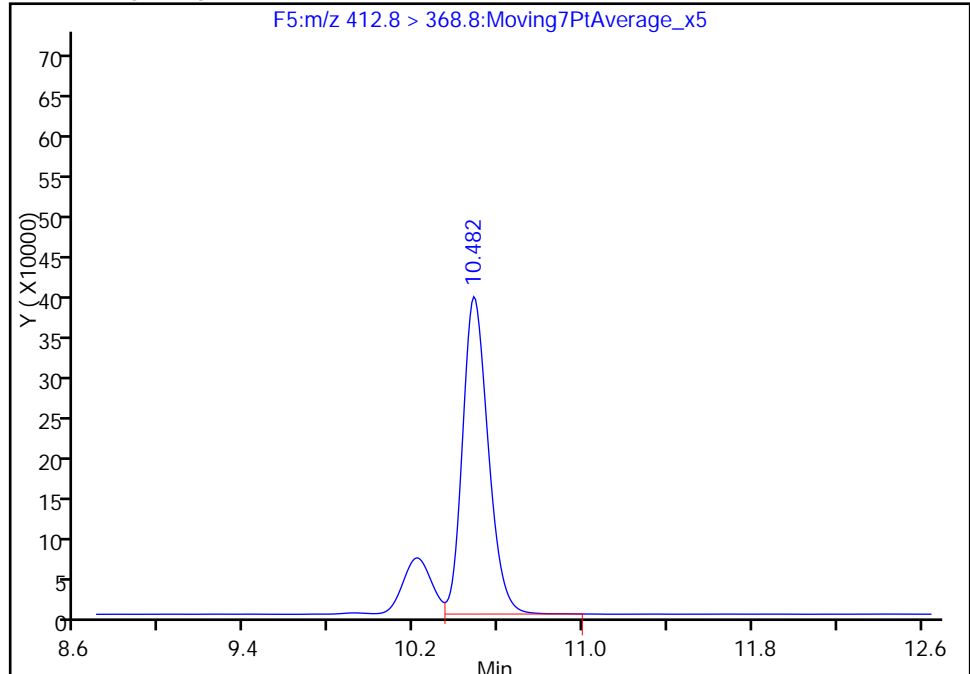
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Injection Date: 26-May-2016 18:11:14 Instrument ID: A4
Lims ID: 320-18796-A-2-A Lab Sample ID: 320-18796-2
Client ID: OF-TRMTLAG-0516
Operator ID: JRB ALS Bottle#: 27 Worklist Smp#: 76
Injection Vol: 15.0 ul Dil. Factor: 10.0000
Method: PFAC_A4 Limit Group: LC PFC_DOD ICAL
Column: Detector F5:MRM

13 Perfluorooctanoic acid, CAS: 335-67-1

Signal: 1

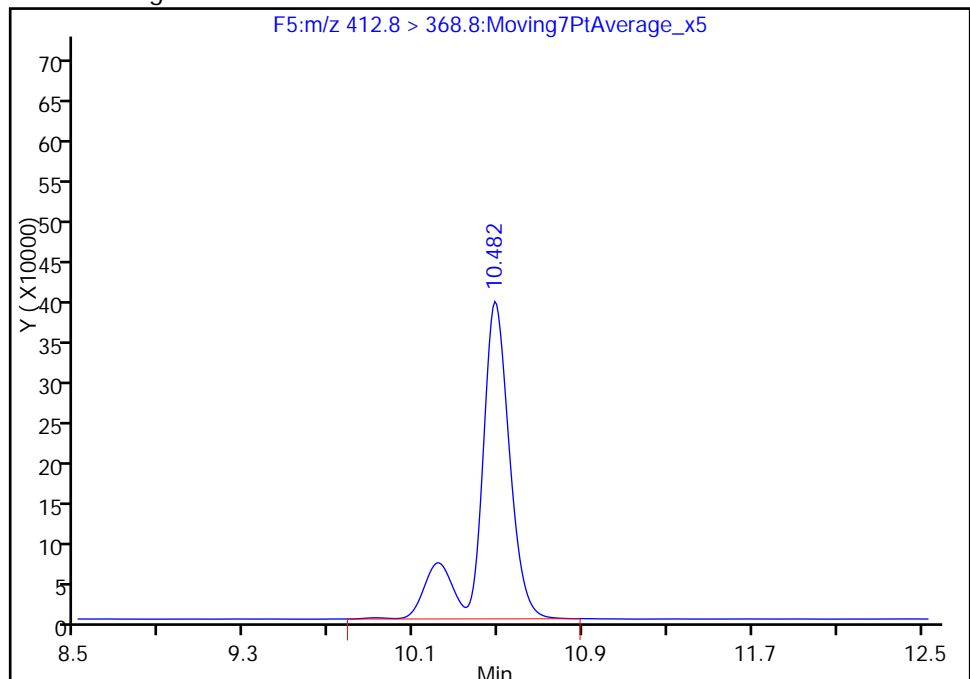
RT: 10.48
Area: 3335281
Amount: 58.587318
Amount Units: ng/ml

Processing Integration Results



RT: 10.48
Area: 3996714
Amount: 70.220107
Amount Units: ng/ml

Manual Integration Results



Reviewer: barnettj, 27-May-2016 09:50:33
Audit Action: Manually Integrated

Audit Reason: Isomers

TestAmerica Sacramento

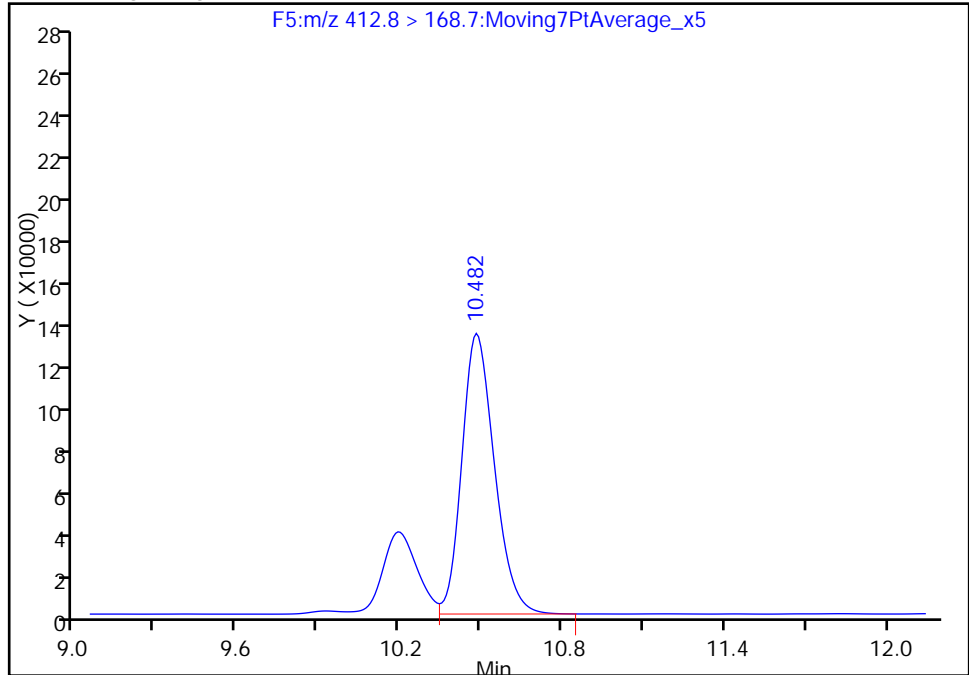
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Injection Date: 26-May-2016 18:11:14 Instrument ID: A4
Lims ID: 320-18796-A-2-A Lab Sample ID: 320-18796-2
Client ID: OF-TRMTLAG-0516
Operator ID: JRB ALS Bottle#: 27 Worklist Smp#: 76
Injection Vol: 15.0 ul Dil. Factor: 10.0000
Method: PFAC_A4 Limit Group: LC PFC_DOD ICAL
Column: Detector F5:MRM

13 Perfluorooctanoic acid, CAS: 335-67-1

Signal: 2

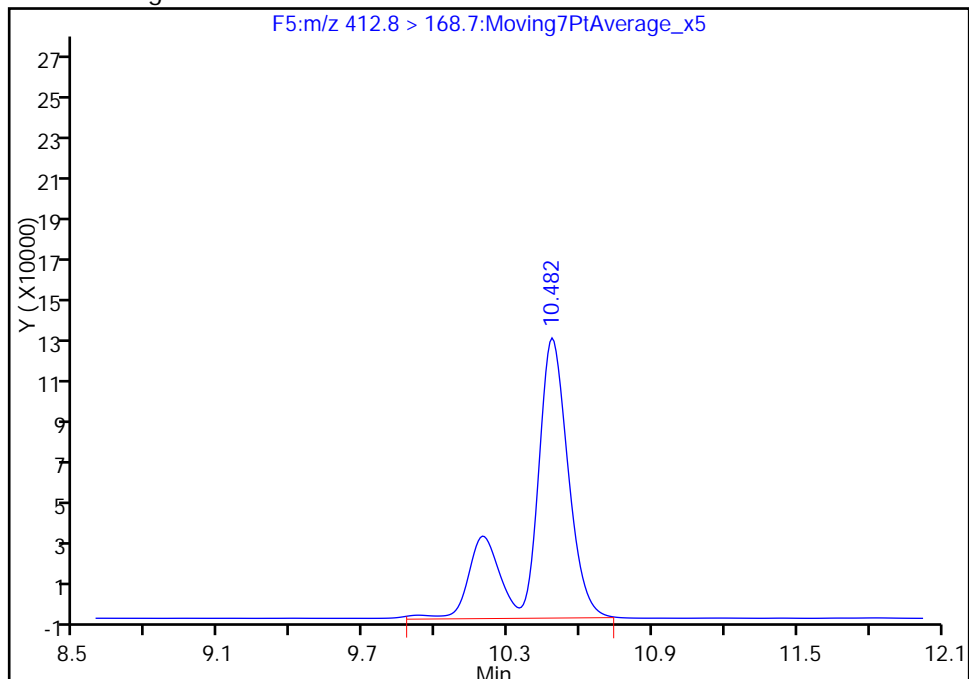
RT: 10.48
Area: 1101041
Amount: 58.587318
Amount Units: ng/ml

Processing Integration Results



RT: 10.48
Area: 1453309
Amount: 70.220107
Amount Units: ng/ml

Manual Integration Results



Reviewer: barnettj, 27-May-2016 09:50:33

Audit Action: Manually Integrated

Audit Reason: Isomers

TestAmerica Sacramento

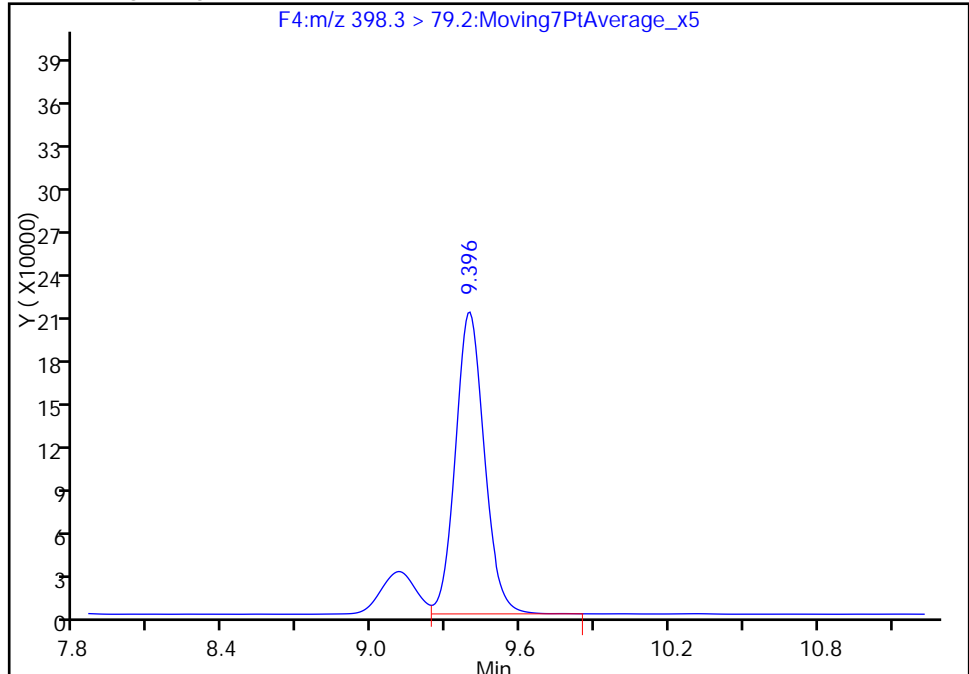
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Injection Date: 26-May-2016 18:11:14 Instrument ID: A4
Lims ID: 320-18796-A-2-A Lab Sample ID: 320-18796-2
Client ID: OF-TRMTLAG-0516
Operator ID: JRB ALS Bottle#: 27 Worklist Smp#: 76
Injection Vol: 15.0 ul Dil. Factor: 10.0000
Method: PFAC_A4 Limit Group: LC PFC_DOD ICAL
Column: Detector F4:MRM

58 Perfluorohexanesulfonic acid, CAS: 355-46-4

Signal: 1

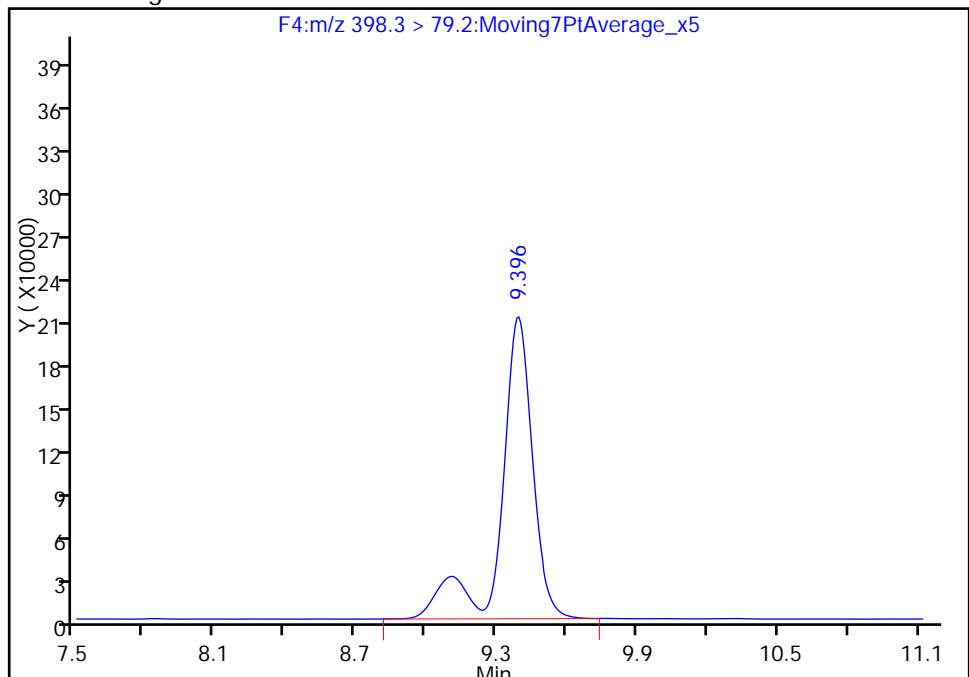
RT: 9.40
Area: 1703297
Amount: 24.660670
Amount Units: ng/ml

Processing Integration Results



RT: 9.40
Area: 1988273
Amount: 28.786609
Amount Units: ng/ml

Manual Integration Results



Reviewer: barnettj, 27-May-2016 09:50:33

Audit Action: Assigned Compound ID

Audit Reason: Isomers

TestAmerica Sacramento

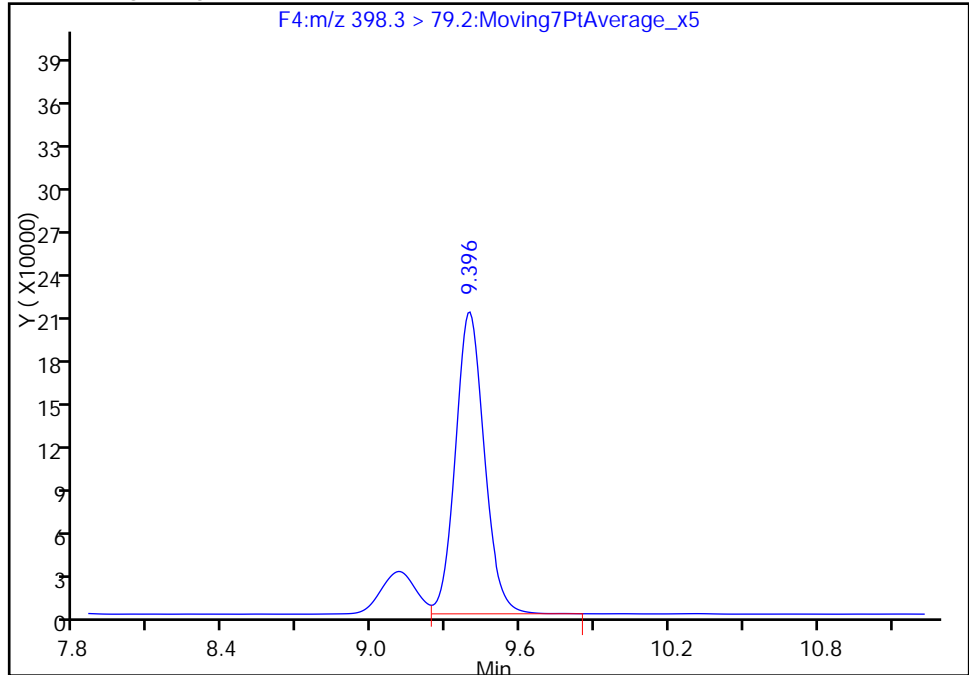
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Injection Date: 26-May-2016 18:11:14 Instrument ID: A4
Lims ID: 320-18796-A-2-A Lab Sample ID: 320-18796-2
Client ID: OF-TRMTLAG-0516
Operator ID: JRB ALS Bottle#: 27 Worklist Smp#: 76
Injection Vol: 15.0 ul Dil. Factor: 10.0000
Method: PFAC_A4 Limit Group: LC PFC_DOD ICAL
Column: Detector F4:MRM

58 Perfluorohexanesulfonic acid, CAS: 355-46-4

Signal: 1

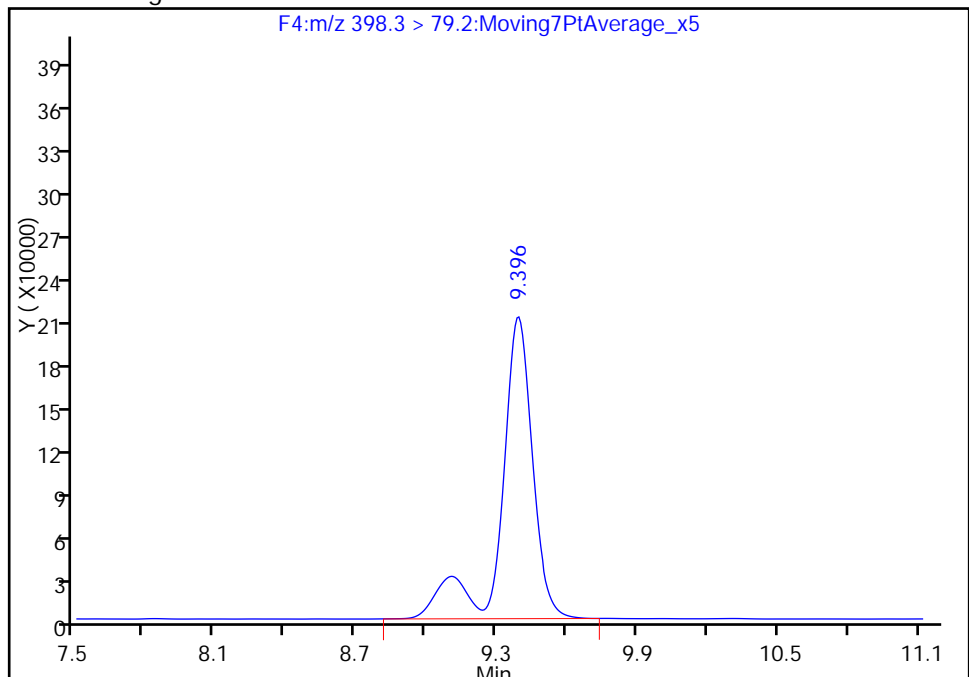
RT: 9.40
Area: 1703297
Amount: 24.660670
Amount Units: ng/ml

Processing Integration Results



RT: 9.40
Area: 1988273
Amount: 28.786609
Amount Units: ng/ml

Manual Integration Results



Reviewer: barnettj, 27-May-2016 09:50:33

Audit Action: Manually Integrated

Audit Reason: Isomers

TestAmerica Sacramento

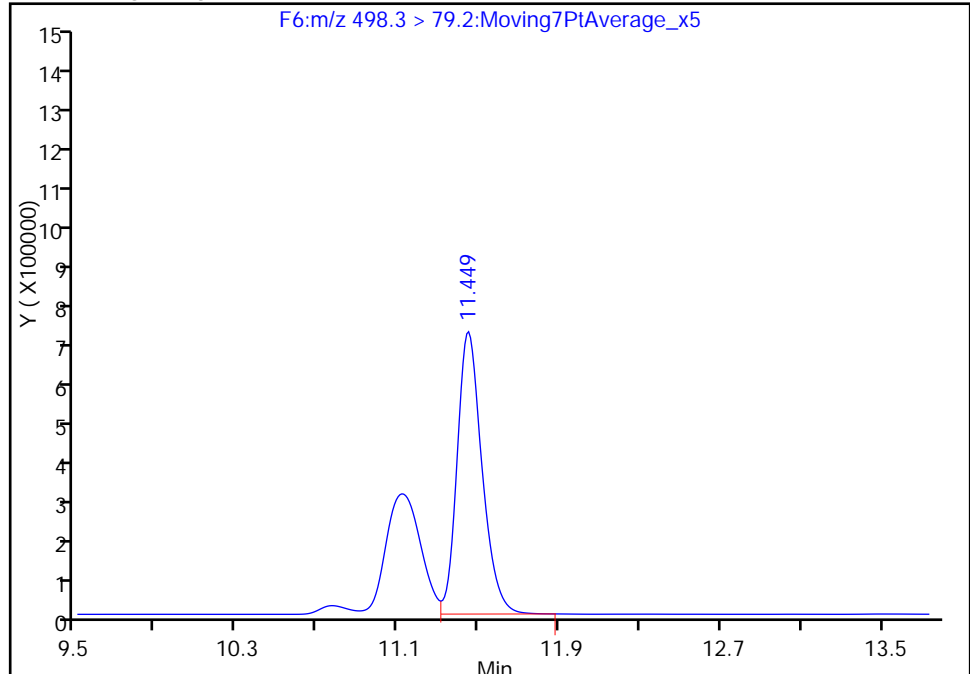
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Injection Date: 26-May-2016 18:11:14 Instrument ID: A4
Lims ID: 320-18796-A-2-A Lab Sample ID: 320-18796-2
Client ID: OF-TRMTLAG-0516
Operator ID: JRB ALS Bottle#: 27 Worklist Smp#: 76
Injection Vol: 15.0 ul Dil. Factor: 10.0000
Method: PFAC_A4 Limit Group: LC PFC_DOD ICAL
Column: Detector F6:MRM

15 Perfluorooctane sulfonic acid, CAS: 1763-23-1

Signal: 1

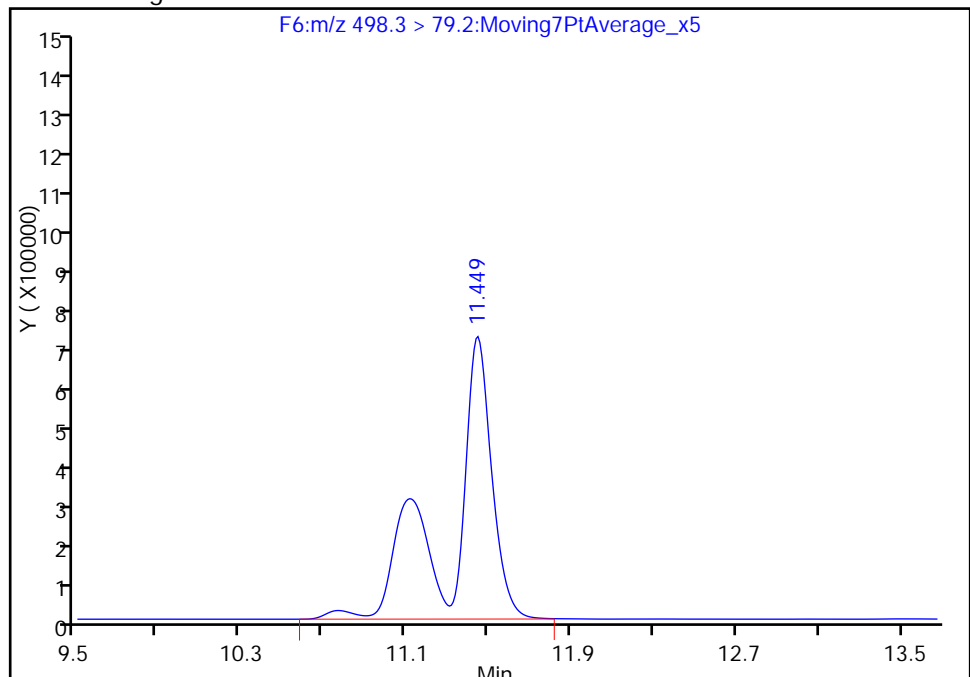
RT: 11.45
Area: 5913278
Amount: 55.012838
Amount Units: ng/ml

Processing Integration Results



RT: 11.45
Area: 9631400
Amount: 89.188026
Amount Units: ng/ml

Manual Integration Results



Reviewer: barnettj, 27-May-2016 09:50:33
Audit Action: Manually Integrated

Audit Reason: Isomers

TestAmerica Sacramento

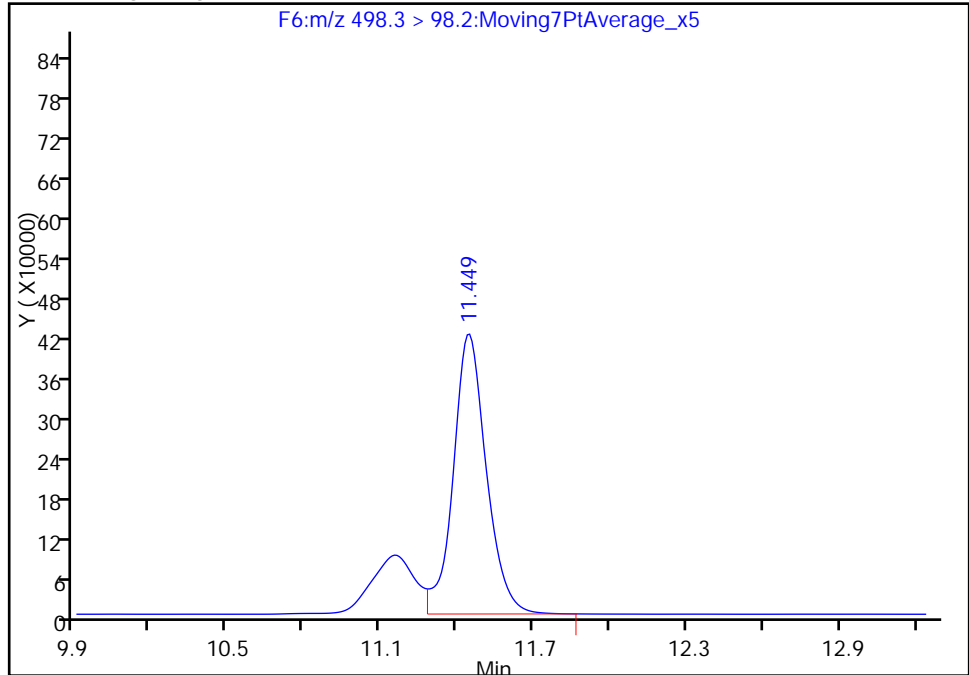
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Injection Date: 26-May-2016 18:11:14 Instrument ID: A4
Lims ID: 320-18796-A-2-A Lab Sample ID: 320-18796-2
Client ID: OF-TRMTLAG-0516
Operator ID: JRB ALS Bottle#: 27 Worklist Smp#: 76
Injection Vol: 15.0 ul Dil. Factor: 10.0000
Method: PFAC_A4 Limit Group: LC PFC_DOD ICAL
Column: Detector F6:MRM

15 Perfluorooctane sulfonic acid, CAS: 1763-23-1

Signal: 2

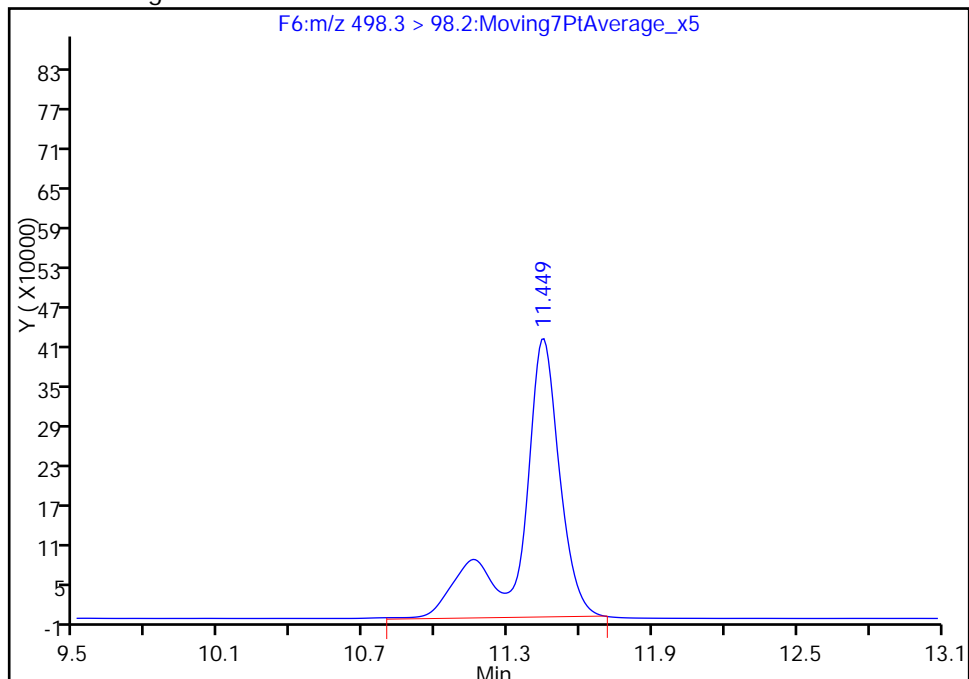
RT: 11.45
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Amount: 55.012838
Amount Units: ng/ml

Processing Integration Results



RT: 11.45
Area: 4737045
Amount: 89.188026
Amount Units: ng/ml

Manual Integration Results



Reviewer: barnettj, 27-May-2016 09:50:33

Audit Action: Manually Integrated

Audit Reason: Isomers

FORM I
LCMS ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Sacramento Job No.: 320-18796-1
SDG No.: _____
Client Sample ID: OF-POLLLAG-0516 Lab Sample ID: 320-18796-3
Matrix: Water Lab File ID: 25MAY2016B4A_056.d
Analysis Method: WS-LC-0025 Date Collected: 05/10/2016 11:25
Extraction Method: 3535 Date Extracted: 05/12/2016 10:01
Sample wt/vol: 506.2 (mL) Date Analyzed: 05/26/2016 10:58
Con. Extract Vol.: 1.0 (mL) Dilution Factor: 20
Injection Volume: 15 (uL) GC Column: Acquity ID: 2.1 (mm)
% Moisture: _____ GPC Cleanup: (Y/N) N
Analysis Batch No.: 111390 Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	LOQ	LOD	DL
375-85-9	Perfluoroheptanoic acid (PFHpA)	0.045	J D	0.049	0.040	0.016
335-67-1	Perfluorooctanoic acid (PFOA)	0.53	D M	0.049	0.040	0.015
375-95-1	Perfluorononanoic acid (PFNA)	0.040	U	0.049	0.040	0.013
375-73-5	Perfluorobutanesulfonic acid (PFBS)	0.040	U	0.049	0.040	0.018
355-46-4	Perfluorohexanesulfonic acid (PFHxS)	0.31	D M	0.049	0.040	0.017
1763-23-1	Perfluorooctanesulfonic acid (PFOS)	1.2	B D M	0.079	0.059	0.025

CAS NO.	ISOTOPE DILUTION	%REC	Q	LIMITS
STL00994	18O2 PFHxS	164	Q	25-150
STL00991	13C4 PFOS	119		25-150
STL00995	13C5 PFNA	120		25-150
STL00990	13C4 PFOA	154	Q	25-150
STL01892	13C4-PFHpA	157	Q	25-150

TestAmerica Sacramento
Target Compound Quantitation Report

Data File: \\ChromNA\Sacramento\ChromData\A4\20160525-31065.b\25MAY2016B4A_056.d
 Lims ID: 320-18796-A-3-A
 Client ID: OF-POLLLAG-0516
 Sample Type: Client
 Inject. Date: 26-May-2016 10:58:14 ALS Bottle#: 33 Worklist Smp#: 56
 Injection Vol: 15.0 ul Dil. Factor: 20.0000
 Sample Info: 320-18796-a-3-a 20X
 Misc. Info.: Acquity BEH C18,1.7u, 3X150mm,T=35C
 Operator ID: JRB Instrument ID: A4
 Method: \\ChromNA\Sacramento\ChromData\A4\20160525-31065.b\PFAC_A4.m
 Limit Group: LC PFC_DOD ICAL
 Last Update: 26-May-2016 16:03:28 Calib Date: 25-May-2016 19:01:43
 Integrator: Picker
 Quant Method: Isotopic Dilution Quant By: Initial Calibration
 Last ICal File: \\ChromNA\Sacramento\ChromData\A4\20160525-31065.b\25MAY2016B4A_011.d
 Column 1 : Det: F1:MRM
 Process Host: XAWRK003

First Level Reviewer: barnettj

Date: 26-May-2016 15:24:05

Signal	RT	EXP RT	DLT RT	REL RT	Response	Amount ng/ml	Ratio(Limits)	%Rec	S/N	Flags
51 Perfluorobutanesulfonic acid										
298.8 > 79.6	7.019	7.024	-0.005	1.000	11436	0.1483				
D 8 13C4-PFHpA										
366.6 > 321.6	9.372	9.387	-0.015		336013	3.93		7.9	1075	
9 Perfluoroheptanoic acid										
362.8 > 318.7	9.372	9.388	-0.016	1.000	99541	1.13			86.5	
58 Perfluorohexanesulfonic acid										M
398.3 > 79.2	9.404	9.421	-0.017	1.000	642484	7.73				M
D 11 18O2 PFHxS										
402.5 > 83.6	9.404	9.422	-0.018		115088	3.88		8.2	276	
D 12 13C4 PFOA										
416.5 > 371.6	10.491	10.503	-0.012		342090	3.84		7.7	1572	
13 Perfluorooctanoic acid										M
412.8 > 368.8	10.491	10.504	-0.013	1.000	833762	13.4			518	M
412.8 > 168.7	10.491	10.504	-0.013	1.000	319728		2.61(0.00-0.00)		635	M
D 16 13C4 PFOS										
502.4 > 79.7	11.458	11.465	-0.007		19145	2.84		5.9	62.3	
15 Perfluorooctane sulfonic acid										M
498.3 > 79.2	11.458	11.466	-0.008	1.000	3352204	30.6			3268	M
498.3 > 98.2	11.449	11.466	-0.017	0.999	1550728		2.16(0.00-0.00)		1446	M
D 17 13C5 PFNA										
467.5 > 422.6	11.478	11.484	-0.006		234398	2.99		6.0	1051	
18 Perfluorononanoic acid										
462.5 > 418.6	11.478	11.486	-0.008	1.000	16518	0.1413			20.2	

QC Flag Legend

Review Flags

M - Manually Integrated

TestAmerica Sacramento

Data File: \\ChromNA\Sacramento\ChromData\A4\20160525-31065.b\25MAY2016B4A_056.d

Injection Date: 26-May-2016 10:58:14

Instrument ID: A4

Lims ID: 320-18796-A-3-A

Lab Sample ID: 320-18796-3

Client ID: OF-POLLLAG-0516

Operator ID: JRB

ALS Bottle#: 33

Worklist Smp#: 56

Injection Vol: 15.0 ul

Dil. Factor: 20.0000

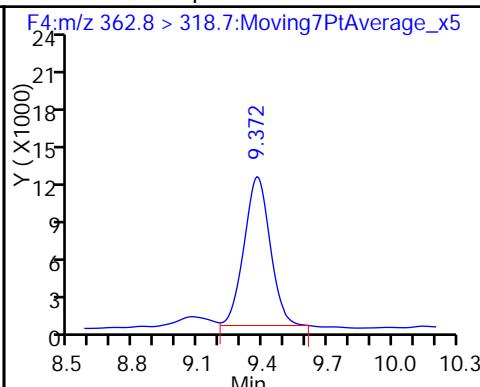
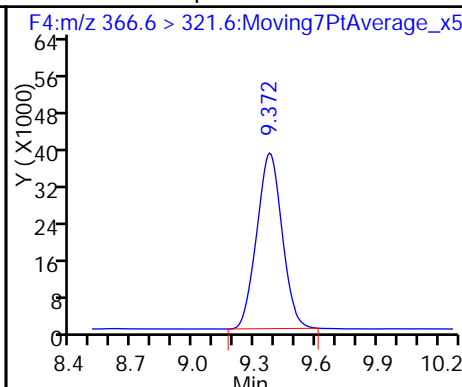
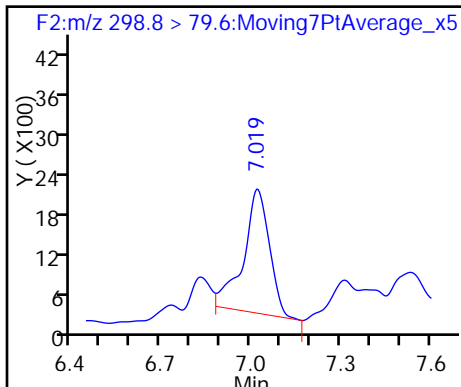
Method: PFAC_A4

Limit Group: LC PFC_DOD ICAL

51 Perfluorobutanesulfonic acid

D 8 13C4-PFHpA

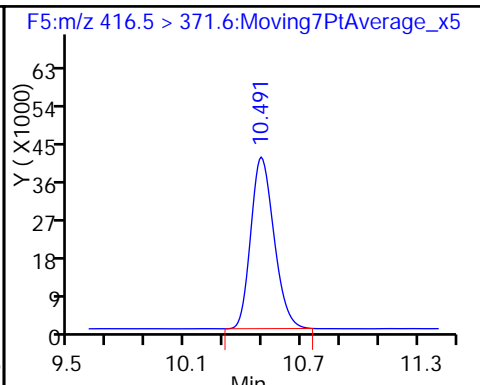
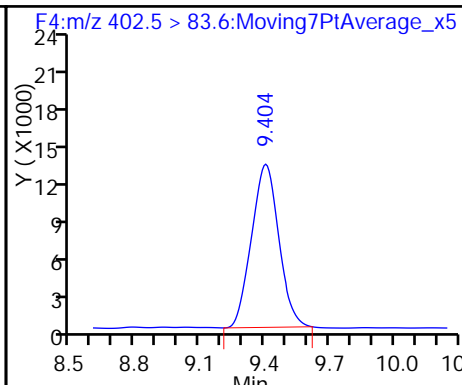
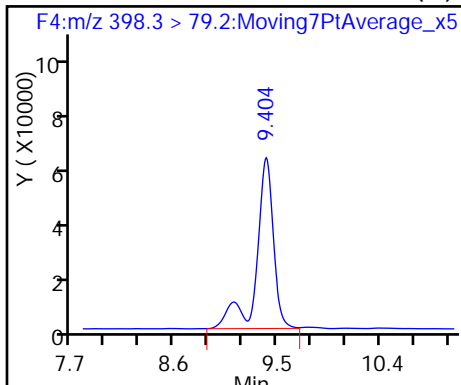
9 Perfluoroheptanoic acid



58 Perfluorohexanesulfonic acid (M)

D 11 18O2 PFHxS

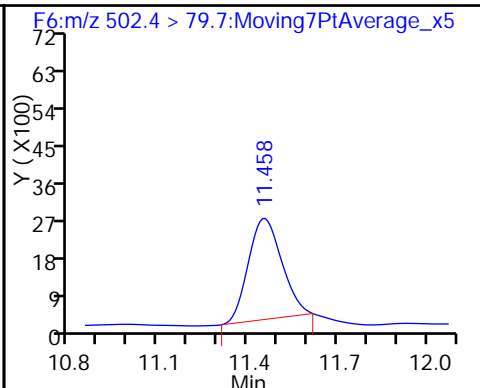
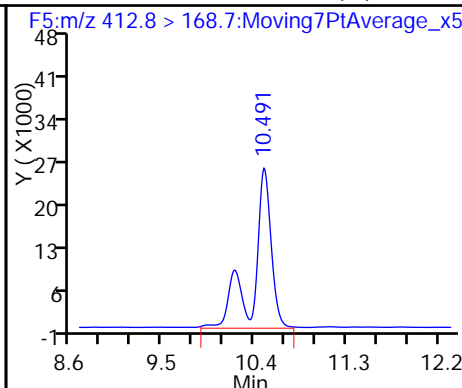
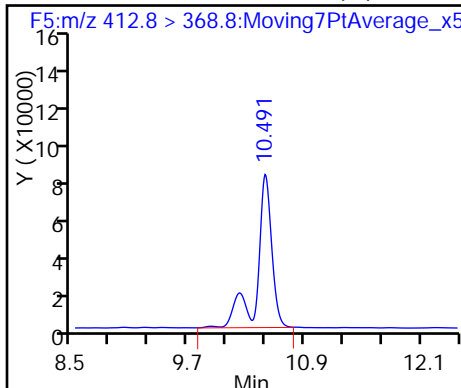
D 12 13C4 PFOA



13 Perfluorooctanoic acid (M)

13 Perfluorooctanoic acid (M)

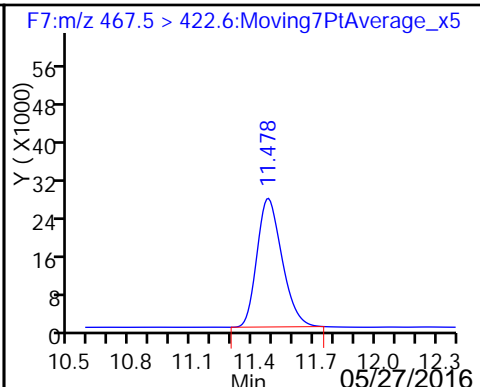
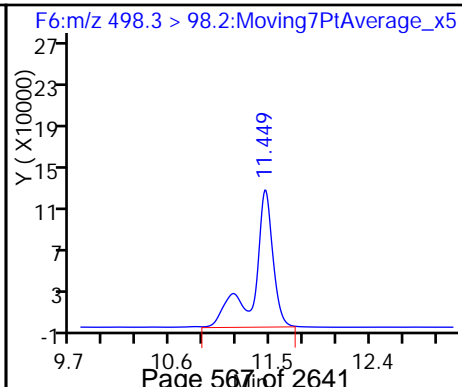
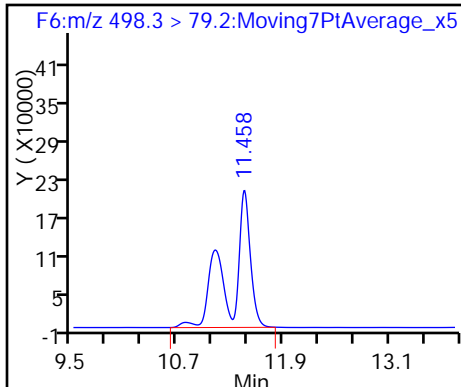
D 16 13C4 PFOS



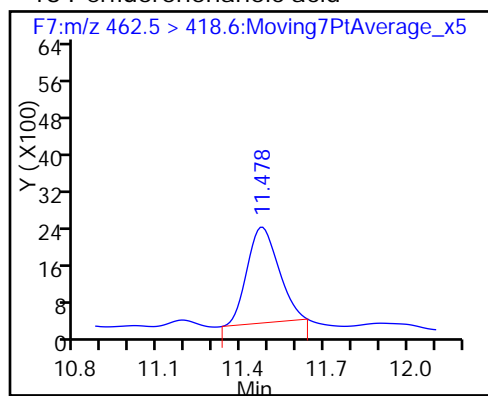
15 Perfluorooctane sulfonic acid (M)

15 Perfluorooctane sulfonic acid (M)

D 17 13C5 PFNA



18 Perfluorononanoic acid



TestAmerica Sacramento

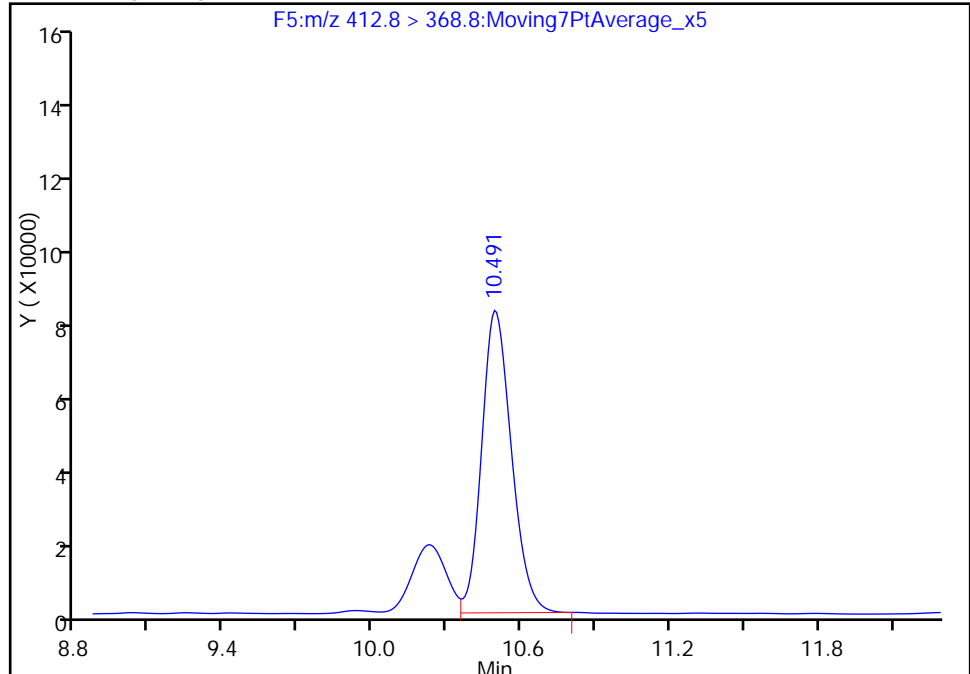
Data File:	\\ChromNA\Sacramento\ChromData\A4\20160525-31065.b\25MAY2016B4A_056.d				
Injection Date:	26-May-2016 10:58:14	Instrument ID:	A4		
Lims ID:	320-18796-A-3-A	Lab Sample ID:	320-18796-3		
Client ID:	OF-POLLLAG-0516				
Operator ID:	JRB	ALS Bottle#:	33	Worklist Smp#:	56
Injection Vol:	15.0 ul	Dil. Factor:	20.0000		
Method:	PFAC_A4	Limit Group:	LC PFC_DOD ICAL		
Column:		Detector	F5:MRM		

13 Perfluorooctanoic acid, CAS: 335-67-1

Signal: 1

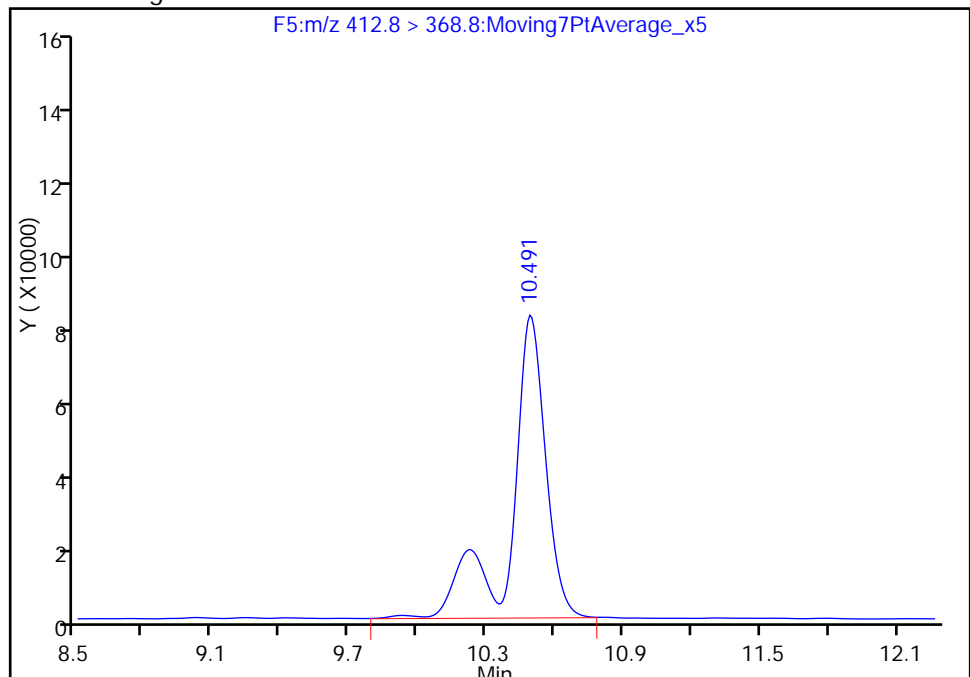
RT: 10.49
Area: 653333
Amount: 10.487053
Amount Units: ng/ml

Processing Integration Results



RT: 10.49
Area: 833762
Amount: 13.402869
Amount Units: ng/ml

Manual Integration Results



Reviewer: barnettj, 26-May-2016 15:24:05
Audit Action: Manually Integrated

Audit Reason: Isomers

TestAmerica Sacramento

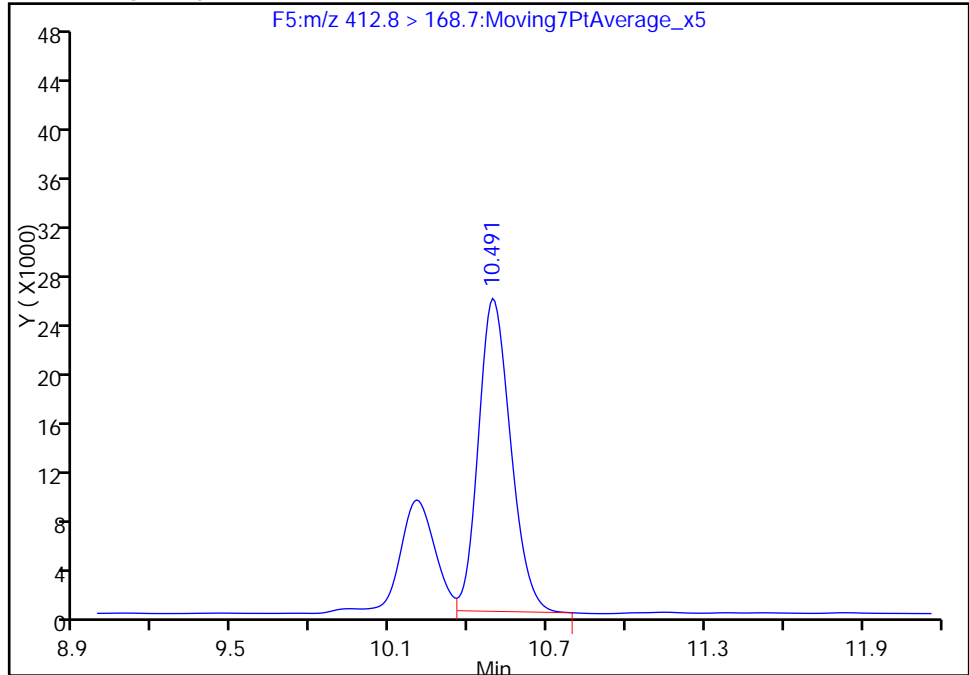
Data File: \\ChromNA\Sacramento\ChromData\A4\20160525-31065.b\25MAY2016B4A_056.d
Injection Date: 26-May-2016 10:58:14 Instrument ID: A4
Lims ID: 320-18796-A-3-A Lab Sample ID: 320-18796-3
Client ID: OF-POLLAG-0516
Operator ID: JRB ALS Bottle#: 33 Worklist Smp#: 56
Injection Vol: 15.0 ul Dil. Factor: 20.0000
Method: PFAC_A4 Limit Group: LC PFC_DOD ICAL
Column: Detector F5:MRM

13 Perfluorooctanoic acid, CAS: 335-67-1

Signal: 2

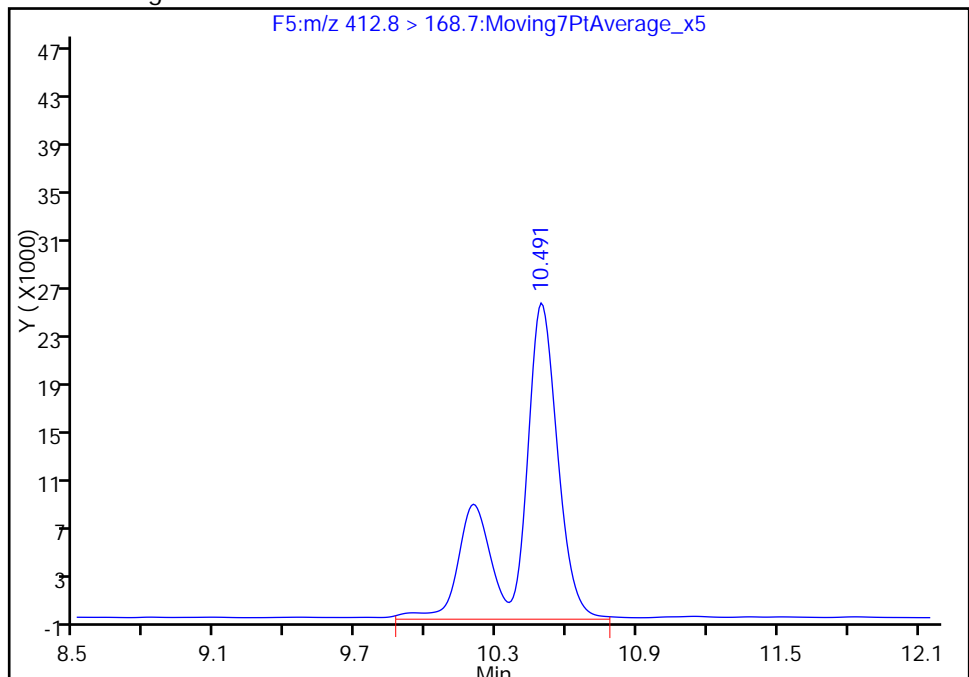
RT: 10.49
Area: 219708
Amount: 10.487053
Amount Units: ng/ml

Processing Integration Results



RT: 10.49
Area: 319728
Amount: 13.402869
Amount Units: ng/ml

Manual Integration Results



Reviewer: barnettj, 26-May-2016 15:24:05

Audit Action: Manually Integrated

Audit Reason: Isomers

TestAmerica Sacramento

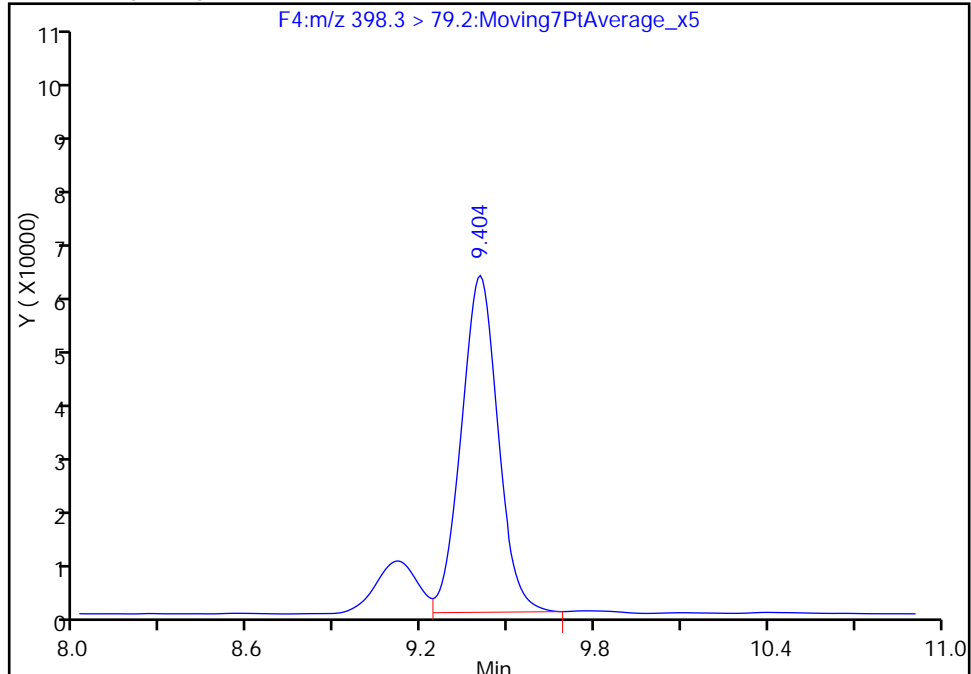
Data File: \\ChromNA\Sacramento\ChromData\A4\20160525-31065.b\25MAY2016B4A_056.d
Injection Date: 26-May-2016 10:58:14 Instrument ID: A4
Lims ID: 320-18796-A-3-A Lab Sample ID: 320-18796-3
Client ID: OF-POLLLAG-0516
Operator ID: JRB ALS Bottle#: 33 Worklist Smp#: 56
Injection Vol: 15.0 ul Dil. Factor: 20.0000
Method: PFAC_A4 Limit Group: LC PFC_DOD ICAL
Column: Detector F4:MRM

58 Perfluorohexanesulfonic acid, CAS: 355-46-4

Signal: 1

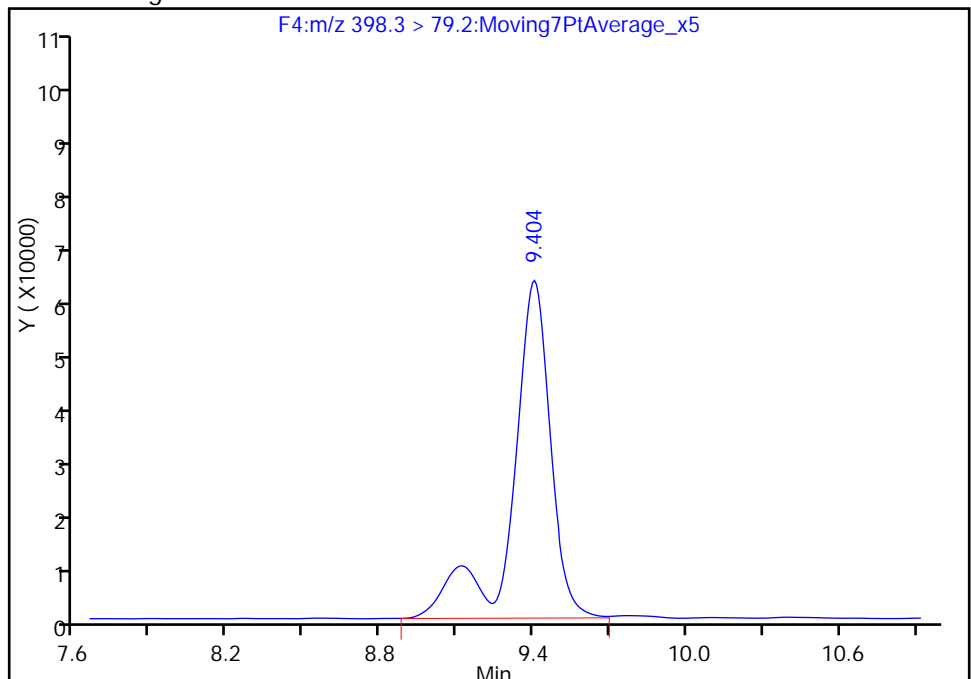
RT: 9.40
Area: 540823
Amount: 6.504016
Amount Units: ng/ml

Processing Integration Results



RT: 9.40
Area: 642484
Amount: 7.726606
Amount Units: ng/ml

Manual Integration Results



Reviewer: barnettj, 26-May-2016 15:24:05
Audit Action: Assigned Compound ID

Audit Reason: Isomers

TestAmerica Sacramento

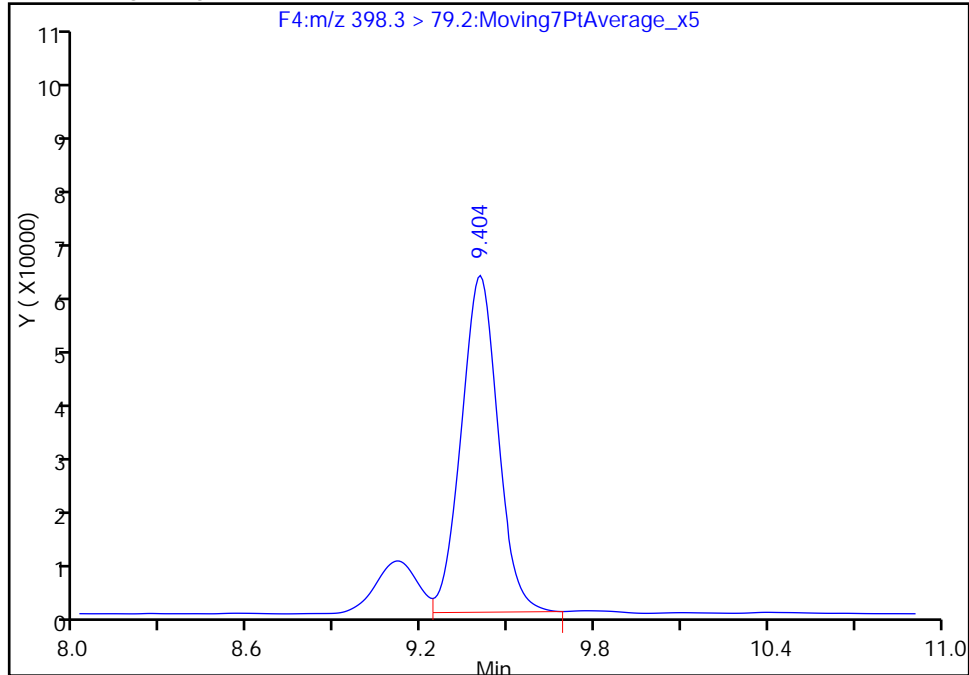
Data File: \\ChromNA\Sacramento\ChromData\A4\20160525-31065.b\25MAY2016B4A_056.d
Injection Date: 26-May-2016 10:58:14 Instrument ID: A4
Lims ID: 320-18796-A-3-A Lab Sample ID: 320-18796-3
Client ID: OF-POLLLAG-0516
Operator ID: JRB ALS Bottle#: 33 Worklist Smp#: 56
Injection Vol: 15.0 ul Dil. Factor: 20.0000
Method: PFAC_A4 Limit Group: LC PFC_DOD ICAL
Column: Detector F4:MRM

58 Perfluorohexanesulfonic acid, CAS: 355-46-4

Signal: 1

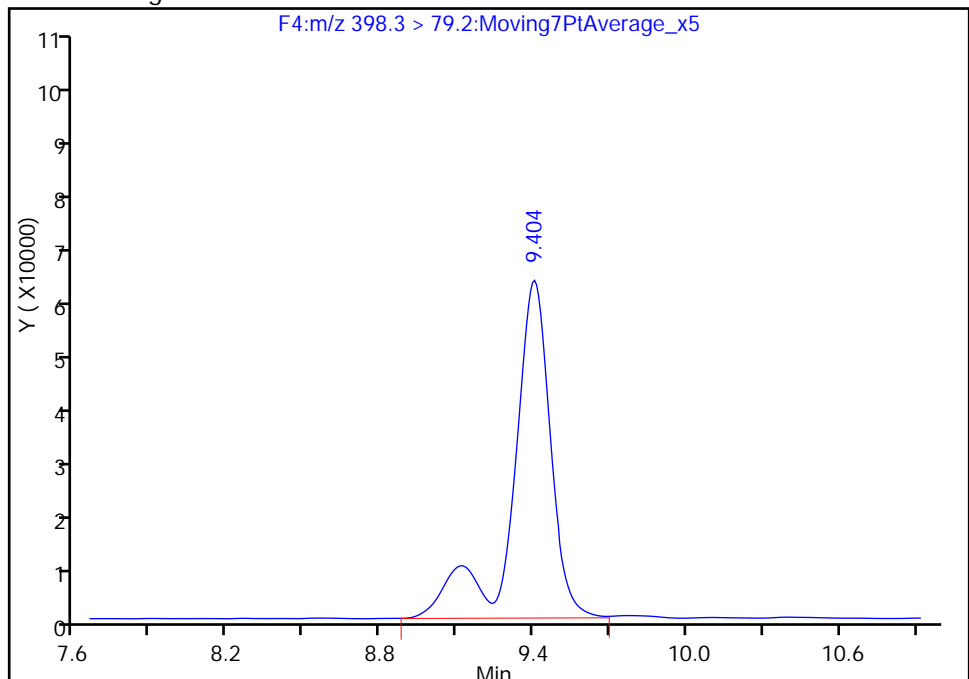
RT: 9.40
Area: 540823
Amount: 6.504016
Amount Units: ng/ml

Processing Integration Results



RT: 9.40
Area: 642484
Amount: 7.726606
Amount Units: ng/ml

Manual Integration Results



Reviewer: barnettj, 26-May-2016 15:24:05

Audit Action: Manually Integrated

Audit Reason: Isomers

TestAmerica Sacramento

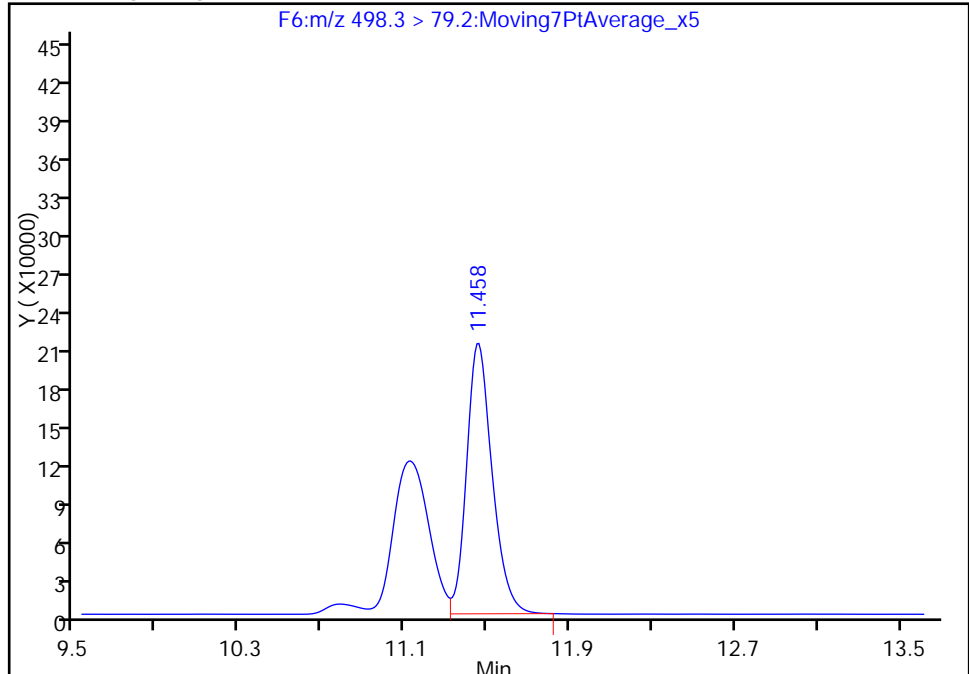
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Injection Date:	26-May-2016 10:58:14	Instrument ID:	A4		
Lims ID:	320-18796-A-3-A	Lab Sample ID:	320-18796-3		
Client ID:	OF-POLLLAG-0516				
Operator ID:	JRB	ALS Bottle#:	33	Worklist Smp#:	56
Injection Vol:	15.0 ul	Dil. Factor:	20.0000		
Method:	PFAC_A4	Limit Group:	LC PFC_DOD ICAL		
Column:		Detector	F6:MRM		

15 Perfluorooctane sulfonic acid, CAS: 1763-23-1

Signal: 1

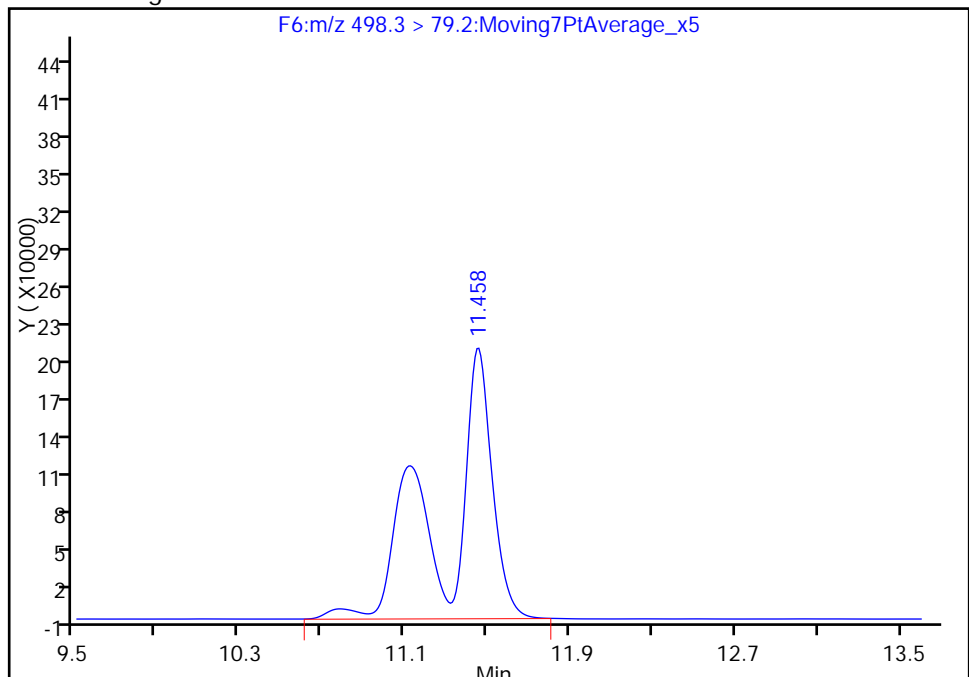
RT: 11.46
Area: 1830705
Amount: 16.993398
Amount Units: ng/ml

Processing Integration Results



RT: 11.46
Area: 3352204
Amount: 30.567394
Amount Units: ng/ml

Manual Integration Results



Reviewer: barnettj, 26-May-2016 15:24:05
Audit Action: Manually Integrated

Audit Reason: Isomers

TestAmerica Sacramento

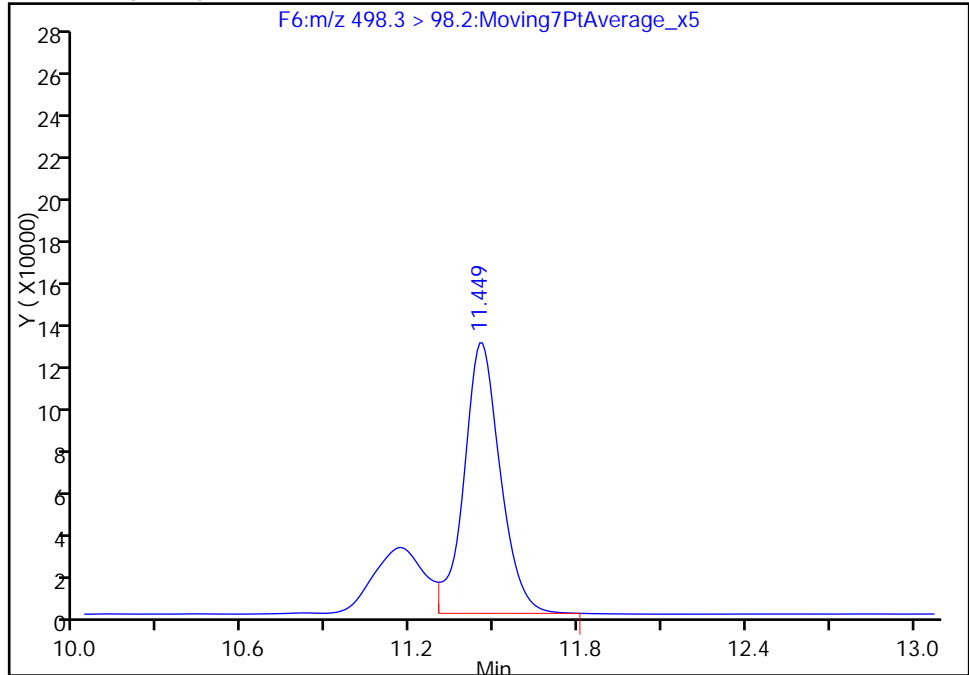
Data File: \\ChromNA\Sacramento\ChromData\A4\20160525-31065.b\25MAY2016B4A_056.d
Injection Date: 26-May-2016 10:58:14 Instrument ID: A4
Lims ID: 320-18796-A-3-A Lab Sample ID: 320-18796-3
Client ID: OF-POLLLAG-0516
Operator ID: JRB ALS Bottle#: 33 Worklist Smp#: 56
Injection Vol: 15.0 ul Dil. Factor: 20.0000
Method: PFAC_A4 Limit Group: LC PFC_DOD ICAL
Column: Detector F6:MRM

15 Perfluorooctane sulfonic acid, CAS: 1763-23-1

Signal: 2

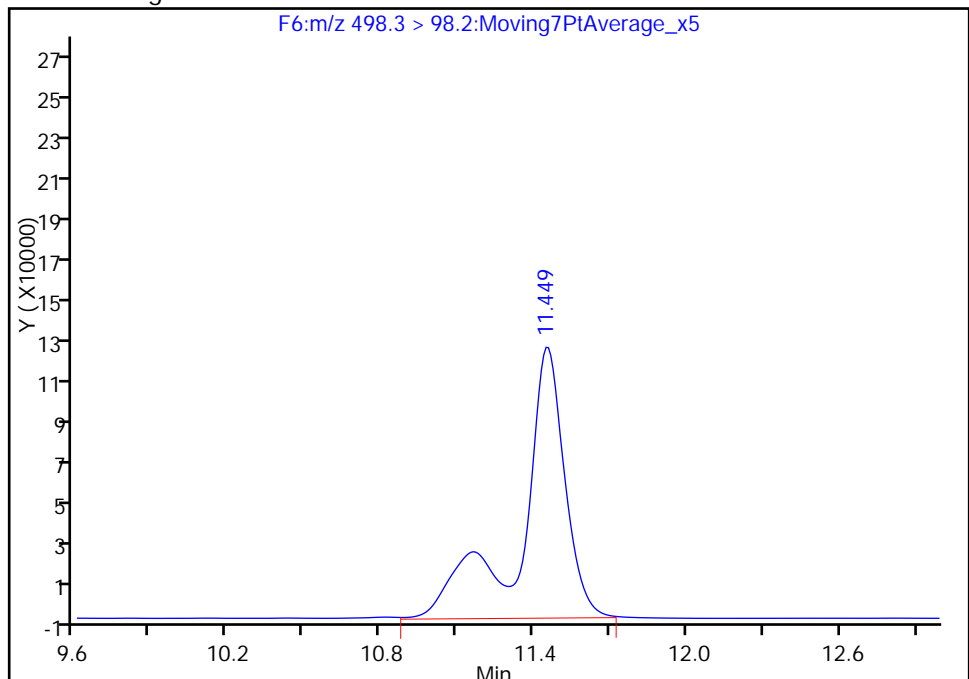
RT: 11.45
Area: 1143784
Amount: 16.993398
Amount Units: ng/ml

Processing Integration Results



RT: 11.45
Area: 1550728
Amount: 30.567394
Amount Units: ng/ml

Manual Integration Results



Reviewer: barnettj, 26-May-2016 15:24:05

Audit Action: Manually Integrated

Audit Reason: Isomers

FORM I
LCMS ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Sacramento Job No.: 320-18796-1
 SDG No.: _____
 Client Sample ID: OF-CLTANK-0516 Lab Sample ID: 320-18796-4
 Matrix: Water Lab File ID: 25MAY2016B4A_057.d
 Analysis Method: WS-LC-0025 Date Collected: 05/10/2016 10:48
 Extraction Method: 3535 Date Extracted: 05/12/2016 10:01
 Sample wt/vol: 526.6(mL) Date Analyzed: 05/26/2016 11:21
 Con. Extract Vol.: 1.0(mL) Dilution Factor: 20
 Injection Volume: 15(uL) GC Column: Acquity ID: 2.1(mm)
 % Moisture: _____ GPC Cleanup: (Y/N) N
 Analysis Batch No.: 111390 Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	LOQ	LOD	DL
375-85-9	Perfluoroheptanoic acid (PFHpA)	0.049	D	0.047	0.038	0.015
335-67-1	Perfluorooctanoic acid (PFOA)	0.47	D M	0.047	0.038	0.014
375-95-1	Perfluorononanoic acid (PFNA)	0.038	U	0.047	0.038	0.012
375-73-5	Perfluorobutanesulfonic acid (PFBS)	0.038	U	0.047	0.038	0.017
355-46-4	Perfluorohexanesulfonic acid (PFHxS)	0.30	D M	0.047	0.038	0.017
1763-23-1	Perfluorooctanesulfonic acid (PFOS)	1.1	B D M	0.076	0.057	0.024

CAS NO.	ISOTOPE DILUTION	%REC	Q	LIMITS
STL00994	18O2 PFHxS	164	Q	25-150
STL00991	13C4 PFOS	135		25-150
STL00995	13C5 PFNA	140		25-150
STL00990	13C4 PFOA	154	Q	25-150
STL01892	13C4-PFHpA	152	Q	25-150

TestAmerica Sacramento
Target Compound Quantitation Report

Data File: \\ChromNA\Sacramento\ChromData\A4\20160525-31065.b\25MAY2016B4A_057.d
 Lims ID: 320-18796-A-4-A
 Client ID: OF-CLTANK-0516
 Sample Type: Client
 Inject. Date: 26-May-2016 11:21:49 ALS Bottle#: 34 Worklist Smp#: 57
 Injection Vol: 15.0 ul Dil. Factor: 20.0000
 Sample Info: 320-18796-a-4-a 20X
 Misc. Info.: Acquity BEH C18,1.7u, 3X150mm,T=35C
 Operator ID: JRB Instrument ID: A4
 Method: \\ChromNA\Sacramento\ChromData\A4\20160525-31065.b\PFAC_A4.m
 Limit Group: LC PFC_DOD ICAL
 Last Update: 26-May-2016 16:03:28 Calib Date: 25-May-2016 19:01:43
 Integrator: Picker
 Quant Method: Isotopic Dilution Quant By: Initial Calibration
 Last ICal File: \\ChromNA\Sacramento\ChromData\A4\20160525-31065.b\25MAY2016B4A_011.d
 Column 1 : Det: F1:MRM
 Process Host: XAWRK003

First Level Reviewer: barnettj

Date: 26-May-2016 15:25:56

Signal	RT	EXP RT	DLT RT	REL RT	Response	Amount ng/ml	Ratio(Limits)	%Rec	S/N	Flags
51 Perfluorobutanesulfonic acid										
298.8 > 79.6	7.024	7.024	0.0	1.000	8398	0.0631				
D 8 13C4-PFHpA										
366.6 > 321.6	9.372	9.387	-0.015		323776	3.79		7.6	928	
9 Perfluoroheptanoic acid										
362.8 > 318.7	9.372	9.388	-0.016	1.000	105072	1.28			83.7	
58 Perfluorohexanesulfonic acid										M
398.3 > 79.2	9.404	9.421	-0.017	1.000	660229	7.95				M
D 11 18O2 PFHxS										
402.5 > 83.6	9.396	9.422	-0.026		114920	3.87		8.2	550	
D 12 13C4 PFOA										
416.5 > 371.6	10.491	10.503	-0.012		342466	3.84		7.7	1321	
13 Perfluorooctanoic acid										M
412.8 > 368.8	10.491	10.504	-0.013	1.000	767644	12.3			761	M
412.8 > 168.7	10.491	10.504	-0.013	1.000	290073		2.65(0.00-0.00)		716	M
D 16 13C4 PFOS										
502.4 > 79.7	11.449	11.465	-0.016		21739	3.22		6.7	54.6	
15 Perfluorooctane sulfonic acid										M
498.3 > 79.2	11.458	11.466	-0.008	1.000	3531890	28.4			3377	M
498.3 > 98.2	11.449	11.466	-0.017	0.999	1722572		2.05(0.00-0.00)		1579	M
D 17 13C5 PFNA										
467.5 > 422.6	11.478	11.484	-0.006		274532	3.50		7.0	1033	
18 Perfluorononanoic acid										
462.5 > 418.6	11.478	11.486	-0.008	1.000	19770	0.1445			24.8	

QC Flag Legend

Review Flags

M - Manually Integrated

TestAmerica Sacramento

Data File: \\ChromNA\Sacramento\ChromData\A4\20160525-31065.b\25MAY2016B4A_057.d

Injection Date: 26-May-2016 11:21:49

Instrument ID: A4

Lims ID: 320-18796-A-4-A

Lab Sample ID: 320-18796-4

Client ID: OF-CLTANK-0516

Operator ID: JRB

ALS Bottle#: 34

Worklist Smp#: 57

Injection Vol: 15.0 ul

Dil. Factor: 20.0000

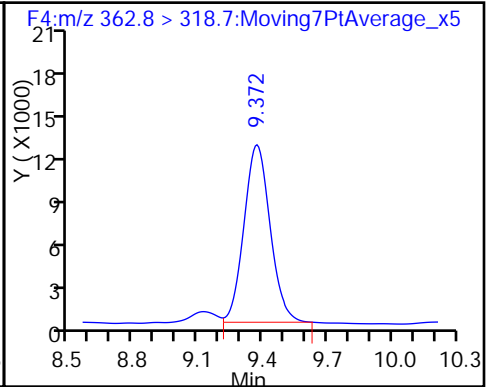
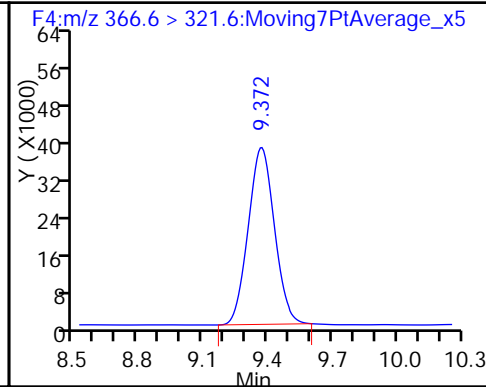
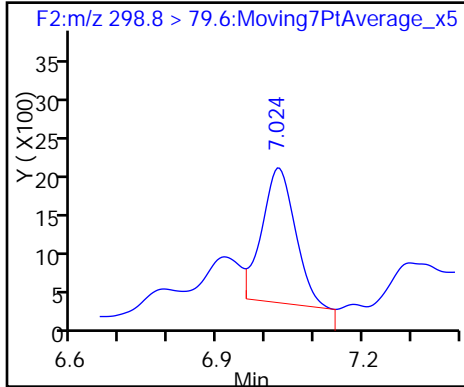
Method: PFAC_A4

Limit Group: LC PFC_DOD ICAL

51 Perfluorobutanesulfonic acid

D 8 13C4-PFHpA

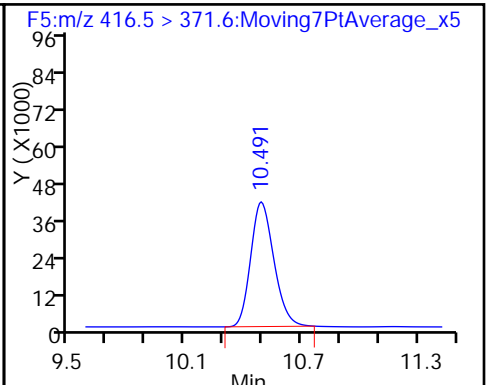
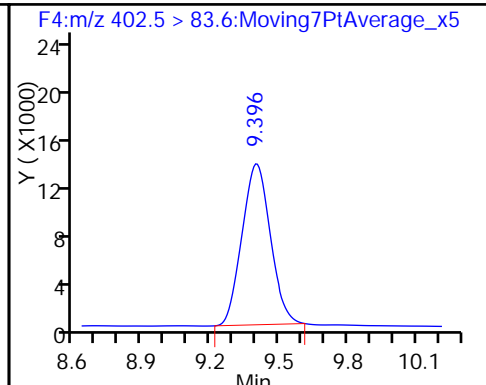
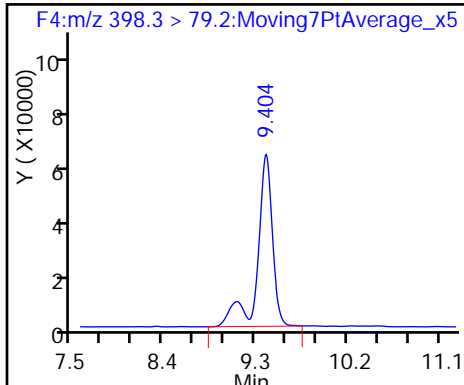
9 Perfluoroheptanoic acid



58 Perfluorohexanesulfonic acid (M)

D 11 18O2 PFHxS

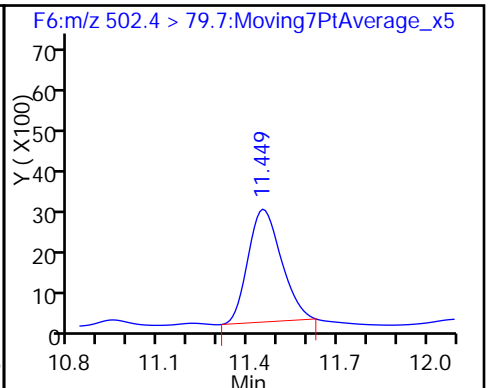
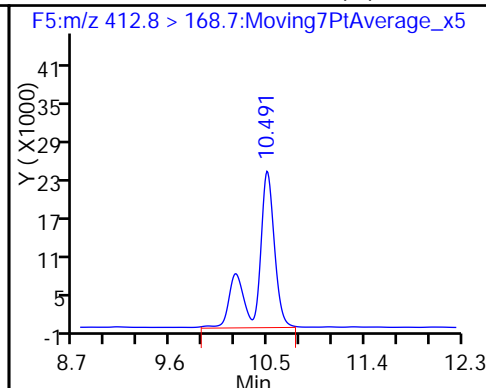
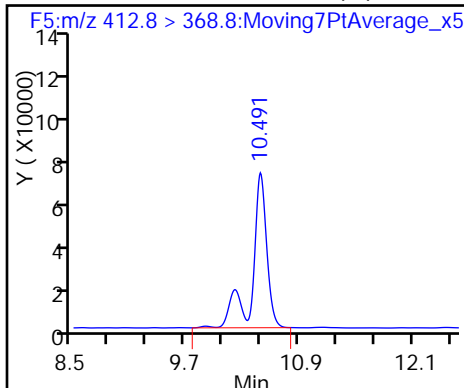
D 12 13C4 PFOA



13 Perfluorooctanoic acid (M)

13 Perfluorooctanoic acid (M)

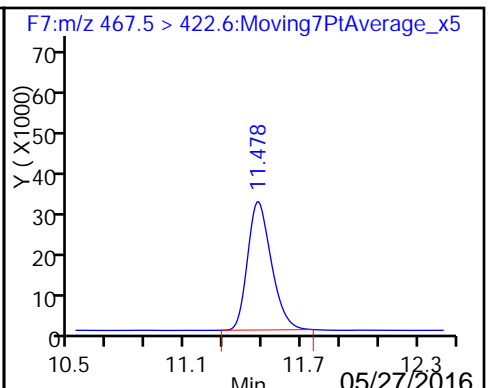
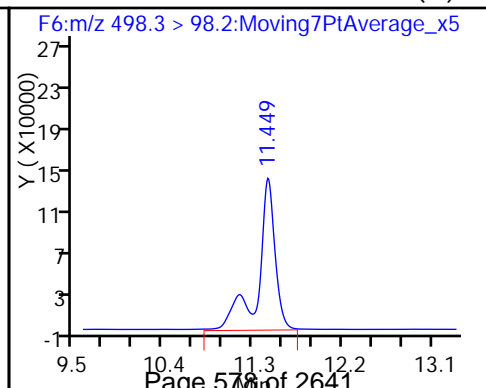
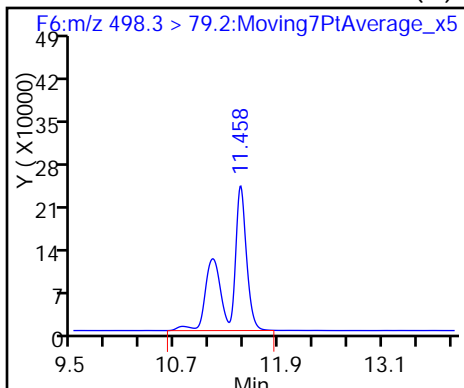
D 16 13C4 PFOS



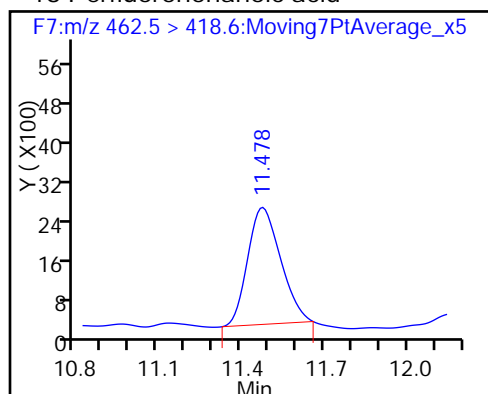
15 Perfluorooctane sulfonic acid (M)

15 Perfluorooctane sulfonic acid (M)

D 17 13C5 PFNA



18 Perfluorononanoic acid



TestAmerica Sacramento

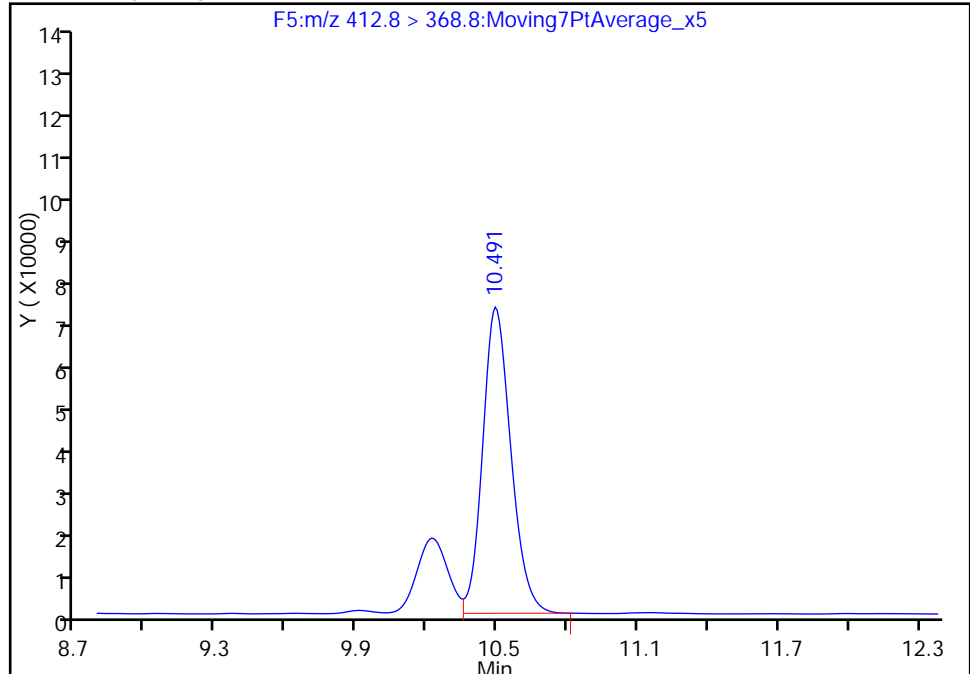
Data File:	\\ChromNA\Sacramento\ChromData\A4\20160525-31065.b\25MAY2016B4A_057.d				
Injection Date:	26-May-2016 11:21:49	Instrument ID:	A4		
Lims ID:	320-18796-A-4-A	Lab Sample ID:	320-18796-4		
Client ID:	OF-CLTANK-0516				
Operator ID:	JRB	ALS Bottle#:	34	Worklist Smp#:	57
Injection Vol:	15.0 ul	Dil. Factor:	20.0000		
Method:	PFAC_A4	Limit Group:	LC PFC_DOD ICAL		
Column:		Detector	F5:MRM		

13 Perfluorooctanoic acid, CAS: 335-67-1

Signal: 1

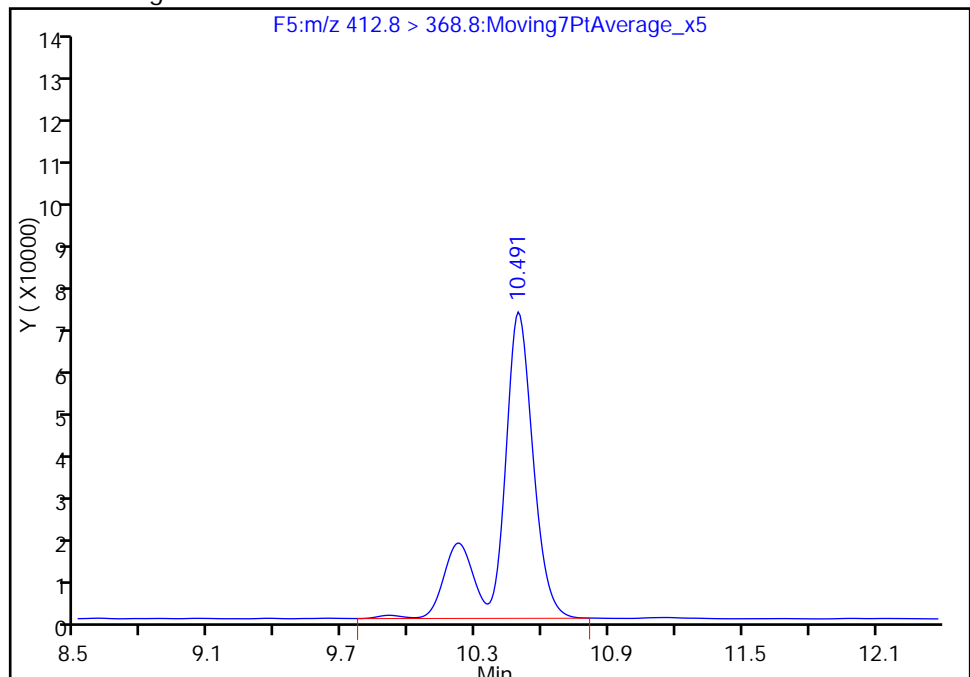
RT: 10.49
Area: 599117
Amount: 9.600267
Amount Units: ng/ml

Processing Integration Results



RT: 10.49
Area: 767644
Amount: 12.320751
Amount Units: ng/ml

Manual Integration Results



Reviewer: barnettj, 26-May-2016 15:25:56
Audit Action: Manually Integrated

Audit Reason: Isomers

TestAmerica Sacramento

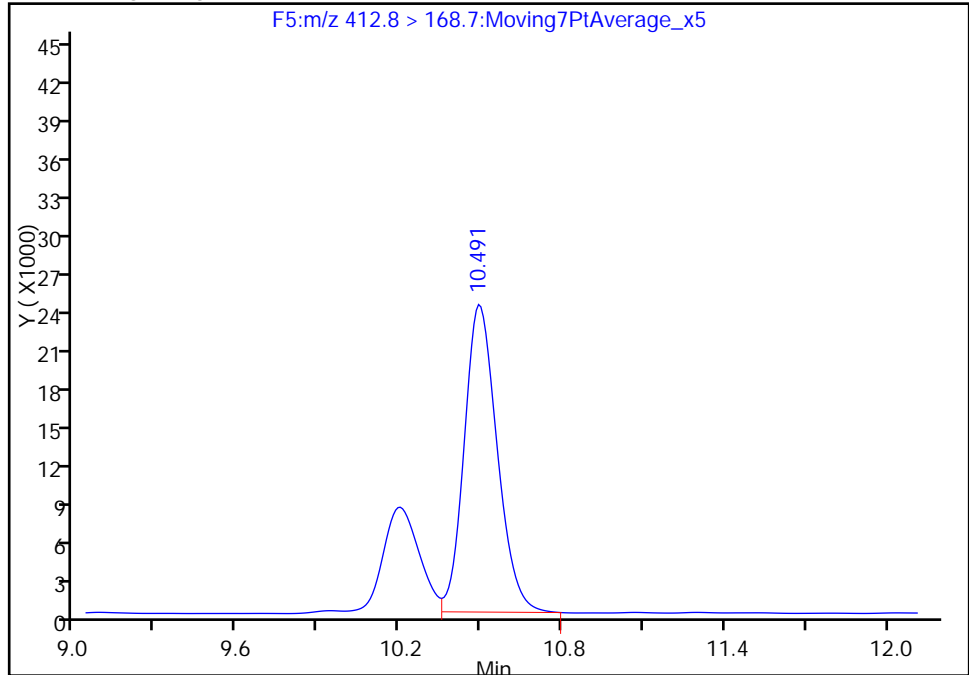
Data File: \\ChromNA\Sacramento\ChromData\A4\20160525-31065.b\25MAY2016B4A_057.d
Injection Date: 26-May-2016 11:21:49 Instrument ID: A4
Lims ID: 320-18796-A-4-A Lab Sample ID: 320-18796-4
Client ID: OF-CLTANK-0516
Operator ID: JRB ALS Bottle#: 34 Worklist Smp#: 57
Injection Vol: 15.0 ul Dil. Factor: 20.0000
Method: PFAC_A4 Limit Group: LC PFC_DOD ICAL
Column: Detector F5:MRM

13 Perfluorooctanoic acid, CAS: 335-67-1

Signal: 2

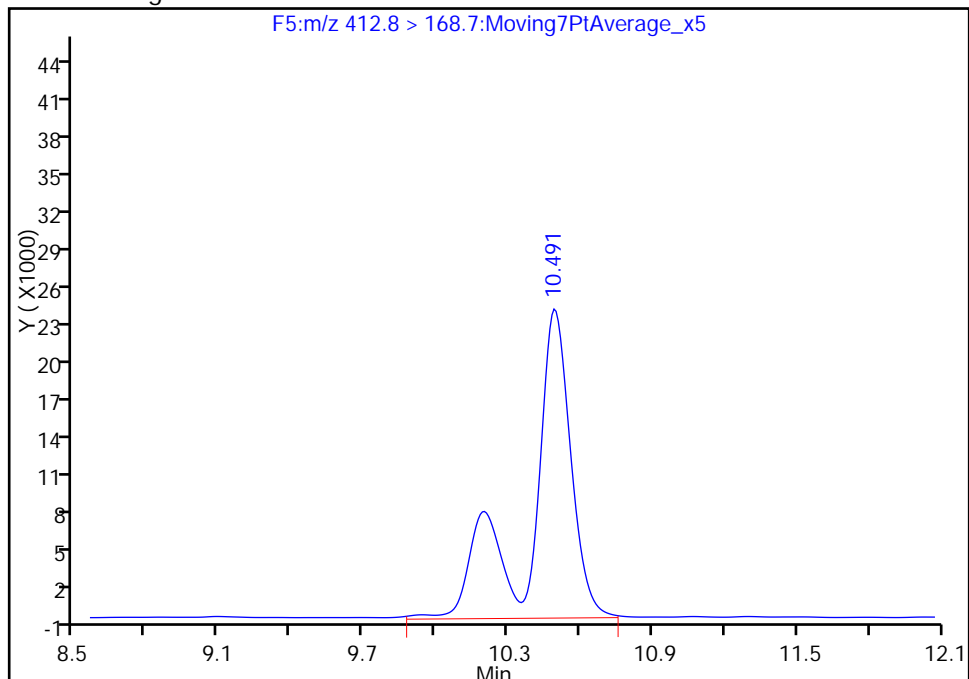
RT: 10.49
Area: 204495
Amount: 9.600267
Amount Units: ng/ml

Processing Integration Results



RT: 10.49
Area: 290073
Amount: 12.320751
Amount Units: ng/ml

Manual Integration Results



Reviewer: barnettj, 26-May-2016 15:25:56

Audit Action: Manually Integrated

Audit Reason: Isomers

TestAmerica Sacramento

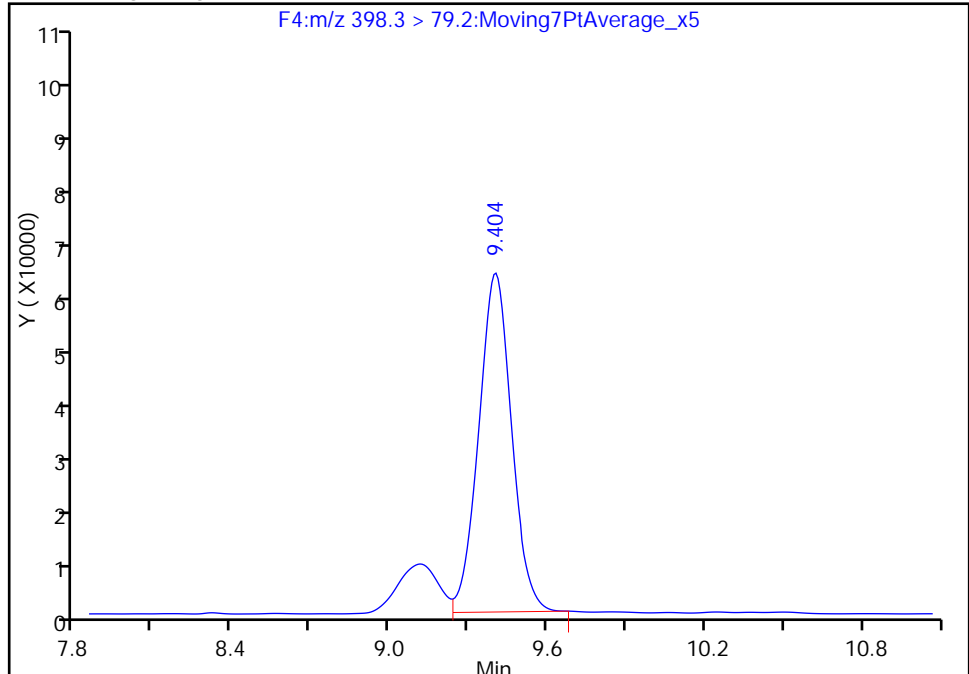
Data File: \\ChromNA\Sacramento\ChromData\A4\20160525-31065.b\25MAY2016B4A_057.d
Injection Date: 26-May-2016 11:21:49 Instrument ID: A4
Lims ID: 320-18796-A-4-A Lab Sample ID: 320-18796-4
Client ID: OF-CLTANK-0516
Operator ID: JRB ALS Bottle#: 34 Worklist Smp#: 57
Injection Vol: 15.0 ul Dil. Factor: 20.0000
Method: PFAC_A4 Limit Group: LC PFC_DOD ICAL
Column: Detector F4:MRM

58 Perfluorohexanesulfonic acid, CAS: 355-46-4

Signal: 1

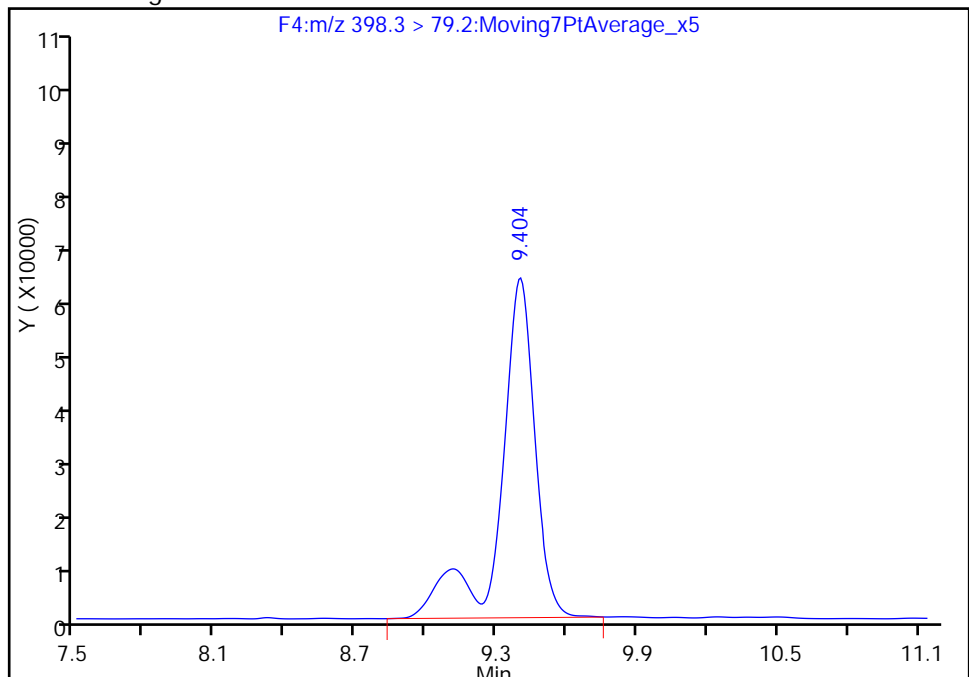
RT: 9.40
Area: 555155
Amount: 6.686135
Amount Units: ng/ml

Processing Integration Results



RT: 9.40
Area: 660229
Amount: 7.951617
Amount Units: ng/ml

Manual Integration Results



Reviewer: barnettj, 26-May-2016 15:25:56

Audit Action: Assigned Compound ID

Audit Reason: Isomers

TestAmerica Sacramento

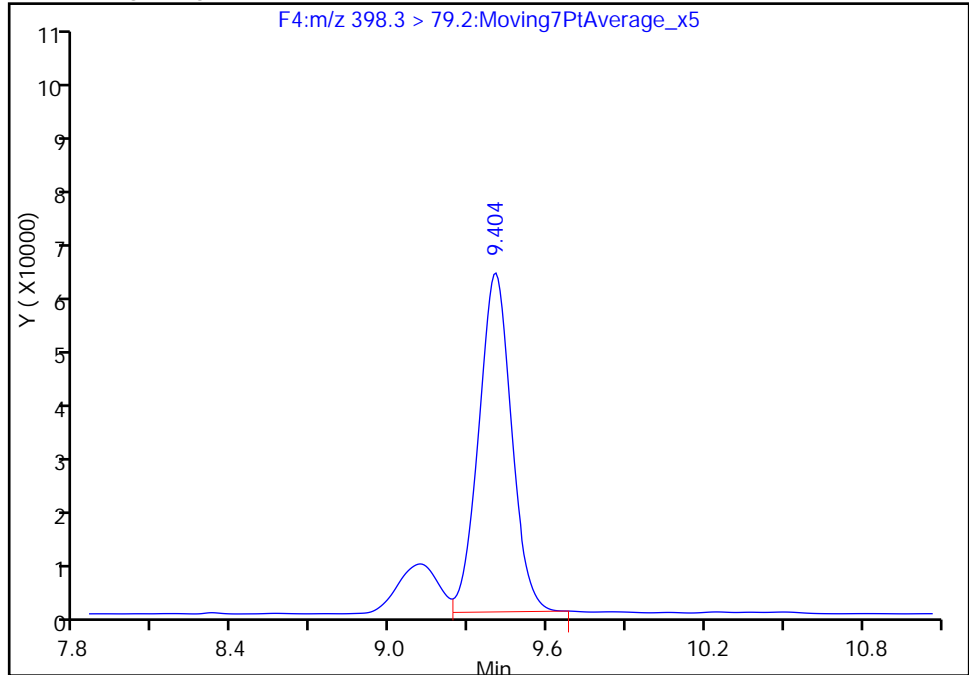
Data File: \\ChromNA\Sacramento\ChromData\A4\20160525-31065.b\25MAY2016B4A_057.d
Injection Date: 26-May-2016 11:21:49 Instrument ID: A4
Lims ID: 320-18796-A-4-A Lab Sample ID: 320-18796-4
Client ID: OF-CLTANK-0516
Operator ID: JRB ALS Bottle#: 34 Worklist Smp#: 57
Injection Vol: 15.0 ul Dil. Factor: 20.0000
Method: PFAC_A4 Limit Group: LC PFC_DOD ICAL
Column: Detector F4:MRM

58 Perfluorohexanesulfonic acid, CAS: 355-46-4

Signal: 1

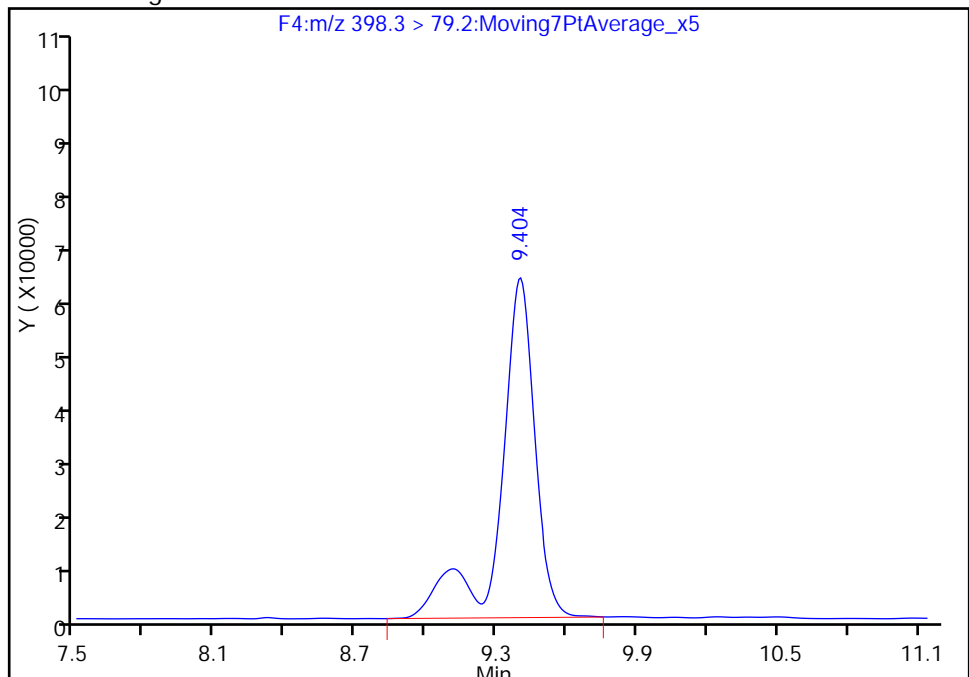
RT: 9.40
Area: 555155
Amount: 6.686135
Amount Units: ng/ml

Processing Integration Results



RT: 9.40
Area: 660229
Amount: 7.951617
Amount Units: ng/ml

Manual Integration Results



Reviewer: barnettj, 26-May-2016 15:25:56

Audit Action: Manually Integrated

Audit Reason: Isomers

TestAmerica Sacramento

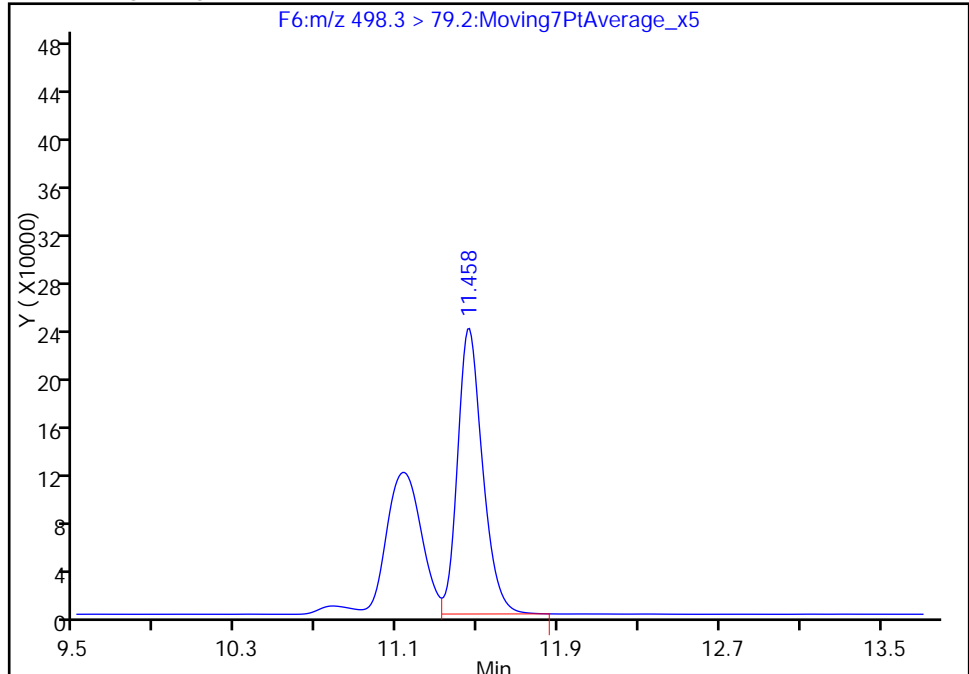
Data File: \\ChromNA\Sacramento\ChromData\A4\20160525-31065.b\25MAY2016B4A_057.d
Injection Date: 26-May-2016 11:21:49 Instrument ID: A4
Lims ID: 320-18796-A-4-A Lab Sample ID: 320-18796-4
Client ID: OF-CLTANK-0516
Operator ID: JRB ALS Bottle#: 34 Worklist Smp#: 57
Injection Vol: 15.0 ul Dil. Factor: 20.0000
Method: PFAC_A4 Limit Group: LC PFC_DOD ICAL
Column: Detector F6:MRM

15 Perfluorooctane sulfonic acid, CAS: 1763-23-1

Signal: 1

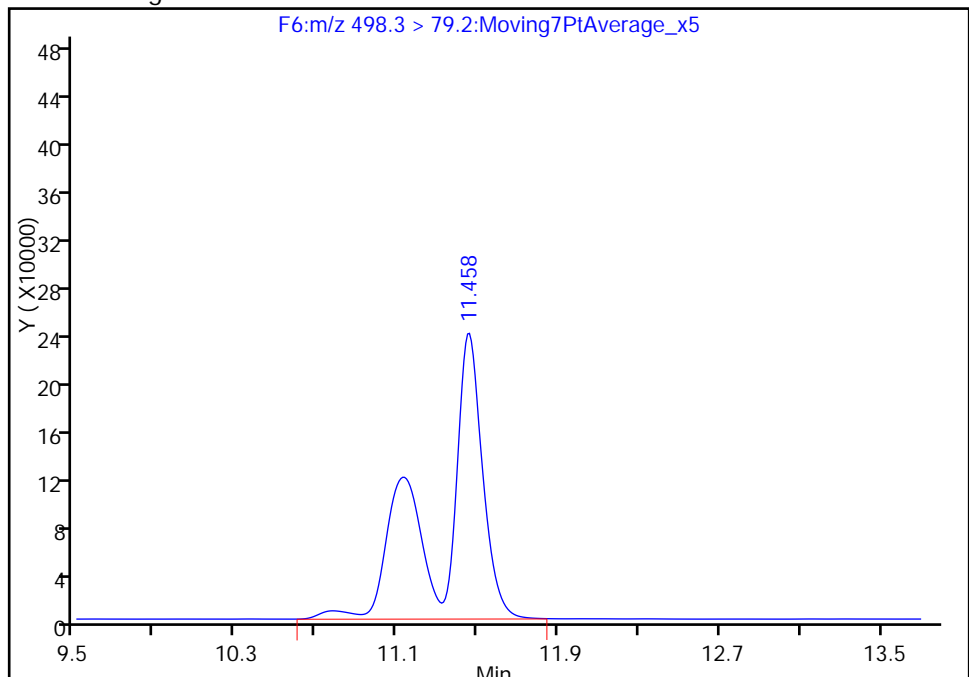
RT: 11.46
Area: 2040097
Amount: 16.689693
Amount Units: ng/ml

Processing Integration Results



RT: 11.46
Area: 3531890
Amount: 28.410579
Amount Units: ng/ml

Manual Integration Results



Reviewer: barnettj, 26-May-2016 15:25:56
Audit Action: Manually Integrated

Audit Reason: Isomers

TestAmerica Sacramento

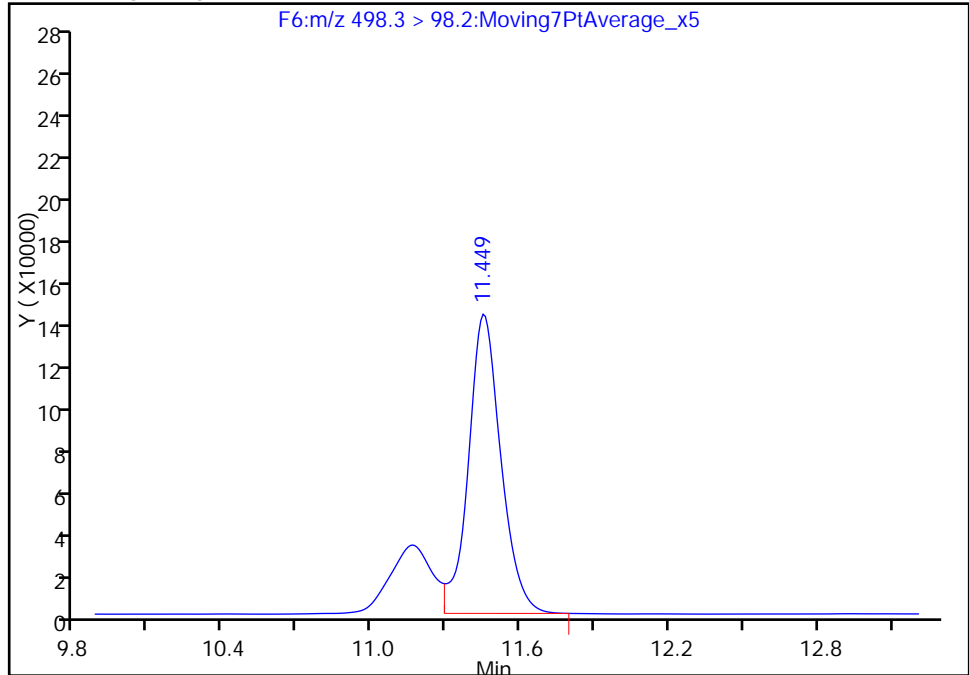
Data File: \\ChromNA\Sacramento\ChromData\A4\20160525-31065.b\25MAY2016B4A_057.d
Injection Date: 26-May-2016 11:21:49 Instrument ID: A4
Lims ID: 320-18796-A-4-A Lab Sample ID: 320-18796-4
Client ID: OF-CLTANK-0516
Operator ID: JRB ALS Bottle#: 34 Worklist Smp#: 57
Injection Vol: 15.0 ul Dil. Factor: 20.0000
Method: PFAC_A4 Limit Group: LC PFC_DOD ICAL
Column: Detector F6:MRM

15 Perfluorooctane sulfonic acid, CAS: 1763-23-1

Signal: 2

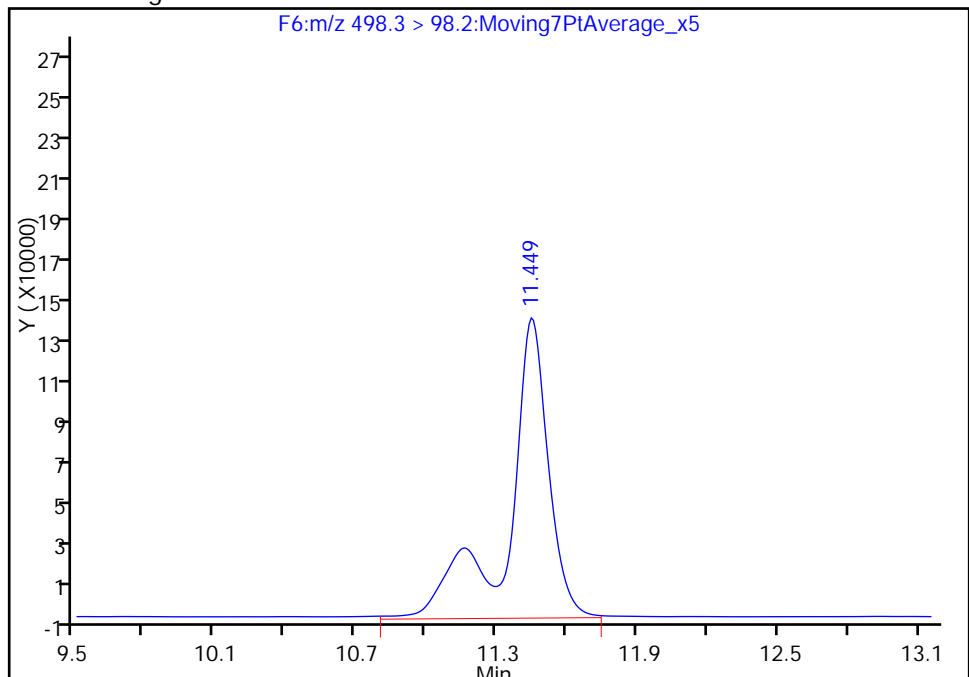
RT: 11.45
Area: 1283269
Amount: 16.689693
Amount Units: ng/ml

Processing Integration Results



RT: 11.45
Area: 1722572
Amount: 28.410579
Amount Units: ng/ml

Manual Integration Results



Reviewer: barnettj, 26-May-2016 15:25:56

Audit Action: Manually Integrated

Audit Reason: Isomers

FORM I
LCMS ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Sacramento Job No.: 320-18796-1
 SDG No.: _____
 Client Sample ID: OF-BACKWASH-0516 Lab Sample ID: 320-18796-5
 Matrix: Water Lab File ID: 25MAY2016B4A_058.d
 Analysis Method: WS-LC-0025 Date Collected: 05/10/2016 10:30
 Extraction Method: 3535 Date Extracted: 05/12/2016 10:01
 Sample wt/vol: 534.5 (mL) Date Analyzed: 05/26/2016 11:42
 Con. Extract Vol.: 1.0 (mL) Dilution Factor: 20
 Injection Volume: 15 (uL) GC Column: Acquity ID: 2.1 (mm)
 % Moisture: _____ GPC Cleanup: (Y/N) N
 Analysis Batch No.: 111390 Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	LOQ	LOD	DL
375-85-9	Perfluoroheptanoic acid (PFHpA)	0.080	D	0.047	0.037	0.015
335-67-1	Perfluorooctanoic acid (PFOA)	4.1	D M	0.047	0.037	0.014
375-95-1	Perfluorononanoic acid (PFNA)	0.037	U	0.047	0.037	0.012
375-73-5	Perfluorobutanesulfonic acid (PFBS)	0.026	J D	0.047	0.037	0.017
355-46-4	Perfluorohexanesulfonic acid (PFHxS)	0.84	D M	0.047	0.037	0.016
1763-23-1	Perfluorooctanesulfonic acid (PFOS)	1.6	B D M	0.075	0.056	0.024

CAS NO.	ISOTOPE DILUTION	%REC	Q	LIMITS
STL00994	18O2 PFHxS	165	Q	25-150
STL00991	13C4 PFOS	127		25-150
STL00995	13C5 PFNA	152	Q	25-150
STL00990	13C4 PFOA	130		25-150
STL01892	13C4-PFHpA	143		25-150

TestAmerica Sacramento
Target Compound Quantitation Report

Data File: \\ChromNA\Sacramento\ChromData\A4\20160525-31065.b\25MAY2016B4A_058.d
 Lims ID: 320-18796-A-5-A
 Client ID: OF-BACKWASH-0516
 Sample Type: Client
 Inject. Date: 26-May-2016 11:42:30 ALS Bottle#: 35 Worklist Smp#: 58
 Injection Vol: 15.0 ul Dil. Factor: 20.0000
 Sample Info: 320-18796-a-5-a 20X
 Misc. Info.: Acquity BEH C18,1.7u, 3X150mm,T=35C
 Operator ID: JRB Instrument ID: A4
 Method: \\ChromNA\Sacramento\ChromData\A4\20160525-31065.b\PFAC_A4.m
 Limit Group: LC PFC_DOD ICAL
 Last Update: 26-May-2016 16:03:28 Calib Date: 25-May-2016 19:01:43
 Integrator: Picker
 Quant Method: Isotopic Dilution Quant By: Initial Calibration
 Last ICal File: \\ChromNA\Sacramento\ChromData\A4\20160525-31065.b\25MAY2016B4A_011.d
 Column 1 : Det: F1:MRM
 Process Host: XAWRK003

First Level Reviewer: barnettj

Date: 26-May-2016 15:28:53

Signal	RT	EXP RT	DLT RT	REL RT	Response	Amount ng/ml	Ratio(Limits)	%Rec	S/N	Flags
51 Perfluorobutanesulfonic acid										
298.8 > 79.6	7.019	7.024	-0.005	1.000	30635	0.6835				
D 8 13C4-PFHpA										
366.6 > 321.6	9.365	9.387	-0.022		305120	3.57		7.1	1586	
9 Perfluoroheptanoic acid										
362.8 > 318.7	9.357	9.388	-0.031	1.000	149278	2.14			91.5	
58 Perfluorohexanesulfonic acid										M
398.3 > 79.2	9.396	9.421	-0.025	1.000	1873266	22.4				M
D 11 18O2 PFHxS										
402.5 > 83.6	9.388	9.422	-0.034		115861	3.90		8.3	449	
D 12 13C4 PFOA										
416.5 > 371.6	10.482	10.503	-0.021		288875	3.24		6.5	1424	
13 Perfluorooctanoic acid										M
412.8 > 368.8	10.482	10.504	-0.022	1.000	5710982	109.2			3689	M
412.8 > 168.7	10.482	10.504	-0.022	1.000	1933420		2.95(0.00-0.00)		3367	M
D 16 13C4 PFOS										
502.4 > 79.7	11.449	11.465	-0.016		20494	3.04		6.4	120	
15 Perfluorooctane sulfonic acid										M
498.3 > 79.2	11.449	11.466	-0.017	1.000	5057603	42.8			3854	M
498.3 > 98.2	11.449	11.466	-0.017	1.000	2602644		1.94(0.00-0.00)		2707	M
D 17 13C5 PFNA										
467.5 > 422.6	11.469	11.484	-0.015		298985	3.81		7.6	1100	
18 Perfluorononanoic acid										
462.5 > 418.6	11.478	11.486	-0.008	1.000	23451	0.1575			34.5	

QC Flag Legend

Review Flags

M - Manually Integrated

TestAmerica Sacramento

Data File: \\ChromNA\Sacramento\ChromData\A4\20160525-31065.b\25MAY2016B4A_058.d

Injection Date: 26-May-2016 11:42:30

Instrument ID: A4

Lims ID: 320-18796-A-5-A

Lab Sample ID: 320-18796-5

Client ID: OF-BACKWASH-0516

Operator ID: JRB

ALS Bottle#: 35

Worklist Smp#: 58

Injection Vol: 15.0 ul

Dil. Factor: 20.0000

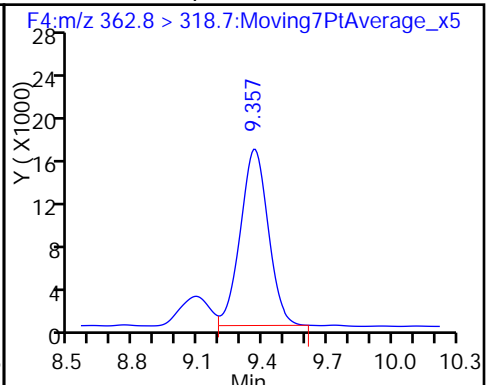
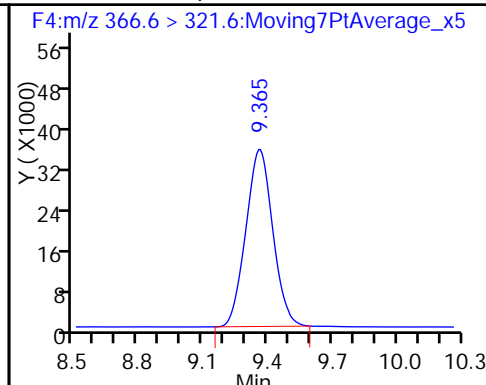
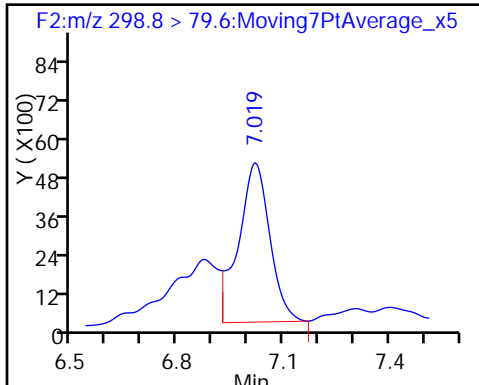
Method: PFAC_A4

Limit Group: LC PFC_DOD ICAL

51 Perfluorobutanesulfonic acid

D 8 13C4-PFHpA

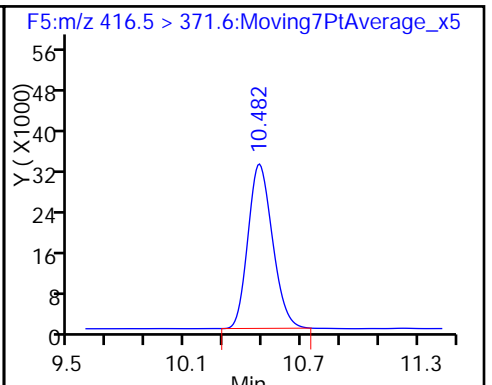
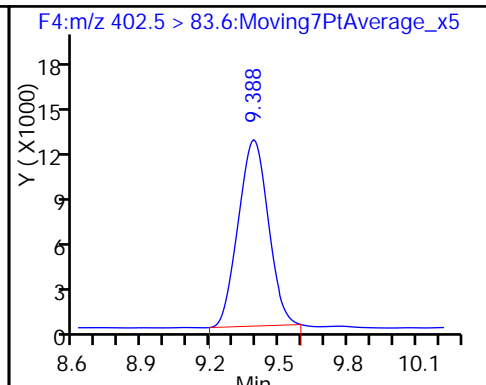
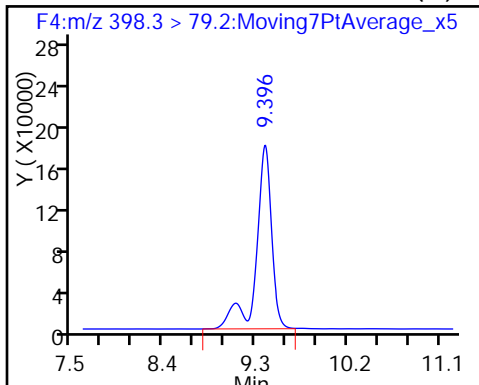
9 Perfluoroheptanoic acid



58 Perfluorohexanesulfonic acid (M)

D 11 18O2 PFHxS

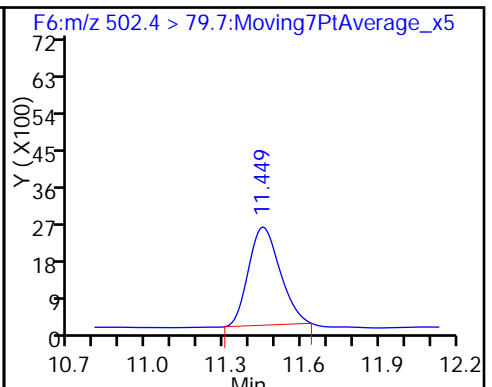
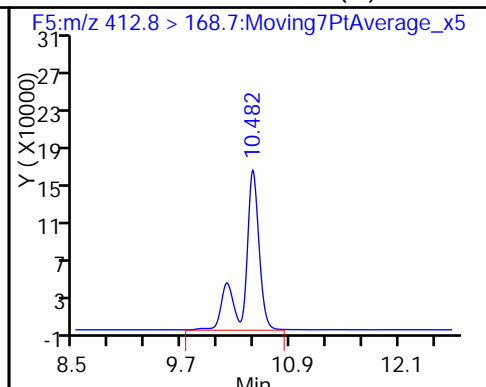
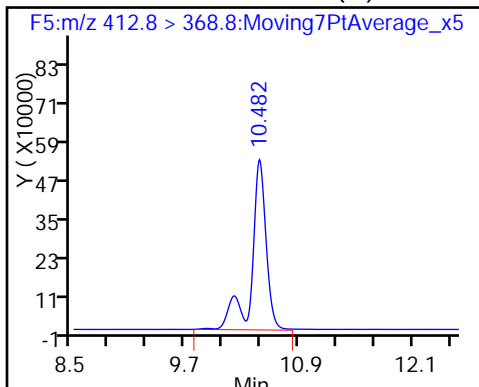
D 12 13C4 PFOA



13 Perfluorooctanoic acid (M)

13 Perfluorooctanoic acid (M)

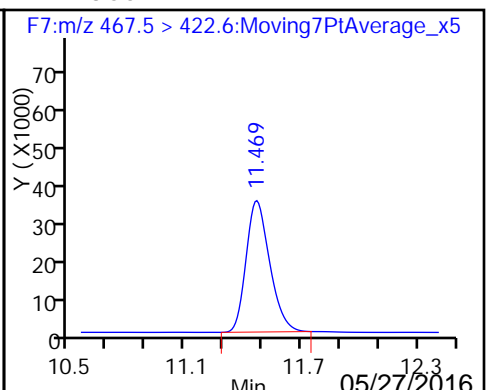
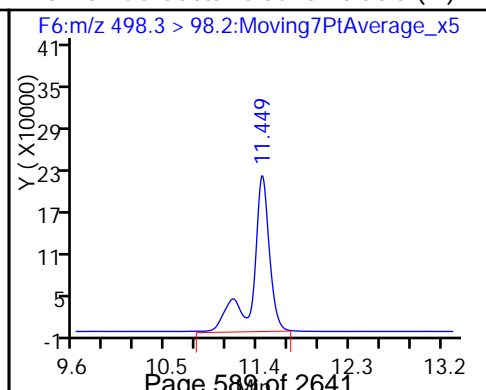
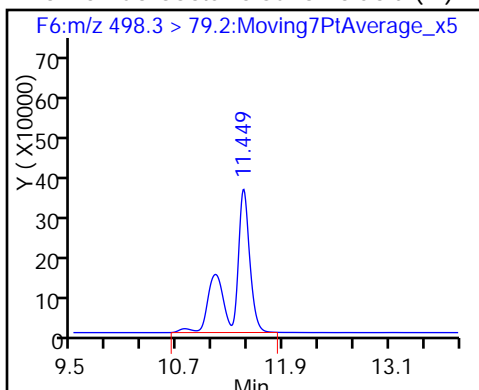
D 16 13C4 PFOS



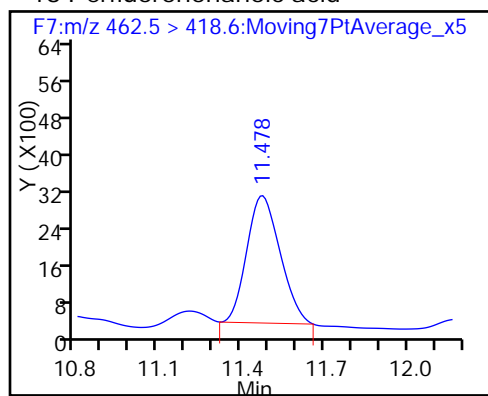
15 Perfluorooctane sulfonic acid (M)

15 Perfluorooctane sulfonic acid (M)

D 17 13C5 PFNA



18 Perfluorononanoic acid



TestAmerica Sacramento

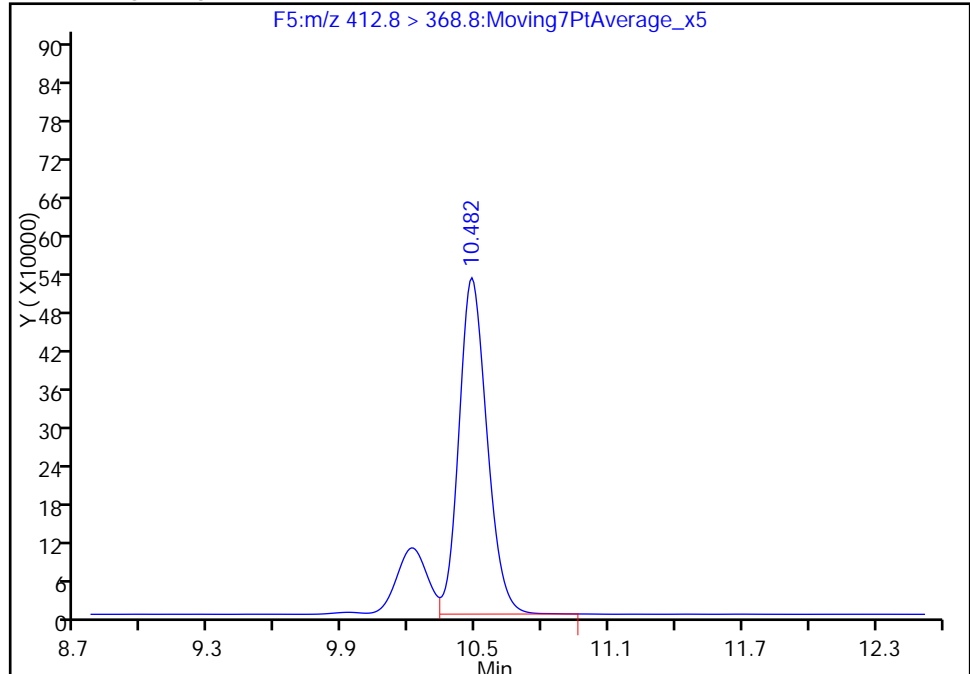
Data File: \\ChromNA\Sacramento\ChromData\A4\20160525-31065.b\25MAY2016B4A_058.d
Injection Date: 26-May-2016 11:42:30 Instrument ID: A4
Lims ID: 320-18796-A-5-A Lab Sample ID: 320-18796-5
Client ID: OF-BACKWASH-0516
Operator ID: JRB ALS Bottle#: 35 Worklist Smp#: 58
Injection Vol: 15.0 ul Dil. Factor: 20.0000
Method: PFAC_A4 Limit Group: LC PFC_DOD ICAL
Column: Detector F5:MRM

13 Perfluorooctanoic acid, CAS: 335-67-1

Signal: 1

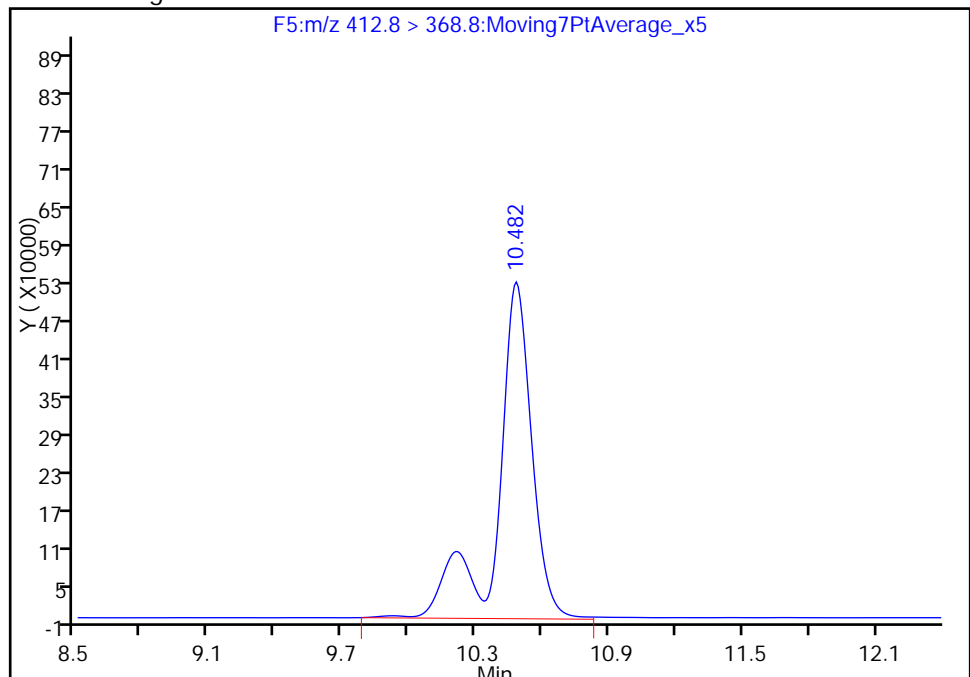
RT: 10.48
Area: 4614136
Amount: 88.231719
Amount Units: ng/ml

Processing Integration Results



RT: 10.48
Area: 5710982
Amount: 109.2226
Amount Units: ng/ml

Manual Integration Results



Reviewer: barnettj, 26-May-2016 15:28:53
Audit Action: Manually Integrated

Audit Reason: Isomers

TestAmerica Sacramento

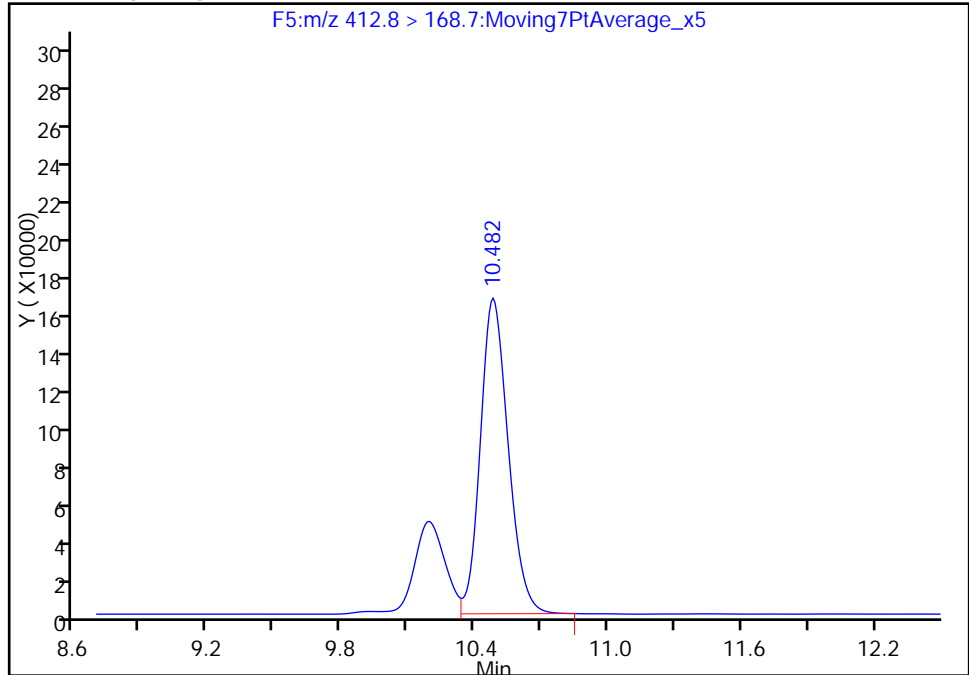
Data File: \\ChromNA\Sacramento\ChromData\A4\20160525-31065.b\25MAY2016B4A_058.d
Injection Date: 26-May-2016 11:42:30 Instrument ID: A4
Lims ID: 320-18796-A-5-A Lab Sample ID: 320-18796-5
Client ID: OF-BACKWASH-0516
Operator ID: JRB ALS Bottle#: 35 Worklist Smp#: 58
Injection Vol: 15.0 ul Dil. Factor: 20.0000
Method: PFAC_A4 Limit Group: LC PFC_DOD ICAL
Column: Detector F5:MRM

13 Perfluorooctanoic acid, CAS: 335-67-1

Signal: 2

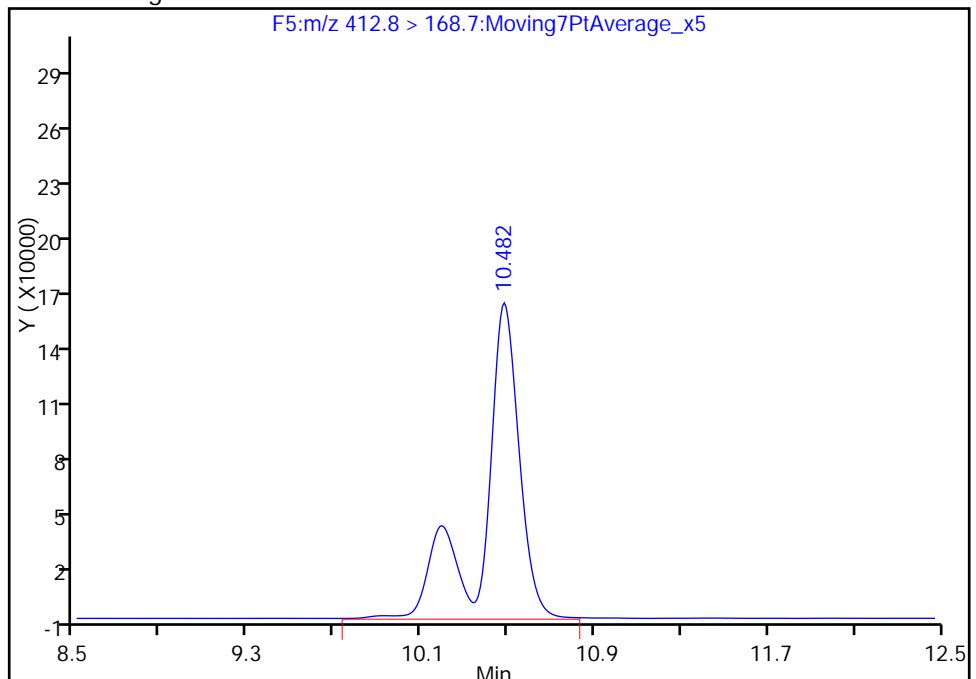
RT: 10.48
Area: 1431751
Amount: 88.231719
Amount Units: ng/ml

Processing Integration Results



RT: 10.48
Area: 1933420
Amount: 109.2226
Amount Units: ng/ml

Manual Integration Results



Reviewer: barnettj, 26-May-2016 15:28:53

Audit Action: Manually Integrated

Audit Reason: Isomers

TestAmerica Sacramento

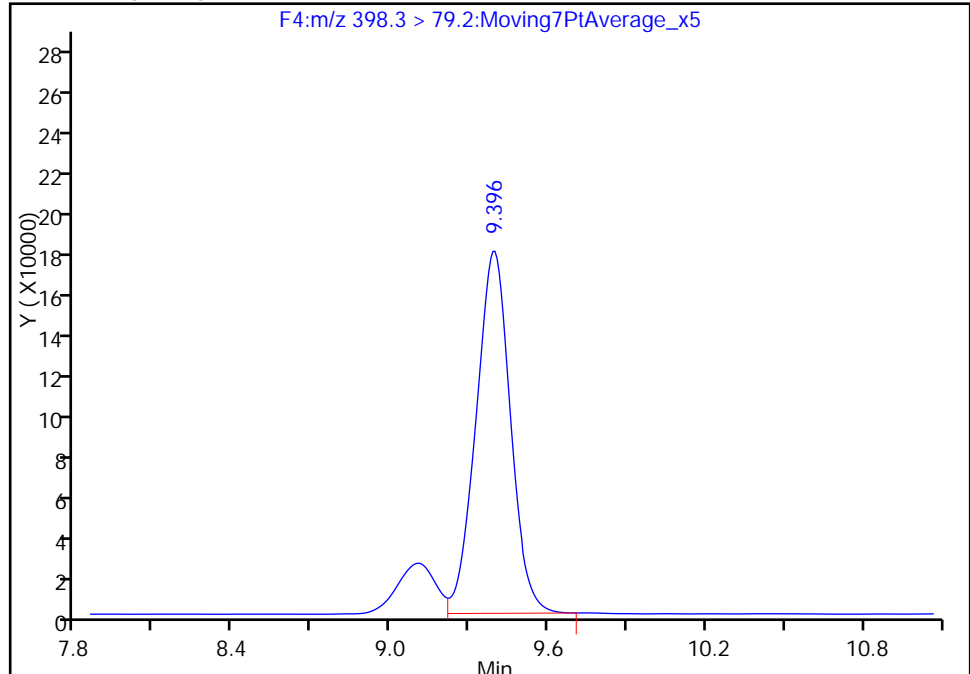
Data File: \\ChromNA\Sacramento\ChromData\A4\20160525-31065.b\25MAY2016B4A_058.d
Injection Date: 26-May-2016 11:42:30 Instrument ID: A4
Lims ID: 320-18796-A-5-A Lab Sample ID: 320-18796-5
Client ID: OF-BACKWASH-0516
Operator ID: JRB ALS Bottle#: 35 Worklist Smp#: 58
Injection Vol: 15.0 ul Dil. Factor: 20.0000
Method: PFAC_A4 Limit Group: LC PFC_DOD ICAL
Column: Detector F4:MRM

58 Perfluorohexanesulfonic acid, CAS: 355-46-4

Signal: 1

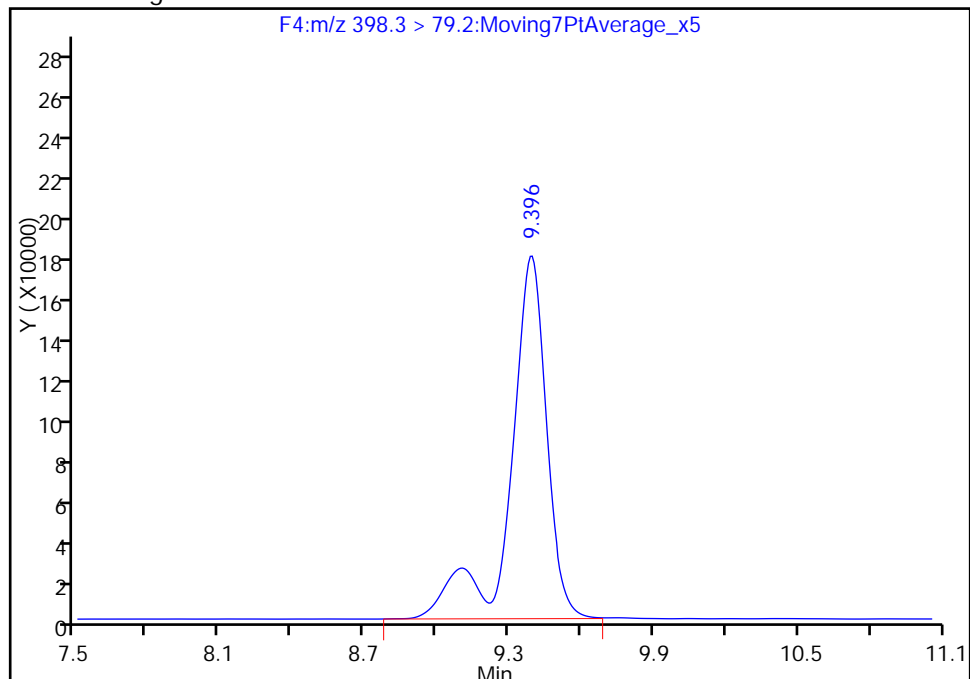
RT: 9.40
Area: 1614453
Amount: 19.286109
Amount Units: ng/ml

Processing Integration Results



RT: 9.40
Area: 1873266
Amount: 22.377866
Amount Units: ng/ml

Manual Integration Results



Reviewer: barnettj, 26-May-2016 15:28:53
Audit Action: Assigned Compound ID

Audit Reason: Isomers

TestAmerica Sacramento

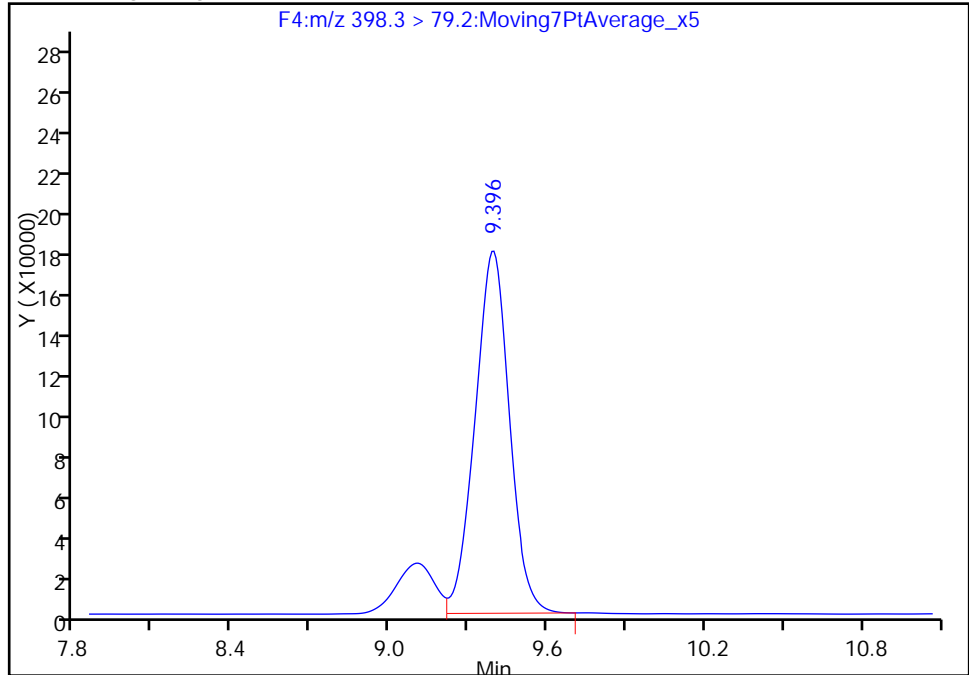
Data File: \\ChromNA\Sacramento\ChromData\A4\20160525-31065.b\25MAY2016B4A_058.d
Injection Date: 26-May-2016 11:42:30 Instrument ID: A4
Lims ID: 320-18796-A-5-A Lab Sample ID: 320-18796-5
Client ID: OF-BACKWASH-0516
Operator ID: JRB ALS Bottle#: 35 Worklist Smp#: 58
Injection Vol: 15.0 ul Dil. Factor: 20.0000
Method: PFAC_A4 Limit Group: LC PFC_DOD ICAL
Column: Detector F4:MRM

58 Perfluorohexanesulfonic acid, CAS: 355-46-4

Signal: 1

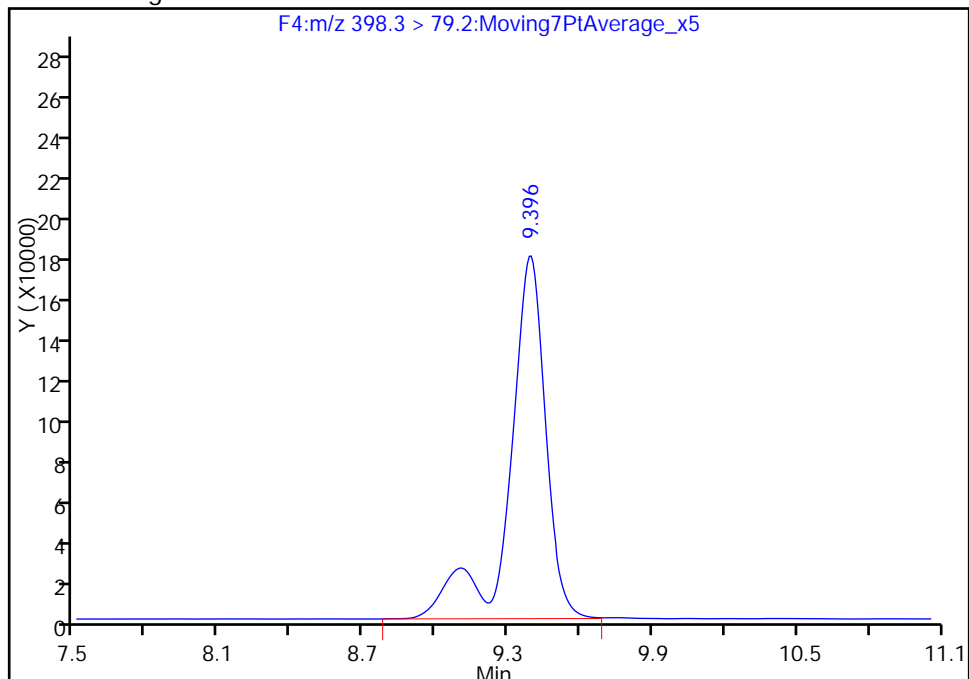
RT: 9.40
Area: 1614453
Amount: 19.286109
Amount Units: ng/ml

Processing Integration Results



RT: 9.40
Area: 1873266
Amount: 22.377866
Amount Units: ng/ml

Manual Integration Results



Reviewer: barnettj, 26-May-2016 15:28:53

Audit Action: Manually Integrated

Audit Reason: Isomers

TestAmerica Sacramento

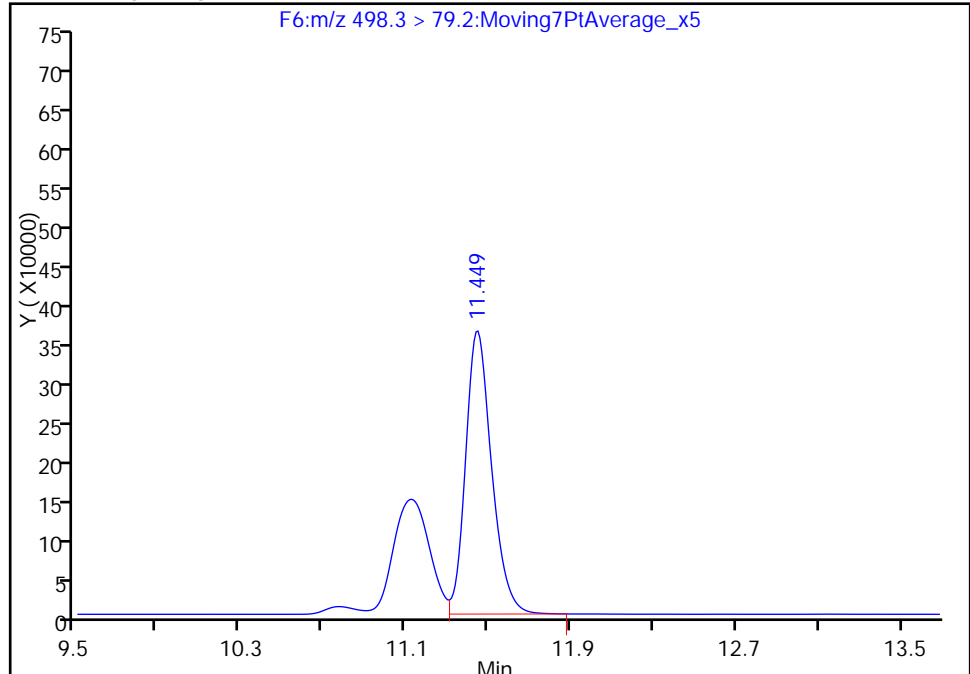
Data File:	\\ChromNA\Sacramento\ChromData\A4\20160525-31065.b\25MAY2016B4A_058.d				
Injection Date:	26-May-2016 11:42:30	Instrument ID:	A4		
Lims ID:	320-18796-A-5-A	Lab Sample ID:	320-18796-5		
Client ID:	OF-BACKWASH-0516				
Operator ID:	JRB	ALS Bottle#:	35	Worklist Smp#:	58
Injection Vol:	15.0 ul	Dil. Factor:	20.0000		
Method:	PFAC_A4	Limit Group:	LC PFC_DOD ICAL		
Column:		Detector	F6:MRM		

15 Perfluorooctane sulfonic acid, CAS: 1763-23-1

Signal: 1

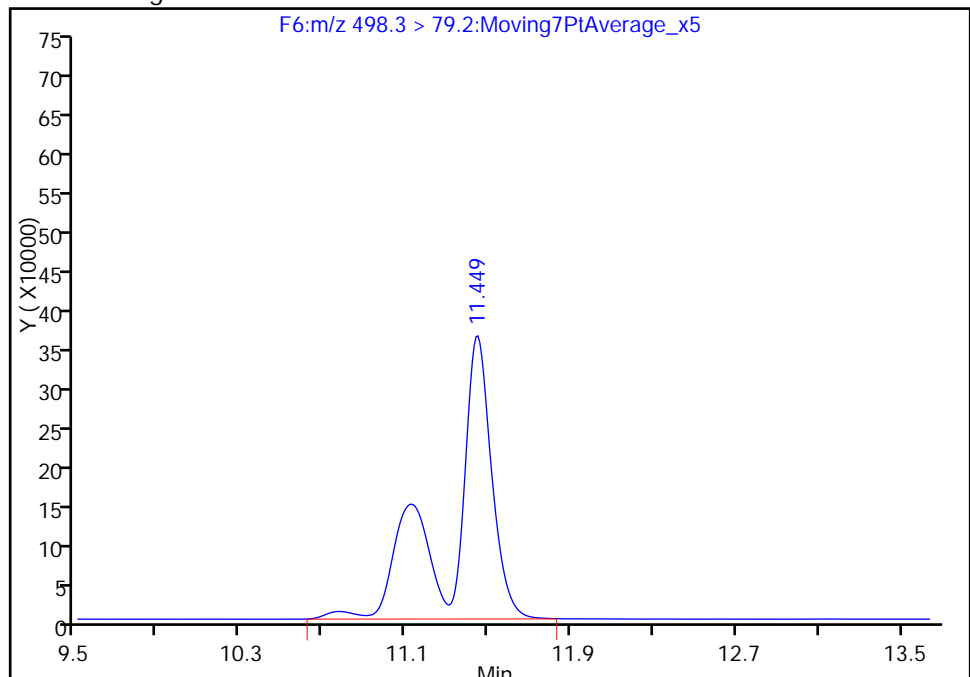
RT: 11.45
Area: 3177318
Amount: 27.141282
Amount Units: ng/ml

Processing Integration Results



RT: 11.45
Area: 5057603
Amount: 42.811982
Amount Units: ng/ml

Manual Integration Results



Reviewer: barnettj, 26-May-2016 15:28:53

Audit Action: Manually Integrated

Audit Reason: Isomers

TestAmerica Sacramento

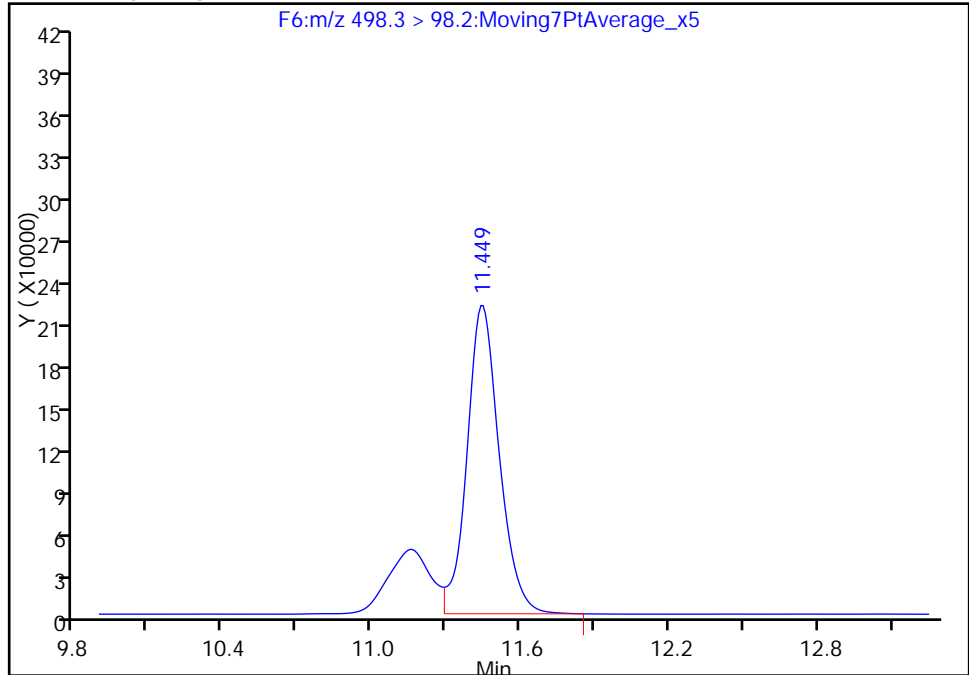
Data File: \\ChromNA\Sacramento\ChromData\A4\20160525-31065.b\25MAY2016B4A_058.d
Injection Date: 26-May-2016 11:42:30 Instrument ID: A4
Lims ID: 320-18796-A-5-A Lab Sample ID: 320-18796-5
Client ID: OF-BACKWASH-0516
Operator ID: JRB ALS Bottle#: 35 Worklist Smp#: 58
Injection Vol: 15.0 ul Dil. Factor: 20.0000
Method: PFAC_A4 Limit Group: LC PFC_DOD ICAL
Column: Detector F6:MRM

15 Perfluorooctane sulfonic acid, CAS: 1763-23-1

Signal: 2

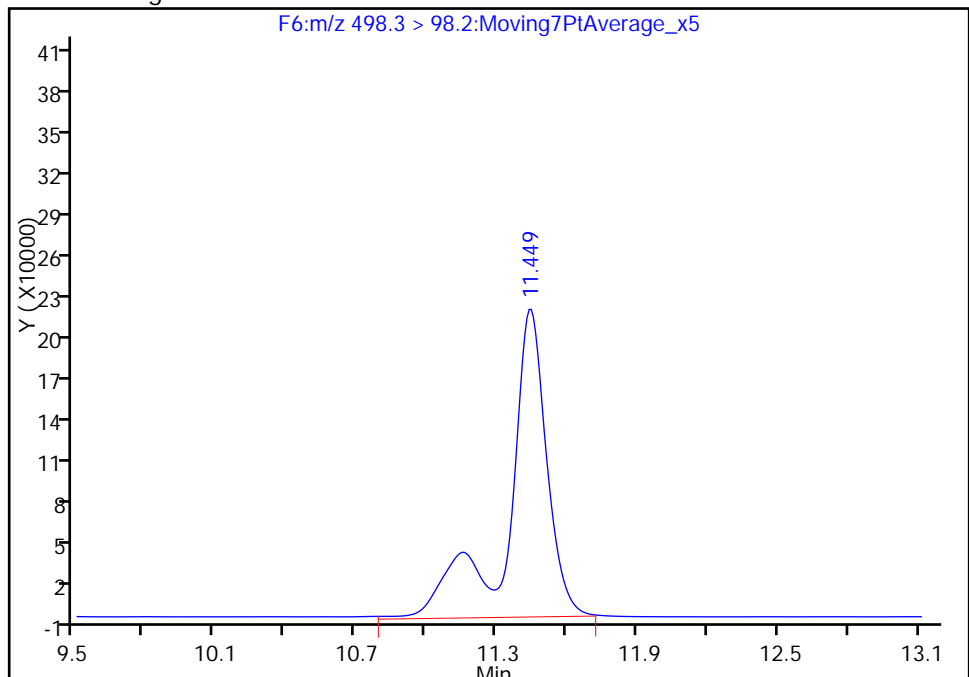
RT: 11.45
Area: 2006262
Amount: 27.141282
Amount Units: ng/ml

Processing Integration Results



RT: 11.45
Area: 2602644
Amount: 42.811982
Amount Units: ng/ml

Manual Integration Results



Reviewer: barnettj, 26-May-2016 15:28:53

Audit Action: Manually Integrated

Audit Reason: Isomers

FORM I
LCMS ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Sacramento Job No.: 320-18796-1
 SDG No.: _____
 Client Sample ID: OF-FILTER-0516 Lab Sample ID: 320-18796-6
 Matrix: Water Lab File ID: 25MAY2016B4A_059.d
 Analysis Method: WS-LC-0025 Date Collected: 05/10/2016 10:15
 Extraction Method: 3535 Date Extracted: 05/12/2016 10:01
 Sample wt/vol: 537.3 (mL) Date Analyzed: 05/26/2016 12:03
 Con. Extract Vol.: 1.0 (mL) Dilution Factor: 20
 Injection Volume: 15 (uL) GC Column: Acquity ID: 2.1 (mm)
 % Moisture: _____ GPC Cleanup: (Y/N) N
 Analysis Batch No.: 111390 Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	LOQ	LOD	DL
375-85-9	Perfluoroheptanoic acid (PFHpA)	0.072	D	0.047	0.037	0.015
335-67-1	Perfluorooctanoic acid (PFOA)	3.6	D M	0.047	0.037	0.014
375-95-1	Perfluorononanoic acid (PFNA)	0.037	U	0.047	0.037	0.012
375-73-5	Perfluorobutanesulfonic acid (PFBS)	0.023	J D	0.047	0.037	0.017
355-46-4	Perfluorohexanesulfonic acid (PFHxS)	0.77	D M	0.047	0.037	0.016
1763-23-1	Perfluorooctanesulfonic acid (PFOS)	1.5	B D M	0.074	0.056	0.024

CAS NO.	ISOTOPE DILUTION	%REC	Q	LIMITS
STL00994	18O2 PFHxS	164	Q	25-150
STL00991	13C4 PFOS	127		25-150
STL00995	13C5 PFNA	140		25-150
STL00990	13C4 PFOA	131		25-150
STL01892	13C4-PFHpA	132		25-150

TestAmerica Sacramento
Target Compound Quantitation Report

Data File: \\ChromNA\Sacramento\ChromData\A4\20160525-31065.b\25MAY2016B4A_059.d
 Lims ID: 320-18796-A-6-A
 Client ID: OF-FILTER-0516
 Sample Type: Client
 Inject. Date: 26-May-2016 12:03:39 ALS Bottle#: 36 Worklist Smp#: 59
 Injection Vol: 15.0 ul Dil. Factor: 20.0000
 Sample Info: 320-18796-a-6-a 20X
 Misc. Info.: Acquity BEH C18,1.7u, 3X150mm,T=35C
 Operator ID: JRB Instrument ID: A4
 Method: \\ChromNA\Sacramento\ChromData\A4\20160525-31065.b\PFAC_A4.m
 Limit Group: LC PFC_DOD ICAL
 Last Update: 26-May-2016 16:03:28 Calib Date: 25-May-2016 19:01:43
 Integrator: Picker
 Quant Method: Isotopic Dilution Quant By: Initial Calibration
 Last ICal File: \\ChromNA\Sacramento\ChromData\A4\20160525-31065.b\25MAY2016B4A_011.d
 Column 1 : Det: F1:MRM
 Process Host: XAWRK003

First Level Reviewer: barnettj

Date: 26-May-2016 15:30:30

Signal	RT	EXP RT	DLT RT	REL RT	Response	Amount ng/ml	Ratio(Limits)	%Rec	S/N	Flags
51 Perfluorobutanesulfonic acid										
298.8 > 79.6	7.014	7.024	-0.010	1.000	27789	0.6074				
D 8 13C4-PFHpA										
366.6 > 321.6	9.365	9.387	-0.022		282258	3.30		6.6	1063	
9 Perfluoroheptanoic acid										
362.8 > 318.7	9.357	9.388	-0.031	1.000	127470	1.95			83.2	
58 Perfluorohexanesulfonic acid										M
398.3 > 79.2	9.396	9.421	-0.025	1.000	1713316	20.6				M
D 11 18O2 PFHxS										
402.5 > 83.6	9.388	9.422	-0.034		115337	3.89		8.2	553	
D 12 13C4 PFOA										
416.5 > 371.6	10.482	10.503	-0.021		291943	3.28		6.6	1700	
13 Perfluorooctanoic acid										M
412.8 > 368.8	10.482	10.504	-0.022	1.000	5148604	97.4			3144	M
412.8 > 168.7	10.482	10.504	-0.022	1.000	1802918		2.86(0.00-0.00)		3127	M
D 16 13C4 PFOS										
502.4 > 79.7	11.440	11.465	-0.025		20418	3.03		6.3	68.8	
15 Perfluorooctane sulfonic acid										M
498.3 > 79.2	11.449	11.466	-0.017	1.000	4678613	39.8			4380	M
498.3 > 98.2	11.449	11.466	-0.017	1.000	2326866		2.01(0.00-0.00)		2319	M
D 17 13C5 PFNA										
467.5 > 422.6	11.469	11.484	-0.015		275509	3.51		7.0	1071	
18 Perfluorononanoic acid										
462.5 > 418.6	11.469	11.486	-0.017	1.000	20384	0.1485			25.3	

QC Flag Legend

Review Flags

M - Manually Integrated

TestAmerica Sacramento

Data File: \\ChromNA\Sacramento\ChromData\A4\20160525-31065.b\25MAY2016B4A_059.d

Injection Date: 26-May-2016 12:03:39

Instrument ID: A4

Lims ID: 320-18796-A-6-A

Lab Sample ID: 320-18796-6

Client ID: OF-FILTER-0516

Operator ID: JRB

ALS Bottle#: 36

Worklist Smp#: 59

Injection Vol: 15.0 ul

Dil. Factor: 20.0000

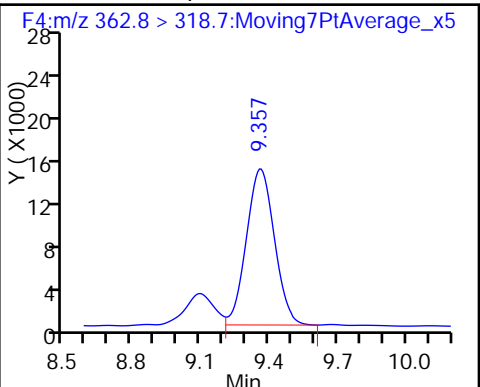
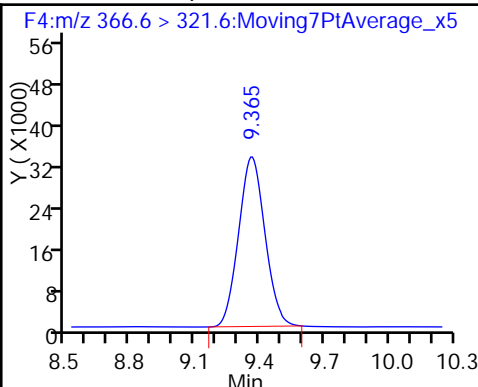
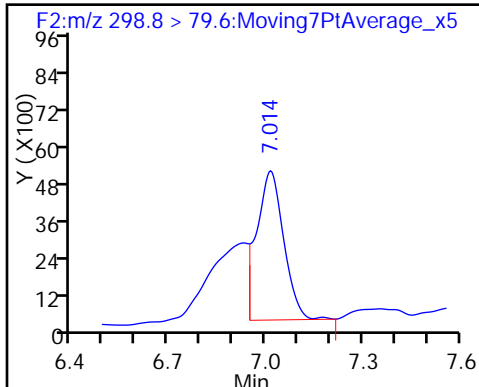
Method: PFAC_A4

Limit Group: LC PFC_DOD ICAL

51 Perfluorobutanesulfonic acid

D 8 13C4-PFHpA

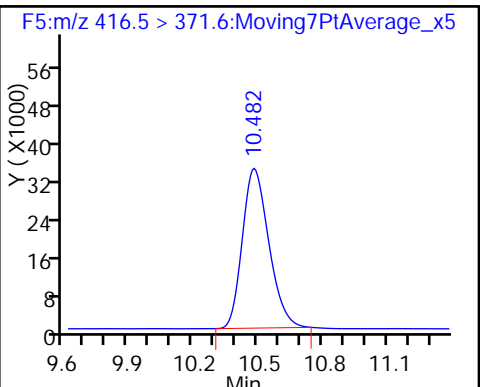
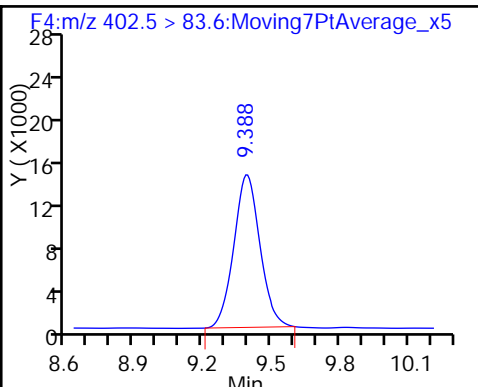
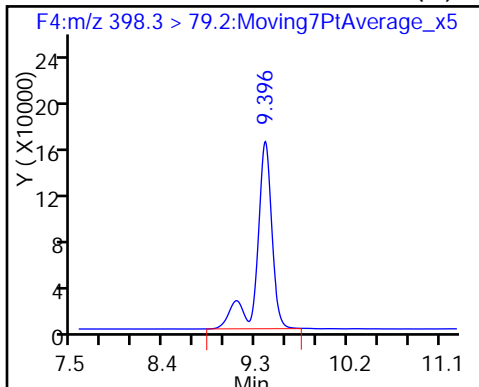
9 Perfluoroheptanoic acid



58 Perfluorohexanesulfonic acid (M)

D 11 18O2 PFHxS

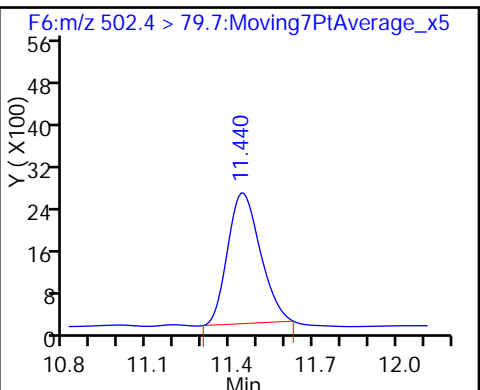
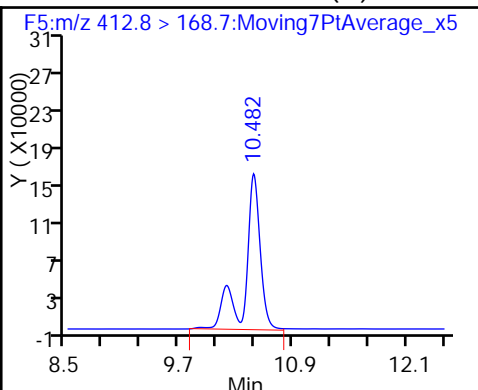
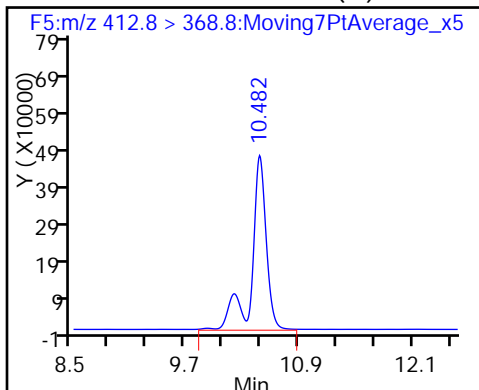
D 12 13C4 PFOA



13 Perfluorooctanoic acid (M)

13 Perfluorooctanoic acid (M)

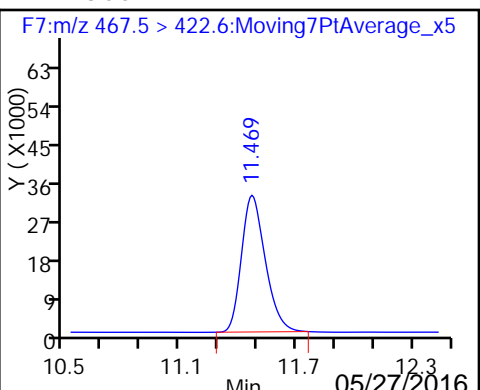
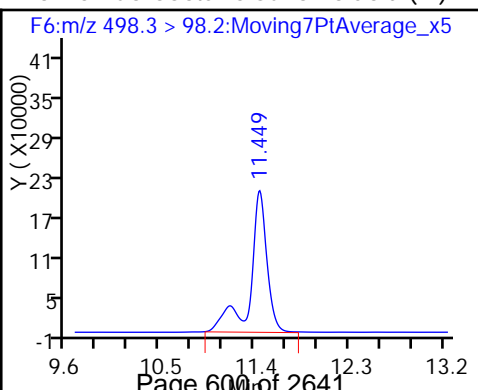
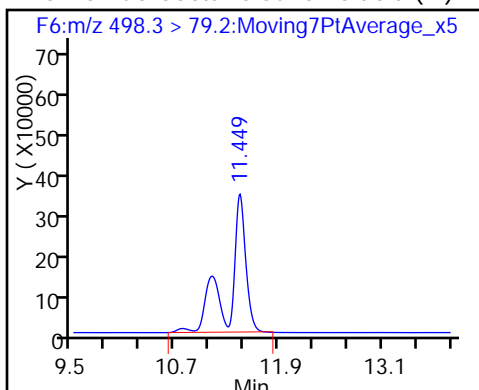
D 16 13C4 PFOS



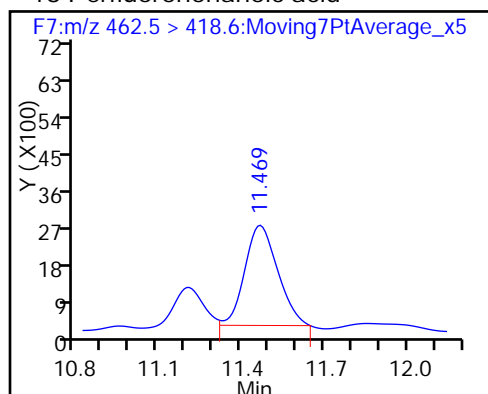
15 Perfluorooctane sulfonic acid (M)

15 Perfluorooctane sulfonic acid (M)

D 17 13C5 PFNA



18 Perfluorononanoic acid



TestAmerica Sacramento

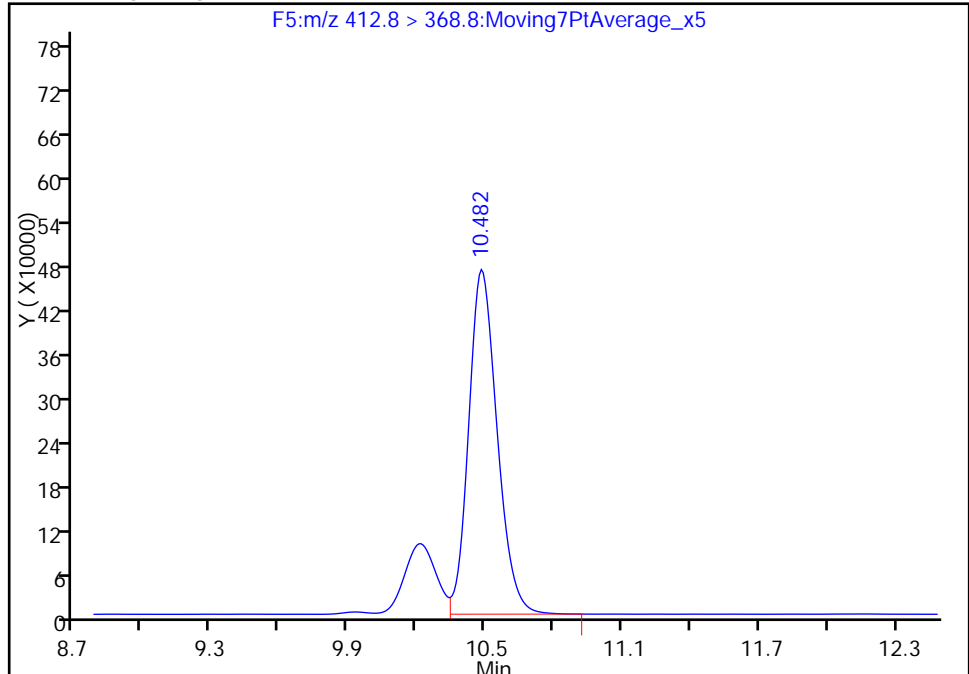
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Injection Date: 26-May-2016 12:03:39 Instrument ID: A4
Lims ID: 320-18796-A-6-A Lab Sample ID: 320-18796-6
Client ID: OF-FILTER-0516
Operator ID: JRB ALS Bottle#: 36 Worklist Smp#: 59
Injection Vol: 15.0 ul Dil. Factor: 20.0000
Method: PFAC_A4 Limit Group: LC PFC_DOD ICAL
Column: Detector F5:MRM

13 Perfluorooctanoic acid, CAS: 335-67-1

Signal: 1

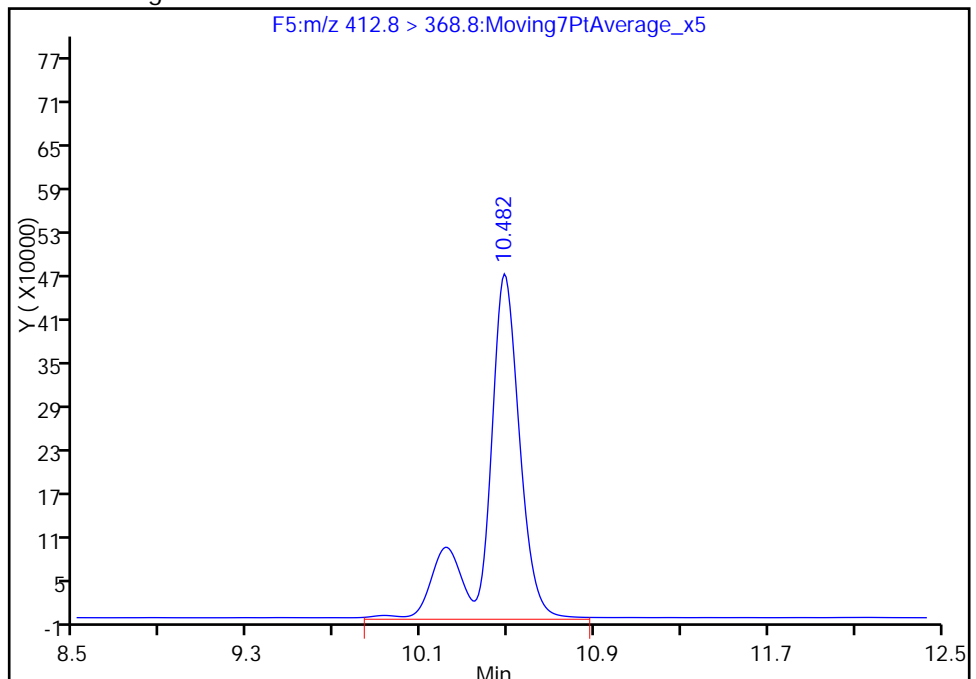
RT: 10.48
Area: 4069718
Amount: 76.994467
Amount Units: ng/ml

Processing Integration Results



RT: 10.48
Area: 5148604
Amount: 97.424624
Amount Units: ng/ml

Manual Integration Results



Reviewer: barnettj, 26-May-2016 15:30:30
Audit Action: Manually Integrated

Audit Reason: Isomers

TestAmerica Sacramento

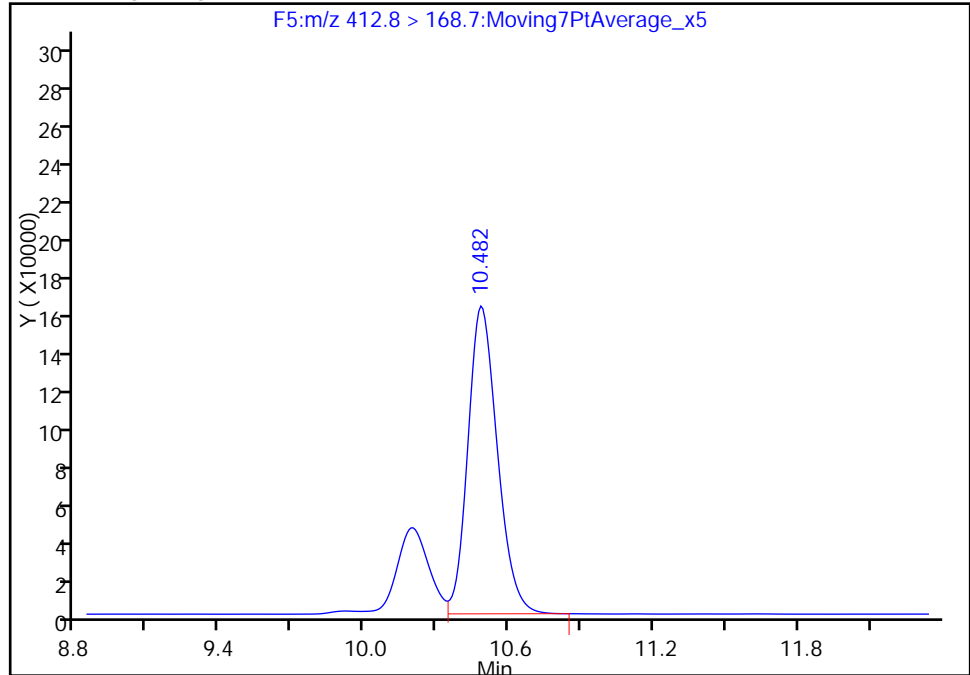
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Injection Date: 26-May-2016 12:03:39 Instrument ID: A4
Lims ID: 320-18796-A-6-A Lab Sample ID: 320-18796-6
Client ID: OF-FILTER-0516
Operator ID: JRB ALS Bottle#: 36 Worklist Smp#: 59
Injection Vol: 15.0 ul Dil. Factor: 20.0000
Method: PFAC_A4 Limit Group: LC PFC_DOD ICAL
Column: Detector F5:MRM

13 Perfluorooctanoic acid, CAS: 335-67-1

Signal: 2

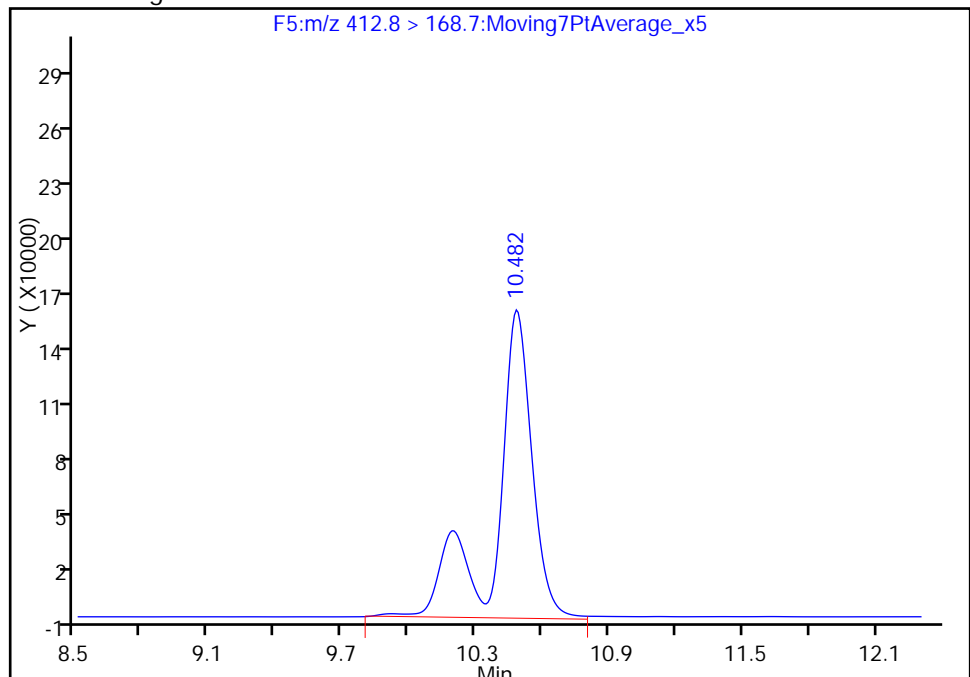
RT: 10.48
Area: 1350874
Amount: 76.994467
Amount Units: ng/ml

Processing Integration Results



RT: 10.48
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Amount: 97.424624
Amount Units: ng/ml

Manual Integration Results



Reviewer: barnettj, 26-May-2016 15:30:30

Audit Action: Manually Integrated

Audit Reason: Isomers

TestAmerica Sacramento

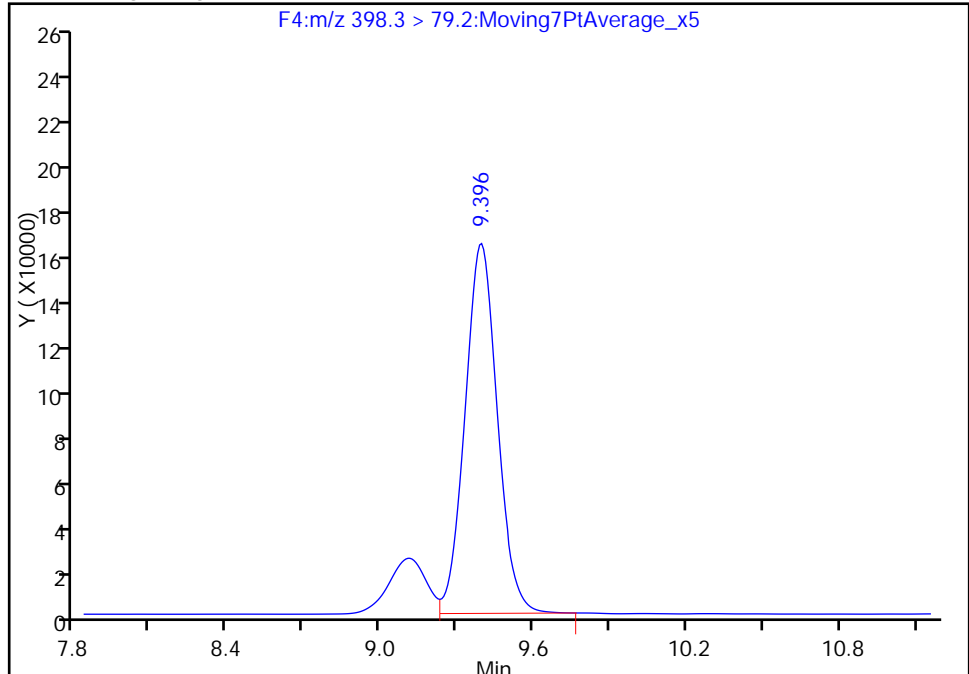
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Injection Date: 26-May-2016 12:03:39 Instrument ID: A4
Lims ID: 320-18796-A-6-A Lab Sample ID: 320-18796-6
Client ID: OF-FILTER-0516
Operator ID: JRB ALS Bottle#: 36 Worklist Smp#: 59
Injection Vol: 15.0 ul Dil. Factor: 20.0000
Method: PFAC_A4 Limit Group: LC PFC_DOD ICAL
Column: Detector F4:MRM

58 Perfluorohexanesulfonic acid, CAS: 355-46-4

Signal: 1

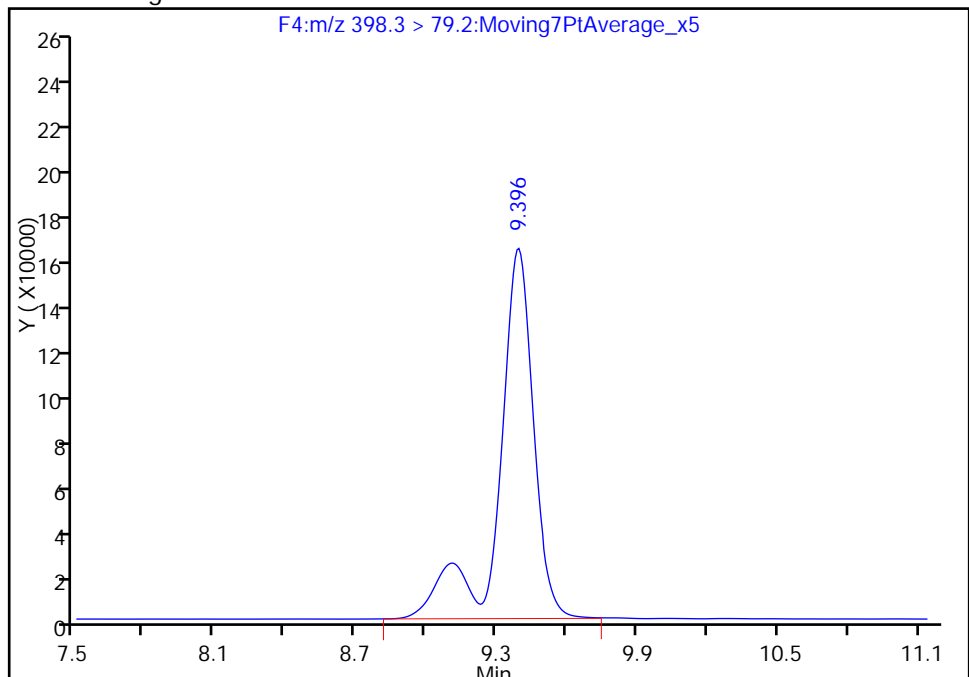
RT: 9.40
Area: 1455827
Amount: 17.470189
Amount Units: ng/ml

Processing Integration Results



RT: 9.40
Area: 1713316
Amount: 20.560104
Amount Units: ng/ml

Manual Integration Results



Reviewer: barnettj, 26-May-2016 15:30:30

Audit Action: Assigned Compound ID

Audit Reason: Isomers

TestAmerica Sacramento

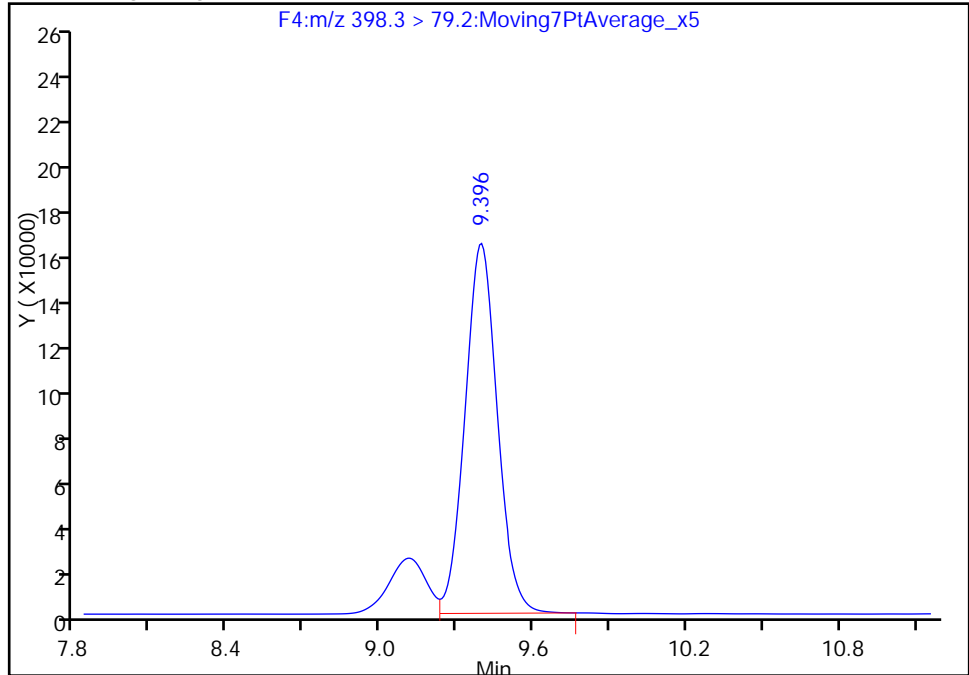
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Injection Date: 26-May-2016 12:03:39 Instrument ID: A4
Lims ID: 320-18796-A-6-A Lab Sample ID: 320-18796-6
Client ID: OF-FILTER-0516
Operator ID: JRB ALS Bottle#: 36 Worklist Smp#: 59
Injection Vol: 15.0 ul Dil. Factor: 20.0000
Method: PFAC_A4 Limit Group: LC PFC_DOD ICAL
Column: Detector F4:MRM

58 Perfluorohexanesulfonic acid, CAS: 355-46-4

Signal: 1

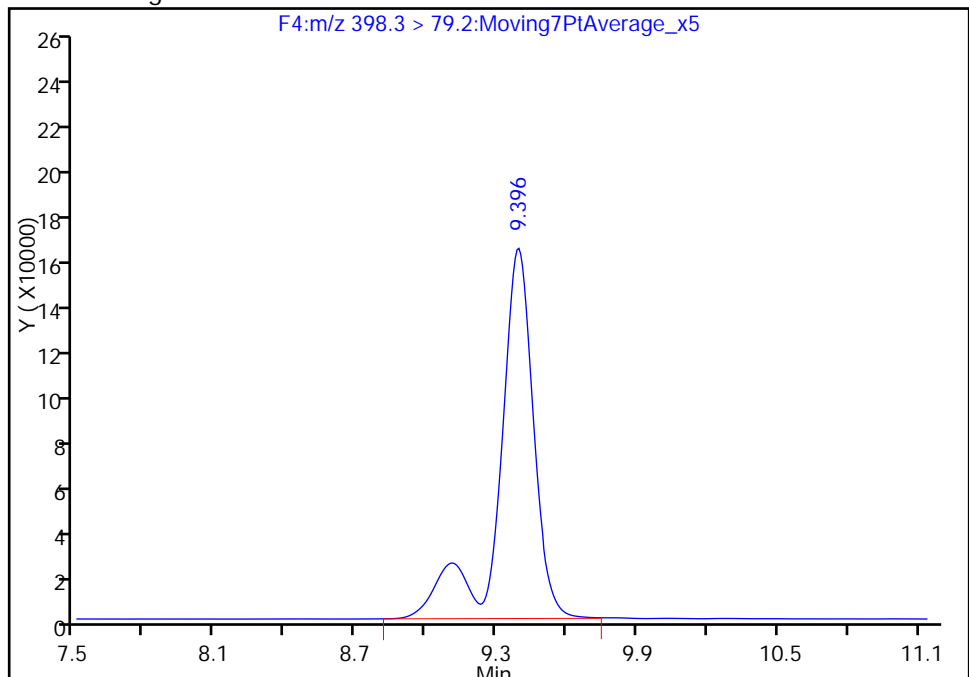
RT: 9.40
Area: 1455827
Amount: 17.470189
Amount Units: ng/ml

Processing Integration Results



RT: 9.40
Area: 1713316
Amount: 20.560104
Amount Units: ng/ml

Manual Integration Results



Reviewer: barnettj, 26-May-2016 15:30:30

Audit Action: Manually Integrated

Audit Reason: Isomers

TestAmerica Sacramento

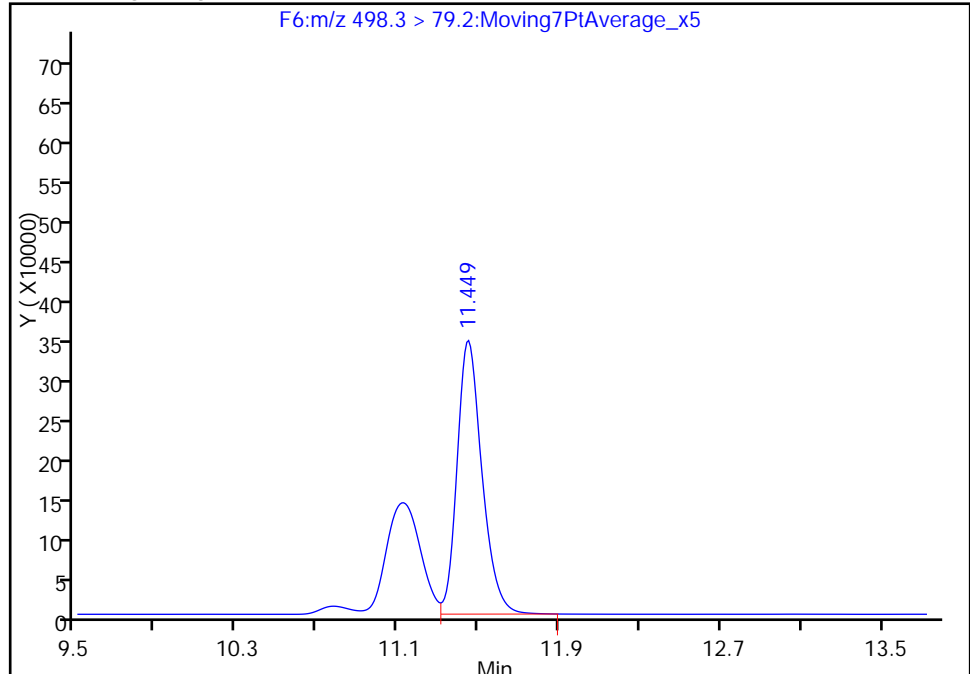
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Injection Date:	26-May-2016 12:03:39	Instrument ID:	A4		
Lims ID:	320-18796-A-6-A	Lab Sample ID:	320-18796-6		
Client ID:	OF-FILTER-0516				
Operator ID:	JRB	ALS Bottle#:	36	Worklist Smp#:	59
Injection Vol:	15.0 ul	Dil. Factor:	20.0000		
Method:	PFAC_A4	Limit Group:	LC PFC_DOD ICAL		
Column:		Detector	F6:MRM		

15 Perfluorooctane sulfonic acid, CAS: 1763-23-1

Signal: 1

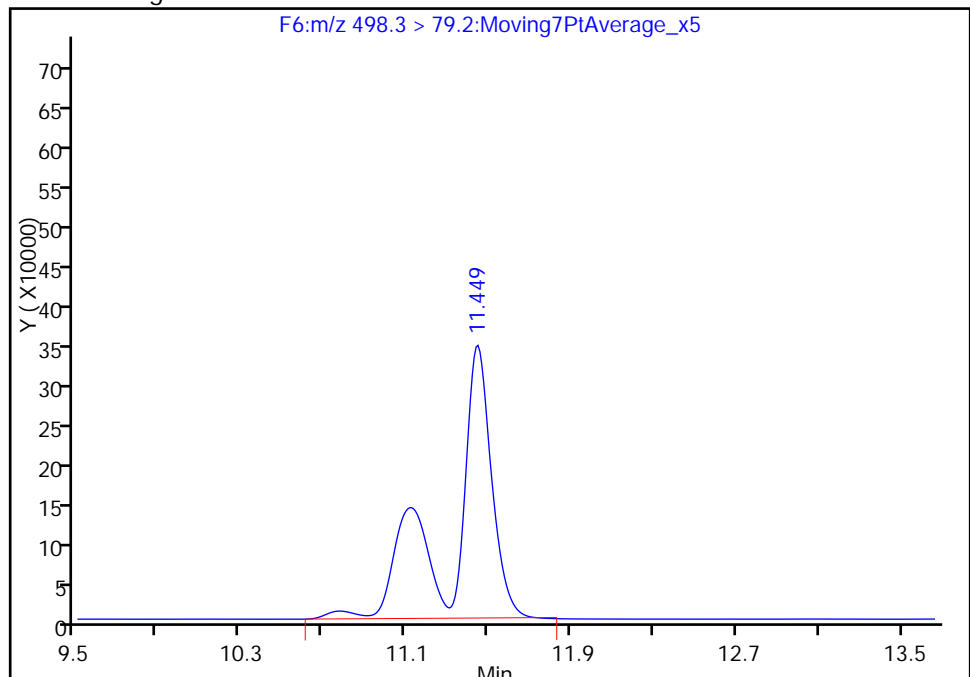
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Area: 2982374
Amount: 25.609095
Amount Units: ng/ml

Processing Integration Results



RT: 11.45
Area: 4678613
Amount: 39.798536
Amount Units: ng/ml

Manual Integration Results



Reviewer: barnettj, 26-May-2016 15:30:30

Audit Action: Manually Integrated

Audit Reason: Isomers

TestAmerica Sacramento

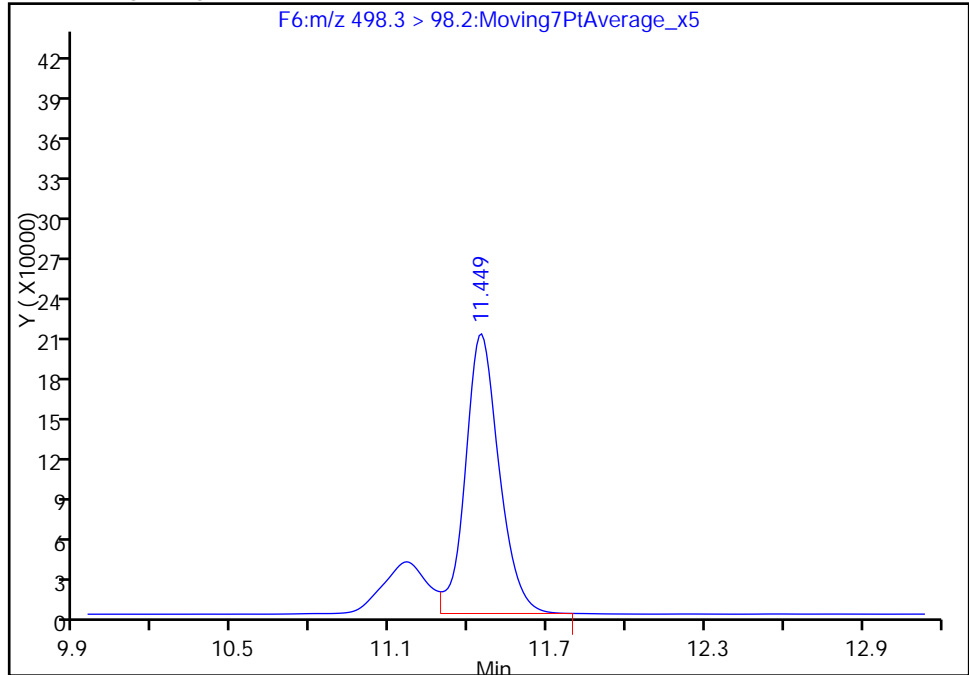
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Injection Date: 26-May-2016 12:03:39 Instrument ID: A4
Lims ID: 320-18796-A-6-A Lab Sample ID: 320-18796-6
Client ID: OF-FILTER-0516
Operator ID: JRB ALS Bottle#: 36 Worklist Smp#: 59
Injection Vol: 15.0 ul Dil. Factor: 20.0000
Method: PFAC_A4 Limit Group: LC PFC_DOD ICAL
Column: Detector F6:MRM

15 Perfluorooctane sulfonic acid, CAS: 1763-23-1

Signal: 2

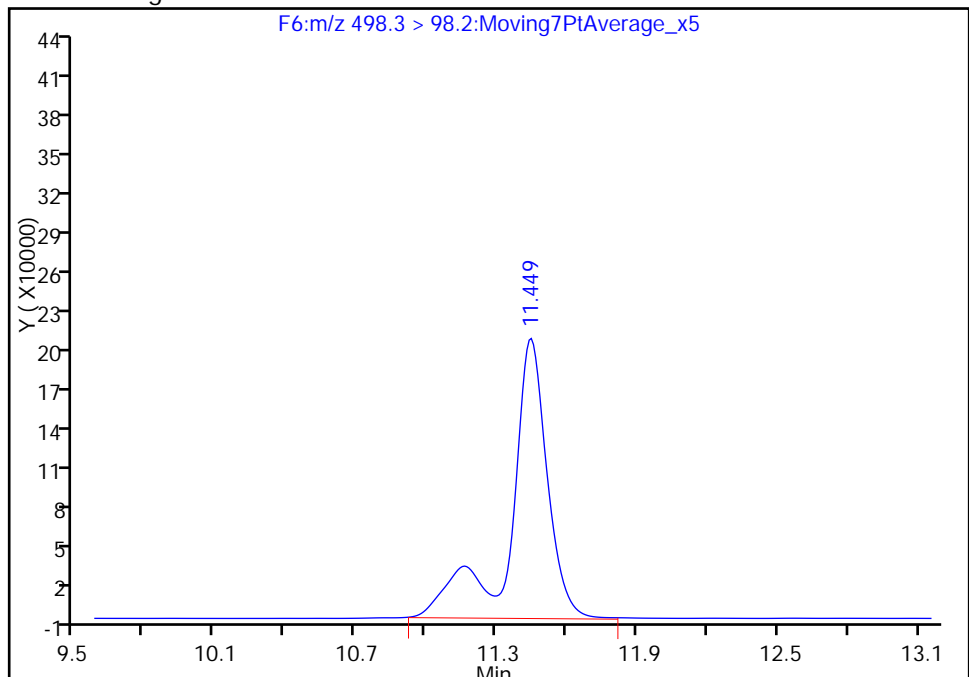
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Area: 1853990
Amount: 25.609095
Amount Units: ng/ml

Processing Integration Results



RT: 11.45
Area: 2326866
Amount: 39.798536
Amount Units: ng/ml

Manual Integration Results



Reviewer: barnettj, 26-May-2016 15:30:30

Audit Action: Manually Integrated

Audit Reason: Isomers

FORM VI
LCMS BY EXTERNAL STANDARD - INITIAL CALIBRATION DATA
RETENTION TIME SUMMARY

Lab Name: TestAmerica Sacramento Job No.: 320-18796-1 Analy Batch No.: 111390

SDG No.: _____

Instrument ID: A4 GC Column: Acquity ID: 2.1 (mm) Heated Purge: (Y/N) N

Calibration Start Date: 05/25/2016 16:55 Calibration End Date: 05/25/2016 19:01 Calibration ID: 21647

Calibration Files:

LEVEL:	LAB SAMPLE ID:	LAB FILE ID:
Level 1	STD 320-111390/5	25MAY2016B4A_005.d
Level 2	STD 320-111390/6	25MAY2016B4A_006.d
Level 3	STD 320-111390/7	25MAY2016B4A_007.d
Level 4	STD 320-111390/8	25MAY2016B4A_008.d
Level 5	STD 320-111390/9	25MAY2016B4A_009.d
Level 6	STD 320-111390/10	25MAY2016B4A_010.d
Level 7	STD 320-111390/11	25MAY2016B4A_011.d

ANALYTE	LVL 1	LVL 2	LVL 3	LVL 4	LVL 5	LVL 6	LVL 7				RT WINDOW	AVG RT
Perfluorobutanoic acid (PFBA)	5.803	5.797	5.797	5.797	5.800	5.797	5.800				5.548 - 6.048	5.799
Perfluoropentanoic acid (PFPeA)	6.913	6.909	6.913	6.909	6.909	6.909	6.909				6.660 - 7.160	6.910
Perfluorobutanesulfonic acid (PFBS)	++++	7.028	7.024	7.024	7.024	7.024	7.024				6.774 - 7.274	7.025
Perfluorohexanoic acid (PFHxA)	++++	8.155	8.160	8.155	8.155	8.155	8.155				7.907 - 8.407	8.156
Perfluoroheptanoic acid (PFHpA)	++++	9.380	9.388	9.388	9.388	9.388	9.388				9.138 - 9.638	9.387
Perfluorohexanesulfonic acid (PFHxS)	9.419	9.419	9.419	9.419	9.419	9.427	9.419				9.171 - 9.671	9.420
Perfluorooctanoic acid (PFOA)	10.509	10.499	10.502	10.502	10.509	10.509	10.502				10.254 - 10.754	10.505
Perfluoroheptanesulfonic Acid (PFHpS)	++++	10.508	10.502	10.511	10.509	10.509	10.511				10.258 - 10.758	10.508
Perfluorooctanesulfonic acid (PFOS)	++++	11.467	11.461	11.470	11.468	11.467	11.461				11.216 - 11.716	11.466
Perfluorononanoic acid (PFNA)	11.487	11.487	11.480	11.480	11.488	11.487	11.489				11.236 - 11.736	11.485
Perfluorodecanoic acid (PFDA)	12.324	12.324	12.327	12.327	12.325	12.324	12.328				12.075 - 12.575	12.326
Perfluorooctane Sulfonamide (FOSA)	12.896	12.896	12.888	12.888	12.897	12.896	12.888				12.643 - 13.143	12.893
Perfluorodecanesulfonic acid (PFDS)	12.999	12.999	12.991	12.991	13.000	12.999	12.991				12.746 - 13.246	12.996
Perfluoroundecanoic acid (PFUnA)	13.041	13.041	13.044	13.044	13.042	13.041	13.045				12.792 - 13.292	13.043
Perfluorododecanoic acid (PFDoA)	13.650	13.650	13.644	13.644	13.639	13.650	13.644				13.396 - 13.896	13.646
Perfluorotetradecanoic Acid (PFTriA)	14.171	14.161	14.154	14.164	14.161	14.161	14.165				13.912 - 14.412	14.162
Perfluorotetradecanoic acid (PFTeA)	14.607	14.598	14.592	14.602	14.599	14.598	14.602				14.350 - 14.850	14.600
Perfluoro-n-hexadecanoic acid (PFHxDA)	15.257	15.257	15.252	15.252	15.258	15.257	15.252				15.005 - 15.505	15.255
Perfluoro-n-octadecanoic acid (PFODA)	15.595	15.595	15.591	15.591	15.595	15.595	15.591				15.343 - 15.843	15.593
13C4 PFBA	5.800	5.797	5.797	5.800	5.797	5.800	5.800				5.548 - 6.048	5.799
13C5-PFPeA	6.913	6.904	6.909	6.904	6.904	6.909	6.904				6.657 - 7.157	6.907
13C2 PFHxA	++++	8.155	8.160	8.155	8.155	8.155	8.155				7.906 - 8.406	8.156
13C4-PFHpA	9.388	9.388	9.388	9.388	9.388	9.388	9.380				9.137 - 9.637	9.387
18O2 PFHxS	9.427	9.419	9.419	9.419	9.419	9.419	++++				9.172 - 9.672	9.420
13C4 PFOA	10.509	10.499	10.502	10.502	10.500	10.509	++++				10.253 - 10.753	10.504
13C4 PFOS	11.467	11.467	11.461	11.461	11.468	11.467	++++				11.215 - 11.715	11.465
13C5 PFNA	11.487	11.487	11.480	11.480	11.488	11.487	11.480				11.234 - 11.734	11.484
13C2 PFDA	12.324	12.324	12.327	12.327	12.325	12.324	12.328				12.075 - 12.575	12.326
13C8 FOSA	12.896	12.896	12.888	12.888	12.897	12.896	12.888				12.643 - 13.143	12.893
13C2 PFUnA	13.051	13.041	13.044	13.044	13.042	13.041	13.045				12.794 - 13.294	13.044
13C2 PFDoA	13.650	13.650	13.644	13.644	13.639	13.650	13.644				13.396 - 13.896	13.646
13C2-PFTeDA	14.607	14.598	14.602	14.602	14.599	14.598	14.602				14.351 - 14.851	14.601
13C2-PFHxDA	15.257	15.257	15.252	15.252	15.258	15.257	15.252				15.005 - 15.505	15.255

FORM VI
LCMS BY EXTERNAL STANDARD - INITIAL CALIBRATION DATA
CURVE EVALUATION

Lab Name: TestAmerica Sacramento Job No.: 320-18796-1 Analy Batch No.: 111390

SDG No.: _____

Instrument ID: A4 GC Column: Acquity ID: 2.1(mm) Heated Purge: (Y/N) N

Calibration Start Date: 05/25/2016 16:55 Calibration End Date: 05/25/2016 19:01 Calibration ID: 21647

Calibration Files:

LEVEL:	LAB SAMPLE ID:	LAB FILE ID:
Level 1	STD 320-111390/5	25MAY2016B4A_005.d
Level 2	STD 320-111390/6	25MAY2016B4A_006.d
Level 3	STD 320-111390/7	25MAY2016B4A_007.d
Level 4	STD 320-111390/8	25MAY2016B4A_008.d
Level 5	STD 320-111390/9	25MAY2016B4A_009.d
Level 6	STD 320-111390/10	25MAY2016B4A_010.d
Level 7	STD 320-111390/11	25MAY2016B4A_011.d

ANALYTE	CF				CURVE TYPE	COEFFICIENT			#	MIN CF	%RSD	#	MAX %RSD	R^2 OR COD	#	MIN R^2 OR COD
	LVL 1 LVL 5	LVL 2 LVL 6	LVL 3 LVL 7	LVL 4		B	M1	M2								
13C4 PFBA	90426 90489	93702 69083	88967 67191	91832	Ave		84527.2857				13.4		50.0			
13C5-PFPeA	84075 80131	88112 67366	79827 57639	79829	Ave		76711.2743				13.7		50.0			
13C2 PFHxA	++++ 88726	93214 75852	88217 63360	88780	Ave		83024.8300				13.6		50.0			
13C4-PFHpA	97016 88518	97521 72637	93069 62582	87045	Ave		85483.7314				15.4		50.0			
18O2 PFHxS	32114 28446	33843 21871	32545 ++++	29259	Ave		29679.5173				14.6		50.0			
13C4 PFOA	95358 86472	101177 69215	94622 ++++	88014	Ave		89142.7267				12.5		50.0			
13C4 PFOS	7547.6 5997.7	8261.6 4238.7	7254.1 ++++	7192.7	Ave		6748.72734				21.2		50.0			
13C5 PFNA	83768 81444	90726 67996	85184 58045	81914	Ave		78439.4543				14.5		50.0			
13C2 PFDA	113865 98334	116442 88286	113382 70925	98189	Ave		99917.5000				16.5		50.0			
13C8 FOSA	106708 97856	108315 81051	106014 70011	105710	Ave		96523.5914				15.6		50.0			
13C2 PFUnA	110798 106166	120213 84367	108832 72975	106384	Ave		101390.671				16.3		50.0			
13C2 PFDoA	114960 108533	119900 92813	108605 81295	111530	Ave		105376.626				12.8		50.0			
13C2-PFTeDA	77742 85231	80236 68244	76604 63739	79461	Ave		75893.7886				9.8		50.0			
13C2-PFHxDA	29325 32507	32299 26911	29981 23318	29654	Ave		29142.1229				11.0		50.0			

Note: The m1 coefficient is the same as Ave CF for an Ave curve type.

FORM VI

CURVE EVALUATION

Lab Name: TestAmerica SacramentoJob No.: 320-18796-1Analy Batch No.: 111390

SDG No.: _____

Instrument ID: A4GC Column: Acquity ID: 2.1(mm)Heated Purge: (Y/N) NCalibration Start Date: 05/25/2016 16:55Calibration End Date: 05/25/2016 19:01Calibration ID: 21647

ANALYTE	RRF					CURVE TYPE	COEFFICIENT			#	MIN RRF	%RSD	#	MAX %RSD	R^2 OR COD	#	MIN R^2 OR COD
	LVL 1 LVL 6	LVL 2 LVL 7	LVL 3	LVL 4	LVL 5		B	M1	M2								
Perfluorobutanoic acid (PFBA)	51562 48110	54589 47389	59528	53593	62013	AveID		0.6418				9.4		35.0			
Perfluoropentanoic acid (PFPeA)	45950 33549	45680 27499	41742	38810	40556	AveID		0.5079				4.7		35.0			
Perfluorobutanesulfonic acid (PFBS)	++++ 16828	30042 13573	22359	20369	22386	L2ID	0.1268	0.7293							0.9950		0.9900
Perfluorohexanoic acid (PFHxA)	++++ 33959	48716 28459	44253	36069	41599	L1ID	0.0815	0.4487							0.9990		0.9900
Perfluoroheptanoic acid (PFHpA)	++++ 36889	66614 30989	45999	38114	44933	L2ID	0.1974	0.4789							0.9950		0.9900
Perfluorohexanesulfonic acid (PFHxS)	56469 37411	62875 32107	53633	44230	49600	AveID		1.7087				6.3		35.0			
Perfluorooctanoic acid (PFOA)	45998 31110	50890 26141	45904	37002	41392	L1ID	0.0322	0.4522							1.0000		0.9900
Perfluoroheptanesulfonic Acid (PFHpS)	++++ 34336	56642 27018	54720	45924	46998	L2ID	-0.926	7.7628							0.9900		0.9900
Perfluorooctanesulfonic acid (PFOS)	++++ 57319	76877 45376	83720	70811	77490	L1ID	-9.247	13.993							0.9960		0.9900
Perfluorononanoic acid (PFNA)	95262 82019	129381 70717	108058	93343	99857	L2ID	0.0022	1.2307							0.9920		0.9900
Perfluorodecanoic acid (PFDA)	94072 93997	117054 78340	119534	106142	111497	AveID		1.0385				9.8		35.0			
Perfluorooctane Sulfonamide (FOSA)	104638 92535	113427 78543	117605	105216	106590	AveID		1.0693				5.9		35.0			
Perfluorodecanesulfonic acid (PFDS)	32002 17577	33342 13614	34233	27101	25265	AveID		4.2089				6.9		50.0			
Perfluoroundecanoic acid (PFUnA)	145968 103214	132732 84787	128944	115402	125000	AveID		1.1791				6.6		35.0			
Perfluorododecanoic acid (PFDoA)	95024 88677	96089 74116	109637	95821	110823	AveID		0.9121				9.6		35.0			
Perfluorotridecanoic Acid (PFTriA)	77272 69226	90621 59609	88571	75800	84755	AveID		1.0254				8.3		50.0			
Perfluorotetradecanoic acid (PFTeA)	67818 31192	48934 28663	38993	35082	38993	AveID		0.5424				28.9		50.0			
Perfluoro-n-hexadecanoic acid (PFHxDA)	188072 70899	147266 62857	85884	71378	89377	L2ID	1.9284	2.5720							0.9960		0.9900
Perfluoro-n-octadecanoic acid (PFODA)	66886 54974	71437 53503	66638	59423	78676	AveID		2.2110				6.6		50.0			

Note: The m1 coefficient is the same as Ave RRF for an Ave curve type.

FORM VI
LCMS BY EXTERNAL STANDARD - INITIAL CALIBRATION DATA
RESPONSE AND CONCENTRATION

Lab Name: TestAmerica Sacramento Job No.: 320-18796-1 Analy Batch No.: 111390

SDG No.: _____

Instrument ID: A4 GC Column: Acquity ID: 2.1(mm) Heated Purge: (Y/N) N

Calibration Start Date: 05/25/2016 16:55 Calibration End Date: 05/25/2016 19:01 Calibration ID: 21647

Calibration Files:

LEVEL:	LAB SAMPLE ID:	LAB FILE ID:
Level 1	STD 320-111390/5	25MAY2016B4A_005.d
Level 2	STD 320-111390/6	25MAY2016B4A_006.d
Level 3	STD 320-111390/7	25MAY2016B4A_007.d
Level 4	STD 320-111390/8	25MAY2016B4A_008.d
Level 5	STD 320-111390/9	25MAY2016B4A_009.d
Level 6	STD 320-111390/10	25MAY2016B4A_010.d
Level 7	STD 320-111390/11	25MAY2016B4A_011.d

ANALYTE	CURVE TYPE	RESPONSE					CONCENTRATION (NG/ML)				
		LVL 1 LVL 6	LVL 2 LVL 7	LVL 3	LVL 4	LVL 5	LVL 1 LVL 6	LVL 2 LVL 7	LVL 3	LVL 4	LVL 5
13C4 PFBA	Ave	4521321 3454161	4685114 3359557	4448328	4591623	4524446	50.0 50.0	50.0 50.0	50.0	50.0	50.0
13C5-PFPeA	Ave	4203739 3368310	4405611 2881925	3991347	3991474	4006540	50.0 50.0	50.0 50.0	50.0	50.0	50.0
13C2 PFHxA	Ave	++++ 3792575	4660722 3168006	4410855	4438990	4436301	++++ 50.0	50.0 50.0	50.0	50.0	50.0
13C4-PFHpA	Ave	4850779 3631838	4876027 3129112	4653428	4352241	4425881	50.0 50.0	50.0 50.0	50.0	50.0	50.0
18O2 PFHxS	Ave	1518975 1034483	1600780 ++++	1539364	1383940	1345505	47.3 47.3	47.3 ++++	47.3	47.3	47.3
13C4 PFOA	Ave	4767875 3460734	5058838 ++++	4731111	4400676	4323584	50.0 50.0	50.0 ++++	50.0	50.0	50.0
13C4 PFOS	Ave	360775 202612	394903 ++++	346744	343813	286688	47.8 47.8	47.8 ++++	47.8	47.8	47.8
13C5 PFNA	Ave	4188406 3399779	4536292 2902258	4259193	4095685	4072196	50.0 50.0	50.0 50.0	50.0	50.0	50.0
13C2 PFDA	Ave	5693238 4414285	5822117 3546229	5669119	4909456	4916681	50.0 50.0	50.0 50.0	50.0	50.0	50.0
13C8 FOSA	Ave	5335389 4052543	5415770 3500532	5300712	5285513	4892798	50.0 50.0	50.0 50.0	50.0	50.0	50.0
13C2 PFUnA	Ave	5539892 4218333	6010665 3648730	5441575	5319223	5308317	50.0 50.0	50.0 50.0	50.0	50.0	50.0
13C2 PFDoA	Ave	5748006 4640667	5994993 4064771	5430267	5576489	5426626	50.0 50.0	50.0 50.0	50.0	50.0	50.0
13C2-PFTeDA	Ave	3887106 3412182	4011816 3186926	3830217	3973031	4261548	50.0 50.0	50.0 50.0	50.0	50.0	50.0
13C2-PFHxDA	Ave	1466248 1345541	1614964 1165903	1499037	1482695	1625355	50.0 50.0	50.0 50.0	50.0	50.0	50.0

Curve Type Legend:

Ave = Average

RESPONSE AND CONCENTRATION

Lab Name: TestAmerica Sacramento Job No.: 320-18796-1 Analy Batch No.: 111390

SDG No.: _____

Instrument ID: A4 GC Column: Acquity ID: 2.1 (mm) Heated Purge: (Y/N) NCalibration Start Date: 05/25/2016 16:55 Calibration End Date: 05/25/2016 19:01 Calibration ID: 21647

Calibration Files:

LEVEL:	LAB SAMPLE ID:	LAB FILE ID:
Level 1	STD 320-111390/5	25MAY2016B4A_005.d
Level 2	STD 320-111390/6	25MAY2016B4A_006.d
Level 3	STD 320-111390/7	25MAY2016B4A_007.d
Level 4	STD 320-111390/8	25MAY2016B4A_008.d
Level 5	STD 320-111390/9	25MAY2016B4A_009.d
Level 6	STD 320-111390/10	25MAY2016B4A_010.d
Level 7	STD 320-111390/11	25MAY2016B4A_011.d

ANALYTE	IS REF	CURVE TYPE	RESPONSE					CONCENTRATION (NG/ML)				
			LVL 1 LVL 6	LVL 2 LVL 7	LVL 3	LVL 4	LVL 5	LVL 1 LVL 6	LVL 2 LVL 7	LVL 3	LVL 4	LVL 5
Perfluorobutanoic acid (PFBA)		AveID	25781 9621902	54589 18955715	297640	1071850	3100647	0.500 200	1.00 400	5.00	20.0	50.0
Perfluoropentanoic acid (PFPeA)		AveID	22975 6709860	45680 10999657	208712	776204	2027795	0.500 200	1.00 400	5.00	20.0	50.0
Perfluorobutanesulfonic acid (PFBS)		L2ID	++++ 2975252	26557 4799473	98828	360125	989482	++++ 177	0.884 354	4.42	17.7	44.2
Perfluorohexanoic acid (PFHxA)		L1ID	++++ 6791811	48716 11383764	221266	721387	2079954	++++ 200	1.00 400	5.00	20.0	50.0
Perfluoroheptanoic acid (PFHpA)		L2ID	++++ 7377792	66614 12395409	229994	762273	2246637	++++ 200	1.00 400	5.00	20.0	50.0
Perfluorohexanesulfonic acid (PFHxS)		AveID	26710 7078226	59480 12149225	253682	836825	2346082	0.473 189	0.946 378	4.73	18.9	47.3
Perfluorooctanoic acid (PFOA)		L1ID	22999 6221982	50890 10456476	229522	740049	2069583	0.500 200	1.00 400	5.00	20.0	50.0
Perfluoroheptanesulfonic Acid (PFHpS)		L2ID	++++ 6537635	53923 10288308	260465	874389	2237092	++++ 190	0.952 381	4.76	19.0	47.6
Perfluorooctanesulfonic acid (PFOS)		L1ID	++++ 10959354	73494 17351697	400180	1353901	3704007	++++ 191	0.956 382	4.78	19.1	47.8
Perfluorononanoic acid (PFNA)		L2ID	47631 16403896	129381 28286865	540290	1866863	4992828	0.500 200	1.00 400	5.00	20.0	50.0
Perfluorodecanoic acid (PFDA)		AveID	47036 18799359	117054 31336025	597671	2122830	5574851	0.500 200	1.00 400	5.00	20.0	50.0
Perfluorooctane Sulfonamide (FOSA)		AveID	52319 18507083	113427 31417050	588024	2104314	5329485	0.500 200	1.00 400	5.00	20.0	50.0
Perfluorodecanesulfonic acid (PFDS)		AveID	15425 3388769	32142 5249459	165005	522503	1217760	0.482 193	0.964 386	4.82	19.3	48.2
Perfluoroundecanoic acid (PFUnA)		AveID	72984 20642853	132732 33914731	644718	2308031	6249999	0.500 200	1.00 400	5.00	20.0	50.0
Perfluorododecanoic acid (PFDoA)		AveID	47512 17735307	96089 29646208	548185	1916429	5541148	0.500 200	1.00 400	5.00	20.0	50.0

RESPONSE AND CONCENTRATION

Lab Name: TestAmerica Sacramento Job No.: 320-18796-1 Analy Batch No.: 111390

SDG No.: _____

Instrument ID: A4 GC Column: Acquity ID: 2.1(mm) Heated Purge: (Y/N) NCalibration Start Date: 05/25/2016 16:55 Calibration End Date: 05/25/2016 19:01 Calibration ID: 21647

ANALYTE	IS REF	CURVE TYPE	RESPONSE					CONCENTRATION (NG/ML)				
			LVL 1 LVL 6	LVL 2 LVL 7	LVL 3	LVL 4	LVL 5	LVL 1 LVL 6	LVL 2 LVL 7	LVL 3	LVL 4	LVL 5
Perfluorotridecanoic Acid (PFTriA)		AveID	38636 13845210	90621 23843779	442855	1515996	4237745	0.500 200	1.00 400	5.00	20.0	50.0
Perfluorotetradecanoic acid (PFTeA)		AveID	33909 6238413	48934 11465072	194966	701642	1949635	0.500 200	1.00 400	5.00	20.0	50.0
Perfluoro-n-hexadecanoic acid (PFHxDA)		L2ID	94036 14179794	147266 25142674	429422	1427552	4468853	0.500 200	1.00 400	5.00	20.0	50.0
Perfluoro-n-octandecanoic acid (PFODA)		AveID	33443 10994803	71437 21401177	333192	1188460	3933807	0.500 200	1.00 400	5.00	20.0	50.0

Curve Type Legend:

AveID = Average isotope dilution
 L1ID = Linear 1/conc IsoDil
 L2ID = Linear 1/conc^2 IsoDil

TestAmerica Sacramento
Target Compound Quantitation Report

Data File: \\ChromNA\Sacramento\ChromData\A4\20160525-31065.b\25MAY2016B4A_005.d
 Lims ID: Std L1
 Client ID:
 Sample Type: IC Calib Level: 1
 Inject. Date: 25-May-2016 16:55:09 ALS Bottle#: 10 Worklist Smp#: 5
 Injection Vol: 15.0 ul Dil. Factor: 1.0000
 Sample Info: STD L1
 Misc. Info.: Acquity BEH C18,1.7u, 3X150mm,T=35C
 Operator ID: JRB Instrument ID: A4
 Sublist: chrom-PFAC_A4*sub12
 Method: \\ChromNA\Sacramento\ChromData\A4\20160525-31065.b\PFAC_A4.m
 Limit Group: LC PFC_DOD ICAL
 Last Update: 27-May-2016 09:59:50 Calib Date: 25-May-2016 19:01:43
 Integrator: Picker
 Quant Method: Isotopic Dilution Quant By: Initial Calibration
 Last ICal File: \\ChromNA\Sacramento\ChromData\A4\20160525-31065.b\25MAY2016B4A_011.d

Column 1 : Det: F1:MRM

Process Host: XAWRK014

First Level Reviewer: barnettj

Date: 25-May-2016 18:27:24

Signal	RT	EXP RT	DLT RT	REL RT	Response	Amount ng/ml	Ratio(Limits)	%Rec	S/N	Flags
2 Perfluorobutyric acid										
212.7 > 168.6	5.803	5.798	0.005	1.000	25781	0.4442		88.8	118	
D 1 13C4 PFBA										
216.7 > 171.5	5.800	5.798	0.002		4521321	53.5		107	18338	
D 3 13C5-PFPeA										
267.6 > 222.7	6.913	6.907	0.006		4203739	54.8		110	8232	
4 Perfluoropentanoic acid										
262.9 > 218.7	6.913	6.910	0.003	1.000	22975	0.5380		108	10.9	
5 Perfluorobutane Sulfonate										
298.8 > 79.6	7.024	7.024	0.0	1.000	12833	NC			25.4	
298.8 > 98.6	7.024	7.024	0.0	1.000	6418		2.00(0.00-0.00)		13.3	
51 Perfluorobutanesulfonic acid										
298.8 > 79.6	7.024	7.024	0.0	1.000	12833	0.3740		84.6		
D 6 13C2 PFHxA										
314.6 > 269.7	8.160	8.156	0.004		4611872	55.5		111	8247	
7 Perfluorohexanoic acid										
312.9 > 268.7	8.165	8.157	0.008	1.000	26685	0.4632		92.6	135	
D 8 13C4-PFHpA										
366.6 > 321.6	9.388	9.387	0.001		4850779	56.7		113	7959	
9 Perfluoroheptanoic acid										
362.8 > 318.7	9.396	9.388	0.008	1.000	24242	0.1095		21.9	110	
10 Perfluorohexane Sulfonate										
398.3 > 79.2	9.419	9.421	-0.002	1.000	26710	NC			46.3	
58 Perfluorohexanesulfonic acid										
398.3 > 79.2	9.419	9.421	-0.002	1.000	26710	0.4868		103		
D 11 18O2 PFHxS										
402.5 > 83.6	9.427	9.422	0.005		1518975	51.2		108	4592	

Signal	RT	EXP RT	DLT RT	REL RT	Response	Amount ng/ml	Ratio(Limits)	%Rec	S/N	Flags
D 12 13C4 PFOA										
416.5 > 371.6	10.509	10.503	0.006		4767875	53.5		107	4857	
13 Perfluorooctanoic acid										
412.8 > 368.8	10.509	10.504	0.005	1.000	22999	0.4622		92.4	50.6	
412.8 > 168.7	10.499	10.504	-0.005	0.999	7461		3.08(0.00-0.00)	92.4	25.8	
39 Perfluoroheptanesulfonic Acid										
448.3 > 79.2	10.509	10.508	0.001	1.000	24080	0.5303		111		
14 Perfluoroheptane Sulfonate										
448.3 > 79.2	10.509	10.508	0.001	1.000	24080	NC			168	
D 16 13C4 PFOS										
502.4 > 79.7	11.467	11.465	0.002		360775	53.5		112	1493	
15 Perfluorooctane sulfonic acid										
498.3 > 79.2	11.467	11.466	0.001	1.000	32668	0.9702		203	158	
498.3 > 98.2	11.467	11.466	0.001	1.000	16176		2.02(0.00-0.00)	203	34.3	
D 17 13C5 PFNA										
467.5 > 422.6	11.487	11.484	0.003		4188406	53.4		107	8199	
18 Perfluorononanoic acid										
462.5 > 418.6	11.487	11.486	0.001	1.000	47631	0.4602		92.0	117	
D 19 13C2 PFDA										
514.4 > 469.5	12.324	12.325	-0.001		5693238	57.0		114	10082	
20 Perfluorodecanoic acid										
512.5 > 468.5	12.324	12.325	-0.001	1.000	47036	0.3978		79.6	120	
D 23 13C8 FOSA										
505.4 > 77.6	12.896	12.893	0.003		5335389	55.3		111	4000	
24 Perfluorooctane Sulfonamide										
497.5 > 77.6	12.896	12.893	0.003	1.000	52319	0.4585		91.7	145	
25 Perfluorodecane Sulfonate										
598.4 > 79.6	12.999	12.996	0.003	1.000	15425	NC			57.5	
49 Perfluorodecane Sulfonic acid										
598.4 > 79.6	12.999	12.996	0.003	1.000	15425	0.4856		101		
27 Perfluoroundecanoic acid										
562.4 > 518.5	13.041	13.042	-0.001	1.000	72984	0.5587		112	82.7	
D 26 13C2 PFUnA										
564.3 > 519.5	13.051	13.044	0.007		5539892	54.6		109	6729	
D 28 13C2 PFDaA										
614.4 > 569.4	13.650	13.646	0.004		5748006	54.5		109	4148	
29 Perfluorododecanoic acid										
612.4 > 568.6	13.650	13.646	0.004	1.000	47512	0.4531		90.6	33.7	
30 Perfluorotridecanoic acid										
662.4 > 618.5	14.171	14.162	0.009	1.000	38636	0.4847		96.9	27.5	
32 Perfluorotetradecanoic acid										
712.6 > 668.5	14.607	14.600	0.007	1.000	33909	0.8041		161	33.0	
D 33 13C2-PFTeDA										
714.5 > 669.5	14.607	14.601	0.006		3887106	51.2		102	3337	
D 35 13C2-PFHxDA										
814.8 > 769.6	15.257	15.255	0.002		1466248	50.3		101	3594	
34 Perfluorohexadecanoic acid										
812.6 > 768.6	15.257	15.255	0.002	1.000	94036	0.4970		99.4	26.5	

Signal	RT	EXP RT	DLT RT	REL RT	Response	Amount ng/ml	Ratio(Limits)	%Rec	S/N	Flags
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36 Perfluorooctadecanoic acid

912.7 > 868.6 15.595 15.593 0.002 1.000 33443 0.5158 103 49.6

QC Flag Legend

Processing Flags

NC - Not Calibrated

Reagents:

LCPFC-L1_00018

Amount Added: 1.00

Units: mL

TestAmerica Sacramento

Data File: \\ChromNA\Sacramento\ChromData\A4\20160525-31065.b\25MAY2016B4A_005.d

Injection Date: 25-May-2016 16:55:09

Instrument ID: A4

Lims ID: Std L1

Client ID:

Operator ID: JRB

ALS Bottle#: 10

Worklist Smp#: 5

Injection Vol: 15.0 ul

Dil. Factor: 1.0000

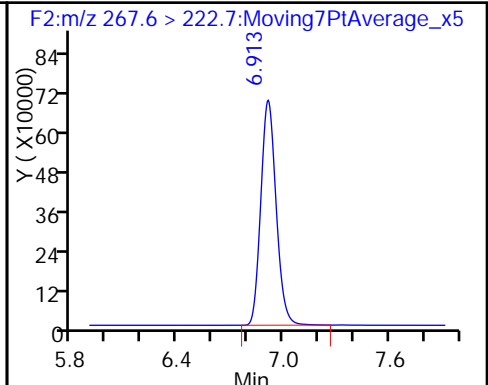
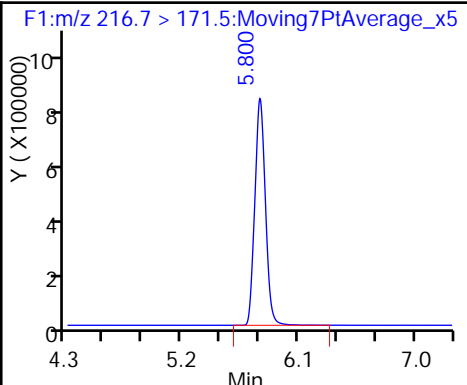
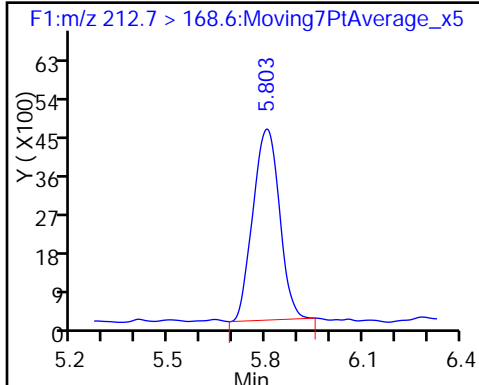
Method: PFAC_A4

Limit Group: LC PFC_DOD ICAL

2 Perfluorobutyric acid

D 1 13C4 PFBA

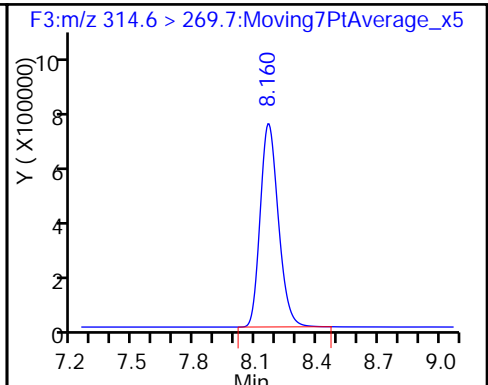
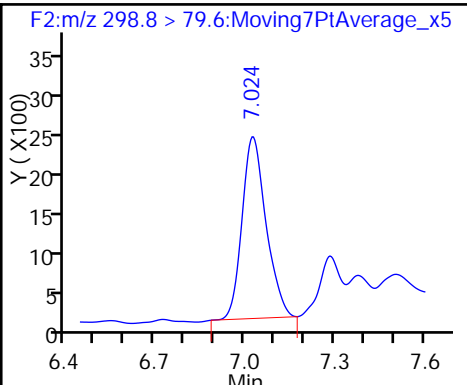
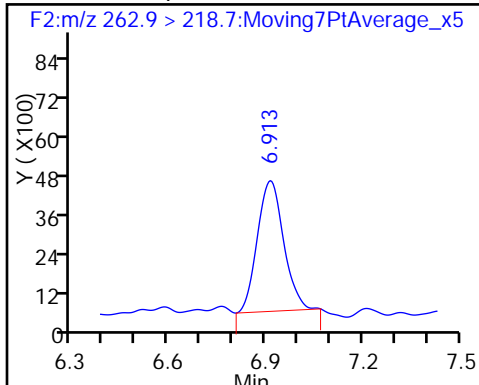
D 3 13C5-PFPeA



4 Perfluoropentanoic acid

51 Perfluorobutanesulfonic acid

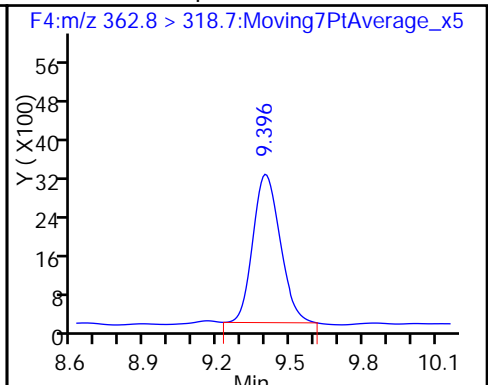
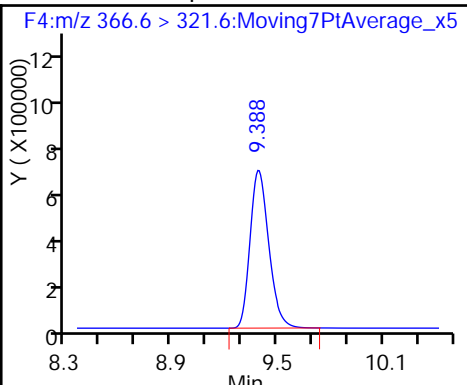
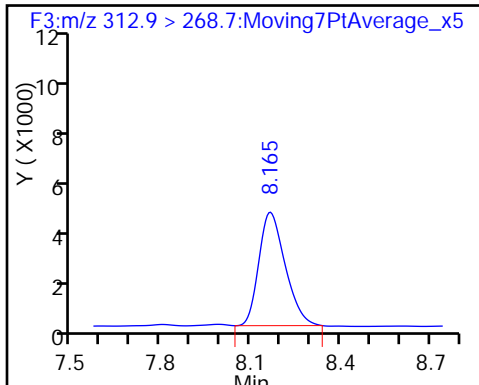
D 6 13C2 PFHxA



7 Perfluorohexanoic acid

D 8 13C4-PFHpA

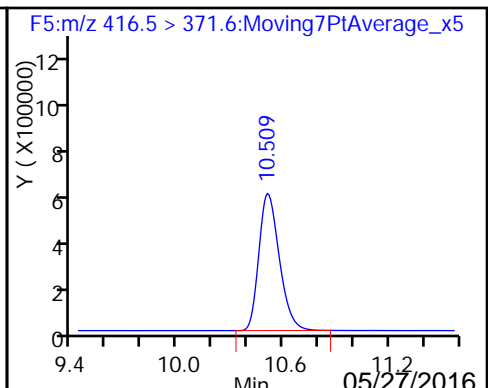
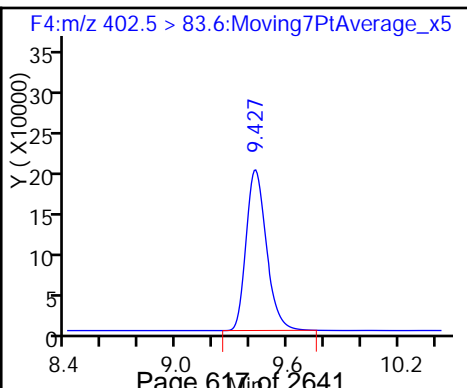
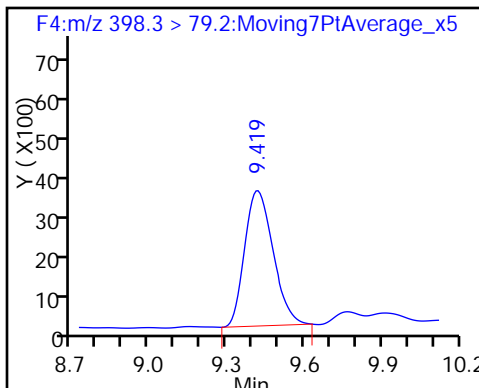
9 Perfluoroheptanoic acid



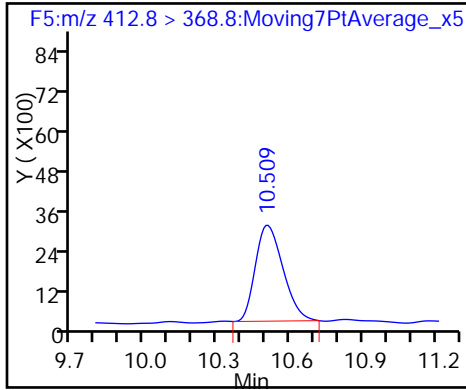
58 Perfluorohexanesulfonic acid

D 11 18O2 PFHxS

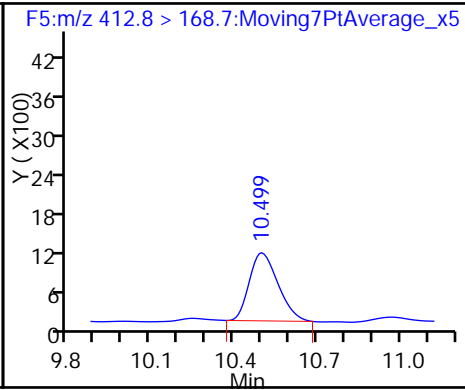
D 12 13C4 PFOA



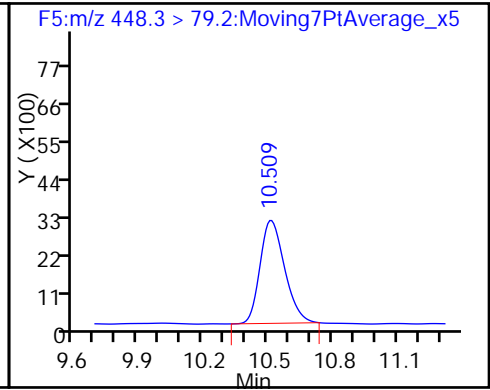
13 Perfluorooctanoic acid



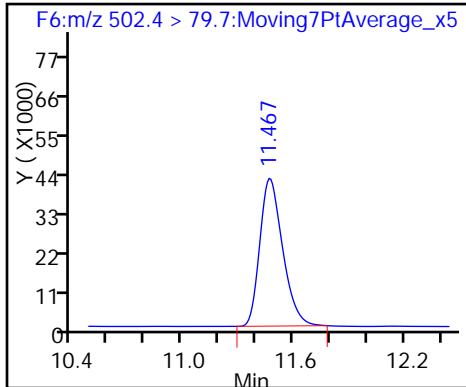
13 Perfluorooctanoic acid



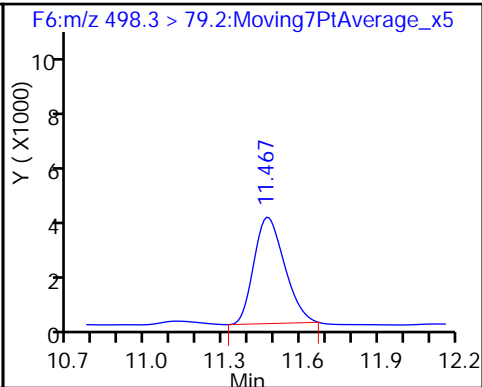
39 Perfluoroheptanesulfonic Acid



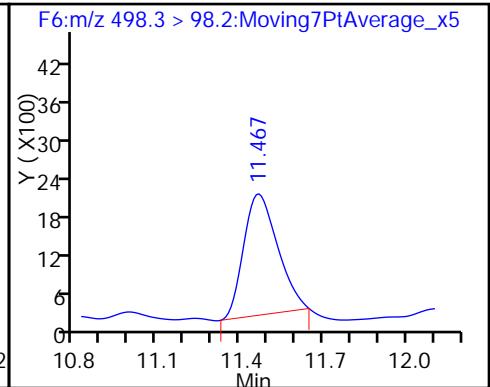
D 16 13C4 PFOS



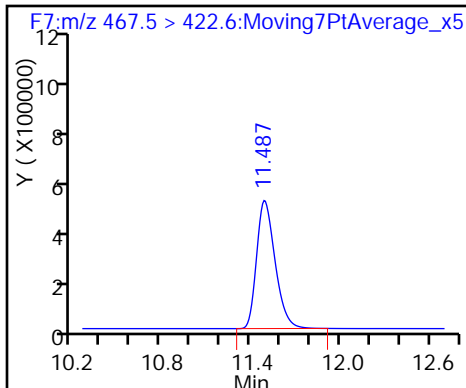
15 Perfluorooctane sulfonic acid



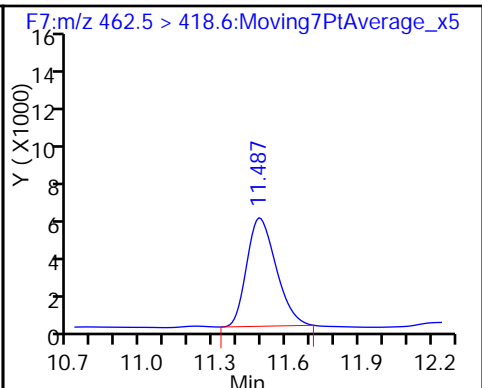
15 Perfluorooctane sulfonic acid



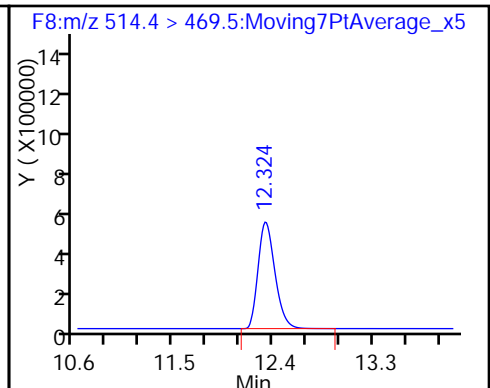
D 17 13C5 PFNA



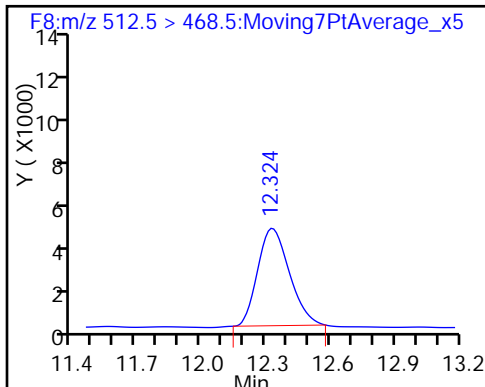
18 Perfluorononanoic acid



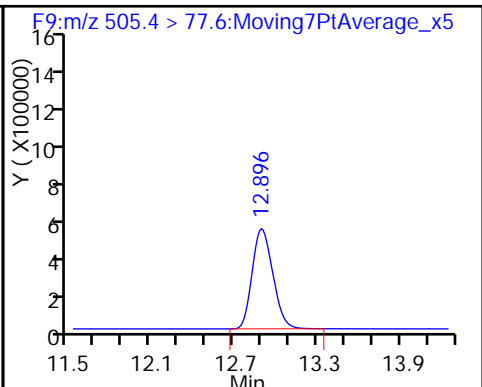
D 19 13C2 PFDA



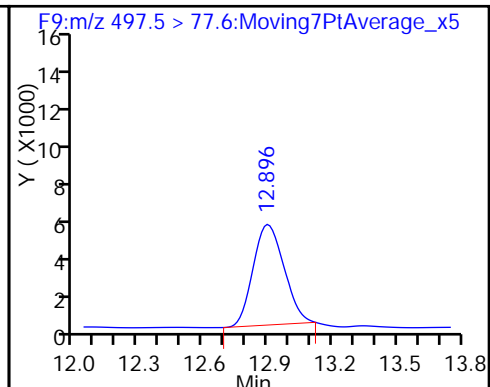
20 Perfluorodecanoic acid



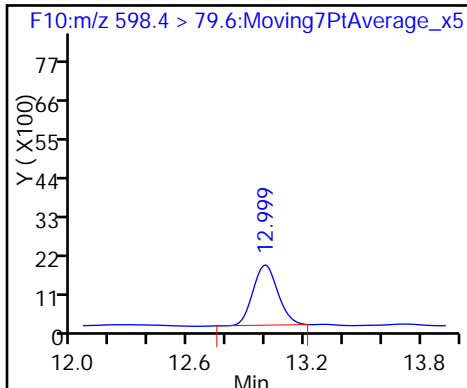
D 23 13C8 FOSA



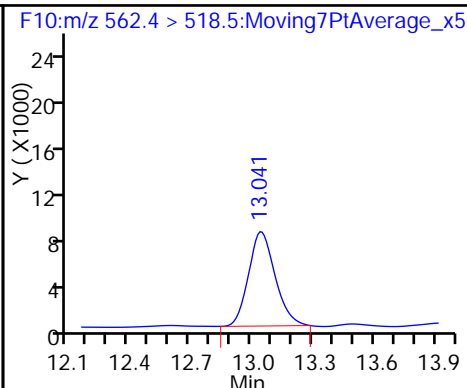
24 Perfluorooctane Sulfonamide



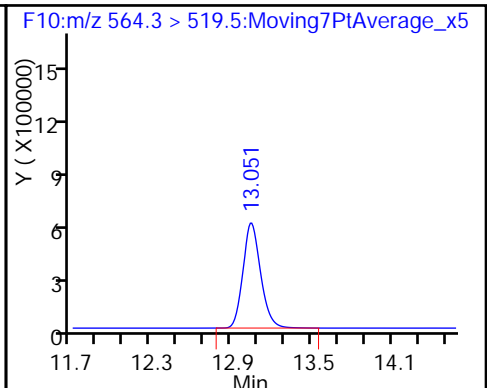
49 Perfluorodecane Sulfonic acid



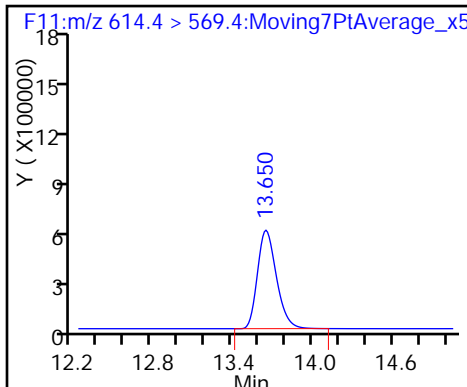
27 Perfluoroundecanoic acid



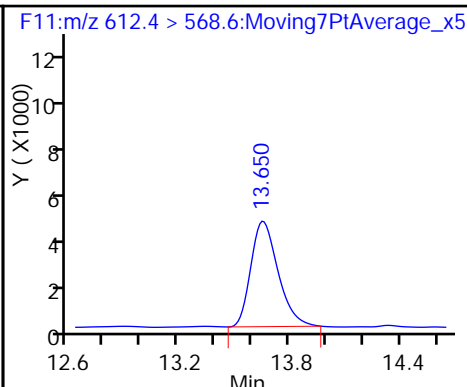
D 26 13C2 PFUnA



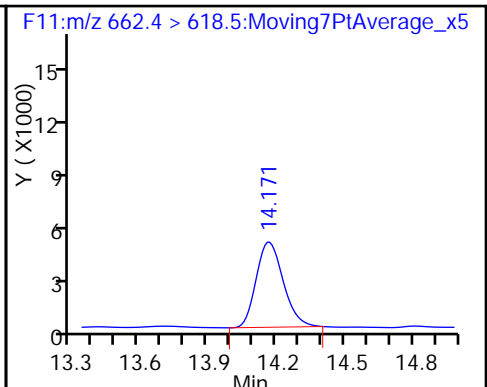
D 28 13C2 PFDaA



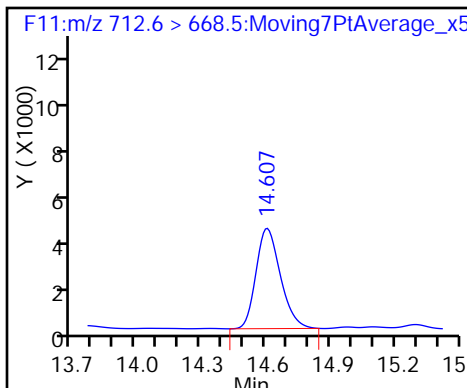
29 Perfluorododecanoic acid



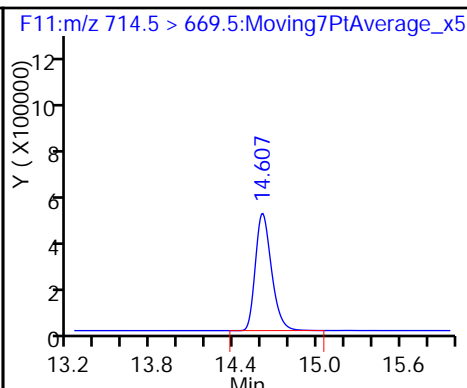
30 Perfluorotridecanoic acid



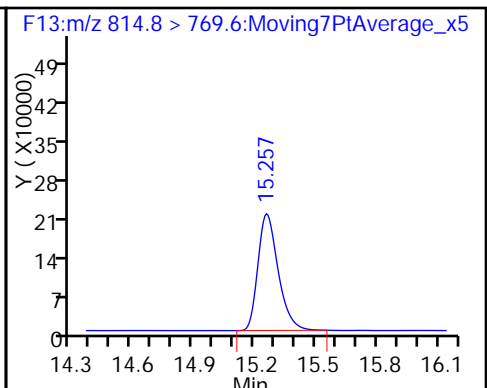
32 Perfluorotetradecanoic acid



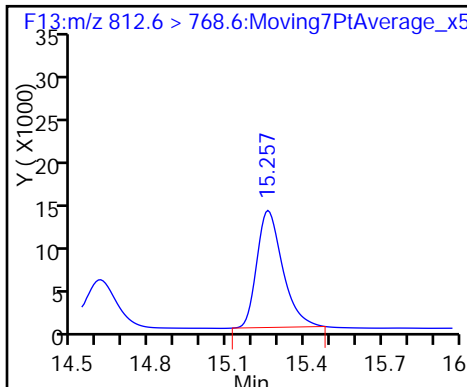
D 33 13C2-PFTeDA



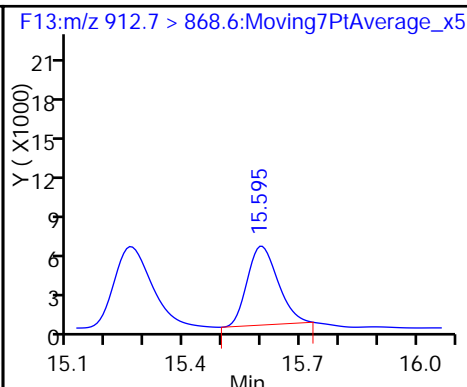
D 35 13C2-PFHxDA



34 Perfluorohexadecanoic acid



36 Perfluorooctadecanoic acid



TestAmerica Sacramento
Target Compound Quantitation Report

Data File: \\ChromNA\Sacramento\ChromData\A4\20160525-31065.b\25MAY2016B4A_006.d
 Lims ID: Std L2
 Client ID:
 Sample Type: IC Calib Level: 2
 Inject. Date: 25-May-2016 17:15:50 ALS Bottle#: 11 Worklist Smp#: 6
 Injection Vol: 15.0 ul Dil. Factor: 1.0000
 Sample Info: STD L2
 Misc. Info.: Acquity BEH C18,1.7u, 3X150mm,T=35C
 Operator ID: JRB Instrument ID: A4
 Sublist: chrom-PFAC_A4*sub12
 Method: \\ChromNA\Sacramento\ChromData\A4\20160525-31065.b\PFAC_A4.m
 Limit Group: LC PFC_DOD ICAL
 Last Update: 27-May-2016 09:59:52 Calib Date: 25-May-2016 19:01:43
 Integrator: Picker
 Quant Method: Isotopic Dilution Quant By: Initial Calibration
 Last ICal File: \\ChromNA\Sacramento\ChromData\A4\20160525-31065.b\25MAY2016B4A_011.d

Column 1 : Det: F1:MRM

Process Host: XAWRK014

First Level Reviewer: barnettj

Date: 25-May-2016 18:13:00

Signal	RT	EXP RT	DLT RT	REL RT	Response	Amount ng/ml	Ratio(Limits)	%Rec	S/N	Flags
2 Perfluorobutyric acid										
212.7 > 168.6	5.797	5.798	-0.001	1.000	54589	0.9078		90.8	227	
D 1 13C4 PFBA										
216.7 > 171.5	5.797	5.798	-0.001		4685114	55.4		111	14887	
D 3 13C5-PFPeA										
267.6 > 222.7	6.904	6.907	-0.003		4405611	57.4		115	10143	
4 Perfluoropentanoic acid										
262.9 > 218.7	6.909	6.910	-0.001	1.000	45680	1.02		102	19.5	
5 Perfluorobutane Sulfonate										
298.8 > 79.6	7.028	7.024	0.004	1.000	26557	NC			53.3	
298.8 > 98.6	7.028	7.024	0.004	1.000	15186		1.75(0.00-0.00)		31.9	
51 Perfluorobutanesulfonic acid										
298.8 > 79.6	7.028	7.024	0.004	1.000	26557	0.9021		102		
D 6 13C2 PFHxA										
314.6 > 269.7	8.155	8.156	-0.001		4660722	56.1		112	9898	
7 Perfluorohexanoic acid										
312.9 > 268.7	8.155	8.157	-0.002	1.000	48716	0.9832		98.3	270	
D 8 13C4-PFHpA										
366.6 > 321.6	9.388	9.387	0.001		4876027	57.0		114	6073	
9 Perfluoroheptanoic acid										
362.8 > 318.7	9.380	9.388	-0.008	1.000	66614	1.01		101	307	
10 Perfluorohexane Sulfonate										
398.3 > 79.2	9.419	9.421	-0.002	1.000	59480	NC			114	
58 Perfluorohexanesulfonic acid										
398.3 > 79.2	9.419	9.421	-0.002	1.000	59480	1.03		109		
D 11 18O2 PFHxS										
402.5 > 83.6	9.419	9.422	-0.003		1600780	53.9		114	3799	

Signal	RT	EXP RT	DLT RT	REL RT	Response	Amount ng/ml	Ratio(Limits)	%Rec	S/N	Flags
D 12 13C4 PFOA										
416.5 > 371.6	10.499	10.503	-0.004		5058838	56.7		113	5920	
13 Perfluorooctanoic acid										
412.8 > 368.8	10.499	10.504	-0.005	1.000	50890	1.04		104	84.7	
412.8 > 168.7	10.508	10.504	0.004	1.001	19193		2.65(0.00-0.00)	104	61.2	
39 Perfluoroheptanesulfonic Acid										
448.3 > 79.2	10.508	10.508	0.0	1.000	53923	0.9601		101		
14 Perfluoroheptane Sulfonate										
448.3 > 79.2	10.508	10.508	0.0	1.000	53923	NC			359	
D 16 13C4 PFOS										
502.4 > 79.7	11.467	11.465	0.002		394903	58.5		122	1542	
15 Perfluorooctane sulfonic acid										
498.3 > 79.2	11.467	11.466	0.001	1.000	73494	1.30		136	215	
498.3 > 98.2	11.467	11.466	0.001	1.000	46925		1.57(0.00-0.00)	136	89.2	
D 17 13C5 PFNA										
467.5 > 422.6	11.487	11.484	0.003		4536292	57.8		116	5606	
18 Perfluorononanoic acid										
462.5 > 418.6	11.487	11.486	0.001	1.000	129381	1.16		116	367	
D 19 13C2 PFDA										
514.4 > 469.5	12.324	12.325	-0.001		5822117	58.3		117	8557	
20 Perfluorodecanoic acid										
512.5 > 468.5	12.324	12.325	-0.001	1.000	117054	0.9679		96.8	254	
D 23 13C8 FOSA										
505.4 > 77.6	12.896	12.893	0.003		5415770	56.1		112	4768	
24 Perfluorooctane Sulfonamide										
497.5 > 77.6	12.896	12.893	0.003	1.000	113427	0.9793		97.9	292	
25 Perfluorodecane Sulfonate										
598.4 > 79.6	12.999	12.996	0.003	1.000	32142	NC			119	
49 Perfluorodecane Sulfonic acid										
598.4 > 79.6	12.999	12.996	0.003	1.000	32142	0.9244		95.9		
27 Perfluoroundecanoic acid										
562.4 > 518.5	13.041	13.042	-0.001	1.000	132732	0.9364		93.6	203	
D 26 13C2 PFUnA										
564.3 > 519.5	13.041	13.044	-0.003		6010665	59.3		119	7574	
D 28 13C2 PFDaA										
614.4 > 569.4	13.650	13.646	0.004		5994993	56.9		114	3402	
29 Perfluorododecanoic acid										
612.4 > 568.6	13.650	13.646	0.004	1.000	96089	0.8786		87.9	51.4	
30 Perfluorotridecanoic acid										
662.4 > 618.5	14.161	14.162	-0.001	1.000	90621	1.10		110	55.8	
32 Perfluorotetradecanoic acid										
712.6 > 668.5	14.598	14.600	-0.002	1.000	48934	1.12		112	50.3	
D 33 13C2-PFTeDA										
714.5 > 669.5	14.598	14.601	-0.003		4011816	52.9		106	3196	
D 35 13C2-PFHxDA										
814.8 > 769.6	15.257	15.255	0.002		1614964	55.4		111	2889	
34 Perfluorohexadecanoic acid										
812.6 > 768.6	15.257	15.255	0.002	1.000	147266	1.02		102	40.2	

Signal	RT	EXP RT	DLT RT	REL RT	Response	Amount ng/ml	Ratio(Limits)	%Rec	S/N	Flags
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36 Perfluorooctadecanoic acid
912.7 > 868.6 15.595 15.593 0.002 1.000 71437 1.00 100 103

QC Flag Legend

Processing Flags

NC - Not Calibrated

Reagents:

LCPFC-L2_00018

Amount Added: 1.00

Units: mL

TestAmerica Sacramento

Data File: \\ChromNA\Sacramento\ChromData\A4\20160525-31065.b\25MAY2016B4A_006.d

Injection Date: 25-May-2016 17:15:50

Instrument ID: A4

Lims ID: Std L2

Client ID:

Operator ID: JRB

ALS Bottle#: 11

Worklist Smp#: 6

Injection Vol: 15.0 ul

Dil. Factor: 1.0000

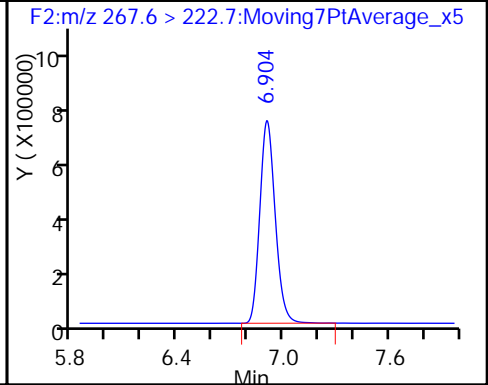
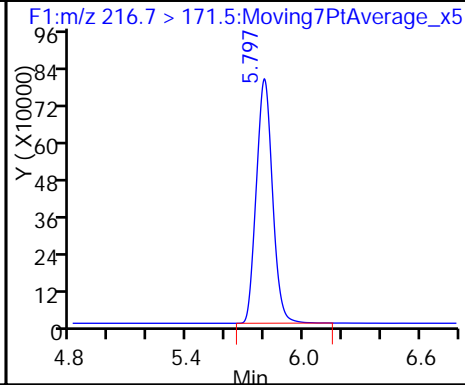
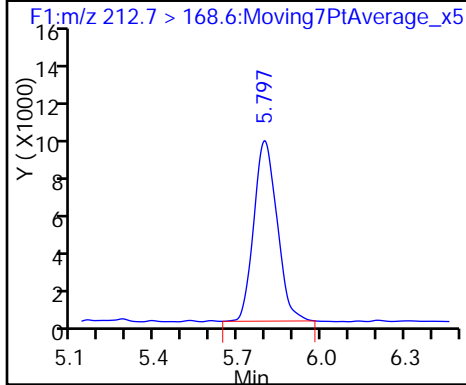
Method: PFAC_A4

Limit Group: LC PFC_DOD ICAL

2 Perfluorobutyric acid

D 1 13C4 PFBA

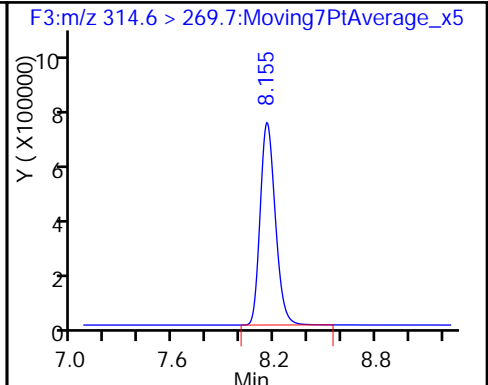
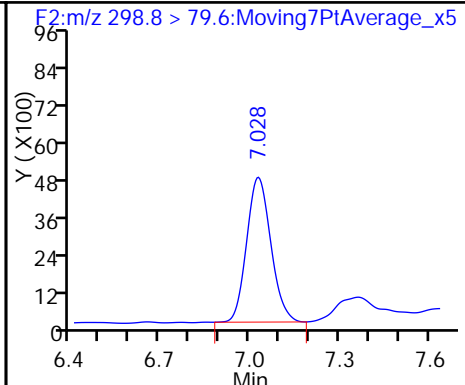
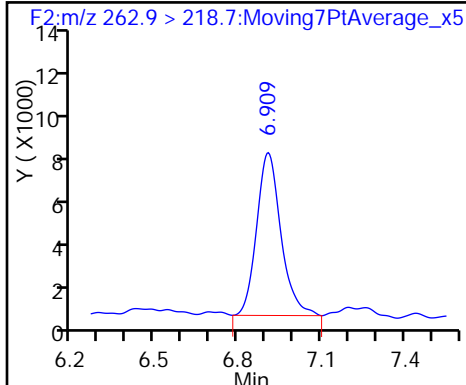
D 3 13C5-PFPeA



4 Perfluoropentanoic acid

51 Perfluorobutanesulfonic acid

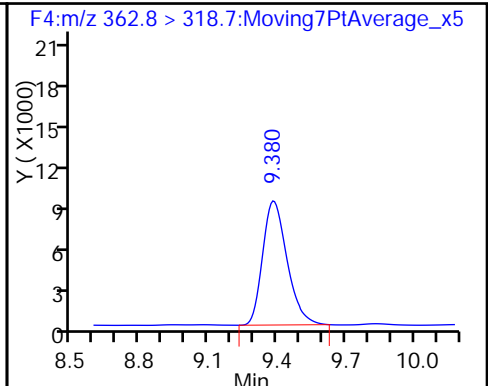
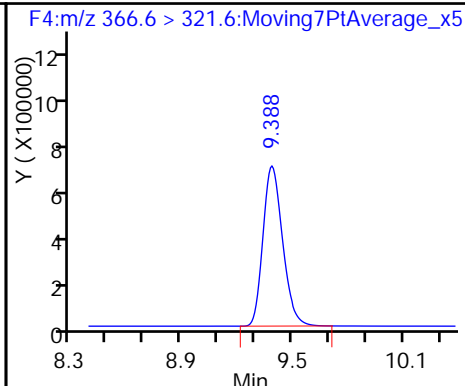
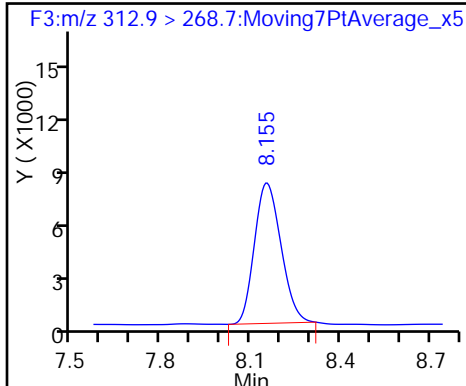
D 6 13C2 PFHxA



7 Perfluorohexanoic acid

D 8 13C4-PFHpA

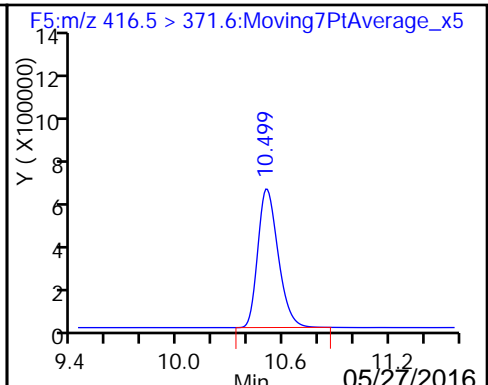
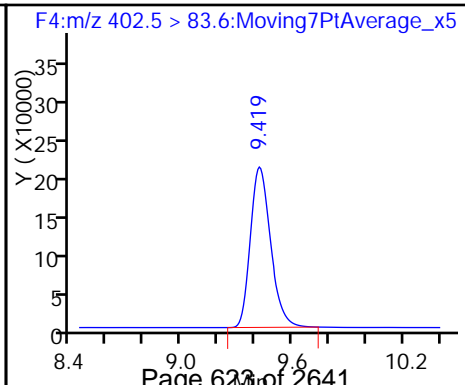
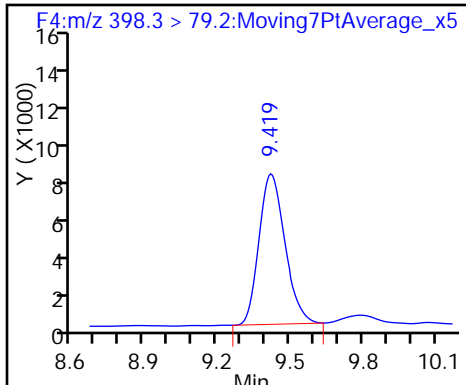
9 Perfluoroheptanoic acid

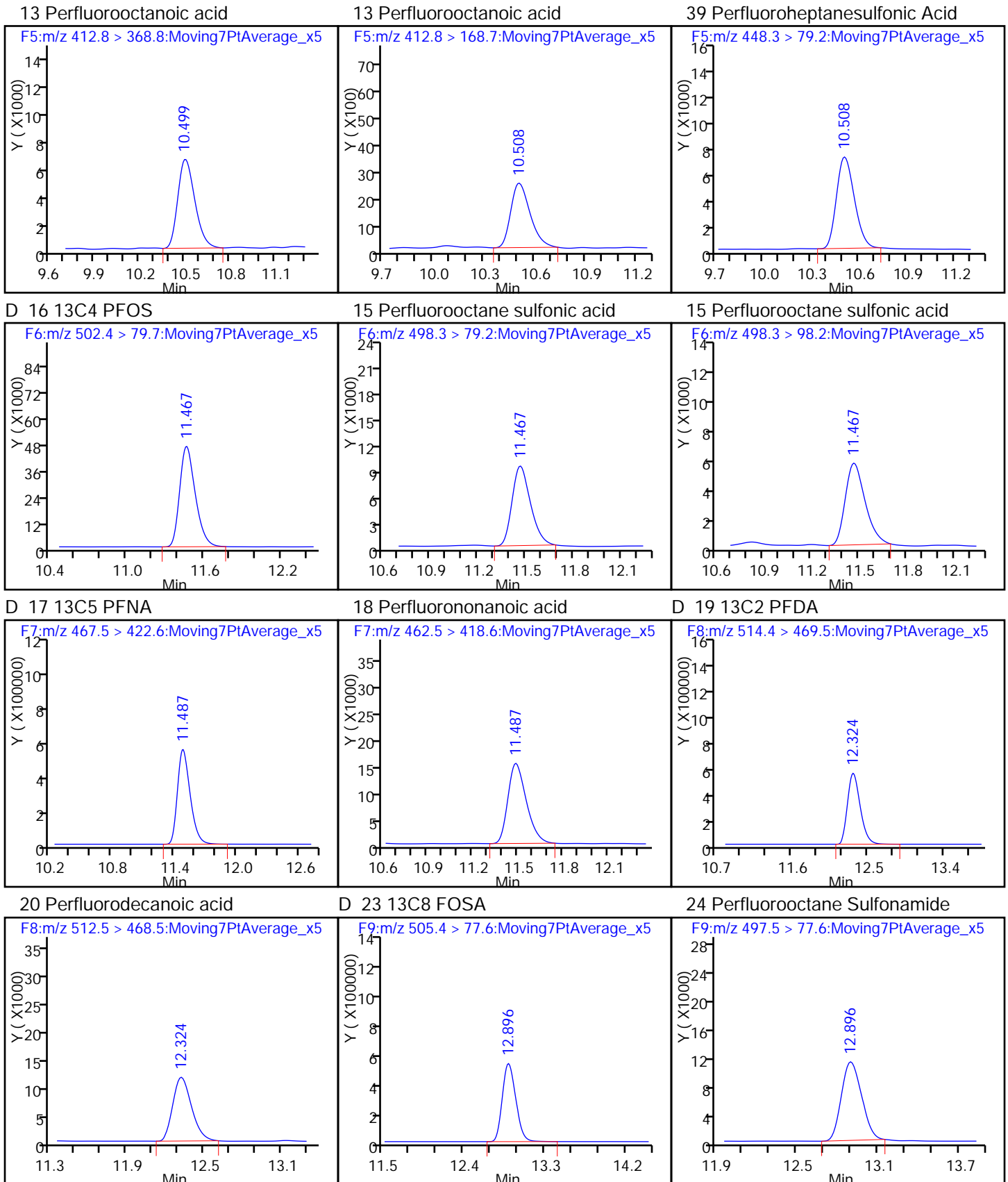


58 Perfluorohexanesulfonic acid

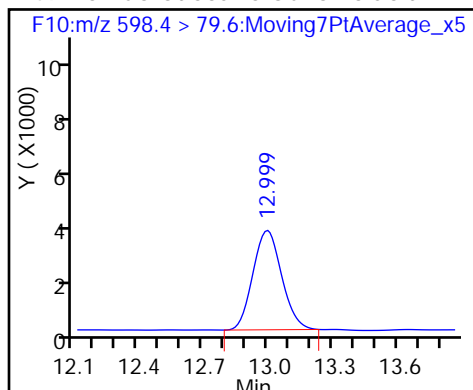
D 11 18O2 PFHxS

D 12 13C4 PFOA

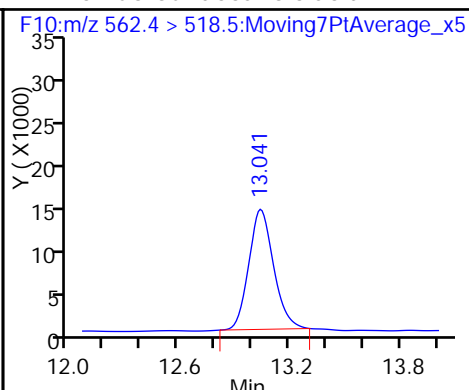




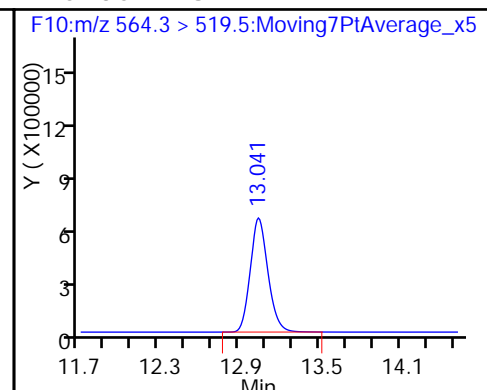
49 Perfluorodecane Sulfonic acid



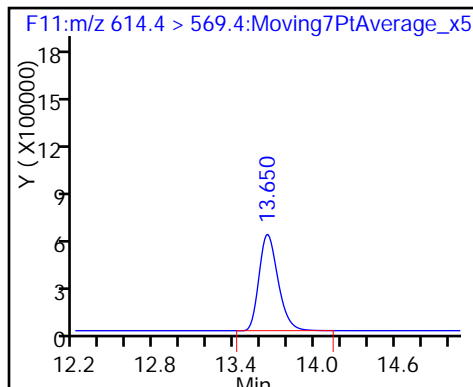
27 Perfluoroundecanoic acid



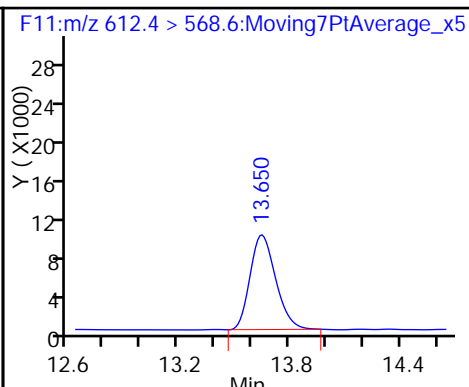
D 26 13C2 PFUnA



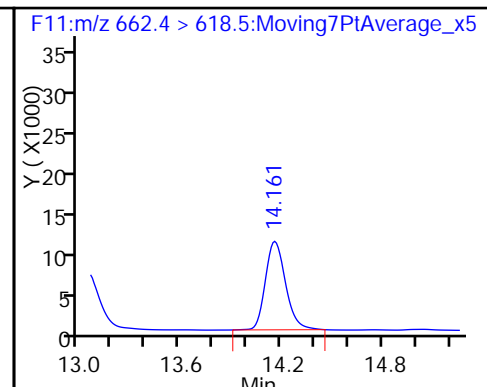
D 28 13C2 PFDaA



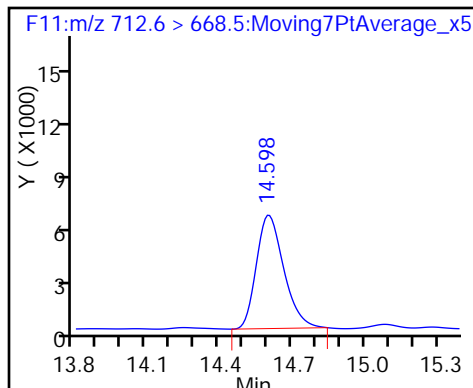
29 Perfluorododecanoic acid



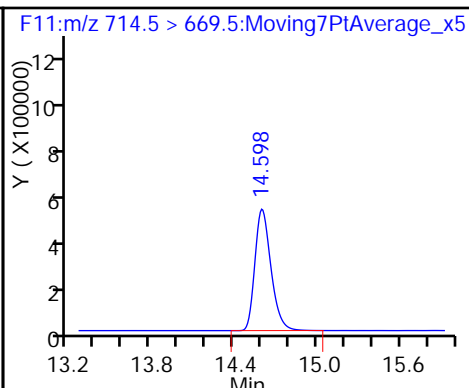
30 Perfluorotridecanoic acid



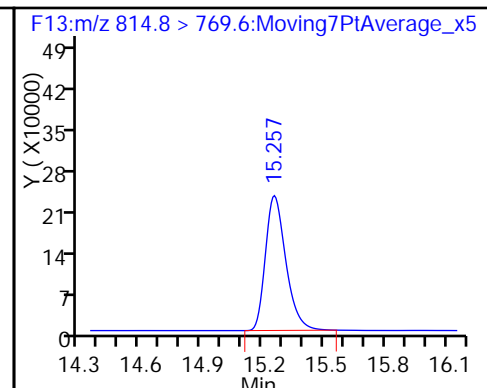
32 Perfluorotetradecanoic acid



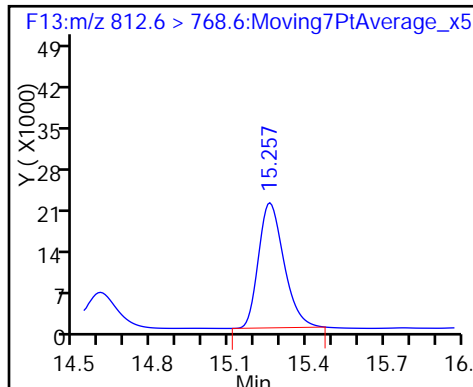
D 33 13C2-PFTeDA



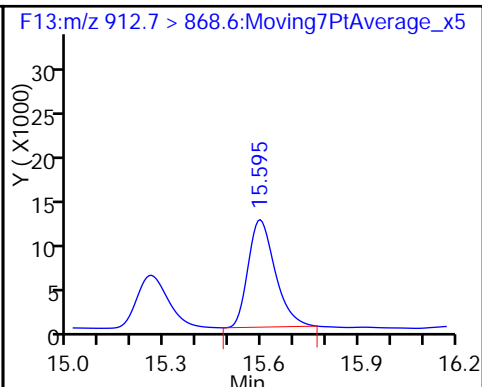
D 35 13C2-PFHxDA



34 Perfluorohexadecanoic acid



36 Perfluorooctadecanoic acid



TestAmerica Sacramento
Target Compound Quantitation Report

Data File: \\ChromNA\Sacramento\ChromData\A4\20160525-31065.b\25MAY2016B4A_007.d
 Lims ID: Std L3
 Client ID:
 Sample Type: IC Calib Level: 3
 Inject. Date: 25-May-2016 17:36:58 ALS Bottle#: 12 Worklist Smp#: 7
 Injection Vol: 15.0 ul Dil. Factor: 1.0000
 Sample Info: STD L3
 Misc. Info.: Acquity BEH C18,1.7u, 3X150mm,T=35C
 Operator ID: JRB Instrument ID: A4
 Sublist: chrom-PFAC_A4*sub12
 Method: \\ChromNA\Sacramento\ChromData\A4\20160525-31065.b\PFAC_A4.m
 Limit Group: LC PFC_DOD ICAL
 Last Update: 27-May-2016 09:59:54 Calib Date: 25-May-2016 19:01:43
 Integrator: Picker
 Quant Method: Isotopic Dilution Quant By: Initial Calibration
 Last ICal File: \\ChromNA\Sacramento\ChromData\A4\20160525-31065.b\25MAY2016B4A_011.d

Column 1 : Det: F1:MRM

Process Host: XAWRK014

First Level Reviewer: barnettj

Date: 27-May-2016 09:55:50

Signal	RT	EXP RT	DLT RT	REL RT	Response	Amount ng/ml	Ratio(Limits)	%Rec	S/N	Flags
2 Perfluorobutyric acid										
212.7 > 168.6	5.797	5.798	-0.001	1.000	297640	5.21		104	1398	
D 1 13C4 PFBA										
216.7 > 171.5	5.797	5.798	-0.001		4448328	52.6		105	16101	
D 3 13C5-PFPeA										
267.6 > 222.7	6.909	6.907	0.002		3991347	52.0		104	6618	
4 Perfluoropentanoic acid										
262.9 > 218.7	6.913	6.910	0.003	1.000	208712	5.15		103	94.5	
5 Perfluorobutane Sulfonate										
298.8 > 79.6	7.024	7.024	0.0	1.000	98828	NC			240	
298.8 > 98.6	7.024	7.024	0.0	1.000	65179		1.52(0.00-0.00)		142	
51 Perfluorobutanesulfonic acid										
298.8 > 79.6	7.024	7.024	0.0	1.000	98828	3.99		90.3		
D 6 13C2 PFHxA										
314.6 > 269.7	8.160	8.156	0.004		4410855	53.1		106	9884	
7 Perfluorohexanoic acid										
312.9 > 268.7	8.160	8.157	0.003	1.000	221266	5.41		108	858	
D 8 13C4-PFHpA										
366.6 > 321.6	9.388	9.387	0.001		4653428	54.4		109	7627	
9 Perfluoroheptanoic acid										
362.8 > 318.7	9.388	9.388	0.0	1.000	229994	4.75		95.0	663	
10 Perfluorohexane Sulfonate										
398.3 > 79.2	9.419	9.421	-0.002	1.000	253682	NC			474	
58 Perfluorohexanesulfonic acid										
398.3 > 79.2	9.419	9.421	-0.002	1.000	253682	4.56		96.4		
D 11 18O2 PFHxS										
402.5 > 83.6	9.419	9.422	-0.003		1539364	51.9		110	4335	

Signal	RT	EXP RT	DLT RT	REL RT	Response	Amount ng/ml	Ratio(Limits)	%Rec	S/N	Flags
D 12 13C4 PFOA										
416.5 > 371.6	10.502	10.503	-0.001		4731111	53.1		106	8520	
13 Perfluorooctanoic acid										
412.8 > 368.8	10.502	10.504	-0.002	1.000	229522	5.29		106	435	
412.8 > 168.7	10.511	10.504	0.007	1.001	76842		2.99(0.00-0.00)	106	335	
39 Perfluoroheptanesulfonic Acid										
448.3 > 79.2	10.502	10.508	-0.006	1.000	260465	4.74		99.7		
14 Perfluoroheptane Sulfonate										
448.3 > 79.2	10.502	10.508	-0.006	1.000	260465	NC			1116	
D 16 13C4 PFOS										
502.4 > 79.7	11.461	11.465	-0.004		346744	51.4		107	1150	
15 Perfluorooctane sulfonic acid										
498.3 > 79.2	11.461	11.466	-0.005	1.000	400180	4.60		96.3	1500	
498.3 > 98.2	11.470	11.466	0.004	1.001	222000		1.80(0.00-0.00)	96.3	444	
D 17 13C5 PFNA										
467.5 > 422.6	11.480	11.484	-0.004		4259193	54.3		109	7438	
18 Perfluorononanoic acid										
462.5 > 418.6	11.480	11.486	-0.006	1.000	540290	5.15		103	1060	
D 19 13C2 PFDA										
514.4 > 469.5	12.327	12.325	0.002		5669119	56.7		113	5615	
20 Perfluorodecanoic acid										
512.5 > 468.5	12.327	12.325	0.002	1.000	597671	5.08		102	1438	
D 23 13C8 FOSA										
505.4 > 77.6	12.888	12.893	-0.005		5300712	54.9		110	4612	
24 Perfluorooctane Sulfonamide										
497.5 > 77.6	12.888	12.893	-0.005	1.000	588024	5.19		104	1148	
25 Perfluorodecane Sulfonate										
598.4 > 79.6	12.991	12.996	-0.005	1.000	165005	NC			776	
49 Perfluorodecane Sulfonic acid										
598.4 > 79.6	12.991	12.996	-0.005	1.000	165005	5.40		112		
27 Perfluoroundecanoic acid										
562.4 > 518.5	13.044	13.042	0.002	1.000	644718	5.02		100	788	
D 26 13C2 PFUnA										
564.3 > 519.5	13.044	13.044	0.0		5441575	53.7		107	5474	
D 28 13C2 PFDaA										
614.4 > 569.4	13.644	13.646	-0.002		5430267	51.5		103	3396	
29 Perfluorododecanoic acid										
612.4 > 568.6	13.644	13.646	-0.002	1.000	548185	5.53		111	336	
30 Perfluorotridecanoic acid										
662.4 > 618.5	14.154	14.162	-0.008	1.000	442855	5.64		113	232	
32 Perfluorotetradecanoic acid										
712.6 > 668.5	14.592	14.600	-0.008	1.000	194966	4.69		93.8	149	
D 33 13C2-PFTeDA										
714.5 > 669.5	14.602	14.601	0.001		3830217	50.5		101	2935	
D 35 13C2-PFHxDA										
814.8 > 769.6	15.252	15.255	-0.003		1499037	51.4		103	3014	
34 Perfluorohexadecanoic acid										
812.6 > 768.6	15.252	15.255	-0.003	1.000	429422	4.82		96.4	104	

Signal	RT	EXP RT	DLT RT	REL RT	Response	Amount ng/ml	Ratio(Limits)	%Rec	S/N	Flags
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36 Perfluorooctadecanoic acid
912.7 > 868.6 15.591 15.593 -0.002 1.000 333192 5.03 101 456

QC Flag Legend

Processing Flags

NC - Not Calibrated

Reagents:

LCPFC-L3_00016

Amount Added: 1.00

Units: mL

TestAmerica Sacramento

Data File: \\ChromNA\Sacramento\ChromData\A4\20160525-31065.b\25MAY2016B4A_007.d

Injection Date: 25-May-2016 17:36:58

Instrument ID: A4

Lims ID: Std L3

Client ID:

Operator ID: JRB

ALS Bottle#: 12

Worklist Smp#: 7

Injection Vol: 15.0 ul

Dil. Factor: 1.0000

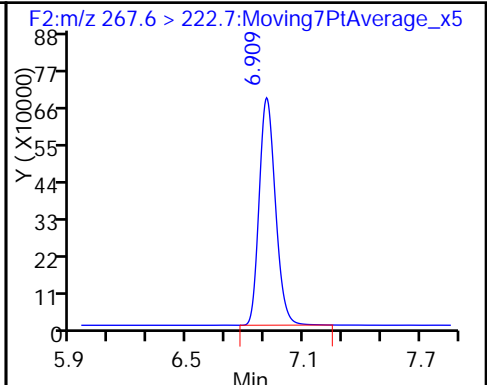
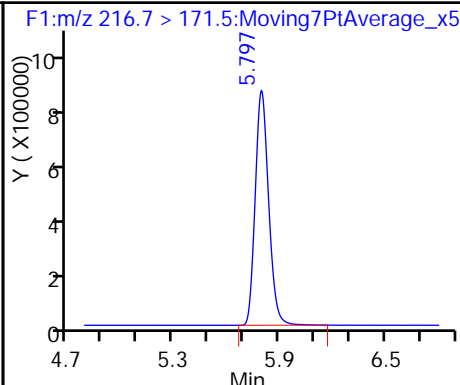
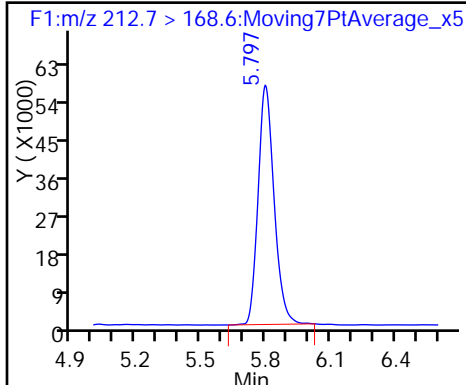
Method: PFAC_A4

Limit Group: LC PFC_DOD ICAL

2 Perfluorobutyric acid

D 1 13C4 PFBA

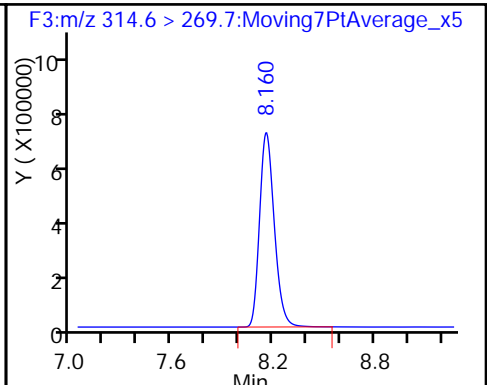
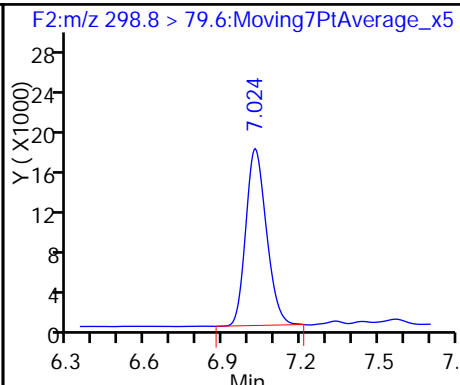
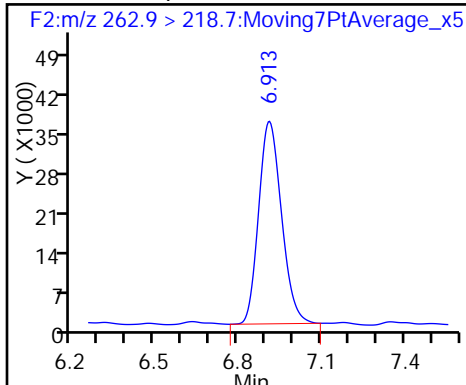
D 3 13C5-PFPeA



4 Perfluoropentanoic acid

51 Perfluorobutanesulfonic acid

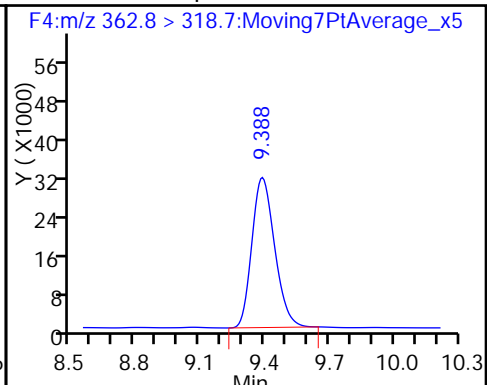
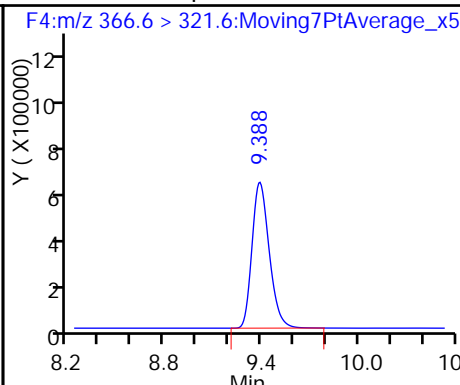
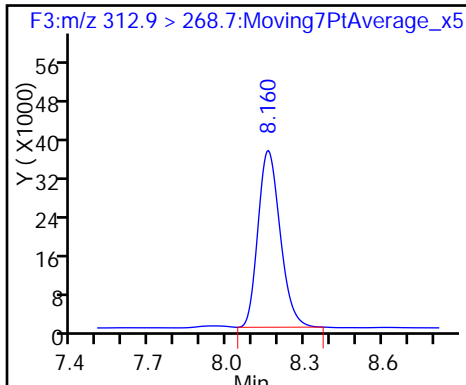
D 6 13C2 PFHxA



7 Perfluorohexanoic acid

D 8 13C4-PFHpA

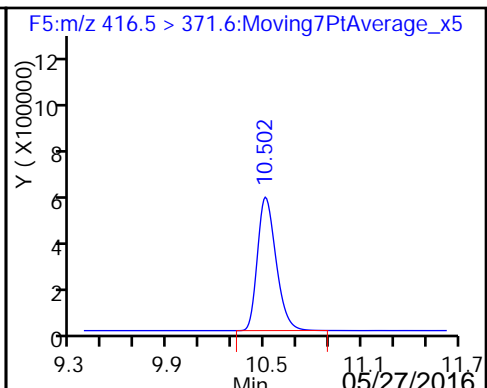
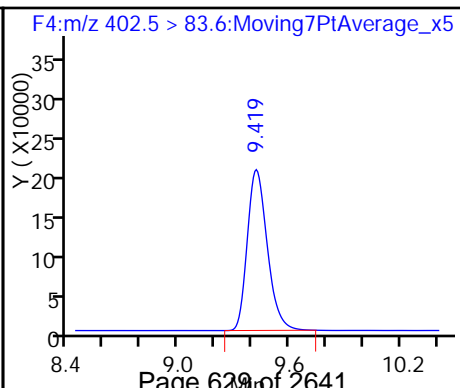
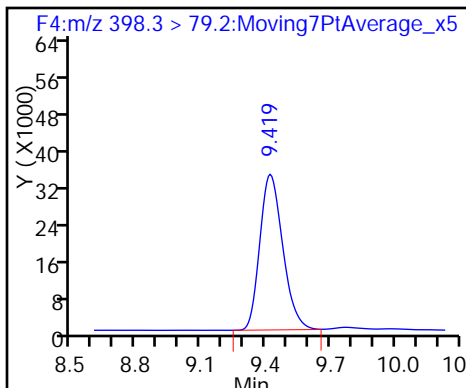
9 Perfluoroheptanoic acid

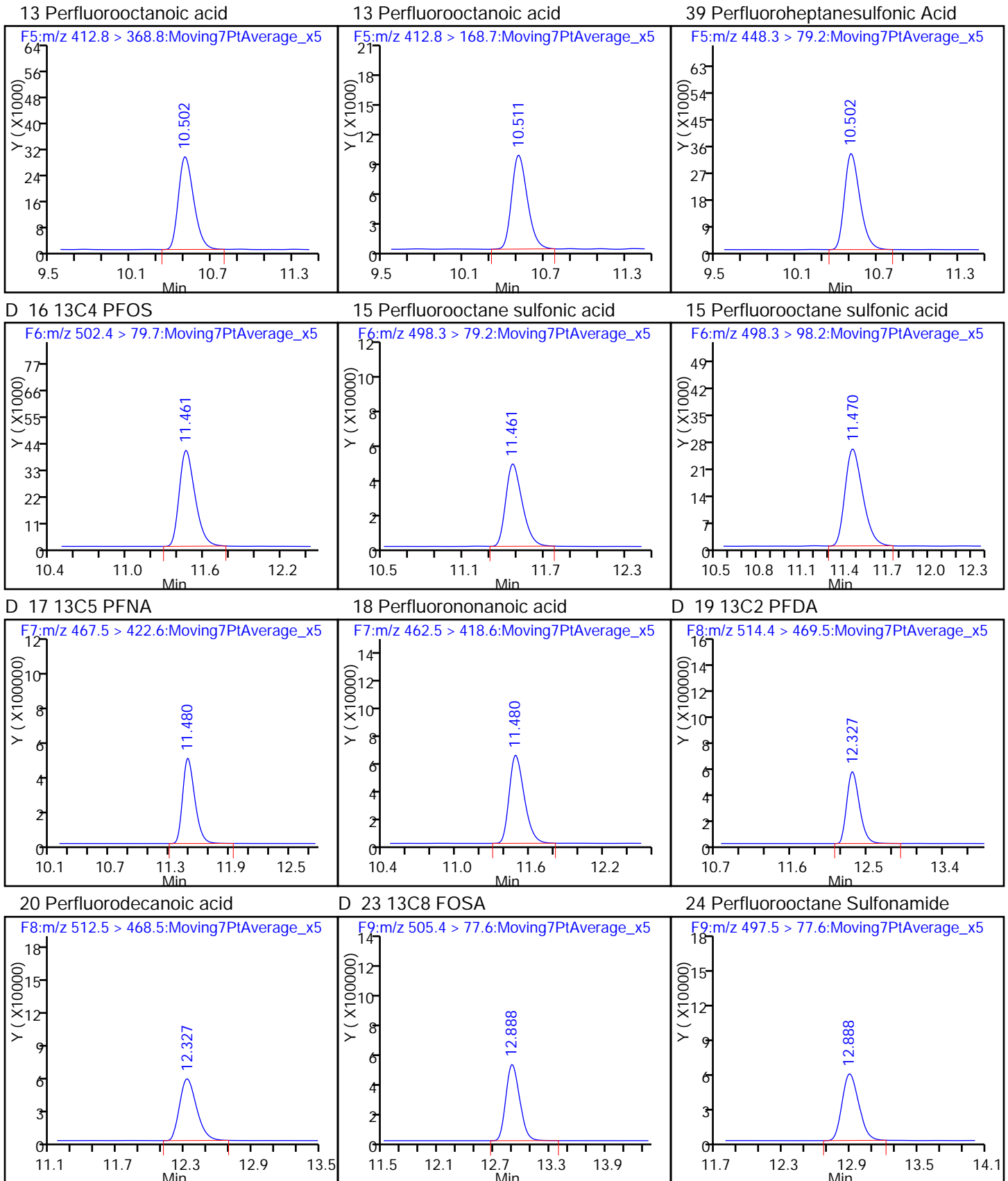


58 Perfluorohexanesulfonic acid

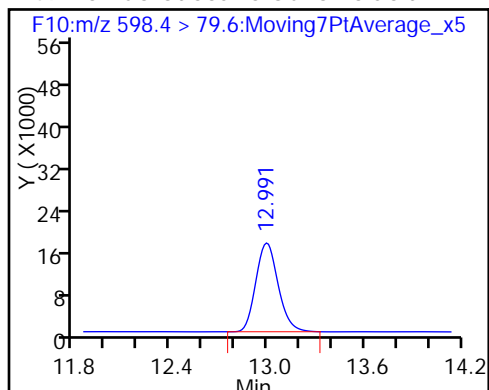
D 11 18O2 PFHxS

D 12 13C4 PFOA

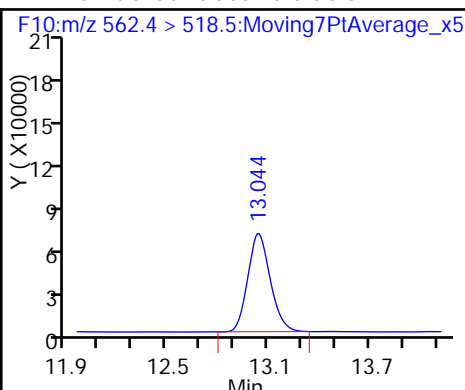




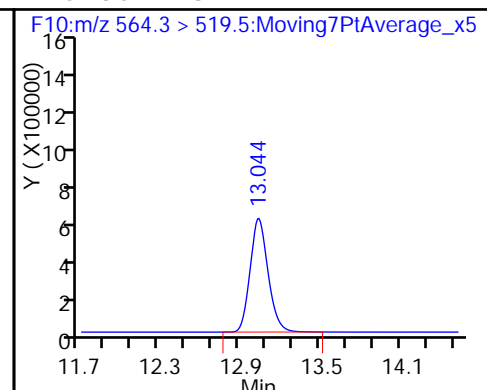
49 Perfluorodecane Sulfonic acid



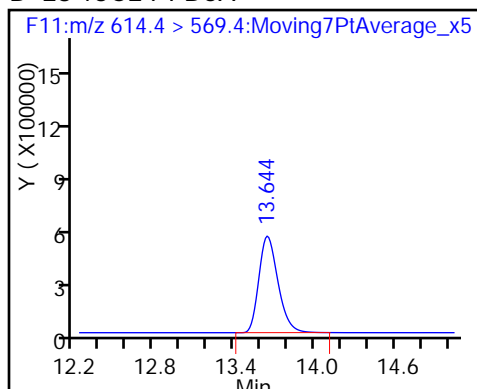
27 Perfluoroundecanoic acid



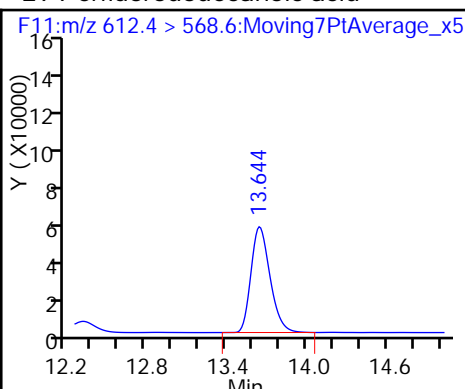
D 26 13C2 PFUnA



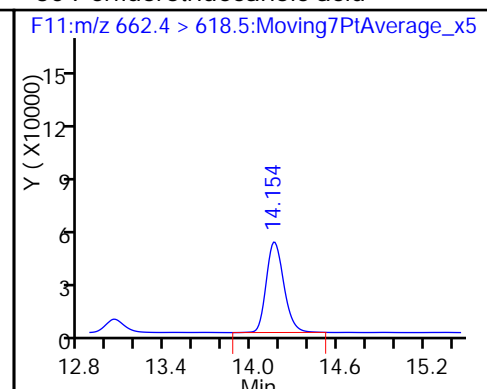
D 28 13C2 PFDaA



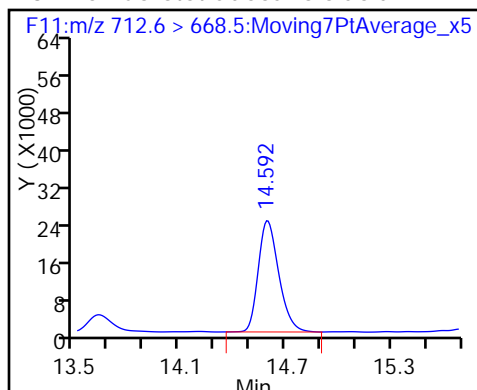
29 Perfluorododecanoic acid



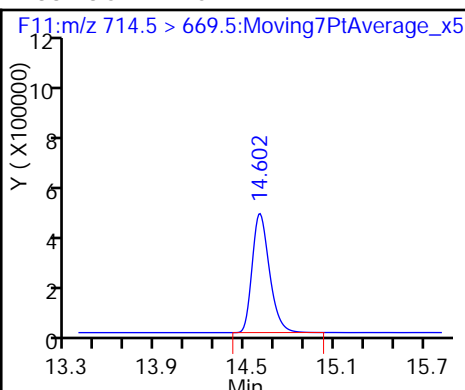
30 Perfluorotridecanoic acid



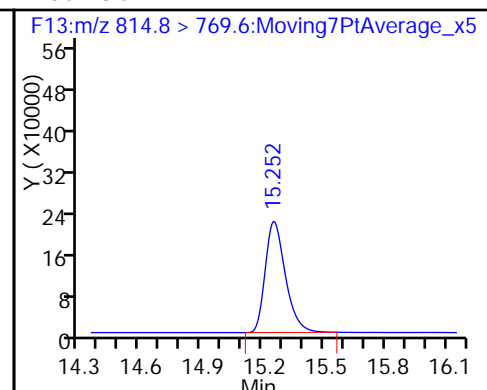
32 Perfluorotetradecanoic acid



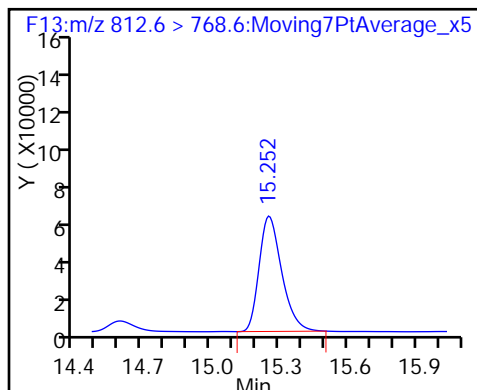
D 33 13C2-PFTeDA



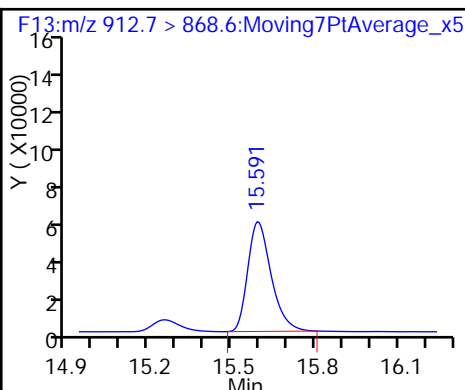
D 35 13C2-PFHxDA



34 Perfluorohexadecanoic acid



36 Perfluorooctadecanoic acid



TestAmerica Sacramento
Target Compound Quantitation Report

Data File: \\ChromNA\Sacramento\ChromData\A4\20160525-31065.b\25MAY2016B4A_008.d
 Lims ID: Std L4
 Client ID:
 Sample Type: IC Calib Level: 4
 Inject. Date: 25-May-2016 17:58:10 ALS Bottle#: 13 Worklist Smp#: 8
 Injection Vol: 15.0 ul Dil. Factor: 1.0000
 Sample Info: STD L4
 Misc. Info.: Acquity BEH C18,1.7u, 3X150mm,T=35C
 Operator ID: JRB Instrument ID: A4
 Sublist: chrom-PFAC_A4*sub12
 Method: \\ChromNA\Sacramento\ChromData\A4\20160525-31065.b\PFAC_A4.m
 Limit Group: LC PFC_DOD ICAL
 Last Update: 27-May-2016 09:59:55 Calib Date: 25-May-2016 19:01:43
 Integrator: Picker
 Quant Method: Isotopic Dilution Quant By: Initial Calibration
 Last ICal File: \\ChromNA\Sacramento\ChromData\A4\20160525-31065.b\25MAY2016B4A_011.d

Column 1 : Det: F1:MRM

Process Host: XAWRK014

First Level Reviewer: barnettj

Date: 25-May-2016 19:09:55

Signal	RT	EXP RT	DLT RT	REL RT	Response	Amount ng/ml	Ratio(Limits)	%Rec	S/N	Flags
2 Perfluorobutyric acid										
212.7 > 168.6	5.797	5.798	-0.001	1.000	1071850	18.2		90.9	3903	
D 1 13C4 PFBA										
216.7 > 171.5	5.800	5.798	0.002		4591623	54.3		109	17146	
D 3 13C5-PFPeA										
267.6 > 222.7	6.904	6.907	-0.003		3991474	52.0		104	7812	
4 Perfluoropentanoic acid										
262.9 > 218.7	6.909	6.910	-0.001	1.000	776204	19.1		95.7	360	
5 Perfluorobutane Sulfonate										
298.8 > 79.6	7.024	7.024	0.0	1.000	360125	NC			703	
298.8 > 98.6	7.024	7.024	0.0	1.000	244125		1.48(0.00-0.00)		548	
51 Perfluorobutanesulfonic acid										
298.8 > 79.6	7.024	7.024	0.0	1.000	360125	16.7		94.5		
D 6 13C2 PFHxA										
314.6 > 269.7	8.155	8.156	-0.001		4438990	53.5		107	7931	
7 Perfluorohexanoic acid										
312.9 > 268.7	8.155	8.157	-0.002	1.000	721387	17.9		89.6	1491	
D 8 13C4-PFHpA										
366.6 > 321.6	9.388	9.387	0.001		4352241	50.9		102	7598	
9 Perfluoroheptanoic acid										
362.8 > 318.7	9.388	9.388	0.0	1.000	762273	17.9		89.4	2345	
10 Perfluorohexane Sulfonate										
398.3 > 79.2	9.419	9.421	-0.002	1.000	836825	NC			1573	
58 Perfluorohexanesulfonic acid										
398.3 > 79.2	9.419	9.421	-0.002	1.000	836825	16.7		88.5		
D 11 18O2 PFHxS										
402.5 > 83.6	9.419	9.422	-0.003		1383940	46.6		98.6	2880	

Signal	RT	EXP RT	DLT RT	REL RT	Response	Amount ng/ml	Ratio(Limits)	%Rec	S/N	Flags
D 12 13C4 PFOA										
416.5 > 371.6	10.502	10.503	-0.001		4400676	49.4		98.7	8204	
13 Perfluorooctanoic acid										
412.8 > 368.8	10.502	10.504	-0.002	1.000	740049	18.5		92.6	1413	
412.8 > 168.7	10.502	10.504	-0.002	1.000	254003		2.91(0.00-0.00)	92.6	1124	
39 Perfluoroheptanesulfonic Acid										
448.3 > 79.2	10.511	10.508	0.003	1.000	874389	15.8		82.9		
14 Perfluoroheptane Sulfonate										
448.3 > 79.2	10.511	10.508	0.003	1.000	874389	NC			1812	
D 16 13C4 PFOS										
502.4 > 79.7	11.461	11.465	-0.004		343813	50.9		107	1367	
15 Perfluorooctane sulfonic acid										
498.3 > 79.2	11.470	11.466	0.004	1.000	1353901	14.1		73.8	2350	
498.3 > 98.2	11.461	11.466	-0.005	0.999	818357		1.65(0.00-0.00)	73.8	1126	
D 17 13C5 PFNA										
467.5 > 422.6	11.480	11.484	-0.004		4095685	52.2		104	5733	
18 Perfluorononanoic acid										
462.5 > 418.6	11.480	11.486	-0.006	1.000	1866863	18.5		92.6	3372	
D 19 13C2 PFDA										
514.4 > 469.5	12.327	12.325	0.002		4909456	49.1		98.3	6069	
20 Perfluorodecanoic acid										
512.5 > 468.5	12.327	12.325	0.002	1.000	2122830	20.8		104	2631	
D 23 13C8 FOSA										
505.4 > 77.6	12.888	12.893	-0.005		5285513	54.8		110	5392	
24 Perfluorooctane Sulfonamide										
497.5 > 77.6	12.888	12.893	-0.005	1.000	2104314	18.6		93.1	2345	
25 Perfluorodecane Sulfonate										
598.4 > 79.6	12.991	12.996	-0.005	1.000	522503	NC			1398	
49 Perfluorodecane Sulfonic acid										
598.4 > 79.6	12.991	12.996	-0.005	1.000	522503	17.3		89.5		
27 Perfluoroundecanoic acid										
562.4 > 518.5	13.044	13.042	0.002	1.000	2308031	18.4		92.0	2547	
D 26 13C2 PFUnA										
564.3 > 519.5	13.044	13.044	0.0		5319223	52.5		105	6022	
D 28 13C2 PFDaA										
614.4 > 569.4	13.644	13.646	-0.002		5576489	52.9		106	2954	
29 Perfluorododecanoic acid										
612.4 > 568.6	13.644	13.646	-0.002	1.000	1916429	18.8		94.2	936	
30 Perfluorotridecanoic acid										
662.4 > 618.5	14.164	14.162	0.002	1.000	1515996	18.6		93.0	875	
32 Perfluorotetradecanoic acid										
712.6 > 668.5	14.602	14.600	0.002	1.000	701642	16.3		81.4	530	
D 33 13C2-PFTeDA										
714.5 > 669.5	14.602	14.601	0.001		3973031	52.3		105	2966	
D 35 13C2-PFHxDA										
814.8 > 769.6	15.252	15.255	-0.003		1482695	50.9		102	2650	
34 Perfluorohexadecanoic acid										
812.6 > 768.6	15.252	15.255	-0.003	1.000	1427552	18.0		89.8	327	

Signal	RT	EXP RT	DLT RT	REL RT	Response	Amount ng/ml	Ratio(Limits)	%Rec	S/N	Flags
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36 Perfluorooctadecanoic acid

912.7 > 868.6 15.591 15.593 -0.002 1.000 1188460 18.1 90.6 1236

QC Flag Legend

Processing Flags

NC - Not Calibrated

Reagents:

LCPFC-L4_00018

Amount Added: 1.00

Units: mL

TestAmerica Sacramento

Data File: \\ChromNA\Sacramento\ChromData\A4\20160525-31065.b\25MAY2016B4A_008.d

Injection Date: 25-May-2016 17:58:10

Instrument ID: A4

Lims ID: Std L4

Client ID:

Operator ID: JRB

ALS Bottle#: 13

Worklist Smp#: 8

Injection Vol: 15.0 ul

Dil. Factor: 1.0000

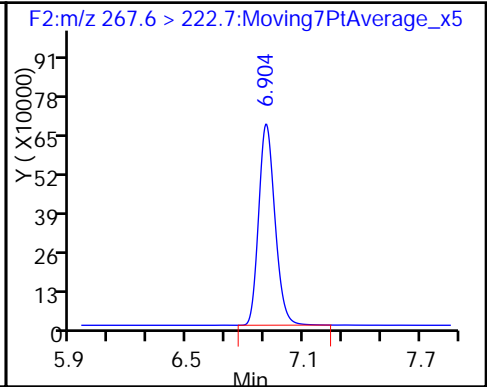
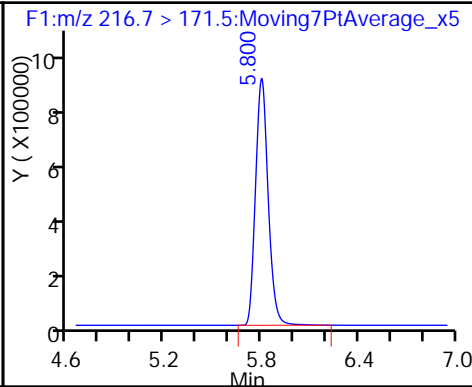
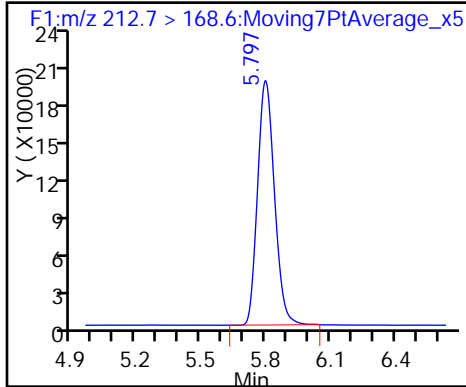
Method: PFAC_A4

Limit Group: LC PFC_DOD ICAL

2 Perfluorobutyric acid

D 1 13C4 PFBA

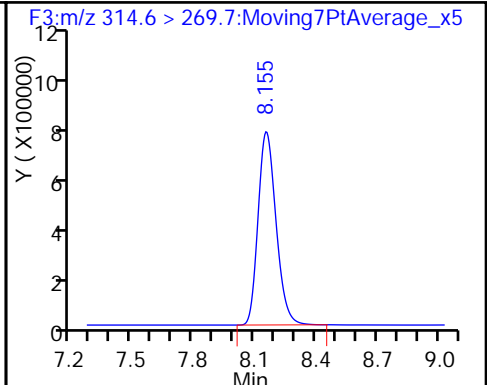
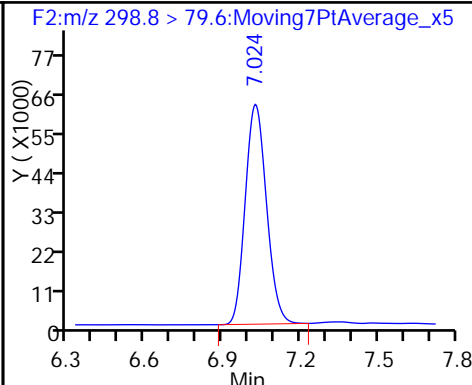
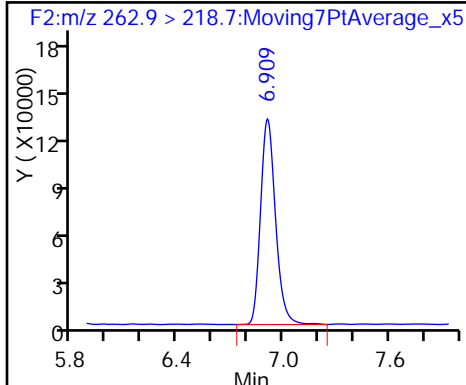
D 3 13C5-PFPeA



4 Perfluoropentanoic acid

51 Perfluorobutanesulfonic acid

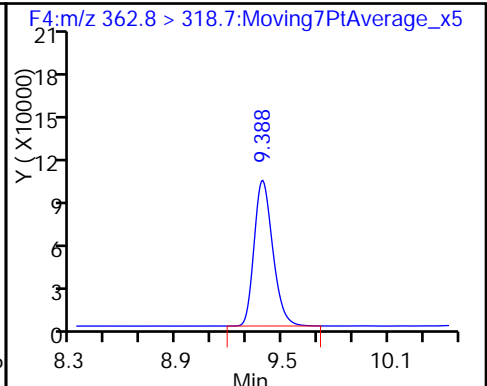
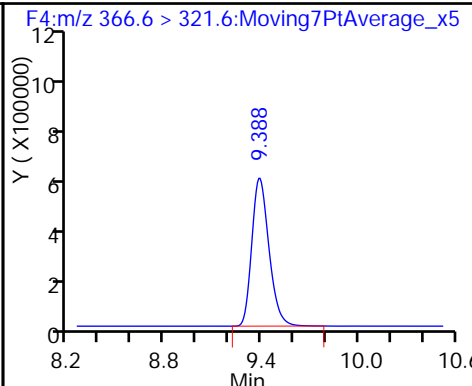
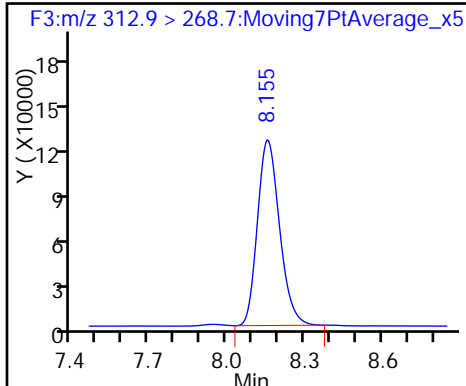
D 6 13C2 PFHxA



7 Perfluorohexanoic acid

D 8 13C4-PFHpA

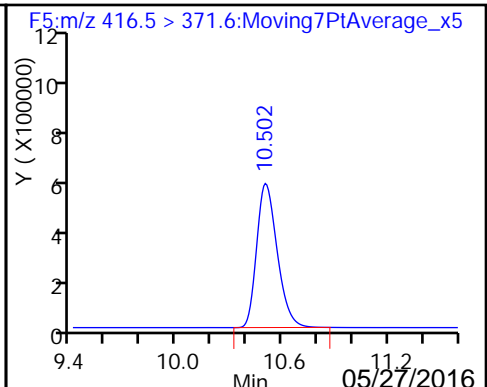
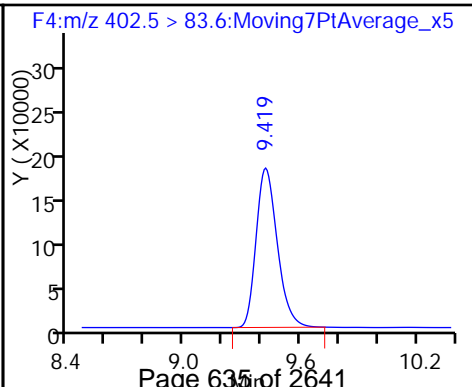
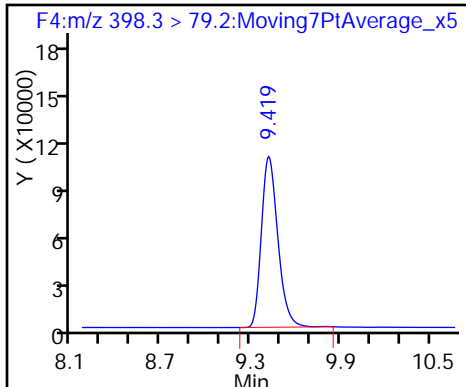
9 Perfluoroheptanoic acid

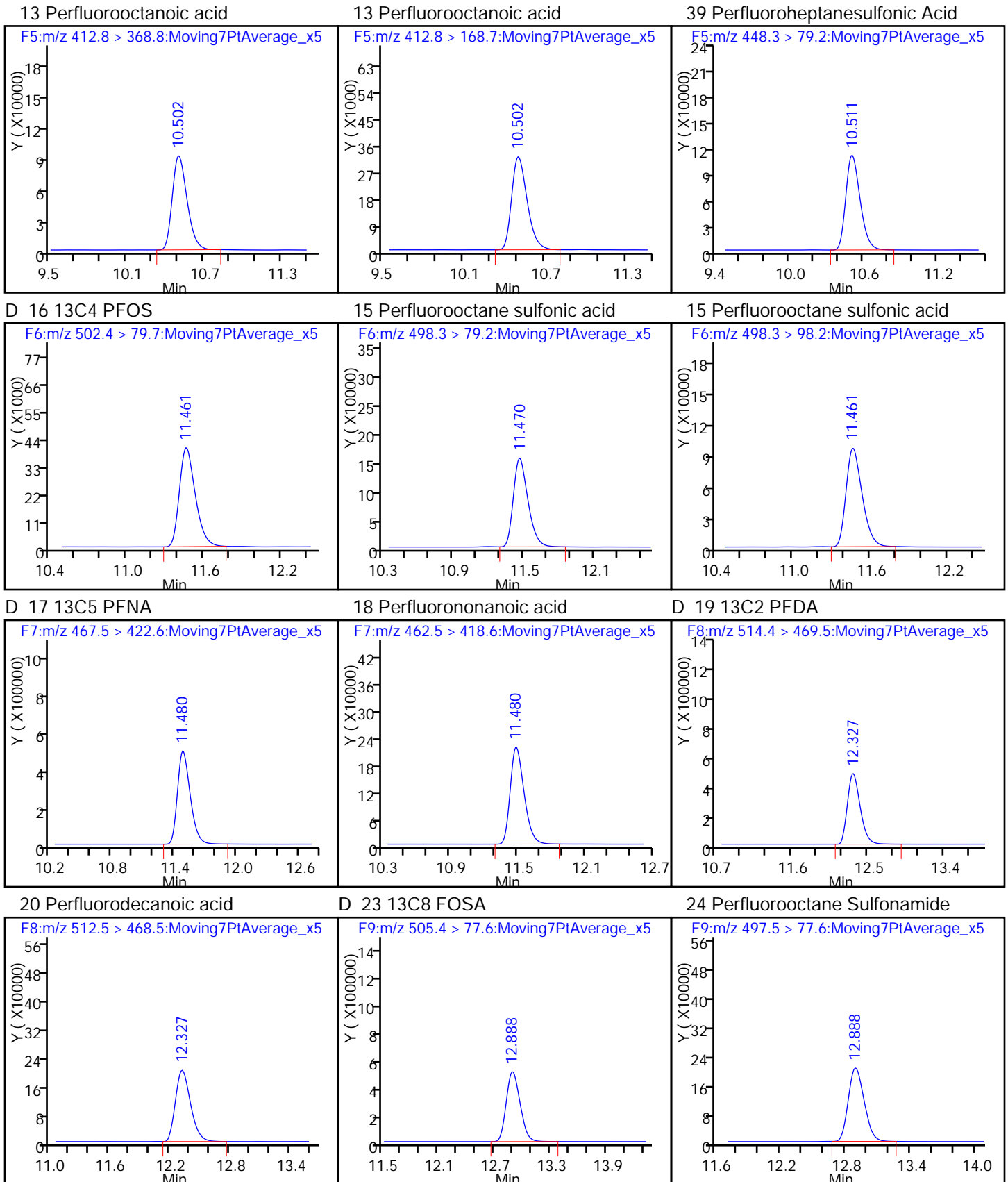


58 Perfluorohexanesulfonic acid

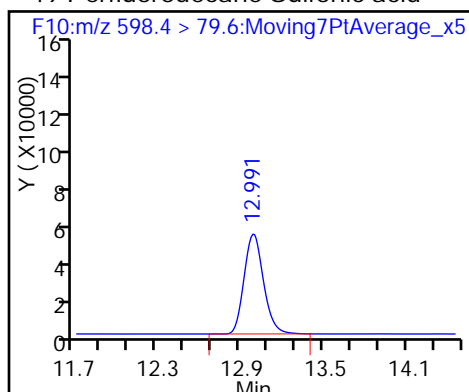
D 11 18O2 PFHxS

D 12 13C4 PFOA

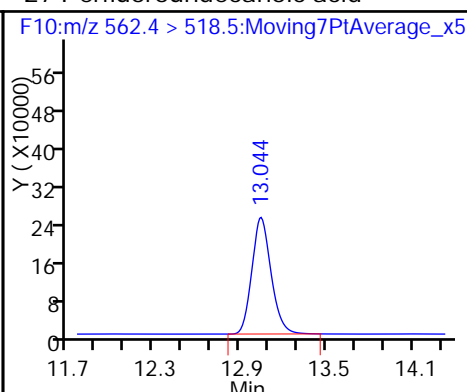




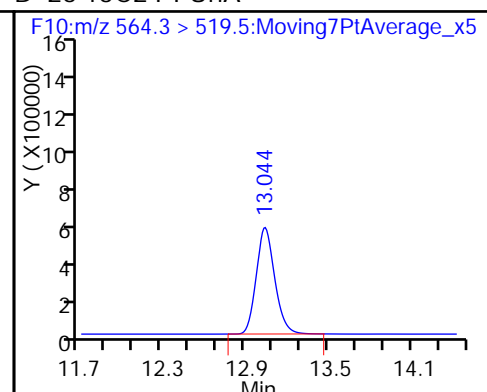
49 Perfluorodecane Sulfonic acid



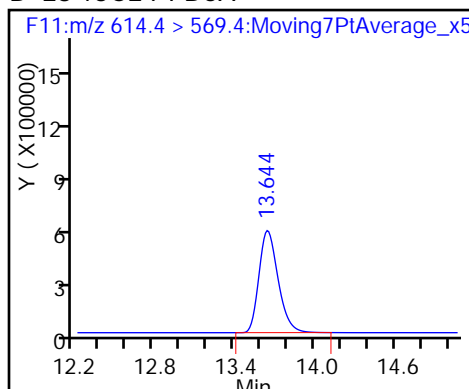
27 Perfluoroundecanoic acid



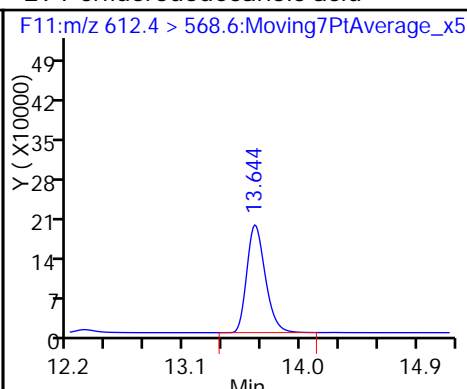
D 26 13C2 PFUnA



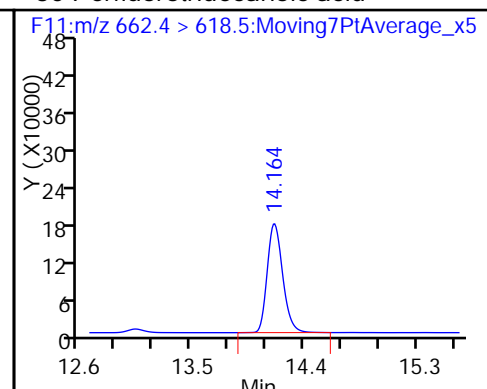
D 28 13C2 PFDaA



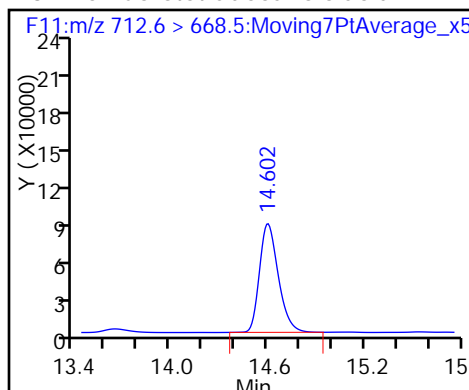
29 Perfluorododecanoic acid



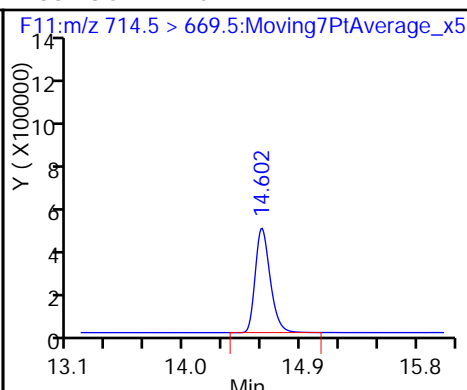
30 Perfluorotridecanoic acid



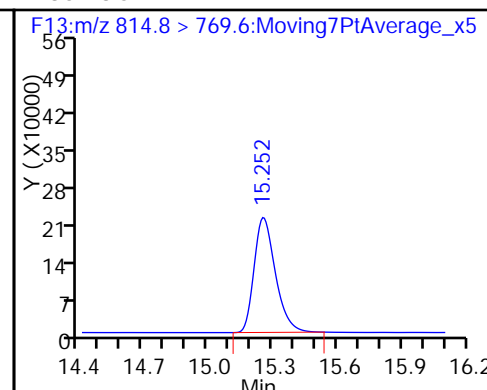
32 Perfluorotetradecanoic acid



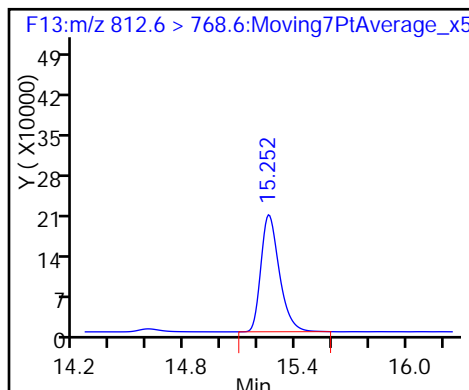
D 33 13C2-PFTeDA



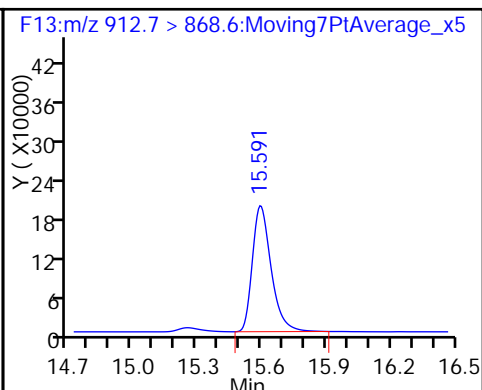
D 35 13C2-PFHxDA



34 Perfluorohexadecanoic acid



36 Perfluorooctadecanoic acid



TestAmerica Sacramento
Target Compound Quantitation Report

Data File: \\ChromNA\Sacramento\ChromData\A4\20160525-31065.b\25MAY2016B4A_009.d
 Lims ID: Std L5
 Client ID:
 Sample Type: IC Calib Level: 5
 Inject. Date: 25-May-2016 18:19:21 ALS Bottle#: 14 Worklist Smp#: 9
 Injection Vol: 15.0 ul Dil. Factor: 1.0000
 Sample Info: STD L5
 Misc. Info.: Acquity BEH C18,1.7u, 3X150mm,T=35C
 Operator ID: JRB Instrument ID: A4
 Sublist: chrom-PFAC_A4*sub12
 Method: \\ChromNA\Sacramento\ChromData\A4\20160525-31065.b\PFAC_A4.m
 Limit Group: LC PFC_DOD ICAL
 Last Update: 27-May-2016 09:59:57 Calib Date: 25-May-2016 19:01:43
 Integrator: Picker
 Quant Method: Isotopic Dilution Quant By: Initial Calibration
 Last ICal File: \\ChromNA\Sacramento\ChromData\A4\20160525-31065.b\25MAY2016B4A_011.d

Column 1 : Det: F1:MRM
 Process Host: XAWRK014

First Level Reviewer: barnettj Date: 25-May-2016 20:09:50

Signal	RT	EXP RT	DLT RT	REL RT	Response	Amount ng/ml	Ratio(Limits)	%Rec	S/N	Flags
2 Perfluorobutyric acid										
212.7 > 168.6	5.800	5.798	0.002	1.000	3100647	53.4		107	9264	
D 1 13C4 PFBA										
216.7 > 171.5	5.797	5.798	-0.001		4524446	53.5		107	13463	
D 3 13C5-PFPeA										
267.6 > 222.7	6.904	6.907	-0.003		4006540	52.2		104	6534	
4 Perfluoropentanoic acid										
262.9 > 218.7	6.909	6.910	-0.001	1.000	2027795	49.8		99.7	813	
5 Perfluorobutane Sulfonate										
298.8 > 79.6	7.024	7.024	0.0	1.000	989482	NC			1707	
298.8 > 98.6	7.024	7.024	0.0	1.000	595561		1.66(0.00-0.00)		1061	
51 Perfluorobutanesulfonic acid										
298.8 > 79.6	7.024	7.024	0.0	1.000	989482	47.5		108		
D 6 13C2 PFHxA										
314.6 > 269.7	8.155	8.156	-0.001		4436301	53.4		107	10982	
7 Perfluorohexanoic acid										
312.9 > 268.7	8.155	8.157	-0.002	1.000	2079954	52.1		104	2188	
D 8 13C4-PFHpA										
366.6 > 321.6	9.388	9.387	0.001		4425881	51.8		104	6353	
9 Perfluoroheptanoic acid										
362.8 > 318.7	9.388	9.388	0.0	1.000	2246637	52.6		105	4886	
10 Perfluorohexane Sulfonate										
398.3 > 79.2	9.419	9.421	-0.002	1.000	2346082	NC			3698	
58 Perfluorohexanesulfonic acid										
398.3 > 79.2	9.419	9.421	-0.002	1.000	2346082	48.3		102		
D 11 18O2 PFHxS										
402.5 > 83.6	9.419	9.422	-0.003		1345505	45.3		95.8	2598	

Signal	RT	EXP RT	DLT RT	REL RT	Response	Amount ng/ml	Ratio(Limits)	%Rec	S/N	Flags
D 12 13C4 PFOA										
416.5 > 371.6	10.500	10.503	-0.003		4323584	48.5		97.0	5641	
13 Perfluorooctanoic acid										
412.8 > 368.8	10.509	10.504	0.005	1.000	2069583	52.9		106	2106	
412.8 > 168.7	10.509	10.504	0.005	1.000	659359		3.14(0.00-0.00)	106	1960	
39 Perfluoroheptanesulfonic Acid										
448.3 > 79.2	10.509	10.508	0.001	1.000	2237092	48.2		101		
14 Perfluoroheptane Sulfonate										
448.3 > 79.2	10.509	10.508	0.001	1.000	2237092	NC			4297	
D 16 13C4 PFOS										
502.4 > 79.7	11.468	11.465	0.003		286688	42.5		88.9	983	
15 Perfluorooctane sulfonic acid										
498.3 > 79.2	11.468	11.466	0.002	1.000	3704007	44.8		93.7	3220	
498.3 > 98.2	11.468	11.466	0.002	1.000	2172713		1.70(0.00-0.00)	93.7	3206	
D 17 13C5 PFNA										
467.5 > 422.6	11.488	11.484	0.004		4072196	51.9		104	6079	
18 Perfluorononanoic acid										
462.5 > 418.6	11.488	11.486	0.002	1.000	4992828	49.8		99.6	4565	
D 19 13C2 PFDA										
514.4 > 469.5	12.325	12.325	0.0		4916681	49.2		98.4	5079	
20 Perfluorodecanoic acid										
512.5 > 468.5	12.325	12.325	0.0	1.000	5574851	54.6		109	4682	
D 23 13C8 FOSA										
505.4 > 77.6	12.897	12.893	0.004		4892798	50.7		101	3472	
24 Perfluorooctane Sulfonamide										
497.5 > 77.6	12.897	12.893	0.004	1.000	5329485	50.9		102	3524	
25 Perfluorodecane Sulfonate										
598.4 > 79.6	13.000	12.996	0.004	1.000	1217760	NC			3026	
49 Perfluorodecane Sulfonic acid										
598.4 > 79.6	13.000	12.996	0.004	1.000	1217760	48.2		100		
27 Perfluoroundecanoic acid										
562.4 > 518.5	13.042	13.042	0.0	1.000	6249999	49.9		99.9	4164	
D 26 13C2 PFUnA										
564.3 > 519.5	13.042	13.044	-0.002		5308317	52.4		105	5567	
D 28 13C2 PFDaA										
614.4 > 569.4	13.639	13.646	-0.007		5426626	51.5		103	3060	
29 Perfluorododecanoic acid										
612.4 > 568.6	13.639	13.646	-0.007	1.000	5541148	56.0		112	2330	
30 Perfluorotridecanoic acid										
662.4 > 618.5	14.161	14.162	-0.001	1.000	4237745	48.5		97.0	1792	
32 Perfluorotetradecanoic acid										
712.6 > 668.5	14.599	14.600	-0.001	1.000	1949635	42.2		84.3	1207	
D 33 13C2-PFTeDA										
714.5 > 669.5	14.599	14.601	-0.002		4261548	56.2		112	3742	
D 35 13C2-PFHxDA										
814.8 > 769.6	15.258	15.255	0.003		1625355	55.8		112	3319	
34 Perfluorohexadecanoic acid										
812.6 > 768.6	15.258	15.255	0.003	1.000	4468853	52.7		105	828	

Signal	RT	EXP RT	DLT RT	REL RT	Response	Amount ng/ml	Ratio(Limits)	%Rec	S/N	Flags
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36 Perfluorooctadecanoic acid

912.7 > 868.6 15.595 15.593 0.002 1.000 3933807 54.7 109 2837

QC Flag Legend

Processing Flags

NC - Not Calibrated

Reagents:

LCPFC-L5_00017

Amount Added: 1.00

Units: mL

TestAmerica Sacramento

Data File: \\ChromNA\Sacramento\ChromData\A4\20160525-31065.b\25MAY2016B4A_009.d

Injection Date: 25-May-2016 18:19:21

Instrument ID: A4

Lims ID: Std L5

Client ID:

Operator ID: JRB

ALS Bottle#: 14

Worklist Smp#: 9

Injection Vol: 15.0 ul

Dil. Factor: 1.0000

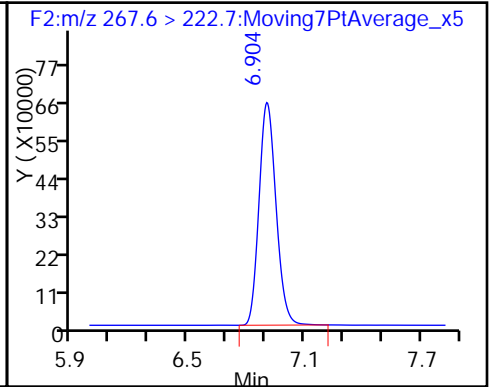
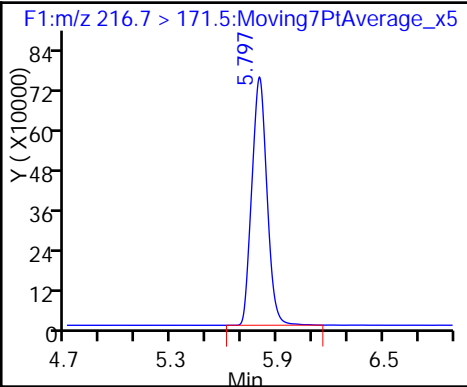
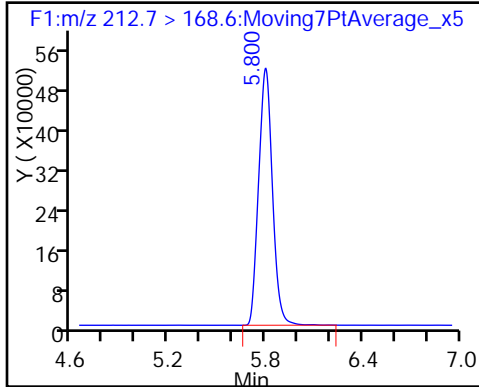
Method: PFAC_A4

Limit Group: LC PFC_DOD ICAL

2 Perfluorobutyric acid

D 1 13C4 PFBA

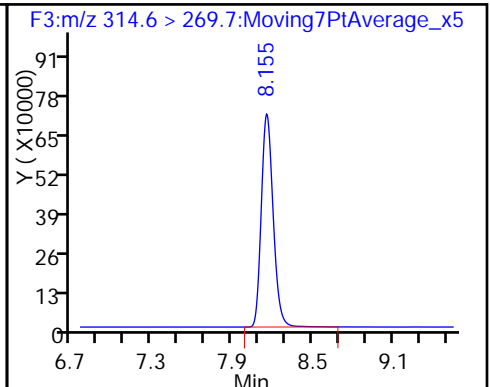
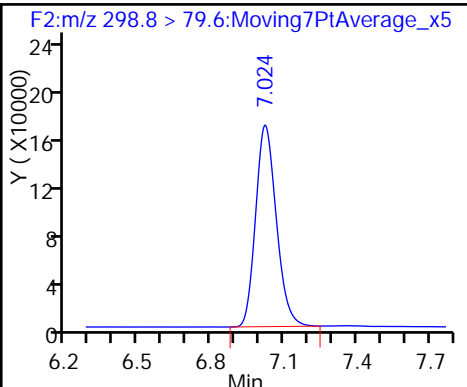
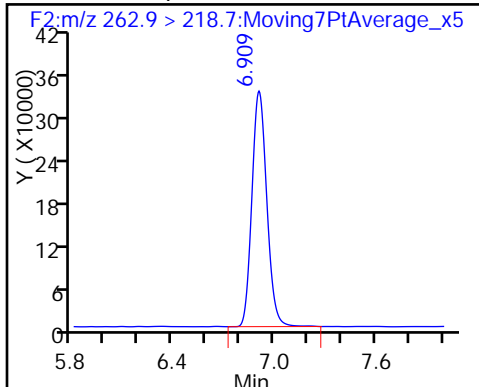
D 3 13C5-PFPeA



4 Perfluoropentanoic acid

51 Perfluorobutanesulfonic acid

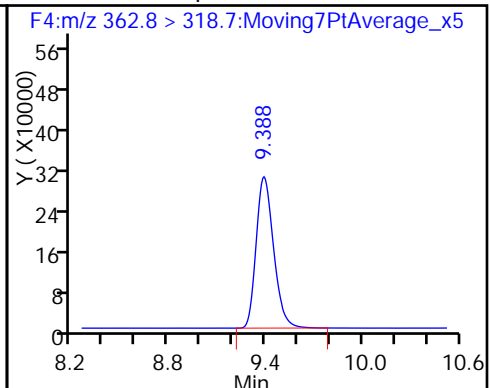
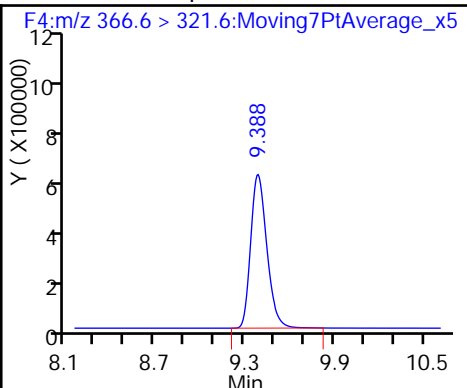
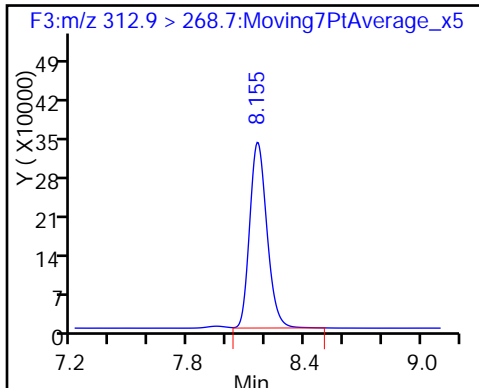
D 6 13C2 PFHxA



7 Perfluorohexanoic acid

D 8 13C4-PFHpA

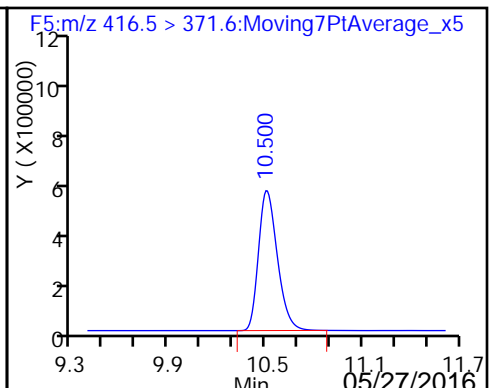
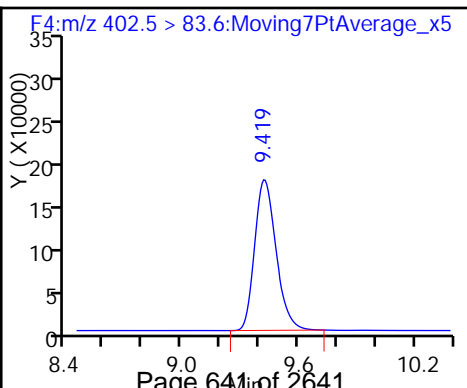
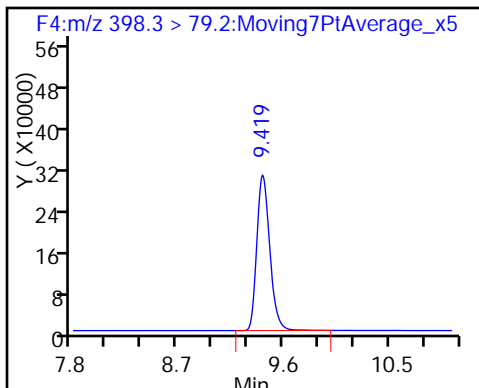
9 Perfluoroheptanoic acid

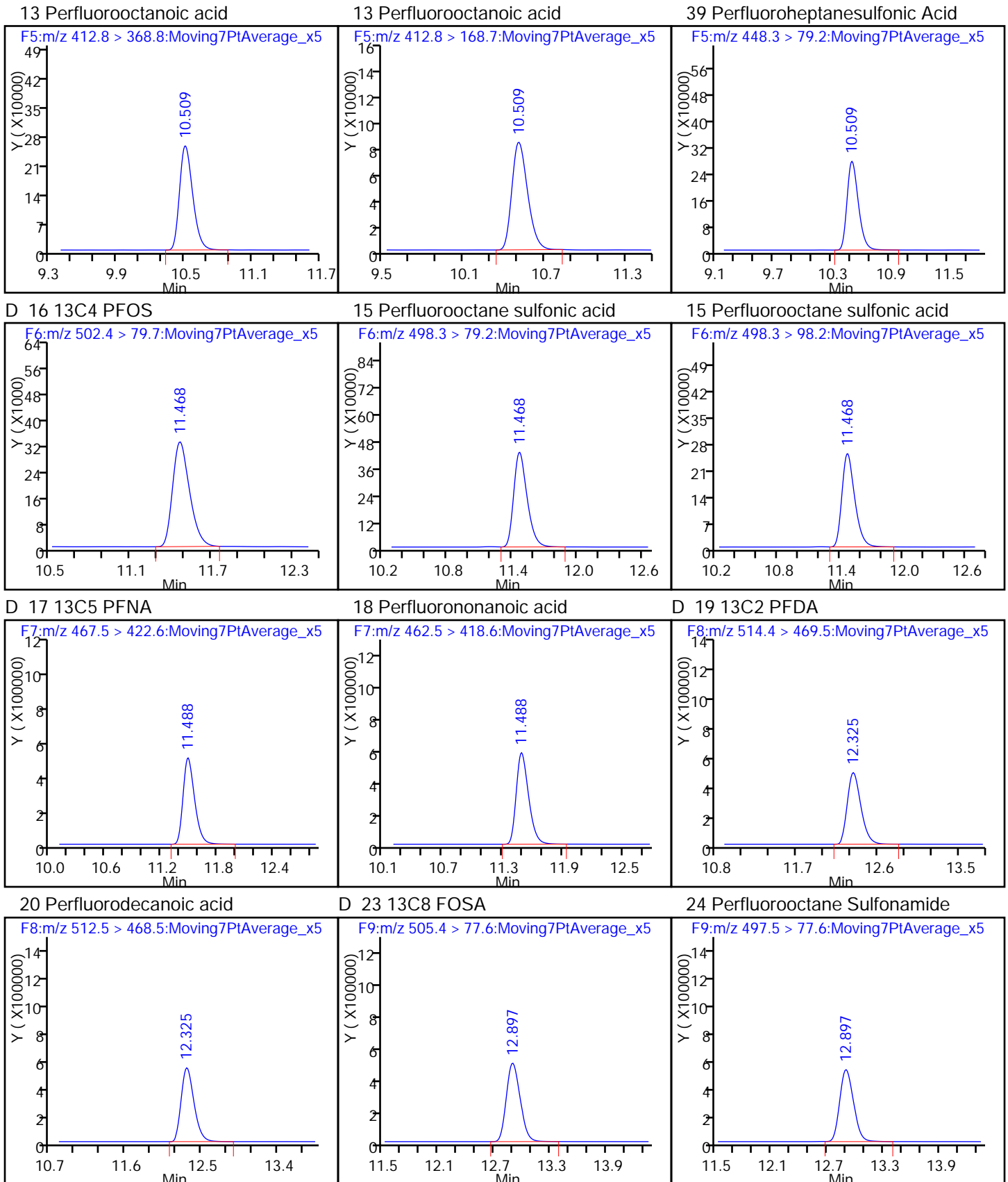


58 Perfluorohexanesulfonic acid

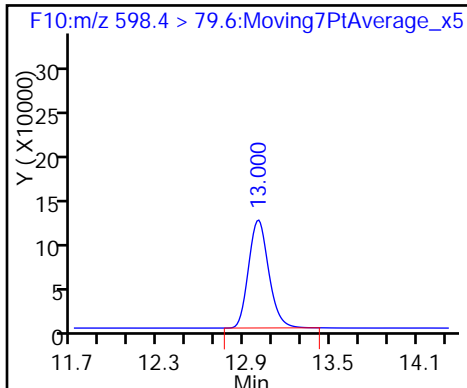
D 11 18O2 PFHxS

D 12 13C4 PFOA

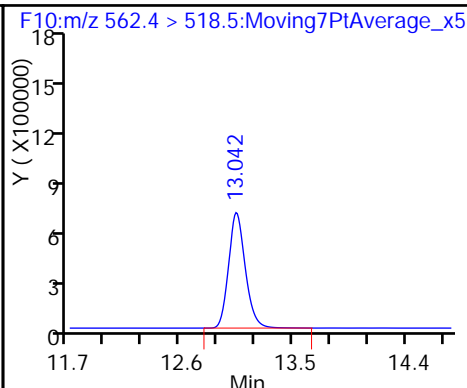




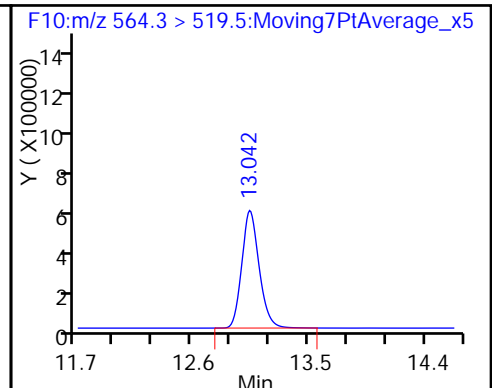
49 Perfluorodecane Sulfonic acid



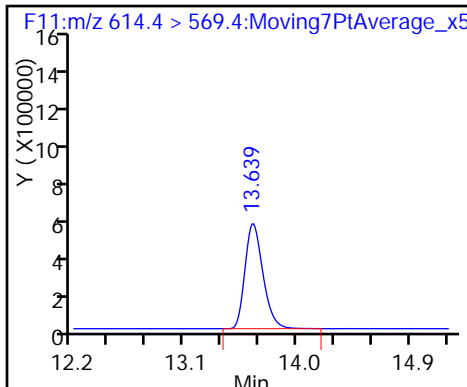
27 Perfluoroundecanoic acid



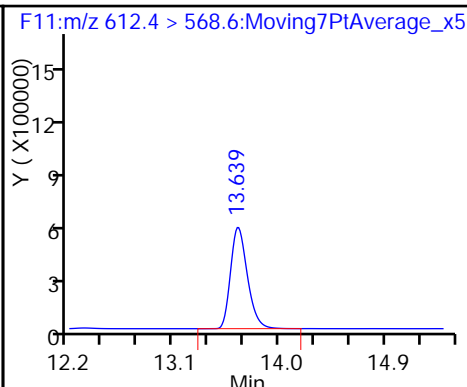
D 26 13C2 PFUnA



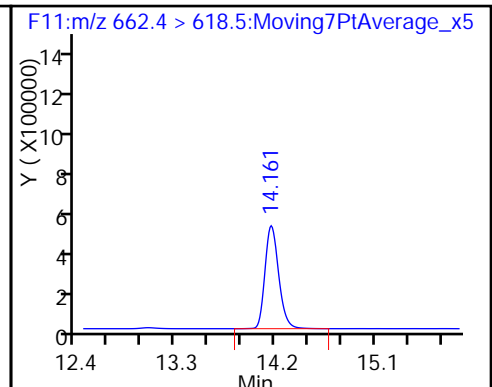
D 28 13C2 PFDaA



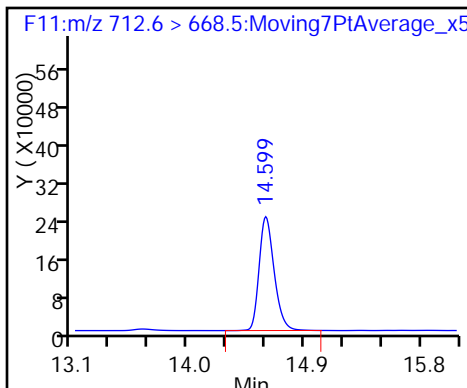
29 Perfluorododecanoic acid



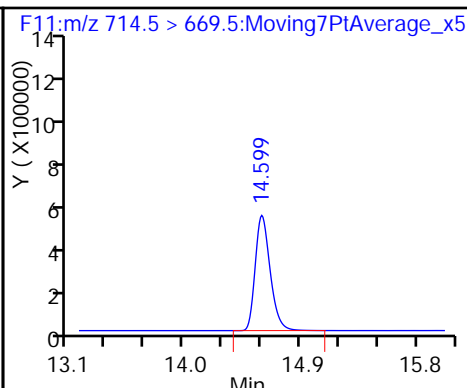
30 Perfluorotridecanoic acid



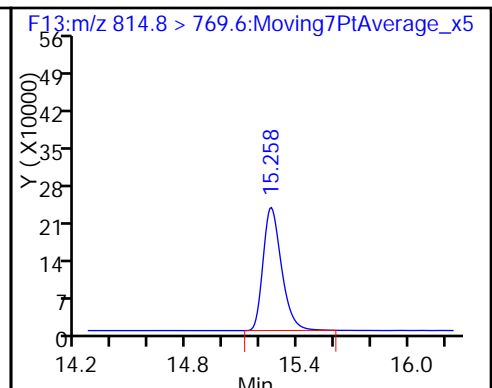
32 Perfluorotetradecanoic acid



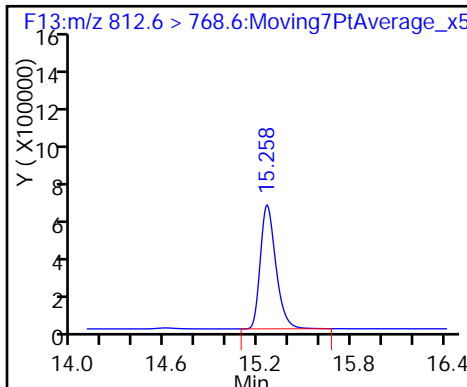
D 33 13C2-PFTeDA



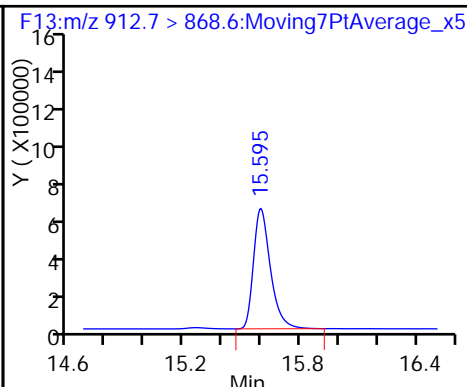
D 35 13C2-PFHxDA



34 Perfluorohexadecanoic acid



36 Perfluorooctadecanoic acid



TestAmerica Sacramento
Target Compound Quantitation Report

Data File: \\ChromNA\Sacramento\ChromData\A4\20160525-31065.b\25MAY2016B4A_010.d
 Lims ID: Std L6
 Client ID:
 Sample Type: IC Calib Level: 6
 Inject. Date: 25-May-2016 18:40:31 ALS Bottle#: 15 Worklist Smp#: 10
 Injection Vol: 15.0 ul Dil. Factor: 1.0000
 Sample Info: STD L6
 Misc. Info.: Acquity BEH C18,1.7u, 3X150mm,T=35C
 Operator ID: JRB Instrument ID: A4
 Sublist: chrom-PFAC_A4*sub12
 Method: \\ChromNA\Sacramento\ChromData\A4\20160525-31065.b\PFAC_A4.m
 Limit Group: LC PFC_DOD ICAL
 Last Update: 27-May-2016 09:59:59 Calib Date: 25-May-2016 19:01:43
 Integrator: Picker
 Quant Method: Isotopic Dilution Quant By: Initial Calibration
 Last ICal File: \\ChromNA\Sacramento\ChromData\A4\20160525-31065.b\25MAY2016B4A_011.d

Column 1 : Det: F1:MRM
 Process Host: XAWRK014

First Level Reviewer: barnettj Date: 25-May-2016 19:32:47

Signal	RT	EXP RT	DLT RT	REL RT	Response	Amount ng/ml	Ratio(Limits)	%Rec	S/N	Flags
2 Perfluorobutyric acid										
212.7 > 168.6	5.797	5.798	-0.001	1.000	9621902	217.0		109	17052	
D 1 13C4 PFBA										
216.7 > 171.5	5.800	5.798	0.002		3454161	40.9		81.7	9277	
D 3 13C5-PFPeA										
267.6 > 222.7	6.909	6.907	0.002		3368310	43.9		87.8	7420	
4 Perfluoropentanoic acid										
262.9 > 218.7	6.909	6.910	-0.001	1.000	6709860	196.1		98.1	2582	
5 Perfluorobutane Sulfonate										
298.8 > 79.6	7.024	7.024	0.0	1.000	2975252	NC			7267	
298.8 > 98.6	7.024	7.024	0.0	1.000	1882375		1.58(0.00-0.00)		4185	
51 Perfluorobutanesulfonic acid										
298.8 > 79.6	7.024	7.024	0.0	1.000	2975252	186.4		105		
D 6 13C2 PFHxA										
314.6 > 269.7	8.155	8.156	-0.001		3792575	45.7		91.4	9905	
7 Perfluorohexanoic acid										
312.9 > 268.7	8.155	8.157	-0.002	1.000	6791811	199.4		99.7	2196	
D 8 13C4-PFHpA										
366.6 > 321.6	9.388	9.387	0.001		3631838	42.5		85.0	5756	
9 Perfluoroheptanoic acid										
362.8 > 318.7	9.388	9.388	0.0	1.000	7377792	211.7		106	7400	
10 Perfluorohexane Sulfonate										
398.3 > 79.2	9.427	9.421	0.006	1.000	7078226	NC			5491	
58 Perfluorohexanesulfonic acid										
398.3 > 79.2	9.427	9.421	0.006	1.000	7078226	189.4		100		
D 11 18O2 PFHxS										
402.5 > 83.6	9.419	9.422	-0.003		1034483	34.9		73.7	2680	

Signal	RT	EXP RT	DLT RT	REL RT	Response	Amount ng/ml	Ratio(Limits)	%Rec	S/N	Flags
D 12 13C4 PFOA										
416.5 > 371.6	10.509	10.503	0.006		3460734	38.8		77.6	6681	
13 Perfluorooctanoic acid										
412.8 > 368.8	10.509	10.504	0.005	1.000	6221982	198.7		99.4	5486	
412.8 > 168.7	10.509	10.504	0.005	1.000	2017481		3.08(0.00-0.00)	99.4	3896	
39 Perfluoroheptanesulfonic Acid										
448.3 > 79.2	10.509	10.508	0.001	1.000	6537635	198.8		104		
14 Perfluoroheptane Sulfonate										
448.3 > 79.2	10.509	10.508	0.001	1.000	6537635	NC			5179	
D 16 13C4 PFOS										
502.4 > 79.7	11.467	11.465	0.002		202612	30.0		62.8	901	
15 Perfluorooctane sulfonic acid										
498.3 > 79.2	11.467	11.466	0.001	1.000	10959354	185.4		97.0	2831	
498.3 > 98.2	11.467	11.466	0.001	1.000	6591696		1.66(0.00-0.00)	97.0	3500	
D 17 13C5 PFNA										
467.5 > 422.6	11.487	11.484	0.003		3399779	43.3		86.7	4637	
18 Perfluorononanoic acid										
462.5 > 418.6	11.487	11.486	0.001	1.000	16403896	196.0		98.0	7842	
D 19 13C2 PFDA										
514.4 > 469.5	12.324	12.325	-0.001		4414285	44.2		88.4	7325	
20 Perfluorodecanoic acid										
512.5 > 468.5	12.324	12.325	-0.001	1.000	18799359	205.0		103	6134	
D 23 13C8 FOSA										
505.4 > 77.6	12.896	12.893	0.003		4052543	42.0		84.0	3474	
24 Perfluorooctane Sulfonamide										
497.5 > 77.6	12.896	12.893	0.003	1.000	18507083	213.5		107	5047	
25 Perfluorodecane Sulfonate										
598.4 > 79.6	12.999	12.996	0.003	1.000	3388769	NC			2969	
49 Perfluorodecane Sulfonic acid										
598.4 > 79.6	12.999	12.996	0.003	1.000	3388769	189.9		98.5		
27 Perfluoroundecanoic acid										
562.4 > 518.5	13.041	13.042	-0.001	1.000	20642853	207.5		104	4465	
D 26 13C2 PFUnA										
564.3 > 519.5	13.041	13.044	-0.003		4218333	41.6		83.2	4177	
D 28 13C2 PFDaA										
614.4 > 569.4	13.650	13.646	0.004		4640667	44.0		88.1	3049	
29 Perfluorododecanoic acid										
612.4 > 568.6	13.650	13.646	0.004	1.000	17735307	209.5		105	3265	
30 Perfluorotridecanoic acid										
662.4 > 618.5	14.161	14.162	-0.001	1.000	13845210	197.9		98.9	2730	
32 Perfluorotetradecanoic acid										
712.6 > 668.5	14.598	14.600	-0.002	1.000	6238413	168.5		84.3	2114	
D 33 13C2-PFTeDA										
714.5 > 669.5	14.598	14.601	-0.003		3412182	45.0		89.9	2965	
D 35 13C2-PFHxDA										
814.8 > 769.6	15.257	15.255	0.002		1345541	46.2		92.3	2295	
34 Perfluorohexadecanoic acid										
812.6 > 768.6	15.257	15.255	0.002	1.000	14179794	204.1		102	1901	

Signal	RT	EXP RT	DLT RT	REL RT	Response	Amount ng/ml	Ratio(Limits)	%Rec	S/N	Flags
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36 Perfluorooctadecanoic acid

912.7 > 868.6 15.595 15.593 0.002 1.000 10994803 184.8 92.4 3575

QC Flag Legend

Processing Flags

NC - Not Calibrated

Reagents:

LCPFC-L6_00015

Amount Added: 1.00

Units: mL

TestAmerica Sacramento

Data File: \\ChromNA\Sacramento\ChromData\A4\20160525-31065.b\25MAY2016B4A_010.d

Injection Date: 25-May-2016 18:40:31

Instrument ID: A4

Lims ID: Std L6

Client ID:

Operator ID: JRB

ALS Bottle#: 15

Worklist Smp#: 10

Injection Vol: 15.0 ul

Dil. Factor: 1.0000

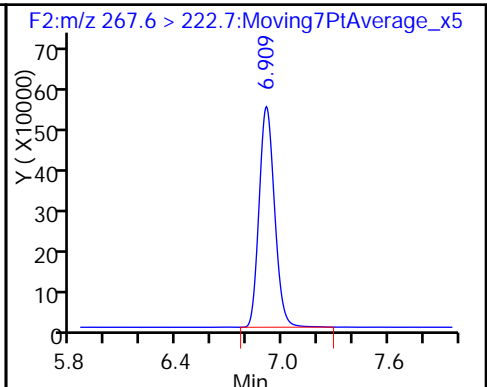
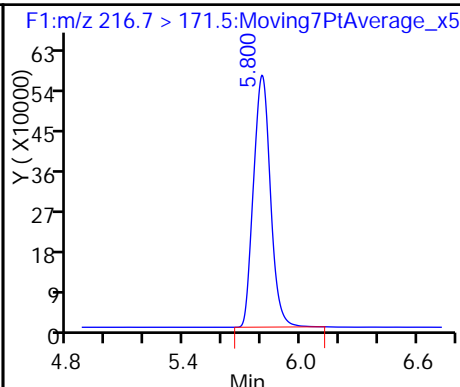
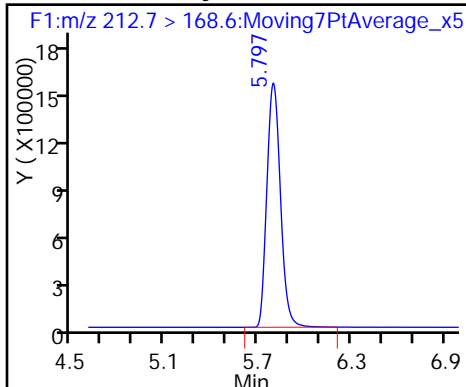
Method: PFAC_A4

Limit Group: LC PFC_DOD ICAL

2 Perfluorobutyric acid

D 1 13C4 PFBA

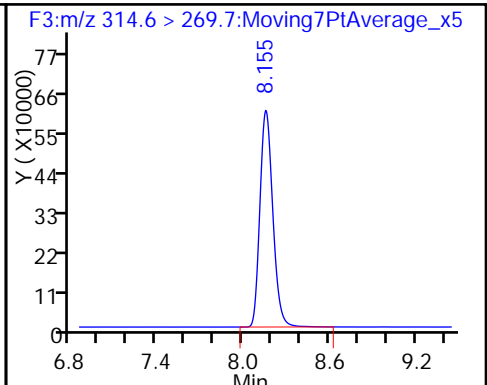
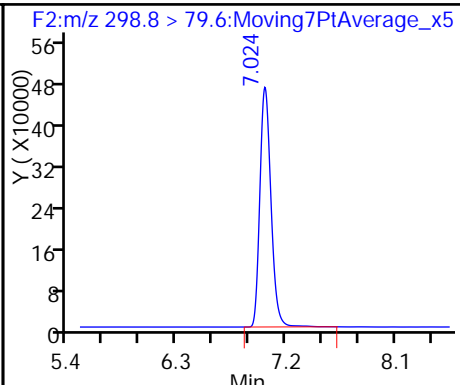
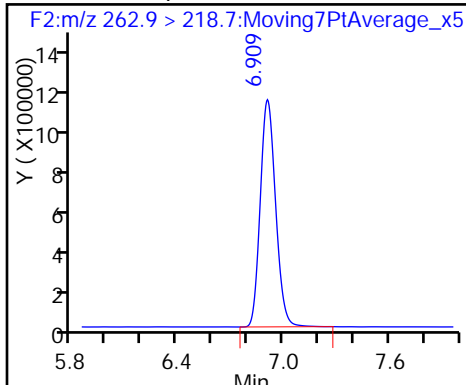
D 3 13C5-PFPeA



4 Perfluoropentanoic acid

51 Perfluorobutanesulfonic acid

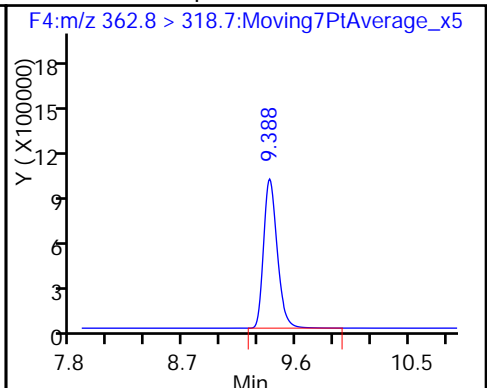
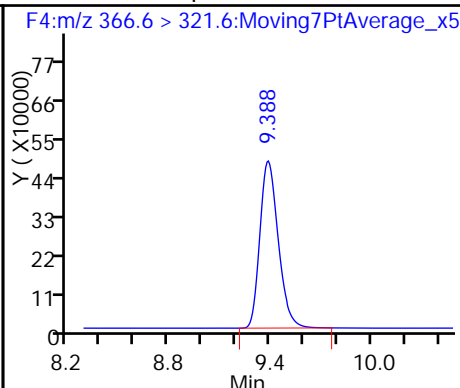
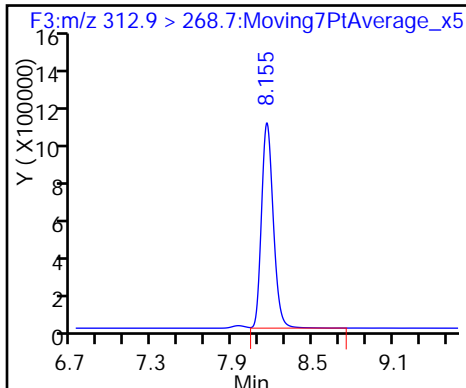
D 6 13C2 PFHxA



7 Perfluorohexanoic acid

D 8 13C4-PFHpA

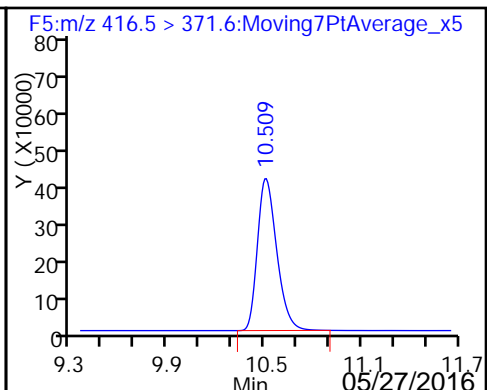
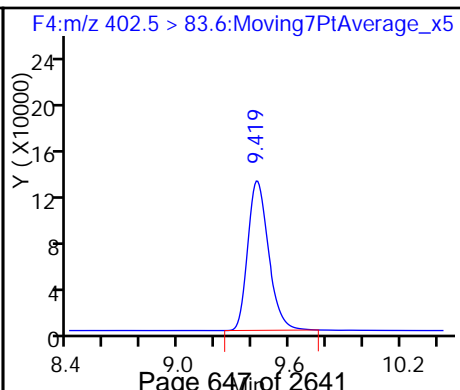
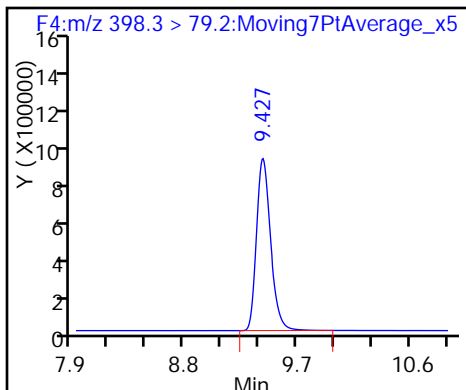
9 Perfluoroheptanoic acid

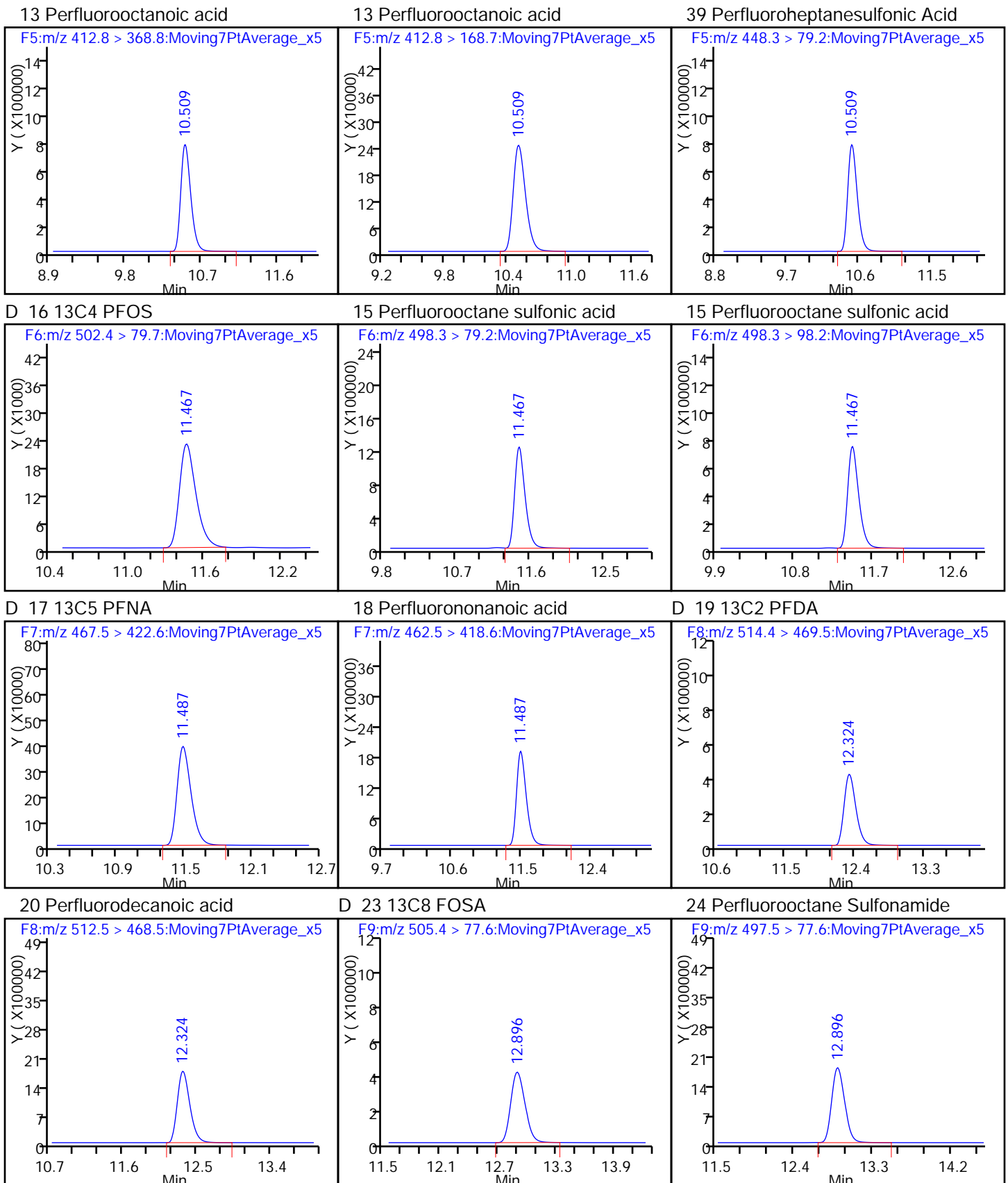


58 Perfluorohexanesulfonic acid

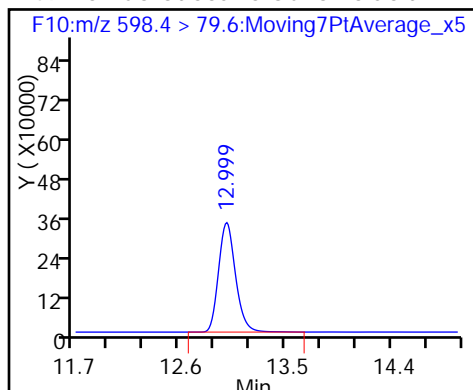
D 11 18O2 PFHxS

D 12 13C4 PFOA

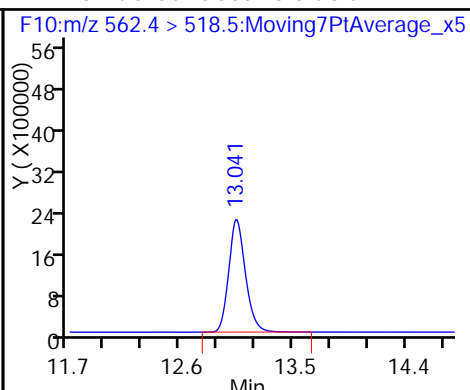




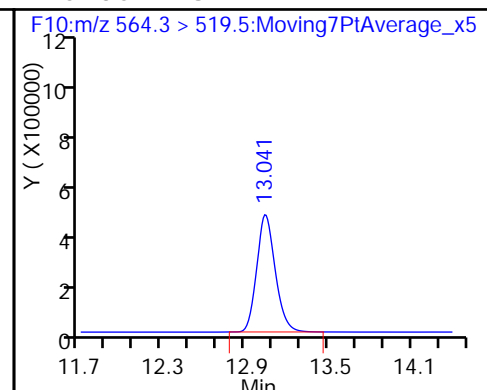
49 Perfluorodecane Sulfonic acid



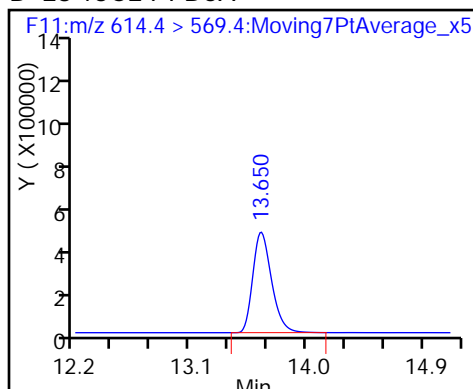
27 Perfluoroundecanoic acid



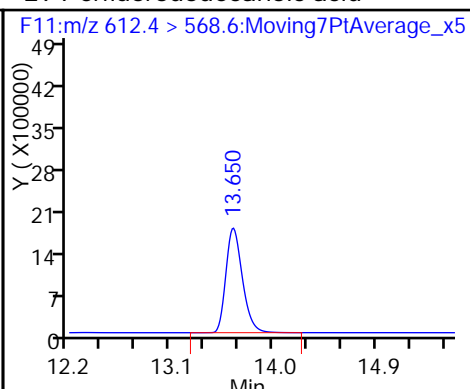
D 26 13C2 PFUnA



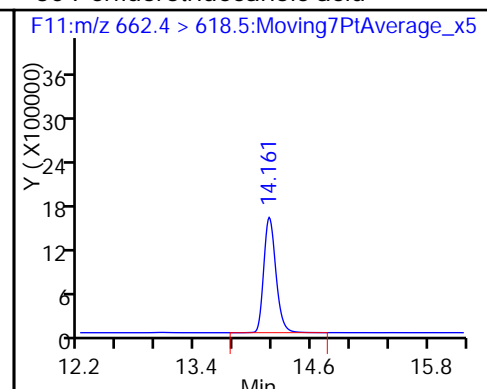
D 28 13C2 PFDaA



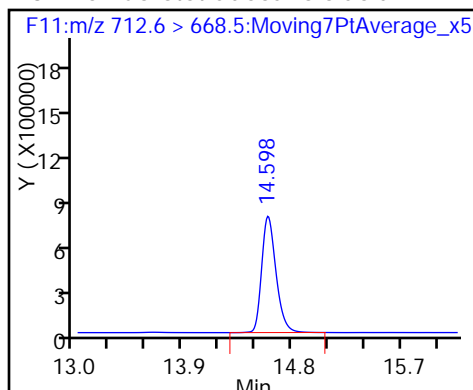
29 Perfluorododecanoic acid



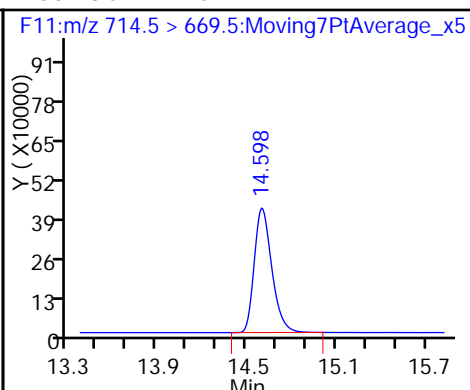
30 Perfluorotridecanoic acid



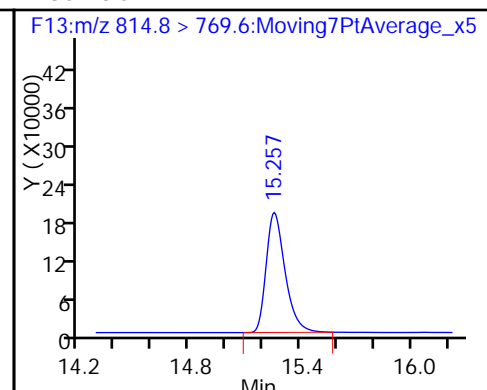
32 Perfluorotetradecanoic acid



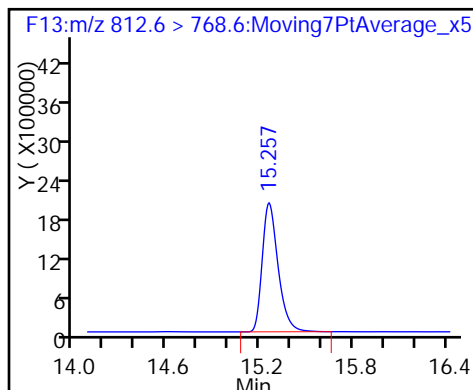
D 33 13C2-PFTeDA



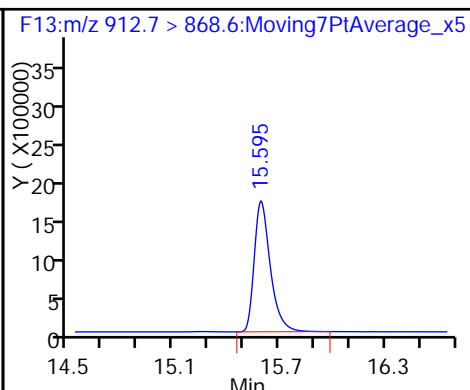
D 35 13C2-PFHxDA



34 Perfluorohexadecanoic acid



36 Perfluorooctadecanoic acid



TestAmerica Sacramento
Target Compound Quantitation Report

Data File: \\ChromNA\Sacramento\ChromData\A4\20160525-31065.b\25MAY2016B4A_011.d
 Lims ID: Std L7
 Client ID:
 Sample Type: IC Calib Level: 7
 Inject. Date: 25-May-2016 19:01:43 ALS Bottle#: 16 Worklist Smp#: 11
 Injection Vol: 15.0 ul Dil. Factor: 1.0000
 Sample Info: STD L7
 Misc. Info.: Acquity BEH C18,1.7u, 3X150mm,T=35C
 Operator ID: JRB Instrument ID: A4
 Sublist: chrom-PFAC_A4*sub12
 Method: \\ChromNA\Sacramento\ChromData\A4\20160525-31065.b\PFAC_A4.m
 Limit Group: LC PFC_DOD ICAL
 Last Update: 27-May-2016 10:00:01 Calib Date: 25-May-2016 19:01:43
 Integrator: Picker
 Quant Method: Isotopic Dilution Quant By: Initial Calibration
 Last ICal File: \\ChromNA\Sacramento\ChromData\A4\20160525-31065.b\25MAY2016B4A_011.d

Column 1 : Det: F1:MRM
 Process Host: XAWRK014

First Level Reviewer: barnettj Date: 25-May-2016 19:38:14

Signal	RT	EXP RT	DLT RT	REL RT	Response	Amount ng/ml	Ratio(Limits)	%Rec	S/N	Flags
2 Perfluorobutyric acid										
212.7 > 168.6	5.800	5.798	0.002	1.000	18955715	439.6		110	31257	
D 1 13C4 PFBA										
216.7 > 171.5	5.800	5.798	0.002		3359557	39.7		79.5	9276	
D 3 13C5-PFPeA										
267.6 > 222.7	6.904	6.907	-0.003		2881925	37.6		75.1	4979	
4 Perfluoropentanoic acid										
262.9 > 218.7	6.909	6.910	-0.001	1.000	10999657	375.7		93.9	3476	
5 Perfluorobutane Sulfonate										
298.8 > 79.6	7.024	7.024	0.0	1.000	4799473	NC			10933	
298.8 > 98.6	7.024	7.024	0.0	1.000	3025074		1.59(0.00-0.00)		6160	
51 Perfluorobutanesulfonic acid										
298.8 > 79.6	7.024	7.024	0.0	1.000	4799473	354.6		100		
D 6 13C2 PFHxA										
314.6 > 269.7	8.155	8.156	-0.001		3168006	38.2		76.3	4926	
7 Perfluorohexanoic acid										
312.9 > 268.7	8.155	8.157	-0.002	1.000	11383764	400.2		100	2155	
D 8 13C4-PFHpA										
366.6 > 321.6	9.380	9.387	-0.007		3129112	36.6		73.2	4202	
9 Perfluoroheptanoic acid										
362.8 > 318.7	9.388	9.388	0.0	1.000	12395409	413.1		103	6683	
10 Perfluorohexane Sulfonate										
398.3 > 79.2	9.419	9.421	-0.002	1.000	12149225	NC			7701	
58 Perfluorohexanesulfonic acid										
398.3 > 79.2	9.419	9.421	-0.002	1.000	12149225	383.3		101		
D 11 18O2 PFHxS										
402.5 > 83.6	9.427	9.422	0.005		877315	29.6		62.5	2317	

Signal	RT	EXP RT	DLT RT	REL RT	Response	Amount ng/ml	Ratio(Limits)	%Rec	S/N	Flags
D 12 13C4 PFOA										
416.5 > 371.6	10.502	10.503	-0.001		2892631	32.4		64.9	3522	
13 Perfluorooctanoic acid										
412.8 > 368.8	10.502	10.504	-0.002	1.000	10456476	399.6		99.9	5451	
412.8 > 168.7	10.502	10.504	-0.002	1.000	3385329		3.09(0.00-0.00)	99.9	3599	
39 Perfluoroheptanesulfonic Acid										
448.3 > 79.2	10.511	10.508	0.003	1.000	10288308	422.7		111		
14 Perfluoroheptane Sulfonate										
448.3 > 79.2	10.511	10.508	0.003	1.000	10288308	NC			4016	
D 16 13C4 PFOS										
502.4 > 79.7	11.461	11.465	-0.004		149927	22.2		46.5	435	
15 Perfluorooctane sulfonic acid										
498.3 > 79.2	11.461	11.466	-0.005	1.000	17351697	396.0		104	2400	
498.3 > 98.2	11.461	11.466	-0.005	1.000	10408783		1.67(0.00-0.00)	104	2974	
D 17 13C5 PFNA										
467.5 > 422.6	11.480	11.484	-0.004		2902258	37.0		74.0	4664	
18 Perfluorononanoic acid										
462.5 > 418.6	11.489	11.486	0.003	1.000	28286865	396.0		99.0	8740	
D 19 13C2 PFDA										
514.4 > 469.5	12.328	12.325	0.003		3546229	35.5		71.0	3861	
20 Perfluorodecanoic acid										
512.5 > 468.5	12.328	12.325	0.003	1.000	31336025	425.4		106	5310	
D 23 13C8 FOSA										
505.4 > 77.6	12.888	12.893	-0.005		3500532	36.3		72.5	3380	
24 Perfluorooctane Sulfonamide										
497.5 > 77.6	12.888	12.893	-0.005	1.000	31417050	419.7		105	3789	
25 Perfluorodecane Sulfonate										
598.4 > 79.6	12.991	12.996	-0.005	1.000	5249459	NC			3431	
49 Perfluorodecane Sulfonic acid										
598.4 > 79.6	12.991	12.996	-0.005	1.000	5249459	397.6		103		
27 Perfluoroundecanoic acid										
562.4 > 518.5	13.045	13.042	0.003	1.000	33914731	394.1		98.5	5142	
D 26 13C2 PFUnA										
564.3 > 519.5	13.045	13.044	0.001		3648730	36.0		72.0	3746	
D 28 13C2 PFDaA										
614.4 > 569.4	13.644	13.646	-0.002		4064771	38.6		77.1	3105	
29 Perfluorododecanoic acid										
612.4 > 568.6	13.644	13.646	-0.002	1.000	29646208	399.8		100.0	3037	
30 Perfluorotridecanoic acid										
662.4 > 618.5	14.165	14.162	0.003	1.000	23843779	364.8		91.2	3003	
32 Perfluorotetradecanoic acid										
712.6 > 668.5	14.602	14.600	0.002	1.000	11465072	331.6		82.9	2655	
D 33 13C2-PFTeDA										
714.5 > 669.5	14.602	14.601	0.001		3186926	42.0		84.0	3029	
D 35 13C2-PFHxDA										
814.8 > 769.6	15.252	15.255	-0.003		1165903	40.0		80.0	2242	
34 Perfluorohexadecanoic acid										
812.6 > 768.6	15.252	15.255	-0.003	1.000	25142674	418.5		105	2375	

Signal	RT	EXP RT	DLT RT	REL RT	Response	Amount ng/ml	Ratio(Limits)	%Rec	S/N	Flags
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36 Perfluorooctadecanoic acid

912.7 > 868.6 15.591 15.593 -0.002 1.000 21401177 415.1 104 4306

QC Flag Legend

Processing Flags

NC - Not Calibrated

Reagents:

LCPFC-L7_00015

Amount Added: 1.00

Units: mL

TestAmerica Sacramento

Data File: \\ChromNA\Sacramento\ChromData\A4\20160525-31065.b\25MAY2016B4A_011.d

Injection Date: 25-May-2016 19:01:43

Instrument ID: A4

Lims ID: Std L7

Client ID:

Operator ID: JRB

ALS Bottle#: 16

Worklist Smp#: 11

Injection Vol: 15.0 ul

Dil. Factor: 1.0000

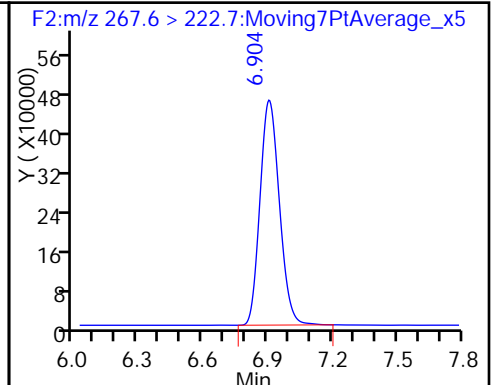
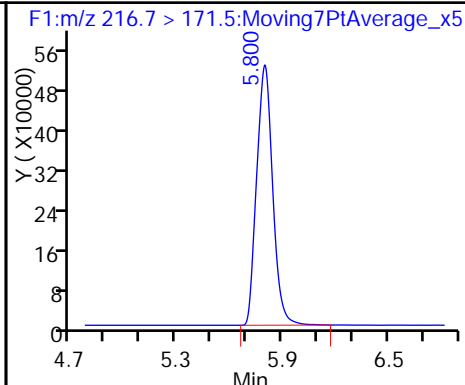
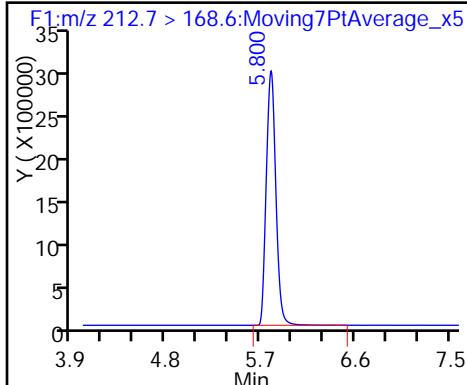
Method: PFAC_A4

Limit Group: LC PFC_DOD ICAL

2 Perfluorobutyric acid

D 1 13C4 PFBA

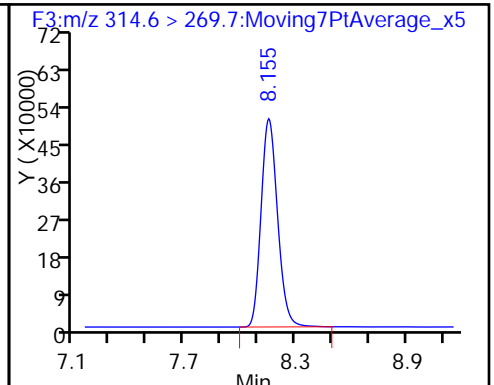
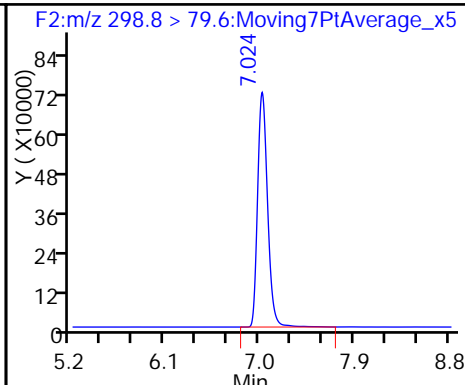
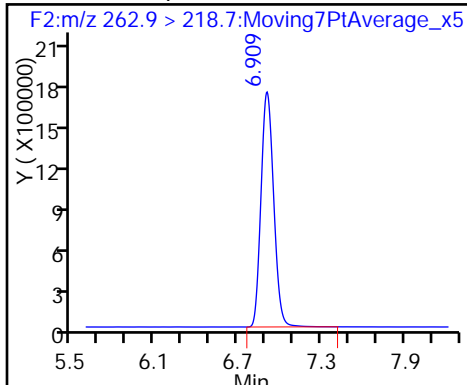
D 3 13C5-PFPeA



4 Perfluoropentanoic acid

51 Perfluorobutanesulfonic acid

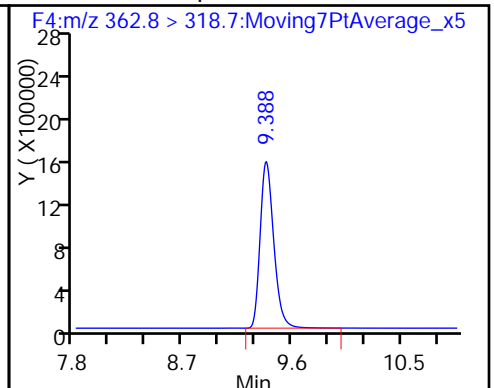
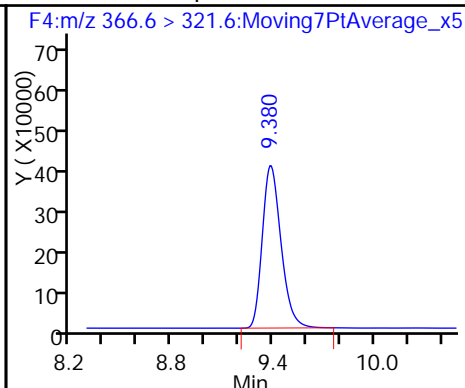
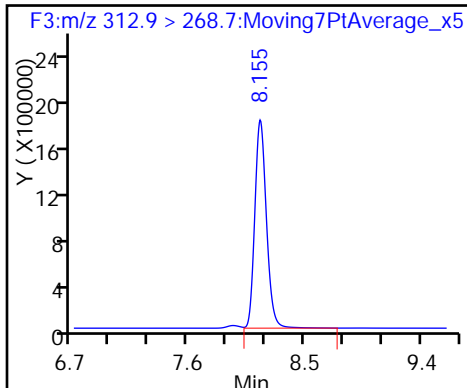
D 6 13C2 PFHxA



7 Perfluorohexanoic acid

D 8 13C4-PFHpA

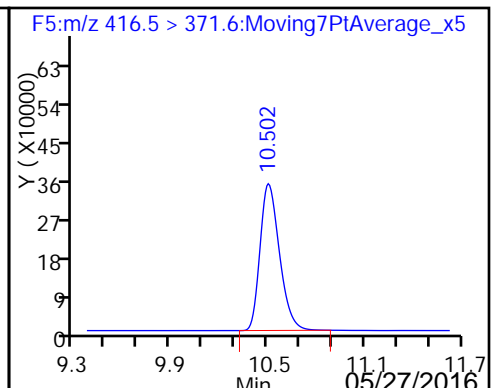
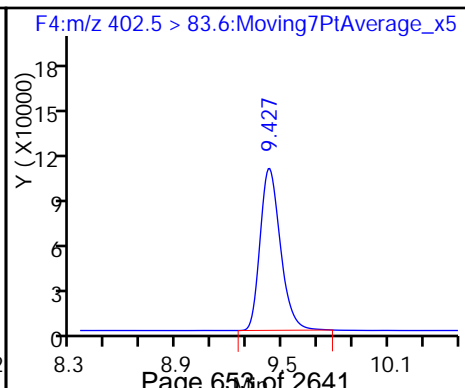
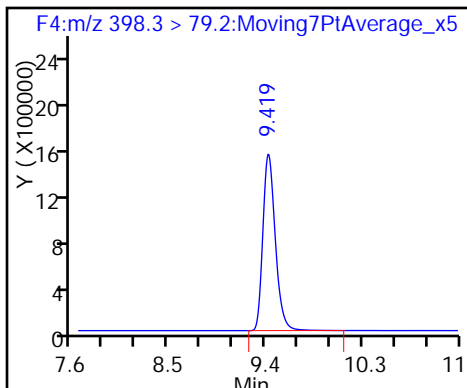
9 Perfluoroheptanoic acid



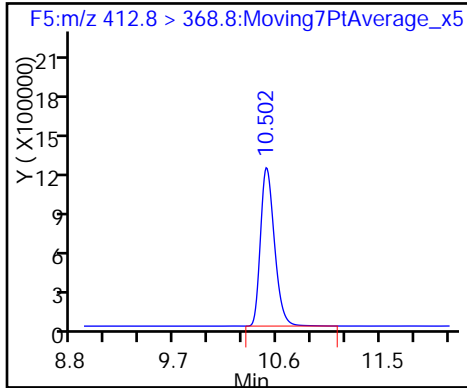
58 Perfluorohexanesulfonic acid

D 11 18O2 PFHxS

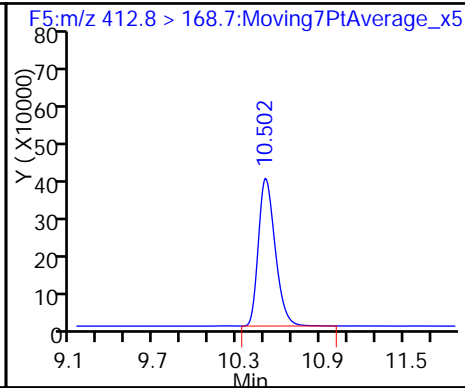
D 12 13C4 PFOA



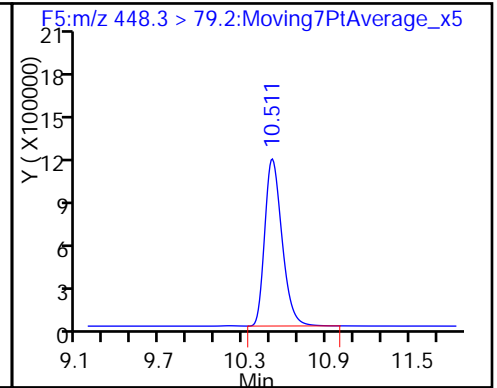
13 Perfluorooctanoic acid



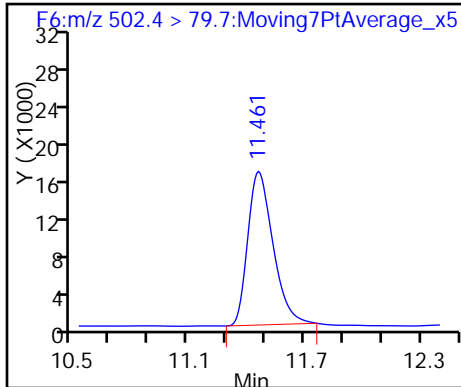
13 Perfluorooctanoic acid



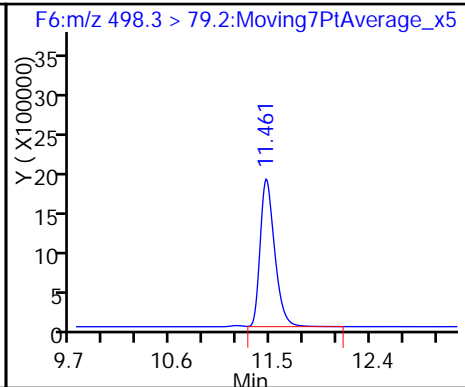
39 Perfluoroheptanesulfonic Acid



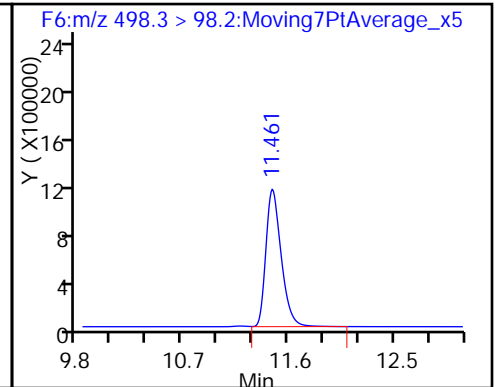
D 16 13C4 PFOS



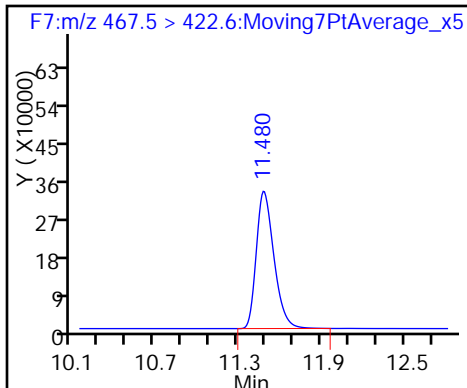
15 Perfluorooctane sulfonic acid



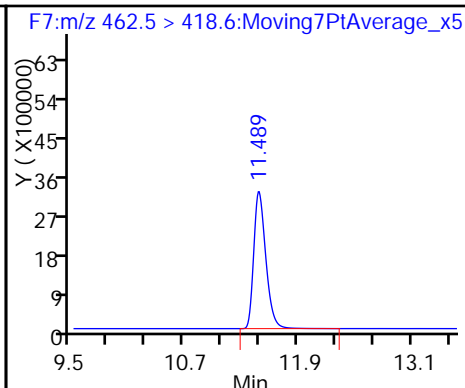
15 Perfluorooctane sulfonic acid



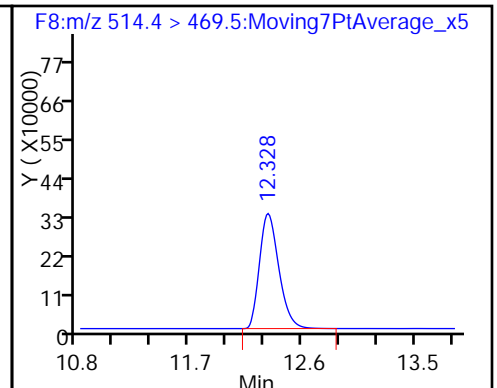
D 17 13C5 PFNA



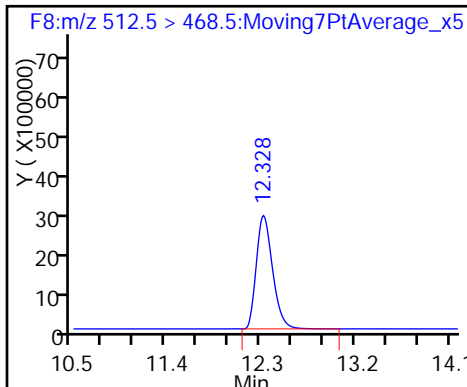
18 Perfluorononanoic acid



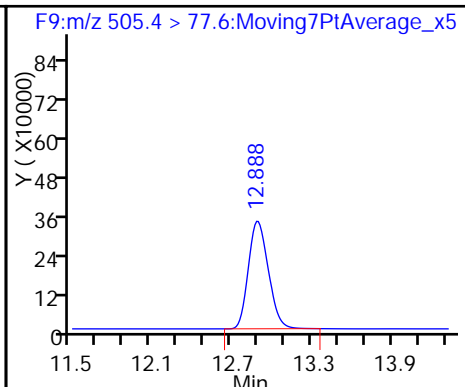
D 19 13C2 PFDA



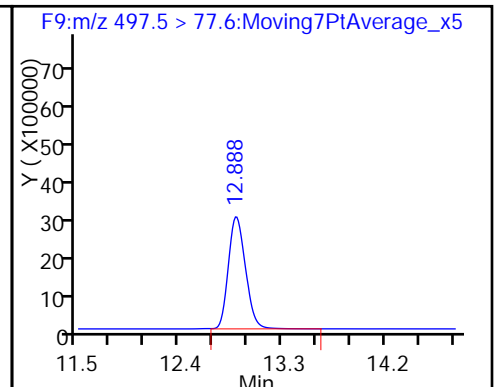
20 Perfluorodecanoic acid



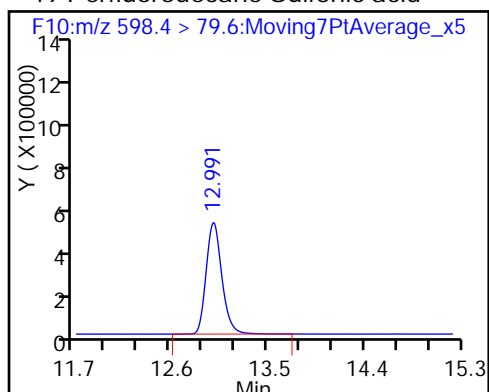
D 23 13C8 FOSA



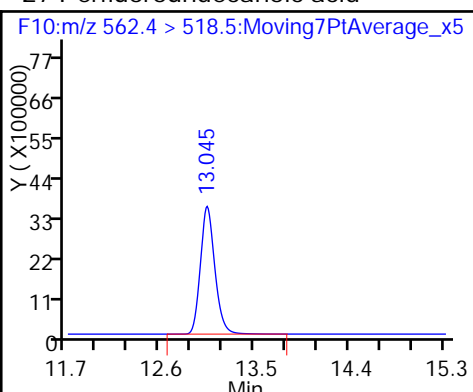
24 Perfluorooctane Sulfonamide



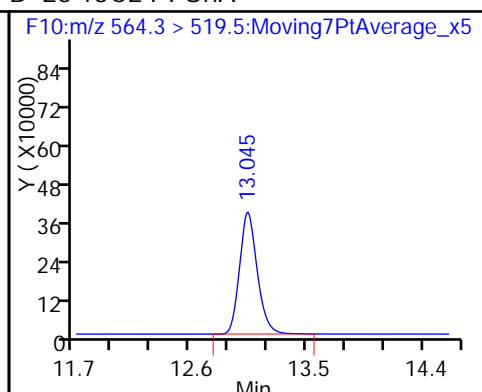
49 Perfluorodecane Sulfonic acid



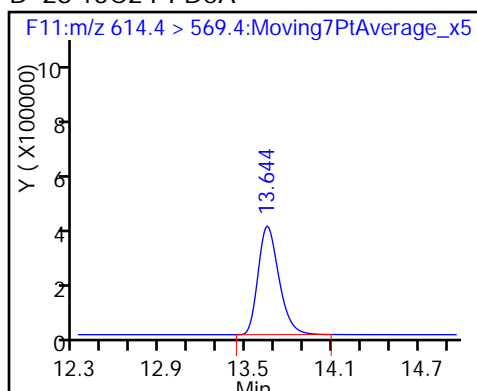
27 Perfluoroundecanoic acid



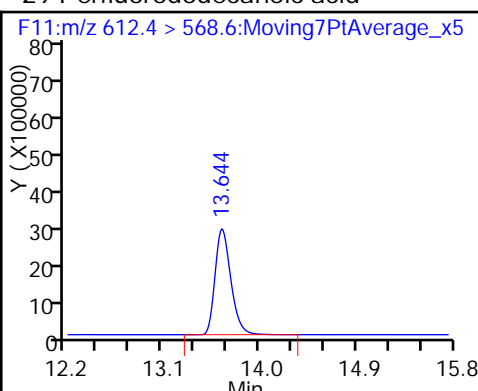
D 26 13C2 PFUnA



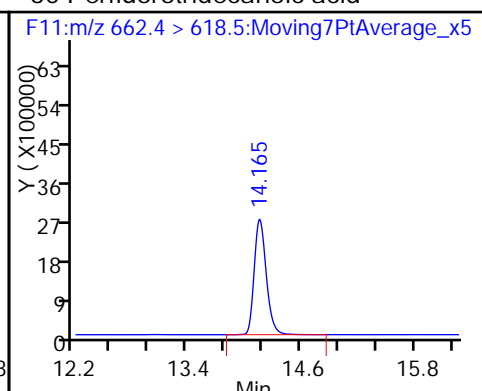
D 28 13C2 PFDaA



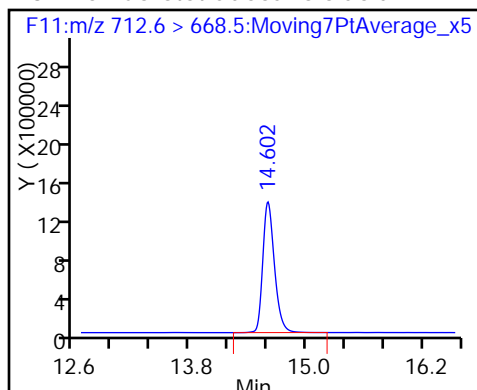
29 Perfluorododecanoic acid



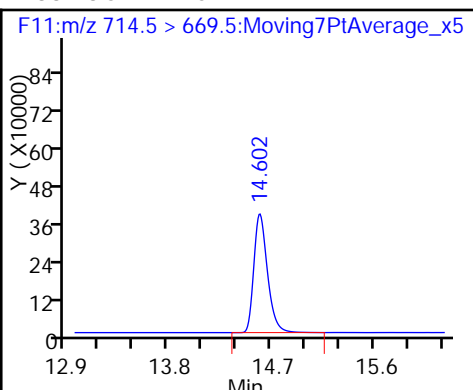
30 Perfluorotridecanoic acid



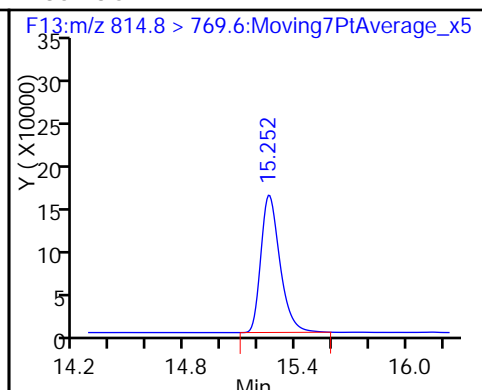
32 Perfluorotetradecanoic acid



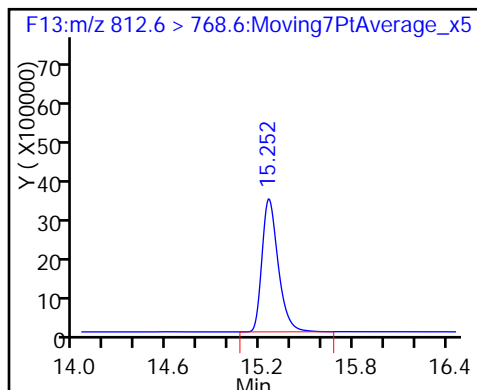
D 33 13C2-PFTeDA



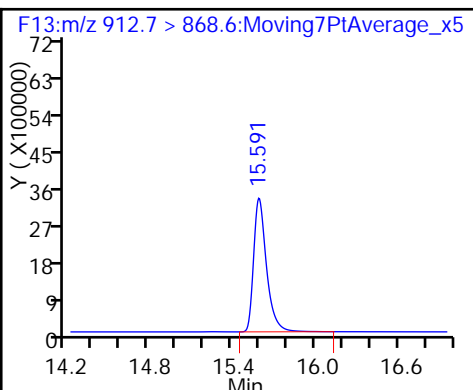
D 35 13C2-PFHxDA



34 Perfluorohexadecanoic acid



36 Perfluorooctadecanoic acid



FORM VI
LCMS BY EXTERNAL STANDARD - INITIAL CALIBRATION DATA
RETENTION TIME SUMMARY

Lab Name: TestAmerica Sacramento Job No.: 320-18796-1 Analy Batch No.: 111182

SDG No.: _____

Instrument ID: A6 GC Column: Acquity ID: 2.1 (mm) Heated Purge: (Y/N) N

Calibration Start Date: 05/24/2016 17:07 Calibration End Date: 05/24/2016 19:14 Calibration ID: 21628

Calibration Files:

LEVEL:	LAB SAMPLE ID:	LAB FILE ID:
Level 1	STD 320-111182/4	24MAY2016A6A_004.d
Level 2	STD 320-111182/5	24MAY2016A6A_005.d
Level 3	STD 320-111182/6	24MAY2016A6A_006.d
Level 4	STD 320-111182/7	24MAY2016A6A_007.d
Level 5	STD 320-111182/8	24MAY2016A6A_008.d
Level 6	STD 320-111182/9	24MAY2016A6A_009.d
Level 7	STD 320-111182/10	24MAY2016A6A_010.d

ANALYTE	LVL 1	LVL 2	LVL 3	LVL 4	LVL 5	LVL 6	LVL 7				RT WINDOW	AVG RT
Perfluorobutanoic acid (PFBA)		5.794	5.791	5.788	5.785	5.791	5.794				0.000 - 0.000	5.791
Perfluoropentanoic acid (PFPeA)	++++	6.951	6.946	6.946	6.951	6.951	6.951				6.699 - 7.199	6.949
Perfluorobutanesulfonic acid (PFBS)	7.078	7.067	7.081	7.078	7.071	7.071	7.071				6.824 - 7.324	7.074
Perfluorohexanoic acid (PFHxA)	8.214	8.230	8.230	8.225	8.230	++++	++++				7.975 - 8.475	8.226
Perfluoroheptanoic acid (PFHpA)	9.464	9.464	9.470	9.463	9.464	9.458	++++				9.212 - 9.712	9.464
Perfluorohexanesulfonic acid (PFHxS)	9.499	9.487	9.499	9.498	9.499	9.493	9.487				9.245 - 9.745	9.495
Perfluorooctanoic acid (PFOA)	++++	10.577	10.577	10.577	10.586	10.568	++++				10.323 - 10.823	10.577
Perfluoroheptanesulfonic Acid (PFHpS)		10.596	10.586	10.586	10.586	10.577	10.577				0.000 - 0.000	10.585
Perfluorooctanesulfonic acid (PFOS)	++++	11.527	11.527	11.526	11.527	11.518	11.518				11.274 - 11.774	11.524
Perfluorononanoic acid (PFNA)	++++	11.545	11.553	11.553	11.553	11.545	++++				11.297 - 11.797	11.550
Perfluorodecanoic acid (PFDA)	12.373	12.363	12.383	12.373	12.383	++++	++++				12.126 - 12.626	12.375
Perfluorooctane Sulfonamide (FOSA)	++++	12.994	12.994	12.994	12.994	12.994	12.994				12.744 - 13.244	12.994
Perfluorodecanesulfonic acid (PFDS)	13.024	13.031	13.032	13.032	13.031	13.031	13.041				12.782 - 13.282	13.032
Perfluoroundecanoic acid (PFUnA)	++++	13.084	13.085	13.076	13.075	13.084	13.094				12.832 - 13.332	13.083
Perfluorododecanoic acid (PFDoA)		13.664	13.666	13.657	13.664	13.673	13.676				0.000 - 0.000	13.667
Perfluorotridecanoic Acid (PFTriA)	14.159	14.166	14.167	14.167	14.166	14.173	14.167				13.916 - 14.416	14.166
Perfluorotetradecanoic acid (PFTeA)	14.589	14.595	14.589	14.589	14.588	14.594	14.583				14.340 - 14.840	14.590
Perfluoro-n-hexadecanoic acid (PFHxDA)	++++	15.178	15.180	15.184	15.178	15.178	15.175				14.929 - 15.429	15.179
Perfluoro-n-octadecanoic acid (PFODA)	15.456	15.445	15.446	15.456	15.450	15.449	15.446				15.200 - 15.700	15.450
13C4 PFBA	5.794	5.797	5.794	5.797	5.788	5.800	5.803				5.546 - 6.046	5.796
13C5-PFPeA	6.951	6.946	6.946	6.941	6.946	6.946	6.946				6.696 - 7.196	6.946
13C2 PFHxA	8.225	8.225	8.219	8.225	8.219	8.219	++++				7.973 - 8.473	8.222
13C4-PFHpA	9.464	9.464	9.464	9.463	9.464	9.452	++++				9.209 - 9.709	9.462
18O2 PFHxS	9.499	9.487	9.499	9.498	9.493	9.493	9.487				9.244 - 9.744	9.494
13C4 PFOA	10.577	10.577	10.577	10.577	10.577	10.577	++++				10.327 - 10.827	10.577
13C4 PFOS	11.527	11.527	11.527	11.526	11.527	11.518	11.518				11.274 - 11.774	11.524
13C5 PFNA	11.544	11.553	11.553	11.553	11.553	++++	++++				11.301 - 11.801	11.551
13C2 PFDA	12.373	12.383	12.383	12.373	12.383	++++	++++				12.130 - 12.630	12.379
13C8 FOSA	12.994	12.994	12.994	12.994	12.994	12.984	12.994				12.743 - 13.243	12.993
13C2 PFUnA	13.076	13.075	13.085	13.076	13.075	13.075	13.094				12.829 - 13.329	13.079
13C2 PFDoA	13.666	13.664	13.666	13.657	13.664	13.673	13.676				13.417 - 13.917	13.667
13C2-PFTeDA	14.589	14.588	14.589	14.589	14.588	14.594	14.583				14.339 - 14.839	14.589
13C2-PFHxDA	15.185	15.178	15.180	15.184	15.178	15.178	15.175				14.930 - 15.430	15.180

FORM VI
LCMS BY EXTERNAL STANDARD - INITIAL CALIBRATION DATA
CURVE EVALUATION

Lab Name: TestAmerica Sacramento Job No.: 320-18796-1 Analy Batch No.: 111182

SDG No.: _____

Instrument ID: A6 GC Column: Acquity ID: 2.1(mm) Heated Purge: (Y/N) N

Calibration Start Date: 05/24/2016 17:07 Calibration End Date: 05/24/2016 19:14 Calibration ID: 21628

Calibration Files:

LEVEL:	LAB SAMPLE ID:	LAB FILE ID:
Level 1	STD 320-111182/4	24MAY2016A6A_004.d
Level 2	STD 320-111182/5	24MAY2016A6A_005.d
Level 3	STD 320-111182/6	24MAY2016A6A_006.d
Level 4	STD 320-111182/7	24MAY2016A6A_007.d
Level 5	STD 320-111182/8	24MAY2016A6A_008.d
Level 6	STD 320-111182/9	24MAY2016A6A_009.d
Level 7	STD 320-111182/10	24MAY2016A6A_010.d

ANALYTE	CF				CURVE TYPE	COEFFICIENT			#	MIN CF	%RSD	#	MAX %RSD	R^2 OR COD	#	MIN R^2 OR COD
	LVL 1 LVL 5	LVL 2 LVL 6	LVL 3 LVL 7	LVL 4		B	M1	M2								
13C4 PFBA	1539.3 1092.6	1282.9 1025.1	1461.5 855.26	1273.0	Ave		1218.52857				19.9		50.0			
13C5-PFPeA	2122.3 2244.1	2509.8 2086.5	3622.5 1518.5	2491.1	Ave		2370.68286				27.1		50.0			
13C2 PFHxA	4154.8 2791.2	3723.8 2487.3	4149.6 ++++	3314.2	Ave		3436.82333				20.3		50.0			
13C4-PFHpA	4217.9 2990.2	3607.8 2581.3	4160.0 ++++	4085.5	Ave		3607.11000				19.0		50.0			
18O2 PFHxS	5797.1 5868.4	6067.4 5096.4	5746.9 4499.4	5613.6	Ave		5527.02809				9.9		50.0			
13C4 PFOA	3688.0 2978.5	4514.1 1829.9	4419.4 ++++	4333.6	Ave		3627.25667				29.1		50.0			
13C4 PFOS	9932.7 10567	10399 9087.2	10721 7923.2	11019	Ave		9949.80873				11.0		50.0			
13C5 PFNA	4818.3 3208.4	4411.4 ++++	4700.7 ++++	3914.2	Ave		3439.82857				41.6		50.0			
13C2 PFDA	4382.7 3498.0	4994.7 ++++	4671.7 ++++	3826.8	Ave		4274.79200				14.3		50.0			
13C8 FOSA	30762 30033	33002 23765	34207 24147	30036	Ave		29421.8800				13.7		50.0			
13C2 PFUnA	7087.1 4263.6	7893.5 2890.3	7571.9 2486.7	6375.5	Ave		5509.80571				41.1		50.0			
13C2 PFDoA	9806.7 7385.1	8750.1 4862.0	8765.8 4220.9	6374.0	Ave		7166.37143				29.4		50.0			
13C2-PFTeDA	12313 9937.2	13445 7182.7	12738 6536.0	11273	Ave		10489.3629				26.0		50.0			
13C2-PFHxDA	22924 21828	24234 18283	23487 16752	22698	Ave		21457.9371				13.2		50.0			

Note: The m1 coefficient is the same as Ave CF for an Ave curve type.

CURVE EVALUATION

Lab Name: TestAmerica SacramentoJob No.: 320-18796-1Analy Batch No.: 111182

SDG No.: _____

Instrument ID: A6GC Column: AcquityID: 2.1(mm)Heated Purge: (Y/N) NCalibration Start Date: 05/24/2016 17:07Calibration End Date: 05/24/2016 19:14Calibration ID: 21628

ANALYTE	RRF					CURVE TYPE	COEFFICIENT			#	MIN RRF	%RSD	#	MAX %RSD	R^2 OR COD	#	MIN R^2 OR COD
	LVL 1 LVL 6	LVL 2 LVL 7	LVL 3	LVL 4	LVL 5		B	M1	M2								
Perfluorobutanoic acid (PFBA)	++++ 1412.8	273.00 1202.3	1247.2	1367.4	1342.5	L2ID	-1.087	1.2569							0.9870	*	0.9900
Perfluoropentanoic acid (PFPeA)	++++ 2419.4	2407.0 1843.0	2919.8	2533.6	2558.7	L1ID	-0.656	1.1888							0.9990		0.9900
Perfluorobutanesulfonic acid (PFBS)	8629.0 7138.5	6955.9 6726.1	8643.4	7023.3	9258.1	L1ID	-0.109	1.4668							0.9980		0.9900
Perfluorohexanoic acid (PFHxA)	150.00 ++++	1066.0 ++++	2657.4	2912.8	2636.1	L1ID	-0.570	0.9301							0.9960		0.9900
Perfluoroheptanoic acid (PFHpA)	1158.0 2776.3	2939.0 ++++	3962.4	3586.5	3800.2	L1ID	-0.409	1.1008							0.9920		0.9900
Perfluorohexanesulfonic acid (PFHxS)	4105.7 5075.3	3808.7 4396.6	6820.9	5380.0	5892.9	L1ID	-0.129	0.9864							0.9990		0.9900
Perfluorooctanoic acid (PFOA)	++++ 1780.6	5270.0 ++++	4424.2	3641.7	3382.3	AveID		1.0654				14.7		35.0			
Perfluoroheptanesulfonic Acid (PFHpS)	++++ 4182.1	5583.0 3683.7	5085.5	4909.2	5815.0	AveID		0.4887				8.9		50.0			
Perfluorooctanesulfonic acid (PFOS)	++++ 8719.8	10286 8089.9	9399.8	8683.7	10079	AveID		0.9314				9.1		35.0			
Perfluorononanoic acid (PFNA)	++++ 2224.1	3622.0 ++++	3086.8	3218.2	3285.6	AveID		0.9155				25.1		35.0			
Perfluorodecanoic acid (PFDA)	1716.0 ++++	3576.0 ++++	5404.8	4642.8	4317.4	L2ID	-0.436	1.2274							0.9980		0.9900
Perfluorooctane Sulfonamide (FOSA)	++++ 28113	29052 26898	38346	35142	36154	AveID		1.1120				10.7		35.0			
Perfluorodecanesulfonic acid (PFDS)	5207.5 4482.1	6414.9 3786.8	5724.1	4803.5	5359.9	L1ID	0.0605	0.4834							0.9990		0.9900
Perfluoroundecanoic acid (PFUnA)	++++ 3727.6	14731 2935.6	11733	6852.0	5858.0	L2ID	0.6384	1.2532							0.9870	*	0.9900
Perfluorododecanoic acid (PFDoA)	++++ 5425.7	6792.0 3901.9	11498	6988.9	6574.6	AveID		1.0192				18.9		35.0			
Perfluorotridecanoic Acid (PFTriA)	7350.0 7026.7	13425 5408.6	17237	11561	11533	AveID		1.4789				26.6		50.0			
Perfluorotetradecanoic acid (PFTeA)	19694 7991.4	18230 6700.0	13399	10810	11063	L1ID	0.2611	1.5985							0.9990		0.9900
Perfluoro-n-hexadecanoic acid (PFHxDA)	++++ 18388	61062 16102	31522	20672	22232	L2ID	3.5645	3.3119							0.9830	*	0.9900
Perfluoro-n-octadecanoic acid (PFODA)	26276 24854	32129 24757	28029	26162	28600	AveID		4.0719				26.9		50.0			

Note: The m1 coefficient is the same as Ave RRF for an Ave curve type.

FORM VI
LCMS BY EXTERNAL STANDARD - INITIAL CALIBRATION DATA
RESPONSE AND CONCENTRATION

Lab Name: TestAmerica Sacramento Job No.: 320-18796-1 Analy Batch No.: 111182

SDG No.: _____

Instrument ID: A6 GC Column: Acquity ID: 2.1(mm) Heated Purge: (Y/N) N

Calibration Start Date: 05/24/2016 17:07 Calibration End Date: 05/24/2016 19:14 Calibration ID: 21628

Calibration Files:

LEVEL:	LAB SAMPLE ID:	LAB FILE ID:
Level 1	STD 320-111182/4	24MAY2016A6A_004.d
Level 2	STD 320-111182/5	24MAY2016A6A_005.d
Level 3	STD 320-111182/6	24MAY2016A6A_006.d
Level 4	STD 320-111182/7	24MAY2016A6A_007.d
Level 5	STD 320-111182/8	24MAY2016A6A_008.d
Level 6	STD 320-111182/9	24MAY2016A6A_009.d
Level 7	STD 320-111182/10	24MAY2016A6A_010.d

ANALYTE	CURVE TYPE	RESPONSE					CONCENTRATION (NG/ML)				
		LVL 1 LVL 6	LVL 2 LVL 7	LVL 3	LVL 4	LVL 5	LVL 1 LVL 6	LVL 2 LVL 7	LVL 3	LVL 4	LVL 5
13C4 PFBA	Ave	76963 51257	64145 42763	73077	63652	54628	50.0 50.0	50.0 50.0	50.0	50.0	50.0
13C5-PFPeA	Ave	106114 104324	125492 75925	181125	124553	112206	50.0 50.0	50.0 50.0	50.0	50.0	50.0
13C2 PFHxA	Ave	207741 124365	186191 +++++	207481	165711	139558	50.0 50.0	50.0 +++++	50.0	50.0	50.0
13C4-PFHpA	Ave	210893 129064	180390 +++++	208002	204276	149508	50.0 50.0	50.0 +++++	50.0	50.0	50.0
18O2 PFHxS	Ave	274201 241061	286987 212821	271830	265525	277574	47.3 47.3	47.3 47.3	47.3	47.3	47.3
13C4 PFOA	Ave	184400 91496	225703 +++++	220970	216681	148927	50.0 50.0	50.0 +++++	50.0	50.0	50.0
13C4 PFOS	Ave	474781 434368	497077 378731	512441	526709	505099	47.8 47.8	47.8 47.8	47.8	47.8	47.8
13C5 PFNA	Ave	240916 +++++	220571 +++++	235035	195708	160421	50.0 +++++	50.0 +++++	50.0	50.0	50.0
13C2 PFDA	Ave	219137 +++++	249735 +++++	233584	191340	174902	50.0 +++++	50.0 +++++	50.0	50.0	50.0
13C8 FOSA	Ave	1538080 1188273	1650124 1207359	1710359	1501807	1501656	50.0 50.0	50.0 50.0	50.0	50.0	50.0
13C2 PFUnA	Ave	354353 144515	394675 124337	378596	318776	213180	50.0 50.0	50.0 50.0	50.0	50.0	50.0
13C2 PFDoA	Ave	490337 243100	437505 211043	438290	318700	369255	50.0 50.0	50.0 50.0	50.0	50.0	50.0
13C2-PFTeDA	Ave	615662 359134	672264 326798	636894	563664	496861	50.0 50.0	50.0 50.0	50.0	50.0	50.0
13C2-PFHxDA	Ave	1146199 914173	1211693 837620	1174335	1134880	1091378	50.0 50.0	50.0 50.0	50.0	50.0	50.0

Curve Type Legend:

Ave = Average

RESPONSE AND CONCENTRATION

Lab Name: TestAmerica Sacramento Job No.: 320-18796-1 Analy Batch No.: 111182

SDG No.: _____

Instrument ID: A6 GC Column: Acquity ID: 2.1(mm) Heated Purge: (Y/N) NCalibration Start Date: 05/24/2016 17:07 Calibration End Date: 05/24/2016 19:14 Calibration ID: 21628

Calibration Files:

LEVEL:	LAB SAMPLE ID:	LAB FILE ID:
Level 1	STD 320-111182/4	24MAY2016A6A_004.d
Level 2	STD 320-111182/5	24MAY2016A6A_005.d
Level 3	STD 320-111182/6	24MAY2016A6A_006.d
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Level 6	STD 320-111182/9	24MAY2016A6A_009.d
Level 7	STD 320-111182/10	24MAY2016A6A_010.d

ANALYTE	IS REF	CURVE TYPE	RESPONSE					CONCENTRATION (NG/ML)				
			LVL 1 LVL 6	LVL 2 LVL 7	LVL 3	LVL 4	LVL 5	LVL 1 LVL 6	LVL 2 LVL 7	LVL 3	LVL 4	LVL 5
Perfluorobutanoic acid (PFBA)		L2ID	++++ 282560	273 480936	6236	27348	67124	++++ 200	1.00 400	5.00	20.0	50.0
Perfluoropentanoic acid (PFPeA)		L1ID	++++ 483871	2407 737184	14599	50671	127936	++++ 200	1.00 400	5.00	20.0	50.0
Perfluorobutanesulfonic acid (PFBS)		L1ID	3814 1262078	6149 2378342	38204	124172	409210	0.442 177	0.884 354	4.42	17.7	44.2
Perfluorohexanoic acid (PFHxA)		L1ID	75 ++++	1066 ++++	13287	58255	131803	0.500 ++++	1.00 ++++	5.00	20.0	50.0
Perfluoroheptanoic acid (PFHpA)		L1ID	579 555259	2939 ++++	19812	71730	190009	0.500 200	1.00 ++++	5.00	20.0	50.0
Perfluorohexanesulfonic acid (PFHxS)		L1ID	1942 960243	3603 1663673	32263	101790	278735	0.473 189	0.946 378	4.73	18.9	47.3
Perfluorooctanoic acid (PFOA)		AveID	++++ 356123	5270 ++++	22121	72833	169115	++++ 200	1.00 ++++	5.00	20.0	50.0
Perfluoroheptanesulfonic Acid (PFHpS)		AveID	++++ 796277	5315 1402764	24207	93471	276794	++++ 190	0.952 381	4.76	19.0	47.6
Perfluorooctanesulfonic acid (PFOS)		AveID	++++ 1667222	9833 3093589	44931	166032	481794	++++ 191	0.956 382	4.78	19.1	47.8
Perfluorononanoic acid (PFNA)		AveID	++++ 444822	3622 ++++	15434	64364	164281	++++ 200	1.00 ++++	5.00	20.0	50.0
Perfluorodecanoic acid (PFDA)		L2ID	858 ++++	3576 ++++	27024	92855	215872	0.500 ++++	1.00 ++++	5.00	20.0	50.0
Perfluorooctane Sulfonamide (FOSA)		AveID	++++ 5622658	29052 10759050	191731	702846	1807702	++++ 200	1.00 400	5.00	20.0	50.0
Perfluorodecanesulfonic acid (PFDS)		L1ID	2510 864142	6184 1460173	27590	92611	258349	0.482 193	0.964 386	4.82	19.3	48.2
Perfluoroundecanoic acid (PFUnA)		L2ID	++++ 745515	14731 1174235	58666	137039	292902	++++ 200	1.00 400	5.00	20.0	50.0
Perfluorododecanoic acid (PFDoA)		AveID	++++ 1085132	6792 1560769	57489	139778	328730	++++ 200	1.00 400	5.00	20.0	50.0

RESPONSE AND CONCENTRATION

Lab Name: TestAmerica Sacramento Job No.: 320-18796-1 Analy Batch No.: 111182

SDG No.: _____

Instrument ID: A6 GC Column: Acquity ID: 2.1(mm) Heated Purge: (Y/N) NCalibration Start Date: 05/24/2016 17:07 Calibration End Date: 05/24/2016 19:14 Calibration ID: 21628

ANALYTE	IS REF	CURVE TYPE	RESPONSE					CONCENTRATION (NG/ML)				
			LVL 1 LVL 6	LVL 2 LVL 7	LVL 3	LVL 4	LVL 5	LVL 1 LVL 6	LVL 2 LVL 7	LVL 3	LVL 4	LVL 5
Perfluorotridecanoic Acid (PFTriA)		AveID	3675 1405333	13425 2163423	86184	231228	576659	0.500 200	1.00 400	5.00	20.0	50.0
Perfluorotetradecanoic acid (PFTeA)		L1ID	9847 1598285	18230 2679987	66997	216201	553149	0.500 200	1.00 400	5.00	20.0	50.0
Perfluoro-n-hexadecanoic acid (PFHxDA)		L2ID	++++ 3677680	61062 6440831	157611	413438	1111597	++++ 200	1.00 400	5.00	20.0	50.0
Perfluoro-n-octandecanoic acid (PFODA)		AveID	13138 4970845	32129 9902853	140146	523232	1430022	0.500 200	1.00 400	5.00	20.0	50.0

Curve Type Legend:

AveID = Average isotope dilution
L1ID = Linear 1/conc IsoDil
L2ID = Linear 1/conc^2 IsoDil

TestAmerica Sacramento
Target Compound Quantitation Report

Data File: \\ChromNA\Sacramento\ChromData\A6\20160524-31021.b\24MAY2016A6A_004.d
 Lims ID: Std L1
 Client ID:
 Sample Type: IC Calib Level: 1
 Inject. Date: 24-May-2016 17:07:08 ALS Bottle#: 9 Worklist Smp#: 4
 Injection Vol: 15.0 ul Dil. Factor: 1.0000
 Sample Info: STD L1
 Misc. Info.: Acquity BEH 1.7um, 3X150mm T=50°C
 Operator ID: JRB Instrument ID: A6
 Sublist: chrom-PFAC_A6*sub9
 Method: \\ChromNA\Sacramento\ChromData\A6\20160524-31021.b\PFAC_A6.m
 Limit Group: LC PFC_DOD ICAL
 Last Update: 25-May-2016 14:05:29 Calib Date: 24-May-2016 19:14:42
 Integrator: Picker
 Quant Method: Isotopic Dilution Quant By: Initial Calibration
 Last ICal File: \\ChromNA\Sacramento\ChromData\A6\20160524-31021.b\24MAY2016A6A_010.d
 Column 1 : Acquity BEH C18 (2.10 mm) Det: F1:MRM
 Process Host: XAWRK049

First Level Reviewer: barnettj

Date: 24-May-2016 17:44:31

Signal	RT	EXP RT	DLT RT	REL RT	Response	Amount ng/ml	Ratio(Limits)	%Rec	S/N	Flags
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D 1 13C4 PFBA

217.0 > 172.0	5.794	5.796	-0.002		76963	63.2		126	9869	
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D 3 13C5-PFPeA

267.9 > 223.0	6.951	6.946	0.005		106114	44.8		89.5	3239	
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4 Perfluoropentanoic acid

262.9 > 219.0	6.951	6.949	0.002	1.000	107	0.5938		119	15.5	M
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40 Perfluorobutanesulfonic acid

298.9 > 80.0	7.078	7.074	0.004	1.000	3814	0.5229		118		
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5 Perfluorobutane Sulfonate

298.9 > 80.0	7.078	7.074	0.004	1.000	3814	NC			22.6	
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298.9 > 99.0	7.067	7.074	-0.007	0.999	971		3.93(0.00-0.00)		108	
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D 6 13C2 PFHxA

315.0 > 270.0	8.225	8.223	0.002		207741	60.4		121	18543	
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7 Perfluorohexanoic acid

313.0 > 269.0	8.214	8.225	-0.011	1.000	75	0.6325		126	9.5	M
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D 8 13C4-PFHpA

367.0 > 322.0	9.464	9.459	0.005		210893	58.5		117	18350	
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9 Perfluoroheptanoic acid

363.0 > 319.0	9.464	9.462	0.002	1.000	579	0.4961		99.2	53.0	M
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D 11 18O2 PFHxS

403.0 > 84.0	9.499	9.494	0.005		274201	49.6		105	23131	
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10 Perfluorohexane Sulfonate

399.0 > 80.0	9.499	9.495	0.004	1.000	1942	NC			194	
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41 Perfluorohexanesulfonic acid

399.0 > 80.0	9.499	9.495	0.004	1.000	1942	0.4702		99.4		
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Signal	RT	EXP RT	DLT RT	REL RT	Response	Amount ng/ml	Ratio(Limits)	%Rec	S/N	Flags
13 Perfluorooctanoic acid										M
413.0 > 369.0	10.559	10.573	-0.014	1.000	1243	0.3164		63.3	15.9	M
D 12 13C4 PFOA										
417.0 > 372.0	10.577	10.577	0.0		184400	50.8		102	12110	
15 Perfluorooctane sulfonic acid										M
499.0 > 80.0	11.527	11.524	0.003	1.000	1084	0.1172		24.5	79.5	M
499.0 > 99.0	11.535	11.524	0.011	1.001	328		3.30(0.00-0.00)	24.5	26.0	M
D 16 13C4 PFOS										
503.0 > 80.0	11.527	11.524	0.003		474781	47.7		99.8	35220	
18 Perfluorononanoic acid										M
463.0 > 419.0	11.528	11.547	-0.019	1.000	154	0.0349		7.0	6.8	M
D 17 13C5 PFNA										
468.0 > 423.0	11.544	11.551	-0.007		240916	57.2		114	17211	
20 Perfluorodecanoic acid										M
513.0 > 469.0	12.373	12.376	-0.003	1.000	858	0.5146		103	55.0	M
D 19 13C2 PFDA										
515.0 > 470.0	12.373	12.380	-0.007		219137	51.3		103	13306	
D 23 13C8 FOSA										
506.0 > 78.0	12.994	12.993	0.001		1538080	52.3		105	66984	
24 Perfluorooctane Sulfonamide										
498.0 > 78.0	12.994	12.994	0.0	1.000	10841	0.3169		63.4	729	
39 Perfluorodecane Sulfonic acid										
599.0 > 80.0	13.024	13.032	-0.008	1.000	2510	0.3976		82.5		
25 Perfluorodecane Sulfonate										
599.0 > 80.0	13.024	13.032	-0.008	1.000	2510	NC			181	
D 26 13C2 PFUnA										
565.0 > 520.0	13.076	13.079	-0.003		354353	64.3		129	24661	
27 Perfluoroundecanoic acid										
563.0 > 519.0	13.076	13.082	-0.006	1.000	5084	0.0630		12.6	18.4	
D 28 13C2 PFDoA										
615.0 > 570.0	13.666	13.667	-0.001		490337	68.4		137	33358	
30 Perfluorotridecanoic acid										
663.0 > 619.0	14.159	14.166	-0.007	1.000	3675	0.2534		50.7	0.9	
D 33 13C2-PFTeDA										
715.0 > 670.0	14.589	14.589	0.0		615662	58.7		117	28040	
32 Perfluorotetradecanoic acid										
713.0 > 669.0	14.589	14.590	-0.001	1.000	9847	0.4648		93.0	6.2	
34 Perfluorohexadecanoic acid										
813.0 > 769.0	15.180	15.179	0.001	1.000	35656	0.0216		4.3	83.5	
D 35 13C2-PFHxDA										
815.0 > 770.0	15.185	15.180	0.005		1146199	53.4		107	10750	
36 Perfluorooctandecanoic acid										
913.0 > 869.0	15.456	15.450	0.006	1.000	13138	0.3290		65.8	20.5	

[QC Flag Legend](#)

Processing Flags

NC - Not Calibrated

Review Flags

M - Manually Integrated

[Reagents:](#)

LCPFC-L1_00019

Amount Added: 1.00

Units: mL

TestAmerica Sacramento

Data File: \\ChromNA\Sacramento\ChromData\A6\20160524-31021.b\24MAY2016A6A_004.d

Injection Date: 24-May-2016 17:07:08

Instrument ID: A6

Lims ID: Std L1

Client ID:

Operator ID: JRB

ALS Bottle#:

9

Worklist Smp#:

4

Injection Vol: 15.0 ul

Dil. Factor:

1.0000

Method: PFAC_A6

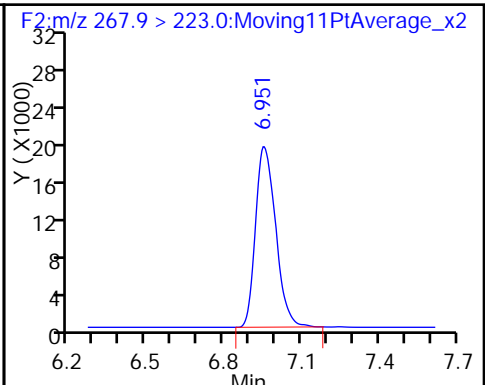
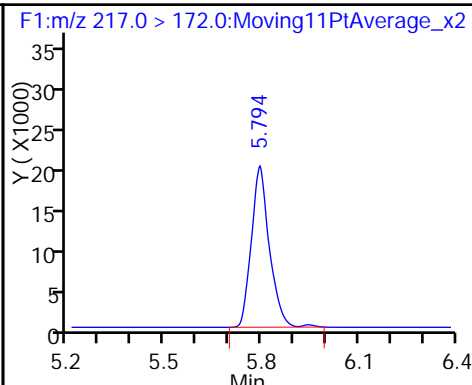
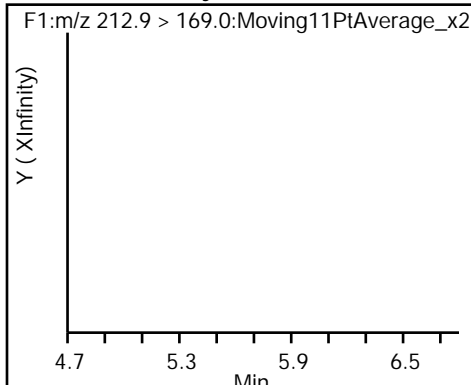
Limit Group:

LC PFC_DOD ICAL

2 Perfluorobutyric acid (ND)

D 1 13C4 PFBA

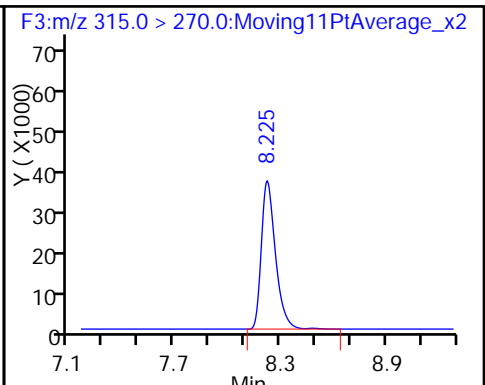
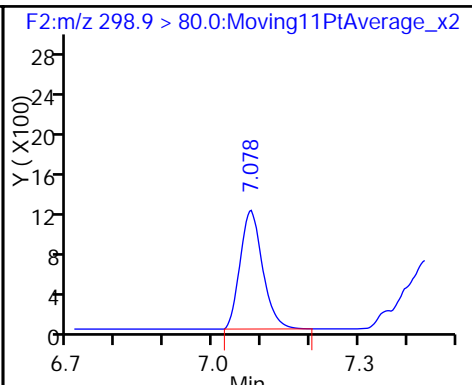
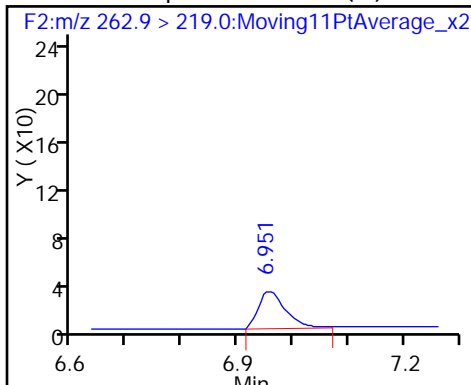
D 3 13C5-PFPeA



4 Perfluoropentanoic acid (M)

40 Perfluorobutanesulfonic acid

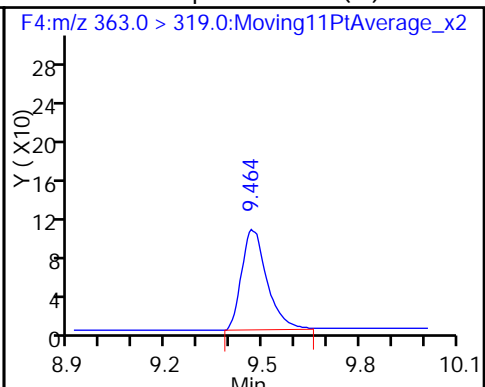
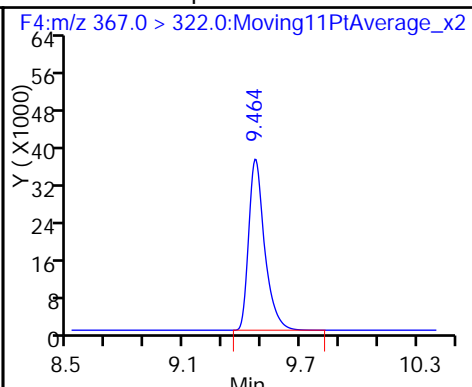
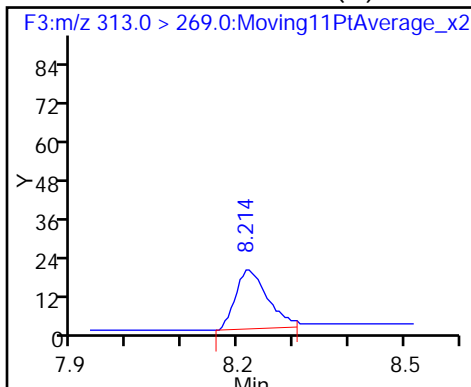
D 6 13C2 PFHxA



7 Perfluorohexanoic acid (M)

D 8 13C4-PFHpA

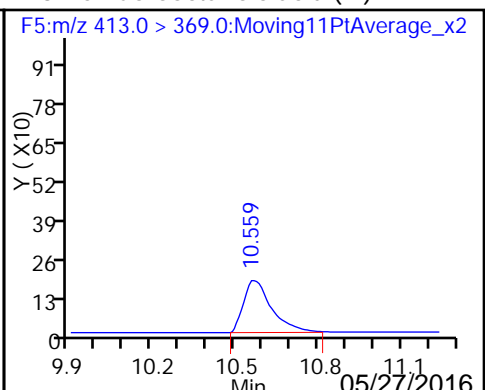
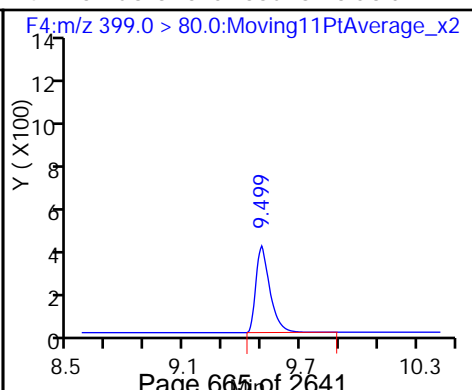
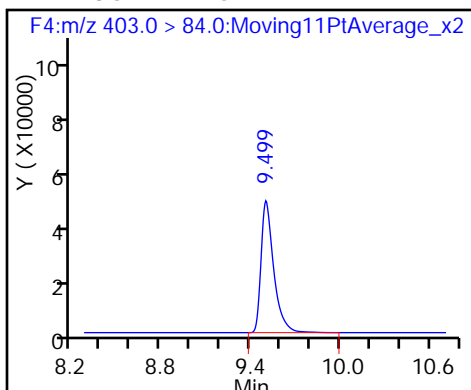
9 Perfluoroheptanoic acid (M)

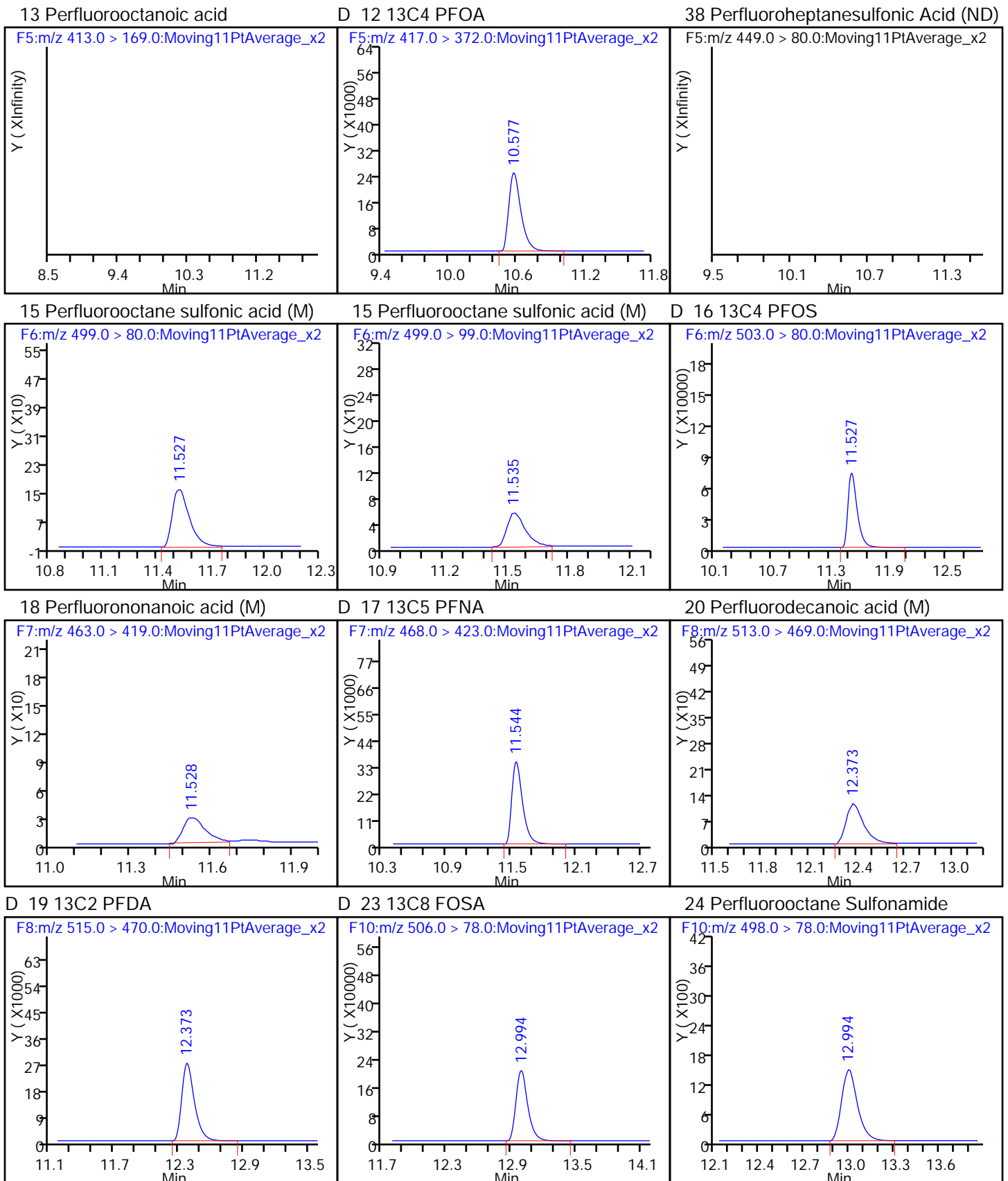


D 11 18O2 PFHxS

41 Perfluorohexanesulfonic acid

13 Perfluorooctanoic acid (M)

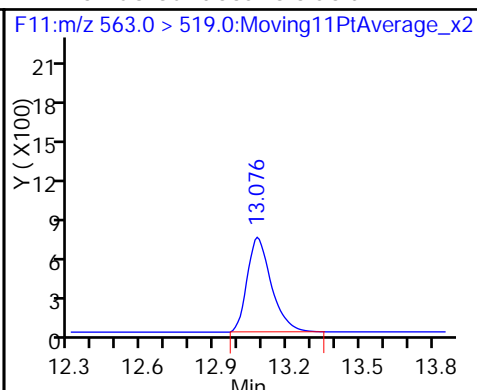
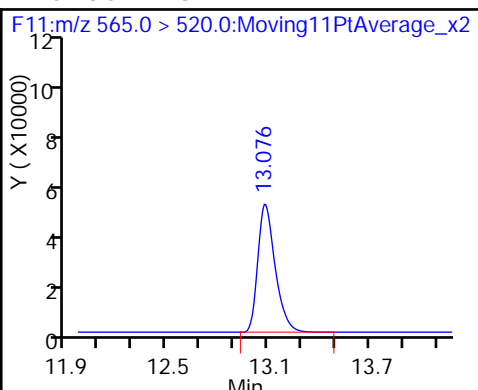
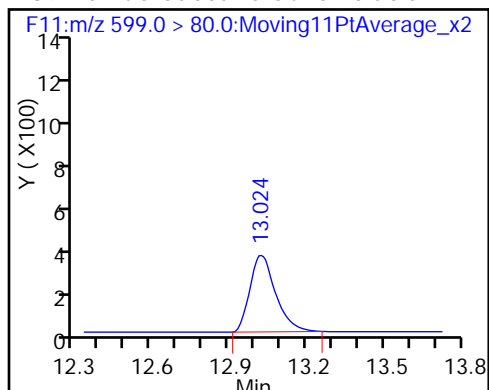




39 Perfluorodecane Sulfonic acid

D 26 13C2 PFUnA

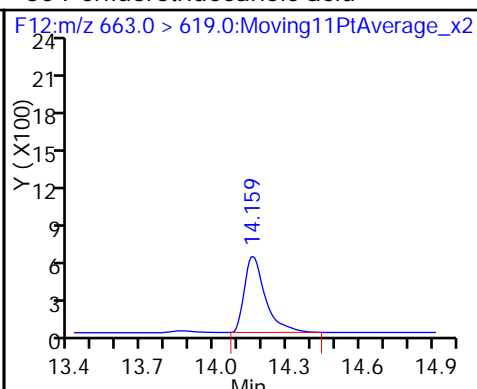
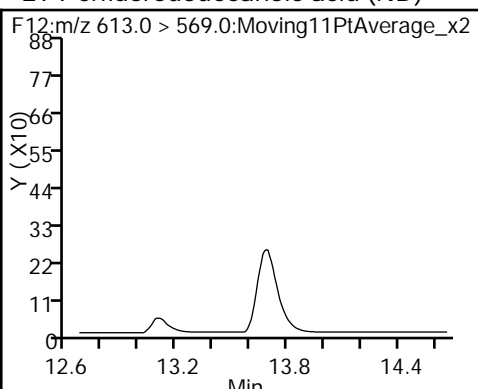
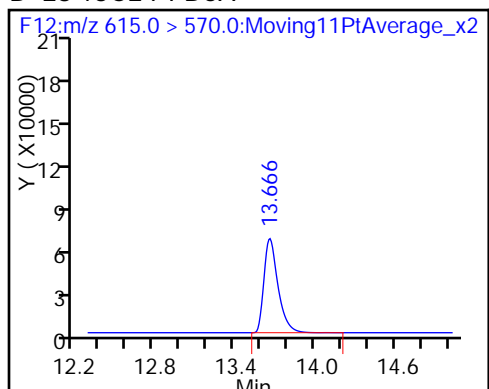
27 Perfluoroundecanoic acid



D 28 13C2 PFDaA

29 Perfluorododecanoic acid (ND)

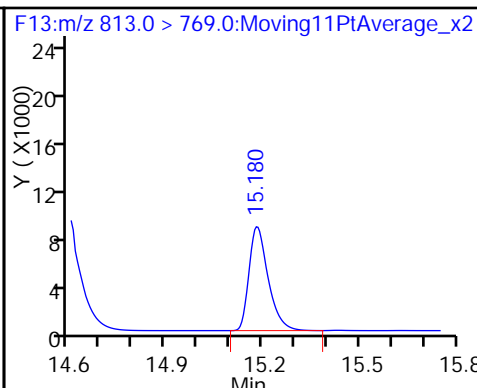
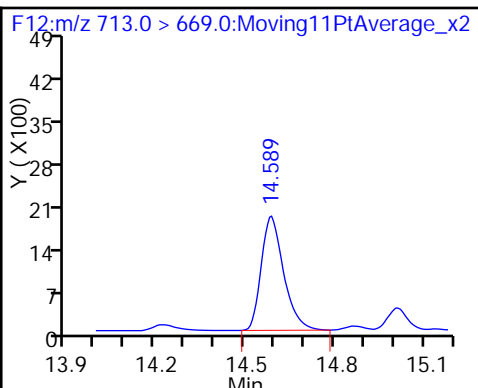
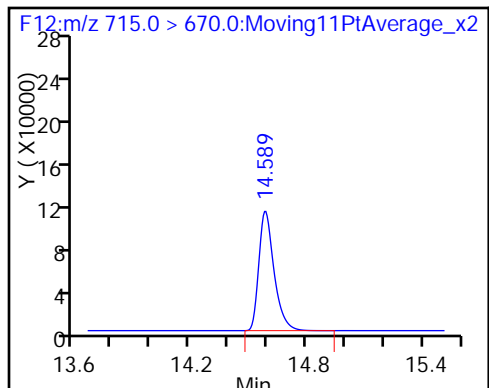
30 Perfluorotridecanoic acid



D 33 13C2-PFTeDA

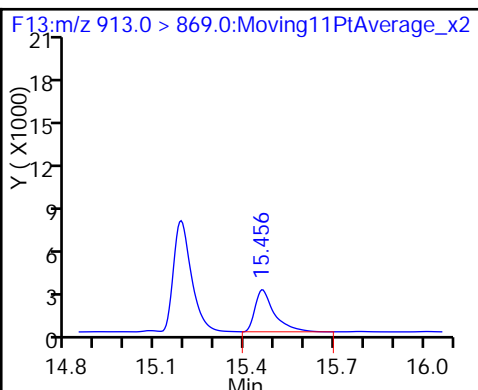
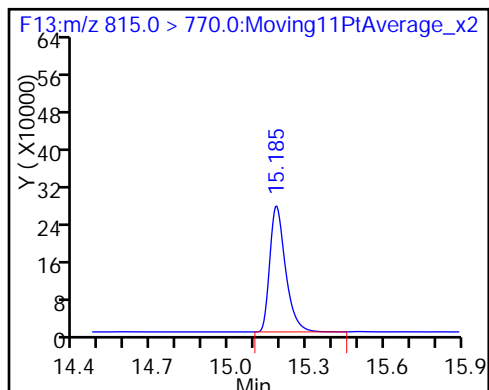
32 Perfluorotetradecanoic acid

34 Perfluorohexadecanoic acid



D 35 13C2-PFHxDA

36 Perfluorooctadecanoic acid



TestAmerica Sacramento

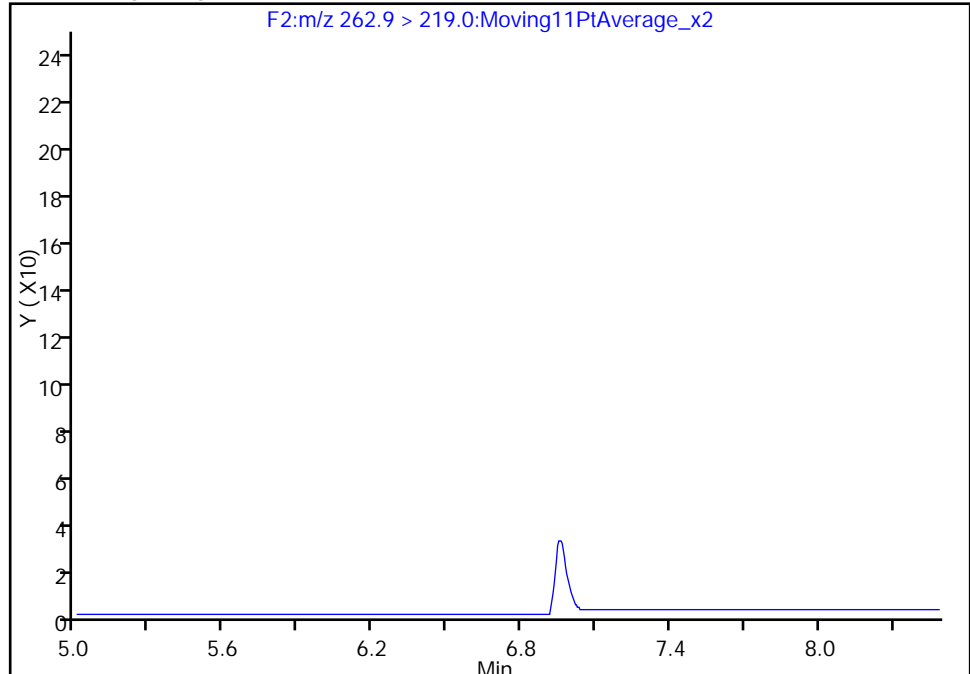
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Injection Date: 24-May-2016 17:07:08 Instrument ID: A6
Lims ID: Std L1
Client ID:
Operator ID: JRB ALS Bottle#: 9 Worklist Smp#: 4
Injection Vol: 15.0 ul Dil. Factor: 1.0000
Method: PFAC_A6 Limit Group: LC PFC_DOD ICAL
Column: Acquity BEH C18 (2.10 mm) Detector F2:MRM

4 Perfluoropentanoic acid, CAS: 2706-90-3

Signal: 1

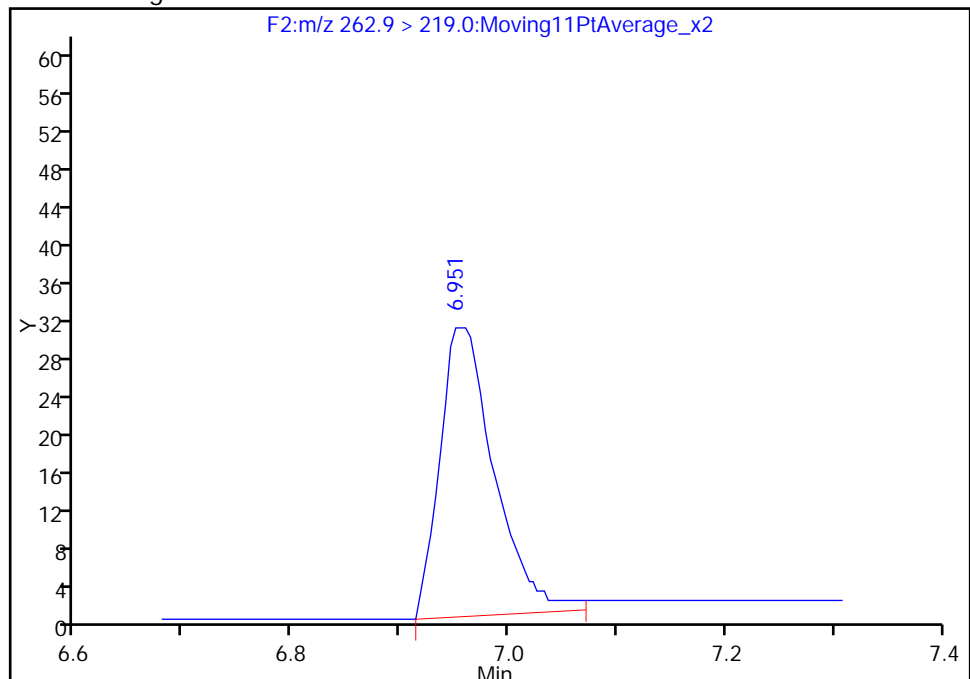
Not Detected
Expected RT: 6.95

Processing Integration Results



RT: 6.95
Area: 107
Amount: 0.593846
Amount Units: ng/ml

Manual Integration Results



Reviewer: barnettj, 24-May-2016 17:44:31
Audit Action: Manually Integrated

Audit Reason: Missed Peak

TestAmerica Sacramento

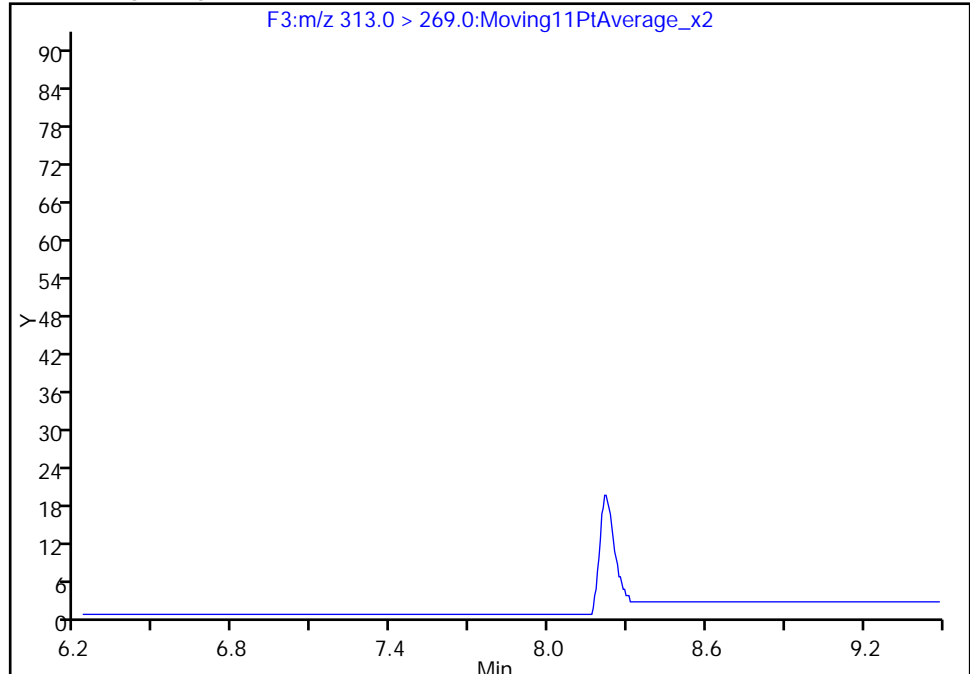
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Lims ID: Std L1
Client ID:
Operator ID: JRB ALS Bottle#: 9 Worklist Smp#: 4
Injection Vol: 15.0 ul Dil. Factor: 1.0000
Method: PFAC_A6 Limit Group: LC PFC_DOD ICAL
Column: Acquity BEH C18 (2.10 mm) Detector F3:MRM

7 Perfluorohexanoic acid, CAS: 307-24-4

Signal: 1

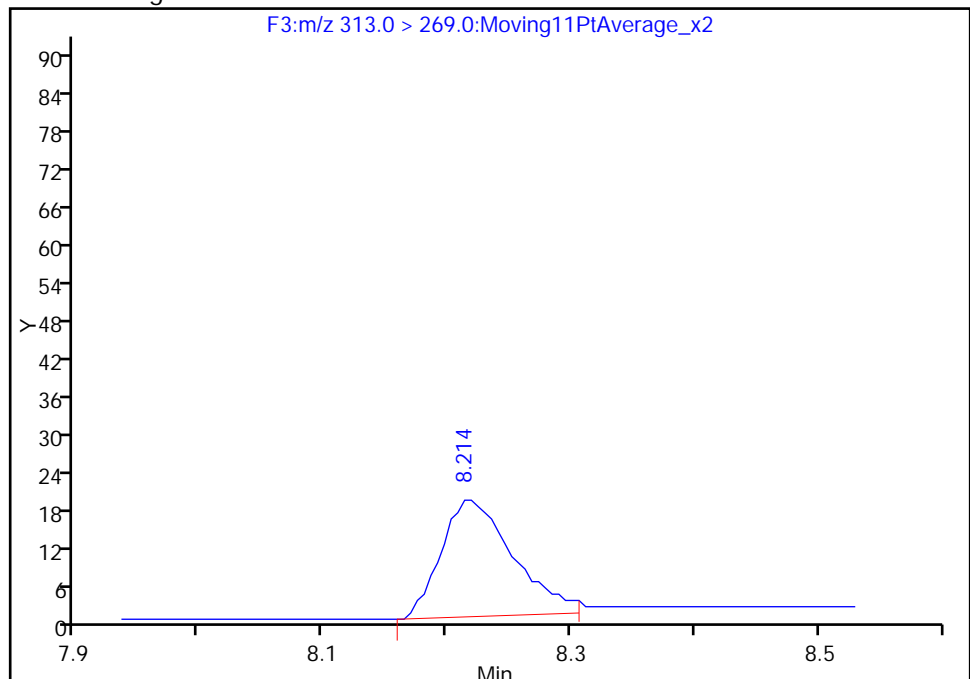
Not Detected
Expected RT: 8.22

Processing Integration Results



RT: 8.21
Area: 75
Amount: 0.632470
Amount Units: ng/ml

Manual Integration Results



Reviewer: barnettj, 24-May-2016 17:44:31
Audit Action: Manually Integrated

Audit Reason: Missed Peak

TestAmerica Sacramento

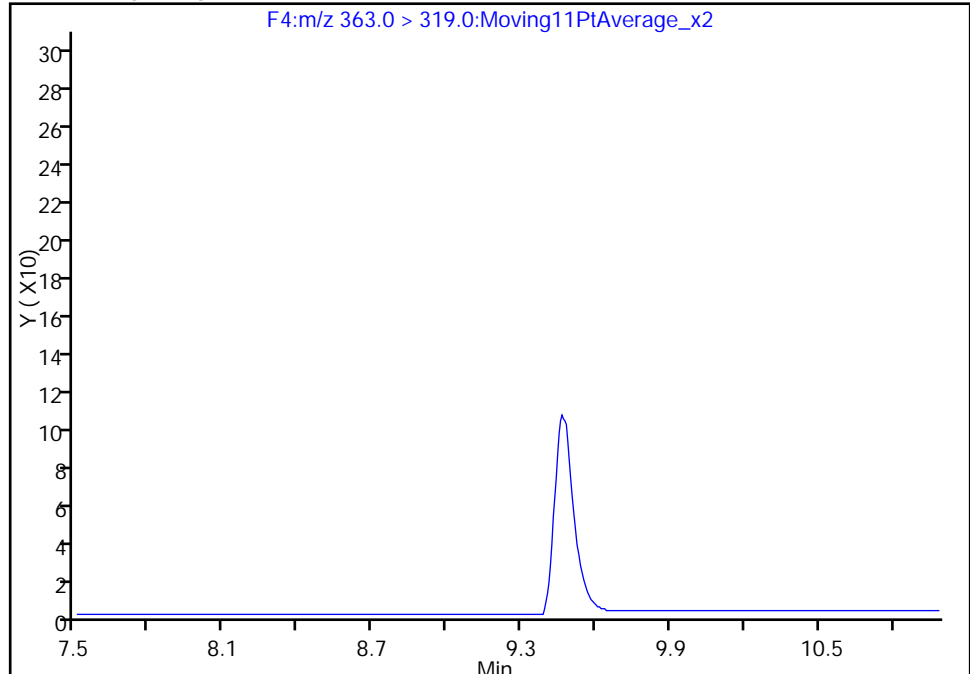
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Lims ID: Std L1
Client ID:
Operator ID: JRB ALS Bottle#: 9 Worklist Smp#: 4
Injection Vol: 15.0 ul Dil. Factor: 1.0000
Method: PFAC_A6 Limit Group: LC PFC_DOD ICAL
Column: Acquity BEH C18 (2.10 mm) Detector F4:MRM

9 Perfluoroheptanoic acid, CAS: 375-85-9

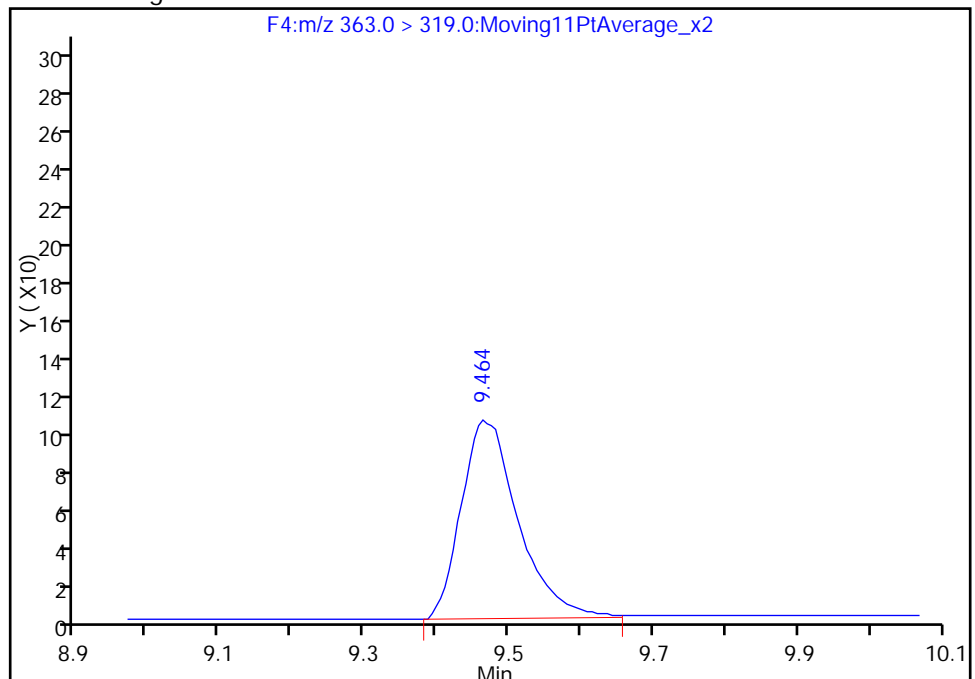
Signal: 1

Not Detected
Expected RT: 9.46

Processing Integration Results



Manual Integration Results



RT: 9.46
Area: 579
Amount: 0.496110
Amount Units: ng/ml

Reviewer: barnettj, 24-May-2016 17:44:31
Audit Action: Manually Integrated

Audit Reason: Missed Peak

TestAmerica Sacramento

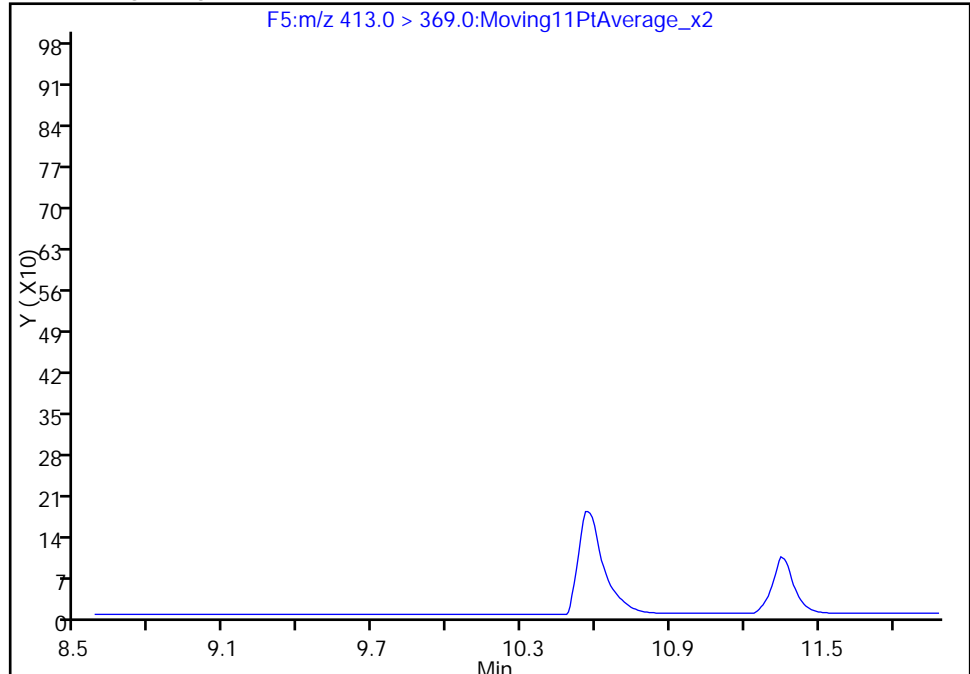
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Client ID:
Operator ID: JRB ALS Bottle#: 9 Worklist Smp#: 4
Injection Vol: 15.0 ul Dil. Factor: 1.0000
Method: PFAC_A6 Limit Group: LC PFC_DOD ICAL
Column: Acquity BEH C18 (2.10 mm) Detector F5:MRM

13 Perfluorooctanoic acid, CAS: 335-67-1

Signal: 1

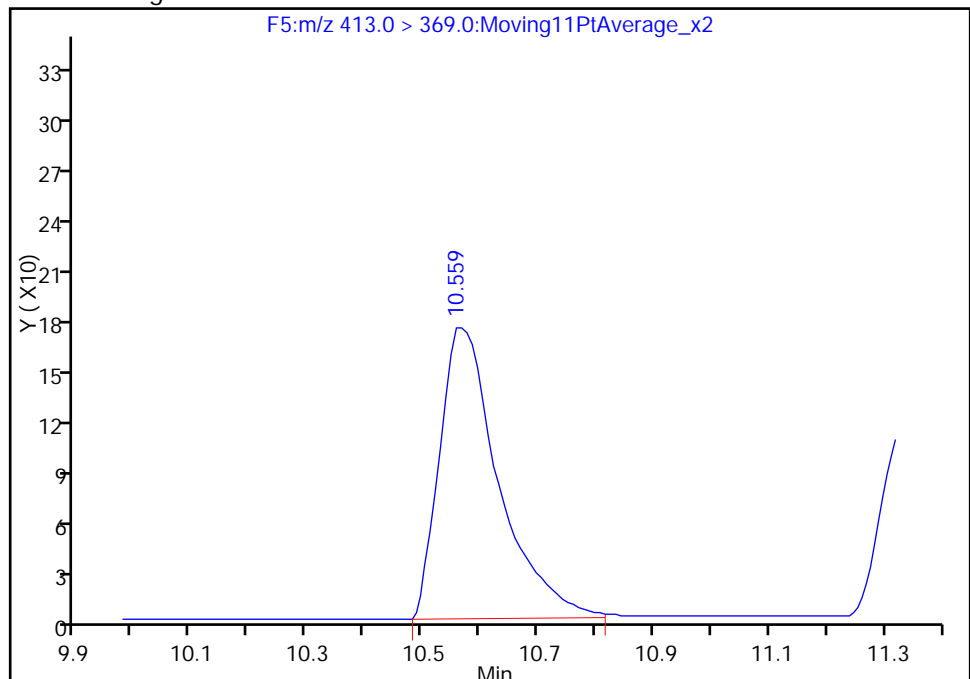
Not Detected
Expected RT: 10.57

Processing Integration Results



RT: 10.56
Area: 1243
Amount: 0.316363
Amount Units: ng/ml

Manual Integration Results



Reviewer: barnettj, 24-May-2016 17:44:31
Audit Action: Manually Integrated

Audit Reason: Missed Peak

TestAmerica Sacramento

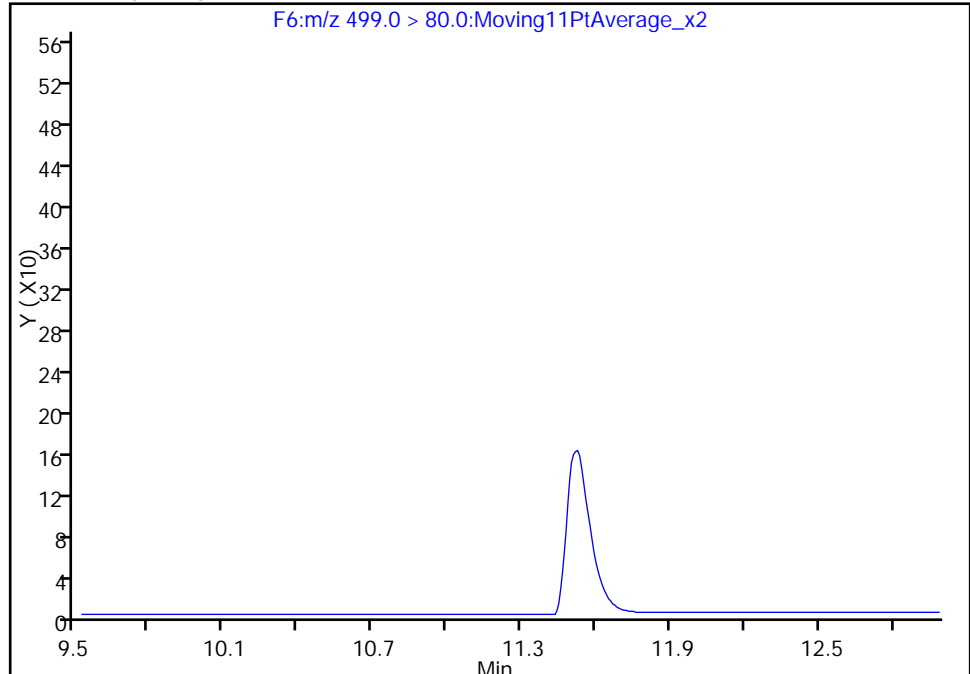
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Lims ID: Std L1
Client ID:
Operator ID: JRB ALS Bottle#: 9 Worklist Smp#: 4
Injection Vol: 15.0 ul Dil. Factor: 1.0000
Method: PFAC_A6 Limit Group: LC PFC_DOD ICAL
Column: Acquity BEH C18 (2.10 mm) Detector F6:MRM

15 Perfluorooctane sulfonic acid, CAS: 1763-23-1

Signal: 1

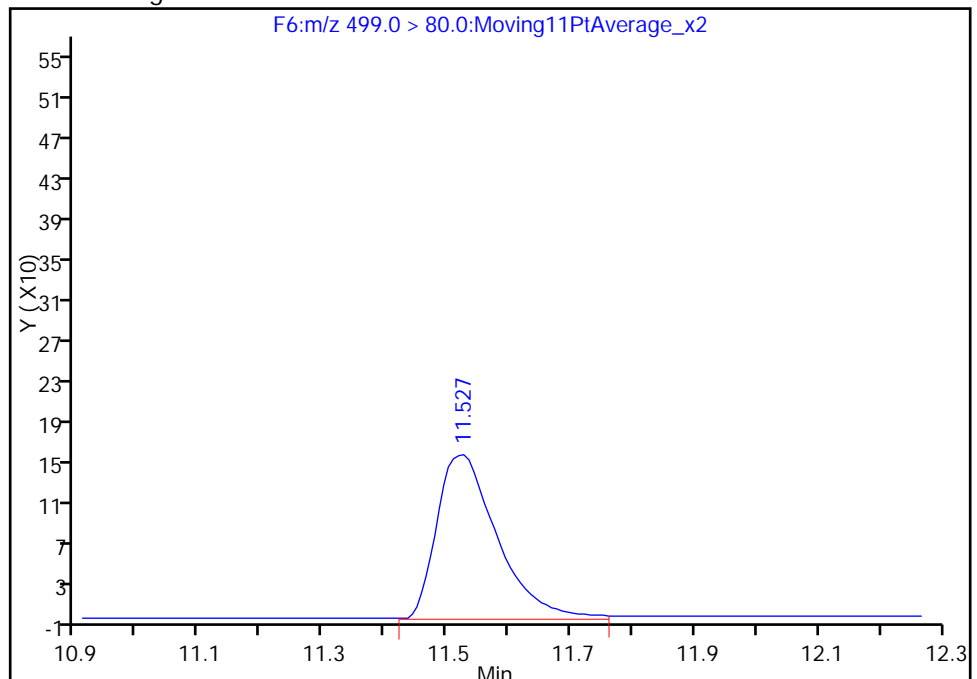
Not Detected
Expected RT: 11.52

Processing Integration Results



RT: 11.53
Area: 1084
Amount: 0.117173
Amount Units: ng/ml

Manual Integration Results



Reviewer: barnettj, 24-May-2016 17:44:31
Audit Action: Manually Integrated

Audit Reason: Missed Peak

TestAmerica Sacramento

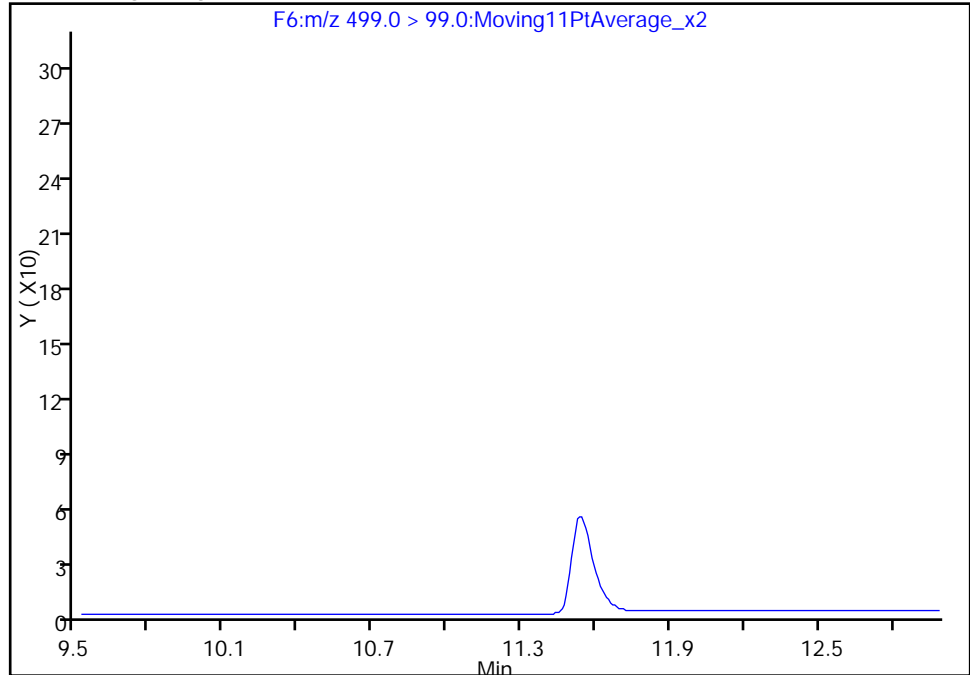
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Lims ID: Std L1
Client ID:
Operator ID: JRB ALS Bottle#: 9 Worklist Smp#: 4
Injection Vol: 15.0 ul Dil. Factor: 1.0000
Method: PFAC_A6 Limit Group: LC PFC_DOD ICAL
Column: Acquity BEH C18 (2.10 mm) Detector F6:MRM

15 Perfluorooctane sulfonic acid, CAS: 1763-23-1

Signal: 2

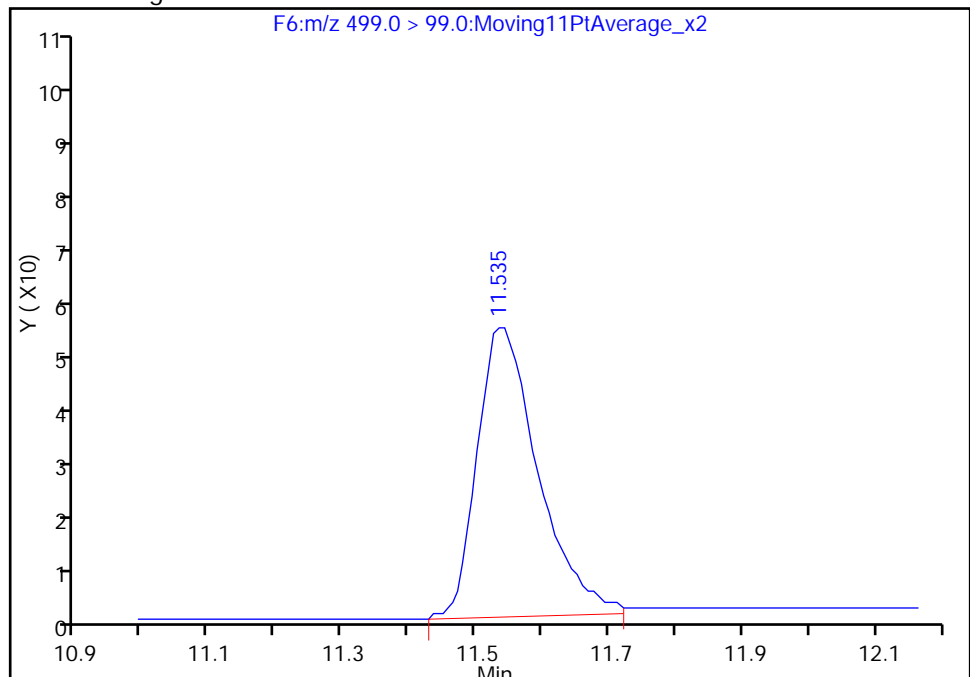
Not Detected
Expected RT: 11.52

Processing Integration Results



Manual Integration Results

RT: 11.54
Area: 328
Amount: 0.117173
Amount Units: ng/ml



Reviewer: barnettj, 24-May-2016 17:44:31

Audit Action: Manually Integrated

Audit Reason: Missed Peak

TestAmerica Sacramento

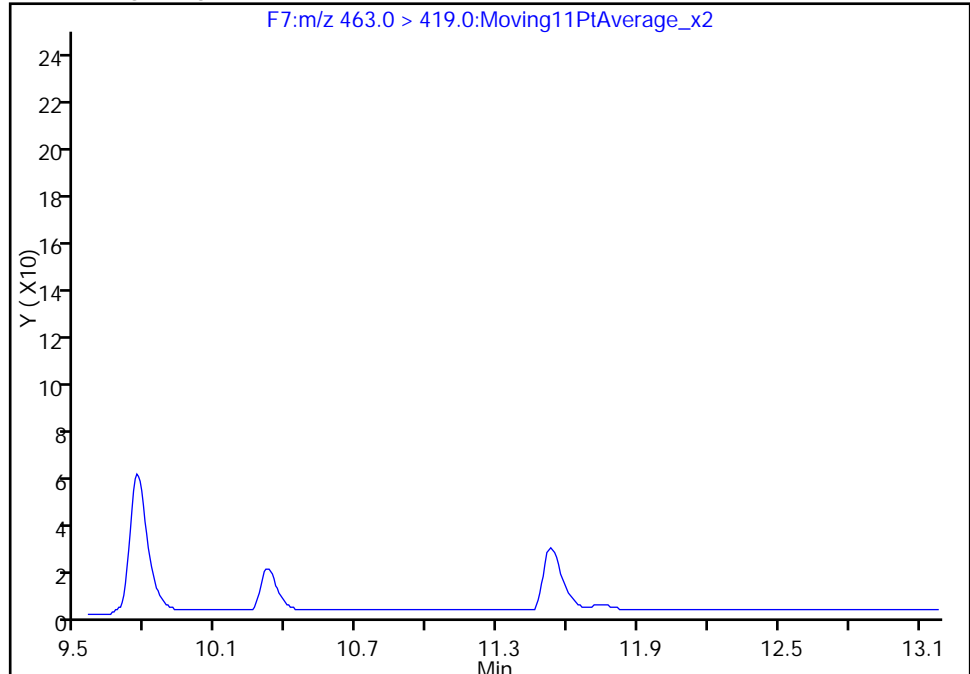
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Lims ID: Std L1
Client ID:
Operator ID: JRB ALS Bottle#: 9 Worklist Smp#: 4
Injection Vol: 15.0 ul Dil. Factor: 1.0000
Method: PFAC_A6 Limit Group: LC PFC_DOD ICAL
Column: Acquity BEH C18 (2.10 mm) Detector F7:MRM

18 Perfluorononanoic acid, CAS: 375-95-1

Signal: 1

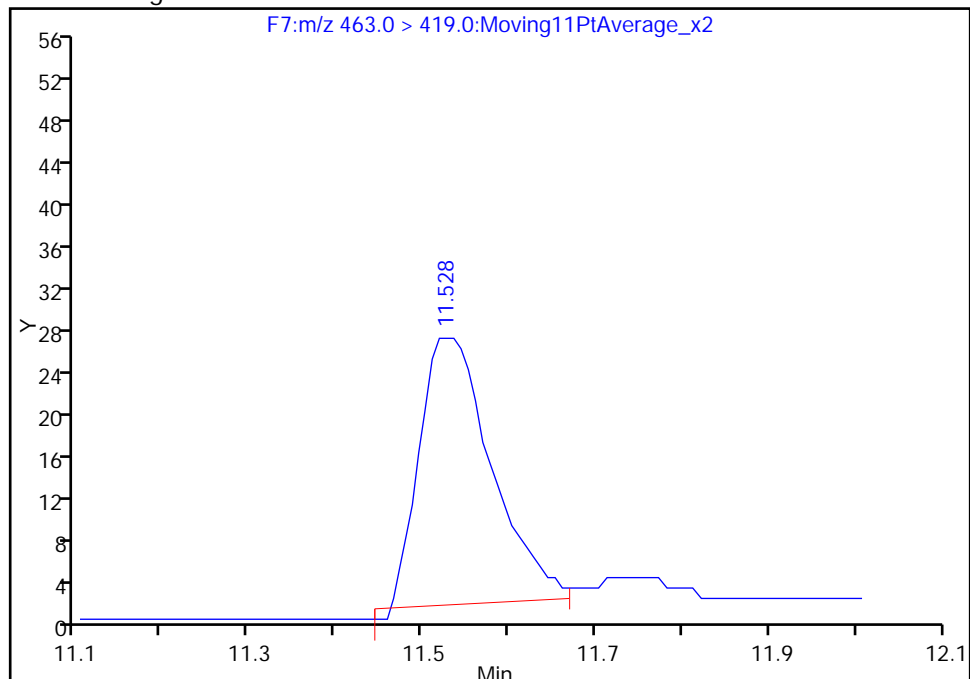
Not Detected
Expected RT: 11.55

Processing Integration Results



RT: 11.53
Area: 154
Amount: 0.034911
Amount Units: ng/ml

Manual Integration Results



Reviewer: barnettj, 24-May-2016 17:44:31
Audit Action: Manually Integrated

Audit Reason: Missed Peak

TestAmerica Sacramento

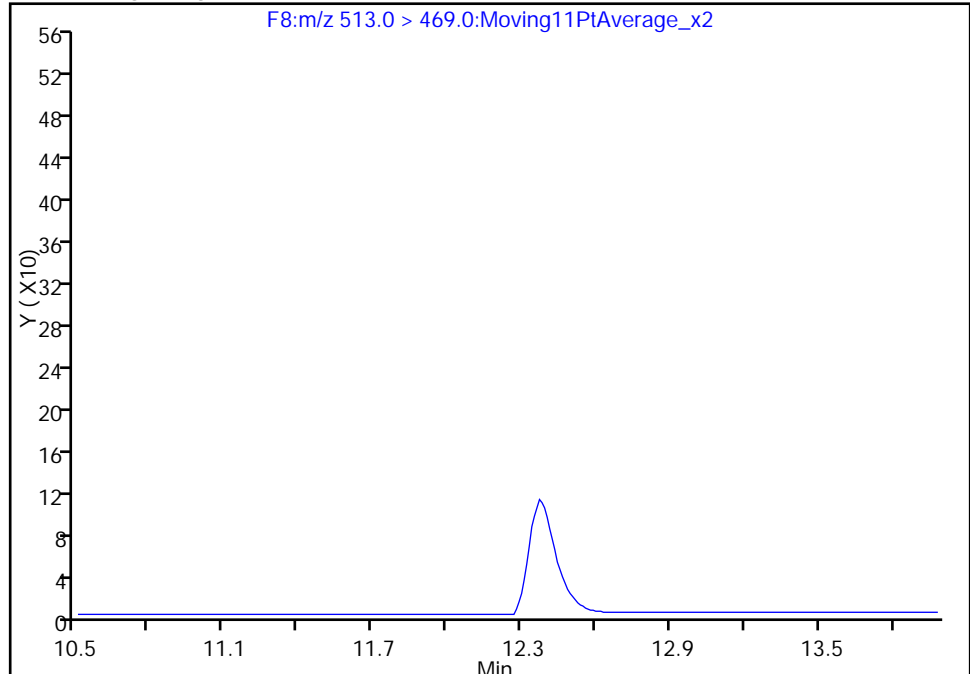
Data File: \\ChromNA\Sacramento\ChromData\A6\20160524-31021.b\24MAY2016A6A_004.d
Injection Date: 24-May-2016 17:07:08 Instrument ID: A6
Lims ID: Std L1
Client ID:
Operator ID: JRB ALS Bottle#: 9 Worklist Smp#: 4
Injection Vol: 15.0 ul Dil. Factor: 1.0000
Method: PFAC_A6 Limit Group: LC PFC_DOD ICAL
Column: Acquity BEH C18 (2.10 mm) Detector F8:MRM

20 Perfluorodecanoic acid, CAS: 335-76-2

Signal: 1

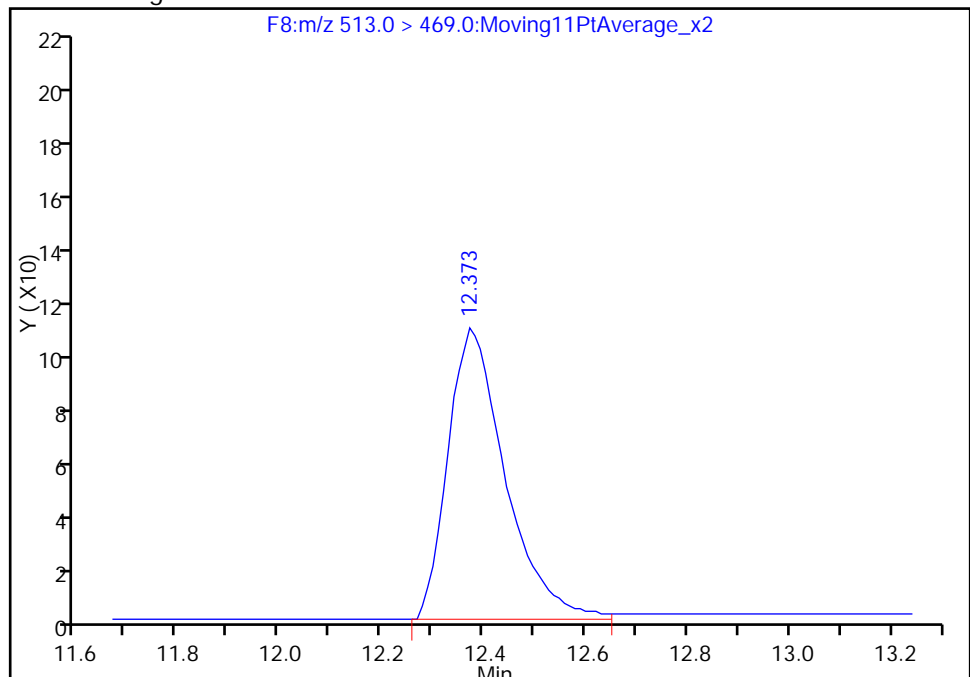
Not Detected
Expected RT: 12.38

Processing Integration Results



RT: 12.37
Area: 858
Amount: 0.514582
Amount Units: ng/ml

Manual Integration Results



Reviewer: barnettj, 24-May-2016 17:44:31
Audit Action: Manually Integrated

Audit Reason: Missed Peak

TestAmerica Sacramento
Target Compound Quantitation Report

Data File: \\ChromNA\Sacramento\ChromData\A6\20160524-31021.b\24MAY2016A6A_005.d
 Lims ID: Std L2
 Client ID:
 Sample Type: IC Calib Level: 2
 Inject. Date: 24-May-2016 17:28:24 ALS Bottle#: 10 Worklist Smp#: 5
 Injection Vol: 15.0 ul Dil. Factor: 1.0000
 Sample Info: STD L2
 Misc. Info.: Acquity BEH 1.7um, 3X150mm T=50°C
 Operator ID: JRB Instrument ID: A6
 Sublist: chrom-PFAC_A6*sub9
 Method: \\ChromNA\Sacramento\ChromData\A6\20160524-31021.b\PFAC_A6.m
 Limit Group: LC PFC_DOD ICAL
 Last Update: 25-May-2016 14:05:46 Calib Date: 24-May-2016 19:14:42
 Integrator: Picker
 Quant Method: Isotopic Dilution Quant By: Initial Calibration
 Last ICal File: \\ChromNA\Sacramento\ChromData\A6\20160524-31021.b\24MAY2016A6A_010.d
 Column 1 : Acquity BEH C18 (2.10 mm) Det: F1:MRM
 Process Host: XAWRK049

First Level Reviewer: barnettj

Date: 24-May-2016 18:11:25

Signal	RT	EXP RT	DLT RT	REL RT	Response	Amount ng/ml	Ratio(Limits)	%Rec	S/N	Flags
2 Perfluorobutyric acid										M
212.9 > 169.0	5.794	5.791	0.003	1.000	273	1.03		103	40.0	M
D 1 13C4 PFBA										
217.0 > 172.0	5.797	5.796	0.001		64145	52.6		105	6791	
D 3 13C5-PFPeA										
267.9 > 223.0	6.946	6.946	0.0		125492	52.9		106	12341	
4 Perfluoropentanoic acid										
262.9 > 219.0	6.951	6.949	0.002	1.000	2407	1.36		136	295	
40 Perfluorobutanesulfonic acid										
298.9 > 80.0	7.067	7.074	-0.007	1.000	6149	0.7653		86.6		
5 Perfluorobutane Sulfonate										
298.9 > 80.0	7.067	7.074	-0.007	1.000	6149	NC			37.5	
298.9 > 99.0	7.085	7.074	0.011	1.002	2846		2.16(0.00-0.00)		126	
D 6 13C2 PFHxA										
315.0 > 270.0	8.225	8.223	0.002		186191	54.2		108	16557	
7 Perfluorohexanoic acid										M
313.0 > 269.0	8.230	8.225	0.005	1.000	1066	0.9208		92.1	122	M
D 8 13C4-PFHpA										
367.0 > 322.0	9.464	9.459	0.005		180390	50.0		100	15866	
9 Perfluoroheptanoic acid										
363.0 > 319.0	9.464	9.462	0.002	1.000	2939	1.11		111	298	
D 11 18O2 PFHxS										
403.0 > 84.0	9.487	9.494	-0.007		286987	51.9		110	24441	
10 Perfluorohexane Sulfonate										
399.0 > 80.0	9.487	9.495	-0.008	1.000	3603	NC			354	
41 Perfluorohexanesulfonic acid										
399.0 > 80.0	9.487	9.495	-0.008	1.000	3603	0.7326		77.4		

Signal	RT	EXP RT	DLT RT	REL RT	Response	Amount ng/ml	Ratio(Limits)	%Rec	S/N	Flags
13 Perfluorooctanoic acid										
413.0 > 369.0	10.577	10.573	0.004	1.000	5270	1.10		110	361	
413.0 > 169.0	10.577	10.573	0.004	1.000	2496		2.11(0.00-0.00)	110	184	
D 12 13C4 PFOA										
417.0 > 372.0	10.577	10.577	0.0		225703	62.2		124	14944	
14 Perfluoroheptane Sulfonate										
449.0 > 80.0	10.596	10.585	0.011	1.000	5315	NC			351	
38 Perfluoroheptanesulfonic Acid										
449.0 > 80.0	10.596	10.585	0.011	1.000	5315	1.05		110		
15 Perfluorooctane sulfonic acid										M
499.0 > 80.0	11.527	11.524	0.003	1.000	9833	1.02		106	782	
499.0 > 99.0	11.527	11.524	0.003	1.000	1034		9.51(0.00-0.00)	106	80.0	M
D 16 13C4 PFOS										
503.0 > 80.0	11.527	11.524	0.003		497077	50.0		105	10487	
18 Perfluorononanoic acid										M
463.0 > 419.0	11.545	11.547	-0.002	1.000	3622	0.8968		89.7	41.3	M
D 17 13C5 PFNA										
468.0 > 423.0	11.553	11.551	0.002		220571	52.4		105	15968	
20 Perfluorodecanoic acid										
513.0 > 469.0	12.363	12.376	-0.013	1.000	3576	0.9384		93.8	234	
D 19 13C2 PFDA										
515.0 > 470.0	12.383	12.380	0.003		249735	58.4		117	14967	
D 23 13C8 FOSA										
506.0 > 78.0	12.994	12.993	0.001		1650124	56.1		112	72506	
24 Perfluorooctane Sulfonamide										
498.0 > 78.0	12.994	12.994	0.0	1.000	29052	0.7916		79.2	1997	
39 Perfluorodecane Sulfonic acid										
599.0 > 80.0	13.031	13.032	-0.001	1.000	6184	1.11		115		
25 Perfluorodecane Sulfonate										
599.0 > 80.0	13.031	13.032	-0.001	1.000	6184	NC			465	
D 26 13C2 PFUnA										
565.0 > 520.0	13.075	13.079	-0.004		394675	71.6		143	27858	
27 Perfluoroundecanoic acid										
563.0 > 519.0	13.084	13.082	0.002	1.000	14731	0.9798		98.0	205	
D 28 13C2 PFDaA										
615.0 > 570.0	13.664	13.667	-0.003		437505	61.0		122	29159	
29 Perfluorododecanoic acid										
613.0 > 569.0	13.664	13.667	-0.003	1.000	6792	0.7616		76.2	6.4	
30 Perfluorotridecanoic acid										
663.0 > 619.0	14.166	14.166	0.0	1.000	13425	1.04		104	3.1	
D 33 13C2-PFTeDA										
715.0 > 670.0	14.588	14.589	-0.001		672264	64.1		128	17239	
32 Perfluorotetradecanoic acid										
713.0 > 669.0	14.595	14.590	0.005	1.000	18230	1.14		114	5.9	
34 Perfluorohexadecanoic acid										
813.0 > 769.0	15.178	15.179	-0.001	1.000	61062	1.03		103	157	
D 35 13C2-PFHxDA										
815.0 > 770.0	15.178	15.180	-0.002		1211693	56.5		113	9442	

Signal	RT	EXP RT	DLT RT	REL RT	Response	Amount ng/ml	Ratio(Limits)	%Rec	S/N	Flags
36 Perfluorooctadecanoic acid										
913.0 > 869.0	15.445	15.450	-0.005	1.000	32129	0.9018		90.2	59.7	

QC Flag Legend

Processing Flags

NC - Not Calibrated

Review Flags

M - Manually Integrated

Reagents:

LCPFC-L2_00020

Amount Added: 1.00

Units: mL

TestAmerica Sacramento

Data File: \\ChromNA\Sacramento\ChromData\A6\20160524-31021.b\24MAY2016A6A_005.d

Injection Date: 24-May-2016 17:28:24

Instrument ID: A6

Lims ID: Std L2

Client ID:

Operator ID: JRB

ALS Bottle#: 10

Worklist Smp#: 5

Injection Vol: 15.0 ul

Dil. Factor: 1.0000

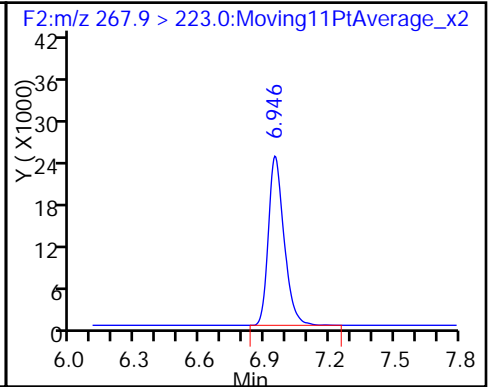
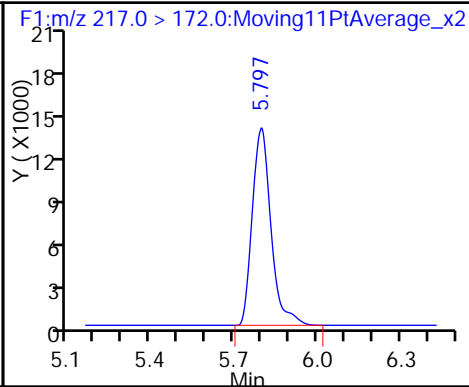
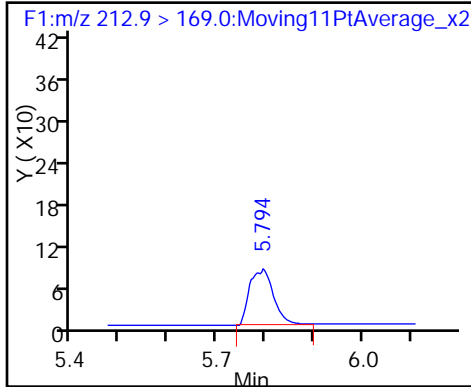
Method: PFAC_A6

Limit Group: LC PFC_DOD ICAL

2 Perfluorobutyric acid (M)

D 1 13C4 PFBA

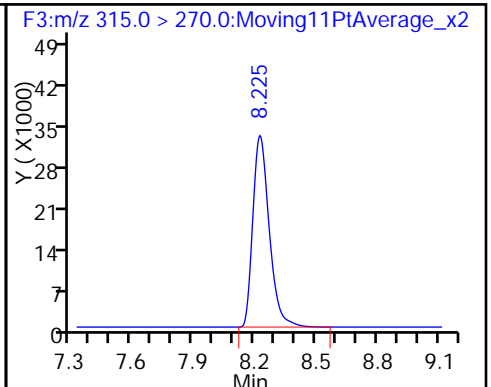
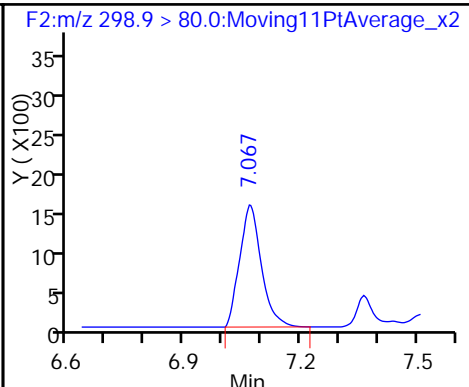
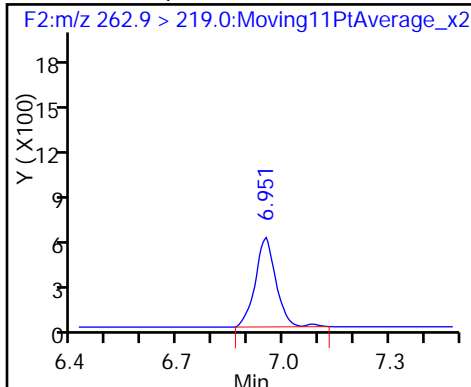
D 3 13C5-PFPeA



4 Perfluoropentanoic acid

40 Perfluorobutanesulfonic acid

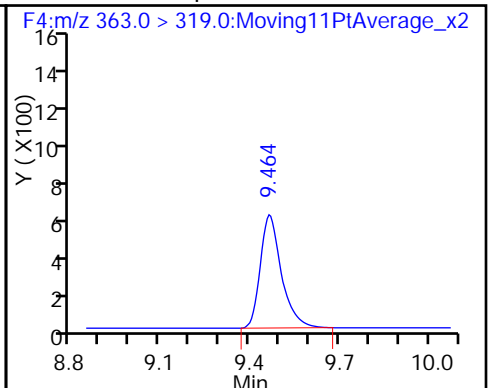
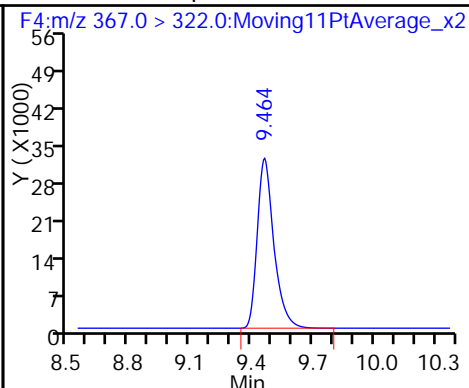
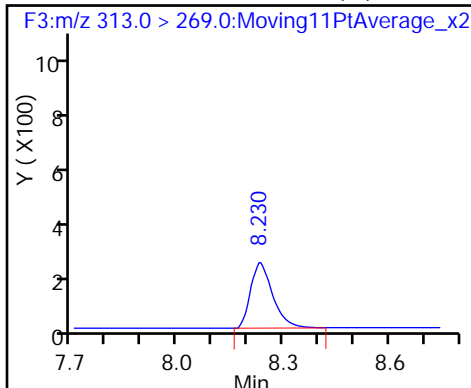
D 6 13C2 PFHxA



7 Perfluorohexanoic acid (M)

D 8 13C4-PFHpA

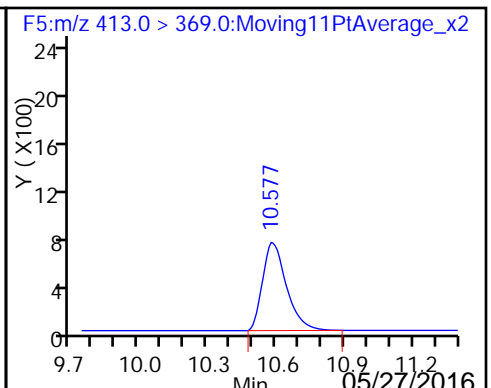
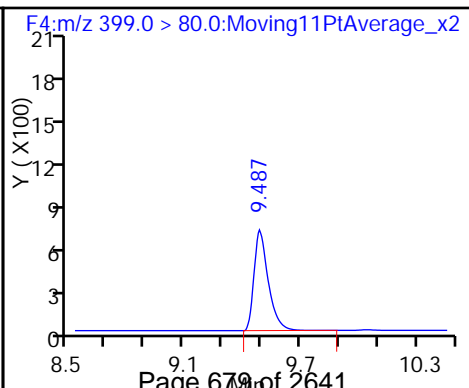
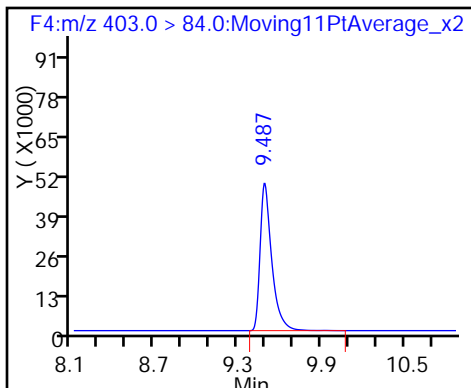
9 Perfluoroheptanoic acid

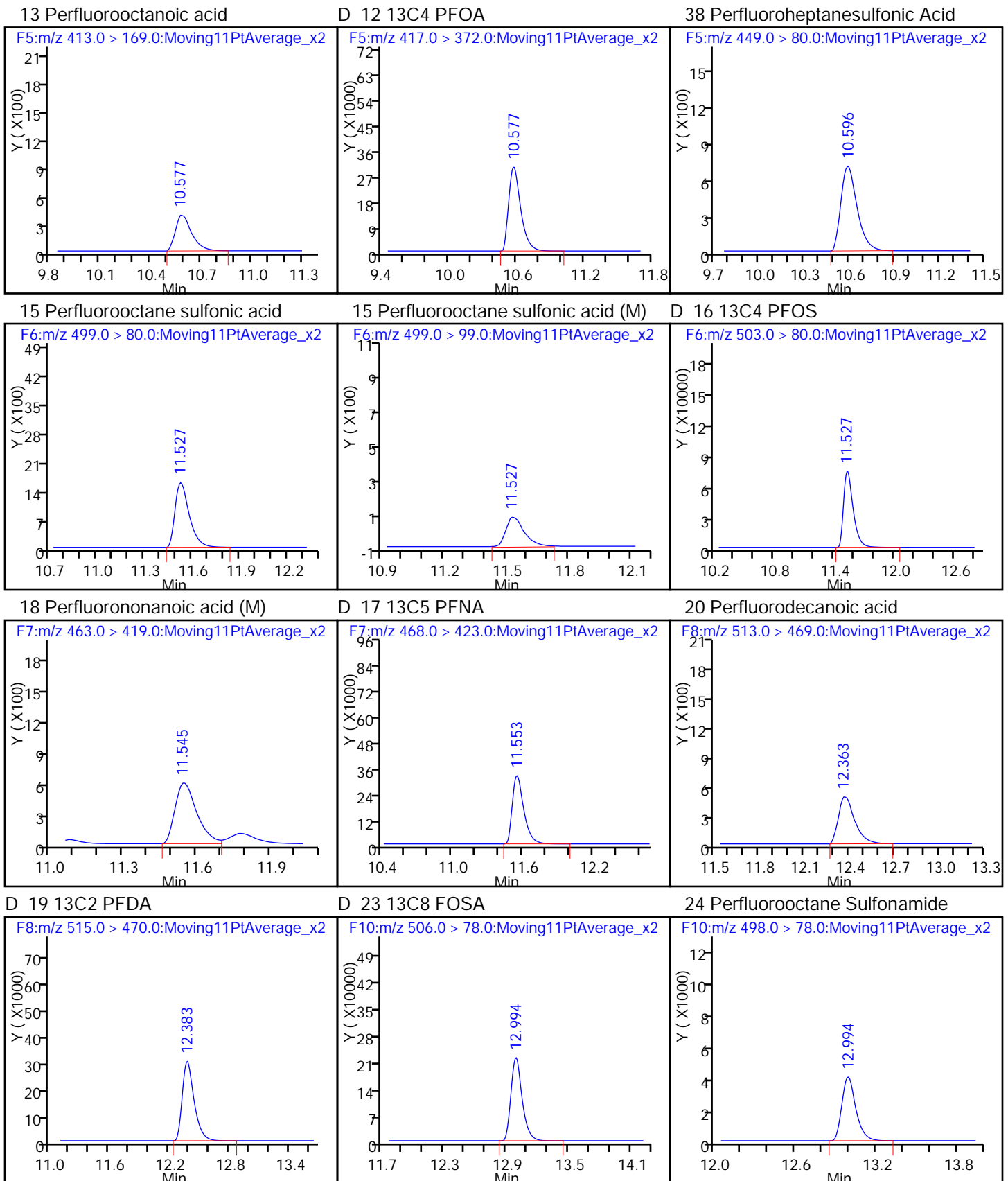


D 11 18O2 PFHxS

41 Perfluorohexanesulfonic acid

13 Perfluorooctanoic acid

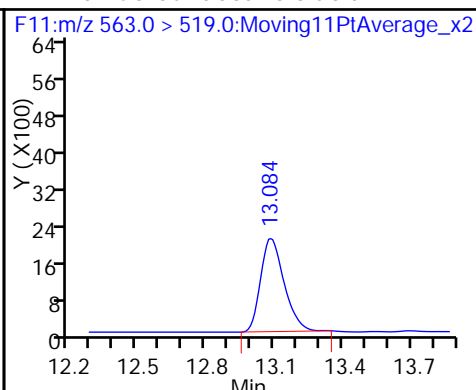
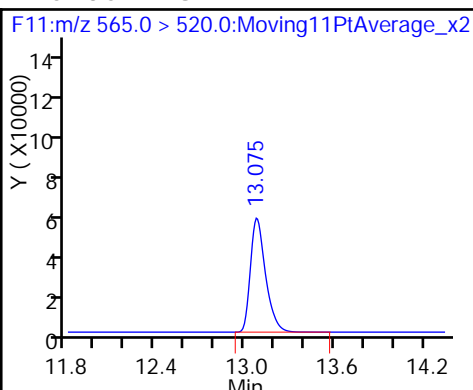
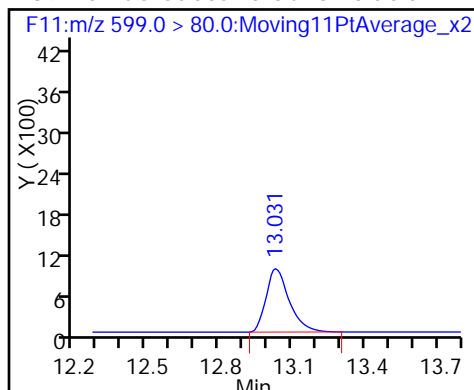




39 Perfluorodecane Sulfonic acid

D 26 13C2 PFUnA

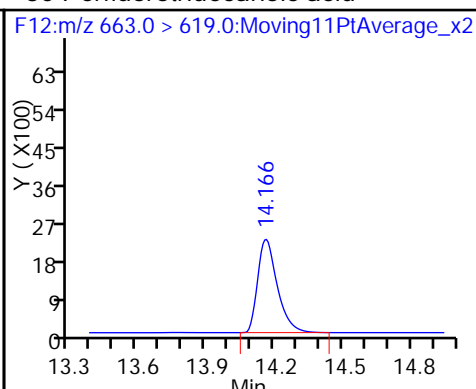
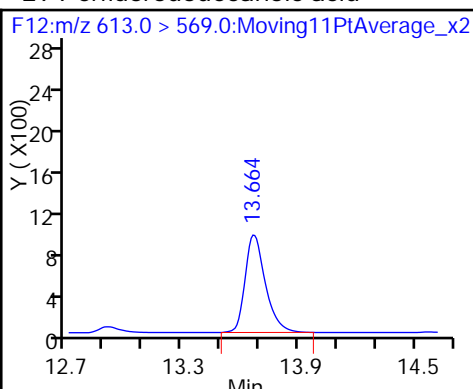
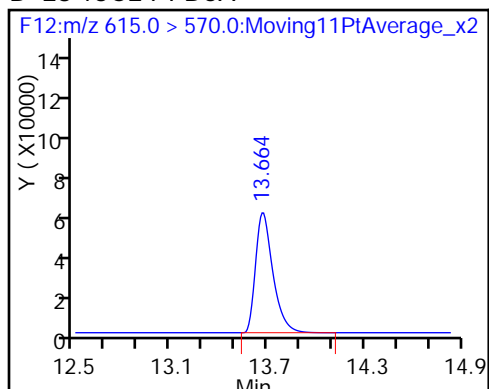
27 Perfluoroundecanoic acid



D 28 13C2 PFDaA

29 Perfluorododecanoic acid

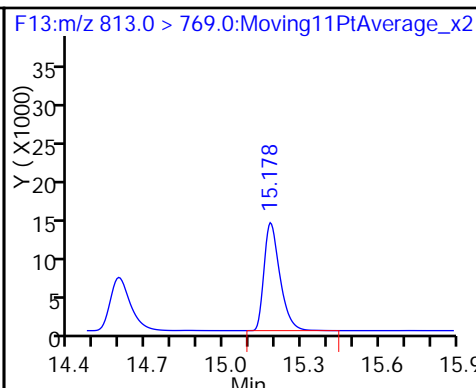
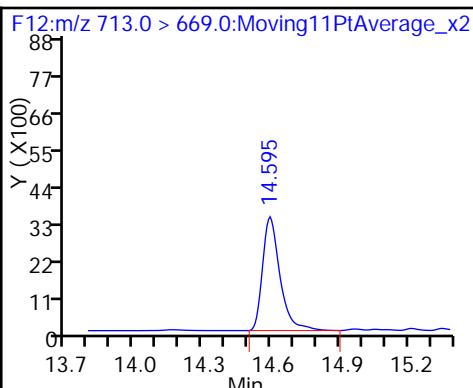
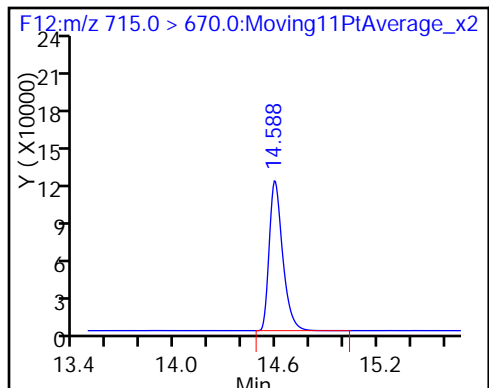
30 Perfluorotridecanoic acid



D 33 13C2-PFTeDA

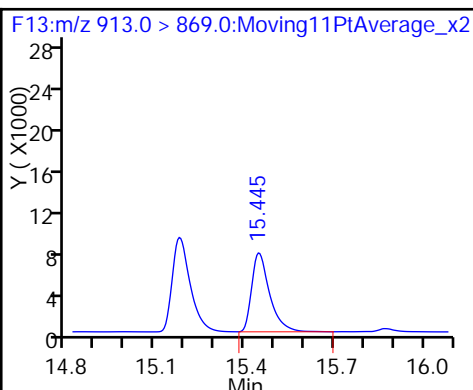
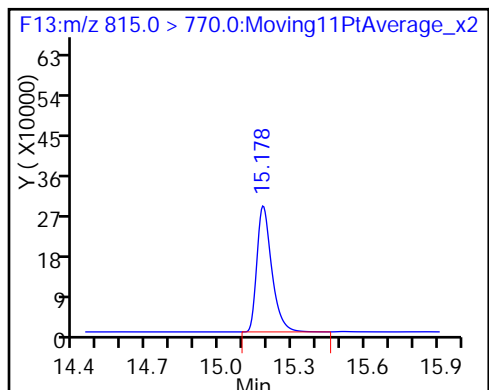
32 Perfluorotetradecanoic acid

34 Perfluorohexadecanoic acid



D 35 13C2-PFHxDA

36 Perfluorooctadecanoic acid



TestAmerica Sacramento

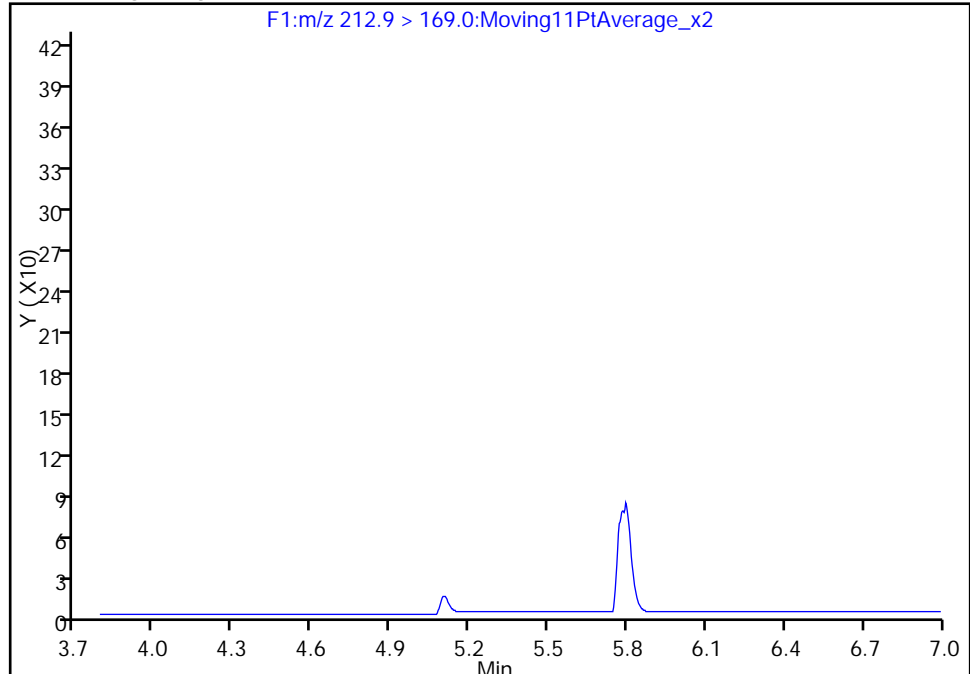
Data File: \\ChromNA\Sacramento\ChromData\A6\20160524-31021.b\24MAY2016A6A_005.d
Injection Date: 24-May-2016 17:28:24 Instrument ID: A6
Lims ID: Std L2
Client ID:
Operator ID: JRB ALS Bottle#: 10 Worklist Smp#: 5
Injection Vol: 15.0 ul Dil. Factor: 1.0000
Method: PFAC_A6 Limit Group: LC PFC_DOD ICAL
Column: Acquity BEH C18 (2.10 mm) Detector F1:MRM

2 Perfluorobutyric acid, CAS: 375-22-4

Signal: 1

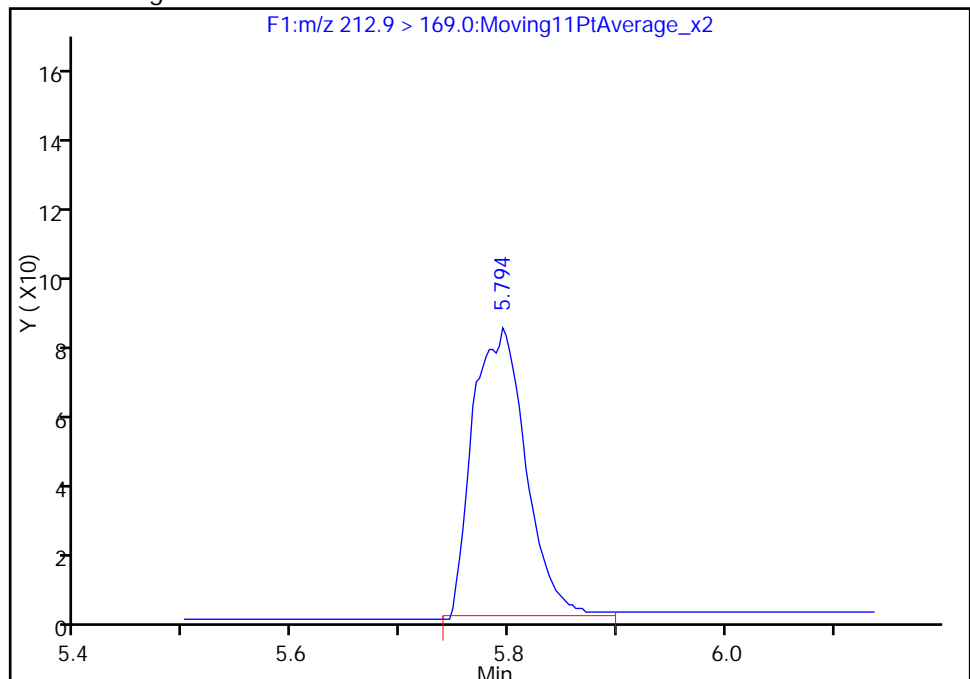
Not Detected
Expected RT: 5.79

Processing Integration Results



RT: 5.79
Area: 273
Amount: 1.034033
Amount Units: ng/ml

Manual Integration Results



Reviewer: barnettj, 24-May-2016 18:11:25
Audit Action: Manually Integrated

Audit Reason: Missed Peak

TestAmerica Sacramento

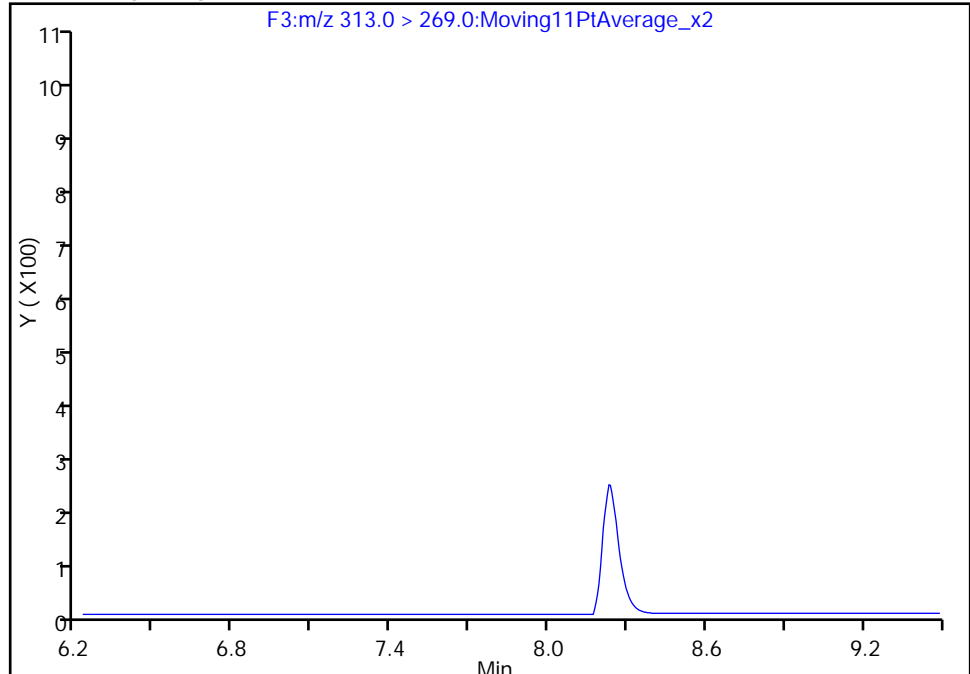
Data File: \\ChromNA\Sacramento\ChromData\A6\20160524-31021.b\24MAY2016A6A_005.d
Injection Date: 24-May-2016 17:28:24 Instrument ID: A6
Lims ID: Std L2
Client ID:
Operator ID: JRB ALS Bottle#: 10 Worklist Smp#: 5
Injection Vol: 15.0 ul Dil. Factor: 1.0000
Method: PFAC_A6 Limit Group: LC PFC_DOD ICAL
Column: Acquity BEH C18 (2.10 mm) Detector F3:MRM

7 Perfluorohexanoic acid, CAS: 307-24-4

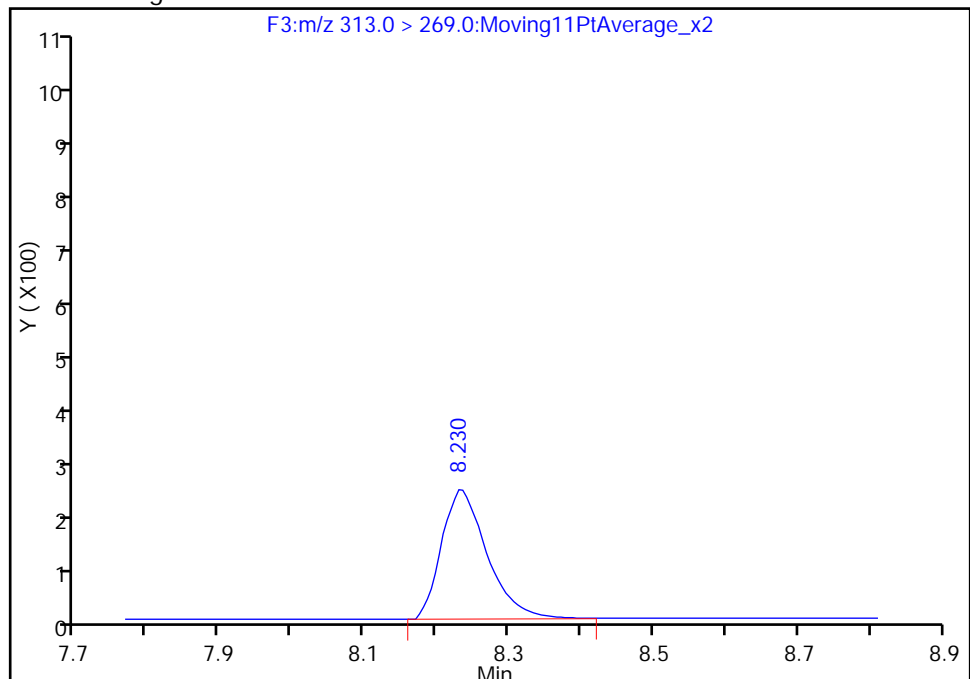
Signal: 1

Not Detected
Expected RT: 8.22

Processing Integration Results



Manual Integration Results



RT: 8.23
Area: 1066
Amount: 0.920826
Amount Units: ng/ml

Reviewer: barnettj, 24-May-2016 18:11:25
Audit Action: Manually Integrated

Audit Reason: Missed Peak

TestAmerica Sacramento

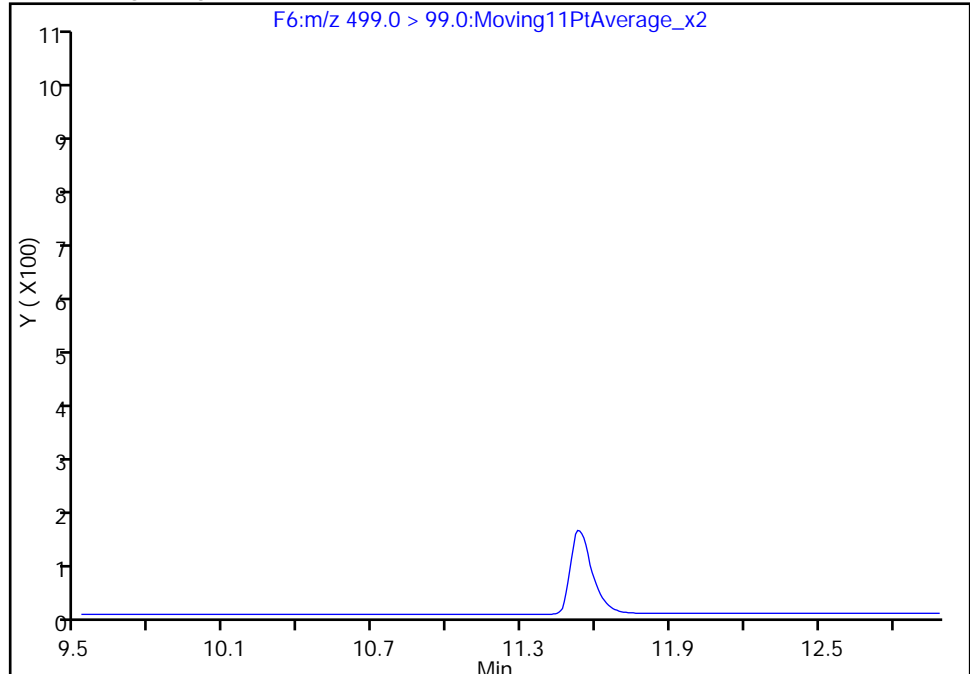
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Injection Date: 24-May-2016 17:28:24 Instrument ID: A6
Lims ID: Std L2
Client ID:
Operator ID: JRB ALS Bottle#: 10 Worklist Smp#: 5
Injection Vol: 15.0 ul Dil. Factor: 1.0000
Method: PFAC_A6 Limit Group: LC PFC_DOD ICAL
Column: Acquity BEH C18 (2.10 mm) Detector F6:MRM

15 Perfluorooctane sulfonic acid, CAS: 1763-23-1

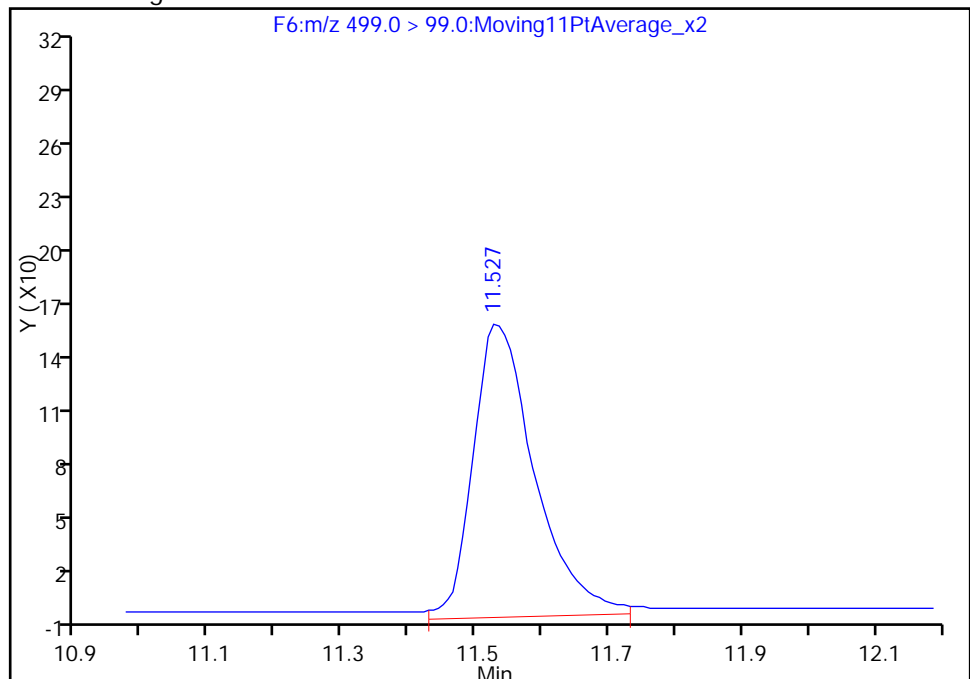
Signal: 2

Not Detected
Expected RT: 11.52

Processing Integration Results



Manual Integration Results



RT: 11.53
Area: 1034
Amount: 1.015203
Amount Units: ng/ml

Reviewer: barnettj, 24-May-2016 18:11:25
Audit Action: Manually Integrated

Audit Reason: Missed Peak

TestAmerica Sacramento

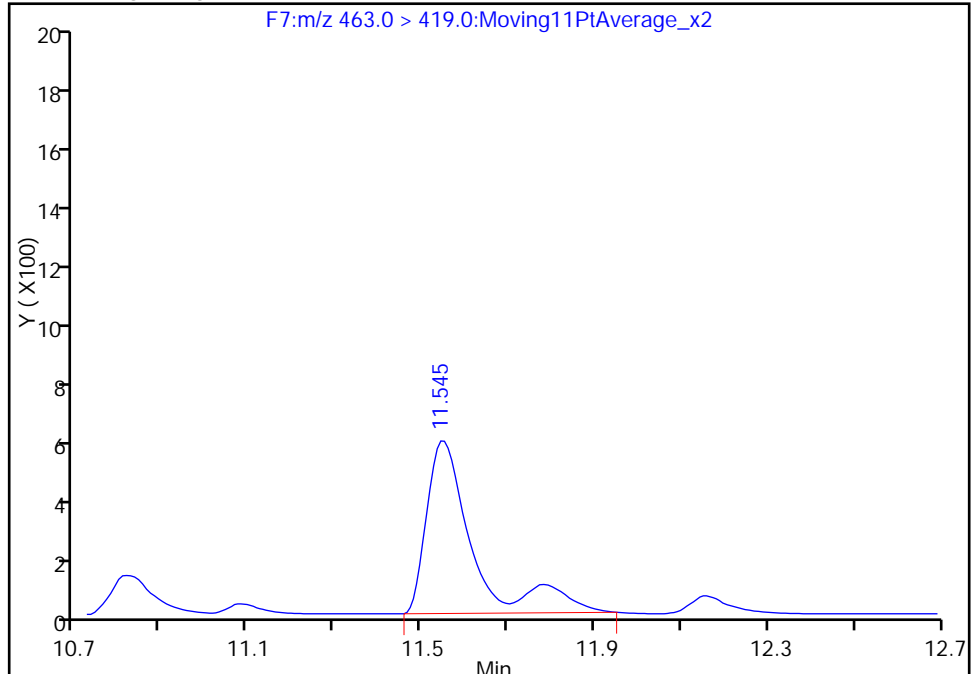
Data File: \\ChromNA\Sacramento\ChromData\A6\20160524-31021.b\24MAY2016A6A_005.d
Injection Date: 24-May-2016 17:28:24 Instrument ID: A6
Lims ID: Std L2
Client ID:
Operator ID: JRB ALS Bottle#: 10 Worklist Smp#: 5
Injection Vol: 15.0 ul Dil. Factor: 1.0000
Method: PFAC_A6 Limit Group: LC PFC_DOD ICAL
Column: Acquity BEH C18 (2.10 mm) Detector F7:MRM

18 Perfluorononanoic acid, CAS: 375-95-1

Signal: 1

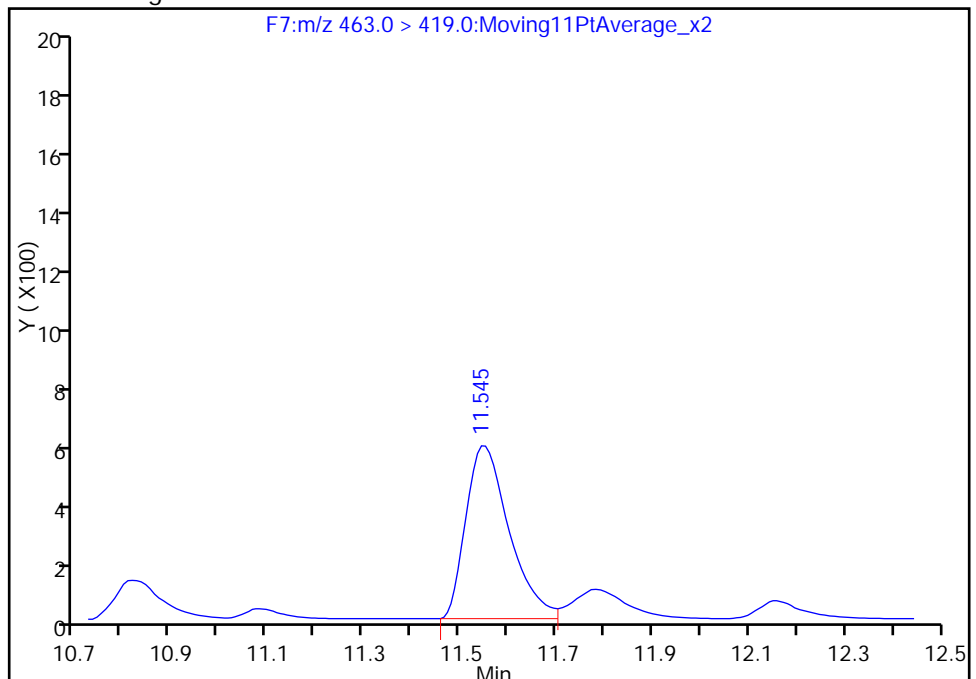
RT: 11.54
Area: 4287
Amount: 0.974035
Amount Units: ng/ml

Processing Integration Results



RT: 11.54
Area: 3622
Amount: 0.896833
Amount Units: ng/ml

Manual Integration Results



Reviewer: westendorfc, 25-May-2016 08:46:40

Audit Action: Manually Integrated

Audit Reason: Assign Peak

TestAmerica Sacramento
Target Compound Quantitation Report

Data File: \\ChromNA\Sacramento\ChromData\A6\20160524-31021.b\24MAY2016A6A_006.d
 Lims ID: Std L3
 Client ID:
 Sample Type: IC Calib Level: 3
 Inject. Date: 24-May-2016 17:49:40 ALS Bottle#: 11 Worklist Smp#: 6
 Injection Vol: 15.0 ul Dil. Factor: 1.0000
 Sample Info: STD L3
 Misc. Info.: Acquity BEH 1.7um, 3X150mm T=50°C
 Operator ID: JRB Instrument ID: A6
 Sublist: chrom-PFAC_A6*sub9
 Method: \\ChromNA\Sacramento\ChromData\A6\20160524-31021.b\PFAC_A6.m
 Limit Group: LC PFC_DOD ICAL
 Last Update: 25-May-2016 14:06:04 Calib Date: 24-May-2016 19:14:42
 Integrator: Picker
 Quant Method: Isotopic Dilution Quant By: Initial Calibration
 Last ICal File: \\ChromNA\Sacramento\ChromData\A6\20160524-31021.b\24MAY2016A6A_010.d
 Column 1 : Acquity BEH C18 (2.10 mm) Det: F1:MRM
 Process Host: XAWRK049

First Level Reviewer: westendorfc

Date: 25-May-2016 08:43:22

Signal	RT	EXP RT	DLT RT	REL RT	Response	Amount ng/ml	Ratio(Limits)	%Rec	S/N	Flags
2 Perfluorobutyric acid										
212.9 > 169.0	5.791	5.791	0.0	1.000	6236	4.26		85.2	755	
D 1 13C4 PFBA										
217.0 > 172.0	5.794	5.796	-0.002		73077	60.0		120	3910	
D 3 13C5-PFPeA										
267.9 > 223.0	6.946	6.946	0.0		181125	76.4		153	18131	
4 Perfluoropentanoic acid										
262.9 > 219.0	6.946	6.949	-0.003	1.000	14599	3.94		78.8	1601	
40 Perfluorobutanesulfonic acid										
298.9 > 80.0	7.081	7.074	0.007	1.000	38204	4.61		104		
5 Perfluorobutane Sulfonate										
298.9 > 80.0	7.081	7.074	0.007	1.000	38204	NC			172	
298.9 > 99.0	7.081	7.074	0.007	1.000	15881		2.41(0.00-0.00)		237	
D 6 13C2 PFHxA										
315.0 > 270.0	8.219	8.223	-0.004		207481	60.4		121	19302	
7 Perfluorohexanoic acid										
313.0 > 269.0	8.230	8.225	0.005	1.000	13287	4.06		81.1	1168	
D 8 13C4-PFHpA										
367.0 > 322.0	9.464	9.459	0.005		208002	57.7		115	18393	
9 Perfluoroheptanoic acid										
363.0 > 319.0	9.470	9.462	0.008	1.000	19812	4.70		94.0	1804	
D 11 18O2 PFHxS										
403.0 > 84.0	9.499	9.494	0.005		271830	49.2		104	14997	
10 Perfluorohexane Sulfonate										
399.0 > 80.0	9.499	9.495	0.004	1.000	32263	NC			908	
41 Perfluorohexanesulfonic acid										
399.0 > 80.0	9.499	9.495	0.004	1.000	32263	5.82		123		

Signal	RT	EXP RT	DLT RT	REL RT	Response	Amount ng/ml	Ratio(Limits)	%Rec	S/N	Flags
13 Perfluorooctanoic acid										
413.0 > 369.0	10.577	10.573	0.004	1.000	22121	4.70		94.0	1454	
413.0 > 169.0	10.577	10.573	0.004	1.000	5775		3.83(0.00-0.00)	94.0	394	
D 12 13C4 PFOA										
417.0 > 372.0	10.577	10.577	0.0		220970	60.9		122	14279	
14 Perfluoroheptane Sulfonate										
449.0 > 80.0	10.586	10.585	0.001	1.000	24207	NC			1633	
38 Perfluoroheptanesulfonic Acid										
449.0 > 80.0	10.586	10.585	0.001	1.000	24207	4.62		97.1		
15 Perfluorooctane sulfonic acid										
499.0 > 80.0	11.527	11.524	0.003	1.000	44931	4.50		94.1	3377	
499.0 > 99.0	11.535	11.524	0.011	1.001	18380		2.44(0.00-0.00)	94.1	1344	
D 16 13C4 PFOS										
503.0 > 80.0	11.527	11.524	0.003		512441	51.5		108	37583	
18 Perfluorononanoic acid										
463.0 > 419.0	11.553	11.547	0.006	1.000	15434	3.59		71.7	372	
D 17 13C5 PFNA										
468.0 > 423.0	11.553	11.551	0.002		235035	55.8		112	17037	
20 Perfluorodecanoic acid										
513.0 > 469.0	12.383	12.376	0.007	1.000	27024	5.07		101	1662	
D 19 13C2 PFDA										
515.0 > 470.0	12.383	12.380	0.003		233584	54.6		109	14151	
D 23 13C8 FOSA										
506.0 > 78.0	12.994	12.993	0.001		1710359	58.1		116	112588	
24 Perfluorooctane Sulfonamide										
498.0 > 78.0	12.994	12.994	0.0	1.000	191731	5.04		101	12690	
39 Perfluorodecane Sulfonic acid										
599.0 > 80.0	13.032	13.032	0.0	1.000	27590	5.20		108		
25 Perfluorodecane Sulfonate										
599.0 > 80.0	13.032	13.032	0.0	1.000	27590	NC			1974	
D 26 13C2 PFUnA										
565.0 > 520.0	13.085	13.079	0.006		378596	68.7		137	26771	
27 Perfluoroundecanoic acid										
563.0 > 519.0	13.085	13.082	0.003	1.000	58666	5.67		113	828	
D 28 13C2 PFDaA										
615.0 > 570.0	13.666	13.667	-0.001		438290	61.2		122	29531	
29 Perfluorododecanoic acid										
613.0 > 569.0	13.666	13.667	-0.001	1.000	57489	6.44		129	44.8	
30 Perfluorotridecanoic acid										
663.0 > 619.0	14.167	14.166	0.001	1.000	86184	6.65		133	22.5	
D 33 13C2-PFTeDA										
715.0 > 670.0	14.589	14.589	0.0		636894	60.7		121	16393	
32 Perfluorotetradecanoic acid										
713.0 > 669.0	14.589	14.590	-0.001	1.000	66997	4.62		92.4	39.3	
34 Perfluorohexadecanoic acid										
813.0 > 769.0	15.180	15.179	0.001	1.000	157611	4.35		87.1	368	
D 35 13C2-PFHxDA										
815.0 > 770.0	15.180	15.180	0.0		1174335	54.7		109	11532	

Signal	RT	EXP RT	DLT RT	REL RT	Response	Amount ng/ml	Ratio(Limits)	%Rec	S/N	Flags
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36 Perfluorooctadecanoic acid
913.0 > 869.0 15.446 15.450 -0.004 1.000 140146 3.93 78.5 157

QC Flag Legend

Processing Flags

NC - Not Calibrated

Reagents:

LCPFC-L3_00017

Amount Added: 1.00

Units: mL

TestAmerica Sacramento

Data File: \\ChromNA\Sacramento\ChromData\A6\20160524-31021.b\24MAY2016A6A_006.d

Injection Date: 24-May-2016 17:49:40

Instrument ID: A6

Lims ID: Std L3

Client ID:

Operator ID: JRB

ALS Bottle#: 11

Worklist Smp#: 6

Injection Vol: 15.0 ul

Dil. Factor: 1.0000

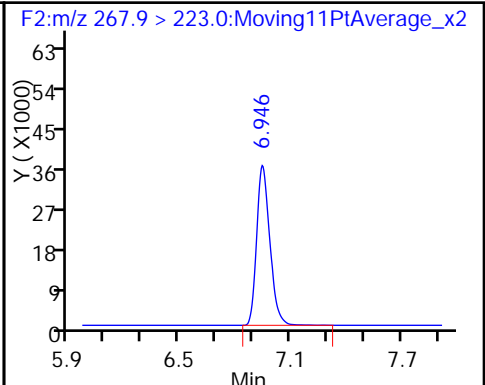
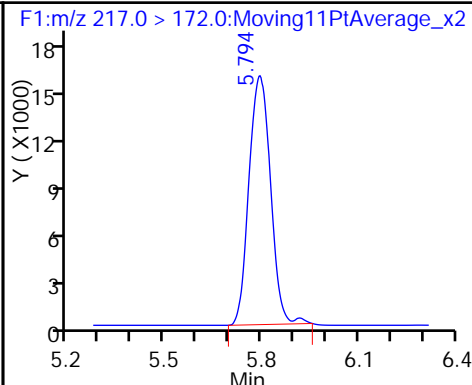
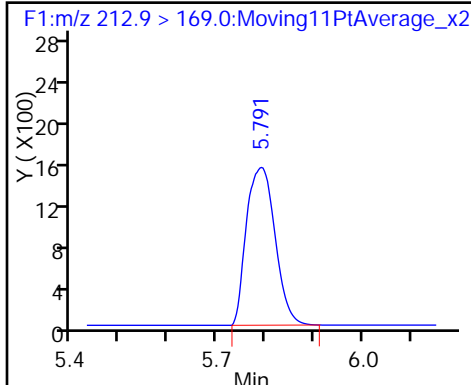
Method: PFAC_A6

Limit Group: LC PFC_DOD ICAL

2 Perfluorobutyric acid

D 1 13C4 PFBA

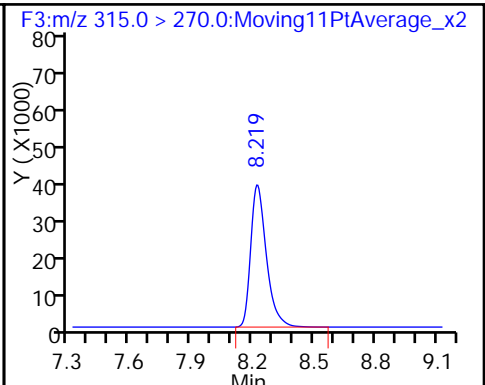
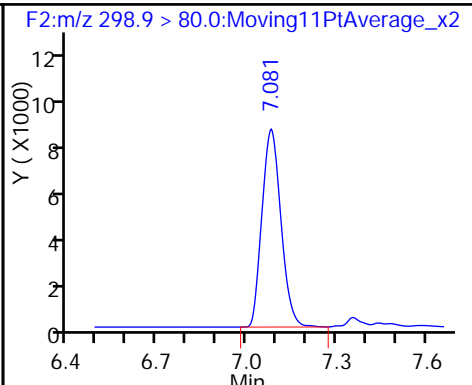
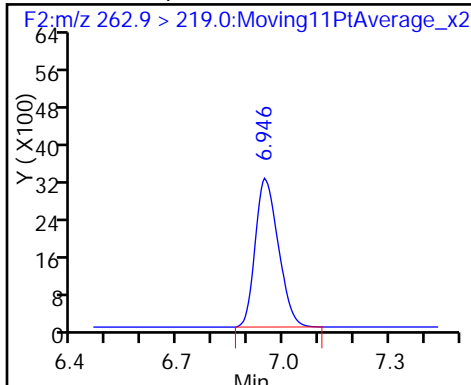
D 3 13C5-PFPeA



4 Perfluoropentanoic acid

40 Perfluorobutanesulfonic acid

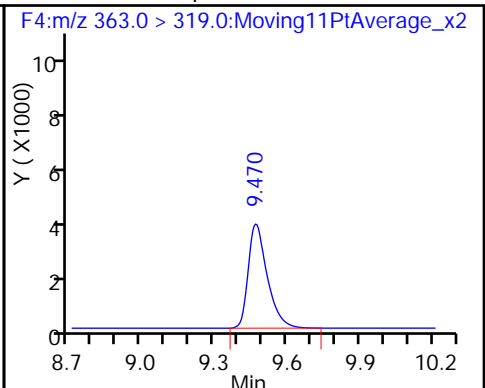
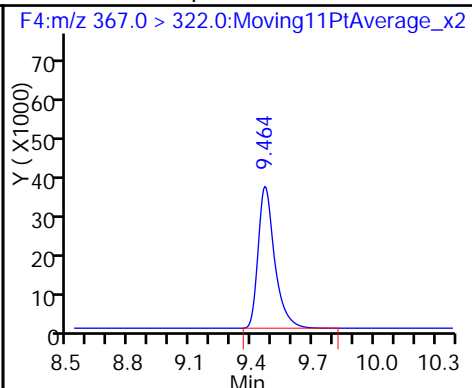
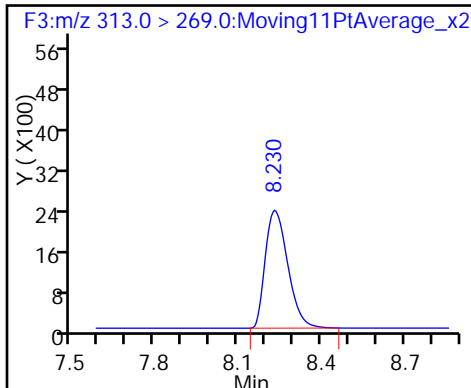
D 6 13C2 PFHxA



7 Perfluorohexanoic acid

D 8 13C4-PFHpA

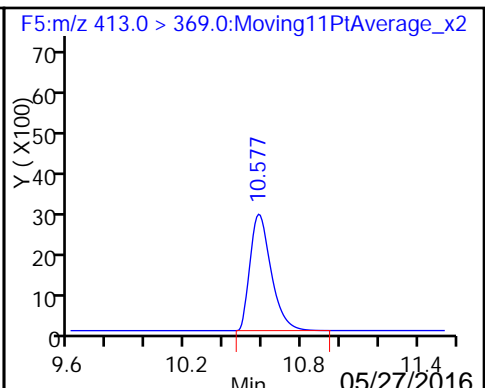
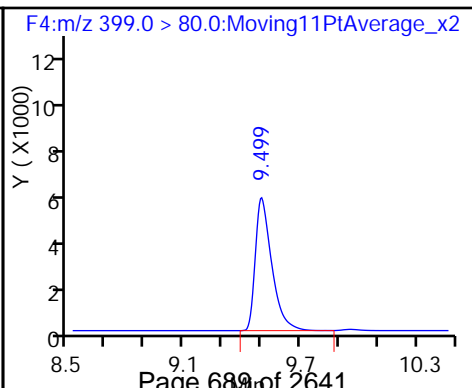
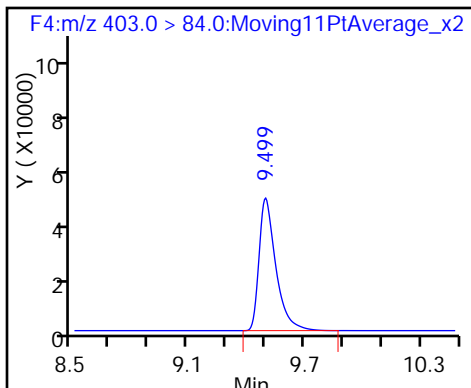
9 Perfluoroheptanoic acid

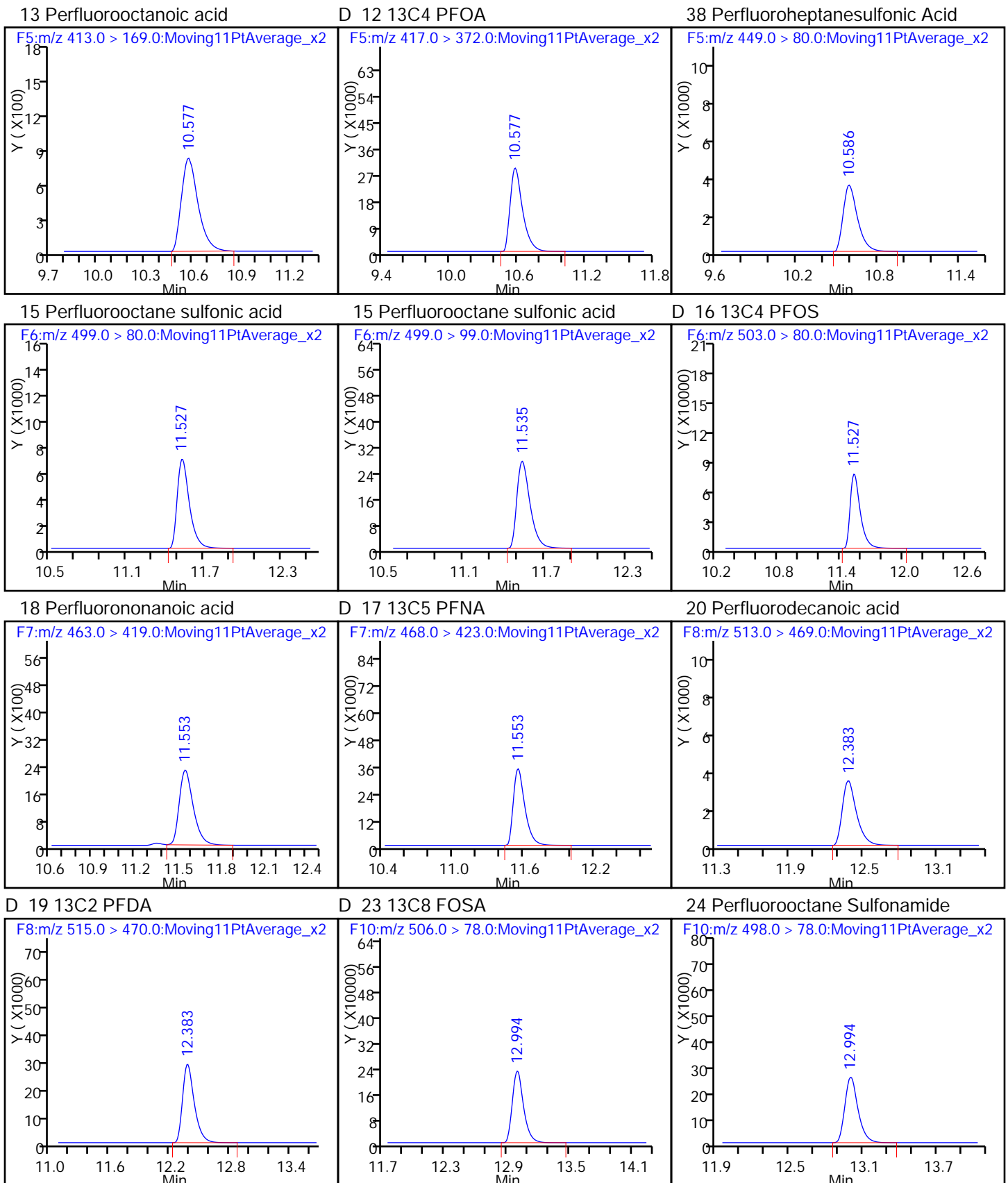


D 11 18O2 PFHxS

41 Perfluorohexanesulfonic acid

13 Perfluorooctanoic acid

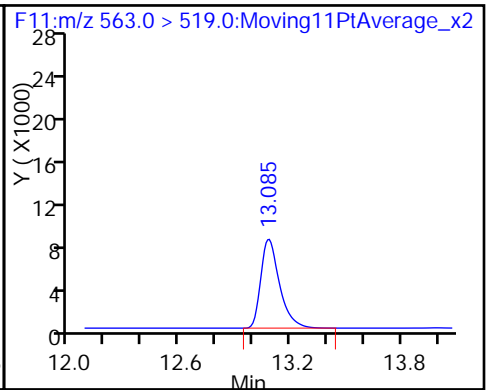
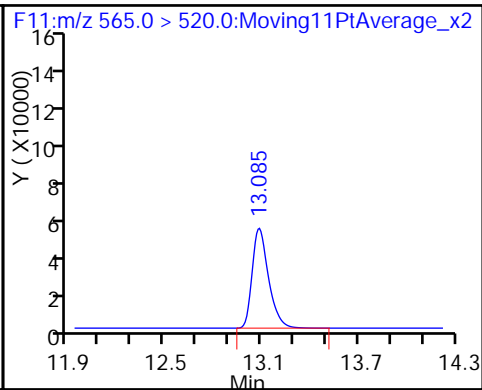
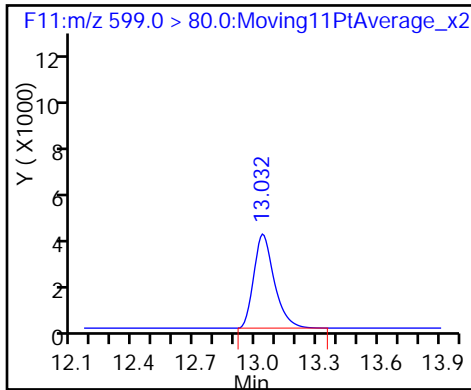




39 Perfluorodecane Sulfonic acid

D 26 13C2 PFUnA

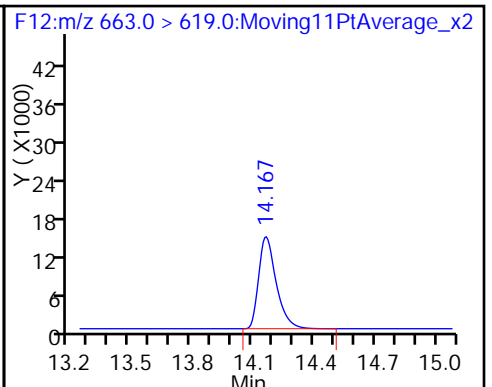
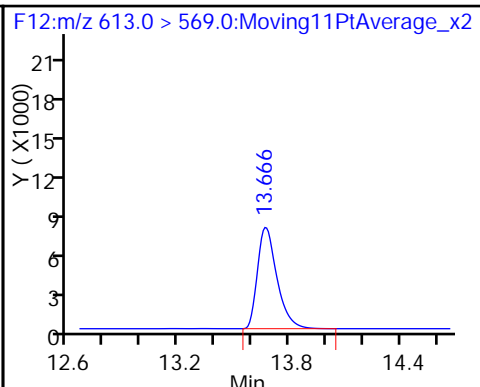
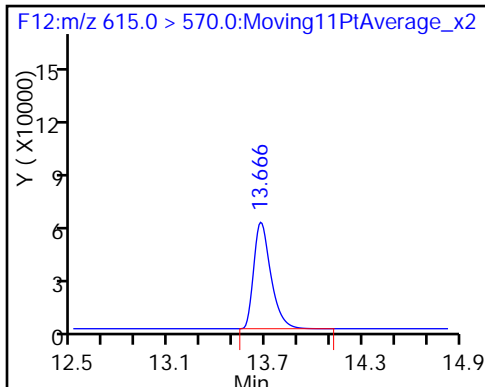
27 Perfluoroundecanoic acid



D 28 13C2 PFDaA

29 Perfluorododecanoic acid

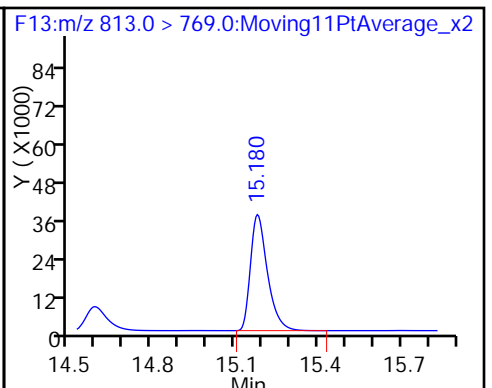
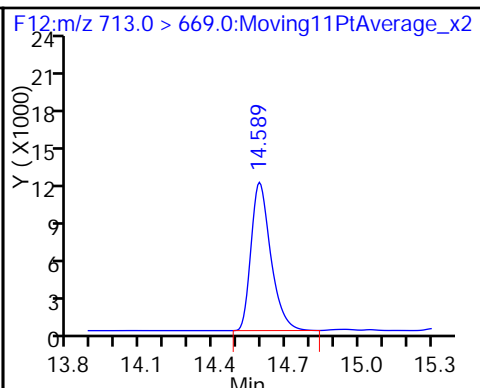
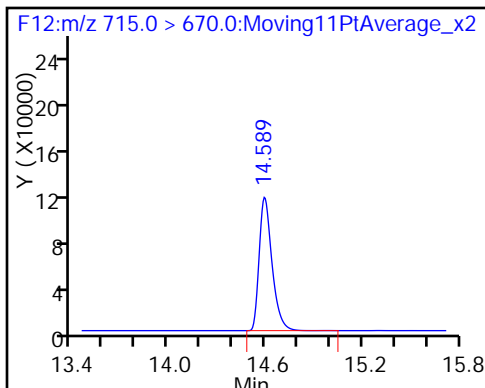
30 Perfluorotridecanoic acid



D 33 13C2-PFTeDA

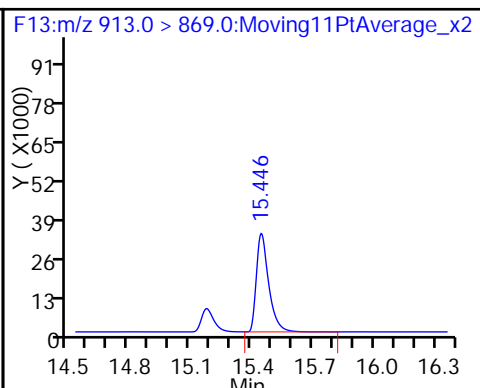
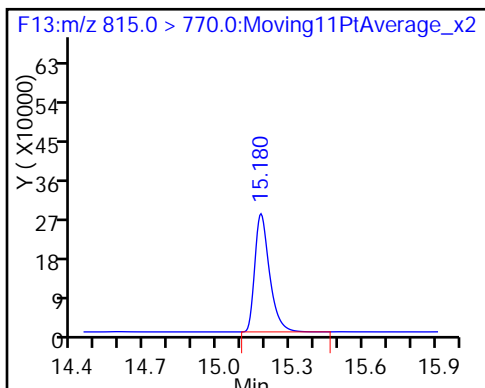
32 Perfluorotetradecanoic acid

34 Perfluorohexadecanoic acid



D 35 13C2-PFHxDA

36 Perfluorooctadecanoic acid



TestAmerica Sacramento
Target Compound Quantitation Report

Data File: \\ChromNA\Sacramento\ChromData\A6\20160524-31021.b\24MAY2016A6A_007.d
 Lims ID: Std L4
 Client ID:
 Sample Type: IC Calib Level: 4
 Inject. Date: 24-May-2016 18:10:55 ALS Bottle#: 12 Worklist Smp#: 7
 Injection Vol: 15.0 ul Dil. Factor: 1.0000
 Sample Info: STD L4
 Misc. Info.: Acquity BEH 1.7um, 3X150mm T=50°C
 Operator ID: JRB Instrument ID: A6
 Sublist: chrom-PFAC_A6*sub9
 Method: \\ChromNA\Sacramento\ChromData\A6\20160524-31021.b\PFAC_A6.m
 Limit Group: LC PFC_DOD ICAL
 Last Update: 26-May-2016 11:29:34 Calib Date: 24-May-2016 19:14:42
 Integrator: Picker
 Quant Method: Isotopic Dilution Quant By: Initial Calibration
 Last ICal File: \\ChromNA\Sacramento\ChromData\A6\20160524-31021.b\24MAY2016A6A_010.d
 Column 1 : Acquity BEH C18 (2.10 mm) Det: F1:MRM
 Process Host: XAWRK003

First Level Reviewer: barnettj

Date: 26-May-2016 11:29:34

Signal	RT	EXP RT	DLT RT	REL RT	Response	Amount ng/ml	Ratio(Limits)	%Rec	S/N	Flags
2 Perfluorobutyric acid										
212.9 > 169.0	5.788	5.791	-0.003	1.000	27348	18.0		89.8	2608	
D 1 13C4 PFBA										
217.0 > 172.0	5.797	5.796	0.001		63652	52.2		104	6598	
D 3 13C5-PFPeA										
267.9 > 223.0	6.941	6.946	-0.005		124553	52.5		105	12323	
4 Perfluoropentanoic acid										
262.9 > 219.0	6.946	6.949	-0.003	1.000	50671	17.7		88.3	5409	
40 Perfluorobutanesulfonic acid										
298.9 > 80.0	7.078	7.074	0.004	1.000	124172	15.2		85.7		
5 Perfluorobutane Sulfonate										
298.9 > 80.0	7.078	7.074	0.004	1.000	124172	NC			241	
298.9 > 99.0	7.078	7.074	0.004	1.000	60653		2.05(0.00-0.00)		1934	
D 6 13C2 PFHxA										
315.0 > 270.0	8.225	8.223	0.002		165711	48.2		96.4	15639	
7 Perfluorohexanoic acid										
313.0 > 269.0	8.225	8.225	0.0	1.000	58255	19.5		97.6	5581	
D 8 13C4-PFHpA										
367.0 > 322.0	9.463	9.459	0.004		204276	56.6		113	17847	
9 Perfluoroheptanoic acid										
363.0 > 319.0	9.463	9.462	0.001	1.000	71730	16.3		81.6	6612	
D 11 18O2 PFHxS										
403.0 > 84.0	9.498	9.494	0.004		265525	48.0		102	22556	
10 Perfluorohexane Sulfonate										
399.0 > 80.0	9.498	9.495	0.003	1.000	101790	NC			722	
41 Perfluorohexanesulfonic acid										
399.0 > 80.0	9.498	9.495	0.003	1.000	101790	18.5		97.9		

Signal	RT	EXP RT	DLT RT	REL RT	Response	Amount ng/ml	Ratio(Limits)	%Rec	S/N	Flags
13 Perfluorooctanoic acid										
413.0 > 369.0	10.577	10.573	0.004	1.000	72833	15.8		78.9	3330	
413.0 > 169.0	10.577	10.573	0.004	1.000	16576		4.39(0.00-0.00)	78.9	1104	
D 12 13C4 PFOA										
417.0 > 372.0	10.577	10.577	0.0		216681	59.7		119	14135	
14 Perfluoroheptane Sulfonate										
449.0 > 80.0	10.586	10.585	0.001	1.000	93471	NC			6112	
38 Perfluoroheptanesulfonic Acid										
449.0 > 80.0	10.586	10.585	0.001	1.000	93471	17.4		91.2		
15 Perfluorooctane sulfonic acid										
499.0 > 80.0	11.526	11.524	0.002	1.000	166032	16.2		84.6	24238	
499.0 > 99.0	11.526	11.524	0.002	1.000	98842		1.68(0.00-0.00)	84.6	4901	
D 16 13C4 PFOS										
503.0 > 80.0	11.526	11.524	0.002		526709	52.9		111	39433	
18 Perfluorononanoic acid										
463.0 > 419.0	11.553	11.547	0.006	1.000	64364	18.0		89.8	544	
D 17 13C5 PFNA										
468.0 > 423.0	11.553	11.551	0.002		195708	56.9		114	13958	
20 Perfluorodecanoic acid										
513.0 > 469.0	12.373	12.376	-0.003	1.000	92855	20.1		101	5653	
D 19 13C2 PFDA										
515.0 > 470.0	12.373	12.380	-0.007		191340	44.8		89.5	11626	
D 23 13C8 FOSA										
506.0 > 78.0	12.994	12.993	0.001		1501807	51.0		102	98845	
24 Perfluorooctane Sulfonamide										
498.0 > 78.0	12.994	12.994	0.0	1.000	702846	21.0		105	46281	
39 Perfluorodecane Sulfonic acid										
599.0 > 80.0	13.032	13.032	0.0	1.000	92611	17.3		89.5		
25 Perfluorodecane Sulfonate										
599.0 > 80.0	13.032	13.032	0.0	1.000	92611	NC			6411	
D 26 13C2 PFUnA										
565.0 > 520.0	13.076	13.079	-0.003		318776	57.9		116	22709	
27 Perfluoroundecanoic acid										
563.0 > 519.0	13.076	13.082	-0.006	1.000	137039	16.6		83.2	1612	
D 28 13C2 PFDaA										
615.0 > 570.0	13.657	13.667	-0.010		318700	44.5		88.9	10700	
29 Perfluorododecanoic acid										
613.0 > 569.0	13.657	13.667	-0.010	1.000	139778	21.5		108	101	
30 Perfluorotridecanoic acid										
663.0 > 619.0	14.167	14.166	0.001	1.000	231228	24.5		123	401	
D 33 13C2-PFTeDA										
715.0 > 670.0	14.589	14.589	0.0		563664	53.7		107	34432	
32 Perfluorotetradecanoic acid										
713.0 > 669.0	14.589	14.590	-0.001	1.000	216201	21.1		105	75.8	
34 Perfluorohexadecanoic acid										
813.0 > 769.0	15.184	15.179	0.005	1.000	413438	18.5		92.5	943	
D 35 13C2-PFHxDA										
815.0 > 770.0	15.184	15.180	0.004		1134880	52.9		106	6127	

Signal	RT	EXP RT	DLT RT	REL RT	Response	Amount ng/ml	Ratio(Limits)	%Rec	S/N	Flags
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36 Perfluorooctadecanoic acid
913.0 > 869.0 15.456 15.450 0.006 1.000 523232 20.2 101 702

QC Flag Legend

Processing Flags

NC - Not Calibrated

Reagents:

LCPFC-L4_00020

Amount Added: 1.00

Units: mL

TestAmerica Sacramento

Data File: \\ChromNA\Sacramento\ChromData\A6\20160524-31021.b\24MAY2016A6A_007.d

Injection Date: 24-May-2016 18:10:55

Instrument ID: A6

Lims ID: Std L4

Client ID:

Operator ID: JRB

ALS Bottle#: 12

Worklist Smp#: 7

Injection Vol: 15.0 ul

Dil. Factor: 1.0000

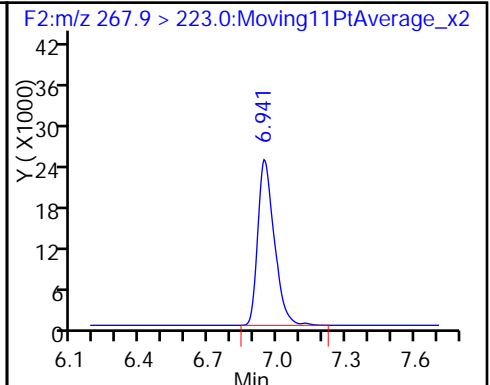
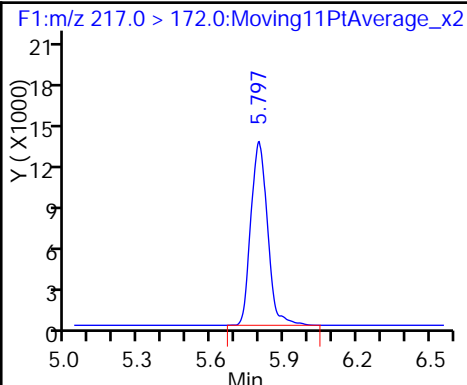
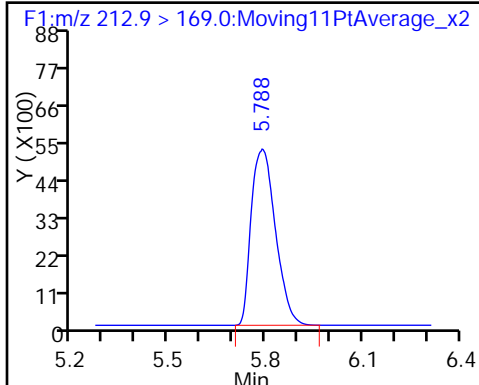
Method: PFAC_A6

Limit Group: LC PFC_DOD ICAL

2 Perfluorobutyric acid

D 1 13C4 PFBA

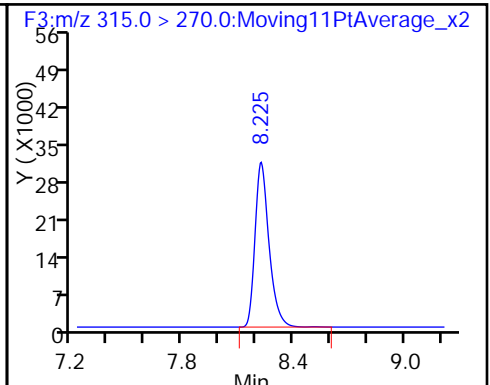
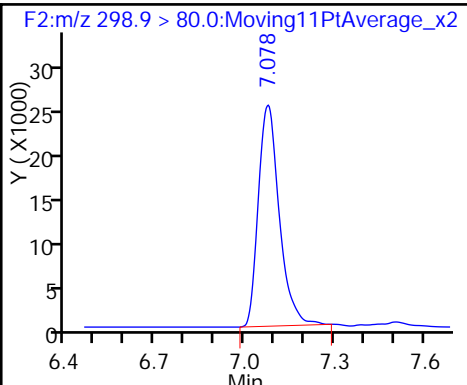
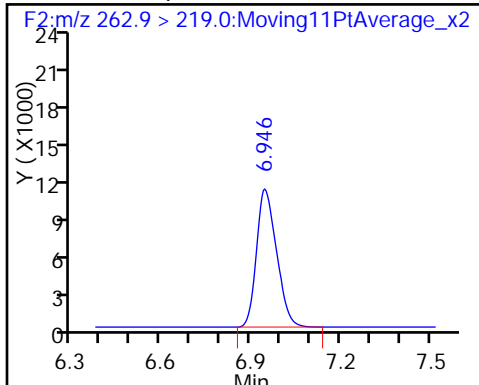
D 3 13C5-PFPeA



4 Perfluoropentanoic acid

40 Perfluorobutanesulfonic acid

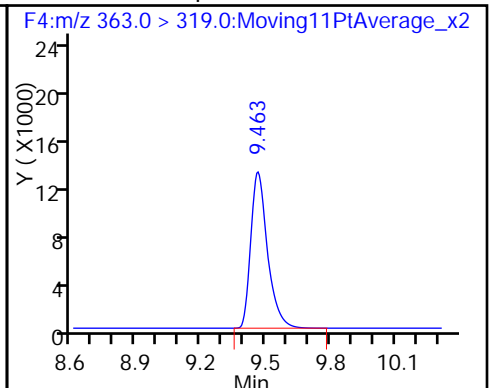
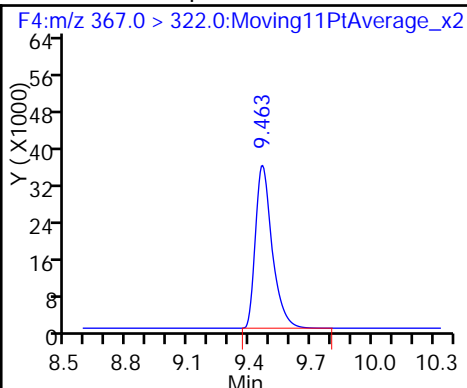
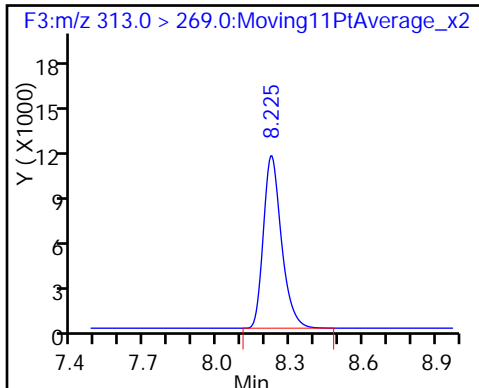
D 6 13C2 PFHxA



7 Perfluorohexanoic acid

D 8 13C4-PFHpA

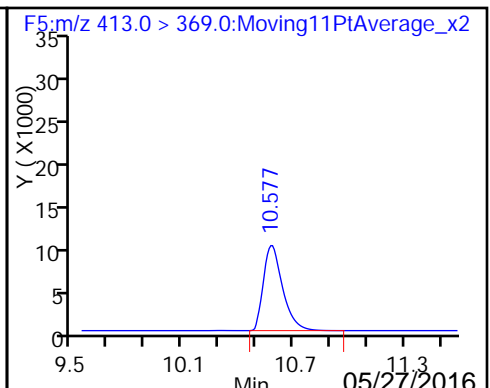
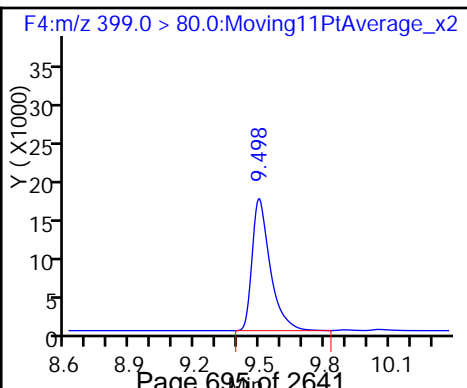
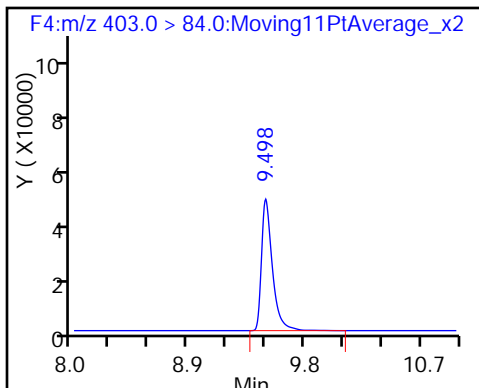
9 Perfluoroheptanoic acid

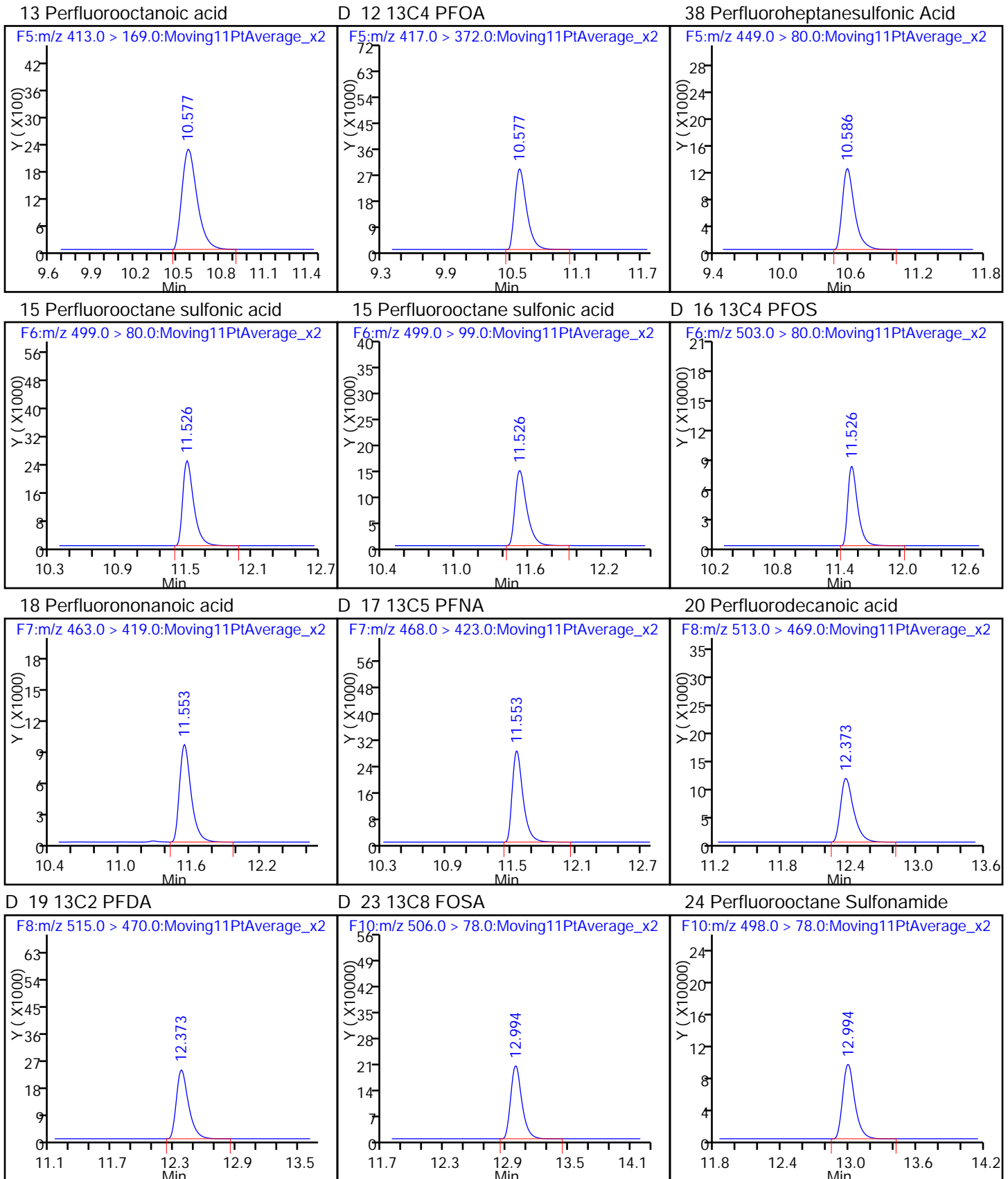


D 11 18O2 PFHxS

41 Perfluorohexanesulfonic acid

13 Perfluorooctanoic acid

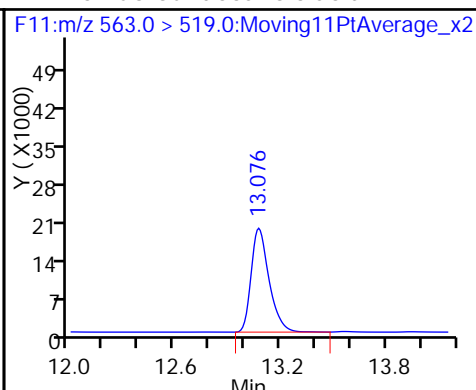
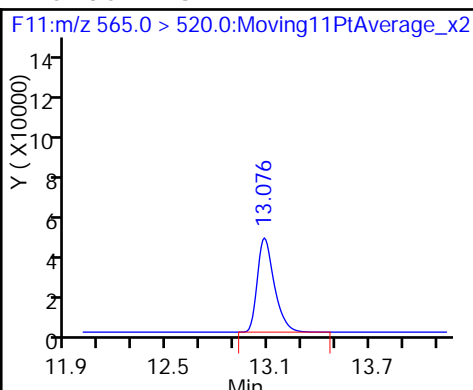
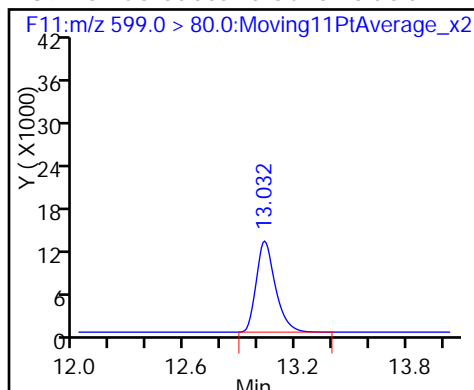




39 Perfluorodecane Sulfonic acid

D 26 13C2 PFUnA

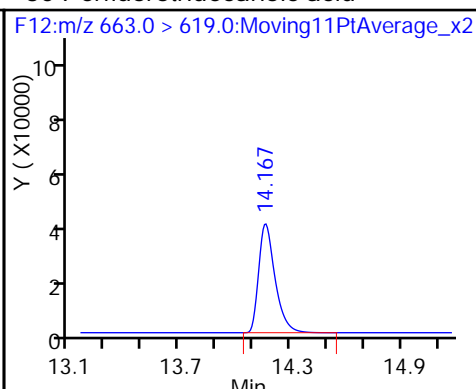
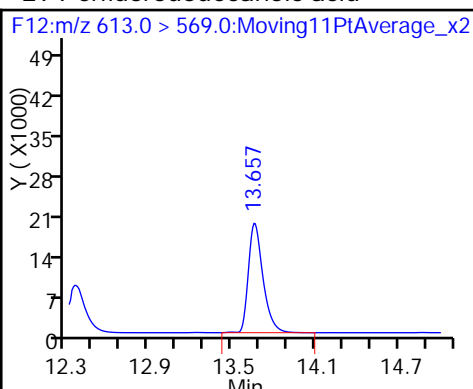
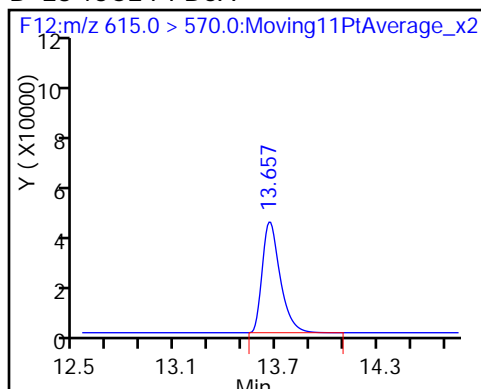
27 Perfluoroundecanoic acid



D 28 13C2 PFDaA

29 Perfluorododecanoic acid

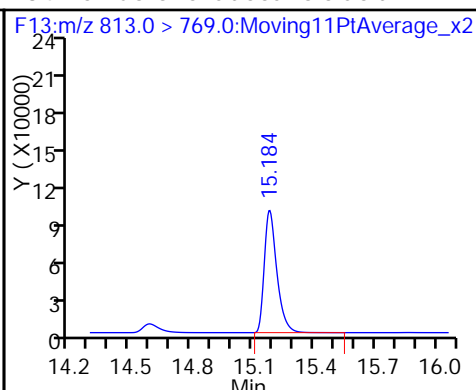
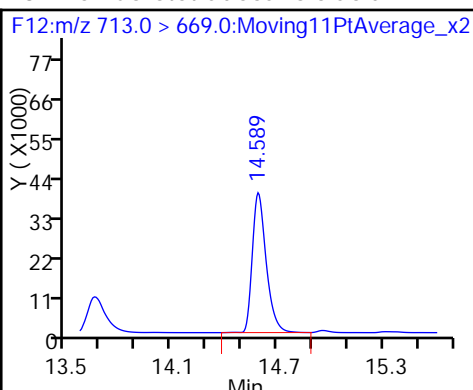
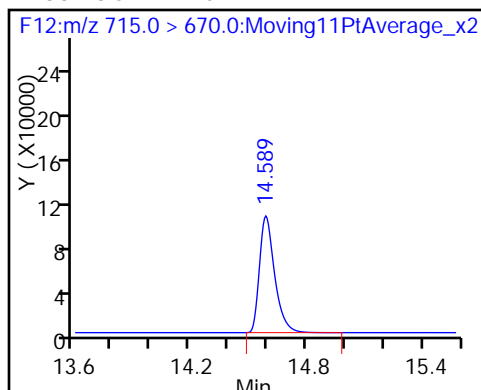
30 Perfluorotridecanoic acid



D 33 13C2-PFTeDA

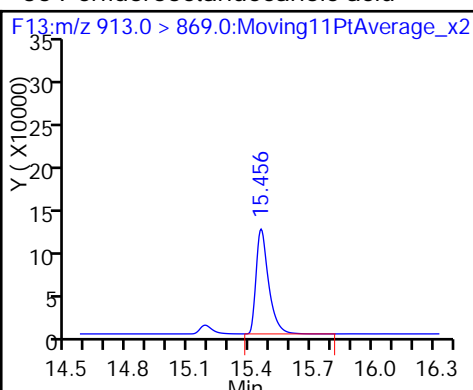
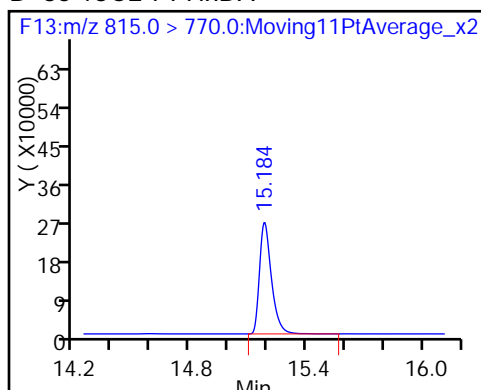
32 Perfluorotetradecanoic acid

34 Perfluorohexadecanoic acid



D 35 13C2-PFHxDA

36 Perfluorooctadecanoic acid



TestAmerica Sacramento
Target Compound Quantitation Report

Data File: \\ChromNA\Sacramento\ChromData\A6\20160524-31021.b\24MAY2016A6A_008.d
 Lims ID: Std L5
 Client ID:
 Sample Type: IC Calib Level: 5
 Inject. Date: 24-May-2016 18:32:11 ALS Bottle#: 13 Worklist Smp#: 8
 Injection Vol: 15.0 ul Dil. Factor: 1.0000
 Sample Info: STD L5
 Misc. Info.: Acquity BEH 1.7um, 3X150mm T=50°C
 Operator ID: JRB Instrument ID: A6
 Sublist: chrom-PFAC_A6*sub9
 Method: \\ChromNA\Sacramento\ChromData\A6\20160524-31021.b\PFAC_A6.m
 Limit Group: LC PFC_DOD ICAL
 Last Update: 25-May-2016 14:06:35 Calib Date: 24-May-2016 19:14:42
 Integrator: Picker
 Quant Method: Isotopic Dilution Quant By: Initial Calibration
 Last ICal File: \\ChromNA\Sacramento\ChromData\A6\20160524-31021.b\24MAY2016A6A_010.d
 Column 1 : Acquity BEH C18 (2.10 mm) Det: F1:MRM
 Process Host: XAWRK049

First Level Reviewer: westendorfc

Date: 25-May-2016 08:45:03

Signal	RT	EXP RT	DLT RT	REL RT	Response	Amount ng/ml	Ratio(Limits)	%Rec	S/N	Flags
2 Perfluorobutyric acid										
212.9 > 169.0	5.785	5.791	-0.006	1.000	67124	49.7		99.5	4565	
D 1 13C4 PFBA										
217.0 > 172.0	5.788	5.796	-0.008		54628	44.8		89.7	3776	
D 3 13C5-PFPeA										
267.9 > 223.0	6.946	6.946	0.0		112206	47.3		94.7	10072	
4 Perfluoropentanoic acid										
262.9 > 219.0	6.951	6.949	0.002	1.000	127936	48.5		97.0	8414	
40 Perfluorobutanesulfonic acid										
298.9 > 80.0	7.071	7.074	-0.003	1.000	409210	47.6		108		
5 Perfluorobutane Sulfonate										
298.9 > 80.0	7.071	7.074	-0.003	1.000	409210	NC			878	
298.9 > 99.0	7.067	7.074	-0.007	0.999	152656		2.68(0.00-0.00)		755	
D 6 13C2 PFHxA										
315.0 > 270.0	8.219	8.223	-0.004		139558	40.6		81.2	11653	
7 Perfluorohexanoic acid										
313.0 > 269.0	8.230	8.225	0.005	1.000	131803	51.4		103	7179	
D 8 13C4-PFHpA										
367.0 > 322.0	9.464	9.459	0.005		149508	41.4		82.9	12507	
9 Perfluoroheptanoic acid										
363.0 > 319.0	9.464	9.462	0.002	1.000	190009	58.1		116	16374	
D 11 18O2 PFHxS										
403.0 > 84.0	9.493	9.494	-0.001		277574	50.2		106	23772	
10 Perfluorohexane Sulfonate										
399.0 > 80.0	9.499	9.495	0.004	1.000	278735	NC			3079	
41 Perfluorohexanesulfonic acid										
399.0 > 80.0	9.499	9.495	0.004	1.000	278735	48.3		102		

Signal	RT	EXP RT	DLT RT	REL RT	Response	Amount ng/ml	Ratio(Limits)	%Rec	S/N	Flags
13 Perfluorooctanoic acid										
413.0 > 369.0	10.586	10.573	0.013	1.000	169115	53.3		107	3057	
413.0 > 169.0	10.577	10.573	0.004	0.999	68555		2.47(0.00-0.00)	107	4415	
D 12 13C4 PFOA										
417.0 > 372.0	10.577	10.577	0.0		148927	41.1		82.1	9614	
14 Perfluoroheptane Sulfonate										
449.0 > 80.0	10.586	10.585	0.001	1.000	276794	NC			17301	
38 Perfluoroheptanesulfonic Acid										
449.0 > 80.0	10.586	10.585	0.001	1.000	276794	53.6		113		
15 Perfluorooctane sulfonic acid										
499.0 > 80.0	11.527	11.524	0.003	1.000	481794	49.0		102	1235	
499.0 > 99.0	11.527	11.524	0.003	1.000	273375		1.76(0.00-0.00)	102	3091	
D 16 13C4 PFOS										
503.0 > 80.0	11.527	11.524	0.003		505099	50.8		106	36296	
18 Perfluorononanoic acid										
463.0 > 419.0	11.553	11.547	0.006	1.000	164281	55.9		112	1361	
D 17 13C5 PFNA										
468.0 > 423.0	11.553	11.551	0.002		160421	38.1		76.2	11734	
20 Perfluorodecanoic acid										
513.0 > 469.0	12.383	12.376	0.007	1.000	215872	50.6		101	12999	
D 19 13C2 PFDA										
515.0 > 470.0	12.383	12.380	0.003		174902	40.9		81.8	10549	
D 23 13C8 FOSA										
506.0 > 78.0	12.994	12.993	0.001		1501656	51.0		102	99229	
24 Perfluorooctane Sulfonamide										
498.0 > 78.0	12.994	12.994	0.0	1.000	1807702	54.1		108	39459	
39 Perfluorodecane Sulfonic acid										
599.0 > 80.0	13.031	13.032	-0.001	1.000	258349	50.5		105		
25 Perfluorodecane Sulfonate										
599.0 > 80.0	13.031	13.032	-0.001	1.000	258349	NC			18253	
D 26 13C2 PFUnA										
565.0 > 520.0	13.075	13.079	-0.004		213180	38.7		77.4	14861	
27 Perfluoroundecanoic acid										
563.0 > 519.0	13.075	13.082	-0.007	1.000	292902	54.3		109	6756	
D 28 13C2 PFDaA										
615.0 > 570.0	13.664	13.667	-0.003		369255	51.5		103	24960	
29 Perfluorododecanoic acid										
613.0 > 569.0	13.664	13.667	-0.003	1.000	328730	43.7		87.4	344	
30 Perfluorotridecanoic acid										
663.0 > 619.0	14.166	14.166	0.0	1.000	576659	52.8		106	575	
D 33 13C2-PFTeDA										
715.0 > 670.0	14.588	14.589	-0.001		496861	47.4		94.7	44656	
32 Perfluorotetradecanoic acid										
713.0 > 669.0	14.588	14.590	-0.002	1.000	553149	46.7		93.4	303	
34 Perfluorohexadecanoic acid										
813.0 > 769.0	15.178	15.179	-0.001	1.000	1111597	44.4		88.7	922	
D 35 13C2-PFHxDA										
815.0 > 770.0	15.178	15.180	-0.002		1091378	50.9		102	9820	

Signal	RT	EXP RT	DLT RT	REL RT	Response	Amount ng/ml	Ratio(Limits)	%Rec	S/N	Flags
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36 Perfluorooctadecanoic acid
913.0 > 869.0 15.450 15.450 0.0 1.000 1430022 47.6 95.1 2245

QC Flag Legend

Processing Flags

NC - Not Calibrated

Reagents:

LCPFC-L5_00018

Amount Added: 1.00

Units: mL

TestAmerica Sacramento

Data File: \\ChromNA\Sacramento\ChromData\A6\20160524-31021.b\24MAY2016A6A_008.d

Injection Date: 24-May-2016 18:32:11

Instrument ID: A6

Lims ID: Std L5

Client ID:

Operator ID: JRB

ALS Bottle#: 13

Worklist Smp#: 8

Injection Vol: 15.0 ul

Dil. Factor: 1.0000

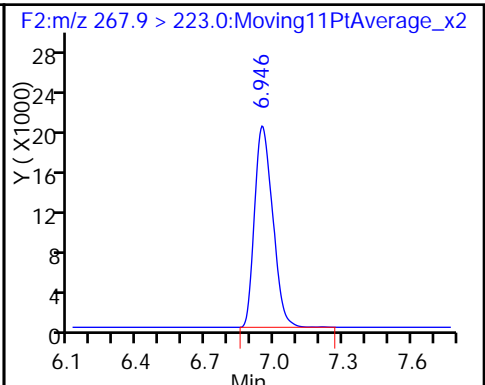
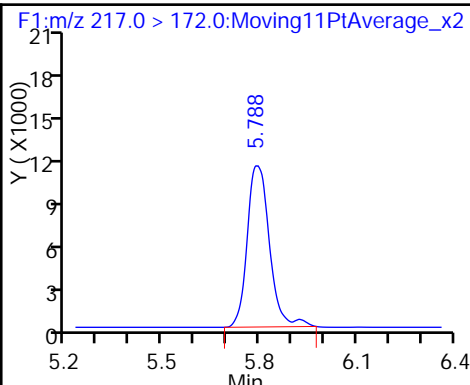
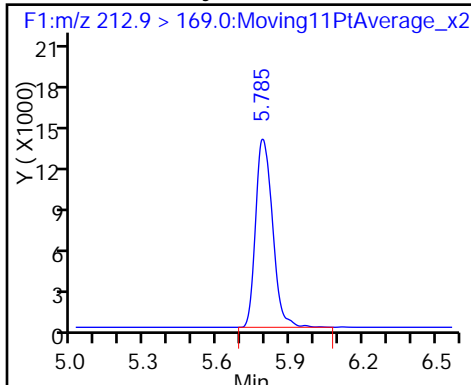
Method: PFAC_A6

Limit Group: LC PFC_DOD ICAL

2 Perfluorobutyric acid

D 1 13C4 PFBA

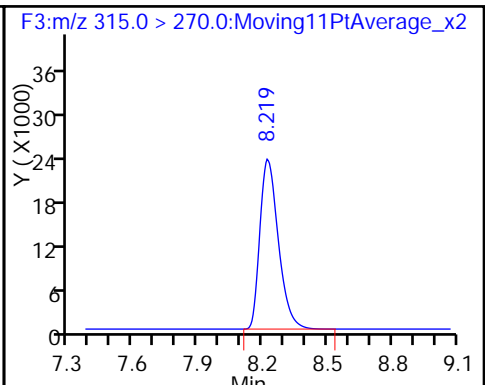
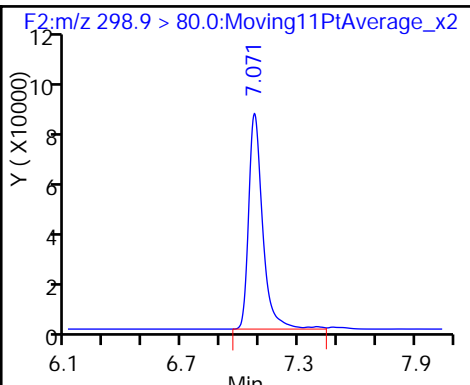
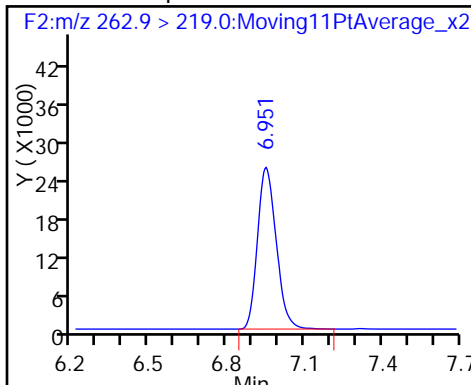
D 3 13C5-PFPeA



4 Perfluoropentanoic acid

40 Perfluorobutanesulfonic acid

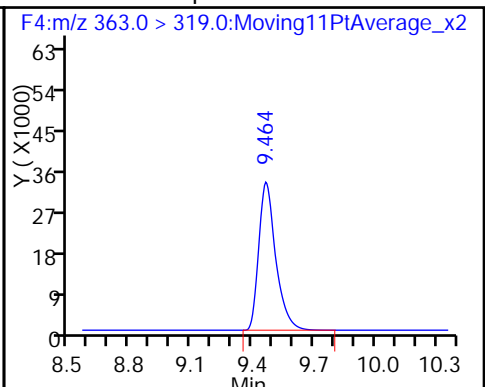
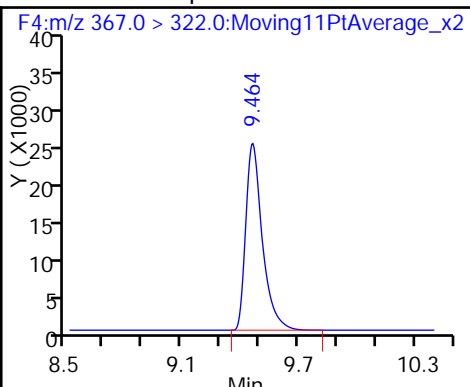
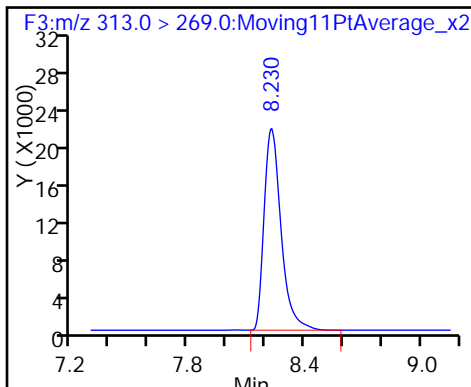
D 6 13C2 PFHxA



7 Perfluorohexanoic acid

D 8 13C4-PFHpA

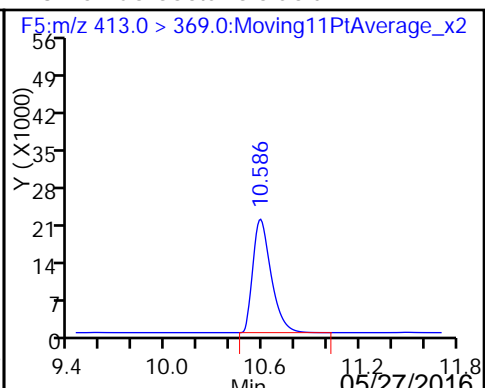
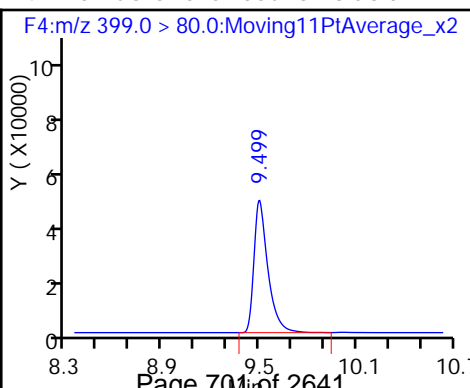
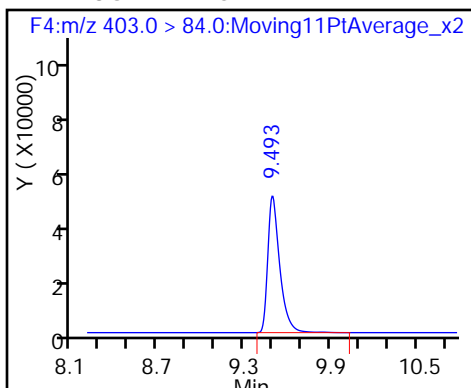
9 Perfluoroheptanoic acid

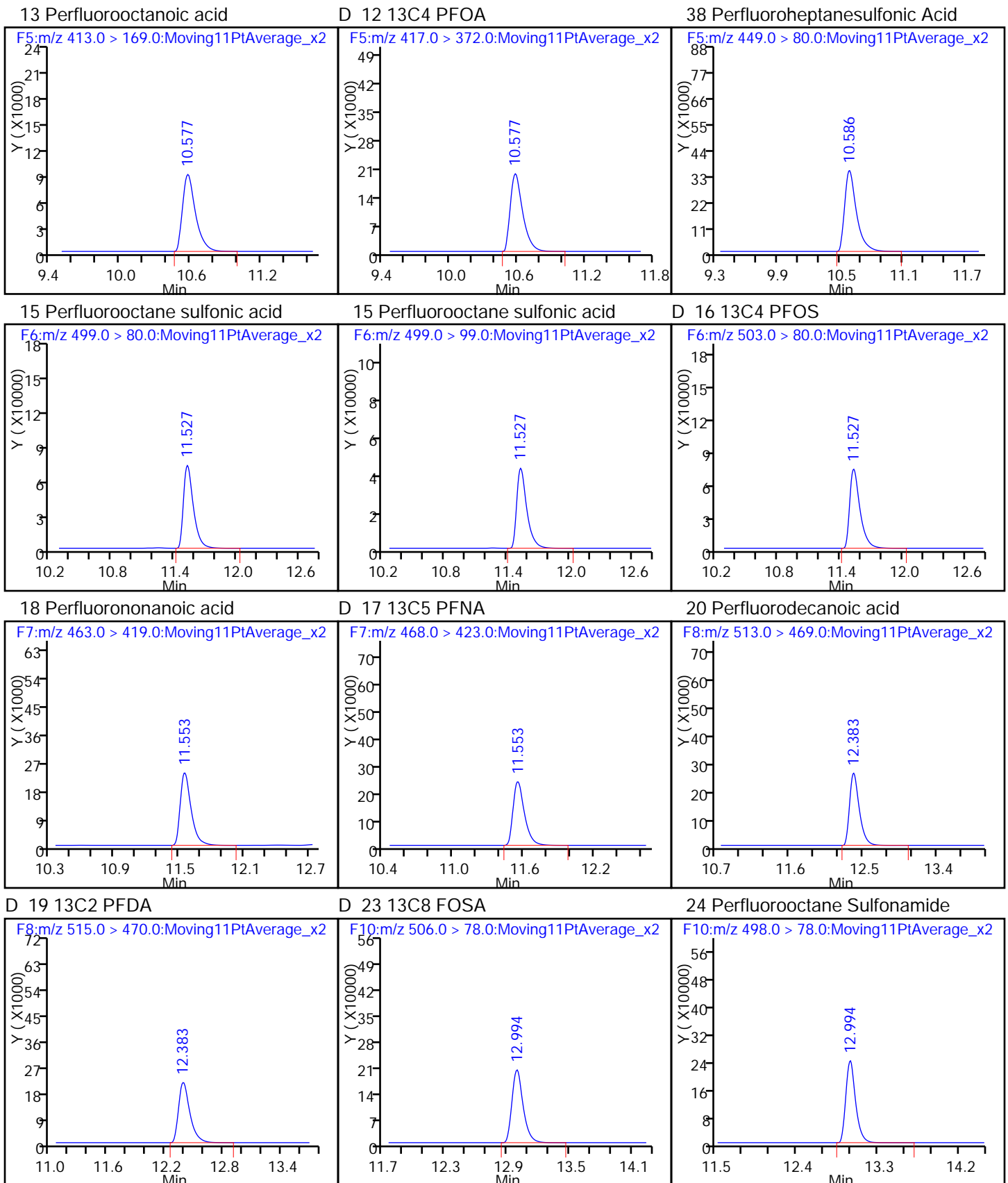


D 11 18O2 PFHxS

41 Perfluorohexanesulfonic acid

13 Perfluorooctanoic acid

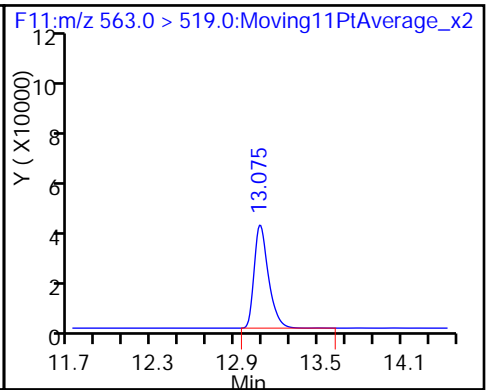
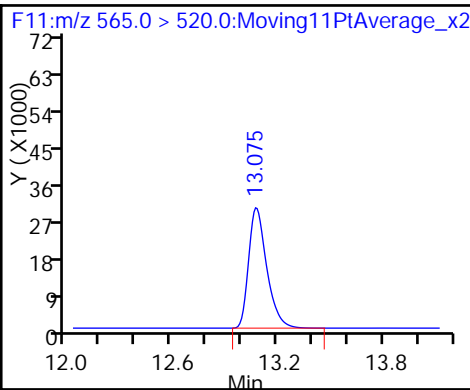
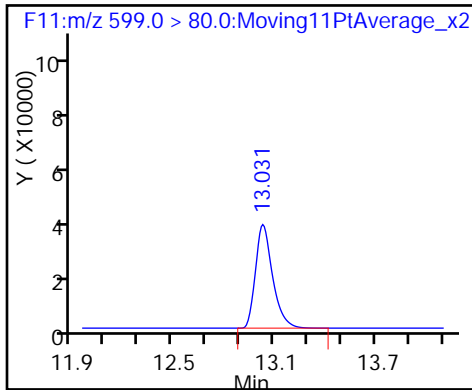




39 Perfluorodecane Sulfonic acid

D 26 13C2 PFUnA

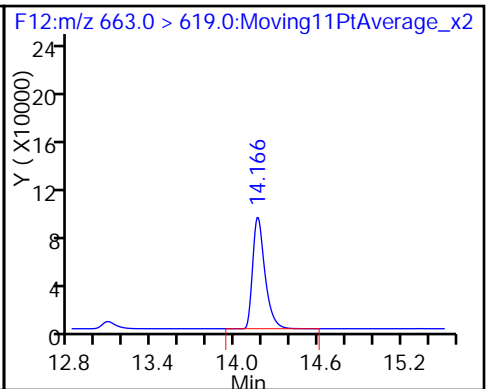
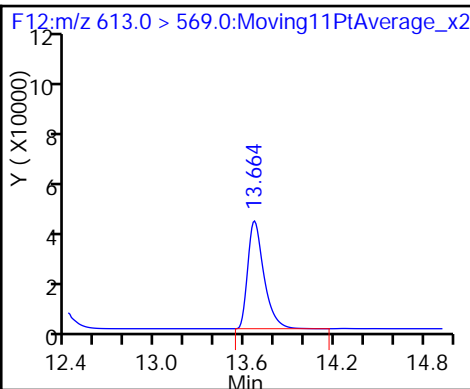
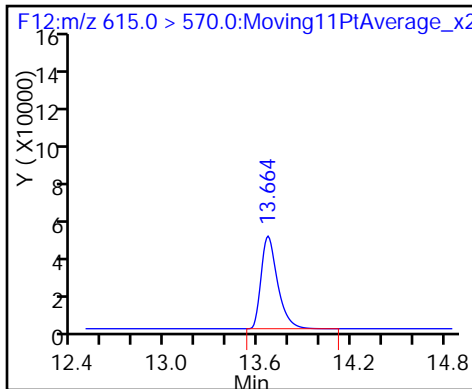
27 Perfluoroundecanoic acid



D 28 13C2 PFDaA

29 Perfluorododecanoic acid

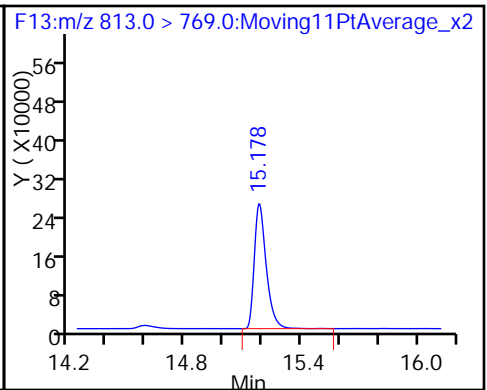
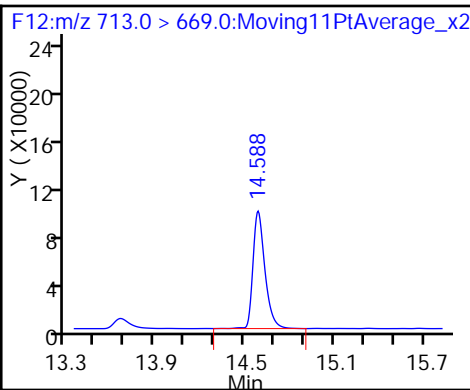
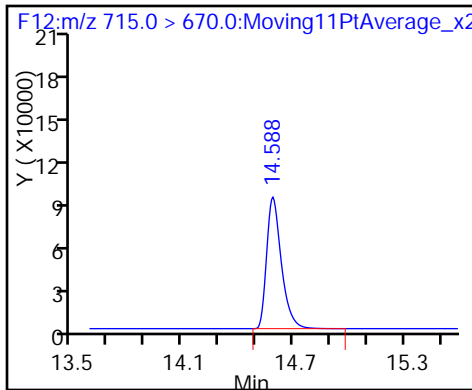
30 Perfluorotridecanoic acid



D 33 13C2-PFTeDA

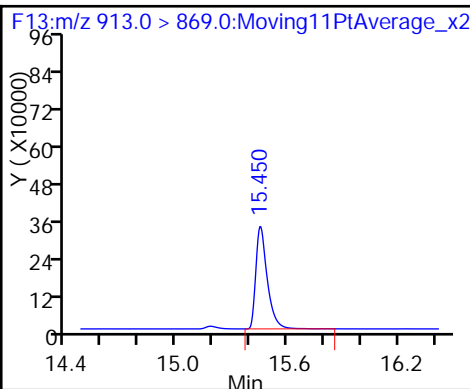
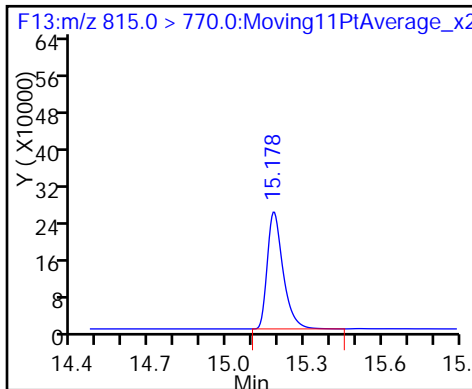
32 Perfluorotetradecanoic acid

34 Perfluorohexadecanoic acid



D 35 13C2-PFHxDA

36 Perfluorooctadecanoic acid



TestAmerica Sacramento
Target Compound Quantitation Report

Data File: \\ChromNA\Sacramento\ChromData\A6\20160524-31021.b\24MAY2016A6A_009.d
 Lims ID: Std L6
 Client ID:
 Sample Type: IC Calib Level: 6
 Inject. Date: 24-May-2016 18:53:25 ALS Bottle#: 14 Worklist Smp#: 9
 Injection Vol: 15.0 ul Dil. Factor: 1.0000
 Sample Info: STD L6
 Misc. Info.: Acquity BEH 1.7um, 3X150mm T=50°C
 Operator ID: JRB Instrument ID: A6
 Sublist: chrom-PFAC_A6*sub9
 Method: \\ChromNA\Sacramento\ChromData\A6\20160524-31021.b\PFAC_A6.m
 Limit Group: LC PFC_DOD ICAL
 Last Update: 25-May-2016 14:06:52 Calib Date: 24-May-2016 19:14:42
 Integrator: Picker
 Quant Method: Isotopic Dilution Quant By: Initial Calibration
 Last ICal File: \\ChromNA\Sacramento\ChromData\A6\20160524-31021.b\24MAY2016A6A_010.d
 Column 1 : Acquity BEH C18 (2.10 mm) Det: F1:MRM
 Process Host: XAWRK049

Signal	RT	EXP RT	DLT RT	REL RT	Response	Amount ng/ml	Ratio(Limits)	%Rec	S/N	Flags
2 Perfluorobutyric acid										
212.9 > 169.0	5.791	5.791	0.0	1.000	282560	220.2		110	3471	
D 1 13C4 PFBA										
217.0 > 172.0	5.800	5.796	0.004		51257	42.1		84.1	2979	
D 3 13C5-PFPeA										
267.9 > 223.0	6.946	6.946	0.0		104324	44.0		88.0	4847	
4 Perfluoropentanoic acid										
262.9 > 219.0	6.951	6.949	0.002	1.000	483871	195.6		97.8	14795	
40 Perfluorobutanesulfonic acid										
298.9 > 80.0	7.071	7.074	-0.003	1.000	1262078	168.9		95.5		
5 Perfluorobutane Sulfonate										
298.9 > 80.0	7.071	7.074	-0.003	1.000	1262078	NC			688	
298.9 > 99.0	7.067	7.074	-0.007	0.999	558381		2.26(0.00-0.00)		1540	
D 6 13C2 PFHxA										
315.0 > 270.0	8.219	8.223	-0.004		124365	36.2		72.4	11213	
7 Perfluorohexanoic acid										
313.0 > 269.0	8.219	8.225	-0.006	1.000	491786	213.2		107	5927	
D 8 13C4-PFHpA										
367.0 > 322.0	9.452	9.459	-0.007		129064	35.8		71.6	11580	
9 Perfluoroheptanoic acid										
363.0 > 319.0	9.458	9.462	-0.004	1.000	555259	195.8		97.9	24489	
D 11 18O2 PFHxS										
403.0 > 84.0	9.493	9.494	-0.001		241061	43.6		92.2	4120	
10 Perfluorohexane Sulfonate										
399.0 > 80.0	9.493	9.495	-0.002	1.000	960243	NC			5433	
41 Perfluorohexanesulfonic acid										
399.0 > 80.0	9.493	9.495	-0.002	1.000	960243	191.1		101		

Signal	RT	EXP RT	DLT RT	REL RT	Response	Amount ng/ml	Ratio(Limits)	%Rec	S/N	Flags
13 Perfluorooctanoic acid										
413.0 > 369.0	10.568	10.573	-0.005	1.000	356123	182.7		91.3	1830	
413.0 > 169.0	10.568	10.573	-0.005	1.000	166130		2.14(0.00-0.00)	91.3	10669	
D 12 13C4 PFOA										
417.0 > 372.0	10.577	10.577	0.0		91496	25.2		50.4	5612	
14 Perfluoroheptane Sulfonate										
449.0 > 80.0	10.577	10.585	-0.008	1.000	796277	NC			16021	
38 Perfluoroheptanesulfonic Acid										
449.0 > 80.0	10.577	10.585	-0.008	1.000	796277	179.3		94.2		
15 Perfluorooctane sulfonic acid										
499.0 > 80.0	11.518	11.524	-0.006	1.000	1667222	197.0		103	667	
499.0 > 99.0	11.518	11.524	-0.006	1.000	970644		1.72(0.00-0.00)	103	7118	
D 16 13C4 PFOS										
503.0 > 80.0	11.518	11.524	-0.006		434368	43.7		91.3	31460	
18 Perfluorononanoic acid										
463.0 > 419.0	11.545	11.547	-0.002	1.000	444822	273.8		137	3180	
D 17 13C5 PFNA										
468.0 > 423.0	11.545	11.551	-0.006		88714	21.1		42.1	6021	
20 Perfluorodecanoic acid										
513.0 > 469.0	12.373	12.376	-0.003	1.000	582943	274.3		137	34940	
D 19 13C2 PFDA										
515.0 > 470.0	12.373	12.380	-0.007		86691	20.3		40.6	5276	
D 23 13C8 FOSA										
506.0 > 78.0	12.984	12.993	-0.009		1188273	40.4		80.8	78225	
24 Perfluorooctane Sulfonamide										
498.0 > 78.0	12.994	12.994	0.0	1.000	5622658	212.8		106	5773	
39 Perfluorodecane Sulfonic acid										
599.0 > 80.0	13.031	13.032	-0.001	1.000	864142	196.6		102		
25 Perfluorodecane Sulfonate										
599.0 > 80.0	13.031	13.032	-0.001	1.000	864142	NC			58581	
D 26 13C2 PFUnA										
565.0 > 520.0	13.075	13.079	-0.004		144515	26.2		52.5	9864	
27 Perfluoroundecanoic acid										
563.0 > 519.0	13.084	13.082	0.002	1.000	745515	205.3		103	2485	
D 28 13C2 PFDoA										
615.0 > 570.0	13.673	13.667	0.006		243100	33.9		67.8	6467	
29 Perfluorododecanoic acid										
613.0 > 569.0	13.673	13.667	0.006	1.000	1085132	219.0		109	1940	
30 Perfluorotridecanoic acid										
663.0 > 619.0	14.173	14.166	0.007	1.000	1405333	195.4		97.7	2774	
D 33 13C2-PFTeDA										
715.0 > 670.0	14.594	14.589	0.005		359134	34.2		68.5	10438	
32 Perfluorotetradecanoic acid										
713.0 > 669.0	14.594	14.590	0.004	1.000	1598285	205.5		103	1559	
34 Perfluorohexadecanoic acid										
813.0 > 769.0	15.178	15.179	-0.001	1.000	3677680	227.3		114	2940	
D 35 13C2-PFHxDA										
815.0 > 770.0	15.178	15.180	-0.002		914173	42.6		85.2	5088	

Signal	RT	EXP RT	DLT RT	REL RT	Response	Amount ng/ml	Ratio(Limits)	%Rec	S/N	Flags
--------	----	-----------	-----------	-----------	----------	-----------------	---------------	------	-----	-------

36 Perfluorooctadecanoic acid
913.0 > 869.0 15.449 15.450 -0.001 1.000 4970845 251.1 126 5172

QC Flag Legend

Processing Flags

NC - Not Calibrated

Reagents:

LCPFC-L6_00017

Amount Added: 1.00

Units: mL

TestAmerica Sacramento

Data File: \\ChromNA\Sacramento\ChromData\A6\20160524-31021.b\24MAY2016A6A_009.d

Injection Date: 24-May-2016 18:53:25

Instrument ID: A6

Lims ID: Std L6

Client ID:

Operator ID: JRB

ALS Bottle#: 14

Worklist Smp#: 9

Injection Vol: 15.0 ul

Dil. Factor: 1.0000

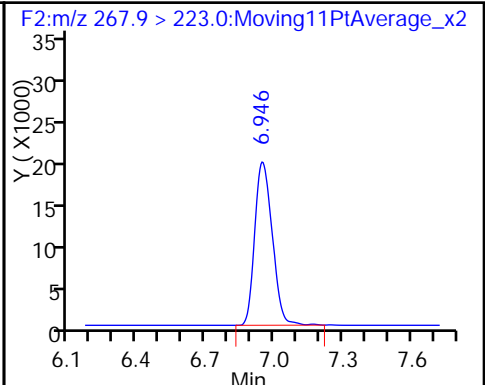
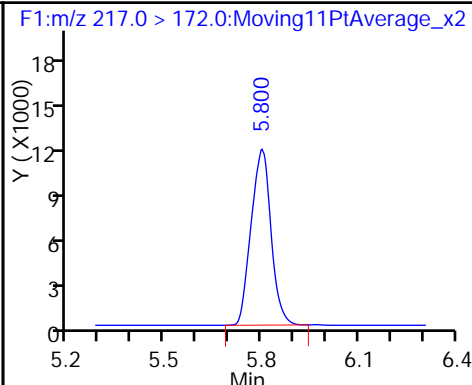
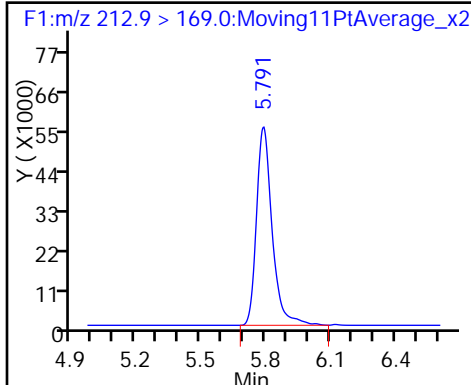
Method: PFAC_A6

Limit Group: LC PFC_DOD ICAL

2 Perfluorobutyric acid

D 1 13C4 PFBA

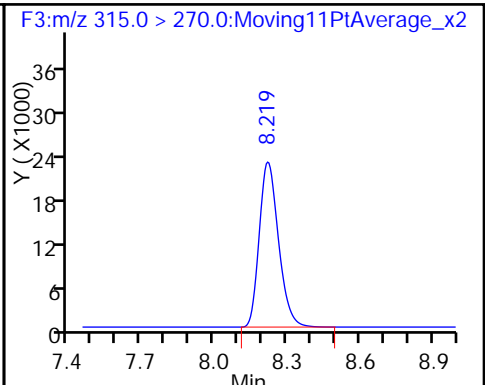
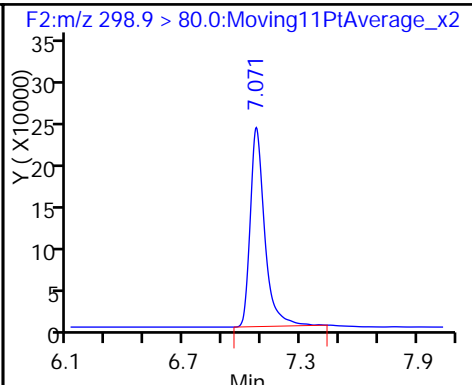
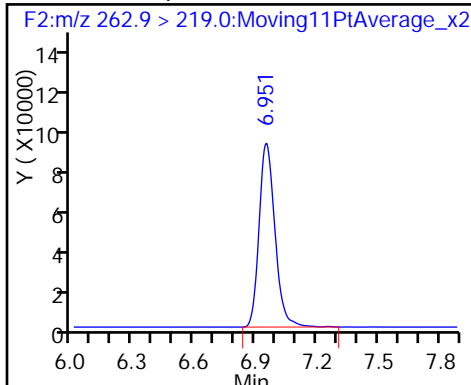
D 3 13C5-PFPeA



4 Perfluoropentanoic acid

40 Perfluorobutanesulfonic acid

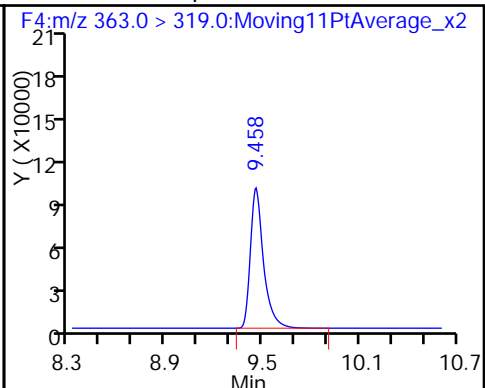
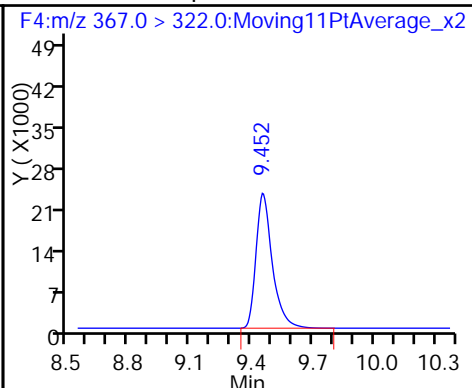
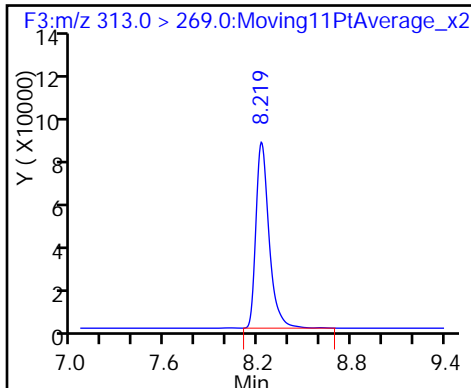
D 6 13C2 PFHxA



7 Perfluorohexanoic acid

D 8 13C4-PFHpA

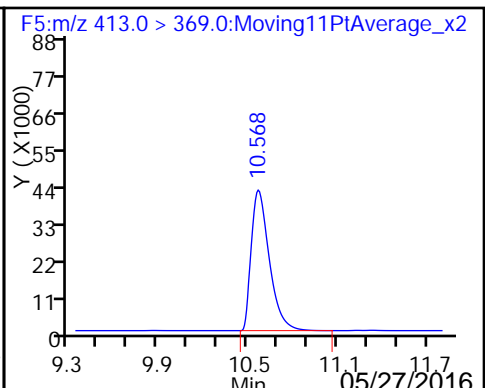
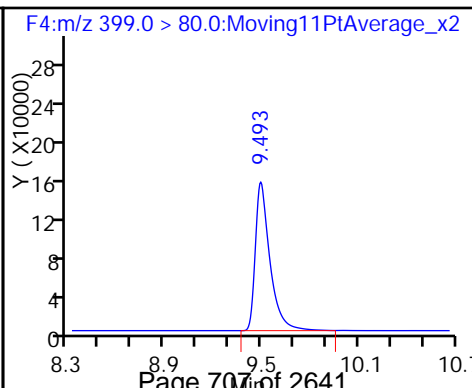
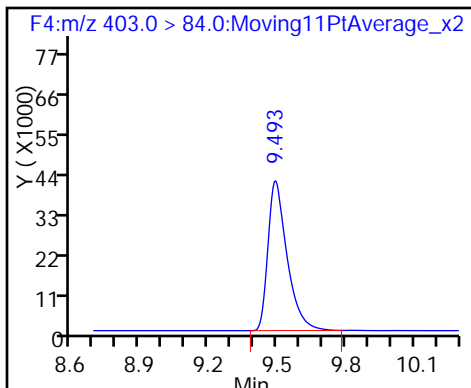
9 Perfluoroheptanoic acid

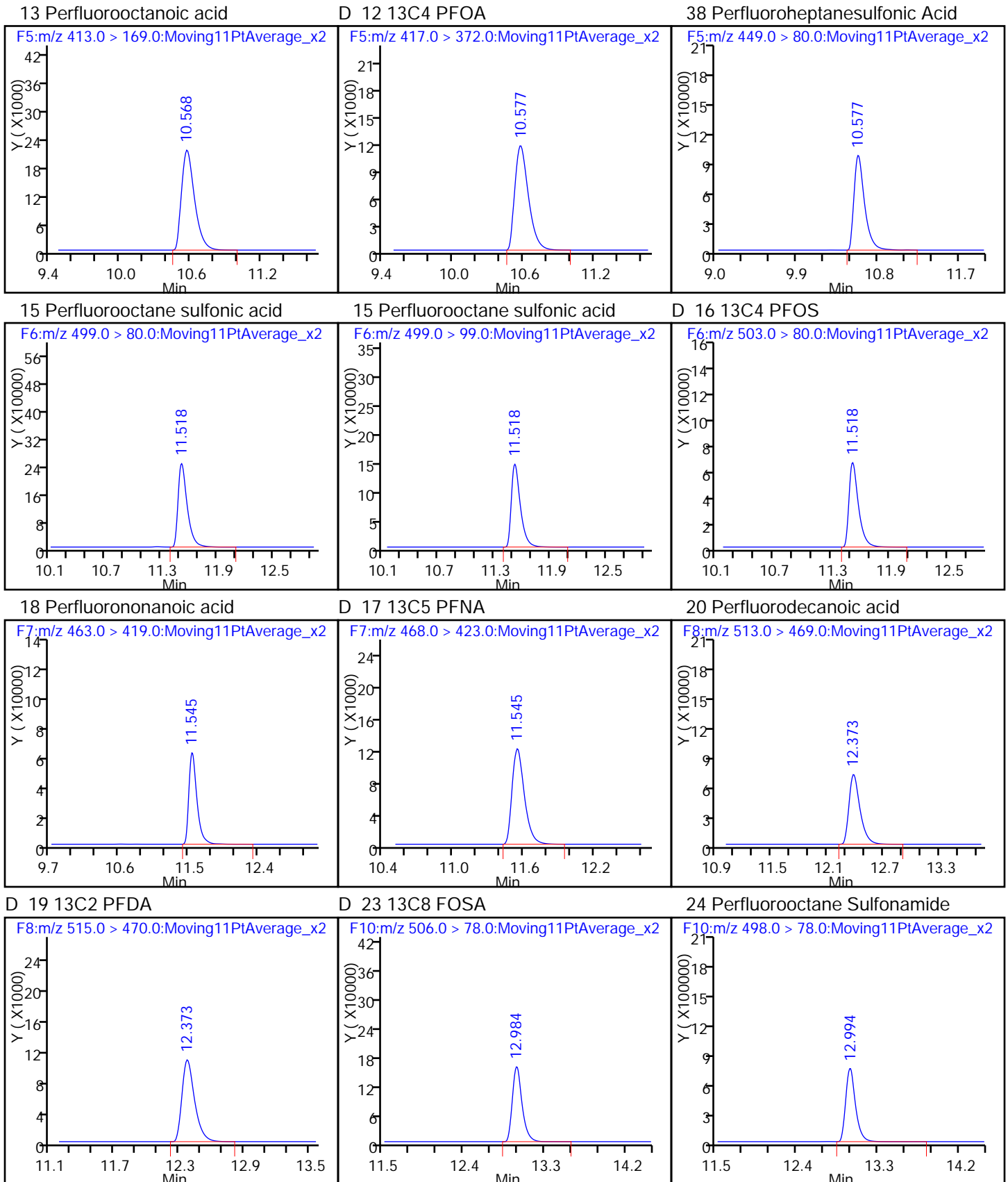


D 11 18O2 PFHxS

41 Perfluorohexanesulfonic acid

13 Perfluorooctanoic acid

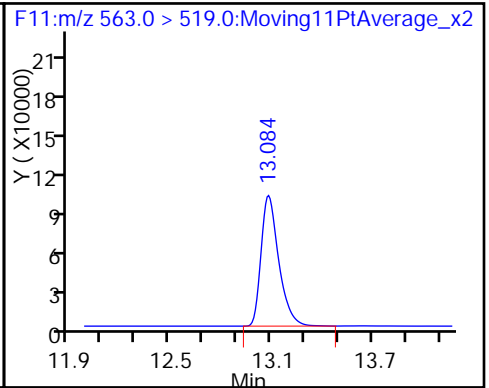
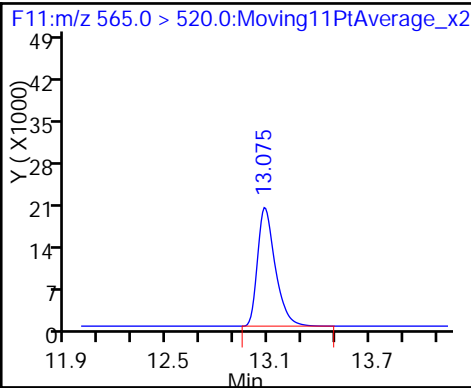
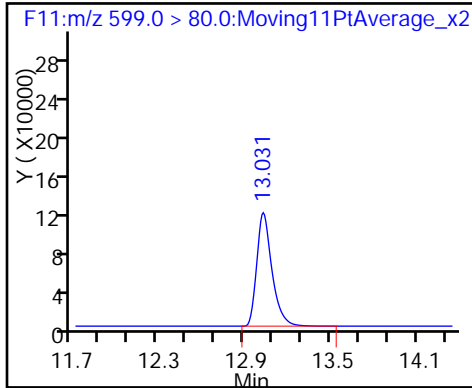




39 Perfluorodecane Sulfonic acid

D 26 13C2 PFUnA

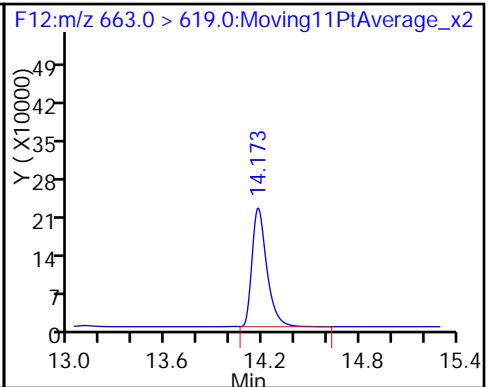
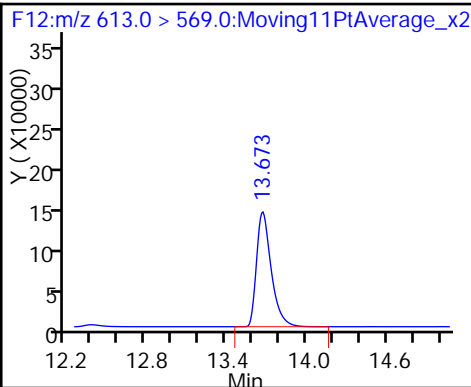
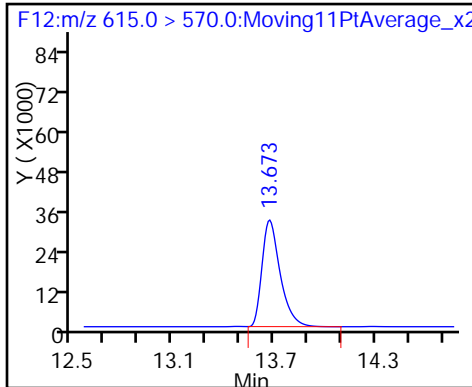
27 Perfluoroundecanoic acid



D 28 13C2 PFDaA

29 Perfluorododecanoic acid

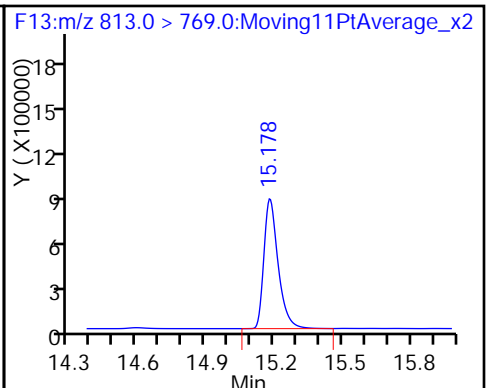
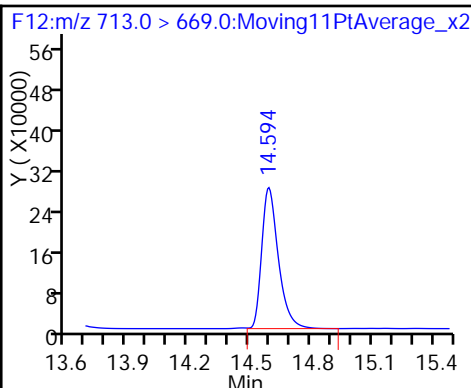
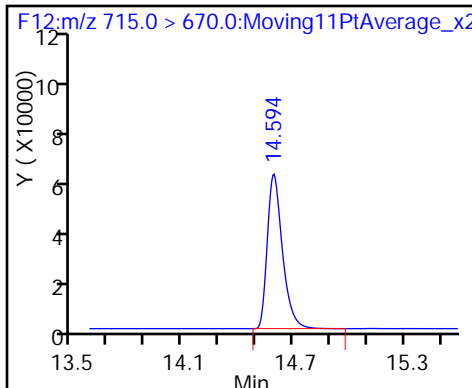
30 Perfluorotridecanoic acid



D 33 13C2-PFTeDA

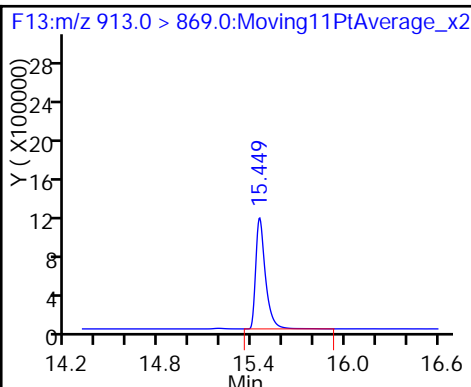
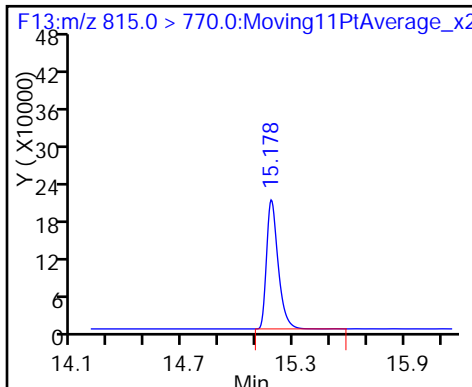
32 Perfluorotetradecanoic acid

34 Perfluorohexadecanoic acid



D 35 13C2-PFHxDA

36 Perfluorooctadecanoic acid



TestAmerica Sacramento
Target Compound Quantitation Report

Data File: \\ChromNA\Sacramento\ChromData\A6\20160524-31021.b\24MAY2016A6A_010.d
 Lims ID: Std L7
 Client ID:
 Sample Type: IC Calib Level: 7
 Inject. Date: 24-May-2016 19:14:42 ALS Bottle#: 15 Worklist Smp#: 10
 Injection Vol: 15.0 ul Dil. Factor: 1.0000
 Sample Info: STD L7
 Misc. Info.: Acquity BEH 1.7um, 3X150mm T=50°C
 Operator ID: JRB Instrument ID: A6
 Sublist: chrom-PFAC_A6*sub9
 Method: \\ChromNA\Sacramento\ChromData\A6\20160524-31021.b\PFAC_A6.m
 Limit Group: LC PFC_DOD ICAL
 Last Update: 25-May-2016 14:07:05 Calib Date: 24-May-2016 19:14:42
 Integrator: Picker
 Quant Method: Isotopic Dilution Quant By: Initial Calibration
 Last ICal File: \\ChromNA\Sacramento\ChromData\A6\20160524-31021.b\24MAY2016A6A_010.d
 Column 1 : Acquity BEH C18 (2.10 mm) Det: F1:MRM
 Process Host: XAWRK049

First Level Reviewer: westendorfc

Date: 25-May-2016 09:09:15

Signal	RT	EXP RT	DLT RT	REL RT	Response	Amount ng/ml	Ratio(Limits)	%Rec	S/N	Flags
2 Perfluorobutyric acid										
212.9 > 169.0	5.794	5.791	0.003	1.000	480936	448.3		112	30992	
D 1 13C4 PFBA										
217.0 > 172.0	5.803	5.796	0.007		42763	35.1		70.2	3993	
D 3 13C5-PFPeA										
267.9 > 223.0	6.946	6.946	0.0		75925	32.0		64.1	6422	
4 Perfluoropentanoic acid										
262.9 > 219.0	6.951	6.949	0.002	1.000	737184	408.9		102	763	
40 Perfluorobutanesulfonic acid										
298.9 > 80.0	7.071	7.074	-0.003	1.000	2378342	360.5		102		
5 Perfluorobutane Sulfonate										
298.9 > 80.0	7.071	7.074	-0.003	1.000	2378342	NC			1609	
298.9 > 99.0	7.071	7.074	-0.003	1.000	1068357		2.23(0.00-0.00)		1247	
D 6 13C2 PFHxA										
315.0 > 270.0	8.230	8.223	0.007		100843	29.3		58.7	8755	
7 Perfluorohexanoic acid										
313.0 > 269.0	8.225	8.225	0.0	1.000	879336	469.3		117	2846	
D 8 13C4-PFHpA										
367.0 > 322.0	9.446	9.459	-0.013		98014	27.2		54.3	8884	
9 Perfluoroheptanoic acid										
363.0 > 319.0	9.452	9.462	-0.010	1.000	934808	433.6		108	10544	
D 11 18O2 PFHxS										
403.0 > 84.0	9.487	9.494	-0.007		212821	38.5		81.4	17795	
10 Perfluorohexane Sulfonate										
399.0 > 80.0	9.487	9.495	-0.008	1.000	1663673	NC			21467	
41 Perfluorohexanesulfonic acid										
399.0 > 80.0	9.487	9.495	-0.008	1.000	1663673	375.0		99.1		

Signal	RT	EXP RT	DLT RT	REL RT	Response	Amount ng/ml	Ratio(Limits)	%Rec	S/N	Flags
13 Perfluorooctanoic acid										
413.0 > 369.0	10.568	10.573	-0.005	1.000	630418	498.2		125	2201	
413.0 > 169.0	10.568	10.573	-0.005	1.000	262989		2.40(0.00-0.00)	125	15603	
D 12 13C4 PFOA										
417.0 > 372.0	10.577	10.577	0.0		61823	17.0		34.1	3730	
14 Perfluoroheptane Sulfonate										
449.0 > 80.0	10.577	10.585	-0.008	1.000	1402764	NC			5422	
38 Perfluoroheptanesulfonic Acid										
449.0 > 80.0	10.577	10.585	-0.008	1.000	1402764	362.3		95.1		
15 Perfluorooctane sulfonic acid										
499.0 > 80.0	11.518	11.524	-0.006	1.000	3093589	419.2		110	848	
499.0 > 99.0	11.518	11.524	-0.006	1.000	1782798		1.74(0.00-0.00)	110	7596	
D 16 13C4 PFOS										
503.0 > 80.0	11.518	11.524	-0.006		378731	38.1		79.6	27398	
18 Perfluorononanoic acid										
463.0 > 419.0	11.553	11.547	0.006	1.000	629734	549.6		137	14015	
D 17 13C5 PFNA										
468.0 > 423.0	11.553	11.551	0.002		62575	14.9		29.7	4265	
20 Perfluorodecanoic acid										
513.0 > 469.0	12.383	12.376	0.007	1.000	764487	625.9		156	14620	
D 19 13C2 PFDA										
515.0 > 470.0	12.393	12.380	0.013		49786	11.6		23.3	2872	
D 23 13C8 FOSA										
506.0 > 78.0	12.994	12.993	0.001		1207359	41.0		82.1	53102	
24 Perfluorooctane Sulfonamide										
498.0 > 78.0	12.994	12.994	0.0	1.000	10759050	400.7		100	3964	
39 Perfluorodecane Sulfonic acid										
599.0 > 80.0	13.041	13.032	0.009	1.000	1460173	381.1		98.8		
25 Perfluorodecane Sulfonate										
599.0 > 80.0	13.041	13.032	0.009	1.000	1460173	NC			32714	
D 26 13C2 PFUnA										
565.0 > 520.0	13.094	13.079	0.015		124337	22.6		45.1	8600	
27 Perfluoroundecanoic acid										
563.0 > 519.0	13.094	13.082	0.012	1.000	1174235	376.3		94.1	1771	
D 28 13C2 PFDoA										
615.0 > 570.0	13.676	13.667	0.009		211043	29.4		58.9	13719	
29 Perfluorododecanoic acid										
613.0 > 569.0	13.676	13.667	0.009	1.000	1560769	362.8		90.7	3244	
30 Perfluorotridecanoic acid										
663.0 > 619.0	14.167	14.166	0.001	1.000	2163423	346.6		86.6	2620	
D 33 13C2-PFTeDA										
715.0 > 670.0	14.583	14.589	-0.006		326798	31.2		62.3	14251	
32 Perfluorotetradecanoic acid										
713.0 > 669.0	14.583	14.590	-0.007	1.000	2679987	397.0		99.3	1786	
34 Perfluorohexadecanoic acid										
813.0 > 769.0	15.175	15.179	-0.004	1.000	6440831	459.7		115	3339	
D 35 13C2-PFHxDA										
815.0 > 770.0	15.175	15.180	-0.005		837620	39.0		78.1	11251	

Signal	RT	EXP RT	DLT RT	REL RT	Response	Amount ng/ml	Ratio(Limits)	%Rec	S/N	Flags
36 Perfluorooctadecanoic acid										
913.0 > 869.0	15.446	15.450	-0.004	1.000	9902853	576.2		144	4788	

QC Flag Legend

Processing Flags

NC - Not Calibrated

Reagents:

LCPFC-L7_00017

Amount Added: 1.00

Units: mL

TestAmerica Sacramento

Data File: \\ChromNA\Sacramento\ChromData\A6\20160524-31021.b\24MAY2016A6A_010.d

Injection Date: 24-May-2016 19:14:42

Instrument ID: A6

Lims ID: Std L7

Client ID:

Operator ID: JRB

ALS Bottle#: 15

Worklist Smp#: 10

Injection Vol: 15.0 ul

Dil. Factor: 1.0000

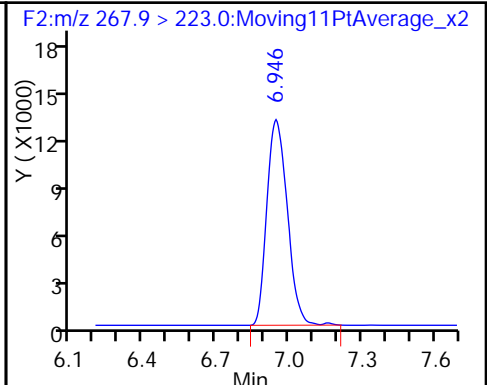
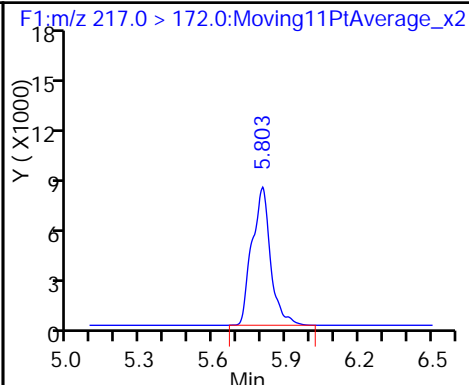
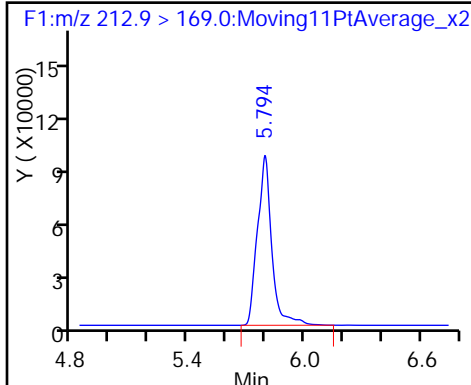
Method: PFAC_A6

Limit Group: LC PFC_DOD ICAL

2 Perfluorobutyric acid

D 1 13C4 PFBA

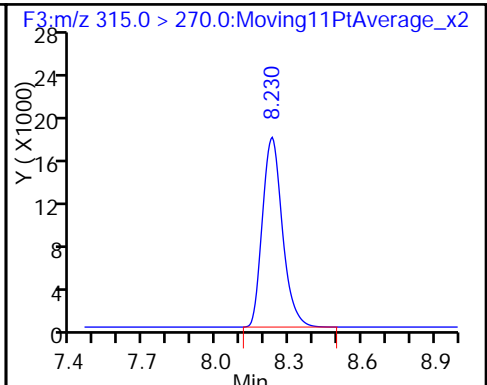
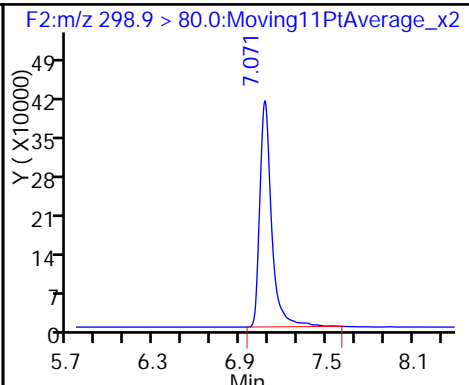
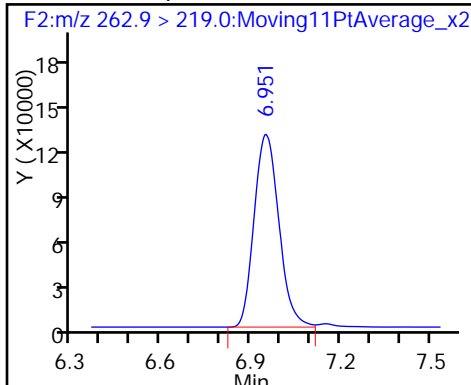
D 3 13C5-PFPeA



4 Perfluoropentanoic acid

40 Perfluorobutanesulfonic acid

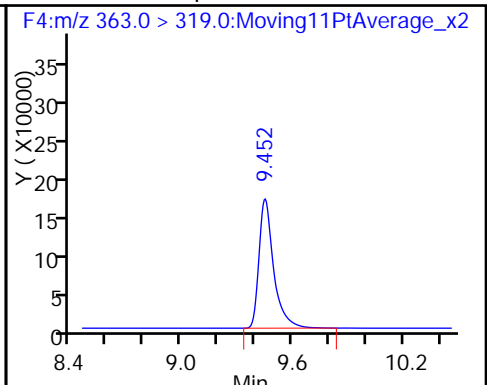
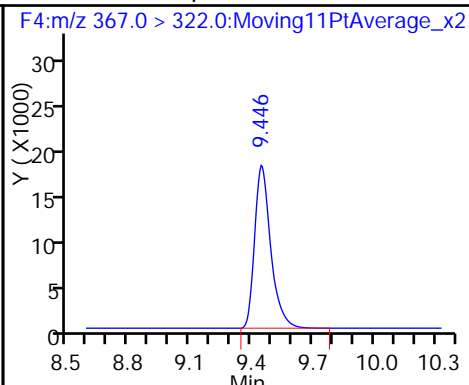
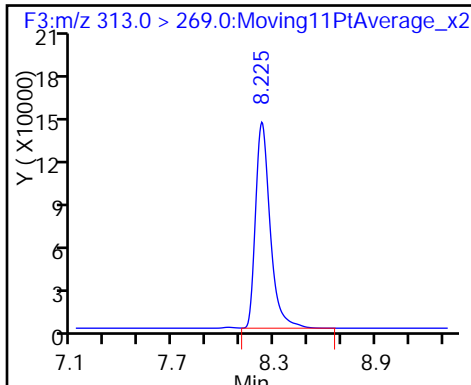
D 6 13C2 PFHxA



7 Perfluorohexanoic acid

D 8 13C4-PFHpA

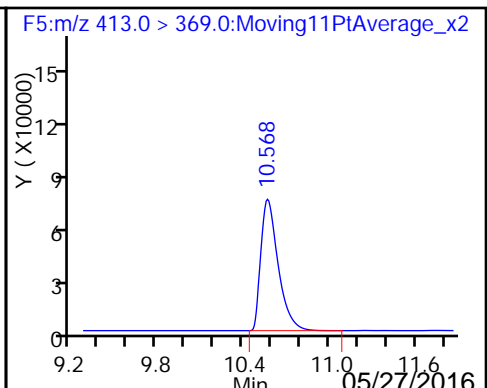
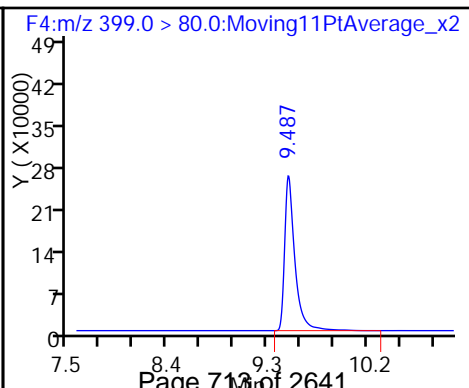
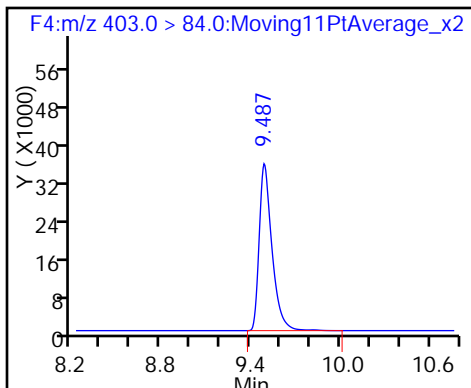
9 Perfluoroheptanoic acid

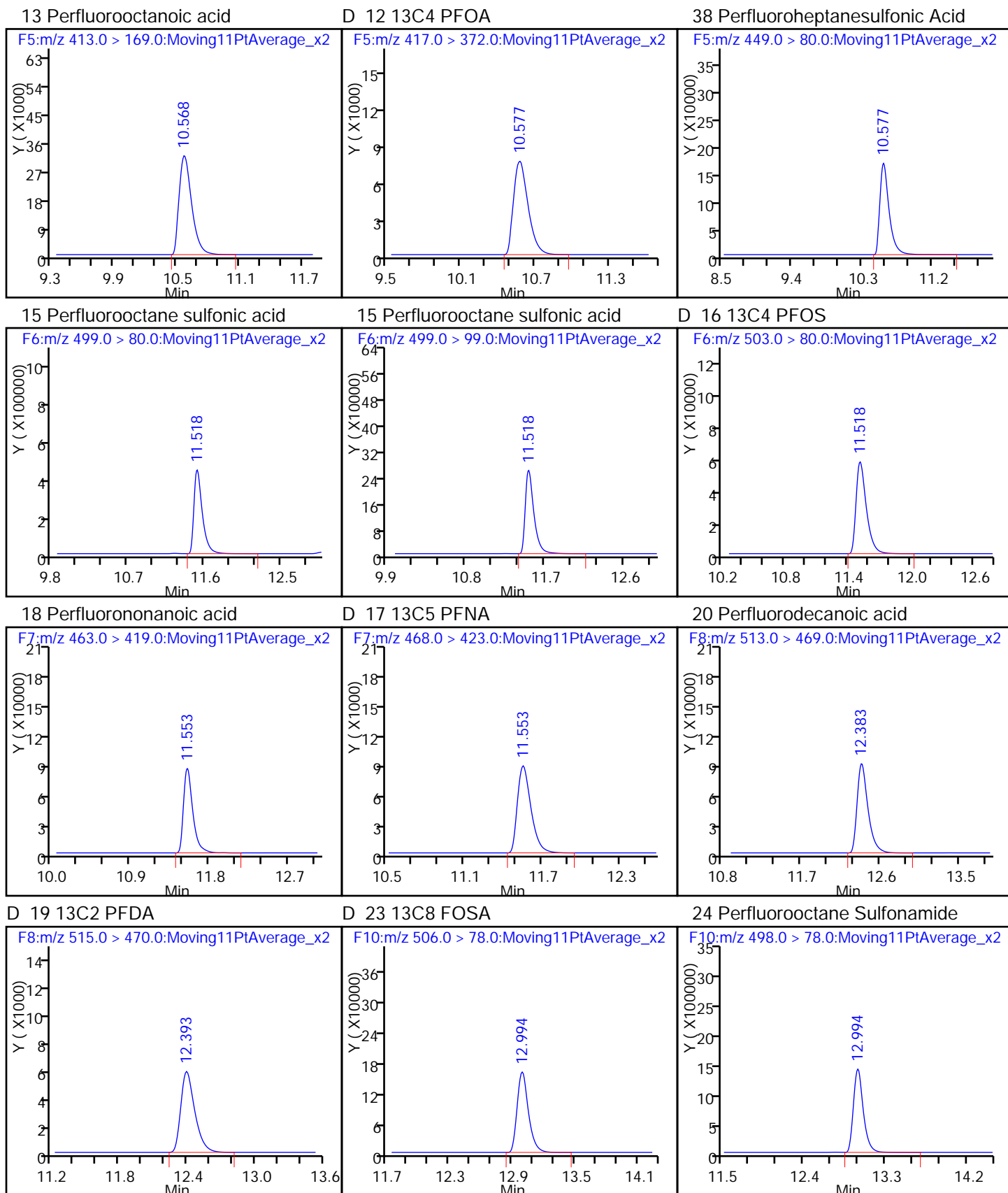


D 11 18O2 PFHxS

41 Perfluorohexanesulfonic acid

13 Perfluorooctanoic acid

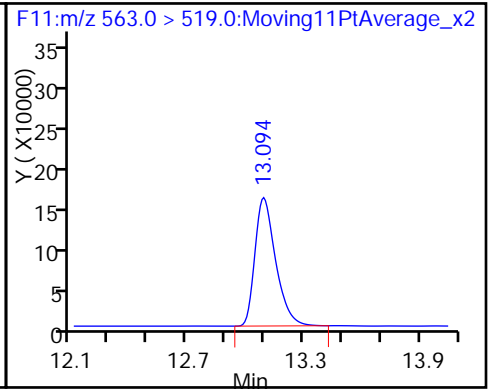
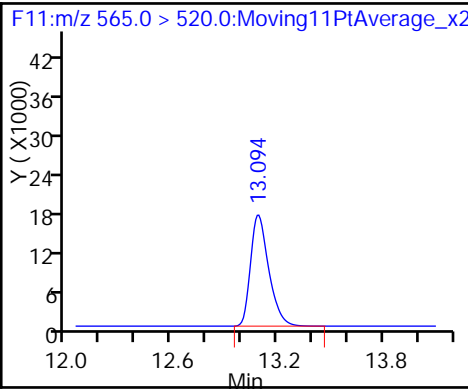
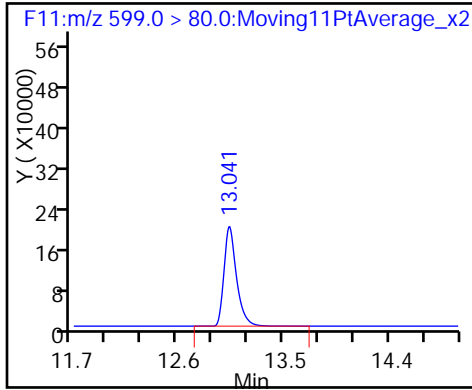




39 Perfluorodecane Sulfonic acid

D 26 13C2 PFUnA

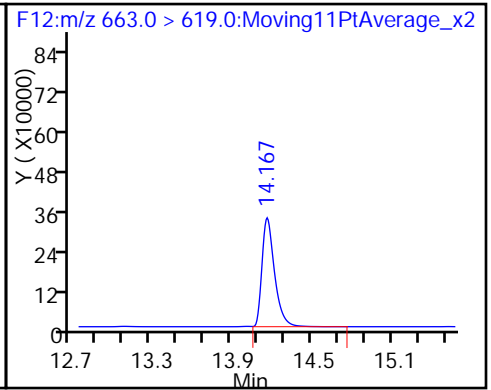
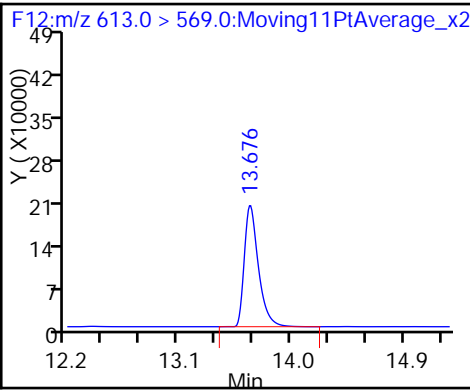
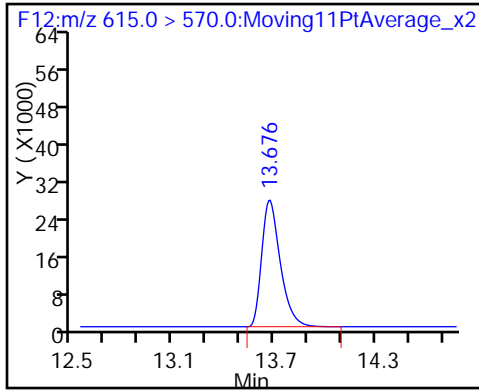
27 Perfluoroundecanoic acid



D 28 13C2 PFDaA

29 Perfluorododecanoic acid

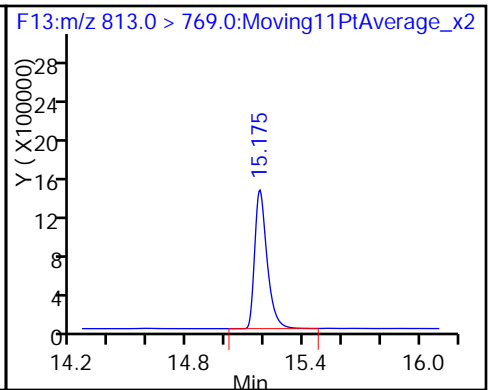
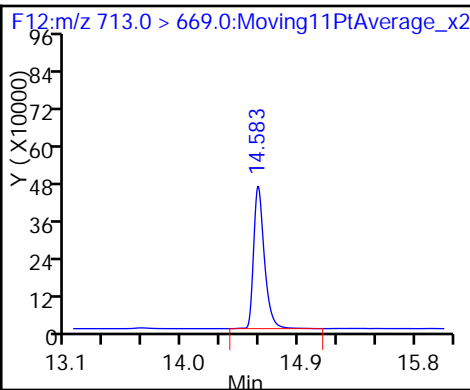
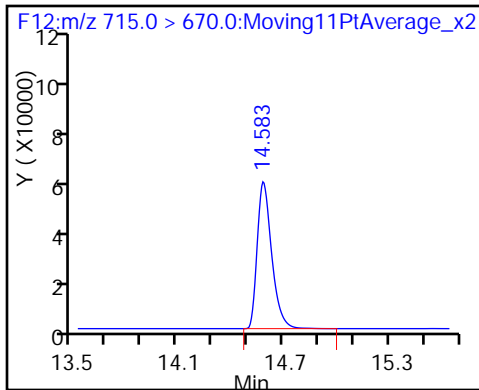
30 Perfluorotridecanoic acid



D 33 13C2-PFTeDA

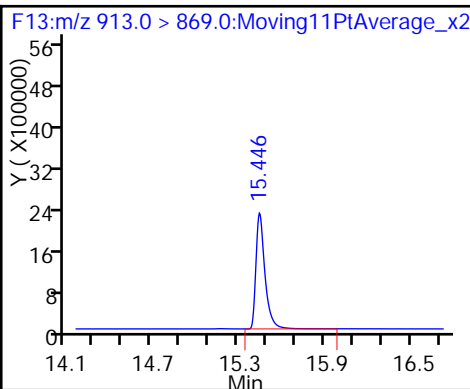
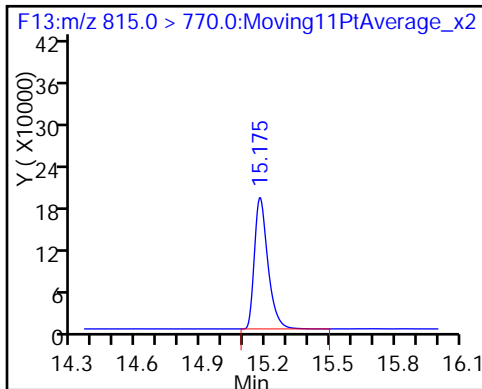
32 Perfluorotetradecanoic acid

34 Perfluorohexadecanoic acid



D 35 13C2-PFHxDA

36 Perfluorooctadecanoic acid



FORM VII
LCMS CONTINUING CALIBRATION DATA

Lab Name: TestAmerica Sacramento Job No.: 320-18796-1
 SDG No.: _____
 Lab Sample ID: ICV 320-111390/13 Calibration Date: 05/25/2016 19:44
 Instrument ID: A4 Calib Start Date: 05/25/2016 16:55
 GC Column: Acquity ID: 2.10 (mm) Calib End Date: 05/25/2016 19:01
 Lab File ID: 25MAY2016B4A_013.d Conc. Units: ng/mL

ANALYTE	CURVE TYPE	AVE RRF	RRF	MIN RRF	CALC AMOUNT	SPIKE AMOUNT	%D	MAX %D
Perfluorobutanoic acid (PFBA)	AveID	0.6418	0.6042		47.1	50.0	-5.9	25.0
Perfluoropentanoic acid (PFPeA)	AveID	0.5079	0.4357		42.9	50.0	-14.2	25.0
Perfluorobutanesulfonic acid (PFBS)	L2ID	0.7655	0.6286		38.0	44.3	-14.2	25.0
Perfluorohexanoic acid (PFHxA)	L1ID		0.4002		44.4	50.0	-11.2	25.0
Perfluoroheptanoic acid (PFHpA)	L2ID		0.4343		44.9	50.0	-10.1	25.0
Perfluorohexanesulfonic acid (PFHxS)	AveID	1.705	1.616		44.7	47.3	-5.2	25.0
Perfluorooctanoic acid (PFOA)	L1ID	0.4698	0.4140		45.7	50.0	-8.6	25.0
Perfluoroheptanesulfonic Acid (PFHpS)	L2ID	7.344	7.099		43.6	47.6	-8.3	25.0
Perfluorooctanesulfonic acid (PFOS)	L1ID	11.43	11.46		39.8	47.8	-16.7	25.0
Perfluorononanoic acid (PFNA)	L2ID		1.183		48.1	50.0	-3.9	25.0
Perfluorodecanoic acid (PFDA)	AveID	1.039	1.015		48.8	50.0	-2.3	25.0
Perfluorooctane Sulfonamide (FOSA)	AveID	1.069	0.9064		42.4	50.0	-15.2	25.0
Perfluorodecanesulfonic acid (PFDS)	AveID	4.187	4.035		46.3	48.3	-3.6	25.0
Perfluoroundecanoic acid (PFUnA)	AveID	1.179	1.055		44.7	50.0	-10.5	25.0
Perfluorododecanoic acid (PFDoA)	AveID	0.9121	0.8447		46.3	50.0	-7.4	25.0
Perfluorotridecanoic Acid (PFTriA)	AveID	1.025	1.020		49.7	50.0	-0.5	25.0
Perfluorotetradecanoic acid (PFTeA)	AveID	0.5424	0.4528		41.7	50.0	-16.5	25.0
Perfluoro-n-hexadecanoic acid (PFHxDA)	L2ID		2.841		54.5	50.0	9.0	25.0
Perfluoro-n-octadecanoic acid (PFODA)	AveID	2.211	2.063		46.7	50.0	-6.7	25.0

TestAmerica Sacramento
Target Compound Quantitation Report

Data File: \\ChromNA\Sacramento\ChromData\A4\20160525-31065.b\25MAY2016B4A_013.d
 Lims ID: ICV
 Client ID:
 Sample Type: ICV
 Inject. Date: 25-May-2016 19:44:02 ALS Bottle#: 9 Worklist Smp#: 13
 Injection Vol: 15.0 ul Dil. Factor: 1.0000
 Sample Info: ICV
 Misc. Info.: Acquity BEH C18,1.7u, 3X150mm,T=35C
 Operator ID: JRB Instrument ID: A4
 Sublist: chrom-PFAC_A4*sub6
 Method: \\ChromNA\Sacramento\ChromData\A4\20160525-31065.b\PFAC_A4.m
 Limit Group: LC PFC_DOD ICAL
 Last Update: 26-May-2016 11:03:48 Calib Date: 25-May-2016 19:01:43
 Integrator: Picker
 Quant Method: Isotopic Dilution Quant By: Initial Calibration
 Last Ical File: \\ChromNA\Sacramento\ChromData\A4\20160525-31065.b\25MAY2016B4A_011.d

Column 1 : Det: F1:MRM

Process Host: XAWRK003

First Level Reviewer: barnettj

Date: 25-May-2016 20:10:40

Signal	RT	EXP RT	DLT RT	REL RT	Response	Amount ng/ml	Ratio(Limits)	%Rec	S/N	Flags
2 Perfluorobutyric acid										
212.7 > 168.6	5.800	5.798	0.002	1.000	2958964	47.1			7956	
D 1 13C4 PFBA										
216.7 > 171.5	5.797	5.798	-0.001		4897041	57.9		116	17343	
D 3 13C5-PFPeA										
267.6 > 222.7	6.909	6.907	0.002		4007616	52.2		104	7316	
4 Perfluoropentanoic acid										
262.9 > 218.7	6.909	6.910	-0.001	1.000	1746168	42.9			558	
5 Perfluorobutane Sulfonate										
298.8 > 79.6	7.024	7.024	0.0	1.000	795232	NC			2061	
298.8 > 98.6	7.024	7.024	0.0	1.000	539269		1.47(0.00-0.00)		1224	
51 Perfluorobutanesulfonic acid										
298.8 > 79.6	7.024	7.024	0.0	1.000	795232	38.0				
D 6 13C2 PFHxA										
314.6 > 269.7	8.155	8.156	-0.001		4868461	58.6		117	8025	
7 Perfluorohexanoic acid										
312.9 > 268.7	8.155	8.157	-0.002	1.000	1948205	44.4			2121	
22 PFPeS (Perflouro-1-pentanesulfonat										
348.7 > 79.5	8.231	8.231	0.0	0.874	1626958	NC			6115	
D 8 13C4-PFHpA										
366.6 > 321.6	9.388	9.387	0.001		4696622	54.9		110	6023	
9 Perfluoroheptanoic acid										
362.8 > 318.7	9.388	9.388	0.0	1.000	2039886	44.9			4057	
10 Perfluorohexane Sulfonate										
398.3 > 79.2	9.419	9.421	-0.002	1.000	2183057	NC			3581	
58 Perfluorohexanesulfonic acid										
398.3 > 79.2	9.419	9.421	-0.002	1.000	2183057	44.7				

Signal	RT	EXP RT	DLT RT	REL RT	Response	Amount ng/ml	Ratio(Limits)	%Rec	S/N	Flags
D 11 18O2 PFHxS										
402.5 > 83.6	9.419	9.422	-0.003		1352349	45.6		96.3	4547	
D 12 13C4 PFOA										
416.5 > 371.6	10.500	10.503	-0.003		4522634	50.7		101	6631	
13 Perfluorooctanoic acid										
412.8 > 368.8	10.500	10.504	-0.004	1.000	1872553	45.7			2392	
412.8 > 168.7	10.500	10.504	-0.004	1.000	614282		3.05(0.00-0.00)		1683	
39 Perfluoroheptanesulfonic Acid										
448.3 > 79.2	10.509	10.508	0.001	1.000	2002003	43.6				
14 Perfluoroheptane Sulfonate										
448.3 > 79.2	10.509	10.508	0.001	1.000	2002003	NC			4517	
D 16 13C4 PFOS										
502.4 > 79.7	11.459	11.465	-0.006		283194	42.0		87.8	1259	
15 Perfluorooctane sulfonic acid										
498.3 > 79.2	11.459	11.466	-0.007	1.000	3241703	39.8			2688	
498.3 > 98.2	11.459	11.466	-0.007	1.000	2020911		1.60(0.00-0.00)		2424	
D 17 13C5 PFNA										
467.5 > 422.6	11.479	11.484	-0.005		4181087	53.3		107	8671	
18 Perfluorononanoic acid										
462.5 > 418.6	11.488	11.486	0.002	1.000	4947520	48.1			5432	
D 19 13C2 PFDA										
514.4 > 469.5	12.325	12.325	0.0		5407179	54.1		108	6738	
20 Perfluorodecanoic acid										
512.5 > 468.5	12.325	12.325	0.0	1.000	5486255	48.8			4722	
D 23 13C8 FOSA										
505.4 > 77.6	12.897	12.893	0.004		5081241	52.6		105	4736	
24 Perfluorooctane Sulfonamide										
497.5 > 77.6	12.897	12.893	0.004	1.000	4605524	42.4			3112	
25 Perfluorodecane Sulfonate										
598.4 > 79.6	12.988	12.996	-0.008	1.000	1153396	NC			3804	
49 Perfluorodecane Sulfonic acid										
598.4 > 79.6	12.988	12.996	-0.008	1.000	1153396	46.3				
27 Perfluoroundecanoic acid										
562.4 > 518.5	13.042	13.042	0.0	1.000	5563123	44.7			4406	
D 26 13C2 PFUnA										
564.3 > 519.5	13.042	13.044	-0.002		5271958	52.0		104	4367	
D 28 13C2 PFDaA										
614.4 > 569.4	13.639	13.646	-0.007		5767571	54.7		109	3882	
29 Perfluorododecanoic acid										
612.4 > 568.6	13.639	13.646	-0.007	1.000	4872011	46.3			1800	
30 Perfluorotridecanoic acid										
662.4 > 618.5	14.161	14.162	-0.001	1.000	3975330	49.7			1664	
32 Perfluorotetradecanoic acid										
712.6 > 668.5	14.599	14.600	-0.001	1.000	1765191	41.7			1124	
D 33 13C2-PFTeDA										
714.5 > 669.5	14.599	14.601	-0.002		3898106	51.4		103	3149	
D 35 13C2-PFHxDA										
814.8 > 769.6	15.250	15.255	-0.005		1343496	46.1		92.2	2719	

Signal	RT	EXP RT	DLT RT	REL RT	Response	Amount ng/ml	Ratio(Limits)	%Rec	S/N	Flags
34 Perfluorohexadecanoic acid										
812.6 > 768.6	15.250	15.255	-0.005	1.000	3816658	54.5			669	
36 Perfluorooctadecanoic acid										
912.7 > 868.6	15.589	15.593	-0.004	1.000	2771533	46.7			2240	

QC Flag Legend

Processing Flags

NC - Not Calibrated

Reagents:

LCPFCIC_00016

Amount Added: 1.00

Units: mL

TestAmerica Sacramento

Data File: \\ChromNA\Sacramento\ChromData\A4\20160525-31065.b\25MAY2016B4A_013.d

Injection Date: 25-May-2016 19:44:02

Instrument ID: A4

Lims ID: ICV

Client ID:

Operator ID: JRB

ALS Bottle#: 9

Worklist Smp#: 13

Injection Vol: 15.0 ul

Dil. Factor: 1.0000

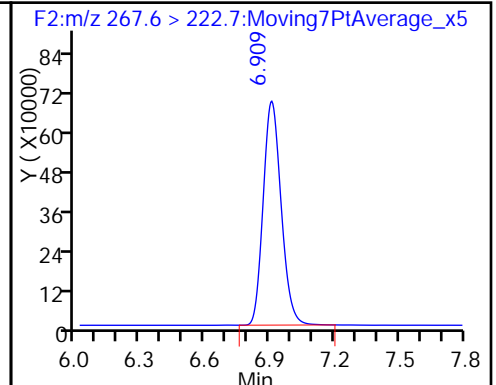
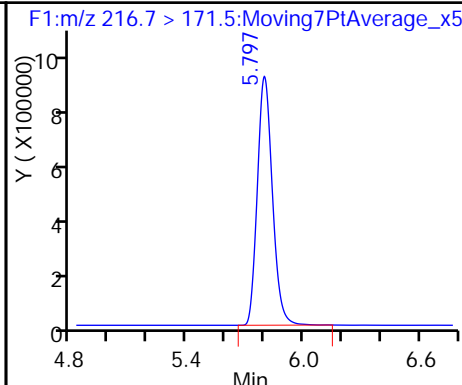
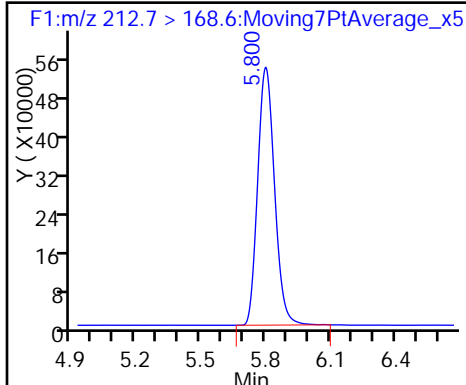
Method: PFAC_A4

Limit Group: LC PFC_DOD ICAL

2 Perfluorobutyric acid

D 1 13C4 PFBA

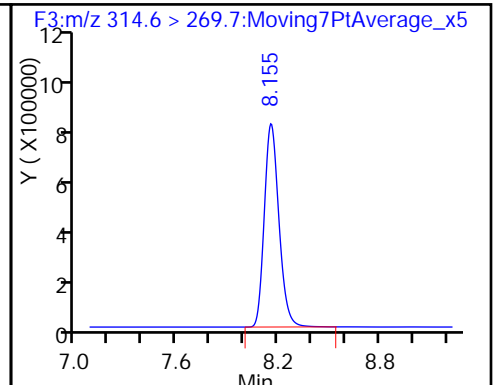
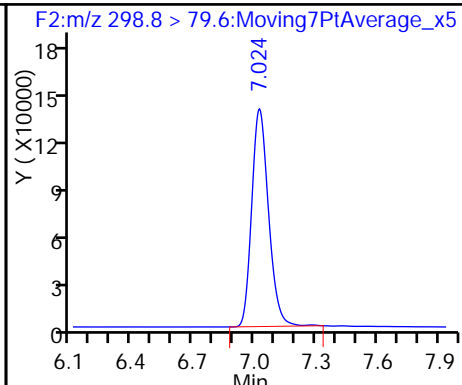
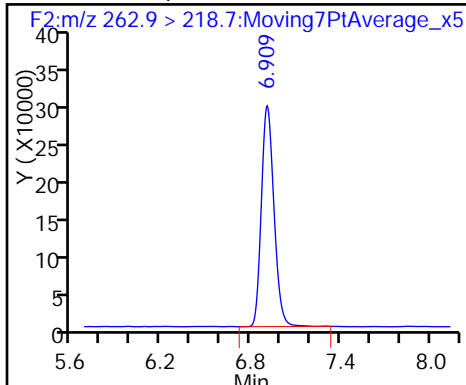
D 3 13C5-PFPeA



4 Perfluoropentanoic acid

51 Perfluorobutanesulfonic acid

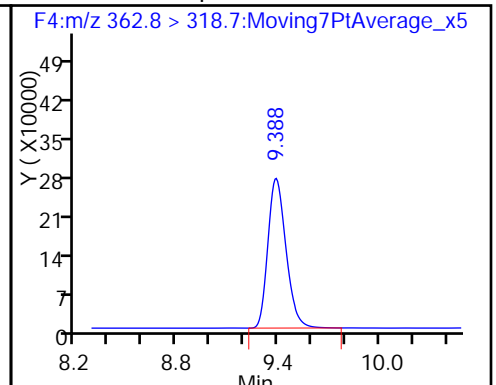
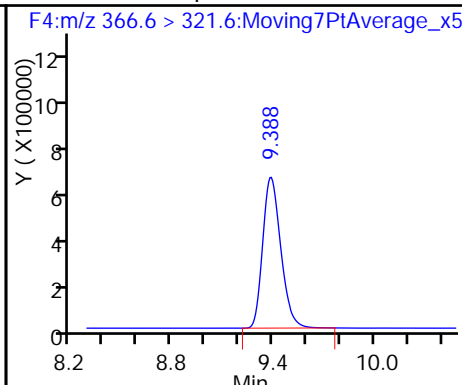
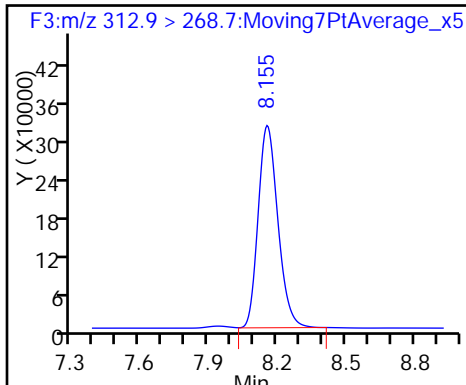
D 6 13C2 PFHxA



7 Perfluorohexanoic acid

D 8 13C4-PFHpA

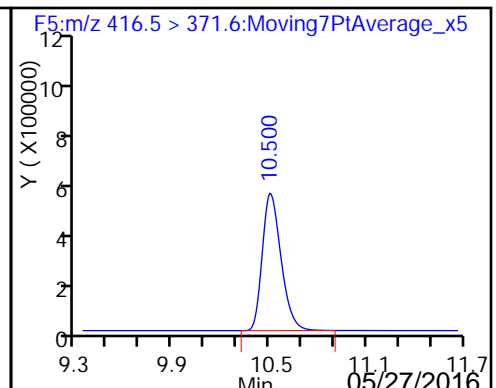
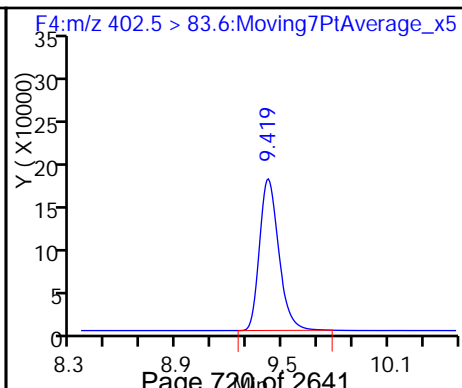
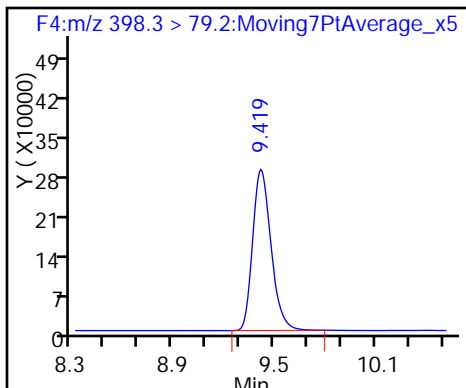
9 Perfluoroheptanoic acid

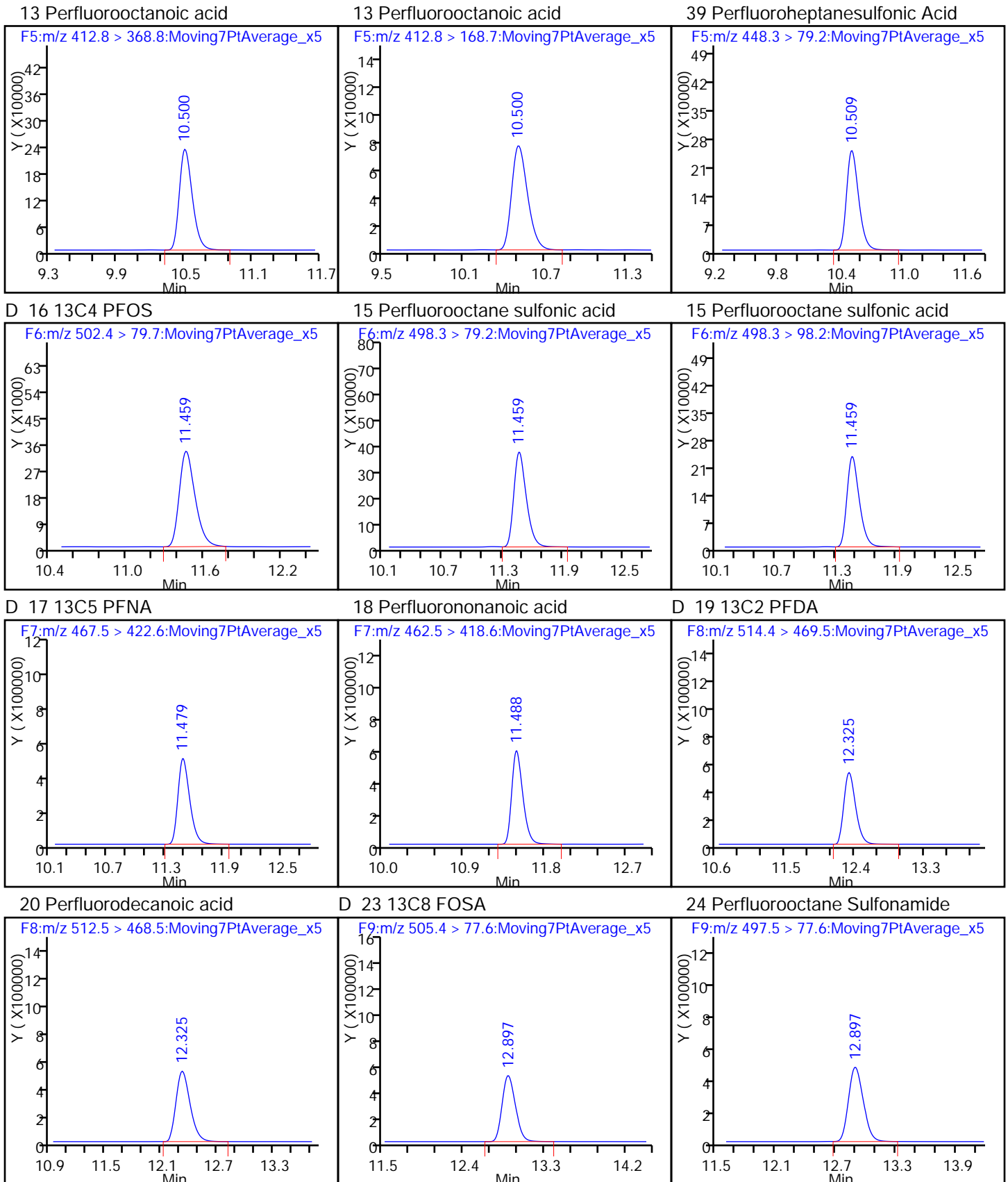


58 Perfluorohexanesulfonic acid

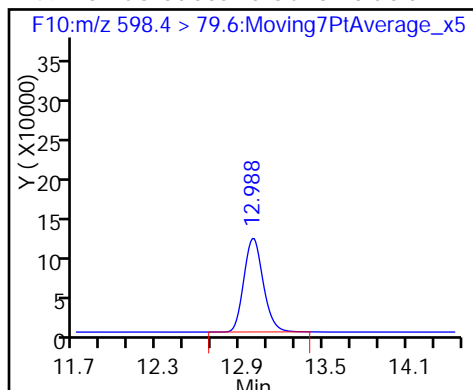
D 11 18O2 PFHxS

D 12 13C4 PFOA

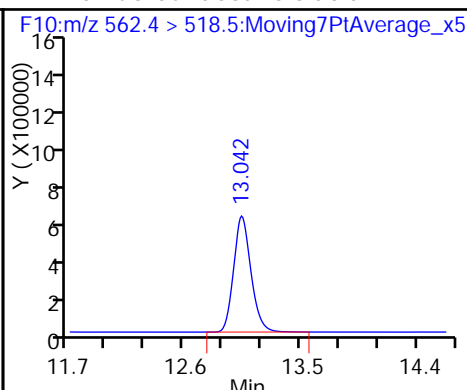




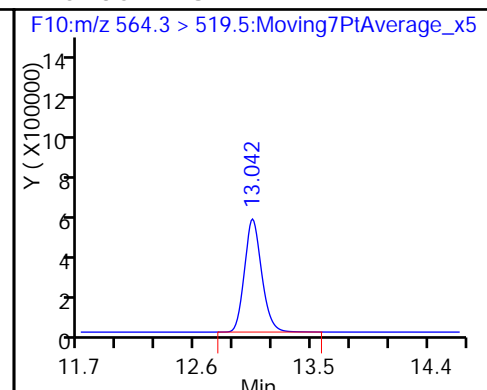
49 Perfluorodecane Sulfonic acid



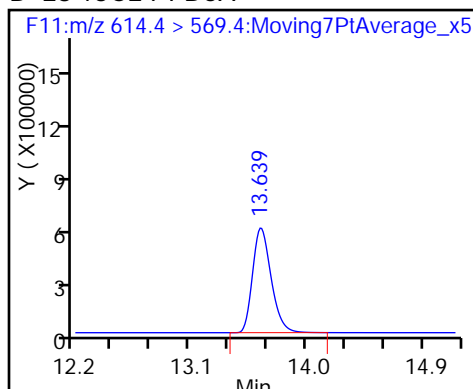
27 Perfluoroundecanoic acid



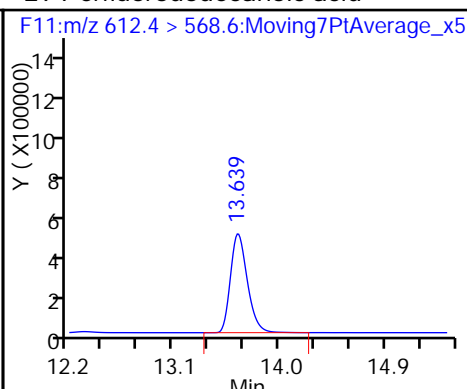
D 26 13C2 PFUnA



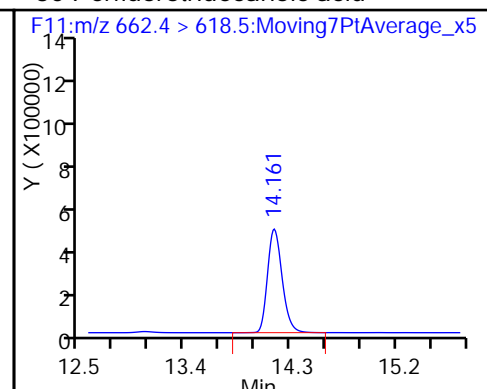
D 28 13C2 PFDaA



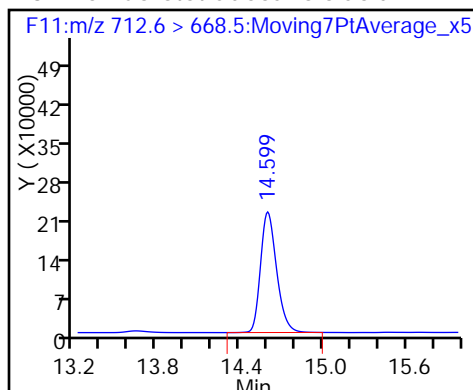
29 Perfluorododecanoic acid



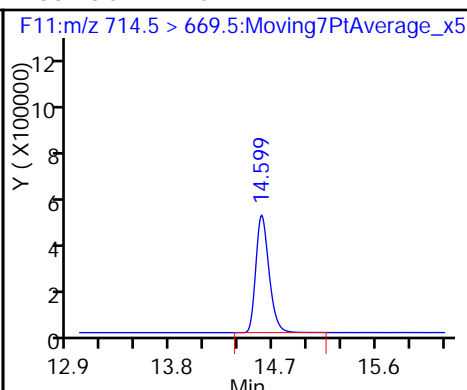
30 Perfluorotridecanoic acid



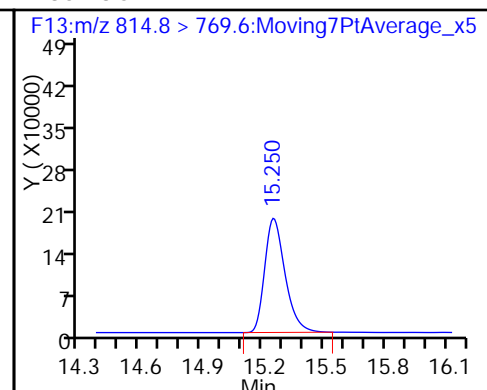
32 Perfluorotetradecanoic acid



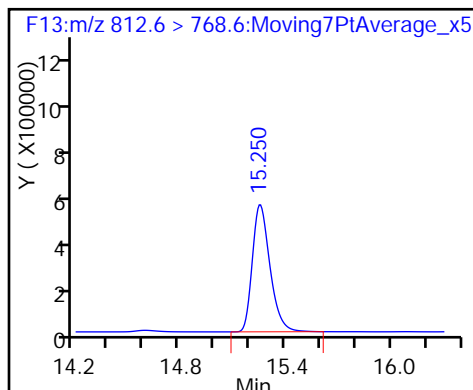
D 33 13C2-PFTeDA



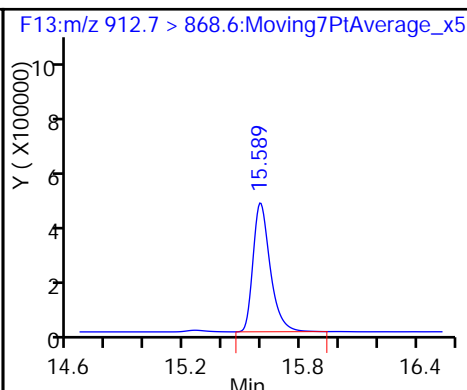
D 35 13C2-PFHxDA



34 Perfluorohexadecanoic acid



36 Perfluorooctadecanoic acid



FORM VII
LCMS CONTINUING CALIBRATION DATA

Lab Name: TestAmerica Sacramento Job No.: 320-18796-1
 SDG No.: _____
 Lab Sample ID: CCV 320-111390/39 Calibration Date: 05/26/2016 04:54
 Instrument ID: A4 Calib Start Date: 05/25/2016 16:55
 GC Column: Acquity ID: 2.10 (mm) Calib End Date: 05/25/2016 19:01
 Lab File ID: 25MAY2016B4A_039.d Conc. Units: ng/mL

ANALYTE	CURVE TYPE	AVE RRF	RRF	MIN RRF	CALC AMOUNT	SPIKE AMOUNT	%D	MAX %D
Perfluorobutanoic acid (PFBA)	AveID	0.6418	0.6046		18.8	20.0	-5.8	25.0
Perfluoropentanoic acid (PFPeA)	AveID	0.5079	0.3257		12.8	20.0	-35.9*	25.0
Perfluorobutanesulfonic acid (PFBS)	L2ID	0.7655	0.5827		14.0	17.7	-21.1	25.0
Perfluorohexanoic acid (PFHxA)	L1ID		0.3311		14.6	20.0	-27.1*	25.0
Perfluoroheptanoic acid (PFHpA)	L2ID		0.4613		18.9	20.0	-5.7	25.0
Perfluorohexanesulfonic acid (PFHxS)	AveID	1.705	1.677		18.6	18.9	-1.7	25.0
Perfluoroheptanesulfonic Acid (PFHpS)	L2ID	7.344	13.58		33.4	19.0	75.5*	25.0
Perfluorooctanoic acid (PFOA)	L1ID	0.4698	0.3494		15.4	20.0	-23.1	25.0
Perfluorooctanesulfonic acid (PFOS)	L1ID	11.43	20.57		28.8	19.1	50.4*	25.0
Perfluorononanoic acid (PFNA)	L2ID		1.148		18.7	20.0	-6.7	25.0
Perfluorodecanoic acid (PFDA)	AveID	1.039	1.031		19.9	20.0	-0.7	25.0
Perfluorooctane Sulfonamide (FOSA)	AveID	1.069	1.035		19.4	20.0	-3.2	25.0
Perfluorodecanesulfonic acid (PFDS)	AveID	4.187	6.238		28.6	19.3	49.0*	25.0
Perfluoroundecanoic acid (PFUnA)	AveID	1.179	1.049		17.8	20.0	-11.0	25.0
Perfluorododecanoic acid (PFDoA)	AveID	0.9121	0.8527		18.7	20.0	-6.5	25.0
Perfluorotridecanoic Acid (PFTriA)	AveID	1.025	1.147		22.4	20.0	11.9	25.0
Perfluorotetradecanoic acid (PFTeA)	AveID	0.5424	0.4834		17.8	20.0	-10.9	25.0
Perfluoro-n-hexadecanoic acid (PFHxDA)	L2ID		3.065		23.1	20.0	15.4	25.0
Perfluoro-n-octadecanoic acid (PFODA)	AveID	2.211	2.456		22.2	20.0	11.1	25.0

TestAmerica Sacramento
Target Compound Quantitation Report

Data File: \\ChromNA\Sacramento\ChromData\A4\20160525-31065.b\25MAY2016B4A_039.d
 Lims ID: CCV L4
 Client ID:
 Sample Type: CCV
 Inject. Date: 26-May-2016 04:54:41 ALS Bottle#: 13 Worklist Smp#: 39
 Injection Vol: 15.0 ul Dil. Factor: 1.0000
 Sample Info: CCV L4
 Misc. Info.: Acquity BEH C18,1.7u, 3X150mm,T=35C
 Operator ID: JRB Instrument ID: A4
 Sublist: chrom-PFAC_A4*sub12
 Method: \\ChromNA\Sacramento\ChromData\A4\20160525-31065.b\PFAC_A4.m
 Limit Group: LC PFC_DOD ICAL
 Last Update: 26-May-2016 11:08:39 Calib Date: 25-May-2016 19:01:43
 Integrator: Picker
 Quant Method: Isotopic Dilution Quant By: Initial Calibration
 Last ICal File: \\ChromNA\Sacramento\ChromData\A4\20160525-31065.b\25MAY2016B4A_011.d

Column 1 : Det: F1:MRM

Process Host: XAWRK003

First Level Reviewer: westendorfc

Date: 26-May-2016 08:58:41

Signal	RT	EXP RT	DLT RT	REL RT	Response	Amount ng/ml	Ratio(Limits)	%Rec	S/N	Flags
2 Perfluorobutyric acid										
212.7 > 168.6	5.794	5.798	-0.004	1.000	1408244	18.8		94.2	4838	
D 1 13C4 PFBA										
216.7 > 171.5	5.794	5.798	-0.004		5822722	68.9		138	28760	
D 3 13C5-PFPeA										
267.6 > 222.7	6.899	6.907	-0.008		4170945	54.4		109	9056	
4 Perfluoropentanoic acid										
262.9 > 218.7	6.904	6.910	-0.006	1.000	543321	12.8		64.1	245	
5 Perfluorobutane Sulfonate										
298.8 > 79.6	7.014	7.024	-0.010	1.000	292564	NC			684	
298.8 > 98.6	7.019	7.024	-0.005	1.001	205302		1.43(0.00-0.00)		483	
51 Perfluorobutanesulfonic acid										
298.8 > 79.6	7.014	7.024	-0.010	1.000	292564	14.0		78.9		
D 6 13C2 PFHxA										
314.6 > 269.7	8.149	8.156	-0.007		5385666	64.9		130	14004	
7 Perfluorohexanoic acid										
312.9 > 268.7	8.149	8.157	-0.008	1.000	713252	14.6		72.9	2148	
22 PFPeS (Perflouro-1-pentanesulfonat										
348.7 > 79.5	8.225	8.231	-0.006	0.874	684713	NC			4875	
D 8 13C4-PFHpA										
366.6 > 321.6	9.380	9.387	-0.007		4536811	53.1		106	9198	
9 Perfluoroheptanoic acid										
362.8 > 318.7	9.380	9.388	-0.008	1.000	837131	18.9		94.3	2318	
10 Perfluorohexane Sulfonate										
398.3 > 79.2	9.412	9.421	-0.009	1.000	900884	NC			1808	
58 Perfluorohexanesulfonic acid										
398.3 > 79.2	9.412	9.421	-0.009	1.000	900884	18.6		98.1		

Signal	RT	EXP RT	DLT RT	REL RT	Response	Amount ng/ml	Ratio(Limits)	%Rec	S/N	Flags
D 11 18O2 PFHxS										
402.5 > 83.6	9.412	9.422	-0.010		1343314	45.3		95.7	3631	
D 12 13C4 PFOA										
416.5 > 371.6	10.499	10.503	-0.004		5015776	56.3		113	8753	
13 Perfluorooctanoic acid										
412.8 > 368.8	10.499	10.504	-0.005	1.000	701051	15.4		76.9	1371	
412.8 > 168.7	10.499	10.504	-0.005	1.000	214873		3.26(0.00-0.00)		750	
39 Perfluoroheptanesulfonic Acid										
448.3 > 79.2	10.499	10.508	-0.009	1.000	938436	33.4		176		
14 Perfluoroheptane Sulfonate										
448.3 > 79.2	10.499	10.508	-0.009	1.000	938436	NC			2899	
D 16 13C4 PFOS										
502.4 > 79.7	11.458	11.465	-0.007		173539	25.7		53.8	760	
15 Perfluorooctane sulfonic acid										
498.3 > 79.2	11.458	11.466	-0.008	1.000	1427567	28.8		150	2846	
498.3 > 98.2	11.458	11.466	-0.008	1.000	871347		1.64(0.00-0.00)		1685	
D 17 13C5 PFNA										
467.5 > 422.6	11.478	11.484	-0.006		4346675	55.4		111	7471	
18 Perfluorononanoic acid										
462.5 > 418.6	11.478	11.486	-0.008	1.000	1996482	18.7		93.3	2740	
D 19 13C2 PFDA										
514.4 > 469.5	12.324	12.325	-0.001		5516495	55.2		110	8090	
20 Perfluorodecanoic acid										
512.5 > 468.5	12.324	12.325	-0.001	1.000	2274852	19.9		99.3	2785	
D 23 13C8 FOSA										
505.4 > 77.6	12.884	12.893	-0.009		4206655	43.6		87.2	2914	
24 Perfluorooctane Sulfonamide										
497.5 > 77.6	12.884	12.893	-0.009	1.000	1742000	19.4		96.8	2325	
25 Perfluorodecane Sulfonate										
598.4 > 79.6	12.987	12.996	-0.009	1.000	436667	NC			1705	
49 Perfluorodecane Sulfonic acid										
598.4 > 79.6	12.987	12.996	-0.009	1.000	436667	28.6		148		
27 Perfluoroundecanoic acid										
562.4 > 518.5	13.041	13.042	-0.001	1.000	2405688	17.8		89.0	2877	
D 26 13C2 PFUnA										
564.3 > 519.5	13.041	13.044	-0.003		5732557	56.5		113	5245	
D 28 13C2 PFDaA										
614.4 > 569.4	13.638	13.646	-0.008		5905805	56.0		112	4549	
29 Perfluorododecanoic acid										
612.4 > 568.6	13.638	13.646	-0.008	1.000	2014334	18.7		93.5	915	
30 Perfluorotridecanoic acid										
662.4 > 618.5	14.161	14.162	-0.001	1.000	1661359	22.4		112	688	
32 Perfluorotetradecanoic acid										
712.6 > 668.5	14.588	14.600	-0.012	1.000	700032	17.8		89.1	418	
D 33 13C2-PFTeDA										
714.5 > 669.5	14.598	14.601	-0.003		3620074	47.7		95.4	3817	
D 35 13C2-PFHxDA										
814.8 > 769.6	15.250	15.255	-0.005		1166727	40.0		80.1	2795	

Signal	RT	EXP RT	DLT RT	REL RT	Response	Amount ng/ml	Ratio(Limits)	%Rec	S/N	Flags
34 Perfluorohexadecanoic acid										
812.6 > 768.6	15.250	15.255	-0.005	1.000	1430209	23.1		115	217	
36 Perfluorooctadecanoic acid										
912.7 > 868.6	15.588	15.593	-0.005	1.000	1146394	22.2		111	1407	

QC Flag Legend

Processing Flags

NC - Not Calibrated

Reagents:

LCPFC-L4_00018

Amount Added: 1.00

Units: mL

TestAmerica Sacramento

Data File: \\ChromNA\Sacramento\ChromData\A4\20160525-31065.b\25MAY2016B4A_039.d

Injection Date: 26-May-2016 04:54:41

Instrument ID: A4

Lims ID: CCV L4

Client ID:

Operator ID: JRB

ALS Bottle#: 13

Worklist Smp#: 39

Injection Vol: 15.0 ul

Dil. Factor: 1.0000

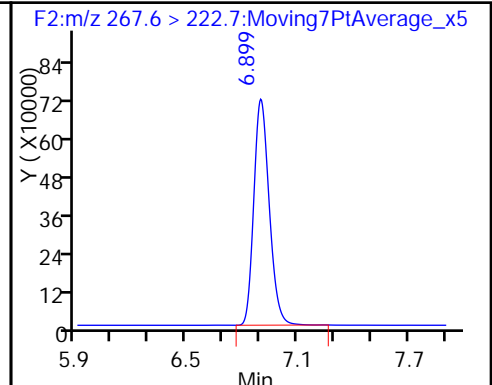
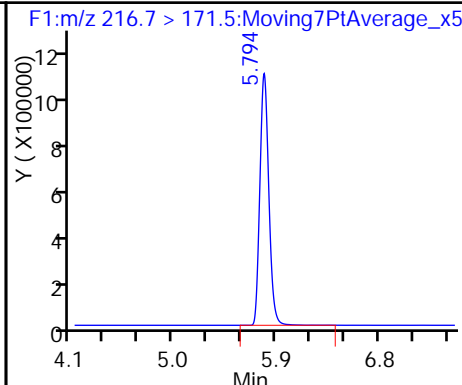
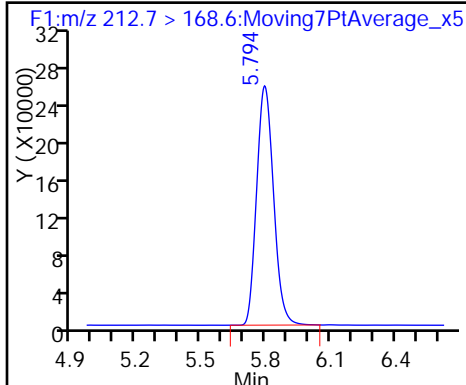
Method: PFAC_A4

Limit Group: LC PFC_DOD ICAL

2 Perfluorobutyric acid

D 1 13C4 PFBA

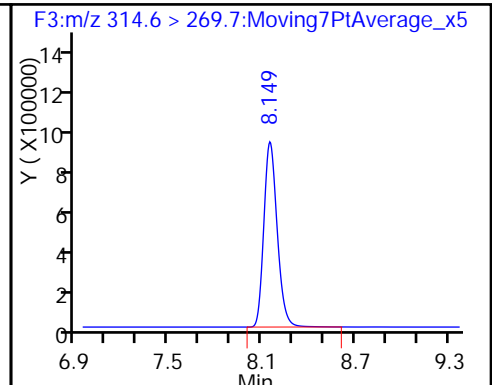
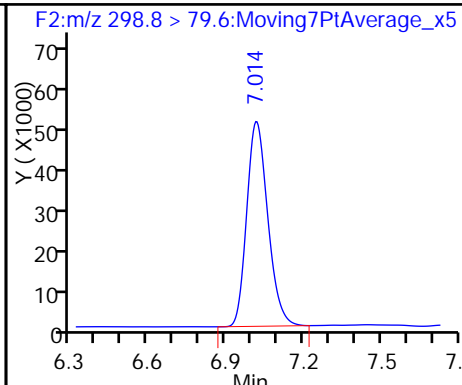
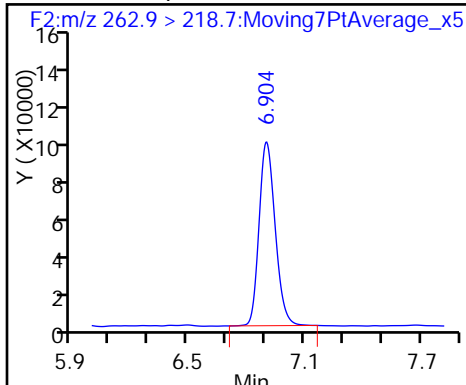
D 3 13C5-PFPeA



4 Perfluoropentanoic acid

51 Perfluorobutanesulfonic acid

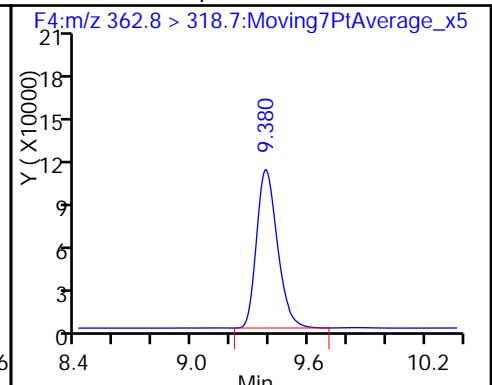
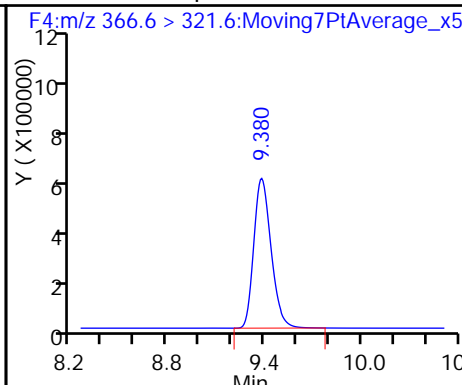
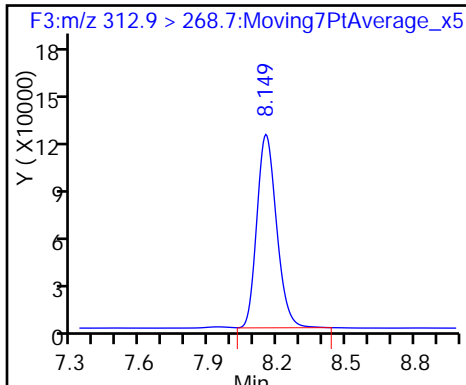
D 6 13C2 PFHxA



7 Perfluorohexanoic acid

D 8 13C4-PFHpA

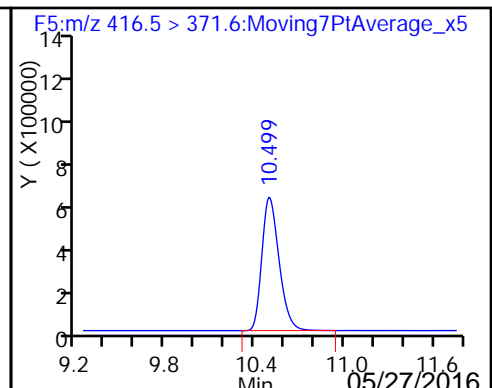
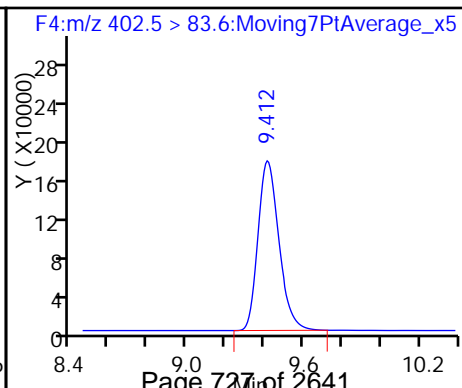
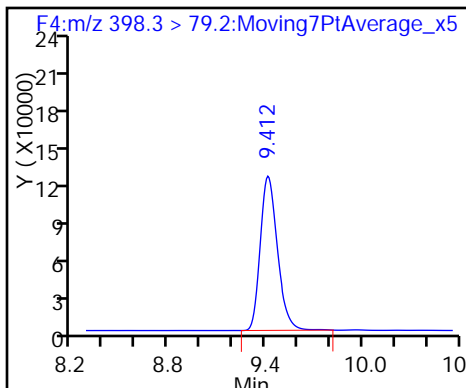
9 Perfluoroheptanoic acid



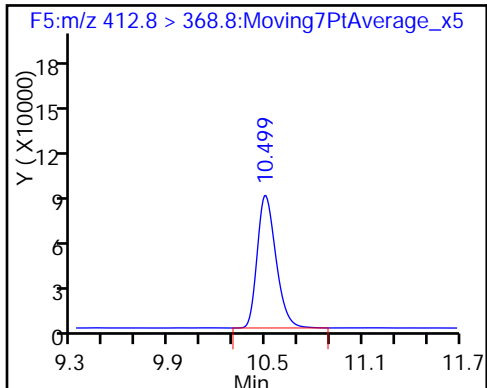
58 Perfluorohexanesulfonic acid

D 11 18O2 PFHxS

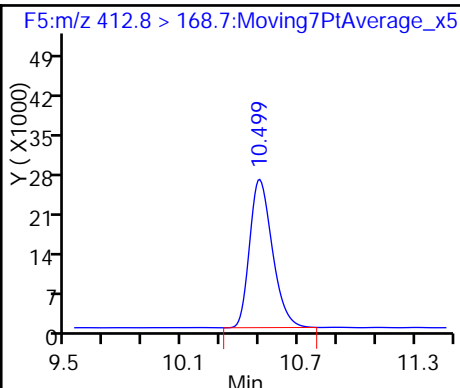
D 12 13C4 PFOA



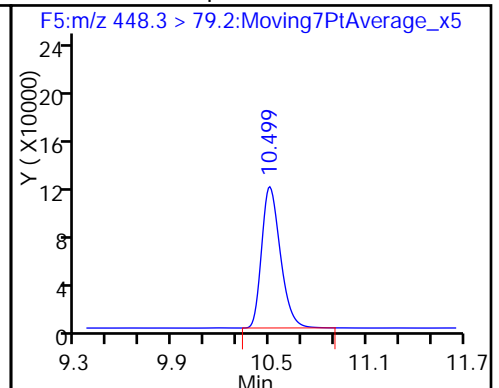
13 Perfluorooctanoic acid



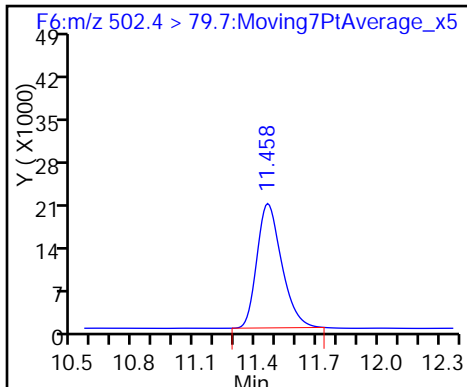
13 Perfluorooctanoic acid



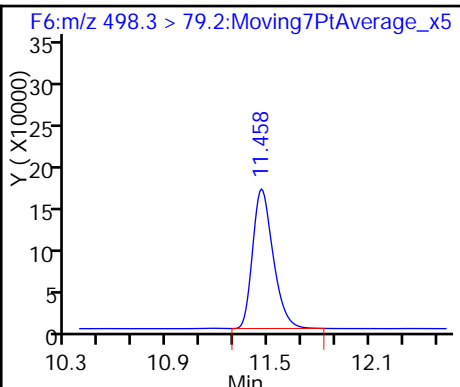
39 Perfluoroheptanesulfonic Acid



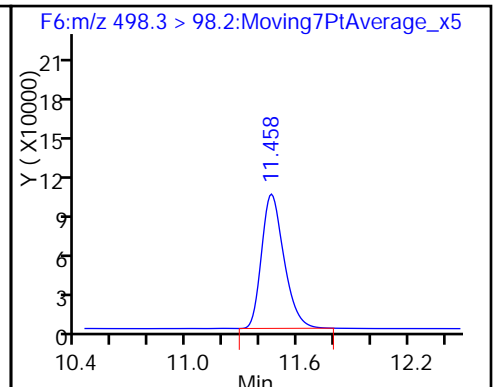
D 16 13C4 PFOS



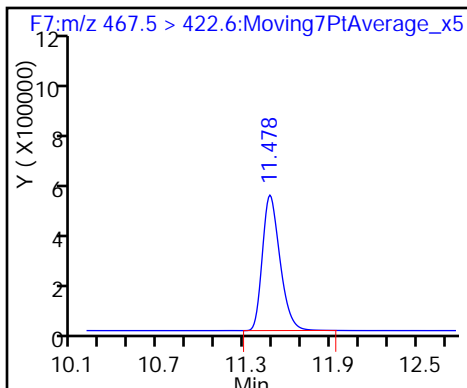
15 Perfluorooctane sulfonic acid



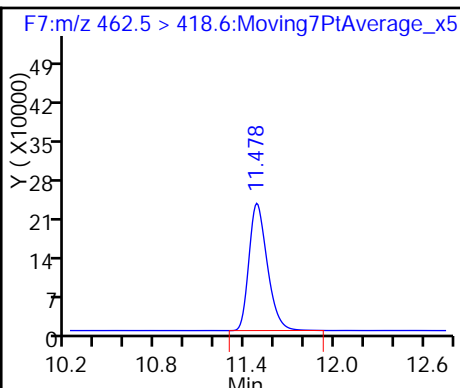
15 Perfluorooctane sulfonic acid



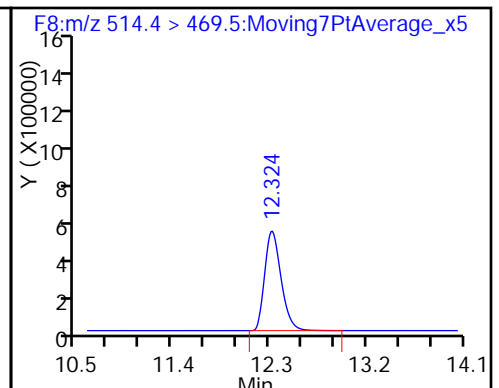
D 17 13C5 PFNA



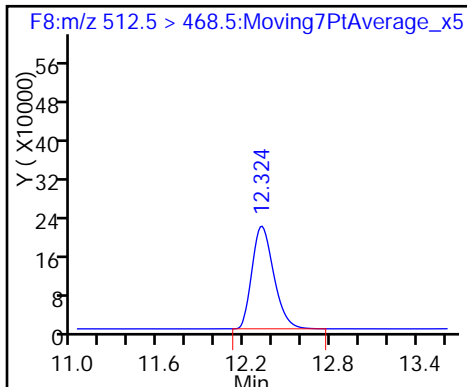
18 Perfluorononanoic acid



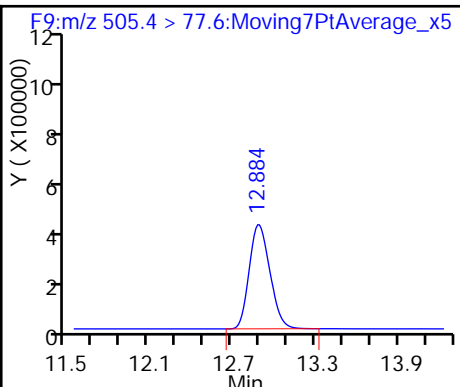
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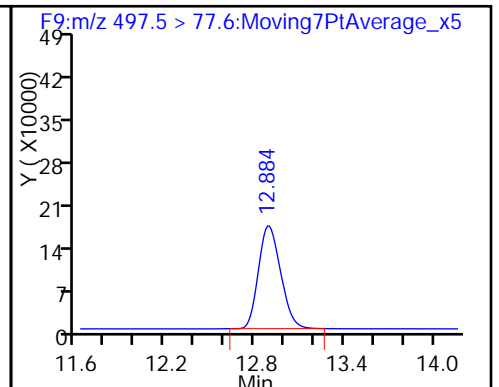
20 Perfluorodecanoic acid



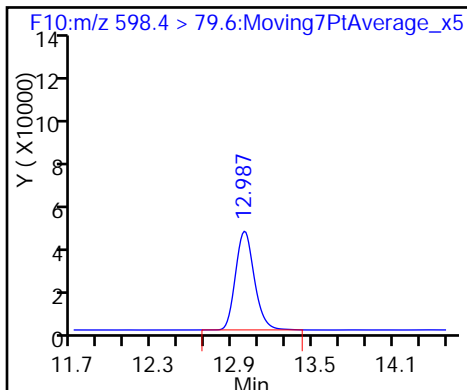
D 23 13C8 FOSA



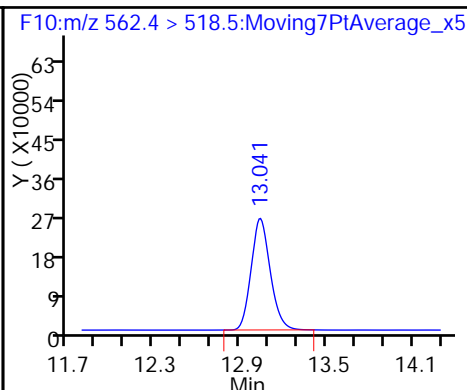
24 Perfluorooctane Sulfonamide



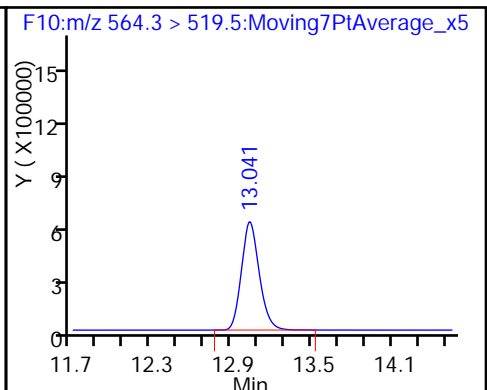
49 Perfluorodecane Sulfonic acid



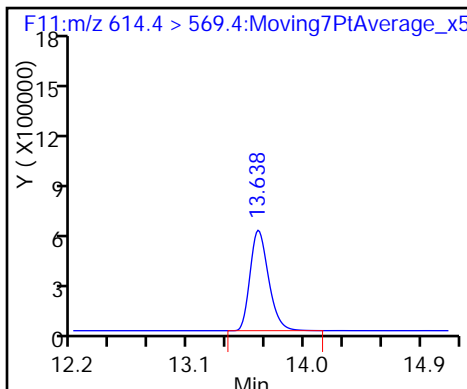
27 Perfluoroundecanoic acid



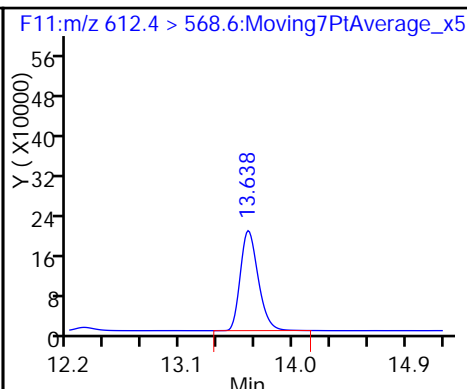
D 26 13C2 PFUnA



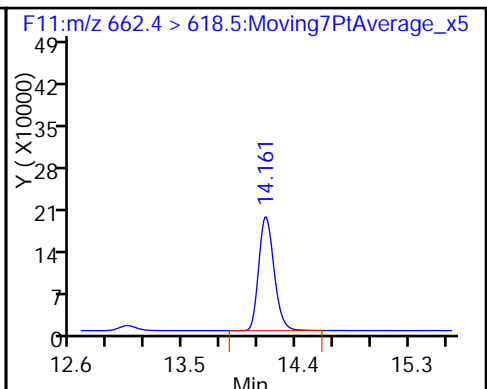
D 28 13C2 PFDaA



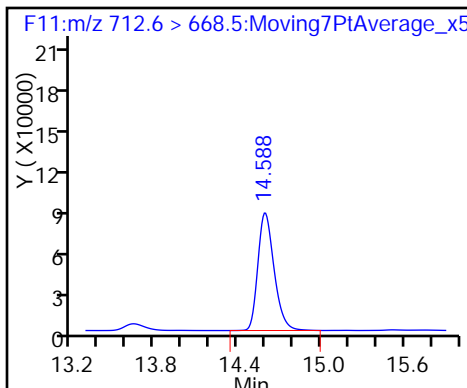
29 Perfluorododecanoic acid



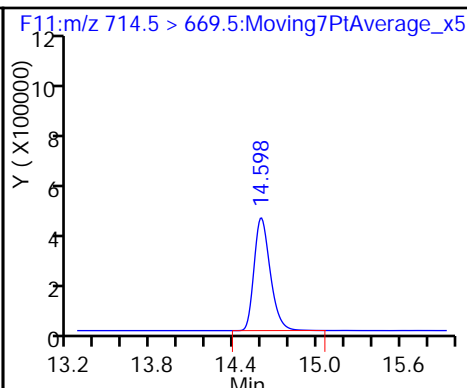
30 Perfluorotridecanoic acid



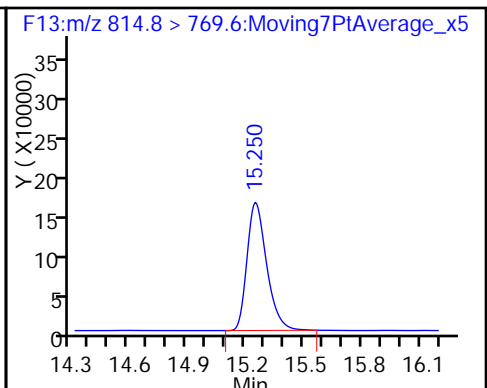
32 Perfluorotetradecanoic acid



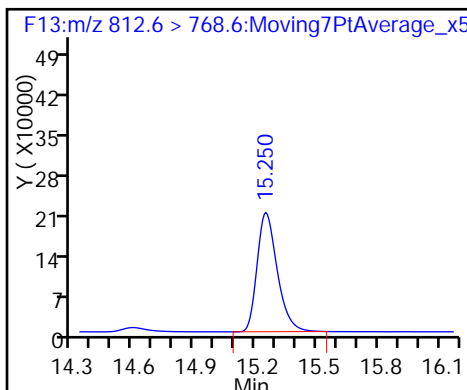
D 33 13C2-PFTeDA



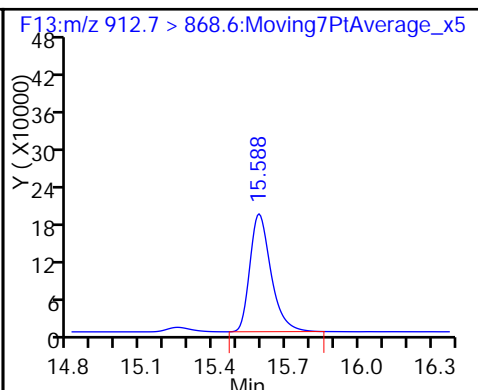
D 35 13C2-PFHxDA



34 Perfluorohexadecanoic acid



36 Perfluorooctadecanoic acid



FORM VII
LCMS CONTINUING CALIBRATION DATA

Lab Name: TestAmerica Sacramento Job No.: 320-18796-1
 SDG No.: _____
 Lab Sample ID: CCV 320-111390/52 Calibration Date: 05/26/2016 09:30
 Instrument ID: A4 Calib Start Date: 05/25/2016 16:55
 GC Column: Acquity ID: 2.10 (mm) Calib End Date: 05/25/2016 19:01
 Lab File ID: 25MAY2016B4A_052.d Conc. Units: ng/mL

ANALYTE	CURVE TYPE	AVE RRF	RRF	MIN RRF	CALC AMOUNT	SPIKE AMOUNT	%D	MAX %D
Perfluorobutanoic acid (PFBA)	AveID	0.6418	0.6808		53.0	50.0	6.1	25.0
Perfluoropentanoic acid (PFPeA)	AveID	0.5079	0.4545		44.7	50.0	-10.5	25.0
Perfluorobutanesulfonic acid (PFBS)	L2ID	0.7655	0.7270		43.9	44.2	-0.7	25.0
Perfluorohexanoic acid (PFHxA)	L1ID		0.4357		48.4	50.0	-3.3	25.0
Perfluoroheptanoic acid (PFHpA)	L2ID		0.4962		51.4	50.0	2.8	25.0
Perfluorohexanesulfonic acid (PFHxS)	AveID	1.705	1.689		46.7	47.3	-1.0	25.0
Perfluoroheptanesulfonic Acid (PFHpS)	L2ID	7.344	9.98		61.3	47.6	28.8*	25.0
Perfluorooctanoic acid (PFOA)	L1ID	0.4698	0.4492		49.6	50.0	-0.8	25.0
Perfluorooctanesulfonic acid (PFOS)	L1ID	11.43	15.04		52.0	47.8	8.9	25.0
Perfluorononanoic acid (PFNA)	L2ID		1.268		51.5	50.0	3.0	25.0
Perfluorodecanoic acid (PFDA)	AveID	1.039	1.133		54.6	50.0	9.1	25.0
Perfluorooctane Sulfonamide (FOSA)	AveID	1.069	1.144		53.5	50.0	7.0	25.0
Perfluorodecanesulfonic acid (PFDS)	AveID	4.187	4.836		55.4	48.2	15.5	25.0
Perfluoroundecanoic acid (PFUnA)	AveID	1.179	1.204		51.0	50.0	2.1	25.0
Perfluorododecanoic acid (PFDoA)	AveID	0.9121	1.011		55.4	50.0	10.9	25.0
Perfluorotridecanoic Acid (PFTriA)	AveID	1.025	1.051		51.3	50.0	2.5	25.0
Perfluorotetradecanoic acid (PFTeA)	AveID	0.5424	0.4976		45.9	50.0	-8.3	25.0
Perfluoro-n-hexadecanoic acid (PFHxDA)	L2ID		3.026		58.1	50.0	16.1	25.0
Perfluoro-n-octadecanoic acid (PFODA)	AveID	2.211	2.271		51.4	50.0	2.7	25.0

TestAmerica Sacramento
Target Compound Quantitation Report

Data File: \\ChromNA\Sacramento\ChromData\A4\20160525-31065.b\25MAY2016B4A_052.d
 Lims ID: CCV L5
 Client ID:
 Sample Type: CCV
 Inject. Date: 26-May-2016 09:30:00 ALS Bottle#: 14 Worklist Smp#: 52
 Injection Vol: 15.0 ul Dil. Factor: 1.0000
 Sample Info: CCV L5
 Misc. Info.: Acquity BEH C18,1.7u, 3X150mm,T=35C
 Operator ID: JRB Instrument ID: A4
 Sublist: chrom-PFAC_A4*sub12
 Method: \\ChromNA\Sacramento\ChromData\A4\20160525-31065.b\PFAC_A4.m
 Limit Group: LC PFC_DOD ICAL
 Last Update: 26-May-2016 14:50:32 Calib Date: 25-May-2016 19:01:43
 Integrator: Picker
 Quant Method: Isotopic Dilution Quant By: Initial Calibration
 Last ICal File: \\ChromNA\Sacramento\ChromData\A4\20160525-31065.b\25MAY2016B4A_011.d

Column 1 : Det: F1:MRM

Process Host: XAWRK003

First Level Reviewer: westendorfc

Date: 26-May-2016 10:42:49

Signal	RT	EXP RT	DLT RT	REL RT	Response	Amount ng/ml	Ratio(Limits)	%Rec	S/N	Flags
2 Perfluorobutyric acid										
212.7 > 168.6	5.791	5.798	-0.007	1.000	3672218	53.0		106	9046	
D 1 13C4 PFBA										
216.7 > 171.5	5.791	5.798	-0.007		5394207	63.8		128	13483	
D 3 13C5-PFPeA										
267.6 > 222.7	6.895	6.907	-0.012		3884337	50.6		101	6219	
4 Perfluoropentanoic acid										
262.9 > 218.7	6.895	6.910	-0.015	1.000	1765434	44.7		89.5	725	
5 Perfluorobutane Sulfonate										
298.8 > 79.6	7.014	7.024	-0.010	1.000	924335	NC			1866	
298.8 > 98.6	7.014	7.024	-0.010	1.000	587226		1.57(0.00-0.00)		1153	
51 Perfluorobutanesulfonic acid										
298.8 > 79.6	7.014	7.024	-0.010	1.000	924335	43.9		99.3		
D 6 13C2 PFHxA										
314.6 > 269.7	8.144	8.156	-0.012		5133825	61.8		124	10226	
7 Perfluorohexanoic acid										
312.9 > 268.7	8.144	8.157	-0.013	1.000	2236561	48.4		96.7	2225	
22 PFPeS (Perflouro-1-pentanesulfonat										
348.7 > 79.5	8.220	8.231	-0.011	0.874	1853798	NC			5500	
D 8 13C4-PFHpA										
366.6 > 321.6	9.372	9.387	-0.015		4322713	50.6		101	7112	
9 Perfluoroheptanoic acid										
362.8 > 318.7	9.372	9.388	-0.016	1.000	2145116	51.4		103	4606	
10 Perfluorohexane Sulfonate										
398.3 > 79.2	9.404	9.421	-0.017	1.000	2297484	NC			2734	
58 Perfluorohexanesulfonic acid										
398.3 > 79.2	9.404	9.421	-0.017	1.000	2297484	46.7		98.8		

Signal	RT	EXP RT	DLT RT	REL RT	Response	Amount ng/ml	Ratio(Limits)	%Rec	S/N	Flags
D 11 18O2 PFHxS										
402.5 > 83.6	9.404	9.422	-0.018		1360545	45.8		96.9	3287	
D 12 13C4 PFOA										
416.5 > 371.6	10.491	10.503	-0.012		4621796	51.8		104	7450	
13 Perfluorooctanoic acid										
412.8 > 368.8	10.491	10.504	-0.013	1.000	2076194	49.6		99.2	3200	
412.8 > 168.7	10.491	10.504	-0.013	1.000	610230		3.40(0.00-0.00)		2261	
39 Perfluoroheptanesulfonic Acid										
448.3 > 79.2	10.491	10.508	-0.017	1.000	2360550	61.3		129		
14 Perfluoroheptane Sulfonate										
448.3 > 79.2	10.491	10.508	-0.017	1.000	2360550	NC			6238	
D 16 13C4 PFOS										
502.4 > 79.7	11.449	11.465	-0.016		237635	35.2		73.7	1147	
15 Perfluorooctane sulfonic acid										
498.3 > 79.2	11.449	11.466	-0.017	1.000	3574629	52.0		109	2989	
498.3 > 98.2	11.449	11.466	-0.017	1.000	2088861		1.71(0.00-0.00)		2393	
D 17 13C5 PFNA										
467.5 > 422.6	11.469	11.484	-0.015		4171021	53.2		106	6910	
18 Perfluorononanoic acid										
462.5 > 418.6	11.469	11.486	-0.017	1.000	5289681	51.5		103	4776	
D 19 13C2 PFDA										
514.4 > 469.5	12.311	12.325	-0.014		5142622	51.5		103	7691	
20 Perfluorodecanoic acid										
512.5 > 468.5	12.311	12.325	-0.014	1.000	5827242	54.6		109	4878	
D 23 13C8 FOSA										
505.4 > 77.6	12.884	12.893	-0.009		4739929	49.1		98.2	4345	
24 Perfluorooctane Sulfonamide										
497.5 > 77.6	12.884	12.893	-0.009	1.000	5423843	53.5		107	4551	
25 Perfluorodecane Sulfonate										
598.4 > 79.6	12.987	12.996	-0.009	1.000	1158799	NC			2778	
49 Perfluorodecane Sulfonic acid										
598.4 > 79.6	12.987	12.996	-0.009	1.000	1158799	55.4		115		
27 Perfluoroundecanoic acid										
562.4 > 518.5	13.030	13.042	-0.012	1.000	6427336	51.0		102	4887	
D 26 13C2 PFUnA										
564.3 > 519.5	13.030	13.044	-0.014		5339142	52.7		105	5389	
D 28 13C2 PFDaA										
614.4 > 569.4	13.638	13.646	-0.008		5501955	52.2		104	3339	
29 Perfluorododecanoic acid										
612.4 > 568.6	13.638	13.646	-0.008	1.000	5564931	55.4		111	2066	
30 Perfluorotridecanoic acid										
662.4 > 618.5	14.150	14.162	-0.012	1.000	4153984	51.3		103	1530	
32 Perfluorotetradecanoic acid										
712.6 > 668.5	14.588	14.600	-0.012	1.000	1966524	45.9		91.7	1060	
D 33 13C2-PFTeDA										
714.5 > 669.5	14.588	14.601	-0.013		3951979	52.1		104	3785	
D 35 13C2-PFHxDA										
814.8 > 769.6	15.242	15.255	-0.013		1453812	49.9		99.8	3079	

Signal	RT	EXP RT	DLT RT	REL RT	Response	Amount ng/ml	Ratio(Limits)	%Rec	S/N	Flags
34 Perfluorohexadecanoic acid										
812.6 > 768.6	15.250	15.255	-0.005	1.000	4398736	58.1		116	628	
36 Perfluorooctadecanoic acid										
912.7 > 868.6	15.581	15.593	-0.012	1.000	3301852	51.4		103	2420	

QC Flag Legend

Processing Flags

NC - Not Calibrated

Reagents:

LCPFC-L5_00017

Amount Added: 1.00

Units: mL

TestAmerica Sacramento

Data File: \\ChromNA\Sacramento\ChromData\A4\20160525-31065.b\25MAY2016B4A_052.d

Injection Date: 26-May-2016 09:30:00

Instrument ID: A4

Lims ID: CCV L5

Client ID:

Operator ID: JRB

ALS Bottle#: 14

Worklist Smp#: 52

Injection Vol: 15.0 ul

Dil. Factor: 1.0000

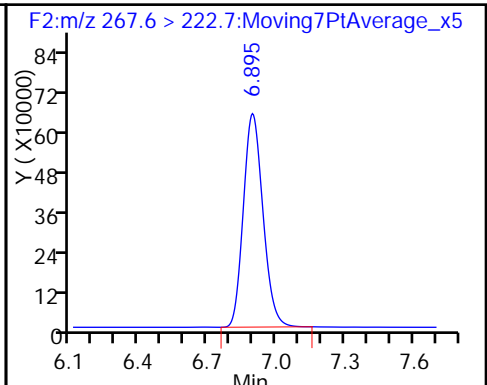
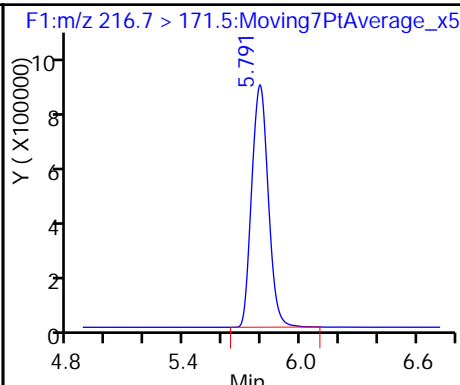
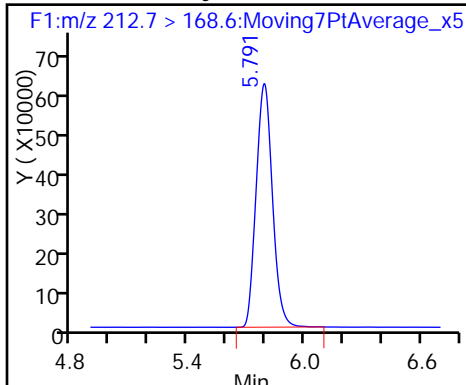
Method: PFAC_A4

Limit Group: LC PFC_DOD ICAL

2 Perfluorobutyric acid

D 1 13C4 PFBA

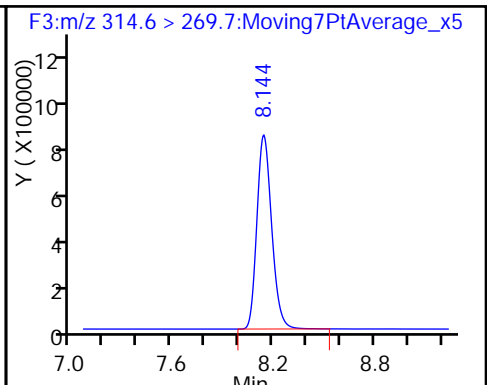
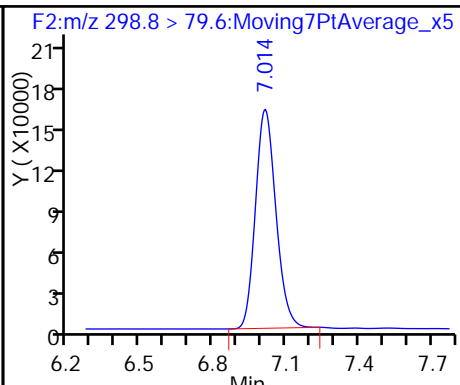
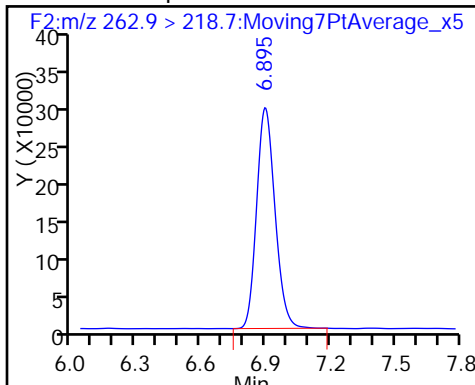
D 3 13C5-PFPeA



4 Perfluoropentanoic acid

51 Perfluorobutanesulfonic acid

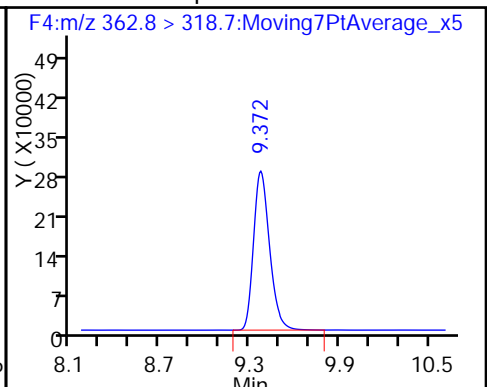
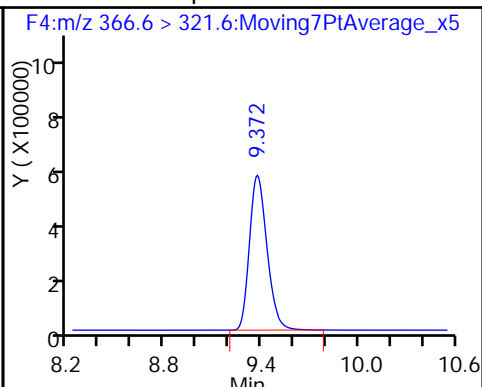
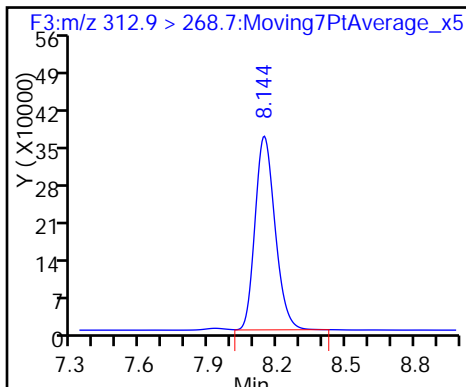
D 6 13C2 PFHxA



7 Perfluorohexanoic acid

D 8 13C4-PFHpA

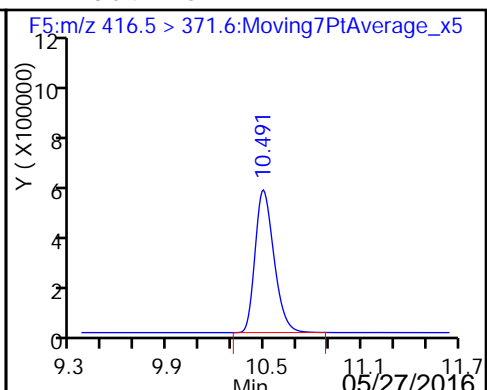
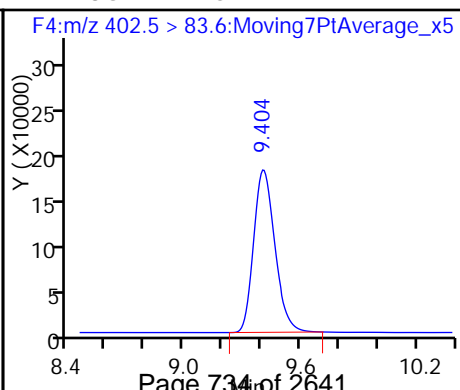
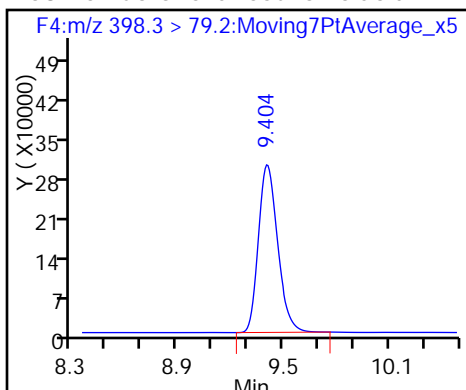
9 Perfluoroheptanoic acid



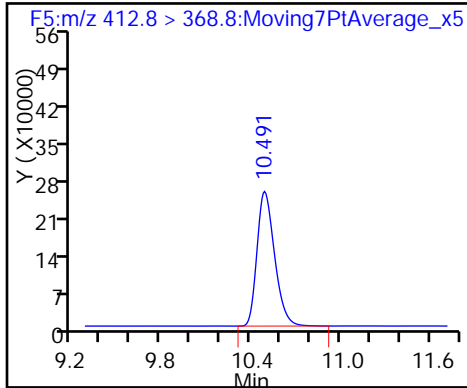
58 Perfluorohexanesulfonic acid

D 11 18O2 PFHxS

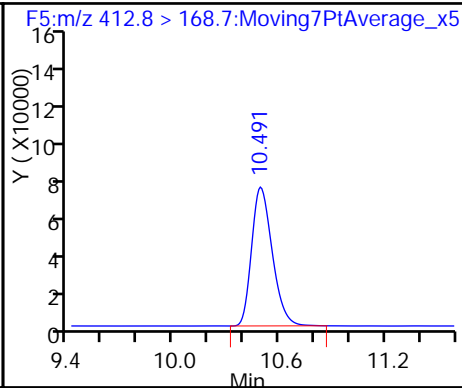
D 12 13C4 PFOA



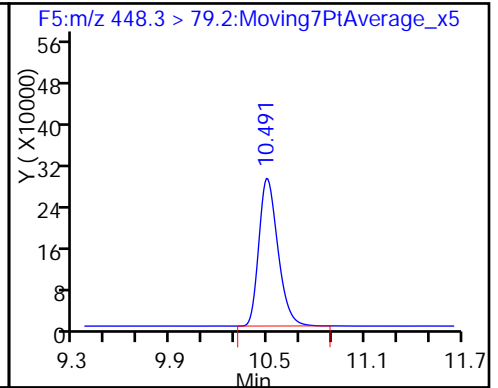
13 Perfluorooctanoic acid



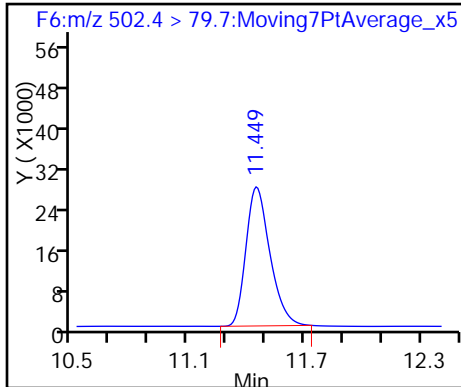
13 Perfluorooctanoic acid



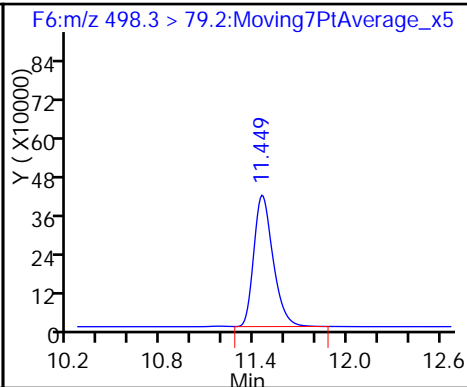
39 Perfluoroheptanesulfonic Acid



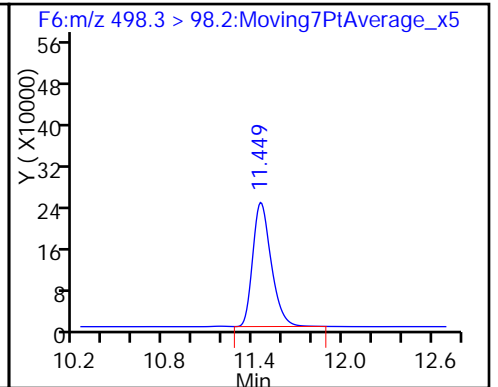
D 16 13C4 PFOS



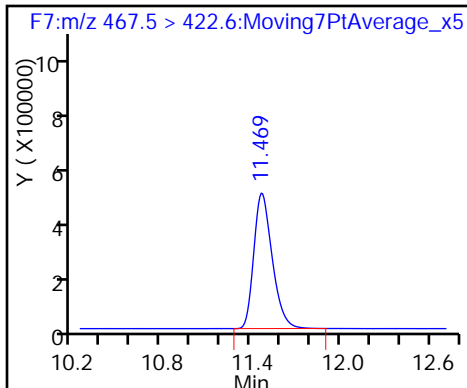
15 Perfluorooctane sulfonic acid



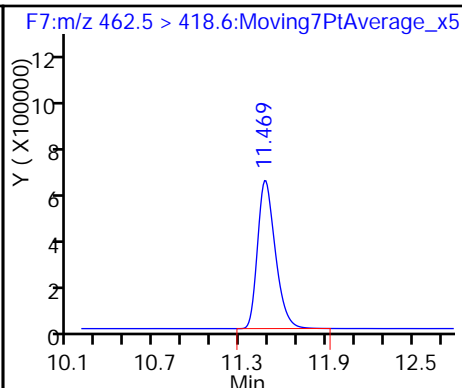
15 Perfluorooctane sulfonic acid



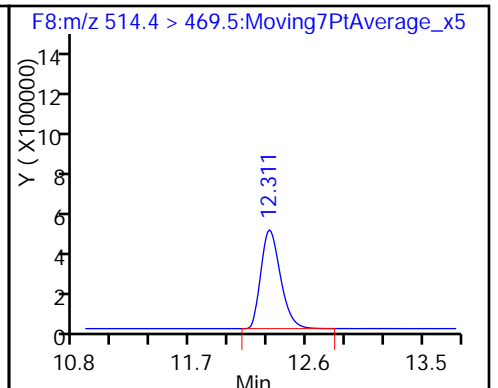
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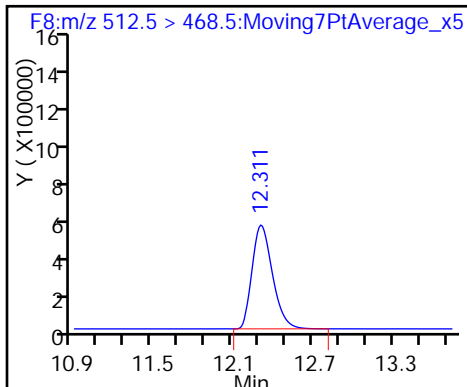
18 Perfluorononanoic acid



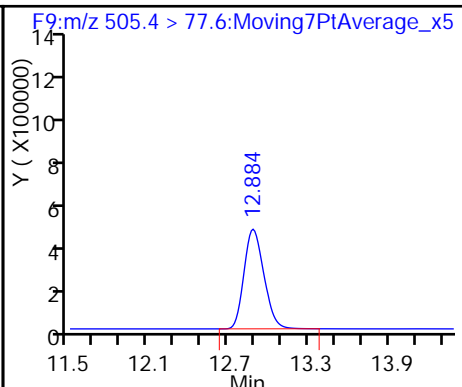
D 19 13C2 PFDA



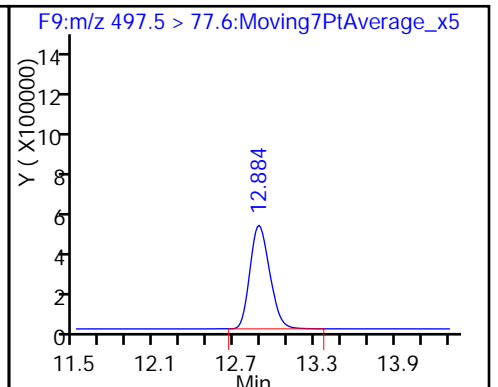
20 Perfluorodecanoic acid



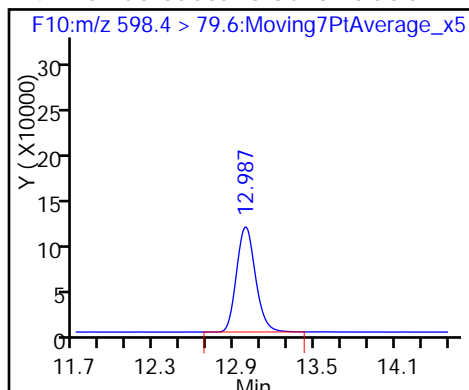
D 23 13C8 FOSA



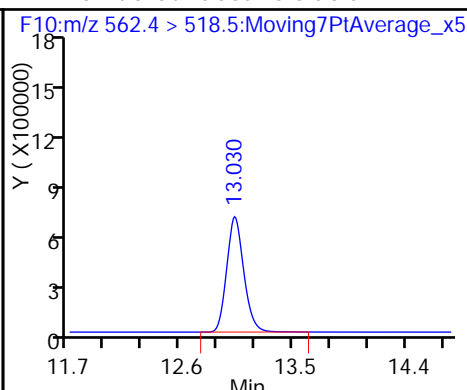
24 Perfluorooctane Sulfonamide



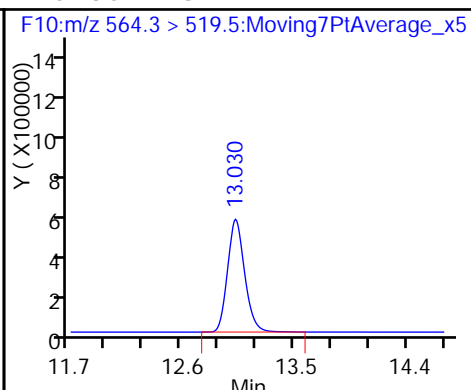
49 Perfluorodecane Sulfonic acid



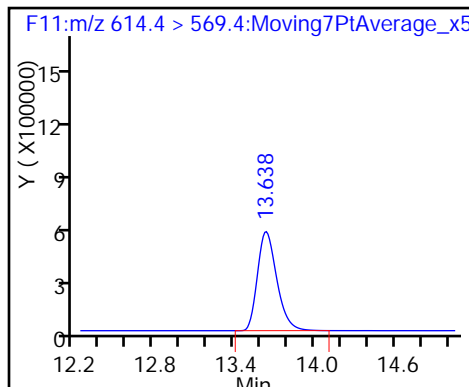
27 Perfluoroundecanoic acid



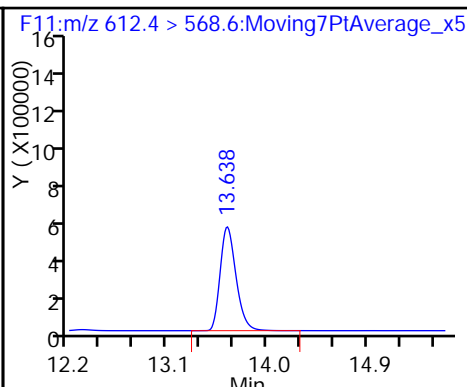
D 26 13C2 PFUnA



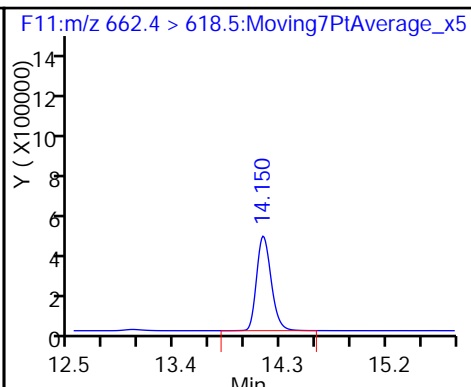
D 28 13C2 PFDaA



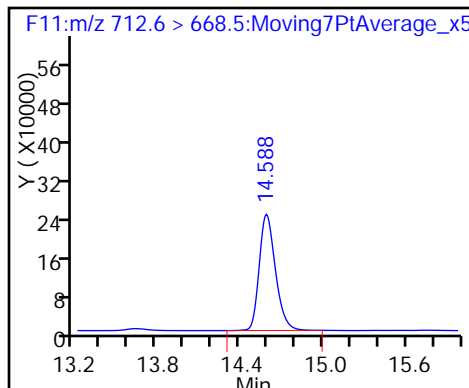
29 Perfluorododecanoic acid



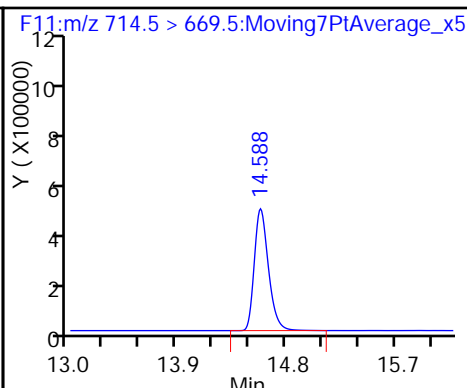
30 Perfluorotridecanoic acid



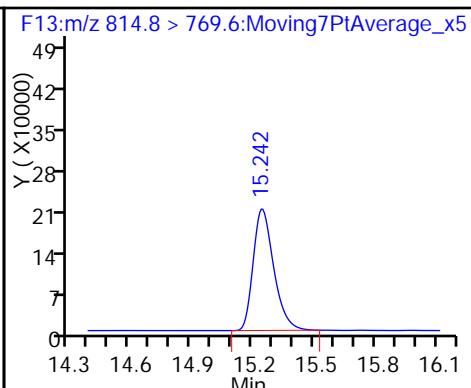
32 Perfluorotetradecanoic acid



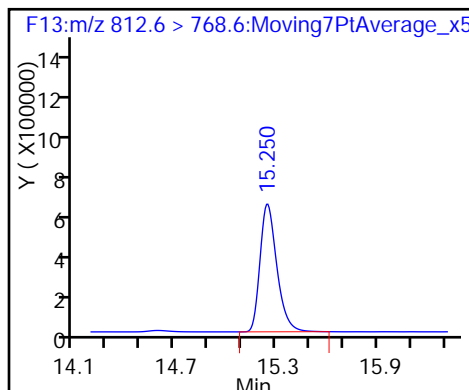
D 33 13C2-PFTeDA



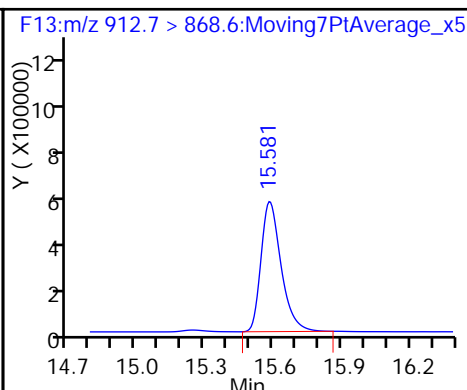
D 35 13C2-PFHxDA



34 Perfluorohexadecanoic acid



36 Perfluorooctadecanoic acid



FORM VII
LCMS CONTINUING CALIBRATION DATA

Lab Name: TestAmerica Sacramento Job No.: 320-18796-1
 SDG No.: _____
 Lab Sample ID: CCV 320-111390/64 Calibration Date: 05/26/2016 13:49
 Instrument ID: A4 Calib Start Date: 05/25/2016 16:55
 GC Column: Acquity ID: 2.10 (mm) Calib End Date: 05/25/2016 19:01
 Lab File ID: 25MAY2016B4A_064.d Conc. Units: ng/mL

ANALYTE	CURVE TYPE	AVE RRF	RRF	MIN RRF	CALC AMOUNT	SPIKE AMOUNT	%D	MAX %D
Perfluorobutanoic acid (PFBA)	AveID	0.6418	0.6718		52.3	50.0	4.7	25.0
Perfluoropentanoic acid (PFPeA)	AveID	0.5079	0.4928		48.5	50.0	-3.0	25.0
Perfluorobutanesulfonic acid (PFBS)	L2ID	0.7655	0.7326		44.2	44.2	0.0	25.0
Perfluorohexanoic acid (PFHxA)	L1ID		0.4616		51.3	50.0	2.5	25.0
Perfluoroheptanoic acid (PFHpA)	L2ID		0.5380		55.7	50.0	11.5	25.0
Perfluorohexanesulfonic acid (PFHxS)	AveID	1.705	1.591		44.0	47.3	-6.7	25.0
Perfluoroheptanesulfonic Acid (PFHpS)	L2ID	7.344	8.682		53.4	47.6	12.1	25.0
Perfluorooctanoic acid (PFOA)	L1ID	0.4698	0.4627		51.1	50.0	2.2	25.0
Perfluorooctanesulfonic acid (PFOS)	L1ID	11.43	13.34		46.2	47.8	-3.3	25.0
Perfluorononanoic acid (PFNA)	L2ID		1.221		49.6	50.0	-0.8	25.0
Perfluorodecanoic acid (PFDA)	AveID	1.039	1.148		55.3	50.0	10.5	25.0
Perfluorooctane Sulfonamide (FOSA)	AveID	1.069	1.178		55.1	50.0	10.1	25.0
Perfluorodecanesulfonic acid (PFDS)	AveID	4.187	4.102		47.0	48.2	-2.0	25.0
Perfluoroundecanoic acid (PFUnA)	AveID	1.179	1.190		50.5	50.0	0.9	25.0
Perfluorododecanoic acid (PFDoA)	AveID	0.9121	0.9790		53.7	50.0	7.3	25.0
Perfluorotridecanoic Acid (PFTriA)	AveID	1.025	1.053		51.3	50.0	2.7	25.0
Perfluorotetradecanoic acid (PFTeA)	AveID	0.5424	0.4888		45.1	50.0	-9.9	25.0
Perfluoro-n-hexadecanoic acid (PFHxDA)	L2ID		2.693		51.6	50.0	3.2	25.0
Perfluoro-n-octadecanoic acid (PFODA)	AveID	2.211	2.266		51.2	50.0	2.5	25.0

TestAmerica Sacramento
Target Compound Quantitation Report

Data File: \\ChromNA\Sacramento\ChromData\A4\20160525-31065.b\25MAY2016B4A_064.d
 Lims ID: CCV L5
 Client ID:
 Sample Type: CCV
 Inject. Date: 26-May-2016 13:49:32 ALS Bottle#: 14 Worklist Smp#: 64
 Injection Vol: 15.0 ul Dil. Factor: 1.0000
 Sample Info: CCV L5
 Misc. Info.: Acquity BEH C18,1.7u, 3X150mm,T=35C
 Operator ID: JRB Instrument ID: A4
 Sublist: chrom-PFAC_A4*sub12
 Method: \\ChromNA\Sacramento\ChromData\A4\20160525-31065.b\PFAC_A4.m
 Limit Group: LC PFC_DOD ICAL
 Last Update: 26-May-2016 14:56:20 Calib Date: 25-May-2016 19:01:43
 Integrator: Picker
 Quant Method: Isotopic Dilution Quant By: Initial Calibration
 Last ICal File: \\ChromNA\Sacramento\ChromData\A4\20160525-31065.b\25MAY2016B4A_011.d

Column 1 : Det: F1:MRM
 Process Host: XAWRK003

First Level Reviewer: barnettj Date: 26-May-2016 14:50:11

Signal	RT	EXP RT	DLT RT	REL RT	Response	Amount ng/ml	Ratio(Limits)	%Rec	S/N	Flags
2 Perfluorobutyric acid										
212.7 > 168.6	5.791	5.798	-0.007	1.000	3909541	52.3		105	10035	
D 1 13C4 PFBA										
216.7 > 171.5	5.794	5.798	-0.004		5819143	68.8		138	18650	
D 3 13C5-PFPeA										
267.6 > 222.7	6.895	6.907	-0.012		4228763	55.1		110	8144	
4 Perfluoropentanoic acid										
262.9 > 218.7	6.899	6.910	-0.011	1.000	2083837	48.5		97.0	907	
5 Perfluorobutane Sulfonate										
298.8 > 79.6	7.014	7.024	-0.010	1.000	1021530	NC			2076	
298.8 > 98.6	7.010	7.024	-0.014	0.999	677240		1.51(0.00-0.00)		1356	
51 Perfluorobutanesulfonic acid										
298.8 > 79.6	7.014	7.024	-0.010	1.000	1021530	44.2		100		
D 6 13C2 PFHxA										
314.6 > 269.7	8.144	8.156	-0.012		5142554	61.9		124	11094	
7 Perfluorohexanoic acid										
312.9 > 268.7	8.144	8.157	-0.013	1.000	2373850	51.3		103	2342	
22 PFPeS (Perflouro-1-pentanesulfonat										
348.7 > 79.5	8.220	8.231	-0.011	0.874	1999761	NC			9023	
D 8 13C4-PFHpA										
366.6 > 321.6	9.372	9.387	-0.015		4424729	51.8		104	6396	
9 Perfluoroheptanoic acid										
362.8 > 318.7	9.372	9.388	-0.016	1.000	2380302	55.7		111	4855	
10 Perfluorohexane Sulfonate										
398.3 > 79.2	9.404	9.421	-0.017	1.000	2373405	NC			2875	
58 Perfluorohexanesulfonic acid										
398.3 > 79.2	9.404	9.421	-0.017	1.000	2373405	44.0		93.1		

Signal	RT	EXP RT	DLT RT	REL RT	Response	Amount ng/ml	Ratio(Limits)	%Rec	S/N	Flags
D 11 18O2 PFHxS										
402.5 > 83.6	9.404	9.422	-0.018		1492109	50.3		106	3060	
D 12 13C4 PFOA										
416.5 > 371.6	10.491	10.503	-0.012		4761254	53.4		107	7285	
13 Perfluorooctanoic acid										
412.8 > 368.8	10.491	10.504	-0.013	1.000	2203209	51.1		102	3047	
412.8 > 168.7	10.491	10.504	-0.013	1.000	699540		3.15(0.00-0.00)		1803	
39 Perfluoroheptanesulfonic Acid										
448.3 > 79.2	10.491	10.508	-0.017	1.000	2485571	53.4		112		
14 Perfluoroheptane Sulfonate										
448.3 > 79.2	10.491	10.508	-0.017	1.000	2485571	NC			5482	
D 16 13C4 PFOS										
502.4 > 79.7	11.449	11.465	-0.016		287502	42.6		89.1	1295	
15 Perfluorooctane sulfonic acid										
498.3 > 79.2	11.449	11.466	-0.017	1.000	3834781	46.2		96.7	4693	
498.3 > 98.2	11.449	11.466	-0.017	1.000	2258814		1.70(0.00-0.00)		2821	
D 17 13C5 PFNA										
467.5 > 422.6	11.469	11.484	-0.015		4388244	55.9		112	6278	
18 Perfluorononanoic acid										
462.5 > 418.6	11.478	11.486	-0.008	1.000	5356499	49.6		99.2	5267	
D 19 13C2 PFDA										
514.4 > 469.5	12.311	12.325	-0.014		5394950	54.0		108	6978	
20 Perfluorodecanoic acid										
512.5 > 468.5	12.311	12.325	-0.014	1.000	6191531	55.3		111	5809	
D 23 13C8 FOSA										
505.4 > 77.6	12.884	12.893	-0.009		4957169	51.4		103	3869	
24 Perfluorooctane Sulfonamide										
497.5 > 77.6	12.884	12.893	-0.009	1.000	5838662	55.1		110	3345	
25 Perfluorodecane Sulfonate										
598.4 > 79.6	12.987	12.996	-0.009	1.000	1189326	NC			3145	
49 Perfluorodecane Sulfonic acid										
598.4 > 79.6	12.987	12.996	-0.009	1.000	1189326	47.0		97.5		
27 Perfluoroundecanoic acid										
562.4 > 518.5	13.030	13.042	-0.012	1.000	6692247	50.5		101	5103	
D 26 13C2 PFUnA										
564.3 > 519.5	13.030	13.044	-0.014		5622371	55.5		111	5156	
D 28 13C2 PFDaA										
614.4 > 569.4	13.638	13.646	-0.008		5829629	55.3		111	3700	
29 Perfluorododecanoic acid										
612.4 > 568.6	13.638	13.646	-0.008	1.000	5706941	53.7		107	2568	
30 Perfluorotridecanoic acid										
662.4 > 618.5	14.150	14.162	-0.012	1.000	4389239	51.3		103	1370	
32 Perfluorotetradecanoic acid										
712.6 > 668.5	14.588	14.600	-0.012	1.000	2038037	45.1		90.1	1016	
D 33 13C2-PFTeDA										
714.5 > 669.5	14.588	14.601	-0.013		4169691	54.9		110	4008	
D 35 13C2-PFHxDA										
814.8 > 769.6	15.250	15.255	-0.005		1647750	56.5		113	2912	

Signal	RT	EXP RT	DLT RT	REL RT	Response	Amount ng/ml	Ratio(Limits)	%Rec	S/N	Flags
34 Perfluorohexadecanoic acid										
812.6 > 768.6	15.250	15.255	-0.005	1.000	4437409	51.6		103	623	
36 Perfluorooctadecanoic acid										
912.7 > 868.6	15.581	15.593	-0.012	1.000	3733517	51.2		102	2866	

QC Flag Legend

Processing Flags

NC - Not Calibrated

Reagents:

LCPFC-L5_00017

Amount Added: 1.00

Units: mL

TestAmerica Sacramento

Data File: \\ChromNA\Sacramento\ChromData\A4\20160525-31065.b\25MAY2016B4A_064.d

Injection Date: 26-May-2016 13:49:32

Instrument ID: A4

Lims ID: CCV L5

Client ID:

Operator ID: JRB

ALS Bottle#: 14

Worklist Smp#: 64

Injection Vol: 15.0 ul

Dil. Factor: 1.0000

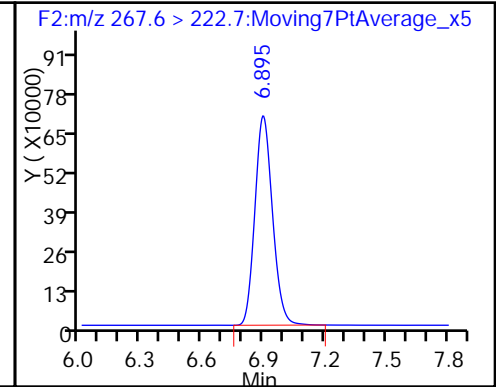
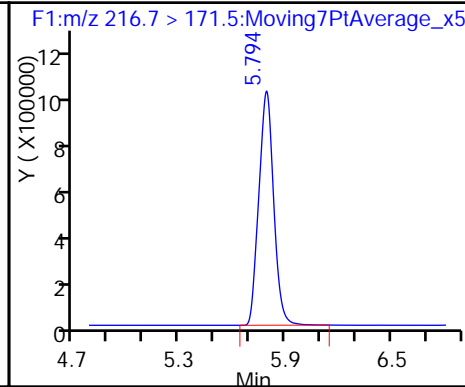
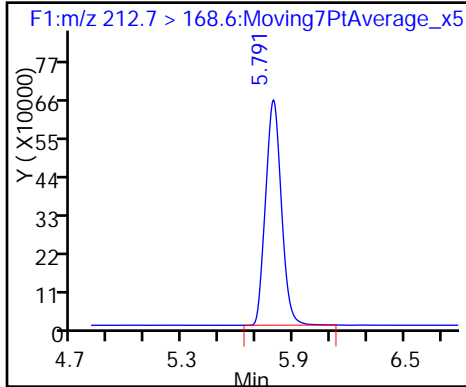
Method: PFAC_A4

Limit Group: LC PFC_DOD ICAL

2 Perfluorobutyric acid

D 1 13C4 PFBA

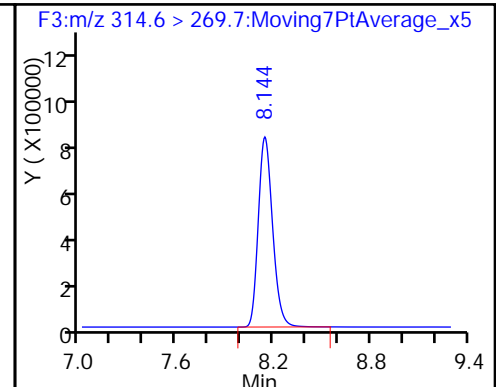
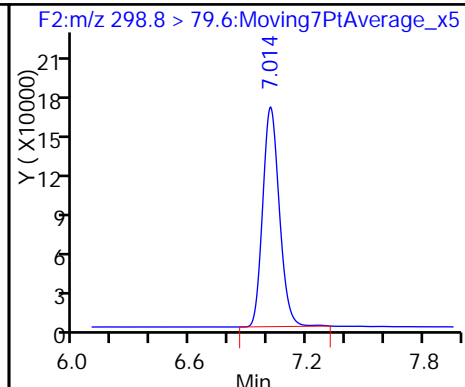
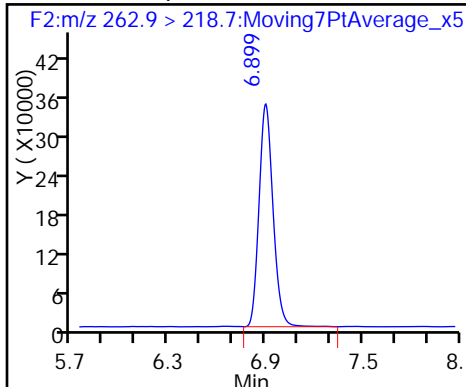
D 3 13C5-PFPeA



4 Perfluoropentanoic acid

51 Perfluorobutanesulfonic acid

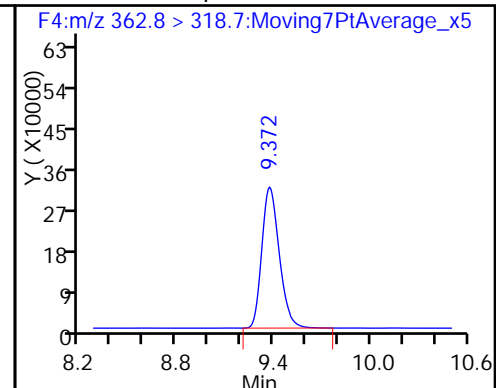
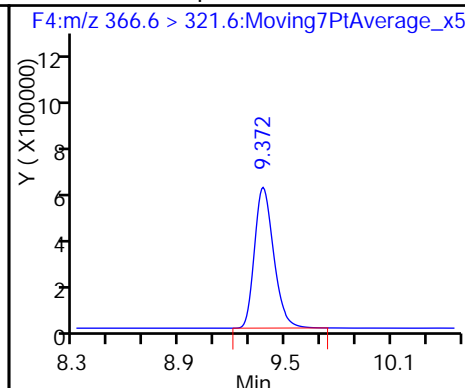
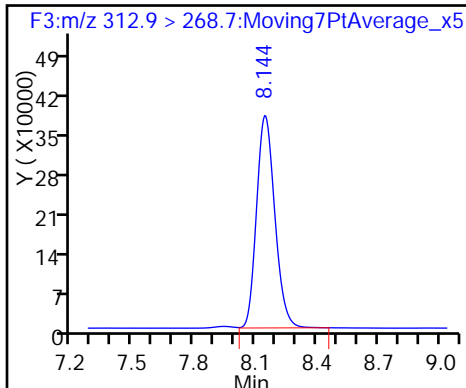
D 6 13C2 PFHxA



7 Perfluorohexanoic acid

D 8 13C4-PFHpA

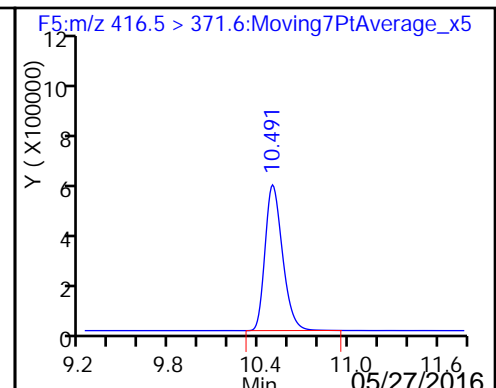
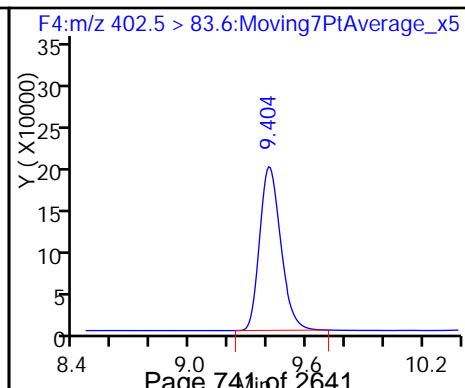
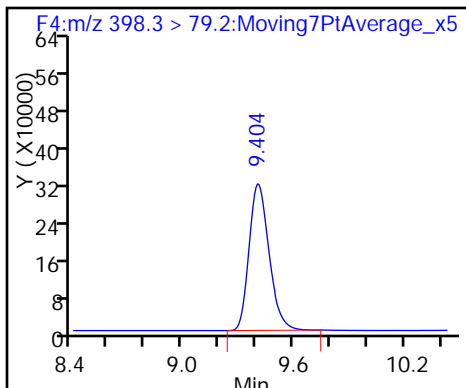
9 Perfluoroheptanoic acid



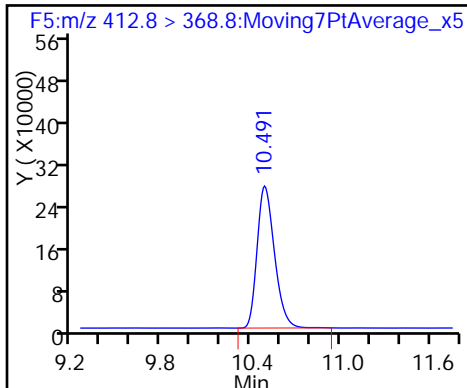
58 Perfluorohexanesulfonic acid

D 11 18O2 PFHxS

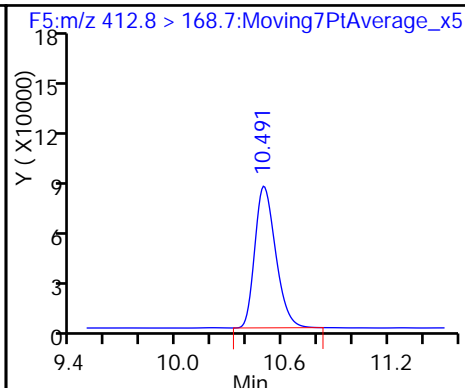
D 12 13C4 PFOA



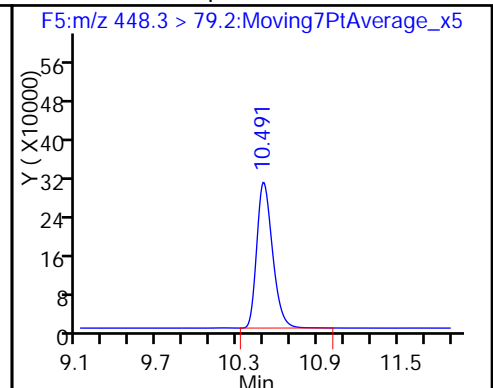
13 Perfluorooctanoic acid



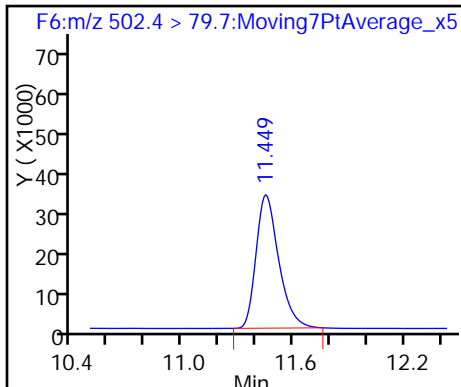
13 Perfluorooctanoic acid



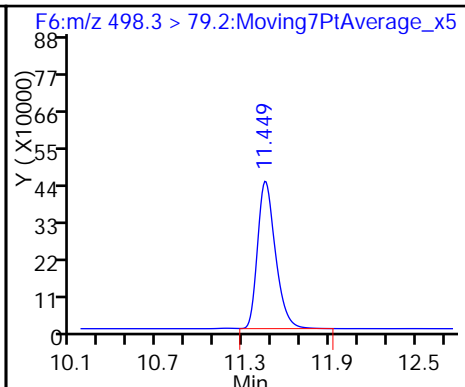
39 Perfluoroheptanesulfonic Acid



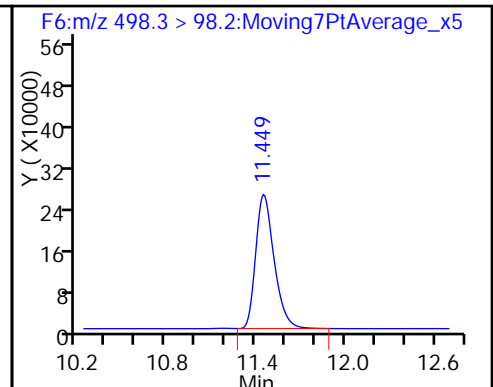
D 16 13C4 PFOS



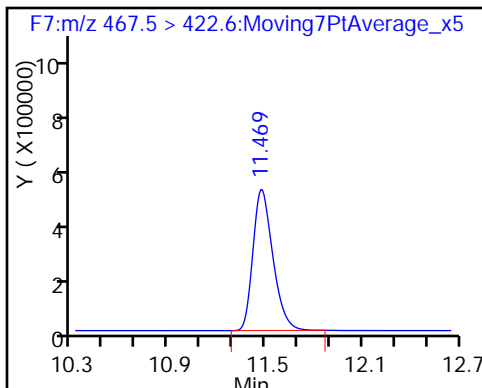
15 Perfluorooctane sulfonic acid



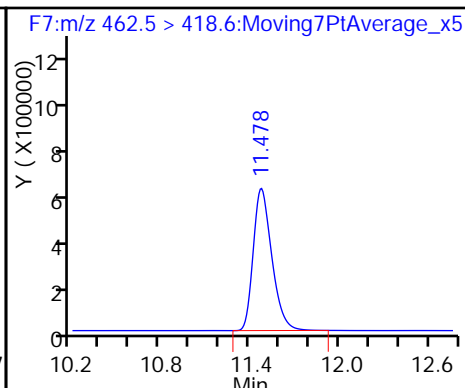
15 Perfluorooctane sulfonic acid



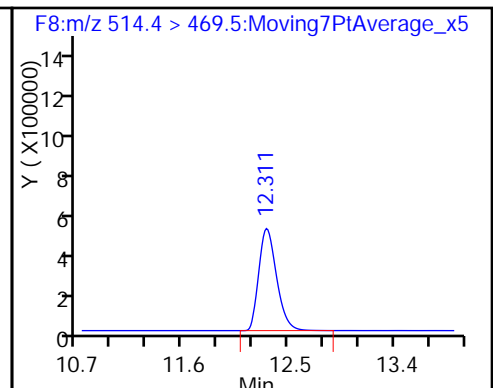
D 17 13C5 PFNA



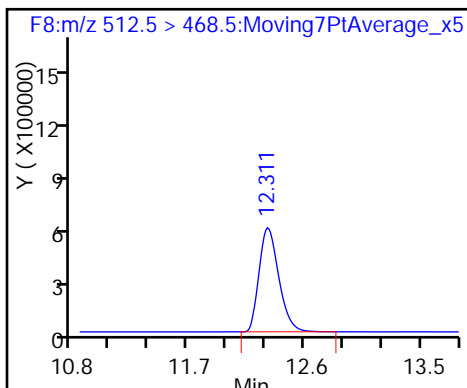
18 Perfluorononanoic acid



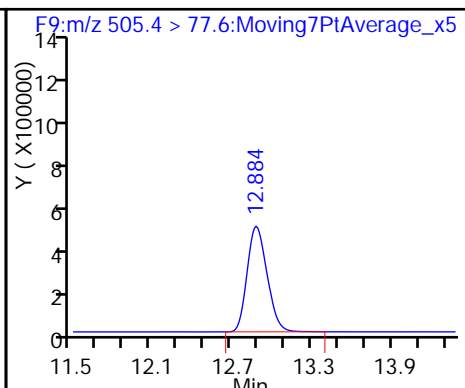
D 19 13C2 PFDA



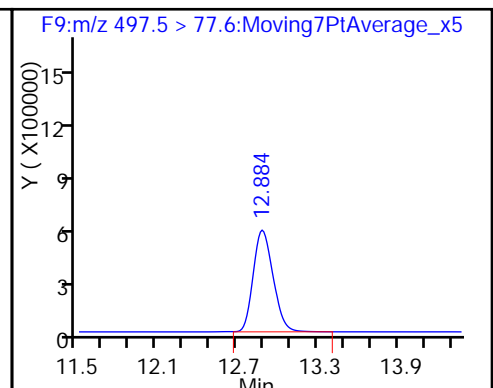
20 Perfluorodecanoic acid



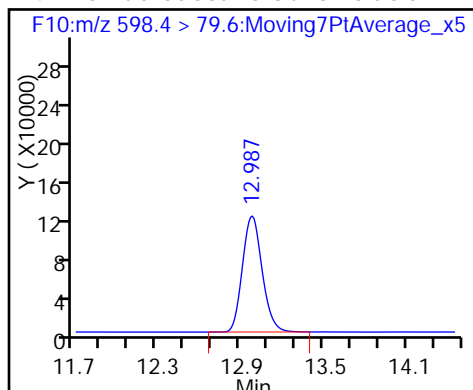
D 23 13C8 FOSA



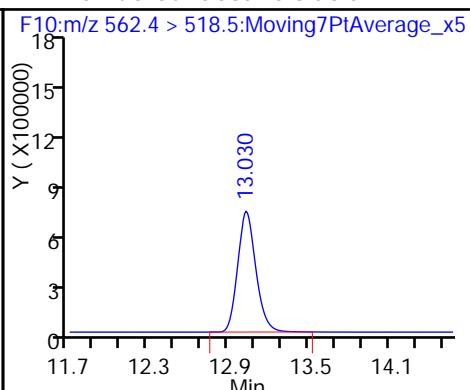
24 Perfluorooctane Sulfonamide



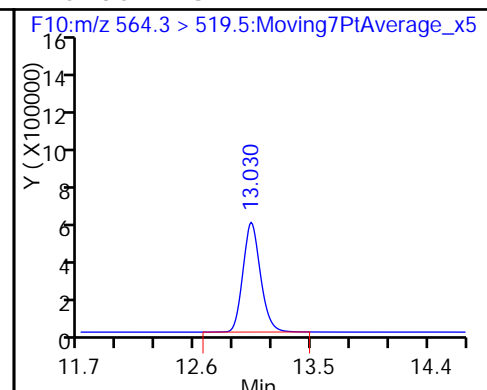
49 Perfluorodecane Sulfonic acid



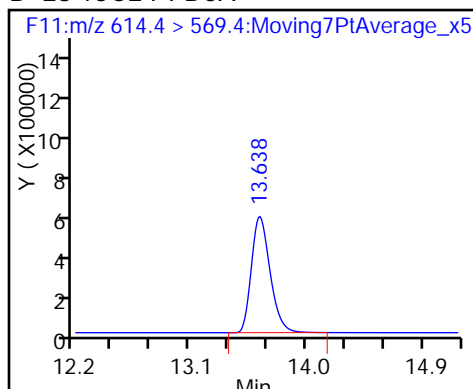
27 Perfluoroundecanoic acid



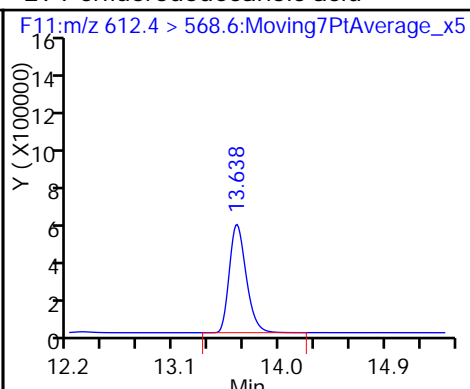
D 26 13C2 PFUnA



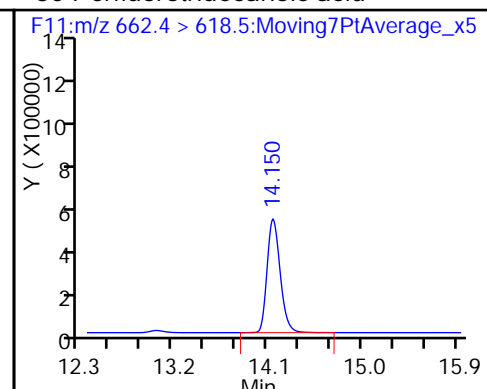
D 28 13C2 PFDaA



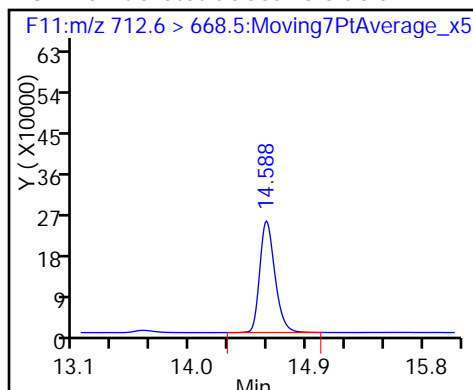
29 Perfluorododecanoic acid



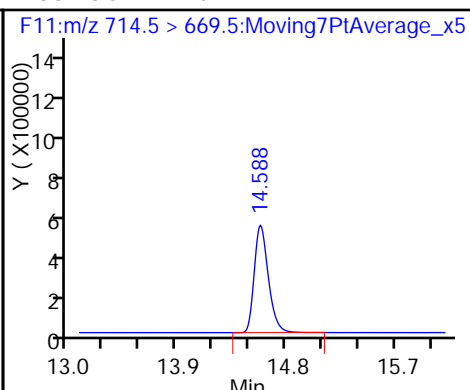
30 Perfluorotridecanoic acid



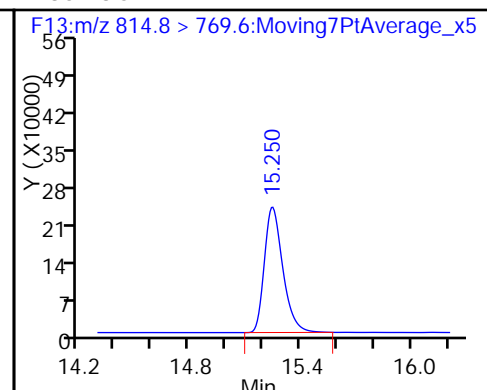
32 Perfluorotetradecanoic acid



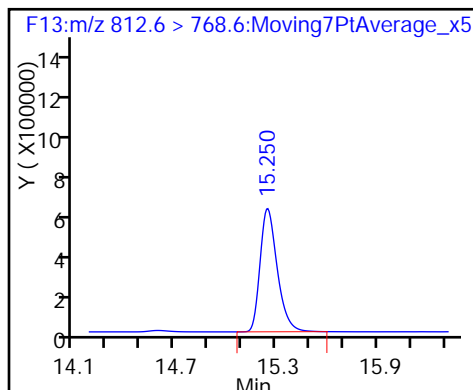
D 33 13C2-PFTeDA



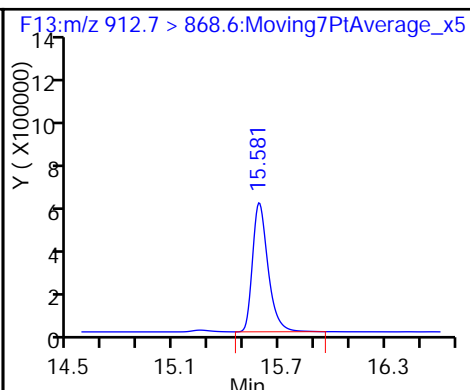
D 35 13C2-PFHxDA



34 Perfluorohexadecanoic acid



36 Perfluorooctadecanoic acid



FORM VII
LCMS CONTINUING CALIBRATION DATA

Lab Name: TestAmerica Sacramento Job No.: 320-18796-1

SDG No.: _____

Lab Sample ID: CCV 320-111390/78 Calibration Date: 05/26/2016 18:53

Instrument ID: A4 Calib Start Date: 05/25/2016 16:55

GC Column: Acquity ID: 2.10 (mm) Calib End Date: 05/25/2016 19:01

Lab File ID: 25MAY2016B4A_078.d Conc. Units: ng/mL

ANALYTE	CURVE TYPE	AVE RRF	RRF	MIN RRF	CALC AMOUNT	SPIKE AMOUNT	%D	MAX %D
Perfluorobutanoic acid (PFBA)	AveID	0.6418	0.6771		52.8	50.0	5.5	25.0
Perfluoropentanoic acid (PFPeA)	AveID	0.5079	0.5131		50.5	50.0	1.0	25.0
Perfluorobutanesulfonic acid (PFBS)	L2ID	0.7655	0.7222		43.6	44.2	-1.4	25.0
Perfluorohexanoic acid (PFHxA)	L1ID		0.4791		53.2	50.0	6.4	25.0
Perfluoroheptanoic acid (PFHpA)	L2ID		0.5074		52.6	50.0	5.1	25.0
Perfluorohexanesulfonic acid (PFHxS)	AveID	1.705	1.591		44.0	47.3	-6.7	25.0
Perfluorooctanoic acid (PFOA)	L1ID	0.4698	0.4710		52.0	50.0	4.0	25.0
Perfluoroheptanesulfonic Acid (PFHpS)	L2ID	7.344	7.807		48.0	47.6	0.8	25.0
Perfluorooctanesulfonic acid (PFOS)	L1ID	11.43	11.93		41.4	47.8	-13.3	25.0
Perfluorononanoic acid (PFNA)	L2ID		1.238		50.3	50.0	0.6	25.0
Perfluorodecanoic acid (PFDA)	AveID	1.039	1.172		56.4	50.0	12.8	25.0
Perfluorooctane Sulfonamide (FOSA)	AveID	1.069	1.130		52.8	50.0	5.6	25.0
Perfluorodecanesulfonic acid (PFDS)	AveID	4.187	3.867		44.3	48.2	-7.6	25.0
Perfluoroundecanoic acid (PFUnA)	AveID	1.179	1.240		52.6	50.0	5.2	25.0
Perfluorododecanoic acid (PFDoA)	AveID	0.9121	0.996		54.6	50.0	9.1	25.0
Perfluorotridecanoic Acid (PFTriA)	AveID	1.025	1.120		54.6	50.0	9.2	25.0
Perfluorotetradecanoic acid (PFTeA)	AveID	0.5424	0.4886		45.0	50.0	-9.9	25.0
Perfluoro-n-hexadecanoic acid (PFHxDA)	L2ID		2.649		50.8	50.0	1.5	25.0
Perfluoro-n-octadecanoic acid (PFODA)	AveID	2.211	2.154		48.7	50.0	-2.6	25.0

TestAmerica Sacramento
Target Compound Quantitation Report

Data File: \\ChromNA\Sacramento\ChromData\A4\20160525-31065.b\25MAY2016B4A_078.d
 Lims ID: CCV L5
 Client ID:
 Sample Type: CCV
 Inject. Date: 26-May-2016 18:53:34 ALS Bottle#: 14 Worklist Smp#: 78
 Injection Vol: 15.0 ul Dil. Factor: 1.0000
 Sample Info: CCV L5
 Misc. Info.: Acquity BEH C18,1.7u, 3X150mm,T=35C
 Operator ID: JRB Instrument ID: A4
 Sublist: chrom-PFAC_A4*sub12
 Method: \\ChromNA\Sacramento\ChromData\A4\20160525-31065.b\PFAC_A4.m
 Limit Group: LC PFC_DOD ICAL
 Last Update: 27-May-2016 09:58:04 Calib Date: 25-May-2016 19:01:43
 Integrator: Picker
 Quant Method: Isotopic Dilution Quant By: Initial Calibration
 Last ICal File: \\ChromNA\Sacramento\ChromData\A4\20160525-31065.b\25MAY2016B4A_011.d

Column 1 : Det: F1:MRM
 Process Host: XAWRK014

First Level Reviewer: westendorfc

Date: 27-May-2016 08:58:24

Signal	RT	EXP RT	DLT RT	REL RT	Response	Amount ng/ml	Ratio(Limits)	%Rec	S/N	Flags
2 Perfluorobutyric acid										
212.7 > 168.6	5.797	5.798	-0.001	1.000	3221735	52.8		106	9336	
D 1 13C4 PFBA										
216.7 > 171.5	5.794	5.798	-0.004		4758076	56.3		113	13666	
D 3 13C5-PFPeA										
267.6 > 222.7	6.899	6.907	-0.008		3555691	46.4		92.7	9590	
4 Perfluoropentanoic acid										
262.9 > 218.7	6.904	6.910	-0.006	1.000	1824477	50.5		101	833	
5 Perfluorobutane Sulfonate										
298.8 > 79.6	7.019	7.024	-0.005	1.000	910375	NC			1831	
298.8 > 98.6	7.014	7.024	-0.010	0.999	585238		1.56(0.00-0.00)		1353	
51 Perfluorobutanesulfonic acid										
298.8 > 79.6	7.019	7.024	-0.005	1.000	910375	43.6		98.6		
D 6 13C2 PFHxA										
314.6 > 269.7	8.149	8.156	-0.007		4625076	55.7		111	9708	
7 Perfluorohexanoic acid										
312.9 > 268.7	8.149	8.157	-0.008	1.000	2216031	53.2		106	2910	
22 PFPeS (Perflouro-1-pentanesulfonat										
348.7 > 79.5	8.225	8.231	-0.006	0.874	1794626	NC			6410	
D 8 13C4-PFHpA										
366.6 > 321.6	9.372	9.387	-0.015		4110461	48.1		96.2	7259	
9 Perfluoroheptanoic acid										
362.8 > 318.7	9.380	9.388	-0.008	1.000	2085677	52.6		105	4070	
10 Perfluorohexane Sulfonate										
398.3 > 79.2	9.412	9.421	-0.009	1.000	2145885	NC			3546	
58 Perfluorohexanesulfonic acid										
398.3 > 79.2	9.412	9.421	-0.009	1.000	2145885	44.0		93.1		

Signal	RT	EXP RT	DLT RT	REL RT	Response	Amount ng/ml	Ratio(Limits)	%Rec	S/N	Flags
D 11 18O2 PFHxS										
402.5 > 83.6	9.412	9.422	-0.010		1348908	45.4		96.1	3231	
D 12 13C4 PFOA										
416.5 > 371.6	10.491	10.503	-0.012		4404711	49.4		98.8	6427	
13 Perfluorooctanoic acid										
412.8 > 368.8	10.491	10.504	-0.013	1.000	2074448	52.0		104	2879	
412.8 > 168.7	10.499	10.504	-0.005	1.001	649970		3.19(0.00-0.00)		2362	
39 Perfluoroheptanesulfonic Acid										
448.3 > 79.2	10.499	10.508	-0.009	1.000	2333985	48.0		101		
14 Perfluoroheptane Sulfonate										
448.3 > 79.2	10.499	10.508	-0.009	1.000	2333985	NC			5523	
D 16 13C4 PFOS										
502.4 > 79.7	11.449	11.465	-0.016		300215	44.5		93.1	1343	
15 Perfluorooctane sulfonic acid										
498.3 > 79.2	11.458	11.466	-0.008	1.000	3582577	41.4		86.7	3931	
498.3 > 98.2	11.458	11.466	-0.008	1.000	2146192		1.67(0.00-0.00)		2220	
D 17 13C5 PFNA										
467.5 > 422.6	11.478	11.484	-0.006		4030722	51.4		103	7151	
18 Perfluorononanoic acid										
462.5 > 418.6	11.478	11.486	-0.008	1.000	4990163	50.3		101	6553	
D 19 13C2 PFDA										
514.4 > 469.5	12.311	12.325	-0.014		4879546	48.8		97.7	5342	
20 Perfluorodecanoic acid										
512.5 > 468.5	12.311	12.325	-0.014	1.000	5717158	56.4		113	5170	
D 23 13C8 FOSA										
505.4 > 77.6	12.884	12.893	-0.009		4925432	51.0		102	3978	
24 Perfluorooctane Sulfonamide										
497.5 > 77.6	12.884	12.893	-0.009	1.000	5563383	52.8		106	2756	
25 Perfluorodecane Sulfonate										
598.4 > 79.6	12.987	12.996	-0.009	1.000	1170685	NC			2794	
49 Perfluorodecane Sulfonic acid										
598.4 > 79.6	12.987	12.996	-0.009	1.000	1170685	44.3		91.9		
27 Perfluoroundecanoic acid										
562.4 > 518.5	13.030	13.042	-0.012	1.000	6302445	52.6		105	4903	
D 26 13C2 PFUnA										
564.3 > 519.5	13.030	13.044	-0.014		5082319	50.1		100	5124	
D 28 13C2 PFDaA										
614.4 > 569.4	13.638	13.646	-0.008		5486712	52.1		104	3733	
29 Perfluorododecanoic acid										
612.4 > 568.6	13.638	13.646	-0.008	1.000	5462266	54.6		109	2014	
30 Perfluorotridecanoic acid										
662.4 > 618.5	14.150	14.162	-0.012	1.000	4385200	54.6		109	1851	
32 Perfluorotetradecanoic acid										
712.6 > 668.5	14.588	14.600	-0.012	1.000	1913320	45.0		90.1	1157	
D 33 13C2-PFTeDA										
714.5 > 669.5	14.588	14.601	-0.013		3916174	51.6		103	3721	
D 35 13C2-PFHxDA										
814.8 > 769.6	15.250	15.255	-0.005		1702272	58.4		117	3171	

Signal	RT	EXP RT	DLT RT	REL RT	Response	Amount ng/ml	Ratio(Limits)	%Rec	S/N	Flags
34 Perfluorohexadecanoic acid										
812.6 > 768.6	15.250	15.255	-0.005	1.000	4509761	50.8		102	638	
36 Perfluorooctadecanoic acid										
912.7 > 868.6	15.581	15.593	-0.012	1.000	3666348	48.7		97.4	2514	

QC Flag Legend

Processing Flags

NC - Not Calibrated

Reagents:

LCPFC-L5_00017

Amount Added: 1.00

Units: mL

TestAmerica Sacramento

Data File: \\ChromNA\Sacramento\ChromData\A4\20160525-31065.b\25MAY2016B4A_078.d

Injection Date: 26-May-2016 18:53:34

Instrument ID: A4

Lims ID: CCV L5

Client ID:

Operator ID: JRB

ALS Bottle#: 14

Worklist Smp#: 78

Injection Vol: 15.0 ul

Dil. Factor: 1.0000

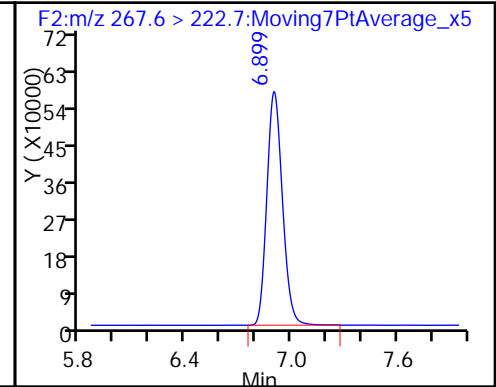
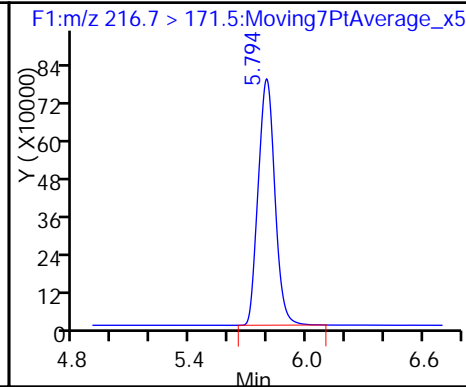
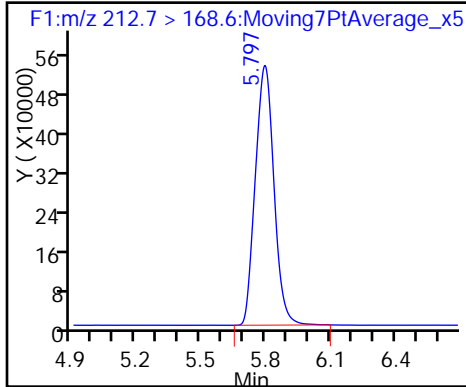
Method: PFAC_A4

Limit Group: LC PFC_DOD ICAL

2 Perfluorobutyric acid

D 1 13C4 PFBA

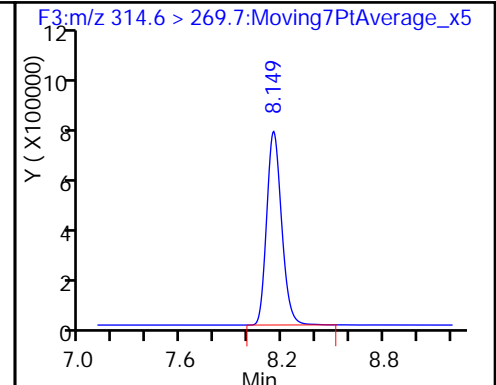
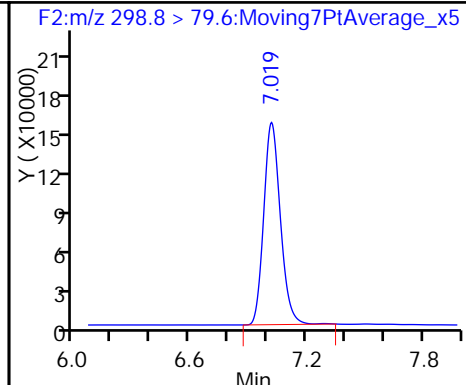
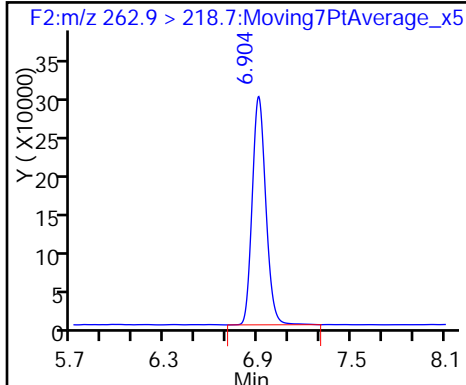
D 3 13C5-PFPeA



4 Perfluoropentanoic acid

51 Perfluorobutanesulfonic acid

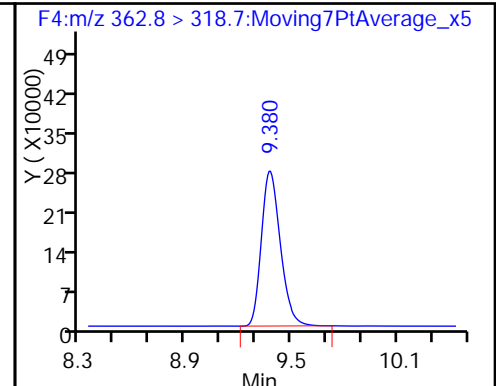
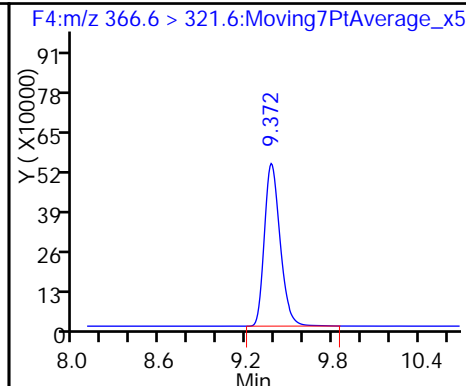
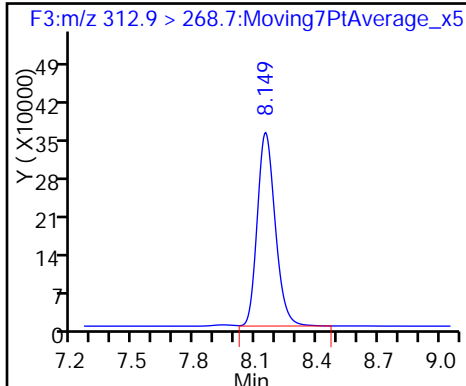
D 6 13C2 PFHxA



7 Perfluorohexanoic acid

D 8 13C4-PFHpA

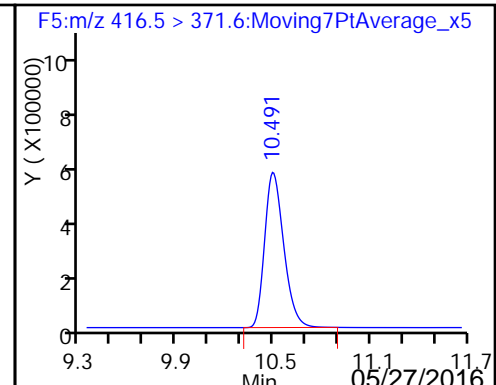
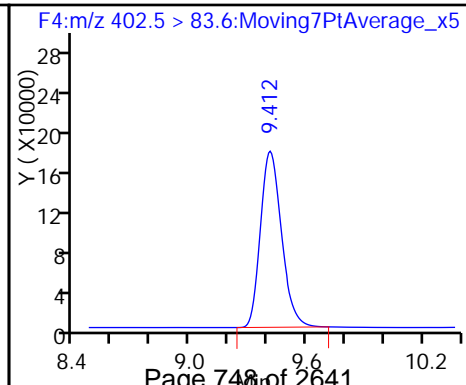
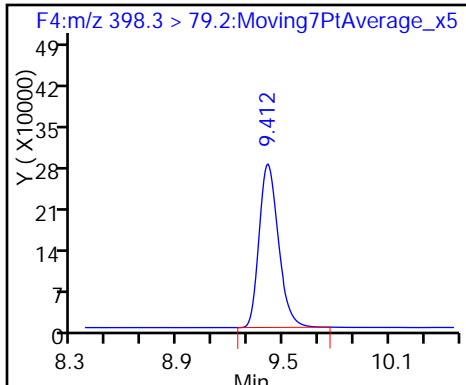
9 Perfluoroheptanoic acid



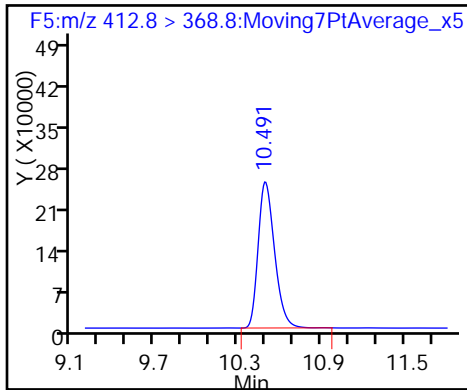
58 Perfluorohexanesulfonic acid

D 11 18O2 PFHxS

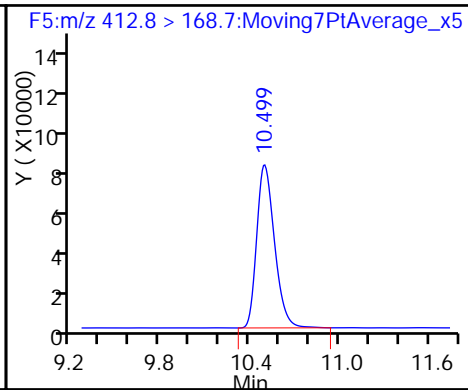
D 12 13C4 PFOA



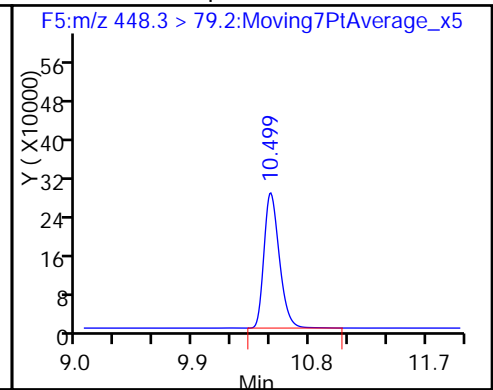
13 Perfluorooctanoic acid



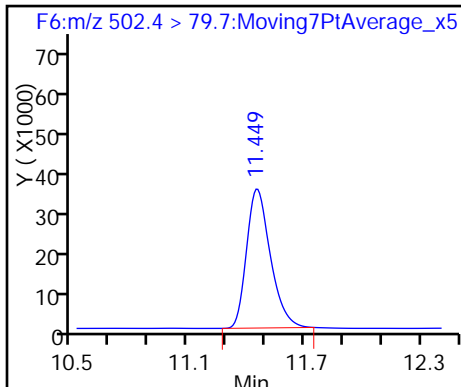
13 Perfluorooctanoic acid



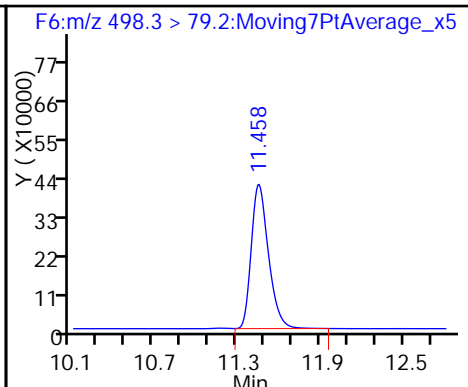
39 Perfluoroheptanesulfonic Acid



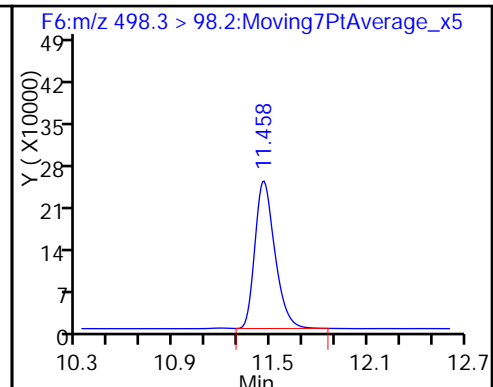
D 16 13C4 PFOS



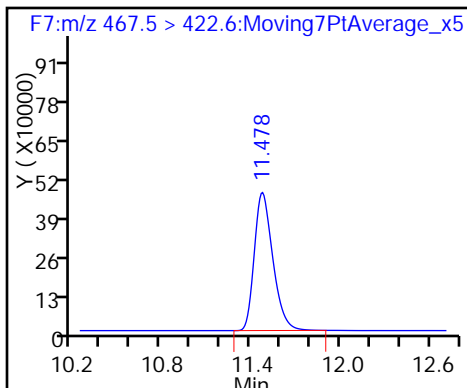
15 Perfluorooctane sulfonic acid



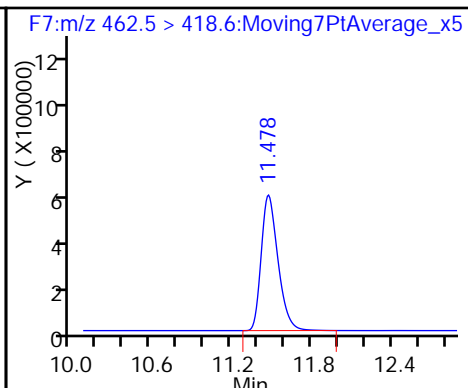
15 Perfluorooctane sulfonic acid



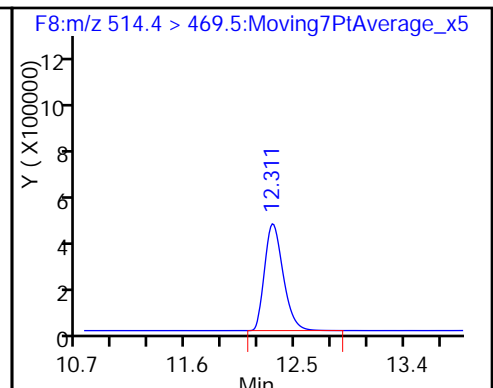
D 17 13C5 PFNA



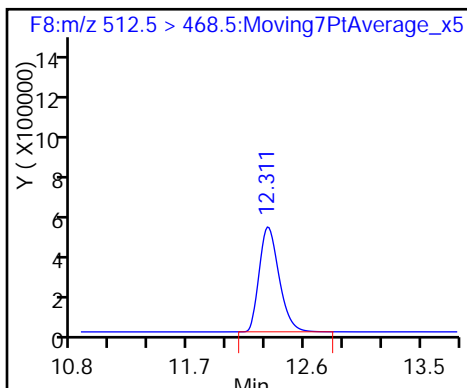
18 Perfluorononanoic acid



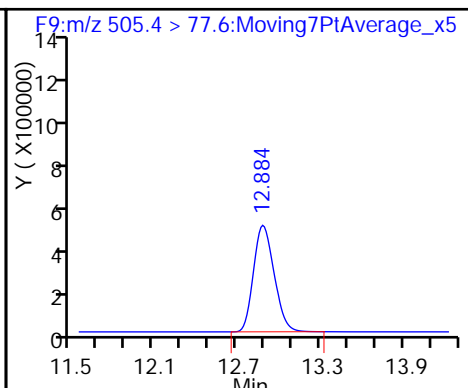
D 19 13C2 PFDA



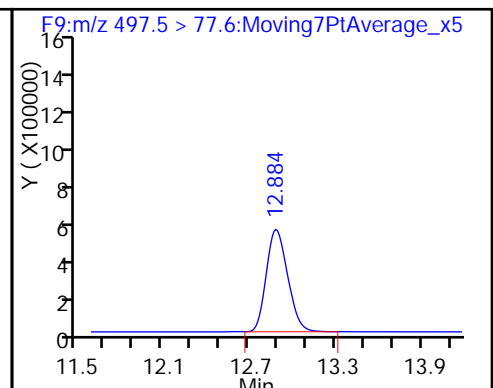
20 Perfluorodecanoic acid



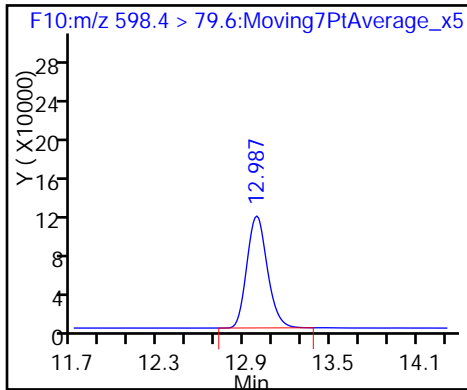
D 23 13C8 FOSA



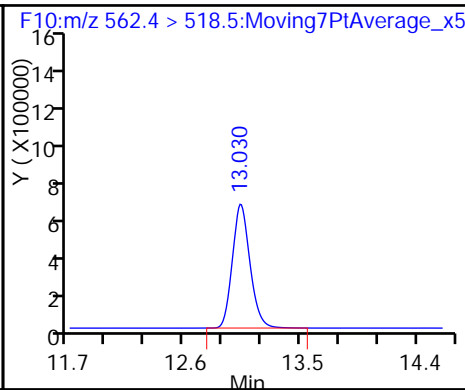
24 Perfluorooctane Sulfonamide



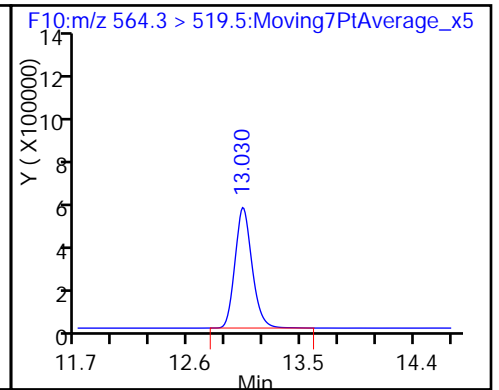
49 Perfluorodecane Sulfonic acid



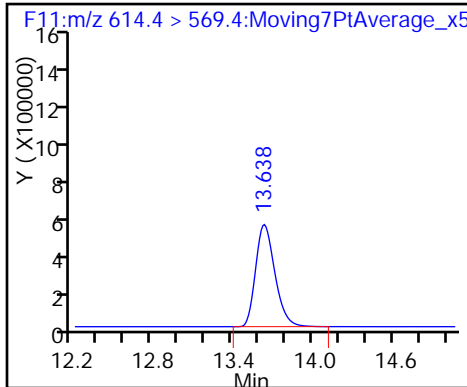
27 Perfluoroundecanoic acid



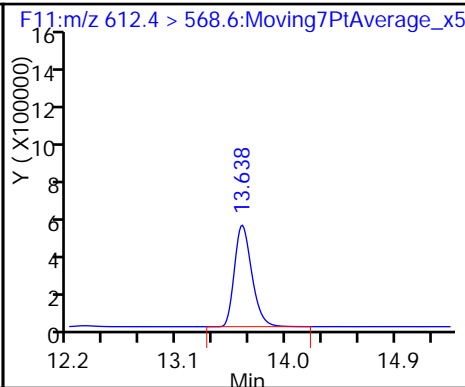
D 26 13C2 PFUnA



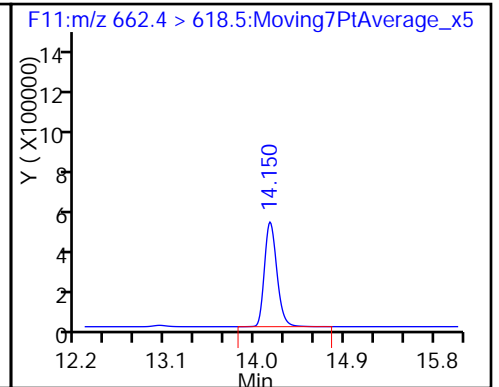
D 28 13C2 PFDaA



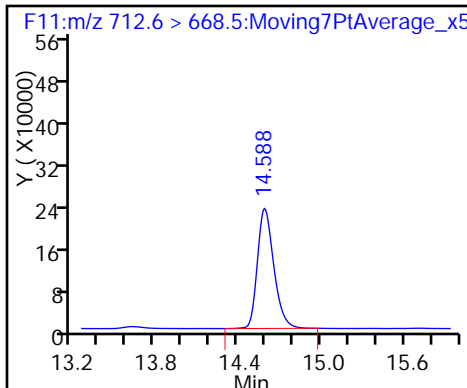
29 Perfluorododecanoic acid



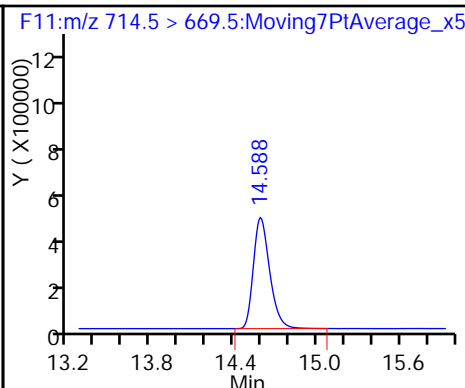
30 Perfluorotridecanoic acid



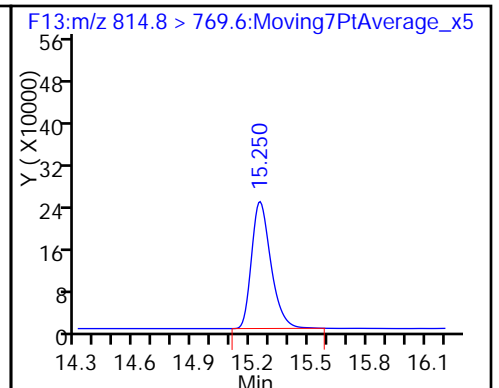
32 Perfluorotetradecanoic acid



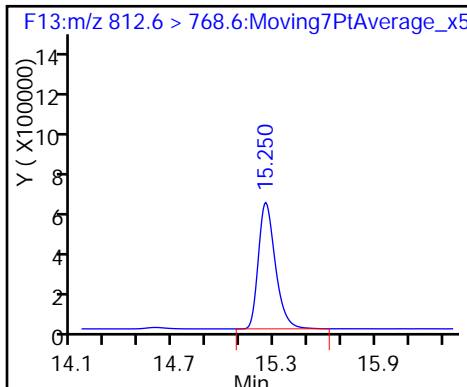
D 33 13C2-PFTeDA



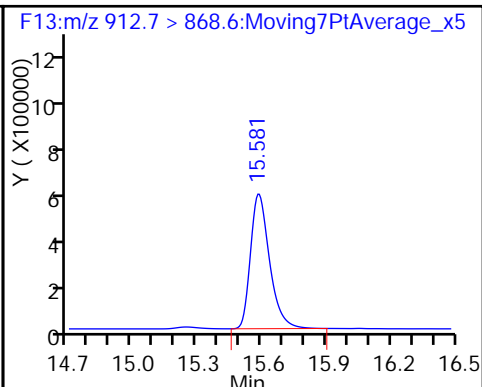
D 35 13C2-PFHxDA



34 Perfluorohexadecanoic acid



36 Perfluorooctadecanoic acid



FORM VII
LCMS CONTINUING CALIBRATION DATA

Lab Name: TestAmerica Sacramento Job No.: 320-18796-1

SDG No.: _____

Lab Sample ID: ICV 320-111182/12 Calibration Date: 05/24/2016 19:57

Instrument ID: A6 Calib Start Date: 05/24/2016 17:07

GC Column: Acquity ID: 2.10 (mm) Calib End Date: 05/24/2016 19:14

Lab File ID: 24MAY2016A6A_012.d Conc. Units: ng/mL

ANALYTE	CURVE TYPE	AVE RRF	RRF	MIN RRF	CALC AMOUNT	SPIKE AMOUNT	%D	MAX %D
Perfluorobutanoic acid (PFBA)	L2ID		1.077		43.7	50.0	-12.6	25.0
Perfluoropentanoic acid (PFPeA)	L1ID		1.145		48.7	50.0	-2.6	25.0
Perfluorobutanesulfonic acid (PFBS)	L1ID		1.208		36.5	44.3	-17.5	25.0
Perfluorohexanoic acid (PFHxA)	L1ID		0.8613		46.9	50.0	-6.2	25.0
Perfluoroheptanoic acid (PFHpA)	L1ID		0.8762		40.2	50.0	-19.7	25.0
Perfluorohexanesulfonic acid (PFHxS)	L1ID		0.9313		44.7	47.3	-5.3	25.0
Perfluorooctanoic acid (PFOA)	AveID	1.065	1.229		57.7	50.0	15.4	25.0
Perfluorooctanesulfonic acid (PFOS)	AveID	0.9314	0.8427		43.2	47.8	-9.5	25.0
Perfluorononanoic acid (PFNA)	AveID	0.9155	0.7533		41.1	50.0	-17.7	25.0
Perfluorodecanoic acid (PFDA)	L2ID		1.194		49.0	50.0	-2.0	25.0
Perfluorooctane Sulfonamide (FOSA)	AveID	1.112	1.135		51.0	50.0	2.1	25.0
Perfluorodecanesulfonic acid (PFDS)	L1ID		0.4548		45.3	48.3	-6.2	25.0
Perfluoroundecanoic acid (PFUnA)	L2ID		1.365		53.9	50.0	7.9	25.0
Perfluorododecanoic acid (PFDoA)	AveID	1.019	1.000		49.1	50.0	-1.9	25.0
Perfluorotridecanoic Acid (PFTrIA)	AveID	1.479	1.474		49.8	50.0	-0.3	25.0
Perfluorotetradecanoic acid (PFTeA)	L1ID		1.569		48.9	50.0	-2.2	25.0
Perfluoro-n-hexadecanoic acid (PFHxDA)	L2ID		3.065		45.2	50.0	-9.6	25.0
Perfluoro-n-octadecanoic acid (PFODA)	AveID	4.072	4.355		53.5	50.0	7.0	25.0

TestAmerica Sacramento
Target Compound Quantitation Report

Data File: \\ChromNA\Sacramento\ChromData\A6\20160524-31021.b\24MAY2016A6A_012.d
 Lims ID: ICV
 Client ID:
 Sample Type: ICV
 Inject. Date: 24-May-2016 19:57:14 ALS Bottle#: 16 Worklist Smp#: 12
 Injection Vol: 15.0 ul Dil. Factor: 1.0000
 Sample Info: ICV
 Misc. Info.: Acquity BEH 1.7um, 3X150mm T=50°C
 Operator ID: JRB Instrument ID: A6
 Sublist: chrom-PFAC_A4*sub6
 Method: \\ChromNA\Sacramento\ChromData\A6\20160524-31021.b\PFAC_A6.m
 Limit Group: LC PFC_DOD ICAL
 Last Update: 26-May-2016 11:29:40 Calib Date: 24-May-2016 19:14:42
 Integrator: Picker
 Quant Method: Isotopic Dilution Quant By: Initial Calibration
 Last ICal File: \\ChromNA\Sacramento\ChromData\A6\20160524-31021.b\24MAY2016A6A_010.d
 Column 1 : Acquity BEH C18 (2.10 mm) Det: F1:MRM
 Process Host: XAWRK003

First Level Reviewer: westendorfc

Date: 25-May-2016 08:51:08

Signal	RT	EXP RT	DLT RT	REL RT	Response	Amount ng/ml	Ratio(Limits)	%Rec	S/N	Flags
2 Perfluorobutyric acid										
212.9 > 169.0	5.803	5.791	0.012	1.000	59854	43.7			3285	
D 1 13C4 PFBA										
217.0 > 172.0	5.794	5.796	-0.002		55582	45.6		91.2	698	
D 3 13C5-PFPeA										
267.9 > 223.0	6.951	6.946	0.005		117592	49.6		99.2	11512	
4 Perfluoropentanoic acid										
262.9 > 219.0	6.946	6.949	-0.003	1.000	134658	48.7			3066	
40 Perfluorobutanesulfonic acid										
298.9 > 80.0	7.075	7.074	0.001	1.000	297389	36.5				
5 Perfluorobutane Sulfonate										
298.9 > 80.0	7.075	7.074	0.001	1.000	297389	NC			441	
298.9 > 99.0	7.071	7.074	-0.003	1.000	133236		2.23(0.00-0.00)		677	
D 6 13C2 PFHxA										
315.0 > 270.0	8.219	8.223	-0.004		153017	44.5		89.0	13828	
7 Perfluorohexanoic acid										
313.0 > 269.0	8.219	8.225	-0.006	1.000	131791	46.9			12290	
D 8 13C4-PFHpA										
367.0 > 322.0	9.463	9.459	0.004		165174	45.8		91.6	15000	
9 Perfluoroheptanoic acid										
363.0 > 319.0	9.463	9.462	0.001	1.000	144719	40.2			12540	
D 11 18O2 PFHxS										
403.0 > 84.0	9.493	9.494	-0.001		263089	47.6		101	22435	
10 Perfluorohexane Sulfonate										
399.0 > 80.0	9.499	9.495	0.004	1.000	244766	NC			2202	
41 Perfluorohexanesulfonic acid										
399.0 > 80.0	9.499	9.495	0.004	1.000	244766	44.7				

Signal	RT	EXP RT	DLT RT	REL RT	Response	Amount ng/ml	Ratio(Limits)	%Rec	S/N	Flags
13 Perfluorooctanoic acid										
413.0 > 369.0	10.586	10.573	0.013	1.000	145134	57.7			9551	
413.0 > 169.0	10.577	10.573	0.004	0.999	60102		2.41(0.00-0.00)		3982	
D 12 13C4 PFOA										
417.0 > 372.0	10.577	10.577	0.0		118065	32.5		65.1	7628	
14 Perfluoroheptane Sulfonate										
449.0 > 80.0	10.586	10.585	0.001	1.000	204733	NC			13262	
15 Perfluorooctane sulfonic acid										
499.0 > 80.0	11.535	11.524	0.011	1.000	431423	43.2			1744	
499.0 > 99.0	11.535	11.524	0.011	1.000	249934		1.73(0.00-0.00)		18628	
D 16 13C4 PFOS										
503.0 > 80.0	11.526	11.524	0.002		512462	51.5		108	24974	
18 Perfluorononanoic acid										
463.0 > 419.0	11.553	11.547	0.006	1.000	141846	41.1			1405	
D 17 13C5 PFNA										
468.0 > 423.0	11.553	11.551	0.002		188289	54.7		109	13634	
20 Perfluorodecanoic acid										
513.0 > 469.0	12.373	12.376	-0.003	1.000	219049	49.0			13443	
D 19 13C2 PFDA										
515.0 > 470.0	12.373	12.380	-0.007		183401	42.9		85.8	10880	
D 23 13C8 FOSA										
506.0 > 78.0	12.994	12.993	0.001		1440030	48.9		97.9	93913	
24 Perfluorooctane Sulfonamide										
498.0 > 78.0	12.994	12.994	0.0	1.000	1634148	51.0			71603	
39 Perfluorodecane Sulfonic acid										
599.0 > 80.0	13.032	13.032	0.0	1.000	235274	45.3				
25 Perfluorodecane Sulfonate										
599.0 > 80.0	13.032	13.032	0.0	1.000	235274	NC			15947	
D 26 13C2 PFUnA										
565.0 > 520.0	13.076	13.079	-0.003		241426	43.8		87.6	16778	
27 Perfluoroundecanoic acid										
563.0 > 519.0	13.076	13.082	-0.006	1.000	329534	53.9			3565	
D 28 13C2 PFDaA										
615.0 > 570.0	13.666	13.667	-0.001		329493	46.0		92.0	21950	
29 Perfluorododecanoic acid										
613.0 > 569.0	13.666	13.667	-0.001	1.000	329486	49.1			114	
30 Perfluorotridecanoic acid										
663.0 > 619.0	14.159	14.166	-0.007	1.000	485819	49.8			648	
D 33 13C2-PFTeDA										
715.0 > 670.0	14.589	14.589	0.0		531672	50.7		101	48125	
32 Perfluorotetradecanoic acid										
713.0 > 669.0	14.589	14.590	-0.001	1.000	516964	48.9			379	
34 Perfluorohexadecanoic acid										
813.0 > 769.0	15.179	15.179	0.0	1.000	1009949	45.2			966	
D 35 13C2-PFHxDA										
815.0 > 770.0	15.179	15.180	-0.001		1047882	48.8		97.7	4867	
36 Perfluorooctandecanoic acid										
913.0 > 869.0	15.456	15.450	0.006	1.000	1434923	53.5			2159	

[QC Flag Legend](#)

Processing Flags

NC - Not Calibrated

[Reagents:](#)

LCPFCIC_00017

Amount Added: 1.00

Units: mL

TestAmerica Sacramento

Data File: \\ChromNA\Sacramento\ChromData\A6\20160524-31021.b\24MAY2016A6A_012.d

Injection Date: 24-May-2016 19:57:14

Instrument ID: A6

Lims ID: ICV

Client ID:

Operator ID: JRB

ALS Bottle#: 16

Worklist Smp#: 12

Injection Vol: 15.0 ul

Dil. Factor: 1.0000

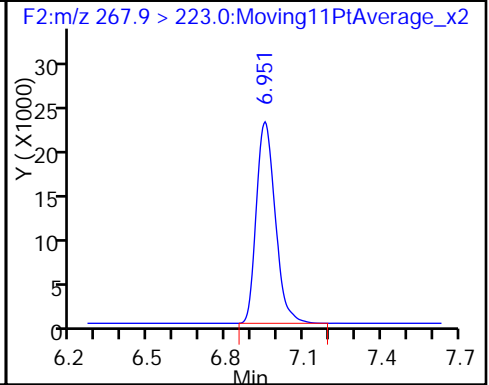
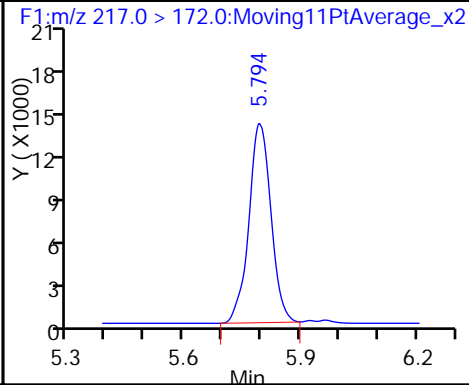
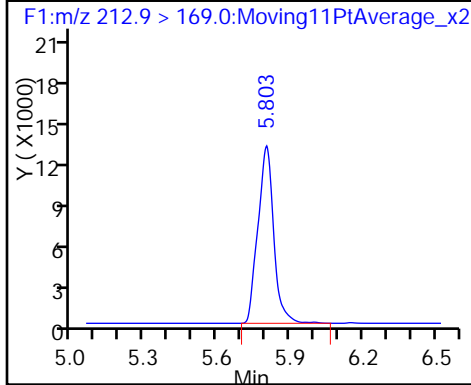
Method: PFAC_A6

Limit Group: LC PFC_DOD ICAL

2 Perfluorobutyric acid

D 1 13C4 PFBA

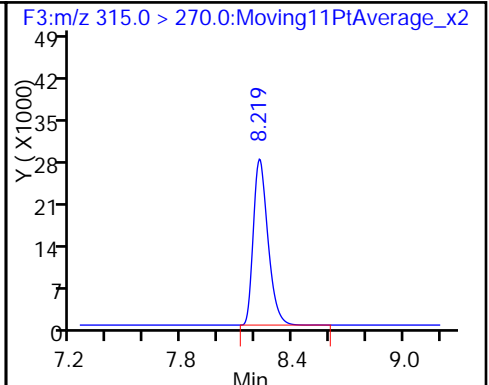
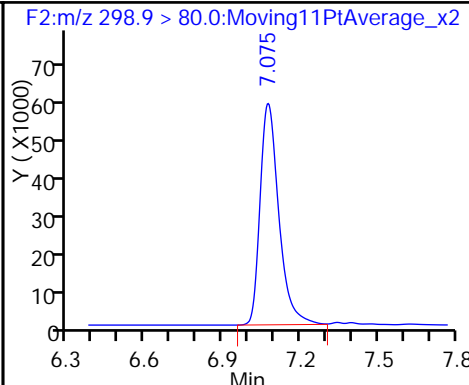
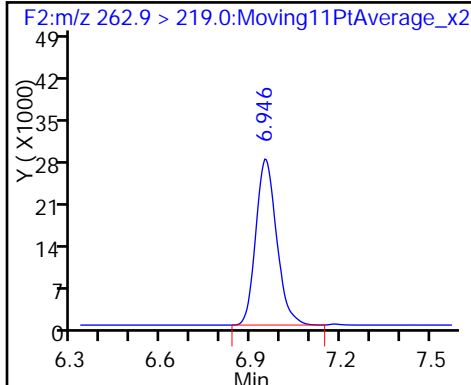
D 3 13C5-PFPeA



4 Perfluoropentanoic acid

40 Perfluorobutanesulfonic acid

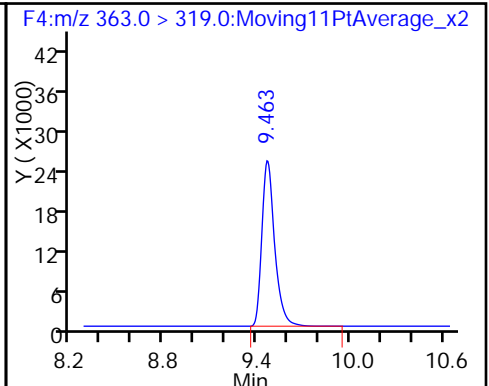
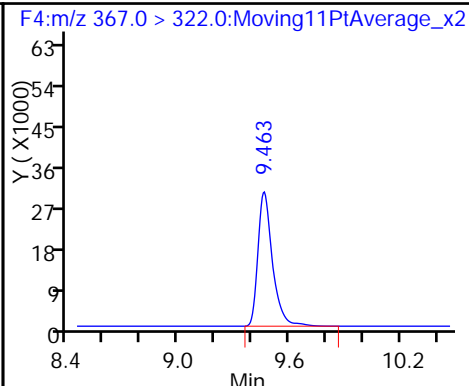
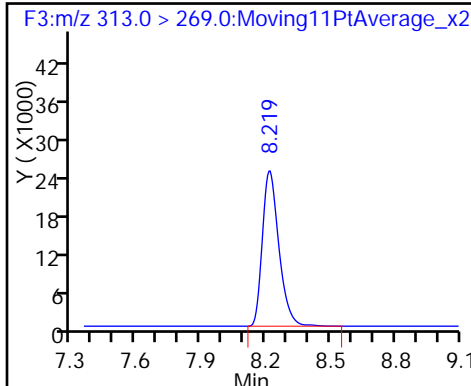
D 6 13C2 PFHxA



7 Perfluorohexanoic acid

D 8 13C4-PFHpA

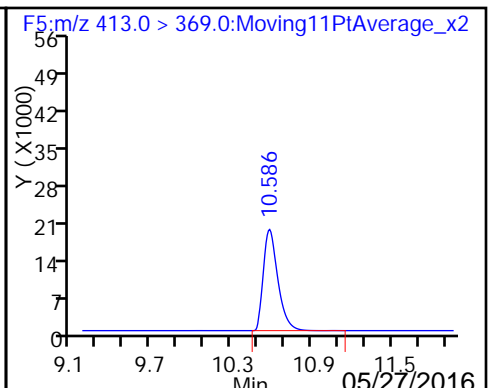
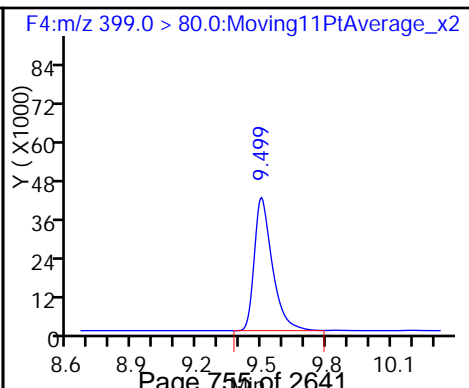
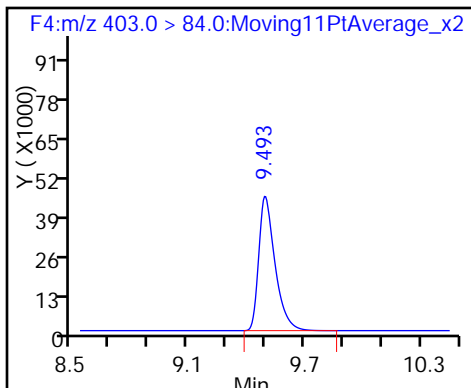
9 Perfluoroheptanoic acid

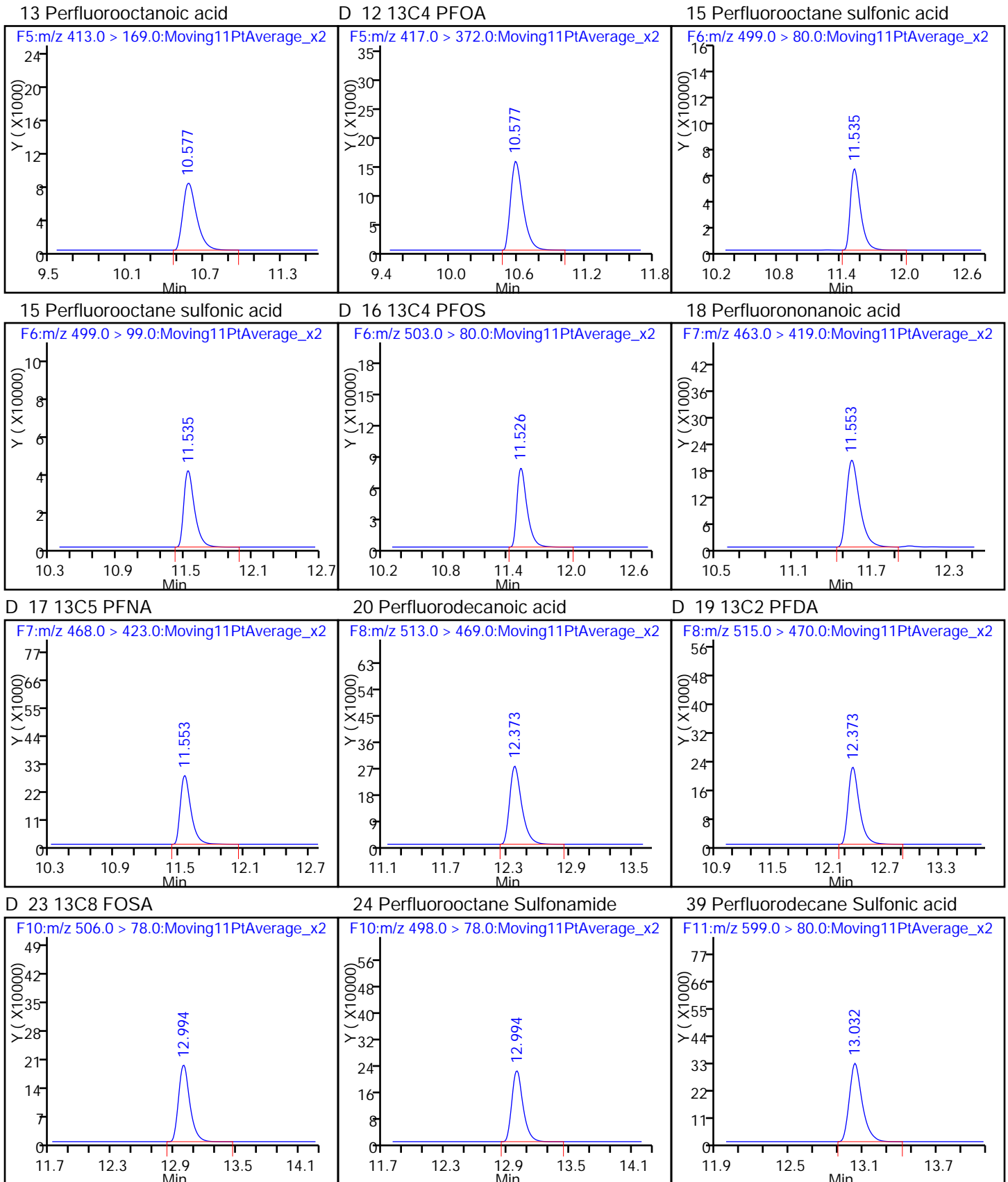


D 11 18O2 PFHxS

41 Perfluorohexanesulfonic acid

13 Perfluorooctanoic acid

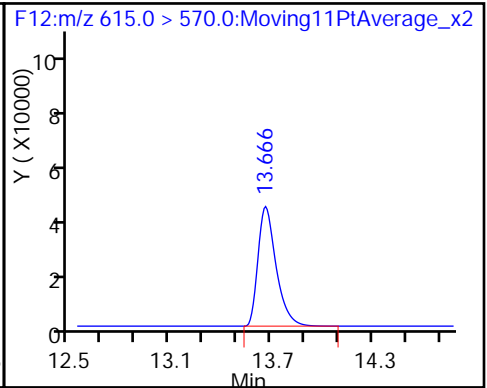
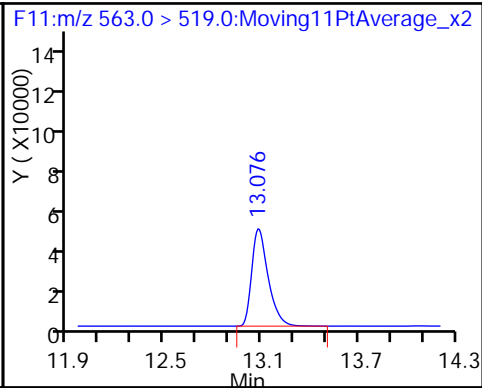
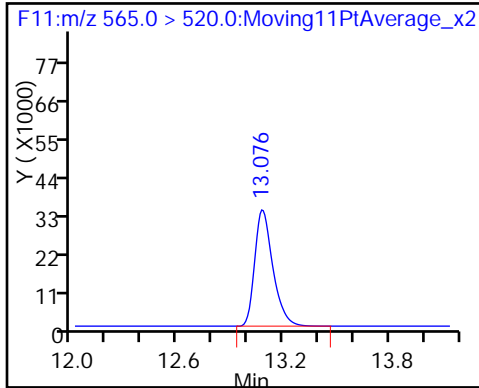




D 26 13C2 PFUnA

27 Perfluoroundecanoic acid

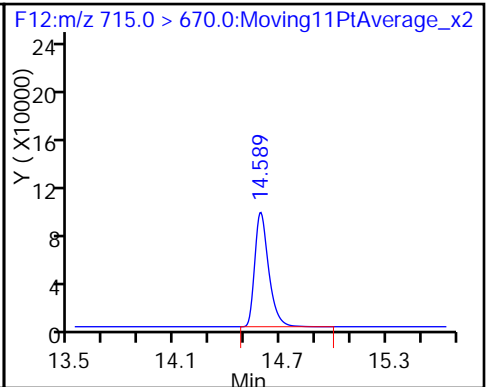
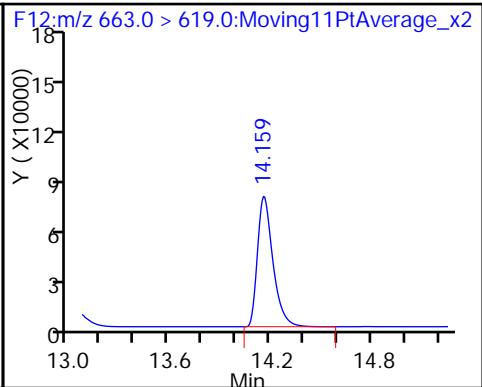
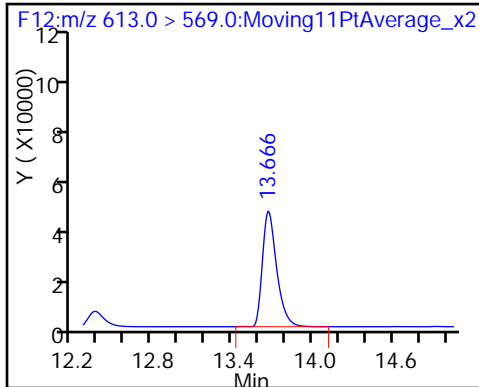
D 28 13C2 PFDoA



29 Perfluorododecanoic acid

30 Perfluorotridecanoic acid

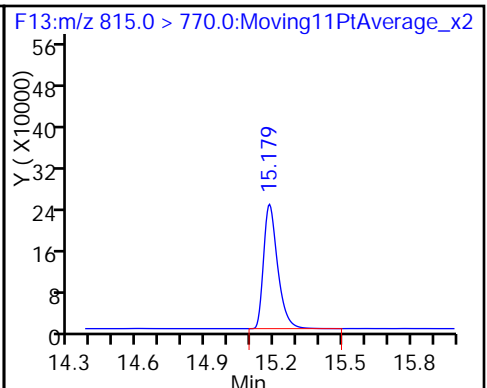
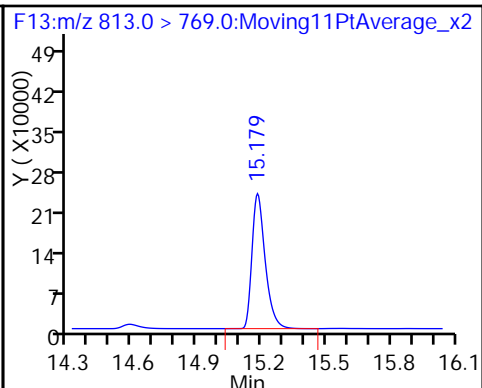
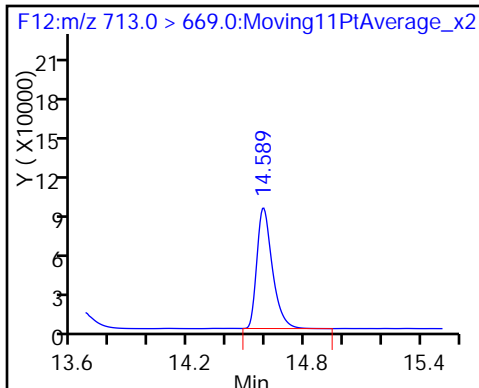
D 33 13C2-PFTeDA



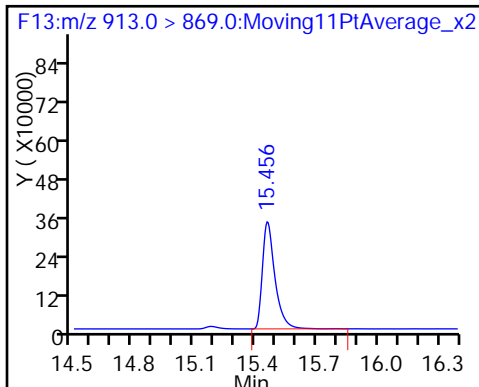
32 Perfluorotetradecanoic acid

34 Perfluorohexadecanoic acid

D 35 13C2-PFHxDA



36 Perfluorooctadecanoic acid



FORM VII
LCMS CONTINUING CALIBRATION DATA

Lab Name: TestAmerica Sacramento Job No.: 320-18796-1
 SDG No.: _____
 Lab Sample ID: CCV 320-111182/39 Calibration Date: 05/25/2016 05:31
 Instrument ID: A6 Calib Start Date: 05/24/2016 17:07
 GC Column: Acquity ID: 2.10 (mm) Calib End Date: 05/24/2016 19:14
 Lab File ID: 24MAY2016A6A_039.d Conc. Units: ng/mL

ANALYTE	CURVE TYPE	AVE RRF	RRF	MIN RRF	CALC AMOUNT	SPIKE AMOUNT	%D	MAX %D
Perfluorobutanoic acid (PFBA)	L2ID		1.189		19.8	20.0	-1.1	25.0
Perfluoropentanoic acid (PFPeA)	L1ID		1.050		18.2	20.0	-8.9	25.0
Perfluorobutanesulfonic acid (PFBS)	L1ID		1.267		15.3	17.7	-13.2	25.0
Perfluorohexanoic acid (PFHxA)	L1ID		0.8371		18.6	20.0	-6.9	25.0
Perfluoroheptanoic acid (PFHpA)	L1ID		0.8494		15.8	20.0	-21.0	25.0
Perfluorohexanesulfonic acid (PFHxS)	L1ID		1.026		19.8	18.9	4.7	25.0
Perfluoroheptanesulfonic Acid (PFHpS)	AveID	0.4887	0.5702		22.2	19.0	16.7	25.0
Perfluorooctanoic acid (PFOA)	AveID	1.065	0.9475		17.8	20.0	-11.1	25.0
Perfluorooctanesulfonic acid (PFOS)	AveID	0.9314	0.7707		15.8	19.1	-17.3	25.0
Perfluorononanoic acid (PFNA)	AveID	0.9155	0.8275		18.1	20.0	-9.6	25.0
Perfluorodecanoic acid (PFDA)	L2ID		1.139		18.9	20.0	-5.4	25.0
Perfluorooctane Sulfonamide (FOSA)	AveID	1.112	1.114		20.0	20.0	0.1	25.0
Perfluorodecanesulfonic acid (PFDS)	L1ID		0.4316		17.1	19.3	-11.4	25.0
Perfluoroundecanoic acid (PFUnA)	L2ID		0.8750		13.5	20.0	-32.7*	25.0
Perfluorododecanoic acid (PFDoA)	AveID	1.019	0.8769		17.2	20.0	-14.0	25.0
Perfluorotridecanoic Acid (PFTriA)	AveID	1.479	1.607		21.7	20.0	8.7	25.0
Perfluorotetradecanoic acid (PFTeA)	L1ID		1.513		18.8	20.0	-6.2	25.0
Perfluoro-n-hexadecanoic acid (PFHxDA)	L2ID		2.880		16.3	20.0	-18.4	25.0
Perfluoro-n-octadecanoic acid (PFODA)	AveID	4.072	3.639		17.9	20.0	-10.6	25.0

TestAmerica Sacramento
Target Compound Quantitation Report

Data File: \\ChromNA\Sacramento\ChromData\A6\20160524-31021.b\24MAY2016A6A_039.d
 Lims ID: CCV L4
 Client ID:
 Sample Type: CCV
 Inject. Date: 25-May-2016 05:31:42 ALS Bottle#: 12 Worklist Smp#: 39
 Injection Vol: 15.0 ul Dil. Factor: 1.0000
 Sample Info: CCV L4 CCV L4
 Misc. Info.: Acquity BEH 1.7um, 3X150mm T=50°C
 Operator ID: JRB Instrument ID: A6
 Sublist: chrom-PFAC_A6*sub9
 Method: \\ChromNA\Sacramento\ChromData\A6\20160524-31021.b\PFAC_A6.m
 Limit Group: LC PFC_DOD ICAL
 Last Update: 26-May-2016 11:33:04 Calib Date: 24-May-2016 19:14:42
 Integrator: Picker
 Quant Method: Isotopic Dilution Quant By: Initial Calibration
 Last ICal File: \\ChromNA\Sacramento\ChromData\A6\20160524-31021.b\24MAY2016A6A_010.d
 Column 1 : Acquity BEH C18 (2.10 mm) Det: F1:MRM
 Process Host: XAWRK003

Signal	RT	EXP RT	DLT RT	REL RT	Response	Amount ng/ml	Ratio(Limits)	%Rec	S/N	Flags
2 Perfluorobutyric acid										
212.9 > 169.0	5.785	5.791	-0.006	1.000	24516	19.8		98.9	2655	
D 1 13C4 PFBA										
217.0 > 172.0	5.788	5.796	-0.008		51543	42.3		84.6	4115	
D 3 13C5-PFPeA										
267.9 > 223.0	6.941	6.946	-0.005		123252	52.0		104	12104	
4 Perfluoropentanoic acid										
262.9 > 219.0	6.951	6.949	0.002	1.000	51754	18.2		91.1	2784	
40 Perfluorobutanesulfonic acid										
298.9 > 80.0	7.064	7.074	-0.010	1.000	132186	15.3		86.8		
5 Perfluorobutane Sulfonate										
298.9 > 80.0	7.064	7.074	-0.010	1.000	132186	NC			2147	
298.9 > 99.0	7.064	7.074	-0.010	1.000	44772		2.95(0.00-0.00)		1922	
D 6 13C2 PFHxA										
315.0 > 270.0	8.220	8.223	-0.003		185496	54.0		108	16254	
7 Perfluorohexanoic acid										
313.0 > 269.0	8.214	8.225	-0.011	1.000	62112	18.6		93.1	5780	
D 8 13C4-PFHpA										
367.0 > 322.0	9.452	9.459	-0.007		197990	54.9		110	17555	
9 Perfluoroheptanoic acid										
363.0 > 319.0	9.452	9.462	-0.010	1.000	67272	15.8		79.0	6059	
D 11 18O2 PFHxS										
403.0 > 84.0	9.487	9.494	-0.007		279183	50.5		107	24612	
10 Perfluorohexane Sulfonate										
399.0 > 80.0	9.487	9.495	-0.008	1.000	114530	NC			2815	
41 Perfluorohexanesulfonic acid										
399.0 > 80.0	9.487	9.495	-0.008	1.000	114530	19.8		105		

Signal	RT	EXP RT	DLT RT	REL RT	Response	Amount ng/ml	Ratio(Limits)	%Rec	S/N	Flags
13 Perfluorooctanoic acid										
413.0 > 369.0	10.568	10.573	-0.005	1.000	72773	17.8		88.9	3171	
413.0 > 169.0	10.568	10.573	-0.005	1.000	33128		2.20(0.00-0.00)		2235	
D 12 13C4 PFOA										
417.0 > 372.0	10.568	10.577	-0.009		192011	52.9		106	12508	
14 Perfluoroheptane Sulfonate										
449.0 > 80.0	10.568	10.585	-0.017	1.000	118851	NC			7870	
38 Perfluoroheptanesulfonic Acid										
449.0 > 80.0	10.568	10.585	-0.017	1.000	118851	22.2		117		
15 Perfluorooctane sulfonic acid										
499.0 > 80.0	11.510	11.524	-0.014	1.000	161312	15.8		82.7	2027	
499.0 > 99.0	11.510	11.524	-0.014	1.000	93311		1.73(0.00-0.00)		7071	
D 16 13C4 PFOS										
503.0 > 80.0	11.510	11.524	-0.014		523298	52.6		110	39424	
18 Perfluorononanoic acid										
463.0 > 419.0	11.536	11.547	-0.011	1.000	66657	18.1		90.4	547	
D 17 13C5 PFNA										
468.0 > 423.0	11.536	11.551	-0.015		201389	58.5		117	14618	
20 Perfluorodecanoic acid										
513.0 > 469.0	12.362	12.376	-0.014	1.000	92943	18.9		94.6	5551	
D 19 13C2 PFDA										
515.0 > 470.0	12.362	12.380	-0.018		204048	47.7		95.5	12472	
D 23 13C8 FOSA										
506.0 > 78.0	12.984	12.993	-0.009		1457981	49.6		99.1	23737	
24 Perfluorooctane Sulfonamide										
498.0 > 78.0	12.984	12.994	-0.010	1.000	649442	20.0		100	42140	
39 Perfluorodecane Sulfonic acid										
599.0 > 80.0	13.023	13.032	-0.009	1.000	91093	17.1		88.6		
25 Perfluorodecane Sulfonate										
599.0 > 80.0	13.023	13.032	-0.009	1.000	91093	NC			6298	
D 26 13C2 PFUnA										
565.0 > 520.0	13.076	13.079	-0.003		294932	53.5		107	20535	
27 Perfluoroundecanoic acid										
563.0 > 519.0	13.076	13.082	-0.006	1.000	103225	13.5		67.3	1092	
D 28 13C2 PFDaA										
615.0 > 570.0	13.657	13.667	-0.010		355704	49.6		99.3	12039	
29 Perfluorododecanoic acid										
613.0 > 569.0	13.657	13.667	-0.010	1.000	124768	17.2		86.0	103	
30 Perfluorotridecanoic acid										
663.0 > 619.0	14.159	14.166	-0.007	1.000	228673	21.7		109	114	
D 33 13C2-PFTeDA										
715.0 > 670.0	14.576	14.589	-0.013		534879	51.0		102	19409	
32 Perfluorotetradecanoic acid										
713.0 > 669.0	14.576	14.590	-0.014	1.000	215249	18.8		93.8	120	
34 Perfluorohexadecanoic acid										
813.0 > 769.0	15.174	15.179	-0.005	1.000	409730	16.3		81.6	240	
D 35 13C2-PFHxDA										
815.0 > 770.0	15.169	15.180	-0.011		1115496	52.0		104	23816	

Signal	RT	EXP RT	DLT RT	REL RT	Response	Amount ng/ml	Ratio(Limits)	%Rec	S/N	Flags
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36 Perfluorooctadecanoic acid
913.0 > 869.0 15.446 15.450 -0.004 1.000 517823 17.9 89.4 744

QC Flag Legend

Processing Flags

NC - Not Calibrated

Reagents:

LCPFC-L4_00020

Amount Added: 1.00

Units: mL

TestAmerica Sacramento

Data File: \\ChromNA\Sacramento\ChromData\A6\20160524-31021.b\24MAY2016A6A_039.d

Injection Date: 25-May-2016 05:31:42

Instrument ID: A6

Lims ID: CCV L4

Client ID:

Operator ID: JRB

ALS Bottle#: 12

Worklist Smp#: 39

Injection Vol: 15.0 ul

Dil. Factor: 1.0000

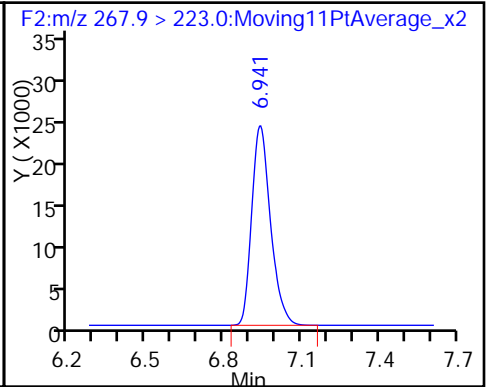
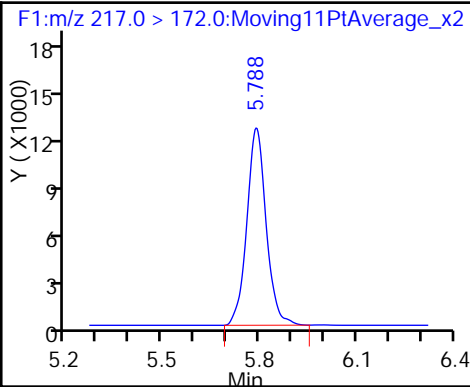
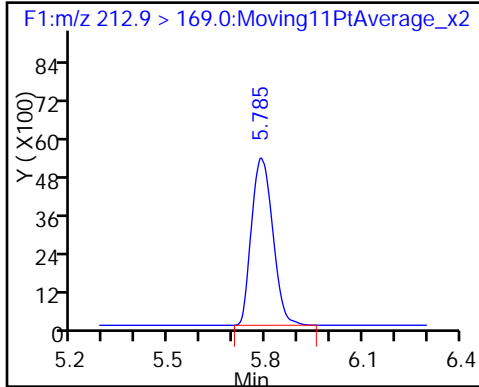
Method: PFAC_A6

Limit Group: LC PFC_DOD ICAL

2 Perfluorobutyric acid

D 1 13C4 PFBA

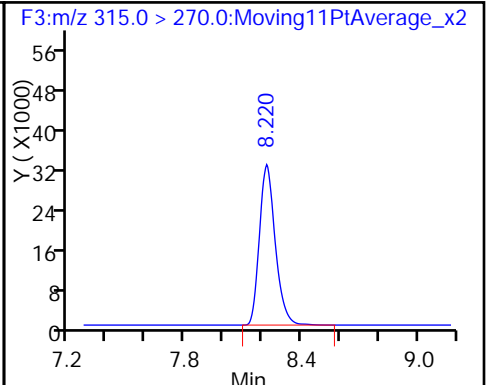
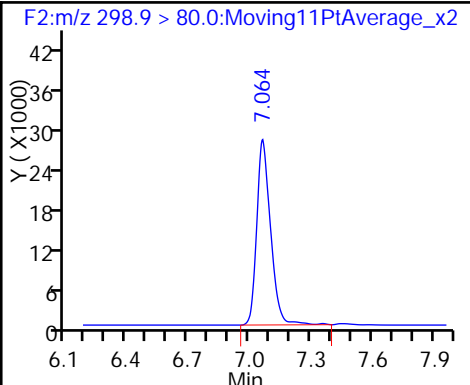
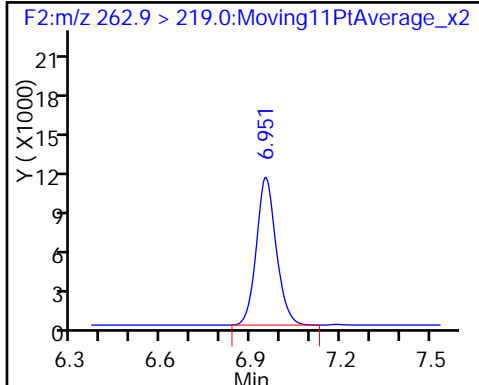
D 3 13C5-PFPeA



4 Perfluoropentanoic acid

40 Perfluorobutanesulfonic acid

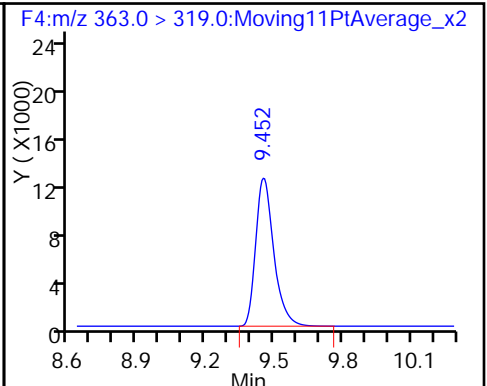
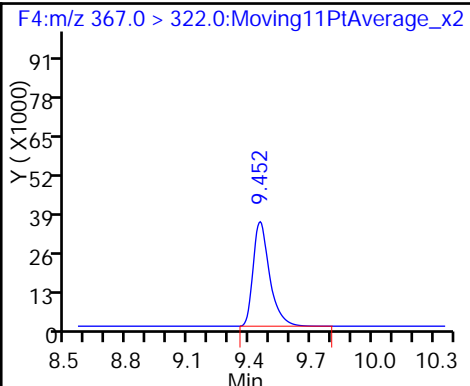
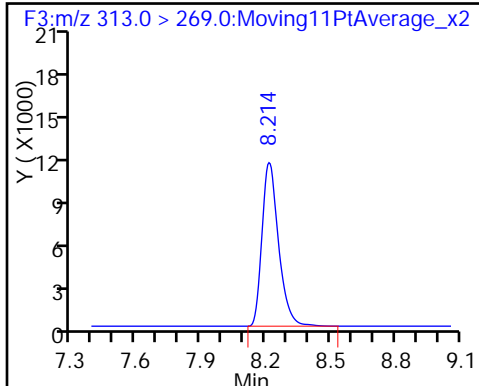
D 6 13C2 PFHxA



7 Perfluorohexanoic acid

D 8 13C4-PFHpA

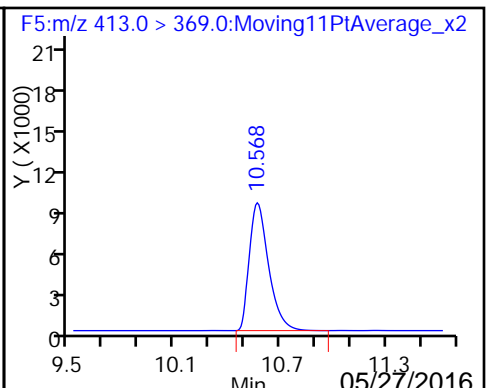
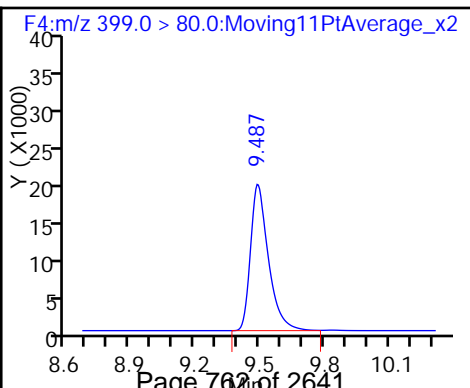
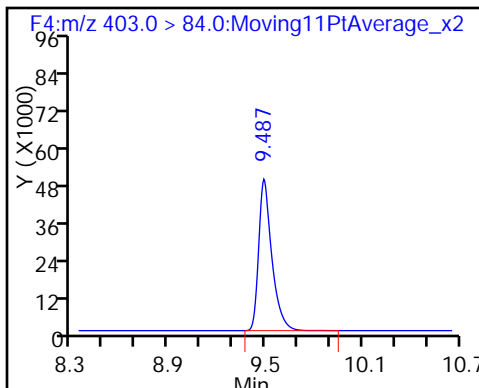
9 Perfluoroheptanoic acid

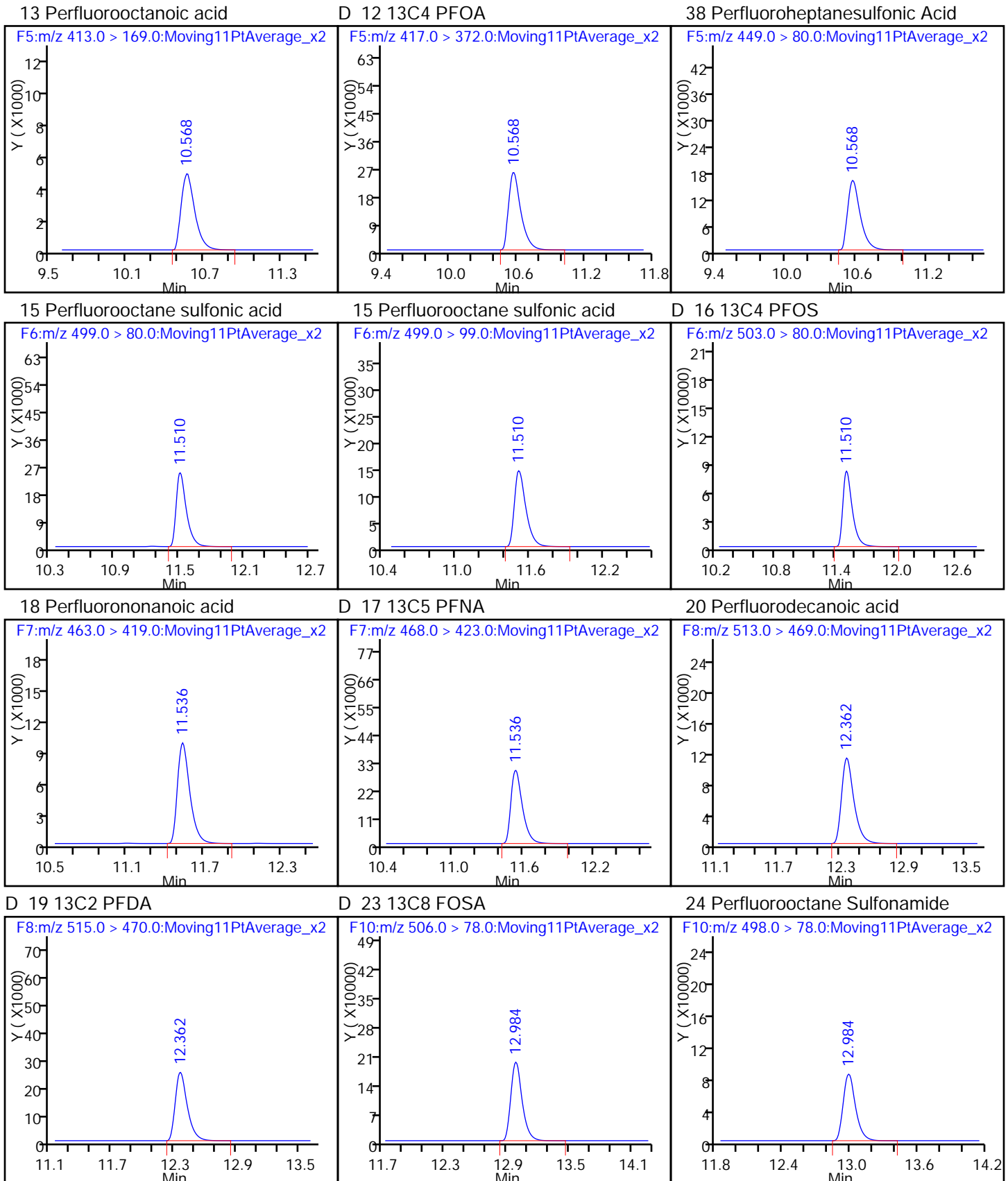


D 11 18O2 PFHxS

41 Perfluorohexanesulfonic acid

13 Perfluorooctanoic acid

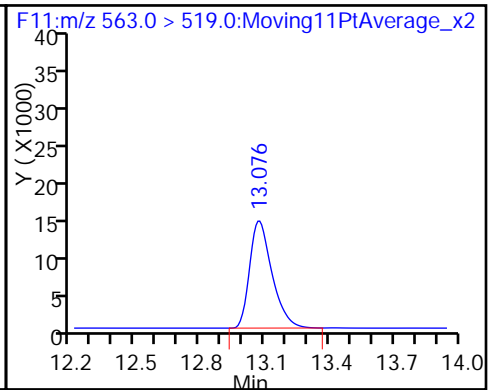
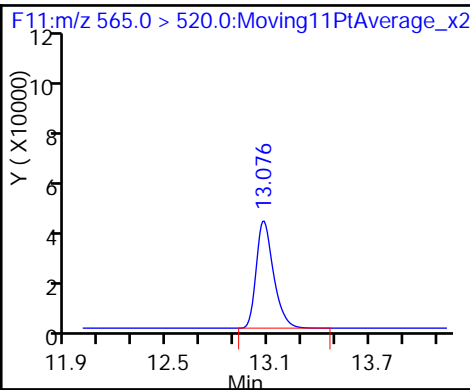
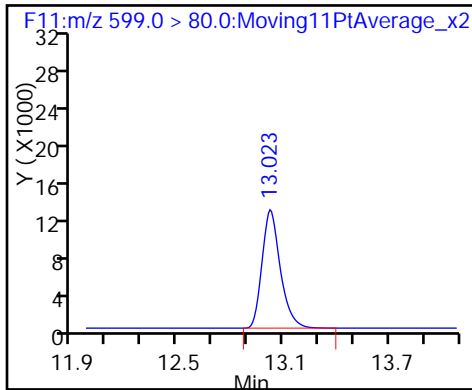




39 Perfluorodecane Sulfonic acid

D 26 13C2 PFUnA

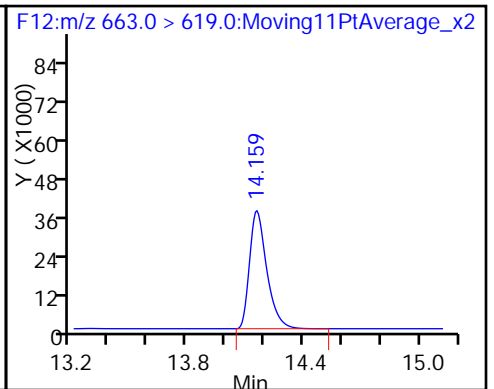
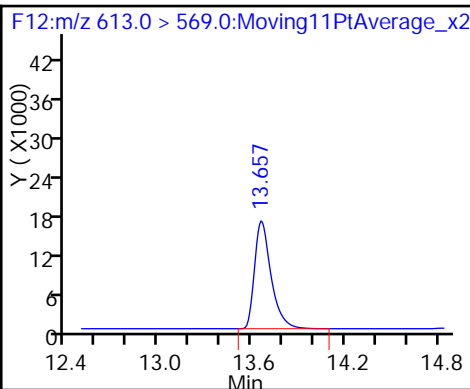
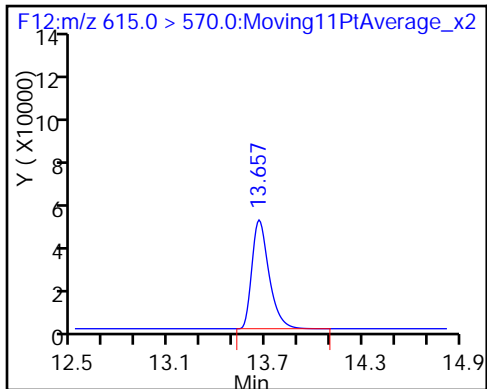
27 Perfluoroundecanoic acid



D 28 13C2 PFDaA

29 Perfluorododecanoic acid

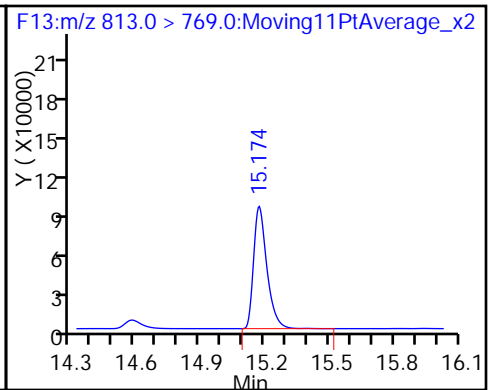
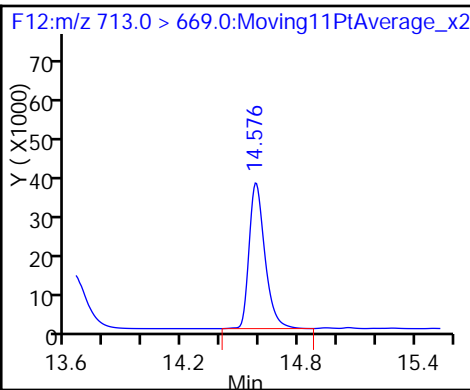
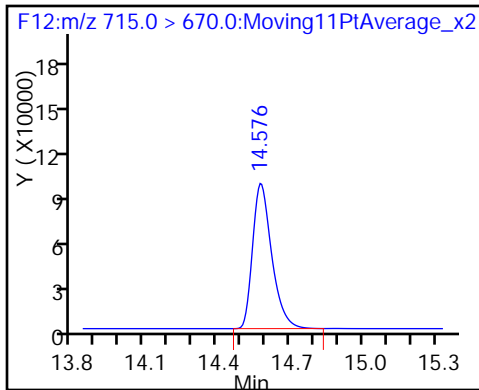
30 Perfluorotridecanoic acid



D 33 13C2-PFTeDA

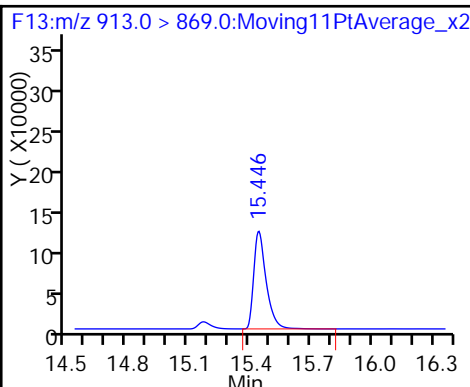
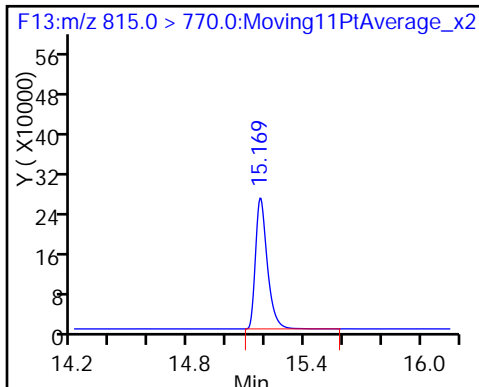
32 Perfluorotetradecanoic acid

34 Perfluorohexadecanoic acid



D 35 13C2-PFHxDA

36 Perfluorooctadecanoic acid



FORM VII
LCMS CONTINUING CALIBRATION DATA

Lab Name: TestAmerica Sacramento Job No.: 320-18796-1
 SDG No.: _____
 Lab Sample ID: CCV 320-111182/52 Calibration Date: 05/25/2016 10:08
 Instrument ID: A6 Calib Start Date: 05/24/2016 17:07
 GC Column: Acquity ID: 2.10 (mm) Calib End Date: 05/24/2016 19:14
 Lab File ID: 24MAY2016A6A_052.d Conc. Units: ng/mL

ANALYTE	CURVE TYPE	AVE RRF	RRF	MIN RRF	CALC AMOUNT	SPIKE AMOUNT	%D	MAX %D
Perfluorobutanoic acid (PFBA)	L2ID		1.200		48.6	50.0	-2.8	25.0
Perfluoropentanoic acid (PFPeA)	L1ID		1.243		52.8	50.0	5.6	25.0
Perfluorobutanesulfonic acid (PFBS)	L1ID		1.447		43.7	44.2	-1.2	25.0
Perfluorohexanoic acid (PFHxA)	L1ID		1.278		69.3	50.0	38.6*	25.0
Perfluoroheptanoic acid (PFHpA)	L1ID		0.9673		44.3	50.0	-11.4	25.0
Perfluorohexanesulfonic acid (PFHxS)	L1ID		1.028		49.4	47.3	4.5	25.0
Perfluorooctanoic acid (PFOA)	AveID	1.065	1.154		54.2	50.0	8.3	25.0
Perfluoroheptanesulfonic Acid (PFHpS)	AveID	0.4887	0.5172		50.4	47.6	5.8	25.0
Perfluorooctanesulfonic acid (PFOS)	AveID	0.9314	0.9856		50.6	47.8	5.8	25.0
Perfluorononanoic acid (PFNA)	AveID	0.9155	0.9786		53.4	50.0	6.9	25.0
Perfluorodecanoic acid (PFDA)	L2ID		1.471		60.3	50.0	20.5	25.0
Perfluorooctane Sulfonamide (FOSA)	AveID	1.112	1.290		58.0	50.0	16.0	25.0
Perfluorodecanesulfonic acid (PFDS)	L1ID		0.5195		51.7	48.2	7.2	25.0
Perfluoroundecanoic acid (PFUnA)	L2ID		1.478		58.5	50.0	16.9	25.0
Perfluorododecanoic acid (PFDoA)	AveID	1.019	0.998		48.9	50.0	-2.1	25.0
Perfluorotridecanoic Acid (PFTriA)	AveID	1.479	1.549		52.4	50.0	4.7	25.0
Perfluorotetradecanoic acid (PFTeA)	L1ID		1.436		44.7	50.0	-10.5	25.0
Perfluoro-n-hexadecanoic acid (PFHxDA)	L2ID		3.060		45.1	50.0	-9.8	25.0
Perfluoro-n-octadecanoic acid (PFODA)	AveID	4.072	3.541		43.5	50.0	-13.0	25.0

TestAmerica Sacramento
Target Compound Quantitation Report

Data File: \\ChromNA\Sacramento\ChromData\A6\20160524-31021.b\24MAY2016A6A_052.d
 Lims ID: CCV L5
 Client ID:
 Sample Type: CCV
 Inject. Date: 25-May-2016 10:08:09 ALS Bottle#: 13 Worklist Smp#: 52
 Injection Vol: 15.0 ul Dil. Factor: 1.0000
 Sample Info: CCV L5 CCV L5
 Misc. Info.: Acquity BEH 1.7um, 3X150mm T=50°C
 Operator ID: JRB Instrument ID: A6
 Sublist: chrom-PFAC_A6*sub5
 Method: \\ChromNA\Sacramento\ChromData\A6\20160524-31021.b\PFAC_A6.m
 Limit Group: LC PFC_DOD ICAL
 Last Update: 26-May-2016 16:16:42 Calib Date: 24-May-2016 19:14:42
 Integrator: Picker
 Quant Method: Isotopic Dilution Quant By: Initial Calibration
 Last ICal File: \\ChromNA\Sacramento\ChromData\A6\20160524-31021.b\24MAY2016A6A_010.d
 Column 1 : Acquity BEH C18 (2.10 mm) Det: F1:MRM
 Process Host: XAWRK003

Signal	RT	EXP RT	DLT RT	REL RT	Response	Amount ng/ml	Ratio(Limits)	%Rec	S/N	Flags
2 Perfluorobutyric acid										
212.9 > 169.0	5.788	5.791	-0.003	1.000	72253	48.6		97.2	8189	
D 1 13C4 PFBA										
217.0 > 172.0	5.782	5.796	-0.014		60209	49.4		98.8	6788	
D 3 13C5-PFPeA										
267.9 > 223.0	6.946	6.946	0.0		105416	44.5		88.9	9781	
4 Perfluoropentanoic acid										
262.9 > 219.0	6.946	6.949	-0.003	1.000	130990	52.8		106	13362	
40 Perfluorobutanesulfonic acid										
298.9 > 80.0	7.071	7.074	-0.003	1.000	337854	43.7		98.8		
5 Perfluorobutane Sulfonate										
298.9 > 80.0	7.071	7.074	-0.003	1.000	337854	NC			1040	
298.9 > 99.0	7.067	7.074	-0.007	0.999	146651		2.30(0.00-0.00)		4119	
D 6 13C2 PFHxA										
315.0 > 270.0	8.219	8.223	-0.004		142779	41.5		83.1	13113	
7 Perfluorohexanoic acid										
313.0 > 269.0	8.219	8.225	-0.006	1.000	182414	69.3		139	16927	E
D 8 13C4-PFHpA										
367.0 > 322.0	9.452	9.459	-0.007		154034	42.7		85.4	12950	E
9 Perfluoroheptanoic acid										
363.0 > 319.0	9.452	9.462	-0.010	1.000	149004	44.3		88.6	12365	
D 11 18O2 PFHxS										
403.0 > 84.0	9.487	9.494	-0.007		249813	45.2		95.6	21723	
10 Perfluorohexane Sulfonate										
399.0 > 80.0	9.487	9.495	-0.008	1.000	256761	NC			4697	
41 Perfluorohexanesulfonic acid										
399.0 > 80.0	9.487	9.495	-0.008	1.000	256761	49.4		104		

Signal	RT	EXP RT	DLT RT	REL RT	Response	Amount ng/ml	Ratio(Limits)	%Rec	S/N	Flags
13 Perfluorooctanoic acid										
413.0 > 369.0	10.568	10.573	-0.005	1.000	165072	54.2		108	3071	
413.0 > 169.0	10.577	10.573	0.004	1.001	42382		3.89(0.00-0.00)		2693	
D 12 13C4 PFOA										
417.0 > 372.0	10.568	10.577	-0.009		143029	39.4		78.9	9154	
14 Perfluoroheptane Sulfonate										
449.0 > 80.0	10.577	10.585	-0.008	1.000	251938	NC			15983	
38 Perfluoroheptanesulfonic Acid										
449.0 > 80.0	10.577	10.585	-0.008	1.000	251938	50.4		106		
15 Perfluorooctane sulfonic acid										
499.0 > 80.0	11.518	11.524	-0.006	1.000	482128	50.6		106	1158	
499.0 > 99.0	11.518	11.524	-0.006	1.000	279777		1.72(0.00-0.00)		13929	
D 16 13C4 PFOS										
503.0 > 80.0	11.518	11.524	-0.006		489174	49.2		103	36247	
18 Perfluorononanoic acid										
463.0 > 419.0	11.545	11.547	-0.002	1.000	156997	53.4		107	1708	
D 17 13C5 PFNA										
468.0 > 423.0	11.545	11.551	-0.006		160425	46.6		93.3	11533	
20 Perfluorodecanoic acid										E
513.0 > 469.0	12.373	12.376	-0.003	1.000	224630	60.3		121	943	E
D 19 13C2 PFDA										
515.0 > 470.0	12.373	12.380	-0.007		152713	35.7		71.4	17916	
D 23 13C8 FOSA										
506.0 > 78.0	12.984	12.993	-0.009		1419265	48.2		96.5	61728	
24 Perfluorooctane Sulfonamide										
498.0 > 78.0	12.984	12.994	-0.010	1.000	1831193	58.0		116	15825	
39 Perfluorodecane Sulfonic acid										
599.0 > 80.0	13.015	13.032	-0.017	1.000	256268	51.7		107		
25 Perfluorodecane Sulfonate										
599.0 > 80.0	13.015	13.032	-0.017	1.000	256268	NC			34395	
D 26 13C2 PFUnA										
565.0 > 520.0	13.067	13.079	-0.012		236436	42.9		85.8	16577	
27 Perfluoroundecanoic acid										
563.0 > 519.0	13.067	13.082	-0.015	1.000	349458	58.5		117	2228	
D 28 13C2 PFDaA										
615.0 > 570.0	13.657	13.667	-0.010		366895	51.2		102	12390	
29 Perfluorododecanoic acid										
613.0 > 569.0	13.657	13.667	-0.010	1.000	366054	48.9		97.9	208	
30 Perfluorotridecanoic acid										
663.0 > 619.0	14.159	14.166	-0.007	1.000	568306	52.4		105	285	
D 33 13C2-PFTeDA										
715.0 > 670.0	14.583	14.589	-0.006		493784	47.1		94.1	29324	
32 Perfluorotetradecanoic acid										
713.0 > 669.0	14.576	14.590	-0.014	1.000	526783	44.7		89.5	369	
34 Perfluorohexadecanoic acid										
813.0 > 769.0	15.175	15.179	-0.004	1.000	1122646	45.1		90.2	2423	
D 35 13C2-PFHxDA										
815.0 > 770.0	15.175	15.180	-0.005		1069380	49.8		99.7	13918	

Signal	RT	EXP RT	DLT RT	REL RT	Response	Amount ng/ml	Ratio(Limits)	%Rec	S/N	Flags
36 Perfluorooctadecanoic acid										
913.0 > 869.0	15.451	15.450	0.001	1.000	1299142	43.5		87.0	2197	

QC Flag Legend

Processing Flags

NC - Not Calibrated

E - Exceeded Maximum Amount

Reagents:

LCPFC-L5_00018

Amount Added: 1.00

Units: mL

TestAmerica Sacramento

Data File: \\ChromNA\Sacramento\ChromData\A6\20160524-31021.b\24MAY2016A6A_052.d

Injection Date: 25-May-2016 10:08:09

Instrument ID: A6

Lims ID: CCV L5

Client ID:

Operator ID: JRB

ALS Bottle#: 13

Worklist Smp#: 52

Injection Vol: 15.0 ul

Dil. Factor: 1.0000

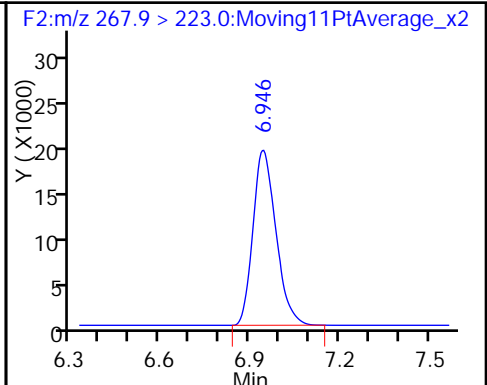
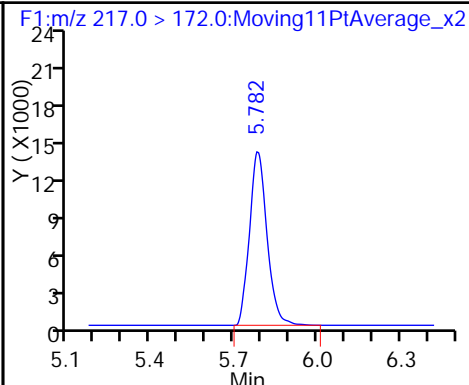
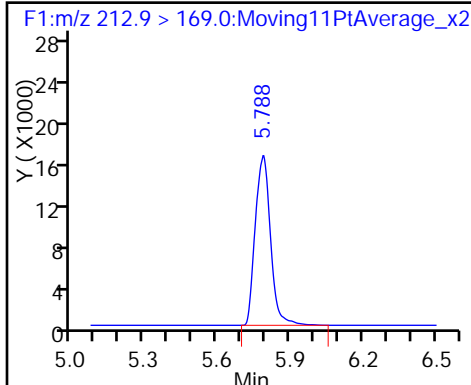
Method: PFAC_A6

Limit Group: LC PFC_DOD ICAL

2 Perfluorobutyric acid

D 1 13C4 PFBA

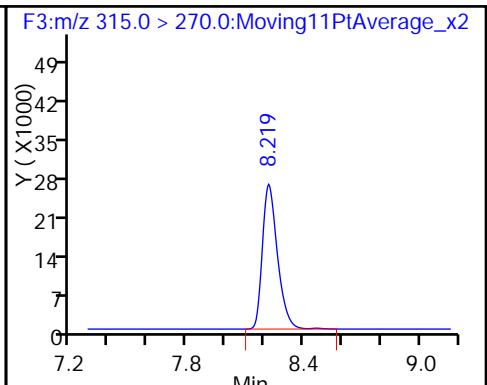
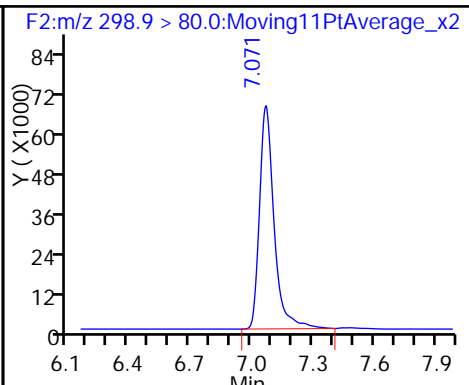
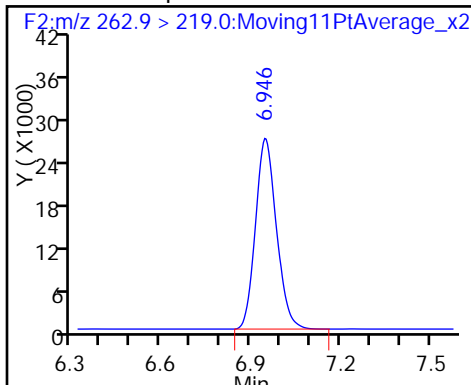
D 3 13C5-PFPeA



4 Perfluoropentanoic acid

40 Perfluorobutanesulfonic acid

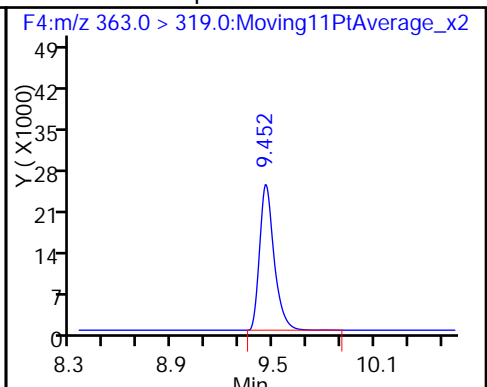
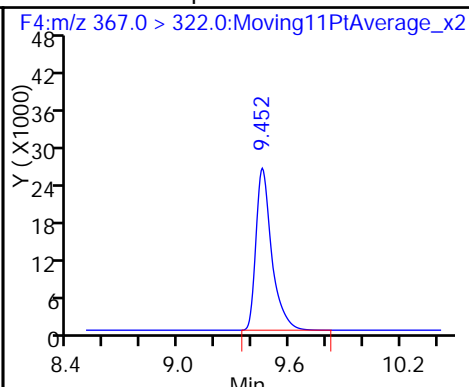
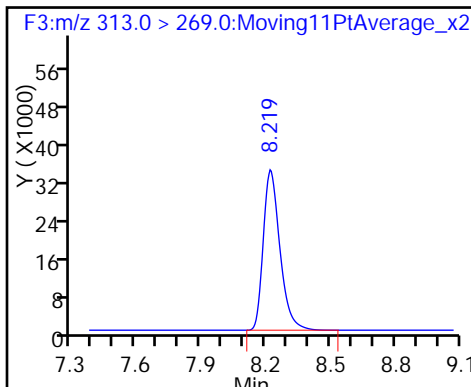
D 6 13C2 PFHxA



7 Perfluorohexanoic acid

D 8 13C4-PFHpA

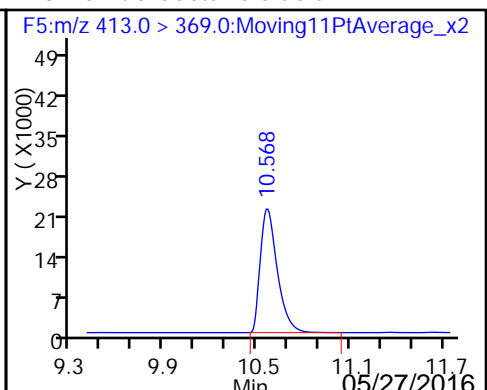
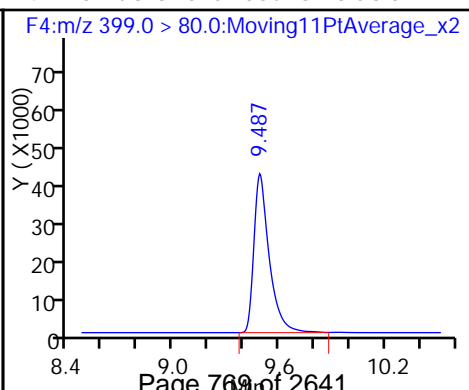
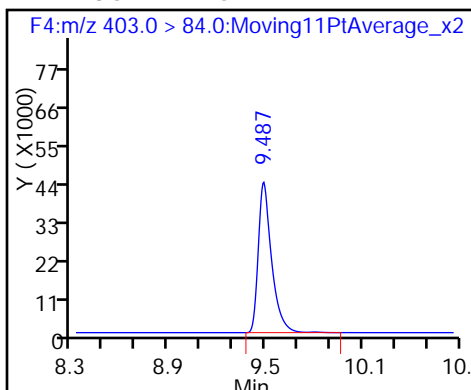
9 Perfluoroheptanoic acid

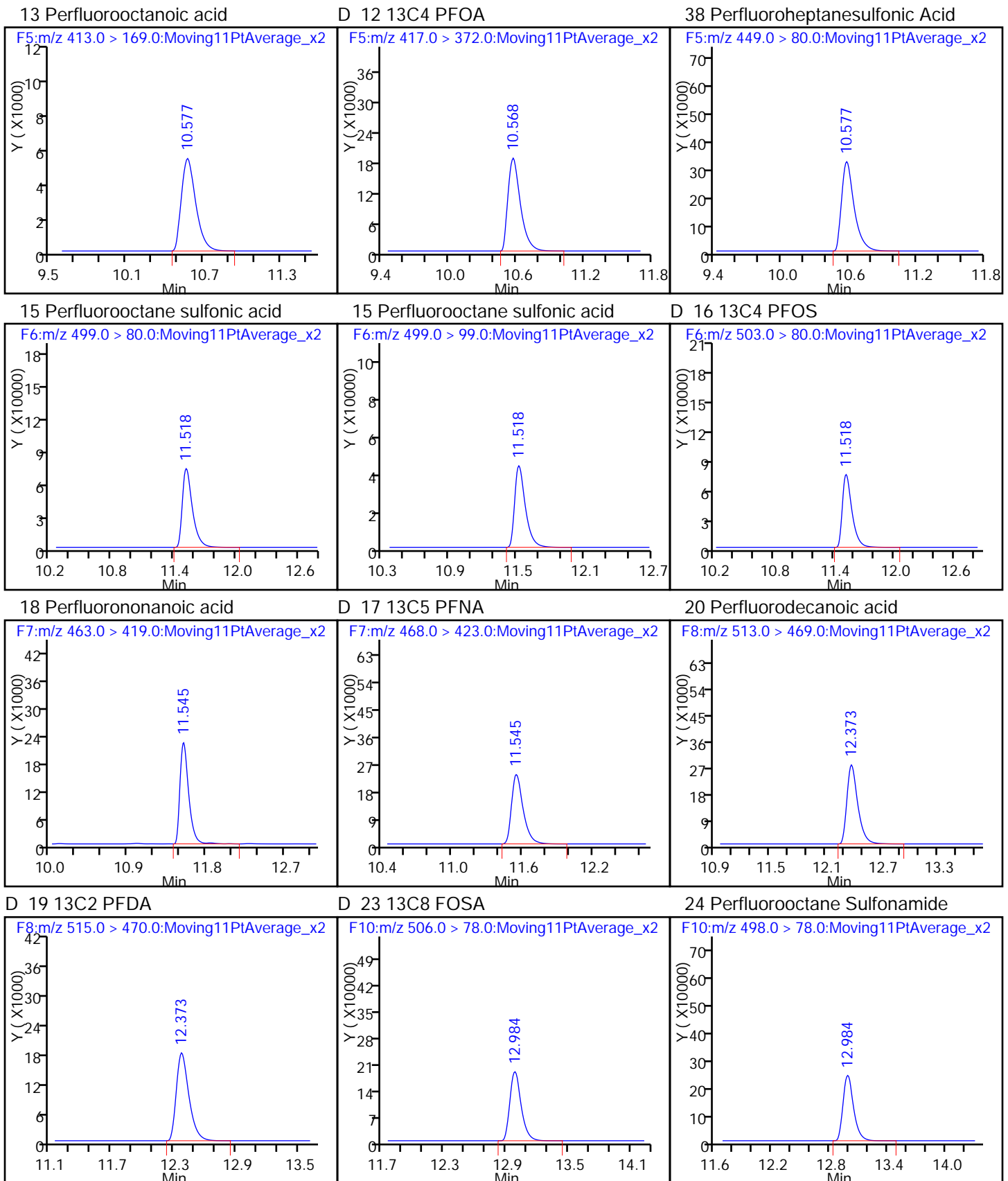


D 11 18O2 PFHxS

41 Perfluorohexanesulfonic acid

13 Perfluorooctanoic acid

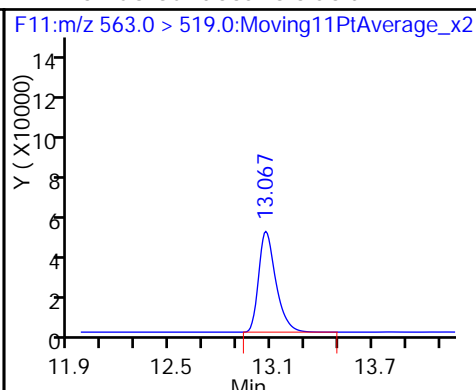
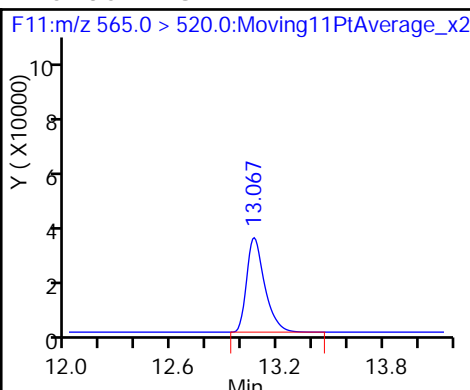
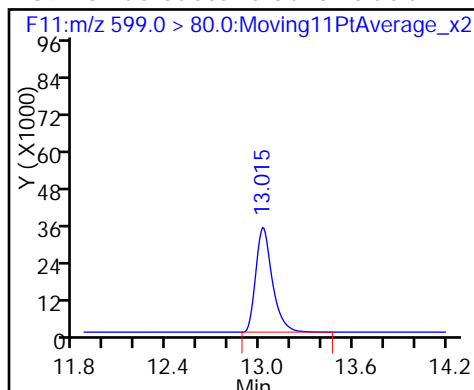




39 Perfluorodecane Sulfonic acid

D 26 13C2 PFUnA

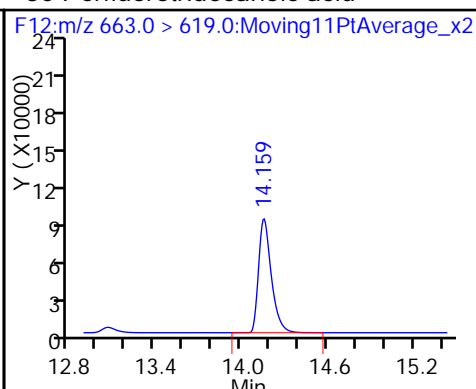
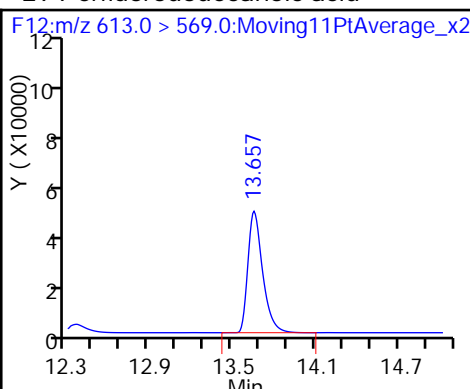
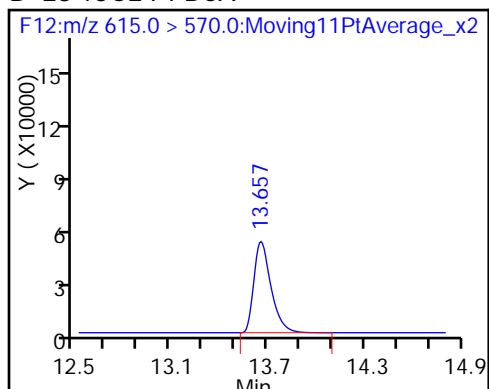
27 Perfluoroundecanoic acid



D 28 13C2 PFDaA

29 Perfluorododecanoic acid

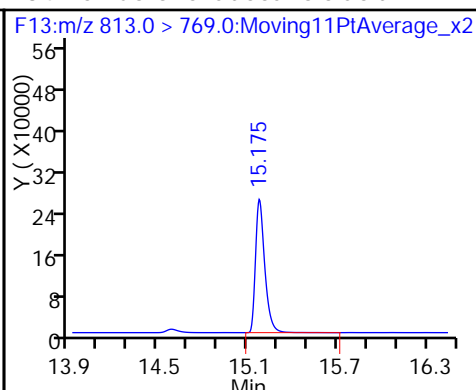
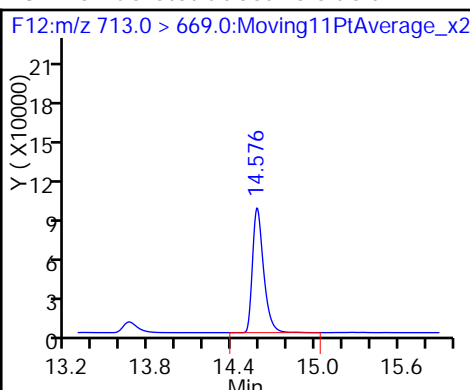
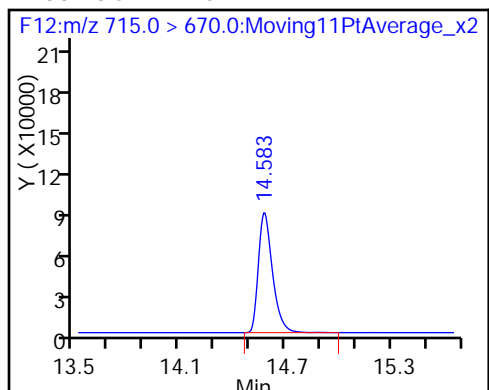
30 Perfluorotridecanoic acid



D 33 13C2-PFTeDA

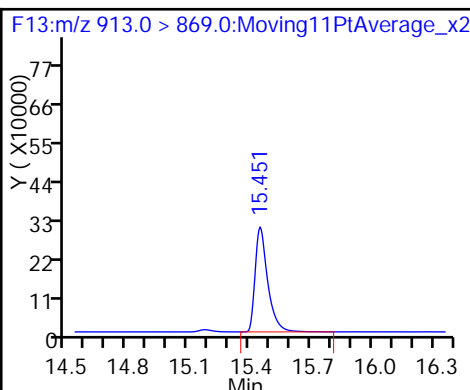
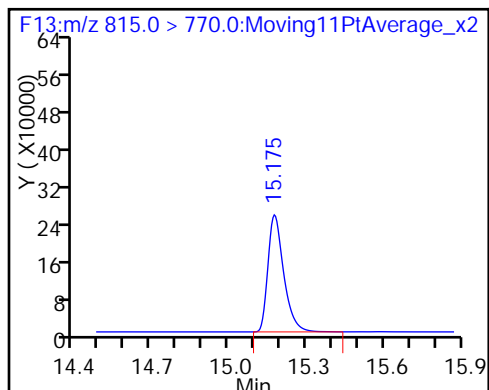
32 Perfluorotetradecanoic acid

34 Perfluorohexadecanoic acid



D 35 13C2-PFHxDA

36 Perfluorooctadecanoic acid



FORM I
LCMS ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Sacramento Job No.: 320-18796-1
SDG No.: _____
Client Sample ID: _____ Lab Sample ID: MB 320-109640/1-A RA
Matrix: Water Lab File ID: 24MAY2016A6A_041.d
Analysis Method: WS-LC-0025 Date Collected: _____
Extraction Method: 3535 Date Extracted: 05/12/2016 10:01
Sample wt/vol: 500 (mL) Date Analyzed: 05/25/2016 06:14
Con. Extract Vol.: 1.0 (mL) Dilution Factor: 1
Injection Volume: 15 (uL) GC Column: Acquity ID: 2.1 (mm)
% Moisture: _____ GPC Cleanup: (Y/N) N
Analysis Batch No.: 111182 Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	LOQ	LOD	DL
1763-23-1	Perfluorooctanesulfonic acid (PFOS)	0.00136	J M	0.0040	0.0030	0.0013

TestAmerica Sacramento
Target Compound Quantitation Report

Data File: \\ChromNA\Sacramento\ChromData\A6\20160524-31021.b\24MAY2016A6A_041.d
 Lims ID: MB 320-109640/1-A
 Client ID:
 Sample Type: MB
 Inject. Date: 25-May-2016 06:14:13 ALS Bottle#: 21 Worklist Smp#: 41
 Injection Vol: 15.0 ul Dil. Factor: 1.0000
 Sample Info: MB 320-109640/1-A BOX 74
 Misc. Info.: Acquity BEH 1.7um, 3X150mm T=50°C
 Operator ID: JRB Instrument ID: A6
 Method: \\ChromNA\Sacramento\ChromData\A6\20160524-31021.b\PFAC_A6.m
 Limit Group: LC PFC_DOD ICAL
 Last Update: 26-May-2016 16:14:19 Calib Date: 24-May-2016 19:14:42
 Integrator: Picker
 Quant Method: Isotopic Dilution Quant By: Initial Calibration
 Last ICal File: \\ChromNA\Sacramento\ChromData\A6\20160524-31021.b\24MAY2016A6A_010.d
 Column 1 : Acquity BEH C18 (2.10 mm) Det: F1:MRM
 Process Host: XAWRK003

First Level Reviewer: barnettj

Date: 26-May-2016 16:10:01

Signal	RT	EXP RT	DLT RT	REL RT	Response	Amount ng/ml	Ratio(Limits)	%Rec	S/N	Flags
D 1 13C4 PFBA										
217.0 > 172.0	5.797	5.796	0.001		69081	56.7		113	1631	
D 3 13C5-PFPeA										
267.9 > 223.0	6.941	6.946	-0.005		138144	58.3		117	14558	
D 6 13C2 PFHxA										
315.0 > 270.0	8.219	8.223	-0.004		203133	59.1		118	18010	
D 8 13C4-PFHpA										
367.0 > 322.0	9.458	9.459	-0.001		178411	49.5		98.9	15883	
D 11 18O2 PFHxS										
403.0 > 84.0	9.493	9.494	-0.001		304884	55.2		117	26324	
D 12 13C4 PFOA										
417.0 > 372.0	10.559	10.577	-0.018		223895	61.7		123	14565	
15 Perfluorooctane sulfonic acid										M
499.0 > 80.0	11.510	11.524	-0.014	1.000	7583	0.6791			482	M
499.0 > 99.0	11.519	11.524	-0.005	1.001	3568		2.13(0.00-0.00)		269	
D 16 13C4 PFOS										
503.0 > 80.0	11.519	11.524	-0.005		573036	57.6		120	42601	
D 17 13C5 PFNA										
468.0 > 423.0	11.545	11.551	-0.006		228847	66.5		133	16034	
D 19 13C2 PFDA										
515.0 > 470.0	12.362	12.380	-0.018		258590	60.5		121	6272	
D 23 13C8 FOSA										
506.0 > 78.0	12.984	12.993	-0.009		547281	18.6		37.2	35785	
D 26 13C2 PFUnA										
565.0 > 520.0	13.066	13.079	-0.013		342552	62.2		124	24006	
27 Perfluoroundecanoic acid										
563.0 > 519.0	13.066	13.082	-0.016	1.000	3562	-0.0945			56.9	
D 28 13C2 PFDaA										
615.0 > 570.0	13.655	13.667	-0.012		482662	67.4		135	33116	

Signal	RT	EXP RT	DLT RT	REL RT	Response	Amount ng/ml	Ratio(Limits)	%Rec	S/N	Flags
D 33 13C2-PFTeDA										
715.0 > 670.0	14.575	14.589	-0.014		649046	61.9		124	59775	
32 Perfluorotetradecanoic acid										
713.0 > 669.0	14.568	14.590	-0.022	1.000	3393	0.0566			3.1	
34 Perfluorohexadecanoic acid										
813.0 > 769.0	15.168	15.179	-0.011	1.000	29634	-0.1494			72.9	
D 35 13C2-PFHxDA										
815.0 > 770.0	15.173	15.180	-0.007		1152117	53.7		107	22334	

QC Flag Legend

Review Flags

M - Manually Integrated

TestAmerica Sacramento

Data File: \\ChromNA\Sacramento\ChromData\A6\20160524-31021.b\24MAY2016A6A_041.d

Injection Date: 25-May-2016 06:14:13

Instrument ID: A6

Lims ID: MB 320-109640/1-A

Client ID:

Operator ID: JRB

ALS Bottle#: 21

Worklist Smp#: 41

Injection Vol: 15.0 ul

Dil. Factor: 1.0000

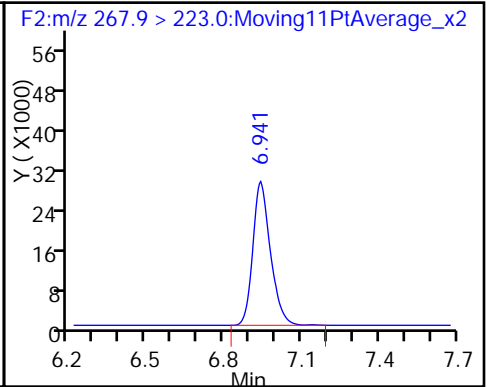
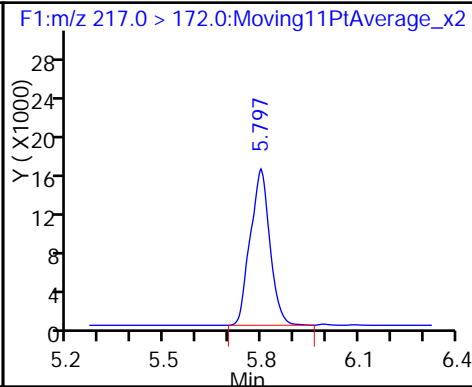
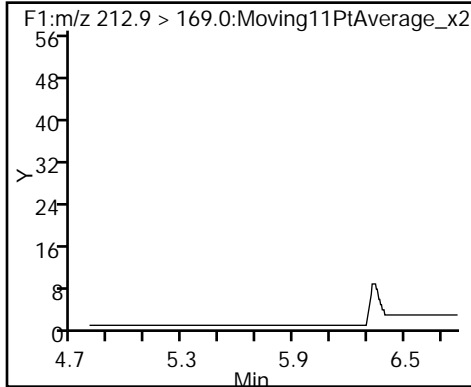
Method: PFAC_A6

Limit Group: LC PFC_DOD ICAL

2 Perfluorobutyric acid (ND)

D 1 13C4 PFBA

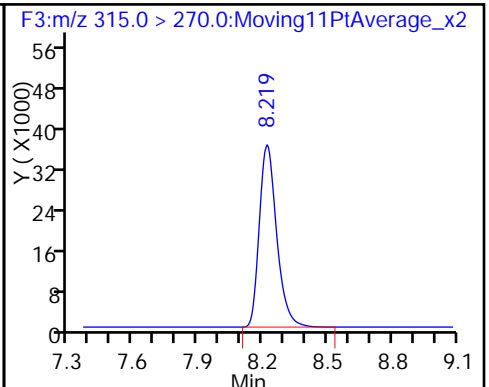
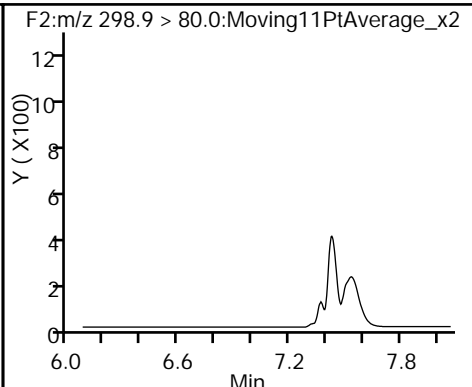
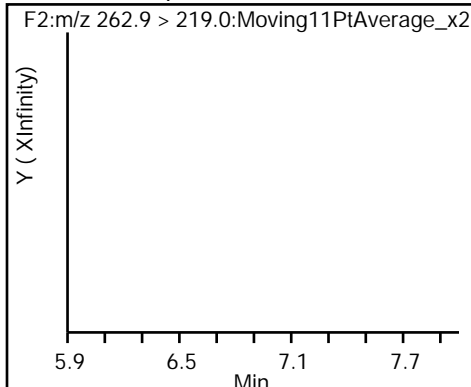
D 3 13C5-PFPeA



4 Perfluoropentanoic acid (ND)

40 Perfluorobutanesulfonic acid (ND)

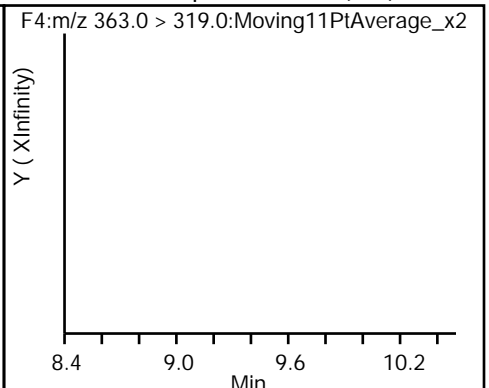
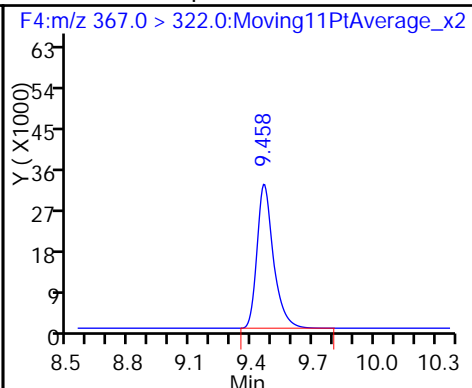
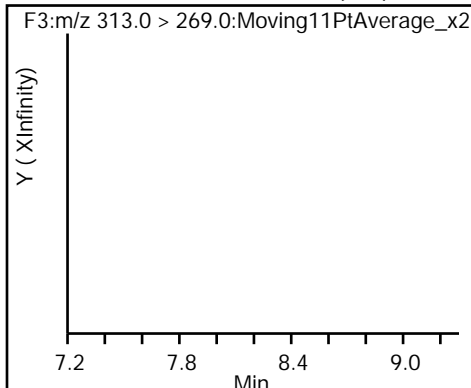
D 6 13C2 PFHxA



7 Perfluorohexanoic acid (ND)

D 8 13C4-PFHpA

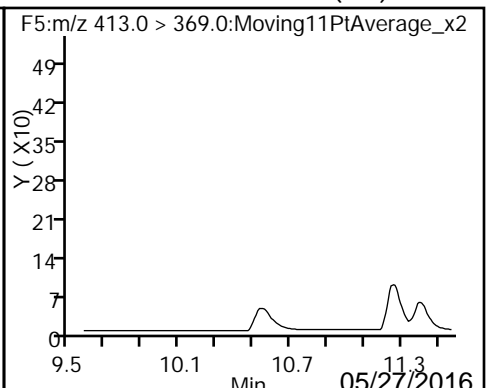
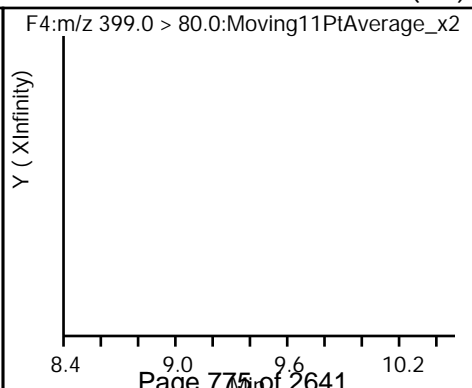
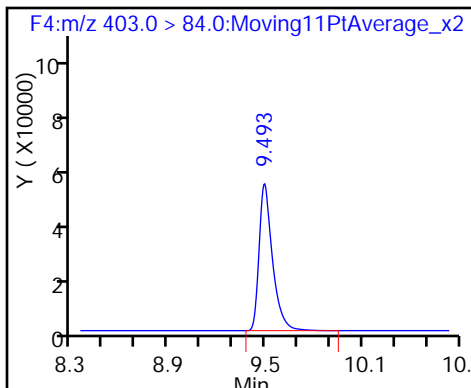
9 Perfluoroheptanoic acid (ND)

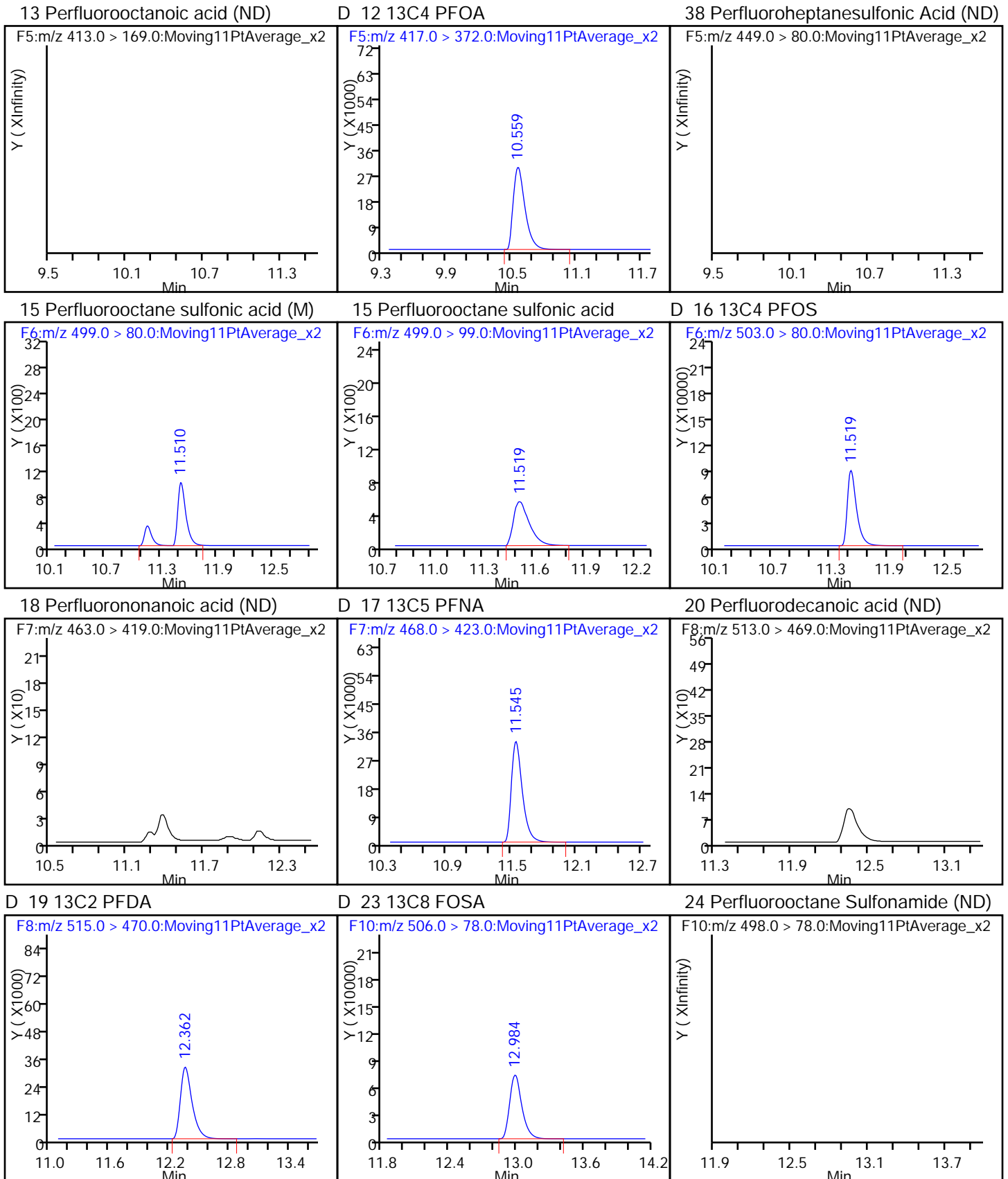


D 11 18O2 PFHxS

41 Perfluorohexanesulfonic acid (ND)

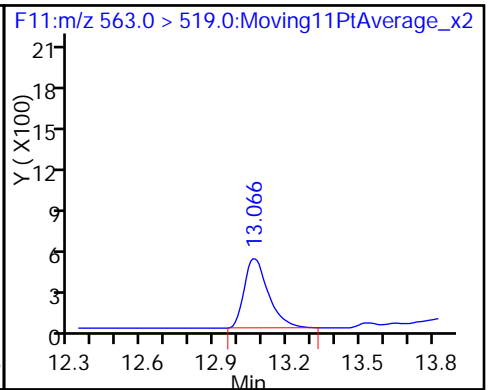
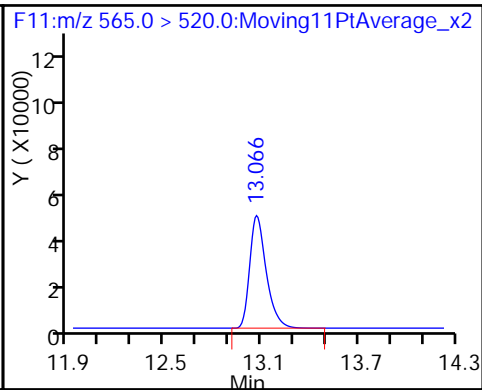
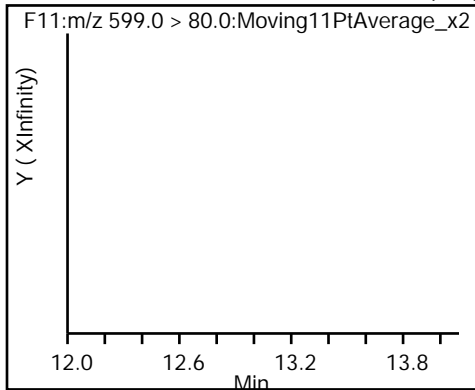
13 Perfluorooctanoic acid (ND)





39 Perfluorodecane Sulfonic acid (ND) D 26 13C2 PFUnA

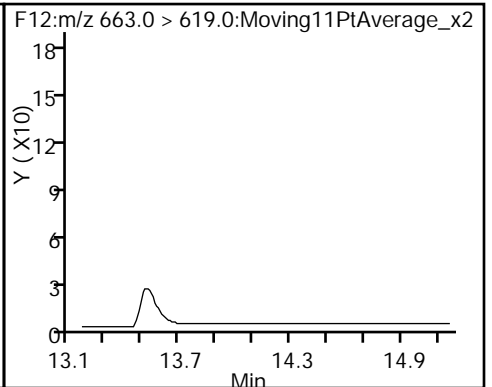
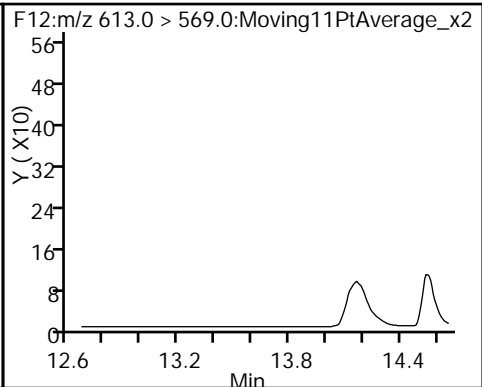
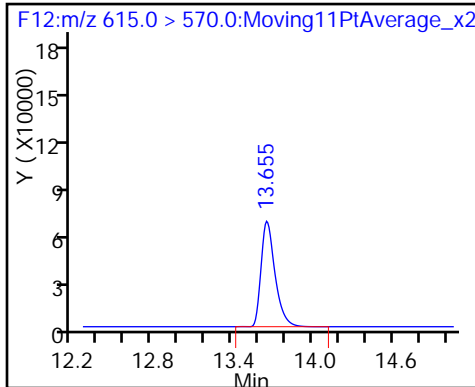
27 Perfluoroundecanoic acid



D 28 13C2 PFDaA

29 Perfluorododecanoic acid (ND)

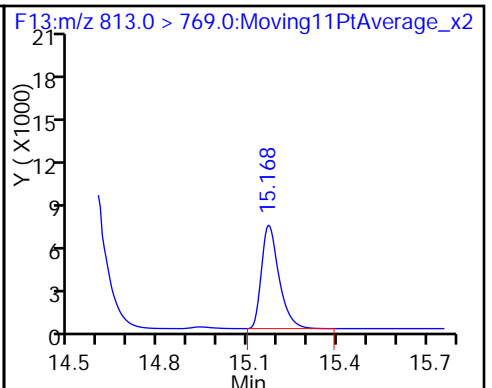
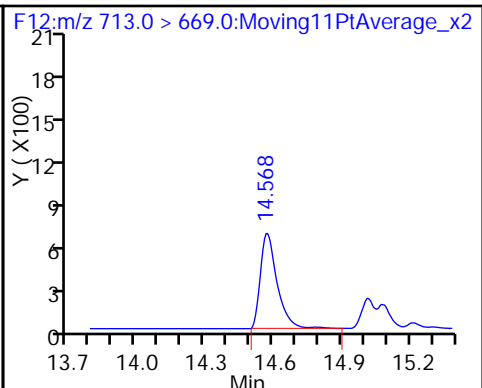
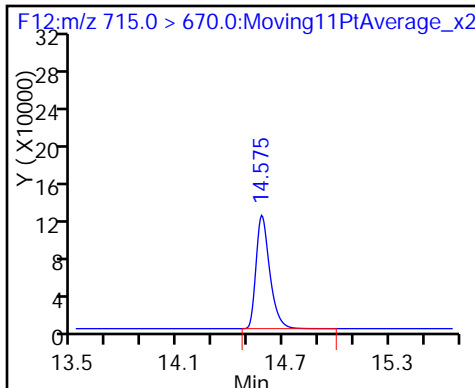
30 Perfluorotridecanoic acid (ND)



D 33 13C2-PFTeDA

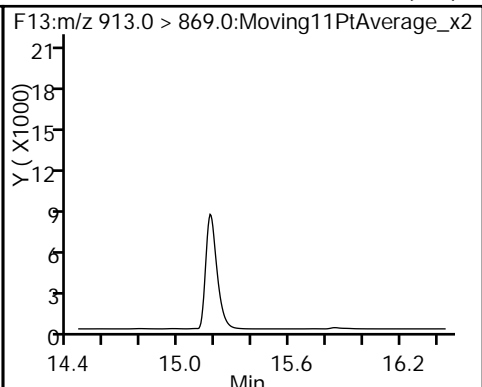
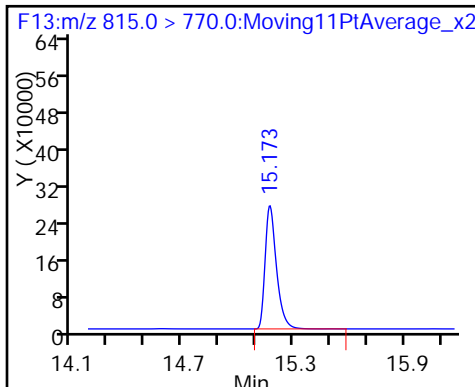
32 Perfluorotetradecanoic acid

34 Perfluorohexadecanoic acid



D 35 13C2-PFHxDA

36 Perfluorooctadecanoic acid (ND)



TestAmerica Sacramento

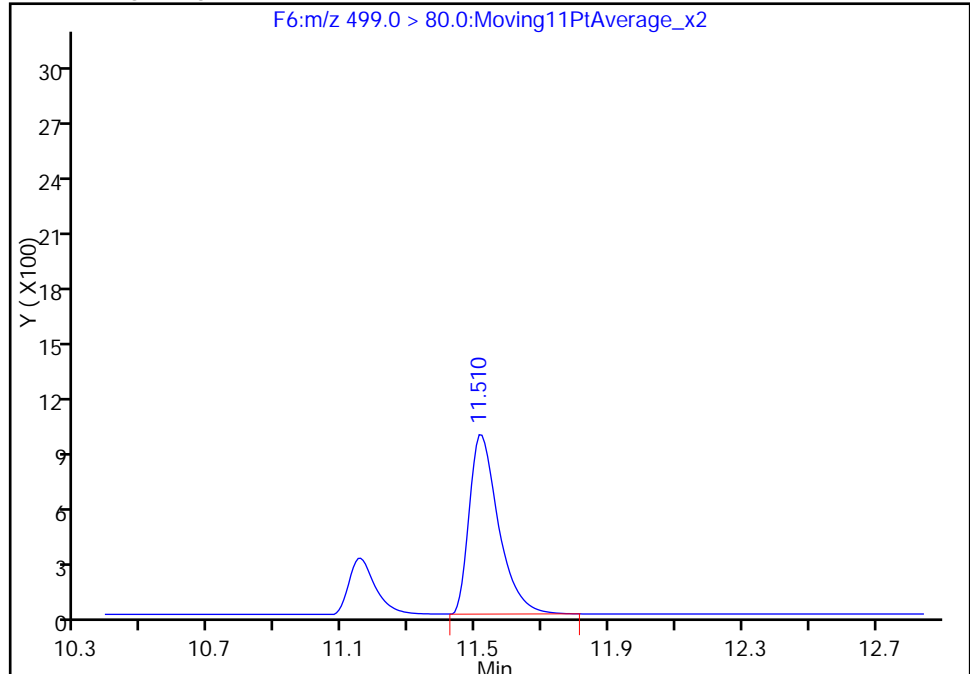
Data File: \\ChromNA\Sacramento\ChromData\A6\20160524-31021.b\24MAY2016A6A_041.d
Injection Date: 25-May-2016 06:14:13 Instrument ID: A6
Lims ID: MB 320-109640/1-A
Client ID:
Operator ID: JRB ALS Bottle#: 21 Worklist Smp#: 41
Injection Vol: 15.0 ul Dil. Factor: 1.0000
Method: PFAC_A6 Limit Group: LC PFC_DOD ICAL
Column: Acquity BEH C18 (2.10 mm) Detector F6:MRM

15 Perfluorooctane sulfonic acid, CAS: 1763-23-1

Signal: 1

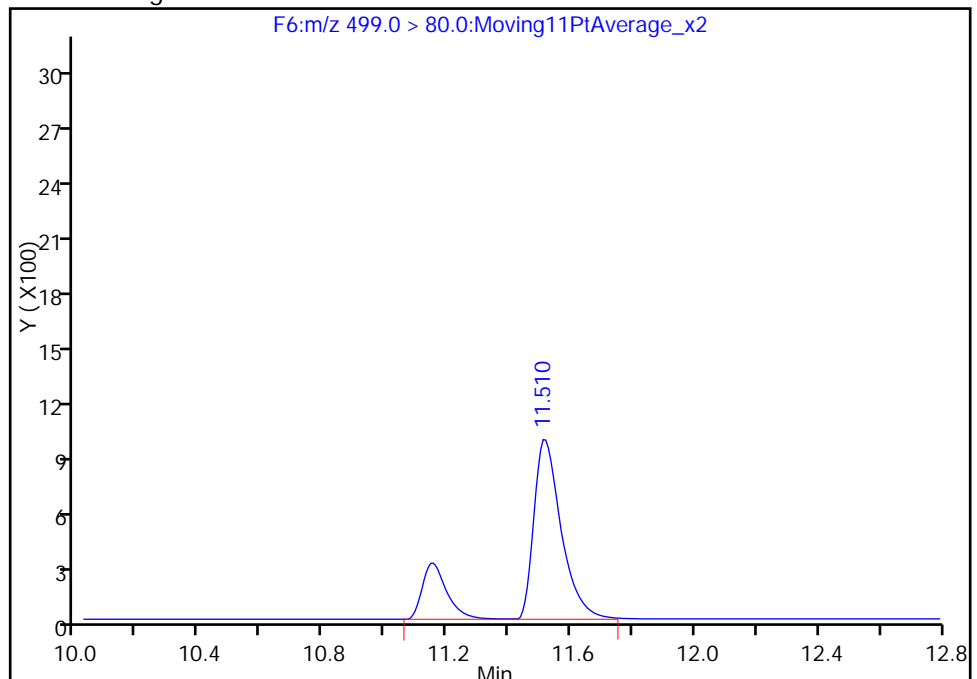
RT: 11.51
Area: 5887
Amount: 0.527233
Amount Units: ng/ml

Processing Integration Results



RT: 11.51
Area: 7583
Amount: 0.679125
Amount Units: ng/ml

Manual Integration Results



Reviewer: barnettj, 26-May-2016 16:10:01
Audit Action: Manually Integrated

Audit Reason: Isomers

FORM I
LCMS ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Sacramento Job No.: 320-18796-1
 SDG No.: _____
 Client Sample ID: _____ Lab Sample ID: MB 320-109640/1-A
 Matrix: Water Lab File ID: 25MAY2016B4A_041.d
 Analysis Method: WS-LC-0025 Date Collected: _____
 Extraction Method: 3535 Date Extracted: 05/12/2016 10:01
 Sample wt/vol: 500 (mL) Date Analyzed: 05/26/2016 05:37
 Con. Extract Vol.: 1.0 (mL) Dilution Factor: 1
 Injection Volume: 15 (uL) GC Column: Acquity ID: 2.1 (mm)
 % Moisture: _____ GPC Cleanup: (Y/N) N
 Analysis Batch No.: 111390 Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	LOQ	LOD	DL
375-85-9	Perfluoroheptanoic acid (PFHpA)	0.0020	U	0.0025	0.0020	0.00080
335-67-1	Perfluorooctanoic acid (PFOA)	0.0020	U	0.0025	0.0020	0.00075
375-95-1	Perfluorononanoic acid (PFNA)	0.0020	U	0.0025	0.0020	0.00065
375-73-5	Perfluorobutanesulfonic acid (PFBS)	0.0020	U	0.0025	0.0020	0.00092
355-46-4	Perfluorohexanesulfonic acid (PFHxS)	0.0020	U	0.0025	0.0020	0.00087

CAS NO.	ISOTOPE DILUTION	%REC	Q	LIMITS
STL00994	18O2 PFHxS	115		25-150
STL00995	13C5 PFNA	129		25-150
STL00990	13C4 PFOA	142		25-150
STL01892	13C4-PFHpA	128		25-150

TestAmerica Sacramento
Target Compound Quantitation Report

Data File: \\ChromNA\Sacramento\ChromData\A4\20160525-31065.b\25MAY2016B4A_041.d
 Lims ID: MB 320-109640/1-A
 Client ID:
 Sample Type: MB
 Inject. Date: 26-May-2016 05:37:03 ALS Bottle#: 21 Worklist Smp#: 41
 Injection Vol: 15.0 ul Dil. Factor: 1.0000
 Sample Info: mb 320-109640/1-a BOX 74
 Misc. Info.: Acquity BEH C18,1.7u, 3X150mm,T=35C
 Operator ID: JRB Instrument ID: A4
 Method: \\ChromNA\Sacramento\ChromData\A4\20160525-31065.b\PFAC_A4.m
 Limit Group: LC PFC_DOD ICAL
 Last Update: 26-May-2016 16:00:59 Calib Date: 25-May-2016 19:01:43
 Integrator: Picker
 Quant Method: Isotopic Dilution Quant By: Initial Calibration
 Last ICal File: \\ChromNA\Sacramento\ChromData\A4\20160525-31065.b\25MAY2016B4A_011.d
 Column 1 : Det: F1:MRM
 Process Host: XAWRK003

First Level Reviewer: barnettj

Date: 26-May-2016 16:00:59

Signal	RT	EXP RT	DLT RT	REL RT	Response	Amount ng/ml	Ratio(Limits)	%Rec	S/N	Flags
2 Perfluorobutyric acid										
212.7 > 168.6	5.787	5.798	-0.011	1.000	10836	0.1219			29.8	
D 1 13C4 PFBA										
216.7 > 171.5	5.794	5.798	-0.004		6927401	82.0		164	24839	
D 3 13C5-PFPeA										
267.6 > 222.7	6.904	6.907	-0.003		5068532	66.1		132	9216	
4 Perfluoropentanoic acid										
262.9 > 218.7	6.890	6.910	-0.020	1.000	12085	0.2347			5.2	
D 6 13C2 PFHxA										
314.6 > 269.7	8.149	8.156	-0.007		6477431	78.0		156	15217	
7 Perfluorohexanoic acid										
312.9 > 268.7	8.144	8.157	-0.013	1.000	25684	0.2603			122	
D 8 13C4-PFHpA										
366.6 > 321.6	9.380	9.387	-0.007		5466328	63.9		128	7477	
10 Perfluorohexane Sulfonate										
398.3 > 79.2	9.404	9.421	-0.017	1.000	10032	NC			19.6	
58 Perfluorohexanesulfonic acid										
398.3 > 79.2	9.404	9.421	-0.017	1.000	10032	0.1718				
D 11 18O2 PFHxS										
402.5 > 83.6	9.412	9.422	-0.010		1615970	54.4		115	4515	
D 12 13C4 PFOA										
416.5 > 371.6	10.493	10.503	-0.010		6311963	70.8		142	11833	
13 Perfluorooctanoic acid										
412.8 > 368.8	10.502	10.504	-0.002	1.000	4959	0.0158			11.4	
D 16 13C4 PFOS										
502.4 > 79.7	11.461	11.465	-0.004		226173	33.5		70.1	868	

Signal	RT	EXP RT	DLT RT	REL RT	Response	Amount ng/ml	Ratio(Limits)	%Rec	S/N	Flags
15 Perfluorooctane sulfonic acid										M
498.3 > 79.2	11.461	11.466	-0.005	1.000	131359	2.64			316	M
498.3 > 98.2	11.452	11.466	-0.014	0.999	68840		1.91(0.00-0.00)		197	M
D 17 13C5 PFNA										
467.5 > 422.6	11.480	11.484	-0.004		5067365	64.6		129	6891	
D 19 13C2 PFDA										
514.4 > 469.5	12.315	12.325	-0.010		7010760	70.2		140	7400	
20 Perfluorodecanoic acid										
512.5 > 468.5	12.315	12.325	-0.010	1.000	11939	0.0820			23.4	
D 23 13C8 FOSA										
505.4 > 77.6	12.888	12.893	-0.005		1932221	20.0		40.0	2704	
27 Perfluoroundecanoic acid										
562.4 > 518.5	13.034	13.042	-0.008	1.000	22032	0.1241			29.8	
D 26 13C2 PFUnA										
564.3 > 519.5	13.034	13.044	-0.010		7527287	74.2		148	8373	
D 28 13C2 PFDoA										
614.4 > 569.4	13.644	13.646	-0.002		7423404	70.4		141	4180	
29 Perfluorododecanoic acid										
612.4 > 568.6	13.632	13.646	-0.014	1.000	4954	0.0366			2.5	
30 Perfluorotridecanoic acid										
662.4 > 618.5	14.154	14.162	-0.008	1.000	5428	0.0588			3.2	
32 Perfluorotetradecanoic acid										
712.6 > 668.5	14.593	14.600	-0.007	1.000	19487	0.3988			9.1	
D 33 13C2-PFTeDA										
714.5 > 669.5	14.593	14.601	-0.008		4503767	59.3		119	4131	
D 35 13C2-PFHxDA										
814.8 > 769.6	15.252	15.255	-0.003		1434992	49.2		98.5	3126	
34 Perfluorohexadecanoic acid										
812.6 > 768.6	15.252	15.255	-0.003	1.000	86766	0.4257			13.7	

QC Flag Legend

Processing Flags

NC - Not Calibrated

Review Flags

M - Manually Integrated

TestAmerica Sacramento

Data File: \\ChromNA\Sacramento\ChromData\A4\20160525-31065.b\25MAY2016B4A_041.d

Injection Date: 26-May-2016 05:37:03

Instrument ID: A4

Lims ID: MB 320-109640/1-A

Client ID:

Operator ID: JRB

ALS Bottle#: 21

Worklist Smp#: 41

Injection Vol: 15.0 ul

Dil. Factor: 1.0000

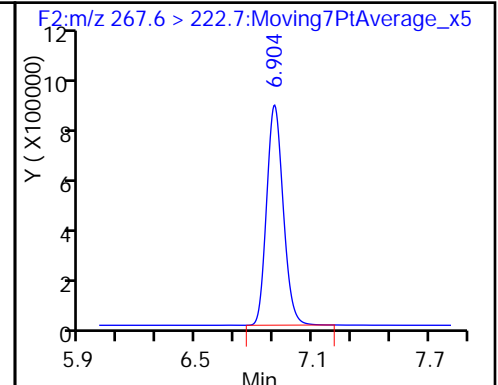
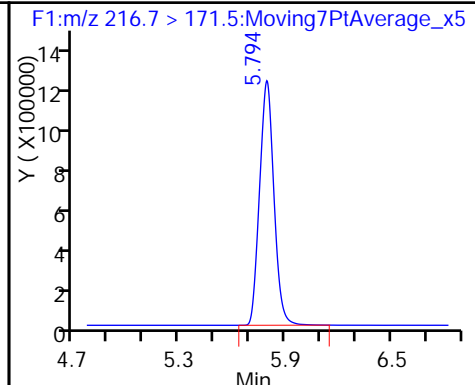
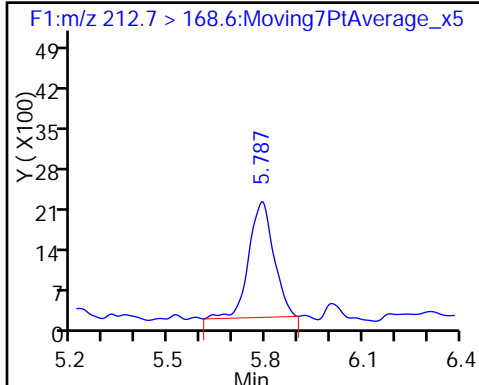
Method: PFAC_A4

Limit Group: LC PFC_DOD ICAL

2 Perfluorobutyric acid

D 1 13C4 PFBA

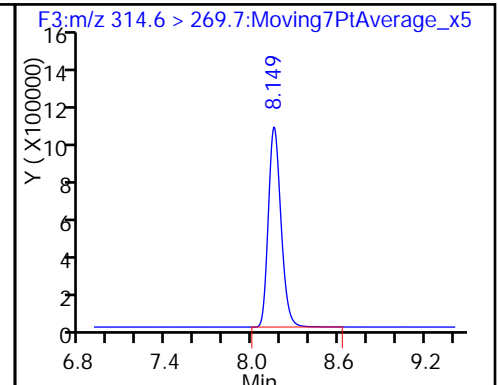
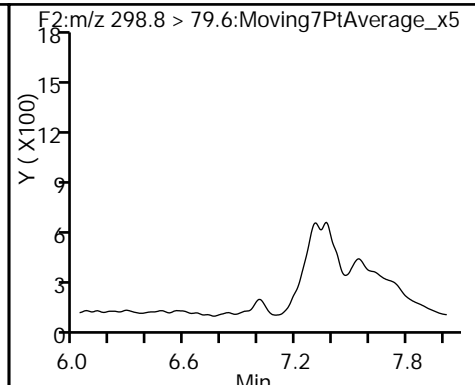
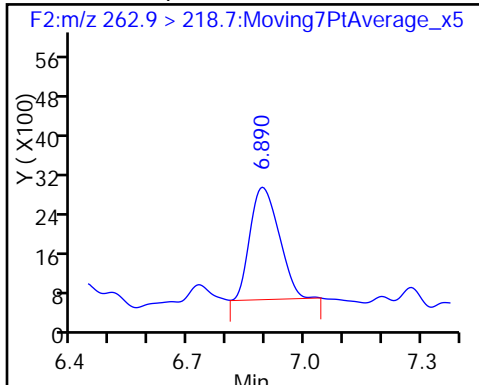
D 3 13C5-PFPeA



4 Perfluoropentanoic acid

51 Perfluorobutanesulfonic acid (ND)

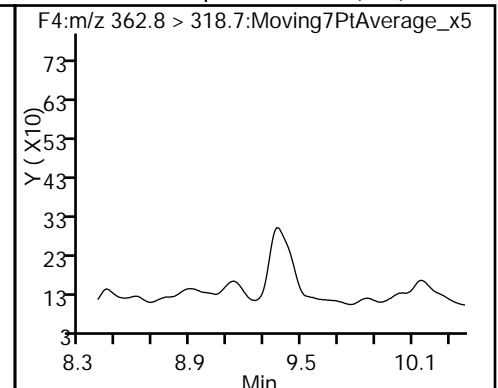
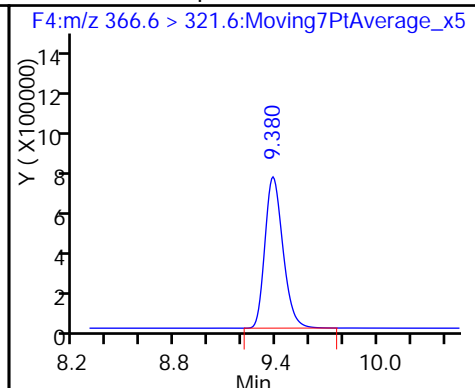
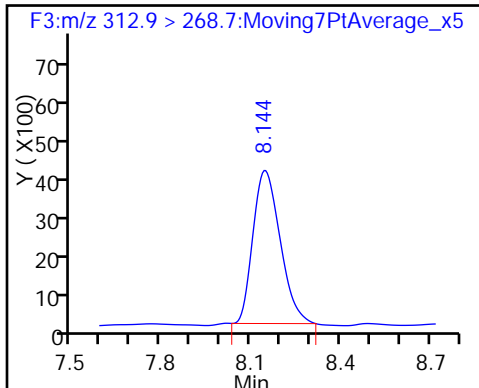
D 6 13C2 PFHxA



7 Perfluorohexanoic acid

D 8 13C4-PFHpA

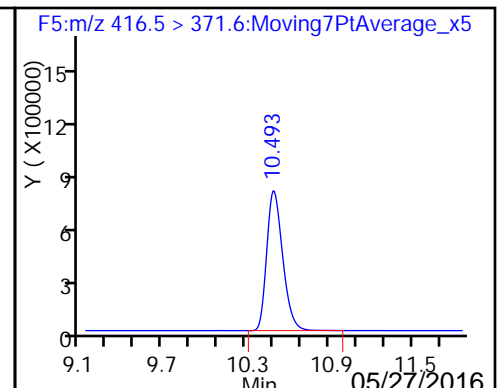
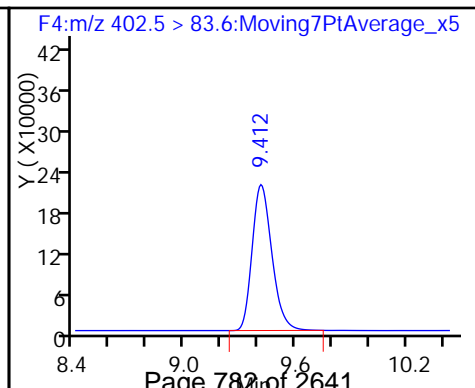
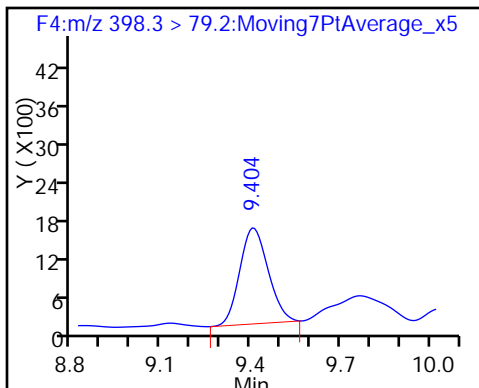
9 Perfluoroheptanoic acid (ND)



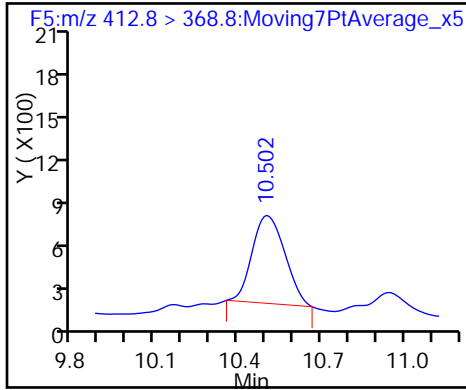
58 Perfluorohexanesulfonic acid

D 11 18O2 PFHxS

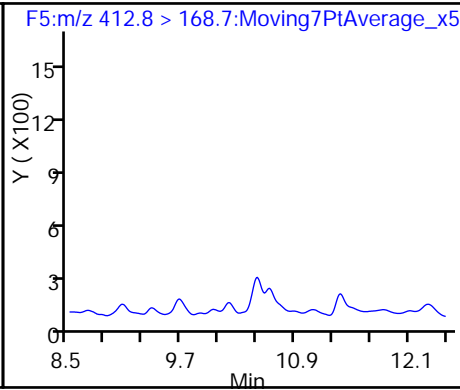
D 12 13C4 PFOA



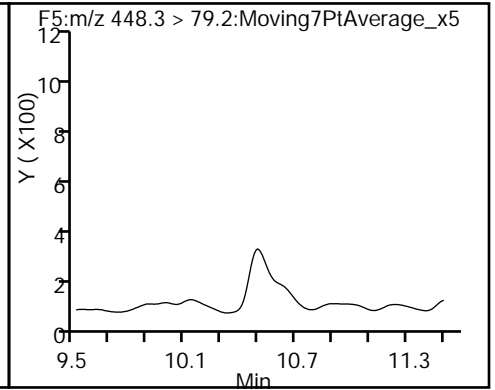
13 Perfluorooctanoic acid



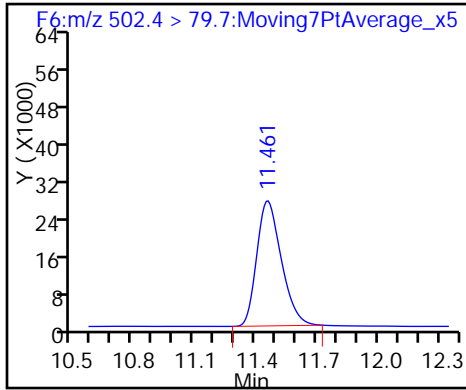
13 Perfluorooctanoic acid



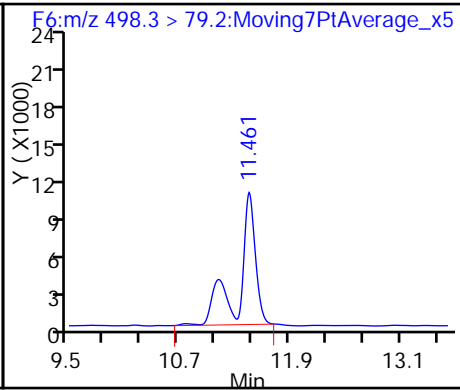
39 Perfluoroheptanesulfonic Acid (ND)



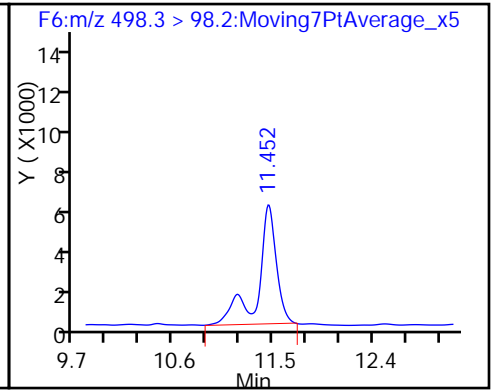
D 16 13C4 PFOS



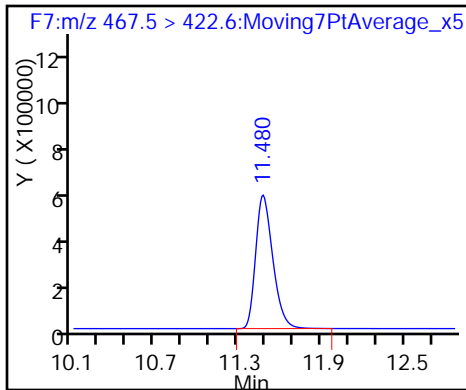
15 Perfluorooctane sulfonic acid (M)



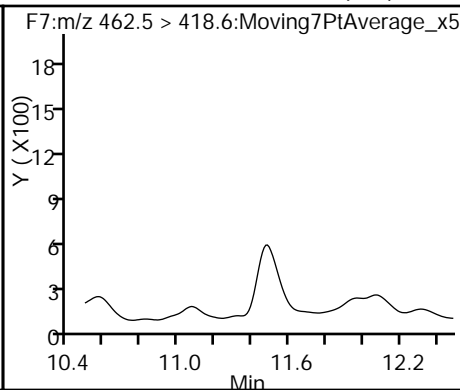
15 Perfluorooctane sulfonic acid (M)



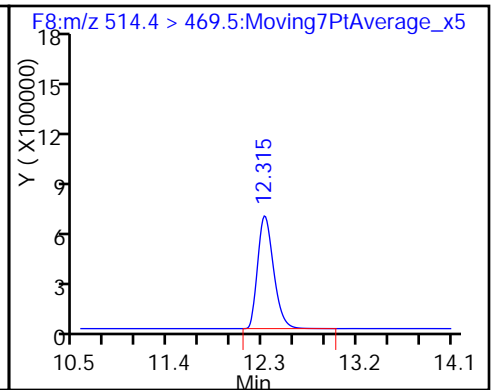
D 17 13C5 PFNA



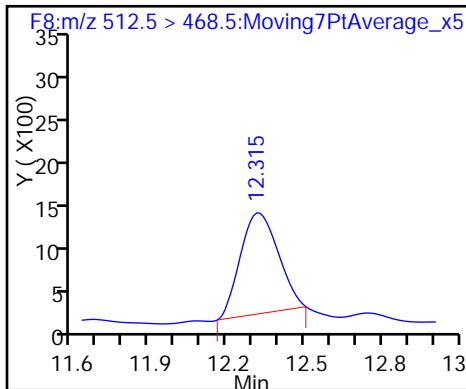
18 Perfluorononanoic acid (ND)



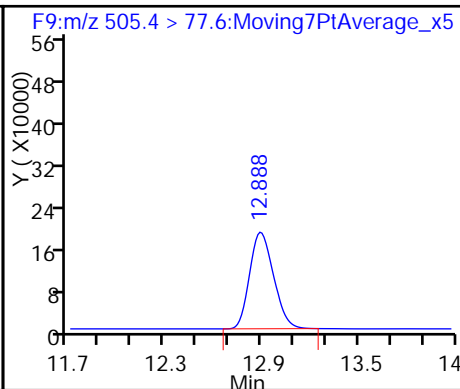
D 19 13C2 PFDA



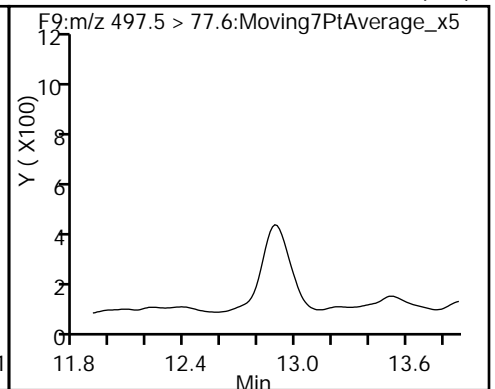
20 Perfluorodecanoic acid



D 23 13C8 FOSA



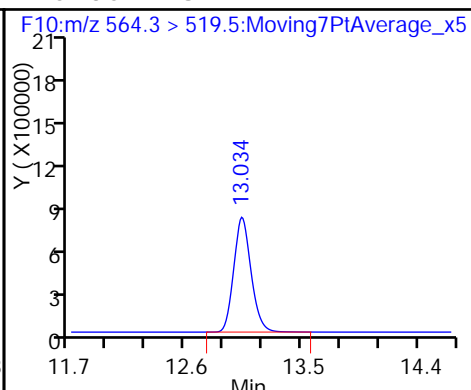
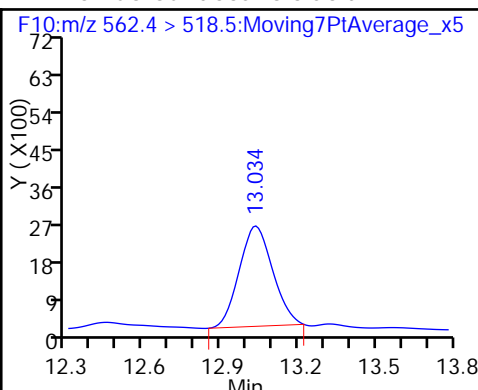
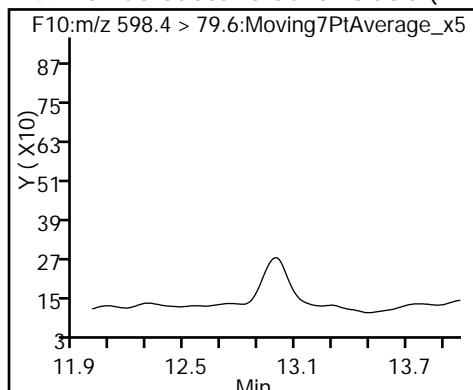
24 Perfluorooctane Sulfonamide (ND)



49 Perfluorodecane Sulfonic acid (ND)

27 Perfluoroundecanoic acid

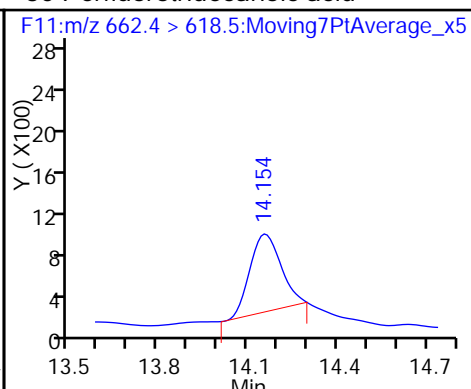
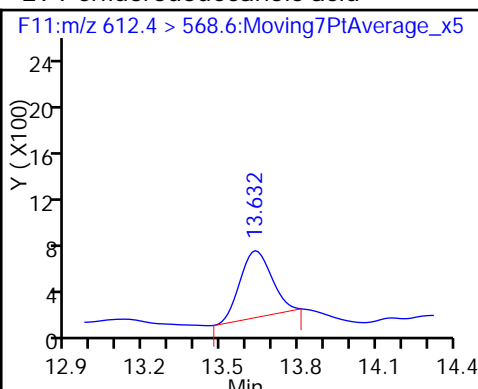
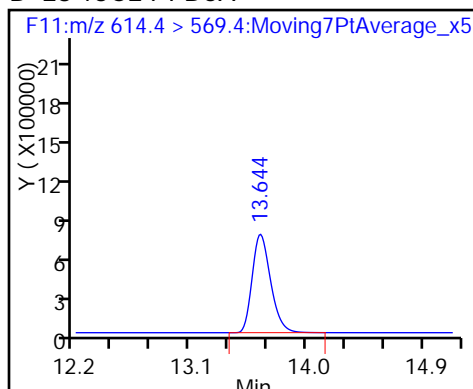
D 26 13C2 PFUnA



D 28 13C2 PFDaA

29 Perfluorododecanoic acid

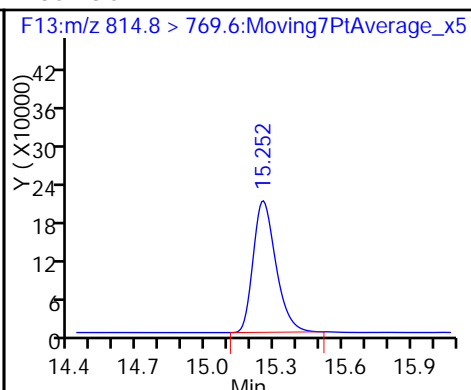
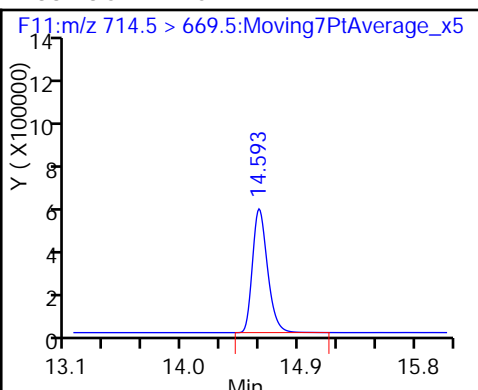
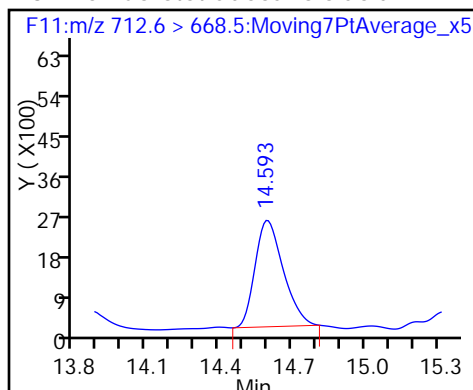
30 Perfluorotridecanoic acid



32 Perfluorotetradecanoic acid

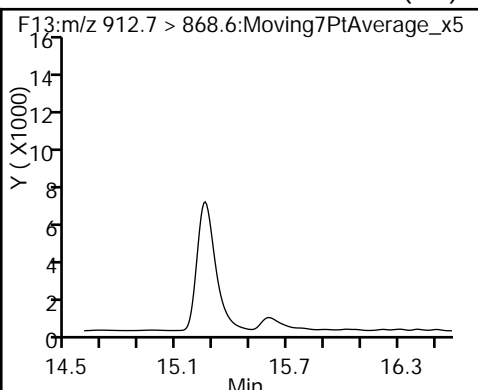
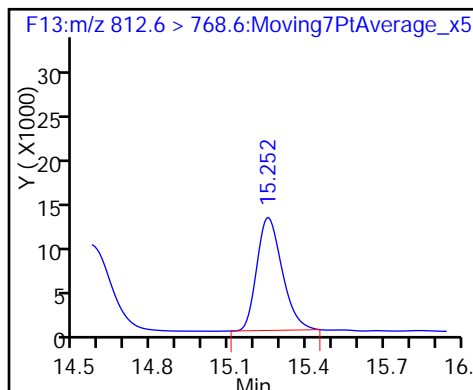
D 33 13C2-PFTeDA

D 35 13C2-PFHxDA



34 Perfluorohexadecanoic acid

36 Perfluorooctadecanoic acid (ND)



FORM I
LCMS ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Sacramento Job No.: 320-18796-1
SDG No.: _____
Client Sample ID: _____ Lab Sample ID: LCS 320-109640/2-A RA
Matrix: Water Lab File ID: 24MAY2016A6A_042.d
Analysis Method: WS-LC-0025 Date Collected: _____
Extraction Method: 3535 Date Extracted: 05/12/2016 10:01
Sample wt/vol: 500 (mL) Date Analyzed: 05/25/2016 06:35
Con. Extract Vol.: 1.0 (mL) Dilution Factor: 1
Injection Volume: 15 (uL) GC Column: Acquity ID: 2.1 (mm)
% Moisture: _____ GPC Cleanup: (Y/N) N
Analysis Batch No.: 111182 Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	LOQ	LOD	DL
375-85-9	Perfluoroheptanoic acid (PFHpA)	0.0416		0.0025	0.0020	0.00080

TestAmerica Sacramento
Target Compound Quantitation Report

Data File: \\ChromNA\Sacramento\ChromData\A6\20160524-31021.b\24MAY2016A6A_042.d
 Lims ID: LCS 320-109640/2-A
 Client ID:
 Sample Type: LCS
 Inject. Date: 25-May-2016 06:35:29 ALS Bottle#: 22 Worklist Smp#: 42
 Injection Vol: 15.0 ul Dil. Factor: 1.0000
 Sample Info: LCS 320-109640/2-A
 Misc. Info.: Acquity BEH 1.7um, 3X150mm T=50°C
 Operator ID: JRB Instrument ID: A6
 Method: \\ChromNA\Sacramento\ChromData\A6\20160524-31021.b\PFAC_A6.m
 Limit Group: LC PFC_DOD ICAL
 Last Update: 26-May-2016 16:14:19 Calib Date: 24-May-2016 19:14:42
 Integrator: Picker
 Quant Method: Isotopic Dilution Quant By: Initial Calibration
 Last ICal File: \\ChromNA\Sacramento\ChromData\A6\20160524-31021.b\24MAY2016A6A_010.d
 Column 1 : Acquity BEH C18 (2.10 mm) Det: F1:MRM
 Process Host: XAWRK003

First Level Reviewer: westendorfc

Date: 25-May-2016 09:24:47

Signal	RT	EXP RT	DLT RT	REL RT	Response	Amount ng/ml	Ratio(Limits)	%Rec	S/N	Flags
2 Perfluorobutyric acid										
212.9 > 169.0	5.794	5.791	0.003	1.000	31388	21.9		110	3478	
D 1 13C4 PFBA										
217.0 > 172.0	5.788	5.796	-0.008		59275	48.6		97.3	1857	
D 3 13C5-PFPeA										
267.9 > 223.0	6.941	6.946	-0.005		138038	58.2		116	4996	
4 Perfluoropentanoic acid										
262.9 > 219.0	6.951	6.949	0.002	1.000	55150	17.4		86.8	542	
40 Perfluorobutanesulfonic acid										
298.9 > 80.0	7.067	7.074	-0.007	1.000	182714	17.5		98.9		
5 Perfluorobutane Sulfonate										
298.9 > 80.0	7.067	7.074	-0.007	1.000	182714	NC			422	
298.9 > 99.0	7.067	7.074	-0.007	1.000	68473		2.67(0.00-0.00)		165	
D 6 13C2 PFHxA										
315.0 > 270.0	8.219	8.223	-0.004		202814	59.0		118	17994	
7 Perfluorohexanoic acid										
313.0 > 269.0	8.219	8.225	-0.006	1.000	72541	19.8		99.2	4576	
D 8 13C4-PFHpA										
367.0 > 322.0	9.452	9.459	-0.007		206070	57.1		114	18287	
9 Perfluoroheptanoic acid										
363.0 > 319.0	9.458	9.462	-0.004	1.000	92793	20.8		104	8567	
D 11 18O2 PFHxS										
403.0 > 84.0	9.487	9.494	-0.007		338477	61.2		129	9548	
10 Perfluorohexane Sulfonate										
399.0 > 80.0	9.487	9.495	-0.008	1.000	102850	NC			9215	
41 Perfluorohexanesulfonic acid										M
399.0 > 80.0	9.487	9.495	-0.008	1.000	123267	17.6		96.7		M

Signal	RT	EXP RT	DLT RT	REL RT	Response	Amount ng/ml	Ratio(Limits)	%Rec	S/N	Flags
13 Perfluorooctanoic acid										
413.0 > 369.0	10.568	10.573	-0.005	1.000	89038	19.7		98.4	1981	
413.0 > 169.0	10.568	10.573	-0.005	1.000	32125		2.77(0.00-0.00)		2126	
D 12 13C4 PFOA										
417.0 > 372.0	10.559	10.577	-0.018		212388	58.6		117	14083	
14 Perfluoroheptane Sulfonate										
449.0 > 80.0	10.568	10.585	-0.017	1.000	118052	NC			7711	
38 Perfluoroheptanesulfonic Acid										
449.0 > 80.0	10.568	10.585	-0.017	1.000	118052	18.4		96.5		
15 Perfluorooctane sulfonic acid										M
499.0 > 80.0	11.510	11.524	-0.014	1.000	201293	16.4		88.6	11760	M
499.0 > 99.0	11.510	11.524	-0.014	1.000	104406		1.93(0.00-0.00)		7071	M
D 16 13C4 PFOS										
503.0 > 80.0	11.510	11.524	-0.014		628180	63.1		132	47794	
18 Perfluorononanoic acid										
463.0 > 419.0	11.528	11.547	-0.019	1.000	85882	21.1		105	601	
D 17 13C5 PFNA										
468.0 > 423.0	11.528	11.551	-0.023		222541	64.7		129	15946	
20 Perfluorodecanoic acid										
513.0 > 469.0	12.352	12.376	-0.024	1.000	100167	19.4		97.1	5904	
D 19 13C2 PFDA										
515.0 > 470.0	12.352	12.380	-0.028		213969	50.1		100	12987	
D 23 13C8 FOSA										
506.0 > 78.0	12.984	12.993	-0.009		458069	15.6		31.1	20191	
24 Perfluorooctane Sulfonamide										
498.0 > 78.0	12.984	12.994	-0.010	1.000	234090	23.0		115	15468	
39 Perfluorodecane Sulfonic acid										
599.0 > 80.0	13.023	13.032	-0.009	1.000	122649	19.2		99.5		
25 Perfluorodecane Sulfonate										
599.0 > 80.0	13.023	13.032	-0.009	1.000	122649	NC			8536	
D 26 13C2 PFUnA										
565.0 > 520.0	13.066	13.079	-0.013		328749	59.7		119	23018	
27 Perfluoroundecanoic acid										
563.0 > 519.0	13.066	13.082	-0.016	1.000	154072	18.2		90.9	1057	
D 28 13C2 PFDaA										
615.0 > 570.0	13.664	13.667	-0.003		380314	53.1		106	25420	
29 Perfluorododecanoic acid										
613.0 > 569.0	13.664	13.667	-0.003	1.000	152886	19.7		98.6	42.3	
30 Perfluorotridecanoic acid										
663.0 > 619.0	14.158	14.166	-0.008	1.000	247354	22.0		110	294	
D 33 13C2-PFTeDA										
715.0 > 670.0	14.581	14.589	-0.008		543133	51.8		104	49250	
32 Perfluorotetradecanoic acid										
713.0 > 669.0	14.581	14.590	-0.009	1.000	208430	17.0		84.9	97.5	
34 Perfluorohexadecanoic acid										
813.0 > 769.0	15.173	15.179	-0.006	1.000	407871	15.1		75.6	862	
D 35 13C2-PFHxDA										
815.0 > 770.0	15.173	15.180	-0.007		1066679	49.7		99.4	17840	

Signal	RT	EXP RT	DLT RT	REL RT	Response	Amount ng/ml	Ratio(Limits)	%Rec	S/N	Flags
36 Perfluorooctadecanoic acid										
913.0 > 869.0	15.439	15.450	-0.011	1.000	472193	15.2		76.2	780	

QC Flag Legend

Processing Flags

NC - Not Calibrated

Review Flags

M - Manually Integrated

TestAmerica Sacramento

Data File: \\ChromNA\Sacramento\ChromData\A6\20160524-31021.b\24MAY2016A6A_042.d

Injection Date: 25-May-2016 06:35:29

Instrument ID: A6

Lims ID: LCS 320-109640/2-A

Client ID:

Operator ID: JRB

ALS Bottle#: 22

Worklist Smp#: 42

Injection Vol: 15.0 ul

Dil. Factor: 1.0000

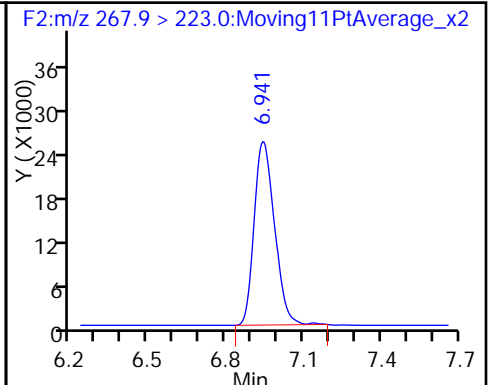
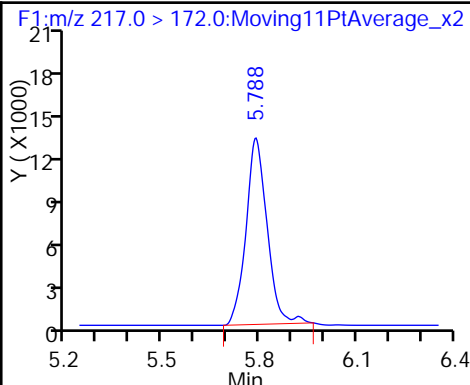
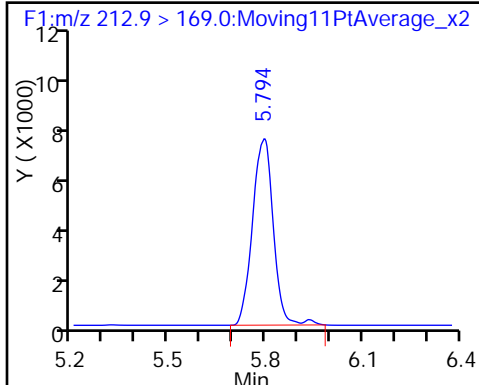
Method: PFAC_A6

Limit Group: LC PFC_DOD ICAL

2 Perfluorobutyric acid

D 1 13C4 PFBA

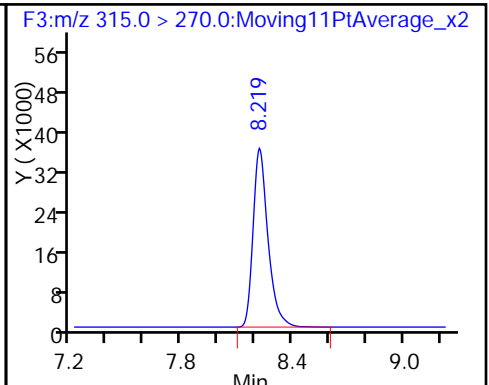
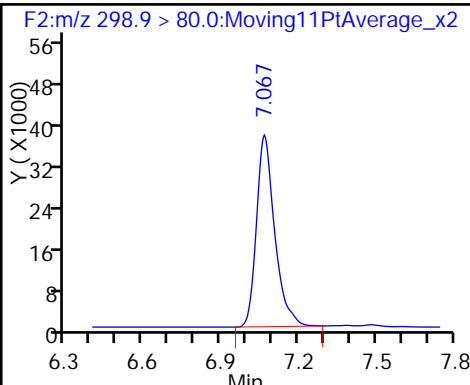
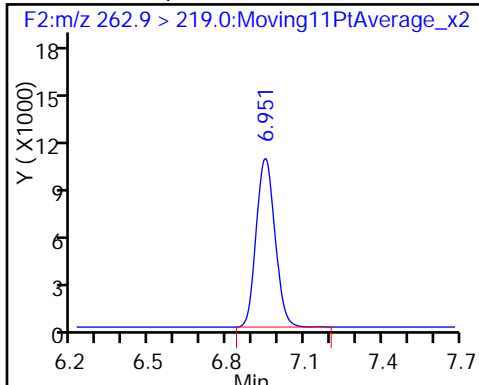
D 3 13C5-PFPeA



4 Perfluoropentanoic acid

40 Perfluorobutanesulfonic acid

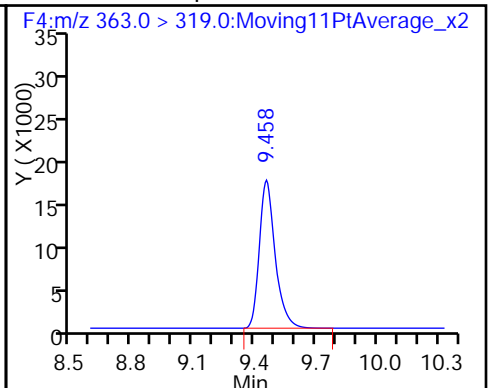
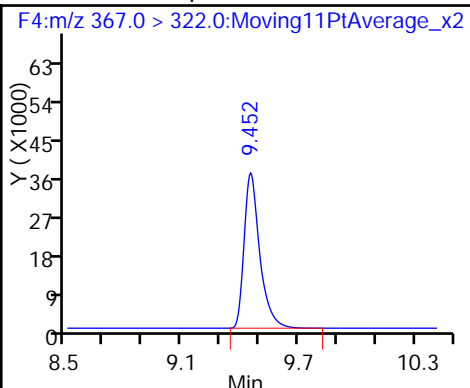
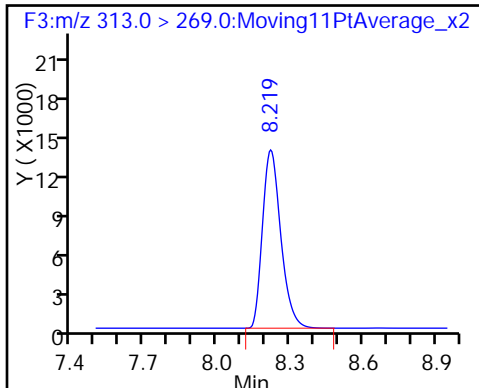
D 6 13C2 PFHxA



7 Perfluorohexanoic acid

D 8 13C4-PFHpA

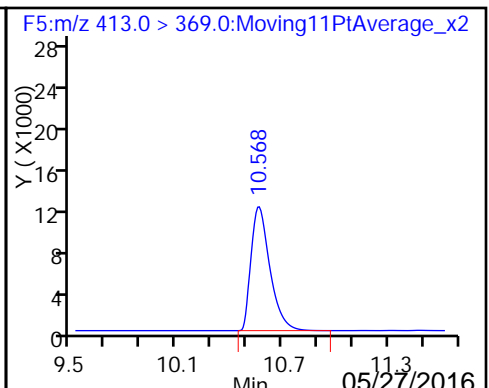
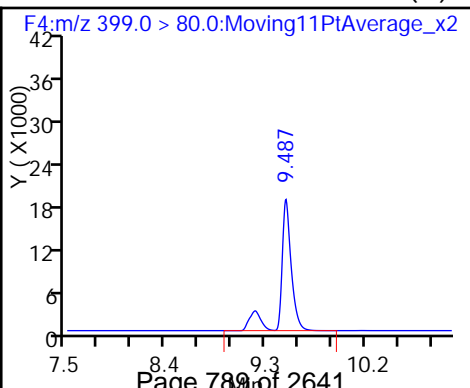
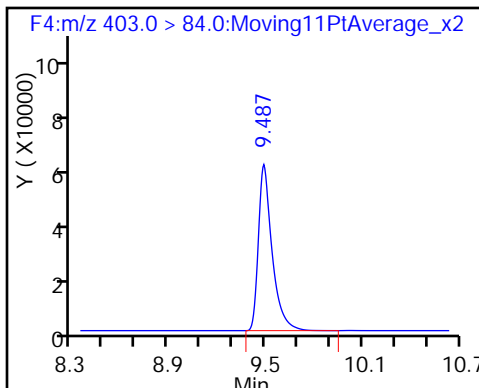
9 Perfluoroheptanoic acid

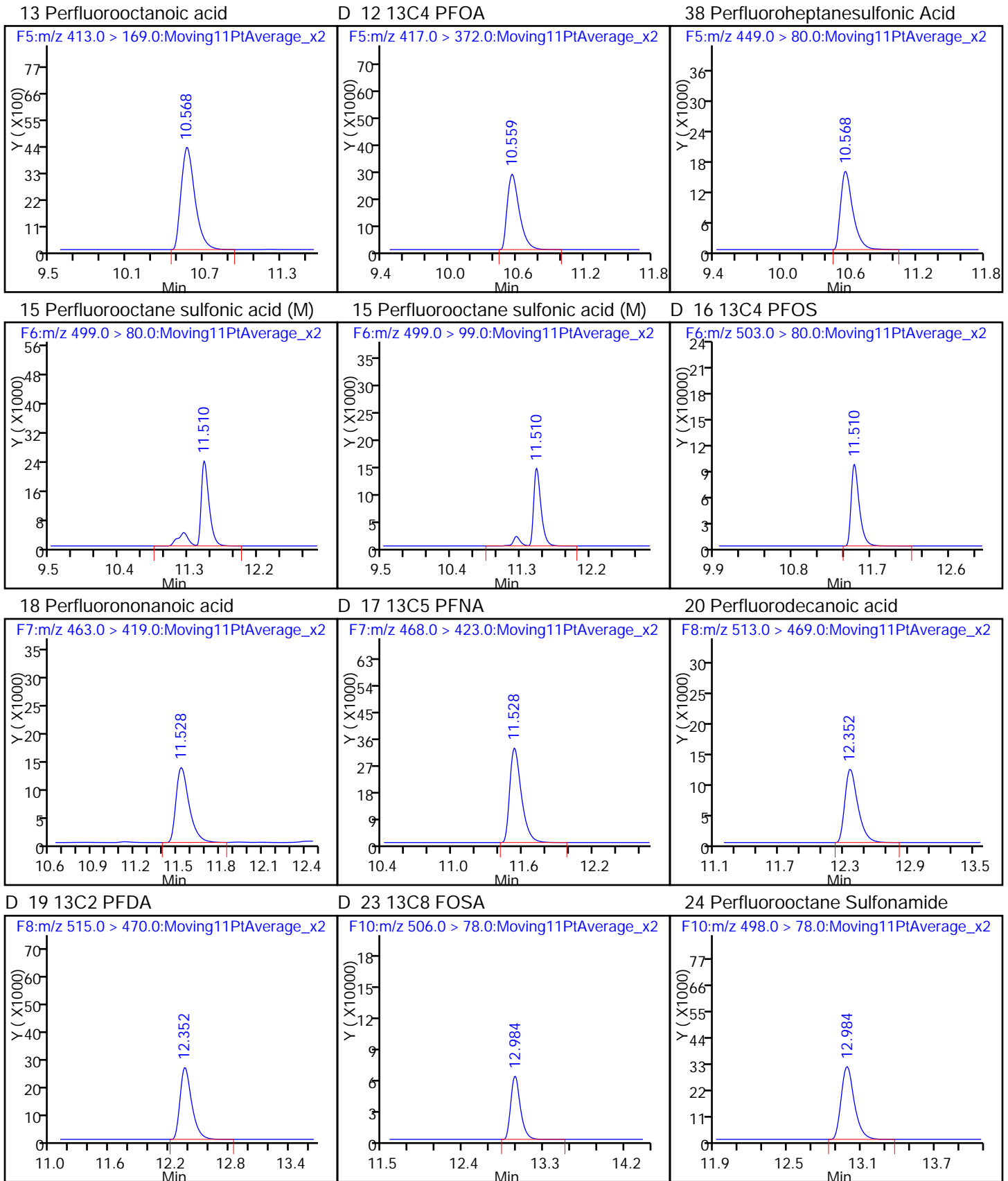


D 11 18O2 PFHxS

41 Perfluorohexanesulfonic acid (M)

13 Perfluorooctanoic acid

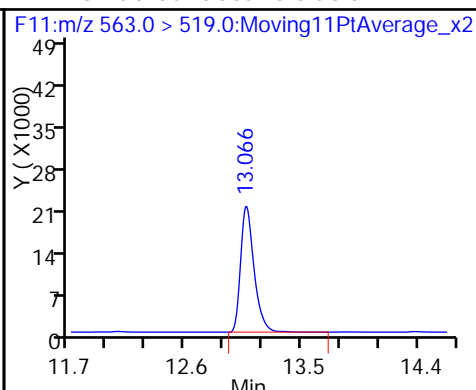
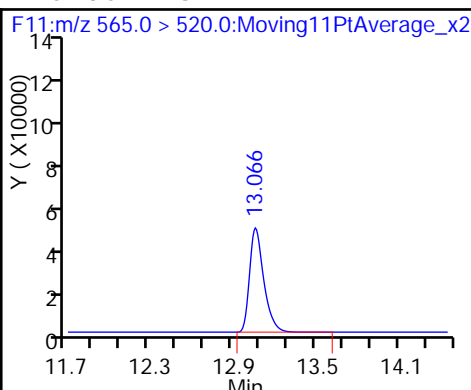
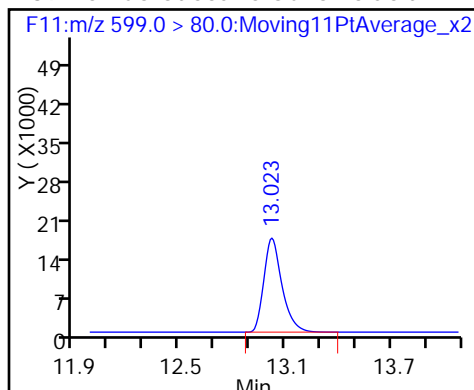




39 Perfluorodecane Sulfonic acid

D 26 13C2 PFUnA

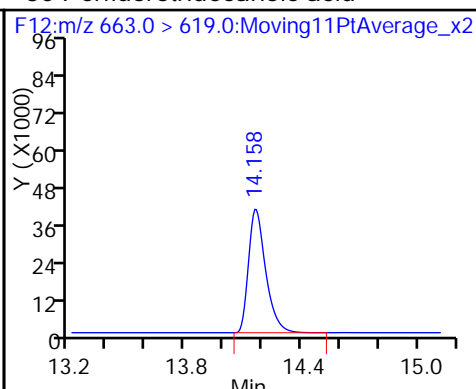
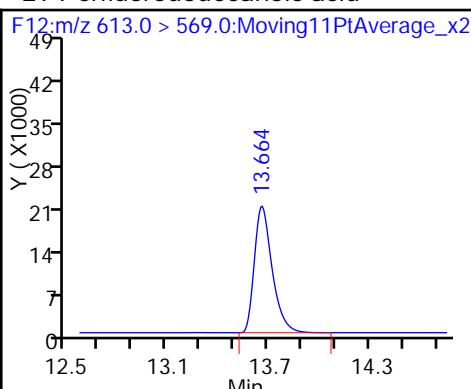
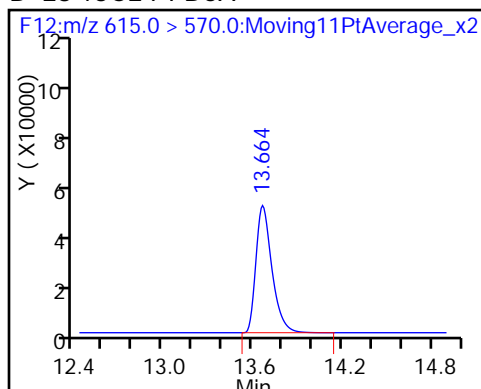
27 Perfluoroundecanoic acid



D 28 13C2 PFDaA

29 Perfluorododecanoic acid

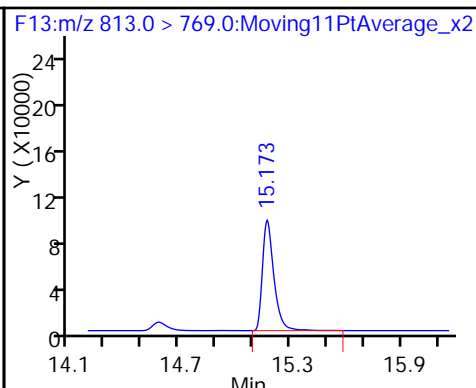
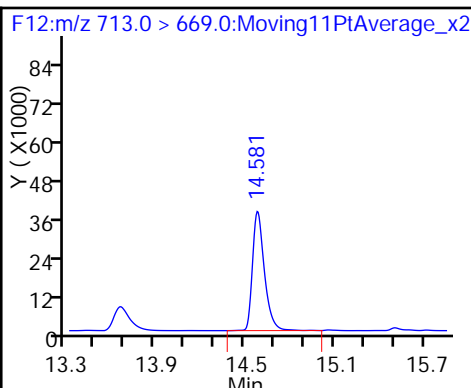
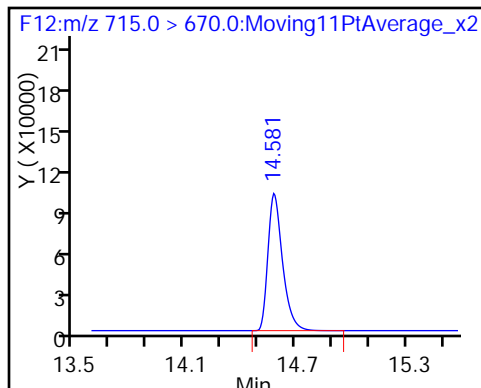
30 Perfluorotridecanoic acid



D 33 13C2-PFTeDA

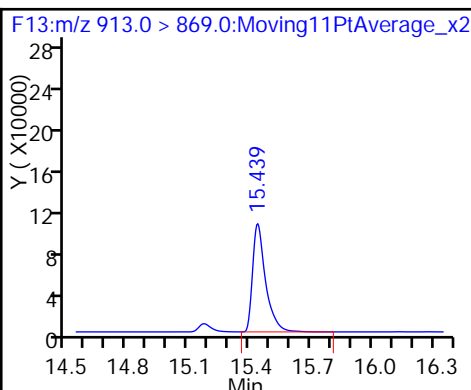
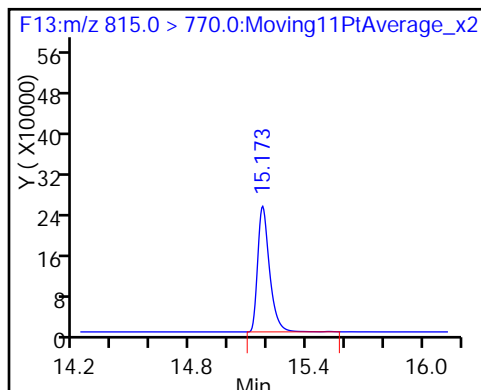
32 Perfluorotetradecanoic acid

34 Perfluorohexadecanoic acid



D 35 13C2-PFHxDA

36 Perfluorooctadecanoic acid



FORM I
LCMS ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Sacramento Job No.: 320-18796-1
 SDG No.: _____
 Client Sample ID: _____ Lab Sample ID: LCS 320-109640/2-A
 Matrix: Water Lab File ID: 25MAY2016B4A_042.d
 Analysis Method: WS-LC-0025 Date Collected: _____
 Extraction Method: 3535 Date Extracted: 05/12/2016 10:01
 Sample wt/vol: 500 (mL) Date Analyzed: 05/26/2016 05:58
 Con. Extract Vol.: 1.0 (mL) Dilution Factor: 1
 Injection Volume: 15 (uL) GC Column: Acquity ID: 2.1 (mm)
 % Moisture: _____ GPC Cleanup: (Y/N) N
 Analysis Batch No.: 111390 Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	LOQ	LOD	DL
375-85-9	Perfluoroheptanoic acid (PFHpA)	0.0393		0.0025	0.0020	0.00080
335-67-1	Perfluorooctanoic acid (PFOA)	0.0334		0.0025	0.0020	0.00075
375-95-1	Perfluorononanoic acid (PFNA)	0.0358		0.0025	0.0020	0.00065
375-73-5	Perfluorobutanesulfonic acid (PFBS)	0.0304		0.0025	0.0020	0.00092
355-46-4	Perfluorohexanesulfonic acid (PFHxS)	0.0376	M	0.0025	0.0020	0.00087

CAS NO.	ISOTOPE DILUTION	%REC	Q	LIMITS
STL00994	18O2 PFHxS	121		25-150
STL00995	13C5 PFNA	138		25-150
STL00990	13C4 PFOA	132		25-150
STL01892	13C4-PFHpA	122		25-150

TestAmerica Sacramento
Target Compound Quantitation Report

Data File: \\ChromNA\Sacramento\ChromData\A4\20160525-31065.b\25MAY2016B4A_042.d
 Lims ID: LCS 320-109640/2-A
 Client ID:
 Sample Type: LCS
 Inject. Date: 26-May-2016 05:58:15 ALS Bottle#: 22 Worklist Smp#: 42
 Injection Vol: 15.0 ul Dil. Factor: 1.0000
 Sample Info: lcs 320-109640/2-a
 Misc. Info.: Acquity BEH C18,1.7u, 3X150mm,T=35C
 Operator ID: JRB Instrument ID: A4
 Method: \\ChromNA\Sacramento\ChromData\A4\20160525-31065.b\PFAC_A4.m
 Limit Group: LC PFC_DOD ICAL
 Last Update: 26-May-2016 16:01:39 Calib Date: 25-May-2016 19:01:43
 Integrator: Picker
 Quant Method: Isotopic Dilution Quant By: Initial Calibration
 Last ICal File: \\ChromNA\Sacramento\ChromData\A4\20160525-31065.b\25MAY2016B4A_011.d
 Column 1 : Det: F1:MRM
 Process Host: XAWRK003

First Level Reviewer: westendorfc

Date: 26-May-2016 09:25:07

Signal	RT	EXP RT	DLT RT	REL RT	Response	Amount ng/ml	Ratio(Limits)	%Rec	S/N	Flags
2 Perfluorobutyric acid										
212.7 > 168.6	5.794	5.798	-0.004	1.000	1705666	19.8		99.0	4413	
D 1 13C4 PFBA										
216.7 > 171.5	5.794	5.798	-0.004		6710230	79.4		159	20507	
D 3 13C5-PFPeA										
267.6 > 222.7	6.904	6.907	-0.003		4850100	63.2		126	9479	
4 Perfluoropentanoic acid										
262.9 > 218.7	6.899	6.910	-0.011	1.000	684653	13.9		69.5	333	
5 Perfluorobutane Sulfonate										
298.8 > 79.6	7.014	7.024	-0.010	1.000	401458	NC			767	
298.8 > 98.6	7.014	7.024	-0.010	1.000	257767		1.56(0.00-0.00)		600	
51 Perfluorobutanesulfonic acid										
298.8 > 79.6	7.014	7.024	-0.010	1.000	401458	15.2		85.8		
D 6 13C2 PFHxA										
314.6 > 269.7	8.149	8.156	-0.007		6364642	76.7		153	11208	
7 Perfluorohexanoic acid										
312.9 > 268.7	8.149	8.157	-0.008	1.000	930930	16.1		80.6	2122	
D 8 13C4-PFHpA										
366.6 > 321.6	9.380	9.387	-0.007		5213534	61.0		122	8848	
9 Perfluoroheptanoic acid										
362.8 > 318.7	9.380	9.388	-0.008	1.000	1001014	19.6		98.2	2727	
10 Perfluorohexane Sulfonate										
398.3 > 79.2	9.412	9.421	-0.009	1.000	902130	NC			2678	
58 Perfluorohexanesulfonic acid										M
398.3 > 79.2	9.412	9.421	-0.009	1.000	1150659	18.8		103		M
D 11 18O2 PFHxS										
402.5 > 83.6	9.412	9.422	-0.010		1696227	57.2		121	3947	
D 12 13C4 PFOA										
416.5 > 371.6	10.499	10.503	-0.004		5866833	65.8		132	8889	

Signal	RT	EXP RT	DLT RT	REL RT	Response	Amount ng/ml	Ratio(Limits)	%Rec	S/N	Flags
13 Perfluorooctanoic acid										
412.8 > 368.8	10.499	10.504	-0.005	1.000	890639	16.7		83.6	2062	
412.8 > 168.7	10.499	10.504	-0.005	1.000	288646		3.09(0.00-0.00)		1176	
39 Perfluoroheptanesulfonic Acid										
448.3 > 79.2	10.499	10.508	-0.009	1.000	1262107	39.1		205		
14 Perfluoroheptane Sulfonate										
448.3 > 79.2	10.499	10.508	-0.009	1.000	1262107	NC			3608	
D 16 13C4 PFOS										
502.4 > 79.7	11.458	11.465	-0.007		199530	29.6		61.9	628	
15 Perfluorooctane sulfonic acid										
498.3 > 79.2	11.458	11.466	-0.008	1.000	2114549	36.9		199	4706	M
498.3 > 98.2	11.458	11.466	-0.008	1.000	1071101		1.97(0.00-0.00)		1473	M
D 17 13C5 PFNA										
467.5 > 422.6	11.478	11.484	-0.006		5393237	68.8		138	8478	
18 Perfluorononanoic acid										
462.5 > 418.6	11.478	11.486	-0.008	1.000	2378220	17.9		89.6	2978	
D 19 13C2 PFDA										
514.4 > 469.5	12.311	12.325	-0.014		7045976	70.5		141	8561	
20 Perfluorodecanoic acid										
512.5 > 468.5	12.324	12.325	-0.001	1.000	2982955	20.4		102	3758	
D 23 13C8 FOSA										
505.4 > 77.6	12.884	12.893	-0.009		1632383	16.9		33.8	2933	
24 Perfluorooctane Sulfonamide										
497.5 > 77.6	12.884	12.893	-0.009	1.000	679400	19.5		97.3	1343	
25 Perfluorodecane Sulfonate										
598.4 > 79.6	12.987	12.996	-0.009	1.000	552245	NC			1826	
49 Perfluorodecane Sulfonic acid										
598.4 > 79.6	12.987	12.996	-0.009	1.000	552245	31.4		163		
27 Perfluoroundecanoic acid										
562.4 > 518.5	13.041	13.042	-0.001	1.000	3047153	18.4		92.0	3092	
D 26 13C2 PFUnA										
564.3 > 519.5	13.041	13.044	-0.003		7018759	69.2		138	6859	
D 28 13C2 PFDoA										
614.4 > 569.4	13.638	13.646	-0.008		7266505	69.0		138	4230	
29 Perfluorododecanoic acid										
612.4 > 568.6	13.638	13.646	-0.008	1.000	2556767	19.3		96.4	976	
30 Perfluorotridecanoic acid										
662.4 > 618.5	14.150	14.162	-0.012	1.000	1976466	23.2		116	887	
32 Perfluorotetradecanoic acid										
712.6 > 668.5	14.588	14.600	-0.012	1.000	752417	16.7		83.6	301	
D 33 13C2-PFTeDA										
714.5 > 669.5	14.588	14.601	-0.013		4150379	54.7		109	3789	
D 35 13C2-PFHxDA										
814.8 > 769.6	15.250	15.255	-0.005		1255024	43.1		86.1	2914	
34 Perfluorohexadecanoic acid										
812.6 > 768.6	15.250	15.255	-0.005	1.000	1594339	23.9		120	238	
36 Perfluorooctadecanoic acid										
912.7 > 868.6	15.588	15.593	-0.005	1.000	1024116	18.5		92.3	1279	

[QC Flag Legend](#)

Processing Flags

NC - Not Calibrated

Review Flags

M - Manually Integrated

TestAmerica Sacramento

Data File: \\ChromNA\Sacramento\ChromData\A4\20160525-31065.b\25MAY2016B4A_042.d

Injection Date: 26-May-2016 05:58:15

Instrument ID: A4

Lims ID: LCS 320-109640/2-A

Client ID:

Operator ID: JRB

ALS Bottle#: 22

Worklist Smp#: 42

Injection Vol: 15.0 ul

Dil. Factor: 1.0000

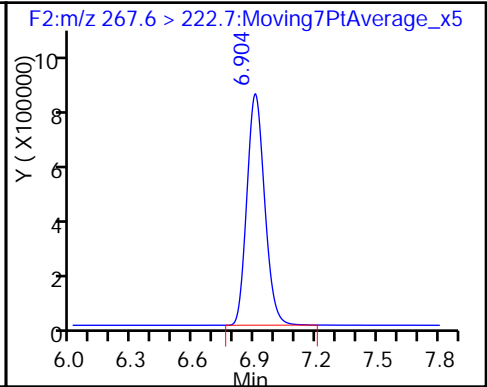
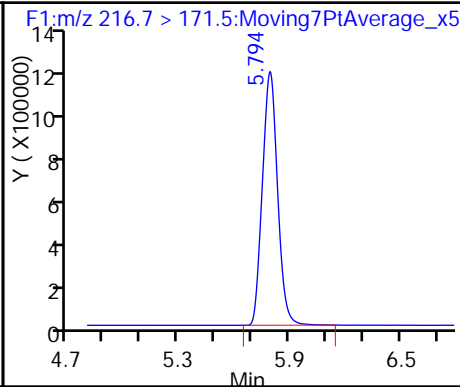
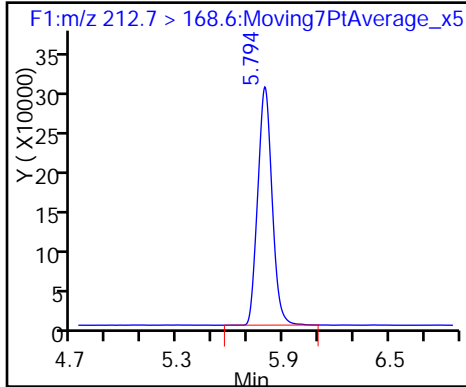
Method: PFAC_A4

Limit Group: LC PFC_DOD ICAL

2 Perfluorobutyric acid

D 1 13C4 PFBA

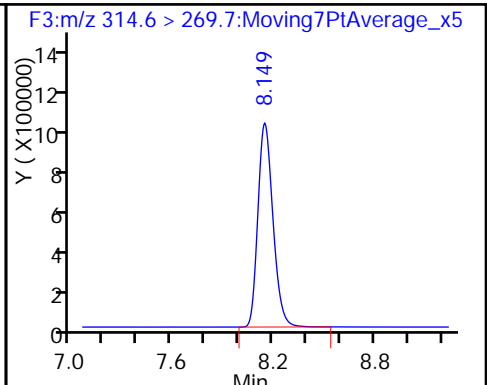
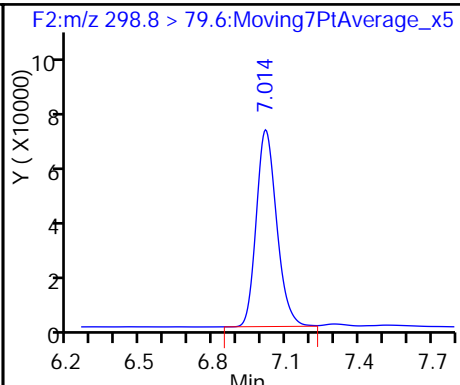
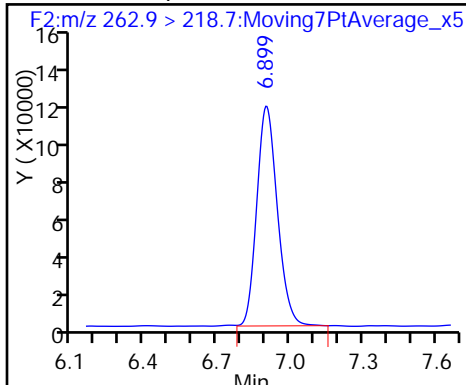
D 3 13C5-PFPeA



4 Perfluoropentanoic acid

51 Perfluorobutanesulfonic acid

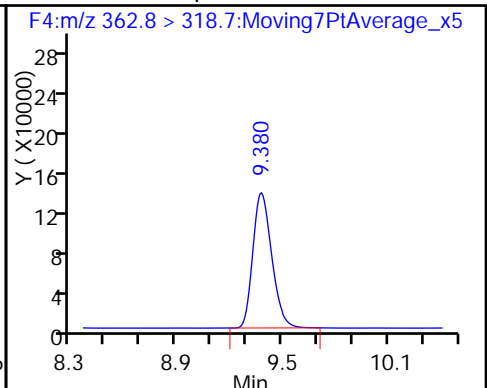
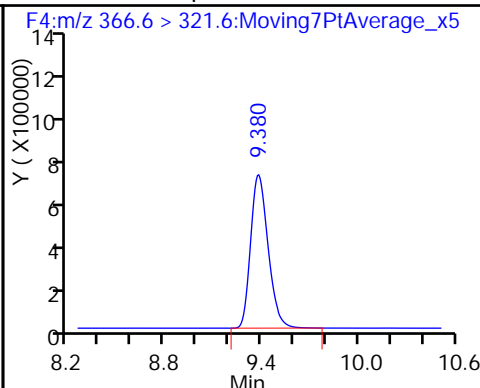
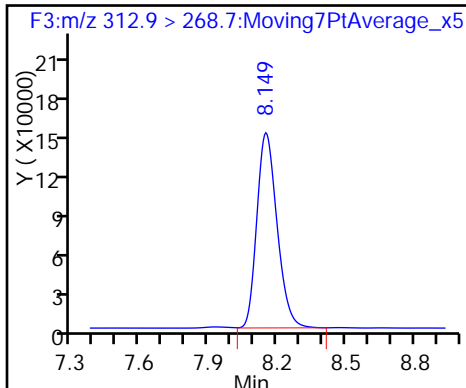
D 6 13C2 PFHxA



7 Perfluorohexanoic acid

D 8 13C4-PFHpA

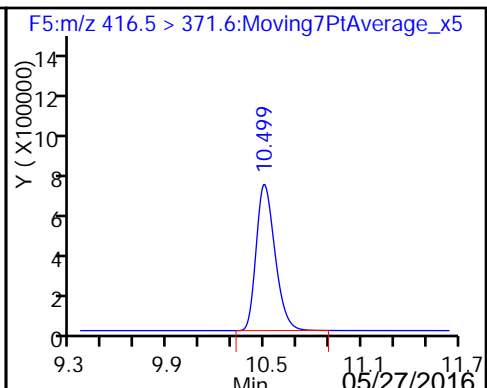
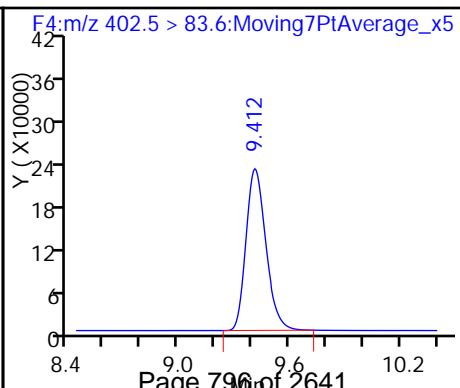
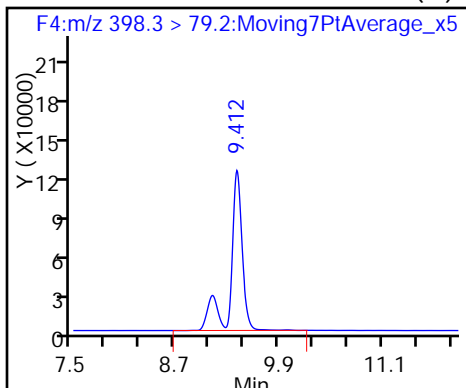
9 Perfluoroheptanoic acid



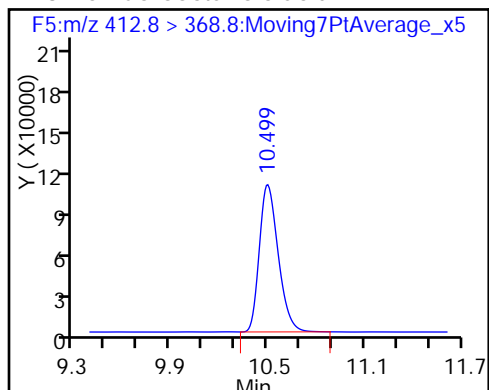
58 Perfluorohexanesulfonic acid (M)

D 11 18O2 PFHxS

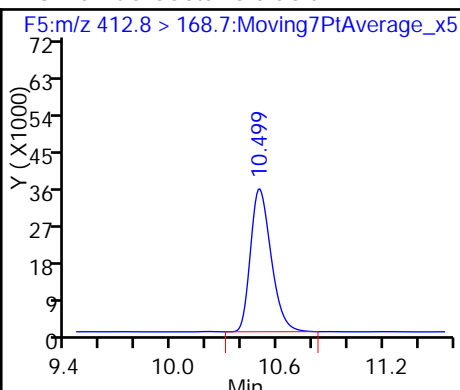
D 12 13C4 PFOA



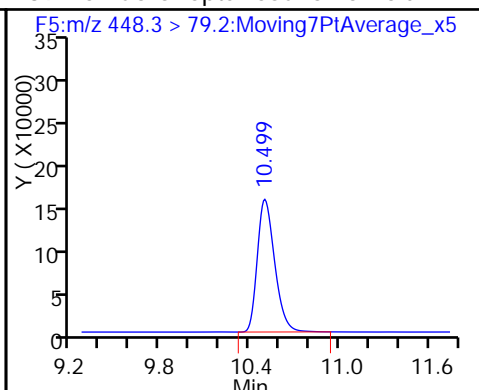
13 Perfluorooctanoic acid



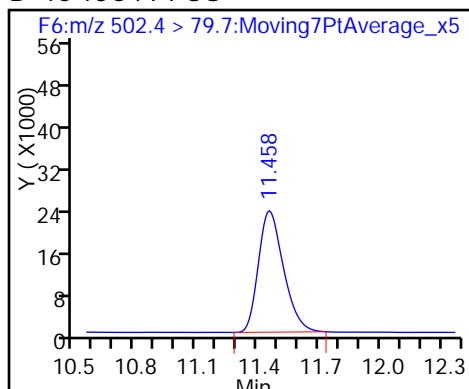
13 Perfluorooctanoic acid



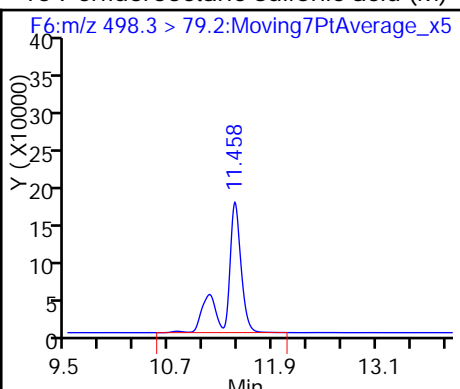
39 Perfluoroheptanesulfonic Acid



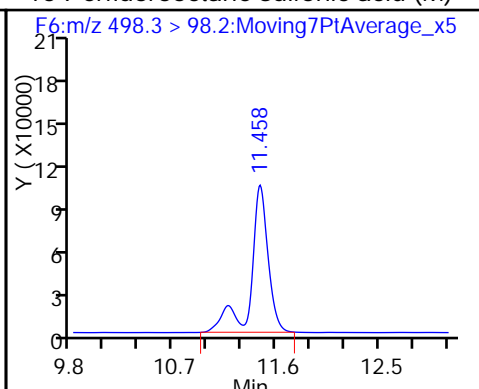
D 16 13C4 PFOS



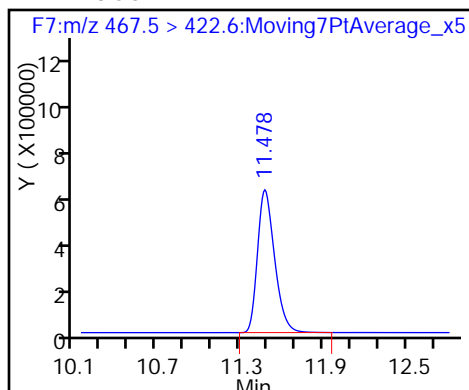
15 Perfluorooctane sulfonic acid (M)



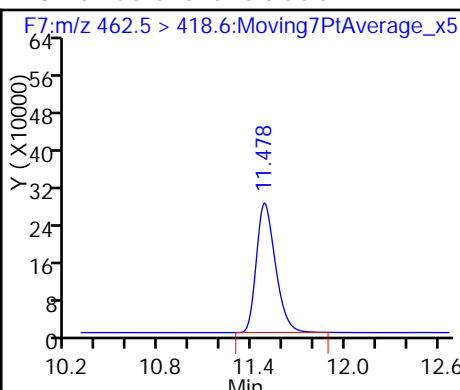
15 Perfluorooctane sulfonic acid (M)



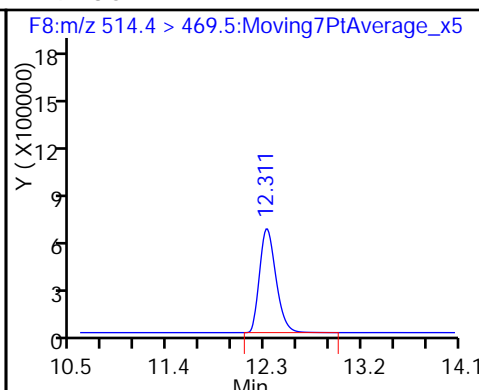
D 17 13C5 PFNA



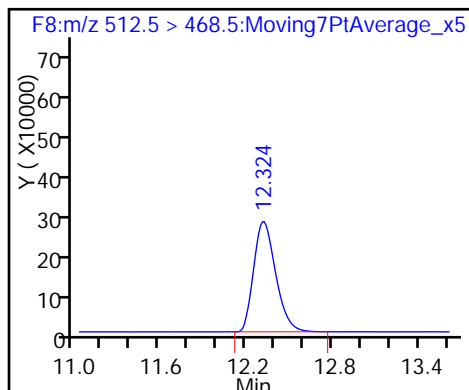
18 Perfluorononanoic acid



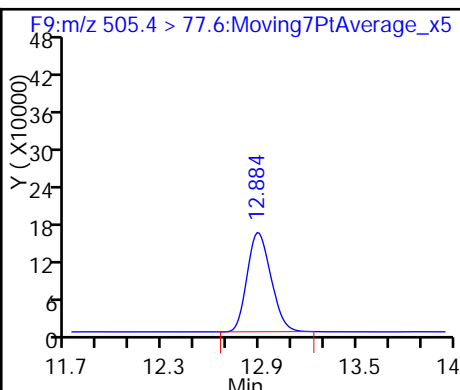
D 19 13C2 PFDA



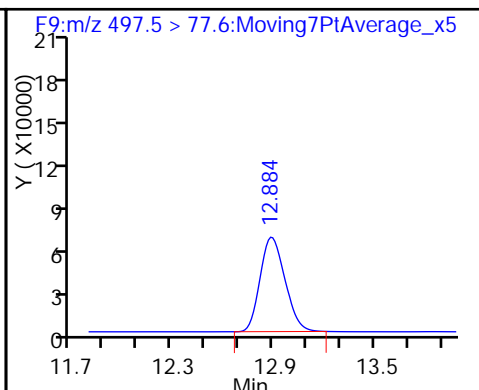
20 Perfluorodecanoic acid



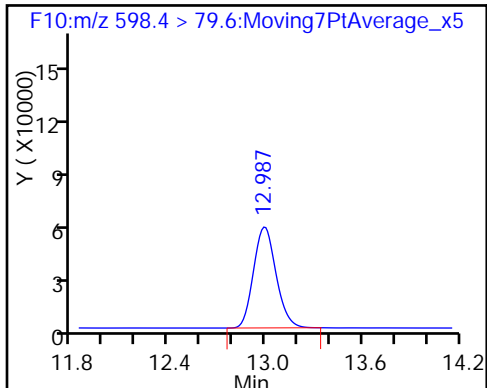
D 23 13C8 FOSA



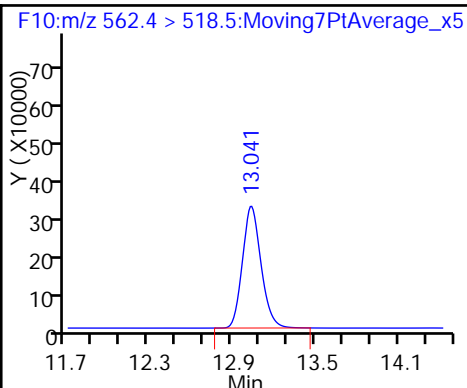
24 Perfluorooctane Sulfonamide



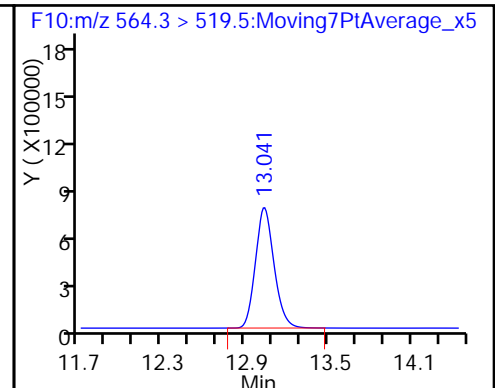
49 Perfluorodecane Sulfonic acid



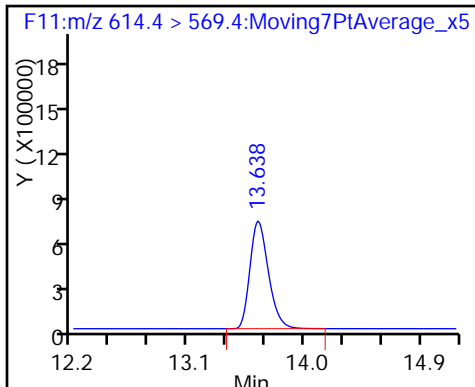
27 Perfluoroundecanoic acid



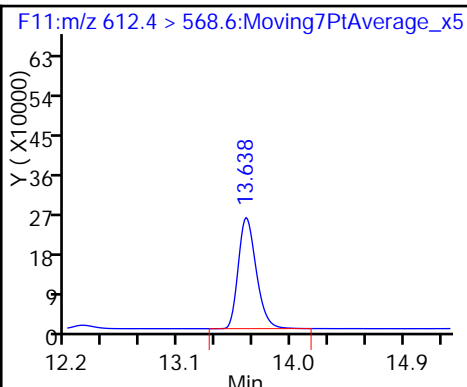
D 26 13C2 PFUnA



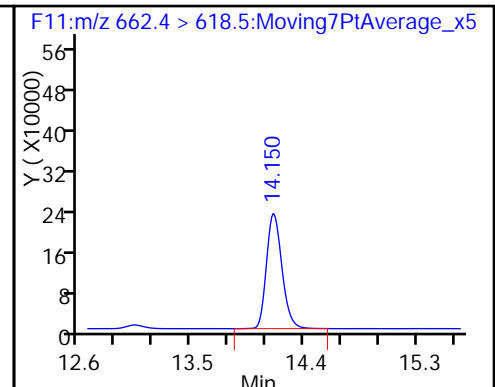
D 28 13C2 PFDaA



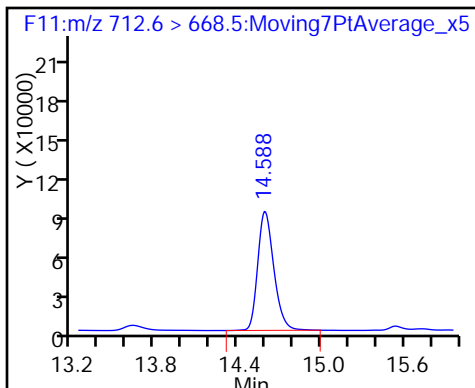
29 Perfluorododecanoic acid



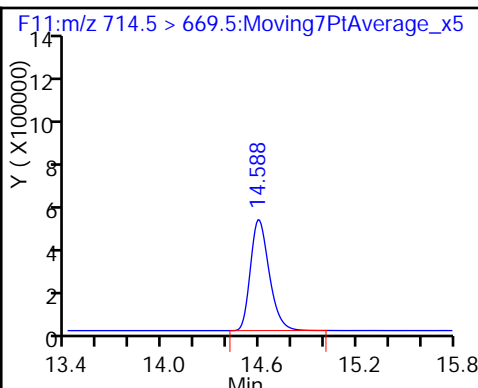
30 Perfluorotridecanoic acid



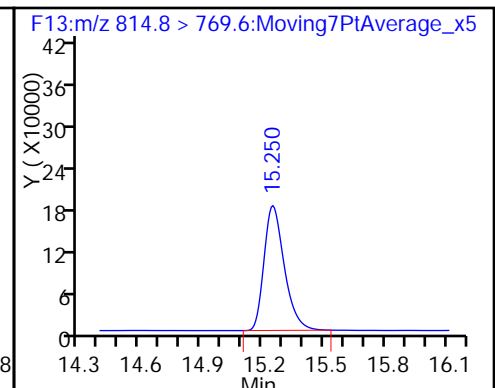
32 Perfluorotetradecanoic acid



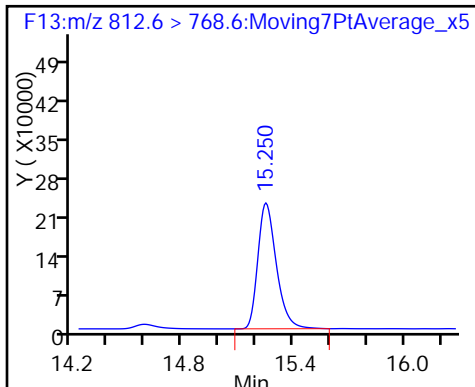
D 33 13C2-PFTeDA



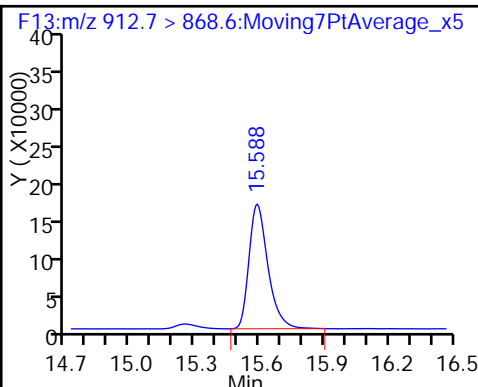
D 35 13C2-PFHxDA



34 Perfluorohexadecanoic acid



36 Perfluorooctadecanoic acid



TestAmerica Sacramento

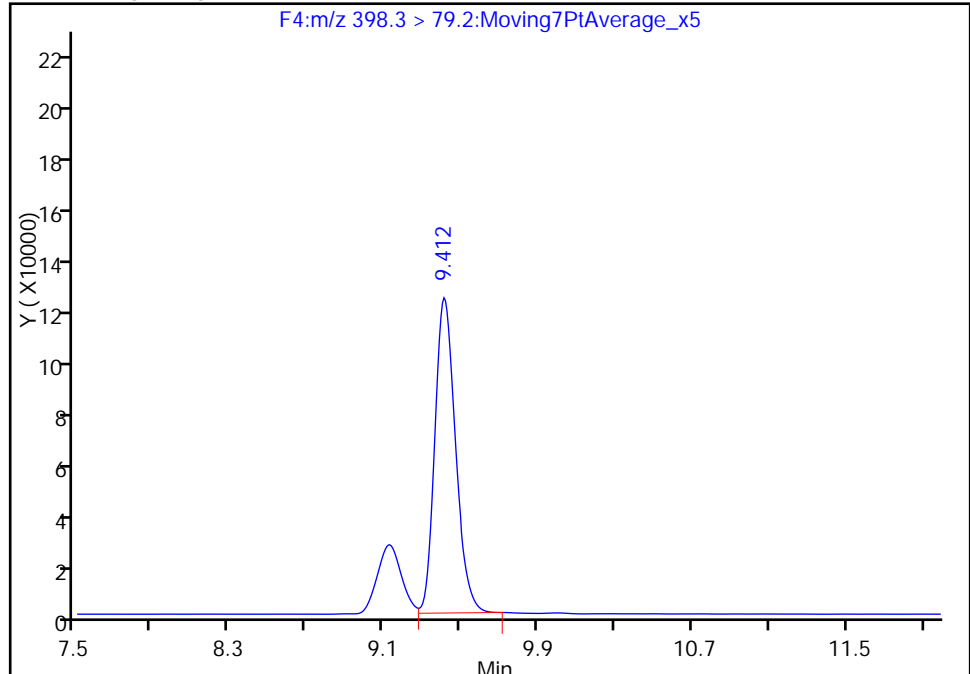
Data File: \\ChromNA\Sacramento\ChromData\A4\20160525-31065.b\25MAY2016B4A_042.d
Injection Date: 26-May-2016 05:58:15 Instrument ID: A4
Lims ID: LCS 320-109640/2-A
Client ID:
Operator ID: JRB ALS Bottle#: 22 Worklist Smp#: 42
Injection Vol: 15.0 ul Dil. Factor: 1.0000
Method: PFAC_A4 Limit Group: LC PFC_DOD ICAL
Column: Detector F4:MRM

58 Perfluorohexanesulfonic acid, CAS: 355-46-4

Signal: 1

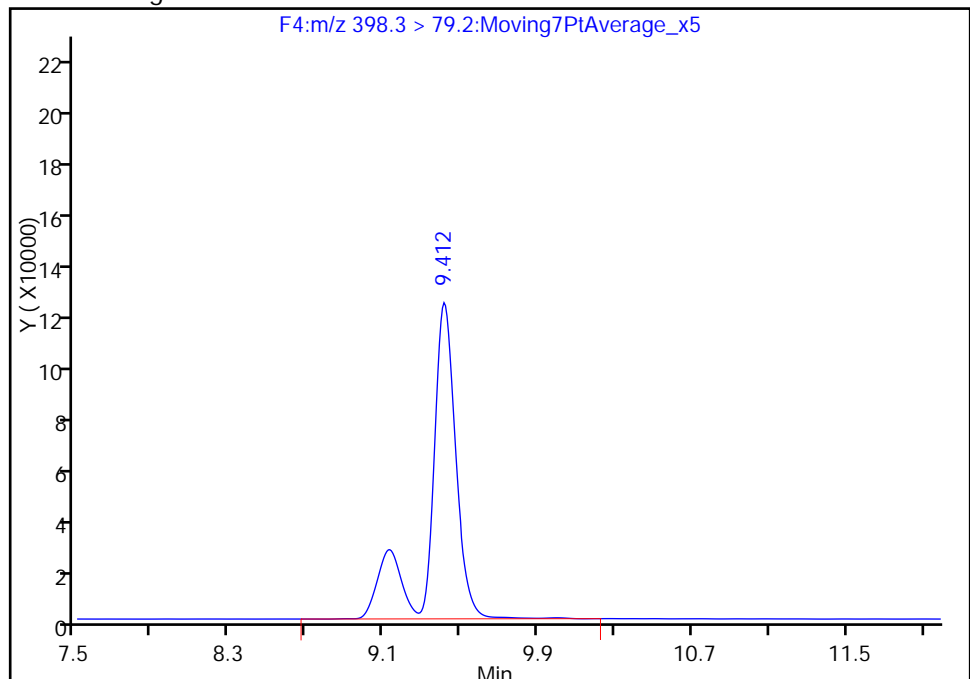
RT: 9.41
Area: 902130
Amount: 14.722163
Amount Units: ng/ml

Processing Integration Results



RT: 9.41
Area: 1150659
Amount: 18.777992
Amount Units: ng/ml

Manual Integration Results



Reviewer: westendorfc, 26-May-2016 09:41:53

Audit Action: Manually Integrated

Audit Reason: Isomers

FORM I
LCMS ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Sacramento Job No.: 320-18796-1
SDG No.: _____
Client Sample ID: _____ Lab Sample ID: LCSD 320-109640/3-A RA
Matrix: Water Lab File ID: 24MAY2016A6A_043.d
Analysis Method: WS-LC-0025 Date Collected: _____
Extraction Method: 3535 Date Extracted: 05/12/2016 10:01
Sample wt/vol: 500 (mL) Date Analyzed: 05/25/2016 06:56
Con. Extract Vol.: 1.0 (mL) Dilution Factor: 1
Injection Volume: 15 (uL) GC Column: Acquity ID: 2.1 (mm)
% Moisture: _____ GPC Cleanup: (Y/N) N
Analysis Batch No.: 111182 Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	LOQ	LOD	DL
335-67-1	Perfluorooctanoic acid (PFOA)	0.0432		0.0025	0.0020	0.00075

TestAmerica Sacramento
Target Compound Quantitation Report

Data File: \\ChromNA\Sacramento\ChromData\A6\20160524-31021.b\24MAY2016A6A_043.d
 Lims ID: LCSD 320-109640/3-A
 Client ID:
 Sample Type: LCSD
 Inject. Date: 25-May-2016 06:56:46 ALS Bottle#: 23 Worklist Smp#: 43
 Injection Vol: 15.0 ul Dil. Factor: 1.0000
 Sample Info: LCSD 320-109640/3-A
 Misc. Info.: Acquity BEH 1.7um, 3X150mm T=50°C
 Operator ID: JRB Instrument ID: A6
 Method: \\ChromNA\Sacramento\ChromData\A6\20160524-31021.b\PFAC_A6.m
 Limit Group: LC PFC_DOD ICAL
 Last Update: 26-May-2016 16:14:19 Calib Date: 24-May-2016 19:14:42
 Integrator: Picker
 Quant Method: Isotopic Dilution Quant By: Initial Calibration
 Last ICal File: \\ChromNA\Sacramento\ChromData\A6\20160524-31021.b\24MAY2016A6A_010.d
 Column 1 : Acquity BEH C18 (2.10 mm) Det: F1:MRM
 Process Host: XAWRK003

First Level Reviewer: westendorfc

Date: 25-May-2016 09:25:30

Signal	RT	EXP RT	DLT RT	REL RT	Response	Amount ng/ml	Ratio(Limits)	%Rec	S/N	Flags
2 Perfluorobutyric acid										
212.9 > 169.0	5.794	5.791	0.003	1.000	29534	18.6		92.8	1870	
D 1 13C4 PFBA										
217.0 > 172.0	5.791	5.796	-0.005		66393	54.5		109	8525	
D 3 13C5-PFPeA										
267.9 > 223.0	6.937	6.946	-0.009		152711	64.4		129	15322	
4 Perfluoropentanoic acid										
262.9 > 219.0	6.946	6.949	-0.003	1.000	43994	12.7		63.3	4338	
40 Perfluorobutanesulfonic acid										
298.9 > 80.0	7.064	7.074	-0.010	1.000	192093	18.6		105		
5 Perfluorobutane Sulfonate										
298.9 > 80.0	7.064	7.074	-0.010	1.000	192093	NC			526	
298.9 > 99.0	7.067	7.074	-0.007	1.000	62649		3.07(0.00-0.00)		455	
D 6 13C2 PFHxA										
315.0 > 270.0	8.214	8.223	-0.009		198446	57.7		115	17969	
7 Perfluorohexanoic acid										
313.0 > 269.0	8.225	8.225	0.0	1.000	65808	18.4		92.2	6042	
D 8 13C4-PFHpA										
367.0 > 322.0	9.452	9.459	-0.007		200718	55.6		111	17243	
9 Perfluoroheptanoic acid										
363.0 > 319.0	9.452	9.462	-0.010	1.000	78050	18.0		90.2	7080	
D 11 18O2 PFHxS										
403.0 > 84.0	9.487	9.494	-0.007		333629	60.4		128	28771	
10 Perfluorohexane Sulfonate										
399.0 > 80.0	9.487	9.495	-0.008	1.000	118022	NC			10277	
41 Perfluorohexanesulfonic acid										M
399.0 > 80.0	9.487	9.495	-0.008	1.000	132058	19.1		105		M

Signal	RT	EXP RT	DLT RT	REL RT	Response	Amount ng/ml	Ratio(Limits)	%Rec	S/N	Flags
13 Perfluorooctanoic acid										
413.0 > 369.0	10.568	10.573	-0.005	1.000	83921	21.6		108	2227	
413.0 > 169.0	10.568	10.573	-0.005	1.000	38238		2.19(0.00-0.00)		2615	
D 12 13C4 PFOA										
417.0 > 372.0	10.559	10.577	-0.018		182408	50.3		101	11568	
14 Perfluoroheptane Sulfonate										
449.0 > 80.0	10.568	10.585	-0.017	1.000	129524	NC			8571	
38 Perfluoroheptanesulfonic Acid										
449.0 > 80.0	10.568	10.585	-0.017	1.000	129524	22.4		118		
15 Perfluorooctane sulfonic acid										M
499.0 > 80.0	11.518	11.524	-0.006	1.000	183642	16.7		89.9	10279	M
499.0 > 99.0	11.518	11.524	-0.006	1.000	93750		1.96(0.00-0.00)		6464	M
D 16 13C4 PFOS										
503.0 > 80.0	11.518	11.524	-0.006		565136	56.8		119	41549	
18 Perfluorononanoic acid										
463.0 > 419.0	11.536	11.547	-0.011	1.000	92934	25.3		126	1301	
D 17 13C5 PFNA										
468.0 > 423.0	11.536	11.551	-0.015		200976	58.4		117	14459	
20 Perfluorodecanoic acid										
513.0 > 469.0	12.362	12.376	-0.014	1.000	116228	25.0		125	7216	
D 19 13C2 PFDA										
515.0 > 470.0	12.362	12.380	-0.018		192074	44.9		89.9	11517	
D 23 13C8 FOSA										
506.0 > 78.0	12.974	12.993	-0.019		639184	21.7		43.4	41470	
24 Perfluorooctane Sulfonamide										
498.0 > 78.0	12.984	12.994	-0.010	1.000	288758	20.3		102	18777	
39 Perfluorodecane Sulfonic acid										
599.0 > 80.0	13.015	13.032	-0.017	1.000	128972	22.4		116		
25 Perfluorodecane Sulfonate										
599.0 > 80.0	13.015	13.032	-0.017	1.000	128972	NC			8694	
D 26 13C2 PFUnA										
565.0 > 520.0	13.059	13.079	-0.020		300139	54.5		109	20859	
27 Perfluoroundecanoic acid										
563.0 > 519.0	13.059	13.082	-0.023	1.000	152908	19.8		99.1	1435	
D 28 13C2 PFDaA										
615.0 > 570.0	13.657	13.667	-0.010		357342	49.9		99.7	24186	
29 Perfluorododecanoic acid										
613.0 > 569.0	13.657	13.667	-0.010	1.000	143158	19.7		98.3	121	
30 Perfluorotridecanoic acid										
663.0 > 619.0	14.151	14.166	-0.015	1.000	247474	23.4		117	69.5	
D 33 13C2-PFTeDA										
715.0 > 670.0	14.576	14.589	-0.013		477568	45.5		91.1	42882	
32 Perfluorotetradecanoic acid										
713.0 > 669.0	14.576	14.590	-0.014	1.000	191066	16.6		82.8	151	
34 Perfluorohexadecanoic acid										
813.0 > 769.0	15.175	15.179	-0.004	1.000	368870	14.5		72.5	1008	
D 35 13C2-PFHxDA										
815.0 > 770.0	15.175	15.180	-0.005		893256	41.6		83.3	25181	

Signal	RT	EXP RT	DLT RT	REL RT	Response	Amount ng/ml	Ratio(Limits)	%Rec	S/N	Flags
36 Perfluorooctadecanoic acid										
913.0 > 869.0	15.451	15.450	0.001	1.000	375388	12.9		64.5	655	

QC Flag Legend

Processing Flags

NC - Not Calibrated

Review Flags

M - Manually Integrated

TestAmerica Sacramento

Data File: \\ChromNA\Sacramento\ChromData\A6\20160524-31021.b\24MAY2016A6A_043.d

Injection Date: 25-May-2016 06:56:46

Instrument ID: A6

Lims ID: LCSD 320-109640/3-A

Client ID:

Operator ID: JRB

ALS Bottle#: 23

Worklist Smp#: 43

Injection Vol: 15.0 ul

Dil. Factor: 1.0000

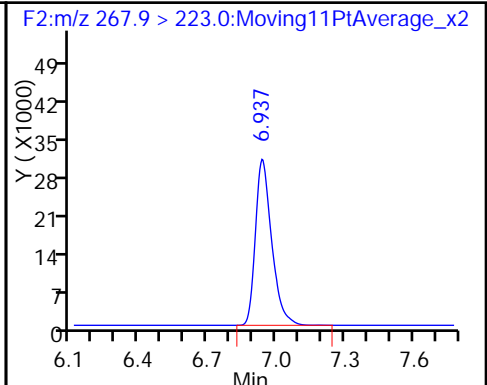
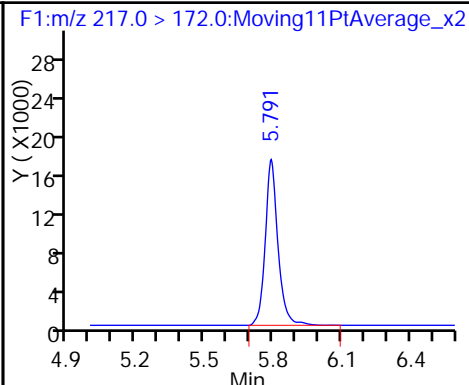
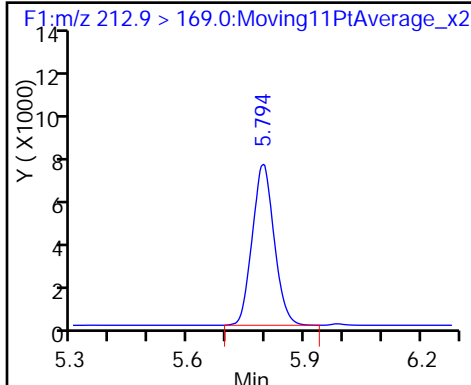
Method: PFAC_A6

Limit Group: LC PFC_DOD ICAL

2 Perfluorobutyric acid

D 1 13C4 PFBA

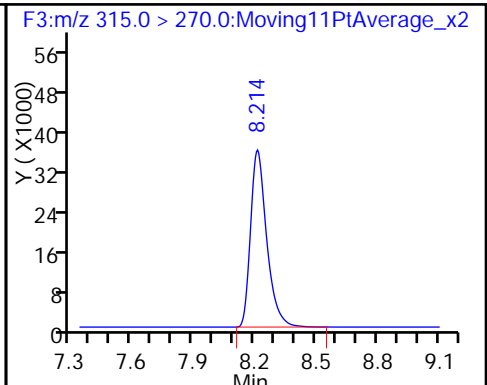
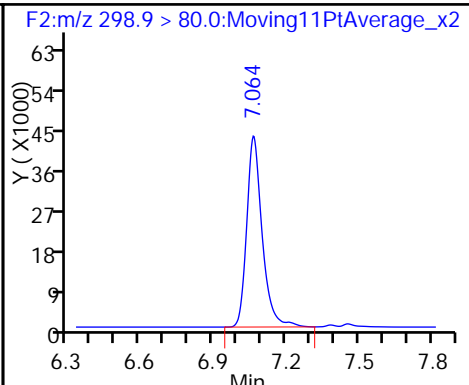
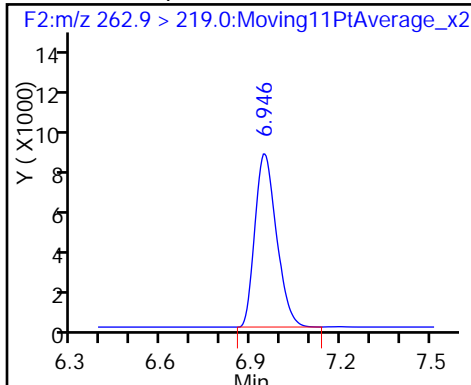
D 3 13C5-PFPeA



4 Perfluoropentanoic acid

40 Perfluorobutanesulfonic acid

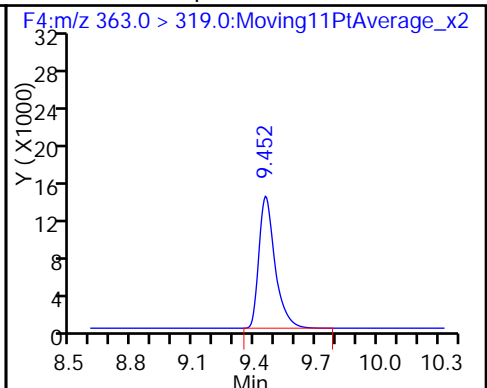
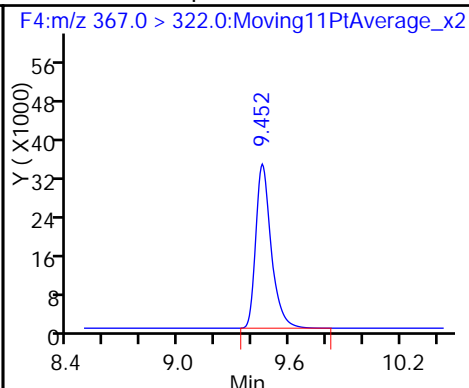
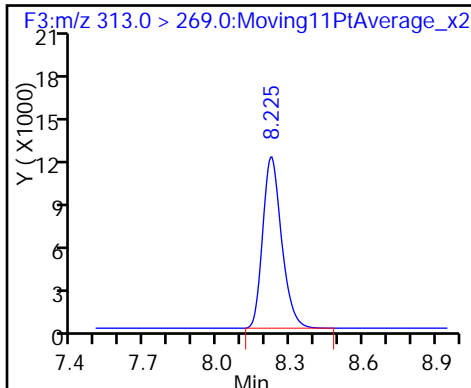
D 6 13C2 PFHxA



7 Perfluorohexanoic acid

D 8 13C4-PFHpA

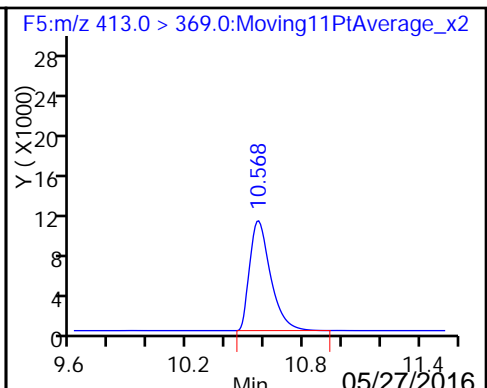
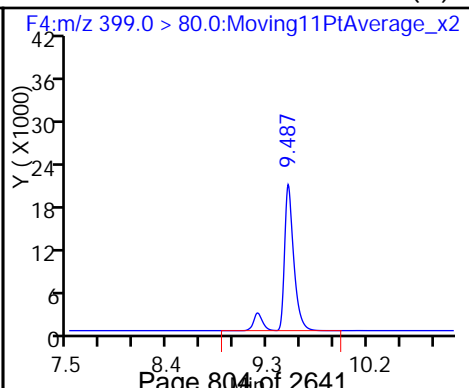
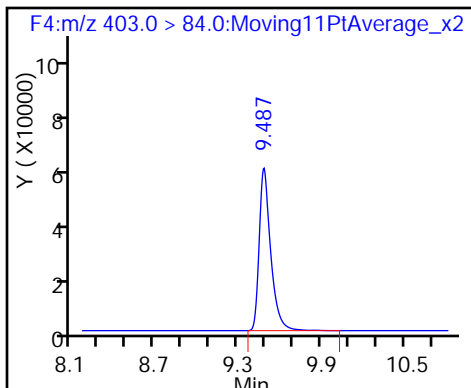
9 Perfluoroheptanoic acid

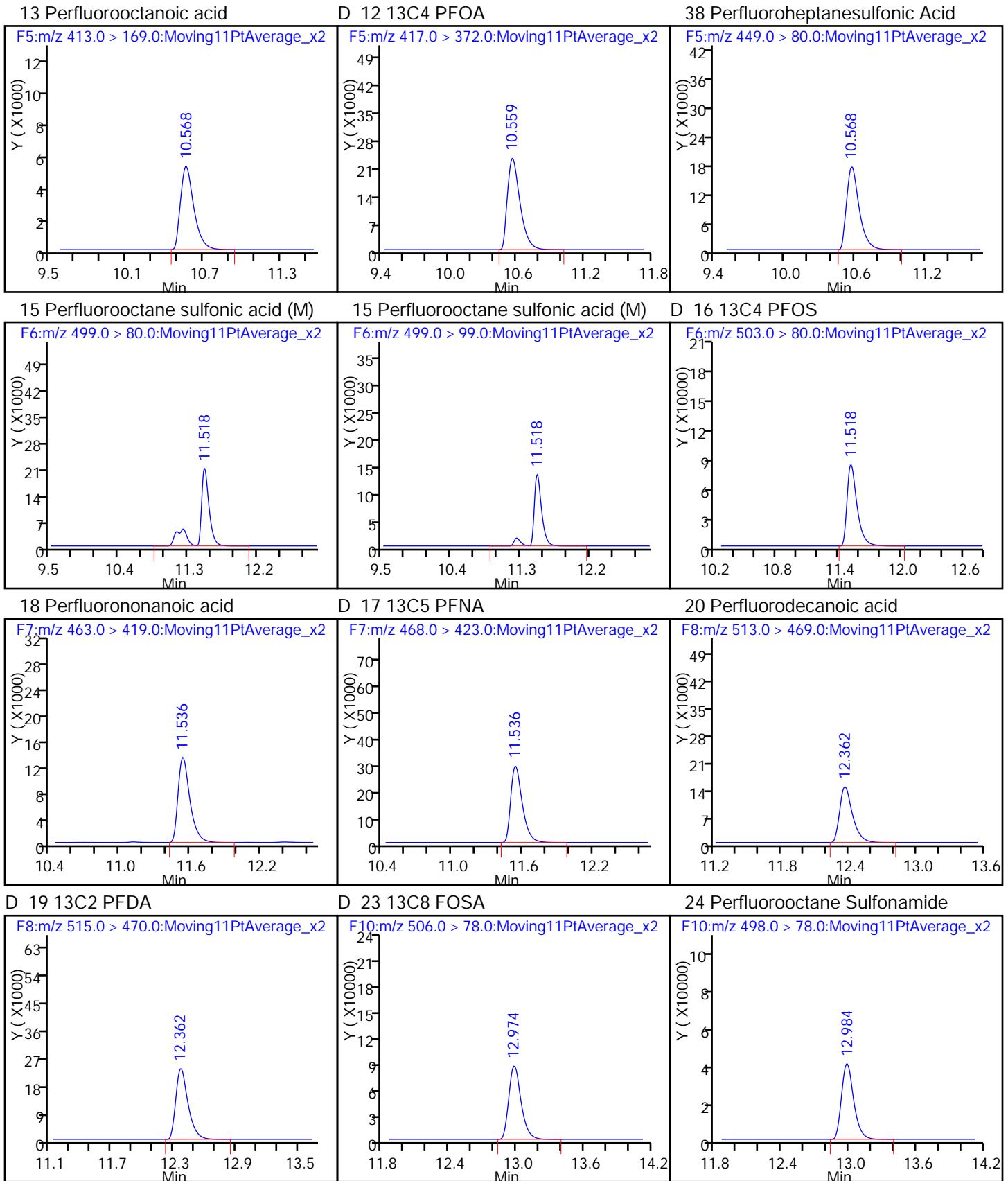


D 11 18O2 PFHxS

41 Perfluorohexanesulfonic acid (M)

13 Perfluorooctanoic acid

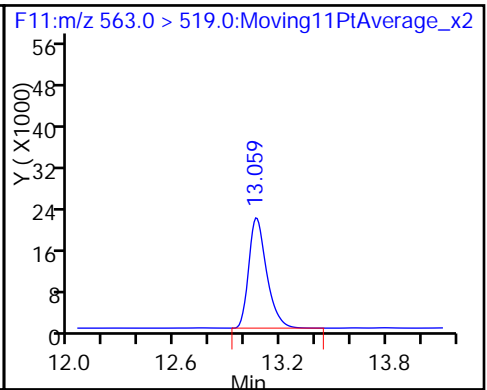
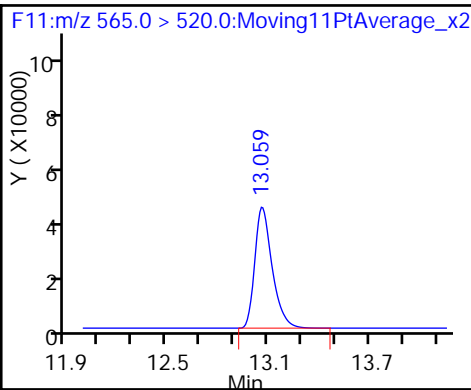
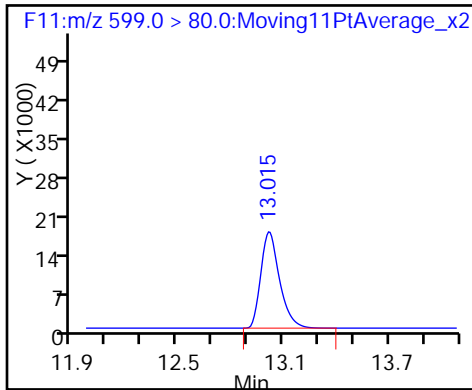




39 Perfluorodecane Sulfonic acid

D 26 13C2 PFUnA

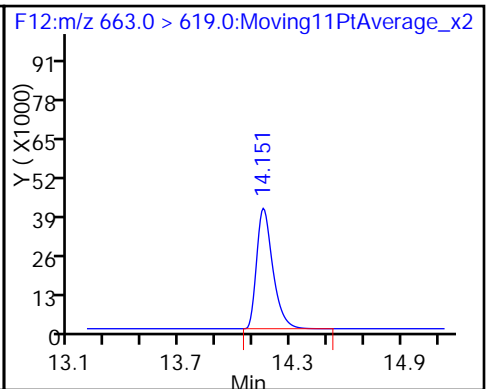
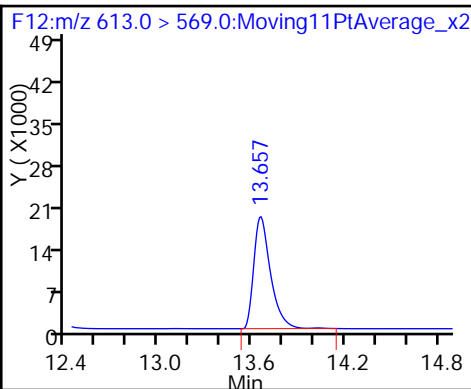
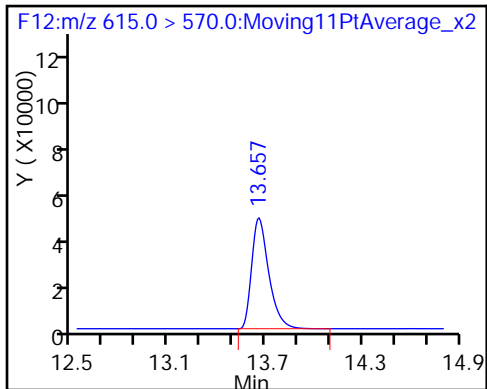
27 Perfluoroundecanoic acid



D 28 13C2 PFDaA

29 Perfluorododecanoic acid

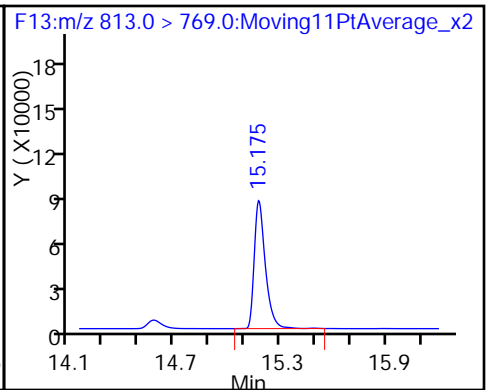
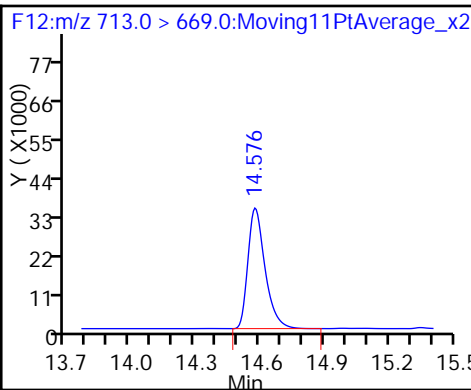
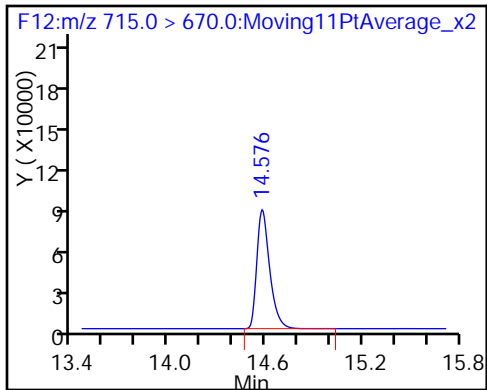
30 Perfluorotridecanoic acid



D 33 13C2-PFTeDA

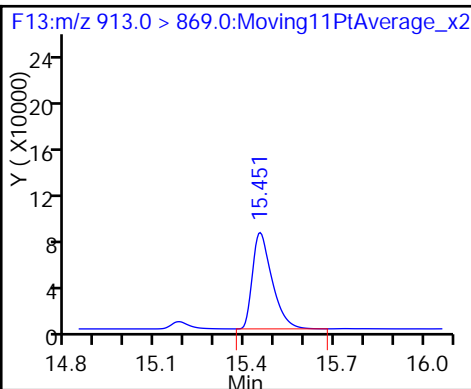
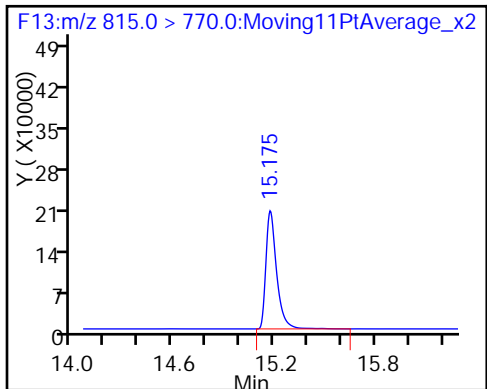
32 Perfluorotetradecanoic acid

34 Perfluorohexadecanoic acid



D 35 13C2-PFHxDA

36 Perfluorooctadecanoic acid



FORM I
LCMS ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Sacramento Job No.: 320-18796-1
 SDG No.: _____
 Client Sample ID: _____ Lab Sample ID: LCSD 320-109640/3-A
 Matrix: Water Lab File ID: 25MAY2016B4A_043.d
 Analysis Method: WS-LC-0025 Date Collected: _____
 Extraction Method: 3535 Date Extracted: 05/12/2016 10:01
 Sample wt/vol: 500 (mL) Date Analyzed: 05/26/2016 06:19
 Con. Extract Vol.: 1.0 (mL) Dilution Factor: 1
 Injection Volume: 15 (uL) GC Column: Acquity ID: 2.1 (mm)
 % Moisture: _____ GPC Cleanup: (Y/N) N
 Analysis Batch No.: 111390 Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	LOQ	LOD	DL
375-85-9	Perfluoroheptanoic acid (PFHpA)	0.0404		0.0025	0.0020	0.00080
335-67-1	Perfluorooctanoic acid (PFOA)	0.0380		0.0025	0.0020	0.00075
375-95-1	Perfluorononanoic acid (PFNA)	0.0388		0.0025	0.0020	0.00065
375-73-5	Perfluorobutanesulfonic acid (PFBS)	0.0311		0.0025	0.0020	0.00092
355-46-4	Perfluorohexanesulfonic acid (PFHxS)	0.0300		0.0025	0.0020	0.00087

CAS NO.	ISOTOPE DILUTION	%REC	Q	LIMITS
STL00994	18O2 PFHxS	114		25-150
STL00995	13C5 PFNA	129		25-150
STL00990	13C4 PFOA	124		25-150
STL01892	13C4-PFHpA	125		25-150

TestAmerica Sacramento
Target Compound Quantitation Report

Data File: \\ChromNA\Sacramento\ChromData\A4\20160525-31065.b\25MAY2016B4A_043.d
 Lims ID: LCSD 320-109640/3-A
 Client ID:
 Sample Type: LCSD
 Inject. Date: 26-May-2016 06:19:25 ALS Bottle#: 23 Worklist Smp#: 43
 Injection Vol: 15.0 ul Dil. Factor: 1.0000
 Sample Info: lcsd 320-109640/3-a
 Misc. Info.: Acquity BEH C18,1.7u, 3X150mm,T=35C
 Operator ID: JRB Instrument ID: A4
 Method: \\ChromNA\Sacramento\ChromData\A4\20160525-31065.b\PFAC_A4.m
 Limit Group: LC PFC_DOD ICAL
 Last Update: 26-May-2016 16:01:39 Calib Date: 25-May-2016 19:01:43
 Integrator: Picker
 Quant Method: Isotopic Dilution Quant By: Initial Calibration
 Last ICal File: \\ChromNA\Sacramento\ChromData\A4\20160525-31065.b\25MAY2016B4A_011.d
 Column 1 : Det: F1:MRM
 Process Host: XAWRK003

First Level Reviewer: westendorfc

Date: 26-May-2016 09:42:54

Signal	RT	EXP RT	DLT RT	REL RT	Response	Amount ng/ml	Ratio(Limits)	%Rec	S/N	Flags
2 Perfluorobutyric acid										
212.7 > 168.6	5.794	5.798	-0.004	1.000	1749833	20.1		100	4248	
D 1 13C4 PFBA										
216.7 > 171.5	5.791	5.798	-0.007		6787157	80.3		161	20326	
D 3 13C5-PFPeA										
267.6 > 222.7	6.899	6.907	-0.008		4844847	63.2		126	10272	
4 Perfluoropentanoic acid										
262.9 > 218.7	6.904	6.910	-0.006	1.000	678932	13.8		69.0	326	
5 Perfluorobutane Sulfonate										
298.8 > 79.6	7.014	7.024	-0.010	1.000	386583	NC			870	
298.8 > 98.6	7.019	7.024	-0.005	1.001	241980		1.60(0.00-0.00)		459	
51 Perfluorobutanesulfonic acid										
298.8 > 79.6	7.014	7.024	-0.010	1.000	386583	15.5		87.9		
D 6 13C2 PFHxA										
314.6 > 269.7	8.149	8.156	-0.007		6201703	74.7		149	9495	
7 Perfluorohexanoic acid										
312.9 > 268.7	8.149	8.157	-0.008	1.000	922424	16.4		82.0	1763	
D 8 13C4-PFHpA										
366.6 > 321.6	9.380	9.387	-0.007		5346749	62.5		125	7859	
9 Perfluoroheptanoic acid										
362.8 > 318.7	9.380	9.388	-0.008	1.000	1054657	20.2		101	2192	
10 Perfluorohexane Sulfonate										M
398.3 > 79.2	9.421	9.421	0.0	1.000	0	NC			104	M
58 Perfluorohexanesulfonic acid										
398.3 > 79.2	9.412	9.421	-0.009	1.000	865234	15.0		82.5		
D 11 18O2 PFHxS										
402.5 > 83.6	9.412	9.422	-0.010		1595317	53.8		114	4470	
D 12 13C4 PFOA										
416.5 > 371.6	10.499	10.503	-0.004		5504783	61.8		124	9446	

Signal	RT	EXP RT	DLT RT	REL RT	Response	Amount ng/ml	Ratio(Limits)	%Rec	S/N	Flags
13 Perfluorooctanoic acid										
412.8 > 368.8	10.499	10.504	-0.005	1.000	949796	19.0		95.0	1341	
412.8 > 168.7	10.499	10.504	-0.005	1.000	261374		3.63(0.00-0.00)		1077	
39 Perfluoroheptanesulfonic Acid										
448.3 > 79.2	10.499	10.508	-0.009	1.000	1228330	41.3		217		
14 Perfluoroheptane Sulfonate										
448.3 > 79.2	10.499	10.508	-0.009	1.000	1228330	NC			4191	
D 16 13C4 PFOS										
502.4 > 79.7	11.458	11.465	-0.007		183452	27.2		56.9	553	
15 Perfluorooctane sulfonic acid										
498.3 > 79.2	11.458	11.466	-0.008	1.000	2032953	38.5		208	3784	M
498.3 > 98.2	11.458	11.466	-0.008	1.000	1057573		1.92(0.00-0.00)		2096	M
D 17 13C5 PFNA										
467.5 > 422.6	11.478	11.484	-0.006		5063904	64.6		129	9119	
18 Perfluorononanoic acid										
462.5 > 418.6	11.478	11.486	-0.008	1.000	2417821	19.4		97.0	2533	
D 19 13C2 PFDA										
514.4 > 469.5	12.324	12.325	-0.001		7089132	70.9		142	8853	
20 Perfluorodecanoic acid										
512.5 > 468.5	12.324	12.325	-0.001	1.000	3161438	21.5		107	4058	
D 23 13C8 FOSA										
505.4 > 77.6	12.884	12.893	-0.009		2136460	22.1		44.3	2893	
24 Perfluorooctane Sulfonamide										
497.5 > 77.6	12.896	12.893	0.003	1.000	891462	19.5		97.6	2142	
25 Perfluorodecane Sulfonate										
598.4 > 79.6	12.987	12.996	-0.009	1.000	547724	NC			1861	
49 Perfluorodecane Sulfonic acid										
598.4 > 79.6	12.987	12.996	-0.009	1.000	547724	33.9		176		
27 Perfluoroundecanoic acid										
562.4 > 518.5	13.041	13.042	-0.001	1.000	3196674	19.2		95.9	3562	
D 26 13C2 PFUnA										
564.3 > 519.5	13.041	13.044	-0.003		7067519	69.7		139	5702	
D 28 13C2 PFDoA										
614.4 > 569.4	13.638	13.646	-0.008		7028538	66.7		133	3973	
29 Perfluorododecanoic acid										
612.4 > 568.6	13.638	13.646	-0.008	1.000	2587928	20.2		101	871	
30 Perfluorotridecanoic acid										
662.4 > 618.5	14.160	14.162	-0.002	1.000	2139243	24.3		121	887	
32 Perfluorotetradecanoic acid										
712.6 > 668.5	14.588	14.600	-0.012	1.000	817330	17.5		87.7	324	
D 33 13C2-PFTeDA										
714.5 > 669.5	14.588	14.601	-0.013		4295547	56.6		113	3113	
D 35 13C2-PFHxDA										
814.8 > 769.6	15.250	15.255	-0.005		1050908	36.1		72.1	2832	
34 Perfluorohexadecanoic acid										
812.6 > 768.6	15.250	15.255	-0.005	1.000	1559520	28.1		140	222	
36 Perfluorooctandecanoic acid										
912.7 > 868.6	15.588	15.593	-0.005	1.000	984775	21.2		106	1186	

[QC Flag Legend](#)

Processing Flags

NC - Not Calibrated

Review Flags

M - Manually Integrated

TestAmerica Sacramento

Data File: \\ChromNA\Sacramento\ChromData\A4\20160525-31065.b\25MAY2016B4A_043.d

Injection Date: 26-May-2016 06:19:25

Instrument ID: A4

Lims ID: LCSD 320-109640/3-A

Client ID:

Operator ID: JRB

ALS Bottle#: 23

Worklist Smp#: 43

Injection Vol: 15.0 ul

Dil. Factor: 1.0000

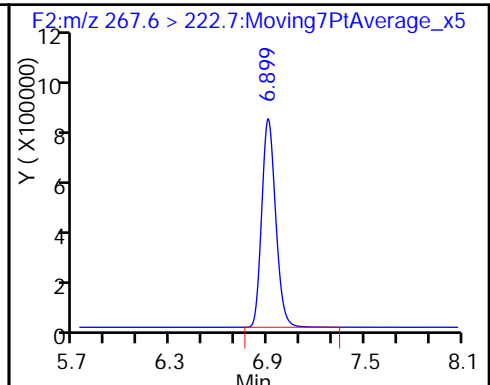
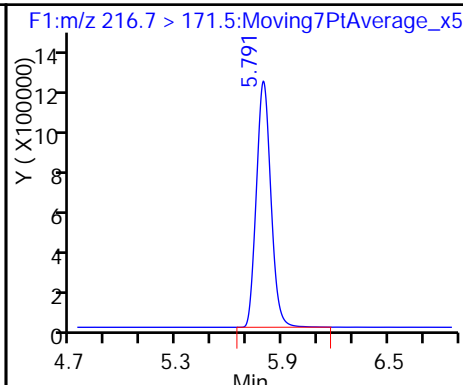
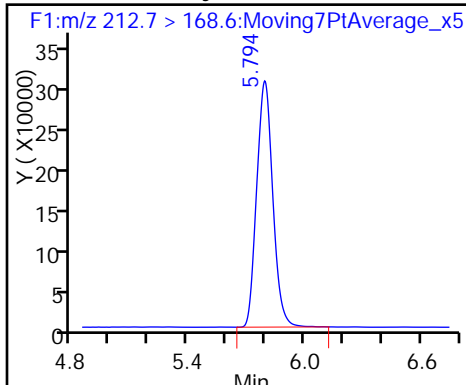
Method: PFAC_A4

Limit Group: LC PFC_DOD ICAL

2 Perfluorobutyric acid

D 1 13C4 PFBA

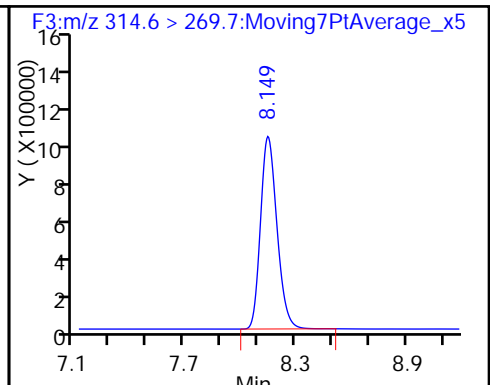
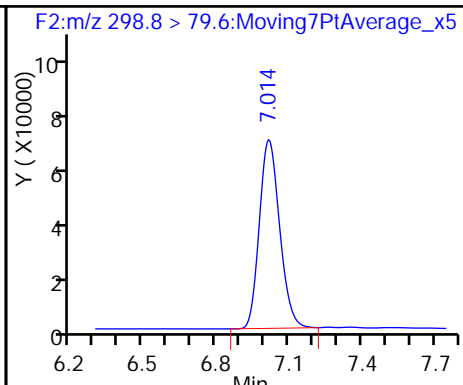
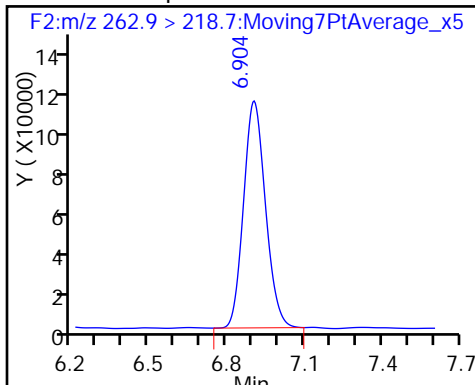
D 3 13C5-PFPeA



4 Perfluoropentanoic acid

51 Perfluorobutanesulfonic acid

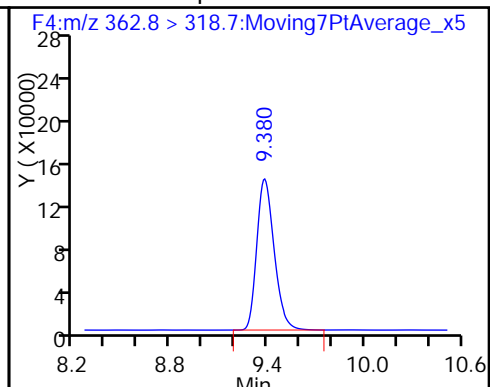
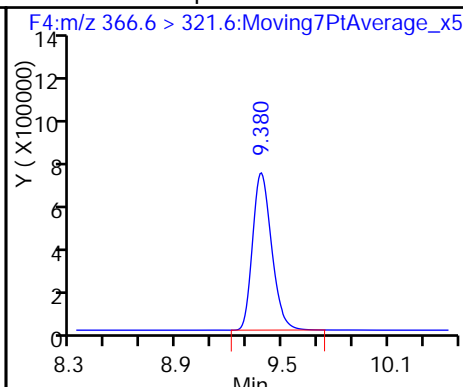
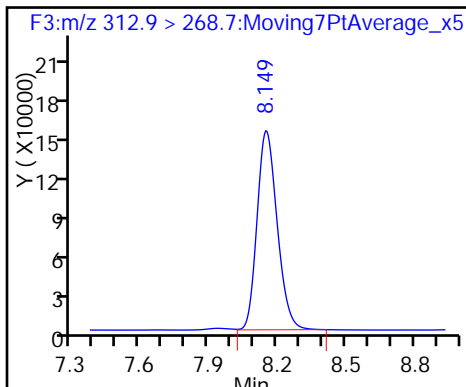
D 6 13C2 PFHxA



7 Perfluorohexanoic acid

D 8 13C4-PFHpA

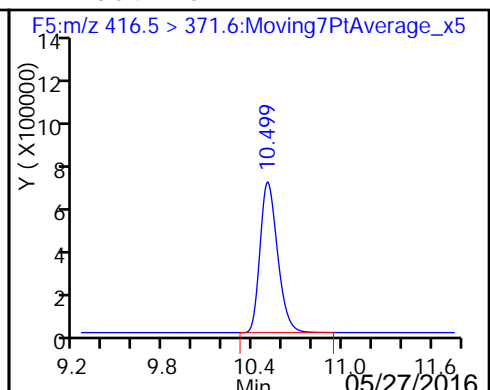
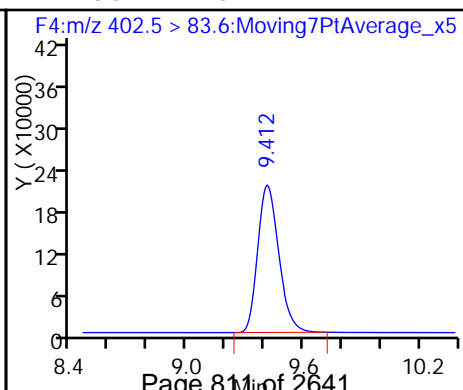
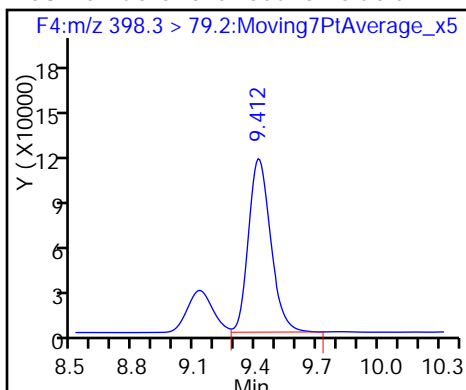
9 Perfluoroheptanoic acid

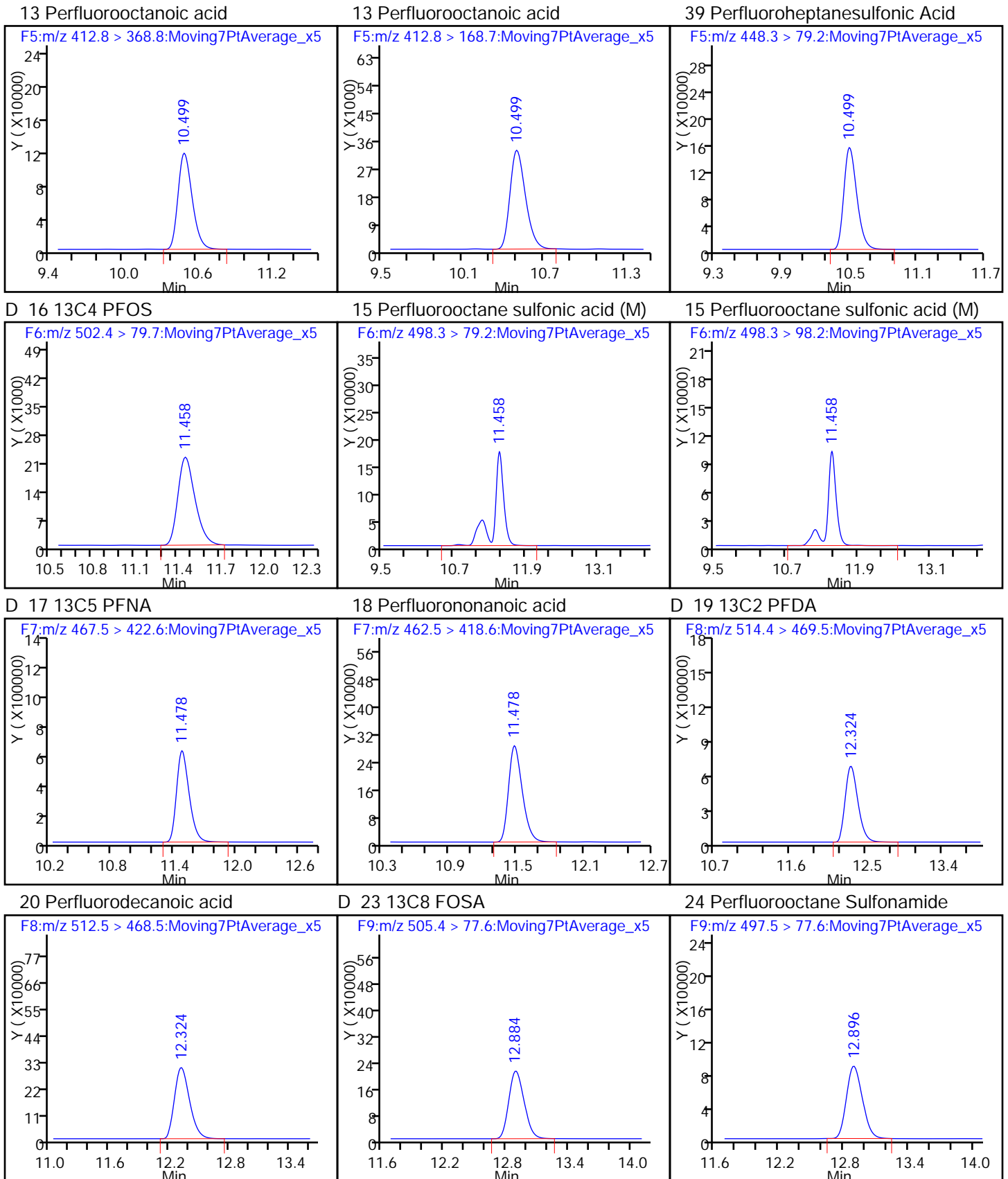


58 Perfluorohexanesulfonic acid

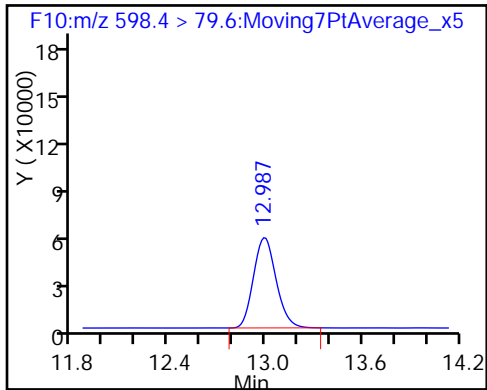
D 11 18O2 PFHxS

D 12 13C4 PFOA

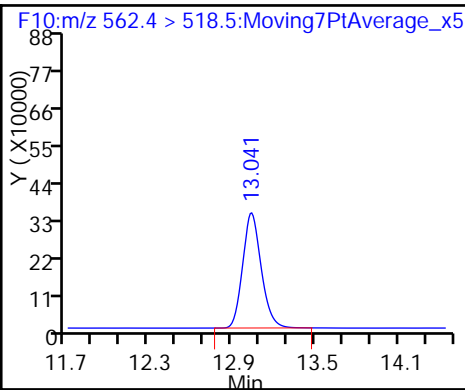




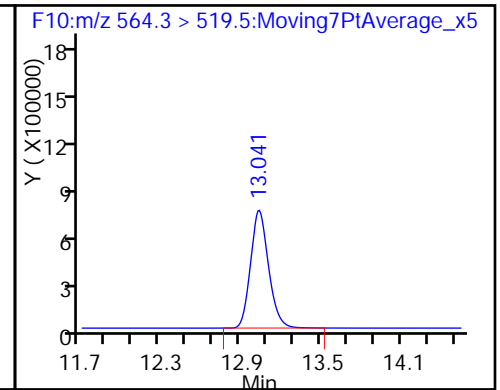
49 Perfluorodecane Sulfonic acid



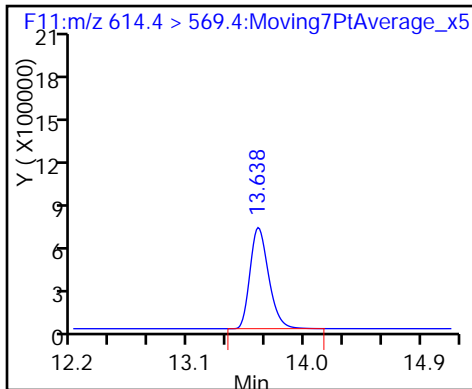
27 Perfluoroundecanoic acid



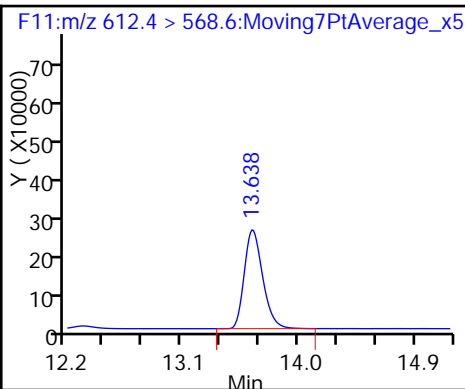
D 26 13C2 PFUnA



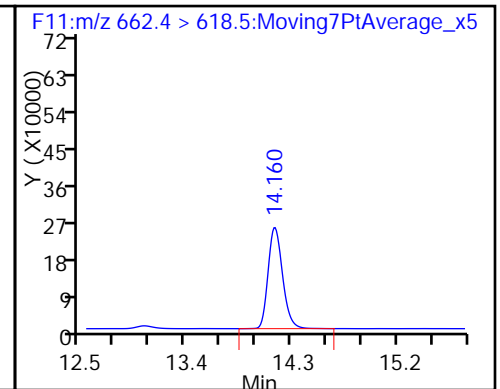
D 28 13C2 PFDaA



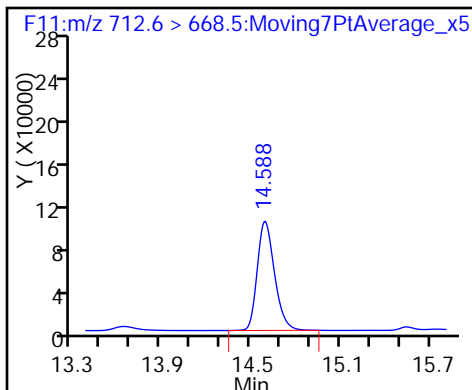
29 Perfluorododecanoic acid



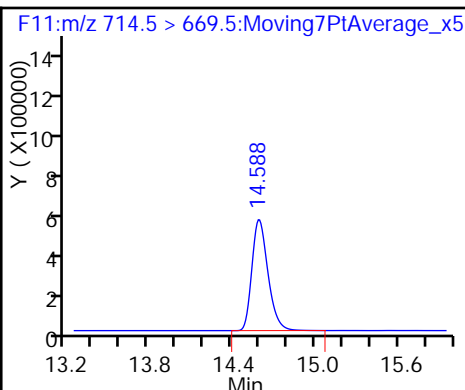
30 Perfluorotridecanoic acid



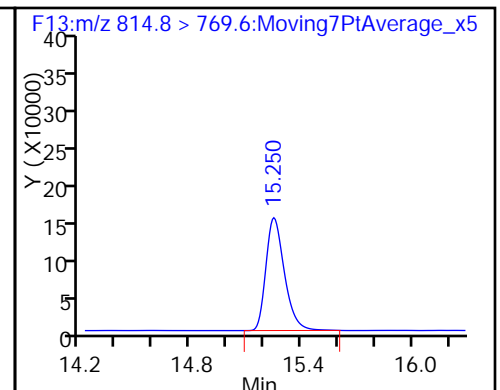
32 Perfluorotetradecanoic acid



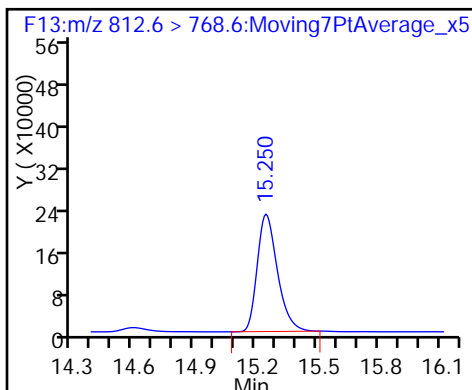
D 33 13C2-PFTeDA



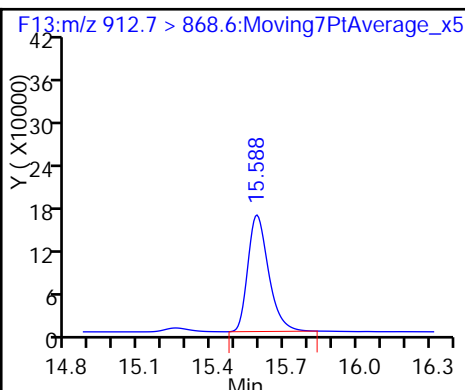
D 35 13C2-PFHxDA



34 Perfluorohexadecanoic acid



36 Perfluorooctadecanoic acid



LCMS ANALYSIS RUN LOG

Lab Name: TestAmerica SacramentoJob No.: 320-18796-1

SDG No.: _____

Instrument ID: A6Start Date: 05/24/2016 17:07Analysis Batch Number: 111182End Date: 05/25/2016 10:08

LAB SAMPLE ID	CLIENT SAMPLE ID	DATE ANALYZED	DILUTION FACTOR	LAB FILE ID	COLUMN ID
STD 320-111182/4 IC		05/24/2016 17:07	1	24MAY2016A6A_00 4.d	Acquity 2.1(mm)
STD 320-111182/5 IC		05/24/2016 17:28	1	24MAY2016A6A_00 5.d	Acquity 2.1(mm)
STD 320-111182/6 IC		05/24/2016 17:49	1	24MAY2016A6A_00 6.d	Acquity 2.1(mm)
STD 320-111182/7 IC		05/24/2016 18:10	1	24MAY2016A6A_00 7.d	Acquity 2.1(mm)
STD 320-111182/8 IC		05/24/2016 18:32	1	24MAY2016A6A_00 8.d	Acquity 2.1(mm)
STD 320-111182/9 IC		05/24/2016 18:53	1	24MAY2016A6A_00 9.d	Acquity 2.1(mm)
STD 320-111182/10 IC		05/24/2016 19:14	1	24MAY2016A6A_01 0.d	Acquity 2.1(mm)
ZZZZZ		05/24/2016 19:35	1		Acquity 2.1(mm)
ICV 320-111182/12		05/24/2016 19:57	1	24MAY2016A6A_01 2.d	Acquity 2.1(mm)
ZZZZZ		05/24/2016 21:01	1		Acquity 2.1(mm)
ZZZZZ		05/24/2016 21:22	1		Acquity 2.1(mm)
ZZZZZ		05/24/2016 21:43	1		Acquity 2.1(mm)
ZZZZZ		05/24/2016 22:04	1		Acquity 2.1(mm)
ZZZZZ		05/24/2016 22:26	1		Acquity 2.1(mm)
ZZZZZ		05/24/2016 22:47	1		Acquity 2.1(mm)
ZZZZZ		05/24/2016 23:08	1		Acquity 2.1(mm)
ZZZZZ		05/24/2016 23:30	1		Acquity 2.1(mm)
ZZZZZ		05/24/2016 23:51	1		Acquity 2.1(mm)
ZZZZZ		05/25/2016 00:12	1		Acquity 2.1(mm)
ZZZZZ		05/25/2016 00:33	1		Acquity 2.1(mm)
CCV 320-111182/26		05/25/2016 00:55	1		Acquity 2.1(mm)
ZZZZZ		05/25/2016 01:16	1		Acquity 2.1(mm)
ZZZZZ		05/25/2016 01:37	1		Acquity 2.1(mm)
ZZZZZ		05/25/2016 01:58	1		Acquity 2.1(mm)
ZZZZZ		05/25/2016 02:20	1		Acquity 2.1(mm)
ZZZZZ		05/25/2016 02:41	1		Acquity 2.1(mm)
ZZZZZ		05/25/2016 03:02	1		Acquity 2.1(mm)
ZZZZZ		05/25/2016 03:24	1		Acquity 2.1(mm)
ZZZZZ		05/25/2016 03:45	1		Acquity 2.1(mm)
ZZZZZ		05/25/2016 04:06	1		Acquity 2.1(mm)
ZZZZZ		05/25/2016 04:27	1		Acquity 2.1(mm)
ZZZZZ		05/25/2016 04:49	1		Acquity 2.1(mm)
ZZZZZ		05/25/2016 05:10	1		Acquity 2.1(mm)
CCV 320-111182/39		05/25/2016 05:31	1	24MAY2016A6A_03 9.d	Acquity 2.1(mm)
ZZZZZ		05/25/2016 05:52	1		Acquity 2.1(mm)
MB 320-109640/1-A RA		05/25/2016 06:14	1	24MAY2016A6A_04 1.d	Acquity 2.1(mm)
LCS 320-109640/2-A RA		05/25/2016 06:35	1	24MAY2016A6A_04 2.d	Acquity 2.1(mm)
LCSD 320-109640/3-A RA		05/25/2016 06:56	1	24MAY2016A6A_04 3.d	Acquity 2.1(mm)
ZZZZZ		05/25/2016 07:18	1		Acquity 2.1(mm)
ZZZZZ		05/25/2016 07:39	1		Acquity 2.1(mm)

LCMS ANALYSIS RUN LOG

Lab Name: TestAmerica Sacramento Job No.: 320-18796-1

SDG No.: _____

Instrument ID: A6 Start Date: 05/24/2016 17:07Analysis Batch Number: 111182 End Date: 05/25/2016 10:08

LAB SAMPLE ID	CLIENT SAMPLE ID	DATE ANALYZED	DILUTION FACTOR	LAB FILE ID	COLUMN ID
ZZZZZ		05/25/2016 08:00	1		Acquity 2.1 (mm)
ZZZZZ		05/25/2016 08:21	1		Acquity 2.1 (mm)
ZZZZZ		05/25/2016 08:43	1		Acquity 2.1 (mm)
ZZZZZ		05/25/2016 09:04	1		Acquity 2.1 (mm)
ZZZZZ		05/25/2016 09:25	1		Acquity 2.1 (mm)
CCV 320-111182/52		05/25/2016 10:08	1	24MAY2016A6A_05 2.d	Acquity 2.1 (mm)

LCMS ANALYSIS RUN LOG

Lab Name: TestAmerica SacramentoJob No.: 320-18796-1

SDG No.: _____

Instrument ID: A4Start Date: 05/25/2016 16:55Analysis Batch Number: 111390End Date: 05/26/2016 18:53

LAB SAMPLE ID	CLIENT SAMPLE ID	DATE ANALYZED	DILUTION FACTOR	LAB FILE ID	COLUMN ID
STD 320-111390/5 IC		05/25/2016 16:55	1	25MAY2016B4A_00 5.d	Acquity 2.1(mm)
STD 320-111390/6 IC		05/25/2016 17:15	1	25MAY2016B4A_00 6.d	Acquity 2.1(mm)
STD 320-111390/7 IC		05/25/2016 17:36	1	25MAY2016B4A_00 7.d	Acquity 2.1(mm)
STD 320-111390/8 IC		05/25/2016 17:58	1	25MAY2016B4A_00 8.d	Acquity 2.1(mm)
STD 320-111390/9 IC		05/25/2016 18:19	1	25MAY2016B4A_00 9.d	Acquity 2.1(mm)
STD 320-111390/10 IC		05/25/2016 18:40	1	25MAY2016B4A_01 0.d	Acquity 2.1(mm)
STD 320-111390/11 IC		05/25/2016 19:01	1	25MAY2016B4A_01 1.d	Acquity 2.1(mm)
ZZZZZ		05/25/2016 19:22	1		Acquity 2.1(mm)
ICV 320-111390/13		05/25/2016 19:44	1	25MAY2016B4A_01 3.d	Acquity 2.1(mm)
ZZZZZ		05/25/2016 20:05	1		Acquity 2.1(mm)
ZZZZZ		05/25/2016 20:26	1		Acquity 2.1(mm)
ZZZZZ		05/25/2016 20:47	1		Acquity 2.1(mm)
ZZZZZ		05/25/2016 21:08	1		Acquity 2.1(mm)
ZZZZZ		05/25/2016 21:29	1		Acquity 2.1(mm)
ZZZZZ		05/25/2016 21:51	1		Acquity 2.1(mm)
ZZZZZ		05/25/2016 22:12	1		Acquity 2.1(mm)
ZZZZZ		05/25/2016 22:33	1		Acquity 2.1(mm)
ZZZZZ		05/25/2016 22:54	1		Acquity 2.1(mm)
ZZZZZ		05/25/2016 23:15	1		Acquity 2.1(mm)
ZZZZZ		05/25/2016 23:37	1		Acquity 2.1(mm)
ZZZZZ		05/25/2016 23:58	1		Acquity 2.1(mm)
CCV 320-111390/26		05/26/2016 00:19	1		Acquity 2.1(mm)
ZZZZZ		05/26/2016 00:40	1		Acquity 2.1(mm)
ZZZZZ		05/26/2016 01:01	1		Acquity 2.1(mm)
ZZZZZ		05/26/2016 01:22	1		Acquity 2.1(mm)
ZZZZZ		05/26/2016 01:44	1		Acquity 2.1(mm)
ZZZZZ		05/26/2016 02:05	1		Acquity 2.1(mm)
ZZZZZ		05/26/2016 02:26	1		Acquity 2.1(mm)
ZZZZZ		05/26/2016 02:47	1		Acquity 2.1(mm)
ZZZZZ		05/26/2016 03:08	1		Acquity 2.1(mm)
ZZZZZ		05/26/2016 03:29	1		Acquity 2.1(mm)
ZZZZZ		05/26/2016 03:51	1		Acquity 2.1(mm)
ZZZZZ		05/26/2016 04:12	1		Acquity 2.1(mm)
ZZZZZ		05/26/2016 04:33	1		Acquity 2.1(mm)
CCV 320-111390/39		05/26/2016 04:54	1	25MAY2016B4A_03 9.d	Acquity 2.1(mm)
ZZZZZ		05/26/2016 05:15	1		Acquity 2.1(mm)
MB 320-109640/1-A		05/26/2016 05:37	1	25MAY2016B4A_04 1.d	Acquity 2.1(mm)
LCS 320-109640/2-A		05/26/2016 05:58	1	25MAY2016B4A_04 2.d	Acquity 2.1(mm)
LCSD 320-109640/3-A		05/26/2016 06:19	1	25MAY2016B4A_04 3.d	Acquity 2.1(mm)
ZZZZZ		05/26/2016 06:40	20		Acquity 2.1(mm)

LCMS ANALYSIS RUN LOG

Lab Name: TestAmerica SacramentoJob No.: 320-18796-1

SDG No.: _____

Instrument ID: A4Start Date: 05/25/2016 16:55Analysis Batch Number: 111390End Date: 05/26/2016 18:53

LAB SAMPLE ID	CLIENT SAMPLE ID	DATE ANALYZED	DILUTION FACTOR	LAB FILE ID	COLUMN ID
ZZZZZ		05/26/2016 07:01	20		Acquity 2.1(mm)
ZZZZZ		05/26/2016 07:22	1		Acquity 2.1(mm)
ZZZZZ		05/26/2016 07:44	1		Acquity 2.1(mm)
ZZZZZ		05/26/2016 08:05	1		Acquity 2.1(mm)
ZZZZZ		05/26/2016 08:26	1		Acquity 2.1(mm)
ZZZZZ		05/26/2016 08:47	1		Acquity 2.1(mm)
ZZZZZ		05/26/2016 09:08	1		Acquity 2.1(mm)
CCV 320-111390/52		05/26/2016 09:30	1	25MAY2016B4A_05 2.d	Acquity 2.1(mm)
ZZZZZ		05/26/2016 09:51	1		Acquity 2.1(mm)
320-18796-1		05/26/2016 10:12	20	25MAY2016B4A_05 4.d	Acquity 2.1(mm)
ZZZZZ		05/26/2016 10:33	100		Acquity 2.1(mm)
320-18796-3		05/26/2016 10:58	20	25MAY2016B4A_05 6.d	Acquity 2.1(mm)
320-18796-4		05/26/2016 11:21	20	25MAY2016B4A_05 7.d	Acquity 2.1(mm)
320-18796-5		05/26/2016 11:42	20	25MAY2016B4A_05 8.d	Acquity 2.1(mm)
320-18796-6		05/26/2016 12:03	20	25MAY2016B4A_05 9.d	Acquity 2.1(mm)
ZZZZZ		05/26/2016 12:24	20		Acquity 2.1(mm)
ZZZZZ		05/26/2016 12:46	20		Acquity 2.1(mm)
ZZZZZ		05/26/2016 13:07	20		Acquity 2.1(mm)
CCV 320-111390/64		05/26/2016 13:49	1	25MAY2016B4A_06 4.d	Acquity 2.1(mm)
ZZZZZ		05/26/2016 14:10	1		Acquity 2.1(mm)
ZZZZZ		05/26/2016 16:46	1		Acquity 2.1(mm)
ZZZZZ		05/26/2016 17:07	1		Acquity 2.1(mm)
ZZZZZ		05/26/2016 17:28	1		Acquity 2.1(mm)
ZZZZZ		05/26/2016 17:50	1		Acquity 2.1(mm)
320-18796-2		05/26/2016 18:11	10	25MAY2016B4A_07 6.d	Acquity 2.1(mm)
ZZZZZ		05/26/2016 18:32	1		Acquity 2.1(mm)
CCV 320-111390/78		05/26/2016 18:53	1	25MAY2016B4A_07 8.d	Acquity 2.1(mm)

LCMS BATCH WORKSHEET

Lab Name: TestAmerica Sacramento Job No.: 320-18796-1

SDG No.: _____

Batch Number: 109640 Batch Start Date: 05/12/16 10:00 Batch Analyst: Marchenko, Veronika PBatch Method: 3535 Batch End Date: 05/13/16 14:41

Lab Sample ID	Client Sample ID	Method Chain	Basis	GrossWeight	TareWeight	InitialAmount	FinalAmount	LCMPFCSU 00039	LCPFCSP 00047
MB 320-109640/1		3535, WS-LC-0025				500 mL	1.0 mL	50 uL	
LCS 320-109640/2		3535, WS-LC-0025				500 mL	1.0 mL	50 uL	20 uL
LCSD 320-109640/3		3535, WS-LC-0025				500 mL	1.0 mL	50 uL	20 uL
320-18796-A-1	OF-STORLAG-0516	3535, WS-LC-0025	T	584.01 g	47.96 g	536.1 mL	1.0 mL	50 uL	
320-18796-A-2	OF-TRMTLAG-0516	3535, WS-LC-0025	T	554.99 g	45.08 g	509.9 mL	1.0 mL	50 uL	
320-18796-A-3	OF-POLLLAG-0516	3535, WS-LC-0025	T	551.47 g	45.29 g	506.2 mL	1.0 mL	50 uL	
320-18796-A-4	OF-CLTANK-0516	3535, WS-LC-0025	T	573.05 g	46.45 g	526.6 mL	1.0 mL	50 uL	
320-18796-A-5	OF-BACKWASH-0516	3535, WS-LC-0025	T	578.93 g	44.46 g	534.5 mL	1.0 mL	50 uL	
320-18796-A-6	OF-FILTER-0516	3535, WS-LC-0025	T	582.07 g	44.75 g	537.3 mL	1.0 mL	50 uL	

Batch Notes	
Balance ID	QA-070
Batch Comment	0.1N NaOH/H2O: 607459; HEXANE: 0000125986; MeOH: 625010; Manifold 5,9
H2O ID	5-04-16/5-09-16
Pipette ID	EC15219, EC15131
Analyst ID - Reagent Drop	VPM
Analyst ID - SU Reagent Drop	VPM
Analyst ID - SU Reagent Drop Witness	SNE
Solvent Lot #	626675
Solvent Name	0.3% NH4OH/MeOH
SOP Number	WS-LC-0025
SPE Cartridge Type	WAX 500mg
Solid Phase Extraction Disk ID	002736075A

Basis	Basis Description
T	Total/NA

The pound sign (#) in the amount added field denotes that the reagent was used undiluted. All calculations are performed using the stated concentration for this reagent.

WS-LC-0025

Page 1 of 1

HPLC/LCMS Data Review Checklist

Job Number(s): 18794, 18796
 Extraction Batch: 109640
 Delivery Rank: 4

Work List ID(s): 31021, 31065
 Analysis Batch(es): 111182, 111390
 Due Date: 5-25-16

A. Calibration/Instrument Run QC	1 st Level	2 nd Level	N/A
1. ICAL locked in Chrom and TALS? ICAL Batch#	✓	✓	
2. ICAL, CCV Frequency & Criteria met.	✓	✓	
• RF _{average} criteria appropriate for the method.	✓	✓	
• Linear Regression criteria appropriate if required ($r \geq 0.995$).	✓	✓	
• Quadratic fit criteria appropriate if required ($r^2 \geq 0.990$).			✓
• For Linear Regression and Quadratic fit – Does the y-intercept support ½ the reporting limit as described in CA-Q-S-005?	✓	✓	
• All curve points show calculated concentrations.	✓	✓	
3. Peaks correctly ID'd by data system.	✓	✓	
5. Tune check frequency & criteria met and Tune check report attached.			✓
B. QA/QC			
1. Are all QC samples properly linked in TALS?	✓	✓	
2. Method blank, LCS/LCSD and MS/SD frequencies met.	✓	✓	
3. LCS/LCSD and MB data are within control limits. If not, NCM is present. <i>NCM</i>	✓	✓	
4. Are MS/MSD recoveries and RPD within control limits?			✓
5. Holding Times were met for prep and analytical.	✓	✓	
6. IS/Surrogate recoveries meet criteria or properly noted. <i>NCM</i>	✓	✓	
C. Sample Analysis			
1. Was correct analysis performed and were project instructions followed?	✓	✓	
2. If required, are compounds within RT windows?			✓
3. If required, are positive hits confirmed and >40% RPD flagged?			✓
4. Manual Integrations reviewed and appropriate.	✓	✓	
5. All analytes correctly reported. (Primary, secondary, acceptable status)	✓	✓	
6. Correct reporting limits used. (based on client request, prep factors, and dilutions)	✓	✓	
D. Documentation <i>53311, 53312</i>			
1. Are all non-conformances documented/attached? NCM# <i>53305 53313</i>	✓	✓	
2. Do results make sense (e.g. dilutions, etc.)?	✓	✓	
3. Have all flags been reviewed for appropriateness?	✓	✓	
4. For level 3 and 4 reports, have forms and raw data been reviewed?	✓	✓	
5. Was QC Checker run for this job?	✓	✓	

*Upon completion of this checklist, the reviewer must scan and attach the checklist to the TALS job.

1st Level (Analyst): JRB

Date: 5-27-16

2nd Level Reviewer: McWaff

Date: 5/27/2016

Aqueous Extraction Analysis Sheet

(To Accompany Samples to Instruments)

Analyst: Marchenko, Veronika P

Batch Number: 320-109640

Method Code: 320-3535_IJWT-320

Batch Open: 5/12/2016 10:00:10AM

Batch End: 5-13-16 14:41

Solid-Phase Extraction (SPE)

Input Sample Lab ID (Analytical Method)	SDG (Job #)	GrossWt TareWt	InitAmt FinAmt	PHs Adj1 Adj2	Due Date	Analytical TAT	Div Rank	Comments	Output Sample Lab ID
MB-320-109640/1 N/A	N/A		500 mL 1.0 mL		N/A	N/A	N/A		MB 320-109640/1-A
LCS-320-109640/2 N/A	N/A		500 mL 1.0 mL		N/A	N/A	N/A		LCS 320-109640/2-A
LCSD-320-109640/3 N/A	N/A		500 mL 1.0 mL		N/A	N/A	N/A		LCSD 320-109640/3-A
320-18794-A-1 (PFC_IDA_DOD5)	N/A (320-18794-1)	570.53 g 45.12 g	525.4 mL 1.0 mL		5/15/16	11_Days	4		320-18794-A-1-A
320-18794-A-2 (PFC_IDA_DOD5)	N/A (320-18794-1)	569.20 g 44.86 g	524.3 mL 1.0 mL		5/15/16	11_Days	4		320-18794-A-2-A
320-18794-A-4 (PFC_IDA_DOD5)	N/A (320-18794-1)	562.18 g 45.09 g	517.1 mL 1.0 mL		5/15/16	11_Days	4		320-18794-A-4-A
320-18794-A-5 (PFC_IDA_DOD5)	N/A (320-18794-1)	586.87 g 45.07 g	541.8 mL 1.0 mL		5/15/16	11_Days	4		320-18794-A-5-A
320-18794-A-6 (PFC_IDA_DOD5)	N/A (320-18794-1)	501.5 g 47.12 g	554.4 mL 1.0 mL		5/15/16	11_Days	4		320-18794-A-6-A
320-18794-A-7 (PFC_IDA_DOD5)	N/A (320-18794-1)	558.67 g 45.78 g	512.9 mL 1.0 mL		5/15/16	11_Days	4		320-18794-A-7-A
320-18794-A-8 (PFC_IDA_DOD5)	N/A (320-18794-1)	590.57 g 45.42 g	545.2 mL 1.0 mL		5/15/16	11_Days	4		320-18794-A-8-A

Aqueous Extraction Analysis Sheet

(To Accompany Samples to Instruments)







Analyst: Marchenko, Veronika P

Batch Number: 320-109640

Batch Open: 5/12/2016 10:00:10AM

Method Code: 320-3535_IVWT-320

Batch End:

11	320-18796-A-1 (PFC_IDA_DOD5) ✓ 20x	N/A (320-18796-1)	584.01 g 47.96 g	536.1 mL 1.0 mL			5/15/16	11_Days	4	
12	320-18796-A-2 (PFC_IDA_DOD5) ✓ 100x	N/A (320-18796-1)	554.99 g 45.08 g	509.9 mL 1.0 mL			5/15/16	11_Days	4	
13	320-18796-A-3 (PFC_IDA_DOD5) ✓ 20x	N/A (320-18796-1)	551.47 g 45.29 g	506.2 mL 1.0 mL			5/15/16	11_Days	4	
14	320-18796-A-4 (PFC_IDA_DOD5) ✓ 20x	N/A (320-18796-1)	573.05 g 46.45 g	526.6 mL 1.0 mL			5/15/16	11_Days	4	
15	320-18796-A-5 (PFC_IDA_DOD5) ✓ 20x	N/A (320-18796-1)	578.93 g 44.46 g	534.5 mL 1.0 mL			5/15/16	11_Days	4	
16	320-18796-A-6 (PFC_IDA_DOD5) ✓ 20x	N/A (320-18796-1)	582.07 g 44.75 g	537.3 mL 1.0 mL			5/15/16	11_Days	4	

Aqueous Extraction Analysis Sheet

(To Accompany Samples to Instruments)

Batch Number: 320-109640

Method Code: 320-3535_IVWT-320

Analyst: Marchenko, Veronika P

Batch Open: 5/12/2016 10:00:10AM

Batch End:

Batch Notes	
First Start time	NA
First End time	NA
Balance ID	QA-070
SPE Cartridge Type	WAX 500mg
Solid Phase Extraction Disk ID	002736075A
H2O ID	5-04-16/5-09-16
Pipette ID	EC15219, EC15131
Solvent Name	0.3% NH4OH/MeOH
Solvent Lot #	626675
Analyst ID - Reagent Drop	VPM
Analyst ID - SU Reagent Drop	VPM
Analyst ID - SU Reagent Drop Witness	SNE
Acid Name	NA
Acid ID	NA
Reagent ID	NA
Reagent Lot Number	NA
NaCl ID	NA
SOP Number	WS-LC-0025
Batch Comment	0.1N NaOH/H2O: 607459; HEXANE: 0000125986; MeOH: 625010; Manifold 5,9

Aqueous Extraction Analysis Sheet

(To Accompany Samples to Instruments)

Analyst: Marchenko, Veronika P

Batch Number: 320-109640

Method Code: 320-3535_IVWT-320

Batch Open: 5/12/2016 10:00:10AM

Batch End:

Comments	
320-18796-A-1	Method Comments: Q5
320-18796-A-2	Method Comments: Q5
320-18796-A-3	Method Comments: Q5
320-18796-A-4	Method Comments: Q5
320-18796-A-5	Method Comments: Q5
320-18796-A-6	Method Comments: Q5

Aqueous Extraction Analysis Sheet

(To Accompany Samples to Instruments)

Analyst: Marchenko, Veronika P

Batch Number: 320-109640

Method Code: 320-3535_IVWT-320

Batch Open: 5/12/2016 10:00:10AM

Batch End:

Reagent Additions Worksheet

Lab ID	Reagent Code	Amount Added	Final Amount	By	Witness
MB 320-109640/1	LCMPFCSU_00039	50 uL	1.0 mL	VPN 5-12-16	SNE 5/12/16
LCS 320-109640/2	LCMPFCSU_00039	50 uL	1.0 mL		
LCS 320-109640/2	LCPFCSU_00047	20 uL	1.0 mL		
LCSD 320-109640/3	LCMPFCSU_00039	50 uL	1.0 mL		
LCSD 320-109640/3	LCPFCSU_00047	20 uL	1.0 mL		
320-18794-A-1	LCMPFCSU_00039	50 uL	1.0 mL		
320-18794-A-2	LCMPFCSU_00039	50 uL	1.0 mL		
320-18794-A-4	LCMPFCSU_00039	50 uL	1.0 mL		
320-18794-A-5	LCMPFCSU_00039	50 uL	1.0 mL		
320-18794-A-6	LCMPFCSU_00039	50 uL	1.0 mL		
320-18794-A-7	LCMPFCSU_00039	50 uL	1.0 mL		
320-18794-A-8	LCMPFCSU_00039	50 uL	1.0 mL		
320-18796-A-1	LCMPFCSU_00039	50 uL	1.0 mL		
320-18796-A-2	LCMPFCSU_00039	50 uL	1.0 mL		
320-18796-A-3	LCMPFCSU_00039	50 uL	1.0 mL		
320-18796-A-4	LCMPFCSU_00039	50 uL	1.0 mL		
320-18796-A-5	LCMPFCSU_00039	50 uL	1.0 mL		
320-18796-A-6	LCMPFCSU_00039	50 uL	1.0 mL		

Aqueous Extraction Analysis Sheet

(To Accompany Samples to Instruments)

Analyst: Marchenko, Veronika P

Batch Number: 320-109640

Method Code: 320-3535_IVWT-320

Batch Open: 5/12/2016 10:00:10AM

Batch End:

Reagent	Other Reagents: Amount/Units	Lot#:

Preparation Batch Number(s): 109640

Test: PFC-IDA_0005-L

Earliest Holding Time: 5-16-16

Sample List Tab	1 st Level Reviewer	2 nd Level Reviewer
Samples identified to the correct method	/	/
All necessary NCMs filed (including holding time)	/	/
Method/sample/login/QAS checked and correct	/	/
Worksheet Tab	1 st Level Reviewer	2 nd Level Reviewer
All samples properly preserved	NA	NA
Weights in anticipated range and not targeted	/	/
All additional test requirements performed, documented, and uploaded to TALS correctly (e.g. final amount, initial amount, turbidity, and CI Check)	/	/
The pH is transcribed correctly in TALS	NA	NA
All additional information transcribed into TALS is correct and raw data is attached	/	/
Comments are transcribed correctly in TALS	/	/
Reagents Tab	1 st Level Reviewer	2 nd Level Reviewer
All necessary reagents not expired and entered into TALS	/	/
All spike amounts correct and added to necessary samples and QC	/	/
Batch Information	1 st Level Reviewer	2 nd Level Reviewer
Date and time accurate and entered into TALS correctly	/	/
All necessary 'batch information' complete and entered into TALS correctly	/	/

1st Level Reviewer: VPM

Date: 05-13-16

2nd Level Reviewer: SNE

Date: 5/13/16

Comments: _____

METALS

COVER PAGE
METALS

Lab Name: TestAmerica Denver Job Number: 320-18796-1

SDG No.: _____

Project: NAS Oceana, VA - 9000 CTO-WE01

Client Sample ID	Lab Sample ID
<u>OF-STORLAG-0516</u>	<u>320-18796-1</u>
<u>OF-TRMTLAG-0516</u>	<u>320-18796-2</u>
<u>OF-POLLLAG-0516</u>	<u>320-18796-3</u>
<u>OF-CLTANK-0516</u>	<u>320-18796-4</u>
<u>OF-BACKWASH-0516</u>	<u>320-18796-5</u>
<u>OF-FILTER-0516</u>	<u>320-18796-6</u>

Comments:

1A-IN
INORGANIC ANALYSIS DATA SHEET
METALS

Client Sample ID: OF-STORLAG-0516

Lab Sample ID: 320-18796-1

Lab Name: TestAmerica Denver

Job No.: 320-18796-1

SDG ID.:

Matrix: Water

Date Sampled: 05/10/2016 12:10

Reporting Basis: WET

Date Received: 05/11/2016 09:30

Analyte	Result	LOQ	LOD	DL	Units	C	Q	DIL	Method
Iron	1100	100	85	22	ug/L			1	6010C

1A-IN
INORGANIC ANALYSIS DATA SHEET
METALS - DISSOLVED

Client Sample ID: OF-STORLAG-0516

Lab Sample ID: 320-18796-1

Lab Name: TestAmerica Denver

Job No.: 320-18796-1

SDG ID.:

Matrix: Water

Date Sampled: 05/10/2016 12:10

Reporting Basis: WET

Date Received: 05/11/2016 09:30

Analyte	Result	LOQ	LOD	DL	Units	C	Q	DIL	Method
Iron	1400	100	85	22	ug/L			1	6010C

1A-IN
INORGANIC ANALYSIS DATA SHEET
METALS

Client Sample ID: OF-TRMTLAG-0516 Lab Sample ID: 320-18796-2
Lab Name: TestAmerica Denver Job No.: 320-18796-1
SDG ID.: _____
Matrix: Water Date Sampled: 05/10/2016 11:50
Reporting Basis: WET Date Received: 05/11/2016 09:30

Analyte	Result	LOQ	LOD	DL	Units	C	Q	DIL	Method
Iron	350	100	85	22	ug/L			1	6010C

1A-IN
INORGANIC ANALYSIS DATA SHEET
METALS - DISSOLVED

Client Sample ID: OF-TRMTLAG-0516
Lab Sample ID: 320-18796-2
Lab Name: TestAmerica Denver
Job No.: 320-18796-1
SDG ID.:
Matrix: Water
Date Sampled: 05/10/2016 11:50
Reporting Basis: WET
Date Received: 05/11/2016 09:30

Analyte	Result	LOQ	LOD	DL	Units	C	Q	DIL	Method
Iron	98	100	85	22	ug/L	J		1	6010C

1A-IN
INORGANIC ANALYSIS DATA SHEET
METALS

Client Sample ID: OF-POLLLAG-0516

Lab Sample ID: 320-18796-3

Lab Name: TestAmerica Denver

Job No.: 320-18796-1

SDG ID.:

Matrix: Water

Date Sampled: 05/10/2016 11:25

Reporting Basis: WET

Date Received: 05/11/2016 09:30

Analyte	Result	LOQ	LOD	DL	Units	C	Q	DIL	Method
Iron	1500	100	85	22	ug/L			1	6010C

1A-IN
INORGANIC ANALYSIS DATA SHEET
METALS - DISSOLVED

Client Sample ID: OF-POLLLAG-0516

Lab Sample ID: 320-18796-3

Lab Name: TestAmerica Denver

Job No.: 320-18796-1

SDG ID.:

Matrix: Water

Date Sampled: 05/10/2016 11:25

Reporting Basis: WET

Date Received: 05/11/2016 09:30

Analyte	Result	LOQ	LOD	DL	Units	C	Q	DIL	Method
Iron	800	100	85	22	ug/L			1	6010C

1A-IN
INORGANIC ANALYSIS DATA SHEET
METALS

Client Sample ID: OF-CLTANK-0516

Lab Sample ID: 320-18796-4

Lab Name: TestAmerica Denver

Job No.: 320-18796-1

SDG ID.:

Matrix: Water

Date Sampled: 05/10/2016 10:48

Reporting Basis: WET

Date Received: 05/11/2016 09:30

Analyte	Result	LOQ	LOD	DL	Units	C	Q	DIL	Method
Iron	1400	100	85	22	ug/L			1	6010C

1A-IN
INORGANIC ANALYSIS DATA SHEET
METALS - DISSOLVED

Client Sample ID: OF-CLTANK-0516 Lab Sample ID: 320-18796-4
Lab Name: TestAmerica Denver Job No.: 320-18796-1
SDG ID.: _____
Matrix: Water Date Sampled: 05/10/2016 10:48
Reporting Basis: WET Date Received: 05/11/2016 09:30

Analyte	Result	LOQ	LOD	DL	Units	C	Q	DIL	Method
Iron	1500	100	85	22	ug/L			1	6010C

1A-IN
INORGANIC ANALYSIS DATA SHEET
METALS

Client Sample ID: OF-BACKWASH-0516

Lab Sample ID: 320-18796-5

Lab Name: TestAmerica Denver

Job No.: 320-18796-1

SDG ID.:

Matrix: Water

Date Sampled: 05/10/2016 10:30

Reporting Basis: WET

Date Received: 05/11/2016 09:30

Analyte	Result	LOQ	LOD	DL	Units	C	Q	DIL	Method
Iron	640000	100	85	22	ug/L			1	6010C

1A-IN
INORGANIC ANALYSIS DATA SHEET
METALS - DISSOLVED

Client Sample ID: OF-BACKWASH-0516 Lab Sample ID: 320-18796-5
Lab Name: TestAmerica Denver Job No.: 320-18796-1
SDG ID.: _____
Matrix: Water Date Sampled: 05/10/2016 10:30
Reporting Basis: WET Date Received: 05/11/2016 09:30

Analyte	Result	LOQ	LOD	DL	Units	C	Q	DIL	Method
Iron	580	100	85	22	ug/L			1	6010C

1A-IN
INORGANIC ANALYSIS DATA SHEET
METALS

Client Sample ID: OF-FILTER-0516 Lab Sample ID: 320-18796-6
Lab Name: TestAmerica Denver Job No.: 320-18796-1
SDG ID.: _____
Matrix: Water Date Sampled: 05/10/2016 10:15
Reporting Basis: WET Date Received: 05/11/2016 09:30

Analyte	Result	LOQ	LOD	DL	Units	C	Q	DIL	Method
Iron	190	100	85	22	ug/L			1	6010C

1A-IN
INORGANIC ANALYSIS DATA SHEET
METALS - DISSOLVED

Client Sample ID: OF-FILTER-0516

Lab Sample ID: 320-18796-6

Lab Name: TestAmerica Denver

Job No.: 320-18796-1

SDG ID.:

Matrix: Water

Date Sampled: 05/10/2016 10:15

Reporting Basis: WET

Date Received: 05/11/2016 09:30

Analyte	Result	LOQ	LOD	DL	Units	C	Q	DIL	Method
Iron	85	100	85	22	ug/L	U		1	6010C

2A-IN
CALIBRATION VERIFICATIONS
METALS

Lab Name: TestAmerica Denver Job No.: 320-18796-1

SDG No.: _____

ICV Source: ICP ICVH_00308 Concentration Units: ug/L

CCV Source: ICP CCVH_00464

Analyte	ICVH 280-325799/6 05/17/2016 10:22				CCVH 280-325799/26 05/17/2016 17:15				CCVH 280-325799/40 05/17/2016 17:51			
	Found	C	True	%R	Found	C	True	%R	Found	C	True	%R
Iron	80900		80000	101	51400		50000	103	51400		50000	103

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

2A-IN
CALIBRATION VERIFICATIONS
METALS

Lab Name: TestAmerica Denver Job No.: 320-18796-1

SDG No.: _____

ICV Source: ICP ICV_00145 Concentration Units: ug/L

CCV Source: ICP CCV_00161

Analyte	ICV 280-325799/7 05/17/2016 10:26				CCV 280-325799/27 05/17/2016 17:18				CCV 280-325799/41 05/17/2016 17:53			
	Found	C	True	%R	Found	C	True	%R	Found	C	True	%R
Iron	256		250	103	2420		2500	97	2420		2500	97

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

2A-IN
CALIBRATION VERIFICATIONS
METALS

Lab Name: TestAmerica Denver Job No.: 320-18796-1

SDG No.: _____

ICV Source: ICP LLCCV_01768 Concentration Units: ug/L

CCV Source: ICP LLCCV_01768

Analyte	ICVL 280-325799/9 05/17/2016 10:34				ICVL 280-325799/10 05/17/2016 10:36				CCVL 280-325799/29 05/17/2016 17:23			
	Found	C	True	%R	Found	C	True	%R	Found	C	True	%R
Iron	92.8	J	100	93	93.9	J	100	94	119		100	119

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

2A-IN
CALIBRATION VERIFICATIONS
METALS

Lab Name: TestAmerica Denver Job No.: 320-18796-1

SDG No.: _____

ICV Source: ICP LLCCV_01768 Concentration Units: ug/L

CCV Source: ICP LLCCV_01768

Analyte	CCVL 280-325799/43 05/17/2016 17:58											
	Found	C	True	%R	Found	C	True	%R	Found	C	True	%R
Iron	105		100	105								

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

2A-IN
CALIBRATION VERIFICATIONS
METALS

Lab Name: TestAmerica Denver Job No.: 320-18796-1

SDG No.: _____

ICV Source: ICP ICVH_00309 Concentration Units: ug/L

CCV Source: ICP CCVH_00465

Analyte	ICVH 280-326010/7 05/18/2016 10:10				CCVH 280-326010/47 05/18/2016 16:15				CCVH 280-326010/60 05/18/2016 16:49			
	Found	C	True	%R	Found	C	True	%R	Found	C	True	%R
Iron	82500		80000	103	50200		50000	100	50700		50000	101

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

2A-IN
CALIBRATION VERIFICATIONS
METALS

Lab Name: TestAmerica Denver Job No.: 320-18796-1

SDG No.: _____

ICV Source: ICP ICVH_00309 Concentration Units: ug/L

CCV Source: ICP CCVH_00465

Analyte	CCVH 280-326010/69 05/18/2016 17:12											
	Found	C	True	%R	Found	C	True	%R	Found	C	True	%R
Iron	50800		50000	102								

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

2A-IN
CALIBRATION VERIFICATIONS
METALS

Lab Name: TestAmerica Denver Job No.: 320-18796-1

SDG No.: _____

ICV Source: ICP ICV_00145 Concentration Units: ug/L

CCV Source: ICP CCV_00162

Analyte	ICV 280-326010/9 05/18/2016 10:21				ICV 280-326010/10 05/18/2016 10:24				CCV 280-326010/48 05/18/2016 16:18			
	Found	C	True	%R	Found	C	True	%R	Found	C	True	%R
Iron	261		250	104	261		250	104	2440		2500	97

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

2A-IN
CALIBRATION VERIFICATIONS
METALS

Lab Name: TestAmerica Denver Job No.: 320-18796-1

SDG No.: _____

ICV Source: ICP ICV_00145 Concentration Units: ug/L

CCV Source: ICP CCV_00162

Analyte	CCV 280-326010/61 05/18/2016 16:52				CCV 280-326010/70 05/18/2016 17:15							
	Found	C	True	%R	Found	C	True	%R	Found	C	True	%R
Iron	2460		2500	98	2450		2500	98				

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

2A-IN
CALIBRATION VERIFICATIONS
METALS

Lab Name: TestAmerica Denver Job No.: 320-18796-1

SDG No.: _____

ICV Source: ICP LLCCV_01769 Concentration Units: ug/L

CCV Source: ICP LLCCV_01769

Analyte	ICVL 280-326010/11 05/18/2016 10:29				CCVL 280-326010/50 05/18/2016 16:23				CCVL 280-326010/63 05/18/2016 16:57			
	Found	C	True	%R	Found	C	True	%R	Found	C	True	%R
Iron	105		100	105	96.6	J	100	97	122		100	122

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

2A-IN
CALIBRATION VERIFICATIONS
METALS

Lab Name: TestAmerica Denver Job No.: 320-18796-1

SDG No.: _____

ICV Source: ICP LLCCV_01769 Concentration Units: ug/L

CCV Source: ICP LLCCV_01769

Analyte	CCVL 280-326010/72 05/18/2016 17:20											
	Found	C	True	%R	Found	C	True	%R	Found	C	True	%R
Iron	90.8	J	100	91								

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

2A-IN
CALIBRATION VERIFICATIONS
METALS

Lab Name: TestAmerica Denver Job No.: 320-18796-1

SDG No.: _____

ICV Source: ICP ICVH_00309 Concentration Units: ug/L

CCV Source: ICP CCVH_00466

Analyte	ICVH 280-326363/6 05/20/2016 14:37				CCVH 280-326363/85 05/20/2016 22:23				CCVH 280-326363/98 05/20/2016 22:57			
	Found	C	True	%R	Found	C	True	%R	Found	C	True	%R
Iron	80200		80000	100	47300		50000	95	46800		50000	94

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

2A-IN
CALIBRATION VERIFICATIONS
METALS

Lab Name: TestAmerica Denver Job No.: 320-18796-1

SDG No.: _____

ICV Source: ICP ICV_00146 Concentration Units: ug/L

CCV Source: ICP CCV_00164

Analyte	ICV 280-326363/7 05/20/2016 14:41				CCV 280-326363/86 05/20/2016 22:26				CCV 280-326363/99 05/20/2016 23:00			
	Found	C	True	%R	Found	C	True	%R	Found	C	True	%R
Iron	260		250	104	2500		2500	100	2520		2500	101

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

2A-IN
CALIBRATION VERIFICATIONS
METALS

Lab Name: TestAmerica Denver Job No.: 320-18796-1

SDG No.: _____

ICV Source: ICP LLCCV_01771 Concentration Units: ug/L

CCV Source: ICP LLCCV_01771

Analyte	ICVL 280-326363/8 05/20/2016 14:45				CCVL 280-326363/88 05/20/2016 22:31				CCVL 280-326363/101 05/20/2016 23:06			
	Found	C	True	%R	Found	C	True	%R	Found	C	True	%R
Iron	107		100	107	108		100	108	123		100	123

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

2A-IN
CALIBRATION VERIFICATIONS
METALS

Lab Name: TestAmerica Denver Job No.: 320-18796-1

SDG No.: _____

ICV Source: ICP ICVH_00309 Concentration Units: ug/L

CCV Source: ICP CCVH_00466

Analyte	ICVH 280-326681/6 05/23/2016 11:50				CCVH 280-326681/10 05/23/2016 12:11				CCVH 280-326681/20 05/23/2016 13:34			
	Found	C	True	%R	Found	C	True	%R	Found	C	True	%R
<i>Iron</i>	77900		80000	97	50200		50000	100	51500		50000	103

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

2A-IN
CALIBRATION VERIFICATIONS
METALS

Lab Name: TestAmerica Denver Job No.: 320-18796-1

SDG No.: _____

ICV Source: ICP ICVH_00309 Concentration Units: ug/L

CCV Source: ICP CCVH_00466

Analyte	CCVH 280-326681/32 05/23/2016 14:15											
	Found	C	True	%R	Found	C	True	%R	Found	C	True	%R
<i>Iron</i>	50200		50000	100								

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

2A-IN
CALIBRATION VERIFICATIONS
METALS

Lab Name: TestAmerica Denver Job No.: 320-18796-1

SDG No.: _____

ICV Source: ICP ICV_00148 Concentration Units: ug/L

CCV Source: ICP CCV_00164

Analyte	ICV 280-326681/7 05/23/2016 11:53				CCV 280-326681/11 05/23/2016 12:13				CCV 280-326681/21 05/23/2016 13:37			
	Found	C	True	%R	Found	C	True	%R	Found	C	True	%R
<i>Iron</i>	252		250	101	2440		2500	98	2440		2500	98

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

2A-IN
CALIBRATION VERIFICATIONS
METALS

Lab Name: TestAmerica Denver Job No.: 320-18796-1

SDG No.: _____

ICV Source: ICP ICV_00148 Concentration Units: ug/L

CCV Source: ICP CCV_00164

Analyte	CCV 280-326681/33 05/23/2016 14:18											
	Found	C	True	%R	Found	C	True	%R	Found	C	True	%R
<i>Iron</i>	2450		2500	98								

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

2A-IN
CALIBRATION VERIFICATIONS
METALS

Lab Name: TestAmerica Denver Job No.: 320-18796-1

SDG No.: _____

ICV Source: ICP LLCCV_01773 Concentration Units: ug/L

CCV Source: ICP LLCCV_01773

Analyte	ICVL 280-326681/8 05/23/2016 11:55				ICVL 280-326681/9 05/23/2016 12:01				CCVL 280-326681/23 05/23/2016 13:43			
	Found	C	True	%R	Found	C	True	%R	Found	C	True	%R
<i>Iron</i>	111		100	111	112		100	112	120		100	120

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

2A-IN
CALIBRATION VERIFICATIONS
METALS

Lab Name: TestAmerica Denver Job No.: 320-18796-1

SDG No.: _____

ICV Source: ICP LLCCV_01773 Concentration Units: ug/L

CCV Source: ICP LLCCV_01773

Analyte	CCVL 280-326681/35 05/23/2016 14:23											
	Found	C	True	%R	Found	C	True	%R	Found	C	True	%R
<i>Iron</i>	109		100	109								

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

2B-IN
CRQL CHECK STANDARD
METALS

Lab Name: TestAmerica Denver Job No.: 320-18796-1
SDG No.: _____
Method: 6010C Instrument ID: MT_025
Lab Sample ID: CRI 280-325799/14 Concentration Units: ug/L
CRQL Check Standard Source: ICP CRI_00387

Analyte	CRQL Check Standard				
	True	Found	Qualifiers	%R(1)	Limits
Iron	30.0	25.6	J	85	80-120

Lab Sample ID: CRI 280-326010/17 Concentration Units: ug/L
CRQL Check Standard Source: Alt AsFeSbSe_00001

Analyte	CRQL Check Standard				
	True	Found	Qualifiers	%R(1)	Limits
Iron	100	95.1	J	95	80-120

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

2B-IN
CRQL CHECK STANDARD
METALS

Lab Name: TestAmerica Denver Job No.: 320-18796-1
SDG No.: _____
Method: 6010C Instrument ID: MT_026
Lab Sample ID: CRI 280-326363/12 Concentration Units: ug/L
CRQL Check Standard Source: ICP CRI_00391

Analyte	CRQL Check Standard				
	True	Found	Qualifiers	%R(1)	Limits
Iron	30.0	35.8	J	119	80-120

Lab Sample ID: CRI 280-326681/13 Concentration Units: ug/L
CRQL Check Standard Source: ICP CRI_00394

Analyte	CRQL Check Standard				
	True	Found	Qualifiers	%R(1)	Limits
Iron	30.0	30.1	J	100	80-120

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

3-IN
INSTRUMENT BLANKS
METALS

Lab Name: TestAmerica Denver Job No.: 320-18796-1
 SDG No.: _____
 Concentration Units: ug/L

Analyte	RL	ICB 280-325799/15 05/17/2016 10:54		CCB 280-325799/28 05/17/2016 17:20		CCB 280-325799/42 05/17/2016 17:56			
		Found	C	Found	C	Found	C	Found	C
Iron	100	85	U	85	U	27.2	J		

Italicized analytes were not requested for this sequence.

3-IN
INSTRUMENT BLANKS
METALS

Lab Name: TestAmerica Denver Job No.: 320-18796-1

SDG No.: _____

Concentration Units: ug/L

Analyte	RL	ICB 280-326010/15 05/18/2016 10:42		CCB 280-326010/49 05/18/2016 16:20		CCB 280-326010/62 05/18/2016 16:54		CCB 280-326010/71 05/18/2016 17:17	
		Found	C	Found	C	Found	C	Found	C
Iron	100	85	U	85	U	85	U	85	U

Italicized analytes were not requested for this sequence.

3-IN
INSTRUMENT BLANKS
METALS

Lab Name: TestAmerica Denver Job No.: 320-18796-1

SDG No.: _____

Concentration Units: ug/L

Analyte	RL	ICB 280-326363/11 05/20/2016 15:02		CCB 280-326363/87 05/20/2016 22:28		CCB 280-326363/100 05/20/2016 23:03			
		Found	C	Found	C	Found	C	Found	C
Iron	100	85	U	85	U	85	U		

Italicized analytes were not requested for this sequence.

3-IN
INSTRUMENT BLANKS
METALS

Lab Name: TestAmerica Denver Job No.: 320-18796-1

SDG No.: _____

Concentration Units: ug/L

Analyte	RL	ICB 280-326681/12 05/23/2016 12:16		CCB 280-326681/22 05/23/2016 13:40		CCB 280-326681/34 05/23/2016 14:20			
		Found	C	Found	C	Found	C	Found	C
<i>Iron</i>	100	85	U	85	U	85	U		

Italicized analytes were not requested for this sequence.

3-IN
METHOD BLANK
METALS - TOTAL RECOVERABLE

Lab Name: TestAmerica Denver Job No.: 320-18796-1
SDG No.: _____
Concentration Units: ug/L Lab Sample ID: MB 280-325382/1-A
Instrument Code: MT_025 Batch No.: 325799

CAS No.	Analyte	Concentration	C	Q	Method
7439-89-6	Iron	23.7	J		6010C_DOD5

3-IN
METHOD BLANK
METALS

Lab Name: TestAmerica Denver Job No.: 320-18796-1

SDG No.: _____

Concentration Units: ug/L Lab Sample ID: MB 280-325380/1-A

Instrument Code: MT_025 Batch No.: 326010

CAS No.	Analyte	Concentration	C	Q	Method
7439-89-6	Iron	85	U		6010C_DOD5

3-IN
METHOD BLANK
METALS - DISSOLVED

Lab Name: TestAmerica Denver Job No.: 320-18796-1
SDG No.: _____
Concentration Units: ug/L Lab Sample ID: MB 280-325709/1-C
Instrument Code: MT_026 Batch No.: 326363

CAS No.	Analyte	Concentration	C	Q	Method
7439-89-6	Iron	85	U		6010C_DOD5

4A-IN
INTERFERENCE CHECK STANDARD
METALS

Lab Name: TestAmerica Denver Job No.: 320-18796-1
 SDG No.: _____
 Lab Sample ID: ICSA 280-325799/18 Instrument ID: MT_025
 Lab File ID: 25C051716.asc ICS Source: ICP ICSA_00122
 Concentration Units: ug/L

Analyte	True Solution A	Found Solution A	Percent Recovery
Iron	200000	199030	100
<i>Aluminum</i>	<i>500000</i>	<i>524620</i>	<i>105</i>
<i>Arsenic</i>		<i>2.82</i>	
<i>Barium</i>		<i>-0.430</i>	
<i>Beryllium</i>		<i>-0.930</i>	
<i>Boron</i>		<i>-0.690</i>	
<i>Cadmium</i>		<i>1.56</i>	
<i>Calcium</i>	<i>500000</i>	<i>465250</i>	<i>93</i>
<i>Chromium</i>		<i>2.24</i>	
<i>Cobalt</i>		<i>-0.530</i>	
<i>Copper</i>		<i>0.0400</i>	
<i>Lead</i>		<i>1.47</i>	
<i>Lithium</i>		<i>-0.290</i>	
<i>Magnesium</i>	<i>500000</i>	<i>502390</i>	<i>100</i>
<i>Molybdenum</i>		<i>-0.530</i>	
<i>Nickel</i>		<i>1.72</i>	
<i>Phosphorus</i>		<i>-2.20</i>	
<i>Potassium</i>		<i>-254</i>	
<i>Selenium</i>		<i>0.790</i>	
<i>Silicon</i>		<i>-9.67</i>	
<i>Silver</i>		<i>-1.51</i>	
<i>SiO2</i>		<i>-20.7</i>	
<i>Sodium</i>		<i>-56.4</i>	
<i>Thallium</i>		<i>-1.77</i>	
<i>Tin</i>		<i>-5.07</i>	
<i>Titanium</i>		<i>1.65</i>	
<i>Zinc</i>		<i>0.360</i>	

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

4A-IN
INTERFERENCE CHECK STANDARD
METALS

Lab Name: TestAmerica Denver Job No.: 320-18796-1
 SDG No.: _____
 Lab Sample ID: ICSAB 280-325799/21 Instrument ID: MT_025
 Lab File ID: 25C051716.asc ICS Source: ICP ICSAB_00130
 Concentration Units: ug/L

Analyte	True	Found	Percent Recovery
	Solution AB	Solution AB	
Iron	200000	200120	100
<i>Aluminum</i>	<i>500000</i>	<i>528190</i>	<i>106</i>
<i>Antimony</i>	<i>1000</i>	<i>1010</i>	<i>101</i>
<i>Arsenic</i>	<i>2000</i>	<i>1928</i>	<i>96</i>
<i>Barium</i>	<i>500</i>	<i>492</i>	<i>98</i>
<i>Beryllium</i>	<i>500</i>	<i>484</i>	<i>97</i>
<i>Boron</i>	<i>2000</i>	<i>1881</i>	<i>94</i>
<i>Cadmium</i>	<i>1000</i>	<i>996</i>	<i>100</i>
<i>Calcium</i>	<i>500000</i>	<i>467980</i>	<i>94</i>
<i>Chromium</i>	<i>500</i>	<i>486</i>	<i>97</i>
<i>Cobalt</i>	<i>500</i>	<i>458</i>	<i>92</i>
<i>Copper</i>	<i>500</i>	<i>492</i>	<i>98</i>
<i>Lead</i>	<i>1000</i>	<i>949</i>	<i>95</i>
<i>Lithium</i>	<i>1000</i>	<i>966</i>	<i>97</i>
<i>Magnesium</i>	<i>500000</i>	<i>500790</i>	<i>100</i>
<i>Manganese</i>	<i>500</i>	<i>480</i>	<i>96</i>
<i>Molybdenum</i>	<i>1000</i>	<i>958</i>	<i>96</i>
<i>Nickel</i>	<i>1000</i>	<i>905</i>	<i>90</i>
<i>Phosphorus</i>	<i>2000</i>	<i>1924</i>	<i>96</i>
<i>Potassium</i>	<i>50000</i>	<i>50207</i>	<i>100</i>
<i>Selenium</i>	<i>5000</i>	<i>4823</i>	<i>96</i>
<i>Silicon</i>	<i>10000</i>	<i>9966</i>	<i>100</i>
<i>Silver</i>	<i>1000</i>	<i>1055</i>	<i>105</i>
<i>SiO2</i>	<i>21400</i>	<i>21328</i>	<i>100</i>
<i>Sodium</i>	<i>50000</i>	<i>55989</i>	<i>112</i>
<i>Strontium</i>	<i>1000</i>	<i>963</i>	<i>96</i>
<i>Thallium</i>	<i>10000</i>	<i>9221</i>	<i>92</i>
<i>Tin</i>	<i>10000</i>	<i>9156</i>	<i>92</i>
<i>Titanium</i>	<i>1000</i>	<i>960</i>	<i>96</i>
<i>Vanadium</i>	<i>500</i>	<i>498</i>	<i>100</i>
<i>Zinc</i>	<i>1000</i>	<i>939</i>	<i>94</i>

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

4A-IN
INTERFERENCE CHECK STANDARD
METALS

Lab Name: TestAmerica Denver Job No.: 320-18796-1
 SDG No.: _____
 Lab Sample ID: ICSA 280-326010/19 Instrument ID: MT_025
 Lab File ID: 25B051816.asc ICS Source: ICP ICSA_00123
 Concentration Units: ug/L

Analyte	True Solution A	Found Solution A	Percent Recovery
Iron	200000	198020	99
<i>Aluminum</i>	<i>500000</i>	<i>533680</i>	<i>107</i>
<i>Antimony</i>		<i>-2.55</i>	
<i>Arsenic</i>		<i>-9.83</i>	
<i>Barium</i>		<i>-0.830</i>	
<i>Beryllium</i>		<i>0.370</i>	
<i>Boron</i>		<i>-3.93</i>	
<i>Cadmium</i>		<i>1.55</i>	
<i>Calcium</i>	<i>500000</i>	<i>486230</i>	<i>97</i>
<i>Cobalt</i>		<i>-1.21</i>	
<i>Copper</i>		<i>3.08</i>	
<i>Lead</i>		<i>-1.00</i>	
<i>Lithium</i>		<i>9.29</i>	
<i>Magnesium</i>	<i>500000</i>	<i>513050</i>	<i>103</i>
<i>Molybdenum</i>		<i>0.500</i>	
<i>Phosphorus</i>		<i>3.23</i>	
<i>Potassium</i>		<i>-159</i>	
<i>Selenium</i>		<i>5.54</i>	
<i>Silicon</i>		<i>-21.7</i>	
<i>Silver</i>		<i>-2.00</i>	
<i>SiO2</i>		<i>-46.5</i>	
<i>Sodium</i>		<i>43.8</i>	
<i>Thallium</i>		<i>-2.04</i>	
<i>Tin</i>		<i>-1.10</i>	
<i>Titanium</i>		<i>-0.140</i>	
<i>Vanadium</i>		<i>1.81</i>	
<i>Zinc</i>		<i>-0.170</i>	

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

4A-IN
INTERFERENCE CHECK STANDARD
METALS

Lab Name: TestAmerica Denver Job No.: 320-18796-1
 SDG No.: _____
 Lab Sample ID: ICSAB 280-326010/20 Instrument ID: MT_025
 Lab File ID: 25B051816.asc ICS Source: ICP ICSAB_00130
 Concentration Units: ug/L

Analyte	True	Found	Percent Recovery
	Solution AB	Solution AB	
Iron	200000	187620	94
<i>Aluminum</i>	<i>500000</i>	<i>505430</i>	<i>101</i>
<i>Antimony</i>	<i>1000</i>	<i>1078</i>	<i>108</i>
<i>Arsenic</i>	<i>2000</i>	<i>2065</i>	<i>103</i>
<i>Barium</i>	<i>500</i>	<i>490</i>	<i>98</i>
<i>Beryllium</i>	<i>500</i>	<i>482</i>	<i>96</i>
<i>Boron</i>	<i>2000</i>	<i>1980</i>	<i>99</i>
<i>Cadmium</i>	<i>1000</i>	<i>1057</i>	<i>106</i>
<i>Calcium</i>	<i>500000</i>	<i>460370</i>	<i>92</i>
<i>Chromium</i>	<i>500</i>	<i>492</i>	<i>98</i>
<i>Cobalt</i>	<i>500</i>	<i>473</i>	<i>95</i>
<i>Copper</i>	<i>500</i>	<i>544</i>	<i>109</i>
<i>Lead</i>	<i>1000</i>	<i>991</i>	<i>99</i>
<i>Lithium</i>	<i>1000</i>	<i>1032</i>	<i>103</i>
<i>Magnesium</i>	<i>500000</i>	<i>509470</i>	<i>102</i>
<i>Manganese</i>	<i>500</i>	<i>502</i>	<i>100</i>
<i>Molybdenum</i>	<i>1000</i>	<i>981</i>	<i>98</i>
<i>Nickel</i>	<i>1000</i>	<i>946</i>	<i>95</i>
<i>Phosphorus</i>	<i>2000</i>	<i>2046</i>	<i>102</i>
<i>Potassium</i>	<i>50000</i>	<i>50789</i>	<i>102</i>
<i>Selenium</i>	<i>5000</i>	<i>5157</i>	<i>103</i>
<i>Silicon</i>	<i>10000</i>	<i>10114</i>	<i>101</i>
<i>Silver</i>	<i>1000</i>	<i>1115</i>	<i>111</i>
<i>SiO2</i>	<i>21400</i>	<i>21644</i>	<i>101</i>
<i>Sodium</i>	<i>50000</i>	<i>52839</i>	<i>106</i>
<i>Strontium</i>	<i>1000</i>	<i>984</i>	<i>98</i>
<i>Thallium</i>	<i>10000</i>	<i>9106</i>	<i>91</i>
<i>Tin</i>	<i>10000</i>	<i>9406</i>	<i>94</i>
<i>Titanium</i>	<i>1000</i>	<i>1020</i>	<i>102</i>
<i>Vanadium</i>	<i>500</i>	<i>505</i>	<i>101</i>
<i>Zinc</i>	<i>1000</i>	<i>972</i>	<i>97</i>

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

4A-IN
INTERFERENCE CHECK STANDARD
METALS

Lab Name: TestAmerica Denver Job No.: 320-18796-1
 SDG No.: _____
 Lab Sample ID: ICSA 280-326363/13 Instrument ID: MT_026
 Lab File ID: 26B052016.asc ICS Source: ICP ICSA_00123
 Concentration Units: ug/L

Analyte	True Solution A	Found Solution A	Percent Recovery
Iron	200000	181660	91
<i>Aluminum</i>	<i>500000</i>	<i>508740</i>	<i>102</i>
<i>Antimony</i>		<i>8.63</i>	
<i>Barium</i>		<i>-0.0900</i>	
<i>Beryllium</i>		<i>-0.110</i>	
<i>Boron</i>		<i>-1.59</i>	
<i>Cadmium</i>		<i>0.650</i>	
<i>Calcium</i>	<i>500000</i>	<i>469130</i>	<i>94</i>
<i>Chromium</i>		<i>0.870</i>	
<i>Cobalt</i>		<i>-0.250</i>	
<i>Copper</i>		<i>2.48</i>	
<i>Lithium</i>		<i>2.84</i>	
<i>Magnesium</i>	<i>500000</i>	<i>516280</i>	<i>103</i>
<i>Manganese</i>		<i>-0.320</i>	
<i>Molybdenum</i>		<i>-1.89</i>	
<i>Nickel</i>		<i>-0.920</i>	
<i>Phosphorus</i>		<i>-5.63</i>	
<i>Potassium</i>		<i>-13.8</i>	
<i>Selenium</i>		<i>5.09</i>	
<i>Silicon</i>		<i>11.5</i>	
<i>Silver</i>		<i>-0.470</i>	
<i>Sodium</i>		<i>37.2</i>	
<i>Thallium</i>		<i>2.17</i>	
<i>Tin</i>		<i>7.99</i>	
<i>Titanium</i>		<i>1.53</i>	
<i>Zinc</i>		<i>-1.90</i>	

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

4A-IN
INTERFERENCE CHECK STANDARD
METALS

Lab Name: TestAmerica Denver Job No.: 320-18796-1
 SDG No.: _____
 Lab Sample ID: ICSAB 280-326363/14 Instrument ID: MT_026
 Lab File ID: 26B052016.asc ICS Source: ICP ICSAB_00131
 Concentration Units: ug/L

Analyte	True	Found	
	Solution AB	Solution AB	Percent Recovery
Iron	200000	180980	90
<i>Aluminum</i>	<i>500000</i>	<i>504340</i>	<i>101</i>
<i>Antimony</i>	<i>1000</i>	<i>1075</i>	<i>107</i>
<i>Arsenic</i>	<i>2000</i>	<i>2105</i>	<i>105</i>
<i>Barium</i>	<i>500</i>	<i>494</i>	<i>99</i>
<i>Beryllium</i>	<i>500</i>	<i>486</i>	<i>97</i>
<i>Boron</i>	<i>2000</i>	<i>2014</i>	<i>101</i>
<i>Cadmium</i>	<i>1000</i>	<i>1090</i>	<i>109</i>
<i>Calcium</i>	<i>500000</i>	<i>467850</i>	<i>94</i>
<i>Chromium</i>	<i>500</i>	<i>495</i>	<i>99</i>
<i>Cobalt</i>	<i>500</i>	<i>475</i>	<i>95</i>
<i>Copper</i>	<i>500</i>	<i>562</i>	<i>112</i>
<i>Lead</i>	<i>1000</i>	<i>960</i>	<i>96</i>
<i>Lithium</i>	<i>1000</i>	<i>1030</i>	<i>103</i>
<i>Magnesium</i>	<i>500000</i>	<i>509540</i>	<i>102</i>
<i>Manganese</i>	<i>500</i>	<i>502</i>	<i>100</i>
<i>Molybdenum</i>	<i>1000</i>	<i>980</i>	<i>98</i>
<i>Nickel</i>	<i>1000</i>	<i>943</i>	<i>94</i>
<i>Phosphorus</i>	<i>2000</i>	<i>2052</i>	<i>103</i>
<i>Potassium</i>	<i>50000</i>	<i>51677</i>	<i>103</i>
<i>Selenium</i>	<i>5000</i>	<i>5149</i>	<i>103</i>
<i>Silicon</i>	<i>10000</i>	<i>10053</i>	<i>101</i>
<i>Silver</i>	<i>1000</i>	<i>1132</i>	<i>113</i>
<i>Sodium</i>	<i>50000</i>	<i>50950</i>	<i>102</i>
<i>Strontium</i>	<i>1000</i>	<i>949</i>	<i>95</i>
<i>Thallium</i>	<i>10000</i>	<i>8691</i>	<i>87</i>
<i>Tin</i>	<i>10000</i>	<i>9308</i>	<i>93</i>
<i>Titanium</i>	<i>1000</i>	<i>1012</i>	<i>101</i>
<i>Vanadium</i>	<i>500</i>	<i>501</i>	<i>100</i>
<i>Zinc</i>	<i>1000</i>	<i>969</i>	<i>97</i>

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

4A-IN
INTERFERENCE CHECK STANDARD
METALS

Lab Name: TestAmerica Denver Job No.: 320-18796-1
 SDG No.: _____
 Lab Sample ID: ICSA 280-326681/14 Instrument ID: MT_026
 Lab File ID: 26A052316.asc ICS Source: ICP ICSA_00123
 Concentration Units: ug/L

Analyte	True Solution A	Found Solution A	Percent Recovery
Aluminum	500000	536730	107
Antimony		11.8	
Arsenic		-10.2	
Barium		0.110	
Beryllium		0.0800	
Boron		-2.90	
Cadmium		0.380	
Calcium	500000	464990	93
Chromium		0.190	
Cobalt		-0.510	
Copper		3.40	
Iron	200000	189520	95
Lead		-4.69	
Lithium		3.10	
Magnesium	500000	510640	102
Manganese		-0.270	
Molybdenum		-2.15	
Nickel		-1.70	
Phosphorus		-0.100	
Potassium		-38.9	
Selenium		6.97	
Silicon		13.5	
Silver		-0.610	
Sodium		18.0	
Thallium		1.67	
Tin		5.99	
Titanium		1.75	
Zinc		0.290	

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

4A-IN
INTERFERENCE CHECK STANDARD
METALS

Lab Name: TestAmerica Denver Job No.: 320-18796-1
 SDG No.: _____
 Lab Sample ID: ICSAB 280-326681/15 Instrument ID: MT_026
 Lab File ID: 26A052316.asc ICS Source: ICP ICSAB_00131
 Concentration Units: ug/L

Analyte	True	Found	
	Solution AB	Solution AB	Percent Recovery
<i>Aluminum</i>	500000	515660	103
<i>Antimony</i>	1000	1015	101
<i>Arsenic</i>	2000	2036	102
<i>Barium</i>	500	487	97
<i>Beryllium</i>	500	475	95
<i>Boron</i>	2000	1897	95
<i>Cadmium</i>	1000	1042	104
<i>Calcium</i>	500000	453910	91
<i>Chromium</i>	500	476	95
<i>Cobalt</i>	500	455	91
<i>Copper</i>	500	557	111
<i>Iron</i>	200000	184530	92
<i>Lead</i>	1000	926	93
<i>Lithium</i>	1000	1025	103
<i>Magnesium</i>	500000	491560	98
<i>Manganese</i>	500	483	97
<i>Molybdenum</i>	1000	939	94
<i>Nickel</i>	1000	913	91
<i>Phosphorus</i>	2000	1969	98
<i>Potassium</i>	50000	51169	102
<i>Selenium</i>	5000	4979	100
<i>Silicon</i>	10000	9758	98
<i>Silver</i>	1000	1118	112
<i>Sodium</i>	50000	51495	103
<i>Strontium</i>	1000	946	95
<i>Thallium</i>	10000	8263	83
<i>Tin</i>	10000	9007	90
<i>Titanium</i>	1000	988	99
<i>Vanadium</i>	500	490	98
<i>Zinc</i>	1000	918	92

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

5A-IN
MATRIX SPIKE SAMPLE RECOVERY
METALS - DISSOLVED

Client ID: OF-CLTANK-0516 MS

Lab ID: 320-18796-4 MS

Lab Name: TestAmerica Denver

Job No.: 320-18796-1

SDG No.: _____

Matrix: Water

Concentration Units: ug/L

% Solids: _____

Analyte	SSR C	Sample Result (SR) C	Spike Added (SA)	%R	Control Limit %R	Q	Method
Iron	2570	1500	1000	110	87-115		6010C

SSR = Spiked Sample Result

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

5A-IN
MATRIX SPIKE DUPLICATE SAMPLE RECOVERY
METALS - DISSOLVED

Client ID: OF-CLTANK-0516 MSD Lab ID: 320-18796-4 MSD
Lab Name: TestAmerica Denver Job No.: 320-18796-1
SDG No.: _____
Matrix: Water Concentration Units: ug/L
% Solids: _____

Analyte	(SDR) C	Spike Added (SA)	%R	Control Limit %R	RPD	RPD Limit	Q	Method
Iron	2510	1000	104	87-115	2	20		6010C

SDR = Sample Duplicate Result

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

5B-IN
POST DIGESTION SPIKE SAMPLE RECOVERY
METALS - DISSOLVED

Client ID: OF-CLTANK-0516 PDS

Lab ID: 320-18796-4 PDS

Lab Name: TestAmerica Denver

Job No.: 320-18796-1

SDG No.: _____

Matrix: Water

Concentration Units: ug/L

Analyte	SSR C	Sample Result (SR) C	Spike Added (SA)	%R	Control Limit %R	Q	Method
Iron	2430	1500	1000	96	80-120		6010C

SSR = Spiked Sample Result

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

7A-IN
LAB CONTROL SAMPLE
METALS - TOTAL RECOVERABLE

Lab ID: LCS 280-325382/2-A

Lab Name: TestAmerica Denver

Job No.: 320-18796-1

Sample Matrix: Water

LCS Source: ICP SPK 3A_00113

Analyte	Water (ug/L)							
	True	Found	C	%R	Limits		Q	Method
Iron	1000	970		97	87	115		6010C

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

FORM VIIA - IN

7A-IN
LAB CONTROL SAMPLE
METALS

Lab ID: LCS 280-325380/2-A

Lab Name: TestAmerica Denver

Job No.: 320-18796-1

Sample Matrix: Water

LCS Source: ICP SPK 3A_00113

Analyte	Water (ug/L)							
	True	Found	C	%R	Limits		Q	Method
Iron	1000	992		99	87	115		6010C

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

FORM VIIA - IN

7A-IN
LAB CONTROL SAMPLE
METALS - DISSOLVED

Lab ID: LCS 280-325709/2-C

Lab Name: TestAmerica Denver

Job No.: 320-18796-1

Sample Matrix: Water

LCS Source: ICP SPK 3A_00113

Analyte	Water (ug/L)							
	True	Found	C	%R	Limits		Q	Method
Iron	1000	996		100	87	115		6010C

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

FORM VIIA - IN

8-IN
ICP-AES AND ICP-MS SERIAL DILUTIONS
METALS - DISSOLVED

Lab ID: 320-18796-4

SDG No:

Lab Name: TestAmerica Denver

Job No: 320-18796-1

Matrix: Water

Concentration Units: ug/L

Analyte	Initial Sample Result (I) C		Serial Dilution Result (S) C		% Difference	Q	Method
Iron	1500		1640		NC	D	6010C

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

FORM VIII-IN

9-IN
DETECTION LIMITS
METALS

Lab Name: TestAmerica Denver Job Number: 320-18796-1
SDG Number: _____
Matrix: Water Instrument ID: MT_025
Method: 6010C DL Date: 02/16/2014 00:00
Prep Method: 3010A

Analyte	Wavelength/ Mass	LOQ (ug/L)	DL (ug/L)
Iron	259.9	100	22

9-IN
CALIBRATION BLANK DETECTION LIMITS
METALS

Lab Name: TestAmerica Denver Job Number: 320-18796-1
SDG Number: _____
Matrix: Water Instrument ID: MT_025
Method: 6010C XMDL Date: 03/13/2014 10:04

Analyte	Wavelength/ Mass	XRL (ug/L)	XMDL (ug/L)
Iron		100	22

9-IN
DETECTION LIMITS
METALS - DISSOLVED

Lab Name: TestAmerica Denver Job Number: 320-18796-1
SDG Number: _____
Matrix: Water Instrument ID: MT_025
Method: 6010C DL Date: 02/16/2014 00:00
Prep Method: 3005A

Analyte	Wavelength/ Mass	LOQ (ug/L)	DL (ug/L)
Iron	259.9	100	22

9-IN
CALIBRATION BLANK DETECTION LIMITS
METALS - DISSOLVED

Lab Name: TestAmerica Denver Job Number: 320-18796-1
SDG Number: _____
Matrix: Water Instrument ID: MT_025
Method: 6010C XMDL Date: 03/13/2014 10:04

Analyte	Wavelength/ Mass	XRL (ug/L)	XMDL (ug/L)
Iron		100	22

9-IN
DETECTION LIMITS
METALS - DISSOLVED

Lab Name: TestAmerica Denver Job Number: 320-18796-1
SDG Number: _____
Matrix: Water Instrument ID: MT_026
Method: 6010C DL Date: 02/16/2014 00:00
Prep Method: 3005A

Analyte	Wavelength/ Mass	LOQ (ug/L)	DL (ug/L)
Iron	259.9	100	22

9-IN
CALIBRATION BLANK DETECTION LIMITS
METALS - DISSOLVED

Lab Name: TestAmerica Denver Job Number: 320-18796-1
SDG Number: _____
Matrix: Water Instrument ID: MT_026
Method: 6010C XMDL Date: 03/13/2014 10:04

Analyte	Wavelength/ Mass	XRL (ug/L)	XMDL (ug/L)
Iron		100	22

10-IN
ICP-AES INTERELEMENT CORRECTION FACTORS
METALS

Lab Name: TestAmerica Denver Job Number: 320-18796-1

SDG No.: _____

ICP-AES Instrument ID: MT_025 Date: 12/23/2015

Analyte	Wave Length	Ag	Al	As	B	Ba	Be	Bi	Ca	Cd	Co	Cr	Cu	Fe	K
Aluminum	167.079													0.000312	
Aluminum	309.271														
Antimony	206.833		0.000026						-0.000006			0.010642		0.000014	
Arsenic	189.042		-0.000034						0.000004					0.000436	
Barium	455.403														
Beryllium	313.042														
Bismuth	223.061		-0.000012			-0.000360			-0.000016			0.001346		0.000158	
Boron	208.959														
Cadmium	228.802			0.004843		-0.000082					0.000036				
Calcium	317.933										-0.000132				
Chromium	205.552						-0.001150							0.000010	
Cobalt	228.616					0.000052						0.000001			
Copper	324.754													0.000010	
Iron	259.940										0.070287				
Iron	271.441										0.076500				
Lead	220.353		-0.000043					-0.000040	-0.000007		-0.000553		0.000454	0.000007	
Lithium	670.784								0.000013						
Magnesium	279.079													0.000149	
Manganese	257.610		0.000001											0.000009	
Molybdenum	202.030														
Nickel	231.604						-0.000094		-0.000007		-0.000384			0.000005	
Phosphorus	178.284		0.000002												
Potassium	766.490														
Selenium	196.090		-0.000018						-0.000003					0.000005	
Silicon	288.158														
Silver	328.068														
Sodium	589.592														
Sodium	818.326														
Strontium	407.771								0.000031						
Sulfur	182.034		-0.000003						-0.000102						

X-IN

10-IN
ICP-AES INTERELEMENT CORRECTION FACTORS
METALS

Lab Name: TestAmerica Denver Job Number: 320-18796-1

SDG No.: _____

ICP-AES Instrument ID: MT_025 Date: 12/23/2015

Analyte	Wave Length	Ag	Al	As	B	Ba	Be	Bi	Ca	Cd	Co	Cr	Cu	Fe	K
Thallium	190.856		-0.000001						0.000002		0.001114	0.000274		-0.000024	
Thorium	283.730									-0.000514		-0.000153		0.000769	
Tin	189.989														
Titanium	334.904								0.000005			0.000255			
Uranium	370.152				0.002187				-0.000005			-0.001869		-0.000127	
Vanadium	292.402											-0.002416		0.000017	
Zinc	206.200		0.000002					-0.000075				-0.000468		0.000007	
Zirconium	339.198													-0.000029	

10-IN
ICP-AES INTERELEMENT CORRECTION FACTORS
METALS

Lab Name: TestAmerica Denver Job Number: 320-18796-1

SDG No.: _____

ICP-AES Instrument ID: MT_025 Date: 12/23/2015

Analyte	Wave Length	Li	Mg	Mn	Mo	Na	Ni	Pb	S	Sb	Se	Si	SiO2	Sn	Sr
Aluminum	309.271		0.001655												
Aluminum	167.079														
Antimony	206.833				-0.021002		-0.000024					0.000031	0.000031	0.000093	
Arsenic	189.042				0.000879										
Barium	455.403														
Beryllium	313.042														
Bismuth	223.061													-0.001095	
Boron	208.959				0.031590										
Cadmium	228.802														
Calcium	317.933														
Chromium	205.552				0.000377		0.000035					0.000000	0.000000		
Cobalt	228.616			-0.000001	-0.000914		0.000125								
Copper	324.754				0.000377										
Iron	259.940		-0.000894												
Iron	271.441		0.000330												
Lead	220.353				-0.001422		0.000027					0.000104	0.000104		
Lithium	670.784		0.000001												
Magnesium	279.079			-0.004762											
Manganese	257.610														
Molybdenum	202.030														
Nickel	231.604				0.000080										
Phosphorus	178.284				-0.001297										
Potassium	766.490														
Selenium	196.090			0.000474											
Silicon	288.158				-0.001696										
Silver	328.068			0.000114	-0.000424										
Sodium	818.326														
Sodium	589.592														
Strontium	407.771														
Sulfur	182.034			-0.002851	-0.003963										

X-IN

10-IN
ICP-AES INTERELEMENT CORRECTION FACTORS
METALS

Lab Name: TestAmerica Denver Job Number: 320-18796-1

SDG No.: _____

ICP-AES Instrument ID: MT_025 Date: 12/23/2015

Analyte	Wave Length	Li	Mg	Mn	Mo	Na	Ni	Pb	S	Sb	Se	Si	SiO2	Sn	Sr
Thallium	190.856			0.000104											
Thorium	283.730		-0.000008		0.000266		0.000116								
Tin	189.989														
Titanium	334.904		0.000001		0.000700										
Uranium	370.152														
Vanadium	292.402		-0.000023	-0.000132	-0.000271										
Zinc	206.200				0.000123										
Zirconium	339.198				0.000270										

10-IN
ICP-AES INTERELEMENT CORRECTION FACTORS
METALS

Lab Name: TestAmerica Denver Job Number: 320-18796-1

SDG No.: _____

ICP-AES Instrument ID: MT_025 Date: 12/23/2015

Analyte	Wave Length	Th	Ti	Tl	U	V	Zn	Zr							
Aluminum	167.079														
Aluminum	309.271														
Antimony	206.833		0.000329		-0.001651	0.000070		-0.000720							
Arsenic	189.042														
Barium	455.403							0.000631							
Beryllium	313.042		0			0.000297									
Bismuth	223.061		-		-0.003000										
Boron	208.959														
Cadmium	228.802				-0.000172										
Calcium	317.933	0.000027													
Chromium	205.552	0.002490	0		-0.000210	0.000270		-0.000710							
Cobalt	228.616		0.001848		0.000180										
Copper	324.754	0.003648	-0.000200		-0.000990	-0.000078		-0.006089							
Iron	259.940					-0.209500									
Iron	271.441					-0.209000	-0.033000	-0.033							
Lead	220.353		-0.000058		0.001102			-0.000255							
Lithium	670.784														
Magnesium	279.079	-0.016400	0.000196		-0.002141										
Manganese	257.610	-0.000636			0.000099										
Molybdenum	202.030				-0.000094										
Nickel	231.604														
Phosphorus	178.284				0.000030										
Potassium	766.490														
Selenium	196.090	-0.0000432		-0.000481	-0.000758										
Silicon	288.158														
Silver	328.068	0.001040			000493			005629							
Sodium	589.592														
Sodium	818.326														
Strontium	407.771														
Sulfur	182.034	0.000409				-0.001026									

X-IN

10-IN
ICP-AES INTERELEMENT CORRECTION FACTORS
METALS

Lab Name: TestAmerica Denver Job Number: 320-18796-1

SDG No.: _____

ICP-AES Instrument ID: MT_025 Date: 12/23/2015

Analyte	Wave Length	Th	Ti	Tl	U	V	Zn	Zr							
Thallium	190.856	-0.000005	0		0.000038	0.000659									
Thorium	283.730				0.022201			0.021074							
Tin	189.989	-0.000081	-0.000188		0.000171										
Titanium	334.904	0.006776			-0.000731										
Uranium	370.152		0.007353												
Vanadium	292.402	0.001165	0.000643		-0.001180										
Zinc	206.200		0												
Zirconium	339.198	0.061600			-0.000206										

10-IN
ICP-AES INTERELEMENT CORRECTION FACTORS
METALS

Lab Name: TestAmerica Denver Job Number: 320-18796-1

SDG No.: _____

ICP-AES Instrument ID: MT_026 Date: 03/15/2016

Analyte	Wave Length	Ag	Al	As	B	Ba	Be	Bi	Ca	Cd	Co	Cr	Cu	Fe	K
Aluminum	167.079													0.001133	
Aluminum	309.271														
Antimony	206.833											0.004932		0.000033	
Arsenic	189.042													-0.000017	
Barium	455.403														
Beryllium	313.042														
Bismuth	223.061														
Boron	208.959														
Cadmium	228.802			0.008770											
Calcium	317.933														
Chromium	205.552														
Cobalt	228.616														
Copper	324.754														
Iron	259.940														
Iron	271.441										0.063046				
Lead	220.353		-0.000033											0.000014	
Lithium	670.784								0.000005						
Magnesium	279.079														
Manganese	257.610													0.000011	
Molybdenum	202.030														
Nickel	231.604														
Phosphorus	178.284														
Potassium	766.490														
Selenium	196.090													-0.000012	
Silicon	288.158														
Silver	328.068														
Sodium	589.592														
Sodium	818.326														
Strontium	407.771														
Sulfur	182.034								0.000194						

X-IN

10-IN
ICP-AES INTERELEMENT CORRECTION FACTORS
METALS

Lab Name: TestAmerica Denver Job Number: 320-18796-1

SDG No.: _____

ICP-AES Instrument ID: MT_026 Date: 03/15/2016

Analyte	Wave Length	Ag	Al	As	B	Ba	Be	Bi	Ca	Cd	Co	Cr	Cu	Fe	K
Thallium	190.856										0.004411			-0.000055	
Thorium	283.730													0.000499	
Tin	189.989														
Titanium	334.904														
Uranium	370.152														
Vanadium	292.402											-0.004231			
Zinc	206.200							-0.001337				-0.001093			
Zirconium	339.198													-0.000036	

10-IN
ICP-AES INTERELEMENT CORRECTION FACTORS
METALS

Lab Name: TestAmerica Denver Job Number: 320-18796-1

SDG No.: _____

ICP-AES Instrument ID: MT_026 Date: 03/15/2016

Analyte	Wave Length	Li	Mg	Mn	Mo	Na	Ni	P	Pb	Sb	Se	Si	SiO2	Sn	Sr
Aluminum	309.271		0.001156												
Aluminum	167.079														
Antimony	206.833				-0.012330										
Arsenic	189.042														
Barium	455.403														
Beryllium	313.042														
Bismuth	223.061														
Boron	208.959				0.019860										
Cadmium	228.802														
Calcium	317.933														
Chromium	205.552														
Cobalt	228.616				-0.000793										
Copper	324.754														
Iron	259.940														
Iron	271.441														
Lead	220.353				-0.001819										
Lithium	670.784														
Magnesium	279.079														
Manganese	257.610														
Molybdenum	202.030														
Nickel	231.604														
Phosphorus	178.284														
Potassium	766.490														
Selenium	196.090														
Silicon	288.158				-0.003743				0.000395						
Silver	328.068														
Sodium	818.326														
Sodium	589.592														
Strontium	407.771														
Sulfur	182.034				-0.003882										

X-IN

10-IN
ICP-AES INTERELEMENT CORRECTION FACTORS
METALS

Lab Name: TestAmerica Denver Job Number: 320-18796-1

SDG No.: _____

ICP-AES Instrument ID: MT_026 Date: 03/15/2016

Analyte	Wave Length	Li	Mg	Mn	Mo	Na	Ni	P	Pb	Sb	Se	Si	SiO2	Sn	Sr
Thallium	190.856			0.001079	-0.000636									-	
Thorium	283.730														
Tin	189.989														
Titanium	334.904				0.000881										
Uranium	370.152														
Vanadium	292.402														
Zinc	206.200														
Zirconium	339.198														

10-IN
ICP-AES INTERELEMENT CORRECTION FACTORS
METALS

Lab Name: TestAmerica Denver Job Number: 320-18796-1

SDG No.: _____

ICP-AES Instrument ID: MT_026 Date: 03/15/2016

Analyte	Wave Length	Th	Ti	Tl	U	V	Zn	Zr							
Aluminum	167.079														
Aluminum	309.271					0.006093	0.002941								
Antimony	206.833							-0.000763							
Arsenic	189.042														
Barium	455.403														
Beryllium	313.042		-0.000506												
Bismuth	223.061														
Boron	208.959														
Cadmium	228.802														
Calcium	317.933														
Chromium	205.552														
Cobalt	228.616		0.002359												
Copper	324.754	0.002640				-0.000270									
Iron	259.940														
Iron	271.441					-0.156229		-0.008367							
Lead	220.353				0.000992			-0.000320							
Lithium	670.784														
Magnesium	279.079				-0.039196										
Manganese	257.610														
Molybdenum	202.030														
Nickel	231.604														
Phosphorus	178.284														
Potassium	766.490														
Selenium	196.090				-0.002369										
Silicon	288.158														
Silver	328.068	-0.003868			0.000976			0.003108							
Sodium	589.592														
Sodium	818.326														
Strontium	407.771														
Sulfur	182.034														

X-IN

10-IN
ICP-AES INTERELEMENT CORRECTION FACTORS
METALS

Lab Name: TestAmerica Denver Job Number: 320-18796-1

SDG No.: _____

ICP-AES Instrument ID: MT_026 Date: 03/15/2016

Analyte	Wave Length	Th	Ti	Tl	U	V	Zn	Zr							
Thallium	190.856		-0.002109			-0.016446									
Thorium	283.730				0.027060										
Tin	189.989														
Titanium	334.904														
Uranium	370.152														
Vanadium	292.402	0.003056													
Zinc	206.200														
Zirconium	339.198	0.070853													

11-IN
LINEAR RANGES
METALS

Lab Name: TestAmerica Denver

Job No: 320-18796-1

SDG No.: _____

Instrument ID: MT_025

Date: 04/11/2016 07:12

Analyte	Integ. Time (Sec.)	Concentration (mg/L)	Method
Iron		1800	6010C

11-IN
LINEAR RANGES
METALS

Lab Name: TestAmerica Denver

Job No: 320-18796-1

SDG No.: _____

Instrument ID: MT_026

Date: 03/22/2016 12:31

Analyte	Integ. Time (Sec.)	Concentration (mg/L)	Method
Iron		450	6010C

12-IN
PREPARATION LOG
METALS

Lab Name: TestAmerica Denver Job No.: 320-18796-1

SDG No.: _____

Prep Method: 3010A

Lab Sample ID	Preparation Date	Prep Batch	Initial Weight	Initial Volume (mL)	Final Volume (mL)
MB 280-325380/1-A	05/17/2016 08:05	325380		50	50
LCS 280-325380/2-A	05/17/2016 08:05	325380		50	50
320-18796-1	05/17/2016 08:05	325380		50	50
320-18796-2	05/17/2016 08:05	325380		50	50
320-18796-3	05/17/2016 08:05	325380		50	50
320-18796-4	05/17/2016 08:05	325380		50	50
320-18796-5	05/17/2016 08:05	325380		50	50
320-18796-6	05/17/2016 08:05	325380		50	50

12-IN
PREPARATION LOG
METALS

Lab Name: TestAmerica Denver Job No.: 320-18796-1

SDG No.: _____

Prep Method: 3005A

Lab Sample ID	Preparation Date	Prep Batch	Initial Weight	Initial Volume (mL)	Final Volume (mL)
MB 280-325382/1-A	05/17/2016 08:05	325382		50	50
LCS 280-325382/2-A	05/17/2016 08:05	325382		50	50
320-18796-1	05/17/2016 08:05	325382		50	50
320-18796-2	05/17/2016 08:05	325382		50	50
320-18796-3	05/17/2016 08:05	325382		50	50
320-18796-4	05/17/2016 08:05	325382		50	50
320-18796-4 MS	05/17/2016 08:05	325382		50	50
320-18796-4 MSD	05/17/2016 08:05	325382		50	50

12-IN
PREPARATION LOG
METALS

Lab Name: TestAmerica Denver Job No.: 320-18796-1

SDG No.: _____

Prep Method: 3005A

Lab Sample ID	Preparation Date	Prep Batch	Initial Weight	Initial Volume (mL)	Final Volume (mL)
MB 280-325709/1-C	05/19/2016 14:45	325989		50	50
LCS 280-325709/2-C	05/19/2016 14:45	325989		50	50
320-18796-5	05/19/2016 14:45	325989		50	50
320-18796-6	05/19/2016 14:45	325989		50	50

13-IN
ANALYSIS RUN LOG
METALS

Lab Name: TestAmerica Denver

Job No.: 320-18796-1

SDG No.: _____

Instrument ID: MT_025

Analysis Method: 6010C

Start Date: 05/17/2016 10:09

End Date: 05/17/2016 20:07

Lab Sample Id	D/F	T y p e	Time	Analytes																	
				F e																	
ICIS 280-325799/1	1		10:09	X																	
IC 280-325799/2			10:11	X																	
IC 280-325799/3			10:14	X																	
ZZZZZZ			10:16																		
ZZZZZZ			10:19																		
ICVH 280-325799/6	1		10:22	X																	
ICV 280-325799/7	1		10:26	X																	
ZZZZZZ			10:30																		
ICVL 280-325799/9	1		10:34	X																	
ICVL 280-325799/10	1		10:36	X																	
CCVH 280-325799/11			10:40																		
CCV 280-325799/12			10:42																		
ZZZZZZ			10:45																		
CRI 280-325799/14	1		10:47	X																	
ICB 280-325799/15	1		10:54	X																	
CRI 280-325799/16			11:00																		
CRI 280-325799/17			11:06																		
ICSA 280-325799/18	1		11:11	X																	
ZZZZZZ			11:14																		
LRA 280-325799/20			11:16																		
ICSAB 280-325799/21	1		11:22	X																	
CCVH 280-325799/22			11:30																		
CCV 280-325799/23			11:32																		
CCB 280-325799/24			11:35																		
CCVL 280-325799/25			11:38																		
CCVH 280-325799/26	1		17:15	X																	
CCV 280-325799/27	1		17:18	X																	
CCB 280-325799/28	1		17:20	X																	
CCVL 280-325799/29	1		17:23	X																	
MB 280-325382/1-A	1	R	17:25	X																	
LCS 280-325382/2-A	1	R	17:28	X																	
320-18796-1	1	D	17:30	X																	
320-18796-2	1	D	17:33	X																	
320-18796-3	1	D	17:35	X																	
320-18796-4	1	D	17:38	X																	
320-18796-4 SD	5	D	17:41	X																	
320-18796-4 MS	1	D	17:43	X																	
320-18796-4 MSD	1	D	17:46	X																	
320-18796-4 PDS	1	D	17:48	X																	
CCVH 280-325799/40	1		17:51	X																	
CCV 280-325799/41	1		17:53	X																	
CCB 280-325799/42	1		17:56	X																	

13-IN
ANALYSIS RUN LOG
METALS

Lab Name: TestAmerica Denver Job No.: 320-18796-1
 SDG No.: _____
 Instrument ID: MT_025 Analysis Method: 6010C
 Start Date: 05/17/2016 10:09 End Date: 05/17/2016 20:07

Lab Sample Id	D/F	T y p e	Time	Analytes																									
				F e																									
CCVL 280-325799/43	1		17:58	X																									
ZZZZZZ			18:01																										
ZZZZZZ			18:03																										
ZZZZZZ			18:06																										
ZZZZZZ			18:08																										
ZZZZZZ			18:11																										
ZZZZZZ			18:13																										
ZZZZZZ			18:16																										
ZZZZZZ			18:19																										
ZZZZZZ			18:22																										
CCVH 280-325799/53			18:24																										
CCV 280-325799/54			18:27																										
CCB 280-325799/55			18:29																										
CCVL 280-325799/56			18:32																										
ZZZZZZ			18:34																										
ZZZZZZ			18:37																										
ZZZZZZ			18:40																										
ZZZZZZ			18:42																										
ZZZZZZ			18:45																										
CCVH 280-325799/62			18:47																										
CCV 280-325799/63			18:50																										
CCB 280-325799/64			18:52																										
CCVL 280-325799/65			18:55																										
ZZZZZZ			18:57																										
ZZZZZZ			19:00																										
ZZZZZZ			19:02																										
ZZZZZZ			19:05																										
ZZZZZZ			19:08																										
ZZZZZZ			19:11																										
ZZZZZZ			19:14																										
ZZZZZZ			19:17																										
ZZZZZZ			19:20																										
CCVH 280-325799/75			19:23																										
CCV 280-325799/76			19:25																										
CCB 280-325799/77			19:28																										
CCVL 280-325799/78			19:30																										
ZZZZZZ			19:33																										
ZZZZZZ			19:35																										
ZZZZZZ			19:38																										
ZZZZZZ			19:41																										
ZZZZZZ			19:44																										
ZZZZZZ			19:46																										

13-IN
ANALYSIS RUN LOG
METALS

Lab Name: TestAmerica Denver Job No.: 320-18796-1

SDG No.: _____

Instrument ID: MT_025 Analysis Method: 6010C

Start Date: 05/17/2016 10:09 End Date: 05/17/2016 20:07

Lab Sample Id	D/F	T y p e	Time	Analytes																									
				F e																									
ZZZZZZ			19:49																										
ZZZZZZ			19:51																										
ZZZZZZ			19:54																										
ZZZZZZ			19:57																										
CCVH 280-325799/89			20:00																										
CCV 280-325799/90			20:02																										
CCB 280-325799/91			20:05																										
CCVL 280-325799/92			20:07																										

Prep Types: _____
D = Dissolved
R = Total Recoverable

13-IN
ANALYSIS RUN LOG
METALS

Lab Name: TestAmerica Denver

Job No.: 320-18796-1

SDG No.: _____

Instrument ID: MT_025

Analysis Method: 6010C

Start Date: 05/18/2016 09:51

End Date: 05/18/2016 19:50

Lab Sample Id	D/F	T y p e	Time	Analytes																	
				F e																	
ICIS 280-326010/1	1		09:51	X																	
IC 280-326010/2			09:54	X																	
IC 280-326010/3			09:56	X																	
ZZZZZZ			09:59																		
ZZZZZZ			10:01																		
ZZZZZZ			10:04																		
ICVH 280-326010/7	1		10:10	X																	
ZZZZZZ			10:15																		
ICV 280-326010/9	1		10:21	X																	
ICV 280-326010/10	1		10:24	X																	
ICVL 280-326010/11	1		10:29	X																	
CCVH 280-326010/12			10:31																		
CCV 280-326010/13			10:34																		
ZZZZZZ			10:39																		
ICB 280-326010/15	1		10:42	X																	
CRI 280-326010/16			10:44																		
CRI 280-326010/17	1		10:51	X																	
CRI 280-326010/18			11:03																		
ICSA 280-326010/19	1		11:08	X																	
ICSAB 280-326010/20	1		11:11	X																	
LRA 280-326010/21			11:14																		
CCVH 280-326010/22			11:17																		
CCV 280-326010/23			11:19																		
CCB 280-326010/24			11:22																		
CCVL 280-326010/25			11:24																		
CCVH 280-326010/26			15:17																		
CCV 280-326010/27			15:20																		
CCB 280-326010/28			15:23																		
CCVL 280-326010/29			15:25																		
ZZZZZZ			15:28																		
ZZZZZZ			15:30																		
ZZZZZZ			15:33																		
ZZZZZZ			15:36																		
ZZZZZZ			15:39																		
ZZZZZZ			15:42																		
ZZZZZZ			15:45																		
ZZZZZZ			15:48																		
CCVH 280-326010/38			15:51																		
CCV 280-326010/39			15:53																		
CCB 280-326010/40			15:56																		
CCVL 280-326010/41			15:58																		
ZZZZZZ			16:01																		

13-IN
ANALYSIS RUN LOG
METALS

Lab Name: TestAmerica Denver

Job No.: 320-18796-1

SDG No.: _____

Instrument ID: MT_025

Analysis Method: 6010C

Start Date: 05/18/2016 09:51

End Date: 05/18/2016 19:50

Lab Sample Id	D/F	T y p e	Time	Analytes																	
				F e																	
ZZZZZZ			16:04																		
ZZZZZZ			16:07																		
ZZZZZZ			16:09																		
ZZZZZZ			16:12																		
CCVH 280-326010/47	1		16:15	X																	
CCV 280-326010/48	1		16:18	X																	
CCB 280-326010/49	1		16:20	X																	
CCVL 280-326010/50	1		16:23	X																	
MB 280-325380/1-A	1	T	16:25	X																	
LCS 280-325380/2-A	1	T	16:28	X																	
ZZZZZZ			16:30																		
320-18796-1	1	T	16:33	X																	
320-18796-2	1	T	16:36	X																	
320-18796-3	1	T	16:38	X																	
320-18796-4	1	T	16:41	X																	
320-18796-5	1	T	16:43	X																	
320-18796-6	1	T	16:46	X																	
CCVH 280-326010/60	1		16:49	X																	
CCV 280-326010/61	1		16:52	X																	
CCB 280-326010/62	1		16:54	X																	
CCVL 280-326010/63	1		16:57	X																	
ZZZZZZ			16:59																		
ZZZZZZ			17:02																		
ZZZZZZ			17:05																		
ZZZZZZ			17:07																		
ZZZZZZ			17:09																		
CCVH 280-326010/69	1		17:12	X																	
CCV 280-326010/70	1		17:15	X																	
CCB 280-326010/71	1		17:17	X																	
CCVL 280-326010/72	1		17:20	X																	
ZZZZZZ			17:22																		
ZZZZZZ			17:25																		
ZZZZZZ			17:27																		
ZZZZZZ			17:30																		
ZZZZZZ			17:33																		
ZZZZZZ			17:36																		
ZZZZZZ			17:39																		
ZZZZZZ			17:41																		
ZZZZZZ			17:45																		
CCVH 280-326010/82			17:48																		
CCV 280-326010/83			17:50																		
CCB 280-326010/84			17:53																		

13-IN
ANALYSIS RUN LOG
METALS

Lab Name: TestAmerica Denver Job No.: 320-18796-1
 SDG No.: _____
 Instrument ID: MT_025 Analysis Method: 6010C
 Start Date: 05/18/2016 09:51 End Date: 05/18/2016 19:50

Lab Sample Id	D/F	T y p e	Time	Analytes																	
				F e																	
CCVL 280-326010/85			17:55																		
ZZZZZZ			17:58																		
ZZZZZZ			18:00																		
ZZZZZZ			18:03																		
ZZZZZZ			18:05																		
ZZZZZZ			18:08																		
ZZZZZZ			18:11																		
ZZZZZZ			18:13																		
ZZZZZZ			18:16																		
ZZZZZZ			18:18																		
ZZZZZZ			18:21																		
CCVH 280-326010/96			18:23																		
CCV 280-326010/97			18:26																		
CCB 280-326010/98			18:29																		
CCVL 280-326010/99			18:31																		
ZZZZZZ			18:34																		
ZZZZZZ			18:36																		
ZZZZZZ			18:39																		
ZZZZZZ			18:42																		
ZZZZZZ			18:44																		
ZZZZZZ			18:47																		
ZZZZZZ			18:49																		
CCVH 280-326010/107			18:52																		
CCV 280-326010/108			18:55																		
CCB 280-326010/109			18:57																		
CCVL 280-326010/110			19:00																		
ZZZZZZ			19:02																		
ZZZZZZ			19:05																		
ZZZZZZ			19:07																		
ZZZZZZ			19:10																		
ZZZZZZ			19:13																		
CCVH 280-326010/116			19:15																		
CCV 280-326010/117			19:18																		
CCB 280-326010/118			19:20																		
CCVL 280-326010/119			19:23																		
ZZZZZZ			19:25																		
ZZZZZZ			19:28																		
ZZZZZZ			19:30																		
ZZZZZZ			19:33																		
ZZZZZZ			19:35																		
ZZZZZZ			19:38																		
ZZZZZZ			19:40																		

13-IN
ANALYSIS RUN LOG
METALS

Lab Name: TestAmerica Denver Job No.: 320-18796-1

SDG No.: _____

Instrument ID: MT_025 Analysis Method: 6010C

Start Date: 05/18/2016 09:51 End Date: 05/18/2016 19:50

Lab Sample Id	D/F	T y p e	Time	Analytes																									
				F e																									
CCVH 280-326010/127			19:43																										
CCV 280-326010/128			19:45																										
CCB 280-326010/129			19:48																										
CCVL 280-326010/130			19:50																										

Prep Types: _____
T = Total/NA

13-IN
ANALYSIS RUN LOG
METALS

Lab Name: TestAmerica Denver

Job No.: 320-18796-1

SDG No.: _____

Instrument ID: MT_026

Analysis Method: 6010C

Start Date: 05/20/2016 14:23

End Date: 05/20/2016 23:06

Lab Sample Id	D/F	T y p e	Time	Analytes																	
				F e																	
ICIS 280-326363/1	1		14:23	X																	
IC 280-326363/2			14:26	X																	
IC 280-326363/3			14:28	X																	
ZZZZZZ			14:31																		
ZZZZZZ			14:33																		
ICVH 280-326363/6	1		14:37	X																	
ICV 280-326363/7	1		14:41	X																	
ICVL 280-326363/8	1		14:45	X																	
CCVH 280-326363/9			14:56																		
CCV 280-326363/10			14:59																		
ICB 280-326363/11	1		15:02	X																	
CRI 280-326363/12	1		15:05	X																	
ICSA 280-326363/13	1		15:08	X																	
ICSAB 280-326363/14	1		15:13	X																	
LRA 280-326363/15			15:18																		
CCVH 280-326363/16			15:22																		
CCV 280-326363/17			15:25																		
CCB 280-326363/18			15:28																		
CCVL 280-326363/19			15:30																		
CCVH 280-326363/20			19:22																		
CCV 280-326363/21			19:25																		
CCB 280-326363/22			19:27																		
CCVL 280-326363/23			19:30																		
ZZZZZZ			19:33																		
ZZZZZZ			19:36																		
ZZZZZZ			19:38																		
ZZZZZZ			19:41																		
ZZZZZZ			19:44																		
ZZZZZZ			19:47																		
ZZZZZZ			19:49																		
ZZZZZZ			19:52																		
ZZZZZZ			19:55																		
ZZZZZZ			19:57																		
CCVH 280-326363/34			20:00																		
CCV 280-326363/35			20:03																		
CCB 280-326363/36			20:06																		
CCVL 280-326363/37			20:08																		
ZZZZZZ			20:11																		
ZZZZZZ			20:14																		
ZZZZZZ			20:17																		
ZZZZZZ			20:19																		
ZZZZZZ			20:22																		

Lab Name: <u>TestAmerica Denver</u>	Job No.: <u>320-18796-1</u>
SDG No.: _____	
Instrument ID: <u>MT_026</u>	Analysis Method: <u>6010C</u>
Start Date: 05/20/2016 14:23	End Date: 05/20/2016 23:06

[illegible]

13-IN
ANALYSIS RUN LOG
METALS

Lab Name: TestAmerica Denver Job No.: 320-18796-1
 SDG No.: _____
 Instrument ID: MT_026 Analysis Method: 6010C
 Start Date: 05/20/2016 14:23 End Date: 05/20/2016 23:06

Lab Sample Id	D/F	T y p e	Time	Analytes																									
				F e																									
CCVH 280-326363/85	1		22:23	X																									
CCV 280-326363/86	1		22:26	X																									
CCB 280-326363/87	1		22:28	X																									
CCVL 280-326363/88	1		22:31	X																									
MB 280-325709/1-C	1	D	22:34	X																									
LCS 280-325709/2-C	1	D	22:36	X																									
320-18796-5	1	D	22:39	X																									
320-18796-6	1	D	22:42	X																									
ZZZZZZ			22:44																										
ZZZZZZ			22:47																										
ZZZZZZ			22:50																										
ZZZZZZ			22:52																										
ZZZZZZ			22:55																										
CCVH 280-326363/98	1		22:57	X																									
CCV 280-326363/99	1		23:00	X																									
CCB 280-326363/100	1		23:03	X																									
CCVL 280-326363/101	1		23:06	X																									

Prep Types: _____
 D = Dissolved

13-IN
ANALYSIS RUN LOG
METALS

Lab Name: TestAmerica Denver

Job No.: 320-18796-1

SDG No.: _____

Instrument ID: MT_026

Analysis Method: 6010C

Start Date: 05/23/2016 11:36

End Date: 05/23/2016 17:56

Lab Sample Id	D/F	T y p e	Time	Analytes																									
				F e																									
ICIS 280-326681/1	1		11:36	X																									
IC 280-326681/2	1		11:39	X																									
IC 280-326681/3	1		11:41	X																									
ZZZZZZ			11:44																										
ZZZZZZ			11:47																										
ICVH 280-326681/6	1		11:50	X																									
ICV 280-326681/7	1		11:53	X																									
ICVL 280-326681/8	1		11:55	X																									
ICVL 280-326681/9	1		12:01	X																									
CCVH 280-326681/10	1		12:11	X																									
CCV 280-326681/11	1		12:13	X																									
ICB 280-326681/12	1		12:16	X																									
CRI 280-326681/13	1		12:19	X																									
ICSA 280-326681/14	1		12:27	X																									
ICSAB 280-326681/15	1		12:31	X																									
LRA 280-326681/16			12:35																										
CRI 280-326681/17			12:49																										
CRI 280-326681/18			13:03																										
CRI 280-326681/19			13:18																										
CCVH 280-326681/20	1		13:34	X																									
CCV 280-326681/21	1		13:37	X																									
CCB 280-326681/22	1		13:40	X																									
CCVL 280-326681/23	1		13:43	X																									
ZZZZZZ			13:46																										
ZZZZZZ			13:49																										
ZZZZZZ			13:52																										
ZZZZZZ			13:57																										
ZZZZZZ			14:00																										
ZZZZZZ			14:06																										
ZZZZZZ			14:09																										
ZZZZZZ			14:12																										
CCVH 280-326681/32	1		14:15	X																									
CCV 280-326681/33	1		14:18	X																									
CCB 280-326681/34	1		14:20	X																									
CCVL 280-326681/35	1		14:23	X																									
ZZZZZZ			14:26																										
ZZZZZZ			14:29																										
ZZZZZZ			14:31																										
ZZZZZZ			14:34																										
ZZZZZZ			14:37																										
ZZZZZZ			14:39																										
ZZZZZZ			14:42																										

13-IN
ANALYSIS RUN LOG
METALS

Lab Name: TestAmerica Denver Job No.: 320-18796-1
 SDG No.: _____
 Instrument ID: MT_026 Analysis Method: 6010C
 Start Date: 05/23/2016 11:36 End Date: 05/23/2016 17:56

Lab Sample Id	D/F	T y p e	Time	Analytes																	
				F e																	
CCVH 280-326681/43			14:44																		
CCV 280-326681/44			14:47																		
CCB 280-326681/45			14:50																		
CCVL 280-326681/46			14:52																		
ZZZZZZ			14:55																		
ZZZZZZ			14:58																		
ZZZZZZ			15:01																		
ZZZZZZ			15:03																		
ZZZZZZ			15:06																		
ZZZZZZ			15:09																		
ZZZZZZ			15:11																		
ZZZZZZ			15:14																		
CCVH 280-326681/55			15:17																		
CCV 280-326681/56			15:20																		
CCB 280-326681/57			15:22																		
CCVL 280-326681/58			15:25																		
ZZZZZZ			15:28																		
ZZZZZZ			15:30																		
ZZZZZZ			15:33																		
ZZZZZZ			15:36																		
ZZZZZZ			15:39																		
ZZZZZZ			15:41																		
ZZZZZZ			15:44																		
ZZZZZZ			15:47																		
CCVH 280-326681/67			15:49																		
CCV 280-326681/68			15:52																		
CCB 280-326681/69			15:55																		
CCVL 280-326681/70			15:57																		
ZZZZZZ			16:00																		
ZZZZZZ			16:03																		
ZZZZZZ			16:05																		
ZZZZZZ			16:08																		
ZZZZZZ			16:11																		
ZZZZZZ			16:13																		
ZZZZZZ			16:16																		
CCVH 280-326681/78			16:19																		
CCV 280-326681/79			16:21																		
CCB 280-326681/80			16:24																		
CCVL 280-326681/81			16:27																		
ZZZZZZ			16:30																		
ZZZZZZ			16:32																		
ZZZZZZ			16:35																		

13-IN
ANALYSIS RUN LOG
METALS

Lab Name: TestAmerica Denver Job No.: 320-18796-1

SDG No.: _____

Instrument ID: MT_026 Analysis Method: 6010C

Start Date: 05/23/2016 11:36 End Date: 05/23/2016 17:56

Lab Sample Id	D/F	T y p e	Time	Analytes																									
				F e																									
ZZZZZZ			16:38																										
ZZZZZZ			16:41																										
CCVH 280-326681/87			16:43																										
CCV 280-326681/88			16:46																										
CCB 280-326681/89			16:49																										
CCVL 280-326681/90			16:52																										
ZZZZZZ			16:54																										
ZZZZZZ			16:57																										
ZZZZZZ			17:00																										
ZZZZZZ			17:02																										
ZZZZZZ			17:06																										
ZZZZZZ			17:08																										
ZZZZZZ			17:12																										
ZZZZZZ			17:15																										
CCVH 280-326681/99			17:18																										
CCV 280-326681/100			17:21																										
CCB 280-326681/101			17:23																										
CCVL 280-326681/102			17:26																										
ZZZZZZ			17:29																										
ZZZZZZ			17:32																										
ZZZZZZ			17:34																										
ZZZZZZ			17:37																										
ZZZZZZ			17:40																										
ZZZZZZ			17:42																										
ZZZZZZ			17:45																										
CCVH 280-326681/110			17:48																										
CCV 280-326681/111			17:51																										
CCB 280-326681/112			17:53																										
CCVL 280-326681/113			17:56																										

Prep Types: _____
=

Sample Name: ICIS Acquired: 5/17/2016 9:02:24 Type: Cal
Method: 6500_025(v6) Mode: IR Corr. Factor: 1.000000
User: CRHOADES Prep Date: Custom ID2: Custom ID3:
Comment:

Elem	Ag3280	Al1670	Al3092	As1890	B_2089	Ba4554	Be3130	Bi2230	Ca3179	Cd2288	Co2286	Cr2055
Units	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S
Avg	-.00382	.00092	-.02786	-.00036	.00103	.05915	-.01190	-.00177	.00255	-.00125	-.00122	.00026
Stddev	.00013	.00001	.00263	.00034	.00006	.00238	.00088	.00039	.00047	.00011	.00011	.00032
%RSD	3.4773	.96299	9.4389	96.751	6.0260	4.0253	7.3553	22.038	18.599	8.4387	8.6345	123.36
#1	-.00373	.00091	-.02600	-.00060	.00107	.06084	-.01128	-.00205	.00222	-.00132	-.00115	.00003
#2	-.00392	.00092	-.02972	-.00011	.00098	.05747	-.01252	-.00149	.00289	-.00118	-.00129	.00049
Elem	Cu3247	Fe2599	Fe2714	K_7664	Li6707	Mg2790	Mn2576	Mo2020	Na5895	Na8183	Ni2316	P_1782
Units	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S
Avg	.00190	.00043	.00013	.00994	.00812	.00123	.00046	.00067	-.00437	-.01617	-.00085	.00005
Stddev	.00010	.00047	.00039	.00321	.00930	.00005	.00003	.00007	.00263	.00141	.00002	.00007
%RSD	5.0348	111.42	292.53	32.318	114.59	4.0703	7.0165	10.134	60.201	8.7139	2.7721	133.19
#1	.00183	.00076	-.00014	.01221	.01469	.00127	.00048	.00062	-.00622	-.01518	-.00083	.00000
#2	.00197	.00009	.00040	.00767	.00154	.00120	.00044	.00071	-.00251	-.01717	-.00086	.00010
Elem	Pb2203	S_1820	Sb2068	Se1960	Si2881	SiO2	Sn1899	Sr4077	Th2837	Ti3349	Tl1908	U_3701
Units	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S
Avg	.00110	.00087	.00008	.00003	.00175	.00175	.00019	-.02294	-.00026	-.00043	.00005	.00054
Stddev	.00086	.00008	.00008	.00000	.00067	.00067	.00010	.00162	.00007	.00002	.00022	.00013
%RSD	78.415	9.0448	96.294	4.5275	38.372	38.372	53.842	7.0459	27.941	5.1350	432.70	23.632
#1	.00049	.00093	.00014	.00003	.00128	.00128	.00011	-.02409	-.00031	-.00042	-.00010	.00045
#2	.00171	.00081	.00003	.00003	.00223	.00223	.00026	-.02180	-.00021	-.00045	.00021	.00063
Elem	V_2924	Zn2062	Zr3391									
Units	Cts/S	Cts/S	Cts/S									
Avg	-.00019	.00000	-.00368									
Stddev	.00022	.00002	.00178									
%RSD	114.79	1935.8	48.390									
#1	-.00035	-.00002	-.00242									
#2	-.00004	.00002	-.00494									
Int. Std.	Y_2243	Y_3600	Y_3774									
Units	Cts/S	Cts/S	Cts/S									
Avg	2669.6	38440.	2003.0									
Stddev	5.7	445.	8.4									
%RSD	.21392	1.1580	.41861									
#1	2673.6	38125.	1997.1									
#2	2665.6	38754.	2009.0									

Sample Name: ICAL1 Acquired: 5/17/2016 9:04:49 Type: Cal
Method: 6500_025(v6) Mode: IR Corr. Factor: 1.000000
User: CRHOADES Prep Date: Custom ID2: Custom ID3:
Comment:

Elem	Ag3280	Al1670	As1890	B_2089	Ba4554	Be3130	Ca3179	Cd2288	Co2286	Cr2055	Cu3247	Fe2599	K_7664
Units	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S
Avg	.26138	.22138	.07548	.27502	7.2902	4.9320	1.3615	1.7978	1.0651	.89084	.34823	.53542	4.8405
Stddev	.00042	.00018	.00029	.00026	.0208	.0194	.0052	.0001	.0007	.00239	.00021	.00061	.0173
%RSD	.16190	.08205	.38078	.09539	.28512	.39430	.38078	.00337	.06809	.26806	.06058	.11305	.35717
#1	.26108	.22151	.07568	.27521	7.2755	4.9183	1.3579	1.7978	1.0656	.89253	.34838	.53585	4.8283
#2	.26168	.22126	.07528	.27484	7.3049	4.9458	1.3652	1.7979	1.0646	.88915	.34808	.53499	4.8528
Elem	Li6707	Mg2790	Mn2576	Mo2020	Na5895	Ni2316	P_1782	Pb2203	Sb2068	Se1960	Si2881	SiO2	Sn1899
Units	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S
Avg	2.4202	1.1009	1.4690	.46893	2.0933	.82008	.10742	.52950	.16957	.06819	.20018	.20018	.19330
Stddev	.0074	.0030	.0055	.00045	.0032	.00889	.00029	.00062	.00031	.00001	.00054	.00054	.00032
%RSD	.30595	.27628	.37124	.09501	.15096	1.0846	.27371	.11676	.18562	.01047	.27207	.27207	.16407
#1	2.4150	1.0987	1.4652	.46924	2.0955	.81379	.10721	.52906	.16980	.06820	.20056	.20056	.19307
#2	2.4255	1.1030	1.4729	.46861	2.0910	.82637	.10763	.52993	.16935	.06819	.19979	.19979	.19352
Elem	Sr4077	Ti3349	Tl1908	V_2924	Zn2062	Zr3391							
Units	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S							
Avg	11.122	.33353	.14903	.26510	.03301	.35275							
Stddev	.053	.00040	.00004	.00106	.00001	.00056							
%RSD	.47207	.11956	.02415	.40093	.04060	.16014							
#1	11.085	.33324	.14900	.26434	.03302	.35235							
#2	11.160	.33381	.14905	.26585	.03300	.35315							
Int. Std.	Y_2243	Y_3600	Y_3774										
Units	Cts/S	Cts/S	Cts/S										
Avg	2646.6	37357.	1968.3										
Stddev	9.0	432.	21.2										
%RSD	.33829	1.1555	1.0750										
#1	2640.2	37662.	1983.3										
#2	2652.9	37052.	1953.4										

Sample Name: ICAL2 Acquired: 5/17/2016 9:07:16 Type: Cal
 Method: 6500_025(v6) Mode: IR Corr. Factor: 1.000000
 User: CRHOADES Prep Date: Custom ID2: Custom ID3:
 Comment:

Elem	Al3092	Bi2230	Fe2714	Na8183	S_1820	Th2837	U_3701
Units	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S
Avg	4.8198	.23854	.57716	2.5128	.26414	.52490	.13221
Stddev	.1059	.00042	.00813	.0476	.00134	.00097	.00011
%RSD	2.1974	.17611	1.4082	1.8940	.50647	.18574	.08626
#1	4.7449	.23884	.57142	2.4791	.26319	.52559	.13229
#2	4.8947	.23824	.58291	2.5464	.26509	.52421	.13213
Int. Std.	Y_2243	Y_3600	Y_3774				
Units	Cts/S	Cts/S	Cts/S				
Avg	2616.1	37130.	2010.5				
Stddev	8.7	349.	36.8				
%RSD	.33403	.94017	1.8318				
#1	2622.3	36883.	2036.6				
#2	2609.9	37376.	1984.5				

Sample Name: s1-3888421 Acquired: 5/17/2016 9:09:52 Type: QC
Method: 6500_025(v6) Mode: CONC Corr. Factor: 1.000000
User: CRHOADES Prep Date: Custom ID2: Custom ID3:
Comment:

Elem	Ag3280	Al1670	As1890	B_2089	Ba4554	Be3130	Bi2230	Ca3179	Cd2288	Co2286	Cr2055	Cu3247	Fe2599
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.99904	1.0086	2.0012	.99724	1.0072	1.0106	.00168	10.039	.99456	.99827	.99591	.99625	5.0521
Stddev	.00496	.0028	.0030	.00410	.0033	.0043	.00351	.034	.00099	.00367	.00137	.00624	.0233
%RSD	.49663	.27806	.15216	.41113	.32732	.42291	208.93	.34306	.09923	.36768	.13790	.62656	.46218

#1	.99553	1.0106	1.9990	.99434	1.0095	1.0136	.00417	10.015	.99386	.99567	.99494	.99183	5.0356
#2	1.0025	1.0066	2.0033	1.0001	1.0049	1.0075	-.00080	10.064	.99526	1.0009	.99688	1.0007	5.0686

Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	None	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Value													
Range													

Elem	K_7664	Li6707	Mg2790	Mn2576	Mo2020	Na5895	Na8183	Ni2316	P_1782	Pb2203	S_1820	Sb2068	Se1960
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	100.66	2.0000	40.002	.99756	1.0023	10.239	10.604	1.0051	2.0032	1.9943	.00646	2.0035	2.0073
Stddev	.40	.0056	.174	.00087	.0028	.015	1.278	.0014	.0130	.0099	.00000	.0160	.0038
%RSD	.40013	.28125	.43438	.08694	.27631	.14445	12.054	.13526	.64656	.49745	.03943	.80086	.18832

#1	100.94	1.9960	39.879	.99695	1.0043	10.229	11.508	1.0061	1.9941	2.0013	.00646	2.0148	2.0046
#2	100.38	2.0040	40.125	.99818	1.0004	10.250	9.7005	1.0042	2.0124	1.9873	.00646	1.9921	2.0100

Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	None	Chk Pass	Chk Pass	Chk Pass	None	Chk Pass	Chk Pass
Value													
Range													

Elem	Si2881	SiO2	Sn1899	Sr4077	Th2837	Ti3349	Ti1908	U_3701	V_2924	Zn2062	Zr3391
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	10.078	21.568	2.0101	1.0117	-.00242	.99856	1.9903	-.05413	1.0003	.99815	1.0008
Stddev	.002	.004	.0016	.0058	.00198	.00177	.0040	.00653	.0009	.00558	.0044
%RSD	.01982	.01982	.07923	.57510	81.654	.17773	.20215	12.060	.08587	.55878	.44231

#1	10.080	21.571	2.0089	1.0158	-.00382	.99730	1.9931	-.04951	.99966	.99421	1.0040
#2	10.077	21.565	2.0112	1.0076	-.00102	.99981	1.9875	-.05875	1.0009	1.0021	.99771

Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	None	Chk Pass	Chk Pass	None	Chk Pass	Chk Pass	Chk Pass
Value											
Range											

Int. Std.	Y_2243	Y_3600	Y_3774
Units	Cts/S	Cts/S	Cts/S
Avg	2650.9	37544.	1986.6
Stddev	14.6	760.	2.2
%RSD	.54988	2.0232	.10928

#1	2661.3	37007.	1988.2
#2	2640.6	38081.	1985.1

Sample Name: s2-3883904 Acquired: 5/17/2016 9:12:19 Type: QC
Method: 6500_025(v6) Mode: CONC Corr. Factor: 1.000000
User: CRHOADES Prep Date: Custom ID2: Custom ID3:
Comment:

Elem	Ag3280	Al3092	As1890	B_2089	Ba4554	Be3130	Bi2230	Ca3179	Cd2288	Co2286	Cr2055	Cu3247	Fe2714
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	-.00979	102.08	.00516	.01003	.00273	.00106	2.0152	.05011	.00093	-.00086	.00207	-.02190	100.68
Stddev	.00120	1.76	.00160	.00005	.00052	.00009	.0040	.00559	.00026	.00066	.00114	.00015	.09
%RSD	12.219	1.7276	31.050	.46491	18.919	8.1835	.19603	11.150	28.577	76.198	55.209	.67740	.09163

#1	-.01064	103.32	.00629	.00999	.00309	.00113	2.0124	.04616	.00111	-.00040	.00287	-.02179	100.62
#2	-.00894	100.83	.00402	.01006	.00236	.00100	2.0180	.05406	.00074	-.00132	.00126	-.02200	100.75

Check ?	None	Chk Pass	None	None	None	None	Chk Pass	None	None	None	None	None	Chk Pass
Value													
Range													

Elem	K_7664	Li6707	Mg2790	Mn2576	Mo2020	Na8183	Ni2316	P_1782	Pb2203	S_1820	Sb2068	Se1960	Si2881
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.74515	.01169	.08136	-.00289	.00421	509.30	.00537	.01309	.00051	10.404	-.00128	.00472	-.07800
Stddev	.00488	.00470	.00348	.00008	.00023	10.73	.00089	.00187	.00290	.322	.00061	.00569	.02397
%RSD	.65490	40.191	4.2763	2.8630	5.4810	2.1076	16.611	14.257	573.57	3.0985	47.608	120.35	30.734

#1	.74169	.00837	.08382	-.00283	.00405	516.89	.00600	.01177	.00256	10.632	-.00171	.00070	-.09495
#2	.74860	.01501	.07890	-.00295	.00437	501.71	.00474	.01441	-.00155	10.177	-.00085	.00875	-.06105

Check ?	None	None	None	None	None	Chk Pass	None	None	None	Chk Pass	None	None	None
Value													
Range													

Elem	SiO2	Sn1899	Sr4077	Th2837	Ti3349	Ti1908	U_3701	V_2924	Zn2062	Zr3391
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	-.16693	.00712	.00219	10.081	-.00389	.00639	20.278	.02776	.01333	-.27857
Stddev	.05130	.00146	.00015	.008	.00036	.00036	.042	.00021	.00085	.00402
%RSD	30.734	20.474	6.8113	.07448	9.2113	5.6433	.20744	.74654	6.4112	1.4448

#1	-.20320	.00815	.00208	10.086	-.00414	.00614	20.308	.02791	.01272	-.27572
#2	-.13065	.00609	.00229	10.075	-.00364	.00665	20.248	.02761	.01393	-.28142

Check ?	None	None	None	Chk Pass	None	None	Chk Pass	None	None	None
Value										
Range										

Int. Std.	Y_2243	Y_3600	Y_3774
Units	Cts/S	Cts/S	Cts/S
Avg	2609.4	36313.	1999.7
Stddev	11.9	219.	19.6
%RSD	.45570	.60196	.97897

#1	2601.0	36467.	2013.6
#2	2617.8	36158.	1985.9

Sample Name: ICVH-3887879 Acquired: 5/17/2016 9:14:55 Type: QC
Method: 6500_025(v6) Mode: CONC Corr. Factor: 1.000000
User: CRHOADES Prep Date: Custom ID2: Custom ID3:
Comment:

Elem	Ag3280	Al3092	As1890	B_2089	Ba4554	Be3130	Bi2230	Ca3179	Cd2288	Co2286	Cr2055	Cu3247	Fe2714
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	-.00313	39.771	.01282	.00209	.00059	-.00045	.50694	-.01315	.00028	.00025	.00079	-.00607	79.559
Stddev	.00005	.265	.00202	.00027	.00003	.00010	.00420	.01187	.00027	.00041	.00013	.00045	.442
%RSD	1.7399	.66532	15.761	13.050	5.9426	22.734	.82867	90.269	96.364	163.71	16.715	7.4307	.55552

#1	-.00309	39.958	.01139	.00189	.00061	-.00038	.50991	-.02154	.00009	.00055	.00070	-.00639	79.247
#2	-.00317	39.584	.01425	.00228	.00056	-.00052	.50397	-.00476	.00048	-.00004	.00089	-.00575	79.872

Check ?	None	Chk Pass	None	None	None	None	Chk Pass	None	None	None	None	None	Chk Pass
Value													
Range													

Elem	K_7664	Li6707	Mg2790	Mn2576	Mo2020	Na8183	Ni2316	P_1782	Pb2203	S_1820	Sb2068	Se1960	Si2881
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.40818	.00475	.00643	-.00139	.00035	41.286	.00149	.00300	-.00182	3.9256	-.00069	-.00420	-.02023
Stddev	.16161	.00016	.00257	.00002	.00001	.530	.00010	.00195	.00158	.0043	.00309	.00929	.05567
%RSD	39.594	3.3724	39.936	1.5189	3.7288	1.2833	6.9594	64.854	86.844	.10862	450.35	221.06	275.14

#1	.52246	.00487	.00824	-.00137	.00035	40.911	.00141	.00438	-.00294	3.9226	-.00287	.00237	.01913
#2	.29390	.00464	.00461	-.00140	.00034	41.660	.00156	.00163	-.00070	3.9286	.00150	-.01077	-.05960

Check ?	None	None	None	None	None	Chk Pass	None	None	None	Chk Pass	None	None	None
Value													
Range													

Elem	SiO2	Sn1899	Sr4077	Th2837	Ti3349	Ti1908	U_3701	V_2924	Zn2062	Zr3391
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	-.04330	.00158	.00052	2.9252	-.00061	.00067	5.2332	.00824	.00075	-.08073
Stddev	.11914	.00109	.00015	.0016	.00077	.00294	.0297	.00048	.00000	.00103
%RSD	275.14	68.785	28.562	.05542	126.00	441.69	.56752	5.8630	.04958	1.2752

#1	.04094	.00081	.00062	2.9263	-.00116	.00274	5.2542	.00790	.00075	-.08146
#2	-.12755	.00235	.00041	2.9240	-.00007	-.00141	5.2122	.00859	.00075	-.08000

Check ?	None	None	None	Chk Pass	None	None	Chk Pass	None	None	None
Value										
Range										

Int. Std.	Y_2243	Y_3600	Y_3774
Units	Cts/S	Cts/S	Cts/S
Avg	2767.9	39325.	2063.7
Stddev	.5	1.	6.7
%RSD	.01760	.00144	.32292

#1	2768.2	39325.	2059.0
#2	2767.5	39325.	2068.5

Sample Name: ICV-3888207 Acquired: 5/17/2016 9:19:18 Type: QC
Method: 6500_025(v6) Mode: CONC Corr. Factor: 1.000000
User: CRHOADES Prep Date: Custom ID2: Custom ID3:
Comment:

Elem	Ag3280	Al1670	As1890	B_2089	Ba4554	Be3130	Bi2230	Ca3179	Cd2288	Co2286	Cr2055
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.25100	.26292	.25777	.24941	.25551	.25281	.00687	2.0027	.25561	.25402	.25484
Stddev	.00017	.00047	.00052	.00113	.00217	.00172	.00174	.0091	.00040	.00010	.00113
%RSD	.06943	.17731	.20041	.45330	.84964	.67984	25.387	.45379	.15537	.04123	.44284

#1	.25088	.26259	.25813	.25021	.25704	.25402	.00564	1.9963	.25589	.25395	.25564
#2	.25113	.26325	.25740	.24861	.25397	.25159	.00811	2.0091	.25533	.25410	.25405

Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	None	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Value											
Range											

Elem	Cu3247	Fe2599	K_7664	Li6707	Mg2790	Mn2576	Mo2020	Na5895	Ni2316	P_1782	Pb2203
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.25083	.26091	20.669	.25388	10.031	.25165	.24826	W 2.1361	.25575	1.9703	.25767
Stddev	.00018	.00109	.193	.00543	.049	.00121	.00170	.0161	.00020	.0048	.00146
%RSD	.07046	.41592	.93585	2.1391	.48858	.48239	.68458	.75283	.07894	.24405	.56534

#1	.25071	.26167	20.533	.25004	9.9968	.25079	.24946	2.1247	.25589	1.9669	.25870
#2	.25096	.26014	20.806	.25772	10.066	.25251	.24706	2.1474	.25560	1.9737	.25664

Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Warn	Chk Pass	Chk Pass	Chk Pass
Value								2.0000			
Range								5.4900%			

Elem	S_1820	Sb2068	Se1960	Si2881	SiO2	Sn1899	Sr4077	Th2837	Ti3349	Ti1908	U_3701
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	-.00387	.26365	.50828	1.9510	4.1751	.49798	.25879	-.00076	.25022	.47696	-.03643
Stddev	.00038	.00448	.00422	.0718	.1537	.00044	.00126	.00055	.00158	.01733	.01166
%RSD	9.8723	1.6988	.82951	3.6804	3.6804	.08769	.48717	71.842	.63062	3.6326	31.995

#1	-.00414	.26048	.51126	1.9002	4.0664	.49829	.25790	-.00038	.24910	.48921	-.02819
#2	-.00360	.26681	.50530	2.0017	4.2837	.49767	.25969	-.00115	.25133	.46471	-.04467

Check ?	None	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	None	Chk Pass	Chk Pass	None
Value											
Range											

Elem	V_2924	Zn2062	Zr3391
Units	ppm	ppm	ppm
Avg	.25061	.24912	.24753
Stddev	.00191	.00378	.00255
%RSD	.76400	1.5176	1.0316

#1	.24925	.24644	.24573
#2	.25196	.25179	.24934

Check ?	Chk Pass	Chk Pass	Chk Pass
Value			
Range			

Int. Std.	Y_2243	Y_3600	Y_3774
Units	Cts/S	Cts/S	Cts/S
Avg	2698.0	38649.	2002.1
Stddev	3.3	430.	21.3
%RSD	.12181	1.1125	1.0638

#1	2700.3	38953.	1987.1
#2	2695.6	38345.	2017.2

Sample Name: ICVL-3894681 Acquired: 5/17/2016 9:22:31 Type: QC

Method: 6500_025(v6) Mode: CONC Corr. Factor: 1.000000

User: CRHOADES Prep Date: Custom ID2: Custom ID3:

Comment:

Elem	Ag3280	Al1670	As1890	B_2089	Ba4554	Be3130	Bi2230	Ca3179	Cd2288	Co2286	Cr2055	Cu3247
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.00953	.10342	.01615	.09549	.01000	.00079	.11008	.18841	.00548	.01022	.00977	.01483
Stddev	.00030	.00140	.00182	.00109	.00004	.00013	.00109	.00046	.00001	.00010	.00011	.00050
%RSD	3.1386	1.3548	11.296	1.1459	.42874	16.351	.98657	.24202	.16898	.93447	1.1758	3.3934

#1	.00932	.10243	.01744	.09471	.00997	.00088	.10931	.18873	.00548	.01029	.00985	.01519
#2	.00974	.10441	.01486	.09626	.01003	.00070	.11084	.18809	.00549	.01015	.00969	.01447

Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Value												
Range												

Elem	Fe2599	K_7664	Li6707	Mg2790	Mn2576	Mo2020	Na5895	Ni2316	P_1782	Pb2203	S_1820	Sb2068
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.09886	3.1749	F .00636	.19650	.01002	.02021	1.0270	.04163	2.8063	.00687	-.00919	.01473
Stddev	.00500	.0523	.00036	.00097	.00024	.00069	.0003	.00027	.0024	.00130	.00084	.00232
%RSD	5.0543	1.6469	5.6220	.49115	2.3459	3.3961	.03200	.65879	.08686	18.910	9.1149	15.732

#1	.10239	3.1379	.00661	.19582	.01019	.01972	1.0272	.04182	2.8080	.00595	-.00860	.01637
#2	.09533	3.2119	.00611	.19719	.00986	.02069	1.0268	.04143	2.8046	.00779	-.00978	.01309

Check ?	Chk Pass	Chk Pass	Chk Fail	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	None	Chk Pass
Value			.01000									
Range			-30.000%									

Elem	Se1960	Si2881	SiO2	Sn1899	Sr4077	Th2837	Ti3349	Ti1908	U_3701	V_2924	Zn2062	Zr3391
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.01919	.40515	.86703	.09973	.01020	.01520	.00984	F .02220	.05831	.01008	.01989	.01097
Stddev	.00459	.00758	.01621	.00224	.00026	.00124	.00048	.00199	.06154	.00009	.00079	.00123
%RSD	23.916	1.8702	1.8702	2.2449	2.5268	8.1478	4.8439	8.9850	105.55	.86635	3.9550	11.233

#1	.02243	.39980	.85556	.09815	.01038	.01433	.01017	.02079	.10182	.01002	.02045	.01184
#2	.01594	.41051	.87849	.10131	.01002	.01608	.00950	.02361	.01479	.01014	.01934	.01009

Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Fail	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Value								.01500				
Range								30.000%				

Int. Std.	Y_2243	Y_3600	Y_3774
Units	Cts/S	Cts/S	Cts/S
Avg	2748.5	40221.	2068.6
Stddev	44.2	101.	40.0
%RSD	1.6097	.25081	1.9359

#1	2779.8	40149.	2096.9
#2	2717.2	40292.	2040.3

Sample Name: CCVH-3883905 Acquired: 5/17/2016 9:25:11 Type: QC

Method: 6500_025(v6) Mode: CONC Corr. Factor: 1.000000

User: CRHOADES Prep Date: Custom ID2: Custom ID3:

Comment:

Elem	Ag3280	Al3092	As1890	B_2089	Ba4554	Be3130	Bi2230	Ca3179	Cd2288	Co2286	Cr2055	Cu3247	Fe2714
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	-0.00501	51.061	.00679	.00256	.00005	-.00016	1.0095	-.00733	-.00003	-.00076	.00028	-.01112	50.903
Stddev	.00021	.005	.00272	.00021	.00111	.00012	.0192	.00989	.00017	.00058	.00039	.00012	.171
%RSD	4.2738	.00888	40.044	8.2546	2099.6	77.314	1.8974	134.99	583.28	76.317	140.46	1.0474	.33602

#1	-.00486	51.064	.00871	.00241	.00084	-.00007	1.0231	-.00033	-.00015	-.00118	.00056	-.01120	50.782
#2	-.00516	51.057	.00487	.00271	-.00073	-.00024	.99598	-.01433	.00009	-.00035	.00000	-.01104	51.024

Check ?	None	Chk Pass	None	None	None	None	Chk Pass	None	None	None	None	None	Chk Pass
Value													
Range													

Elem	K_7664	Li6707	Mg2790	Mn2576	Mo2020	Na8183	Ni2316	P_1782	Pb2203	S_1820	Sb2068	Se1960	Si2881
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.10208	-.00043	.01310	-.00221	-.00025	259.30	.00190	.00610	-.00139	4.9676	-.01077	.00324	-.10780
Stddev	.14577	.00291	.00638	.00008	.00080	1.47	.00091	.00123	.00136	.0611	.00022	.00082	.02075
%RSD	142.81	679.91	48.690	3.8295	320.74	.56521	47.700	20.219	97.872	1.2305	2.0697	25.316	19.250

#1	-.00100	-.00248	.01760	-.00227	-.00082	258.26	.00254	.00523	-.00043	5.0108	-.01093	.00382	-.12247
#2	.20515	.00163	.00859	-.00215	.00032	260.33	.00126	.00697	-.00234	4.9244	-.01061	.00266	-.09312

Check ?	None	None	None	None	None	Chk Pass	None	None	None	Chk Pass	None	None	None
Value													
Range													

Elem	SiO2	Sn1899	Sr4077	Th2837	Ti3349	Ti1908	U_3701	V_2924	Zn2062	Zr3391
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	-.23068	.00147	.00039	5.0011	-.00211	-.00067	10.233	.01330	.00057	-.13574
Stddev	.04441	.00116	.00001	.0077	.00072	.00048	.069	.00058	.00011	.00714
%RSD	19.250	78.853	1.7871	.15439	33.985	71.253	.67193	4.3684	20.183	5.2628

#1	-.26208	.00230	.00039	5.0066	-.00261	-.00101	10.281	.01371	.00049	-.14079
#2	-.19928	.00065	.00040	4.9957	-.00160	-.00033	10.184	.01289	.00065	-.13069

Check ?	None	None	None	Chk Pass	None	None	Chk Pass	None	None	None
Value										
Range										

Int. Std.	Y_2243	Y_3600	Y_3774
Units	Cts/S	Cts/S	Cts/S
Avg	2628.5	37481.	2033.4
Stddev	10.1	96.	.1
%RSD	.38250	.25547	.00336

#1	2621.4	37413.	2033.4
#2	2635.6	37549.	2033.5

Sample Name: CCV-3888422 Acquired: 5/17/2016 9:27:48 Type: QC
Method: 6500_025(v6) Mode: CONC Corr. Factor: 1.000000
User: CRHOADES Prep Date: Custom ID2: Custom ID3:
Comment:

Elem	Ag3280	Al1670	As1890	B_2089	Ba4554	Be3130	Bi2230	Ca3179	Cd2288	Co2286	Cr2055	Cu3247	Fe2599
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.50137	.51468	.99934	.49827	.48685	.48941	.00284	4.8398	.50421	.50978	.50582	.50434	2.4655
Stddev	.00097	.00376	.00966	.00259	.00896	.00944	.00236	.0814	.00525	.00129	.00088	.00065	.0481
%RSD	.19426	.73055	.96668	.52043	1.8408	1.9285	82.885	1.6820	1.0419	.25395	.17357	.12987	1.9504

#1	.50068	.51734	1.0062	.49643	.49319	.49609	.00451	4.8974	.50050	.50886	.50520	.50388	2.4995
#2	.50206	.51202	.99251	.50010	.48051	.48274	.00118	4.7823	.50793	.51069	.50644	.50480	2.4315

Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	None	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Value													
Range													

Elem	K_7664	Li6707	Mg2790	Mn2576	Mo2020	Na5895	Ni2316	P_1782	Pb2203	S_1820	Sb2068	Se1960	Si2881
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	48.736	.99687	19.989	.49887	.49658	5.1291	.50550	.99470	1.0052	.00134	.98474	.99265	4.9961
Stddev	.823	.00314	.041	.00057	.00162	.0153	.00042	.00315	.0009	.00036	.00235	.01012	.0256
%RSD	1.6880	.31547	.20493	.11511	.32654	.29778	.08238	.31684	.09314	26.819	.23835	1.0198	.51197

#1	49.317	.99909	19.960	.49847	.49773	5.1399	.50521	.99693	1.0045	.00109	.98640	.98549	5.0142
#2	48.154	.99464	20.018	.49928	.49544	5.1183	.50580	.99247	1.0058	.00159	.98309	.99980	4.9780

Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	None	Chk Pass	Chk Pass	Chk Pass
Value													
Range													

Elem	SiO2	Sn1899	Sr4077	Th2837	Ti3349	Ti1908	U_3701	V_2924	Zn2062	Zr3391
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	10.692	1.0056	.48814	-.00024	.49748	1.0158	-.02580	.49746	.49854	.49944
Stddev	.055	.0005	.00948	.00270	.00141	.0053	.06769	.00720	.00365	.00525
%RSD	.51197	.04827	1.9420	1136.8	.28372	.51758	262.32	1.4472	.73179	1.0503
#1	10.730	1.0053	.49485	.00167	.49649	1.0196	-.07367	.49237	.50112	.49573
#2	10.653	1.0060	.48144	-.00215	.49848	1.0121	.02206	.50255	.49596	.50315

Check ?	Chk Pass	Chk Pass	Chk Pass	None	Chk Pass	Chk Pass	None	Chk Pass	Chk Pass	Chk Pass
Value										
Range										

Int. Std.	Y_2243	Y_3600	Y_3774
Units	Cts/S	Cts/S	Cts/S
Avg	2641.8	37520.	2023.8
Stddev	14.5	54.	41.8
%RSD	.54966	.14381	2.0659
#1	2652.1	37482.	1994.3
#2	2631.6	37558.	2053.4

Sample Name: ICB Acquired: 5/17/2016 9:30:19 Type: QC
 Method: 6500_025(v6) Mode: CONC Corr. Factor: 1.000000
 User: CRHOADES Prep Date: Custom ID2: Custom ID3:
 Comment:

Elem	Ag3280	Al1670	As1890	B_2089	Ba4554	Be3130	Bi2230	Ca3179	Cd2288	Co2286	Cr2055
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.00071	.00022	.00585	.00109	.00059	-.00046	.00775	-.00862	.00024	.00044	-.00016
Stddev	.00043	.00019	.00557	.00028	.00066	.00013	.00623	.00903	.00015	.00041	.00030
%RSD	60.516	85.866	95.268	25.986	111.76	29.013	80.319	104.77	61.519	92.845	179.57

#1	.00101	.00009	.00191	.00089	.00105	-.00037	.01216	-.00223	.00014	.00015	-.00037
#2	.00040	.00035	.00979	.00129	.00012	-.00056	.00335	-.01501	.00035	.00073	.00004

Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit											
Low Limit											

Elem	Cu3247	Fe2599	K_7664	Li6707	Mg2790	Mn2576	Mo2020	Na5895	Ni2316	P_1782	Pb2203
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	-.00074	-.00197	-.04882	-.00220	.00041	-.00008	.00219	.07652	.00096	.00181	-.00151
Stddev	.00027	.00225	.04933	.00057	.00103	.00003	.00053	.00936	.00025	.00170	.00201
%RSD	36.240	114.36	101.06	26.058	253.32	38.365	24.171	12.230	26.069	93.555	133.65

#1	-.00055	-.00038	-.01393	-.00179	-.00032	-.00010	.00182	.06991	.00114	.00061	-.00293
#2	-.00093	-.00356	-.08370	-.00260	.00113	-.00006	.00257	.08314	.00079	.00301	-.00008

Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit											
Low Limit											

Elem	S_1820	Sb2068	Se1960	Si2881	SiO2	Sn1899	Sr4077	Th2837	Ti3349	Tl1908	U_3701
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	-.00859	W .00661	.00191	-.07890	W -.16885	.00171	.00021	.00169	.00048	.00172	-.03232
Stddev	.00285	.00269	.00187	.01431	.03063	.00060	.00035	.00214	.00021	.00312	.03138
%RSD	33.219	40.615	98.049	18.140	18.140	35.196	163.93	127.02	44.766	180.79	97.098

#1	-.00657	.00471	.00059	-.08902	-.19051	.00213	.00046	.00017	.00063	-.00048	-.05451
#2	-.01061	.00851	.00324	-.06878	-.14720	.00128	-.00003	.00320	.00033	.00393	-.01013

Check ?	Chk Pass	Chk Warn	Chk Pass	Chk Pass	Chk Warn	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit		.00100			.13000						
Low Limit		-.00100			-.13000						

Elem	V_2924	Zn2062	Zr3391
Units	ppm	ppm	ppm
Avg	-.00040	-.00020	-.00187
Stddev	.00038	.00007	.00412
%RSD	94.878	33.420	219.88

#1	-.00013	-.00015	-.00479
#2	-.00067	-.00024	.00104

Check ?	Chk Pass	Chk Pass	Chk Pass
High Limit			
Low Limit			

Int. Std.	Y_2243	Y_3600	Y_3774
Units	Cts/S	Cts/S	Cts/S
Avg	2663.8	38527.	1981.9
Stddev	17.9	187.	20.6
%RSD	.67154	.48547	1.0390

#1	2676.5	38395.	1996.4
#2	2651.2	38659.	1967.3

Sample Name: CRI-3894682 Acquired: 5/17/2016 9:32:42 Type: QC
Method: 6500_025(v6) Mode: CONC Corr. Factor: 1.000000
User: CRHOADES Prep Date: Custom ID2: Custom ID3:
Comment:

Elem	Ag3280	Al1670	As1890	B_2089	Ba4554	Be3130	Bi2230	Ca3179	Cd2288	Co2286	Cr2055
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.00962	.10704	W .01266	.10351	.00542	W .00058	W .12936	.20238	.00555	.00540	.01009
Stddev	.00070	.00034	.00250	.00145	.00044	.00011	.00060	.00195	.00008	.00008	.00020
%RSD	7.2922	.32046	19.715	1.3966	8.1547	19.209	.46413	.96156	1.5054	1.4525	2.0214
#1	.00913	.10728	.01090	.10249	.00573	.00066	.12893	.20376	.00561	.00534	.00994
#2	.01012	.10679	.01443	.10454	.00511	.00051	.12978	.20101	.00549	.00545	.01023
Check ?	Chk Pass	Chk Pass	Chk Warn	Chk Pass	Chk Pass	Chk Warn	Chk Warn	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Value			.01000			.00100	.10000				
Range			20.490%			-20.490%	20.490%				
Elem	Cu3247	Fe2599	K_7664	Li6707	Mg2790	Mn2576	Mo2020	Na5895	Ni2316	P_1782	Pb2203
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.01000	F .13101	1.0872	.00944	.21449	.00321	.01066	1.0711	.01141	1.0074	W .00236
Stddev	.00061	.00023	.0227	.00146	.00023	.00001	.00062	.0293	.00034	.0178	.00074
%RSD	6.0716	.17322	2.0877	15.459	.10514	.28735	5.8200	2.7328	2.9544	1.7695	31.245
#1	.00957	.13085	1.0711	.01047	.21433	.00322	.01022	1.0918	.01117	.99478	.00184
#2	.01043	.13117	1.1032	.00840	.21465	.00321	.01110	1.0504	.01165	1.0200	.00288
Check ?	Chk Pass	Chk Fail	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Warn
Value		.03000									.00300
Range		50.000%									-20.490%
Elem	S_1820	Sb2068	Se1960	Si2881	SiO2	Sn1899	Sr4077	Th2837	Ti3349	Ti1908	U_3701
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.10081	.01112	.01185	.47034	1.0065	.02068	.00535	W .01322	.01049	.01001	.05073
Stddev	.00117	.00569	.00700	.05211	.1115	.00106	.00042	.00304	.00110	.00166	.00537
%RSD	1.1576	51.137	59.079	11.079	11.079	5.1116	7.8470	22.989	10.527	16.595	10.585
#1	.09998	.01514	.01680	.43350	.92768	.02143	.00505	.01536	.00970	.01118	.05453
#2	.10163	.00710	.00690	.50719	1.0854	.01993	.00565	.01107	.01127	.00883	.04694
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Warn	Chk Pass	Chk Pass	Chk Pass
Value								.01000			
Range								20.490%			
Elem	V_2924	Zn2062	Zr3391								
Units	ppm	ppm	ppm								
Avg	.01006	.01019	.00998								
Stddev	.00018	.00004	.00137								
%RSD	1.7469	.42262	13.689								
#1	.01019	.01016	.01094								
#2	.00994	.01022	.00901								
Check ?	Chk Pass	Chk Pass	Chk Pass								
Value											
Range											
Int. Std.	Y_2243	Y_3600	Y_3774								
Units	Cts/S	Cts/S	Cts/S								
Avg	2714.3	38445.	1992.0								
Stddev	9.3	42.	20.5								
%RSD	.34185	.10844	1.0299								
#1	2707.8	38475.	1977.5								
#2	2720.9	38416.	2006.5								

Sample Name: CRI-3894682 Acquired: 5/17/2016 9:42:25 Type: QC
Method: 6500_025(v6) Mode: CONC Corr. Factor: 1.000000
User: CRHOADES Prep Date: Custom ID2: Custom ID3:
Comment:

Elem	Ag3280	Al1670	As1890	B_2089	Ba4554	Be3130	Bi2230	Ca3179	Cd2288	Co2286	Cr2055
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.00981	.10432	F .01806	.09923	.00584	W .00075	W .13023	.18885	.00527	.00549	.00959
Stddev	.00148	.00106	.00762	.00141	.00009	.00022	.00157	.00113	.00013	.00044	.00036
%RSD	15.122	1.0139	42.188	1.4221	1.5096	29.852	1.2093	.59823	2.4102	8.0245	3.7707
#1	.00876	.10357	.01267	.10022	.00577	.00059	.12912	.18805	.00536	.00518	.00985
#2	.01086	.10507	.02345	.09823	.00590	.00091	.13135	.18965	.00518	.00580	.00934
Check ?	Chk Pass	Chk Pass	Chk Fail	Chk Pass	Chk Pass	Chk Warn	Chk Warn	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Value			.01000			.00100	.10000				
Range			50.000%			-20.490%	20.490%				
Elem	Cu3247	Fe2599	K_7664	Li6707	Mg2790	Mn2576	Mo2020	Na5895	Ni2316	P_1782	Pb2203
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.00980	.02595	1.1572	.01079	.21028	.00315	.00831	1.0091	.01108	.96397	F .00008
Stddev	.00003	.00693	.0036	.00062	.00005	.00000	.00045	.0046	.00020	.00866	.00105
%RSD	.28894	26.719	.31142	5.7312	.02575	.05616	5.4332	.45618	1.7730	.89887	1361.2
#1	.00982	.03086	1.1597	.01123	.21024	.00315	.00863	1.0058	.01094	.97010	.00082
#2	.00978	.02105	1.1546	.01036	.21032	.00315	.00799	1.0123	.01121	.95785	-.00066
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Fail
Value											.00300
Range											-50.000%
Elem	S_1820	Sb2068	Se1960	Si2881	SiO2	Sn1899	Sr4077	Th2837	Ti3349	Ti1908	U_3701
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.09574	W .00514	.00818	.46153	.98767	.02184	.00499	.00964	.01028	W .00682	W .04697
Stddev	.00540	.00568	.00557	.03043	.06511	.00145	.00016	.00300	.00030	.00153	.05030
%RSD	5.6445	110.49	68.092	6.5925	6.5925	6.6152	3.1306	31.100	2.9485	22.494	107.08
#1	.09192	.00112	.01212	.48304	1.0337	.02287	.00488	.01176	.01049	.00573	.08254
#2	.09956	.00915	.00424	.44001	.94163	.02082	.00510	.00752	.01006	.00790	.01141
Check ?	Chk Pass	Chk Warn	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Warn	Chk Warn
Value		.01000								.01000	.06000
Range		-20.490%								-20.490%	-20.490%
Elem	V_2924	Zn2062	Zr3391								
Units	ppm	ppm	ppm								
Avg	.01033	.00991	W .00729								
Stddev	.00099	.00047	.00360								
%RSD	9.6186	4.7166	49.425								
#1	.01103	.01024	.00474								
#2	.00962	.00958	.00984								
Check ?	Chk Pass	Chk Pass	Chk Warn								
Value			.01000								
Range			-20.490%								
Int. Std.	Y_2243	Y_3600	Y_3774								
Units	Cts/S	Cts/S	Cts/S								
Avg	2674.0	38344.	1937.9								
Stddev	27.9	7.	8.8								
%RSD	1.0429	.01708	.45492								
#1	2693.7	38349.	1931.6								
#2	2654.3	38340.	1944.1								

Sample Name: alt Acquired: 5/17/2016 9:52:54 Type: QC
 Method: 6500_025(v6) Mode: CONC Corr. Factor: 1.000000
 User: CRHOADES Prep Date: Custom ID2: Custom ID3:
 Comment:

Elem	Ag3280	Al1670	As1890	B_2089	Ba4554	Be3130	Bi2230	Ca3179	Cd2288	Co2286	Cr2055
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	-.00013	.00081	F .02113	-.00090	.00007	F .00958	.00643	.00373	.00054	.00048	-.00033
Stddev	.00002	.00068	.00465	.00035	.00006	.00002	.00217	.00032	.00018	.00010	.00040
%RSD	12.609	83.388	22.006	38.636	81.648	.21315	33.790	8.7012	32.832	21.494	121.14

#1	-.00014	.00129	.02442	-.00114	.00003	.00959	.00797	.00396	.00041	.00055	-.00005
#2	-.00012	.00033	.01784	-.00065	.00012	.00957	.00489	.00350	.00066	.00040	-.00062

Check ?	Chk Pass	Chk Pass	Chk Fail	Chk Pass	Chk Pass	Chk Fail	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit			.01500			.00500					
Low Limit			-.01500			-.01000					

Elem	Cu3247	Fe2599	K_7664	Li6707	Mg2790	Mn2576	Mo2020	Na5895	Ni2316	P_1782	Pb2203
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.00038	-.00305	.17772	.00393	.00189	.00003	-.00059	.00503	.00040	.00009	W .00655
Stddev	.00016	.00188	.00233	.00101	.00242	.00000	.00039	.00641	.00045	.00080	.00130
%RSD	43.355	61.643	1.3135	25.623	128.12	11.478	66.462	127.36	113.11	910.84	19.869

#1	.00026	-.00438	.17606	.00464	.00018	.00002	-.00087	.00956	.00008	-.00048	.00747
#2	.00049	-.00172	.17937	.00322	.00360	.00003	-.00031	.00050	.00072	.00065	.00563

Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Warn
High Limit											.00450
Low Limit											-.00450

Elem	S_1820	Sb2068	Se1960	Si2881	SiO2	Sn1899	Sr4077	Th2837	Ti3349	Tl1908	U_3701
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	-.01709	F .01953	-.00333	-.07961	W -.17036	.00144	.00011	.00182	-.00008	-.00343	.00015
Stddev	.00257	.00392	.00220	.01593	.03408	.00071	.00009	.00246	.00048	.00238	.00241
%RSD	15.012	20.066	66.015	20.005	20.005	49.155	79.809	135.29	636.01	69.256	1592.6

#1	-.01528	.02230	-.00489	-.06835	-.14626	.00094	.00005	.00355	-.00041	-.00512	.00186
#2	-.01891	.01676	-.00178	-.09087	-.19446	.00194	.00018	.00008	.00026	-.00175	-.00155

Check ?	Chk Pass	Chk Fail	Chk Pass	Chk Pass	Chk Warn	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit		.01200			.13000						
Low Limit		-.01200			-.13000						

Elem	V_2924	Zn2062	Zr3391
Units	ppm	ppm	ppm
Avg	-.00002	.00017	-.00547
Stddev	.00083	.00053	.00381
%RSD	4892.6	313.27	69.590

#1	-.00061	-.00021	-.00816
#2	.00057	.00055	-.00278

Check ?	Chk Pass	Chk Pass	Chk Pass
High Limit			
Low Limit			

Int. Std.	Y_2243	Y_3600	Y_3774
Units	Cts/S	Cts/S	Cts/S
Avg	2675.6	38142.	1999.4
Stddev	35.3	109.	4.4
%RSD	1.3180	.28691	.22101

#1	2650.7	38064.	2002.5
#2	2700.5	38219.	1996.3

Sample Name: ICIS Acquired: 5/17/2016 10:09:27 Type: Cal
Method: 6500_025(v6) Mode: IR Corr. Factor: 1.000000
User: CRHOADES Prep Date: Custom ID2: Custom ID3:
Comment:

Elem	Ag3280	Al1670	Al3092	As1890	B_2089	Ba4554	Be3130	Bi2230	Ca3179	Cd2288	Co2286	Cr2055
Units	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S
Avg	-.00400	.00100	-.02710	-.00026	.00105	.07543	-.01280	-.00110	.00208	-.00087	-.00085	.00058
Stddev	.00002	.00002	.00077	.00002	.00000	.00067	.00043	.00012	.00001	.00091	.00025	.00018
%RSD	.43471	2.0887	2.8430	8.3139	.14285	.88948	3.3457	10.774	.37960	104.81	29.884	30.723
#1	-.00398	.00099	-.02764	-.00025	.00104	.07496	-.01249	-.00118	.00208	-.00022	-.00067	.00046
#2	-.00401	.00102	-.02655	-.00028	.00105	.07591	-.01310	-.00101	.00207	-.00151	-.00103	.00071
Elem	Cu3247	Fe2599	Fe2714	K_7664	Li6707	Mg2790	Mn2576	Mo2020	Na5895	Na8183	Ni2316	P_1782
Units	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S
Avg	.00200	.00053	-.00103	.02420	.01294	.00128	.00039	.00134	.02155	-.01804	-.00042	-.00007
Stddev	.00005	.00063	.00003	.00061	.00719	.00002	.00010	.00015	.00192	.00215	.00026	.00031
%RSD	2.2648	119.31	3.1187	2.5011	55.615	1.2240	24.280	11.351	8.9068	11.903	60.527	417.83
#1	.00203	.00098	-.00105	.02463	.01802	.00129	.00046	.00123	.02290	-.01652	-.00060	.00015
#2	.00197	.00008	-.00100	.02377	.00785	.00127	.00032	.00145	.02019	-.01956	-.00024	-.00029
Elem	Pb2203	S_1820	Sb2068	Se1960	Si2881	SiO2	Sn1899	Sr4077	Th2837	Ti3349	Tl1908	U_3701
Units	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S
Avg	.00093	.00309	.00020	.00036	.00165	.00165	.00044	-.02174	-.00024	-.00056	.00003	.00008
Stddev	.00030	.00007	.00058	.00002	.00056	.00056	.00023	.00024	.00001	.00007	.00024	.00031
%RSD	32.583	2.1063	281.10	5.6824	33.800	33.800	51.621	1.1225	2.6630	11.534	854.01	395.95
#1	.00115	.00314	.00061	.00034	.00204	.00204	.00028	-.02191	-.00025	-.00052	.00019	.00030
#2	.00072	.00304	-.00020	.00037	.00125	.00125	.00060	-.02156	-.00024	-.00061	-.00014	-.00014
Elem	V_2924	Zn2062	Zr3391									
Units	Cts/S	Cts/S	Cts/S									
Avg	-.00024	.00001	-.00423									
Stddev	.00013	.00001	.00136									
%RSD	54.364	96.925	32.169									
#1	-.00015	.00002	-.00327									
#2	-.00033	.00000	-.00520									
Int. Std.	Y_2243	Y_3600	Y_3774									
Units	Cts/S	Cts/S	Cts/S									
Avg	2545.5	36615.	1980.0									
Stddev	4.0	354.	24.4									
%RSD	.15793	.96802	1.2336									
#1	2542.6	36365.	1997.3									
#2	2548.3	36866.	1962.7									

Sample Name: ICAL1 Acquired: 5/17/2016 10:11:53 Type: Cal
Method: 6500_025(v6) Mode: IR Corr. Factor: 1.000000
User: CRHOADES Prep Date: Custom ID2: Custom ID3:
Comment:

Elem	Ag3280	Al1670	As1890	B_2089	Ba4554	Be3130	Ca3179	Cd2288	Co2286	Cr2055	Cu3247	Fe2599	K_7664
Units	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S
Avg	.27307	.22853	.07844	.28315	7.7576	5.2724	1.4380	1.8499	1.0921	.90862	.36786	.56785	5.2430
Stddev	.00327	.00006	.00038	.00015	.0451	.0209	.0063	.0041	.0007	.00002	.00458	.00399	.0236
%RSD	1.1963	.02633	.47976	.05174	.58148	.39673	.43939	.21927	.06152	.00189	1.2444	.70335	.45019
#1	.27538	.22849	.07871	.28304	7.7257	5.2577	1.4335	1.8528	1.0917	.90861	.37109	.56503	5.2263
#2	.27076	.22857	.07817	.28325	7.7895	5.2872	1.4425	1.8470	1.0926	.90863	.36462	.57068	5.2597
Elem	Li6707	Mg2790	Mn2576	Mo2020	Na5895	Ni2316	P_1782	Pb2203	Sb2068	Se1960	Si2881	SiO2	Sn1899
Units	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S
Avg	2.6940	1.1426	1.5363	.48220	2.2569	.85108	.11110	.54113	.17349	.07083	.21747	.21747	.19859
Stddev	.0190	.0169	.0236	.00112	.0018	.00327	.00048	.00230	.00071	.00023	.00287	.00287	.00095
%RSD	.70637	1.4815	1.5346	.23312	.07754	.38428	.42811	.42579	.41100	.32068	1.3177	1.3177	.47918
#1	2.6806	1.1546	1.5529	.48140	2.2557	.84877	.11076	.53950	.17400	.07067	.21544	.21544	.19792
#2	2.7075	1.1307	1.5196	.48299	2.2582	.85340	.11143	.54276	.17299	.07099	.21950	.21950	.19926
Elem	Sr4077	Ti3349	Tl1908	V_2924	Zn2062	Zr3391							
Units	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S							
Avg	11.821	.35009	.15261	.27359	.03448	.37749							
Stddev	.040	.00541	.00099	.00385	.00047	.00367							
%RSD	.34201	1.5457	.64900	1.4089	1.3711	.97106							
#1	11.793	.35392	.15191	.27632	.03481	.37490							
#2	11.850	.34627	.15331	.27086	.03414	.38008							
Int. Std.	Y_2243	Y_3600	Y_3774										
Units	Cts/S	Cts/S	Cts/S										
Avg	2531.3	35380.	1844.5										
Stddev	4.1	737.	14.3										
%RSD	.16043	2.0835	.77688										
#1	2534.2	34859.	1854.6										
#2	2528.5	35902.	1834.3										

Sample Name: ICAL2 Acquired: 5/17/2016 10:14:21 Type: Cal
 Method: 6500_025(v6) Mode: IR Corr. Factor: 1.000000
 User: CRHOADES Prep Date: Custom ID2: Custom ID3:
 Comment:

Elem	Al3092	Bi2230	Fe2714	Na8183	S_1820	Th2837	U_3701
Units	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S
Avg	4.9360	.24208	.58606	2.6140	.26787	.53912	.13710
Stddev	.0029	.00453	.00037	.0056	.00254	.00004	.00049
%RSD	.05880	1.8721	.06245	.21311	.94876	.00688	.35496
#1	4.9339	.24528	.58580	2.6101	.26966	.53909	.13676
#2	4.9380	.23887	.58632	2.6180	.26607	.53915	.13745
Int. Std.	Y_2243	Y_3600	Y_3774				
Units	Cts/S	Cts/S	Cts/S				
Avg	2482.2	35325.	1973.1				
Stddev	.7	86.	3.1				
%RSD	.02690	.24445	.15633				
#1	2481.7	35386.	1970.9				
#2	2482.6	35264.	1975.3				

Sample Name: s1-3888421 Acquired: 5/17/2016 10:16:57 Type: QC
Method: 6500_025(v6) Mode: CONC Corr. Factor: 1.000000
User: CRHOADES Prep Date: Custom ID2: Custom ID3:
Comment:

Elem	Ag3280	Al1670	As1890	B_2089	Ba4554	Be3130	Bi2230	Ca3179	Cd2288	Co2286	Cr2055	Cu3247
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.98467	1.0098	1.9989	1.0061	.96574	.97147	-.00220	9.6657	1.0023	1.0042	1.0065	.97416
Stddev	.00283	.0004	.0141	.0004	.00183	.00049	.00355	.0029	.0020	.0014	.0012	.00370
%RSD	.28772	.03569	.70805	.03479	.18923	.05066	161.54	.02953	.19917	.14461	.11750	.37996

#1	.98267	1.0095	1.9889	1.0059	.96703	.97112	-.00470	9.6637	1.0009	1.0032	1.0073	.97154
#2	.98668	1.0100	2.0089	1.0063	.96445	.97182	.00031	9.6677	1.0038	1.0053	1.0056	.97678

Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	None	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Value												
Range												

Elem	Fe2599	K_7664	Li6707	Mg2790	Mn2576	Mo2020	Na5895	Na8183	Ni2316	P_1782	Pb2203	S_1820
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	4.8655	96.323	1.9042	39.242	.97912	1.0136	9.9475	11.466	1.0071	2.0251	2.0362	-.04484
Stddev	.0066	.068	.0031	.222	.00708	.0008	.1132	.252	.0001	.0016	.0114	.00483
%RSD	.13530	.07049	.16019	.56619	.72320	.07618	1.1377	2.1957	.01417	.07822	.55740	10.767

#1	4.8702	96.371	1.9064	39.085	.97411	1.0142	10.028	11.288	1.0072	2.0262	2.0442	-.04143
#2	4.8608	96.275	1.9021	39.399	.98412	1.0131	9.8675	11.644	1.0070	2.0240	2.0282	-.04826

Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	None	Chk Pass	Chk Pass	Chk Pass	None
Value												
Range												

Elem	Sb2068	Se1960	Si2881	SiO2	Sn1899	Sr4077	Th2837	Ti3349	Ti1908	U_3701	V_2924	Zn2062
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	2.0485	2.0193	F 9.4849	F 20.298	2.0405	.96973	-.00447	.97560	2.0287	.07935	.98869	.97612
Stddev	.0216	.0092	.0300	.064	.0105	.00022	.00225	.00556	.0078	.02854	.00938	.00169
%RSD	1.0527	.45638	.31645	.31645	.51475	.02248	50.328	.56973	.38266	35.974	.94846	.17336

#1	2.0637	2.0258	9.4636	20.252	2.0479	.96988	-.00288	.97167	2.0342	.05916	.98206	.97493
#2	2.0332	2.0128	9.5061	20.343	2.0330	.96957	-.00605	.97954	2.0232	.09953	.99532	.97732

Check ?	Chk Pass	Chk Pass	Chk Fail	Chk Fail	Chk Pass	Chk Pass	None	Chk Pass	Chk Pass	None	Chk Pass	Chk Pass
Value			10.000	21.400								
Range			-5.0000%	-5.0000%								

Elem	Zr3391
Units	ppm
Avg	.95312
Stddev	.00292
%RSD	.30687

#1	.95518
#2	.95105

Check ?	Chk Pass
Value	
Range	

Int. Std.	Y_2243	Y_3600	Y_3774
Units	Cts/S	Cts/S	Cts/S
Avg	2571.4	36356.	1913.6
Stddev	7.0	754.	23.1
%RSD	.27348	2.0731	1.2063

#1	2566.4	36889.	1929.9
#2	2576.4	35823.	1897.3

Sample Name: s2-3883904 Acquired: 5/17/2016 10:19:24 Type: QC
Method: 6500_025(v6) Mode: CONC Corr. Factor: 1.000000
User: CRHOADES Prep Date: Custom ID2: Custom ID3:
Comment:

Elem	Ag3280	Al3092	As1890	B_2089	Ba4554	Be3130	Bi2230	Ca3179	Cd2288	Co2286	Cr2055	Cu3247	Fe2714
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	-.00856	99.383	.00213	.00955	.00051	.00057	2.0267	.02335	.00011	-.00198	.00106	-.02330	101.16
Stddev	.00059	.899	.00023	.00039	.00043	.00025	.0225	.00257	.00041	.00042	.00038	.00012	.94
%RSD	6.9094	.90423	10.991	4.0470	83.741	43.197	1.1085	11.002	386.05	20.988	35.901	.52605	.92988

#1	-.00898	98.747	.00197	.00982	.00021	.00075	2.0426	.02153	.00040	-.00169	.00079	-.02322	100.50
#2	-.00815	100.02	.00230	.00928	.00082	.00040	2.0108	.02516	-.00019	-.00227	.00133	-.02339	101.83

Check ?	None	Chk Pass	None	None	None	None	Chk Pass	None	None	None	None	None	Chk Pass
Value													
Range													

Elem	K_7664	Li6707	Mg2790	Mn2576	Mo2020	Na8183	Ni2316	P_1782	Pb2203	S_1820	Sb2068	Se1960	Si2881
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.54200	.00554	.05824	-.00348	.00163	496.39	.00262	.01195	-.00079	10.296	-.00220	-.00559	-.04833
Stddev	.10887	.00082	.00068	.00001	.00149	5.89	.00018	.00288	.00212	.170	.00127	.00034	.03727
%RSD	20.088	14.768	1.1761	.37848	91.751	1.1863	6.9566	24.092	268.53	1.6464	57.687	6.0867	77.113

#1	.46501	.00496	.05776	-.00349	.00057	492.23	.00249	.00991	.00071	10.416	-.00131	-.00583	-.07468
#2	.61898	.00612	.05873	-.00347	.00268	500.55	.00275	.01398	-.00229	10.176	-.00310	-.00535	-.02198

Check ?	None	None	None	None	None	Chk Pass	None	None	None	Chk Pass	None	None	None
Value													
Range													

Elem	SiO2	Sn1899	Sr4077	Th2837	Ti3349	Ti1908	U_3701	V_2924	Zn2062	Zr3391
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	-.10342	.00436	.00159	9.8903	-.00557	.00790	19.832	.02744	.01009	-.27779
Stddev	.07975	.00260	.00019	.0813	.00103	.00310	.163	.00055	.00024	.00002
%RSD	77.113	59.631	12.264	.82212	18.507	39.205	.82016	1.9905	2.3594	.00713

#1	-.15982	.00620	.00145	9.8328	-.00630	.00571	19.717	.02706	.01025	-.27781
#2	-.04703	.00252	.00172	9.9477	-.00484	.01009	19.947	.02783	.00992	-.27778

Check ?	None	None	None	Chk Pass	None	None	Chk Pass	None	None	None
Value										
Range										

Int. Std.	Y_2243	Y_3600	Y_3774
Units	Cts/S	Cts/S	Cts/S
Avg	2502.4	35452.	1972.4
Stddev	19.8	133.	49.8
%RSD	.79056	.37505	2.5228

#1	2488.4	35546.	2007.6
#2	2516.4	35358.	1937.3

Sample Name: ICVH-3887879 Acquired: 5/17/2016 10:22:00 Type: QC

Method: 6500_025(v6) Mode: CONC Corr. Factor: 1.000000

User: CRHOADES Prep Date: Custom ID2: Custom ID3:

Comment:

Elem	Ag3280	Al3092	As1890	B_2089	Ba4554	Be3130	Bi2230	Ca3179	Cd2288	Co2286	Cr2055	Cu3247	Fe2714
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	-0.00321	40.317	.00390	.00318	-0.00100	-0.00017	.50989	.00418	.00005	-0.00007	-0.00021	-0.00638	80.850
Stddev	.00016	.482	.00476	.00011	.00038	.00009	.01023	.00330	.00020	.00024	.00003	.00079	.725
%RSD	5.0119	1.1944	122.15	3.3296	38.547	49.523	2.0064	79.060	388.45	346.69	12.319	12.352	.89698

#1	-0.00310	39.976	.00053	.00310	-0.00127	-0.00011	.51713	.00652	-0.00009	-0.00024	-0.00019	-0.00694	80.337
#2	-0.00333	40.658	.00726	.00325	-0.00073	-0.00024	.50266	.00184	.00019	.00010	-0.00023	-0.00583	81.363

Check ?	None	Chk Pass	None	None	None	None	Chk Pass	None	None	None	None	None	Chk Pass
Value													
Range													

Elem	K_7664	Li6707	Mg2790	Mn2576	Mo2020	Na8183	Ni2316	P_1782	Pb2203	S_1820	Sb2068	Se1960	Si2881
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.08340	.00165	-0.00360	-0.00137	-0.00095	41.979	.00101	.00499	-0.00003	3.9154	-0.00475	-0.00508	-0.01541
Stddev	.03498	.00132	.00327	.00008	.00112	.280	.00050	.00200	.00302	.0429	.00083	.00639	.06241
%RSD	41.943	79.687	90.719	5.8574	117.47	.66778	49.821	40.059	9914.3	1.0963	17.402	125.61	405.12

#1	.10814	.00072	-0.00129	-0.00142	-0.00175	41.781	.00065	.00641	.00210	3.9458	-0.00534	-0.00057	.02873
#2	.05867	.00258	-0.00591	-0.00131	-0.00016	42.178	.00136	.00358	-0.00217	3.8850	-0.00417	-0.00960	-.05954

Check ?	None	None	None	None	None	Chk Pass	None	None	None	Chk Pass	None	None	None
Value													
Range													

Elem	SiO2	Sn1899	Sr4077	Th2837	Ti3349	Ti1908	U_3701	V_2924	Zn2062	Zr3391
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	-0.03297	-0.00221	.00004	2.9275	-0.00146	-0.00193	5.2231	.00823	-0.00028	-0.08493
Stddev	.13357	.00025	.00001	.0104	.00025	.00047	.0372	.00015	.00013	.00082
%RSD	405.12	11.185	13.412	.35435	17.394	24.462	.71287	1.8335	45.293	.96895

#1	.06148	-0.00238	.00004	2.9348	-0.00164	-0.00160	5.2495	.00833	-0.00037	-0.08551
#2	-.12742	-0.00203	.00004	2.9201	-0.00128	-0.00227	5.1968	.00812	-0.00019	-0.08435

Check ?	None	None	None	Chk Pass	None	None	Chk Pass	None	None	None
Value										
Range										

Int. Std.	Y_2243	Y_3600	Y_3774
Units	Cts/S	Cts/S	Cts/S
Avg	2601.6	36719.	2009.7
Stddev	18.9	55.	10.1
%RSD	.72803	.14878	.50128

#1	2588.2	36680.	2016.8
#2	2614.9	36758.	2002.6

Sample Name: ICV-3888207 Acquired: 5/17/2016 10:26:24 Type: QC
Method: 6500_025(v6) Mode: CONC Corr. Factor: 1.000000
User: CRHOADES Prep Date: Custom ID2: Custom ID3:
Comment:

Elem	Ag3280	Al1670	As1890	B_2089	Ba4554	Be3130	Bi2230	Ca3179	Cd2288	Co2286	Cr2055
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.24639	.25888	.24871	.24850	.24840	.24914	.00079	1.9927	.25158	.25140	.25448
Stddev	.00121	.00039	.00823	.00192	.00010	.00146	.00081	.0193	.00087	.00069	.00115
%RSD	.49300	.14977	3.3087	.77101	.04197	.58481	102.17	.96750	.34393	.27527	.45267
#1	.24553	.25861	.24289	.24715	.24847	.24811	.00136	1.9790	.25097	.25091	.25366
#2	.24725	.25915	.25453	.24986	.24832	.25017	.00022	2.0063	.25219	.25189	.25529
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	None	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Value Range											
Elem	Cu3247	Fe2599	K_7664	Li6707	Mg2790	Mn2576	Mo2020	Na5895	Ni2316	P_1782	Pb2203
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.24406	.25649	19.777	.23974	9.8737	.24613	.24445	2.0094	.24986	1.9414	.25512
Stddev	.00096	.00388	.151	.00052	.0042	.00011	.00062	.0221	.00102	.0026	.00098
%RSD	.39432	1.5143	.76561	.21711	.04233	.04280	.25287	1.0995	.40836	.13212	.38370
#1	.24474	.25374	19.670	.23937	9.8767	.24621	.24488	2.0250	.24914	1.9396	.25443
#2	.24338	.25924	19.884	.24011	9.8708	.24606	.24401	1.9937	.25059	1.9432	.25581
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Value Range											
Elem	S_1820	Sb2068	Se1960	Si2881	SiO2	Sn1899	Sr4077	Th2837	Ti3349	Ti1908	U_3701
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	-.06825	.25637	.48635	1.9412	4.1542	.49325	.25174	-.00115	.24373	W .46293	.06355
Stddev	.00054	.00040	.00007	.0303	.0648	.00427	.00118	.00372	.00018	.00614	.00810
%RSD	.78941	.15715	.01508	1.5598	1.5598	.86534	.46732	323.43	.07240	1.3263	12.745
#1	-.06863	.25609	.48630	1.9198	4.1084	.49023	.25091	-.00378	.24361	.46727	.06927
#2	-.06787	.25666	.48640	1.9626	4.2000	.49627	.25257	.00148	.24386	.45859	.05782
Check ?	None	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	None	Chk Pass	Chk Warn	None
Value Range										.50000 -5.4900%	
Elem	V_2924	Zn2062	Zr3391								
Units	ppm	ppm	ppm								
Avg	.24703	.24135	.24048								
Stddev	.00181	.00125	.00367								
%RSD	.73376	.51848	1.5247								
#1	.24575	.24047	.23789								
#2	.24832	.24224	.24308								
Check ?	Chk Pass	Chk Pass	Chk Pass								
Value Range											
Int. Std.	Y_2243	Y_3600	Y_3774								
Units	Cts/S	Cts/S	Cts/S								
Avg	2536.3	36685.	1872.7								
Stddev	15.9	62.	21.8								
%RSD	.62510	.16870	1.1662								
#1	2525.1	36641.	1888.2								
#2	2547.5	36729.	1857.3								

Sample Name: ICVL-3894681 Acquired: 5/17/2016 10:30:26 Type: QC
Method: 6500_025(v6) Mode: CONC Corr. Factor: 1.000000
User: CRHOADES Prep Date: Custom ID2: Custom ID3:
Comment:

Elem	Ag3280	Al1670	As1890	B_2089	Ba4554	Be3130	Bi2230	Ca3179	Cd2288	Co2286	Cr2055	Cu3247
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.00959	.10018	.01672	.09521	.00891	F .00062	.10512	.18903	.00489	.00967	.00962	.01528
Stddev	.00049	.00055	.00241	.00154	.00023	.00002	.00190	.01352	.00005	.00056	.00042	.00060
%RSD	5.0967	.54936	14.399	1.6134	2.6275	2.4552	1.8040	7.1501	1.0259	5.8074	4.3775	3.9270
#1	.00924	.10057	.01843	.09629	.00875	.00063	.10646	.19858	.00485	.01007	.00932	.01570
#2	.00994	.09980	.01502	.09412	.00908	.00061	.10378	.17947	.00492	.00927	.00992	.01485
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Fail	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Value						.00100						
Range						-30.000%						
Elem	Fe2599	K_7664	Li6707	Mg2790	Mn2576	Mo2020	Na5895	Ni2316	P_1782	Pb2203	S_1820	Sb2068
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.10462	2.7363	F .00484	.19988	.00988	.01851	.90620	.03963	2.7341	.00873	-.08059	.01903
Stddev	.00251	.0924	.00084	.00646	.00005	.00046	.02780	.00021	.0387	.00427	.00526	.00295
%RSD	2.3945	3.3782	17.407	3.2296	.48512	2.4922	3.0681	.54079	1.4162	48.872	6.5323	15.499
#1	.10639	2.6709	.00544	.19531	.00992	.01884	.92586	.03978	2.7615	.01175	-.08432	.01695
#2	.10285	2.8017	.00425	.20444	.00985	.01818	.88654	.03947	2.7067	.00572	-.07687	.02112
Check ?	Chk Pass	Chk Pass	Chk Fail	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	None	Chk Pass
Value			.01000									
Range			-30.000%									
Elem	Se1960	Si2881	SiO2	Sn1899	Sr4077	Th2837	Ti3349	Ti1908	U_3701	V_2924	Zn2062	Zr3391
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	F .00077	.45332	.97010	.09725	.00931	.01373	.01025	.01794	F .13197	.01013	.01927	.01113
Stddev	.01435	.00186	.00398	.00281	.00011	.00113	.00029	.00018	.02512	.00056	.00022	.00403
%RSD	1860.4	.41011	.41011	2.8930	1.1969	8.2423	2.7959	1.0104	19.036	5.5224	1.1442	36.219
#1	-.00938	.45200	.96729	.09924	.00939	.01453	.01045	.01781	.14973	.00973	.01911	.00828
#2	.01092	.45463	.97291	.09526	.00924	.01293	.01004	.01807	.11420	.01053	.01943	.01398
Check ?	Chk Fail	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Fail	Chk Pass	Chk Pass	Chk Pass
Value	.01500								.06000			
Range	-30.000%								30.000%			
Int. Std.	Y_2243	Y_3600	Y_3774									
Units	Cts/S	Cts/S	Cts/S									
Avg	2521.1	35691.	1845.8									
Stddev	5.2	167.	39.3									
%RSD	.20616	.46666	2.1289									
#1	2517.4	35809.	1873.6									
#2	2524.7	35573.	1818.0									

Sample Name: ICVL-3894681 Acquired: 5/17/2016 10:34:22 Type: QC
Method: 6500_025(v6) Mode: CONC Corr. Factor: 1.000000
User: CRHOADES Prep Date: Custom ID2: Custom ID3:
Comment:

Elem	Ag3280	Al1670	As1890	B_2089	Ba4554	Be3130	Bi2230	Ca3179	Cd2288	Co2286	Cr2055	Cu3247
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.00880	.09825	.01798	.09418	.00840	F .00060	.10831	.17259	.00508	.00966	.00988	.01448
Stddev	.00106	.00031	.00368	.00052	.00006	.00053	.00058	.00546	.00005	.00034	.00062	.00049
%RSD	12.066	.31082	20.489	.54944	.70327	88.214	.53842	3.1609	.90032	3.5619	6.2745	3.3706
#1	.00955	.09846	.01538	.09455	.00835	.00023	.10790	.16873	.00505	.00991	.01032	.01413
#2	.00805	.09803	.02059	.09382	.00844	.00097	.10873	.17644	.00511	.00942	.00944	.01482
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Fail	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Value						.00100						
Range						-30.000%						
Elem	Fe2599	K_7664	Li6707	Mg2790	Mn2576	Mo2020	Na5895	Ni2316	P_1782	Pb2203	S_1820	Sb2068
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.09276	2.7109	F .00654	.19751	.00976	.01877	.87082	.04072	2.8154	.01017	-.08456	.01862
Stddev	.00206	.0346	.00108	.00491	.00002	.00032	.02391	.00218	.1597	.00030	.00623	.00564
%RSD	2.2229	1.2763	16.493	2.4872	.16494	1.7201	2.7461	5.3647	5.6709	2.9772	7.3662	30.261
#1	.09130	2.7354	.00730	.19404	.00975	.01900	.88773	.04227	2.9283	.00996	-.08016	.02261
#2	.09422	2.6865	.00577	.20099	.00977	.01854	.85391	.03918	2.7025	.01038	-.08896	.01464
Check ?	Chk Pass	Chk Pass	Chk Fail	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	None	Chk Pass
Value			.01000									
Range			-30.000%									
Elem	Se1960	Si2881	SiO2	Sn1899	Sr4077	Th2837	Ti3349	Ti1908	U_3701	V_2924	Zn2062	Zr3391
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.01248	.37544	.80344	.09965	.00919	.01216	.00968	.01258	F .13925	.00965	.01811	.01080
Stddev	.00095	.00445	.00952	.00769	.00002	.00256	.00008	.00175	.01101	.00116	.00145	.00677
%RSD	7.6005	1.1853	1.1853	7.7152	.25599	21.065	.84180	13.945	7.9082	12.037	7.9865	62.717
#1	.01181	.37229	.79670	.10508	.00917	.01035	.00974	.01382	.14704	.01047	.01913	.01559
#2	.01315	.37859	.81017	.09421	.00921	.01398	.00962	.01134	.13147	.00883	.01709	.00601
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Fail	Chk Pass	Chk Pass	Chk Pass
Value									.06000			
Range									30.000%			
Int. Std.	Y_2243	Y_3600	Y_3774									
Units	Cts/S	Cts/S	Cts/S									
Avg	2510.5	35588.	1835.8									
Stddev	1.2	411.	34.7									
%RSD	.04688	1.1560	1.8902									
#1	2511.3	35298.	1811.2									
#2	2509.7	35879.	1860.3									

Sample Name: ICVL-3894681 Acquired: 5/17/2016 10:36:46 Type: QC
Method: 6500_025(v6) Mode: CONC Corr. Factor: 1.000000
User: CRHOADES Prep Date: Custom ID2: Custom ID3:
Comment:

Elem	Ag3280	Al1670	As1890	B_2089	Ba4554	Be3130	Bi2230	Ca3179	Cd2288	Co2286	Cr2055	Cu3247
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.00883	.10120	.01929	.09581	.00855	F .00053	.10761	.18611	.00534	.01010	.00964	.01427
Stddev	.00004	.00033	.00393	.00114	.00119	.00019	.00011	.00822	.00029	.00027	.00065	.00042
%RSD	.45874	.32674	20.389	1.1918	13.912	35.266	.09773	4.4181	5.3624	2.6690	6.7717	2.9655

#1	.00886	.10096	.01651	.09662	.00771	.00067	.10753	.18030	.00554	.00991	.01010	.01457
#2	.00881	.10143	.02207	.09500	.00939	.00040	.10768	.19193	.00513	.01029	.00918	.01397

Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Fail	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Value						.00100						
Range						-30.000%						

Elem	Fe2599	K_7664	Li6707	Mg2790	Mn2576	Mo2020	Na5895	Ni2316	P_1782	Pb2203	S_1820	Sb2068
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.09392	2.6192	F .00326	.19595	.00979	.01852	.84513	.04083	2.8017	.01035	-.08354	.01524
Stddev	.00991	.0837	.00017	.00132	.00005	.00019	.02348	.00006	.0528	.00207	.00502	.00268
%RSD	10.554	3.1940	5.1032	.67528	.49991	1.0283	2.7777	.15036	1.8840	20.026	6.0143	17.581

#1	.08691	2.6783	.00338	.19502	.00983	.01866	.82853	.04087	2.8391	.00889	-.08709	.01714
#2	.10092	2.5600	.00314	.19689	.00976	.01839	.86173	.04079	2.7644	.01182	-.07999	.01335

Check ?	Chk Pass	Chk Pass	Chk Fail	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	None	Chk Pass
Value			.01000									
Range			-30.000%									

Elem	Se1960	Si2881	SiO2	Sn1899	Sr4077	Th2837	Ti3349	Ti1908	U_3701	V_2924	Zn2062	Zr3391
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	F .00486	.47637	1.0194	.09882	.00955	.01228	.01016	.01432	F .11247	.00950	.01818	.01377
Stddev	.00297	.05545	.1187	.00042	.00003	.00270	.00039	.00209	.03194	.00111	.00040	.00001
%RSD	61.058	11.640	11.640	.42162	.31075	21.960	3.8499	14.569	28.399	11.633	2.2107	.08070

#1	.00276	.43716	.93553	.09912	.00957	.01038	.00989	.01285	.08989	.00872	.01847	.01378
#2	.00696	.51558	1.1034	.09853	.00953	.01419	.01044	.01580	.13506	.01028	.01790	.01377

Check ?	Chk Fail	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Fail	Chk Pass	Chk Pass	Chk Pass
Value	.01500								.06000			
Range	-30.000%								30.000%			

Int. Std.	Y_2243	Y_3600	Y_3774
Units	Cts/S	Cts/S	Cts/S
Avg	2487.3	35473.	1868.2
Stddev	7.8	445.	88.3
%RSD	.31213	1.2546	4.7253

#1	2492.8	35159.	1930.6
#2	2481.8	35788.	1805.8

Sample Name: CCVH-3883905 Acquired: 5/17/2016 10:40:21 Type: QC
Method: 6500_025(v6) Mode: CONC Corr. Factor: 1.000000
User: CRHOADES Prep Date: Custom ID2: Custom ID3:
Comment:

Elem	Ag3280	Al3092	As1890	B_2089	Ba4554	Be3130	Bi2230	Ca3179	Cd2288	Co2286	Cr2055	Cu3247	Fe2714
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	-0.00468	52.185	-0.00065	.00433	-0.00011	-0.00036	1.0061	-0.01561	-0.00072	-0.00149	.00020	-0.01306	52.935
Stddev	.00139	1.704	.00017	.00005	.00042	.00022	.0131	.01354	.00028	.00044	.00028	.00019	1.091
%RSD	29.796	3.2643	25.767	1.0817	378.80	59.506	1.3021	86.757	38.513	29.454	136.06	1.4617	2.0617

#1	-0.00369	53.389	-0.00077	.00437	.00019	-0.00021	1.0154	-0.00603	-0.00092	-0.00118	.00001	-.01293	53.707
#2	-0.00566	50.980	-0.00053	.00430	-0.00041	-0.00052	.99687	-.02518	-0.00053	-0.00180	.00040	-.01320	52.163

Check ?	None	Chk Pass	None	None	None	None	Chk Pass	None	None	None	None	None	Chk Pass
Value													
Range													

Elem	K_7664	Li6707	Mg2790	Mn2576	Mo2020	Na8183	Ni2316	P_1782	Pb2203	S_1820	Sb2068	Se1960	Si2881
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	-0.12584	-0.00051	.01988	-0.00201	-0.00155	271.57	.00101	.00460	-0.00055	4.9141	-0.01571	-0.00897	-0.00030
Stddev	.06396	.00235	.00032	.00004	.00005	2.46	.00040	.00136	.00146	.0743	.00470	.00549	.03189
%RSD	50.828	461.17	1.5951	1.8141	2.9372	.90424	39.312	29.573	262.97	1.5123	29.888	61.209	10716.

#1	-0.17107	-0.00217	.02011	-0.00203	-0.00152	273.30	.00129	.00364	-0.00159	4.9666	-.01903	-.00509	-.02284
#2	-0.08061	.00115	.01966	-0.00198	-0.00159	269.83	.00073	.00556	.00048	4.8615	-.01239	-.01286	.02225

Check ?	None	None	None	None	None	Chk Pass	None	None	None	Chk Pass	None	None	None
Value													
Range													

Elem	SiO2	Sn1899	Sr4077	Th2837	Ti3349	Ti1908	U_3701	V_2924	Zn2062	Zr3391
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	-0.00064	-0.00253	.00023	4.9948	-0.00255	.00395	10.128	.01289	.00046	-.14445
Stddev	.06824	.00209	.00018	.0049	.00094	.00426	.083	.00029	.00067	.00715
%RSD	10716.	82.603	76.443	.09785	36.766	107.79	.81983	2.2725	144.86	4.9490

#1	-0.04889	-0.00105	.00036	4.9983	-0.00189	.00094	10.187	.01309	-0.00001	-.14951
#2	.04761	-0.00401	.00011	4.9914	-0.00321	.00696	10.070	.01268	.00094	-.13940

Check ?	None	None	None	Chk Pass	None	None	Chk Pass	None	None	None
Value										
Range										

Int. Std.	Y_2243	Y_3600	Y_3774
Units	Cts/S	Cts/S	Cts/S
Avg	2413.3	34236.	1783.2
Stddev	.1	61.	57.1
%RSD	.00495	.17856	3.2042

#1	2413.2	34279.	1742.8
#2	2413.4	34192.	1823.6

Sample Name: CCV-3888422 Acquired: 5/17/2016 10:42:58 Type: QC
Method: 6500_025(v6) Mode: CONC Corr. Factor: 1.000000
User: CRHOADES Prep Date: Custom ID2: Custom ID3:
Comment:

Elem	Ag3280	Al1670	As1890	B_2089	Ba4554	Be3130	Bi2230	Ca3179	Cd2288	Co2286	Cr2055	Cu3247	Fe2599
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.49156	.50159	.96764	.48844	.48857	.49225	.00059	4.8622	.50012	.50555	.50560	.48710	2.4625
Stddev	.00153	.00285	.00750	.01104	.00147	.00183	.00085	.0208	.00762	.00602	.00785	.00388	.0105
%RSD	.31032	.56870	.77471	2.2610	.30007	.37261	144.32	.42794	1.5234	1.1900	1.5527	.79653	.42521

#1	.49048	.49957	.96234	.48063	.48753	.49354	-.00001	4.8769	.49473	.50130	.50005	.48436	2.4699
#2	.49264	.50361	.97294	.49625	.48960	.49095	.00118	4.8475	.50551	.50980	.51115	.48985	2.4551

Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	None	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Value													
Range													

Elem	K_7664	Li6707	Mg2790	Mn2576	Mo2020	Na5895	Ni2316	P_1782	Pb2203	S_1820	Sb2068	Se1960	Si2881
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	48.644	.95254	19.600	.48708	.49014	5.0205	.49501	.96887	1.0005	-.07750	.96739	.95072	4.8307
Stddev	.048	.00048	.097	.00132	.00551	.0262	.00740	.01234	.0112	.00793	.01005	.01441	.0624
%RSD	.09884	.05016	.49554	.27097	1.1244	.52158	1.4940	1.2733	1.1154	10.227	1.0392	1.5157	1.2915

#1	48.610	.95287	19.531	.48615	.48624	5.0390	.48979	.96015	.99260	-.07190	.96028	.94053	4.8749
#2	48.678	.95220	19.668	.48802	.49403	5.0020	.50024	.97759	1.0084	-.08311	.97450	.96091	4.7866

Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	None	Chk Pass	Chk Pass	Chk Pass
Value													
Range													

Elem	SiO2	Sn1899	Sr4077	Th2837	Ti3349	Ti1908	U_3701	V_2924	Zn2062	Zr3391
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	10.338	.98733	.49080	-.00285	.48029	.99923	.03260	.49626	.48465	.47042
Stddev	.134	.01355	.00012	.00333	.00107	.01030	.05059	.00697	.00886	.00294
%RSD	1.2915	1.3727	.02505	116.64	.22211	1.0311	155.17	1.4042	1.8287	.62472
#1	10.432	.97775	.49089	-.00520	.47953	.99194	.06837	.49133	.47838	.46834
#2	10.243	.99692	.49072	-.00050	.48104	1.0065	-.00317	.50119	.49092	.47249

Check ?	Chk Pass	Chk Pass	Chk Pass	None	Chk Pass	Chk Pass	None	Chk Pass	Chk Pass	Chk Pass
Value										
Range										

Int. Std.	Y_2243	Y_3600	Y_3774
Units	Cts/S	Cts/S	Cts/S
Avg	2467.7	35276.	1804.9
Stddev	.4	429.	5.8
%RSD	.01823	1.2157	.32332
#1	2467.4	35580.	1809.1
#2	2468.0	34973.	1800.8

Sample Name: ICB Acquired: 5/17/2016 10:45:30 Type: QC
 Method: 6500_025(v6) Mode: CONC Corr. Factor: 1.000000
 User: CRHOADES Prep Date: Custom ID2: Custom ID3:
 Comment:

Elem	Ag3280	Al1670	As1890	B_2089	Ba4554	Be3130	Bi2230	Ca3179	Cd2288	Co2286	Cr2055
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.00125	.00352	W .00804	.00429	.00162	W .00167	-.00264	.03670	W .00195	.00175	.00134
Stddev	.00113	.00034	.00813	.00082	.00071	.00003	.00174	.00507	.00023	.00034	.00003
%RSD	90.228	9.6367	101.14	19.230	44.084	1.8602	66.170	13.816	11.876	19.586	2.2481
#1	.00205	.00376	.01379	.00371	.00111	.00169	-.00140	.03312	.00179	.00151	.00132
#2	.00045	.00328	.00229	.00487	.00212	.00164	-.00387	.04029	.00212	.00199	.00136
Check ?	Chk Pass	Chk Pass	Chk Warn	Chk Pass	Chk Pass	Chk Warn	Chk Pass	Chk Pass	Chk Warn	Chk Pass	Chk Pass
High Limit			.00750			.00120			.00180		
Low Limit			-.01500			-.00120			-.00180		
Elem	Cu3247	Fe2599	K_7664	Li6707	Mg2790	Mn2576	Mo2020	Na5895	Ni2316	P_1782	Pb2203
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.00238	.00852	-.01013	.00096	W .07988	W .00216	.00267	-.05417	.00239	.00471	W .00606
Stddev	.00048	.00458	.05674	.00509	.00824	.00003	.00080	.00842	.00005	.00153	.00016
%RSD	20.357	53.705	560.42	532.70	10.318	1.2715	29.825	15.538	2.2237	32.507	2.6591
#1	.00272	.01176	.03000	-.00265	.08571	.00214	.00211	-.04822	.00243	.00363	.00618
#2	.00203	.00529	-.05025	.00456	.07405	.00218	.00323	-.06012	.00235	.00580	.00595
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Warn	Chk Warn	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Warn
High Limit					.04000	.00100					.00450
Low Limit					-.04000	-.01000					-.00450
Elem	S_1820	Sb2068	Se1960	Si2881	SiO2	Sn1899	Sr4077	Th2837	Ti3349	Ti1908	U_3701
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	-.08664	W .00562	.00573	-.00197	-.00421	.00260	W .00183	-.00054	W .00272	.00611	.02400
Stddev	.00492	.00266	.00845	.01491	.03191	.00077	.00019	.00233	.00093	.00079	.00236
%RSD	5.6735	47.314	147.35	757.96	757.96	29.616	10.365	430.73	34.114	12.991	9.8178
#1	-.09012	.00374	-.00024	.00858	.01835	.00314	.00170	-.00219	.00206	.00555	.02233
#2	-.08317	.00750	.01170	-.01251	-.02677	.00205	.00196	.00111	.00337	.00667	.02566
Check ?	Chk Pass	Chk Warn	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Warn	Chk Pass	Chk Warn	Chk Pass	Chk Pass
High Limit		.00100					.00120		.00230		
Low Limit		-.00100					-.00120		-.00230		
Elem	V_2924	Zn2062	Zr3391								
Units	ppm	ppm	ppm								
Avg	.00270	.00329	.00332								
Stddev	.00048	.00003	.00370								
%RSD	17.826	.95578	111.33								
#1	.00304	.00331	.00071								
#2	.00236	.00327	.00594								
Check ?	Chk Pass	Chk Pass	Chk Pass								
High Limit											
Low Limit											
Int. Std.	Y_2243	Y_3600	Y_3774								
Units	Cts/S	Cts/S	Cts/S								
Avg	2495.0	35406.	1764.5								
Stddev	13.5	277.	1.1								
%RSD	.54275	.78362	.06198								
#1	2504.6	35210.	1763.8								
#2	2485.4	35602.	1765.3								

Sample Name: CRI-3894682 Acquired: 5/17/2016 10:47:51 Type: QC
Method: 6500_025(v6) Mode: CONC Corr. Factor: 1.000000
User: CRHOADES Prep Date: Custom ID2: Custom ID3:
Comment:

Elem	Ag3280	Al1670	As1890	B_2089	Ba4554	Be3130	Bi2230	Ca3179	Cd2288	Co2286	Cr2055
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.00921	.10176	.00858	.09916	.00461	F .00036	W .12169	.19844	.00507	.00479	.00939
Stddev	.00057	.00003	.00015	.00117	.00038	.00017	.00730	.00858	.00023	.00011	.00044
%RSD	6.1455	.02575	1.7263	1.1805	8.2843	48.734	6.0023	4.3245	4.6177	2.2168	4.6836
#1	.00881	.10174	.00847	.09999	.00488	.00048	.12685	.20451	.00524	.00472	.00908
#2	.00961	.10177	.00868	.09833	.00434	.00023	.11652	.19237	.00490	.00487	.00970
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Fail	Chk Warn	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Value						.00100	.10000				
Range						-50.000%	20.490%				
Elem	Cu3247	Fe2599	K_7664	Li6707	Mg2790	Mn2576	Mo2020	Na5895	Ni2316	P_1782	Pb2203
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.00932	.02564	.85245	F .00460	.20324	.00309	.00919	.90872	.01023	.95880	F .00093
Stddev	.00068	.00138	.01561	.00249	.00109	.00006	.00020	.00880	.00024	.01525	.00036
%RSD	7.3467	5.3645	1.8310	54.219	.53616	1.9512	2.1470	.96818	2.3326	1.5910	39.234
#1	.00883	.02466	.86348	.00283	.20247	.00304	.00933	.90250	.01039	.96958	.00119
#2	.00980	.02661	.84141	.00636	.20401	.00313	.00905	.91494	.01006	.94801	.00067
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Fail	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Fail
Value				.01000							.00300
Range				-50.000%							-50.000%
Elem	S_1820	Sb2068	Se1960	Si2881	SiO2	Sn1899	Sr4077	Th2837	Ti3349	Ti1908	U_3701
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	F .01741	.00974	F .00236	.46692	.99922	.01840	.00490	.00870	.01034	.00936	F .10813
Stddev	.00379	.00110	.00386	.01712	.03663	.00233	.00033	.00213	.00022	.00326	.03596
%RSD	21.746	11.241	163.38	3.6658	3.6658	12.678	6.7382	24.432	2.1717	34.825	33.254
#1	.02009	.01052	-.00037	.47903	1.0251	.02005	.00467	.01020	.01050	.00705	.08270
#2	.01473	.00897	.00509	.45482	.97332	.01675	.00513	.00720	.01018	.01166	.13356
Check ?	Chk Fail	Chk Pass	Chk Fail	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Fail
Value	.10000		.01000								.06000
Range	-50.000%		-50.000%								50.000%
Elem	V_2924	Zn2062	Zr3391								
Units	ppm	ppm	ppm								
Avg	.00936	.00984	.00891								
Stddev	.00050	.00016	.00145								
%RSD	5.3269	1.6699	16.252								
#1	.00901	.00972	.00788								
#2	.00972	.00995	.00993								
Check ?	Chk Pass	Chk Pass	Chk Pass								
Value											
Range											
Int. Std.	Y_2243	Y_3600	Y_3774								
Units	Cts/S	Cts/S	Cts/S								
Avg	2544.2	35273.	1776.2								
Stddev	9.0	112.	61.3								
%RSD	.35471	.31656	3.4530								
#1	2550.6	35195.	1819.6								
#2	2537.9	35352.	1732.9								

Sample Name: icb Acquired: 5/17/2016 10:54:52 Type: QC
 Method: 6500_025(v6) Mode: CONC Corr. Factor: 1.000000
 User: CRHOADES Prep Date: Custom ID2: Custom ID3:
 Comment:

Elem	Ag3280	Al1670	As1890	B_2089	Ba4554	Be3130	Bi2230	Ca3179	Cd2288	Co2286	Cr2055
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.00003	.00029	.00615	.00084	-.00109	-.00025	-.00254	-.00614	.00006	-.00021	-.00008
Stddev	.00051	.00012	.00814	.00154	.00013	.00020	.00146	.00580	.00016	.00025	.00009
%RSD	1639.1	39.993	132.36	184.49	12.329	82.237	57.480	94.392	243.01	117.91	113.40

#1	.00039	.00037	.01190	.00192	-.00100	-.00010	-.00358	-.01024	-.00005	-.00003	-.00002
#2	-.00033	.00021	.00039	-.00025	-.00119	-.00039	-.00151	-.00204	.00017	-.00038	-.00014

Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit											
Low Limit											

Elem	Cu3247	Fe2599	K_7664	Li6707	Mg2790	Mn2576	Mo2020	Na5895	Ni2316	P_1782	Pb2203
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	-.00092	.00288	-.20258	-.00566	.00248	.00000	-.00136	-.12547	-.00002	.00344	-.00125
Stddev	.00059	.01161	.11482	.00112	.00067	.0001	.00014	.00431	.00005	.00156	.00032
%RSD	64.310	402.55	56.679	19.861	26.887	2159.1	9.9083	3.4327	238.16	45.336	25.273

#1	-.00133	.01109	-.28377	-.00646	.00296	.00007	-.00127	-.12243	.00001	.00455	-.00147
#2	-.00050	-.00532	-.12139	-.00487	.00201	-.00008	-.00146	-.12852	-.00005	.00234	-.00103

Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit											
Low Limit											

Elem	S_1820	Sb2068	Se1960	Si2881	SiO2	Sn1899	Sr4077	Th2837	Ti3349	Tl1908	U_3701
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	-.09054	W -.00588	-.00553	-.03818	-.08170	-.00216	-.00008	.00120	.00020	-.00111	-.00513
Stddev	.00943	.00435	.00648	.02005	.04290	.00117	.00020	.00067	.00006	.00053	.08630
%RSD	10.417	73.950	117.25	52.505	52.505	54.169	249.92	55.744	31.850	48.024	1682.7

#1	-.09721	-.00281	-.01011	-.02400	-.05137	-.00133	-.00023	.00168	.00016	-.00148	-.06615
#2	-.08387	-.00896	-.00094	-.05235	-.11203	-.00299	.00006	.00073	.00025	-.00073	.05589

Check ?	Chk Pass	Chk Warn	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit		.00100									
Low Limit		-.00100									

Elem	V_2924	Zn2062	Zr3391
Units	ppm	ppm	ppm
Avg	.00029	.00024	-.00195
Stddev	.00024	.00039	.00344
%RSD	85.268	160.57	176.12

#1	.00046	.00051	.00048
#2	.00011	-.00003	-.00438

Check ?	Chk Pass	Chk Pass	Chk Pass
High Limit			
Low Limit			

Int. Std.	Y_2243	Y_3600	Y_3774
Units	Cts/S	Cts/S	Cts/S
Avg	2506.3	36247.	1872.7
Stddev	6.4	216.	73.4
%RSD	.25573	.59665	3.9181

#1	2510.8	36095.	1820.8
#2	2501.8	36400.	1924.6

Sample Name: alt cri Acquired: 5/17/2016 11:00:34 Type: QC
 Method: 6500_025(v6) Mode: CONC Corr. Factor: 1.000000
 User: CRHOADES Prep Date: Custom ID2: Custom ID3:
 Comment:

Elem	Ag3280	Al1670	As1890	B_2089	Ba4554	Be3130	Bi2230	Ca3179	Cd2288	Co2286	Cr2055
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.00008	.00023	.00225	-.00007	-.00054	.00019	.00073	-.00195	-.00012	-.00026	-.00049
Stddev	.00093	.00007	.00038	.00080	.00029	.00005	.00311	.00750	.00003	.00020	.00008
%RSD	1143.9	30.205	16.683	1229.8	53.964	24.027	424.11	384.99	27.217	75.513	16.127

#1	-.00058	.00028	.00252	-.00063	-.00075	.00016	-.00147	.00336	-.00014	-.00012	-.00043
#2	.00074	.00018	.00199	.00050	-.00034	.00022	.00293	-.00725	-.00010	-.00040	-.00054

Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit											
Low Limit											

Elem	Cu3247	Fe2599	K_7664	Li6707	Mg2790	Mn2576	Mo2020	Na5895	Ni2316	P_1782	Pb2203
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	-.00012	-.00107	-.22036	W .00700	.00126	-.00005	-.00204	-.15804	-.00011	.00441	F .01006
Stddev	.00013	.00131	.02437	.00642	.00080	.00003	.00071	.00873	.00026	.00204	.00334
%RSD	105.66	122.38	11.057	91.766	63.420	66.228	34.801	5.5248	245.25	46.316	33.200

#1	-.00003	-.00014	-.23759	.01153	.00069	-.00007	-.00254	-.16421	.00008	.00297	.00770
#2	-.00021	-.00200	-.20314	.00246	.00182	-.00003	-.00154	-.15186	-.00029	.00586	.01242

Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Warn	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Fail
High Limit				.00500							.01000
Low Limit				-.01000							-.01000

Elem	S_1820	Sb2068	Se1960	Si2881	SiO2	Sn1899	Sr4077	Th2837	Ti3349	Tl1908	U_3701
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	-.09720	W -.00850	W .01127	-.00808	-.01728	-.00302	-.00011	-.00139	.00001	-.00452	.03077
Stddev	.00589	.00376	.00284	.04991	.10680	.00164	.00000	.00099	.00061	.00265	.03683
%RSD	6.0626	44.268	25.250	617.94	617.94	54.511	3.3016	71.160	9725.6	58.533	119.72

#1	-.09303	-.01117	.01328	.02721	.05824	-.00418	-.00012	-.00069	-.00042	-.00265	.05681
#2	-.10136	-.00584	.00925	-.04337	-.09280	-.00185	-.00011	-.00209	.00044	-.00639	.00472

Check ?	Chk Pass	Chk Warn	Chk Warn	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit		.00100	.00750								
Low Limit		-.00100	-.01500								

Elem	V_2924	Zn2062	Zr3391
Units	ppm	ppm	ppm
Avg	-.00039	-.00029	.00159
Stddev	.00047	.00000	.00135
%RSD	120.97	1.1740	85.012

#1	-.00006	-.00029	.00063
#2	-.00073	-.00029	.00255

Check ?	Chk Pass	Chk Pass	Chk Pass
High Limit			
Low Limit			

Int. Std.	Y_2243	Y_3600	Y_3774
Units	Cts/S	Cts/S	Cts/S
Avg	2505.0	35730.	1791.8
Stddev	9.8	216.	2.4
%RSD	.39180	.60566	.13317

#1	2498.1	35577.	1790.2
#2	2512.0	35883.	1793.5

Sample Name: ALT BE Acquired: 5/17/2016 11:06:59 Type: QC
 Method: 6500_025(v6) Mode: CONC Corr. Factor: 1.000000
 User: CRHOADES Prep Date: Custom ID2: Custom ID3:
 Comment:

Elem	Ag3280	Al1670	As1890	B_2089	Ba4554	Be3130	Bi2230	Ca3179	Cd2288	Co2286	Cr2055
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.00019	.00090	.00014	-.00020	-.00063	.00066	.00146	-.00683	-.00015	-.00069	-.00072
Stddev	.00015	.00057	.00062	.00112	.00006	.00016	.00041	.01012	.00006	.00043	.00025
%RSD	77.954	63.692	455.41	570.09	10.044	23.713	28.269	148.21	38.899	62.114	34.462

#1	.00030	.00050	-.00030	.00060	-.00068	.00077	.00175	-.01398	-.00011	-.00100	-.00089
#2	.00009	.00131	.00058	-.00099	-.00059	.00055	.00117	.00033	-.00019	-.00039	-.00054

Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit											
Low Limit											

Elem	Cu3247	Fe2599	K_7664	Li6707	Mg2790	Mn2576	Mo2020	Na5895	Ni2316	P_1782	Pb2203
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	-.00070	.00097	-.28925	-.00712	.00096	.00003	-.00160	-.16752	.00016	.00343	-.00113
Stddev	.00007	.00151	.01518	.00147	.00075	.00000	.00030	.00164	.00009	.00146	.00086
%RSD	10.157	154.63	5.2479	20.687	78.067	1.3453	19.040	.98051	58.570	42.652	75.917

#1	-.00065	.00204	-.29999	-.00816	.00043	.00003	-.00138	-.16868	.00009	.00446	-.00174
#2	-.00075	-.00009	-.27852	-.00608	.00149	.00003	-.00181	-.16636	.00022	.00240	-.00052

Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit											
Low Limit											

Elem	S_1820	Sb2068	Se1960	Si2881	SiO2	Sn1899	Sr4077	Th2837	Ti3349	Tl1908	U_3701
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	-.09145	W -.00426	-.01301	-.04397	-.09411	-.00205	-.00022	.00040	.00111	-.00508	.05938
Stddev	.00722	.00642	.00888	.01942	.04156	.00239	.00005	.00155	.00014	.00054	.00020
%RSD	7.8922	150.62	68.234	44.164	44.164	116.47	23.610	388.87	12.606	10.581	.33107

#1	-.08634	.00028	-.00673	-.03024	-.06472	-.00036	-.00018	-.00070	.00101	-.00470	.05924
#2	-.09655	-.00880	-.01928	-.05771	-.12349	-.00374	-.00026	.00149	.00120	-.00547	.05952

Check ?	Chk Pass	Chk Warn	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit		.00100									
Low Limit		-.00100									

Elem	V_2924	Zn2062	Zr3391
Units	ppm	ppm	ppm
Avg	-.00015	-.00003	-.00054
Stddev	.00020	.00032	.00093
%RSD	134.30	944.07	172.55

#1	-.00001	-.00026	.00012
#2	-.00029	.00020	-.00119

Check ?	Chk Pass	Chk Pass	Chk Pass
High Limit			
Low Limit			

Int. Std.	Y_2243	Y_3600	Y_3774
Units	Cts/S	Cts/S	Cts/S
Avg	2501.3	35676.	1801.7
Stddev	9.9	112.	39.4
%RSD	.39625	.31411	2.1858

#1	2508.3	35756.	1773.9
#2	2494.3	35597.	1829.6

Sample Name: ICSA-3859077 Acquired: 5/17/2016 11:11:02 Type: QC

Method: 6500_025(v6) Mode: CONC Corr. Factor: 1.000000

User: CRHOADES Prep Date: Custom ID2: Custom ID3:

Comment:

Elem	Ag3280	Al3092	As1890	B_2089	Ba4554	Be3130	Bi2230	Ca3179	Cd2288	Co2286	Cr2055
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	-.00151	524.62	.00282	-.00069	-.00043	-.00093	-.01181	465.25	W .00156	-.00053	W .00224
Stddev	.00023	19.78	.01235	.00067	.00113	.00010	.00459	18.67	.00002	.00014	.00033
%RSD	15.345	3.7697	438.31	97.235	264.23	10.412	38.846	4.0118	1.4560	27.254	14.577
#1	-.00135	538.60	-.00591	-.00022	.00037	-.00100	-.01506	478.45	.00154	-.00043	.00247
#2	-.00168	510.63	.01155	-.00116	-.00123	-.00086	-.00857	452.05	.00157	-.00063	.00200
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Warn	Chk Pass	Chk Warn
High Limit									.00080		.00186
Low Limit									-.00080		-.00186
Elem	Cu3247	Fe2714	K_7664	Li6707	Mg2790	Mn2576	Mo2020	Na5895	Ni2316	P_1782	Pb2203
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.00004	199.03	W -.25431	-.00029	502.39	W .00171	-.00053	-.05641	.00172	-.00220	.00147
Stddev	.00011	5.51	.03383	.00377	3.64	.00001	.00001	.00172	.00006	.00047	.00032
%RSD	295.80	2.7696	13.304	1297.2	.72457	.75030	1.9955	3.0465	3.3219	21.317	21.796
#1	-.00004	202.92	-.23039	.00238	499.82	.00172	-.00054	-.05519	.00176	-.00187	.00170
#2	.00012	195.13	-.27824	-.00296	504.97	.00170	-.00052	-.05762	.00168	-.00253	.00124
Check ?	Chk Pass	Chk Pass	Chk Warn	Chk Pass	Chk Pass	Chk Warn	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit			.25000			.00050					
Low Limit			-.25000			-.00050					
Elem	S_1820	Sb2068	Se1960	Si2881	SiO2	Sn1899	Sr4077	Th2837	Ti3349	Tl1908	U_3701
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	-.08958	W -.01333	.00079	-.00967	-.02070	-.00507	W .00377	.00581	W .00165	-.00177	.09272
Stddev	.00632	.00713	.00253	.00435	.00932	.00166	.00025	.00610	.00016	.00377	.04215
%RSD	7.0542	53.466	318.83	45.013	45.013	32.767	6.5137	104.94	9.9815	212.94	45.458
#1	-.08511	-.00829	.00259	-.00659	-.01411	-.00390	.00359	.00150	.00176	.00090	.06292
#2	-.09405	-.01837	-.00100	-.01275	-.02729	-.00625	.00394	.01013	.00153	-.00444	.12253
Check ?	Chk Pass	Chk Warn	Chk Pass	Chk Pass	None	Chk Pass	Chk Warn	Chk Pass	Chk Warn	Chk Pass	Chk Pass
High Limit		.00628					.00050		.00100		
Low Limit		-.00628					-.00050		-.00100		
Elem	V_2924	Zn2062	Zr3391								
Units	ppm	ppm	ppm								
Avg	W .00406	.00036	-.00195								
Stddev	.00015	.00071	.00131								
%RSD	3.7308	195.87	67.313								
#1	.00395	-.00014	-.00102								
#2	.00417	.00087	-.00288								
Check ?	Chk Warn	Chk Pass	Chk Pass								
High Limit	.00222										
Low Limit	-.00222										
Int. Std.	Y_2243	Y_3600	Y_3774								
Units	Cts/S	Cts/S	Cts/S								
Avg	2289.6	31158.	1755.2								
Stddev	71.5	92.	74.4								
%RSD	3.1225	.29564	4.2404								
#1	2340.1	31223.	1702.6								
#2	2239.0	31093.	1807.9								

Sample Name: ICSAB-3868570 Acquired: 5/17/2016 11:14:04 Type: QC

Method: 6500_025(v6) Mode: CONC Corr. Factor: 1.000000

User: CRHOADES Prep Date: Custom ID2: Custom ID3:

Comment:

Elem	Ag3280	Al3092	As1890	B_2089	Ba4554	Be3130	Bi2230	Ca3179	Cd2288	Co2286	Cr2055	Cu3247	Fe2714
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	k 1.0822	k 524.64	k 1.9636	1.8892	k .48719	k .48034	k .98217	462.92	k 1.0226	k .46677	k .49265	k .50787	k 197.39
Stddev	.0078	2.49	.0207	.0062	.00161	.00252	.01217	.88	.0053	.00090	.00056	.00108	.78
%RSD	.72558	.47437	1.0524	.32981	.33079	.52394	1.2394	.19007	.51900	.19361	.11404	.21336	.39474

#1	1.0767	522.88	1.9782	1.8936	.48605	.47856	.97356	462.30	1.0189	.46740	.49305	.50710	196.83
#2	k 1.0878	k 526.40	k 1.9490	1.8848	k .48833	k .48212	k .99078	463.54	k 1.0264	k .46613	k .49225	k .50863	k 197.94

Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Value													
Range													

Elem	K_7664	Li6707	Mg2790	Mn2576	Mo2020	Na8183	Ni2316	P_1782	Pb2203	S_1820	Sb2068	Se1960	Si2881
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	49.649	.95401	^F *****	.48767	.95703	55.398	k .91986	k 1.9690	k .96395	k .96723	k 1.0345	k 4.9443	k 9.8465
Stddev	.236	.00482	-----	.00237	.00781	.636	.00317	.0091	.02164	.00554	.0122	.0086	.0158
%RSD	.47458	.50511	-----	.48656	.81632	1.1480	.34482	.46281	2.2451	.57279	1.1787	.17486	.16047

#1	49.482	.95060	519.32	.48600	.96256	54.948	.92211	1.9754	.97925	.96331	1.0258	4.9382	9.8576
#2	49.815	.95742	^ -----	.48935	.95151	55.847	k .91762	k 1.9626	k .94864	k .97115	k 1.0431	k 4.9504	k 9.8353

Check ?	Chk Pass	Chk Pass	Chk Fail	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Value			500.00										
Range			-20.000%										

Elem	SiO2	Sn1899	Sr4077	Th2837	Ti3349	Ti1908	U_3701	V_2924	Zn2062	Zr3391
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	k 21.071	9.2915	.95211	k 2.1592	k .98683	k 8.6510	k .04195	k .50798	k .95493	k .95010
Stddev	.034	.2069	.00279	.1573	.01365	.1530	.08781	.00788	.01664	.06515
%RSD	.16047	2.2268	.29316	7.2840	1.3837	1.7681	209.32	1.5505	1.7422	6.8573

#1	21.095	9.1451	.95014	2.0480	.97718	8.7592	.10404	.50241	.94316	.90403
#2	k 21.048	9.4378	.95409	k 2.2704	k .99649	k 8.5429	k -.02014	k .51355	k .96669	k .99617

Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	None	Chk Pass	Chk Pass	Chk Pass
Value										
Range										

Int. Std.	Y_2243	Y_3600	Y_3774
Units	Cts/S	Cts/S	Cts/S
Avg	2269.3	31534.	1773.8
Stddev	2.5	156.	9.5
%RSD	.10808	.49406	.53836

#1	2267.6	31645.	1767.0
#2	2271.0	31424.	1780.5

Sample Name: LRA-3827717 Acquired: 5/17/2016 11:16:50 Type: QC

Method: 6500_025(v6) Mode: CONC Corr. Factor: 1.000000

User: CRHOADES Prep Date: Custom ID2: Custom ID3:

Comment:

Elem	Ag3280	Al1670	As1890	B_2089	Ba4554	Be3130	Bi2230	Ca3179	Cd2288	Co2286	Cr2055	Cu3247	Fe2714
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.00108	.55535	9.4030	9.2213	11.762	-.00048	-.05571	.12195	1.9668	4.8874	9.9550	9.8070	548.88
Stddev	.00021	.01065	.0469	.0225	.274	.00005	.00008	.00342	.0064	.0193	.0345	.0465	3.88
%RSD	19.472	1.9181	.49897	.24391	2.3315	10.707	.14434	2.8046	.32764	.39519	.34638	.47371	.70688

#1	.00093	.56288	9.4362	9.2372	11.568	-.00044	-.05565	.12437	1.9713	4.9011	9.9793	9.8398	546.13
#2	.00123	.54782	9.3698	9.2054	11.956	-.00052	-.05577	.11953	1.9622	4.8738	9.9306	9.7741	551.62

Check ?	None	None	Chk Pass	Chk Pass	Chk Pass	None	None	None	Chk Pass	Chk Pass	None	Chk Pass	Chk Pass
Value													
Range													

Elem	K_7664	Li6707	Mg2790	Mn2576	Mo2020	Na5895	Ni2316	P_1782	Pb2203	S_1820	Sb2068	Se1960	Si2881
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	-.50678	-.00793	.11711	9.4584	5.0291	-.11801	9.5846	.00743	9.9104	-.07400	-.00775	4.7959	46.596
Stddev	.03097	.00206	.04142	.1842	.0287	.04019	.0416	.00487	.0226	.00360	.00003	.0742	.469
%RSD	6.1103	25.941	35.369	1.9470	.56986	34.059	.43398	65.600	.22808	4.8669	.34685	1.5465	1.0066

#1	-.52868	-.00938	.08782	9.3282	5.0494	-.08959	9.6140	.01088	9.9264	-.07655	-.00773	4.7434	46.264
#2	-.48489	-.00647	.14639	9.5886	5.0088	-.14643	9.5552	.00398	9.8944	-.07145	-.00776	4.8483	46.927

Check ?	None	None	None	Chk Pass	Chk Pass	None	Chk Pass	None	Chk Pass	None	None	Chk Pass	Chk Pass
Value													
Range													

Elem	SiO2	Sn1899	Sr4077	Th2837	Ti3349	Ti1908	U_3701	V_2924	Zn2062	Zr3391
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	99.714	-.00067	9.7843	-.00072	9.6348	4.9445	.22126	9.8841	9.1915	.00130
Stddev	1.004	.00078	.2252	.00304	.0093	.0481	.00488	.0223	.0250	.00481
%RSD	1.0066	115.35	2.3018	422.02	.09682	.97224	2.2074	.22523	.27168	369.95

#1	99.005	-.00122	9.6250	.00143	9.6282	4.9105	.22471	9.8683	9.1738	-.00210
#2	100.42	-.00012	9.9435	-.00287	9.6414	4.9785	.21781	9.8998	9.2091	.00470

Check ?	None	None	Chk Pass	None	Chk Pass	None	None	Chk Pass	Chk Pass	None
Value										
Range										

Int. Std.	Y_2243	Y_3600	Y_3774
Units	Cts/S	Cts/S	Cts/S
Avg	2436.8	34809.	1779.8
Stddev	7.5	523.	47.8
%RSD	.30689	1.5038	2.6857

#1	2431.5	35179.	1813.6
#2	2442.1	34439.	1746.0

Sample Name: ICSAB-3868570 Acquired: 5/17/2016 11:22:18 Type: QC
Method: 6500_025(v6) Mode: CONC Corr. Factor: 1.000000
User: CRHOADES Prep Date: Custom ID2: Custom ID3:
Comment:

Elem	Ag3280	Al3092	As1890	B_2089	Ba4554	Be3130	Bi2230	Ca3179	Cd2288	Co2286	Cr2055	Cu3247	Fe2714	K_7664
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	1.0547	528.19	1.9279	1.8810	.49206	.48436	.95040	467.98	.99614	.45800	.48642	.49203	200.12	50.207
Stddev	.0035	5.16	.0477	.0402	.00263	.00290	.02483	4.15	.02143	.00974	.00970	.00183	1.72	.430
%RSD	.32993	.97653	2.4736	2.1360	.53485	.59942	2.6123	.88642	2.1509	2.1262	1.9946	.37283	.85909	.85624

#1	1.0522	531.84	1.9617	1.9095	.49392	.48641	.96796	470.92	1.0113	.46488	.49328	.49074	201.33	50.511
#2	1.0571	524.55	1.8942	1.8526	.49020	.48230	.93285	465.05	.98099	.45111	.47956	.49333	198.90	49.903

Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Value														
Range														

Elem	Li6707	Mg2790	Mn2576	Mo2020	Na8183	Ni2316	P_1782	Pb2203	S_1820	Sb2068	Se1960	Si2881	SiO2	Sn1899
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.96581	500.79	.47956	.95770	55.989	.90476	1.9242	.94881	.95456	1.0101	4.8231	9.9661	21.328	9.1564
Stddev	.00090	4.00	.00238	.02025	.789	.01912	.0226	.01267	.00447	.0123	.0599	.0402	.086	.0831
%RSD	.09356	.79816	.49704	2.1141	1.4086	2.1132	1.1751	1.3350	.46822	1.2156	1.2413	.40370	.40370	.90781

#1	.96645	497.96	.47787	.97202	56.547	.91828	1.9402	.95776	.95140	1.0188	4.8655	9.9946	21.388	9.2151
#2	.96517	503.62	.48124	.94338	55.432	.89124	1.9082	.93985	.95772	1.0014	4.7808	9.9377	21.267	9.0976

Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Value														
Range														

Elem	Sr4077	Th2837	Ti3349	Tl1908	U_3701	V_2924	Zn2062	Zr3391
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.96255	2.0320	.96005	9.2206	.09159	.49835	.93880	.89269
Stddev	.00817	.0126	.00478	.0870	.09046	.00345	.00321	.00404
%RSD	.84882	.62024	.49771	.94385	98.771	.69225	.34173	.45232
#1	.96832	2.0231	.95667	9.2822	.02762	.49591	.93653	.89554
#2	.95677	2.0409	.96343	9.1591	.15555	.50079	.94107	.88983

Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	None	Chk Pass	Chk Pass	Chk Pass
Value								
Range								

Int. Std.	Y_2243	Y_3600	Y_3774
Units	Cts/S	Cts/S	Cts/S
Avg	2277.4	30376.	1689.6
Stddev	47.5	238.	39.5
%RSD	2.0850	.78325	2.3406
#1	2243.8	30544.	1661.7
#2	2311.0	30208.	1717.6

Sample Name: CCVH-3883905 Acquired: 5/17/2016 11:30:03 Type: QC
Method: 6500_025(v6) Mode: CONC Corr. Factor: 1.000000
User: CRHOADES Prep Date: Custom ID2: Custom ID3:
Comment:

Elem	Ag3280	Al3092	As1890	B_2089	Ba4554	Be3130	Bi2230	Ca3179	Cd2288	Co2286	Cr2055	Cu3247	Fe2714
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	-.00475	53.233	.00219	.01478	-.00051	-.00053	1.0167	.00605	-.00030	-.00130	-.00012	-.01300	52.819
Stddev	.00049	.124	.00838	.00027	.00029	.00007	.0036	.00182	.00008	.00029	.00027	.00008	.856
%RSD	10.224	.23381	382.05	1.8051	55.803	12.361	.34938	30.089	27.108	22.099	222.10	.63318	1.6207

#1	-.00441	53.145	-.00373	.01497	-.00071	-.00049	1.0192	.00734	-.00024	-.00109	-.00031	-.01306	52.213
#2	-.00509	53.321	.00812	.01459	-.00031	-.00058	1.0142	.00477	-.00036	-.00150	.00007	-.01294	53.424

Check ?	None	Chk Pass	None	None	None	None	Chk Pass	None	None	None	None	None	Chk Pass
Value													
Range													

Elem	K_7664	Li6707	Mg2790	Mn2576	Mo2020	Na8183	Ni2316	P_1782	Pb2203	S_1820	Sb2068	Se1960	Si2881
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	-.22437	-.00541	.03834	-.00212	.00148	272.71	.00143	.00827	.00175	5.0299	-.01269	-.00656	-.05621
Stddev	.02025	.00012	.01098	.00015	.00229	4.13	.00003	.00291	.00057	.0687	.00165	.00419	.00287
%RSD	9.0271	2.1404	28.647	6.8513	154.27	1.5160	2.3058	35.226	32.569	1.3662	13.006	63.855	5.1088

#1	-.23869	-.00549	.04610	-.00222	-.00013	269.79	.00146	.01033	.00135	5.0785	-.01385	-.00952	-.05418
#2	-.21005	-.00533	.03057	-.00202	.00310	275.64	.00141	.00621	.00215	4.9813	-.01152	-.00360	-.05824

Check ?	None	None	None	None	None	Chk Pass	None	None	None	Chk Pass	None	None	None
Value													
Range													

Elem	SiO2	Sn1899	Sr4077	Th2837	Ti3349	Ti1908	U_3701	V_2924	Zn2062	Zr3391
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	-.12029	.00098	.00028	4.9783	-.00209	.04872	10.247	.01362	.00006	-.14006
Stddev	.00615	.00162	.00000	.0285	.00018	.00797	.095	.00054	.00071	.00255
%RSD	5.1088	166.11	.22877	.57260	8.6012	16.357	.92506	3.9564	1252.6	1.8215

#1	-.11594	-.00017	.00028	4.9582	-.00197	.04309	10.314	.01401	-.00045	-.14187
#2	-.12463	.00213	.00028	4.9985	-.00222	.05436	10.180	.01324	.00056	-.13826

Check ?	None	None	None	Chk Pass	None	None	Chk Pass	None	None	None
Value										
Range										

Int. Std.	Y_2243	Y_3600	Y_3774
Units	Cts/S	Cts/S	Cts/S
Avg	2437.9	34733.	1764.1
Stddev	11.2	94.	14.2
%RSD	.46123	.26948	.80214

#1	2445.9	34799.	1754.1
#2	2430.0	34667.	1774.1

Sample Name: CCV-3888422 Acquired: 5/17/2016 11:32:39 Type: QC
Method: 6500_025(v6) Mode: CONC Corr. Factor: 1.000000
User: CRHOADES Prep Date: Custom ID2: Custom ID3:
Comment:

Elem	Ag3280	Al1670	As1890	B_2089	Ba4554	Be3130	Bi2230	Ca3179	Cd2288	Co2286	Cr2055	Cu3247	Fe2599
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.49286	.51040	.97740	.50160	.48463	.49336	-.00073	4.8636	.50657	.51120	.51453	.48498	2.5585
Stddev	.00268	.00233	.00238	.00359	.00410	.00461	.00199	.0629	.01123	.01160	.01111	.00232	.0334
%RSD	.54390	.45584	.24393	.71515	.84671	.93446	270.68	1.2932	2.2165	2.2687	2.1583	.47924	1.3056

#1	.49096	.51204	.97909	.50414	.48753	.49662	-.00214	4.9081	.51451	.51940	.52238	.48334	2.5822
#2	.49475	.50875	.97572	.49906	.48173	.49010	.00067	4.8191	.49863	.50300	.50668	.48663	2.5349

Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	None	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Value													
Range													

Elem	K_7664	Li6707	Mg2790	Mn2576	Mo2020	Na5895	Ni2316	P_1782	Pb2203	S_1820	Sb2068	Se1960	Si2881
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	48.153	.95464	19.561	.48463	.49823	5.0798	.50069	.98804	1.0138	-.09143	.97922	.97598	4.9209
Stddev	.270	.01013	.061	.00097	.01166	.0698	.01086	.01825	.0198	.00256	.03486	.03011	.0208
%RSD	.56041	1.0610	.31127	.19984	2.3397	1.3747	2.1699	1.8473	1.9528	2.8003	3.5603	3.0855	.42332

#1	48.344	.96180	19.518	.48395	.50647	5.1292	.50837	1.0009	1.0278	-.09324	1.0039	.99727	4.9356
#2	47.963	.94748	19.604	.48532	.48999	5.0304	.49301	.97513	.99976	-.08962	.95457	.95469	4.9062

Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	None	Chk Pass	Chk Pass	Chk Pass
Value													
Range													

Elem	SiO2	Sn1899	Sr4077	Th2837	Ti3349	Ti1908	U_3701	V_2924	Zn2062	Zr3391
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	10.531	1.0044	.48934	-.00542	.47899	1.0172	.11242	.50211	.48811	.47589
Stddev	.045	.0195	.00506	.00293	.00111	.0237	.03492	.00007	.00459	.00695
%RSD	.42332	1.9454	1.0344	54.014	.23262	2.3333	31.062	.01360	.93960	1.4600
#1	10.562	1.0183	.49291	-.00749	.47820	1.0340	.13712	.50216	.49135	.48080
#2	10.499	.99062	.48576	-.00335	.47978	1.0004	.08773	.50206	.48487	.47098

Check ?	Chk Pass	Chk Pass	Chk Pass	None	Chk Pass	Chk Pass	None	Chk Pass	Chk Pass	Chk Pass
Value										
Range										

Int. Std.	Y_2243	Y_3600	Y_3774
Units	Cts/S	Cts/S	Cts/S
Avg	2502.5	35598.	1874.3
Stddev	18.2	110.	20.1
%RSD	.72915	.30896	1.0720
#1	2489.6	35520.	1860.1
#2	2515.4	35676.	1888.5

Sample Name: CCB Acquired: 5/17/2016 11:35:10 Type: QC
 Method: 6500_025(v6) Mode: CONC Corr. Factor: 1.000000
 User: CRHOADES Prep Date: Custom ID2: Custom ID3:
 Comment:

Elem	Ag3280	Al1670	As1890	B_2089	Ba4554	Be3130	Bi2230	Ca3179	Cd2288	Co2286	Cr2055
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.00093	.00488	.00313	.00941	-.00094	-.00030	-.00415	-.00195	.00014	-.00038	-.00044
Stddev	.00018	.00127	.01032	.00167	.00068	.00002	.00010	.00166	.00015	.00038	.00021
%RSD	18.916	26.021	330.03	17.784	72.857	7.6713	2.3986	85.366	102.85	100.79	48.644

#1	.00106	.00398	-.00417	.01060	-.00045	-.00031	-.00407	-.00077	.00025	-.00011	-.00029
#2	.00081	.00578	.01042	.00823	-.00142	-.00028	-.00422	-.00312	.00004	-.00065	-.00059

Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit											
Low Limit											

Elem	Cu3247	Fe2599	K_7664	Li6707	Mg2790	Mn2576	Mo2020	Na5895	Ni2316	P_1782	Pb2203
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	-.00057	.00424	-.10091	-.00292	.00670	.00012	.00139	-.08669	.00032	.00256	-.00017
Stddev	.00002	.00180	.05251	.00396	.00564	.00003	.00118	.02884	.00016	.00494	.00246
%RSD	3.1373	42.486	52.034	135.92	84.172	23.414	84.638	33.272	50.666	193.14	1460.0

#1	-.00056	.00551	-.06378	-.00011	.01069	.00010	.00056	-.06630	.00020	-.00093	.00157
#2	-.00058	.00296	-.13804	-.00572	.00271	.00014	.00222	-.10709	.00043	.00605	-.00191

Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit											
Low Limit											

Elem	S_1820	Sb2068	Se1960	Si2881	SiO2	Sn1899	Sr4077	Th2837	Ti3349	Ti1908	U_3701
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	-.10199	W .00199	-.00454	.02186	.04678	-.00209	.00002	.00124	.00074	W .00776	.05227
Stddev	.00878	.00728	.00250	.00216	.00463	.00058	.00013	.00240	.00068	.00011	.05504
%RSD	8.6086	365.43	55.050	9.9014	9.9014	27.886	657.52	194.51	92.624	1.4213	105.29

#1	-.09578	-.00316	-.00277	.02339	.05005	-.00250	-.00007	.00293	.00026	.00784	.01336
#2	-.10820	.00714	-.00631	.02033	.04350	-.00168	.00011	-.00046	.00122	.00768	.09119

Check ?	Chk Pass	Chk Warn	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Warn	Chk Pass
High Limit		.00100								.00750	
Low Limit		-.00100								-.01900	

Elem	V_2924	Zn2062	Zr3391
Units	ppm	ppm	ppm
Avg	-.00026	-.00037	.00069
Stddev	.00022	.00043	.00154
%RSD	84.415	113.87	222.63

#1	-.00010	-.00068	.00178
#2	-.00041	-.00007	-.00040

Check ?	Chk Pass	Chk Pass	Chk Pass
High Limit			
Low Limit			

Int. Std.	Y_2243	Y_3600	Y_3774
Units	Cts/S	Cts/S	Cts/S
Avg	2577.9	36785.	1928.2
Stddev	5.8	264.	70.4
%RSD	.22523	.71821	3.6501

#1	2573.7	36599.	1878.4
#2	2582.0	36972.	1978.0

Sample Name: CCVL-3894681 Acquired: 5/17/2016 11:38:03 Type: QC
Method: 6500_025(v6) Mode: CONC Corr. Factor: 1.000000
User: CRHOADES Prep Date: Custom ID2: Custom ID3:
Comment:

Elem	Ag3280	Al1670	As1890	B_2089	Ba4554	Be3130	Bi2230	Ca3179	Cd2288	Co2286	Cr2055	Cu3247
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.00879	.10483	.01519	.09897	.00904	F .00063	.10338	.20570	.00504	.00976	.00967	.01366
Stddev	.00071	.00334	.00413	.00005	.00034	.00022	.00255	.00355	.00030	.00008	.00000	.00077
%RSD	8.0614	3.1826	27.197	.04683	3.7642	35.664	2.4679	1.7241	5.8924	.81176	.04696	5.6486

#1	.00829	.10719	.01811	.09894	.00880	.00079	.10158	.20319	.00525	.00970	.00967	.01311
#2	.00929	.10247	.01227	.09901	.00928	.00047	.10519	.20821	.00483	.00981	.00966	.01420

Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Fail	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Value						.00100						
Range						-30.000%						

Elem	Fe2599	K_7664	Li6707	Mg2790	Mn2576	Mo2020	Na5895	Ni2316	P_1782	Pb2203	S_1820	Sb2068
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.11257	2.7769	F .00031	.20762	.00980	.01823	.90812	.03921	2.7285	.00903	-.09877	.01498
Stddev	.00891	.0618	.00182	.00314	.00007	.00032	.00857	.00096	.0127	.00011	.00228	.00108
%RSD	7.9154	2.2257	581.38	1.5141	.70340	1.7831	.94393	2.4404	.46622	1.2155	2.3071	7.2226

#1	.10627	2.8206	-.00097	.20540	.00984	.01846	.91418	.03853	2.7195	.00910	-.09716	.01422
#2	.11887	2.7332	.00160	.20984	.00975	.01800	.90206	.03989	2.7375	.00895	-.10038	.01575

Check ?	Chk Pass	Chk Pass	Chk Fail	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	None	Chk Pass
Value			.01000									
Range			-30.000%									

Elem	Se1960	Si2881	SiO2	Sn1899	Sr4077	Th2837	Ti3349	Ti1908	U_3701	V_2924	Zn2062	Zr3391
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	F .00456	.45924	.98278	.09675	.00979	.01388	.00990	.01282	.07618	.00918	.01921	F .00983
Stddev	.00355	.05792	.12395	.00310	.00003	.00078	.00057	.00116	.00340	.00019	.00005	.00509
%RSD	77.836	12.612	12.612	3.2014	.28479	5.5833	5.8046	9.0712	4.4665	2.1016	.27265	51.769

#1	.00706	.50020	1.0704	.09456	.00977	.01443	.01030	.01199	.07377	.00932	.01917	.00623
#2	.00205	.41829	.89513	.09894	.00981	.01333	.00949	.01364	.07859	.00904	.01925	.01343

Check ?	Chk Fail	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Fail
Value	.01500											.01500
Range	-30.000%											-30.000%

Int. Std.	Y_2243	Y_3600	Y_3774
Units	Cts/S	Cts/S	Cts/S
Avg	2527.8	35483.	1782.7
Stddev	23.3	19.	38.2
%RSD	.92173	.05252	2.1404

#1	2511.3	35469.	1809.7
#2	2544.3	35496.	1755.7

Sample Name: MB Acquired: 5/17/2016 11:45:11 Type: Unk
 Method: 6500_025(v6) Mode: CONC Corr. Factor: 1.000000
 User: CRHOADES Prep Date: Custom ID2: Custom ID3:
 Comment: SAR H2O

Elem	Ag3280	Al1670	As1890	B_2089	Ba4554	Be3130	Bi2230	Ca3179	Cd2288
Line	328.068 {103}	167.079 {502}	189.042 {478}	208.959 {461}	455.403 { 74}	313.042 {108}	223.061 {451}	317.933 {106}	228.802 {447}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.00104	.00133	.00000	.00398	.00013	-.00037	.00224	.00201	.00002
Stddev	.00039	.00088	.0020	.00097	.00000	.00018	.00231	.00715	.00013
%RSD	37.206	65.726	291970.	24.256	3.2198	48.974	103.56	356.16	694.90
#1	.00077	.00071	-.00142	.00467	.00013	-.00050	.00387	-.00305	-.00007
#2	.00131	.00195	.00142	.00330	.00014	-.00024	.00060	.00707	.00011

Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Elem	Co2286	Cr2055	Cu3247	Fe2599	K_7664	Li6707	Mg2790	Mn2576	Mo2020
Line	228.616 {447}	205.560 {464}	324.754 {104}	259.940 {130}	766.490 { 44}	670.784 { 50}	279.079 {121}2	257.610 {131}	202.030 {467}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	-.00075	-.00043	-.00092	-.00034	-.24680	F -.01088	.00700	.00004	-.00116
Stddev	.00045	.00028	.00036	.00033	.08369	.00376	.00061	.00005	.00007
%RSD	60.693	64.490	39.480	96.302	33.909	34.528	8.7176	122.17	6.3122
#1	-.00043	-.00023	-.00117	-.00011	-.30597	-.00822	.00744	.00001	-.00122
#2	-.00107	-.00062	-.00066	-.00057	-.18762	-.01353	.00657	.00008	-.00111

Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Fail	Chk Pass	Chk Pass	Chk Pass
High Limit						.01000			
Low Limit						-.01000			

Elem	Na5895	Ni2316	P_1782	Pb2203	S_1820	Sb2068	Se1960	Si2881	SiO2
Line	589.592 { 57}	231.604 {446}	178.284 {489}	220.353 {453}	182.034 {485}	206.833 {463}	196.090 {472}	288.158 {117}	288.158 {117}2
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	-.14344	.00027	.00377	.00054	W -.09514	-.00372	-.00432	-.06923	-.14814
Stddev	.00739	.00009	.00316	.00023	.00016	.00006	.00281	.01216	.02601
%RSD	5.1503	34.206	83.879	41.960	.17279	1.5629	65.002	17.561	17.561
#1	-.13821	.00021	.00600	.00070	-.09502	-.00376	-.00630	-.06063	-.12975
#2	-.14866	.00034	.00153	.00038	-.09525	-.00368	-.00233	-.07782	-.16654

Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Warn	Chk Pass	Chk Pass	Chk Pass	None
High Limit					.05000				
Low Limit					-.05000				

Elem	Sn1899	Sr4077	Th2837	Ti3349	Ti1908	U_3701	V_2924	Zn2062	Zr3391
Line	189.989 {477}	407.771 { 83}	283.730 {119}	334.904 {101}	190.856 {477}	370.152 { 91}	292.402 {115}	206.200 {163}	339.198 { 99}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	-.00053	-.00016	-.00019	.00073	-.00052	F .06528	.00078	-.00017	.00027
Stddev	.00264	.00024	.00002	.00050	.00015	.04080	.00110	.00070	.00075
%RSD	498.24	145.86	9.5482	68.602	28.841	62.508	141.81	405.18	279.88
#1	-.00240	-.00033	-.00021	.00108	-.00042	.03642	.00000	.00032	-.00026
#2	.00134	.00001	-.00018	.00037	-.00063	.09413	.00156	-.00067	.00080

Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Fail	Chk Pass	Chk Pass	Chk Pass
High Limit						.06000			
Low Limit						-.06000			

Int. Std.	Y_2243	Y_3600	Y_3774						
Line	224.306 {450}	360.073 { 94}	377.433 { 89}						
Units	Cts/S	Cts/S	Cts/S						
Avg	2478.9	35310.	1730.8						
Stddev	6.6	528.	12.9						
%RSD	.26567	1.4944	.74805						
#1	2474.2	35684.	1740.0						
#2	2483.5	34937.	1721.7						

Sample Name: 83141-B-1 Acquired: 5/17/2016 11:48:36 Type: Unk
Method: 6500_025(v6) Mode: CONC Corr. Factor: 1.000000
User: CRHOADES Prep Date: Custom ID2: Custom ID3:
Comment: SAR H2O

Elem	Ag3280	Al1670	Al3092	As1890	B_2089	Ba4554	Be3130	Bi2230	Ca3179
Line	328.068 {103}	167.079 {502}	309.271 {109}	189.042 {478}	208.959 {461}	455.403 { 74}	313.042 {108}	223.061 {451}	317.933 {106}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.00045	2.2175	W 3.1566	-.00189	.01765	.10112	-.00041	.00342	49.692
Stddev	.00020	.0566	.1098	.00556	.00174	.00184	.00001	.00081	.452
%RSD	45.147	2.5539	3.4791	294.41	9.8674	1.8187	1.7626	23.841	.90935

#1	.00031	2.2576	3.2342	-.00582	.01888	.09982	-.00040	.00284	49.372
#2	.00060	2.1775	3.0789	.00204	.01642	.10242	-.00041	.00399	50.011

Check ?	Chk Pass	Chk Pass	Chk Warn	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit			500.00						
Low Limit			3.2000						

Elem	Cd2288	Co2286	Cr2055	Cu3247	Fe2599	K_7664	Li6707	Mg2790	Mn2576
Line	228.802 {447}	228.616 {447}	205.560 {464}	324.754 {104}	259.940 {130}	766.490 { 44}	670.784 { 50}	279.079 {121}2	257.610 {131}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.00012	.00250	.00017	.00147	1.0320	1.4319	-.00629	12.362	.10633
Stddev	.00015	.00013	.00054	.00012	.0384	.2089	.00176	.040	.00010
%RSD	125.01	5.1815	313.62	8.0691	3.7252	14.589	27.930	.32560	.09340

#1	.00023	.00259	.00056	.00155	1.0592	1.5796	-.00753	12.391	.10626
#2	.00001	.00241	-.00021	.00138	1.0048	1.2842	-.00504	12.334	.10640

Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Elem	Mo2020	Na8183	Ni2316	P_1782	Pb2203	S_1820	Sb2068	Se1960	Si2881
Line	202.030 {467}	818.326 { 41}	231.604 {446}	178.284 {489}	220.353 {453}	182.034 {485}	206.833 {463}	196.090 {472}	288.158 {117}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	-.00147	41.606	.00124	.02481	-.00067	30.387	-.00558	F -.01293	11.696
Stddev	.00012	.252	.00006	.00624	.00241	.561	.00097	.00705	.171
%RSD	8.2844	.60558	5.0682	25.170	359.96	1.8459	17.446	54.546	1.4654

#1	-.00138	41.428	.00120	.02039	.00103	30.784	-.00627	-.01791	11.817
#2	-.00156	41.785	.00129	.02922	-.00237	29.991	-.00489	-.00794	11.574

Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Fail	Chk Pass
High Limit								50.000	
Low Limit								-.01000	

Elem	SiO2	Sn1899	Sr4077	Th2837	Ti3349	Ti1908	U_3701	V_2924	Zn2062
Line	288.158 {117}2	189.989 {477}	407.771 { 83}	283.730 {119}	334.904 {101}	190.856 {477}	370.152 { 91}	292.402 {115}	206.200 {163}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	25.029	-.00136	.48478	.00013	.05096	.00140	.02263	.00195	.02828
Stddev	.367	.00028	.00558	.00132	.00596	.00271	.00879	.00017	.00082
%RSD	1.4654	20.319	1.1514	1050.6	11.697	193.38	38.846	8.7611	2.9160

#1	25.288	-.00116	.48084	.00106	.04674	.00332	.01641	.00183	.02886
#2	24.769	-.00155	.48873	-.00081	.05517	-.00052	.02884	.00208	.02769

Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Elem	Zr3391								
Line	339.198 { 99}								
Units	ppm								
Avg	.00086								
Stddev	.00096								
%RSD	110.76								

#1	.00019								
#2	.00154								

Check ?	Chk Pass								
High Limit									
Low Limit									

Sample Name: 83141-B-1 Acquired: 5/17/2016 11:48:36 Type: Unk
 Method: 6500_025(v6) Mode: CONC Corr. Factor: 1.000000
 User: CRHOADES Prep Date: Custom ID2: Custom ID3:
 Comment: SAR H2O

Int. Std.	Y_2243	Y_3600	Y_3774
Line	224.306 {450}	360.073 { 94}	377.433 { 89}
Units	Cts/S	Cts/S	Cts/S
Avg	2592.5	36519.	1813.5
Stddev	38.1	55.	7.2
%RSD	1.4710	.14967	.39637
#1	2565.5	36558.	1818.6
#2	2619.5	36481.	1808.4

Sample Name: 83141-B-2 Acquired: 5/17/2016 11:51:14 Type: Unk
Method: 6500_025(v6) Mode: CONC Corr. Factor: 1.000000
User: CRHOADES Prep Date: Custom ID2: Custom ID3:
Comment: SAR H2O

Elem	Ag3280	Al1670	As1890	B_2089	Ba4554	Be3130	Bi2230	Ca3179	Cd2288
Line	328.068 {103}	167.079 {502}	189.042 {478}	208.959 {461}	455.403 { 74}	313.042 {108}	223.061 {451}	317.933 {106}	228.802 {447}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.00016	.14813	-.00125	.01399	.67425	-.00009	.00413	42.468	.00008
Stddev	.00053	.00012	.00208	.00053	.01296	.00022	.00108	.750	.00061
%RSD	338.86	.07944	166.19	3.7989	1.9218	251.51	26.148	1.7660	726.44

#1	.00053	.14805	-.00272	.01361	.68341	.00007	.00337	42.998	-.00035
#2	-.00022	.14822	.00022	.01437	.66508	-.00025	.00490	41.938	.00051

Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Elem	Co2286	Cr2055	Cu3247	Fe2599	K_7664	Li6707	Mg2790	Mn2576	Mo2020
Line	228.616 {447}	205.560 {464}	324.754 {104}	259.940 {130}	766.490 { 44}	670.784 { 50}	279.079 {121}2	257.610 {131}	202.030 {467}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	-.00031	-.00052	.00012	.35022	1.8246	.00097	8.8546	.09444	-.00166
Stddev	.00025	.00008	.00024	.00234	.0127	.00232	.0085	.00007	.00016
%RSD	80.625	15.432	202.04	.66789	.69563	240.09	.09553	.07032	9.8033

#1	-.00048	-.00058	-.00005	.35187	1.8156	-.00067	8.8606	.09439	-.00154
#2	-.00013	-.00046	.00028	.34857	1.8336	.00261	8.8486	.09448	-.00177

Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Elem	Na8183	Ni2316	P_1782	Pb2203	S_1820	Sb2068	Se1960	Si2881	SiO2
Line	818.326 { 41}	231.604 {446}	178.284 {489}	220.353 {453}	182.034 {485}	206.833 {463}	196.090 {472}	288.158 {117}	288.158 {117}2
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	20.776	.00027	.01036	-.00031	9.6726	W -.01058	-.00075	6.3119	13.508
Stddev	.059	.00066	.00194	.00100	.0182	.00110	.00470	.0680	.146
%RSD	.28222	244.39	18.679	320.53	.18863	10.414	622.58	1.0777	1.0777

#1	20.734	.00074	.00899	-.00101	9.6597	-.01136	.00257	6.3600	13.610
#2	20.817	-.00020	.01173	.00039	9.6855	-.00980	-.00408	6.2638	13.405

Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Warn	Chk Pass	Chk Pass	Chk Pass
High Limit						2.0000			
Low Limit						-.01000			

Elem	Sn1899	Sr4077	Th2837	Ti3349	Ti1908	U_3701	V_2924	Zn2062	Zr3391
Line	189.989 {477}	407.771 { 83}	283.730 {119}	334.904 {101}	190.856 {477}	370.152 { 91}	292.402 {115}	206.200 {163}	339.198 { 99}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	-.00103	1.1749	.00333	.00211	-.00061	-.00447	.00008	.00241	-.00158
Stddev	.00085	.0238	.00046	.00038	.00182	.03995	.00015	.00031	.00100
%RSD	82.558	2.0254	13.757	17.796	298.82	893.47	173.82	12.955	63.136

#1	-.00043	1.1917	.00300	.00184	-.00190	.02378	-.00002	.00219	-.00228
#2	-.00163	1.1580	.00365	.00237	.00068	-.03272	.00019	.00264	-.00087

Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Int. Std.	Y_2243	Y_3600	Y_3774
Line	224.306 {450}	360.073 { 94}	377.433 { 89}
Units	Cts/S	Cts/S	Cts/S
Avg	2572.2	36676.	1831.1
Stddev	17.4	246.	15.3
%RSD	.67630	.67206	.83537

#1	2559.9	36502.	1820.2
#2	2584.5	36850.	1841.9

Sample Name: 83141-B-3 Acquired: 5/17/2016 11:53:51 Type: Unk
Method: 6500_025(v6) Mode: CONC Corr. Factor: 1.000000
User: CRHOADES Prep Date: Custom ID2: Custom ID3:
Comment: SAR H2O

Elem	Ag3280	Al1670	As1890	B_2089	Ba4554	Be3130	Bi2230	Ca3179	Cd2288
Line	328.068 {103}	167.079 {502}	189.042 {478}	208.959 {461}	455.403 { 74}	313.042 {108}	223.061 {451}	317.933 {106}	228.802 {447}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.00068	.00242	.00539	.00240	.00003	-.00037	.00389	.01529	-.00024
Stddev	.00143	.00066	.00088	.00002	.00015	.00016	.00035	.01549	.00023
%RSD	209.89	27.171	16.401	.64359	565.20	43.611	8.9566	101.29	97.601

#1	.00169	.00195	.00476	.00241	-.00008	-.00025	.00413	.00434	-.00007
#2	-.00033	.00288	.00601	.00239	.00014	-.00048	.00364	.02624	-.00040

Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Elem	Co2286	Cr2055	Cu3247	Fe2599	K_7664	Li6707	Mg2790	Mn2576	Mo2020
Line	228.616 {447}	205.560 {464}	324.754 {104}	259.940 {130}	766.490 { 44}	670.784 { 50}	279.079 {121}2	257.610 {131}	202.030 {467}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	-.00020	-.00051	.00013	-.00005	-.21949	-.00793	-.00450	.00018	-.00115
Stddev	.00044	.00023	.00008	.00397	.04857	.00015	.00649	.00006	.00071
%RSD	221.36	44.636	60.846	7437.2	22.128	1.9198	144.33	31.304	61.785

#1	.00011	-.00035	.00018	-.00286	-.25384	-.00803	.00009	.00014	-.00165
#2	-.00051	-.00067	.00007	.00276	-.18515	-.00782	-.00909	.00022	-.00065

Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Elem	Na5895	Ni2316	P_1782	Pb2203	S_1820	Sb2068	Se1960	Si2881	SiO2
Line	589.592 { 57}	231.604 {446}	178.284 {489}	220.353 {453}	182.034 {485}	206.833 {463}	196.090 {472}	288.158 {117}	288.158 {117}2
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	-.15491	.00077	.00557	-.00007	-.09201	-.00953	F -.01011	-.02406	-.05149
Stddev	.01637	.00055	.00281	.00024	.00181	.00296	.00180	.04837	.10352
%RSD	10.568	71.459	50.449	341.98	1.9619	31.100	17.751	201.03	201.03

#1	-.16649	.00116	.00756	-.00024	-.09073	-.01163	-.00884	.01014	.02170
#2	-.14334	.00038	.00358	.00010	-.09328	-.00743	-.01138	-.05827	-.12469

Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Fail	Chk Pass	Chk Pass
High Limit							50.000		
Low Limit							-.01000		

Elem	Sn1899	Sr4077	Th2837	Ti3349	Ti1908	U_3701	V_2924	Zn2062	Zr3391
Line	189.989 {477}	407.771 { 83}	283.730 {119}	334.904 {101}	190.856 {477}	370.152 { 91}	292.402 {115}	206.200 {163}	339.198 { 99}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	-.00136	.00023	.00083	.00016	.00087	.04142	-.00065	.00449	-.00326
Stddev	.00032	.00021	.00138	.00001	.00255	.01184	.00019	.00067	.00192
%RSD	23.133	90.459	165.62	8.5296	294.05	28.587	28.513	14.865	58.753

#1	-.00114	.00008	-.00014	.00017	.00267	.04979	-.00079	.00496	-.00462
#2	-.00159	.00038	.00181	.00015	-.00093	.03305	-.00052	.00402	-.00191

Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Int. Std.	Y_2243	Y_3600	Y_3774
Line	224.306 {450}	360.073 { 94}	377.433 { 89}
Units	Cts/S	Cts/S	Cts/S
Avg	2638.8	36665.	1832.2
Stddev	2.5	306.	.8
%RSD	.09298	.83590	.04401

#1	2640.5	36882.	1831.7
#2	2637.0	36449.	1832.8

Sample Name: 83158-D-1 Acquired: 5/17/2016 11:56:14 Type: Unk
Method: 6500_025(v6) Mode: CONC Corr. Factor: 1.000000
User: CRHOADES Prep Date: Custom ID2: Custom ID3:
Comment: SAR H2O

Elem	Ag3280	Al1670	As1890	B_2089	Ba4554	Be3130	Bi2230	Ca3179	Cd2288
Line	328.068 {103}	167.079 {502}	189.042 {478}	208.959 {461}	455.403 { 74}	313.042 {108}	223.061 {451}	317.933 {106}	228.802 {447}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.00004	.27714	-.00432	.02743	.02418	-.00045	-.00053	173.78	.00106
Stddev	.00017	.01215	.00490	.00031	.00021	.00016	.00111	.41	.00001
%RSD	414.64	4.3823	113.41	1.1285	.86531	34.481	209.83	.23611	.65667

#1	.00016	.28573	-.00779	.02721	.02432	-.00056	.00026	174.07	.00105
#2	-.00008	.26855	-.00086	.02765	.02403	-.00034	-.00132	173.49	.00106

Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Elem	Co2286	Cr2055	Cu3247	Fe2599	K_7664	Li6707	Mg2790	Mn2576	Mo2020
Line	228.616 {447}	205.560 {464}	324.754 {104}	259.940 {130}	766.490 { 44}	670.784 { 50}	279.079 {121}2	257.610 {131}	202.030 {467}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	-.00081	-.00022	.00172	.14805	4.9668	.05183	120.20	.00401	-.00101
Stddev	.00016	.00008	.00077	.00746	.0232	.00579	.08	.00000	.00039
%RSD	19.629	37.072	45.000	5.0394	.46646	11.175	.06637	.02568	38.393

#1	-.00093	-.00028	.00227	.15333	4.9504	.04773	120.26	.00401	-.00129
#2	-.00070	-.00017	.00117	.14277	4.9832	.05592	120.14	.00401	-.00074

Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Elem	Na8183	Ni2316	P_1782	Pb2203	S_1820	Sb2068	Se1960	Si2881	SiO2
Line	818.326 { 41}	231.604 {446}	178.284 {489}	220.353 {453}	182.034 {485}	206.833 {463}	196.090 {472}	288.158 {117}	288.158 {117}2
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	356.99	.00155	.02199	-.00112	F 387.73	-.00759	.00347	5.5567	11.891
Stddev	1.46	.00017	.00403	.00091	.73	.00582	.00097	.0160	.034
%RSD	.40799	11.113	18.339	81.411	.18755	76.669	27.963	.28762	.28762

#1	355.96	.00143	.01914	-.00177	388.24	-.01171	.00416	5.5454	11.867
#2	358.02	.00167	.02485	-.00048	387.21	-.00348	.00279	5.5680	11.915

Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Fail	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit					200.00				
Low Limit					-.20000				

Elem	Sn1899	Sr4077	Th2837	Ti3349	Ti1908	U_3701	V_2924	Zn2062	Zr3391
Line	189.989 {477}	407.771 { 83}	283.730 {119}	334.904 {101}	190.856 {477}	370.152 { 91}	292.402 {115}	206.200 {163}	339.198 { 99}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	-.00191	4.4582	-.00201	.01051	-.00128	.00470	-.00009	.00222	-.00495
Stddev	.00253	.0099	.00311	.00075	.00114	.05338	.00027	.00007	.00517
%RSD	132.72	.22203	154.66	7.1836	88.730	1136.7	304.39	3.3047	104.40

#1	-.00012	4.4652	-.00421	.01104	-.00048	-.03305	.00010	.00217	-.00860
#2	-.00369	4.4512	.00019	.00997	-.00209	.04244	-.00028	.00228	-.00130

Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Int. Std.	Y_2243	Y_3600	Y_3774
Line	224.306 {450}	360.073 { 94}	377.433 { 89}
Units	Cts/S	Cts/S	Cts/S
Avg	2450.6	34579.	1811.3
Stddev	1.8	43.	33.2
%RSD	.07539	.12363	1.8327

#1	2451.9	34609.	1834.7
#2	2449.3	34548.	1787.8

Sample Name: 83158-D-2 Acquired: 5/17/2016 11:58:51 Type: Unk
Method: 6500_025(v6) Mode: CONC Corr. Factor: 1.000000
User: CRHOADES Prep Date: Custom ID2: Custom ID3:
Comment: SAR H2O

Elem	Ag3280	Al1670	As1890	B_2089	Ba4554	Be3130	Bi2230	Ca3179	Cd2288
Line	328.068 {103}	167.079 {502}	189.042 {478}	208.959 {461}	455.403 { 74}	313.042 {108}	223.061 {451}	317.933 {106}	228.802 {447}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.00070	.06904	.00239	.01547	.09923	-.00047	.00570	56.832	.00014
Stddev	.00047	.00190	.00082	.00020	.00097	.00021	.00192	.451	.00021
%RSD	66.375	2.7511	34.179	1.2614	.97790	44.350	33.741	.79412	151.40

#1	.00037	.07038	.00297	.01560	.09992	-.00062	.00706	57.151	-.00001
#2	.00103	.06769	.00182	.01533	.09854	-.00032	.00434	56.512	.00028

Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Elem	Co2286	Cr2055	Cu3247	Fe2599	K_7664	Li6707	Mg2790	Mn2576	Mo2020
Line	228.616 {447}	205.560 {464}	324.754 {104}	259.940 {130}	766.490 { 44}	670.784 { 50}	279.079 {121}2	257.610 {131}	202.030 {467}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.00013	-.00081	.00037	.13368	1.2362	-.00022	13.726	.08768	-.00171
Stddev	.00044	.00013	.00036	.01451	.0405	.00291	.027	.00039	.00039
%RSD	343.77	15.725	98.789	10.851	3.2782	1298.4	.19427	.44620	22.935

#1	.00044	-.00072	.00062	.14394	1.2648	.00184	13.707	.08740	-.00199
#2	-.00018	-.00090	.00011	.12342	1.2075	-.00229	13.745	.08796	-.00143

Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Elem	Na8183	Ni2316	P_1782	Pb2203	S_1820	Sb2068	Se1960	Si2881	SiO2
Line	818.326 { 41}	231.604 {446}	178.284 {489}	220.353 {453}	182.034 {485}	206.833 {463}	196.090 {472}	288.158 {117}	288.158 {117}2
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	35.765	.00025	.00726	.00027	23.833	-.00993	W -.00591	6.0241	12.892
Stddev	.643	.00020	.00093	.00005	.097	.00092	.00671	.0560	.120
%RSD	1.7971	78.568	12.842	17.405	.40767	9.3105	113.53	.92944	.92944

#1	36.220	.00011	.00660	.00024	23.902	-.00928	-.01065	6.0637	12.976
#2	35.311	.00039	.00792	.00030	23.765	-.01059	-.00117	5.9845	12.807

Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Warn	Chk Pass	Chk Pass
High Limit							5.0000		
Low Limit							-.00500		

Elem	Sn1899	Sr4077	Th2837	Ti3349	Ti1908	U_3701	V_2924	Zn2062	Zr3391
Line	189.989 {477}	407.771 { 83}	283.730 {119}	334.904 {101}	190.856 {477}	370.152 { 91}	292.402 {115}	206.200 {163}	339.198 { 99}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	-.00226	.84373	.00219	.00162	-.00235	.00000	-.00016	.00216	-.00102
Stddev	.00158	.00724	.00095	.00034	.00111	.03699	.00017	.00025	.00183
%RSD	69.857	.85868	43.212	20.889	47.387	848390.	107.94	11.713	178.93

#1	-.00337	.84885	.00152	.00186	-.00156	-.02615	-.00028	.00198	-.00232
#2	-.00114	.83861	.00286	.00138	-.00314	.02616	-.00004	.00233	.00027

Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Int. Std.	Y_2243	Y_3600	Y_3774
Line	224.306 {450}	360.073 { 94}	377.433 { 89}
Units	Cts/S	Cts/S	Cts/S
Avg	2607.9	37329.	1844.6
Stddev	39.2	877.	53.5
%RSD	1.5038	2.3506	2.8990

#1	2635.6	37949.	1806.7
#2	2580.2	36708.	1882.4

Sample Name: 83158-D-3 Acquired: 5/17/2016 12:01:30 Type: Unk
Method: 6500_025(v6) Mode: CONC Corr. Factor: 1.000000
User: CRHOADES Prep Date: Custom ID2: Custom ID3:
Comment: SAR H2O

Elem	Ag3280	Al1670	As1890	B_2089	Ba4554	Be3130	Bi2230	Ca3179	Cd2288
Line	328.068 {103}	167.079 {502}	189.042 {478}	208.959 {461}	455.403 { 74}	313.042 {108}	223.061 {451}	317.933 {106}	228.802 {447}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.00149	.00129	.00791	.00204	-.00109	-.00023	.00510	.00422	.00000
Stddev	.00099	.00034	.00206	.00058	.00023	.00005	.00045	.01203	.0001
%RSD	66.329	26.545	26.101	28.613	21.241	22.844	8.8820	285.13	1205.5

#1	.00219	.00153	.00937	.00163	-.00093	-.00027	.00478	.01273	-.00004
#2	.00079	.00105	.00645	.00245	-.00126	-.00020	.00542	-.00429	.00003

Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Elem	Co2286	Cr2055	Cu3247	Fe2599	K_7664	Li6707	Mg2790	Mn2576	Mo2020
Line	228.616 {447}	205.560 {464}	324.754 {104}	259.940 {130}	766.490 { 44}	670.784 { 50}	279.079 {121}2	257.610 {131}	202.030 {467}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.00007	-.00052	.00016	-.00432	3.5378	-.00881	-.00196	.00017	-.00214
Stddev	.00006	.00047	.00037	.00415	.0590	.00013	.00331	.00004	.00019
%RSD	84.876	91.137	231.78	95.960	1.6676	1.4700	169.19	22.704	8.8236

#1	.00003	-.00018	.00042	-.00725	3.5795	-.00872	-.00430	.00020	-.00227
#2	.00011	-.00085	-.00010	-.00139	3.4961	-.00890	.00038	.00014	-.00201

Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Elem	Na5895	Ni2316	P_1782	Pb2203	S_1820	Sb2068	Se1960	Si2881	SiO2
Line	589.592 { 57}	231.604 {446}	178.284 {489}	220.353 {453}	182.034 {485}	206.833 {463}	196.090 {472}	288.158 {117}	288.158 {117}2
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.04727	.00049	.00246	.00050	-.07123	-.00928	-.00250	.02475	.05297
Stddev	.01234	.00025	.00215	.00089	.00291	.00240	.00100	.00257	.00550
%RSD	26.101	49.970	87.467	177.80	4.0841	25.867	40.108	10.385	10.385

#1	.05599	.00032	.00398	-.00013	-.07329	-.00758	-.00321	.02293	.04908
#2	.03854	.00067	.00094	.00113	-.06918	-.01097	-.00179	.02657	.05686

Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Elem	Sn1899	Sr4077	Th2837	Ti3349	Ti1908	U_3701	V_2924	Zn2062	Zr3391
Line	189.989 {477}	407.771 { 83}	283.730 {119}	334.904 {101}	190.856 {477}	370.152 { 91}	292.402 {115}	206.200 {163}	339.198 { 99}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	-.00393	.00011	-.00425	.00107	-.00076	.07862	.00034	.00005	.00088
Stddev	.00007	.00005	.00143	.00043	.00021	.00983	.00067	.00053	.00581
%RSD	1.7146	45.341	33.672	40.088	27.338	12.497	196.09	987.20	662.23

#1	-.00389	.00014	-.00526	.00137	-.00061	.08557	.00082	.00043	.00498
#2	-.00398	.00007	-.00323	.00076	-.00091	.07168	-.00013	-.00032	-.00323

Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Int. Std.	Y_2243	Y_3600	Y_3774
Line	224.306 {450}	360.073 { 94}	377.433 { 89}
Units	Cts/S	Cts/S	Cts/S
Avg	2656.1	38087.	2004.9
Stddev	3.9	75.	63.6
%RSD	.14836	.19564	3.1726

#1	2653.3	38034.	1960.0
#2	2658.9	38140.	2049.9

Sample Name: 83158-D-3 SD@5 Acquired: 5/17/2016 12:04:10 Type: Unk

Method: 6500_025(v6) Mode: CONC Corr. Factor: 1.000000

User: CRHOADES Prep Date: Custom ID2: Custom ID3:

Comment: SAR H2O

Elem	Ag3280	Al1670	As1890	B_2089	Ba4554	Be3130	Bi2230	Ca3179	Cd2288
Line	328.068 {103}	167.079 {502}	189.042 {478}	208.959 {461}	455.403 {74}	313.042 {108}	223.061 {451}	317.933 {106}	228.802 {447}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.00129	.00032	.00079	.00164	-.00204	-.00006	.00239	.02285	.00002
Stddev	.00013	.00005	.00795	.00029	.00029	.00020	.00037	.01548	.00013
%RSD	10.247	15.285	1008.9	17.817	14.348	354.63	15.580	67.749	647.55

#1	.00138	.00035	-.00483	.00143	-.00183	.00009	.00212	.03380	.00011
#2	.00119	.00028	.00641	.00184	-.00225	-.00020	.00265	.01190	-.00007

Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Elem	Co2286	Cr2055	Cu3247	Fe2599	K_7664	Li6707	Mg2790	Mn2576	Mo2020
Line	228.616 {447}	205.560 {464}	324.754 {104}	259.940 {130}	766.490 {44}	670.784 {50}	279.079 {121}2	257.610 {131}	202.030 {467}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	-.00017	-.00061	.00008	.05818	.51731	-.00897	-.00201	.00210	-.00083
Stddev	.00002	.00029	.00059	.00186	.05591	.00356	.00070	.00004	.00011
%RSD	12.248	47.895	730.09	3.1900	10.807	39.695	35.048	2.1083	13.669

#1	-.00018	-.00082	-.00034	.05949	.47778	-.00646	-.00151	.00214	-.00091
#2	-.00015	-.00041	.00050	.05687	.55684	-.01149	-.00251	.00207	-.00075

Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Elem	Na5895	Ni2316	P_1782	Pb2203	S_1820	Sb2068	Se1960	Si2881	SiO2
Line	589.592 {57}	231.604 {446}	178.284 {489}	220.353 {453}	182.034 {485}	206.833 {463}	196.090 {472}	288.158 {117}	288.158 {117}2
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	-.05157	.00041	.00242	-.00210	-.06428	-.00436	-.00488	-.03424	-.07327
Stddev	.00667	.00030	.00105	.00359	.00662	.00402	.00098	.02142	.04583
%RSD	12.938	73.477	43.374	170.80	10.296	92.242	20.037	62.547	62.547

#1	-.05629	.00020	.00316	.00044	-.05960	-.00720	-.00557	-.04938	-.10568
#2	-.04686	.00063	.00168	-.00464	-.06896	-.00152	-.00419	-.01910	-.04087

Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Elem	Sn1899	Sr4077	Th2837	Ti3349	Ti1908	U_3701	V_2924	Zn2062	Zr3391
Line	189.989 {477}	407.771 {83}	283.730 {119}	334.904 {101}	190.856 {477}	370.152 {91}	292.402 {115}	206.200 {163}	339.198 {99}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	-.00052	.00022	-.00145	.00060	-.00057	.05011	.00014	.00495	-.00154
Stddev	.00184	.00003	.00028	.00030	.00130	.01036	.00044	.00048	.00290
%RSD	353.85	15.990	19.440	50.175	230.14	20.673	322.35	9.7236	188.64

#1	.00078	.00019	-.00164	.00081	.00036	.05744	.00045	.00461	-.00359
#2	-.00182	.00024	-.00125	.00039	-.00149	.04279	-.00017	.00529	.00051

Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Int. Std.	Y_2243	Y_3600	Y_3774
Line	224.306 {450}	360.073 {94}	377.433 {89}
Units	Cts/S	Cts/S	Cts/S
Avg	2694.8	37712.	1968.4
Stddev	67.6	147.	59.4
%RSD	2.5087	.39005	3.0161

#1	2647.0	37816.	1926.4
#2	2742.6	37608.	2010.3

Sample Name: 83158-D-3 DU Acquired: 5/17/2016 12:06:33 Type: Unk
Method: 6500_025(v6) Mode: CONC Corr. Factor: 1.000000
User: CRHOADES Prep Date: Custom ID2: Custom ID3:
Comment: SAR H2O

Elem	Ag3280	Al1670	As1890	B_2089	Ba4554	Be3130	Bi2230	Ca3179	Cd2288
Line	328.068 {103}	167.079 {502}	189.042 {478}	208.959 {461}	455.403 { 74}	313.042 {108}	223.061 {451}	317.933 {106}	228.802 {447}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.00123	.00188	-.00005	.00111	-.00116	-.00032	.00634	.00017	-.00019
Stddev	.00065	.00047	.00316	.00065	.00001	.00018	.00263	.00912	.00049
%RSD	53.140	25.011	6748.7	58.182	.55268	57.738	41.469	5284.3	263.15

#1	.00077	.00154	-.00228	.00157	-.00117	-.00019	.00820	.00662	-.00054
#2	.00169	.00221	.00219	.00066	-.00116	-.00045	.00448	-.00628	.00016

Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Elem	Co2286	Cr2055	Cu3247	Fe2599	K_7664	Li6707	Mg2790	Mn2576	Mo2020
Line	228.616 {447}	205.560 {464}	324.754 {104}	259.940 {130}	766.490 { 44}	670.784 { 50}	279.079 {121}2	257.610 {131}	202.030 {467}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	-.00017	-.00083	-.00015	-.00419	3.6152	W -.01136	-.00746	.00006	-.00196
Stddev	.00012	.00027	.00036	.00704	.0430	.00103	.00098	.00008	.00001
%RSD	69.055	32.548	234.14	167.74	1.1896	9.0910	13.069	139.85	.64878

#1	-.00009	-.00064	-.00041	.00078	3.5848	-.01209	-.00677	.00012	-.00197
#2	-.00026	-.00103	.00010	-.00917	3.6457	-.01063	-.00815	.00000	-.00195

Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Warn	Chk Pass	Chk Pass	Chk Pass
High Limit						2.0000			
Low Limit						-.01000			

Elem	Na5895	Ni2316	P_1782	Pb2203	S_1820	Sb2068	Se1960	Si2881	SiO2
Line	589.592 { 57}	231.604 {446}	178.284 {489}	220.353 {453}	182.034 {485}	206.833 {463}	196.090 {472}	288.158 {117}	288.158 {117}2
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	-.01738	.00075	.00473	.00045	-.09058	-.00369	F -.01095	-.01296	-.02773
Stddev	.00853	.00011	.00237	.00070	.00567	.00030	.00595	.02015	.04313
%RSD	49.050	14.363	50.175	155.11	6.2616	8.1121	54.327	155.54	155.54

#1	-.01135	.00068	.00305	-.00004	-.08657	-.00390	-.00675	.00129	.00277
#2	-.02341	.00083	.00640	.00094	-.09459	-.00347	-.01516	-.02721	-.05823

Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Fail	Chk Pass	Chk Pass
High Limit							50.000		
Low Limit							-.01000		

Elem	Sn1899	Sr4077	Th2837	Ti3349	Ti1908	U_3701	V_2924	Zn2062	Zr3391
Line	189.989 {477}	407.771 { 83}	283.730 {119}	334.904 {101}	190.856 {477}	370.152 { 91}	292.402 {115}	206.200 {163}	339.198 { 99}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	-.00192	.00014	-.00285	.00100	-.00125	.04458	.00042	-.00018	.00267
Stddev	.00023	.00016	.00156	.00107	.00152	.00227	.00070	.00048	.00139
%RSD	11.906	114.28	54.840	106.90	122.32	5.0951	167.63	259.54	51.823

#1	-.00175	.00025	-.00174	.00175	-.00232	.04298	.00091	.00015	.00365
#2	-.00208	.00003	-.00395	.00024	-.00017	.04619	-.00008	-.00052	.00169

Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Int. Std.	Y_2243	Y_3600	Y_3774						
Line	224.306 {450}	360.073 { 94}	377.433 { 89}						
Units	Cts/S	Cts/S	Cts/S						
Avg	2678.4	38546.	1955.2						
Stddev	3.8	261.	19.6						
%RSD	.14128	.67802	1.0018						

#1	2675.7	38731.	1941.3						
#2	2681.1	38361.	1969.0						

Sample Name: CCVH-3883905 Acquired: 5/17/2016 12:09:14 Type: QC
Method: 6500_025(v6) Mode: CONC Corr. Factor: 1.000000
User: CRHOADES Prep Date: Custom ID2: Custom ID3:
Comment:

Elem	Ag3280	Al3092	As1890	B_2089	Ba4554	Be3130	Bi2230	Ca3179	Cd2288	Co2286	Cr2055	Cu3247	Fe2714
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	-0.00632	51.646	-0.00074	.00377	-0.00126	-0.00016	1.0091	-0.00652	-0.00033	-0.00132	-0.00005	-0.01289	53.328
Stddev	.00019	.491	.00279	.00030	.00020	.00001	.0007	.00595	.00035	.00024	.00053	.00061	.205
%RSD	3.0013	.95147	379.32	8.0201	15.739	8.8195	.06765	91.381	103.14	18.126	1087.6	4.7370	.38499

#1	-0.00646	51.299	.00124	.00355	-.00140	-.00017	1.0086	-.01073	-.00009	-.00115	-.00042	-.01246	53.183
#2	-.00619	51.994	-.00271	.00398	-.00112	-.00015	1.0096	-.00231	-.00058	-.00149	.00033	-.01332	53.473

Check ?	None	Chk Pass	None	None	None	None	Chk Pass	None	None	None	None	None	Chk Pass
Value													
Range													

Elem	K_7664	Li6707	Mg2790	Mn2576	Mo2020	Na8183	Ni2316	P_1782	Pb2203	S_1820	Sb2068	Se1960	Si2881
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	-0.15043	-0.00443	.01026	-0.00212	-0.00186	272.24	.00144	.00555	-0.00111	5.1299	-0.01410	-0.00404	-0.04962
Stddev	.03796	.00326	.00360	.00000	.00042	.77	.00023	.00026	.00101	.0520	.00238	.00586	.02757
%RSD	25.235	73.502	35.057	.00973	22.318	.28405	15.831	4.6479	91.113	1.0143	16.903	145.15	55.564

#1	-.17727	-.00673	.01281	-.00212	-.00157	272.79	.00128	.00536	-.00040	5.0932	-.01578	-.00818	-.03013
#2	-.12359	-.00213	.00772	-.00212	-.00215	271.70	.00160	.00573	-.00183	5.1667	-.01241	.00011	-.06912

Check ?	None	None	None	None	None	Chk Pass	None	None	None	Chk Pass	None	None	None
Value													
Range													

Elem	SiO2	Sn1899	Sr4077	Th2837	Ti3349	Ti1908	U_3701	V_2924	Zn2062	Zr3391
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	-0.10619	-0.00086	.00037	4.8924	-0.00144	-0.00190	10.065	.01289	.00151	-0.14305
Stddev	.05900	.00051	.00023	.0104	.00070	.00155	.197	.00018	.00081	.00415
%RSD	55.564	58.857	62.639	.21308	48.488	81.784	1.9566	1.4004	53.740	2.8986

#1	-.06447	-.00050	.00054	4.8998	-.00194	-.00299	10.204	.01302	.00093	-.14012
#2	-.14791	-.00122	.00021	4.8850	-.00095	-.00080	9.9255	.01277	.00208	-.14599

Check ?	None	None	None	Chk Pass	None	None	Chk Pass	None	None	None
Value										
Range										

Int. Std.	Y_2243	Y_3600	Y_3774
Units	Cts/S	Cts/S	Cts/S
Avg	2557.8	36394.	1879.0
Stddev	19.6	921.	34.5
%RSD	.76813	2.5304	1.8348

#1	2571.7	35743.	1903.4
#2	2543.9	37046.	1854.6

Sample Name: CCV-3888422 Acquired: 5/17/2016 12:12:54 Type: QC
Method: 6500_025(v6) Mode: CONC Corr. Factor: 1.000000
User: CRHOADES Prep Date: Custom ID2: Custom ID3:
Comment:

Elem	Ag3280	Al1670	As1890	B_2089	Ba4554	Be3130	Bi2230	Ca3179	Cd2288	Co2286	Cr2055	Cu3247	Fe2599
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.49386	.50068	.97100	.50158	.50072	.51001	.00043	5.0026	.51263	.51754	.52040	.48013	2.6030
Stddev	.00152	.00014	.00716	.00089	.00438	.00036	.00147	.0172	.00243	.00369	.00289	.00005	.0295
%RSD	.30832	.02827	.73689	.17791	.87391	.07035	343.34	.34444	.47461	.71295	.55440	.01084	1.1331

#1	.49494	.50078	.96594	.50094	.50382	.50976	-.00061	5.0148	.51091	.51493	.51836	.48017	2.5822
#2	.49278	.50058	.97606	.50221	.49763	.51026	.00146	4.9905	.51435	.52014	.52244	.48009	2.6239

Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	None	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Value													
Range													

Elem	K_7664	Li6707	Mg2790	Mn2576	Mo2020	Na5895	Ni2316	P_1782	Pb2203	S_1820	Sb2068	Se1960	Si2881
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	49.693	.97551	19.470	.47832	.50498	5.1596	.50754	.99358	1.0231	-.08669	1.0001	.98736	5.0120
Stddev	.326	.00346	.026	.00055	.00092	.0078	.00360	.00628	.0050	.00265	.0015	.01550	.0369
%RSD	.65657	.35502	.13309	.11595	.18288	.15087	.71022	.63243	.48544	3.0529	.14658	1.5695	.73684

#1	49.924	.97796	19.488	.47871	.50563	5.1651	.50499	.98914	1.0196	-.08856	.99906	.99832	5.0381
#2	49.463	.97306	19.452	.47793	.50432	5.1541	.51009	.99802	1.0266	-.08482	1.0011	.97640	4.9859

Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	None	Chk Pass	Chk Pass	Chk Pass
Value													
Range													

Elem	SiO2	Sn1899	Sr4077	Th2837	Ti3349	Ti1908	U_3701	V_2924	Zn2062	Zr3391
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	10.726	1.0234	.50930	-.00124	.47064	1.0340	.02317	.49971	.47698	.48457
Stddev	.079	.0025	.00355	.00163	.00068	.0030	.02078	.00015	.00263	.00065
%RSD	.73684	.24838	.69622	131.76	.14503	.29341	89.688	.02996	.55063	.13346
#1	10.782	1.0216	.51180	-.00008	.47113	1.0361	.00847	.49981	.47883	.48503
#2	10.670	1.0252	.50679	-.00239	.47016	1.0318	.03786	.49960	.47512	.48412

Check ?	Chk Pass	Chk Pass	Chk Pass	None	Chk Pass	Chk Pass	None	Chk Pass	Chk Pass	Chk Pass
Value										
Range										

Int. Std.	Y_2243	Y_3600	Y_3774
Units	Cts/S	Cts/S	Cts/S
Avg	2566.7	36679.	1810.7
Stddev	15.1	16.	37.4
%RSD	.58979	.04308	2.0657
#1	2577.5	36690.	1784.2
#2	2556.0	36667.	1837.1

Sample Name: CCB Acquired: 5/17/2016 12:16:01 Type: QC
 Method: 6500_025(v6) Mode: CONC Corr. Factor: 1.000000
 User: CRHOADES Prep Date: Custom ID2: Custom ID3:
 Comment:

Elem	Ag3280	Al1670	As1890	B_2089	Ba4554	Be3130	Bi2230	Ca3179	Cd2288	Co2286	Cr2055
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.00144	.00191	.00229	.00305	.00080	.00053	-.00262	.00106	.00077	.00053	.00009
Stddev	.00060	.00067	.00217	.00039	.00003	.00010	.00390	.00266	.00008	.00015	.00021
%RSD	41.341	35.367	94.552	12.670	3.2874	19.406	149.23	251.94	9.7073	27.852	234.71

#1	.00186	.00239	.00383	.00333	.00078	.00060	-.00538	-.00082	.00072	.00043	-.00006
#2	.00102	.00143	.00076	.00278	.00082	.00046	.00014	.00294	.00083	.00064	.00023

Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit											
Low Limit											

Elem	Cu3247	Fe2599	K_7664	Li6707	Mg2790	Mn2576	Mo2020	Na5895	Ni2316	P_1782	Pb2203
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.00115	.00112	-.21953	-.00552	.03539	.00088	.00135	-.09257	.00097	.00490	.00189
Stddev	.00076	.00915	.01079	.00155	.00237	.00002	.00032	.03043	.00005	.00106	.00083
%RSD	66.046	820.20	4.9149	28.008	6.7075	1.8994	23.738	32.870	5.1594	21.709	43.863

#1	.00061	-.00535	-.21190	-.00442	.03707	.00089	.00112	-.07105	.00100	.00415	.00130
#2	.00168	.00759	-.22716	-.00661	.03371	.00087	.00157	-.11408	.00093	.00565	.00247

Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit											
Low Limit											

Elem	S_1820	Sb2068	Se1960	Si2881	SiO2	Sn1899	Sr4077	Th2837	Ti3349	Ti1908	U_3701
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	-.08788	W .00666	-.00906	.01387	.02969	-.00066	.00069	.00151	.00150	.00335	.04533
Stddev	.00474	.00216	.00147	.01889	.04043	.00124	.00008	.00059	.00012	.00133	.04142
%RSD	5.3991	32.422	16.268	136.20	136.20	188.64	11.853	38.716	7.8522	39.720	91.369

#1	-.09124	.00513	-.01010	.02723	.05828	-.00153	.00063	.00193	.00142	.00429	.01604
#2	-.08453	.00818	-.00802	.00051	.00110	.00022	.00075	.00110	.00158	.00241	.07461

Check ?	Chk Pass	Chk Warn	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit		.00100									
Low Limit		-.00100									

Elem	V_2924	Zn2062	Zr3391
Units	ppm	ppm	ppm
Avg	.00137	.00141	.00389
Stddev	.00012	.00126	.00115
%RSD	8.7478	89.517	29.593

#1	.00129	.00052	.00471
#2	.00146	.00230	.00308

Check ?	Chk Pass	Chk Pass	Chk Pass
High Limit			
Low Limit			

Int. Std.	Y_2243	Y_3600	Y_3774
Units	Cts/S	Cts/S	Cts/S
Avg	2574.5	36206.	1780.1
Stddev	2.2	837.	25.5
%RSD	.08482	2.3105	1.4317

#1	2576.1	36797.	1762.1
#2	2573.0	35614.	1798.1

Sample Name: CCVL-3894681 Acquired: 5/17/2016 12:18:45 Type: QC
Method: 6500_025(v6) Mode: CONC Corr. Factor: 1.000000
User: CRHOADES Prep Date: Custom ID2: Custom ID3:
Comment:

Elem	Ag3280	Al1670	As1890	B_2089	Ba4554	Be3130	Bi2230	Ca3179	Cd2288	Co2286	Cr2055
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.01078	.10226	F .02007	.09576	.00856	.00072	.10161	.22358	.00497	.00990	.01003
Stddev	.00024	.00059	.00073	.00120	.00043	.00009	.00090	.01057	.00011	.00056	.00029
%RSD	2.2028	.58126	3.6449	1.2486	4.9713	12.046	.88446	4.7288	2.2212	5.6672	2.9103
#1	.01061	.10268	.01955	.09661	.00826	.00078	.10098	.21611	.00505	.01030	.01024
#2	.01095	.10184	.02059	.09492	.00887	.00066	.10225	.23106	.00489	.00951	.00982
Check ?	Chk Pass	Chk Pass	Chk Fail	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Value			.01500								
Range			30.000%								
Elem	Cu3247	Fe2599	K_7664	Li6707	Mg2790	Mn2576	Mo2020	Na5895	Ni2316	P_1782	Pb2203
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.01457	F .22557	2.7473	F -.00177	.19039	.01120	.01795	.91550	.04070	2.7918	.00895
Stddev	.00002	.00692	.0183	.00459	.00343	.00027	.00041	.00970	.00133	.0547	.00141
%RSD	.16876	3.0675	.66529	258.87	1.8013	2.4087	2.2823	1.0594	3.2608	1.9609	15.770
#1	.01455	.23046	2.7602	.00147	.19282	.01139	.01824	.92236	.04164	2.8305	.00795
#2	.01459	.22068	2.7344	-.00501	.18797	.01100	.01766	.90864	.03976	2.7531	.00995
Check ?	Chk Pass	Chk Fail	Chk Pass	Chk Fail	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Value		.10000		.01000							
Range		30.000%		-30.000%							
Elem	S_1820	Sb2068	Se1960	Si2881	SiO2	Sn1899	Sr4077	Th2837	Ti3349	Ti1908	U_3701
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	-.09499	.01715	F .00944	.43712	.93544	.09744	.00973	.01695	.00952	.01443	F .07957
Stddev	.00116	.00169	.00599	.00237	.00506	.00393	.00001	.00031	.00107	.00355	.02361
%RSD	1.2161	9.8430	63.441	.54120	.54120	4.0333	.12823	1.8455	11.281	24.589	29.667
#1	-.09417	.01596	.00521	.43545	.93186	.10022	.00972	.01717	.01028	.01192	.06288
#2	-.09580	.01834	.01368	.43880	.93902	.09466	.00974	.01673	.00876	.01694	.09626
Check ?	None	Chk Pass	Chk Fail	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Fail
Value			.01500								.06000
Range			-30.000%								30.000%
Elem	V_2924	Zn2062	Zr3391								
Units	ppm	ppm	ppm								
Avg	.00948	F .02829	.01190								
Stddev	.00043	.00050	.00363								
%RSD	4.5448	1.7617	30.494								
#1	.00917	.02864	.01447								
#2	.00978	.02793	.00934								
Check ?	Chk Pass	Chk Fail	Chk Pass								
Value		.02000									
Range		30.000%									
Int. Std.	Y_2243	Y_3600	Y_3774								
Units	Cts/S	Cts/S	Cts/S								
Avg	2591.5	37370.	1805.9								
Stddev	38.3	517.	19.0								
%RSD	1.4764	1.3830	1.0503								
#1	2564.5	37735.	1819.3								
#2	2618.6	37004.	1792.5								

Sample Name: CCVL-3894681 Acquired: 5/17/2016 12:23:32 Type: QC
Method: 6500_025(v6) Mode: CONC Corr. Factor: 1.000000
User: CRHOADES Prep Date: Custom ID2: Custom ID3:
Comment:

Elem	Ag3280	Al1670	As1890	B_2089	Ba4554	Be3130	Bi2230	Ca3179	Cd2288	Co2286	Cr2055	Cu3247
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.01144	.09708	.01617	.09378	.00892	.00072	.10515	.19482	.00472	.00992	.00985	.01420
Stddev	.00019	.00142	.00412	.00095	.00002	.00005	.00216	.01483	.00011	.00021	.00022	.00046
%RSD	1.6539	1.4643	25.485	1.0167	.26841	7.5394	2.0533	7.6134	2.3087	2.1385	2.2597	3.2293

#1	.01131	.09608	.01909	.09446	.00894	.00075	.10667	.18433	.00464	.00977	.00969	.01453
#2	.01157	.09809	.01326	.09311	.00891	.00068	.10362	.20531	.00479	.01007	.01000	.01388

Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Value												
Range												

Elem	Fe2599	K_7664	Li6707	Mg2790	Mn2576	Mo2020	Na5895	Ni2316	P_1782	Pb2203	S_1820	Sb2068
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.10497	2.7271	.00913	.19034	.00945	.01793	.86194	.03932	2.7456	.01023	-.10389	F .01217
Stddev	.00437	.0438	.00254	.00183	.00017	.00010	.01141	.00033	.0079	.00167	.00602	.00066
%RSD	4.1650	1.6058	27.770	.95926	1.7912	.53736	1.3238	.84063	.28746	16.364	5.7936	5.3910

#1	.10806	2.6962	.00734	.18905	.00933	.01786	.87001	.03908	2.7512	.00905	-.09963	.01263
#2	.10188	2.7581	.01093	.19163	.00957	.01800	.85387	.03955	2.7401	.01141	-.10814	.01170

Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	None	Chk Fail
Value												.02000
Range												-30.000%

Elem	Se1960	Si2881	SiO2	Sn1899	Sr4077	Th2837	Ti3349	Ti1908	U_3701	V_2924	Zn2062	Zr3391
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	F .00442	.48788	1.0441	.09631	.00984	.01589	.00965	.01538	F .10489	.00989	.01921	.01246
Stddev	.00193	.02348	.0503	.00161	.00017	.00345	.00015	.00135	.00037	.00016	.00171	.00277
%RSD	43.676	4.8134	4.8134	1.6730	1.7193	21.712	1.5364	8.7503	.35414	1.5741	8.9139	22.238

#1	.00578	.50449	1.0796	.09745	.00972	.01833	.00954	.01443	.10515	.01000	.02042	.01050
#2	.00305	.47128	1.0085	.09517	.00996	.01345	.00975	.01634	.10463	.00978	.01800	.01442

Check ?	Chk Fail	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Fail	Chk Pass	Chk Pass	Chk Pass
Value	.01500								.06000			
Range	-30.000%								30.000%			

Int. Std.	Y_2243	Y_3600	Y_3774
Units	Cts/S	Cts/S	Cts/S
Avg	2621.8	37661.	1888.0
Stddev	1.9	458.	5.3
%RSD	.07259	1.2154	.28320

#1	2620.5	37984.	1891.8
#2	2623.2	37337.	1884.2

Sample Name: CCVL-3894681 Acquired: 5/17/2016 12:26:55 Type: QC
Method: 6500_025(v6) Mode: CONC Corr. Factor: 1.000000
User: CRHOADES Prep Date: Custom ID2: Custom ID3:
Comment:

Elem	Ag3280	Al1670	As1890	B_2089	Ba4554	Be3130	Bi2230	Ca3179	Cd2288	Co2286	Cr2055	Cu3247
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.01056	.09931	.01464	.09780	.00883	F .00068	.10702	.19499	.00523	.00976	.01012	.01332
Stddev	.00047	.00148	.00252	.00138	.00043	.00032	.00147	.00581	.00015	.00040	.00011	.00044
%RSD	4.4286	1.4927	17.219	1.4157	4.8864	46.894	1.3698	2.9804	2.8606	4.0586	1.0451	3.3183
#1	.01023	.09826	.01286	.09682	.00852	.00091	.10806	.19088	.00534	.00948	.01019	.01363
#2	.01089	.10036	.01642	.09878	.00913	.00046	.10599	.19910	.00512	.01004	.01004	.01300
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Fail	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Value						.00100						
Range						-30.000%						
Elem	Fe2599	K_7664	Li6707	Mg2790	Mn2576	Mo2020	Na5895	Ni2316	P_1782	Pb2203	S_1820	Sb2068
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.10387	2.8432	.00717	.18889	.00987	.01778	.89057	.04009	2.8344	.00825	-1.10360	F .01261
Stddev	.00278	.0714	.00308	.00067	.00019	.00060	.00018	.00062	.0376	.00059	.00422	.00089
%RSD	2.6729	2.5119	42.948	.35537	1.9069	3.3838	.02028	1.5398	1.3262	7.1761	4.0753	7.0792
#1	.10583	2.8937	.00499	.18936	.01000	.01735	.89070	.03965	2.8078	.00783	-1.10658	.01324
#2	.10190	2.7927	.00935	.18841	.00974	.01821	.89045	.04053	2.8610	.00867	-1.10061	.01198
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	None	Chk Fail
Value												.02000
Range												-30.000%
Elem	Se1960	Si2881	SiO2	Sn1899	Sr4077	Th2837	Ti3349	Ti1908	U_3701	V_2924	Zn2062	Zr3391
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	F .01016	.45358	.97065	.10045	.01003	.01179	.00974	.01626	F .12435	.00964	.01875	.01252
Stddev	.00505	.06878	.14719	.00247	.00014	.00032	.00036	.00157	.00989	.00009	.00022	.00599
%RSD	49.672	15.164	15.164	2.4545	1.4131	2.7271	3.6473	9.6318	7.9501	.96602	1.1877	47.848
#1	.00659	.50221	1.0747	.09871	.01013	.01156	.00949	.01515	.11736	.00957	.01860	.01676
#2	.01373	.40494	.86657	.10219	.00993	.01202	.01000	.01737	.13134	.00971	.01891	.00829
Check ?	Chk Fail	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Fail	Chk Pass	Chk Pass	Chk Pass
Value	.01500								.06000			
Range	-30.000%								30.000%			
Int. Std.	Y_2243	Y_3600	Y_3774									
Units	Cts/S	Cts/S	Cts/S									
Avg	2610.9	37845.	1914.0									
Stddev	26.1	344.	48.6									
%RSD	.99994	.90803	2.5413									
#1	2629.4	37602.	1948.4									
#2	2592.5	38088.	1879.6									

Sample Name: MB 280-324470/1-A Acquired: 5/17/2016 12:32:25 Type: Unk

Method: 6500_025(v6) Mode: CONC Corr. Factor: 1.000000

User: CRHOADES Prep Date: 5/13 Custom ID2: Custom ID3:

Comment: 324470 6010C (Fe) Q5

Elem	Ag3280	Al1670	As1890	B_2089	Ba4554	Be3130	Bi2230	Ca3179	Cd2288
Line	328.068 {103}	167.079 {502}	189.042 {478}	208.959 {461}	455.403 { 74}	313.042 {108}	223.061 {451}	317.933 {106}	228.802 {447}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.00246	.00232	.00333	.00004	-.00066	-.00009	-.00082	-.00301	.00033
Stddev	.00055	.00040	.00127	.00021	.00002	.00015	.00178	.00219	.00028
%RSD	22.286	17.279	38.029	471.78	3.3374	173.32	216.22	72.749	86.114

#1	.00285	.00203	.00244	-.00010	-.00068	.00002	.00043	-.00455	.00013
#2	.00207	.00260	.00423	.00019	-.00065	-.00019	-.00208	-.00146	.00053

Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Elem	Co2286	Cr2055	Cu3247	Fe2599	K_7664	Li6707	Mg2790	Mn2576	Mo2020
Line	228.616 {447}	205.560 {464}	324.754 {104}	259.940 {130}	766.490 { 44}	670.784 { 50}	279.079 {121}2	257.610 {131}	202.030 {467}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	-.00009	.00015	-.00084	.01943	-.29932	W -.00689	-.00143	.00015	-.00094
Stddev	.00017	.00018	.00010	.00131	.01486	.00145	.00139	.00010	.00012
%RSD	198.55	122.84	11.791	6.7642	4.9652	21.052	97.170	69.280	12.949

#1	.00004	.00028	-.00077	.02036	-.28881	-.00587	-.00241	.00008	-.00103
#2	-.00021	.00002	-.00091	.01850	-.30983	-.00792	-.00045	.00022	-.00085

Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Warn	Chk Pass	Chk Pass	Chk Pass
High Limit						.00500			
Low Limit						-.00500			

Elem	Na5895	Ni2316	P_1782	Pb2203	S_1820	Sb2068	Se1960	Si2881	SiO2
Line	589.592 { 57}	231.604 {446}	178.284 {489}	220.353 {453}	182.034 {485}	206.833 {463}	196.090 {472}	288.158 {117}	288.158 {117}2
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	-.13216	.00035	.00538	.00163	F -.10630	W -.00635	-.00176	-.04930	-.10550
Stddev	.00463	.00052	.00305	.00202	.00605	.00195	.00255	.05194	.11115
%RSD	3.5036	150.62	56.738	123.81	5.6928	30.690	144.83	105.36	105.36

#1	-.13543	.00072	.00753	.00020	-.10202	-.00772	-.00357	-.01257	-.02690
#2	-.12888	-.00002	.00322	.00306	-.11057	-.00497	.00004	-.08603	-.18409

Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Fail	Chk Warn	Chk Pass	Chk Pass	None
High Limit					.10000	.00500			
Low Limit					-.10000	-.00500			

Elem	Sn1899	Sr4077	Th2837	Ti3349	Ti1908	U_3701	V_2924	Zn2062	Zr3391
Line	189.989 {477}	407.771 { 83}	283.730 {119}	334.904 {101}	190.856 {477}	370.152 { 91}	292.402 {115}	206.200 {163}	339.198 { 99}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	-.00179	.00002	-.00068	.00041	-.00060	W .05125	-.00010	.00000	-.00033
Stddev	.00032	.00008	.00093	.00018	.00036	.03983	.00048	.00006	.00158
%RSD	17.791	355.91	135.95	44.442	60.598	77.716	473.97	16542.	485.05

#1	-.00157	.00007	-.00134	.00054	-.00034	.07941	-.00044	-.00004	-.00144
#2	-.00202	-.00003	-.00003	.00028	-.00085	.02309	.00024	.00004	.00079

Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Warn	Chk Pass	Chk Pass	Chk Pass
High Limit						.05000			
Low Limit						-.05000			

Int. Std.	Y_2243	Y_3600	Y_3774						
Line	224.306 {450}	360.073 { 94}	377.433 { 89}						
Units	Cts/S	Cts/S	Cts/S						
Avg	2687.1	38410.	1905.0						
Stddev	3.6	478.	7.6						
%RSD	.13380	1.2432	.40014						

#1	2689.7	38747.	1910.4						
#2	2684.6	38072.	1899.6						

Sample Name: LCS 280-324470/2-A Acquired: 5/17/2016 12:35:44 Type: Unk
Method: 6500_025(v6) Mode: CONC Corr. Factor: 1.000000
User: CRHOADES Prep Date: Custom ID2: Custom ID3:
Comment: 324470 6010C (Fe) Q5

Elem	Ag3280	Al1670	As1890	B_2089	Ba4554	Be3130	Bi2230	Ca3179	Cd2288
Line	328.068 {103}	167.079 {502}	189.042 {478}	208.959 {461}	455.403 { 74}	313.042 {108}	223.061 {451}	317.933 {106}	228.802 {447}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.04849	1.9127	.98028	1.0007	1.9802	.05033	2.0452	48.894	.10031
Stddev	.00025	.0034	.00287	.0043	.0046	.00053	.0008	.075	.00011
%RSD	.51120	.17583	.29270	.42490	.22995	1.0528	.03684	.15395	.10751

#1	.04831	1.9150	.98231	.99770	1.9834	.05070	2.0446	48.947	.10024
#2	.04866	1.9103	.97825	1.0037	1.9770	.04995	2.0457	48.841	.10039

Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	None	Chk Pass	Chk Pass
High Limit									
Low Limit									

Elem	Co2286	Cr2055	Cu3247	Fe2599	K_7664	Li6707	Mg2790	Mn2576	Mo2020
Line	228.616 {447}	205.560 {464}	324.754 {104}	259.940 {130}	766.490 { 44}	670.784 { 50}	279.079 {121}2	257.610 {131}	202.030 {467}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.49208	.20143	.23558	F 1.2432	49.266	.94558	48.210	.47047	1.0341
Stddev	.00022	.00001	.00097	.0126	.214	.00666	.116	.00186	.0024
%RSD	.04376	.00688	.41308	1.0170	.43458	.70474	.24126	.39540	.23092

#1	.49193	.20142	.23627	1.2343	49.417	.94087	48.292	.47179	1.0358
#2	.49223	.20144	.23489	1.2521	49.114	.95030	48.128	.46915	1.0324

Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Fail	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit				1.1500					
Low Limit				.89000					

Elem	Na8183	Ni2316	P_1782	Pb2203	S_1820	Sb2068	Se1960	Si2881	SiO2
Line	818.326 { 41}	231.604 {446}	178.284 {489}	220.353 {453}	182.034 {485}	206.833 {463}	196.090 {472}	288.158 {117}	288.158 {117}2
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	55.846	.48208	10.043	.50285	1.9997	.53311	2.0225	9.8957	21.177
Stddev	.754	.00168	.023	.00388	.0080	.00460	.0150	.0715	.153
%RSD	1.3500	.34786	.22871	.77112	.40173	.86293	.73954	.72285	.72285

#1	55.313	.48327	10.027	.50011	1.9941	.52986	2.0331	9.8451	21.068
#2	56.379	.48089	10.059	.50559	2.0054	.53637	2.0119	9.9462	21.285

Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	None	Chk Pass	Chk Pass	Chk Pass	None
High Limit									
Low Limit									

Elem	Sn1899	Sr4077	Th2837	Ti3349	Ti1908	U_3701	V_2924	Zn2062	Zr3391
Line	189.989 {477}	407.771 { 83}	283.730 {119}	334.904 {101}	190.856 {477}	370.152 { 91}	292.402 {115}	206.200 {163}	339.198 { 99}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	2.0301	.99221	1.0002	.95646	1.8342	2.0377	.48553	.46721	.45101
Stddev	.0190	.00347	.0095	.00454	.0697	.0444	.00346	.00177	.00244
%RSD	.93737	.34932	.95340	.47440	3.7994	2.1797	.71294	.37961	.54027

#1	2.0435	.99466	1.0070	.95967	1.8835	2.0691	.48798	.46846	.44929
#2	2.0166	.98976	.99350	.95325	1.7850	2.0063	.48308	.46595	.45273

Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Int. Std.	Y_2243	Y_3600	Y_3774
Line	224.306 {450}	360.073 { 94}	377.433 { 89}
Units	Cts/S	Cts/S	Cts/S
Avg	2603.7	36307.	1851.7
Stddev	30.0	319.	19.5
%RSD	1.1510	.87883	1.0519

#1	2582.5	36081.	1865.5
#2	2624.9	36533.	1837.9

Sample Name: 280-82764-G-1-B Acquired: 5/17/2016 12:38:11 Type: Unk

Method: 6500_025(v6) Mode: CONC Corr. Factor: 1.000000

User: CRHOADES Prep Date: Custom ID2: Custom ID3:

Comment: 324470 6010C (Fe) Q5

Elem	Ag3280	Al1670	As1890	B_2089	Ba4554	Be3130	Bi2230	Ca3179	Cd2288
Line	328.068 {103}	167.079 {502}	189.042 {478}	208.959 {461}	455.403 { 74}	313.042 {108}	223.061 {451}	317.933 {106}	228.802 {447}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.00026	.05489	.01963	.47245	.12571	-.00015	-.00452	77.192	.00066
Stddev	.00026	.00032	.00302	.00396	.00105	.00017	.00519	.300	.00015
%RSD	100.23	.58331	15.381	.83863	.83321	115.39	114.77	.38861	23.455

#1	.00045	.05466	.02176	.47525	.12497	-.00003	-.00819	76.979	.00077
#2	.00008	.05512	.01749	.46965	.12646	-.00027	-.00085	77.404	.00055

Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Elem	Co2286	Cr2055	Cu3247	Fe2599	K_7664	Li6707	Mg2790	Mn2576	Mo2020
Line	228.616 {447}	205.560 {464}	324.754 {104}	259.940 {130}	766.490 { 44}	670.784 { 50}	279.079 {121}2	257.610 {131}	202.030 {467}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.01717	.00140	.00098	33.274	17.125	-.00802	13.837	.18882	.00245
Stddev	.00058	.00024	.00049	.192	.037	.00294	.032	.00016	.00148
%RSD	3.3986	17.018	49.407	.57691	.21454	36.700	.23159	.08563	60.533

#1	.01759	.00157	.00064	33.138	17.099	-.00594	13.815	.18871	.00140
#2	.01676	.00123	.00133	33.410	17.151	-.01010	13.860	.18894	.00349

Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Elem	Na8183	Ni2316	P_1782	Pb2203	S_1820	Sb2068	Se1960	Si2881	SiO2
Line	818.326 { 41}	231.604 {446}	178.284 {489}	220.353 {453}	182.034 {485}	206.833 {463}	196.090 {472}	288.158 {117}	288.158 {117}2
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	25.923	.00781	.16561	-.00087	13.341	-.00719	.00279	2.2745	4.8675
Stddev	.159	.00048	.00294	.00219	.173	.00066	.00170	.0013	.0028
%RSD	.61308	6.1591	1.7753	250.12	1.2931	9.1584	60.884	.05785	.05785

#1	25.810	.00815	.16769	-.00242	13.463	-.00766	.00159	2.2736	4.8655
#2	26.035	.00747	.16354	.00067	13.219	-.00673	.00399	2.2754	4.8694

Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Elem	Sn1899	Sr4077	Th2837	Ti3349	Ti1908	U_3701	V_2924	Zn2062	Zr3391
Line	189.989 {477}	407.771 { 83}	283.730 {119}	334.904 {101}	190.856 {477}	370.152 { 91}	292.402 {115}	206.200 {163}	339.198 { 99}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	-.00082	.36978	.00411	.00046	.04859	.01777	.00453	.02237	-.00033
Stddev	.00031	.00196	.00258	.00044	.00682	.04552	.00055	.00037	.00217
%RSD	37.622	.52942	62.835	95.802	14.045	256.19	12.185	1.6605	661.78

#1	-.00103	.36840	.00229	.00077	.04376	.04996	.00492	.02263	-.00186
#2	-.00060	.37117	.00594	.00015	.05341	-.01442	.00414	.02211	.00120

Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Int. Std.	Y_2243	Y_3600	Y_3774						
Line	224.306 {450}	360.073 { 94}	377.433 { 89}						
Units	Cts/S	Cts/S	Cts/S						
Avg	2653.1	37914.	1961.0						
Stddev	6.6	43.	9.9						
%RSD	.24704	.11232	.50586						

#1	2657.7	37884.	1968.1						
#2	2648.4	37945.	1954.0						

Sample Name: 280-82764-G-2-B Acquired: 5/17/2016 12:40:47 Type: Unk

Method: 6500_025(v6) Mode: CONC Corr. Factor: 1.000000

User: CRHOADES Prep Date: Custom ID2: Custom ID3:

Comment: 324470 6010C (Fe) Q5

Elem	Ag3280	Al1670	As1890	B_2089	Ba4554	Be3130	Bi2230	Ca3179	Cd2288
Line	328.068 {103}	167.079 {502}	189.042 {478}	208.959 {461}	455.403 { 74}	313.042 {108}	223.061 {451}	317.933 {106}	228.802 {447}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	-.00047	.05057	.02767	.14193	.15863	-.00017	-.00021	12.393	.00015
Stddev	.00039	.00021	.00933	.00168	.00192	.00016	.00904	.050	.00004
%RSD	83.366	.40726	33.728	1.1821	1.2127	97.326	4304.4	.40679	24.652

#1	-.00074	.05072	.02107	.14312	.15999	-.00028	.00619	12.429	.00012
#2	-.00019	.05043	.03427	.14075	.15727	-.00005	-.00661	12.358	.00018

Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Elem	Co2286	Cr2055	Cu3247	Fe2599	K_7664	Li6707	Mg2790	Mn2576	Mo2020
Line	228.616 {447}	205.560 {464}	324.754 {104}	259.940 {130}	766.490 { 44}	670.784 { 50}	279.079 {121}2	257.610 {131}	202.030 {467}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.00147	.00022	.00021	22.416	6.0221	-.00934	5.8932	.07905	-.00067
Stddev	.00041	.00037	.00031	.007	.0611	.00148	.0009	.00000	.00083
%RSD	28.284	165.84	147.05	.03276	1.0147	15.865	.01574	.00115	124.63

#1	.00176	-.00004	-.00001	22.411	5.9789	-.00829	5.8926	.07905	-.00125
#2	.00117	.00048	.00043	22.421	6.0653	-.01038	5.8939	.07905	-.00008

Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Elem	Na8183	Ni2316	P_1782	Pb2203	S_1820	Sb2068	Se1960	Si2881	SiO2
Line	818.326 { 41}	231.604 {446}	178.284 {489}	220.353 {453}	182.034 {485}	206.833 {463}	196.090 {472}	288.158 {117}	288.158 {117}2
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	23.603	.00951	.05069	-.00044	2.0422	-.00482	-.00470	2.7942	5.9795
Stddev	.679	.00070	.00091	.00083	.0135	.00353	.00816	.0101	.0216
%RSD	2.8779	7.3789	1.7999	189.25	.66241	73.259	173.58	.36141	.36141

#1	23.123	.00901	.05134	-.00103	2.0518	-.00732	.00107	2.8013	5.9948
#2	24.084	.01001	.05005	.00015	2.0326	-.00232	-.01047	2.7870	5.9642

Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Elem	Sn1899	Sr4077	Th2837	Ti3349	Ti1908	U_3701	V_2924	Zn2062	Zr3391
Line	189.989 {477}	407.771 { 83}	283.730 {119}	334.904 {101}	190.856 {477}	370.152 { 91}	292.402 {115}	206.200 {163}	339.198 { 99}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	-.00111	.08305	.00085	.00019	.00562	.04110	.00196	.00353	-.00320
Stddev	.00154	.00065	.00095	.00107	.00334	.00361	.00027	.00053	.00120
%RSD	139.26	.78841	112.13	578.42	59.469	8.7903	13.617	15.039	37.580

#1	-.00002	.08258	.00018	-.00057	.00799	.04365	.00178	.00391	-.00405
#2	-.00219	.08351	.00152	.00094	.00326	.03854	.00215	.00316	-.00235

Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Int. Std.	Y_2243	Y_3600	Y_3774
Line	224.306 {450}	360.073 { 94}	377.433 { 89}
Units	Cts/S	Cts/S	Cts/S
Avg	2586.8	36817.	1847.2
Stddev	28.2	443.	38.0
%RSD	1.0889	1.2024	2.0570

#1	2606.7	36504.	1874.0
#2	2566.9	37130.	1820.3

Sample Name: 280-82764-X-9-D Acquired: 5/17/2016 12:43:26 Type: Unk

Method: 6500_025(v6) Mode: CONC Corr. Factor: 1.000000

User: CRHOADES Prep Date: Custom ID2: Custom ID3:

Comment: 324470 6010C (Fe) Q5

Elem	Ag3280	Al1670	As1890	B_2089	Ba4554	Be3130	Bi2230	Ca3179	Cd2288
Line	328.068 {103}	167.079 {502}	189.042 {478}	208.959 {461}	455.403 {74}	313.042 {108}	223.061 {451}	317.933 {106}	228.802 {447}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.00123	.00274	.00995	.25388	.09420	-.00032	-.00204	35.725	.00022
Stddev	.00022	.00004	.00575	.00421	.00101	.00021	.00237	.351	.00021
%RSD	17.538	1.3462	57.783	1.6592	1.0680	64.001	116.15	.98141	95.301

#1	.00138	.00277	.00589	.25686	.09491	-.00047	-.00371	35.973	.00007
#2	.00108	.00272	.01402	.25091	.09349	-.00018	-.00036	35.477	.00037

Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Elem	Co2286	Cr2055	Cu3247	Fe2599	K_7664	Li6707	Mg2790	Mn2576	Mo2020
Line	228.616 {447}	205.560 {464}	324.754 {104}	259.940 {130}	766.490 {44}	670.784 {50}	279.079 {121}2	257.610 {131}	202.030 {467}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.00241	-.00013	.00100	.13537	10.200	-.00940	8.7232	.03862	-.00059
Stddev	.00031	.00007	.00045	.00318	.114	.00130	.0357	.00023	.00009
%RSD	12.837	53.880	44.888	2.3456	1.1222	13.806	.40934	.58821	15.713

#1	.00263	-.00018	.00132	.13761	10.119	-.00849	8.6980	.03845	-.00052
#2	.00219	-.00008	.00068	.13312	10.281	-.01032	8.7485	.03878	-.00065

Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Elem	Na8183	Ni2316	P_1782	Pb2203	S_1820	Sb2068	Se1960	Si2881	SiO2
Line	818.326 {41}	231.604 {446}	178.284 {489}	220.353 {453}	182.034 {485}	206.833 {463}	196.090 {472}	288.158 {117}	288.158 {117}2
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	84.834	.00640	.27575	-.00131	6.4148	-.00671	-.00334	2.0774	4.4456
Stddev	.352	.00007	.00745	.00137	.1530	.00786	.00517	.0539	.1153
%RSD	.41493	1.0644	2.7032	105.12	2.3847	117.16	154.84	2.5939	2.5939

#1	84.585	.00645	.28102	-.00228	6.5229	-.01226	-.00700	2.1155	4.5271
#2	85.083	.00635	.27048	-.00034	6.3066	-.00115	.00032	2.0393	4.3640

Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Elem	Sn1899	Sr4077	Th2837	Ti3349	Ti1908	U_3701	V_2924	Zn2062	Zr3391
Line	189.989 {477}	407.771 {83}	283.730 {119}	334.904 {101}	190.856 {477}	370.152 {91}	292.402 {115}	206.200 {163}	339.198 {99}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	-.00103	.18377	-.00435	.00049	.00122	.05353	.00029	.00174	-.00153
Stddev	.00066	.00023	.00078	.00076	.00045	.01866	.00059	.00022	.00400
%RSD	64.304	.12323	17.870	156.42	36.831	34.864	200.32	12.913	262.28

#1	-.00150	.18393	-.00489	.00103	.00090	.04033	-.00012	.00158	-.00436
#2	-.00056	.18361	-.00380	-.00005	.00154	.06673	.00071	.00190	.00130

Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Int. Std.	Y_2243	Y_3600	Y_3774
Line	224.306 {450}	360.073 {94}	377.433 {89}
Units	Cts/S	Cts/S	Cts/S
Avg	2559.6	35951.	1803.4
Stddev	4.5	17.	13.0
%RSD	.17519	.04785	.72220

#1	2556.5	35963.	1794.2
#2	2562.8	35939.	1812.6

Sample Name: 280-82764-X-9-D SD@5 Acquired: 5/17/2016 12:46:03 Type: Unk
Method: 6500_025(v6) Mode: CONC Corr. Factor: 1.000000
User: CRHOADES Prep Date: Custom ID2: Custom ID3:
Comment: 324470 6010C (Fe) Q5

Elem	Ag3280	Al1670	As1890	B_2089	Ba4554	Be3130	Bi2230	Ca3179	Cd2288
Line	328.068 {103}	167.079 {502}	189.042 {478}	208.959 {461}	455.403 { 74}	313.042 {108}	223.061 {451}	317.933 {106}	228.802 {447}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	-0.00039	.00036	-0.00035	.04410	.01404	-0.00045	.00165	5.7377	.00010
Stddev	.00009	.00032	.00599	.00032	.00053	.00014	.00149	.0248	.00052
%RSD	23.340	91.135	1723.5	.72346	3.7762	30.109	90.251	.43155	540.00

#1	-0.00033	.00013	-0.00458	.04387	.01442	-0.00035	.00060	5.7202	.00046
#2	-0.00046	.00058	.00389	.04432	.01367	-0.00055	.00270	5.7552	-.00027

Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Elem	Co2286	Cr2055	Cu3247	Fe2599	K_7664	Li6707	Mg2790	Mn2576	Mo2020
Line	228.616 {447}	205.560 {464}	324.754 {104}	259.940 {130}	766.490 { 44}	670.784 { 50}	279.079 {121}2	257.610 {131}	202.030 {467}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.00047	-0.00067	.00031	.03567	1.4089	-0.00637	1.4221	.00786	-0.00133
Stddev	.00027	.00033	.00003	.00405	.0997	.00038	.0032	.00014	.00021
%RSD	58.307	49.399	10.085	11.363	7.0765	5.9130	.22482	1.7589	15.709

#1	.00066	-0.00044	.00029	.03280	1.3384	-0.00611	1.4243	.00795	-.00148
#2	.00027	-0.00091	.00034	.03853	1.4794	-0.00664	1.4198	.00776	-.00118

Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Elem	Na8183	Ni2316	P_1782	Pb2203	S_1820	Sb2068	Se1960	Si2881	SiO2
Line	818.326 { 41}	231.604 {446}	178.284 {489}	220.353 {453}	182.034 {485}	206.833 {463}	196.090 {472}	288.158 {117}	288.158 {117}2
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	12.723	.00119	.04649	-0.00075	.96236	-0.00298	W -.00571	.30751	.65808
Stddev	.456	.00015	.00385	.00177	.03075	.00445	.00033	.03712	.07943
%RSD	3.5802	12.526	8.2850	236.32	3.1950	149.61	5.8392	12.071	12.071

#1	12.401	.00129	.04377	.00050	.94061	-0.00612	-.00595	.28127	.60191
#2	13.045	.00108	.04922	-.00200	.98410	.00017	-.00547	.33376	.71425

Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Warn	Chk Pass	Chk Pass
High Limit							5.0000		
Low Limit							-.00500		

Elem	Sn1899	Sr4077	Th2837	Ti3349	Ti1908	U_3701	V_2924	Zn2062	Zr3391
Line	189.989 {477}	407.771 { 83}	283.730 {119}	334.904 {101}	190.856 {477}	370.152 { 91}	292.402 {115}	206.200 {163}	339.198 { 99}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	-0.00083	.02886	-0.00265	.00058	-0.00035	.04025	.00036	-0.00031	.00241
Stddev	.00051	.00016	.00123	.00010	.00022	.00681	.00048	.00015	.00506
%RSD	60.660	.56687	46.559	17.238	62.232	16.908	132.92	48.596	210.02

#1	-0.00119	.02874	-0.00352	.00051	-0.00050	.03544	.00070	-.00020	-.00117
#2	-0.00048	.02897	-0.00178	.00065	-0.00020	.04507	.00002	-.00041	.00598

Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Int. Std.	Y_2243	Y_3600	Y_3774
Line	224.306 {450}	360.073 { 94}	377.433 { 89}
Units	Cts/S	Cts/S	Cts/S
Avg	2568.6	36572.	1789.4
Stddev	9.0	901.	23.5
%RSD	.35212	2.4626	1.3146

#1	2575.0	35935.	1772.8
#2	2562.2	37209.	1806.1

Sample Name: 280-82764-X-9-E MS Acquired: 5/17/2016 12:48:42 Type: Unk
Method: 6500_025(v6) Mode: CONC Corr. Factor: 1.000000
User: CRHOADES Prep Date: Custom ID2: Custom ID3:
Comment: 324470 6010C (Fe) Q5

Elem	Ag3280	Al1670	As1890	B_2089	Ba4554	Be3130	Bi2230	Ca3179	Cd2288
Line	328.068 {103}	167.079 {502}	189.042 {478}	208.959 {461}	455.403 {74}	313.042 {108}	223.061 {451}	317.933 {106}	228.802 {447}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.04872	1.8727	1.0025	1.2614	2.0761	.05024	F 2.0238	84.484	.10089
Stddev	.00065	.0035	.0078	.0039	.0366	.00006	.0094	1.499	.00043
%RSD	1.3414	.18477	.78249	.30834	1.7639	.11514	.46580	1.7739	.42681

#1	.04825	1.8703	1.0080	1.2586	2.1020	.05019	2.0305	85.544	.10058
#2	.04918	1.8752	.99693	1.2641	2.0502	.05028	2.0172	83.424	.10119

Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Fail	Chk Pass	Chk Pass
High Limit							.10000		
Low Limit							-.10000		

Elem	Co2286	Cr2055	Cu3247	Fe2599	K_7664	Li6707	Mg2790	Mn2576	Mo2020
Line	228.616 {447}	205.560 {464}	324.754 {104}	259.940 {130}	766.490 {44}	670.784 {50}	279.079 {121}2	257.610 {131}	202.030 {467}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.49338	.20239	.23703	1.1503	59.981	.94898	56.676	.50602	1.0403
Stddev	.00007	.00112	.00067	.0129	.771	.00423	.126	.00112	.0047
%RSD	.01410	.55372	.28363	1.1179	1.2858	.44549	.22279	.22167	.45375

#1	.49333	.20318	.23655	1.1594	60.526	.94599	56.766	.50681	1.0437
#2	.49343	.20160	.23750	1.1412	59.436	.95197	56.587	.50522	1.0370

Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Elem	Na8183	Ni2316	P_1782	Pb2203	S_1820	Sb2068	Se1960	Si2881	SiO2
Line	818.326 {41}	231.604 {446}	178.284 {489}	220.353 {453}	182.034 {485}	206.833 {463}	196.090 {472}	288.158 {117}	288.158 {117}2
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	139.99	.48857	W 10.460	.49629	8.6779	.52843	2.0027	11.963	25.601
Stddev	1.11	.00105	.008	.00128	.0392	.00024	.0105	.126	.269
%RSD	.79115	.21588	.07240	.25859	.45186	.04470	.52492	1.0503	1.0503

#1	140.77	.48783	10.465	.49538	8.7056	.52860	2.0101	12.052	25.791
#2	139.21	.48932	10.455	.49719	8.6502	.52827	1.9952	11.874	25.411

Check ?	Chk Pass	Chk Pass	Chk Warn	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit			2.0000						
Low Limit			-1.0000						

Elem	Sn1899	Sr4077	Th2837	Ti3349	Ti1908	U_3701	V_2924	Zn2062	Zr3391
Line	189.989 {477}	407.771 {83}	283.730 {119}	334.904 {101}	190.856 {477}	370.152 {91}	292.402 {115}	206.200 {163}	339.198 {99}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	1.9987	1.1807	.99976	.95862	1.7297	2.0233	.49015	.47412	.45649
Stddev	.0090	.0194	.00107	.00189	.0694	.0210	.00087	.00248	.00614
%RSD	.44841	1.6425	.10653	.19725	4.0106	1.0382	.17721	.52292	1.3459

#1	2.0050	1.1944	.99900	.95995	1.7788	2.0084	.49076	.47588	.46083
#2	1.9924	1.1670	1.0005	.95728	1.6807	2.0381	.48953	.47237	.45214

Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Int. Std.	Y_2243	Y_3600	Y_3774
Line	224.306 {450}	360.073 {94}	377.433 {89}
Units	Cts/S	Cts/S	Cts/S
Avg	2590.0	36894.	1913.8
Stddev	17.1	520.	33.3
%RSD	.65954	1.4082	1.7416

#1	2577.9	36527.	1890.3
#2	2602.1	37262.	1937.4

Sample Name: 280-82764-X-9-F MSD Acquired: 5/17/2016 12:51:08 Type: Unk
Method: 6500_025(v6) Mode: CONC Corr. Factor: 1.000000
User: CRHOADES Prep Date: Custom ID2: Custom ID3:
Comment: 324470 6010C (Fe) Q5

Elem	Ag3280	Al1670	As1890	B_2089	Ba4554	Be3130	Bi2230	Ca3179	Cd2288
Line	328.068 {103}	167.079 {502}	189.042 {478}	208.959 {461}	455.403 {74}	313.042 {108}	223.061 {451}	317.933 {106}	228.802 {447}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.05087	1.9055	1.0236	1.2878	2.1177	.05197	F 2.0621	86.178	.10246
Stddev	.00037	.0086	.0014	.0060	.0165	.00011	.0042	.800	.00108
%RSD	.73343	.45114	.13605	.46934	.78084	.21698	.20140	.92797	1.0509

#1	.05113	1.8995	1.0226	1.2835	2.1294	.05205	2.0592	86.744	.10170
#2	.05060	1.9116	1.0246	1.2921	2.1060	.05189	2.0651	85.613	.10322

Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Fail	Chk Pass	Chk Pass
High Limit							.10000		
Low Limit							-.10000		

Elem	Co2286	Cr2055	Cu3247	Fe2599	K_7664	Li6707	Mg2790	Mn2576	Mo2020
Line	228.616 {447}	205.560 {464}	324.754 {104}	259.940 {130}	766.490 {44}	670.784 {50}	279.079 {121}2	257.610 {131}	202.030 {467}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.50118	.20622	.24402	1.1809	60.945	.97607	57.956	.51728	1.0674
Stddev	.00446	.00186	.00002	.0053	.588	.00267	.237	.00189	.0063
%RSD	.88940	.90009	.00624	.45044	.96442	.27392	.40958	.36542	.59444

#1	.49803	.20490	.24403	1.1847	61.360	.97796	58.124	.51862	1.0629
#2	.50433	.20753	.24401	1.1771	60.529	.97418	57.788	.51595	1.0718

Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Elem	Na8183	Ni2316	P_1782	Pb2203	S_1820	Sb2068	Se1960	Si2881	SiO2
Line	818.326 {41}	231.604 {446}	178.284 {489}	220.353 {453}	182.034 {485}	206.833 {463}	196.090 {472}	288.158 {117}	288.158 {117}2
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	143.50	.49471	W 10.631	.50114	8.8549	.53487	2.0305	12.334	26.395
Stddev	2.34	.00574	.060	.00554	.0596	.00433	.0333	.059	.125
%RSD	1.6281	1.1595	.56737	1.1046	.67354	.81047	1.6424	.47533	.47533

#1	141.85	.49065	10.588	.49722	8.8128	.53180	2.0069	12.293	26.306
#2	145.15	.49877	10.673	.50505	8.8971	.53793	2.0540	12.376	26.484

Check ?	Chk Pass	Chk Pass	Chk Warn	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit			2.0000						
Low Limit			-1.0000						

Elem	Sn1899	Sr4077	Th2837	Ti3349	Ti1908	U_3701	V_2924	Zn2062	Zr3391
Line	189.989 {477}	407.771 {83}	283.730 {119}	334.904 {101}	190.856 {477}	370.152 {91}	292.402 {115}	206.200 {163}	339.198 {99}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	W 2.0302	1.2057	1.0343	.97971	1.8479	2.0913	.50336	.47667	.46211
Stddev	.0229	.0100	.0043	.00443	.0147	.0000	.00186	.00166	.00327
%RSD	1.1296	.82896	.41704	.45208	.79267	.00215	.36983	.34764	.70736

#1	2.0140	1.2128	1.0374	.98284	1.8582	2.0914	.50468	.47784	.45980
#2	2.0464	1.1986	1.0313	.97657	1.8375	2.0913	.50205	.47550	.46442

Check ?	Chk Warn	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit	2.0000								
Low Limit	-.05000								

Int. Std.	Y_2243	Y_3600	Y_3774
Line	224.306 {450}	360.073 {94}	377.433 {89}
Units	Cts/S	Cts/S	Cts/S
Avg	2621.5	37231.	1942.1
Stddev	4.1	537.	8.3
%RSD	.15498	1.4435	.42859

#1	2624.3	36851.	1936.2
#2	2618.6	37611.	1947.9

Sample Name: 280-82764-X-9-D PDS Acquired: 5/17/2016 12:53:33 Type: Unk
Method: 6500_025(v6) Mode: CONC Corr. Factor: 1.000000
User: CRHOADES Prep Date: Custom ID2: Custom ID3:
Comment: 324470 6010C (Fe) Q5

Elem	Ag3280	Al1670	As1890	B_2089	Ba4554	Be3130	Bi2230	Ca3179	Cd2288
Line	328.068 {103}	167.079 {502}	189.042 {478}	208.959 {461}	455.403 {74}	313.042 {108}	223.061 {451}	317.933 {106}	228.802 {447}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.04469	.90568	.19453	.35464	.18394	.04764	-.00043	52.230	.04860
Stddev	.00156	.00328	.00761	.00271	.00018	.00006	.00106	.255	.00037
%RSD	3.4917	.36183	3.9107	.76453	.10008	.12055	244.02	.48907	.76194

#1	.04580	.90800	.19991	.35655	.18407	.04760	.00032	52.049	.04886
#2	.04359	.90336	.18915	.35272	.18381	.04768	-.00118	52.410	.04834

Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Elem	Co2286	Cr2055	Cu3247	Fe2599	K_7664	Li6707	Mg2790	Mn2576	Mo2020
Line	228.616 {447}	205.560 {464}	324.754 {104}	259.940 {130}	766.490 {44}	670.784 {50}	279.079 {121}2	257.610 {131}	202.030 {467}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.04939	.04864	.04599	1.1115	28.965	.08384	26.429	.08305	.05323
Stddev	.00029	.00033	.00035	.0163	.278	.00239	.061	.00018	.00068
%RSD	.58344	.68292	.76374	1.4625	.95979	2.8485	.23137	.21982	1.2831

#1	.04918	.04888	.04574	1.1230	29.161	.08215	26.472	.08292	.05275
#2	.04959	.04841	.04623	1.1001	28.768	.08553	26.385	.08318	.05371

Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Elem	Na8183	Ni2316	P_1782	Pb2203	S_1820	Sb2068	Se1960	Si2881	SiO2
Line	818.326 {41}	231.604 {446}	178.284 {489}	220.353 {453}	182.034 {485}	206.833 {463}	196.090 {472}	288.158 {117}	288.158 {117}2
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	105.03	.05302	W 2.2044	.09506	6.3696	.09776	.18938	7.1004	15.195
Stddev	.48	.00088	.0248	.00330	.0580	.00482	.00395	.0213	.046
%RSD	.45246	1.6690	1.1259	3.4680	.91062	4.9270	2.0869	.30040	.30040

#1	105.36	.05365	2.2219	.09739	6.4106	.10116	.19218	7.1155	15.227
#2	104.69	.05239	2.1868	.09273	6.3286	.09435	.18659	7.0853	15.163

Check ?	Chk Pass	Chk Pass	Chk Warn	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit			2.0000						
Low Limit			-1.0000						

Elem	Sn1899	Sr4077	Th2837	Ti3349	Ti1908	U_3701	V_2924	Zn2062	Zr3391
Line	189.989 {477}	407.771 {83}	283.730 {119}	334.904 {101}	190.856 {477}	370.152 {91}	292.402 {115}	206.200 {163}	339.198 {99}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.09732	.22703	.19088	.04756	.25660	.50697	.04835	.18731	.03999
Stddev	.00090	.00147	.00206	.00030	.00555	.04178	.00015	.00046	.00271
%RSD	.92119	.64586	1.0815	.62478	2.1612	8.2410	.30280	.24454	6.7831

#1	.09669	.22807	.19234	.04735	.25268	.47743	.04825	.18764	.04191
#2	.09796	.22600	.18942	.04777	.26052	.53652	.04845	.18699	.03807

Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Int. Std.	Y_2243	Y_3600	Y_3774
Line	224.306 {450}	360.073 {94}	377.433 {89}
Units	Cts/S	Cts/S	Cts/S
Avg	2652.5	38003.	1917.8
Stddev	11.6	170.	11.1
%RSD	.43903	.44692	.58118

#1	2644.3	38123.	1909.9
#2	2660.8	37883.	1925.7

Sample Name: CCVH-3883905 Acquired: 5/17/2016 12:56:08 Type: QC
Method: 6500_025(v6) Mode: CONC Corr. Factor: 1.000000
User: CRHOADES Prep Date: Custom ID2: Custom ID3:
Comment:

Elem	Ag3280	Al3092	As1890	B_2089	Ba4554	Be3130	Bi2230	Ca3179	Cd2288	Co2286	Cr2055	Cu3247	Fe2714
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	-0.00494	52.500	-0.00675	.00691	-0.00003	-0.00007	1.0004	.04329	-0.00059	-0.00119	-0.00054	-0.01321	53.537
Stddev	.00098	.501	.00082	.00023	.00070	.00003	.0126	.00109	.00035	.00020	.00010	.00095	.197
%RSD	19.824	.95468	12.131	3.3742	2537.4	50.261	1.2550	2.5293	58.902	17.107	19.228	7.1940	.36832

#1	-0.00424	52.854	-0.00733	.00707	-0.00052	-0.00004	1.0093	.04407	-0.00083	-0.00133	-0.00061	-0.01388	53.676
#2	-0.00563	52.145	-0.00617	.00674	.00047	-0.00009	.99152	.04252	-0.00034	-0.00104	-0.00046	-0.01254	53.397

Check ?	None	Chk Pass	None	None	None	None	Chk Pass	None	None	None	None	None	Chk Pass
Value													
Range													

Elem	K_7664	Li6707	Mg2790	Mn2576	Mo2020	Na8183	Ni2316	P_1782	Pb2203	S_1820	Sb2068	Se1960	Si2881
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.01976	-0.00535	.02295	-0.00190	-0.00133	271.57	.00176	.00893	.00071	5.0839	-0.01818	-0.00194	-0.03602
Stddev	.03964	.00521	.00554	.00011	.00057	.26	.00016	.00255	.00027	.0728	.00139	.00160	.04170
%RSD	200.65	97.400	24.134	5.5453	42.718	.09740	9.3433	28.579	37.680	1.4317	7.6433	82.283	115.79

#1	-0.00827	-0.00903	.02687	-0.00182	-0.00173	271.39	.00165	.01074	.00052	5.1354	-0.01720	-0.00081	-0.00653
#2	.04779	-0.00166	.01903	-0.00197	-0.00093	271.76	.00188	.00713	.00090	5.0325	-0.01916	-0.00307	-0.06551

Check ?	None	None	None	None	None	Chk Pass	None	None	None	Chk Pass	None	None	None
Value													
Range													

Elem	SiO2	Sn1899	Sr4077	Th2837	Ti3349	Ti1908	U_3701	V_2924	Zn2062	Zr3391
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	-0.07708	-0.00286	.00050	4.8791	-0.00130	.00898	9.8420	.01306	.00582	-0.14103
Stddev	.08925	.00074	.00007	.0033	.00049	.00230	.0084	.00097	.00140	.00128
%RSD	115.79	25.757	14.793	.06730	37.278	25.553	.08553	7.3967	24.073	.90729

#1	-0.01397	-0.00234	.00055	4.8768	-0.00096	.00736	9.8479	.01238	.00681	-.14193
#2	-.14018	-0.00339	.00045	4.8814	-0.00165	.01061	9.8360	.01375	.00483	-.14012

Check ?	None	None	None	Chk Pass	None	None	Chk Pass	None	None	None
Value										
Range										

Int. Std.	Y_2243	Y_3600	Y_3774
Units	Cts/S	Cts/S	Cts/S
Avg	2605.0	37008.	1897.2
Stddev	6.8	1016.	3.1
%RSD	.25937	2.7446	.16295

#1	2609.8	36290.	1895.0
#2	2600.2	37727.	1899.4

Sample Name: CCV-3888422 Acquired: 5/17/2016 12:58:45 Type: QC
Method: 6500_025(v6) Mode: CONC Corr. Factor: 1.000000
User: CRHOADES Prep Date: Custom ID2: Custom ID3:
Comment:

Elem	Ag3280	Al1670	As1890	B_2089	Ba4554	Be3130	Bi2230	Ca3179	Cd2288	Co2286	Cr2055	Cu3247	Fe2599
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.48729	.49229	.95645	.49870	.48848	.50008	-.00150	4.8706	.49316	.50976	.51316	.47326	2.5241
Stddev	.00320	.00184	.00044	.00363	.00369	.00006	.00123	.0054	.00106	.00320	.00284	.00217	.0208
%RSD	.65751	.37476	.04635	.72856	.75622	.01243	82.248	.11105	.21520	.62723	.55343	.45832	.82488

#1	.48503	.49099	.95676	.49613	.49110	.50012	-.00237	4.8744	.49391	.50750	.51115	.47173	2.5388
#2	.48956	.49360	.95614	.50127	.48587	.50003	-.00063	4.8668	.49240	.51203	.51517	.47480	2.5094

Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	None	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Value													
Range													

Elem	K_7664	Li6707	Mg2790	Mn2576	Mo2020	Na5895	Ni2316	P_1782	Pb2203	S_1820	Sb2068	Se1960	Si2881
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	48.614	.94675	19.131	.47305	.50183	5.0870	.50016	.99447	1.0223	-.09777	1.0055	.98666	4.9064
Stddev	.165	.00247	.056	.00111	.00161	.0637	.00331	.01334	.0075	.00573	.0090	.00575	.0195
%RSD	.33853	.26132	.29090	.23387	.32083	1.2525	.66088	1.3419	.72871	5.8604	.89122	.58244	.39790

#1	48.730	.94500	19.092	.47227	.50070	5.1320	.49782	.98503	1.0171	-.10182	1.0118	.99073	4.9202
#2	48.497	.94850	19.171	.47384	.50297	5.0419	.50250	1.0039	1.0276	-.09372	.99912	.98260	4.8926

Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	None	Chk Pass	Chk Pass	Chk Pass
Value													
Range													

Elem	SiO2	Sn1899	Sr4077	Th2837	Ti3349	Ti1908	U_3701	V_2924	Zn2062	Zr3391
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	10.500	1.0330	.49761	-.00080	.46683	1.0449	.03874	.48973	.47655	.47525
Stddev	.042	.0005	.00311	.00010	.00138	.0037	.00508	.00403	.00220	.00103
%RSD	.39790	.05166	.62558	12.497	.29490	.35904	13.109	.82284	.46227	.21733

#1	10.529	1.0333	.49981	-.00087	.46585	1.0476	.03515	.49258	.47811	.47452
#2	10.470	1.0326	.49541	-.00073	.46780	1.0423	.04233	.48688	.47499	.47598

Check ?	Chk Pass	Chk Pass	Chk Pass	None	Chk Pass	Chk Pass	None	Chk Pass	Chk Pass	Chk Pass
Value										
Range										

Int. Std.	Y_2243	Y_3600	Y_3774
Units	Cts/S	Cts/S	Cts/S
Avg	2628.5	37397.	1927.9
Stddev	34.6	91.	32.3
%RSD	1.3159	.24379	1.6777

#1	2653.0	37462.	1950.8
#2	2604.1	37333.	1905.0

Sample Name: CCB Acquired: 5/17/2016 13:02:09 Type: QC
 Method: 6500_025(v6) Mode: CONC Corr. Factor: 1.000000
 User: CRHOADES Prep Date: Custom ID2: Custom ID3:
 Comment:

Elem	Ag3280	Al1670	As1890	B_2089	Ba4554	Be3130	Bi2230	Ca3179	Cd2288	Co2286	Cr2055	Cu3247	Fe2599
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.00051	.00036	.00734	.00402	-.00090	-.00028	.00257	-.00475	.00002	-.00013	-.00047	-.00086	-.00134
Stddev	.00002	.00060	.00183	.00045	.00037	.00023	.00541	.01321	.00015	.00039	.00000	.00006	.00185
%RSD	3.0928	164.99	24.969	11.222	41.051	83.565	210.83	278.04	782.08	308.05	.47636	7.4969	138.19

#1	.00050	.00079	.00864	.00434	-.00064	-.00011	.00639	.00459	-.00009	-.00040	-.00047	-.00090	-.00003
#2	.00052	-.00006	.00605	.00371	-.00116	-.00045	-.00126	-.01409	.00013	.00015	-.00047	-.00081	-.00265

Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit													
Low Limit													

Elem	K_7664	Li6707	Mg2790	Mn2576	Mo2020	Na5895	Ni2316	P_1782	Pb2203	S_1820	Sb2068	Se1960	Si2881
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	-.20784	-.00950	.00366	.00000	.00020	-.06798	.00061	.00614	-.00010	-.10426	.00018	.00418	-.04718
Stddev	.03161	.00156	.00121	.00008	.00099	.00096	.00072	.00108	.00150	.00157	.00484	.00105	.01786
%RSD	15.209	16.401	33.014	5228.0	495.07	1.4123	118.94	17.610	1499.9	1.5060	2761.8	25.140	37.863

#1	-.23019	-.00840	.00451	.00006	-.00050	-.06866	.00112	.00690	.00096	-.10537	-.00325	.00344	-.05981
#2	-.18549	-.01061	.00280	-.00006	.00090	-.06730	.00010	.00537	-.00116	-.10315	.00360	.00492	-.03455

Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit													
Low Limit													

Elem	SiO2	Sn1899	Sr4077	Th2837	Ti3349	Ti1908	U_3701	V_2924	Zn2062	Zr3391
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	-.10096	-.00110	.00013	-.00017	.00065	.00477	.04879	.00000	-.00030	-.00023
Stddev	.03823	.00094	.00009	.00086	.00015	.00085	.00008	.00072	.00068	.00534
%RSD	37.863	85.845	65.269	496.78	22.977	17.849	.17360	30337.	230.37	2274.7
#1	-.12800	-.00043	.00007	.00043	.00076	.00417	.04885	-.00051	-.00078	-.00401
#2	-.07393	-.00177	.00020	-.00078	.00055	.00538	.04873	.00051	.00019	.00354

Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit										
Low Limit										

Int. Std.	Y_2243	Y_3600	Y_3774
Units	Cts/S	Cts/S	Cts/S
Avg	2593.0	37245.	1841.6
Stddev	15.4	1261.	17.1
%RSD	.59269	3.3859	.92799
#1	2603.8	36353.	1829.5
#2	2582.1	38136.	1853.7

Sample Name: CCVL-3894681 Acquired: 5/17/2016 13:05:11 Type: QC
Method: 6500_025(v6) Mode: CONC Corr. Factor: 1.000000
User: CRHOADES Prep Date: Custom ID2: Custom ID3:
Comment:

Elem	Ag3280	Al1670	As1890	B_2089	Ba4554	Be3130	Bi2230	Ca3179	Cd2288	Co2286	Cr2055
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.01034	.09891	.01891	.09728	.00830	F .00052	.10103	.19108	.00486	.01023	.01010
Stddev	.00054	.00069	.00370	.00028	.00020	.00016	.00369	.00713	.00042	.00004	.00009
%RSD	5.1818	.69344	19.578	.28700	2.4368	31.137	3.6494	3.7327	8.6528	.42098	.93032
#1	.01072	.09842	.02153	.09748	.00844	.00063	.09842	.18604	.00456	.01020	.01003
#2	.00996	.09939	.01629	.09708	.00815	.00041	.10364	.19613	.00515	.01026	.01016
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Fail	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Value						.00100					
Range						-30.000%					
Elem	Cu3247	Fe2599	K_7664	Li6707	Mg2790	Mn2576	Mo2020	Na5895	Ni2316	P_1782	Pb2203
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.01440	.09648	2.7007	F -.00039	.18981	.00965	.01892	.91654	.04121	2.8306	.00993
Stddev	.00050	.00080	.0884	.00305	.00332	.00011	.00008	.02072	.00015	.0456	.00076
%RSD	3.4679	.82408	3.2716	776.72	1.7498	1.1624	.43181	2.2610	.35842	1.6094	7.6604
#1	.01404	.09592	2.6382	-.00255	.19216	.00973	.01886	.93120	.04132	2.7984	.00939
#2	.01475	.09704	2.7632	.00176	.18746	.00957	.01898	.90189	.04111	2.8628	.01047
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Fail	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Value				.01000							
Range				-30.000%							
Elem	S_1820	Sb2068	Se1960	Si2881	SiO2	Sn1899	Sr4077	Th2837	Ti3349	Tl1908	U_3701
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	-.08481	.01779	F .00851	.45958	.98351	.10106	.00993	.01433	.00981	.01398	F .09194
Stddev	.02426	.00199	.00849	.01557	.03331	.00171	.00011	.00113	.00040	.00014	.01657
%RSD	28.606	11.170	99.728	3.3873	3.3873	1.6959	1.1071	7.8689	4.1193	1.0096	18.017
#1	-.06766	.01639	.01452	.47059	1.0071	.09984	.01001	.01513	.01009	.01408	.10365
#2	-.10197	.01920	.00251	.44857	.95995	.10227	.00986	.01353	.00952	.01388	.08023
Check ?	None	Chk Pass	Chk Fail	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Fail
Value			.01500								.06000
Range			-30.000%								30.000%
Elem	V_2924	Zn2062	Zr3391								
Units	ppm	ppm	ppm								
Avg	.00975	.01867	.01159								
Stddev	.00005	.00135	.00428								
%RSD	.48404	7.2411	36.906								
#1	.00978	.01963	.00857								
#2	.00972	.01772	.01462								
Check ?	Chk Pass	Chk Pass	Chk Pass								
Value											
Range											
Int. Std.	Y_2243	Y_3600	Y_3774								
Units	Cts/S	Cts/S	Cts/S								
Avg	2561.9	37504.	1890.6								
Stddev	18.2	367.	55.6								
%RSD	.70986	.97881	2.9408								
#1	2549.1	37245.	1851.3								
#2	2574.8	37764.	1930.0								

Sample Name: MB 280-324753/1-A Acquired: 5/17/2016 13:07:50 Type: Unk

Method: 6500_025(v6) Mode: CONC Corr. Factor: 1.000000

User: CRHOADES Prep Date: 5/13 Custom ID2: Custom ID3:

Comment: 324753 6010C (Fe)

Elem	Ag3280	Al1670	As1890	B_2089	Ba4554	Be3130	Bi2230	Ca3179	Cd2288
Line	328.068 {103}	167.079 {502}	189.042 {478}	208.959 {461}	455.403 { 74}	313.042 {108}	223.061 {451}	317.933 {106}	228.802 {447}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.00071	.00213	.00383	.00167	-.00149	.00000	-.00261	-.00890	.00010
Stddev	.00120	.00040	.00033	.00026	.00051	.0001	.00079	.00813	.00002
%RSD	168.87	18.606	8.6329	15.816	34.312	10255.	30.310	91.431	17.415

#1	-.00014	.00240	.00360	.00148	-.00113	.00010	-.00316	-.01465	.00011
#2	.00155	.00185	.00406	.00186	-.00186	-.00010	-.00205	-.00314	.00009

Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Elem	Co2286	Cr2055	Cu3247	Fe2599	K_7664	Li6707	Mg2790	Mn2576	Mo2020
Line	228.616 {447}	205.560 {464}	324.754 {104}	259.940 {130}	766.490 { 44}	670.784 { 50}	279.079 {121}2	257.610 {131}	202.030 {467}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	-.00025	-.00043	.00053	.04259	-.22139	W -.00962	-.00102	.00029	-.00118
Stddev	.00010	.00064	.00074	.00571	.03488	.00021	.00134	.00006	.00001
%RSD	41.875	150.03	138.83	13.403	15.752	2.2030	131.23	21.567	1.0923

#1	-.00032	.00003	.00106	.03856	-.24606	-.00977	-.00197	.00033	-.00119
#2	-.00018	-.00088	.00001	.04663	-.19673	-.00947	-.00007	.00024	-.00117

Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Warn	Chk Pass	Chk Pass	Chk Pass
High Limit						.00500			
Low Limit						-.00500			

Elem	Na5895	Ni2316	P_1782	Pb2203	S_1820	Sb2068	Se1960	Si2881	SiO2
Line	589.592 { 57}	231.604 {446}	178.284 {489}	220.353 {453}	182.034 {485}	206.833 {463}	196.090 {472}	288.158 {117}	288.158 {117}2
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	-.14710	.00064	.00215	.00060	F -.10355	W -.00763	W -.01461	-.01547	-.03310
Stddev	.02385	.00000	.00186	.00074	.00343	.00413	.00112	.06688	.14312
%RSD	16.212	.57301	86.473	122.71	3.3082	54.177	7.6412	432.41	432.41

#1	-.16397	.00065	.00084	.00112	-.10113	-.00471	-.01540	-.06275	-.13430
#2	-.13024	.00064	.00347	.00008	-.10598	-.01055	-.01382	.03182	.06810

Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Fail	Chk Warn	Chk Warn	Chk Pass	None
High Limit					.10000	.00500	.00750		
Low Limit					-.10000	-.00500	-.00750		

Elem	Sn1899	Sr4077	Th2837	Ti3349	Ti1908	U_3701	V_2924	Zn2062	Zr3391
Line	189.989 {477}	407.771 { 83}	283.730 {119}	334.904 {101}	190.856 {477}	370.152 { 91}	292.402 {115}	206.200 {163}	339.198 { 99}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	-.00145	-.00016	.00218	-.00014	-.00104	.04490	.00005	.00055	.00254
Stddev	.00041	.00037	.00170	.00014	.00085	.00295	.00030	.00034	.00072
%RSD	27.951	231.75	77.937	98.260	81.980	6.5760	551.62	61.991	28.362

#1	-.00174	.00010	.00338	-.00004	-.00164	.04699	.00027	.00079	.00203
#2	-.00117	-.00043	.00098	-.00024	-.00044	.04282	-.00016	.00031	.00305

Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Int. Std.	Y_2243	Y_3600	Y_3774
Line	224.306 {450}	360.073 { 94}	377.433 { 89}
Units	Cts/S	Cts/S	Cts/S
Avg	2664.8	37670.	1938.4
Stddev	5.3	947.	41.9
%RSD	.20057	2.5143	2.1617

#1	2668.6	37001.	1908.8
#2	2661.1	38340.	1968.0

Sample Name: LCS 280-324753/2-A Acquired: 5/17/2016 13:10:21 Type: Unk
Method: 6500_025(v6) Mode: CONC Corr. Factor: 1.000000
User: CRHOADES Prep Date: Custom ID2: Custom ID3:
Comment: 324753 6010C (Fe)

Elem	Ag3280	Al1670	As1890	B_2089	Ba4554	Be3130	Bi2230	Ca3179	Cd2288
Line	328.068 {103}	167.079 {502}	189.042 {478}	208.959 {461}	455.403 {74}	313.042 {108}	223.061 {451}	317.933 {106}	228.802 {447}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	F .00099	F .00048	F .00684	F .00168	F -.00016	F -.00018	.00552	F .02217	F -.00001
Stddev	.00053	.00085	.00070	.00091	.00050	.00006	.00581	.01977	.00028
%RSD	53.721	177.81	10.221	54.366	314.92	30.987	105.27	89.158	4908.8
#1	.00062	.00108	.00733	.00232	.00019	-.00022	.00141	.03614	-.00020
#2	.00137	-.00012	.00634	.00103	-.00051	-.00014	.00963	.00819	.00019
Check ?	Chk Fail	Chk Fail	Chk Fail	Chk Fail	Chk Fail	Chk Fail	None	Chk Fail	Chk Fail
High Limit	.05750	2.2299	1.1050	1.1050	2.2499	.05650		55.500	.11100
Low Limit	.04275	1.7300	.87500	.86000	1.7900	.04450		44.750	.08800
Elem	Co2286	Cr2055	Cu3247	Fe2599	K_7664	Li6707	Mg2790	Mn2576	Mo2020
Line	228.616 {447}	205.560 {464}	324.754 {104}	259.940 {130}	766.490 {44}	670.784 {50}	279.079 {121}2	257.610 {131}	202.030 {467}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	F .00004	F -.00101	F .00015	F .00182	F -.25224	F -.01040	F -.00118	F .00011	F -.00183
Stddev	.00008	.00014	.00072	.00541	.07344	.00167	.01380	.00002	.00025
%RSD	206.09	13.453	489.58	296.68	29.116	16.078	1170.6	13.927	13.761
#1	-.00002	-.00092	.00065	.00565	-.20031	-.01158	.00858	.00012	-.00165
#2	.00010	-.00111	-.00036	-.00200	-.30418	-.00922	-.01094	.00010	-.00201
Check ?	Chk Fail	Chk Fail	Chk Fail	Chk Fail	Chk Fail	Chk Fail	Chk Fail	Chk Fail	Chk Fail
High Limit	.55500	.22000	.28000	1.1500	57.000	1.1400	56.500	.55000	1.1000
Low Limit	.44500	.18000	.21500	.89000	44.500	.89000	46.000	.45000	.90000
Elem	Na5895	Ni2316	P_1782	Pb2203	S_1820	Sb2068	Se1960	Si2881	SiO2
Line	589.592 {57}	231.604 {446}	178.284 {489}	220.353 {453}	182.034 {485}	206.833 {463}	196.090 {472}	288.158 {117}	288.158 {117}2
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	F -.13291	F .00021	F .00459	F -.00102	-.09979	F -.00993	F -.00711	F -.01946	-.04164
Stddev	.00463	.00007	.00302	.00096	.00043	.00593	.00486	.00507	.01084
%RSD	3.4859	33.534	65.795	94.076	.42675	59.723	68.299	26.041	26.041
#1	-.13619	.00016	.00672	-.00170	-.10009	-.01412	-.00368	-.02304	-.04930
#2	-.12964	.00025	.00245	-.00034	-.09949	-.00573	-.01054	-.01587	-.03397
Check ?	Chk Fail	Chk Fail	Chk Fail	Chk Fail	None	Chk Fail	Chk Fail	Chk Fail	None
High Limit	56.000	.55500	11.100	.55000		.55499	2.2400	11.000	
Low Limit	45.500	.44500	9.1000	.44500		.44000	1.7000	9.0000	
Elem	Sn1899	Sr4077	Th2837	Ti3349	Ti1908	U_3701	V_2924	Zn2062	Zr3391
Line	189.989 {477}	407.771 {83}	283.730 {119}	334.904 {101}	190.856 {477}	370.152 {91}	292.402 {115}	206.200 {163}	339.198 {99}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	F -.00173	F .00008	F -.00254	F .00135	F -.00144	F .03719	F -.00017	F .00011	F -.00088
Stddev	.00101	.00021	.00187	.00046	.00101	.02297	.00020	.00010	.00455
%RSD	58.366	270.59	73.579	34.238	70.391	61.754	116.98	90.269	514.52
#1	-.00101	.00022	-.00386	.00167	-.00072	.05344	-.00031	.00018	-.00410
#2	-.00244	-.00007	-.00122	.00102	-.00215	.02095	-.00003	.00004	.00233
Check ?	Chk Fail	Chk Fail	Chk Fail	Chk Fail	Chk Fail	Chk Fail	Chk Fail	Chk Fail	Chk Fail
High Limit	2.2600	1.1100	1.2000	1.1100	2.2000	2.3000	.55500	.55500	.57500
Low Limit	1.7000	.90000	.80000	.90000	1.7600	1.7000	.45000	.42500	.42500
Int. Std.	Y_2243	Y_3600	Y_3774						
Line	224.306 {450}	360.073 {94}	377.433 {89}						
Units	Cts/S	Cts/S	Cts/S						
Avg	2568.8	36687.	1820.1						
Stddev	2.3	668.	30.5						
%RSD	.08812	1.8200	1.6770						
#1	2570.4	36215.	1841.7						
#2	2567.2	37159.	1798.6						

Sample Name: LCSD 280-324753/3-A Acquired: 5/17/2016 13:12:42 Type: Unk
 Method: 6500_025(v6) Mode: CONC Corr. Factor: 1.000000
 User: CRHOADES Prep Date: Custom ID2: Custom ID3:
 Comment: 324753 6010C (Fe)

Elem	Ag3280	Al1670	As1890	B_2089	Ba4554	Be3130	Bi2230	Ca3179	Cd2288
Line	328.068 {103}	167.079 {502}	189.042 {478}	208.959 {461}	455.403 {74}	313.042 {108}	223.061 {451}	317.933 {106}	228.802 {447}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.04838	1.9040	.98029	.99792	1.9176	.04971	F 2.0317	47.392	.10041
Stddev	.00055	.0030	.00596	.00340	.0720	.00175	.0025	1.736	.00017
%RSD	1.1288	.15730	.60822	.34062	3.7542	3.5245	.12222	3.6632	.17347

#1	.04876	1.9019	.98451	.99552	1.9685	.05095	2.0334	48.620	.10029
#2	.04799	1.9061	.97607	1.0003	1.8667	.04847	2.0299	46.164	.10054

Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Fail	Chk Pass	Chk Pass
High Limit							.10000		
Low Limit							-.10000		

Elem	Co2286	Cr2055	Cu3247	Fe2599	K_7664	Li6707	Mg2790	Mn2576	Mo2020
Line	228.616 {447}	205.560 {464}	324.754 {104}	259.940 {130}	766.490 {44}	670.784 {50}	279.079 {121}2	257.610 {131}	202.030 {467}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.49420	.20288	.23396	1.0179	47.921	.94461	48.540	.47309	1.0438
Stddev	.00006	.00036	.00055	.0233	1.764	.00914	.038	.00011	.0001
%RSD	.01162	.17692	.23606	2.2854	3.6819	.96782	.07783	.02420	.01317

#1	.49424	.20262	.23435	1.0344	49.169	.95108	48.567	.47301	1.0439
#2	.49416	.20313	.23357	1.0015	46.674	.93815	48.514	.47318	1.0437

Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Elem	Na8183	Ni2316	P_1782	Pb2203	S_1820	Sb2068	Se1960	Si2881	SiO2
Line	818.326 {41}	231.604 {446}	178.284 {489}	220.353 {453}	182.034 {485}	206.833 {463}	196.090 {472}	288.158 {117}	288.158 {117}2
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	56.118	.48278	W 10.039	.50420	1.9739	.51978	1.9758	9.8410	21.060
Stddev	.717	.00057	.024	.00109	.0195	.00064	.0011	.0302	.065
%RSD	1.2771	.11833	.23427	.21532	.98682	.12377	.05733	.30712	.30712

#1	56.624	.48238	10.022	.50343	1.9601	.52023	1.9766	9.8623	21.105
#2	55.611	.48319	10.055	.50497	1.9877	.51932	1.9750	9.8196	21.014

Check ?	Chk Pass	Chk Pass	Chk Warn	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit			2.0000						
Low Limit			-1.0000						

Elem	Sn1899	Sr4077	Th2837	Ti3349	Ti1908	U_3701	V_2924	Zn2062	Zr3391
Line	189.989 {477}	407.771 {83}	283.730 {119}	334.904 {101}	190.856 {477}	370.152 {91}	292.402 {115}	206.200 {163}	339.198 {99}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	W 2.0029	.96597	1.0131	.95955	1.8563	2.0891	.49177	.47759	.45318
Stddev	.0061	.03347	.0013	.00106	.0381	.0066	.00157	.00155	.00415
%RSD	.30671	3.4647	.12382	.11024	2.0536	.31572	.32015	.32490	.91495

#1	1.9986	.98964	1.0140	.95880	1.8833	2.0938	.49065	.47869	.45611
#2	2.0073	.94231	1.0122	.96030	1.8294	2.0844	.49288	.47650	.45025

Check ?	Chk Warn	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit	2.0000								
Low Limit	-.05000								

Int. Std.	Y_2243	Y_3600	Y_3774
Line	224.306 {450}	360.073 {94}	377.433 {89}
Units	Cts/S	Cts/S	Cts/S
Avg	2506.3	35420.	1894.8
Stddev	31.4	55.	109.3
%RSD	1.2513	.15570	5.7667

#1	2484.2	35381.	1817.5
#2	2528.5	35459.	1972.0

Sample Name: 280-82891-A-4-D Acquired: 5/17/2016 13:15:08 Type: Unk

Method: 6500_025(v6) Mode: CONC Corr. Factor: 1.000000

User: CRHOADES Prep Date: Custom ID2: Custom ID3:

Comment: 324753 6010C (Fe)

Elem	Ag3280	Al1670	As1890	B_2089	Ba4554	Be3130	Bi2230	Ca3179	Cd2288
Line	328.068 {103}	167.079 {502}	189.042 {478}	208.959 {461}	455.403 { 74}	313.042 {108}	223.061 {451}	317.933 {106}	228.802 {447}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	-.00034	.18737	.00408	.07074	.03957	-.00025	.00088	80.013	.00039
Stddev	.00118	.00071	.00594	.00023	.00127	.00003	.00164	.940	.00037
%RSD	350.84	.37824	145.61	.32542	3.2047	13.645	186.54	1.1746	96.038

#1	-.00117	.18787	.00828	.07090	.04046	-.00028	-.00028	80.678	.00012
#2	.00050	.18687	-.00012	.07058	.03867	-.00023	.00203	79.349	.00065

Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Elem	Co2286	Cr2055	Cu3247	Fe2599	K_7664	Li6707	Mg2790	Mn2576	Mo2020
Line	228.616 {447}	205.560 {464}	324.754 {104}	259.940 {130}	766.490 { 44}	670.784 { 50}	279.079 {121}2	257.610 {131}	202.030 {467}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.00026	.02186	.00117	.84401	.30534	.00006	26.629	.01283	.00620
Stddev	.00004	.00006	.00040	.00531	.06568	.00126	.178	.00009	.00101
%RSD	15.015	.28867	34.068	.62918	21.511	2091.5	.67000	.67414	16.362

#1	.00023	.02191	.00145	.84777	.25890	.00095	26.756	.01289	.00548
#2	.00028	.02182	.00089	.84026	.35178	-.00083	26.503	.01277	.00691

Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Elem	Na8183	Ni2316	P_1782	Pb2203	S_1820	Sb2068	Se1960	Si2881	SiO2
Line	818.326 { 41}	231.604 {446}	178.284 {489}	220.353 {453}	182.034 {485}	206.833 {463}	196.090 {472}	288.158 {117}	288.158 {117}2
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	62.724	.01371	.01858	.00046	27.346	-.00949	W -.00669	6.6621	14.257
Stddev	.261	.00041	.00096	.00212	.574	.00610	.00752	.0154	.033
%RSD	.41607	2.9839	5.1592	460.63	2.0975	64.291	112.54	.23173	.23173

#1	62.539	.01400	.01790	.00196	27.752	-.01380	-.01201	6.6730	14.280
#2	62.908	.01342	.01926	-.00104	26.941	-.00517	-.00137	6.6512	14.234

Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Warn	Chk Pass	Chk Pass
High Limit							5.0000		
Low Limit							-.00500		

Elem	Sn1899	Sr4077	Th2837	Ti3349	Ti1908	U_3701	V_2924	Zn2062	Zr3391
Line	189.989 {477}	407.771 { 83}	283.730 {119}	334.904 {101}	190.856 {477}	370.152 { 91}	292.402 {115}	206.200 {163}	339.198 { 99}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	-.00261	.15982	.00095	.00315	.04817	.05266	.00208	.01360	.00375
Stddev	.00033	.00011	.00030	.00055	.00429	.00853	.00016	.00089	.00168
%RSD	12.480	.07044	32.066	17.485	8.9150	16.198	7.8642	6.5645	44.774

#1	-.00284	.15990	.00116	.00276	.04513	.05869	.00219	.01423	.00494
#2	-.00238	.15974	.00073	.00354	.05121	.04663	.00196	.01297	.00257

Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Int. Std.	Y_2243	Y_3600	Y_3774
Line	224.306 {450}	360.073 { 94}	377.433 { 89}
Units	Cts/S	Cts/S	Cts/S
Avg	2593.2	36274.	1883.6
Stddev	25.3	1006.	37.8
%RSD	.97650	2.7720	2.0074

#1	2611.1	35563.	1856.9
#2	2575.3	36985.	1910.3

Sample Name: 280-82891-A-4-D SD@5 Acquired: 5/17/2016 13:17:47 Type: Unk
 Method: 6500_025(v6) Mode: CONC Corr. Factor: 1.000000
 User: CRHOADES Prep Date: Custom ID2: Custom ID3:
 Comment: 324753 6010C (Fe)

Elem	Ag3280	Al1670	As1890	B_2089	Ba4554	Be3130	Bi2230	Ca3179	Cd2288
Line	328.068 {103}	167.079 {502}	189.042 {478}	208.959 {461}	455.403 {74}	313.042 {108}	223.061 {451}	317.933 {106}	228.802 {447}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.00147	.05657	.00703	.01480	.00567	-.00041	-.00076	14.640	-.00009
Stddev	.00134	.00023	.00505	.00011	.00041	.00021	.00042	.080	.00017
%RSD	91.035	.40341	71.927	.72030	7.2343	51.568	55.917	.54305	192.45

#1	.00241	.05673	.01060	.01473	.00596	-.00026	-.00106	14.584	.00003
#2	.00052	.05641	.00345	.01488	.00538	-.00056	-.00046	14.696	-.00020

Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Elem	Co2286	Cr2055	Cu3247	Fe2599	K_7664	Li6707	Mg2790	Mn2576	Mo2020
Line	228.616 {447}	205.560 {464}	324.754 {104}	259.940 {130}	766.490 {44}	670.784 {50}	279.079 {121}2	257.610 {131}	202.030 {467}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.00017	.00354	-.00043	.15193	-.17463	-.00711	4.7693	.00239	.00042
Stddev	.00020	.00021	.00084	.00223	.07286	.00315	.0098	.00001	.00026
%RSD	123.51	6.0758	193.83	1.4668	41.725	44.356	.20620	.58776	62.401

#1	.00002	.00339	.00016	.15035	-.22615	-.00488	4.7624	.00238	.00023
#2	.00031	.00369	-.00102	.15350	-.12310	-.00934	4.7763	.00240	.00060

Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Elem	Na5895	Na8183	Ni2316	P_1782	Pb2203	S_1820	Sb2068	Se1960	Si2881
Line	589.592 {57}	818.326 {41}	231.604 {446}	178.284 {489}	220.353 {453}	182.034 {485}	206.833 {463}	196.090 {472}	288.158 {117}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	10.085	12.028	.00251	.00455	-.00057	4.7707	-.00287	-.00391	1.2028
Stddev	.050	1.218	.00011	.00272	.00175	.1319	.00014	.00150	.0511
%RSD	.49680	10.129	4.3314	59.811	308.49	2.7649	4.8127	38.274	4.2492

#1	10.050	11.166	.00259	.00647	-.00180	4.6774	-.00277	-.00285	1.2390
#2	10.120	12.889	.00243	.00263	.00067	4.8640	-.00297	-.00497	1.1667

Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Elem	SiO2	Sn1899	Sr4077	Th2837	Ti3349	Ti1908	U_3701	V_2924	Zn2062
Line	288.158 {117}2	189.989 {477}	407.771 {83}	283.730 {119}	334.904 {101}	190.856 {477}	370.152 {91}	292.402 {115}	206.200 {163}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	2.5740	-.00200	.02824	-.00224	.00200	.00492	.03443	.00006	.00164
Stddev	.1094	.00004	.00019	.00085	.00061	.00287	.00413	.00067	.00010
%RSD	4.2492	1.9681	.68862	38.017	30.490	58.292	11.994	1108.6	5.9003

#1	2.6514	-.00202	.02810	-.00285	.00244	.00289	.03151	-.00042	.00171
#2	2.4967	-.00197	.02837	-.00164	.00157	.00694	.03735	.00054	.00157

Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Elem	Zr3391
Line	339.198 {99}
Units	ppm
Avg	-.00097
Stddev	.00146
%RSD	150.21

#1	-.00201
#2	.00006

Check ?	Chk Pass
High Limit	
Low Limit	

Sample Name: 280-82891-A-4-D SD@5 Acquired: 5/17/2016 13:17:47 Type: Unk
 Method: 6500_025(v6) Mode: CONC Corr. Factor: 1.000000
 User: CRHOADES Prep Date: Custom ID2: Custom ID3:
 Comment: 324753 6010C (Fe)

Int. Std.	Y_2243	Y_3600	Y_3774
Line	224.306 {450}	360.073 { 94}	377.433 { 89}
Units	Cts/S	Cts/S	Cts/S
Avg	2652.0	37851.	1878.5
Stddev	44.3	38.	21.3
%RSD	1.6720	.09935	1.1320
#1	2620.7	37825.	1863.5
#2	2683.4	37878.	1893.6

Sample Name: 280-82891-A-4-E MS Acquired: 5/17/2016 13:20:25 Type: Unk
Method: 6500_025(v6) Mode: CONC Corr. Factor: 1.000000
User: CRHOADES Prep Date: Custom ID2: Custom ID3:
Comment: 324753 6010C (Fe)

Elem	Ag3280	Al1670	Al3092	As1890	B_2089	Ba4554	Be3130	Bi2230	Ca3179
Line	328.068 {103}	167.079 {502}	309.271 {109}	189.042 {478}	208.959 {461}	455.403 { 74}	313.042 {108}	223.061 {451}	317.933 {106}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.05033	2.1805	W 2.5772	.99331	1.0805	2.0167	.05084	F 2.0290	130.58
Stddev	.00012	.0071	.0864	.00004	.0026	.0191	.00049	.0054	1.48
%RSD	.24150	.32556	3.3508	.00376	.23616	.94559	.96993	.26447	1.1341

#1	.05041	2.1855	2.6382	.99334	1.0787	2.0302	.05119	2.0328	131.63
#2	.05024	2.1755	2.5161	.99328	1.0823	2.0032	.05050	2.0252	129.53

Check ?	Chk Pass	Chk Pass	Chk Warn	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Fail	Chk Pass
High Limit			500.00					.10000	
Low Limit			3.2000					-.10000	

Elem	Cd2288	Co2286	Cr2055	Cu3247	Fe2599	K_7664	Li6707	Mg2790	Mn2576
Line	228.802 {447}	228.616 {447}	205.560 {464}	324.754 {104}	259.940 {130}	766.490 { 44}	670.784 { 50}	279.079 {121}2	257.610 {131}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.10139	.48954	.22315	.23714	1.9027	50.396	.96997	75.345	.48129
Stddev	.00019	.00009	.00094	.00168	.0020	.468	.00342	.363	.00076
%RSD	.18686	.01771	.42097	.71040	.10362	.92774	.35217	.48159	.15854

#1	.10126	.48960	.22381	.23833	1.9013	50.726	.97239	75.601	.48183
#2	.10153	.48948	.22248	.23595	1.9040	50.065	.96756	75.088	.48075

Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Elem	Mo2020	Na8183	Ni2316	P_1782	Pb2203	S_1820	Sb2068	Se1960	Si2881
Line	202.030 {467}	818.326 { 41}	231.604 {446}	178.284 {489}	220.353 {453}	182.034 {485}	206.833 {463}	196.090 {472}	288.158 {117}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	1.0505	120.09	.49303	W 10.338	.49944	29.694	.53128	2.0097	16.859
Stddev	.0034	1.32	.00062	.023	.00054	.430	.00704	.0096	.003
%RSD	.32775	1.0965	.12642	.21867	.10855	1.4480	1.3251	.47853	.01490

#1	1.0530	121.02	.49347	10.322	.49906	29.390	.52630	2.0029	16.861
#2	1.0481	119.16	.49259	10.354	.49982	29.998	.53625	2.0165	16.857

Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Warn	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit				2.0000					
Low Limit				-1.0000					

Elem	SiO2	Sn1899	Sr4077	Th2837	Ti3349	Ti1908	U_3701	V_2924	Zn2062
Line	288.158 {117}2	189.989 {477}	407.771 { 83}	283.730 {119}	334.904 {101}	190.856 {477}	370.152 { 91}	292.402 {115}	206.200 {163}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	36.078	W 2.0115	1.1556	1.0097	.96214	1.7200	1.9841	.49173	.46851
Stddev	.005	.0118	.0098	.0021	.00253	.0525	.0618	.00189	.00102
%RSD	.01490	.58927	.85270	.20551	.26344	3.0526	3.1128	.38402	.21796

#1	36.082	2.0031	1.1626	1.0111	.96394	1.7572	1.9405	.49307	.46923
#2	36.074	2.0199	1.1486	1.0082	.96035	1.6829	2.0278	.49040	.46778

Check ?	Chk Pass	Chk Warn	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit		2.0000							
Low Limit		-.05000							

Elem	Zr3391								
Line	339.198 { 99}								
Units	ppm								
Avg	.45438								
Stddev	.00033								
%RSD	.07176								

#1	.45461								
#2	.45415								

Check ?	Chk Pass								
High Limit									
Low Limit									

Sample Name: 280-82891-A-4-E MS Acquired: 5/17/2016 13:20:25 Type: Unk
 Method: 6500_025(v6) Mode: CONC Corr. Factor: 1.000000
 User: CRHOADES Prep Date: Custom ID2: Custom ID3:
 Comment: 324753 6010C (Fe)

Int. Std.	Y_2243	Y_3600	Y_3774
Line	224.306 {450}	360.073 { 94}	377.433 { 89}
Units	Cts/S	Cts/S	Cts/S
Avg	2538.8	37183.	1845.7
Stddev	70.6	360.	45.6
%RSD	2.7826	.96944	2.4693
#1	2488.8	37438.	1813.5
#2	2588.8	36928.	1877.9

Sample Name: 280-82891-A-4-F MSD Acquired: 5/17/2016 13:22:50 Type: Unk
Method: 6500_025(v6) Mode: CONC Corr. Factor: 1.000000
User: CRHOADES Prep Date: Custom ID2: Custom ID3:
Comment: 324753 6010C (Fe)

Elem	Ag3280	Al1670	Al3092	As1890	B_2089	Ba4554	Be3130	Bi2230	Ca3179
Line	328.068 {103}	167.079 {502}	309.271 {109}	189.042 {478}	208.959 {461}	455.403 { 74}	313.042 {108}	223.061 {451}	317.933 {106}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.04844	2.1328	W 2.5071	.98293	1.0628	1.9543	.04994	F 1.9953	125.87
Stddev	.00083	.0116	.0799	.00178	.0054	.0354	.00114	.0024	2.36
%RSD	1.7196	.54178	3.1861	.18121	.50885	1.8122	2.2751	.11955	1.8765

#1	.04903	2.1409	2.5636	.98167	1.0589	1.9793	.05074	1.9936	127.54
#2	.04785	2.1246	2.4507	.98419	1.0666	1.9292	.04913	1.9970	124.20

Check ?	Chk Pass	Chk Pass	Chk Warn	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Fail	Chk Pass
High Limit			500.00					.10000	
Low Limit			3.2000					-.10000	

Elem	Cd2288	Co2286	Cr2055	Cu3247	Fe2599	K_7664	Li6707	Mg2790	Mn2576
Line	228.802 {447}	228.616 {447}	205.560 {464}	324.754 {104}	259.940 {130}	766.490 { 44}	670.784 { 50}	279.079 {121}2	257.610 {131}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.09997	.48200	.21940	.23238	1.8554	48.614	.95205	73.640	.47416
Stddev	.00031	.00129	.00044	.00139	.0188	1.096	.00142	.379	.00271
%RSD	.31014	.26704	.20024	.59663	1.0111	2.2539	.14942	.51445	.57142

#1	.09975	.48291	.21909	.23140	1.8687	49.388	.95305	73.908	.47607
#2	.10019	.48109	.21971	.23336	1.8421	47.839	.95104	73.372	.47224

Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Elem	Mo2020	Na8183	Ni2316	P_1782	Pb2203	S_1820	Sb2068	Se1960	Si2881
Line	202.030 {467}	818.326 { 41}	231.604 {446}	178.284 {489}	220.353 {453}	182.034 {485}	206.833 {463}	196.090 {472}	288.158 {117}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	1.0400	118.00	.48383	W 10.126	.49058	28.934	.52458	1.9834	16.474
Stddev	.0036	.13	.00013	.013	.00331	.163	.00365	.0047	.007
%RSD	.34450	.11413	.02787	.12341	.67524	.56277	.69656	.23947	.04518

#1	1.0425	118.09	.48393	10.118	.49292	29.049	.52716	1.9867	16.479
#2	1.0375	117.90	.48374	10.135	.48824	28.819	.52199	1.9800	16.468

Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Warn	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit				2.0000					
Low Limit				-1.0000					

Elem	SiO2	Sn1899	Sr4077	Th2837	Ti3349	Ti1908	U_3701	V_2924	Zn2062
Line	288.158 {117}2	189.989 {477}	407.771 { 83}	283.730 {119}	334.904 {101}	190.856 {477}	370.152 { 91}	292.402 {115}	206.200 {163}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	35.254	1.9982	1.1184	1.0007	.94954	1.7419	1.9832	.48629	.45945
Stddev	.016	.0338	.0223	.0111	.00569	.0810	.1306	.00331	.00817
%RSD	.04518	1.6912	1.9970	1.1048	.59883	4.6477	6.5871	.68026	1.7790

#1	35.265	2.0221	1.1342	1.0085	.95356	1.7991	1.8909	.48863	.46522
#2	35.242	1.9743	1.1026	.99286	.94552	1.6846	2.0756	.48395	.45367

Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Elem	Zr3391								
Line	339.198 { 99}								
Units	ppm								
Avg	.45111								
Stddev	.00262								
%RSD	.57999								

#1	.44926								
#2	.45296								

Check ?	Chk Pass								
High Limit									
Low Limit									

Sample Name: 280-82891-A-4-F MSD Acquired: 5/17/2016 13:22:50 Type: Unk
 Method: 6500_025(v6) Mode: CONC Corr. Factor: 1.000000
 User: CRHOADES Prep Date: Custom ID2: Custom ID3:
 Comment: 324753 6010C (Fe)

Int. Std.	Y_2243	Y_3600	Y_3774
Line	224.306 {450}	360.073 { 94}	377.433 { 89}
Units	Cts/S	Cts/S	Cts/S
Avg	2608.4	36356.	1952.0
Stddev	73.4	1206.	19.5
%RSD	2.8123	3.3166	.99992
#1	2556.5	35503.	1938.2
#2	2660.2	37209.	1965.8

Sample Name: 280-82891-A-4-D PDS Acquired: 5/17/2016 13:25:15 Type: Unk
Method: 6500_025(v6) Mode: CONC Corr. Factor: 1.000000
User: CRHOADES Prep Date: Custom ID2: Custom ID3:
Comment: 324753 6010C (Fe)

Elem	Ag3280	Al1670	As1890	B_2089	Ba4554	Be3130	Bi2230	Ca3179	Cd2288
Line	328.068 {103}	167.079 {502}	189.042 {478}	208.959 {461}	455.403 { 74}	313.042 {108}	223.061 {451}	317.933 {106}	228.802 {447}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.04696	1.2380	.19471	.17038	.13746	.04965	.00355	97.605	.05206
Stddev	.00008	.0023	.00835	.00017	.00275	.00041	.00154	1.517	.00004
%RSD	.16101	.18329	4.2886	.10099	2.0032	.83258	43.262	1.5543	.07070

#1	.04690	1.2364	.18881	.17051	.13941	.04994	.00247	98.678	.05204
#2	.04701	1.2396	.20062	.17026	.13551	.04935	.00464	96.532	.05209

Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Elem	Co2286	Cr2055	Cu3247	Fe2599	K_7664	Li6707	Mg2790	Mn2576	Mo2020
Line	228.616 {447}	205.560 {464}	324.754 {104}	259.940 {130}	766.490 { 44}	670.784 { 50}	279.079 {121}2	257.610 {131}	202.030 {467}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.05017	.07280	.04712	1.9039	20.214	.09521	44.774	.05962	.05801
Stddev	.00018	.00040	.00030	.0019	.107	.00052	.080	.00007	.00127
%RSD	.36548	.54664	.62722	.10062	.52981	.54210	.17771	.11118	2.1846

#1	.05030	.07308	.04733	1.9025	20.138	.09484	44.830	.05958	.05712
#2	.05004	.07252	.04691	1.9052	20.290	.09557	44.718	.05967	.05891

Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Elem	Na8183	Ni2316	P_1782	Pb2203	S_1820	Sb2068	Se1960	Si2881	SiO2
Line	818.326 { 41}	231.604 {446}	178.284 {489}	220.353 {453}	182.034 {485}	206.833 {463}	196.090 {472}	288.158 {117}	288.158 {117}2
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	84.675	.06241	W 2.1018	.10371	27.081	.09781	.20130	11.671	24.976
Stddev	.853	.00011	.0066	.00327	.831	.00060	.00555	.028	.060
%RSD	1.0069	.18350	.31368	3.1563	3.0697	.61524	2.7569	.23876	.23876

#1	84.072	.06249	2.0971	.10602	27.669	.09738	.19737	11.651	24.934
#2	85.278	.06233	2.1064	.10139	26.493	.09823	.20522	11.691	25.018

Check ?	Chk Pass	Chk Pass	Chk Warn	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit			2.0000						
Low Limit			-1.0000						

Elem	Sn1899	Sr4077	Th2837	Ti3349	Ti1908	U_3701	V_2924	Zn2062	Zr3391
Line	189.989 {477}	407.771 { 83}	283.730 {119}	334.904 {101}	190.856 {477}	370.152 { 91}	292.402 {115}	206.200 {163}	339.198 { 99}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.09879	.20740	.20246	.05632	.26208	.46600	.05121	.20596	.04043
Stddev	.00133	.00120	.00223	.00168	.00517	.02827	.00017	.00092	.00005
%RSD	1.3490	.57986	1.0993	2.9794	1.9735	6.0657	.33110	.44620	.11496

#1	.09974	.20655	.20089	.05751	.25842	.48599	.05109	.20661	.04039
#2	.09785	.20825	.20403	.05514	.26574	.44602	.05133	.20531	.04046

Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Int. Std.	Y_2243	Y_3600	Y_3774
Line	224.306 {450}	360.073 { 94}	377.433 { 89}
Units	Cts/S	Cts/S	Cts/S
Avg	2651.2	38519.	1986.0
Stddev	14.3	115.	74.5
%RSD	.53824	.29777	3.7511

#1	2661.3	38600.	1933.3
#2	2641.1	38438.	2038.7

Sample Name: CCVH-3883905 Acquired: 5/17/2016 13:27:49 Type: QC
Method: 6500_025(v6) Mode: CONC Corr. Factor: 1.000000
User: CRHOADES Prep Date: Custom ID2: Custom ID3:
Comment:

Elem	Ag3280	Al3092	As1890	B_2089	Ba4554	Be3130	Bi2230	Ca3179	Cd2288	Co2286	Cr2055	Cu3247	Fe2714
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	-.00573	51.923	-.00580	.00646	-.00123	-.00009	.99062	.00331	-.00027	-.00144	.00013	-.01383	53.203
Stddev	.00007	.714	.00088	.00085	.00038	.00014	.00307	.00250	.00028	.00002	.00068	.00018	.001
%RSD	1.2619	1.3744	15.200	13.204	30.600	165.45	.30978	75.374	104.98	1.6459	518.55	1.2994	.00257

#1	-.00568	52.428	-.00642	.00706	-.00149	-.00019	.99279	.00155	-.00007	-.00142	-.00035	-.01371	53.202
#2	-.00578	51.418	-.00518	.00586	-.00096	.00001	.98845	.00508	-.00047	-.00145	.00062	-.01396	53.204

Check ?	None	Chk Pass	None	None	None	None	Chk Pass	None	None	None	None	None	Chk Pass
Value													
Range													

Elem	K_7664	Li6707	Mg2790	Mn2576	Mo2020	Na8183	Ni2316	P_1782	Pb2203	S_1820	Sb2068	Se1960	Si2881
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	-.04591	-.00712	.01213	-.00205	-.00110	272.67	.00090	.00867	.00097	5.1575	-.01055	-.00162	-.00114
Stddev	.01637	.00517	.00010	.00003	.00014	.21	.00055	.00389	.00310	.0083	.00223	.00262	.00142
%RSD	35.664	72.546	.82726	1.5939	12.807	.07545	61.807	44.880	318.95	.16068	21.143	162.08	125.32

#1	-.03433	-.01078	.01220	-.00207	-.00100	272.52	.00129	.00592	.00316	5.1516	-.01213	.00024	-.00214
#2	-.05748	-.00347	.01205	-.00202	-.00120	272.81	.00050	.01142	-.00122	5.1633	-.00897	-.00347	-.00013

Check ?	None	None	None	None	None	Chk Pass	None	None	None	Chk Pass	None	None	None
Value													
Range													

Elem	SiO2	Sn1899	Sr4077	Th2837	Ti3349	Ti1908	U_3701	V_2924	Zn2062	Zr3391
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	-.00243	.00031	.00011	4.8582	-.00078	.00798	9.7916	.01310	.00001	-.13879
Stddev	.00305	.00000	.00020	.0033	.00013	.00267	.0214	.00046	.00069	.00343
%RSD	125.32	1.3764	170.58	.06750	16.426	33.398	.21802	3.5435	9632.2	2.4715

#1	-.00458	.00032	-.00002	4.8606	-.00069	.00610	9.8067	.01277	-.00048	-.14122
#2	-.00028	.00031	.00025	4.8559	-.00087	.00987	9.7765	.01342	.00049	-.13637

Check ?	None	None	None	Chk Pass	None	None	Chk Pass	None	None	None
Value										
Range										

Int. Std.	Y_2243	Y_3600	Y_3774
Units	Cts/S	Cts/S	Cts/S
Avg	2576.3	37513.	1872.8
Stddev	23.2	236.	20.1
%RSD	.90209	.63005	1.0724

#1	2559.9	37680.	1858.6
#2	2592.7	37346.	1887.0

Sample Name: CCV-3888422 Acquired: 5/17/2016 13:30:25 Type: QC
Method: 6500_025(v6) Mode: CONC Corr. Factor: 1.000000
User: CRHOADES Prep Date: Custom ID2: Custom ID3:
Comment:

Elem	Ag3280	Al1670	As1890	B_2089	Ba4554	Be3130	Bi2230	Ca3179	Cd2288	Co2286	Cr2055	Cu3247	Fe2599
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.48620	.50761	.94730	.49012	.47630	.48889	-.00078	4.7702	.49728	.50201	.50648	.47125	2.4829
Stddev	.00081	.01778	.01019	.00253	.00400	.00487	.00121	.0113	.00971	.01242	.01148	.00017	.0260
%RSD	.16585	3.5019	1.0762	.51719	.84000	.99551	155.25	.23663	1.9532	2.4740	2.2663	.03632	1.0463
#1	.48677	.52018	.94009	.48833	.47913	.49233	-.00164	4.7782	.49041	.49323	.49836	.47138	2.5012
#2	.48563	.49504	.95451	.49191	.47347	.48545	.00008	4.7622	.50415	.51079	.51459	.47113	2.4645

Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	None	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Value													
Range													

Elem	K_7664	Li6707	Mg2790	Mn2576	Mo2020	Na5895	Ni2316	P_1782	Pb2203	S_1820	Sb2068	Se1960	Si2881
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	47.043	.95301	19.107	.47110	.49318	5.0712	.49020	.97607	1.0011	-.07089	.97219	.95368	4.9562
Stddev	.435	.00399	.021	.00162	.00876	.0233	.01323	.01781	.0268	.02572	.01862	.01636	.0065
%RSD	.92534	.41886	.10863	.34380	1.7763	.45955	2.6985	1.8242	2.6736	36.285	1.9153	1.7150	.13077
#1	47.351	.95583	19.122	.47224	.48698	5.0877	.48085	.96348	.98217	-.05270	.95902	.94212	4.9608
#2	46.736	.95019	19.092	.46995	.49937	5.0548	.49955	.98866	1.0200	-.08907	.98535	.96525	4.9516

Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	None	Chk Pass	Chk Pass	Chk Pass
Value													
Range													

Elem	SiO2	Sn1899	Sr4077	Th2837	Ti3349	Ti1908	U_3701	V_2924	Zn2062	Zr3391
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	10.606	1.0021	.48510	.00096	.46492	1.0087	.06366	.49291	.46901	.47528
Stddev	.014	.0232	.00519	.00122	.00068	.0265	.05354	.00063	.00159	.00163
%RSD	.13077	2.3149	1.0705	126.25	.14648	2.6224	84.100	.12820	.33847	.34362
#1	10.616	.98568	.48877	.00182	.46540	.99002	.10152	.49246	.46789	.47412
#2	10.597	1.0185	.48143	.00010	.46444	1.0274	.02580	.49336	.47013	.47643

Check ?	Chk Pass	Chk Pass	Chk Pass	None	Chk Pass	Chk Pass	None	Chk Pass	Chk Pass	Chk Pass
Value										
Range										

Int. Std.	Y_2243	Y_3600	Y_3774
Units	Cts/S	Cts/S	Cts/S
Avg	2565.8	38103.	2007.8
Stddev	54.5	302.	32.4
%RSD	2.1249	.79368	1.6127
#1	2604.4	37889.	2030.7
#2	2527.3	38317.	1984.9

Sample Name: CCB Acquired: 5/17/2016 13:32:56 Type: QC
 Method: 6500_025(v6) Mode: CONC Corr. Factor: 1.000000
 User: CRHOADES Prep Date: Custom ID2: Custom ID3:
 Comment:

Elem	Ag3280	Al1670	As1890	B_2089	Ba4554	Be3130	Bi2230	Ca3179	Cd2288	Co2286	Cr2055
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.00155	.00037	.00467	.00357	-.00045	-.00031	.00172	.00127	.00011	-.00019	-.00029
Stddev	.00112	.00025	.00174	.00073	.00006	.00002	.00347	.01609	.00018	.00004	.00013
%RSD	72.435	67.017	37.229	20.376	13.891	5.2865	202.12	1268.7	160.36	23.520	44.221

#1	.00076	.00020	.00590	.00409	-.00049	-.00032	-.00074	-.01011	-.00001	-.00016	-.00020
#2	.00234	.00055	.00344	.00306	-.00041	-.00030	.00417	.01264	.00024	-.00022	-.00038

Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit											
Low Limit											

Elem	Cu3247	Fe2599	K_7664	Li6707	Mg2790	Mn2576	Mo2020	Na5895	Ni2316	P_1782	Pb2203
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	-.00085	.00856	-.10455	-.00133	.00535	.00010	.00152	-.07610	.00055	.00365	-.00337
Stddev	.00141	.00829	.10853	.00017	.00918	.00013	.00033	.01564	.00055	.00434	.00273
%RSD	166.00	96.791	103.81	13.037	171.58	132.37	21.432	20.555	100.12	118.87	80.882

#1	-.00185	.00270	-.18130	-.00121	-.00114	.00019	.00129	-.08716	.00016	.00058	-.00144
#2	.00015	.01443	-.02781	-.00145	.01184	.00001	.00175	-.06504	.00094	.00673	-.00530

Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit											
Low Limit											

Elem	S_1820	Sb2068	Se1960	Si2881	SiO2	Sn1899	Sr4077	Th2837	Ti3349	Ti1908	U_3701
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	-.10157	W .00382	-.00288	-.02135	-.04569	.00124	.00024	.00158	.00071	.00518	-.00124
Stddev	.00013	.00564	.00059	.03243	.06940	.00103	.00043	.00144	.00055	.00114	.02385
%RSD	.12344	147.66	20.577	151.89	151.89	83.150	176.53	91.200	77.708	21.929	1928.3

#1	-.10166	.00781	-.00246	-.04428	-.09476	.00051	-.00006	.00056	.00032	.00437	-.01810
#2	-.10148	-.00017	-.00330	.00158	.00338	.00197	.00054	.00259	.00110	.00598	.01563

Check ?	Chk Pass	Chk Warn	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit		.00100									
Low Limit		-.00100									

Elem	V_2924	Zn2062	Zr3391
Units	ppm	ppm	ppm
Avg	-.00064	-.00040	-.00222
Stddev	.00051	.00022	.00231
%RSD	79.071	54.692	104.49

#1	-.00100	-.00056	-.00385
#2	-.00028	-.00025	-.00058

Check ?	Chk Pass	Chk Pass	Chk Pass
High Limit			
Low Limit			

Int. Std.	Y_2243	Y_3600	Y_3774
Units	Cts/S	Cts/S	Cts/S
Avg	2587.7	37024.	1921.9
Stddev	3.5	345.	43.9
%RSD	.13652	.93232	2.2865

#1	2590.1	36780.	1890.9
#2	2585.2	37268.	1953.0

Sample Name: CCVL-3894681 Acquired: 5/17/2016 13:36:00 Type: QC
Method: 6500_025(v6) Mode: CONC Corr. Factor: 1.000000
User: CRHOADES Prep Date: Custom ID2: Custom ID3:
Comment:

Elem	Ag3280	Al1670	As1890	B_2089	Ba4554	Be3130	Bi2230	Ca3179	Cd2288	Co2286	Cr2055	Cu3247
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.01019	.09951	.01686	.09894	.00936	F .00068	.10704	.19285	.00534	.01019	.01013	.01382
Stddev	.00050	.00033	.00690	.00147	.00006	.00012	.00259	.00457	.00039	.00037	.00033	.00051
%RSD	4.8687	.32696	40.902	1.4862	.60816	17.197	2.4221	2.3672	7.3175	3.6394	3.3030	3.7065

#1	.00984	.09974	.02173	.09998	.00940	.00077	.10887	.18962	.00561	.01046	.01037	.01346
#2	.01054	.09928	.01198	.09790	.00932	.00060	.10521	.19608	.00506	.00993	.00989	.01418

Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Fail	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Value						.00100						
Range						-30.000%						

Elem	Fe2599	K_7664	Li6707	Mg2790	Mn2576	Mo2020	Na5895	Ni2316	P_1782	Pb2203	S_1820	Sb2068
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.09666	2.8585	F .00655	.19547	.00975	.01957	.89802	.04043	2.8808	.00893	-.09636	.01600
Stddev	.00608	.1044	.00190	.00019	.00008	.00071	.03328	.00156	.1047	.00140	.00360	.00205
%RSD	6.2916	3.6529	29.003	.09502	.79309	3.6176	3.7059	3.8546	3.6332	15.664	3.7364	12.830

#1	.09236	2.9324	.00521	.19534	.00981	.02007	.92156	.04153	2.9548	.00991	-.09382	.01454
#2	.10096	2.7847	.00790	.19561	.00970	.01907	.87449	.03933	2.8068	.00794	-.09891	.01745

Check ?	Chk Pass	Chk Pass	Chk Fail	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	None	Chk Pass
Value			.01000									
Range			-30.000%									

Elem	Se1960	Si2881	SiO2	Sn1899	Sr4077	Th2837	Ti3349	Ti1908	U_3701	V_2924	Zn2062	Zr3391
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.01160	.43551	.93199	.10289	.00994	.01669	.00980	.01212	F .08086	.00963	.01939	.01328
Stddev	.00013	.02927	.06265	.00357	.00017	.00251	.00016	.00296	.01096	.00091	.00116	.00319
%RSD	1.1156	6.7220	6.7220	3.4718	1.6606	15.067	1.6828	24.440	13.557	9.4376	5.9982	24.048

#1	.01169	.45621	.97629	.10542	.00983	.01491	.00992	.01003	.08861	.01028	.02021	.01554
#2	.01151	.41481	.88769	.10037	.01006	.01846	.00969	.01422	.07311	.00899	.01857	.01102

Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Fail	Chk Pass	Chk Pass	Chk Pass
Value									.06000			
Range									30.000%			

Int. Std.	Y_2243	Y_3600	Y_3774
Units	Cts/S	Cts/S	Cts/S
Avg	2656.7	38912.	1837.3
Stddev	36.3	742.	43.9
%RSD	1.3646	1.9079	2.3870

#1	2682.4	38387.	1806.3
#2	2631.1	39437.	1868.3

Sample Name: LCS 280-324753/2-A Acquired: 5/17/2016 13:39:28 Type: Unk
Method: 6500_025(v6) Mode: CONC Corr. Factor: 1.000000
User: CRHOADES Prep Date: Custom ID2: Custom ID3:
Comment: 324753 6010C (Fe)

Elem	Ag3280	Al1670	As1890	B_2089	Ba4554	Be3130	Bi2230	Ca3179	Cd2288
Line	328.068 {103}	167.079 {502}	189.042 {478}	208.959 {461}	455.403 { 74}	313.042 {108}	223.061 {451}	317.933 {106}	228.802 {447}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.04930	1.9337	1.0070	1.0232	1.9875	.05052	2.0617	49.024	.10229
Stddev	.00001	.0323	.0170	.0096	.0014	.00020	.0188	.098	.00096
%RSD	.01872	1.6690	1.6912	.93584	.06912	.40446	.91036	.20008	.93652

#1	.04931	1.9108	.99495	1.0164	1.9865	.05038	2.0485	48.955	.10161
#2	.04930	1.9565	1.0190	1.0299	1.9884	.05067	2.0750	49.093	.10296

Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	None	Chk Pass	Chk Pass
High Limit									
Low Limit									

Elem	Co2286	Cr2055	Cu3247	Fe2599	K_7664	Li6707	Mg2790	Mn2576	Mo2020
Line	228.616 {447}	205.560 {464}	324.754 {104}	259.940 {130}	766.490 { 44}	670.784 { 50}	279.079 {121}2	257.610 {131}	202.030 {467}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.49601	.20428	.23757	1.0273	49.612	.96422	48.794	.47239	1.0461
Stddev	.00098	.00081	.00070	.0118	.327	.00901	.013	.00017	.0114
%RSD	.19683	.39424	.29460	1.1520	.66011	.93468	.02574	.03521	1.0908

#1	.49670	.20371	.23708	1.0357	49.380	.97059	48.785	.47251	1.0542
#2	.49532	.20485	.23807	1.0189	49.843	.95785	48.803	.47227	1.0380

Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Elem	Na8183	Ni2316	P_1782	Pb2203	S_1820	Sb2068	Se1960	Si2881	SiO2
Line	818.326 { 41}	231.604 {446}	178.284 {489}	220.353 {453}	182.034 {485}	206.833 {463}	196.090 {472}	288.158 {117}	288.158 {117}2
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	F 56.181	.48819	10.176	.50687	2.0463	.53572	2.0281	9.9612	21.317
Stddev	1.428	.00250	.035	.00458	.0118	.00986	.0107	.0018	.004
%RSD	2.5420	.51187	.34291	.90439	.57571	1.8413	.52641	.01783	.01783

#1	57.191	.48642	10.201	.50363	2.0380	.54270	2.0356	9.9599	21.314
#2	55.171	.48996	10.151	.51011	2.0546	.52875	2.0205	9.9624	21.320

Check ?	Chk Fail	Chk Pass	Chk Pass	Chk Pass	None	Chk Pass	Chk Pass	Chk Pass	None
High Limit	56.000								
Low Limit	45.500								

Elem	Sn1899	Sr4077	Th2837	Ti3349	Ti1908	U_3701	V_2924	Zn2062	Zr3391
Line	189.989 {477}	407.771 { 83}	283.730 {119}	334.904 {101}	190.856 {477}	370.152 { 91}	292.402 {115}	206.200 {163}	339.198 { 99}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	2.0488	.99808	1.0073	.96109	1.8257	2.0923	.49205	.47076	.45716
Stddev	.0287	.00065	.0030	.00148	.0742	.0665	.00058	.00187	.00277
%RSD	1.4022	.06494	.29643	.15419	4.0661	3.1781	.11738	.39807	.60492

#1	2.0692	.99762	1.0052	.96214	1.8782	2.1394	.49164	.46943	.45911
#2	2.0285	.99854	1.0094	.96004	1.7732	2.0453	.49245	.47208	.45520

Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Int. Std.	Y_2243	Y_3600	Y_3774
Line	224.306 {450}	360.073 { 94}	377.433 { 89}
Units	Cts/S	Cts/S	Cts/S
Avg	2647.3	37342.	1912.0
Stddev	36.3	196.	53.3
%RSD	1.3708	.52353	2.7901

#1	2621.6	37481.	1949.8
#2	2672.9	37204.	1874.3

Sample Name: 280-82891-A-13-B Acquired: 5/17/2016 13:41:52 Type: Unk

Method: 6500_025(v6) Mode: CONC Corr. Factor: 1.000000

User: CRHOADES Prep Date: Custom ID2: Custom ID3:

Comment: 324753 6010C (Fe)

Elem	Ag3280	Al1670	As1890	B_2089	Ba4554	Be3130	Bi2230	Ca3179	Cd2288
Line	328.068 {103}	167.079 {502}	189.042 {478}	208.959 {461}	455.403 { 74}	313.042 {108}	223.061 {451}	317.933 {106}	228.802 {447}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.00109	.13362	.00470	.04003	.03463	-.00031	-.00244	43.528	.00064
Stddev	.00003	.00082	.00317	.00029	.00170	.00025	.00237	1.429	.00010
%RSD	3.0327	.61258	67.286	.72624	4.9134	79.715	97.381	3.2827	16.225

#1	.00107	.13304	.00247	.04023	.03584	-.00049	-.00076	44.538	.00072
#2	.00111	.13419	.00694	.03982	.03343	-.00014	-.00412	42.517	.00057

Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Elem	Co2286	Cr2055	Cu3247	Fe2599	K_7664	Li6707	Mg2790	Mn2576	Mo2020
Line	228.616 {447}	205.560 {464}	324.754 {104}	259.940 {130}	766.490 { 44}	670.784 { 50}	279.079 {121}2	257.610 {131}	202.030 {467}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.00013	.01022	.00046	.60147	2.5081	.09319	35.492	.04091	.00371
Stddev	.00053	.00032	.00005	.01211	.1219	.00361	.128	.00019	.00110
%RSD	407.95	3.1003	11.600	2.0131	4.8610	3.8755	.36153	.47553	29.743

#1	-.00024	.01045	.00042	.61003	2.5943	.09063	35.583	.04105	.00293
#2	.00050	.01000	.00050	.59291	2.4219	.09574	35.401	.04078	.00450

Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Elem	Na8183	Ni2316	P_1782	Pb2203	S_1820	Sb2068	Se1960	Si2881	SiO2
Line	818.326 { 41}	231.604 {446}	178.284 {489}	220.353 {453}	182.034 {485}	206.833 {463}	196.090 {472}	288.158 {117}	288.158 {117}2
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	71.916	.01638	.02527	-.00056	33.424	-.00844	.00424	17.532	37.518
Stddev	.426	.00052	.00401	.00130	.032	.00311	.00051	.009	.019
%RSD	.59251	3.1996	15.855	232.40	.09635	36.892	12.119	.04949	.04949

#1	71.615	.01675	.02810	.00036	33.447	-.00624	.00460	17.538	37.531
#2	72.217	.01601	.02244	-.00148	33.401	-.01064	.00388	17.525	37.505

Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Elem	Sn1899	Sr4077	Th2837	Ti3349	Ti1908	U_3701	V_2924	Zn2062	Zr3391
Line	189.989 {477}	407.771 { 83}	283.730 {119}	334.904 {101}	190.856 {477}	370.152 { 91}	292.402 {115}	206.200 {163}	339.198 { 99}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	-.00004	.28111	-.00095	.00268	.04917	.01309	.00069	.00601	-.00088
Stddev	.00041	.00877	.00453	.00023	.00929	.03559	.00090	.00034	.00381
%RSD	1014.9	3.1207	477.06	8.6792	18.900	271.98	129.86	5.6764	433.41

#1	-.00033	.28731	-.00415	.00284	.04260	.03825	.00006	.00625	.00181
#2	.00025	.27490	.00225	.00251	.05574	-.01208	.00133	.00577	-.00357

Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Int. Std.	Y_2243	Y_3600	Y_3774
Line	224.306 {450}	360.073 { 94}	377.433 { 89}
Units	Cts/S	Cts/S	Cts/S
Avg	2606.5	36863.	1972.2
Stddev	17.4	672.	40.1
%RSD	.66762	1.8229	2.0348

#1	2618.9	36388.	1943.8
#2	2594.2	37339.	2000.6

Sample Name: 280-82891-A-22-B Acquired: 5/17/2016 13:44:29 Type: Unk

Method: 6500_025(v6) Mode: CONC Corr. Factor: 1.000000

User: CRHOADES Prep Date: Custom ID2: Custom ID3:

Comment: 324753 6010C (Fe)

Elem	Ag3280	Al1670	As1890	B_2089	Ba4554	Be3130	Bi2230	Ca3179	Cd2288
Line	328.068 {103}	167.079 {502}	189.042 {478}	208.959 {461}	455.403 { 74}	313.042 {108}	223.061 {451}	317.933 {106}	228.802 {447}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.00077	.00209	.00406	.00237	-.00023	-.00030	.00028	.03178	.00038
Stddev	.00143	.00024	.00208	.00039	.00040	.00058	.00227	.00120	.00029
%RSD	186.61	11.722	51.072	16.550	173.90	190.42	822.94	3.7916	75.146

#1	-.00025	.00191	.00553	.00265	-.00052	.00011	-.00133	.03263	.00018
#2	.00178	.00226	.00260	.00209	.00005	-.00071	.00188	.03092	.00058

Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Elem	Co2286	Cr2055	Cu3247	Fe2599	K_7664	Li6707	Mg2790	Mn2576	Mo2020
Line	228.616 {447}	205.560 {464}	324.754 {104}	259.940 {130}	766.490 { 44}	670.784 { 50}	279.079 {121}2	257.610 {131}	202.030 {467}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	-.00023	-.00038	-.00022	.01773	-.15111	-.00368	.00407	.00014	-.00072
Stddev	.00020	.00010	.00076	.00441	.06177	.00157	.00269	.00009	.00030
%RSD	89.617	26.011	351.57	24.885	40.874	42.782	66.104	68.765	41.842

#1	-.00008	-.00045	-.00075	.01461	-.19479	-.00257	.00217	.00007	-.00051
#2	-.00037	-.00031	.00032	.02084	-.10744	-.00479	.00597	.00020	-.00093

Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Elem	Na5895	Ni2316	P_1782	Pb2203	S_1820	Sb2068	Se1960	Si2881	SiO2
Line	589.592 { 57}	231.604 {446}	178.284 {489}	220.353 {453}	182.034 {485}	206.833 {463}	196.090 {472}	288.158 {117}	288.158 {117}2
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	-.09714	-.00025	.00324	-.00078	-.09005	-.00318	W -.00558	-.01915	-.04097
Stddev	.01475	.00036	.00085	.00117	.00025	.00705	.00330	.00653	.01398
%RSD	15.183	147.81	26.326	150.66	.27250	221.60	59.256	34.113	34.113

#1	-.08671	-.00050	.00264	-.00160	-.09022	-.00816	-.00324	-.01453	-.03109
#2	-.10757	.00001	.00385	.00005	-.08988	.00180	-.00791	-.02376	-.05086

Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Warn	Chk Pass	Chk Pass
High Limit							5.0000		
Low Limit							-.00500		

Elem	Sn1899	Sr4077	Th2837	Ti3349	Ti1908	U_3701	V_2924	Zn2062	Zr3391
Line	189.989 {477}	407.771 { 83}	283.730 {119}	334.904 {101}	190.856 {477}	370.152 { 91}	292.402 {115}	206.200 {163}	339.198 { 99}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	-.00071	.00012	-.00074	.00066	.01047	.05916	.00050	.00170	-.00045
Stddev	.00051	.00005	.00433	.00088	.00395	.03604	.00026	.00067	.00119
%RSD	72.602	38.977	585.05	132.76	37.735	60.924	52.102	39.503	263.59

#1	-.00034	.00015	-.00380	.00004	.00768	.08464	.00031	.00217	-.00129
#2	-.00107	.00009	.00232	.00128	.01327	.03367	.00068	.00122	.00039

Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Int. Std.	Y_2243	Y_3600	Y_3774
Line	224.306 {450}	360.073 { 94}	377.433 { 89}
Units	Cts/S	Cts/S	Cts/S
Avg	2739.5	37612.	1865.6
Stddev	11.6	160.	49.2
%RSD	.42190	.42453	2.6381

#1	2747.7	37500.	1900.4
#2	2731.4	37725.	1830.8

Sample Name: 280-82891-A-31-B Acquired: 5/17/2016 13:46:51 Type: Unk

Method: 6500_025(v6) Mode: CONC Corr. Factor: 1.000000

User: CRHOADES Prep Date: Custom ID2: Custom ID3:

Comment: 324753 6010C (Fe)

Elem	Ag3280	Al1670	As1890	B_2089	Ba4554	Be3130	Bi2230	Ca3179	Cd2288
Line	328.068 {103}	167.079 {502}	189.042 {478}	208.959 {461}	455.403 { 74}	313.042 {108}	223.061 {451}	317.933 {106}	228.802 {447}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.00144	.13538	-.00177	.03481	.05489	.00000	.00157	19.152	.00042
Stddev	.00006	.00209	.00028	.00043	.00014	.0003	.00414	.279	.00051
%RSD	4.0118	1.5419	15.996	1.2244	.26244	1669700.	263.50	1.4565	120.54

#1	.00140	.13390	-.00197	.03511	.05479	.00021	.00450	19.349	.00078
#2	.00148	.13685	-.00157	.03451	.05499	-.00021	-.00136	18.954	.00006

Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Elem	Co2286	Cr2055	Cu3247	Fe2599	K_7664	Li6707	Mg2790	Mn2576	Mo2020
Line	228.616 {447}	205.560 {464}	324.754 {104}	259.940 {130}	766.490 { 44}	670.784 { 50}	279.079 {121}2	257.610 {131}	202.030 {467}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	-.00012	.00072	.00046	.53733	1.7753	.05897	15.183	.02946	-.00058
Stddev	.00009	.00046	.00087	.00756	.0410	.00386	.052	.00016	.00031
%RSD	74.630	64.222	187.47	1.4072	2.3096	6.5469	.34105	.55090	53.154

#1	-.00006	.00039	.00107	.53198	1.8043	.05624	15.220	.02957	-.00080
#2	-.00018	.00105	-.00015	.54267	1.7463	.06170	15.146	.02934	-.00036

Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Elem	Na8183	Ni2316	P_1782	Pb2203	S_1820	Sb2068	Se1960	Si2881	SiO2
Line	818.326 { 41}	231.604 {446}	178.284 {489}	220.353 {453}	182.034 {485}	206.833 {463}	196.090 {472}	288.158 {117}	288.158 {117}2
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	32.811	.00194	.02141	-.00024	28.207	-.00586	-.00454	18.893	40.432
Stddev	.122	.00006	.00456	.00155	.108	.00075	.00285	.109	.233
%RSD	.37246	3.1677	21.316	634.32	.38301	12.846	62.800	.57612	.57612

#1	32.898	.00189	.01818	-.00134	28.284	-.00532	-.00253	18.970	40.597
#2	32.725	.00198	.02463	.00085	28.131	-.00639	-.00656	18.817	40.267

Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Elem	Sn1899	Sr4077	Th2837	Ti3349	Ti1908	U_3701	V_2924	Zn2062	Zr3391
Line	189.989 {477}	407.771 { 83}	283.730 {119}	334.904 {101}	190.856 {477}	370.152 { 91}	292.402 {115}	206.200 {163}	339.198 { 99}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.00019	.18874	-.00290	.00200	.00352	.05637	.00087	.00435	-.00110
Stddev	.00152	.00012	.00159	.00120	.00289	.00388	.00113	.00005	.00245
%RSD	810.76	.06387	54.833	59.800	82.032	6.8782	130.26	1.2029	222.43

#1	-.00088	.18883	-.00177	.00116	.00148	.05363	.00007	.00439	.00063
#2	.00126	.18866	-.00402	.00285	.00556	.05911	.00167	.00431	-.00283

Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Int. Std.	Y_2243	Y_3600	Y_3774
Line	224.306 {450}	360.073 { 94}	377.433 { 89}
Units	Cts/S	Cts/S	Cts/S
Avg	2697.3	40057.	2049.1
Stddev	58.6	525.	12.9
%RSD	2.1719	1.3102	.63055

#1	2738.7	39686.	2040.0
#2	2655.9	40428.	2058.2

Sample Name: 280-82891-A-40-B Acquired: 5/17/2016 13:49:29 Type: Unk

Method: 6500_025(v6) Mode: CONC Corr. Factor: 1.000000

User: CRHOADES Prep Date: Custom ID2: Custom ID3:

Comment: 324753 6010C (Fe)

Elem	Ag3280	Al1670	As1890	B_2089	Ba4554	Be3130	Bi2230	Ca3179	Cd2288
Line	328.068 {103}	167.079 {502}	189.042 {478}	208.959 {461}	455.403 { 74}	313.042 {108}	223.061 {451}	317.933 {106}	228.802 {447}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.00169	.01728	.00212	.02696	.03709	-.00023	-.00513	27.088	.00110
Stddev	.00035	.00005	.00555	.00045	.00043	.00009	.00438	.296	.00044
%RSD	20.507	.28529	262.32	1.6732	1.1602	39.524	85.380	1.0944	40.254

#1	.00193	.01725	-.00181	.02728	.03679	-.00030	-.00822	27.298	.00141
#2	.00144	.01732	.00604	.02664	.03739	-.00017	-.00203	26.879	.00079

Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Elem	Co2286	Cr2055	Cu3247	Fe2599	K_7664	Li6707	Mg2790	Mn2576	Mo2020
Line	228.616 {447}	205.560 {464}	324.754 {104}	259.940 {130}	766.490 { 44}	670.784 { 50}	279.079 {121}2	257.610 {131}	202.030 {467}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.00100	.36515	.00611	2.1864	1.8286	.04961	19.538	.09208	.00185
Stddev	.00031	.00138	.00066	.0147	.0555	.00119	.072	.00042	.00076
%RSD	30.488	.37658	10.757	.67067	3.0334	2.4003	.37054	.45435	40.953

#1	.00079	.36613	.00564	2.1968	1.7894	.04877	19.487	.09179	.00132
#2	.00122	.36418	.00657	2.1760	1.8678	.05045	19.589	.09238	.00239

Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Elem	Na8183	Ni2316	P_1782	Pb2203	S_1820	Sb2068	Se1960	Si2881	SiO2
Line	818.326 { 41}	231.604 {446}	178.284 {489}	220.353 {453}	182.034 {485}	206.833 {463}	196.090 {472}	288.158 {117}	288.158 {117}2
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	68.490	.10467	.00828	-.00171	33.058	-.00565	-.00143	17.993	38.506
Stddev	.060	.00015	.00103	.00018	.728	.00865	.00782	.166	.355
%RSD	.08806	.14148	12.394	10.674	2.2029	152.97	546.15	.92210	.92210

#1	68.533	.10477	.00900	-.00158	32.543	.00046	.00410	18.111	38.757
#2	68.448	.10456	.00755	-.00183	33.573	-.01177	-.00696	17.876	38.255

Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Elem	Sn1899	Sr4077	Th2837	Ti3349	Ti1908	U_3701	V_2924	Zn2062	Zr3391
Line	189.989 {477}	407.771 { 83}	283.730 {119}	334.904 {101}	190.856 {477}	370.152 { 91}	292.402 {115}	206.200 {163}	339.198 { 99}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	-.00145	.24099	-.00116	.00033	-.00136	.04477	.00094	.00594	.00261
Stddev	.00161	.00254	.00055	.00024	.00154	.02280	.00004	.00118	.00181
%RSD	111.19	1.0559	47.838	72.730	113.02	50.918	4.0487	19.915	69.436

#1	-.00031	.24279	-.00155	.00049	-.00027	.02865	.00097	.00677	.00389
#2	-.00259	.23919	-.00077	.00016	-.00245	.06089	.00092	.00510	.00133

Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Int. Std.	Y_2243	Y_3600	Y_3774
Line	224.306 {450}	360.073 { 94}	377.433 { 89}
Units	Cts/S	Cts/S	Cts/S
Avg	2637.9	38492.	2050.3
Stddev	20.7	227.	68.6
%RSD	.78479	.58950	3.3471

#1	2652.5	38332.	2001.8
#2	2623.3	38653.	2098.9

Sample Name: 280-82891-A-49-B Acquired: 5/17/2016 13:52:06 Type: Unk

Method: 6500_025(v6) Mode: CONC Corr. Factor: 1.000000

User: CRHOADES Prep Date: Custom ID2: Custom ID3:

Comment: 324753 6010C (Fe)

Elem	Ag3280	Al1670	As1890	B_2089	Ba4554	Be3130	Bi2230	Ca3179	Cd2288
Line	328.068 {103}	167.079 {502}	189.042 {478}	208.959 {461}	455.403 {74}	313.042 {108}	223.061 {451}	317.933 {106}	228.802 {447}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.00195	.01918	-.00503	.04088	.02775	-.00009	-.00148	31.609	.00072
Stddev	.00024	.00036	.00245	.00065	.00015	.00013	.00738	.069	.00023
%RSD	12.167	1.8777	48.696	1.5989	.54031	149.11	497.44	.21697	31.886

#1	.00212	.01892	-.00677	.04135	.02765	.00000	.00373	31.657	.00056
#2	.00178	.01943	-.00330	.04042	.02786	-.00018	-.00670	31.560	.00088

Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Elem	Co2286	Cr2055	Cu3247	Fe2599	K_7664	Li6707	Mg2790	Mn2576	Mo2020
Line	228.616 {447}	205.560 {464}	324.754 {104}	259.940 {130}	766.490 {44}	670.784 {50}	279.079 {121}2	257.610 {131}	202.030 {467}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	-.00074	.00009	.00048	.11587	1.8811	.05893	20.666	.00598	-.00072
Stddev	.00031	.00053	.00038	.00083	.1232	.00149	.016	.00008	.00013
%RSD	42.772	580.00	78.418	.71308	6.5485	2.5237	.07802	1.3388	17.958

#1	-.00051	.00047	.00022	.11645	1.7940	.05788	20.678	.00593	-.00063
#2	-.00096	-.00028	.00075	.11528	1.9682	.05998	20.655	.00604	-.00082

Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Elem	Na8183	Ni2316	P_1782	Pb2203	S_1820	Sb2068	Se1960	Si2881	SiO2
Line	818.326 {41}	231.604 {446}	178.284 {489}	220.353 {453}	182.034 {485}	206.833 {463}	196.090 {472}	288.158 {117}	288.158 {117}2
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	63.221	.00686	.01337	.00185	45.052	-.00630	W -.00811	20.960	44.855
Stddev	.680	.00005	.00398	.00035	.116	.00772	.00347	.165	.353
%RSD	1.0757	.71372	29.742	18.717	.25766	122.58	42.732	.78653	.78653

#1	63.702	.00690	.01056	.00209	45.134	-.01175	-.00566	20.844	44.605
#2	62.740	.00683	.01618	.00160	44.970	-.00084	-.01056	21.077	45.104

Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Warn	Chk Pass	Chk Pass
High Limit							5.0000		
Low Limit							-.00500		

Elem	Sn1899	Sr4077	Th2837	Ti3349	Ti1908	U_3701	V_2924	Zn2062	Zr3391
Line	189.989 {477}	407.771 {83}	283.730 {119}	334.904 {101}	190.856 {477}	370.152 {91}	292.402 {115}	206.200 {163}	339.198 {99}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	-.00136	.18331	-.00146	.00100	.00178	.04549	.00018	.00774	-.00110
Stddev	.00101	.00085	.00531	.00039	.00318	.04905	.00044	.00003	.00146
%RSD	74.396	.46580	364.34	38.942	178.67	107.83	240.27	.40256	133.14

#1	-.00208	.18391	.00230	.00072	.00403	.01080	-.00013	.00776	-.00214
#2	-.00065	.18270	-.00521	.00127	-.00047	.08017	.00049	.00772	-.00006

Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Int. Std.	Y_2243	Y_3600	Y_3774
Line	224.306 {450}	360.073 {94}	377.433 {89}
Units	Cts/S	Cts/S	Cts/S
Avg	2644.2	38782.	1975.2
Stddev	37.2	128.	9.6
%RSD	1.4061	.33112	.48599

#1	2670.4	38691.	1968.4
#2	2617.9	38873.	1982.0

Sample Name: 280-82891-A-58-B Acquired: 5/17/2016 13:54:44 Type: Unk

Method: 6500_025(v6) Mode: CONC Corr. Factor: 1.000000

User: CRHOADES Prep Date: Custom ID2: Custom ID3:

Comment: 324753 6010C (Fe)

Elem	Ag3280	Al1670	As1890	B_2089	Ba4554	Be3130	Bi2230	Ca3179	Cd2288
Line	328.068 {103}	167.079 {502}	189.042 {478}	208.959 {461}	455.403 { 74}	313.042 {108}	223.061 {451}	317.933 {106}	228.802 {447}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.00196	.01847	-.00013	.03977	.02593	-.00010	-.00677	30.703	.00032
Stddev	.00014	.00010	.00142	.00134	.00065	.00038	.00402	.533	.00020
%RSD	7.3187	.54839	1132.9	3.3723	2.4948	392.85	59.287	1.7370	63.179

#1	.00207	.01854	-.00113	.03882	.02638	.00017	-.00961	31.080	.00046
#2	.00186	.01840	.00088	.04072	.02547	-.00036	-.00393	30.326	.00018

Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Elem	Co2286	Cr2055	Cu3247	Fe2599	K_7664	Li6707	Mg2790	Mn2576	Mo2020
Line	228.616 {447}	205.560 {464}	324.754 {104}	259.940 {130}	766.490 { 44}	670.784 { 50}	279.079 {121}2	257.610 {131}	202.030 {467}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	-.00072	.00025	.00033	.11002	1.8509	.05392	20.450	.00599	-.00086
Stddev	.00009	.00017	.00002	.00859	.0290	.00183	.001	.00013	.00008
%RSD	12.099	65.577	6.7230	7.8116	1.5684	3.4004	.00619	2.2159	8.8674

#1	-.00065	.00014	.00034	.11610	1.8715	.05263	20.449	.00608	-.00080
#2	-.00078	.00037	.00031	.10394	1.8304	.05522	20.450	.00589	-.00091

Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Elem	Na8183	Ni2316	P_1782	Pb2203	S_1820	Sb2068	Se1960	Si2881	SiO2
Line	818.326 { 41}	231.604 {446}	178.284 {489}	220.353 {453}	182.034 {485}	206.833 {463}	196.090 {472}	288.158 {117}	288.158 {117}2
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	61.826	.00567	.01405	-.00283	44.579	-.00309	W -.00775	20.641	44.173
Stddev	.698	.00042	.00013	.00006	.371	.00533	.00338	.111	.238
%RSD	1.1285	7.4397	.94106	2.0334	.83242	172.37	43.653	.53916	.53916

#1	61.333	.00597	.01414	-.00288	44.841	.00068	-.01014	20.563	44.004
#2	62.320	.00537	.01395	-.00279	44.316	-.00687	-.00536	20.720	44.341

Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Warn	Chk Pass	Chk Pass
High Limit							5.0000		
Low Limit							-.00500		

Elem	Sn1899	Sr4077	Th2837	Ti3349	Ti1908	U_3701	V_2924	Zn2062	Zr3391
Line	189.989 {477}	407.771 { 83}	283.730 {119}	334.904 {101}	190.856 {477}	370.152 { 91}	292.402 {115}	206.200 {163}	339.198 { 99}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	-.00147	.18016	-.00192	.00110	-.00302	.02451	.00017	.00588	.00047
Stddev	.00042	.00003	.00178	.00000	.00329	.04072	.00098	.00012	.00068
%RSD	28.821	.01416	92.397	.09068	109.19	166.16	574.45	1.9719	145.11

#1	-.00117	.18018	-.00067	.00110	-.00534	.05330	-.00052	.00596	.00094
#2	-.00177	.18014	-.00318	.00110	-.00069	-.00429	.00087	.00579	-.00001

Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Int. Std.	Y_2243	Y_3600	Y_3774
Line	224.306 {450}	360.073 { 94}	377.433 { 89}
Units	Cts/S	Cts/S	Cts/S
Avg	2684.8	39065.	2032.5
Stddev	62.3	479.	12.1
%RSD	2.3211	1.2272	.59356

#1	2728.8	39404.	2024.0
#2	2640.7	38726.	2041.1

Sample Name: 280-82891-A-69-B Acquired: 5/17/2016 13:57:21 Type: Unk

Method: 6500_025(v6) Mode: CONC Corr. Factor: 1.000000

User: CRHOADES Prep Date: Custom ID2: Custom ID3:

Comment: 324753 6010C (Fe)

Elem	Ag3280	Al1670	As1890	B_2089	Ba4554	Be3130	Bi2230	Ca3179	Cd2288
Line	328.068 {103}	167.079 {502}	189.042 {478}	208.959 {461}	455.403 { 74}	313.042 {108}	223.061 {451}	317.933 {106}	228.802 {447}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.00122	.01789	.00399	.05756	.01440	.00000	-.00085	52.733	.00111
Stddev	.00035	.00009	.00092	.00107	.00076	.0002	.00025	.957	.00026
%RSD	28.948	.50611	22.930	1.8586	5.2919	8517.2	29.807	1.8157	23.104

#1	.00097	.01782	.00335	.05681	.01494	-.00013	-.00103	53.410	.00093
#2	.00147	.01795	.00464	.05832	.01386	.00013	-.00067	52.056	.00129

Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Elem	Co2286	Cr2055	Cu3247	Fe2599	K_7664	Li6707	Mg2790	Mn2576	Mo2020
Line	228.616 {447}	205.560 {464}	324.754 {104}	259.940 {130}	766.490 { 44}	670.784 { 50}	279.079 {121}2	257.610 {131}	202.030 {467}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.00300	.00013	.00028	.08859	2.3058	.05071	44.442	.03098	-.00118
Stddev	.00018	.00019	.00005	.00614	.0867	.00094	.098	.00002	.00072
%RSD	6.0309	142.58	18.921	6.9362	3.7585	1.8479	.22018	.06207	60.686

#1	.00313	.00000	.00032	.08424	2.3671	.05005	44.512	.03097	-.00169
#2	.00287	.00027	.00024	.09293	2.2446	.05137	44.373	.03100	-.00067

Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Elem	Na8183	Ni2316	P_1782	Pb2203	S_1820	Sb2068	Se1960	Si2881	SiO2
Line	818.326 { 41}	231.604 {446}	178.284 {489}	220.353 {453}	182.034 {485}	206.833 {463}	196.090 {472}	288.158 {117}	288.158 {117}2
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	66.529	.00894	.00627	-.00068	94.778	-.00359	W -.00503	18.274	39.107
Stddev	.167	.00013	.00044	.00197	.250	.00066	.00410	.050	.106
%RSD	.25158	1.4599	6.9609	291.07	.26389	18.345	81.523	.27095	.27095

#1	66.648	.00903	.00596	.00072	94.955	-.00405	-.00792	18.309	39.182
#2	66.411	.00885	.00658	-.00207	94.601	-.00312	-.00213	18.239	39.032

Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Warn	Chk Pass	Chk Pass
High Limit							5.0000		
Low Limit							-.00500		

Elem	Sn1899	Sr4077	Th2837	Ti3349	Ti1908	U_3701	V_2924	Zn2062	Zr3391
Line	189.989 {477}	407.771 { 83}	283.730 {119}	334.904 {101}	190.856 {477}	370.152 { 91}	292.402 {115}	206.200 {163}	339.198 { 99}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	-.00209	.31756	-.00113	.00080	-.00030	-.00137	-.00009	.00799	.00152
Stddev	.00165	.00663	.00055	.00040	.00626	.04283	.00029	.00005	.00059
%RSD	78.809	2.0878	48.908	49.703	2064.9	3116.5	323.07	.65610	38.933

#1	-.00325	.32225	-.00153	.00108	-.00473	-.03166	.00012	.00803	.00110
#2	-.00092	.31287	-.00074	.00052	.00412	.02891	-.00030	.00796	.00193

Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Int. Std.	Y_2243	Y_3600	Y_3774
Line	224.306 {450}	360.073 { 94}	377.433 { 89}
Units	Cts/S	Cts/S	Cts/S
Avg	2727.1	39302.	2002.7
Stddev	12.7	15.	24.1
%RSD	.46714	.03808	1.2035

#1	2736.1	39312.	1985.6
#2	2718.1	39291.	2019.7

Sample Name: 280-82967-B-3-A Acquired: 5/17/2016 13:59:58 Type: Unk

Method: 6500_025(v6) Mode: CONC Corr. Factor: 1.000000

User: CRHOADES Prep Date: 5/13 Custom ID2: Custom ID3:

Comment: 325081 6010C (Fe)

Elem	Ag3280	Al1670	As1890	B_2089	Ba4554	Be3130	Bi2230	Ca3179	Cd2288
Line	328.068 {103}	167.079 {502}	189.042 {478}	208.959 {461}	455.403 {74}	313.042 {108}	223.061 {451}	317.933 {106}	228.802 {447}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.00151	.32128	.00356	.29388	.02379	-.00025	-.00762	8.5624	.00006
Stddev	.00082	.00020	.00484	.00219	.00071	.00027	.00027	.0014	.00024
%RSD	54.489	.06315	136.12	.74456	2.9707	111.68	3.4879	.01647	425.96

#1	.00209	.32142	.00013	.29234	.02329	-.00044	-.00743	8.5634	-.00011
#2	.00093	.32113	.00699	.29543	.02429	-.00005	-.00781	8.5614	.00023

Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Elem	Co2286	Cr2055	Cu3247	Fe2599	K_7664	Li6707	Mg2790	Mn2576	Mo2020
Line	228.616 {447}	205.560 {464}	324.754 {104}	259.940 {130}	766.490 {44}	670.784 {50}	279.079 {121}2	257.610 {131}	202.030 {467}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.00028	.00066	.00080	.67739	.89585	-.00613	1.5924	.01358	.00056
Stddev	.00012	.00037	.00026	.00366	.03831	.00199	.0022	.00002	.00035
%RSD	44.142	56.259	32.352	.54049	4.2768	32.367	.14022	.15162	63.209

#1	.00037	.00040	.00099	.67998	.92294	-.00473	1.5908	.01356	.00031
#2	.00019	.00093	.00062	.67480	.86876	-.00754	1.5939	.01359	.00081

Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Elem	Na5895	Na8183	Ni2316	P_1782	Pb2203	S_1820	Sb2068	Se1960	Si2881
Line	589.592 {57}	818.326 {41}	231.604 {446}	178.284 {489}	220.353 {453}	182.034 {485}	206.833 {463}	196.090 {472}	288.158 {117}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	9.2639	W 10.759	.00182	.14470	-.00054	6.6451	-.00572	-.00374	18.323
Stddev	.0084	.162	.00077	.00246	.00005	.0459	.00407	.00070	.113
%RSD	.09065	1.5077	42.385	1.7022	10.108	.69059	71.078	18.658	.61650

#1	9.2698	10.874	.00127	.14644	-.00058	6.6126	-.00285	-.00325	18.403
#2	9.2580	10.645	.00236	.14296	-.00050	6.6775	-.00860	-.00424	18.243

Check ?	Chk Pass	Chk Warn	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit		500.00							
Low Limit		11.000							

Elem	SiO2	Sn1899	Sr4077	Th2837	Ti3349	Ti1908	U_3701	V_2924	Zn2062
Line	288.158 {117}2	189.989 {477}	407.771 {83}	283.730 {119}	334.904 {101}	190.856 {477}	370.152 {91}	292.402 {115}	206.200 {163}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	39.211	-.00197	.09891	-.00165	.01738	.00043	.06272	.00297	.02373
Stddev	.242	.00028	.00001	.00099	.00006	.00008	.00570	.00012	.00081
%RSD	.61650	14.451	.00564	60.260	.32745	19.330	9.0883	3.9267	3.4120

#1	39.382	-.00217	.09892	-.00235	.01734	.00037	.05869	.00305	.02316
#2	39.040	-.00177	.09891	-.00095	.01742	.00049	.06675	.00288	.02430

Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Elem	Zr3391								
Line	339.198 {99}								
Units	ppm								
Avg	-.00137								
Stddev	.00190								
%RSD	137.97								

#1	-.00003								
#2	-.00271								

Check ?	Chk Pass								
High Limit									
Low Limit									

Sample Name: 280-82967-B-3-A Acquired: 5/17/2016 13:59:58 Type: Unk
Method: 6500_025(v6) Mode: CONC Corr. Factor: 1.000000
User: CRHOADES Prep Date: 5/13 Custom ID2: Custom ID3:
Comment: 325081 6010C (Fe)

Int. Std.	Y_2243	Y_3600	Y_3774
Line	224.306 {450}	360.073 { 94}	377.433 { 89}
Units	Cts/S	Cts/S	Cts/S
Avg	2676.6	38896.	1988.0
Stddev	11.8	507.	20.8
%RSD	.44061	1.3035	1.0481
#1	2668.2	38537.	1973.2
#2	2684.9	39254.	2002.7

Sample Name: CCVH-3883905 Acquired: 5/17/2016 14:02:36 Type: QC
Method: 6500_025(v6) Mode: CONC Corr. Factor: 1.000000
User: CRHOADES Prep Date: Custom ID2: Custom ID3:
Comment:

Elem	Ag3280	Al3092	As1890	B_2089	Ba4554	Be3130	Bi2230	Ca3179	Cd2288	Co2286	Cr2055	Cu3247	Fe2714
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	-0.00600	52.366	.00017	.00367	-.00041	-.00009	.98230	-.01091	-.00053	-.00151	-.00032	-.01361	52.777
Stddev	.00117	.624	.00221	.00134	.00024	.00012	.03017	.00362	.00017	.00040	.00056	.00017	.228
%RSD	19.520	1.1910	1315.9	36.478	59.126	133.85	3.0709	33.167	31.220	26.816	174.76	1.2308	.43134

#1	-0.00517	52.807	-0.00139	.00273	-0.00024	-0.00017	1.0036	-.00835	-.00041	-.00122	-.00072	-.01373	52.616
#2	-.00683	51.925	.00173	.00462	-0.00058	.00000	.96097	-.01347	-.00065	-.00179	.00008	-.01349	52.938

Check ?	None	Chk Pass	None	None	None	None	Chk Pass	None	None	None	None	None	Chk Pass
Value													
Range													

Elem	K_7664	Li6707	Mg2790	Mn2576	Mo2020	Na8183	Ni2316	P_1782	Pb2203	S_1820	Sb2068	Se1960	Si2881
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	-.10362	-.00814	.01655	-.00088	-.00227	268.93	.00146	.00905	.00024	4.9976	-.01016	-.01379	-.10111
Stddev	.12137	.00058	.00004	.00003	.00005	1.25	.00044	.00252	.00043	.1387	.00264	.00742	.00216
%RSD	117.12	7.0954	.26847	3.6813	2.0649	.46498	29.923	27.798	181.43	2.7744	25.949	53.792	2.1329

#1	-.18944	-.00774	.01658	-0.00086	-.00224	269.82	.00115	.00727	.00054	5.0956	-.01202	-.01903	-.09958
#2	-.01780	-.00855	.01651	-0.00091	-.00230	268.05	.00177	.01083	-.00007	4.8995	-.00830	-.00854	-.10263

Check ?	None	None	None	None	None	Chk Pass	None	None	None	Chk Pass	None	None	None
Value													
Range													

Elem	SiO2	Sn1899	Sr4077	Th2837	Ti3349	Ti1908	U_3701	V_2924	Zn2062	Zr3391
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	-.21637	-.00136	.00016	4.8651	-.00136	-.00159	9.9571	.01204	.00907	-.13924
Stddev	.00462	.00032	.00000	.0042	.00074	.00372	.2673	.00019	.00041	.00403
%RSD	2.1329	23.395	2.2996	.08576	54.734	233.40	2.6850	1.5661	4.5021	2.8958

#1	-.21311	-.00159	.00017	4.8680	-0.00083	-.00423	10.146	.01218	.00878	-.13639
#2	-.21963	-.00114	.00016	4.8621	-0.00188	.00104	9.7680	.01191	.00936	-.14209

Check ?	None	None	None	Chk Pass	None	None	Chk Pass	None	None	None
Value										
Range										

Int. Std.	Y_2243	Y_3600	Y_3774
Units	Cts/S	Cts/S	Cts/S
Avg	2566.9	35701.	1811.9
Stddev	67.2	1021.	5.9
%RSD	2.6190	2.8610	.32465

#1	2519.4	36423.	1807.8
#2	2614.5	34979.	1816.1

Sample Name: CCV-3888422 Acquired: 5/17/2016 14:05:13 Type: QC
Method: 6500_025(v6) Mode: CONC Corr. Factor: 1.000000
User: CRHOADES Prep Date: Custom ID2: Custom ID3:
Comment:

Elem	Ag3280	Al1670	As1890	B_2089	Ba4554	Be3130	Bi2230	Ca3179	Cd2288	Co2286	Cr2055	Cu3247	Fe2599
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.48606	.49299	.95549	.49225	.48097	.49263	.00066	4.8047	.49937	.50792	.51124	.47409	2.5150
Stddev	.00126	.00280	.01843	.00128	.01515	.01316	.00067	.1459	.01035	.00492	.00502	.00260	.0575
%RSD	.25982	.56773	1.9290	.25984	3.1507	2.6707	101.22	3.0358	2.0727	.96850	.98224	.54842	2.2860
#1	.48695	.49497	.96852	.49315	.49169	.50193	.00113	4.9078	.50669	.51139	.51479	.47593	2.5557
#2	.48517	.49101	.94245	.49134	.47026	.48333	.00019	4.7015	.49205	.50444	.50769	.47225	2.4743

Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	None	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Value													
Range													

Elem	K_7664	Li6707	Mg2790	Mn2576	Mo2020	Na5895	Ni2316	P_1782	Pb2203	S_1820	Sb2068	Se1960	Si2881
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	47.960	.95252	19.184	.47350	.49590	5.0894	.49670	.97662	1.0059	-.08981	.97987	.95648	4.8982
Stddev	1.266	.00560	.017	.00028	.00749	.0974	.00697	.01057	.0118	.00074	.01696	.00245	.0165
%RSD	2.6399	.58776	.08824	.05902	1.5096	1.9138	1.4036	1.0823	1.1685	.81971	1.7310	.25605	.33608
#1	48.856	.95648	19.196	.47370	.50119	5.1583	.50163	.98409	1.0143	-.09033	.99186	.95821	4.8866
#2	47.065	.94856	19.172	.47330	.49060	5.0205	.49177	.96914	.99764	-.08929	.96787	.95475	4.9099

Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	None	Chk Pass	Chk Pass	Chk Pass
Value													
Range													

Elem	SiO2	Sn1899	Sr4077	Th2837	Ti3349	Ti1908	U_3701	V_2924	Zn2062	Zr3391
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	10.482	1.0038	.48772	-.00167	.46833	1.0137	.03803	.48967	.47241	.47315
Stddev	.035	.0101	.01480	.00538	.00072	.0076	.00265	.00551	.00214	.00066
%RSD	.33608	1.0036	3.0340	321.83	.15365	.75076	6.9585	1.1254	.45324	.13974
#1	10.457	1.0110	.49819	-.00547	.46782	1.0191	.03990	.49357	.47090	.47268
#2	10.507	.99672	.47726	.00213	.46884	1.0084	.03616	.48578	.47392	.47362

Check ?	Chk Pass	Chk Pass	Chk Pass	None	Chk Pass	Chk Pass	None	Chk Pass	Chk Pass	Chk Pass
Value										
Range										

Int. Std.	Y_2243	Y_3600	Y_3774
Units	Cts/S	Cts/S	Cts/S
Avg	2589.5	37449.	1820.3
Stddev	1.4	1004.	66.6
%RSD	.05351	2.6820	3.6561
#1	2590.5	38159.	1773.2
#2	2588.5	36739.	1867.3

Sample Name: CCB Acquired: 5/17/2016 14:07:43 Type: QC
Method: 6500_025(v6) Mode: CONC Corr. Factor: 1.000000
User: CRHOADES Prep Date: Custom ID2: Custom ID3:
Comment:

Elem	Ag3280	Al1670	As1890	B_2089	Ba4554	Be3130	Bi2230	Ca3179	Cd2288	Co2286	Cr2055
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.00011	.00079	.00520	.00191	-.00132	-.00002	-.00094	.00142	.00000	.00019	-.00036
Stddev	.00008	.00004	.00210	.00054	.00060	.00018	.00003	.00730	.00017	.00056	.00004
%RSD	78.579	4.6709	40.288	28.333	45.174	836.55	3.6931	513.21	26414.	296.90	11.627

#1	.00005	.00077	.00669	.00153	-.00174	.00010	-.00096	.00658	-.00012	-.00021	-.00039
#2	.00017	.00082	.00372	.00229	-.00090	-.00015	-.00091	-.00374	.00012	.00058	-.00033

Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit											
Low Limit											

Elem	Cu3247	Fe2599	K_7664	Li6707	Mg2790	Mn2576	Mo2020	Na5895	Ni2316	P_1782	Pb2203
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	-.00066	.00947	-.27114	-.00984	-.00025	.00005	.00145	-.06696	.00048	.00359	.00127
Stddev	.00022	.00326	.06956	.00452	.00005	.00012	.00096	.01384	.00052	.00050	.00019
%RSD	33.611	34.469	25.657	45.873	20.200	220.35	65.745	20.667	108.86	13.829	14.736

#1	-.00082	.01177	-.32033	-.00665	-.00029	.00014	.00078	-.07675	.00011	.00394	.00140
#2	-.00050	.00716	-.22195	-.01304	-.00022	-.00003	.00213	-.05718	.00085	.00324	.00114

Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit											
Low Limit											

Elem	S_1820	Sb2068	Se1960	Si2881	SiO2	Sn1899	Sr4077	Th2837	Ti3349	Ti1908	U_3701
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	-.09063	W .00445	-.00422	-.02433	-.05207	-.00197	-.00025	-.00281	.00095	.00432	.02686
Stddev	.00082	.00528	.00325	.10060	.21529	.00040	.00017	.00257	.00042	.00335	.02568
%RSD	.90899	118.74	77.042	413.48	413.48	20.108	68.979	91.404	43.493	77.446	95.630

#1	-.09005	.00819	-.00651	.04681	.10016	-.00225	-.00013	-.00100	.00125	.00196	.04501
#2	-.09121	.00071	-.00192	-.09547	-.20430	-.00169	-.00037	-.00463	.00066	.00669	.00870

Check ?	Chk Pass	Chk Warn	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit		.00100									
Low Limit		-.00100									

Elem	V_2924	Zn2062	Zr3391
Units	ppm	ppm	ppm
Avg	-.00023	.00098	-.00110
Stddev	.00058	.00006	.00487
%RSD	248.73	6.2664	442.60

#1	-.00064	.00094	.00234
#2	.00018	.00103	-.00455

Check ?	Chk Pass	Chk Pass	Chk Pass
High Limit			
Low Limit			

Int. Std.	Y_2243	Y_3600	Y_3774
Units	Cts/S	Cts/S	Cts/S
Avg	2537.0	37104.	1845.1
Stddev	12.6	38.	1.1
%RSD	.49843	.10358	.06167

#1	2546.0	37077.	1845.9
#2	2528.1	37131.	1844.3

Sample Name: CCVL-3894681 Acquired: 5/17/2016 14:10:12 Type: QC
Method: 6500_025(v6) Mode: CONC Corr. Factor: 1.000000
User: CRHOADES Prep Date: Custom ID2: Custom ID3:
Comment:

Elem	Ag3280	Al1670	As1890	B_2089	Ba4554	Be3130	Bi2230	Ca3179	Cd2288	Co2286	Cr2055
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.00974	.10021	.01652	.09626	.00835	F .00058	.10498	.18849	.00498	.01006	.01006
Stddev	.00016	.00002	.00071	.00126	.00033	.00003	.00845	.00785	.00026	.00062	.00005
%RSD	1.6378	.02181	4.3140	1.3102	3.9914	5.4397	8.0480	4.1649	5.1928	6.1660	.48001

#1	.00985	.10020	.01602	.09715	.00812	.00056	.11095	.19404	.00516	.01049	.01010
#2	.00962	.10023	.01703	.09536	.00859	.00061	.09900	.18294	.00480	.00962	.01003

Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Fail	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Value						.00100					
Range						-30.000%					

Elem	Cu3247	Fe2599	K_7664	Li6707	Mg2790	Mn2576	Mo2020	Na5895	Ni2316	P_1782	Pb2203
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.01362	.10485	2.7561	F -.00073	.19257	.00981	.01895	.92319	.04087	2.8303	.00968
Stddev	.00036	.00793	.1137	.00229	.00193	.00021	.00021	.02267	.00063	.0392	.00130
%RSD	2.6701	7.5666	4.1239	312.12	1.0039	2.1345	1.1320	2.4553	1.5381	1.3846	13.444

#1	.01336	.09924	2.6757	-.00235	.19121	.00996	.01879	.90716	.04131	2.8581	.01060
#2	.01387	.11046	2.8365	.00089	.19394	.00966	.01910	.93922	.04042	2.8026	.00876

Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Fail	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Value				.01000							
Range				-30.000%							

Elem	S_1820	Sb2068	Se1960	Si2881	SiO2	Sn1899	Sr4077	Th2837	Ti3349	Ti1908	U_3701
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	-.09269	.01859	.01566	.48746	1.0432	.09919	.00979	.01327	.00969	.01373	F .11197
Stddev	.00506	.00078	.00472	.01336	.0286	.00346	.00021	.00135	.00031	.00158	.01734
%RSD	5.4639	4.2190	30.126	2.7410	2.7410	3.4867	2.1027	10.164	3.2108	11.512	15.488

#1	-.09627	.01914	.01233	.49691	1.0634	.10164	.00964	.01232	.00947	.01485	.09971
#2	-.08911	.01803	.01900	.47801	1.0230	.09675	.00994	.01423	.00991	.01261	.12424

Check ?	None	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Fail
Value											.06000
Range											30.000%

Elem	V_2924	Zn2062	Zr3391
Units	ppm	ppm	ppm
Avg	.01007	.01876	.01363
Stddev	.00030	.00008	.00133
%RSD	3.0223	.44325	9.7587

#1	.01028	.01870	.01269
#2	.00985	.01882	.01457

Check ?	Chk Pass	Chk Pass	Chk Pass
Value			
Range			

Int. Std.	Y_2243	Y_3600	Y_3774
Units	Cts/S	Cts/S	Cts/S
Avg	2561.3	37016.	1850.7
Stddev	12.2	9.	6.4
%RSD	.47729	.02511	.34562

#1	2570.0	37023.	1846.2
#2	2552.7	37010.	1855.2

Sample Name: MB 280-325210/1-A Acquired: 5/17/2016 14:13:11 Type: Unk

Method: 6500_025(v6) Mode: CONC Corr. Factor: 1.000000

User: CRHOADES Prep Date: 5/16 Custom ID2: Custom ID3:

Comment: 325210 6010C (Sb) Q4

Elem	Ag3280	Al1670	As1890	B_2089	Ba4554	Be3130	Bi2230	Ca3179	Cd2288
Line	328.068 {103}	167.079 {502}	189.042 {478}	208.959 {461}	455.403 { 74}	313.042 {108}	223.061 {451}	317.933 {106}	228.802 {447}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.00104	.00389	.00489	.00034	-.00158	-.00028	-.00071	W .12458	.00011
Stddev	.00047	.00096	.00323	.00040	.00059	.00004	.00196	.01247	.00018
%RSD	45.452	24.549	66.096	119.41	37.355	13.046	276.86	10.009	158.10

#1	.00071	.00457	.00260	.00005	-.00199	-.00026	-.00210	.11577	.00024
#2	.00138	.00322	.00717	.00062	-.00116	-.00031	.00068	.13340	-.00001

Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Warn	Chk Pass
High Limit								.10000	
Low Limit								-.10000	

Elem	Co2286	Cr2055	Cu3247	Fe2599	K_7664	Li6707	Mg2790	Mn2576	Mo2020
Line	228.616 {447}	205.560 {464}	324.754 {104}	259.940 {130}	766.490 { 44}	670.784 { 50}	279.079 {121}2	257.610 {131}	202.030 {467}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	-.00018	-.00055	.00021	.03504	-.23451	F -.01031	.04747	.00044	-.00107
Stddev	.00013	.00006	.00045	.00892	.08603	.00265	.00254	.00005	.00004
%RSD	72.291	10.153	212.73	25.469	36.686	25.721	5.3443	10.782	4.0443

#1	-.00009	-.00059	.00053	.04135	-.29535	-.00843	.04567	.00041	-.00104
#2	-.00028	-.00051	-.00011	.02873	-.17368	-.01218	.04926	.00047	-.00110

Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Fail	Chk Pass	Chk Pass	Chk Pass
High Limit						.01000			
Low Limit						-.01000			

Elem	Na5895	Ni2316	P_1782	Pb2203	S_1820	Sb2068	Se1960	Si2881	SiO2
Line	589.592 { 57}	231.604 {446}	178.284 {489}	220.353 {453}	182.034 {485}	206.833 {463}	196.090 {472}	288.158 {117}	288.158 {117}2
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.27712	.00033	.00303	.00054	F .32268	W -.00719	-.00240	-.03335	-.07136
Stddev	.01459	.00007	.00039	.00099	.01301	.00708	.00318	.02034	.04354
%RSD	5.2647	21.707	12.847	182.54	4.0320	98.495	132.61	61.009	61.009

#1	.28743	.00038	.00331	-.00016	.31348	-.01220	-.00464	-.01896	-.04058
#2	.26680	.00028	.00276	.00124	.33188	-.00218	-.00015	-.04773	-.10215

Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Fail	Chk Warn	Chk Pass	Chk Pass	None
High Limit					.10000	.00500			
Low Limit					-.10000	-.00500			

Elem	Sn1899	Sr4077	Th2837	Ti3349	Ti1908	U_3701	V_2924	Zn2062	Zr3391
Line	189.989 {477}	407.771 { 83}	283.730 {119}	334.904 {101}	190.856 {477}	370.152 { 91}	292.402 {115}	206.200 {163}	339.198 { 99}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	-.00187	.00219	-.00043	.00057	.00021	F .06789	.00014	.00048	.00030
Stddev	.00109	.00023	.00193	.00022	.00006	.10845	.00035	.00022	.00200
%RSD	58.613	10.518	444.27	39.136	30.977	159.73	250.73	47.144	678.12

#1	-.00264	.00202	-.00180	.00072	.00025	.14458	.00039	.00032	-.00112
#2	-.00109	.00235	.00093	.00041	.00016	-.00879	-.00011	.00063	.00171

Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Fail	Chk Pass	Chk Pass	Chk Pass
High Limit						.06000			
Low Limit						-.06000			

Int. Std.	Y_2243	Y_3600	Y_3774						
Line	224.306 {450}	360.073 { 94}	377.433 { 89}						
Units	Cts/S	Cts/S	Cts/S						
Avg	2636.7	38300.	1863.9						
Stddev	8.7	59.	21.5						
%RSD	.32935	.15445	1.1510						

#1	2642.9	38341.	1879.1						
#2	2630.6	38258.	1848.8						

Sample Name: LCS 280-325210/2-A Acquired: 5/17/2016 14:15:33 Type: Unk
Method: 6500_025(v6) Mode: CONC Corr. Factor: 1.000000
User: CRHOADES Prep Date: Custom ID2: Custom ID3:
Comment: 325210 6010C (Sb) Q4

Elem	Ag3280	Al1670	As1890	B_2089	Ba4554	Be3130	Bi2230	Ca3179	Cd2288
Line	328.068 {103}	167.079 {502}	189.042 {478}	208.959 {461}	455.403 {74}	313.042 {108}	223.061 {451}	317.933 {106}	228.802 {447}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.04834	1.9022	.98534	.98780	1.9356	.04949	2.0211	47.703	.09993
Stddev	.00030	.0001	.00976	.00451	.0286	.00060	.0005	.734	.00017
%RSD	.61119	.00719	.99082	.45617	1.4793	1.2158	.02345	1.5380	.17385

#1	.04813	1.9023	.97843	.98461	1.9153	.04907	2.0214	47.184	.09980
#2	.04855	1.9021	.99224	.99098	1.9558	.04992	2.0208	48.222	.10005

Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	None	Chk Pass	Chk Pass
High Limit									
Low Limit									

Elem	Co2286	Cr2055	Cu3247	Fe2599	K_7664	Li6707	Mg2790	Mn2576	Mo2020
Line	228.616 {447}	205.560 {464}	324.754 {104}	259.940 {130}	766.490 {44}	670.784 {50}	279.079 {121}2	257.610 {131}	202.030 {467}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.49010	.20087	.23101	1.0018	48.591	.94232	47.976	.46675	1.0280
Stddev	.00212	.00056	.00009	.0056	.671	.00670	.042	.00093	.0009
%RSD	.43336	.27691	.03691	.56027	1.3815	.71049	.08852	.19866	.08398

#1	.48860	.20047	.23095	.99787	48.116	.94705	48.006	.46740	1.0286
#2	.49160	.20126	.23107	1.0058	49.066	.93758	47.946	.46609	1.0274

Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Elem	Na8183	Ni2316	P_1782	Pb2203	S_1820	Sb2068	Se1960	Si2881	SiO2
Line	818.326 {41}	231.604 {446}	178.284 {489}	220.353 {453}	182.034 {485}	206.833 {463}	196.090 {472}	288.158 {117}	288.158 {117}2
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	55.933	.48203	9.9716	.50026	1.9810	.52199	2.0087	9.7715	20.911
Stddev	.393	.00126	.0170	.00258	.0059	.00340	.0069	.0222	.048
%RSD	.70298	.26239	.17048	.51658	.29988	.65112	.34088	.22713	.22713

#1	56.211	.48114	9.9596	.49844	1.9768	.52439	2.0135	9.7872	20.945
#2	55.655	.48293	9.9836	.50209	1.9853	.51958	2.0038	9.7558	20.877

Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	None	Chk Pass	Chk Pass	Chk Pass	None
High Limit									
Low Limit									

Elem	Sn1899	Sr4077	Th2837	Ti3349	Ti1908	U_3701	V_2924	Zn2062	Zr3391
Line	189.989 {477}	407.771 {83}	283.730 {119}	334.904 {101}	190.856 {477}	370.152 {91}	292.402 {115}	206.200 {163}	339.198 {99}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	2.0215	.97410	.99078	.94209	1.8467	2.0197	.48183	.46555	.44553
Stddev	.0063	.01354	.00181	.00178	.0577	.0138	.00053	.00710	.00312
%RSD	.31288	1.3901	.18289	.18898	3.1229	.68329	.10908	1.5251	.70013

#1	2.0260	.96452	.99206	.94335	1.8875	2.0100	.48220	.46053	.44774
#2	2.0170	.98367	.98949	.94083	1.8059	2.0295	.48146	.47057	.44333

Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Int. Std.	Y_2243	Y_3600	Y_3774
Line	224.306 {450}	360.073 {94}	377.433 {89}
Units	Cts/S	Cts/S	Cts/S
Avg	2550.4	36906.	1870.3
Stddev	5.2	53.	26.5
%RSD	.20288	.14246	1.4158

#1	2554.1	36869.	1889.0
#2	2546.7	36943.	1851.6

Sample Name: 280-82931-B-4-A Acquired: 5/17/2016 14:17:59 Type: Unk

Method: 6500_025(v6) Mode: CONC Corr. Factor: 1.000000

User: CRHOADES Prep Date: Custom ID2: Custom ID3:

Comment: 325210 6010C (Sb) Q4

Elem	Ag3280	Al1670	As1890	B_2089	Ba4554	Be3130	Bi2230	Ca3179	Cd2288
Line	328.068 {103}	167.079 {502}	189.042 {478}	208.959 {461}	455.403 { 74}	313.042 {108}	223.061 {451}	317.933 {106}	228.802 {447}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.00121	.00091	.00535	.00469	.00014	.00011	.00201	.03530	.00005
Stddev	.00002	.00067	.00866	.00126	.00148	.00015	.00346	.01011	.00034
%RSD	1.3819	74.193	161.96	26.759	1046.2	131.85	172.16	28.640	725.77

#1	.00120	.00139	-.00078	.00558	.00119	.00001	-.00044	.04245	-.00019
#2	.00122	.00043	.01147	.00380	-.00091	.00021	.00445	.02815	.00028

Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Elem	Co2286	Cr2055	Cu3247	Fe2599	K_7664	Li6707	Mg2790	Mn2576	Mo2020
Line	228.616 {447}	205.560 {464}	324.754 {104}	259.940 {130}	766.490 { 44}	670.784 { 50}	279.079 {121}2	257.610 {131}	202.030 {467}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	-.00042	-.00036	-.00004	.00814	-.20594	-.00770	.00326	.00015	.00246
Stddev	.00027	.00031	.00098	.00751	.10783	.00014	.00052	.00001	.00158
%RSD	65.010	85.453	2639.2	92.345	52.360	1.8279	16.043	8.6589	64.131

#1	-.00062	-.00058	-.00073	.01345	-.12970	-.00780	.00363	.00014	.00135
#2	-.00023	-.00014	.00065	.00282	-.28219	-.00760	.00289	.00016	.00358

Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Elem	Na5895	Ni2316	P_1782	Pb2203	S_1820	Sb2068	Se1960	Si2881	SiO2
Line	589.592 { 57}	231.604 {446}	178.284 {489}	220.353 {453}	182.034 {485}	206.833 {463}	196.090 {472}	288.158 {117}	288.158 {117}2
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	-.10048	.00185	.00399	-.00197	-.09804	-.00539	.00359	-.03947	-.08447
Stddev	.02850	.00028	.00092	.00033	.00752	.00310	.00218	.00004	.00009
%RSD	28.365	15.049	23.122	16.822	7.6715	57.595	60.724	.10738	.10738

#1	-.08033	.00204	.00464	-.00221	-.09272	-.00758	.00205	-.03950	-.08454
#2	-.12064	.00165	.00333	-.00174	-.10336	-.00319	.00513	-.03944	-.08441

Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Elem	Sn1899	Sr4077	Th2837	Ti3349	Ti1908	U_3701	V_2924	Zn2062	Zr3391
Line	189.989 {477}	407.771 { 83}	283.730 {119}	334.904 {101}	190.856 {477}	370.152 { 91}	292.402 {115}	206.200 {163}	339.198 { 99}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	-.00231	.00015	-.00207	.00116	.03836	.07014	.00011	.00049	.00202
Stddev	.00193	.00038	.00397	.00084	.01182	.02291	.00018	.00044	.00324
%RSD	83.429	243.99	191.53	72.662	30.811	32.664	165.99	88.759	160.09

#1	-.00095	.00042	.00073	.00056	.03001	.05394	-.00002	.00018	.00431
#2	-.00367	-.00011	-.00488	.00176	.04672	.08635	.00024	.00080	-.00027

Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Int. Std.	Y_2243	Y_3600	Y_3774
Line	224.306 {450}	360.073 { 94}	377.433 { 89}
Units	Cts/S	Cts/S	Cts/S
Avg	2681.5	38855.	1840.1
Stddev	37.1	102.	91.2
%RSD	1.3834	.26272	4.9542

#1	2655.2	38783.	1775.6
#2	2707.7	38927.	1904.5

Sample Name: 280-82954-C-16-A Acquired: 5/17/2016 14:20:22 Type: Unk

Method: 6500_025(v6) Mode: CONC Corr. Factor: 1.000000

User: CRHOADES Prep Date: Custom ID2: Custom ID3:

Comment: 325210 6010C (Sb) Q4

Elem	Ag3280	Al1670	As1890	B_2089	Ba4554	Be3130	Bi2230	Ca3179	Cd2288
Line	328.068 {103}	167.079 {502}	189.042 {478}	208.959 {461}	455.403 {74}	313.042 {108}	223.061 {451}	317.933 {106}	228.802 {447}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.00179	.00354	-.00101	.00192	-.00160	-.00010	-.00048	.02271	.00035
Stddev	.00067	.00003	.00466	.00021	.00028	.00012	.00134	.00232	.00024
%RSD	37.615	.96834	460.25	10.843	17.545	121.17	277.93	10.226	67.687

#1	.00131	.00351	.00228	.00206	-.00140	-.00018	-.00143	.02107	.00052
#2	.00226	.00356	-.00431	.00177	-.00180	-.00001	.00046	.02435	.00018

Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Elem	Co2286	Cr2055	Cu3247	Fe2599	K_7664	Li6707	Mg2790	Mn2576	Mo2020
Line	228.616 {447}	205.560 {464}	324.754 {104}	259.940 {130}	766.490 {44}	670.784 {50}	279.079 {121}2	257.610 {131}	202.030 {467}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	-.00020	-.00043	.00019	.04045	-.22930	-.00613	-.00456	.00043	-.00025
Stddev	.00003	.00042	.00067	.00341	.00556	.00023	.00764	.00007	.00029
%RSD	15.815	96.940	358.90	8.4261	2.4256	3.7656	167.47	16.721	116.20

#1	-.00022	-.00073	-.00029	.03804	-.23323	-.00597	-.00997	.00038	-.00046
#2	-.00017	-.00014	.00066	.04285	-.22536	-.00629	.00084	.00048	-.00004

Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Elem	Na5895	Ni2316	P_1782	Pb2203	S_1820	Sb2068	Se1960	Si2881	SiO2
Line	589.592 {57}	231.604 {446}	178.284 {489}	220.353 {453}	182.034 {485}	206.833 {463}	196.090 {472}	288.158 {117}	288.158 {117}2
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	-.11280	-.00005	.00577	.00006	-.09956	-.00578	F -.01081	-.03343	-.07154
Stddev	.00727	.00052	.00175	.00054	.00735	.00261	.00284	.00840	.01797
%RSD	6.4424	976.41	30.364	837.17	7.3778	45.183	26.248	25.116	25.116

#1	-.11794	-.00042	.00701	.00044	-.10475	-.00393	-.01281	-.03937	-.08425
#2	-.10767	.00031	.00453	-.00031	-.09437	-.00762	-.00880	-.02749	-.05883

Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Fail	Chk Pass	Chk Pass
High Limit							50.000		
Low Limit							-.01000		

Elem	Sn1899	Sr4077	Th2837	Ti3349	Ti1908	U_3701	V_2924	Zn2062	Zr3391
Line	189.989 {477}	407.771 {83}	283.730 {119}	334.904 {101}	190.856 {477}	370.152 {91}	292.402 {115}	206.200 {163}	339.198 {99}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	-.00257	.00018	-.00107	.00087	.01628	.02212	-.00004	.00098	.00072
Stddev	.00255	.00004	.00210	.00042	.00444	.01143	.00059	.00088	.00415
%RSD	99.170	20.729	197.02	48.833	27.275	51.684	1461.5	89.837	576.53

#1	-.00437	.00020	-.00255	.00117	.01314	.03020	.00038	.00036	-.00221
#2	-.00077	.00015	.00042	.00057	.01942	.01403	-.00046	.00160	.00365

Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Int. Std.	Y_2243	Y_3600	Y_3774
Line	224.306 {450}	360.073 {94}	377.433 {89}
Units	Cts/S	Cts/S	Cts/S
Avg	2741.9	40035.	2139.6
Stddev	38.7	308.	98.2
%RSD	1.4132	.77018	4.5907

#1	2769.3	39817.	2070.1
#2	2714.5	40253.	2209.0

Sample Name: 82954-C-16-A SD@5 Acquired: 5/17/2016 14:22:44 Type: Unk
Method: 6500_025(v6) Mode: CONC Corr. Factor: 1.000000
User: CRHOADES Prep Date: Custom ID2: Custom ID3:
Comment: 325210 6010C (Sb) Q4

Elem	Ag3280	Al1670	As1890	B_2089	Ba4554	Be3130	Bi2230	Ca3179	Cd2288
Line	328.068 {103}	167.079 {502}	189.042 {478}	208.959 {461}	455.403 { 74}	313.042 {108}	223.061 {451}	317.933 {106}	228.802 {447}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.00163	-.00002	-.00232	.00094	-.00148	.00006	-.00285	-.00089	-.00004
Stddev	.00047	.00000	.00562	.00057	.00049	.00012	.00238	.01050	.00039
%RSD	28.973	16.456	242.43	61.206	33.065	192.09	83.414	1184.4	872.93

#1	.00129	-.00002	-.00629	.00134	-.00183	-.00002	-.00453	-.00831	-.00032
#2	.00196	-.00003	.00165	.00053	-.00113	.00015	-.00117	.00654	.00023

Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Elem	Co2286	Cr2055	Cu3247	Fe2599	K_7664	Li6707	Mg2790	Mn2576	Mo2020
Line	228.616 {447}	205.560 {464}	324.754 {104}	259.940 {130}	766.490 { 44}	670.784 { 50}	279.079 {121}2	257.610 {131}	202.030 {467}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	-.00024	-.00051	.00000	.00862	-.06717	-.00193	-.00998	.00016	-.00122
Stddev	.00027	.00024	.0001	.00164	.08036	.00410	.00234	.00004	.00079
%RSD	115.92	46.548	2466.7	18.991	119.65	212.82	23.412	25.957	64.812

#1	-.00004	-.00068	.00006	.00746	-.12399	.00097	-.01163	.00019	-.00178
#2	-.00043	-.00034	-.00007	.00978	-.01034	-.00483	-.00833	.00013	-.00066

Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Elem	Na5895	Ni2316	P_1782	Pb2203	S_1820	Sb2068	Se1960	Si2881	SiO2
Line	589.592 { 57}	231.604 {446}	178.284 {489}	220.353 {453}	182.034 {485}	206.833 {463}	196.090 {472}	288.158 {117}	288.158 {117}2
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	-.15431	-.00048	.00439	-.00186	-.10309	-.00103	W -.00921	-.03214	-.06877
Stddev	.02563	.00018	.00120	.00155	.00551	.00443	.00834	.01482	.03171
%RSD	16.607	37.821	27.237	83.043	5.3474	428.83	90.494	46.110	46.110

#1	-.17243	-.00035	.00524	-.00077	-.10698	-.00417	-.01511	-.02166	-.04635
#2	-.13619	-.00061	.00355	-.00296	-.09919	.00210	-.00332	-.04262	-.09120

Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Warn	Chk Pass	Chk Pass
High Limit							5.0000		
Low Limit							-.00500		

Elem	Sn1899	Sr4077	Th2837	Ti3349	Ti1908	U_3701	V_2924	Zn2062	Zr3391
Line	189.989 {477}	407.771 { 83}	283.730 {119}	334.904 {101}	190.856 {477}	370.152 { 91}	292.402 {115}	206.200 {163}	339.198 { 99}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	-.00322	.00004	-.00152	.00022	.00592	.04098	-.00001	.00078	.00016
Stddev	.00010	.00006	.00312	.00000	.00199	.03581	.00027	.00020	.00085
%RSD	3.1141	166.62	205.66	.77578	33.581	87.400	2690.1	25.389	529.89

#1	-.00329	-.00001	-.00372	.00021	.00733	.06630	.00018	.00064	-.00044
#2	-.00315	.00008	.00069	.00022	.00452	.01565	-.00020	.00092	.00076

Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Int. Std.	Y_2243	Y_3600	Y_3774
Line	224.306 {450}	360.073 { 94}	377.433 { 89}
Units	Cts/S	Cts/S	Cts/S
Avg	2688.1	39941.	2119.8
Stddev	19.3	510.	91.1
%RSD	.71721	1.2769	4.2999

#1	2701.7	40301.	2184.3
#2	2674.5	39580.	2055.4

Sample Name: 280-82954-C-16-B MS Acquired: 5/17/2016 14:25:06 Type: Unk
Method: 6500_025(v6) Mode: CONC Corr. Factor: 1.000000
User: CRHOADES Prep Date: Custom ID2: Custom ID3:
Comment: 325210 6010C (Sb) Q4

Elem	Ag3280	Al1670	As1890	B_2089	Ba4554	Be3130	Bi2230	Ca3179	Cd2288
Line	328.068 {103}	167.079 {502}	189.042 {478}	208.959 {461}	455.403 {74}	313.042 {108}	223.061 {451}	317.933 {106}	228.802 {447}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.04864	1.8586	.97384	.99740	1.8705	.04804	F 2.0109	46.004	.09876
Stddev	.00014	.0053	.00329	.00324	.0116	.00006	.0024	.364	.00038
%RSD	.29017	.28410	.33775	.32521	.62059	.13324	.11909	.79167	.38938

#1	.04854	1.8549	.97616	.99511	1.8787	.04808	2.0126	46.261	.09903
#2	.04874	1.8623	.97151	.99970	1.8623	.04799	2.0092	45.746	.09849

Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Fail	Chk Pass	Chk Pass
High Limit							.10000		
Low Limit							-.10000		

Elem	Co2286	Cr2055	Cu3247	Fe2599	K_7664	Li6707	Mg2790	Mn2576	Mo2020
Line	228.616 {447}	205.560 {464}	324.754 {104}	259.940 {130}	766.490 {44}	670.784 {50}	279.079 {121}2	257.610 {131}	202.030 {467}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.48219	.19793	.23205	.98350	46.770	.92980	47.104	.45729	1.0227
Stddev	.00048	.00027	.00063	.00485	.194	.00171	.054	.00076	.0021
%RSD	.09918	.13734	.27329	.49313	.41508	.18398	.11430	.16686	.20483

#1	.48185	.19774	.23160	.98007	46.907	.92859	47.066	.45675	1.0242
#2	.48253	.19812	.23249	.98693	46.633	.93101	47.142	.45782	1.0212

Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Elem	Na8183	Ni2316	P_1782	Pb2203	S_1820	Sb2068	Se1960	Si2881	SiO2
Line	818.326 {41}	231.604 {446}	178.284 {489}	220.353 {453}	182.034 {485}	206.833 {463}	196.090 {472}	288.158 {117}	288.158 {117}2
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	52.948	.47371	W 9.9044	.48962	2.0053	.52455	2.0013	9.5509	20.439
Stddev	.328	.00222	.0149	.00257	.0026	.00584	.0034	.0345	.074
%RSD	.61889	.46769	.15016	.52471	.12935	1.1142	.17192	.36123	.36123

#1	52.716	.47215	9.9150	.49144	2.0034	.52868	1.9989	9.5265	20.387
#2	53.179	.47528	9.8939	.48781	2.0071	.52042	2.0037	9.5753	20.491

Check ?	Chk Pass	Chk Pass	Chk Warn	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit			2.0000						
Low Limit			-1.0000						

Elem	Sn1899	Sr4077	Th2837	Ti3349	Ti1908	U_3701	V_2924	Zn2062	Zr3391
Line	189.989 {477}	407.771 {83}	283.730 {119}	334.904 {101}	190.856 {477}	370.152 {91}	292.402 {115}	206.200 {163}	339.198 {99}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	W 2.0092	.93976	.96883	.93725	1.8325	2.0867	.47001	.44932	.44562
Stddev	.0069	.00577	.00003	.00110	.0321	.0078	.00101	.00156	.00144
%RSD	.34350	.61373	.00349	.11731	1.7498	.37230	.21441	.34645	.32253

#1	2.0141	.94384	.96885	.93647	1.8552	2.0812	.46930	.45042	.44664
#2	2.0044	.93569	.96880	.93803	1.8099	2.0922	.47073	.44822	.44461

Check ?	Chk Warn	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit	2.0000								
Low Limit	-.05000								

Int. Std.	Y_2243	Y_3600	Y_3774
Line	224.306 {450}	360.073 {94}	377.433 {89}
Units	Cts/S	Cts/S	Cts/S
Avg	2691.2	39130.	2051.3
Stddev	14.2	149.	.2
%RSD	.52752	.38092	.01105

#1	2701.2	39236.	2051.1
#2	2681.2	39025.	2051.5

Sample Name: 280-82954-C-16-C MSD Acquired: 5/17/2016 14:27:32 Type: Unk
Method: 6500_025(v6) Mode: CONC Corr. Factor: 1.000000
User: CRHOADES Prep Date: Custom ID2: Custom ID3:
Comment: 325210 6010C (Sb) Q4

Elem	Ag3280	Al1670	As1890	B_2089	Ba4554	Be3130	Bi2230	Ca3179	Cd2288
Line	328.068 {103}	167.079 {502}	189.042 {478}	208.959 {461}	455.403 {74}	313.042 {108}	223.061 {451}	317.933 {106}	228.802 {447}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.05015	1.9118	1.0034	1.0211	1.9054	.04869	F 2.0764	46.690	.10183
Stddev	.00053	.0098	.0048	.0052	.0702	.00174	.0009	1.790	.00044
%RSD	1.0631	.51547	.48111	.50503	3.6828	3.5795	.04130	3.8337	.42884

#1	.04978	1.9049	.99994	1.0174	1.9551	.04993	2.0758	47.956	.10152
#2	.05053	1.9188	1.0068	1.0247	1.8558	.04746	2.0770	45.424	.10214

Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Fail	Chk Pass	Chk Pass
High Limit							.10000		
Low Limit							-.10000		

Elem	Co2286	Cr2055	Cu3247	Fe2599	K_7664	Li6707	Mg2790	Mn2576	Mo2020
Line	228.616 {447}	205.560 {464}	324.754 {104}	259.940 {130}	766.490 {44}	670.784 {50}	279.079 {121}2	257.610 {131}	202.030 {467}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.49389	.20343	.23797	.98374	47.615	.93554	48.493	.47383	1.0452
Stddev	.00411	.00004	.00100	.03121	1.619	.00695	.014	.00138	.0086
%RSD	.83116	.01900	.41915	3.1726	3.4003	.74324	.02929	.29222	.82259

#1	.49679	.20340	.23867	1.0058	48.760	.94046	48.483	.47285	1.0513
#2	.49099	.20345	.23726	.96167	46.470	.93062	48.503	.47481	1.0391

Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Elem	Na8183	Ni2316	P_1782	Pb2203	S_1820	Sb2068	Se1960	Si2881	SiO2
Line	818.326 {41}	231.604 {446}	178.284 {489}	220.353 {453}	182.034 {485}	206.833 {463}	196.090 {472}	288.158 {117}	288.158 {117}2
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	54.596	.48807	W 10.106	.50575	2.0346	.53438	2.0531	9.7354	20.834
Stddev	.688	.00304	.082	.00233	.0014	.00193	.0408	.0398	.085
%RSD	1.2593	.62316	.80880	.46139	.06674	.36066	1.9893	.40879	.40879

#1	55.083	.48592	10.164	.50410	2.0355	.53302	2.0819	9.7635	20.894
#2	54.110	.49022	10.048	.50740	2.0336	.53574	2.0242	9.7072	20.773

Check ?	Chk Pass	Chk Pass	Chk Warn	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit			2.0000						
Low Limit			-1.0000						

Elem	Sn1899	Sr4077	Th2837	Ti3349	Ti1908	U_3701	V_2924	Zn2062	Zr3391
Line	189.989 {477}	407.771 {83}	283.730 {119}	334.904 {101}	190.856 {477}	370.152 {91}	292.402 {115}	206.200 {163}	339.198 {99}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	W 2.0375	.95817	1.0036	.96630	1.8938	2.0751	.48500	.46393	.45664
Stddev	.0388	.03552	.0028	.00288	.0803	.0247	.00227	.00006	.00707
%RSD	1.9023	3.7074	.28236	.29822	4.2392	1.1920	.46857	.01342	1.5475

#1	2.0650	.98329	1.0016	.96426	1.9505	2.0926	.48339	.46397	.46164
#2	2.0101	.93305	1.0057	.96833	1.8370	2.0576	.48660	.46388	.45165

Check ?	Chk Warn	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit	2.0000								
Low Limit	-.05000								

Int. Std.	Y_2243	Y_3600	Y_3774						
Line	224.306 {450}	360.073 {94}	377.433 {89}						
Units	Cts/S	Cts/S	Cts/S						
Avg	2645.6	37823.	2049.7						
Stddev	19.0	303.	104.1						
%RSD	.71701	.80123	5.0807						

#1	2632.1	38038.	1976.0						
#2	2659.0	37609.	2123.3						

Sample Name: 280-82954-C-16-A PDS Acquired: 5/17/2016 14:29:56 Type: Unk
Method: 6500_025(v6) Mode: CONC Corr. Factor: 1.000000
User: CRHOADES Prep Date: Custom ID2: Custom ID3:
Comment: 325210 6010C (Sb) Q4

Elem	Ag3280	Al1670	As1890	B_2089	Ba4554	Be3130	Bi2230	Ca3179	Cd2288
Line	328.068 {103}	167.079 {502}	189.042 {478}	208.959 {461}	455.403 {74}	313.042 {108}	223.061 {451}	317.933 {106}	228.802 {447}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.04579	.95187	.19458	.10395	.09574	.04849	-.00222	18.583	.05055
Stddev	.00015	.00071	.00189	.00009	.00066	.00033	.00131	.250	.00029
%RSD	.33623	.07476	.96933	.09066	.69223	.68650	59.154	1.3448	.56975

#1	.04590	.95137	.19325	.10388	.09527	.04825	-.00315	18.406	.05034
#2	.04568	.95237	.19591	.10401	.09620	.04873	-.00129	18.759	.05075

Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Elem	Co2286	Cr2055	Cu3247	Fe2599	K_7664	Li6707	Mg2790	Mn2576	Mo2020
Line	228.616 {447}	205.560 {464}	324.754 {104}	259.940 {130}	766.490 {44}	670.784 {50}	279.079 {121}2	257.610 {131}	202.030 {467}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.04971	.05031	.04696	.97899	19.192	.08862	18.688	.04691	.05424
Stddev	.00109	.00086	.00054	.00506	.138	.00046	.035	.00042	.00196
%RSD	2.1947	1.7014	1.1512	.51725	.71662	.51365	.18979	.89757	3.6114

#1	.04893	.04971	.04734	.97541	19.095	.08894	18.663	.04661	.05286
#2	.05048	.05092	.04658	.98257	19.289	.08830	18.713	.04721	.05563

Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Elem	Na8183	Ni2316	P_1782	Pb2203	S_1820	Sb2068	Se1960	Si2881	SiO2
Line	818.326 {41}	231.604 {446}	178.284 {489}	220.353 {453}	182.034 {485}	206.833 {463}	196.090 {472}	288.158 {117}	288.158 {117}2
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	22.330	.04936	1.9975	.10166	-.06814	.10036	.19717	4.7098	10.079
Stddev	.522	.00001	.0295	.00289	.00458	.00358	.00478	.0794	.170
%RSD	2.3379	.02171	1.4749	2.8416	6.7218	3.5640	2.4229	1.6851	1.6851

#1	21.961	.04937	1.9767	.09961	-.06490	.09783	.19380	4.6537	9.9589
#2	22.700	.04935	2.0184	.10370	-.07138	.10289	.20055	4.7659	10.199

Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Elem	Sn1899	Sr4077	Th2837	Ti3349	Ti1908	U_3701	V_2924	Zn2062	Zr3391
Line	189.989 {477}	407.771 {83}	283.730 {119}	334.904 {101}	190.856 {477}	370.152 {91}	292.402 {115}	206.200 {163}	339.198 {99}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.09928	.04957	.19119	.04781	.25496	.53685	.04824	.19002	.04215
Stddev	.00219	.00024	.00227	.00040	.01221	.02028	.00002	.00068	.00534
%RSD	2.2032	.48913	1.1860	.84227	4.7880	3.7782	.05039	.35884	12.674

#1	.09774	.04940	.19279	.04752	.24633	.52251	.04822	.18954	.04593
#2	.10083	.04974	.18958	.04809	.26360	.55120	.04825	.19051	.03837

Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Int. Std.	Y_2243	Y_3600	Y_3774
Line	224.306 {450}	360.073 {94}	377.433 {89}
Units	Cts/S	Cts/S	Cts/S
Avg	2723.1	39134.	1993.6
Stddev	1.1	359.	.4
%RSD	.04151	.91643	.01850

#1	2722.3	39387.	1993.3
#2	2723.9	38880.	1993.8

Sample Name: CCVH-3883905 Acquired: 5/17/2016 14:32:32 Type: QC
Method: 6500_025(v6) Mode: CONC Corr. Factor: 1.000000
User: CRHOADES Prep Date: Custom ID2: Custom ID3:
Comment:

Elem	Ag3280	Al3092	As1890	B_2089	Ba4554	Be3130	Bi2230	Ca3179	Cd2288	Co2286	Cr2055	Cu3247	Fe2714
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	-0.00573	51.512	-0.00586	.00581	-0.00083	-0.00026	.98502	-0.00726	-0.00057	-0.00139	-0.00019	-0.01355	52.539
Stddev	.00022	.659	.00097	.00024	.00071	.00011	.01103	.00247	.00027	.00010	.00002	.00035	.487
%RSD	3.7760	1.2791	16.475	4.1777	85.517	41.465	1.1195	34.035	47.324	7.0874	9.9387	2.5595	.92653

#1	-0.00589	51.977	-0.00518	.00598	-0.00134	-0.00033	.97723	-0.00551	-0.00076	-0.00146	-0.00020	-0.01379	52.195
#2	-0.00558	51.046	-0.00654	.00563	-0.00033	-0.00018	.99282	-0.00900	-0.00038	-0.00132	-0.00018	-0.01330	52.883

Check ?	None	Chk Pass	None	None	None	None	Chk Pass	None	None	None	None	None	Chk Pass
Value													
Range													

Elem	K_7664	Li6707	Mg2790	Mn2576	Mo2020	Na8183	Ni2316	P_1782	Pb2203	S_1820	Sb2068	Se1960	Si2881
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	-0.04501	-0.00892	.01001	-0.00218	-0.00121	264.76	.00098	.00738	.00039	4.9432	-0.01163	-0.01458	-0.02201
Stddev	.09321	.00272	.00521	.00014	.00017	.28	.00001	.00077	.00241	.0846	.00497	.00226	.01434
%RSD	207.07	30.442	52.088	6.5701	14.307	.10441	1.2682	10.490	614.10	1.7117	42.692	15.520	65.138

#1	-0.11092	-0.01084	.00632	-0.00208	-0.00134	264.57	.00097	.00683	-0.00131	4.8834	-0.01514	-0.01618	-0.03215
#2	.02090	-0.00700	.01369	-0.00229	-0.00109	264.96	.00098	.00793	.00209	5.0030	-0.00812	-0.01298	-0.01187

Check ?	None	None	None	None	None	Chk Pass	None	None	None	Chk Pass	None	None	None
Value													
Range													

Elem	SiO2	Sn1899	Sr4077	Th2837	Ti3349	Ti1908	U_3701	V_2924	Zn2062	Zr3391
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	-0.04710	-0.00186	.00014	4.8054	-0.00127	.00421	9.7563	.01326	-0.00030	-0.13507
Stddev	.03068	.00043	.00007	.0014	.00048	.00030	.0208	.00111	.00122	.00002
%RSD	65.138	23.375	49.746	.02810	37.803	7.1785	.21266	8.3960	413.71	.01813

#1	-0.06880	-0.00216	.00009	4.8045	-0.00160	.00400	9.7417	.01248	-0.00116	-0.13509
#2	-0.02541	-0.00155	.00019	4.8064	-0.00093	.00442	9.7710	.01405	.00057	-0.13505

Check ?	None	None	None	Chk Pass	None	None	Chk Pass	None	None	None
Value										
Range										

Int. Std.	Y_2243	Y_3600	Y_3774
Units	Cts/S	Cts/S	Cts/S
Avg	2560.5	37752.	1918.2
Stddev	2.0	267.	23.6
%RSD	.07653	.70765	1.2306

#1	2561.9	37941.	1934.9
#2	2559.1	37563.	1901.5

Sample Name: CCV-3888422 Acquired: 5/17/2016 14:35:07 Type: QC

Method: 6500_025(v6) Mode: CONC Corr. Factor: 1.000000

User: CRHOADES Prep Date: Custom ID2: Custom ID3:

Comment:

Elem	Ag3280	Al1670	As1890	B_2089	Ba4554	Be3130	Bi2230	Ca3179	Cd2288	Co2286	Cr2055	Cu3247	Fe2599
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.48690	.49270	.95924	.49088	.48079	.49458	.00082	4.8040	.49455	.50050	.50203	.47260	2.5159
Stddev	.00043	.00133	.00027	.00144	.00483	.00465	.00395	.0403	.00149	.00318	.00318	.00148	.0318
%RSD	.08869	.26943	.02808	.29415	1.0044	.93956	483.37	.83798	.30081	.63489	.63383	.31274	1.2638

#1	.48659	.49364	.95905	.49190	.48421	.49787	.00361	4.8325	.49350	.50275	.50428	.47155	2.5384
#2	.48720	.49176	.95943	.48986	.47738	.49130	-.00197	4.7756	.49561	.49825	.49978	.47364	2.4934

Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	None	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Value													
Range													

Elem	K_7664	Li6707	Mg2790	Mn2576	Mo2020	Na5895	Ni2316	P_1782	Pb2203	S_1820	Sb2068	Se1960	Si2881
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	47.969	.94935	19.170	.47301	.49147	5.1336	.48953	.97163	.99446	-.10348	.97311	.94927	4.8642
Stddev	.531	.00177	.013	.00187	.00467	.0423	.00267	.00724	.00763	.00995	.01183	.00058	.0191
%RSD	1.1062	.18621	.06698	.39484	.95105	.82431	.54602	.74559	.76761	9.6165	1.2152	.06096	.39232

#1	48.344	.95060	19.179	.47433	.49478	5.1635	.49142	.97675	.99985	-.09644	.98148	.94968	4.8507
#2	47.594	.94810	19.161	.47169	.48817	5.1037	.48764	.96651	.98906	-.11051	.96475	.94886	4.8776

Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	None	Chk Pass	Chk Pass	Chk Pass
Value													
Range													

Elem	SiO2	Sn1899	Sr4077	Th2837	Ti3349	Ti1908	U_3701	V_2924	Zn2062	Zr3391
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	10.409	.99313	.48883	-.00211	.46863	1.0047	.06319	.49174	.47045	.47694
Stddev	.041	.00792	.00562	.00260	.00101	.0077	.08921	.00115	.00073	.00213
%RSD	.39232	.79716	1.1492	123.32	.21516	.77022	141.17	.23346	.15435	.44665

#1	10.380	.99873	.49280	-.00027	.46934	1.0102	.00011	.49255	.46994	.47543
#2	10.438	.98754	.48486	-.00395	.46792	.99927	.12627	.49092	.47097	.47844

Check ?	Chk Pass	Chk Pass	Chk Pass	None	Chk Pass	Chk Pass	None	Chk Pass	Chk Pass	Chk Pass
Value										
Range										

Int. Std.	Y_2243	Y_3600	Y_3774
Units	Cts/S	Cts/S	Cts/S
Avg	2596.4	37465.	1853.9
Stddev	15.6	336.	7.5
%RSD	.60048	.89720	.40475

#1	2607.4	37702.	1859.2
#2	2585.4	37227.	1848.6

Sample Name: CCB Acquired: 5/17/2016 14:37:39 Type: QC
 Method: 6500_025(v6) Mode: CONC Corr. Factor: 1.000000
 User: CRHOADES Prep Date: Custom ID2: Custom ID3:
 Comment:

Elem	Ag3280	Al1670	As1890	B_2089	Ba4554	Be3130	Bi2230	Ca3179	Cd2288	Co2286	Cr2055
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.00079	.00122	.00186	.00323	-.00115	-.00005	-.00254	-.00004	-.00004	-.00017	-.00034
Stddev	.00033	.00009	.00163	.00059	.00008	.00004	.00053	.00546	.00028	.00001	.00005
%RSD	41.850	7.1286	87.513	18.108	6.8086	87.548	20.678	12966.	726.86	3.5842	16.242

#1	.00056	.00116	.00301	.00365	-.00109	-.00002	-.00217	.00382	.00016	-.00018	-.00030
#2	.00103	.00128	.00071	.00282	-.00120	-.00008	-.00292	-.00391	-.00024	-.00017	-.00037

Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit											
Low Limit											

Elem	Cu3247	Fe2599	K_7664	Li6707	Mg2790	Mn2576	Mo2020	Na5895	Ni2316	P_1782	Pb2203
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	-.00025	.00106	-.17639	-.00635	.00167	.00004	.00094	-.09271	.00023	.00181	.00059
Stddev	.00043	.00032	.04285	.00009	.00334	.00001	.00109	.01931	.00029	.00290	.00029
%RSD	174.67	30.185	24.291	1.4324	200.13	34.256	115.70	20.825	128.99	160.09	49.375

#1	.00006	.00129	-.14609	-.00628	.00403	.00003	.00017	-.10637	.00043	-.00024	.00039
#2	-.00055	.00084	-.20668	-.00641	-.00069	.00005	.00171	-.07906	.00002	.00386	.00080

Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit											
Low Limit											

Elem	S_1820	Sb2068	Se1960	Si2881	SiO2	Sn1899	Sr4077	Th2837	Ti3349	Ti1908	U_3701
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	-.10728	W .00212	-.00648	-.04152	-.08885	-.00188	-.00012	.00084	.00012	.00150	.04685
Stddev	.00174	.00003	.00923	.01853	.03965	.00128	.00004	.00111	.00000	.00033	.02946
%RSD	1.6190	1.2698	142.47	44.630	44.630	67.980	29.451	133.02	1.8538	22.237	62.879

#1	-.10605	.00214	-.01300	-.02842	-.06081	-.00098	-.00010	.00005	.00012	.00174	.06768
#2	-.10851	.00210	.00005	-.05462	-.11688	-.00278	-.00015	.00163	.00012	.00127	.02602

Check ?	Chk Pass	Chk Warn	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit		.00100									
Low Limit		-.00100									

Elem	V_2924	Zn2062	Zr3391
Units	ppm	ppm	ppm
Avg	.00036	.00067	-.00237
Stddev	.00011	.00020	.00187
%RSD	30.601	29.847	78.970

#1	.00028	.00081	-.00105
#2	.00044	.00053	-.00369

Check ?	Chk Pass	Chk Pass	Chk Pass
High Limit			
Low Limit			

Int. Std.	Y_2243	Y_3600	Y_3774
Units	Cts/S	Cts/S	Cts/S
Avg	2607.2	36749.	1869.5
Stddev	71.1	693.	16.5
%RSD	2.7272	1.8860	.88283

#1	2556.9	37239.	1857.8
#2	2657.5	36259.	1881.2

Sample Name: CCVL-3894681 Acquired: 5/17/2016 14:40:01 Type: QC
Method: 6500_025(v6) Mode: CONC Corr. Factor: 1.000000
User: CRHOADES Prep Date: Custom ID2: Custom ID3:
Comment:

Elem	Ag3280	Al1670	As1890	B_2089	Ba4554	Be3130	Bi2230	Ca3179	Cd2288	Co2286	Cr2055	Cu3247
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.01002	.10038	.01405	.09619	.00931	.00078	.10025	.21344	.00496	.00944	.00992	.01433
Stddev	.00088	.00014	.00635	.00016	.00043	.00013	.00296	.00769	.00014	.00007	.00025	.00099
%RSD	8.7501	.13836	45.231	.16961	4.6354	16.622	2.9497	3.6027	2.8047	.77000	2.5443	6.9118

#1	.01064	.10028	.00955	.09631	.00901	.00069	.09816	.21888	.00506	.00949	.01010	.01363
#2	.00940	.10048	.01854	.09608	.00962	.00088	.10234	.20800	.00486	.00938	.00974	.01503

Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Value												
Range												

Elem	Fe2599	K_7664	Li6707	Mg2790	Mn2576	Mo2020	Na5895	Ni2316	P_1782	Pb2203	S_1820	Sb2068
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.11894	2.6602	F .00087	.19738	.00982	.01871	.90546	.03988	2.7804	.00875	-.10071	.02009
Stddev	.00578	.0031	.00234	.00565	.00013	.00025	.03035	.00039	.0037	.00073	.01060	.00163
%RSD	4.8611	.11735	268.08	2.8638	1.3709	1.3246	3.3516	.98528	.13476	8.3961	10.522	8.1242

#1	.11485	2.6580	-.00078	.20138	.00991	.01854	.88401	.04016	2.7830	.00927	-.09322	.01894
#2	.12303	2.6624	.00253	.19339	.00972	.01889	.92692	.03961	2.7777	.00823	-.10821	.02125

Check ?	Chk Pass	Chk Pass	Chk Fail	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	None	Chk Pass
Value			.01000									
Range			-30.000%									

Elem	Se1960	Si2881	SiO2	Sn1899	Sr4077	Th2837	Ti3349	Ti1908	U_3701	V_2924	Zn2062	Zr3391
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	F .00862	.41768	.89383	.09791	.00981	.01335	.01049	.01354	F .10713	.00994	.02033	.01631
Stddev	.00001	.00417	.00892	.00027	.00004	.00291	.00056	.00007	.00443	.00106	.00042	.00201
%RSD	.14446	.99842	.99842	.27935	.45634	21.824	5.3099	.54173	4.1331	10.700	2.0848	12.340

#1	.00861	.42063	.90014	.09810	.00978	.01540	.01009	.01359	.10399	.00918	.02003	.01489
#2	.00863	.41473	.88752	.09772	.00984	.01129	.01088	.01349	.11026	.01069	.02063	.01774

Check ?	Chk Fail	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Fail	Chk Pass	Chk Pass	Chk Pass
Value	.01500								.06000			
Range	-30.000%								30.000%			

Int. Std.	Y_2243	Y_3600	Y_3774
Units	Cts/S	Cts/S	Cts/S
Avg	2588.5	37169.	1783.8
Stddev	46.4	396.	1.9
%RSD	1.7941	1.0655	.10900

#1	2555.7	37449.	1782.4
#2	2621.3	36889.	1785.2

Sample Name: MB 280-325053/1-A Acquired: 5/17/2016 14:42:41 Type: Unk

Method: 6500_025(v6) Mode: CONC Corr. Factor: 1.000000

User: CRHOADES Prep Date: 5/13 Custom ID2: Custom ID3:

Comment: 325053 6010B

Elem	Ag3280	Al1670	As1890	B_2089	Ba4554	Be3130	Bi2230	Ca3179	Cd2288
Line	328.068 {103}	167.079 {502}	189.042 {478}	208.959 {461}	455.403 { 74}	313.042 {108}	223.061 {451}	317.933 {106}	228.802 {447}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.00143	.00364	.00359	.00133	-.00098	.00008	-.00112	.01144	-.00012
Stddev	.00012	.00005	.00010	.00075	.00014	.00005	.00151	.00141	.00043
%RSD	8.6094	1.3272	2.8323	56.213	14.476	60.542	134.92	12.365	347.03

#1	.00134	.00360	.00366	.00080	-.00088	.00005	-.00218	.01244	-.00043
#2	.00152	.00367	.00351	.00186	-.00107	.00012	-.00005	.01044	.00018

Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Elem	Co2286	Cr2055	Cu3247	Fe2599	K_7664	Li6707	Mg2790	Mn2576	Mo2020
Line	228.616 {447}	205.560 {464}	324.754 {104}	259.940 {130}	766.490 { 44}	670.784 { 50}	279.079 {121}2	257.610 {131}	202.030 {467}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	-.00011	-.00067	-.00017	.01950	-.30266	W -.00802	.00119	.00024	-.00101
Stddev	.00024	.00062	.00051	.00190	.10793	.00385	.00149	.00007	.00006
%RSD	224.54	92.740	302.64	9.7367	35.659	47.954	125.31	28.819	5.4885

#1	.00006	-.00110	-.00053	.02084	-.22635	-.01074	.00225	.00029	-.00097
#2	-.00028	-.00023	.00019	.01816	-.37898	-.00530	.00014	.00019	-.00105

Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Warn	Chk Pass	Chk Pass	Chk Pass
High Limit						.00500			
Low Limit						-.00500			

Elem	Na5895	Ni2316	P_1782	Pb2203	S_1820	Sb2068	Se1960	Si2881	SiO2
Line	589.592 { 57}	231.604 {446}	178.284 {489}	220.353 {453}	182.034 {485}	206.833 {463}	196.090 {472}	288.158 {117}	288.158 {117}2
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	-.14596	.00012	.00410	-.00108	W -.09650	-.00330	-.00325	-.00631	-.01350
Stddev	.02866	.00039	.00325	.00077	.00976	.00519	.00252	.01047	.02241
%RSD	19.638	315.53	79.438	71.082	10.112	157.32	77.482	165.93	165.93

#1	-.12570	-.00015	.00640	-.00054	-.08960	-.00696	-.00147	.00109	.00234
#2	-.16623	.00040	.00179	-.00162	-.10340	.00037	-.00503	-.01371	-.02935

Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Warn	Chk Pass	Chk Pass	Chk Pass	None
High Limit					.05000				
Low Limit					-.05000				

Elem	Sn1899	Sr4077	Th2837	Ti3349	Ti1908	U_3701	V_2924	Zn2062	Zr3391
Line	189.989 {477}	407.771 { 83}	283.730 {119}	334.904 {101}	190.856 {477}	370.152 { 91}	292.402 {115}	206.200 {163}	339.198 { 99}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	-.00085	-.00007	.00002	.00076	-.00248	F .07948	.00016	.00142	-.00002
Stddev	.00235	.00028	.00186	.00081	.00205	.05605	.00051	.00068	.00279
%RSD	276.42	400.22	11754.	107.22	82.390	70.522	322.36	48.098	13361.

#1	.00081	.00013	-.00130	.00133	-.00393	.03984	-.00020	.00094	.00195
#2	-.00251	-.00027	.00133	.00018	-.00104	.11911	.00052	.00191	-.00199

Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Fail	Chk Pass	Chk Pass	Chk Pass
High Limit						.06000			
Low Limit						-.06000			

Int. Std.	Y_2243	Y_3600	Y_3774
Line	224.306 {450}	360.073 { 94}	377.433 { 89}
Units	Cts/S	Cts/S	Cts/S
Avg	2662.3	39112.	1946.3
Stddev	28.5	561.	53.0
%RSD	1.0720	1.4335	2.7223

#1	2682.5	38715.	1908.8
#2	2642.1	39508.	1983.7

Sample Name: LCS 280-325053/2-A Acquired: 5/17/2016 14:45:03 Type: Unk
Method: 6500_025(v6) Mode: CONC Corr. Factor: 1.000000
User: CRHOADES Prep Date: Custom ID2: Custom ID3:
Comment: 325053 6010B

Elem	Ag3280	Al1670	As1890	B_2089	Ba4554	Be3130	Bi2230	Ca3179	Cd2288
Line	328.068 {103}	167.079 {502}	189.042 {478}	208.959 {461}	455.403 { 74}	313.042 {108}	223.061 {451}	317.933 {106}	228.802 {447}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.05036	1.9765	1.0307	1.0466	2.0444	.05253	2.1207	50.515	.10448
Stddev	.00054	.0028	.0031	.0019	.0032	.00016	.0126	.031	.00037
%RSD	1.0764	.14293	.29639	.17689	.15654	.30597	.59496	.06173	.35167

#1	.04998	1.9785	1.0329	1.0479	2.0467	.05265	2.1296	50.493	.10422
#2	.05075	1.9745	1.0285	1.0453	2.0422	.05242	2.1118	50.537	.10474

Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	None	Chk Pass	Chk Pass
High Limit									
Low Limit									

Elem	Co2286	Cr2055	Cu3247	Fe2599	K_7664	Li6707	Mg2790	Mn2576	Mo2020
Line	228.616 {447}	205.560 {464}	324.754 {104}	259.940 {130}	766.490 { 44}	670.784 { 50}	279.079 {121}2	257.610 {131}	202.030 {467}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.50981	W .21018	.24472	1.1467	51.012	.98005	50.099	.48595	1.0755
Stddev	.00067	.00039	.00173	.0050	.046	.00257	.115	.00209	.0029
%RSD	.13163	.18549	.70862	.43367	.09047	.26261	.22909	.42974	.26645

#1	.51029	.21046	.24594	1.1432	50.979	.97823	50.180	.48743	1.0775
#2	.50934	.20991	.24349	1.1503	51.044	.98187	50.018	.48448	1.0735

Check ?	Chk Pass	Chk Warn	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit		.21000							
Low Limit		.19000							

Elem	Na8183	Ni2316	P_1782	Pb2203	S_1820	Sb2068	Se1960	Si2881	SiO2
Line	818.326 { 41}	231.604 {446}	178.284 {489}	220.353 {453}	182.034 {485}	206.833 {463}	196.090 {472}	288.158 {117}	288.158 {117}2
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	F 58.355	.49964	10.468	.52252	2.1154	W .55265	2.1131	10.330	22.106
Stddev	.220	.00109	.036	.00077	.0101	.00138	.0034	.054	.116
%RSD	.37692	.21722	.34510	.14686	.47647	.25013	.16258	.52633	.52633

#1	58.510	.50041	10.493	.52307	2.1225	.55362	2.1155	10.291	22.024
#2	58.199	.49887	10.442	.52198	2.1083	.55167	2.1106	10.368	22.188

Check ?	Chk Fail	Chk Pass	Chk Pass	Chk Pass	None	Chk Warn	Chk Pass	Chk Pass	None
High Limit	56.000					.54000			
Low Limit	45.500					.44000			

Elem	Sn1899	Sr4077	Th2837	Ti3349	Ti1908	U_3701	V_2924	Zn2062	Zr3391
Line	189.989 {477}	407.771 { 83}	283.730 {119}	334.904 {101}	190.856 {477}	370.152 { 91}	292.402 {115}	206.200 {163}	339.198 { 99}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	2.1150	1.0296	1.0394	.98599	1.9193	2.1346	.50459	.48614	.46959
Stddev	.0164	.0026	.0024	.00476	.0441	.0286	.00376	.00072	.00434
%RSD	.77764	.25247	.22910	.48245	2.2968	1.3397	.74602	.14725	.92484

#1	2.1034	1.0314	1.0411	.98935	1.9504	2.1144	.50725	.48665	.46652
#2	2.1266	1.0277	1.0377	.98262	1.8881	2.1548	.50192	.48564	.47266

Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Int. Std.	Y_2243	Y_3600	Y_3774
Line	224.306 {450}	360.073 { 94}	377.433 { 89}
Units	Cts/S	Cts/S	Cts/S
Avg	2617.5	36610.	1884.9
Stddev	1.5	822.	32.2
%RSD	.05663	2.2449	1.7108

#1	2616.5	36029.	1907.7
#2	2618.6	37191.	1862.1

Elem	Ag3280	Al1670	As1890	B_2089	Ba4554	Be3130	Bi2230	Ca3179	Cd2288
Line	328.068 {103}	167.079 {502}	189.042 {478}	208.959 {461}	455.403 { 74}	313.042 {108}	223.061 {451}	317.933 {106}	228.802 {447}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.00121	.60495	-.00064	.02586	.01803	-.00012	.00039	2.6918	.00054
Stddev	.00076	.00210	.00231	.00010	.00083	.00019	.00319	.0140	.00064
%RSD	62.650	.34759	359.65	.39901	4.6231	165.92	809.87	.52076	118.41

#1	.00067	.60346	-.00227	.02594	.01744	-.00025	-.00186	2.6818	.00099
#2	.00174	.60644	.00099	.02579	.01862	.00002	.00265	2.7017	.00009

Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Elem	Co2286	Cr2055	Cu3247	Fe2599	K_7664	Li6707	Mg2790	Mn2576	Mo2020
Line	228.616 {447}	205.560 {464}	324.754 {104}	259.940 {130}	766.490 { 44}	670.784 { 50}	279.079 {121}2	257.610 {131}	202.030 {467}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.00370	.01413	.00306	1.6827	5.3617	-.00832	43.298	.03929	.00348
Stddev	.00042	.00013	.00044	.0086	.1068	.00274	.042	.00002	.00104
%RSD	11.210	.89249	14.505	.50956	1.9919	32.913	.09666	.03981	29.960

#1	.00400	.01404	.00274	1.6888	5.2862	-.01026	43.268	.03928	.00274
#2	.00341	.01422	.00337	1.6767	5.4372	-.00639	43.327	.03931	.00422

Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Elem	Na5895	Ni2316	P_1782	Pb2203	S_1820	Sb2068	Se1960	Si2881	SiO2
Line	589.592 { 57}	231.604 {446}	178.284 {489}	220.353 {453}	182.034 {485}	206.833 {463}	196.090 {472}	288.158 {117}	288.158 {117}2
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	5.8833	.08049	.12505	.00021	1.1227	-.00511	.00258	19.685	42.125
Stddev	.0019	.00018	.00351	.00198	.0004	.00030	.00408	.185	.395
%RSD	.03301	.22672	2.8106	947.22	.03677	5.8399	158.12	.93806	.93806

#1	5.8847	.08036	.12753	-.00119	1.1225	-.00490	.00547	19.815	42.404
#2	5.8820	.08062	.12256	.00161	1.1230	-.00532	-.00031	19.554	41.846

Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Elem	Sn1899	Sr4077	Th2837	Ti3349	Ti1908	U_3701	V_2924	Zn2062	Zr3391
Line	189.989 {477}	407.771 { 83}	283.730 {119}	334.904 {101}	190.856 {477}	370.152 { 91}	292.402 {115}	206.200 {163}	339.198 { 99}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	-.00210	.01882	-.00001	.01700	.04291	.00506	.00194	.00571	-.00151
Stddev	.00054	.00022	.00010	.00072	.00701	.01982	.00010	.00032	.00271
%RSD	25.915	1.1670	1030.3	4.2525	16.344	391.41	5.2056	5.5531	179.48

#1	-.00248	.01867	-.00008	.01751	.03795	-.00895	.00187	.00549	.00041
#2	-.00171	.01898	.00006	.01649	.04786	.01908	.00201	.00593	-.00343

Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Int. Std.	Y_2243	Y_3600	Y_3774						
Line	224.306 {450}	360.073 { 94}	377.433 { 89}						
Units	Cts/S	Cts/S	Cts/S						
Avg	2635.9	37207.	1857.1						
Stddev	66.6	705.	40.9						
%RSD	2.5257	1.8943	2.2046						

#1	2683.0	37705.	1828.1						
#2	2588.8	36708.	1886.0						

Elem	Ag3280	Al1670	As1890	B_2089	Ba4554	Be3130	Bi2230	Ca3179	Cd2288
Line	328.068 {103}	167.079 {502}	189.042 {478}	208.959 {461}	455.403 { 74}	313.042 {108}	223.061 {451}	317.933 {106}	228.802 {447}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.00056	1.2531	-.00216	.01544	.00952	-.00001	-.00162	1.7541	.00036
Stddev	.00040	.0022	.00191	.00093	.00054	.00014	.00075	.0096	.00052
%RSD	71.239	.17809	88.491	6.0014	5.6575	1995.9	46.330	.54918	146.74

#1	.00028	1.2516	-.00350	.01609	.00990	.00009	-.00109	1.7609	-.00001
#2	.00084	1.2547	-.00081	.01478	.00914	-.00011	-.00215	1.7473	.00073

Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Elem	Co2286	Cr2055	Cu3247	Fe2599	K_7664	Li6707	Mg2790	Mn2576	Mo2020
Line	228.616 {447}	205.560 {464}	324.754 {104}	259.940 {130}	766.490 { 44}	670.784 { 50}	279.079 {121}2	257.610 {131}	202.030 {467}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.01268	.04619	.00539	6.8860	1.1922	-.00748	24.094	.10131	-.00016
Stddev	.00013	.00087	.00032	.0060	.0302	.00146	.042	.00011	.00017
%RSD	1.0609	1.8822	5.9784	.08762	2.5319	19.508	.17352	.10986	103.67

#1	.01259	.04680	.00562	6.8817	1.1708	-.00852	24.124	.10138	-.00004
#2	.01278	.04557	.00516	6.8903	1.2135	-.00645	24.065	.10123	-.00029

Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Elem	Na5895	Ni2316	P_1782	Pb2203	S_1820	Sb2068	Se1960	Si2881	SiO2
Line	589.592 { 57}	231.604 {446}	178.284 {489}	220.353 {453}	182.034 {485}	206.833 {463}	196.090 {472}	288.158 {117}	288.158 {117}2
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	2.7417	.26247	.12528	.00173	.61158	-.00681	W -.00649	22.474	48.095
Stddev	.0134	.00426	.00417	.00062	.00548	.00067	.00201	.076	.163
%RSD	.48841	1.6237	3.3277	36.039	.89590	9.8322	31.028	.33937	.33937

#1	2.7322	.26548	.12233	.00217	.61546	-.00634	-.00792	22.420	47.979
#2	2.7511	.25945	.12823	.00129	.60771	-.00729	-.00507	22.528	48.210

Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Warn	Chk Pass	Chk Pass
High Limit							5.0000		
Low Limit							-.00500		

Elem	Sn1899	Sr4077	Th2837	Ti3349	Ti1908	U_3701	V_2924	Zn2062	Zr3391
Line	189.989 {477}	407.771 { 83}	283.730 {119}	334.904 {101}	190.856 {477}	370.152 { 91}	292.402 {115}	206.200 {163}	339.198 { 99}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	-.00229	.01044	-.00338	.02849	.00437	.10828	.00386	.01040	.00044
Stddev	.00069	.00005	.00342	.00008	.00217	.00748	.00019	.00019	.00113
%RSD	29.975	.48294	101.10	.27424	49.736	6.9104	4.9183	1.7917	255.95

#1	-.00278	.01048	-.00580	.02844	.00590	.11357	.00372	.01026	-.00036
#2	-.00181	.01040	-.00096	.02855	.00283	.10299	.00399	.01053	.00124

Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Int. Std.	Y_2243	Y_3600	Y_3774						
Line	224.306 {450}	360.073 { 94}	377.433 { 89}						
Units	Cts/S	Cts/S	Cts/S						
Avg	2692.6	38293.	1944.5						
Stddev	23.1	43.	59.0						
%RSD	.85931	.11157	3.0332						

#1	2676.3	38263.	1902.8						
#2	2709.0	38323.	1986.2						

Elem	Ag3280	Al3092	As1890	B_2089	Ba4554	Be3130	Bi2230	Ca3179	Cd2288
Line	328.068 {103}	309.271 {109}	189.042 {478}	208.959 {461}	455.403 {74}	313.042 {108}	223.061 {451}	317.933 {106}	228.802 {447}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.00100	7.6182	.00516	.02709	.08711	.00013	-.00913	14.779	.00107
Stddev	.00044	.1274	.00012	.00091	.00168	.00006	.00280	.040	.00015
%RSD	44.047	1.6720	2.2785	3.3751	1.9231	50.216	30.656	.27347	13.824

#1	.00069	7.5281	.00524	.02773	.08592	.00017	-.00715	14.808	.00097
#2	.00132	7.7083	.00507	.02644	.08829	.00008	-.01111	14.750	.00118

Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Elem	Co2286	Cr2055	Cu3247	Fe2599	K_7664	Li6707	Mg2790	Mn2576	Mo2020
Line	228.616 {447}	205.560 {464}	324.754 {104}	259.940 {130}	766.490 {44}	670.784 {50}	279.079 {121}2	257.610 {131}	202.030 {467}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.02523	.06872	.01500	16.318	3.9448	-.00199	50.122	.50381	.00037
Stddev	.00037	.00125	.00012	.254	.0237	.00006	.039	.00019	.00055
%RSD	1.4604	1.8182	.78433	1.5571	.60107	2.8361	.07692	.03719	148.64

#1	.02497	.06960	.01508	16.139	3.9280	-.00195	50.094	.50368	.00075
#2	.02549	.06783	.01492	16.498	3.9616	-.00203	50.149	.50394	-.00002

Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Elem	Na5895	Ni2316	P_1782	Pb2203	S_1820	Sb2068	Se1960	Si2881	SiO2
Line	589.592 {57}	231.604 {446}	178.284 {489}	220.353 {453}	182.034 {485}	206.833 {463}	196.090 {472}	288.158 {117}	288.158 {117}2
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	4.7870	.41387	.29120	.01411	1.8724	-.00752	W -.00827	42.059	90.006
Stddev	.0044	.00335	.00599	.00199	.0187	.00232	.00279	.065	.140
%RSD	.09221	.80923	2.0556	14.088	.99950	30.892	33.750	.15520	.15520

#1	4.7901	.41624	.29544	.01271	1.8856	-.00916	-.00629	42.013	89.908
#2	4.7839	.41150	.28697	.01552	1.8591	-.00588	-.01024	42.105	90.105

Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Warn	Chk Pass	Chk Pass
High Limit							5.0000		
Low Limit							-.00500		

Elem	Sn1899	Sr4077	Th2837	Ti3349	Ti1908	U_3701	V_2924	Zn2062	Zr3391
Line	189.989 {477}	407.771 {83}	283.730 {119}	334.904 {101}	190.856 {477}	370.152 {91}	292.402 {115}	206.200 {163}	339.198 {99}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	-.00104	.05460	.00076	.19689	-.00107	.01905	.02062	.07196	.00048
Stddev	.00056	.00013	.00211	.00013	.00352	.01088	.00053	.00074	.00209
%RSD	54.372	.24165	278.96	.06461	327.64	57.095	2.5531	1.0225	432.08

#1	-.00144	.05469	.00225	.19680	.00141	.01136	.02024	.07144	.00196
#2	-.00064	.05450	-.00074	.19698	-.00356	.02675	.02099	.07248	-.00099

Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Int. Std.	Y_2243	Y_3600	Y_3774						
Line	224.306 {450}	360.073 {94}	377.433 {89}						
Units	Cts/S	Cts/S	Cts/S						
Avg	2734.0	39312.	2065.8						
Stddev	37.3	89.	8.6						
%RSD	1.3641	.22551	.41769						

#1	2760.4	39249.	2071.9						
#2	2707.6	39374.	2059.7						

Elem	Ag3280	Al1670	As1890	B_2089	Ba4554	Be3130	Bi2230	Ca3179	Cd2288
Line	328.068 {103}	167.079 {502}	189.042 {478}	208.959 {461}	455.403 {74}	313.042 {108}	223.061 {451}	317.933 {106}	228.802 {447}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.00195	.54588	.00436	.03462	.01617	-.00019	-.00300	9.4424	.00039
Stddev	.00074	.00013	.00260	.00073	.00036	.00003	.00010	.0228	.00004
%RSD	38.116	.02308	59.636	2.0963	2.2453	17.379	3.2057	.24133	9.6738

#1	.00143	.54579	.00252	.03411	.01643	-.00022	-.00307	9.4585	.00042
#2	.00248	.54597	.00619	.03514	.01591	-.00017	-.00294	9.4263	.00037

Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Elem	Co2286	Cr2055	Cu3247	Fe2599	K_7664	Li6707	Mg2790	Mn2576	Mo2020
Line	228.616 {447}	205.560 {464}	324.754 {104}	259.940 {130}	766.490 {44}	670.784 {50}	279.079 {121}2	257.610 {131}	202.030 {467}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.00417	.00987	.00412	1.9549	3.2101	-.00599	16.894	.04505	-.00078
Stddev	.00019	.00006	.00010	.0254	.1152	.00162	.073	.00001	.00004
%RSD	4.5377	.55792	2.3778	1.2977	3.5882	27.040	.43256	.01123	4.5429

#1	.00431	.00991	.00405	1.9369	3.2916	-.00484	16.842	.04505	-.00076
#2	.00404	.00983	.00419	1.9728	3.1287	-.00713	16.946	.04504	-.00081

Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Elem	Na5895	Ni2316	P_1782	Pb2203	S_1820	Sb2068	Se1960	Si2881	SiO2
Line	589.592 {57}	231.604 {446}	178.284 {489}	220.353 {453}	182.034 {485}	206.833 {463}	196.090 {472}	288.158 {117}	288.158 {117}2
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	7.2412	.08443	.16069	.00026	1.9533	-.00674	-.00449	12.509	26.769
Stddev	.0197	.00103	.00287	.00184	.0037	.00088	.00140	.043	.092
%RSD	.27185	1.2159	1.7854	712.78	.18924	13.013	31.149	.34358	.34358

#1	7.2551	.08370	.15866	.00156	1.9507	-.00612	-.00350	12.479	26.704
#2	7.2273	.08516	.16271	-.00104	1.9560	-.00736	-.00548	12.539	26.834

Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Elem	Sn1899	Sr4077	Th2837	Ti3349	Ti1908	U_3701	V_2924	Zn2062	Zr3391
Line	189.989 {477}	407.771 {83}	283.730 {119}	334.904 {101}	190.856 {477}	370.152 {91}	292.402 {115}	206.200 {163}	339.198 {99}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	-.00060	.04152	-.00179	.01759	-.00184	.02427	.00414	.01569	.00289
Stddev	.00337	.00008	.00234	.00037	.00138	.04723	.00012	.00116	.00135
%RSD	562.23	.20261	131.13	2.0928	74.689	194.61	2.9535	7.4200	46.783

#1	-.00299	.04146	-.00344	.01733	-.00282	.05767	.00423	.01487	.00194
#2	.00179	.04158	-.00013	.01785	-.00087	-.00913	.00406	.01651	.00385

Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Int. Std.	Y_2243	Y_3600	Y_3774
Line	224.306 {450}	360.073 {94}	377.433 {89}
Units	Cts/S	Cts/S	Cts/S
Avg	2758.6	39607.	2013.9
Stddev	8.7	339.	28.7
%RSD	.31462	.85703	1.4262

#1	2764.8	39847.	1993.5
#2	2752.5	39367.	2034.2

Sample Name: 280-82959-C-2-A Acquired: 5/17/2016 14:57:53 Type: Unk

Method: 6500_025(v6) Mode: CONC Corr. Factor: 1.000000

User: CRHOADES Prep Date: Custom ID2: Custom ID3:

Comment: 325053 6010B

Elem	Ag3280	Al1670	As1890	B_2089	Ba4554	Be3130	Bi2230	Ca3179	Cd2288
Line	328.068 {103}	167.079 {502}	189.042 {478}	208.959 {461}	455.403 { 74}	313.042 {108}	223.061 {451}	317.933 {106}	228.802 {447}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.00115	-.00161	-.00853	.23944	.01373	-.00026	-.00123	491.31	.00148
Stddev	.00009	.00084	.00290	.00076	.00052	.00005	.00382	10.68	.00005
%RSD	7.6210	51.788	34.038	.31742	3.7793	18.885	310.38	2.1732	3.5539

#1	.00109	-.00220	-.00648	.23890	.01410	-.00029	.00147	498.86	.00144
#2	.00121	-.00102	-.01058	.23998	.01337	-.00022	-.00394	483.76	.00152

Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Elem	Co2286	Cr2055	Cu3247	Fe2599	K_7664	Li6707	Mg2790	Mn2576	Mo2020
Line	228.616 {447}	205.560 {464}	324.754 {104}	259.940 {130}	766.490 { 44}	670.784 { 50}	279.079 {121}2	257.610 {131}	202.030 {467}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	-.00151	.00008	.00077	.01529	19.010	.51244	136.12	.02291	-.00035
Stddev	.00085	.00032	.00074	.00056	.075	.00261	.20	.00010	.00069
%RSD	56.146	405.18	96.062	3.6740	.39557	.50845	.14897	.44546	198.83

#1	-.00091	.00031	.00129	.01489	19.063	.51428	136.26	.02298	-.00083
#2	-.00211	-.00015	.00025	.01569	18.956	.51060	135.97	.02283	.00014

Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Elem	Na8183	Ni2316	P_1782	Pb2203	S_1820	Sb2068	Se1960	Si2881	SiO2
Line	818.326 { 41}	231.604 {446}	178.284 {489}	220.353 {453}	182.034 {485}	206.833 {463}	196.090 {472}	288.158 {117}	288.158 {117}2
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	W 563.92	.00496	.01786	-.00147	F 904.61	-.00948	W -.00690	8.8621	18.965
Stddev	11.52	.00032	.00347	.00182	1.57	.00391	.00210	.0300	.064
%RSD	2.0428	6.4261	19.420	123.49	.17340	41.253	30.439	.33847	.33847

#1	572.07	.00473	.01541	-.00276	905.72	-.00671	-.00839	8.8833	19.010
#2	555.77	.00518	.02031	-.00019	903.50	-.01224	-.00542	8.8409	18.920

Check ?	Chk Warn	Chk Pass	Chk Pass	Chk Pass	Chk Fail	Chk Pass	Chk Warn	Chk Pass	Chk Pass
High Limit	500.00				200.00		5.0000		
Low Limit	11.000				-.20000		-.00500		

Elem	Sn1899	Sr4077	Th2837	Ti3349	Ti1908	U_3701	V_2924	Zn2062	Zr3391
Line	189.989 {477}	407.771 { 83}	283.730 {119}	334.904 {101}	190.856 {477}	370.152 { 91}	292.402 {115}	206.200 {163}	339.198 { 99}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	-.00230	W 8.4753	-.00367	.00093	-.00294	.08317	-.00016	.00278	-.00054
Stddev	.00129	.1830	.00427	.00045	.00057	.00566	.00084	.00010	.00380
%RSD	55.842	2.1594	116.35	48.291	19.254	6.7999	521.78	3.4641	703.90

#1	-.00321	8.6047	-.00670	.00061	-.00334	.08717	-.00076	.00285	-.00323
#2	-.00139	8.3459	-.00065	.00125	-.00254	.07917	.00043	.00272	.00215

Check ?	Chk Pass	Chk Warn	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit		5.0000							
Low Limit		-.01000							

Int. Std.	Y_2243	Y_3600	Y_3774						
Line	224.306 {450}	360.073 { 94}	377.433 { 89}						
Units	Cts/S	Cts/S	Cts/S						
Avg	2538.3	35854.	1940.8						
Stddev	2.7	954.	48.1						
%RSD	.10586	2.6611	2.4801						

#1	2540.2	35179.	1906.8						
#2	2536.4	36528.	1974.8						

Elem	Ag3280	Al1670	As1890	B_2089	Ba4554	Be3130	Bi2230	Ca3179	Cd2288
Line	328.068 {103}	167.079 {502}	189.042 {478}	208.959 {461}	455.403 {74}	313.042 {108}	223.061 {451}	317.933 {106}	228.802 {447}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.00044	.29240	W -.01189	.19284	.01143	-.00014	-.00501	392.38	.00226
Stddev	.00035	.00787	.00297	.00264	.00025	.00014	.00071	8.50	.00027
%RSD	79.561	2.6911	25.001	1.3672	2.1992	105.30	14.195	2.1650	11.893

#1	.00068	.28684	-.00979	.19097	.01161	-.00024	-.00450	398.39	.00207
#2	.00019	.29796	-.01399	.19470	.01125	-.00003	-.00551	386.38	.00245

Check ?	Chk Pass	Chk Pass	Chk Warn	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit			10.000						
Low Limit			-.01000						

Elem	Co2286	Cr2055	Cu3247	Fe2599	K_7664	Li6707	Mg2790	Mn2576	Mo2020
Line	228.616 {447}	205.560 {464}	324.754 {104}	259.940 {130}	766.490 {44}	670.784 {50}	279.079 {121}2	257.610 {131}	202.030 {467}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.00110	.00183	.00779	.54062	30.928	1.0085	278.29	.44969	.00023
Stddev	.00032	.00004	.00058	.00937	.358	.0094	6.84	.00028	.00008
%RSD	29.179	2.1007	7.5108	1.7335	1.1585	.93494	2.4590	.06309	34.344

#1	.00087	.00186	.00737	.54725	30.674	1.0019	273.45	.44949	.00028
#2	.00133	.00180	.00820	.53400	31.181	1.0152	283.13	.44989	.00017

Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Elem	Na8183	Ni2316	P_1782	Pb2203	S_1820	Sb2068	Se1960	Si2881	SiO2
Line	818.326 {41}	231.604 {446}	178.284 {489}	220.353 {453}	182.034 {485}	206.833 {463}	196.090 {472}	288.158 {117}	288.158 {117}2
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	W 2606.7	.00931	.03137	-.00094	F 2009.4	-.00975	W -.00844	8.9279	19.106
Stddev	56.4	.00036	.00044	.00172	62.8	.00077	.00285	.0514	.110
%RSD	2.1639	3.9076	1.4089	184.20	3.1269	7.8996	33.734	.57542	.57542

#1	2646.5	.00956	.03106	-.00215	1964.9	-.00920	-.01045	8.8915	19.028
#2	2566.8	.00905	.03168	.00028	2053.8	-.01029	-.00643	8.9642	19.183

Check ?	Chk Warn	Chk Pass	Chk Pass	Chk Pass	Chk Fail	Chk Pass	Chk Warn	Chk Pass	Chk Pass
High Limit	500.00				200.00		5.0000		
Low Limit	11.000				-.20000		-.00500		

Elem	Sn1899	Sr4077	Th2837	Ti3349	Ti1908	U_3701	V_2924	Zn2062	Zr3391
Line	189.989 {477}	407.771 {83}	283.730 {119}	334.904 {101}	190.856 {477}	370.152 {91}	292.402 {115}	206.200 {163}	339.198 {99}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	-.00469	W 9.0657	-.00258	.00936	-.00074	.05496	-.00022	.01242	-.00378
Stddev	.00071	.2025	.00010	.00007	.00263	.06133	.00096	.00104	.00315
%RSD	15.095	2.2341	4.0255	.78377	356.33	111.60	441.74	8.3690	83.430

#1	-.00419	9.2089	-.00266	.00941	-.00260	.01159	.00046	.01168	-.00155
#2	-.00519	8.9225	-.00251	.00931	.00112	.09832	-.00089	.01315	-.00601

Check ?	Chk Pass	Chk Warn	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit		5.0000							
Low Limit		-.01000							

Int. Std.	Y_2243	Y_3600	Y_3774						
Line	224.306 {450}	360.073 {94}	377.433 {89}						
Units	Cts/S	Cts/S	Cts/S						
Avg	2473.4	33838.	1940.8						
Stddev	94.6	1244.	17.8						
%RSD	3.8254	3.6774	.91484						

#1	2540.3	34718.	1928.3						
#2	2406.5	32958.	1953.4						

Elem	Ag3280	Al1670	As1890	B_2089	Ba4554	Be3130	Bi2230	Ca3179	Cd2288
Line	328.068 {103}	167.079 {502}	189.042 {478}	208.959 {461}	455.403 {74}	313.042 {108}	223.061 {451}	317.933 {106}	228.802 {447}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.00146	.29784	-.00094	.30908	.01730	.00003	-.00047	59.305	.00077
Stddev	.00117	.00193	.00401	.00442	.00098	.00003	.00049	1.554	.00075
%RSD	80.123	.64889	424.59	1.4306	5.6870	78.304	104.38	2.6198	97.095

#1	.00063	.29921	-.00378	.30595	.01800	.00002	-.00081	60.404	.00130
#2	.00229	.29648	.00189	.31220	.01661	.00005	-.00012	58.207	.00024

Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Elem	Co2286	Cr2055	Cu3247	Fe2599	K_7664	Li6707	Mg2790	Mn2576	Mo2020
Line	228.616 {447}	205.560 {464}	324.754 {104}	259.940 {130}	766.490 {44}	670.784 {50}	279.079 {121}2	257.610 {131}	202.030 {467}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	-.00076	.00886	.02497	.49088	8.6409	.19064	30.099	.02479	.02080
Stddev	.00010	.00018	.00056	.00091	.0480	.00234	.019	.00000	.00063
%RSD	12.890	2.0398	2.2484	.18614	.55564	1.2263	.06202	.01954	3.0100

#1	-.00083	.00874	.02457	.49152	8.6748	.18899	30.112	.02479	.02035
#2	-.00069	.00899	.02536	.49023	8.6069	.19230	30.085	.02480	.02124

Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Elem	Na8183	Ni2316	P_1782	Pb2203	S_1820	Sb2068	Se1960	Si2881	SiO2
Line	818.326 {41}	231.604 {446}	178.284 {489}	220.353 {453}	182.034 {485}	206.833 {463}	196.090 {472}	288.158 {117}	288.158 {117}2
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	353.75	.00284	.02117	.00136	W 193.32	-.00341	.01922	7.0344	15.054
Stddev	9.99	.00025	.00144	.00068	.60	.00393	.00465	.0774	.166
%RSD	2.8247	8.7118	6.7872	50.383	.30969	115.28	24.203	1.1009	1.1009

#1	360.81	.00266	.02015	.00184	193.74	-.00063	.02251	6.9796	14.936
#2	346.68	.00301	.02218	.00087	192.89	-.00619	.01593	7.0892	15.171

Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Warn	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit					180.00				
Low Limit					-.15000				

Elem	Sn1899	Sr4077	Th2837	Ti3349	Ti1908	U_3701	V_2924	Zn2062	Zr3391
Line	189.989 {477}	407.771 {83}	283.730 {119}	334.904 {101}	190.856 {477}	370.152 {91}	292.402 {115}	206.200 {163}	339.198 {99}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	-.00141	1.3192	-.00035	.00917	-.00061	-.01950	-.00005	.02761	-.00257
Stddev	.00045	.0352	.00110	.00016	.00323	.04409	.00028	.00075	.00025
%RSD	31.704	2.6642	310.61	1.7933	532.01	226.06	605.97	2.7115	9.7474

#1	-.00172	1.3441	-.00113	.00929	.00168	.01167	.00015	.02814	-.00239
#2	-.00109	1.2944	.00042	.00905	-.00289	-.05068	-.00024	.02708	-.00274

Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Int. Std.	Y_2243	Y_3600	Y_3774						
Line	224.306 {450}	360.073 {94}	377.433 {89}						
Units	Cts/S	Cts/S	Cts/S						
Avg	2666.3	37625.	2012.6						
Stddev	.7	797.	79.9						
%RSD	.02801	2.1174	3.9685						

#1	2666.8	37062.	1956.1						
#2	2665.7	38188.	2069.1						

Sample Name: CCVH-3883905 Acquired: 5/17/2016 15:06:19 Type: QC
Method: 6500_025(v6) Mode: CONC Corr. Factor: 1.000000
User: CRHOADES Prep Date: Custom ID2: Custom ID3:
Comment:

Elem	Ag3280	Al3092	As1890	B_2089	Ba4554	Be3130	Bi2230	Ca3179	Cd2288	Co2286	Cr2055	Cu3247
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	-.00487	50.731	-.00009	.00430	-.00082	-.00028	.98766	.01086	-.00044	-.00116	-.00012	-.01331
Stddev	.00023	1.893	.00506	.00043	.00021	.00012	.00905	.00781	.00000	.00008	.00023	.00014
%RSD	4.6207	3.7304	5622.3	9.9868	25.893	43.487	.91677	71.929	.40797	6.6563	193.20	1.0890

#1	-.00471	52.069	.00349	.00461	-.00097	-.00037	.99406	.00533	-.00045	-.00122	-.00028	-.01341
#2	-.00503	49.393	-.00367	.00400	-.00067	-.00020	.98126	.01638	-.00044	-.00111	.00004	-.01321

Check ?	None	Chk Pass	None	None	None	None	Chk Pass	None	None	None	None	None
Value												
Range												

Elem	Fe2714	K_7664	Li6707	Mg2790	Mn2576	Mo2020	Na8183	Ni2316	P_1782	Pb2203	S_1820	Sb2068
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	52.216	.06216	-.00444	.02288	-.00217	-.00180	266.41	.00141	.00380	.00025	F 5.5422	-.01780
Stddev	1.459	.07429	.00090	.00768	.00001	.00008	4.41	.00040	.00208	.00123	.0503	.00247
%RSD	2.7931	119.52	20.349	33.550	.61095	4.1794	1.6548	28.344	54.918	499.65	.90848	13.902

#1	53.247	.11468	-.00380	.02831	-.00218	-.00185	269.53	.00169	.00527	-.00062	5.5778	-.01605
#2	51.184	.00963	-.00508	.01745	-.00216	-.00175	263.29	.00112	.00232	.00112	5.5066	-.01955

Check ?	Chk Pass	None	None	None	None	None	Chk Pass	None	None	None	Chk Fail	None
Value											5.0000	
Range											10.490%	

Elem	Se1960	Si2881	SiO2	Sn1899	Sr4077	Th2837	Ti3349	Ti1908	U_3701	V_2924	Zn2062	Zr3391
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	-.01073	-.05012	-.10725	-.00189	.00089	4.8301	-.00175	-.00404	9.9873	.01283	.00018	-.13660
Stddev	.00121	.07153	.15307	.00012	.00015	.0006	.00016	.00031	.0306	.00025	.00002	.00187
%RSD	11.307	142.72	142.72	6.3720	16.296	.01355	9.0134	7.6395	.30678	1.9172	12.673	1.3666

#1	-.00987	-.10070	-.21549	-.00198	.00100	4.8296	-.00187	-.00382	10.009	.01265	.00019	-.13528
#2	-.01159	.00046	.00099	-.00181	.00079	4.8305	-.00164	-.00426	9.9656	.01300	.00016	-.13792

Check ?	None	None	None	None	None	Chk Pass	None	None	Chk Pass	None	None	None
Value												
Range												

Int. Std.	Y_2243	Y_3600	Y_3774
Units	Cts/S	Cts/S	Cts/S
Avg	2561.2	36785.	1906.4
Stddev	80.7	892.	34.1
%RSD	3.1523	2.4243	1.7866

#1	2618.3	36154.	1882.3
#2	2504.1	37415.	1930.4

Sample Name: CCV-3888422 Acquired: 5/17/2016 15:08:54 Type: QC
Method: 6500_025(v6) Mode: CONC Corr. Factor: 1.000000
User: CRHOADES Prep Date: Custom ID2: Custom ID3:
Comment:

Elem	Ag3280	Al1670	As1890	B_2089	Ba4554	Be3130	Bi2230	Ca3179	Cd2288	Co2286	Cr2055	Cu3247	Fe2599
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.48442	.48819	.94956	.49478	.47477	.48882	.00188	4.7617	.49952	.51082	.51408	.47146	2.4812
Stddev	.00214	.00503	.01127	.00287	.00753	.00640	.00113	.0707	.01161	.00105	.00002	.00076	.0330
%RSD	.44167	1.0298	1.1870	.58018	1.5859	1.3083	60.280	1.4841	2.3245	.20524	.00395	.16154	1.3296

#1	.48291	.49174	.95753	.49681	.48010	.49335	.00108	4.8117	.49131	.51156	.51407	.47092	2.5046
#2	.48593	.48463	.94159	.49275	.46945	.48430	.00268	4.7117	.50773	.51008	.51410	.47199	2.4579

Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	None	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Value													
Range													

Elem	K_7664	Li6707	Mg2790	Mn2576	Mo2020	Na5895	Ni2316	P_1782	Pb2203	S_1820	Sb2068	Se1960	Si2881
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	47.276	.94863	19.055	.46942	.50168	5.1848	.49847	.99604	1.0148	.14725	.98973	.96010	4.8899
Stddev	.743	.00460	.033	.00070	.00265	.0192	.00165	.00787	.0073	.00683	.01370	.02097	.0338
%RSD	1.5726	.48534	.17063	.14827	.52767	.36968	.33129	.79027	.71872	4.6372	1.3846	2.1839	.69029

#1	47.801	.95189	19.032	.46991	.50355	5.1984	.49964	1.0016	1.0199	.15207	.99942	.97493	4.8660
#2	46.750	.94537	19.078	.46893	.49981	5.1713	.49731	.99047	1.0096	.14242	.98004	.94527	4.9138

Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	None	Chk Pass	Chk Pass	Chk Pass
Value													
Range													

Elem	SiO2	Sn1899	Sr4077	Th2837	Ti3349	Ti1908	U_3701	V_2924	Zn2062	Zr3391
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	10.464	1.0153	.48475	-.00490	.46241	1.0246	.01353	.48937	.46945	.47415
Stddev	.072	.0090	.00746	.00075	.00257	.0063	.02556	.00116	.00686	.00576
%RSD	.69029	.88748	1.5387	15.394	.55639	.61560	188.97	.23715	1.4616	1.2138

#1	10.413	1.0217	.49002	-.00436	.46423	1.0291	.03160	.48855	.46460	.47008
#2	10.515	1.0089	.47947	-.00543	.46059	1.0202	-.00455	.49019	.47430	.47822

Check ?	Chk Pass	Chk Pass	Chk Pass	None	Chk Pass	Chk Pass	None	Chk Pass	Chk Pass	Chk Pass
Value										
Range										

Int. Std.	Y_2243	Y_3600	Y_3774
Units	Cts/S	Cts/S	Cts/S
Avg	2609.1	37100.	1944.2
Stddev	48.8	920.	19.8
%RSD	1.8690	2.4787	1.0195

#1	2643.6	36449.	1958.3
#2	2574.7	37750.	1930.2

Sample Name: CCB Acquired: 5/17/2016 15:11:24 Type: QC
 Method: 6500_025(v6) Mode: CONC Corr. Factor: 1.000000
 User: CRHOADES Prep Date: Custom ID2: Custom ID3:
 Comment:

Elem	Ag3280	Al1670	As1890	B_2089	Ba4554	Be3130	Bi2230	Ca3179	Cd2288	Co2286	Cr2055
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.00093	.00058	.00560	.00333	-.00118	.00004	-.00101	.04769	-.00001	-.00022	-.00061
Stddev	.00048	.00031	.00154	.00156	.00020	.00001	.00178	.05490	.00019	.00038	.00004
%RSD	52.213	52.793	27.543	46.747	17.235	21.834	176.13	115.11	1456.1	175.87	7.2297

#1	.00127	.00080	.00669	.00444	-.00132	.00004	-.00227	.00887	-.00015	-.00049	-.00058
#2	.00059	.00037	.00451	.00223	-.00103	.00003	.00025	.08651	.00012	.00005	-.00064

Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit											
Low Limit											

Elem	Cu3247	Fe2599	K_7664	Li6707	Mg2790	Mn2576	Mo2020	Na5895	Ni2316	P_1782	Pb2203
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.00009	.00496	-.10054	F -.01032	.00683	.00006	.00070	.33305	.00029	.00110	-.00109
Stddev	.00031	.01280	.10230	.00079	.00009	.00013	.00052	.30713	.00105	.00398	.00182
%RSD	334.92	257.95	101.75	7.6587	1.2600	204.25	75.029	92.216	367.82	362.30	166.80

#1	-.00012	-.00409	-.17288	-.00977	.00689	.00016	.00033	.11588	.00103	-.00172	-.00238
#2	.00031	.01401	-.02821	-.01088	.00677	-.00003	.00107	.55023	-.00046	.00392	.00020

Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Fail	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit				.01000							
Low Limit				-.01000							

Elem	S_1820	Sb2068	Se1960	Si2881	SiO2	Sn1899	Sr4077	Th2837	Ti3349	Ti1908	U_3701
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	W .09187	W .00238	-.00796	-.03884	-.08312	-.00089	.00091	-.00080	.00105	.00054	.04039
Stddev	.01218	.00125	.00137	.00264	.00566	.00045	.00126	.00354	.00034	.00269	.00076
%RSD	13.261	52.512	17.179	6.8045	6.8045	50.600	138.42	442.96	32.738	495.66	1.8782

#1	.10049	.00150	-.00892	-.03697	-.07912	-.00121	.00002	.00170	.00129	-.00136	.04093
#2	.08326	.00326	-.00699	-.04071	-.08712	-.00057	.00180	-.00330	.00081	.00245	.03986

Check ?	Chk Warn	Chk Warn	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit	.05000	.00100									
Low Limit	-.20000	-.00100									

Elem	V_2924	Zn2062	Zr3391
Units	ppm	ppm	ppm
Avg	.00050	-.00057	.00060
Stddev	.00014	.00033	.00490
%RSD	29.036	57.983	811.33

#1	.00060	-.00034	-.00286
#2	.00040	-.00080	.00407

Check ?	Chk Pass	Chk Pass	Chk Pass
High Limit			
Low Limit			

Int. Std.	Y_2243	Y_3600	Y_3774
Units	Cts/S	Cts/S	Cts/S
Avg	2564.4	37262.	1815.4
Stddev	.0	700.	9.9
%RSD	.00169	1.8786	.54525

#1	2564.4	37757.	1808.4
#2	2564.4	36767.	1822.4

Sample Name: CCVL-3894681 Acquired: 5/17/2016 15:13:45 Type: QC
Method: 6500_025(v6) Mode: CONC Corr. Factor: 1.000000
User: CRHOADES Prep Date: Custom ID2: Custom ID3:
Comment:

Elem	Ag3280	Al1670	As1890	B_2089	Ba4554	Be3130	Bi2230	Ca3179	Cd2288	Co2286	Cr2055	Cu3247
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.01093	.09947	F .02218	.09629	.00857	.00105	.10420	.22509	.00481	.01000	.00992	.01387
Stddev	.00078	.00025	.00292	.00067	.00123	.00026	.00286	.00444	.00015	.00045	.00013	.00045
%RSD	7.1008	.25549	13.155	.69347	14.382	24.981	2.7480	1.9703	3.0253	4.4565	1.3516	3.2501
#1	.01038	.09929	.02012	.09582	.00944	.00123	.10623	.22196	.00471	.00968	.00983	.01355
#2	.01147	.09965	.02425	.09676	.00770	.00086	.10218	.22823	.00492	.01031	.01002	.01419
Check ?	Chk Pass	Chk Pass	Chk Fail	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Value			.01500									
Range			30.000%									
Elem	Fe2599	K_7664	Li6707	Mg2790	Mn2576	Mo2020	Na5895	Ni2316	P_1782	Pb2203	S_1820	Sb2068
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.11403	2.7952	F .00123	.19949	.00964	.01911	1.0858	.03979	2.8087	.00821	.04349	.01907
Stddev	.00766	.1501	.00090	.00157	.00004	.00070	.0400	.00020	.0211	.00160	.00531	.00357
%RSD	6.7162	5.3710	72.769	.78813	.37940	3.6376	3.6833	.50862	.75174	19.504	12.214	18.714
#1	.10862	2.9013	.00187	.20060	.00961	.01862	1.0575	.03965	2.7938	.00935	.04725	.01655
#2	.11945	2.6890	.00060	.19838	.00967	.01960	1.1141	.03993	2.8237	.00708	.03974	.02159
Check ?	Chk Pass	Chk Pass	Chk Fail	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	None	Chk Pass
Value			.01000									
Range			-30.000%									
Elem	Se1960	Si2881	SiO2	Sn1899	Sr4077	Th2837	Ti3349	Ti1908	U_3701	V_2924	Zn2062	Zr3391
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	F .00950	.45984	.98405	.09899	.01006	.01557	.01014	.01523	F .09245	.00975	.02058	.01552
Stddev	.00090	.07660	.16393	.00209	.00000	.00111	.00031	.00470	.00716	.00005	.00040	.00325
%RSD	9.5144	16.659	16.659	2.1128	.03250	7.1283	3.0191	30.842	7.7415	.52149	1.9305	20.937
#1	.00886	.51400	1.1000	.09751	.01006	.01479	.01036	.01191	.09751	.00971	.02030	.01322
#2	.01014	.40567	.86813	.10047	.01005	.01636	.00993	.01855	.08739	.00979	.02086	.01782
Check ?	Chk Fail	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Fail	Chk Pass	Chk Pass	Chk Pass
Value	.01500								.06000			
Range	-30.000%								30.000%			
Int. Std.	Y_2243	Y_3600	Y_3774									
Units	Cts/S	Cts/S	Cts/S									
Avg	2560.2	37595.	1863.4									
Stddev	1.1	70.	127.8									
%RSD	.04338	.18747	6.8585									
#1	2561.0	37645.	1773.1									
#2	2559.4	37545.	1953.8									

Sample Name: 280-82959-C-5-A Acquired: 5/17/2016 15:16:26 Type: Unk

Method: 6500_025(v6) Mode: CONC Corr. Factor: 1.000000

User: CRHOADES Prep Date: Custom ID2: Custom ID3:

Comment: 325053 6010B

Elem	Ag3280	Al1670	As1890	B_2089	Ba4554	Be3130	Bi2230	Ca3179	Cd2288
Line	328.068 {103}	167.079 {502}	189.042 {478}	208.959 {461}	455.403 { 74}	313.042 {108}	223.061 {451}	317.933 {106}	228.802 {447}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.00051	.17477	-.00693	.29581	.01139	-.00021	-.00266	358.02	.00191
Stddev	.00001	.00162	.00055	.00394	.00010	.00014	.00045	.76	.00008
%RSD	1.0488	.92946	7.9724	1.3319	.86342	65.087	16.756	.21135	3.9730

#1	.00052	.17592	-.00654	.29860	.01132	-.00011	-.00297	357.49	.00196
#2	.00051	.17362	-.00732	.29303	.01146	-.00031	-.00234	358.56	.00185

Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Elem	Co2286	Cr2055	Cu3247	Fe2599	K_7664	Li6707	Mg2790	Mn2576	Mo2020
Line	228.616 {447}	205.560 {464}	324.754 {104}	259.940 {130}	766.490 { 44}	670.784 { 50}	279.079 {121}2	257.610 {131}	202.030 {467}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.00094	.00125	.00214	.30737	20.682	.62945	227.26	.16541	.00062
Stddev	.00005	.00026	.00005	.00295	.257	.00493	.60	.00053	.00076
%RSD	4.8492	20.524	2.3000	.96087	1.2409	.78250	.26418	.32226	122.91

#1	.00091	.00143	.00210	.30946	20.500	.62596	227.68	.16579	.00116
#2	.00098	.00107	.00217	.30528	20.863	.63293	226.83	.16504	.00008

Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Elem	Na8183	Ni2316	P_1782	Pb2203	S_1820	Sb2068	Se1960	Si2881	SiO2
Line	818.326 { 41}	231.604 {446}	178.284 {489}	220.353 {453}	182.034 {485}	206.833 {463}	196.090 {472}	288.158 {117}	288.158 {117}2
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	W 1318.8	.00764	.01995	-.00103	F 1259.3	-.00422	-.00053	8.3488	17.866
Stddev	4.3	.00013	.00198	.00122	2.6	.00006	.00159	.0220	.047
%RSD	.32515	1.6569	9.9039	118.57	.20614	1.4921	298.26	.26316	.26316

#1	1315.7	.00755	.02134	-.00189	1261.2	-.00417	.00059	8.3332	17.833
#2	1321.8	.00772	.01855	-.00017	1257.5	-.00426	-.00166	8.3643	17.900

Check ?	Chk Warn	Chk Pass	Chk Pass	Chk Pass	Chk Fail	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit	500.00				200.00				
Low Limit	11.000				-.20000				

Elem	Sn1899	Sr4077	Th2837	Ti3349	Ti1908	U_3701	V_2924	Zn2062	Zr3391
Line	189.989 {477}	407.771 { 83}	283.730 {119}	334.904 {101}	190.856 {477}	370.152 { 91}	292.402 {115}	206.200 {163}	339.198 { 99}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	-.00508	W 7.8621	-.00595	.00561	-.00637	.06084	.00015	.00372	.00232
Stddev	.00109	.0180	.00395	.00042	.00179	.04249	.00007	.00018	.00117
%RSD	21.541	.22927	66.440	7.4329	28.152	69.845	48.462	4.8436	50.373

#1	-.00431	7.8494	-.00875	.00590	-.00510	.03079	.00020	.00359	.00149
#2	-.00585	7.8749	-.00315	.00531	-.00763	.09089	.00010	.00385	.00315

Check ?	Chk Pass	Chk Warn	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit		5.0000							
Low Limit		-.01000							

Int. Std.	Y_2243	Y_3600	Y_3774
Line	224.306 {450}	360.073 { 94}	377.433 { 89}
Units	Cts/S	Cts/S	Cts/S
Avg	2394.1	33985.	1906.5
Stddev	12.8	620.	.2
%RSD	.53503	1.8229	.01185

#1	2403.1	33547.	1906.4
#2	2385.0	34423.	1906.7

Elem	Ag3280	Al1670	As1890	B_2089	Ba4554	Be3130	Bi2230	Ca3179	Cd2288
Line	328.068 {103}	167.079 {502}	189.042 {478}	208.959 {461}	455.403 { 74}	313.042 {108}	223.061 {451}	317.933 {106}	228.802 {447}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.00081	.03868	.00129	.42810	.01176	-.00012	-.00213	118.30	.00086
Stddev	.00079	.00088	.00845	.00316	.00050	.00008	.00337	1.97	.00064
%RSD	97.684	2.2705	654.15	.73771	4.2706	64.737	158.15	1.6680	75.023

#1	.00137	.03930	-.00468	.43034	.01211	-.00007	.00025	119.69	.00131
#2	.00025	.03806	.00727	.42587	.01140	-.00018	-.00452	116.90	.00040

Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Elem	Co2286	Cr2055	Cu3247	Fe2599	K_7664	Li6707	Mg2790	Mn2576	Mo2020
Line	228.616 {447}	205.560 {464}	324.754 {104}	259.940 {130}	766.490 { 44}	670.784 { 50}	279.079 {121}2	257.610 {131}	202.030 {467}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	-.00091	.00023	.00138	.08449	8.6602	.24281	75.205	.03260	.00087
Stddev	.00012	.00002	.00020	.00162	.0738	.00570	.107	.00019	.00011
%RSD	13.488	6.6608	14.307	1.9143	.85265	2.3493	.14235	.58621	12.057

#1	-.00083	.00022	.00124	.08563	8.7124	.24685	75.281	.03273	.00095
#2	-.00100	.00024	.00152	.08335	8.6080	.23878	75.129	.03246	.00080

Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Elem	Na8183	Ni2316	P_1782	Pb2203	S_1820	Sb2068	Se1960	Si2881	SiO2
Line	818.326 { 41}	231.604 {446}	178.284 {489}	220.353 {453}	182.034 {485}	206.833 {463}	196.090 {472}	288.158 {117}	288.158 {117}2
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	405.38	.00133	.02403	-.00031	F 326.64	-.00155	-.00412	7.3313	15.689
Stddev	6.30	.00013	.00119	.00073	1.25	.00106	.00199	.1050	.225
%RSD	1.5530	9.7652	4.9501	239.26	.38131	68.111	48.237	1.4328	1.4328

#1	409.83	.00124	.02319	.00021	327.52	-.00080	-.00271	7.4055	15.848
#2	400.93	.00143	.02487	-.00082	325.76	-.00230	-.00552	7.2570	15.530

Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Fail	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit					200.00				
Low Limit					-.20000				

Elem	Sn1899	Sr4077	Th2837	Ti3349	Ti1908	U_3701	V_2924	Zn2062	Zr3391
Line	189.989 {477}	407.771 { 83}	283.730 {119}	334.904 {101}	190.856 {477}	370.152 { 91}	292.402 {115}	206.200 {163}	339.198 { 99}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	-.00292	3.1580	-.00153	.00138	-.00249	.02360	-.00013	.00280	.00128
Stddev	.00133	.0438	.00025	.00021	.00135	.00309	.00130	.00045	.00382
%RSD	45.670	1.3874	16.206	14.880	54.224	13.113	962.91	16.256	297.40

#1	-.00386	3.1890	-.00135	.00153	-.00153	.02141	.00078	.00247	.00398
#2	-.00197	3.1270	-.00170	.00124	-.00344	.02578	-.00105	.00312	-.00142

Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Int. Std.	Y_2243	Y_3600	Y_3774						
Line	224.306 {450}	360.073 { 94}	377.433 { 89}						
Units	Cts/S	Cts/S	Cts/S						
Avg	2589.7	35544.	1873.9						
Stddev	14.2	1247.	36.5						
%RSD	.55000	3.5088	1.9491						

#1	2599.7	34662.	1848.1						
#2	2579.6	36425.	1899.7						

Elem	Ag3280	Al1670	As1890	B_2089	Ba4554	Be3130	Bi2230	Ca3179	Cd2288
Line	328.068 {103}	167.079 {502}	189.042 {478}	208.959 {461}	455.403 {74}	313.042 {108}	223.061 {451}	317.933 {106}	228.802 {447}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.00064	.87325	.00272	.22616	.04505	-.00001	.00148	69.411	.00072
Stddev	.00017	.00190	.00452	.00018	.00037	.00012	.00453	.780	.00001
%RSD	26.441	.21772	165.96	.08080	.83189	882.59	305.35	1.1238	2.0467

#1	.00076	.87459	.00592	.22603	.04531	-.00010	-.00172	69.963	.00071
#2	.00052	.87190	-.00047	.22629	.04478	.00007	.00469	68.860	.00073

Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Elem	Co2286	Cr2055	Cu3247	Fe2599	K_7664	Li6707	Mg2790	Mn2576	Mo2020
Line	228.616 {447}	205.560 {464}	324.754 {104}	259.940 {130}	766.490 {44}	670.784 {50}	279.079 {121}2	257.610 {131}	202.030 {467}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	-.00018	.00195	.00227	.85160	5.9923	.09481	22.927	.02390	.00216
Stddev	.00028	.00030	.00043	.00013	.0258	.00516	.024	.00016	.00005
%RSD	154.85	15.190	18.741	.01531	.43043	5.4461	.10430	.68090	2.1159

#1	-.00038	.00174	.00197	.85169	5.9741	.09116	22.944	.02379	.00213
#2	.00002	.00216	.00257	.85151	6.0106	.09846	22.910	.02402	.00220

Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Elem	Na8183	Ni2316	P_1782	Pb2203	S_1820	Sb2068	Se1960	Si2881	SiO2
Line	818.326 {41}	231.604 {446}	178.284 {489}	220.353 {453}	182.034 {485}	206.833 {463}	196.090 {472}	288.158 {117}	288.158 {117}2
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	86.649	.00236	.04620	-.00074	47.206	-.00401	.00506	10.039	21.482
Stddev	.614	.00020	.00125	.00259	.355	.00344	.00152	.058	.123
%RSD	.70887	8.4109	2.7088	349.70	.75120	85.645	29.925	.57366	.57366

#1	87.083	.00222	.04532	.00109	46.956	-.00644	.00399	10.079	21.570
#2	86.214	.00251	.04709	-.00257	47.457	-.00158	.00614	9.9978	21.395

Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Elem	Sn1899	Sr4077	Th2837	Ti3349	Ti1908	U_3701	V_2924	Zn2062	Zr3391
Line	189.989 {477}	407.771 {83}	283.730 {119}	334.904 {101}	190.856 {477}	370.152 {91}	292.402 {115}	206.200 {163}	339.198 {99}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	-.00240	1.9016	-.00158	.01223	-.00202	.03719	.00250	.00439	.00041
Stddev	.00111	.0194	.00278	.00061	.00187	.00363	.00089	.00041	.00030
%RSD	46.215	1.0188	176.27	4.9504	92.909	9.7564	35.618	9.4141	72.816

#1	-.00319	1.9153	-.00354	.01266	-.00069	.03976	.00187	.00410	.00020
#2	-.00162	1.8879	.00039	.01180	-.00334	.03463	.00313	.00469	.00061

Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Int. Std.	Y_2243	Y_3600	Y_3774
Line	224.306 {450}	360.073 {94}	377.433 {89}
Units	Cts/S	Cts/S	Cts/S
Avg	2694.8	39600.	2022.5
Stddev	35.0	182.	3.9
%RSD	1.2998	.45893	.19377

#1	2670.0	39471.	2019.7
#2	2719.5	39728.	2025.3

Elem	Ag3280	Al1670	As1890	B_2089	Ba4554	Be3130	Bi2230	Ca3179	Cd2288
Line	328.068 {103}	167.079 {502}	189.042 {478}	208.959 {461}	455.403 { 74}	313.042 {108}	223.061 {451}	317.933 {106}	228.802 {447}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	-0.00017	.00864	W -0.01189	.23095	.05054	-0.00043	-0.00061	437.11	.00222
Stddev	.00013	.00002	.00154	.00417	.00095	.00004	.00216	2.26	.00028
%RSD	78.066	.19203	12.915	1.8053	1.8792	9.5558	353.37	.51708	12.850

#1	-0.00026	.00865	-0.01298	.23390	.05121	-0.00046	-0.00214	435.52	.00201
#2	-0.00008	.00863	-0.01081	.22800	.04986	-0.00040	.00092	438.71	.00242

Check ?	Chk Pass	Chk Pass	Chk Warn	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit			10.000						
Low Limit			-.01000						

Elem	Co2286	Cr2055	Cu3247	Fe2599	K_7664	Li6707	Mg2790	Mn2576	Mo2020
Line	228.616 {447}	205.560 {464}	324.754 {104}	259.940 {130}	766.490 { 44}	670.784 { 50}	279.079 {121}2	257.610 {131}	202.030 {467}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	-0.00086	.00037	.00212	.02890	25.333	.85737	280.87	.05546	.00527
Stddev	.00023	.00015	.00063	.00472	.072	.00456	7.12	.00005	.00063
%RSD	26.402	40.951	29.706	16.347	.28366	.53148	2.5351	.09645	11.917

#1	-0.00070	.00048	.00168	.02556	25.384	.86059	275.84	.05549	.00572
#2	-0.00102	.00026	.00257	.03224	25.283	.85415	285.91	.05542	.00483

Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Elem	Na8183	Ni2316	P_1782	Pb2203	S_1820	Sb2068	Se1960	Si2881	SiO2
Line	818.326 { 41}	231.604 {446}	178.284 {489}	220.353 {453}	182.034 {485}	206.833 {463}	196.090 {472}	288.158 {117}	288.158 {117}2
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	W 2307.6	.01276	.14140	-0.00156	F 1580.9	-0.00689	.31841	7.0509	15.089
Stddev	15.4	.00003	.00463	.00018	19.4	.00122	.01410	.0066	.014
%RSD	.66676	.24416	3.2746	11.864	1.2261	17.686	4.4281	.09292	.09292

#1	2296.7	.01274	.14467	-.00143	1594.6	-.00603	.32838	7.0555	15.099
#2	2318.4	.01278	.13812	-.00169	1567.2	-.00775	.30844	7.0463	15.079

Check ?	Chk Warn	Chk Pass	Chk Pass	Chk Pass	Chk Fail	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit	500.00				200.00				
Low Limit	11.000				-.20000				

Elem	Sn1899	Sr4077	Th2837	Ti3349	Ti1908	U_3701	V_2924	Zn2062	Zr3391
Line	189.989 {477}	407.771 { 83}	283.730 {119}	334.904 {101}	190.856 {477}	370.152 { 91}	292.402 {115}	206.200 {163}	339.198 { 99}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	-0.00770	W 16.269	-0.00409	.00100	-0.00395	.25733	-0.00097	.00811	.00161
Stddev	.00022	.155	.00099	.00105	.00244	.00940	.00014	.00063	.00102
%RSD	2.9042	.95279	24.135	104.79	61.728	3.6515	13.949	7.7879	63.302

#1	-0.00754	16.378	-0.00339	.00174	-0.00568	.26397	-0.00107	.00856	.00089
#2	-0.00786	16.159	-0.00479	.00026	-0.00223	.25068	-0.00088	.00767	.00233

Check ?	Chk Pass	Chk Warn	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit		5.0000							
Low Limit		-.01000							

Int. Std.	Y_2243	Y_3600	Y_3774						
Line	224.306 {450}	360.073 { 94}	377.433 { 89}						
Units	Cts/S	Cts/S	Cts/S						
Avg	2426.5	33880.	1861.1						
Stddev	15.3	221.	36.8						
%RSD	.63156	.65257	1.9788						

#1	2415.6	34036.	1835.1						
#2	2437.3	33724.	1887.1						

Elem	Ag3280	Al1670	As1890	B_2089	Ba4554	Be3130	Bi2230	Ca3179	Cd2288
Line	328.068 {103}	167.079 {502}	189.042 {478}	208.959 {461}	455.403 {74}	313.042 {108}	223.061 {451}	317.933 {106}	228.802 {447}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.00192	.03727	.00624	1.8302	.25208	-.00014	-.00139	118.45	.00149
Stddev	.00049	.00018	.00508	.0087	.00637	.00006	.00293	2.68	.00024
%RSD	25.529	.48730	81.392	.47490	2.5252	45.651	210.40	2.2653	16.066

#1	.00227	.03714	.00984	1.8363	.25658	-.00018	-.00347	120.35	.00166
#2	.00157	.03740	.00265	1.8241	.24757	-.00009	.00068	116.56	.00132

Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Elem	Co2286	Cr2055	Cu3247	Fe2599	K_7664	Li6707	Mg2790	Mn2576	Mo2020
Line	228.616 {447}	205.560 {464}	324.754 {104}	259.940 {130}	766.490 {44}	670.784 {50}	279.079 {121}2	257.610 {131}	202.030 {467}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.00679	.00326	.00189	.21681	12.138	.00539	176.87	.84145	.01540
Stddev	.00013	.00043	.00039	.01700	.065	.00074	.03	.00017	.00013
%RSD	1.8830	13.224	20.726	7.8415	.53534	13.801	.01791	.02006	.84160

#1	.00670	.00295	.00217	.22884	12.184	.00592	176.85	.84133	.01549
#2	.00688	.00356	.00161	.20479	12.092	.00486	176.89	.84157	.01531

Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Elem	Na8183	Ni2316	P_1782	Pb2203	S_1820	Sb2068	Se1960	Si2881	SiO2
Line	818.326 {41}	231.604 {446}	178.284 {489}	220.353 {453}	182.034 {485}	206.833 {463}	196.090 {472}	288.158 {117}	288.158 {117}2
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	166.33	.13139	.16971	-.00120	102.40	-.00630	W -.00534	17.304	37.030
Stddev	.06	.00079	.00592	.00005	.24	.00028	.00567	.101	.216
%RSD	.03764	.60464	3.4892	3.8492	.23614	4.4004	106.12	.58261	.58261

#1	166.29	.13195	.17390	-.00123	102.58	-.00649	-.00935	17.233	36.878
#2	166.38	.13083	.16552	-.00117	102.23	-.00610	-.00133	17.375	37.183

Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Warn	Chk Pass	Chk Pass
High Limit							5.0000		
Low Limit							-.00500		

Elem	Sn1899	Sr4077	Th2837	Ti3349	Ti1908	U_3701	V_2924	Zn2062	Zr3391
Line	189.989 {477}	407.771 {83}	283.730 {119}	334.904 {101}	190.856 {477}	370.152 {91}	292.402 {115}	206.200 {163}	339.198 {99}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	-.00336	.89026	-.00820	.00185	-.00112	.03364	.00087	.02444	.00241
Stddev	.00191	.01971	.00010	.00009	.00041	.00973	.00015	.00026	.00079
%RSD	56.988	2.2137	1.2697	4.8189	36.533	28.919	17.048	1.0521	32.735

#1	-.00471	.90419	-.00828	.00178	-.00141	.04052	.00077	.02462	.00297
#2	-.00201	.87632	-.00813	.00191	-.00083	.02676	.00098	.02426	.00185

Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Int. Std.	Y_2243	Y_3600	Y_3774						
Line	224.306 {450}	360.073 {94}	377.433 {89}						
Units	Cts/S	Cts/S	Cts/S						
Avg	2697.1	39589.	2089.4						
Stddev	36.6	199.	37.8						
%RSD	1.3581	.50256	1.8115						

#1	2723.0	39730.	2062.6						
#2	2671.2	39448.	2116.2						

Sample Name: 280-82994-C-2-A Acquired: 5/17/2016 15:30:34 Type: Unk

Method: 6500_025(v6) Mode: CONC Corr. Factor: 1.000000

User: CRHOADES Prep Date: Custom ID2: Custom ID3:

Comment: 325053 6010B

Elem	Ag3280	Al1670	As1890	B_2089	Ba4554	Be3130	Bi2230	Ca3179	Cd2288
Line	328.068 {103}	167.079 {502}	189.042 {478}	208.959 {461}	455.403 {74}	313.042 {108}	223.061 {451}	317.933 {106}	228.802 {447}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.00036	.01727	-.00925	.20506	.00770	-.00004	-.00132	378.41	.00274
Stddev	.00005	.00037	.00269	.00241	.00080	.00028	.00106	12.58	.00013
%RSD	12.863	2.1365	29.033	1.1755	10.452	779.84	80.142	3.3243	4.7003

#1	.00039	.01701	-.01115	.20676	.00713	.00016	-.00057	369.52	.00283
#2	.00032	.01753	-.00735	.20335	.00827	-.00023	-.00206	387.31	.00264

Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Elem	Co2286	Cr2055	Cu3247	Fe2599	K_7664	Li6707	Mg2790	Mn2576	Mo2020
Line	228.616 {447}	205.560 {464}	324.754 {104}	259.940 {130}	766.490 {44}	670.784 {50}	279.079 {121}2	257.610 {131}	202.030 {467}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	-.00105	.00084	.00260	.07738	24.311	.98650	224.23	.60972	-.00084
Stddev	.00050	.00008	.00017	.00188	.394	.01218	.49	.00070	.00002
%RSD	47.805	9.9762	6.5731	2.4266	1.6210	1.2351	.21771	.11500	2.5964

#1	-.00140	.00078	.00248	.07605	24.032	.97789	223.89	.60922	-.00082
#2	-.00069	.00090	.00272	.07871	24.589	.99512	224.58	.61021	-.00085

Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Elem	Na8183	Ni2316	P_1782	Pb2203	S_1820	Sb2068	Se1960	Si2881	SiO2
Line	818.326 {41}	231.604 {446}	178.284 {489}	220.353 {453}	182.034 {485}	206.833 {463}	196.090 {472}	288.158 {117}	288.158 {117}2
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	W 2290.3	.01987	.04474	-.00018	F 1909.8	-.00836	F -.01055	9.2049	19.699
Stddev	76.6	.00017	.00219	.00007	.7	.00298	.00562	.0619	.133
%RSD	3.3447	.86038	4.8999	40.884	.03731	35.709	53.266	.67297	.67297

#1	2236.1	.01975	.04629	-.00023	1909.3	-.01046	-.00658	9.1611	19.605
#2	2344.5	.01999	.04319	-.00012	1910.3	-.00625	-.01453	9.2488	19.792

Check ?	Chk Warn	Chk Pass	Chk Pass	Chk Pass	Chk Fail	Chk Pass	Chk Fail	Chk Pass	Chk Pass
High Limit	500.00				200.00		50.000		
Low Limit	11.000				-.20000		-.01000		

Elem	Sn1899	Sr4077	Th2837	Ti3349	Ti1908	U_3701	V_2924	Zn2062	Zr3391
Line	189.989 {477}	407.771 {83}	283.730 {119}	334.904 {101}	190.856 {477}	370.152 {91}	292.402 {115}	206.200 {163}	339.198 {99}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	-.00543	W 8.9533	-.00610	.00123	-.00775	.03243	-.00046	.01269	.00034
Stddev	.00246	.2848	.00030	.00013	.00007	.05185	.00046	.00028	.00175
%RSD	45.338	3.1812	4.9462	10.352	.93594	159.87	98.158	2.2144	507.49

#1	-.00717	8.7519	-.00589	.00114	-.00780	.06909	-.00079	.01289	-.00089
#2	-.00369	9.1547	-.00632	.00132	-.00770	-.00423	-.00014	.01249	.00158

Check ?	Chk Pass	Chk Warn	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit		5.0000							
Low Limit		-.01000							

Int. Std.	Y_2243	Y_3600	Y_3774						
Line	224.306 {450}	360.073 {94}	377.433 {89}						
Units	Cts/S	Cts/S	Cts/S						
Avg	2461.4	34207.	2000.1						
Stddev	6.4	449.	116.4						
%RSD	.25896	1.3117	5.8180						

#1	2456.9	33889.	2082.4						
#2	2465.9	34524.	1917.8						

Sample Name: 280-82994-C-3-A Acquired: 5/17/2016 15:33:38 Type: Unk

Method: 6500_025(v6) Mode: CONC Corr. Factor: 1.000000

User: CRHOADES Prep Date: Custom ID2: Custom ID3:

Comment: 325053 6010B

Elem	Ag3280	Al1670	As1890	B_2089	Ba4554	Be3130	Bi2230	Ca3179	Cd2288
Line	328.068 {103}	167.079 {502}	189.042 {478}	208.959 {461}	455.403 { 74}	313.042 {108}	223.061 {451}	317.933 {106}	228.802 {447}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.00095	.02140	-.00909	.42666	.00902	-.00045	-.00191	423.89	.00197
Stddev	.00046	.00101	.00812	.00382	.00021	.00012	.00403	4.48	.00035
%RSD	48.734	4.7375	89.269	.89457	2.3342	26.933	210.59	1.0575	17.808

#1	.00062	.02068	-.01483	.42396	.00917	-.00037	.00094	427.06	.00172
#2	.00128	.02211	-.00335	.42936	.00887	-.00054	-.00476	420.72	.00221

Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Elem	Co2286	Cr2055	Cu3247	Fe2599	K_7664	Li6707	Mg2790	Mn2576	Mo2020
Line	228.616 {447}	205.560 {464}	324.754 {104}	259.940 {130}	766.490 { 44}	670.784 { 50}	279.079 {121}2	257.610 {131}	202.030 {467}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	-.00168	.00062	.00162	.02771	18.140	.63096	198.61	.04805	.00034
Stddev	.00009	.00009	.00024	.00364	.118	.00591	.38	.00026	.00031
%RSD	5.4847	15.340	14.605	13.121	.64982	.93697	.18893	.55121	91.161

#1	-.00162	.00055	.00145	.02514	18.057	.62678	198.88	.04824	.00012
#2	-.00175	.00068	.00179	.03028	18.224	.63514	198.35	.04786	.00055

Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Elem	Na8183	Ni2316	P_1782	Pb2203	S_1820	Sb2068	Se1960	Si2881	SiO2
Line	818.326 { 41}	231.604 {446}	178.284 {489}	220.353 {453}	182.034 {485}	206.833 {463}	196.090 {472}	288.158 {117}	288.158 {117}2
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	W 1347.7	.00588	.02252	-.00046	F 1388.5	-.00499	F -.01057	7.7874	16.665
Stddev	15.2	.00061	.00090	.00260	.7	.00160	.00532	.0501	.107
%RSD	1.1312	10.412	3.9856	567.64	.05206	32.042	50.313	.64381	.64381

#1	1358.5	.00631	.02189	-.00230	1388.0	-.00612	-.01433	7.8229	16.741
#2	1336.9	.00545	.02316	.00138	1389.0	-.00386	-.00681	7.7520	16.589

Check ?	Chk Warn	Chk Pass	Chk Pass	Chk Pass	Chk Fail	Chk Pass	Chk Fail	Chk Pass	Chk Pass
High Limit	500.00				200.00		50.000		
Low Limit	11.000				-.20000		-.01000		

Elem	Sn1899	Sr4077	Th2837	Ti3349	Ti1908	U_3701	V_2924	Zn2062	Zr3391
Line	189.989 {477}	407.771 { 83}	283.730 {119}	334.904 {101}	190.856 {477}	370.152 { 91}	292.402 {115}	206.200 {163}	339.198 { 99}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	-.00280	W 9.1273	-.00374	.00131	-.00161	.11062	-.00051	.00596	.00153
Stddev	.00129	.0815	.00172	.00011	.00002	.01608	.00039	.00012	.00253
%RSD	46.228	.89283	45.939	8.3107	1.2851	14.532	77.664	2.0529	165.32

#1	-.00371	9.1849	-.00252	.00139	-.00162	.09925	-.00023	.00588	.00331
#2	-.00188	9.0697	-.00495	.00123	-.00159	.12199	-.00078	.00605	-.00026

Check ?	Chk Pass	Chk Warn	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit		5.0000							
Low Limit		-.01000							

Int. Std.	Y_2243	Y_3600	Y_3774						
Line	224.306 {450}	360.073 { 94}	377.433 { 89}						
Units	Cts/S	Cts/S	Cts/S						
Avg	2479.5	35350.	1994.1						
Stddev	28.5	181.	49.8						
%RSD	1.1495	.51073	2.4986						

#1	2499.6	35222.	1958.8						
#2	2459.3	35478.	2029.3						

Elem	Ag3280	Al1670	As1890	B_2089	Ba4554	Be3130	Bi2230	Ca3179	Cd2288
Line	328.068 {103}	167.079 {502}	189.042 {478}	208.959 {461}	455.403 {74}	313.042 {108}	223.061 {451}	317.933 {106}	228.802 {447}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.00080	.01317	-.00294	.22215	.00556	-.00061	-.00359	361.71	.00228
Stddev	.00131	.00003	.00732	.00005	.00049	.00009	.00079	4.56	.00001
%RSD	165.19	.19857	249.32	.02429	8.8020	15.439	21.938	1.2598	.38622

#1	.00172	.01319	.00224	.22211	.00521	-.00054	-.00414	358.48	.00227
#2	-.00013	.01315	-.00811	.22219	.00591	-.00068	-.00303	364.93	.00229

Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Elem	Co2286	Cr2055	Cu3247	Fe2599	K_7664	Li6707	Mg2790	Mn2576	Mo2020
Line	228.616 {447}	205.560 {464}	324.754 {104}	259.940 {130}	766.490 {44}	670.784 {50}	279.079 {121}2	257.610 {131}	202.030 {467}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	-.00112	-.00005	.00201	.02949	22.937	.81814	242.27	.04222	-.00156
Stddev	.00031	.00011	.00027	.00600	.030	.00468	.66	.00004	.00047
%RSD	27.937	235.06	13.572	20.342	.12953	.57159	.27439	.09503	29.913

#1	-.00090	.00003	.00220	.03374	22.958	.82144	242.74	.04219	-.00123
#2	-.00135	-.00012	.00182	.02525	22.916	.81483	241.80	.04225	-.00189

Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Elem	Na8183	Ni2316	P_1782	Pb2203	S_1820	Sb2068	Se1960	Si2881	SiO2
Line	818.326 {41}	231.604 {446}	178.284 {489}	220.353 {453}	182.034 {485}	206.833 {463}	196.090 {472}	288.158 {117}	288.158 {117}2
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	W 2020.4	.01658	.02878	-.00100	F 1841.7	-.00845	-.00122	7.3082	15.640
Stddev	27.3	.00030	.00183	.00226	12.9	.00216	.01167	.0432	.092
%RSD	1.3514	1.7986	6.3698	226.48	.69818	25.509	953.18	.59085	.59085

#1	2001.1	.01679	.02748	-.00260	1832.6	-.00693	-.00948	7.3388	15.705
#2	2039.8	.01637	.03008	.00060	1850.8	-.00998	.00703	7.2777	15.574

Check ?	Chk Warn	Chk Pass	Chk Pass	Chk Pass	Chk Fail	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit	500.00				200.00				
Low Limit	11.000				-.20000				

Elem	Sn1899	Sr4077	Th2837	Ti3349	Ti1908	U_3701	V_2924	Zn2062	Zr3391
Line	189.989 {477}	407.771 {83}	283.730 {119}	334.904 {101}	190.856 {477}	370.152 {91}	292.402 {115}	206.200 {163}	339.198 {99}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	-.00531	W 8.3281	-.00698	.00141	-.00111	.04289	.00007	.02569	.00006
Stddev	.00329	.1305	.00458	.00033	.00233	.08999	.00054	.00147	.00170
%RSD	61.999	1.5671	65.595	23.403	209.65	209.83	805.64	5.7033	2686.6

#1	-.00764	8.2358	-.00374	.00165	-.00276	-.02075	-.00031	.02466	-.00114
#2	-.00298	8.4204	-.01022	.00118	.00054	.10652	.00045	.02673	.00126

Check ?	Chk Pass	Chk Warn	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit		5.0000							
Low Limit		-.01000							

Int. Std.	Y_2243	Y_3600	Y_3774						
Line	224.306 {450}	360.073 {94}	377.433 {89}						
Units	Cts/S	Cts/S	Cts/S						
Avg	2431.4	34735.	1986.1						
Stddev	25.5	496.	24.8						
%RSD	1.0508	1.4294	1.2472						

#1	2413.3	35087.	1968.5						
#2	2449.4	34384.	2003.6						

Elem	Ag3280	Al1670	As1890	B_2089	Ba4554	Be3130	Bi2230	Ca3179	Cd2288
Line	328.068 {103}	167.079 {502}	189.042 {478}	208.959 {461}	455.403 {74}	313.042 {108}	223.061 {451}	317.933 {106}	228.802 {447}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.00153	.13425	-.00383	.32556	.01027	.00001	.00271	329.03	.00119
Stddev	.00004	.00249	.00084	.00112	.00001	.00004	.00051	.36	.00003
%RSD	2.9241	1.8520	21.950	.34542	.11378	291.61	18.662	.10982	2.9282

#1	.00150	.13601	-.00443	.32636	.01028	-.00001	.00307	329.29	.00117
#2	.00156	.13249	-.00324	.32477	.01026	.00004	.00235	328.78	.00122

Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Elem	Co2286	Cr2055	Cu3247	Fe2599	K_7664	Li6707	Mg2790	Mn2576	Mo2020
Line	228.616 {447}	205.560 {464}	324.754 {104}	259.940 {130}	766.490 {44}	670.784 {50}	279.079 {121}2	257.610 {131}	202.030 {467}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	-.00052	.00306	.00452	.29093	13.432	.29988	149.86	.01178	-.00051
Stddev	.00027	.00008	.00125	.00537	.035	.00097	.15	.00007	.00016
%RSD	51.385	2.4632	27.532	1.8475	.26231	.32465	.10312	.59947	31.622

#1	-.00033	.00311	.00541	.29473	13.407	.30057	149.97	.01173	-.00062
#2	-.00070	.00300	.00364	.28713	13.456	.29919	149.75	.01183	-.00039

Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Elem	Na8183	Ni2316	P_1782	Pb2203	S_1820	Sb2068	Se1960	Si2881	SiO2
Line	818.326 {41}	231.604 {446}	178.284 {489}	220.353 {453}	182.034 {485}	206.833 {463}	196.090 {472}	288.158 {117}	288.158 {117}2
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	223.58	.00213	.01358	-.00056	F 603.95	-.00547	W -.00585	8.2070	17.563
Stddev	2.13	.00080	.00226	.00193	1.28	.00306	.00219	.0718	.154
%RSD	.95402	37.686	16.672	346.54	.21180	55.918	37.460	.87519	.87519

#1	222.07	.00156	.01518	.00081	603.04	-.00330	-.00430	8.1562	17.454
#2	225.09	.00270	.01198	-.00192	604.85	-.00763	-.00740	8.2578	17.672

Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Fail	Chk Pass	Chk Warn	Chk Pass	Chk Pass
High Limit					200.00		5.0000		
Low Limit					-.20000		-.00500		

Elem	Sn1899	Sr4077	Th2837	Ti3349	Ti1908	U_3701	V_2924	Zn2062	Zr3391
Line	189.989 {477}	407.771 {83}	283.730 {119}	334.904 {101}	190.856 {477}	370.152 {91}	292.402 {115}	206.200 {163}	339.198 {99}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	-.00340	W 6.5990	-.00305	.00531	-.00166	.03722	-.00071	.00335	-.00273
Stddev	.00024	.0253	.00129	.00034	.00097	.01827	.00096	.00035	.00078
%RSD	6.9644	.38316	42.379	6.3717	58.827	49.093	135.66	10.506	28.666

#1	-.00324	6.6168	-.00214	.00507	-.00097	.05014	-.00003	.00310	-.00328
#2	-.00357	6.5811	-.00397	.00554	-.00234	.02430	-.00138	.00360	-.00218

Check ?	Chk Pass	Chk Warn	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit		5.0000							
Low Limit		-.01000							

Int. Std.	Y_2243	Y_3600	Y_3774						
Line	224.306 {450}	360.073 {94}	377.433 {89}						
Units	Cts/S	Cts/S	Cts/S						
Avg	2634.5	37664.	1910.7						
Stddev	34.4	394.	23.1						
%RSD	1.3061	1.0458	1.2071						

#1	2610.2	37385.	1927.0						
#2	2658.9	37942.	1894.4						

Sample Name: CCVH-3883905 Acquired: 5/17/2016 15:42:22 Type: QC
Method: 6500_025(v6) Mode: CONC Corr. Factor: 1.000000
User: CRHOADES Prep Date: Custom ID2: Custom ID3:
Comment:

Elem	Ag3280	Al3092	As1890	B_2089	Ba4554	Be3130	Bi2230	Ca3179	Cd2288	Co2286	Cr2055	Cu3247
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	-.00485	50.311	-.00434	.00553	-.00157	.00032	1.0098	.08779	-.00069	-.00143	-.00007	-.01407
Stddev	.00018	1.155	.00497	.00009	.00038	.00007	.0092	.01488	.00024	.00006	.00037	.00000
%RSD	3.7506	2.2960	114.43	1.6516	24.515	21.309	.91258	16.955	34.204	4.2862	509.88	.01055

#1	-.00472	51.128	-.00083	.00547	-.00130	.00027	1.0164	.09831	-.00086	-.00139	.00019	-.01407
#2	-.00498	49.494	-.00785	.00560	-.00184	.00037	1.0033	.07726	-.00052	-.00147	-.00034	-.01407

Check ?	None	Chk Pass	None	None	None	None	Chk Pass	None	None	None	None	None
Value												
Range												

Elem	Fe2714	K_7664	Li6707	Mg2790	Mn2576	Mo2020	Na8183	Ni2316	P_1782	Pb2203	S_1820	Sb2068
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	52.199	-.07697	-.00565	.04786	-.00212	-.00201	265.02	.00118	.00274	.00105	F 6.7195	-.01190
Stddev	.514	.08254	.00059	.01931	.00014	.00042	2.02	.00044	.00564	.00139	.9858	.00108
%RSD	.98492	107.23	10.375	40.343	6.5067	20.673	.76060	37.097	205.36	132.83	14.670	9.1015

#1	52.563	-.01861	-.00606	.06151	-.00203	-.00172	266.45	.00148	.00673	.00006	7.4166	-.01113
#2	51.836	-.13534	-.00524	.03421	-.00222	-.00230	263.60	.00087	-.00124	.00203	6.0225	-.01266

Check ?	Chk Pass	None	None	None	None	None	Chk Pass	None	None	None	Chk Fail	None
Value											5.0000	
Range											10.490%	

Elem	Se1960	Si2881	SiO2	Sn1899	Sr4077	Th2837	Ti3349	Ti1908	U_3701	V_2924	Zn2062	Zr3391
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	-.01035	-.01701	-.03640	-.00074	.00254	4.7517	-.00124	-.00360	9.6788	.01250	-.00022	-.13618
Stddev	.00868	.01505	.03221	.00274	.00021	.0078	.00052	.00219	.0060	.00004	.00008	.00221
%RSD	83.885	88.492	88.492	371.53	8.2964	.16337	42.126	60.782	.06181	.29281	38.053	1.6192

#1	-.00421	-.00637	-.01362	-.00268	.00269	4.7572	-.00087	-.00515	9.6746	.01253	-.00028	-.13462
#2	-.01649	-.02765	-.05917	.00120	.00240	4.7462	-.00161	-.00205	9.6830	.01247	-.00016	-.13774

Check ?	None	None	None	None	None	Chk Pass	None	None	Chk Pass	None	None	None
Value												
Range												

Int. Std.	Y_2243	Y_3600	Y_3774
Units	Cts/S	Cts/S	Cts/S
Avg	2643.0	38164.	2046.6
Stddev	14.2	65.	67.7
%RSD	.53672	.17050	3.3071

#1	2653.0	38118.	1998.8
#2	2633.0	38210.	2094.5

Sample Name: CCV-3888422 Acquired: 5/17/2016 15:44:58 Type: QC
Method: 6500_025(v6) Mode: CONC Corr. Factor: 1.000000
User: CRHOADES Prep Date: Custom ID2: Custom ID3:
Comment:

Elem	Ag3280	Al1670	As1890	B_2089	Ba4554	Be3130	Bi2230	Ca3179	Cd2288	Co2286	Cr2055	Cu3247	Fe2599
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.48776	.49260	.96249	.50086	.46481	.47693	-.00037	4.6387	.49451	.50838	.51365	.47335	2.4207
Stddev	.00316	.00355	.00968	.00004	.00358	.00234	.00244	.0260	.00047	.00159	.00064	.00460	.0064
%RSD	.64698	.72010	1.0056	.00812	.76918	.48980	653.59	.55962	.09474	.31269	.12509	.97150	.26478

#1	.48553	.49511	.96933	.50083	.46228	.47527	.00135	4.6203	.49418	.50726	.51410	.47010	2.4162
#2	.49000	.49009	.95564	.50089	.46734	.47858	-.00210	4.6571	.49484	.50950	.51319	.47660	2.4253

Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	None	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Value													
Range													

Elem	K_7664	Li6707	Mg2790	Mn2576	Mo2020	Na5895	Ni2316	P_1782	Pb2203	S_1820	Sb2068	Se1960	Si2881
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	46.511	.93791	19.094	.46907	.49937	5.2328	.49769	1.0080	1.0184	.29588	1.0014	.98239	4.8536
Stddev	.106	.00139	.022	.00148	.00030	.0312	.00013	.0005	.0003	.01340	.0122	.00413	.0165
%RSD	.22874	.14773	.11550	.31451	.05921	.59521	.02555	.04741	.02949	4.5289	1.2172	.42068	.34054

#1	46.436	.93693	19.109	.47012	.49958	5.2108	.49760	1.0077	1.0187	.30536	1.0100	.97947	4.8653
#2	46.587	.93889	19.078	.46803	.49916	5.2548	.49778	1.0084	1.0182	.28641	.99274	.98532	4.8420

Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	None	Chk Pass	Chk Pass	Chk Pass
Value													
Range													

Elem	SiO2	Sn1899	Sr4077	Th2837	Ti3349	Ti1908	U_3701	V_2924	Zn2062	Zr3391
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	10.387	1.0248	.47382	-.00225	.46428	1.0294	.04962	.48844	.46582	.47341
Stddev	.035	.0044	.00127	.00219	.00015	.0008	.01361	.00028	.00516	.00228
%RSD	.34054	.42578	.26831	97.494	.03141	.07527	27.434	.05811	1.1075	.48199
#1	10.412	1.0217	.47292	-.00380	.46417	1.0288	.05924	.48824	.46947	.47179
#2	10.362	1.0279	.47472	-.00070	.46438	1.0299	.03999	.48864	.46217	.47502

Check ?	Chk Pass	Chk Pass	Chk Pass	None	Chk Pass	Chk Pass	None	Chk Pass	Chk Pass	Chk Pass
Value										
Range										

Int. Std.	Y_2243	Y_3600	Y_3774
Units	Cts/S	Cts/S	Cts/S
Avg	2674.3	37764.	1957.0
Stddev	.3	940.	16.9
%RSD	.01064	2.4904	.86281
#1	2674.1	37099.	1968.9
#2	2674.5	38429.	1945.0

Sample Name: CCB Acquired: 5/17/2016 15:47:27 Type: QC
 Method: 6500_025(v6) Mode: CONC Corr. Factor: 1.000000
 User: CRHOADES Prep Date: Custom ID2: Custom ID3:
 Comment:

Elem	Ag3280	Al1670	As1890	B_2089	Ba4554	Be3130	Bi2230	Ca3179	Cd2288	Co2286	Cr2055
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.00142	.00140	.00163	.00281	-.00165	.00013	-.00516	.00673	.00021	-.00016	-.00036
Stddev	.00019	.00056	.00667	.00035	.00054	.00043	.00076	.00017	.00061	.00017	.00009
%RSD	13.309	40.148	408.83	12.555	32.856	328.21	14.720	2.5344	291.36	105.66	24.876

#1	.00156	.00180	.00635	.00256	-.00204	.00044	-.00462	.00661	.00064	-.00004	-.00029
#2	.00129	.00100	-.00308	.00306	-.00127	-.00017	-.00569	.00685	-.00022	-.00028	-.00042

Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit											
Low Limit											

Elem	Cu3247	Fe2599	K_7664	Li6707	Mg2790	Mn2576	Mo2020	Na5895	Ni2316	P_1782	Pb2203
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	-.00048	.00099	-.07892	-.00834	.00703	-.00002	.00128	.28755	-.00038	.00343	-.00138
Stddev	.00070	.00453	.06273	.00294	.00167	.00004	.00035	.00184	.00013	.00057	.00102
%RSD	143.51	458.47	79.489	35.203	23.779	179.47	27.824	.64130	35.914	16.502	73.630

#1	.00001	-.00221	-.03456	-.00626	.00585	-.00005	.00102	.28624	-.00047	.00303	-.00210
#2	-.00098	.00419	-.12327	-.01041	.00821	.00001	.00153	.28885	-.00028	.00383	-.00066

Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit											
Low Limit											

Elem	S_1820	Sb2068	Se1960	Si2881	SiO2	Sn1899	Sr4077	Th2837	Ti3349	Ti1908	U_3701
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	F .23356	W .00489	.00195	-.02584	-.05531	-.00030	.00035	-.00053	.00010	-.00118	.02716
Stddev	.01370	.00283	.00379	.04741	.10146	.00008	.00007	.00272	.00051	.00119	.04689
%RSD	5.8654	57.855	194.56	183.46	183.46	24.746	19.428	512.48	503.60	101.12	172.67

#1	.24324	.00289	.00463	.00768	.01644	-.00025	.00030	.00139	.00047	-.00203	.06032
#2	.22387	.00690	-.00073	-.05937	-.12705	-.00036	.00039	-.00246	-.00026	-.00034	-.00600

Check ?	Chk Fail	Chk Warn	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit	.10000	.00100									
Low Limit	-.20000	-.00100									

Elem	V_2924	Zn2062	Zr3391
Units	ppm	ppm	ppm
Avg	-.00023	-.00063	.00084
Stddev	.00026	.00017	.00143
%RSD	112.73	27.157	171.28

#1	-.00005	-.00051	-.00018
#2	-.00042	-.00076	.00185

Check ?	Chk Pass	Chk Pass	Chk Pass
High Limit			
Low Limit			

Int. Std.	Y_2243	Y_3600	Y_3774
Units	Cts/S	Cts/S	Cts/S
Avg	2610.4	39017.	2075.1
Stddev	5.5	445.	49.0
%RSD	.20936	1.1406	2.3610

#1	2606.5	39332.	2109.8
#2	2614.3	38702.	2040.5

Sample Name: CCVL-3894681 Acquired: 5/17/2016 15:49:48 Type: QC
Method: 6500_025(v6) Mode: CONC Corr. Factor: 1.000000
User: CRHOADES Prep Date: Custom ID2: Custom ID3:
Comment:

Elem	Ag3280	Al1670	As1890	B_2089	Ba4554	Be3130	Bi2230	Ca3179	Cd2288	Co2286	Cr2055
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.00998	.10074	.01489	.09703	.00793	.00106	.10064	.20861	.00520	.01005	.01002
Stddev	.00073	.00105	.00328	.00035	.00134	.00015	.00671	.00646	.00003	.00030	.00011
%RSD	7.2813	1.0403	22.025	.35826	16.964	13.803	6.6646	3.0990	.59417	2.9386	1.1390

#1	.01049	.10148	.01721	.09728	.00888	.00096	.10538	.20404	.00517	.01025	.01010
#2	.00946	.10000	.01257	.09679	.00698	.00116	.09590	.21318	.00522	.00984	.00994

Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Value											
Range											

Elem	Cu3247	Fe2599	K_7664	Li6707	Mg2790	Mn2576	Mo2020	Na5895	Ni2316	P_1782	Pb2203
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.01476	F .27076	2.6057	F -.00092	.19791	.01165	.01837	1.2064	.04009	2.7930	.00919
Stddev	.00024	.00441	.0376	.00386	.00247	.00002	.00026	.0014	.00008	.0179	.00193
%RSD	1.6096	1.6286	1.4420	420.19	1.2478	.16451	1.3960	.11698	.20346	.64222	20.997

#1	.01459	.27388	2.6323	-.00365	.19616	.01166	.01819	1.2074	.04015	2.8057	.00782
#2	.01493	.26764	2.5792	.00181	.19965	.01163	.01855	1.2054	.04004	2.7803	.01055

Check ?	Chk Pass	Chk Fail	Chk Pass	Chk Fail	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Value		.10000		.01000							
Range		30.000%		-30.000%							

Elem	S_1820	Sb2068	Se1960	Si2881	SiO2	Sn1899	Sr4077	Th2837	Ti3349	Ti1908	U_3701
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.17709	.01705	F .00808	.46908	1.0038	.09583	.00995	.01506	.00981	.01119	F .11111
Stddev	.00876	.00558	.00147	.01325	.0284	.00305	.00010	.00206	.00030	.00305	.03788
%RSD	4.9479	32.710	18.236	2.8254	2.8254	3.1833	1.0377	13.667	3.0148	27.277	34.089

#1	.18329	.02099	.00703	.45971	.98378	.09799	.01002	.01652	.00960	.01335	.13789
#2	.17089	.01310	.00912	.47845	1.0239	.09368	.00988	.01361	.01002	.00903	.08433

Check ?	None	Chk Pass	Chk Fail	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Fail
Value			.01500								.06000
Range			-30.000%								30.000%

Elem	V_2924	Zn2062	Zr3391
Units	ppm	ppm	ppm
Avg	.00954	.01962	.01188
Stddev	.00021	.00060	.00561
%RSD	2.2434	3.0596	47.218

#1	.00939	.01920	.00792
#2	.00969	.02005	.01585

Check ?	Chk Pass	Chk Pass	Chk Pass
Value			
Range			

Int. Std.	Y_2243	Y_3600	Y_3774
Units	Cts/S	Cts/S	Cts/S
Avg	2646.1	37613.	1963.6
Stddev	58.2	269.	133.5
%RSD	2.1986	.71429	6.8003

#1	2687.2	37803.	1869.1
#2	2605.0	37423.	2058.0

Sample Name: 280-82998-I-2-A Acquired: 5/17/2016 15:52:27 Type: Unk
Method: 6500_025(v6) Mode: CONC Corr. Factor: 1.000000
User: CRHOADES Prep Date: Custom ID2: Custom ID3:
Comment: 325053 6010B

Elem	Ag3280	Al1670	As1890	B_2089	Ba4554	Be3130	Bi2230	Ca3179	Cd2288
Line	328.068 {103}	167.079 {502}	189.042 {478}	208.959 {461}	455.403 { 74}	313.042 {108}	223.061 {451}	317.933 {106}	228.802 {447}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.00139	.21634	.00945	4.9138	1.2741	-.00014	-.00940	499.32	.00197
Stddev	.00027	.00112	.00644	.0174	.0016	.00004	.00099	.18	.00018
%RSD	19.454	.51622	68.100	.35449	.12608	31.193	10.502	.03606	8.9664

#1	.00120	.21555	.00490	4.9015	1.2730	-.00016	-.01009	499.19	.00185
#2	.00159	.21713	.01400	4.9261	1.2753	-.00011	-.00870	499.44	.00210

Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Elem	Co2286	Cr2055	Cu3247	Fe2599	K_7664	Li6707	Mg2790	Mn2576	Mo2020
Line	228.616 {447}	205.560 {464}	324.754 {104}	259.940 {130}	766.490 { 44}	670.784 { 50}	279.079 {121}2	257.610 {131}	202.030 {467}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.00446	.02010	.00534	24.857	W 219.70	.30079	344.54	1.8230	.00160
Stddev	.00016	.00090	.00065	.016	.57	.00081	2.89	.0100	.00016
%RSD	3.6387	4.4538	12.230	.06467	.25760	.26787	.84000	.54665	9.9190

#1	.00435	.01946	.00580	24.869	220.10	.30136	346.58	1.8300	.00172
#2	.00458	.02073	.00487	24.846	219.30	.30022	342.49	1.8159	.00149

Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Warn	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit					100.00				
Low Limit					-.50000				

Elem	Na8183	Ni2316	P_1782	Pb2203	S_1820	Sb2068	Se1960	Si2881	SiO2
Line	818.326 { 41}	231.604 {446}	178.284 {489}	220.353 {453}	182.034 {485}	206.833 {463}	196.090 {472}	288.158 {117}	288.158 {117}2
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	W 1287.3	.11339	W 5.1324	.00355	14.917	.00110	W -.00748	21.965	47.004
Stddev	1.1	.00303	.1454	.00239	.406	.00215	.00593	.159	.339
%RSD	.08658	2.6697	2.8324	67.324	2.7231	194.69	79.257	.72175	.72175

#1	1288.1	.11125	5.0296	.00186	14.630	.00262	-.00329	21.853	46.764
#2	1286.5	.11553	5.2352	.00524	15.205	-.00042	-.01167	22.077	47.244

Check ?	Chk Warn	Chk Pass	Chk Warn	Chk Pass	Chk Pass	Chk Pass	Chk Warn	Chk Pass	Chk Pass
High Limit	500.00		2.0000				5.0000		
Low Limit	11.000		-1.0000				-.00500		

Elem	Sn1899	Sr4077	Th2837	Ti3349	Ti1908	U_3701	V_2924	Zn2062	Zr3391
Line	189.989 {477}	407.771 { 83}	283.730 {119}	334.904 {101}	190.856 {477}	370.152 { 91}	292.402 {115}	206.200 {163}	339.198 { 99}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.00517	W 8.9953	-.00413	.01869	-.00179	-.03112	.01619	.16250	.00613
Stddev	.00096	.2042	.00039	.00028	.00394	.00875	.00053	.00255	.00203
%RSD	18.470	2.2703	9.5498	1.5240	219.42	28.112	3.2900	1.5684	33.178

#1	.00585	9.1397	-.00386	.01849	-.00458	-.02494	.01657	.16430	.00756
#2	.00450	8.8509	-.00441	.01889	.00099	-.03731	.01582	.16070	.00469

Check ?	Chk Pass	Chk Warn	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit		5.0000							
Low Limit		-.01000							

Int. Std.	Y_2243	Y_3600	Y_3774
Line	224.306 {450}	360.073 { 94}	377.433 { 89}
Units	Cts/S	Cts/S	Cts/S
Avg	2476.3	35912.	2021.3
Stddev	10.9	473.	19.1
%RSD	.43972	1.3182	.94370

#1	2468.6	35577.	2007.8
#2	2484.0	36247.	2034.8

Sample Name: 280-82998-I-2-A SD@5 Acquired: 5/17/2016 15:55:36 Type: Unk
 Method: 6500_025(v6) Mode: CONC Corr. Factor: 1.000000
 User: CRHOADES Prep Date: Custom ID2: Custom ID3:
 Comment: 325053 6010B

Elem	Ag3280	Al1670	As1890	B_2089	Ba4554	Be3130	Bi2230	Ca3179	Cd2288
Line	328.068 {103}	167.079 {502}	189.042 {478}	208.959 {461}	455.403 {74}	313.042 {108}	223.061 {451}	317.933 {106}	228.802 {447}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.00180	.04289	-.00183	.86544	.20319	.00008	-.00203	80.475	.00089
Stddev	.00042	.00044	.00054	.00993	.00332	.00010	.00165	.595	.00008
%RSD	23.301	1.0361	29.356	1.1474	1.6315	123.82	81.702	.73910	9.3423

#1	.00210	.04258	-.00145	.85842	.20085	.00001	-.00320	80.054	.00095
#2	.00150	.04321	-.00221	.87246	.20553	.00015	-.00086	80.895	.00083

Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Elem	Co2286	Cr2055	Cu3247	Fe2599	K_7664	Li6707	Mg2790	Mn2576	Mo2020
Line	228.616 {447}	205.560 {464}	324.754 {104}	259.940 {130}	766.490 {44}	670.784 {50}	279.079 {121}2	257.610 {131}	202.030 {467}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.00045	.00279	.00155	4.0346	34.572	.03587	54.846	.29307	-.00084
Stddev	.00000	.00027	.00032	.0361	.436	.00033	.290	.00070	.00073
%RSD	.42619	9.6490	20.522	.89568	1.2598	.91907	.52840	.23837	87.007

#1	.00045	.00260	.00133	4.0091	34.264	.03610	54.641	.29257	-.00135
#2	.00046	.00298	.00178	4.0602	34.880	.03564	55.051	.29356	-.00032

Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Elem	Na8183	Ni2316	P_1782	Pb2203	S_1820	Sb2068	Se1960	Si2881	SiO2
Line	818.326 {41}	231.604 {446}	178.284 {489}	220.353 {453}	182.034 {485}	206.833 {463}	196.090 {472}	288.158 {117}	288.158 {117}2
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	213.71	.01872	.83178	.00112	2.4014	-.00485	-.00230	3.4493	7.3815
Stddev	3.75	.00063	.01578	.00320	.0318	.00137	.00018	.1080	.2311
%RSD	1.7549	3.3713	1.8968	284.62	1.3227	28.360	7.7687	3.1304	3.1304

#1	211.06	.01917	.82062	.00339	2.3789	-.00582	-.00242	3.3730	7.2181
#2	216.36	.01828	.84294	-.00114	2.4239	-.00387	-.00217	3.5257	7.5449

Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Elem	Sn1899	Sr4077	Th2837	Ti3349	Ti1908	U_3701	V_2924	Zn2062	Zr3391
Line	189.989 {477}	407.771 {83}	283.730 {119}	334.904 {101}	190.856 {477}	370.152 {91}	292.402 {115}	206.200 {163}	339.198 {99}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	-.00160	1.4455	-.00298	.00390	-.00515	.07220	.00259	.02672	.00624
Stddev	.00256	.0138	.00291	.00047	.00254	.04481	.00022	.00099	.00314
%RSD	160.46	.95640	97.664	12.182	49.361	62.067	8.6210	3.6940	50.330

#1	-.00341	1.4357	-.00092	.00356	-.00336	.04051	.00275	.02742	.00402
#2	.00021	1.4553	-.00505	.00423	-.00695	.10389	.00244	.02603	.00846

Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Int. Std.	Y_2243	Y_3600	Y_3774
Line	224.306 {450}	360.073 {94}	377.433 {89}
Units	Cts/S	Cts/S	Cts/S
Avg	2658.5	38882.	2027.1
Stddev	3.1	65.	34.2
%RSD	.11753	.16829	1.6863

#1	2656.3	38928.	2051.2
#2	2660.7	38836.	2002.9

Sample Name: 280-82998-I-2-B MS Acquired: 5/17/2016 15:58:13 Type: Unk
Method: 6500_025(v6) Mode: CONC Corr. Factor: 1.000000
User: CRHOADES Prep Date: Custom ID2: Custom ID3:
Comment: 325053 6010B

Elem	Ag3280	Al1670	Al3092	As1890	B_2089	Ba4554	Be3130	Bi2230	Ca3179
Line	328.068 {103}	167.079 {502}	309.271 {109}	189.042 {478}	208.959 {461}	455.403 { 74}	313.042 {108}	223.061 {451}	317.933 {106}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	k .05731	2.0388	kW 3.0799	1.0754	6.0365	3.3382	k .05049	kF 2.1161	W 560.37
Stddev	.00331	.0034	.4607	.0007	.0153	.0621	.00043	.0321	12.32
%RSD	5.7718	.16793	14.959	.06555	.25379	1.8607	.85365	1.5185	2.1988

#1	.05497	2.0412	2.7542	1.0749	6.0473	3.3821	.05080	2.1389	569.08
#2	k .05965	2.0364	k 3.4057	1.0759	6.0256	3.2943	k .05019	k 2.0934	551.66

Check ?	Chk Pass	Chk Pass	Chk Warn	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Fail	Chk Warn
High Limit			500.00					.10000	500.00
Low Limit			3.2000					-.10000	-.05000

Elem	Cd2288	Co2286	Cr2055	Cu3247	Fe2599	K_7664	Li6707	Mg2790	Mn2576
Line	228.802 {447}	228.616 {447}	205.560 {464}	324.754 {104}	259.940 {130}	766.490 { 44}	670.784 { 50}	279.079 {121}2	257.610 {131}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	k .11001	k .49299	k .22723	k .25032	26.463	W 275.73	1.3228	^ *****	2.3395
Stddev	.00079	.00063	.00085	.00027	.295	6.20	.0034	----	.0133
%RSD	.71843	.12871	.37566	.10807	1.1162	2.2484	.25965	----	.56864

#1	.11057	.49344	.22783	.25013	26.672	280.12	1.3204	397.27	2.3301
#2	k .10945	k .49254	k .22663	k .25051	26.254	271.35	1.3252	^ ----	2.3489

Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Warn	Chk Pass	Chk Pass	Chk Pass
High Limit						100.00			
Low Limit						-.50000			

Elem	Mo2020	Na8183	Ni2316	P_1782	Pb2203	S_1820	Sb2068	Se1960	Si2881
Line	202.030 {467}	818.326 { 41}	231.604 {446}	178.284 {489}	220.353 {453}	182.034 {485}	206.833 {463}	196.090 {472}	288.158 {117}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	k 1.0739	W 1387.8	k .58620	W 16.141	k .48788	k 17.418	k .56856	k 2.1553	k 31.870
Stddev	.0065	25.5	.00192	.149	.00036	.128	.00215	.0076	.072
%RSD	.60059	1.8350	.32705	.92005	.07471	.73768	.37843	.35467	.22636

#1	1.0785	1405.8	.58756	16.036	.48814	17.509	.57008	2.1499	31.819
#2	k 1.0694	1369.8	k .58484	16.246	k .48762	k 17.327	k .56704	k 2.1607	k 31.921

Check ?	Chk Pass	Chk Warn	Chk Pass	Chk Warn	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit		500.00		2.0000					
Low Limit		11.000		-1.0000					

Elem	SiO2	Sn1899	Sr4077	Th2837	Ti3349	Ti1908	U_3701	V_2924	Zn2062
Line	288.158 {117}2	189.989 {477}	407.771 { 83}	283.730 {119}	334.904 {101}	190.856 {477}	370.152 { 91}	292.402 {115}	206.200 {163}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	k 68.203	1.9813	W 10.490	k 1.0124	k .99658	k 1.5662	k 2.0189	k .51318	k .60896
Stddev	.154	.0182	.167	.0329	.00497	.0511	.0391	.00038	.00395
%RSD	.22636	.91972	1.5875	3.2520	.49861	3.2617	1.9367	.07430	.64823

#1	68.093	1.9684	10.608	.98915	.99306	1.6023	1.9912	.51345	.60617
#2	k 68.312	1.9942	10.372	k 1.0357	k 1.0001	k 1.5301	k 2.0465	k .51291	k .61175

Check ?	Chk Pass	Chk Pass	Chk Warn	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit			5.0000						
Low Limit			-.01000						

Elem	Zr3391
Line	339.198 { 99}
Units	ppm
Avg	k .46543
Stddev	.03977
%RSD	8.5438

#1	.43731
#2	k .49354

Check ?	Chk Pass
High Limit	
Low Limit	

Sample Name: 280-82998-I-2-B MS Acquired: 5/17/2016 15:58:13 Type: Unk
 Method: 6500_025(v6) Mode: CONC Corr. Factor: 1.000000
 User: CRHOADES Prep Date: Custom ID2: Custom ID3:
 Comment: 325053 6010B

Int. Std.	Y_2243	Y_3600	Y_3774
Line	224.306 {450}	360.073 { 94}	377.433 { 89}
Units	Cts/S	Cts/S	Cts/S
Avg	2432.4	35648.	2004.7
Stddev	9.5	119.	39.0
%RSD	.39004	.33242	1.9474
#1	2425.7	35564.	1977.0
#2	2439.1	35731.	2032.3

Sample Name: 280-82998-I-2-C MSD Acquired: 5/17/2016 16:01:12 Type: Unk
Method: 6500_025(v6) Mode: CONC Corr. Factor: 1.000000
User: CRHOADES Prep Date: Custom ID2: Custom ID3:
Comment: 325053 6010B

Elem	Ag3280	Al1670	Al3092	As1890	B_2089	Ba4554	Be3130	Bi2230	Ca3179
Line	328.068 {103}	167.079 {502}	309.271 {109}	189.042 {478}	208.959 {461}	455.403 { 74}	313.042 {108}	223.061 {451}	317.933 {106}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.05502	1.9946	W 2.7089	1.0558	5.7948	3.2466	.05022	F 2.0889	W 537.25
Stddev	.00071	.0589	.0488	.0265	.1331	.0032	.00059	.0471	.50
%RSD	1.2901	2.9535	1.8005	2.5132	2.2972	.09803	1.1693	2.2538	.09314

#1	.05452	1.9529	2.6744	1.0370	5.7007	3.2488	.05064	2.0556	537.61
#2	.05552	2.0362	2.7434	1.0745	5.8890	3.2443	.04981	2.1222	536.90

Check ?	Chk Pass	Chk Pass	Chk Warn	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Fail	Chk Warn
High Limit			500.00					.10000	500.00
Low Limit			3.2000					-.10000	-.05000

Elem	Cd2288	Co2286	Cr2055	Cu3247	Fe2599	K_7664	Li6707	Mg2790	Mn2576
Line	228.802 {447}	228.616 {447}	205.560 {464}	324.754 {104}	259.940 {130}	766.490 { 44}	670.784 { 50}	279.079 {121}2	257.610 {131}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.10813	.48279	.22334	.25069	25.556	W 262.83	1.3160	384.32	2.2648
Stddev	.00256	.01339	.00627	.00024	.044	1.44	.0007	4.36	.0078
%RSD	2.3703	2.7734	2.8067	.09691	.17256	.54673	.05493	1.1334	.34672

#1	.10631	.47332	.21891	.25087	25.588	263.85	1.3165	387.40	2.2703
#2	.10994	.49226	.22778	.25052	25.525	261.81	1.3155	381.24	2.2592

Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Warn	Chk Pass	Chk Pass	Chk Pass
High Limit						100.00			
Low Limit						-.50000			

Elem	Mo2020	Na8183	Ni2316	P_1782	Pb2203	S_1820	Sb2068	Se1960	Si2881
Line	202.030 {467}	818.326 { 41}	231.604 {446}	178.284 {489}	220.353 {453}	182.034 {485}	206.833 {463}	196.090 {472}	288.158 {117}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	1.0566	W 1325.1	.57423	W 15.862	.47800	16.698	.55686	2.1186	31.416
Stddev	.0257	1.3	.01447	.378	.01462	.353	.00987	.0303	.171
%RSD	2.4307	.09932	2.5197	2.3814	3.0591	2.1122	1.7733	1.4288	.54300

#1	1.0385	1326.0	.56400	15.595	.46766	16.449	.54988	2.0972	31.295
#2	1.0748	1324.1	.58446	16.129	.48834	16.947	.56384	2.1400	31.536

Check ?	Chk Pass	Chk Warn	Chk Pass	Chk Warn	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit		500.00		2.0000					
Low Limit		11.000		-1.0000					

Elem	SiO2	Sn1899	Sr4077	Th2837	Ti3349	Ti1908	U_3701	V_2924	Zn2062
Line	288.158 {117}2	189.989 {477}	407.771 { 83}	283.730 {119}	334.904 {101}	190.856 {477}	370.152 { 91}	292.402 {115}	206.200 {163}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	67.230	1.9383	W 10.097	.99361	.99152	1.5740	1.9886	.51241	.60026
Stddev	.365	.0276	.092	.00043	.00442	.0208	.0140	.00077	.00567
%RSD	.54300	1.4256	.91194	.04348	.44613	1.3196	.70219	.15055	.94450

#1	66.972	1.9187	10.031	.99391	.99465	1.5886	1.9787	.51295	.60427
#2	67.488	1.9578	10.162	.99330	.98839	1.5593	1.9985	.51186	.59625

Check ?	Chk Pass	Chk Pass	Chk Warn	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit			5.0000						
Low Limit			-.01000						

Elem	Zr3391
Line	339.198 { 99}
Units	ppm
Avg	.45030
Stddev	.00120
%RSD	.26699

#1	.45115
#2	.44945

Check ?	Chk Pass
High Limit	
Low Limit	

Sample Name: 280-82998-I-2-C MSD Acquired: 5/17/2016 16:01:12 Type: Unk
Method: 6500_025(v6) Mode: CONC Corr. Factor: 1.000000
User: CRHOADES Prep Date: Custom ID2: Custom ID3:
Comment: 325053 6010B

Int. Std.	Y_2243	Y_3600	Y_3774
Line	224.306 {450}	360.073 { 94}	377.433 { 89}
Units	Cts/S	Cts/S	Cts/S
Avg	2518.3	35768.	2017.5
Stddev	92.9	741.	11.6
%RSD	3.6877	2.0710	.57615
#1	2583.9	35244.	2009.2
#2	2452.6	36291.	2025.7

Sample Name: 280-82948-D-3-A Acquired: 5/17/2016 16:04:11 Type: Unk
Method: 6500_025(v6) Mode: CONC Corr. Factor: 1.000000
User: CRHOADES Prep Date: 5/13 Custom ID2: Custom ID3:
Comment: 325056 6010B (K Na)

Elem	Ag3280	Al1670	As1890	B_2089	Ba4554	Be3130	Bi2230	Ca3179	Cd2288
Line	328.068 {103}	167.079 {502}	189.042 {478}	208.959 {461}	455.403 { 74}	313.042 {108}	223.061 {451}	317.933 {106}	228.802 {447}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.00173	.00230	-.00032	.03880	-.00169	.00011	.00098	.06313	.00020
Stddev	.00059	.00044	.00379	.00321	.00019	.00026	.00032	.00286	.00008
%RSD	34.099	19.220	1187.8	8.2720	11.465	242.06	32.597	4.5277	38.761

#1	.00214	.00198	.00236	.04107	-.00156	.00029	.00075	.06515	.00015
#2	.00131	.00261	-.00300	.03653	-.00183	-.00008	.00121	.06111	.00026

Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Elem	Co2286	Cr2055	Cu3247	Fe2599	K_7664	Li6707	Mg2790	Mn2576	Mo2020
Line	228.616 {447}	205.560 {464}	324.754 {104}	259.940 {130}	766.490 { 44}	670.784 { 50}	279.079 {121}2	257.610 {131}	202.030 {467}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	-.00009	-.00050	-.00042	.03924	.35893	-.00977	.02033	.00038	.00212
Stddev	.00024	.00000	.00001	.00173	.13830	.00276	.00029	.00009	.00098
%RSD	254.80	.52961	2.1291	4.4063	38.531	28.307	1.4226	24.290	46.486

#1	.00008	-.00050	-.00043	.04046	.45673	-.00781	.02013	.00032	.00142
#2	-.00026	-.00050	-.00041	.03802	.26114	-.01172	.02054	.00045	.00281

Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Elem	Na5895	Ni2316	P_1782	Pb2203	S_1820	Sb2068	Se1960	Si2881	SiO2
Line	589.592 { 57}	231.604 {446}	178.284 {489}	220.353 {453}	182.034 {485}	206.833 {463}	196.090 {472}	288.158 {117}	288.158 {117}2
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.62166	.00018	.00651	-.00059	.07582	-.00549	W -.00587	-.00611	-.01308
Stddev	.04557	.00000	.00146	.00090	.00130	.00627	.01112	.04862	.10405
%RSD	7.3299	2.4541	22.411	151.51	1.7117	114.12	189.47	795.70	795.70

#1	.65388	.00018	.00754	.00004	.07673	-.00992	-.01374	.02827	.06050
#2	.58944	.00017	.00548	-.00122	.07490	-.00106	.00199	-.04049	-.08665

Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Warn	Chk Pass	Chk Pass
High Limit							5.0000		
Low Limit							-.00500		

Elem	Sn1899	Sr4077	Th2837	Ti3349	Ti1908	U_3701	V_2924	Zn2062	Zr3391
Line	189.989 {477}	407.771 { 83}	283.730 {119}	334.904 {101}	190.856 {477}	370.152 { 91}	292.402 {115}	206.200 {163}	339.198 { 99}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	-.00048	.00075	-.00104	.00009	.03612	.02264	.00041	.00147	-.00284
Stddev	.00132	.00006	.00008	.00003	.00745	.07188	.00001	.00028	.00445
%RSD	276.67	8.5503	7.7977	36.154	20.625	317.55	2.2631	19.183	156.50

#1	-.00141	.00079	-.00110	.00007	.03085	.07347	.00040	.00167	.00030
#2	.00045	.00070	-.00099	.00011	.04139	-.02819	.00042	.00127	-.00599

Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Int. Std.	Y_2243	Y_3600	Y_3774
Line	224.306 {450}	360.073 { 94}	377.433 { 89}
Units	Cts/S	Cts/S	Cts/S
Avg	2696.1	40028.	1999.3
Stddev	11.3	154.	21.1
%RSD	.42059	.38494	1.0543

#1	2704.1	39919.	1984.4
#2	2688.1	40137.	2014.2

Sample Name: 280-82957-E-9-A Acquired: 5/17/2016 16:06:33 Type: Unk

Method: 6500_025(v6) Mode: CONC Corr. Factor: 1.000000

User: CRHOADES Prep Date: Custom ID2: Custom ID3:

Comment: 325056 6010B (Cr)

Elem	Ag3280	Al1670	As1890	B_2089	Ba4554	Be3130	Bi2230	Ca3179	Cd2288
Line	328.068 {103}	167.079 {502}	189.042 {478}	208.959 {461}	455.403 {74}	313.042 {108}	223.061 {451}	317.933 {106}	228.802 {447}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.00134	.01387	-.00624	.12316	.08616	-.00001	-.00433	119.30	.00108
Stddev	.00178	.00076	.00390	.00227	.00192	.00027	.00007	2.60	.00023
%RSD	132.68	5.4677	62.572	1.8424	2.2243	4356.2	1.6088	2.1821	20.969

#1	.00008	.01440	-.00900	.12476	.08480	-.00020	-.00438	117.46	.00124
#2	.00260	.01333	-.00348	.12155	.08751	.00019	-.00428	121.14	.00092

Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Elem	Co2286	Cr2055	Cu3247	Fe2599	K_7664	Li6707	Mg2790	Mn2576	Mo2020
Line	228.616 {447}	205.560 {464}	324.754 {104}	259.940 {130}	766.490 {44}	670.784 {50}	279.079 {121}2	257.610 {131}	202.030 {467}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.00090	.10466	.00237	.36388	4.6903	-.00295	50.431	.01145	.00215
Stddev	.00012	.00083	.00038	.00498	.0420	.00061	.053	.00015	.00043
%RSD	13.275	.79200	15.907	1.3672	.89582	20.759	.10571	1.3241	20.179

#1	.00099	.10408	.00264	.36036	4.7200	-.00338	50.468	.01156	.00184
#2	.00082	.10525	.00210	.36739	4.6606	-.00251	50.393	.01134	.00246

Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Elem	Na8183	Ni2316	P_1782	Pb2203	S_1820	Sb2068	Se1960	Si2881	SiO2
Line	818.326 {41}	231.604 {446}	178.284 {489}	220.353 {453}	182.034 {485}	206.833 {463}	196.090 {472}	288.158 {117}	288.158 {117}2
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	52.487	.13107	.01604	-.00015	22.503	-.00605	W -.00923	7.0082	14.998
Stddev	.319	.00206	.00436	.00038	.033	.00042	.00200	.0513	.110
%RSD	.60709	1.5718	27.150	248.50	.14806	6.8800	21.630	.73160	.73160

#1	52.262	.12961	.01912	-.00042	22.479	-.00634	-.01064	6.9720	14.920
#2	52.713	.13252	.01296	.00012	22.526	-.00575	-.00781	7.0445	15.075

Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Warn	Chk Pass	Chk Pass
High Limit							5.0000		
Low Limit							-.00500		

Elem	Sn1899	Sr4077	Th2837	Ti3349	Ti1908	U_3701	V_2924	Zn2062	Zr3391
Line	189.989 {477}	407.771 {83}	283.730 {119}	334.904 {101}	190.856 {477}	370.152 {91}	292.402 {115}	206.200 {163}	339.198 {99}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	-.00091	.18448	-.00392	.00107	.01163	-.00953	.00027	.00278	.00274
Stddev	.00123	.00032	.00060	.00015	.00290	.02882	.00167	.00018	.00568
%RSD	134.87	.17099	15.343	14.075	24.942	302.57	631.91	6.5936	207.05

#1	-.00004	.18470	-.00350	.00096	.01368	.01085	.00145	.00290	.00676
#2	-.00178	.18426	-.00435	.00118	.00958	-.02991	-.00092	.00265	-.00127

Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Int. Std.	Y_2243	Y_3600	Y_3774
Line	224.306 {450}	360.073 {94}	377.433 {89}
Units	Cts/S	Cts/S	Cts/S
Avg	2595.8	38117.	1950.1
Stddev	.5	365.	31.9
%RSD	.01964	.95637	1.6371

#1	2595.5	37859.	1972.7
#2	2596.2	38375.	1927.6

Sample Name: 280-82957-E-10-A Acquired: 5/17/2016 16:09:10 Type: Unk

Method: 6500_025(v6) Mode: CONC Corr. Factor: 1.000000

User: CRHOADES Prep Date: Custom ID2: Custom ID3:

Comment: 325056 6010B (Pb)

Elem	Ag3280	Al1670	As1890	B_2089	Ba4554	Be3130	Bi2230	Ca3179	Cd2288
Line	328.068 {103}	167.079 {502}	189.042 {478}	208.959 {461}	455.403 { 74}	313.042 {108}	223.061 {451}	317.933 {106}	228.802 {447}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.00228	.00489	-.00050	.15257	.05015	-.00001	-.00226	102.44	.00078
Stddev	.00026	.00020	.00253	.00064	.00082	.00021	.00454	1.69	.00008
%RSD	11.202	4.0509	501.67	.42248	1.6316	1723.6	200.48	1.6483	9.9353

#1	.00246	.00475	.00129	.15212	.05073	-.00016	.00095	103.63	.00084
#2	.00210	.00503	-.00229	.15303	.04957	.00014	-.00547	101.25	.00073

Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Elem	Co2286	Cr2055	Cu3247	Fe2599	K_7664	Li6707	Mg2790	Mn2576	Mo2020
Line	228.616 {447}	205.560 {464}	324.754 {104}	259.940 {130}	766.490 { 44}	670.784 { 50}	279.079 {121}2	257.610 {131}	202.030 {467}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.00037	-.00030	.00058	.90404	4.4435	-.00466	38.926	.12448	-.00085
Stddev	.00016	.00018	.00023	.00135	.1934	.00680	.066	.00038	.00021
%RSD	41.753	59.520	39.660	.14986	4.3519	145.93	.17046	.30912	24.363

#1	.00048	-.00043	.00075	.90309	4.5802	-.00947	38.973	.12475	-.00100
#2	.00026	-.00018	.00042	.90500	4.3068	.00015	38.879	.12420	-.00071

Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Elem	Na8183	Ni2316	P_1782	Pb2203	S_1820	Sb2068	Se1960	Si2881	SiO2
Line	818.326 { 41}	231.604 {446}	178.284 {489}	220.353 {453}	182.034 {485}	206.833 {463}	196.090 {472}	288.158 {117}	288.158 {117}2
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	76.715	.00622	.01165	-.00023	22.332	-.00555	-.00445	5.9672	12.770
Stddev	1.598	.00018	.00195	.00310	.183	.00184	.00170	.0008	.002
%RSD	2.0832	2.9483	16.746	1373.3	.82050	33.144	38.128	.01326	.01326

#1	75.585	.00609	.01027	-.00242	22.203	-.00685	-.00564	5.9678	12.771
#2	77.845	.00635	.01303	.00197	22.462	-.00425	-.00325	5.9667	12.769

Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Elem	Sn1899	Sr4077	Th2837	Ti3349	Ti1908	U_3701	V_2924	Zn2062	Zr3391
Line	189.989 {477}	407.771 { 83}	283.730 {119}	334.904 {101}	190.856 {477}	370.152 { 91}	292.402 {115}	206.200 {163}	339.198 { 99}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	-.00262	.20869	-.00085	.00048	.00212	.00249	.00037	.00138	.00160
Stddev	.00104	.00023	.00068	.00022	.00007	.01957	.00097	.00006	.00035
%RSD	39.732	.11208	80.586	44.412	3.3786	787.02	265.49	4.5115	21.787

#1	-.00336	.20853	-.00133	.00064	.00207	-.01135	-.00032	.00143	.00185
#2	-.00189	.20886	-.00036	.00033	.00217	.01633	.00105	.00134	.00136

Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Int. Std.	Y_2243	Y_3600	Y_3774
Line	224.306 {450}	360.073 { 94}	377.433 { 89}
Units	Cts/S	Cts/S	Cts/S
Avg	2615.8	38439.	1927.0
Stddev	2.5	272.	49.4
%RSD	.09548	.70747	2.5659

#1	2614.0	38246.	1892.1
#2	2617.6	38631.	1962.0

Sample Name: 280-83023-C-1-C Acquired: 5/17/2016 16:11:47 Type: Unk
Method: 6500_025(v6) Mode: CONC Corr. Factor: 1.000000
User: CRHOADES Prep Date: 5/16 Custom ID2: Custom ID3:
Comment: 325141 200.7 (Al)

Elem	Ag3280	Al1670	As1890	B_2089	Ba4554	Be3130	Bi2230	Ca3179	Cd2288
Line	328.068 {103}	167.079 {502}	189.042 {478}	208.959 {461}	455.403 { 74}	313.042 {108}	223.061 {451}	317.933 {106}	228.802 {447}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.00085	1.8250	-.00508	.01787	.02055	-.00028	-.00419	W 567.51	.00077
Stddev	.00045	.0056	.00021	.00044	.00109	.00028	.00483	12.20	.00017
%RSD	53.047	.30816	4.1518	2.4389	5.2896	100.97	115.14	2.1500	22.020

#1	.00117	1.8290	-.00523	.01818	.02132	-.00008	-.00078	576.14	.00089
#2	.00053	1.8211	-.00493	.01756	.01978	-.00048	-.00761	558.89	.00065

Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Warn	Chk Pass
High Limit								500.00	
Low Limit								-.05000	

Elem	Co2286	Cr2055	Cu3247	Fe2599	K_7664	Li6707	Mg2790	Mn2576	Mo2020
Line	228.616 {447}	205.560 {464}	324.754 {104}	259.940 {130}	766.490 { 44}	670.784 { 50}	279.079 {121}2	257.610 {131}	202.030 {467}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.00038	.00054	.00875	.05629	4.2264	.01887	21.260	1.0219	.00195
Stddev	.00024	.00024	.00028	.00172	.1343	.00077	.018	.0009	.00021
%RSD	63.193	44.335	3.1734	3.0502	3.1779	4.0924	.08438	.08395	10.623

#1	.00056	.00071	.00856	.05751	4.3214	.01832	21.247	1.0225	.00181
#2	.00021	.00037	.00895	.05508	4.1314	.01942	21.272	1.0213	.00210

Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Elem	Na8183	Ni2316	P_1782	Pb2203	S_1820	Sb2068	Se1960	Si2881	SiO2
Line	818.326 { 41}	231.604 {446}	178.284 {489}	220.353 {453}	182.034 {485}	206.833 {463}	196.090 {472}	288.158 {117}	288.158 {117}2
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	31.957	.00377	.00553	.00043	F 555.62	-.00667	-.00279	.11521	.24654
Stddev	.562	.00081	.00301	.00105	2.26	.00047	.00010	.00531	.01137
%RSD	1.7599	21.524	54.374	242.40	.40707	7.0301	3.5491	4.6110	4.6110

#1	32.355	.00434	.00766	-.00031	554.02	-.00634	-.00286	.11896	.25458
#2	31.559	.00320	.00340	.00117	557.22	-.00701	-.00272	.11145	.23850

Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Fail	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit					200.00				
Low Limit					-.20000				

Elem	Sn1899	Sr4077	Th2837	Ti3349	Ti1908	U_3701	V_2924	Zn2062	Zr3391
Line	189.989 {477}	407.771 { 83}	283.730 {119}	334.904 {101}	190.856 {477}	370.152 { 91}	292.402 {115}	206.200 {163}	339.198 { 99}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	-.00341	1.2023	-.00063	.00077	.00125	-.02090	-.00007	.00279	.00107
Stddev	.00048	.0290	.00045	.00007	.00229	.07722	.00039	.00084	.00111
%RSD	14.204	2.4100	71.566	8.7413	183.66	369.43	542.75	30.024	103.45

#1	-.00375	1.2228	-.00094	.00072	-.00037	.03370	.00020	.00339	.00185
#2	-.00307	1.1818	-.00031	.00082	.00287	-.07550	-.00034	.00220	.00029

Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Int. Std.	Y_2243	Y_3600	Y_3774
Line	224.306 {450}	360.073 { 94}	377.433 { 89}
Units	Cts/S	Cts/S	Cts/S
Avg	2554.6	37665.	2012.6
Stddev	34.3	442.	11.7
%RSD	1.3446	1.1740	.58166

#1	2530.3	37352.	2004.3
#2	2578.9	37978.	2020.8

Elem	Ag3280	Al1670	As1890	B_2089	Ba4554	Be3130	Bi2230	Ca3179	Cd2288
Line	328.068 {103}	167.079 {502}	189.042 {478}	208.959 {461}	455.403 {74}	313.042 {108}	223.061 {451}	317.933 {106}	228.802 {447}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.00148	.19004	.00503	.01256	.02566	.00001	.00108	85.332	.00059
Stddev	.00011	.00003	.00128	.00176	.00032	.00010	.00156	.262	.00009
%RSD	7.7403	.01390	25.404	13.979	1.2362	1300.8	144.84	.30735	15.204

#1	.00156	.19002	.00413	.01381	.02588	.00008	.00218	85.147	.00065
#2	.00140	.19006	.00594	.01132	.02543	-.00006	-.00003	85.518	.00053

Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Elem	Co2286	Cr2055	Cu3247	Fe2599	K_7664	Li6707	Mg2790	Mn2576	Mo2020
Line	228.616 {447}	205.560 {464}	324.754 {104}	259.940 {130}	766.490 {44}	670.784 {50}	279.079 {121}2	257.610 {131}	202.030 {467}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.00266	.00001	.03360	.09866	1.4311	-.00339	6.1172	.45493	-.00145
Stddev	.00011	.00036	.00039	.01222	.0107	.00160	.2468	.00206	.00047
%RSD	3.9569	3448.0	1.1515	12.385	.74687	47.176	4.0351	.45317	32.729

#1	.00259	-.00024	.03333	.10730	1.4387	-.00226	6.2917	.45639	-.00179
#2	.00273	.00026	.03388	.09002	1.4236	-.00452	5.9427	.45348	-.00111

Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Elem	Na5895	Ni2316	P_1782	Pb2203	S_1820	Sb2068	Se1960	Si2881	SiO2
Line	589.592 {57}	231.604 {446}	178.284 {489}	220.353 {453}	182.034 {485}	206.833 {463}	196.090 {472}	288.158 {117}	288.158 {117}2
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	4.8720	.00542	.00924	-.00174	84.745	-.00498	W -.00797	4.4365	9.4940
Stddev	.0438	.00012	.00032	.00250	.200	.00344	.00039	.0302	.0646
%RSD	.89912	2.2564	3.4429	143.87	.23580	69.099	4.8337	.68050	.68050

#1	4.8410	.00550	.00902	.00003	84.603	-.00742	-.00825	4.4151	9.4483
#2	4.9029	.00533	.00947	-.00351	84.886	-.00255	-.00770	4.4578	9.5397

Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Warn	Chk Pass	Chk Pass
High Limit							5.0000		
Low Limit							-.00500		

Elem	Sn1899	Sr4077	Th2837	Ti3349	Ti1908	U_3701	V_2924	Zn2062	Zr3391
Line	189.989 {477}	407.771 {83}	283.730 {119}	334.904 {101}	190.856 {477}	370.152 {91}	292.402 {115}	206.200 {163}	339.198 {99}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	-.00162	.24369	-.00056	.00163	.00089	-.00590	.00028	.07108	-.00034
Stddev	.00124	.00334	.00264	.00099	.00244	.05751	.00025	.00022	.00193
%RSD	76.149	1.3714	468.52	60.817	274.02	974.82	88.911	.31059	566.79

#1	-.00075	.24605	.00130	.00232	.00261	-.04657	.00010	.07124	.00102
#2	-.00250	.24132	-.00243	.00093	-.00083	.03477	.00045	.07093	-.00170

Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Int. Std.	Y_2243	Y_3600	Y_3774						
Line	224.306 {450}	360.073 {94}	377.433 {89}						
Units	Cts/S	Cts/S	Cts/S						
Avg	2663.5	39157.	2047.2						
Stddev	2.2	39.	18.4						
%RSD	.08104	.09883	.90049						

#1	2665.0	39129.	2060.2						
#2	2661.9	39184.	2034.2						

Sample Name: CCVH-3883905 Acquired: 5/17/2016 16:17:01 Type: QC
Method: 6500_025(v6) Mode: CONC Corr. Factor: 1.000000
User: CRHOADES Prep Date: Custom ID2: Custom ID3:
Comment:

Elem	Ag3280	Al3092	As1890	B_2089	Ba4554	Be3130	Bi2230	Ca3179	Cd2288	Co2286	Cr2055
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	-.00465	51.578	.00090	.00888	-.00189	.00019	.98454	.01803	-.00036	-.00129	-.00010
Stddev	.00111	.258	.00297	.00023	.00021	.00005	.04136	.00162	.00028	.00015	.00004
%RSD	23.934	.49991	331.49	2.6342	11.110	26.370	4.2011	8.9630	76.773	11.528	39.484

#1	-.00386	51.760	.00299	.00905	-.00203	.00022	1.0138	.01917	-.00056	-.00139	-.00008
#2	-.00543	51.395	-.00120	.00872	-.00174	.00015	.95529	.01689	-.00016	-.00118	-.00013

Check ?	None	Chk Pass	None	None	None	None	Chk Pass	None	None	None	None
Value											
Range											

Elem	Cu3247	Fe2714	K_7664	Li6707	Mg2790	Mn2576	Mo2020	Na8183	Ni2316	P_1782	Pb2203
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	-.01354	52.396	-.05801	-.01303	.02391	-.00166	-.00229	263.72	.00154	.00906	.00006
Stddev	.00051	.202	.02358	.00097	.00266	.00002	.00073	.31	.00058	.00167	.00194
%RSD	3.7892	.38470	40.652	7.4748	11.109	1.3425	31.880	.11623	37.905	18.445	3362.1

#1	-.01317	52.539	-.07468	-.01234	.02203	-.00165	-.00280	263.94	.00196	.01024	.00143
#2	-.01390	52.254	-.04133	-.01371	.02579	-.00168	-.00177	263.50	.00113	.00788	-.00132

Check ?	None	Chk Pass	None	None	None	None	None	Chk Pass	None	None	None
Value											
Range											

Elem	S_1820	Sb2068	Se1960	Si2881	SiO2	Sn1899	Sr4077	Th2837	Ti3349	Ti1908	U_3701
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	W 5.3148	-.01770	-.00853	-.05768	-.12344	-.00256	.00046	W 4.7196	-.00032	-.00154	9.6944
Stddev	.3567	.00080	.00219	.05218	.11167	.00221	.00002	.0003	.00059	.00129	.2847
%RSD	6.7113	4.4980	25.668	90.472	90.472	86.379	4.6261	.00543	183.57	83.915	2.9372

#1	5.5670	-.01714	-.00698	-.09458	-.20240	-.00100	.00047	4.7194	.00010	-.00246	9.8958
#2	5.0625	-.01826	-.01008	-.02078	-.04447	-.00412	.00044	4.7198	-.00074	-.00063	9.4931

Check ?	Chk Warn	None	None	None	None	None	None	Chk Warn	None	None	Chk Pass
Value	5.0000							5.0000			
Range	5.0000%							-5.0000%			

Elem	V_2924	Zn2062	Zr3391
Units	ppm	ppm	ppm
Avg	.01210	.00018	-.13195
Stddev	.00101	.00020	.00021
%RSD	8.3683	108.42	.16089

#1	.01281	.00004	-.13180
#2	.01138	.00032	-.13210

Check ?	None	None	None
Value			
Range			

Int. Std.	Y_2243	Y_3600	Y_3774
Units	Cts/S	Cts/S	Cts/S
Avg	2583.4	37309.	1922.3
Stddev	38.5	213.	13.5
%RSD	1.4901	.57008	.70455

#1	2556.2	37158.	1931.9
#2	2610.6	37459.	1912.7

Sample Name: CCV-3888422 Acquired: 5/17/2016 16:19:37 Type: QC

Method: 6500_025(v6) Mode: CONC Corr. Factor: 1.000000

User: CRHOADES Prep Date: Custom ID2: Custom ID3:

Comment:

Elem	Ag3280	Al1670	As1890	B_2089	Ba4554	Be3130	Bi2230	Ca3179	Cd2288	Co2286	Cr2055	Cu3247	Fe2599	K_7664
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.48686	.49575	.95397	.49975	.46445	.47807	.00534	4.6135	.49468	.50682	.50985	.47093	2.4082	46.780
Stddev	.00127	.00720	.00552	.00427	.00092	.00128	.00060	.0108	.00012	.00246	.00205	.00269	.0006	.334
%RSD	.25997	1.4517	.57869	.85374	.19752	.26811	11.210	.23352	.02369	.48576	.40278	.57176	.02321	.71402

#1	.48776	.50084	.95007	.49673	.46380	.47716	.00576	4.6212	.49476	.50508	.50840	.47283	2.4086	46.543
#2	.48597	.49066	.95787	.50277	.46510	.47898	.00492	4.6059	.49459	.50857	.51131	.46903	2.4078	47.016

Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	None	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Value														
Range														

Elem	Li6707	Mg2790	Mn2576	Mo2020	Na5895	Ni2316	P_1782	Pb2203	S_1820	Sb2068	Se1960	Si2881	SiO2	Sn1899
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.94321	18.905	.46770	.49920	5.0918	.49769	.99898	1.0153	.09871	1.0125	.99971	4.7873	10.245	1.0306
Stddev	.00546	.042	.00029	.00064	.0246	.00266	.00275	.0062	.09830	.0118	.01303	.1184	.253	.0239
%RSD	.57836	.22150	.06221	.12884	.48227	.53481	.27509	.61231	99.578	1.1676	1.3032	2.4721	2.4721	2.3179

#1	.93935	18.935	.46791	.49874	5.0744	.49581	1.0009	1.0109	.16822	1.0041	.99050	4.7036	10.066	1.0137
#2	.94707	18.876	.46750	.49965	5.1092	.49957	.99703	1.0197	.02921	1.0208	1.0089	4.8710	10.424	1.0475

Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	None	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Value														
Range														

Elem	Sr4077	Th2837	Ti3349	Tl1908	U_3701	V_2924	Zn2062	Zr3391
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.47366	.00257	.46448	1.0489	.01290	.47833	.46032	.46972
Stddev	.00133	.00022	.00041	.0318	.02520	.00719	.00265	.00332
%RSD	.28028	8.3606	.08868	3.0328	195.28	1.5029	.57618	.70772
#1	.47272	.00242	.46477	1.0264	-.00491	.48341	.46220	.46737
#2	.47460	.00273	.46419	1.0714	.03072	.47325	.45845	.47208

Check ?	Chk Pass	None	Chk Pass	Chk Pass	None	Chk Pass	Chk Pass	Chk Pass
Value								
Range								

Int. Std.	Y_2243	Y_3600	Y_3774
Units	Cts/S	Cts/S	Cts/S
Avg	2630.0	38519.	1962.9
Stddev	6.2	434.	17.9
%RSD	.23744	1.1276	.91410
#1	2634.4	38826.	1950.2
#2	2625.6	38212.	1975.6

Sample Name: CCB Acquired: 5/17/2016 16:22:05 Type: QC
 Method: 6500_025(v6) Mode: CONC Corr. Factor: 1.000000
 User: CRHOADES Prep Date: Custom ID2: Custom ID3:
 Comment:

Elem	Ag3280	Al1670	As1890	B_2089	Ba4554	Be3130	Bi2230	Ca3179	Cd2288	Co2286	Cr2055
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.00108	.00090	W .00847	.00606	W -.00248	.00009	.00251	.00594	-.00014	.00004	-.00073
Stddev	.00002	.00066	.00335	.00211	.00051	.00021	.00236	.00797	.00001	.00016	.00013
%RSD	1.9022	72.947	39.530	34.718	20.422	223.45	94.287	134.03	3.7356	389.47	17.758

#1	.00106	.00136	.01084	.00755	-.00212	-.00005	.00418	.01158	-.00014	.00015	-.00064
#2	.00109	.00044	.00610	.00458	-.00284	.00024	.00083	.00031	-.00013	-.00007	-.00082

Check ?	Chk Pass	Chk Pass	Chk Warn	Chk Pass	Chk Warn	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit			.00750		.00200						
Low Limit			-.01500		-.00200						

Elem	Cu3247	Fe2599	K_7664	Li6707	Mg2790	Mn2576	Mo2020	Na5895	Ni2316	P_1782	Pb2203
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	-.00066	.01080	-1.10042	F -.01016	-.00172	.00013	.00123	.09973	.00028	.00228	-.00070
Stddev	.00011	.00831	.04773	.00214	.00092	.00013	.00102	.02009	.00011	.00009	.00220
%RSD	16.153	76.902	47.529	21.043	53.400	96.847	82.405	20.141	39.733	4.0004	314.48

#1	-.00074	.00493	-.13417	-.01167	-.00237	.00004	.00051	.08552	.00020	.00234	-.00225
#2	-.00059	.01667	-.06667	-.00865	-.00107	.00022	.00195	.11393	.00036	.00221	.00085

Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Fail	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit				.01000							
Low Limit				-.01000							

Elem	S_1820	Sb2068	Se1960	Si2881	SiO2	Sn1899	Sr4077	Th2837	Ti3349	Tl1908	U_3701
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.01661	W .00600	-.00256	-.02572	-.05505	-.00060	.00010	.00194	.00099	.00315	.05824
Stddev	.00365	.00182	.00293	.02102	.04499	.00228	.00004	.00133	.00036	.00195	.01725
%RSD	21.998	30.415	114.25	81.734	81.734	381.29	40.643	68.543	36.264	61.816	29.615

#1	.01919	.00729	-.00463	-.01086	-.02323	-.00221	.00013	.00100	.00074	.00452	.04605
#2	.01402	.00471	-.00049	-.04059	-.08686	.00101	.00007	.00288	.00125	.00177	.07044

Check ?	Chk Pass	Chk Warn	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit		.00100									
Low Limit		-.00100									

Elem	V_2924	Zn2062	Zr3391
Units	ppm	ppm	ppm
Avg	-.00013	-.00060	-.00174
Stddev	.00015	.00048	.00207
%RSD	114.91	79.523	118.83

#1	-.00023	-.00094	-.00320
#2	-.00002	-.00026	-.00028

Check ?	Chk Pass	Chk Pass	Chk Pass
High Limit			
Low Limit			

Int. Std.	Y_2243	Y_3600	Y_3774
Units	Cts/S	Cts/S	Cts/S
Avg	2606.0	38137.	2032.0
Stddev	3.3	380.	97.2
%RSD	.12488	.99753	4.7838

#1	2603.7	38406.	1963.2
#2	2608.3	37868.	2100.7

Sample Name: CCVL-3894681 Acquired: 5/17/2016 16:24:26 Type: QC
Method: 6500_025(v6) Mode: CONC Corr. Factor: 1.000000
User: CRHOADES Prep Date: Custom ID2: Custom ID3:
Comment:

Elem	Ag3280	Al1670	As1890	B_2089	Ba4554	Be3130	Bi2230	Ca3179	Cd2288	Co2286	Cr2055	Cu3247
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.01027	.10123	.01063	.10156	.00783	.00098	.09917	.22554	.00528	.01017	.00985	.01381
Stddev	.00023	.00099	.00301	.00013	.00025	.00009	.00820	.00119	.00002	.00001	.00037	.00059
%RSD	2.2187	.97777	28.334	.12543	3.2518	8.8966	8.2676	.52910	.31699	.07700	3.7978	4.3036

#1	.01043	.10193	.00850	.10147	.00801	.00092	.10497	.22638	.00530	.01018	.00959	.01339
#2	.01011	.10053	.01276	.10165	.00765	.00104	.09338	.22469	.00527	.01017	.01012	.01423

Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Value												
Range												

Elem	Fe2599	K_7664	Li6707	Mg2790	Mn2576	Mo2020	Na5895	Ni2316	P_1782	Pb2203	S_1820	Sb2068
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	F .13802	2.8365	F .00154	.19316	.00990	.01927	1.0879	.03973	2.8045	.00896	.00723	.02175
Stddev	.00024	.0215	.00020	.01489	.00013	.00010	.0078	.00018	.0415	.00089	.02088	.00399
%RSD	.17373	.75849	13.014	7.7113	1.3562	.51763	.71845	.45786	1.4796	9.9568	288.61	18.364

#1	.13785	2.8517	.00140	.20369	.00999	.01934	1.0934	.03986	2.8338	.00960	.02200	.02458
#2	.13818	2.8213	.00169	.18262	.00980	.01920	1.0824	.03960	2.7752	.00833	-.00753	.01893

Check ?	Chk Fail	Chk Pass	Chk Fail	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	None	Chk Pass
Value	.10000		.01000									
Range	30.000%		-30.000%									

Elem	Se1960	Si2881	SiO2	Sn1899	Sr4077	Th2837	Ti3349	Ti1908	U_3701	V_2924	Zn2062	Zr3391
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	F .00612	.45816	.98046	.09790	.00979	.01416	.01033	.01653	.07660	.01036	.02075	.01457
Stddev	.00187	.01997	.04274	.00357	.00005	.00247	.00047	.00100	.04831	.00016	.00038	.00346
%RSD	30.543	4.3595	4.3595	3.6461	.49691	17.424	4.5557	6.0482	63.063	1.5900	1.8332	23.748

#1	.00745	.47228	1.0107	.10042	.00983	.01241	.01066	.01724	.04244	.01047	.02048	.01213
#2	.00480	.44404	.95024	.09537	.00976	.01590	.01000	.01582	.11076	.01024	.02102	.01702

Check ?	Chk Fail	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Value	.01500											
Range	-30.000%											

Int. Std.	Y_2243	Y_3600	Y_3774
Units	Cts/S	Cts/S	Cts/S
Avg	2643.8	37520.	1919.8
Stddev	6.4	695.	30.3
%RSD	.24184	1.8527	1.5807

#1	2639.2	37028.	1898.3
#2	2648.3	38011.	1941.2

Sample Name: MB 280-325144/1-A Acquired: 5/17/2016 16:27:05 Type: Unk

Method: 6500_025(v6) Mode: CONC Corr. Factor: 1.000000

User: CRHOADES Prep Date: 5/16 Custom ID2: Custom ID3:

Comment: 325144 6010B (Fe)

Elem	Ag3280	Al1670	As1890	B_2089	Ba4554	Be3130	Bi2230	Ca3179	Cd2288
Line	328.068 {103}	167.079 {502}	189.042 {478}	208.959 {461}	455.403 { 74}	313.042 {108}	223.061 {451}	317.933 {106}	228.802 {447}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.00130	.00485	.00158	.00403	-.00184	-.00007	.00070	.04328	.00011
Stddev	.00046	.00073	.00124	.00048	.00071	.00002	.00570	.00666	.00035
%RSD	35.748	15.121	78.284	11.893	38.530	25.780	818.09	15.394	301.03

#1	.00163	.00537	.00071	.00437	-.00234	-.00006	-.00333	.04799	.00036
#2	.00097	.00433	.00246	.00369	-.00134	-.00009	.00473	.03857	-.00013

Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Elem	Co2286	Cr2055	Cu3247	Fe2599	K_7664	Li6707	Mg2790	Mn2576	Mo2020
Line	228.616 {447}	205.560 {464}	324.754 {104}	259.940 {130}	766.490 { 44}	670.784 { 50}	279.079 {121}2	257.610 {131}	202.030 {467}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	-.00003	-.00063	-.00036	F .39837	-.18078	F -.01321	-.00456	.00109	-.00104
Stddev	.00014	.00045	.00054	.00163	.11131	.00167	.00112	.00000	.00011
%RSD	450.51	71.728	151.30	.40989	61.569	12.638	24.565	.09431	10.703

#1	-.00013	-.00095	-.00073	.39953	-.10208	-.01203	-.00535	.00109	-.00096
#2	.00007	-.00031	.00002	.39722	-.25949	-.01439	-.00377	.00109	-.00112

Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Fail	Chk Pass	Chk Fail	Chk Pass	Chk Pass	Chk Pass
High Limit				.10000		.01000			
Low Limit				-.10000		-.01000			

Elem	Na5895	Ni2316	P_1782	Pb2203	S_1820	Sb2068	Se1960	Si2881	SiO2
Line	589.592 { 57}	231.604 {446}	178.284 {489}	220.353 {453}	182.034 {485}	206.833 {463}	196.090 {472}	288.158 {117}	288.158 {117}2
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.09947	.00032	.00396	-.00085	.00041	-.00444	-.00713	-.01560	-.03338
Stddev	.00853	.00018	.00264	.00157	.00515	.00281	.00016	.00346	.00740
%RSD	8.5793	55.466	66.612	184.18	1264.8	63.333	2.2456	22.157	22.157

#1	.10550	.00045	.00583	-.00196	-.00323	-.00643	-.00724	-.01804	-.03861
#2	.09343	.00020	.00210	.00026	.00405	-.00245	-.00701	-.01315	-.02815

Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	None
High Limit									
Low Limit									

Elem	Sn1899	Sr4077	Th2837	Ti3349	Ti1908	U_3701	V_2924	Zn2062	Zr3391
Line	189.989 {477}	407.771 { 83}	283.730 {119}	334.904 {101}	190.856 {477}	370.152 { 91}	292.402 {115}	206.200 {163}	339.198 { 99}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	-.00132	.00004	-.00270	.00066	-.00012	F .07549	.00043	.00514	-.00065
Stddev	.00061	.00006	.00083	.00022	.00194	.01350	.00015	.00092	.00435
%RSD	46.648	136.87	30.676	33.774	1571.0	17.879	34.004	17.964	671.37

#1	-.00175	.00000	-.00329	.00081	.00125	.06594	.00053	.00448	.00243
#2	-.00088	.00009	-.00212	.00050	-.00150	.08503	.00033	.00579	-.00372

Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Fail	Chk Pass	Chk Pass	Chk Pass
High Limit						.06000			
Low Limit						-.06000			

Int. Std.	Y_2243	Y_3600	Y_3774
Line	224.306 {450}	360.073 { 94}	377.433 { 89}
Units	Cts/S	Cts/S	Cts/S
Avg	2677.9	39401.	1946.6
Stddev	33.7	638.	26.5
%RSD	1.2567	1.6199	1.3620

#1	2654.1	38950.	1965.3
#2	2701.7	39853.	1927.8

Sample Name: LCS 280-325144/2-A Acquired: 5/17/2016 16:29:25 Type: Unk
Method: 6500_025(v6) Mode: CONC Corr. Factor: 1.000000
User: CRHOADES Prep Date: Custom ID2: Custom ID3:
Comment: 325144 6010B (Fe)

Elem	Ag3280	Al1670	As1890	B_2089	Ba4554	Be3130	Bi2230	Ca3179	Cd2288
Line	328.068 {103}	167.079 {502}	189.042 {478}	208.959 {461}	455.403 {74}	313.042 {108}	223.061 {451}	317.933 {106}	228.802 {447}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.04912	1.8789	.99108	1.0171	1.9167	.04886	2.0557	46.571	.10069
Stddev	.00001	.0007	.00155	.0009	.0626	.00067	.0027	1.477	.00015
%RSD	.02735	.03902	.15608	.09249	3.2685	1.3652	.13213	3.1714	.15366

#1	.04911	1.8795	.98998	1.0165	1.9609	.04933	2.0576	47.615	.10058
#2	.04913	1.8784	.99217	1.0178	1.8724	.04839	2.0537	45.526	.10080

Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	None	Chk Pass	Chk Pass
High Limit									
Low Limit									

Elem	Co2286	Cr2055	Cu3247	Fe2599	K_7664	Li6707	Mg2790	Mn2576	Mo2020
Line	228.616 {447}	205.560 {464}	324.754 {104}	259.940 {130}	766.490 {44}	670.784 {50}	279.079 {121}2	257.610 {131}	202.030 {467}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.48954	.20051	.23436	.98624	48.191	.93536	47.473	.46257	1.0416
Stddev	.00055	.00056	.00058	.01513	1.474	.00295	.070	.00015	.0003
%RSD	.11276	.28043	.24547	1.5342	3.0579	.31544	.14784	.03227	.03016

#1	.48915	.20090	.23395	.99694	49.233	.93328	47.523	.46267	1.0419
#2	.48993	.20011	.23477	.97554	47.149	.93745	47.424	.46246	1.0414

Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Elem	Na8183	Ni2316	P_1782	Pb2203	S_1820	Sb2068	Se1960	Si2881	SiO2
Line	818.326 {41}	231.604 {446}	178.284 {489}	220.353 {453}	182.034 {485}	206.833 {463}	196.090 {472}	288.158 {117}	288.158 {117}2
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	54.316	.47980	10.064	.50142	2.1136	.53370	1.9969	9.5236	20.380
Stddev	.366	.00049	.018	.00013	.0066	.00735	.0289	.0826	.177
%RSD	.67469	.10283	.17525	.02685	.31423	1.3777	1.4478	.86737	.86737

#1	54.575	.47946	10.051	.50151	2.1089	.52850	1.9765	9.5820	20.505
#2	54.057	.48015	10.076	.50132	2.1183	.53890	2.0174	9.4652	20.255

Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	None	Chk Pass	Chk Pass	Chk Pass	None
High Limit									
Low Limit									

Elem	Sn1899	Sr4077	Th2837	Ti3349	Ti1908	U_3701	V_2924	Zn2062	Zr3391
Line	189.989 {477}	407.771 {83}	283.730 {119}	334.904 {101}	190.856 {477}	370.152 {91}	292.402 {115}	206.200 {163}	339.198 {99}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	2.0175	.96705	.97198	.94975	1.8588	2.0332	.47370	.45128	.44978
Stddev	.0219	.03210	.00011	.00231	.0310	.0529	.00124	.00035	.00431
%RSD	1.0834	3.3198	.01123	.24361	1.6688	2.5993	.26095	.07858	.95859

#1	2.0020	.98975	.97190	.94811	1.8807	2.0706	.47282	.45153	.45283
#2	2.0329	.94435	.97206	.95139	1.8368	1.9958	.47457	.45103	.44673

Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Int. Std.	Y_2243	Y_3600	Y_3774
Line	224.306 {450}	360.073 {94}	377.433 {89}
Units	Cts/S	Cts/S	Cts/S
Avg	2635.6	38506.	1993.7
Stddev	16.0	456.	73.7
%RSD	.60575	1.1834	3.6971

#1	2646.9	38828.	1941.6
#2	2624.3	38184.	2045.8

Sample Name: 280-82786-M-1-A Acquired: 5/17/2016 16:31:49 Type: Unk

Method: 6500_025(v6) Mode: CONC Corr. Factor: 1.000000

User: CRHOADES Prep Date: Custom ID2: Custom ID3:

Comment: 325144 6010B (Fe)

Elem	Ag3280	Al1670	As1890	B_2089	Ba4554	Be3130	Bi2230	Ca3179	Cd2288
Line	328.068 {103}	167.079 {502}	189.042 {478}	208.959 {461}	455.403 { 74}	313.042 {108}	223.061 {451}	317.933 {106}	228.802 {447}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.00131	.00476	.00467	.15243	.01212	-.00005	-.00129	36.375	.00035
Stddev	.00013	.00007	.00581	.00187	.00030	.00029	.00718	.686	.00016
%RSD	9.5915	1.5325	124.41	1.2243	2.4660	579.03	557.92	1.8855	44.461

#1	.00122	.00471	.00878	.15375	.01233	.00015	-.00637	36.860	.00047
#2	.00140	.00481	.00056	.15111	.01191	-.00025	.00379	35.890	.00024

Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Elem	Co2286	Cr2055	Cu3247	Fe2599	K_7664	Li6707	Mg2790	Mn2576	Mo2020
Line	228.616 {447}	205.560 {464}	324.754 {104}	259.940 {130}	766.490 { 44}	670.784 { 50}	279.079 {121}2	257.610 {131}	202.030 {467}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	-.00080	-.00046	.00176	.27151	3.7405	.05367	15.633	.04849	.00251
Stddev	.00025	.00006	.00051	.00166	.1004	.00212	.028	.00001	.00083
%RSD	31.368	13.207	28.876	.61039	2.6846	3.9423	.18082	.01496	33.129

#1	-.00098	-.00050	.00140	.27268	3.8115	.05516	15.653	.04848	.00192
#2	-.00062	-.00042	.00212	.27034	3.6695	.05217	15.613	.04849	.00309

Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Elem	Na8183	Ni2316	P_1782	Pb2203	S_1820	Sb2068	Se1960	Si2881	SiO2
Line	818.326 { 41}	231.604 {446}	178.284 {489}	220.353 {453}	182.034 {485}	206.833 {463}	196.090 {472}	288.158 {117}	288.158 {117}2
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	284.06	.00040	.02514	-.00004	95.353	-.00671	-.00443	5.2302	11.193
Stddev	.84	.00007	.00448	.00001	.169	.00009	.00601	.0008	.002
%RSD	.29439	16.335	17.836	28.508	.17734	1.3732	135.65	.01439	.01439

#1	284.65	.00036	.02831	-.00003	95.472	-.00664	-.00018	5.2308	11.194
#2	283.47	.00045	.02197	-.00005	95.233	-.00677	-.00868	5.2297	11.192

Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Elem	Sn1899	Sr4077	Th2837	Ti3349	Ti1908	U_3701	V_2924	Zn2062	Zr3391
Line	189.989 {477}	407.771 { 83}	283.730 {119}	334.904 {101}	190.856 {477}	370.152 { 91}	292.402 {115}	206.200 {163}	339.198 { 99}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	-.00074	1.0799	.00003	.00084	.03872	.06393	-.00002	.04205	-.00360
Stddev	.00027	.0185	.00200	.00050	.00930	.02696	.00046	.00111	.00295
%RSD	36.763	1.7131	6303.1	59.361	24.017	42.174	1870.2	2.6397	81.871

#1	-.00093	1.0930	-.00138	.00048	.03214	.08299	.00030	.04284	-.00152
#2	-.00055	1.0668	.00145	.00119	.04529	.04486	-.00035	.04127	-.00568

Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Int. Std.	Y_2243	Y_3600	Y_3774
Line	224.306 {450}	360.073 { 94}	377.433 { 89}
Units	Cts/S	Cts/S	Cts/S
Avg	2585.4	36298.	1856.9
Stddev	14.9	989.	47.5
%RSD	.57539	2.7249	2.5589

#1	2595.9	35599.	1823.3
#2	2574.9	36997.	1890.5

Sample Name: 280-82864-A-1-A Acquired: 5/17/2016 16:34:25 Type: Unk

Method: 6500_025(v6) Mode: CONC Corr. Factor: 1.000000

User: CRHOADES Prep Date: Custom ID2: Custom ID3:

Comment: 325144 6010B (Fe)

Elem	Ag3280	Al1670	As1890	B_2089	Ba4554	Be3130	Bi2230	Ca3179	Cd2288
Line	328.068 {103}	167.079 {502}	189.042 {478}	208.959 {461}	455.403 {74}	313.042 {108}	223.061 {451}	317.933 {106}	228.802 {447}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.00193	.05797	-.00171	.06405	.11287	.00025	.00010	72.330	.00053
Stddev	.00062	.00025	.00301	.00041	.00030	.00046	.00192	.712	.00033
%RSD	32.375	.43562	175.59	.64683	.26173	185.56	1866.1	.98453	63.309

#1	.00149	.05815	.00041	.06375	.11266	-.00008	.00146	71.826	.00077
#2	.00237	.05779	-.00384	.06434	.11308	.00058	-.00126	72.833	.00029

Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Elem	Co2286	Cr2055	Cu3247	Fe2599	K_7664	Li6707	Mg2790	Mn2576	Mo2020
Line	228.616 {447}	205.560 {464}	324.754 {104}	259.940 {130}	766.490 {44}	670.784 {50}	279.079 {121}2	257.610 {131}	202.030 {467}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	-.00014	.00000	.00271	.06597	7.3567	.01940	18.980	.00730	-.00010
Stddev	.00016	.00008	.00012	.00897	.0371	.00077	.020	.00022	.00047
%RSD	117.28	3667.7	4.3596	13.595	.50378	3.9847	.10460	3.0022	491.14

#1	-.00025	-.00005	.00279	.07231	7.3829	.01994	18.994	.00746	-.00043
#2	-.00002	.00006	.00262	.05963	7.3304	.01885	18.966	.00715	.00024

Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Elem	Na8183	Ni2316	P_1782	Pb2203	S_1820	Sb2068	Se1960	Si2881	SiO2
Line	818.326 {41}	231.604 {446}	178.284 {489}	220.353 {453}	182.034 {485}	206.833 {463}	196.090 {472}	288.158 {117}	288.158 {117}2
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	96.295	.00195	.01811	-.00064	21.935	-.00485	-.00402	2.4443	5.2308
Stddev	.032	.00063	.00213	.00052	.327	.00850	.00615	.0584	.1250
%RSD	.03273	32.385	11.769	81.182	1.4894	175.17	152.94	2.3907	2.3907

#1	96.318	.00151	.01962	-.00027	21.704	-.01086	-.00837	2.4030	5.1423
#2	96.273	.00240	.01661	-.00101	22.166	.00116	.00033	2.4856	5.3192

Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Elem	Sn1899	Sr4077	Th2837	Ti3349	Ti1908	U_3701	V_2924	Zn2062	Zr3391
Line	189.989 {477}	407.771 {83}	283.730 {119}	334.904 {101}	190.856 {477}	370.152 {91}	292.402 {115}	206.200 {163}	339.198 {99}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	-.00269	.55677	.00149	.00211	.00851	-.01905	.00043	.00273	-.00139
Stddev	.00049	.00507	.00482	.00079	.00184	.02489	.00055	.00015	.00221
%RSD	18.343	.91122	323.57	37.387	21.601	130.68	129.26	5.4652	158.92

#1	-.00234	.55318	.00490	.00155	.00721	-.03665	.00004	.00284	.00017
#2	-.00304	.56036	-.00192	.00266	.00981	-.00145	.00082	.00263	-.00296

Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Int. Std.	Y_2243	Y_3600	Y_3774
Line	224.306 {450}	360.073 {94}	377.433 {89}
Units	Cts/S	Cts/S	Cts/S
Avg	2645.7	37744.	1956.7
Stddev	5.7	732.	49.5
%RSD	.21365	1.9399	2.5283

#1	2641.7	37226.	1991.7
#2	2649.7	38262.	1921.8

Sample Name: 280-82864-A-1-A SD@5 Acquired: 5/17/2016 16:37:04 Type: Unk
Method: 6500_025(v6) Mode: CONC Corr. Factor: 1.000000
User: CRHOADES Prep Date: Custom ID2: Custom ID3:
Comment: 325144 6010B (Fe)

Elem	Ag3280	Al1670	As1890	B_2089	Ba4554	Be3130	Bi2230	Ca3179	Cd2288
Line	328.068 {103}	167.079 {502}	189.042 {478}	208.959 {461}	455.403 { 74}	313.042 {108}	223.061 {451}	317.933 {106}	228.802 {447}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.00117	.01075	.00102	.01509	.01982	.00024	-.00115	14.211	.00014
Stddev	.00001	.00083	.01014	.00044	.00115	.00007	.00217	.327	.00013
%RSD	1.1591	7.7247	993.46	2.9342	5.8140	30.210	187.84	2.2998	94.379

#1	.00118	.01016	-.00615	.01478	.01900	.00030	.00038	13.980	.00005
#2	.00116	.01133	.00819	.01541	.02063	.00019	-.00269	14.442	.00023

Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Elem	Co2286	Cr2055	Cu3247	Fe2599	K_7664	Li6707	Mg2790	Mn2576	Mo2020
Line	228.616 {447}	205.560 {464}	324.754 {104}	259.940 {130}	766.490 { 44}	670.784 { 50}	279.079 {121}2	257.610 {131}	202.030 {467}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	-.00054	-.00005	.00049	.04126	1.2688	-.00456	3.8575	.00165	-.00107
Stddev	.00030	.00070	.00034	.00255	.0576	.00132	.0045	.00000	.00009
%RSD	56.009	1355.6	69.834	6.1896	4.5424	28.845	.11604	.22704	8.7368

#1	-.00033	-.00055	.00074	.04307	1.2281	-.00363	3.8543	.00165	-.00114
#2	-.00075	.00044	.00025	.03946	1.3096	-.00550	3.8606	.00166	-.00100

Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Elem	Na8183	Ni2316	P_1782	Pb2203	S_1820	Sb2068	Se1960	Si2881	SiO2
Line	818.326 { 41}	231.604 {446}	178.284 {489}	220.353 {453}	182.034 {485}	206.833 {463}	196.090 {472}	288.158 {117}	288.158 {117}2
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	20.333	.00049	.00258	-.00055	4.2022	-.00750	-.00241	.46633	.99795
Stddev	.383	.00007	.00011	.00051	.0050	.00648	.00365	.01838	.03933
%RSD	1.8846	13.684	4.4018	91.670	.11811	86.382	151.71	3.9410	3.9410

#1	20.604	.00054	.00266	-.00091	4.1987	-.00292	-.00499	.45334	.97014
#2	20.062	.00045	.00250	-.00019	4.2057	-.01208	.00018	.47933	1.0258

Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Elem	Sn1899	Sr4077	Th2837	Ti3349	Ti1908	U_3701	V_2924	Zn2062	Zr3391
Line	189.989 {477}	407.771 { 83}	283.730 {119}	334.904 {101}	190.856 {477}	370.152 { 91}	292.402 {115}	206.200 {163}	339.198 { 99}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	-.00112	.11126	.00011	.00079	-.00201	.01879	-.00001	.00135	-.00060
Stddev	.00261	.00098	.00039	.00044	.00250	.04586	.00039	.00011	.00168
%RSD	233.70	.88518	340.86	55.703	124.33	244.09	3509.6	7.7898	278.46

#1	.00073	.11057	.00039	.00110	-.00024	.05122	-.00029	.00127	-.00179
#2	-.00296	.11196	-.00016	.00048	-.00378	-.01364	.00026	.00142	.00058

Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Int. Std.	Y_2243	Y_3600	Y_3774
Line	224.306 {450}	360.073 { 94}	377.433 { 89}
Units	Cts/S	Cts/S	Cts/S
Avg	2703.5	39786.	2103.3
Stddev	30.3	639.	46.5
%RSD	1.1200	1.6050	2.2123

#1	2724.9	39334.	2136.2
#2	2682.1	40237.	2070.4

Sample Name: 280-82864-A-1-B MS Acquired: 5/17/2016 16:39:42 Type: Unk
Method: 6500_025(v6) Mode: CONC Corr. Factor: 1.000000
User: CRHOADES Prep Date: Custom ID2: Custom ID3:
Comment: 325144 6010B (Fe)

Elem	Ag3280	Al1670	As1890	B_2089	Ba4554	Be3130	Bi2230	Ca3179	Cd2288
Line	328.068 {103}	167.079 {502}	189.042 {478}	208.959 {461}	455.403 { 74}	313.042 {108}	223.061 {451}	317.933 {106}	228.802 {447}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.05000	1.9371	1.0008	1.0829	2.0324	.04940	F 2.0418	120.62	.10142
Stddev	.00036	.0053	.0038	.0033	.0227	.00045	.0204	1.27	.00084
%RSD	.72676	.27118	.37938	.30670	1.1172	.90579	1.0009	1.0525	.82539

#1	.04974	1.9408	.99815	1.0853	2.0485	.04971	2.0562	121.52	.10201
#2	.05026	1.9334	1.0035	1.0806	2.0164	.04908	2.0273	119.72	.10083

Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Fail	Chk Pass	Chk Pass
High Limit							.10000		
Low Limit							-.10000		

Elem	Co2286	Cr2055	Cu3247	Fe2599	K_7664	Li6707	Mg2790	Mn2576	Mo2020
Line	228.616 {447}	205.560 {464}	324.754 {104}	259.940 {130}	766.490 { 44}	670.784 { 50}	279.079 {121}2	257.610 {131}	202.030 {467}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.48492	.19980	.23922	1.0458	55.566	.96522	66.272	.46585	1.0426
Stddev	.00016	.00006	.00085	.0078	.570	.00461	.122	.00109	.0003
%RSD	.03204	.02843	.35476	.74208	1.0256	.47749	.18468	.23352	.02953

#1	.48503	.19976	.23862	1.0403	55.969	.96197	66.185	.46509	1.0428
#2	.48481	.19984	.23982	1.0512	55.163	.96848	66.358	.46662	1.0424

Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Elem	Na8183	Ni2316	P_1782	Pb2203	S_1820	Sb2068	Se1960	Si2881	SiO2
Line	818.326 { 41}	231.604 {446}	178.284 {489}	220.353 {453}	182.034 {485}	206.833 {463}	196.090 {472}	288.158 {117}	288.158 {117}2
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	151.67	.47557	W 10.283	.49077	25.172	.53680	2.0145	12.081	25.854
Stddev	.17	.00037	.031	.00118	.138	.00508	.0394	.073	.156
%RSD	.11042	.07796	.30559	.24031	.54906	.94658	1.9547	.60415	.60415

#1	151.55	.47583	10.305	.49161	25.270	.54039	2.0423	12.030	25.743
#2	151.79	.47531	10.261	.48994	25.074	.53321	1.9866	12.133	25.964

Check ?	Chk Pass	Chk Pass	Chk Warn	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit			2.0000						
Low Limit			-1.0000						

Elem	Sn1899	Sr4077	Th2837	Ti3349	Ti1908	U_3701	V_2924	Zn2062	Zr3391
Line	189.989 {477}	407.771 { 83}	283.730 {119}	334.904 {101}	190.856 {477}	370.152 { 91}	292.402 {115}	206.200 {163}	339.198 { 99}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	1.9815	1.5378	.97920	.95031	1.7538	1.9978	.47593	.44537	.44805
Stddev	.0299	.0199	.00162	.00237	.0881	.0017	.00018	.00546	.00393
%RSD	1.5102	1.2967	.16581	.24941	5.0206	.08653	.03700	1.2255	.87808

#1	2.0027	1.5519	.97805	.94864	1.8160	1.9990	.47581	.44923	.44527
#2	1.9603	1.5237	.98035	.95199	1.6915	1.9965	.47606	.44151	.45083

Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Int. Std.	Y_2243	Y_3600	Y_3774
Line	224.306 {450}	360.073 { 94}	377.433 { 89}
Units	Cts/S	Cts/S	Cts/S
Avg	2636.2	38494.	2052.2
Stddev	32.5	379.	31.7
%RSD	1.2319	.98516	1.5436

#1	2659.2	38225.	2029.8
#2	2613.2	38762.	2074.6

Sample Name: 280-82864-A-1-C MSD Acquired: 5/17/2016 16:42:06 Type: Unk
Method: 6500_025(v6) Mode: CONC Corr. Factor: 1.000000
User: CRHOADES Prep Date: Custom ID2: Custom ID3:
Comment: 325144 6010B (Fe)

Elem	Ag3280	Al1670	As1890	B_2089	Ba4554	Be3130	Bi2230	Ca3179	Cd2288
Line	328.068 {103}	167.079 {502}	189.042 {478}	208.959 {461}	455.403 { 74}	313.042 {108}	223.061 {451}	317.933 {106}	228.802 {447}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.04961	1.9498	.99984	1.0716	2.0227	.04914	F 2.0327	118.86	.10075
Stddev	.00005	.0093	.00113	.0083	.0337	.00043	.0249	1.83	.00025
%RSD	.10488	.47801	.11348	.77620	1.6656	.86550	1.2263	1.5413	.24419

#1	.04965	1.9564	1.0006	1.0775	2.0465	.04944	2.0503	120.15	.10092
#2	.04958	1.9432	.99903	1.0657	1.9989	.04884	2.0150	117.56	.10057

Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Fail	Chk Pass	Chk Pass
High Limit							.10000		
Low Limit							-.10000		

Elem	Co2286	Cr2055	Cu3247	Fe2599	K_7664	Li6707	Mg2790	Mn2576	Mo2020
Line	228.616 {447}	205.560 {464}	324.754 {104}	259.940 {130}	766.490 { 44}	670.784 { 50}	279.079 {121}2	257.610 {131}	202.030 {467}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.48321	.19930	.23913	1.0480	55.517	.96519	66.395	.46887	1.0403
Stddev	.00389	.00200	.00156	.0113	.746	.00334	.090	.00002	.0113
%RSD	.80497	1.0030	.65197	1.0757	1.3439	.34654	.13489	.00333	1.0864

#1	.48596	.20071	.24023	1.0560	56.045	.96755	66.458	.46888	1.0483
#2	.48046	.19789	.23803	1.0400	54.989	.96282	66.332	.46886	1.0323

Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Elem	Na8183	Ni2316	P_1782	Pb2203	S_1820	Sb2068	Se1960	Si2881	SiO2
Line	818.326 { 41}	231.604 {446}	178.284 {489}	220.353 {453}	182.034 {485}	206.833 {463}	196.090 {472}	288.158 {117}	288.158 {117}2
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	149.73	.47460	W 10.230	.48879	24.380	.52365	2.0053	12.173	26.051
Stddev	1.54	.00429	.103	.00519	.250	.00528	.0503	.102	.218
%RSD	1.0270	.90413	1.0095	1.0612	1.0260	1.0093	2.5102	.83776	.83776

#1	150.82	.47764	10.303	.49246	24.557	.52738	2.0409	12.246	26.205
#2	148.64	.47157	10.157	.48512	24.203	.51991	1.9697	12.101	25.897

Check ?	Chk Pass	Chk Pass	Chk Warn	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit			2.0000						
Low Limit			-1.0000						

Elem	Sn1899	Sr4077	Th2837	Ti3349	Ti1908	U_3701	V_2924	Zn2062	Zr3391
Line	189.989 {477}	407.771 { 83}	283.730 {119}	334.904 {101}	190.856 {477}	370.152 { 91}	292.402 {115}	206.200 {163}	339.198 { 99}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	1.9854	1.5218	.98199	.95756	1.8110	2.0259	.47622	.45003	.45174
Stddev	.0367	.0266	.00141	.00164	.0877	.0815	.00267	.00450	.00459
%RSD	1.8475	1.7499	.14341	.17135	4.8426	4.0230	.56066	.99950	1.0156

#1	2.0113	1.5406	.98299	.95872	1.8730	1.9682	.47811	.45321	.45498
#2	1.9594	1.5029	.98100	.95640	1.7490	2.0835	.47433	.44685	.44850

Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Int. Std.	Y_2243	Y_3600	Y_3774
Line	224.306 {450}	360.073 { 94}	377.433 { 89}
Units	Cts/S	Cts/S	Cts/S
Avg	2595.8	37970.	2019.1
Stddev	.9	1.	33.0
%RSD	.03515	.00315	1.6328

#1	2595.1	37970.	1995.8
#2	2596.4	37969.	2042.4

Sample Name: 280-82864-A-2-A Acquired: 5/17/2016 16:44:31 Type: Unk

Method: 6500_025(v6) Mode: CONC Corr. Factor: 1.000000

User: CRHOADES Prep Date: Custom ID2: Custom ID3:

Comment: 325144 6010B (Fe)

Elem	Ag3280	Al1670	As1890	B_2089	Ba4554	Be3130	Bi2230	Ca3179	Cd2288
Line	328.068 {103}	167.079 {502}	189.042 {478}	208.959 {461}	455.403 { 74}	313.042 {108}	223.061 {451}	317.933 {106}	228.802 {447}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.00105	.08549	.00745	.06773	.10298	.00035	-.00004	68.493	.00060
Stddev	.00090	.00197	.00592	.00078	.00083	.00022	.00503	.043	.00009
%RSD	85.523	2.3016	79.535	1.1464	.80507	63.083	13043.	.06232	14.413

#1	.00041	.08688	.01164	.06828	.10356	.00020	-.00360	68.462	.00066
#2	.00168	.08409	.00326	.06718	.10239	.00051	.00352	68.523	.00054

Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Elem	Co2286	Cr2055	Cu3247	Fe2599	K_7664	Li6707	Mg2790	Mn2576	Mo2020
Line	228.616 {447}	205.560 {464}	324.754 {104}	259.940 {130}	766.490 { 44}	670.784 { 50}	279.079 {121}2	257.610 {131}	202.030 {467}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	-.00009	-.00003	.00236	.11307	8.2783	.02309	18.091	.01048	.00376
Stddev	.00021	.00004	.00030	.00154	.1241	.00403	.009	.00016	.00129
%RSD	223.62	133.46	12.533	1.3636	1.4990	17.470	.05043	1.4951	34.384

#1	.00005	.00000	.00215	.11198	8.3661	.02594	18.098	.01037	.00285
#2	-.00024	-.00006	.00257	.11416	8.1906	.02024	18.085	.01059	.00468

Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Elem	Na8183	Ni2316	P_1782	Pb2203	S_1820	Sb2068	Se1960	Si2881	SiO2
Line	818.326 { 41}	231.604 {446}	178.284 {489}	220.353 {453}	182.034 {485}	206.833 {463}	196.090 {472}	288.158 {117}	288.158 {117}2
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	96.660	.00159	.01272	.00062	22.380	-.00364	.00616	2.7646	5.9163
Stddev	.413	.00063	.00146	.00091	1.317	.00449	.00514	.0179	.0383
%RSD	.42774	39.340	11.463	146.84	5.8842	123.32	83.450	.64664	.64664

#1	96.368	.00115	.01169	.00126	21.449	-.00682	.00252	2.7773	5.9434
#2	96.952	.00203	.01375	-.00002	23.312	-.00047	.00979	2.7520	5.8892

Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Elem	Sn1899	Sr4077	Th2837	Ti3349	Ti1908	U_3701	V_2924	Zn2062	Zr3391
Line	189.989 {477}	407.771 { 83}	283.730 {119}	334.904 {101}	190.856 {477}	370.152 { 91}	292.402 {115}	206.200 {163}	339.198 { 99}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	-.00135	.53294	.00031	.00255	.04066	.04288	.00062	.00217	-.00275
Stddev	.00403	.00045	.00518	.00015	.00882	.06599	.00051	.00021	.00024
%RSD	297.73	.08466	1654.7	5.8346	21.690	153.90	83.111	9.6189	8.7775

#1	-.00421	.53262	-.00335	.00244	.03442	.08954	.00026	.00231	-.00258
#2	.00150	.53326	.00397	.00265	.04689	-.00378	.00098	.00202	-.00292

Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Int. Std.	Y_2243	Y_3600	Y_3774
Line	224.306 {450}	360.073 { 94}	377.433 { 89}
Units	Cts/S	Cts/S	Cts/S
Avg	2605.9	38002.	2006.2
Stddev	10.4	18.	32.4
%RSD	.39901	.04611	1.6144

#1	2613.3	38014.	2029.1
#2	2598.6	37989.	1983.3

Elem	Ag3280	Al1670	As1890	B_2089	Ba4554	Be3130	Bi2230	Ca3179	Cd2288
Line	328.068 {103}	167.079 {502}	189.042 {478}	208.959 {461}	455.403 {74}	313.042 {108}	223.061 {451}	317.933 {106}	228.802 {447}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.00176	.06426	.00264	.05987	.09285	.00001	-.00102	59.656	.00022
Stddev	.00096	.00040	.00099	.00007	.00043	.00032	.00339	.416	.00016
%RSD	54.599	.61861	37.392	.11209	.46486	2299.1	331.18	.69696	72.714

#1	.00244	.06398	.00334	.05991	.09315	.00024	.00137	59.950	.00033
#2	.00108	.06454	.00194	.05982	.09254	-.00021	-.00342	59.362	.00011

Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Elem	Co2286	Cr2055	Cu3247	Fe2599	K_7664	Li6707	Mg2790	Mn2576	Mo2020
Line	228.616 {447}	205.560 {464}	324.754 {104}	259.940 {130}	766.490 {44}	670.784 {50}	279.079 {121}2	257.610 {131}	202.030 {467}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	-.00057	-.00052	.00215	.05642	6.5372	.01350	18.293	.00269	.00066
Stddev	.00009	.00002	.00058	.00441	.0116	.00119	.104	.00004	.00019
%RSD	16.705	4.3184	27.214	7.8220	.17747	8.8276	.56685	1.3252	29.490

#1	-.00050	-.00050	.00173	.05954	6.5290	.01434	18.220	.00266	.00052
#2	-.00063	-.00053	.00256	.05330	6.5454	.01266	18.367	.00272	.00079

Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Elem	Na8183	Ni2316	P_1782	Pb2203	S_1820	Sb2068	Se1960	Si2881	SiO2
Line	818.326 {41}	231.604 {446}	178.284 {489}	220.353 {453}	182.034 {485}	206.833 {463}	196.090 {472}	288.158 {117}	288.158 {117}2
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	91.349	.00171	.01592	-.00056	23.710	-.00308	-.00425	1.2989	2.7797
Stddev	.625	.00026	.00028	.00179	.115	.00203	.00234	.0361	.0772
%RSD	.68385	15.135	1.7483	320.10	.48583	66.151	55.080	2.7762	2.7762

#1	90.907	.00152	.01612	.00071	23.791	-.00452	-.00260	1.2734	2.7252
#2	91.791	.00189	.01572	-.00183	23.629	-.00164	-.00591	1.3244	2.8343

Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Elem	Sn1899	Sr4077	Th2837	Ti3349	Ti1908	U_3701	V_2924	Zn2062	Zr3391
Line	189.989 {477}	407.771 {83}	283.730 {119}	334.904 {101}	190.856 {477}	370.152 {91}	292.402 {115}	206.200 {163}	339.198 {99}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	-.00303	.48653	-.00208	.00235	.00591	.05021	.00118	.00135	-.00180
Stddev	.00053	.00294	.00198	.00006	.00035	.05081	.00064	.00054	.00486
%RSD	17.611	.60350	95.109	2.5217	5.9117	101.19	54.683	39.645	269.95

#1	-.00266	.48861	-.00068	.00239	.00616	.01428	.00072	.00097	-.00523
#2	-.00341	.48446	-.00348	.00231	.00566	.08614	.00163	.00173	.00164

Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Int. Std.	Y_2243	Y_3600	Y_3774						
Line	224.306 {450}	360.073 {94}	377.433 {89}						
Units	Cts/S	Cts/S	Cts/S						
Avg	2604.5	38505.	1970.9						
Stddev	39.2	45.	12.6						
%RSD	1.5035	.11604	.63885						

#1	2632.2	38537.	1979.8						
#2	2576.8	38474.	1962.0						

Sample Name: CCVH-3883905 Acquired: 5/17/2016 16:49:47 Type: QC
Method: 6500_025(v6) Mode: CONC Corr. Factor: 1.000000
User: CRHOADES Prep Date: Custom ID2: Custom ID3:
Comment:

Elem	Ag3280	Al3092	As1890	B_2089	Ba4554	Be3130	Bi2230	Ca3179	Cd2288	Co2286	Cr2055
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	-.00468	50.432	.00287	.00545	-.00099	.00029	.99080	.01475	-.00018	-.00130	-.00022
Stddev	.00064	.469	.00168	.00061	.00037	.00004	.01453	.01607	.00009	.00011	.00031
%RSD	13.762	.92978	58.596	11.291	37.259	14.399	1.4667	108.97	46.935	8.5606	144.72

#1	-.00514	50.100	.00406	.00588	-.00073	.00026	1.0011	.02612	-.00012	-.00137	.00001
#2	-.00423	50.763	.00168	.00501	-.00125	.00032	.98053	.00338	-.00025	-.00122	-.00044

Check ?	None	Chk Pass	None	None	None	None	Chk Pass	None	None	None	None
Value											
Range											

Elem	Cu3247	Fe2714	K_7664	Li6707	Mg2790	Mn2576	Mo2020	Na8183	Ni2316	P_1782	Pb2203
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	-.01224	51.818	-.07974	-.00834	.01127	-.00217	-.00158	260.54	.00135	.00895	.00174
Stddev	.00042	.204	.10451	.00065	.00175	.00003	.00083	.71	.00022	.00346	.00110
%RSD	3.4486	.39402	131.07	7.8029	15.519	1.2268	52.687	.27270	16.149	38.728	63.155

#1	-.01194	51.673	-.15364	-.00788	.01251	-.00219	-.00217	261.04	.00151	.00650	.00252
#2	-.01253	51.962	-.00584	-.00880	.01004	-.00215	-.00099	260.04	.00120	.01140	.00096

Check ?	None	Chk Pass	None	None	None	None	None	Chk Pass	None	None	None
Value											
Range											

Elem	S_1820	Sb2068	Se1960	Si2881	SiO2	Sn1899	Sr4077	Th2837	Ti3349	Ti1908	U_3701
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	5.0578	-.01074	-.01035	-.06562	-.14043	-.00007	.00053	W 4.7390	-.00006	-.00113	9.9506
Stddev	.1043	.00443	.00515	.00753	.01612	.00003	.00005	.0199	.00009	.00089	.1313
%RSD	2.0614	41.251	49.734	11.476	11.476	47.036	9.2975	.41914	150.13	78.408	1.3191

#1	5.1315	-.01388	-.01399	-.07095	-.15182	-.00009	.00057	4.7250	-.00013	-.00051	9.8578
#2	4.9841	-.00761	-.00671	-.06030	-.12903	-.00005	.00050	4.7531	.00000	-.00176	10.043

Check ?	Chk Pass	None	None	None	None	None	None	Chk Warn	None	None	Chk Pass
Value								5.0000			
Range								-5.0000%			

Elem	V_2924	Zn2062	Zr3391
Units	ppm	ppm	ppm
Avg	.01254	.00105	-.13558
Stddev	.00032	.00004	.00102
%RSD	2.5223	3.6719	.75217

#1	.01232	.00102	-.13630
#2	.01277	.00108	-.13486

Check ?	None	None	None
Value			
Range			

Int. Std.	Y_2243	Y_3600	Y_3774
Units	Cts/S	Cts/S	Cts/S
Avg	2552.9	37669.	1963.2
Stddev	.6	390.	19.1
%RSD	.02231	1.0364	.97460

#1	2552.5	37393.	1949.7
#2	2553.3	37946.	1976.8

Sample Name: CCV-3888422 Acquired: 5/17/2016 16:52:23 Type: QC
Method: 6500_025(v6) Mode: CONC Corr. Factor: 1.000000
User: CRHOADES Prep Date: Custom ID2: Custom ID3:
Comment:

Elem	Ag3280	Al1670	As1890	B_2089	Ba4554	Be3130	Bi2230	Ca3179	Cd2288	Co2286	Cr2055	Cu3247	Fe2599
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.48483	.49412	.96275	.49093	.48051	.48657	-.00116	4.7352	.49845	.49915	.50047	.47404	2.4566
Stddev	.00007	.00158	.00043	.00965	.00633	.00131	.00144	.0030	.00577	.00605	.00509	.00146	.0052
%RSD	.01414	.32036	.04444	1.9648	1.3175	.26825	124.73	.06354	1.1573	1.2118	1.0163	.30772	.21222

#1	.48488	.49300	.96245	.48411	.48498	.48749	-.00014	4.7373	.49437	.49487	.49687	.47507	2.4602
#2	.48479	.49524	.96305	.49775	.47603	.48564	-.00218	4.7331	.50253	.50343	.50407	.47301	2.4529

Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	None	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Value													
Range													

Elem	K_7664	Li6707	Mg2790	Mn2576	Mo2020	Na5895	Ni2316	P_1782	Pb2203	S_1820	Sb2068	Se1960	Si2881
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	48.597	.94496	18.997	.47244	.48914	5.0651	.48828	.96455	.98512	-.02901	.96692	.94639	4.7282
Stddev	.505	.00135	.011	.00057	.00391	.0032	.00623	.00889	.01355	.01510	.00429	.00773	.0580
%RSD	1.0392	.14238	.05996	.12095	.79964	.06239	1.2763	.92177	1.3757	52.054	.44360	.81632	1.2271

#1	48.954	.94591	19.005	.47285	.48637	5.0673	.48387	.95826	.97553	-.01833	.96996	.94092	4.7692
#2	48.240	.94400	18.989	.47204	.49190	5.0628	.49269	.97083	.99470	-.03968	.96389	.95185	4.6872

Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	None	Chk Pass	Chk Pass	Chk Pass
Value													
Range													

Elem	SiO2	Sn1899	Sr4077	Th2837	Ti3349	Ti1908	U_3701	V_2924	Zn2062	Zr3391
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	10.118	.98848	.48833	-.00061	.46909	.99560	.05462	.48098	.46523	.47359
Stddev	.124	.01055	.00649	.00044	.00012	.01113	.05928	.00039	.00127	.00344
%RSD	1.2271	1.0674	1.3294	72.501	.02563	1.1177	108.52	.08131	.27247	.72723
#1	10.206	.98101	.49292	-.00030	.46900	.98773	.01271	.48071	.46433	.47603
#2	10.031	.99594	.48374	-.00092	.46917	1.0035	.09654	.48126	.46612	.47116

Check ?	Chk Pass	Chk Pass	Chk Pass	None	Chk Pass	Chk Pass	None	Chk Pass	Chk Pass	Chk Pass
Value										
Range										

Int. Std.	Y_2243	Y_3600	Y_3774
Units	Cts/S	Cts/S	Cts/S
Avg	2531.5	37083.	1800.9
Stddev	18.6	88.	10.0
%RSD	.73469	.23732	.55756
#1	2544.6	37021.	1793.8
#2	2518.3	37146.	1808.0

Sample Name: CCB Acquired: 5/17/2016 16:54:54 Type: QC
Method: 6500_025(v6) Mode: CONC Corr. Factor: 1.000000
User: CRHOADES Prep Date: Custom ID2: Custom ID3:
Comment:

Elem	Ag3280	Al1670	As1890	B_2089	Ba4554	Be3130	Bi2230	Ca3179	Cd2288	Co2286	Cr2055
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.00129	.00019	-.00224	.00365	-.00169	.00032	-.00517	.00261	.00000	.00003	-.00057
Stddev	.00081	.00114	.00451	.00028	.00087	.00014	.00418	.00374	.00026	.00029	.00036
%RSD	62.751	605.62	201.31	7.5878	51.771	45.029	80.846	143.53	12980.	963.42	63.571

#1	.00072	.00100	.00095	.00384	-.00231	.00042	-.00221	.00526	-.00018	.00024	-.00031
#2	.00186	-.00062	-.00543	.00345	-.00107	.00022	-.00812	-.00004	.00019	-.00018	-.00082

Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit											
Low Limit											

Elem	Cu3247	Fe2599	K_7664	Li6707	Mg2790	Mn2576	Mo2020	Na5895	Ni2316	P_1782	Pb2203
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	-.00009	-.00071	-.16080	-.00971	-.00015	.00000	.00096	.03995	.00017	.00179	-.00166
Stddev	.00018	.00151	.09471	.00158	.00843	.0001	.00086	.02651	.00002	.00720	.00033
%RSD	204.24	214.51	58.896	16.310	5643.0	1533.9	89.259	66.343	12.055	401.68	19.644

#1	.00004	-.00178	-.09383	-.01083	.00581	-.00005	.00035	.05870	.00016	.00688	-.00143
#2	-.00022	.00036	-.22777	-.00859	-.00611	.00004	.00156	.02121	.00019	-.00330	-.00189

Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit											
Low Limit											

Elem	S_1820	Sb2068	Se1960	Si2881	SiO2	Sn1899	Sr4077	Th2837	Ti3349	Ti1908	U_3701
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	-.04593	W .00296	-.00874	-.02937	-.06285	-.00258	.00000	-.00170	.00058	.00672	.06514
Stddev	.00557	.00887	.00243	.00468	.01001	.00018	.0001	.00036	.00036	.00338	.00597
%RSD	12.124	299.80	27.789	15.931	15.931	7.0131	6349.8	21.234	62.634	50.262	9.1630

#1	-.04199	-.00331	-.00703	-.03268	-.06993	-.00271	.00006	-.00195	.00084	.00433	.06936
#2	-.04986	.00923	-.01046	-.02606	-.05577	-.00246	-.00006	-.00144	.00032	.00911	.06092

Check ?	Chk Pass	Chk Warn	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit		.00100									
Low Limit		-.00100									

Elem	V_2924	Zn2062	Zr3391
Units	ppm	ppm	ppm
Avg	.00001	-.00061	.00116
Stddev	.00039	.00063	.00252
%RSD	4310.0	103.49	217.12

#1	.00028	-.00016	.00294
#2	-.00026	-.00105	-.00062

Check ?	Chk Pass	Chk Pass	Chk Pass
High Limit			
Low Limit			

Int. Std.	Y_2243	Y_3600	Y_3774
Units	Cts/S	Cts/S	Cts/S
Avg	2548.1	37165.	1895.3
Stddev	29.8	369.	95.1
%RSD	1.1698	.99398	5.0156

#1	2569.1	36904.	1962.5
#2	2527.0	37426.	1828.1

Sample Name: CCVL-3894681 Acquired: 5/17/2016 16:57:16 Type: QC
Method: 6500_025(v6) Mode: CONC Corr. Factor: 1.000000
User: CRHOADES Prep Date: Custom ID2: Custom ID3:
Comment:

Elem	Ag3280	Al1670	As1890	B_2089	Ba4554	Be3130	Bi2230	Ca3179	Cd2288	Co2286	Cr2055
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.01031	.09988	F .01957	.09647	.00866	.00114	.10216	.21062	.00514	.00972	.00972
Stddev	.00002	.00119	.00499	.00250	.00001	.00017	.00574	.01153	.00015	.00006	.00027
%RSD	.20439	1.1931	25.475	2.5924	.07429	15.333	5.6171	5.4746	2.8453	.64363	2.7898
#1	.01033	.10072	.01604	.09824	.00867	.00126	.10622	.20247	.00504	.00976	.00953
#2	.01030	.09904	.02309	.09470	.00866	.00102	.09810	.21877	.00524	.00968	.00991
Check ?	Chk Pass	Chk Pass	Chk Fail	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Value			.01500								
Range			30.000%								
Elem	Cu3247	Fe2599	K_7664	Li6707	Mg2790	Mn2576	Mo2020	Na5895	Ni2316	P_1782	Pb2203
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.01387	.12127	2.8210	F -.00114	.18889	.00970	.01887	1.0240	.03997	2.7738	.00804
Stddev	.00030	.00617	.0309	.00045	.00356	.00012	.00025	.0322	.00067	.0487	.00026
%RSD	2.1620	5.0889	1.0960	39.000	1.8851	1.2677	1.3388	3.1478	1.6702	1.7548	3.2082
#1	.01408	.12563	2.7991	-.00146	.18637	.00962	.01905	1.0468	.04044	2.8082	.00786
#2	.01366	.11690	2.8429	-.00083	.19141	.00979	.01870	1.0012	.03950	2.7393	.00822
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Fail	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Value				.01000							
Range				-30.000%							
Elem	S_1820	Sb2068	Se1960	Si2881	SiO2	Sn1899	Sr4077	Th2837	Ti3349	Ti1908	U_3701
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	-.04301	.01733	F .00112	.47086	1.0076	.09932	.00958	.01652	.01041	.01091	F .11963
Stddev	.01204	.00220	.00672	.01711	.0366	.00160	.00018	.00049	.00050	.00112	.00815
%RSD	28.002	12.715	599.64	3.6332	3.6332	1.6088	1.8336	2.9790	4.7916	10.237	6.8093
#1	-.03449	.01577	-.00363	.48296	1.0335	.10045	.00970	.01617	.01006	.01169	.11387
#2	-.05152	.01888	.00587	.45877	.98176	.09819	.00946	.01686	.01077	.01012	.12539
Check ?	None	Chk Pass	Chk Fail	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Fail
Value			.01500								.06000
Range			-30.000%								30.000%
Elem	V_2924	Zn2062	Zr3391								
Units	ppm	ppm	ppm								
Avg	.00942	.02004	.01654								
Stddev	.00091	.00082	.00043								
%RSD	9.6247	4.0892	2.5931								
#1	.00878	.01946	.01624								
#2	.01006	.02062	.01684								
Check ?	Chk Pass	Chk Pass	Chk Pass								
Value											
Range											
Int. Std.	Y_2243	Y_3600	Y_3774								
Units	Cts/S	Cts/S	Cts/S								
Avg	2499.9	37392.	1794.1								
Stddev	12.4	225.	3.8								
%RSD	.49711	.60095	.21182								
#1	2508.7	37234.	1791.4								
#2	2491.1	37551.	1796.7								

Sample Name: 280-82864-A-4-A Acquired: 5/17/2016 16:59:56 Type: Unk

Method: 6500_025(v6) Mode: CONC Corr. Factor: 1.000000

User: CRHOADES Prep Date: Custom ID2: Custom ID3:

Comment: 325144 6010B (Fe)

Elem	Ag3280	Al1670	As1890	B_2089	Ba4554	Be3130	Bi2230	Ca3179	Cd2288
Line	328.068 {103}	167.079 {502}	189.042 {478}	208.959 {461}	455.403 {74}	313.042 {108}	223.061 {451}	317.933 {106}	228.802 {447}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.00120	.03460	.00517	.06110	.10902	-.00022	-.00251	68.380	.00070
Stddev	.00045	.00048	.00193	.00216	.00050	.00040	.00214	.092	.00006
%RSD	37.682	1.3765	37.393	3.5382	.45623	178.75	85.214	.13493	9.2315

#1	.00088	.03426	.00380	.05957	.10937	-.00051	-.00100	68.446	.00065
#2	.00152	.03493	.00654	.06263	.10867	.00006	-.00402	68.315	.00074

Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Elem	Co2286	Cr2055	Cu3247	Fe2599	K_7664	Li6707	Mg2790	Mn2576	Mo2020
Line	228.616 {447}	205.560 {464}	324.754 {104}	259.940 {130}	766.490 {44}	670.784 {50}	279.079 {121}2	257.610 {131}	202.030 {467}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	-.00055	.00000	.00294	.03976	6.8741	.02227	18.512	.00361	.00040
Stddev	.00068	.0007	.00014	.00603	.0007	.00165	.024	.00002	.00008
%RSD	123.14	21194.	4.8780	15.168	.01050	7.3918	.13074	.48450	20.755

#1	-.00103	.00049	.00304	.04402	6.8736	.02111	18.495	.00359	.00034
#2	-.00007	-.00049	.00284	.03549	6.8746	.02343	18.529	.00362	.00046

Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Elem	Na8183	Ni2316	P_1782	Pb2203	S_1820	Sb2068	Se1960	Si2881	SiO2
Line	818.326 {41}	231.604 {446}	178.284 {489}	220.353 {453}	182.034 {485}	206.833 {463}	196.090 {472}	288.158 {117}	288.158 {117}2
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	92.989	.00185	.01982	-.00007	23.735	-.00367	F -.01129	2.1981	4.7040
Stddev	.424	.00014	.00244	.00100	1.191	.00086	.00236	.0332	.0710
%RSD	.45650	7.5488	12.332	1347.1	5.0183	23.403	20.915	1.5096	1.5096

#1	92.689	.00194	.02155	-.00078	24.577	-.00306	-.00962	2.2216	4.7542
#2	93.289	.00175	.01809	.00063	22.893	-.00428	-.01296	2.1747	4.6538

Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Fail	Chk Pass	Chk Pass
High Limit							50.000		
Low Limit							-.01000		

Elem	Sn1899	Sr4077	Th2837	Ti3349	Ti1908	U_3701	V_2924	Zn2062	Zr3391
Line	189.989 {477}	407.771 {83}	283.730 {119}	334.904 {101}	190.856 {477}	370.152 {91}	292.402 {115}	206.200 {163}	339.198 {99}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	-.00253	.52920	-.00110	.00148	.00198	.02968	.00091	.00058	.00037
Stddev	.00177	.00085	.00121	.00082	.00250	.00421	.00017	.00053	.00052
%RSD	69.890	.16077	110.18	55.092	126.29	14.174	18.505	91.035	139.35

#1	-.00128	.52980	-.00024	.00090	.00375	.03265	.00103	.00021	.00001
#2	-.00379	.52860	-.00196	.00206	.00021	.02671	.00079	.00096	.00074

Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Int. Std.	Y_2243	Y_3600	Y_3774
Line	224.306 {450}	360.073 {94}	377.433 {89}
Units	Cts/S	Cts/S	Cts/S
Avg	2643.5	39304.	1894.0
Stddev	9.4	27.	79.2
%RSD	.35527	.06947	4.1793

#1	2650.1	39323.	1838.0
#2	2636.8	39284.	1949.9

Sample Name: 280-82864-A-5-A Acquired: 5/17/2016 17:02:34 Type: Unk

Method: 6500_025(v6) Mode: CONC Corr. Factor: 1.000000

User: CRHOADES Prep Date: Custom ID2: Custom ID3:

Comment: 325144 6010B (Fe)

Elem	Ag3280	Al1670	As1890	B_2089	Ba4554	Be3130	Bi2230	Ca3179	Cd2288
Line	328.068 {103}	167.079 {502}	189.042 {478}	208.959 {461}	455.403 { 74}	313.042 {108}	223.061 {451}	317.933 {106}	228.802 {447}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.00142	.33762	.00116	.07398	.26206	.00010	-.00324	97.914	.00074
Stddev	.00043	.00133	.00356	.00194	.00255	.00024	.00147	.660	.00019
%RSD	30.118	.39476	307.08	2.6184	.97456	237.39	45.243	.67388	25.512

#1	.00172	.33856	.00368	.07261	.26386	-.00007	-.00221	98.380	.00087
#2	.00112	.33668	-.00136	.07535	.26025	.00027	-.00428	97.447	.00061

Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Elem	Co2286	Cr2055	Cu3247	Fe2599	K_7664	Li6707	Mg2790	Mn2576	Mo2020
Line	228.616 {447}	205.560 {464}	324.754 {104}	259.940 {130}	766.490 { 44}	670.784 { 50}	279.079 {121}2	257.610 {131}	202.030 {467}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.00006	.00028	.00507	.54284	7.5308	.00525	23.676	.05508	.00063
Stddev	.00071	.00042	.00039	.00432	.1012	.00071	.002	.00025	.00058
%RSD	1280.2	152.80	7.7014	.79663	1.3435	13.527	.00958	.45015	91.560

#1	.00056	.00057	.00480	.54590	7.6024	.00575	23.677	.05490	.00104
#2	-.00045	-.00002	.00535	.53978	7.4593	.00474	23.674	.05525	.00022

Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Elem	Na8183	Ni2316	P_1782	Pb2203	S_1820	Sb2068	Se1960	Si2881	SiO2
Line	818.326 { 41}	231.604 {446}	178.284 {489}	220.353 {453}	182.034 {485}	206.833 {463}	196.090 {472}	288.158 {117}	288.158 {117}2
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	113.64	.00222	.36678	.00019	21.351	-.00616	W -.00878	2.9824	6.3824
Stddev	1.17	.00000	.00084	.00063	.151	.00147	.00699	.0317	.0678
%RSD	1.0318	.04564	.22852	329.54	.70694	23.807	79.672	1.0620	1.0620

#1	114.47	.00223	.36619	-.00026	21.245	-.00512	-.01372	3.0048	6.4304
#2	112.81	.00222	.36737	.00064	21.458	-.00720	-.00383	2.9600	6.3345

Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Warn	Chk Pass	Chk Pass
High Limit							5.0000		
Low Limit							-.00500		

Elem	Sn1899	Sr4077	Th2837	Ti3349	Ti1908	U_3701	V_2924	Zn2062	Zr3391
Line	189.989 {477}	407.771 { 83}	283.730 {119}	334.904 {101}	190.856 {477}	370.152 { 91}	292.402 {115}	206.200 {163}	339.198 { 99}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	-.00158	.71296	.00034	.01140	-.00062	-.01319	.00277	.00538	-.00242
Stddev	.00087	.00308	.00019	.00041	.00411	.04187	.00094	.00006	.00323
%RSD	54.747	.43203	54.608	3.6374	663.38	317.52	33.975	1.0313	133.66

#1	-.00097	.71513	.00047	.01111	.00229	-.04280	.00211	.00542	-.00470
#2	-.00219	.71078	.00021	.01170	-.00353	.01642	.00344	.00534	-.00013

Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Int. Std.	Y_2243	Y_3600	Y_3774
Line	224.306 {450}	360.073 { 94}	377.433 { 89}
Units	Cts/S	Cts/S	Cts/S
Avg	2650.9	39326.	2024.7
Stddev	4.6	454.	26.0
%RSD	.17454	1.1534	1.2824

#1	2654.2	39647.	2006.3
#2	2647.6	39005.	2043.0

Sample Name: 280-82864-A-6-A Acquired: 5/17/2016 17:05:10 Type: Unk

Method: 6500_025(v6) Mode: CONC Corr. Factor: 1.000000

User: CRHOADES Prep Date: Custom ID2: Custom ID3:

Comment: 325144 6010B (Fe)

Elem	Ag3280	Al1670	As1890	B_2089	Ba4554	Be3130	Bi2230	Ca3179	Cd2288
Line	328.068 {103}	167.079 {502}	189.042 {478}	208.959 {461}	455.403 { 74}	313.042 {108}	223.061 {451}	317.933 {106}	228.802 {447}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.00107	.08503	.00243	.06641	.15732	-.00007	.00056	81.155	.00048
Stddev	.00034	.00049	.00265	.00086	.00118	.00013	.00336	.574	.00021
%RSD	31.695	.58042	109.10	1.2933	.74707	205.08	599.35	.70713	43.973

#1	.00083	.08538	.00056	.06581	.15649	.00003	.00293	80.749	.00033
#2	.00131	.08468	.00431	.06702	.15815	-.00016	-.00181	81.561	.00063

Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Elem	Co2286	Cr2055	Cu3247	Fe2599	K_7664	Li6707	Mg2790	Mn2576	Mo2020
Line	228.616 {447}	205.560 {464}	324.754 {104}	259.940 {130}	766.490 { 44}	670.784 { 50}	279.079 {121}2	257.610 {131}	202.030 {467}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	-.00032	-.00008	.00151	.22673	6.0794	-.00039	22.876	.03255	.00021
Stddev	.00022	.00033	.00016	.00381	.0097	.00078	.005	.00009	.00019
%RSD	69.574	415.04	10.760	1.6806	.15944	200.51	.02283	.26175	94.082

#1	-.00047	.00015	.00162	.22403	6.0725	.00016	22.873	.03261	.00007
#2	-.00016	-.00031	.00139	.22942	6.0862	-.00094	22.880	.03249	.00034

Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Elem	Na8183	Ni2316	P_1782	Pb2203	S_1820	Sb2068	Se1960	Si2881	SiO2
Line	818.326 { 41}	231.604 {446}	178.284 {489}	220.353 {453}	182.034 {485}	206.833 {463}	196.090 {472}	288.158 {117}	288.158 {117}2
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	107.36	.00156	.03467	-.00143	19.636	-.00491	-.00377	.46228	.98928
Stddev	.07	.00055	.00010	.00177	.345	.00521	.00560	.01499	.03208
%RSD	.06684	35.023	.28688	123.75	1.7558	105.95	148.33	3.2432	3.2432

#1	107.41	.00195	.03460	-.00269	19.392	-.00123	-.00773	.45168	.96660
#2	107.31	.00118	.03474	-.00018	19.880	-.00860	.00018	.47288	1.0120

Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Elem	Sn1899	Sr4077	Th2837	Ti3349	Ti1908	U_3701	V_2924	Zn2062	Zr3391
Line	189.989 {477}	407.771 { 83}	283.730 {119}	334.904 {101}	190.856 {477}	370.152 { 91}	292.402 {115}	206.200 {163}	339.198 { 99}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	-.00212	.66167	-.00047	.00282	-.00461	.03118	.00123	.00157	.00039
Stddev	.00150	.00408	.00056	.00040	.00006	.03966	.00024	.00036	.00033
%RSD	70.819	.61648	119.38	14.313	1.3763	127.18	19.615	22.971	85.180

#1	-.00318	.65878	-.00087	.00253	-.00466	.00314	.00140	.00182	.00062
#2	-.00106	.66455	-.00007	.00310	-.00457	.05923	.00106	.00131	.00015

Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Int. Std.	Y_2243	Y_3600	Y_3774
Line	224.306 {450}	360.073 { 94}	377.433 { 89}
Units	Cts/S	Cts/S	Cts/S
Avg	2633.9	38350.	1970.7
Stddev	3.3	133.	10.0
%RSD	.12382	.34607	.50956

#1	2636.2	38256.	1977.8
#2	2631.6	38444.	1963.6

Sample Name: 280-82864-A-7-A Acquired: 5/17/2016 17:07:47 Type: Unk

Method: 6500_025(v6) Mode: CONC Corr. Factor: 1.000000

User: CRHOADES Prep Date: Custom ID2: Custom ID3:

Comment: 325144 6010B (Fe)

Elem	Ag3280	Al1670	As1890	B_2089	Ba4554	Be3130	Bi2230	Ca3179	Cd2288
Line	328.068 {103}	167.079 {502}	189.042 {478}	208.959 {461}	455.403 {74}	313.042 {108}	223.061 {451}	317.933 {106}	228.802 {447}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.00115	.14658	-.00239	.06398	.15969	-.00007	-.00203	83.217	.00063
Stddev	.00057	.00052	.00080	.00020	.00127	.00005	.00194	.726	.00048
%RSD	49.834	.35447	33.559	.31744	.79487	72.520	95.703	.87219	75.780

#1	.00156	.14622	-.00182	.06384	.15879	-.00003	-.00340	82.704	.00029
#2	.00075	.14695	-.00295	.06413	.16059	-.00011	-.00066	83.731	.00097

Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Elem	Co2286	Cr2055	Cu3247	Fe2599	K_7664	Li6707	Mg2790	Mn2576	Mo2020
Line	228.616 {447}	205.560 {464}	324.754 {104}	259.940 {130}	766.490 {44}	670.784 {50}	279.079 {121}2	257.610 {131}	202.030 {467}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	-.00024	-.00025	.00265	.22812	5.4531	.00553	23.669	.02757	-.00015
Stddev	.00011	.00027	.00021	.00420	.1068	.00167	.074	.00013	.00068
%RSD	44.621	107.24	7.9786	1.8392	1.9591	30.212	.31379	.46914	450.18

#1	-.00016	-.00044	.00250	.23109	5.5286	.00672	23.722	.02766	-.00064
#2	-.00031	-.00006	.00280	.22516	5.3775	.00435	23.617	.02748	.00033

Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Elem	Na8183	Ni2316	P_1782	Pb2203	S_1820	Sb2068	Se1960	Si2881	SiO2
Line	818.326 {41}	231.604 {446}	178.284 {489}	220.353 {453}	182.034 {485}	206.833 {463}	196.090 {472}	288.158 {117}	288.158 {117}2
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	101.12	.00199	.04581	-.00099	21.536	-.00478	-.00385	.84156	1.8009
Stddev	1.00	.00017	.00016	.00095	.276	.00217	.00900	.05469	.1170
%RSD	.99376	8.5502	.34341	95.745	1.2796	45.397	233.61	6.4987	6.4987

#1	101.83	.00211	.04593	-.00166	21.341	-.00324	-.01022	.88024	1.8837
#2	100.41	.00187	.04570	-.00032	21.731	-.00631	.00251	.80289	1.7182

Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Elem	Sn1899	Sr4077	Th2837	Ti3349	Ti1908	U_3701	V_2924	Zn2062	Zr3391
Line	189.989 {477}	407.771 {83}	283.730 {119}	334.904 {101}	190.856 {477}	370.152 {91}	292.402 {115}	206.200 {163}	339.198 {99}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	-.00189	.66730	-.00091	.00296	-.00119	.02290	.00074	.00046	-.00038
Stddev	.00005	.00636	.00039	.00009	.00145	.03684	.00003	.00017	.00245
%RSD	2.6478	.95342	42.775	2.9505	122.14	160.84	4.4881	36.652	649.87

#1	-.00185	.66280	-.00119	.00302	-.00016	.04895	.00076	.00058	-.00211
#2	-.00192	.67180	-.00063	.00290	-.00221	-.00314	.00072	.00034	.00135

Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Int. Std.	Y_2243	Y_3600	Y_3774
Line	224.306 {450}	360.073 {94}	377.433 {89}
Units	Cts/S	Cts/S	Cts/S
Avg	2652.0	38778.	2053.2
Stddev	5.4	52.	12.1
%RSD	.20207	.13347	.58854

#1	2648.2	38742.	2044.6
#2	2655.8	38815.	2061.7

Sample Name: 280-82864-A-8-A Acquired: 5/17/2016 17:10:24 Type: Unk

Method: 6500_025(v6) Mode: CONC Corr. Factor: 1.000000

User: CRHOADES Prep Date: Custom ID2: Custom ID3:

Comment: 325144 6010B (Fe)

Elem	Ag3280	Al1670	As1890	B_2089	Ba4554	Be3130	Bi2230	Ca3179	Cd2288
Line	328.068 {103}	167.079 {502}	189.042 {478}	208.959 {461}	455.403 {74}	313.042 {108}	223.061 {451}	317.933 {106}	228.802 {447}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.00182	.11061	.00208	.06557	.11231	.00015	-.00530	63.764	.00053
Stddev	.00041	.00090	.00693	.00060	.00065	.00007	.00046	.406	.00009
%RSD	22.412	.81709	332.63	.91285	.58270	48.024	8.6305	.63637	17.349

#1	.00211	.11125	-.00282	.06515	.11277	.00010	-.00497	64.051	.00046
#2	.00153	.10997	.00699	.06600	.11185	.00020	-.00562	63.477	.00059

Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Elem	Co2286	Cr2055	Cu3247	Fe2599	K_7664	Li6707	Mg2790	Mn2576	Mo2020
Line	228.616 {447}	205.560 {464}	324.754 {104}	259.940 {130}	766.490 {44}	670.784 {50}	279.079 {121}2	257.610 {131}	202.030 {467}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	-.00037	-.00020	.00305	.22492	8.7174	.01215	16.280	.05028	-.00097
Stddev	.00022	.00004	.00008	.00466	.0334	.00068	.010	.00005	.00017
%RSD	58.642	18.595	2.5240	2.0722	.38323	5.6093	.05937	.10252	17.330

#1	-.00052	-.00023	.00310	.22821	8.7410	.01263	16.273	.05032	-.00109
#2	-.00021	-.00018	.00299	.22162	8.6938	.01167	16.286	.05024	-.00085

Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Elem	Na8183	Ni2316	P_1782	Pb2203	S_1820	Sb2068	Se1960	Si2881	SiO2
Line	818.326 {41}	231.604 {446}	178.284 {489}	220.353 {453}	182.034 {485}	206.833 {463}	196.090 {472}	288.158 {117}	288.158 {117}2
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	92.341	.00197	.01483	-.00251	21.094	-.00488	W -.00900	3.2612	6.9789
Stddev	.042	.00001	.00178	.00186	.819	.00394	.00418	.0906	.1939
%RSD	.04526	.71566	11.994	73.993	3.8810	80.613	46.404	2.7788	2.7788

#1	92.312	.00198	.01357	-.00120	21.672	-.00210	-.01195	3.1971	6.8417
#2	92.371	.00196	.01608	-.00382	20.515	-.00766	-.00605	3.3252	7.1160

Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Warn	Chk Pass	Chk Pass
High Limit							5.0000		
Low Limit							-.00500		

Elem	Sn1899	Sr4077	Th2837	Ti3349	Ti1908	U_3701	V_2924	Zn2062	Zr3391
Line	189.989 {477}	407.771 {83}	283.730 {119}	334.904 {101}	190.856 {477}	370.152 {91}	292.402 {115}	206.200 {163}	339.198 {99}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	-.00161	.46618	.00054	.00310	-.00017	.00449	.00097	.00102	.00148
Stddev	.00052	.00309	.00163	.00002	.00260	.01541	.00059	.00105	.00400
%RSD	32.224	.66349	301.31	.50310	1535.0	343.26	61.036	102.76	270.55

#1	-.00198	.46836	.00170	.00309	-.00201	-.00641	.00138	.00028	-.00135
#2	-.00124	.46399	-.00061	.00311	.00167	.01538	.00055	.00177	.00430

Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Int. Std.	Y_2243	Y_3600	Y_3774
Line	224.306 {450}	360.073 {94}	377.433 {89}
Units	Cts/S	Cts/S	Cts/S
Avg	2679.6	39947.	2171.6
Stddev	25.3	418.	25.2
%RSD	.94273	1.0453	1.1592

#1	2697.5	39652.	2153.8
#2	2661.8	40243.	2189.4

Sample Name: 280-82864-A-9-A Acquired: 5/17/2016 17:13:01 Type: Unk

Method: 6500_025(v6) Mode: CONC Corr. Factor: 1.000000

User: CRHOADES Prep Date: Custom ID2: Custom ID3:

Comment: 325144 6010B (Fe)

Elem	Ag3280	Al1670	As1890	B_2089	Ba4554	Be3130	Bi2230	Ca3179	Cd2288
Line	328.068 {103}	167.079 {502}	189.042 {478}	208.959 {461}	455.403 { 74}	313.042 {108}	223.061 {451}	317.933 {106}	228.802 {447}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.00224	.17513	.00688	.04924	.11481	.00022	-.00142	64.283	.00066
Stddev	.00042	.00037	.00400	.00029	.00183	.00020	.00107	1.168	.00002
%RSD	18.810	.20879	58.167	.58308	1.5928	90.221	75.033	1.8177	3.6556

#1	.00195	.17539	.00971	.04903	.11611	.00008	-.00218	65.110	.00064
#2	.00254	.17487	.00405	.04944	.11352	.00036	-.00067	63.457	.00068

Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Elem	Co2286	Cr2055	Cu3247	Fe2599	K_7664	Li6707	Mg2790	Mn2576	Mo2020
Line	228.616 {447}	205.560 {464}	324.754 {104}	259.940 {130}	766.490 { 44}	670.784 { 50}	279.079 {121}2	257.610 {131}	202.030 {467}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	-.00038	-.00063	.00092	.16893	3.4709	-.00272	14.641	.03776	-.00057
Stddev	.00025	.00023	.00076	.00254	.0259	.00391	.047	.00001	.00012
%RSD	65.946	37.081	83.245	1.5012	.74563	144.01	.32206	.02114	21.453

#1	-.00020	-.00046	.00146	.17073	3.4526	.00005	14.674	.03775	-.00066
#2	-.00056	-.00079	.00038	.16714	3.4892	-.00548	14.607	.03776	-.00048

Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Elem	Na8183	Ni2316	P_1782	Pb2203	S_1820	Sb2068	Se1960	Si2881	SiO2
Line	818.326 { 41}	231.604 {446}	178.284 {489}	220.353 {453}	182.034 {485}	206.833 {463}	196.090 {472}	288.158 {117}	288.158 {117}2
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	68.522	.00109	.01696	-.00013	18.825	-.00175	F -.01156	2.4370	5.2152
Stddev	.085	.00002	.00069	.00068	.790	.00341	.00276	.0241	.0515
%RSD	.12409	1.7150	4.0798	544.12	4.1946	194.88	23.900	.98821	.98821

#1	68.462	.00110	.01647	-.00061	19.383	.00066	-.01351	2.4200	5.1787
#2	68.582	.00107	.01745	.00036	18.266	-.00416	-.00961	2.4540	5.2516

Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Fail	Chk Pass	Chk Pass
High Limit							50.000		
Low Limit							-.01000		

Elem	Sn1899	Sr4077	Th2837	Ti3349	Ti1908	U_3701	V_2924	Zn2062	Zr3391
Line	189.989 {477}	407.771 { 83}	283.730 {119}	334.904 {101}	190.856 {477}	370.152 { 91}	292.402 {115}	206.200 {163}	339.198 { 99}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	-.00158	.45357	-.00238	.00397	-.00034	.01489	.00042	.00150	-.00026
Stddev	.00100	.00964	.00371	.00007	.00009	.01748	.00022	.00005	.00232
%RSD	63.395	2.1261	155.67	1.7438	26.030	117.39	52.279	3.6172	903.86

#1	-.00087	.46039	.00024	.00402	-.00041	.00253	.00058	.00146	-.00190
#2	-.00229	.44675	-.00501	.00392	-.00028	.02725	.00027	.00154	.00138

Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Int. Std.	Y_2243	Y_3600	Y_3774
Line	224.306 {450}	360.073 { 94}	377.433 { 89}
Units	Cts/S	Cts/S	Cts/S
Avg	2709.6	40142.	2068.7
Stddev	35.5	23.	43.7
%RSD	1.3119	.05614	2.1119

#1	2734.7	40126.	2037.8
#2	2684.5	40158.	2099.6

Sample Name: CCVH-3883905 Acquired: 5/17/2016 17:15:39 Type: QC
Method: 6500_025(v6) Mode: CONC Corr. Factor: 1.000000
User: CRHOADES Prep Date: Custom ID2: Custom ID3:
Comment:

Elem	Ag3280	Al3092	As1890	B_2089	Ba4554	Be3130	Bi2230	Ca3179	Cd2288	Co2286	Cr2055
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	-0.00428	50.124	-0.00474	.00297	-0.00129	.00006	1.0136	.01681	-0.00024	-0.00112	-0.00038
Stddev	.00027	2.573	.00928	.00003	.00087	.00050	.0119	.00042	.00011	.00016	.00035
%RSD	6.2921	5.1333	195.77	.86285	67.039	815.00	1.1776	2.5098	44.564	14.207	93.421

#1	-0.00447	51.944	.00182	.00298	-0.00068	-0.00029	1.0220	.01711	-0.00032	-0.00123	-0.00013
#2	-0.00409	48.305	-0.1130	.00295	-0.00191	.00042	1.0051	.01651	-0.00017	-0.00100	-0.00063

Check ?	None	Chk Pass	None	None	None	None	Chk Pass	None	None	None	None
Value											
Range											

Elem	Cu3247	Fe2714	K_7664	Li6707	Mg2790	Mn2576	Mo2020	Na8183	Ni2316	P_1782	Pb2203
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	-0.01331	51.378	-0.13209	-0.00936	.01221	-0.00216	-0.00229	257.26	.00144	.00432	-0.00142
Stddev	.00049	1.149	.00907	.00361	.00263	.00002	.00026	4.92	.00057	.00407	.00121
%RSD	3.6797	2.2355	6.8699	38.537	21.559	.94701	11.339	1.9124	39.936	94.220	85.533

#1	-0.01365	52.190	-0.12568	-0.01191	.01035	-0.00217	-0.00247	260.74	.00184	.00144	-0.00227
#2	-0.01296	50.566	-0.13851	-0.00681	.01408	-0.00214	-0.00210	253.79	.00103	.00719	-0.00056

Check ?	None	Chk Pass	None	None	None	None	None	Chk Pass	None	None	None
Value											
Range											

Elem	S_1820	Sb2068	Se1960	Si2881	SiO2	Sn1899	Sr4077	Th2837	Ti3349	Ti1908	U_3701
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	W 5.3082	-0.02012	-0.01238	-0.06338	-0.13564	-0.00164	.00028	W 4.7068	-0.00049	-0.00204	9.7806
Stddev	.2898	.00770	.00318	.00483	.01034	.00079	.00011	.0270	.00040	.00670	.1799
%RSD	5.4590	38.243	25.685	7.6198	7.6198	48.166	39.772	.57273	81.525	328.59	1.8398

#1	5.1033	-0.01468	-0.01463	-0.06680	-0.14295	-0.00220	.00036	4.6877	-0.00077	.00270	9.9078
#2	5.5131	-0.02556	-0.01013	-0.05997	-0.12833	-0.00108	.00020	4.7258	-0.00021	-0.00678	9.6534

Check ?	Chk Warn	None	None	None	None	None	None	Chk Warn	None	None	Chk Pass
Value	5.0000							5.0000			
Range	5.0000%							-5.0000%			

Elem	V_2924	Zn2062	Zr3391
Units	ppm	ppm	ppm
Avg	.01349	.00179	-0.13445
Stddev	.00031	.00026	.00241
%RSD	2.2694	14.765	1.7927

#1	.01327	.00161	-0.13615
#2	.01370	.00198	-0.13274

Check ?	None	None	None
Value			
Range			

Int. Std.	Y_2243	Y_3600	Y_3774
Units	Cts/S	Cts/S	Cts/S
Avg	2640.1	38824.	2033.1
Stddev	7.7	129.	108.9
%RSD	.29256	.33133	5.3569

#1	2634.6	38915.	1956.1
#2	2645.5	38733.	2110.1

Sample Name: CCV-3888422 Acquired: 5/17/2016 17:18:15 Type: QC
Method: 6500_025(v6) Mode: CONC Corr. Factor: 1.000000
User: CRHOADES Prep Date: Custom ID2: Custom ID3:
Comment:

Elem	Ag3280	Al1670	As1890	B_2089	Ba4554	Be3130	Bi2230	Ca3179	Cd2288	Co2286	Cr2055	Cu3247	Fe2599
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.49306	.50415	.97681	.50513	.46433	.47426	-.00133	4.6224	.51405	.50937	.51009	.47887	2.4158
Stddev	.00014	.00062	.00536	.00034	.00944	.00947	.00175	.0840	.00618	.00679	.00551	.00145	.0513
%RSD	.02804	.12392	.54859	.06636	2.0325	1.9959	131.77	1.8177	1.2030	1.3330	1.0795	.30228	2.1250
#1	.49296	.50371	.97302	.50537	.45765	.46756	-.00009	4.5630	.51842	.51417	.51398	.47784	2.3795
#2	.49315	.50459	.98060	.50489	.47100	.48095	-.00256	4.6818	.50968	.50456	.50620	.47989	2.4521

Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	None	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Value													
Range													

Elem	K_7664	Li6707	Mg2790	Mn2576	Mo2020	Na5895	Ni2316	P_1782	Pb2203	S_1820	Sb2068	Se1960	Si2881
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	46.638	.93074	19.024	.47049	.49906	4.9984	.49774	1.0119	1.0113	-.05274	1.0133	.98737	4.6809
Stddev	.888	.00730	.023	.00036	.00898	.0330	.00535	.0179	.0159	.00053	.0292	.02945	.0313
%RSD	1.9042	.78412	.12293	.07603	1.7994	.65946	1.0752	1.7670	1.5684	1.0022	2.8787	2.9828	.66912
#1	46.010	.92558	19.040	.47074	.50541	4.9751	.50152	1.0245	1.0225	-.05237	1.0340	1.0082	4.6588
#2	47.266	.93590	19.007	.47024	.49271	5.0217	.49395	.99923	1.0001	-.05311	.99270	.96654	4.7031

Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	None	Chk Pass	Chk Pass	Chk Pass
Value													
Range													

Elem	SiO2	Sn1899	Sr4077	Th2837	Ti3349	Ti1908	U_3701	V_2924	Zn2062	Zr3391
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	10.017	1.0110	.47398	-.00121	.46964	1.0207	.01814	.47369	.46123	.46773
Stddev	.067	.0135	.00935	.00477	.00099	.0130	.04483	.00142	.00047	.00853
%RSD	.66912	1.3324	1.9718	396.10	.21057	1.2697	247.15	.29964	.10185	1.8241
#1	9.9698	1.0205	.46737	.00217	.46895	1.0298	-.01356	.47470	.46090	.46170
#2	10.065	1.0014	.48059	-.00458	.47034	1.0115	.04983	.47269	.46157	.47376

Check ?	Chk Pass	Chk Pass	Chk Pass	None	Chk Pass	Chk Pass	None	Chk Pass	Chk Pass	Chk Pass
Value										
Range										

Int. Std.	Y_2243	Y_3600	Y_3774
Units	Cts/S	Cts/S	Cts/S
Avg	2701.4	39479.	2058.3
Stddev	2.3	119.	46.4
%RSD	.08566	.30068	2.2531
#1	2703.0	39395.	2091.1
#2	2699.7	39563.	2025.5

Sample Name: CCB Acquired: 5/17/2016 17:20:45 Type: QC
 Method: 6500_025(v6) Mode: CONC Corr. Factor: 1.000000
 User: CRHOADES Prep Date: Custom ID2: Custom ID3:
 Comment:

Elem	Ag3280	Al1670	As1890	B_2089	Ba4554	Be3130	Bi2230	Ca3179	Cd2288	Co2286	Cr2055
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.00151	.00008	.00726	.00122	W -.00206	.00024	-.00123	.01091	-.00007	-.00016	-.00070
Stddev	.00054	.00061	.00463	.00051	.00023	.00033	.00182	.00032	.00011	.00002	.00011
%RSD	35.771	773.33	63.710	42.124	11.126	140.96	148.47	2.9131	147.94	15.599	15.767

#1	.00189	.00051	.00399	.00159	-.00222	.00047	.00006	.01113	-.00015	-.00014	-.00062
#2	.00113	-.00035	.01053	.00086	-.00190	.00000	-.00252	.01068	.00000	-.00017	-.00078

Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Warn	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit					.00200						
Low Limit					-.00200						

Elem	Cu3247	Fe2599	K_7664	Li6707	Mg2790	Mn2576	Mo2020	Na5895	Ni2316	P_1782	Pb2203
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.00011	.00331	-.16343	F -.01124	-.00385	-.00012	.00123	.03117	-.00009	.00339	.00207
Stddev	.00050	.00267	.03333	.00486	.00569	.00000	.00071	.01250	.00007	.00093	.00048
%RSD	445.23	80.494	20.397	43.245	147.66	2.4287	58.113	40.094	73.352	27.346	23.213

#1	.00046	.00520	-.18700	-.00780	.00017	-.00012	.00072	.02233	-.00005	.00274	.00241
#2	-.00024	.00143	-.13986	-.01468	-.00787	-.00012	.00173	.04000	-.00014	.00405	.00173

Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Fail	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit				.01000							
Low Limit				-.01000							

Elem	S_1820	Sb2068	Se1960	Si2881	SiO2	Sn1899	Sr4077	Th2837	Ti3349	Tl1908	U_3701
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	-.06329	-.00004	-.00073	-.03749	-.08024	-.00218	.00020	.00136	.00047	.00522	.04687
Stddev	.00052	.00013	.00222	.04791	.10253	.00132	.00000	.00065	.00002	.00164	.03304
%RSD	.81563	359.22	303.49	127.78	127.78	60.582	2.2734	47.694	3.7973	31.486	70.484

#1	-.06366	-.00013	-.00230	-.07137	-.15274	-.00124	.00020	.00181	.00048	.00406	.02351
#2	-.06293	.00006	.00084	-.00362	-.00774	-.00311	.00020	.00090	.00046	.00639	.07023

Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit											
Low Limit											

Elem	V_2924	Zn2062	Zr3391
Units	ppm	ppm	ppm
Avg	.00036	-.00081	.00087
Stddev	.00053	.00002	.00006
%RSD	147.90	2.4995	6.5589

#1	-.00002	-.00083	.00083
#2	.00073	-.00080	.00091

Check ?	Chk Pass	Chk Pass	Chk Pass
High Limit			
Low Limit			

Int. Std.	Y_2243	Y_3600	Y_3774
Units	Cts/S	Cts/S	Cts/S
Avg	2640.1	39760.	1913.4
Stddev	2.9	13.	9.4
%RSD	.11032	.03357	.49074

#1	2638.0	39750.	1920.1
#2	2642.1	39769.	1906.8

Sample Name: CCVL-3894681 Acquired: 5/17/2016 17:23:07 Type: QC
Method: 6500_025(v6) Mode: CONC Corr. Factor: 1.000000
User: CRHOADES Prep Date: Custom ID2: Custom ID3:
Comment:

Elem	Ag3280	Al1670	As1890	B_2089	Ba4554	Be3130	Bi2230	Ca3179	Cd2288	Co2286	Cr2055
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.01152	.09911	.01922	.09753	F .00696	.00102	.10340	.20609	.00510	.00964	.00948
Stddev	.00069	.00010	.00308	.00358	.00127	.00019	.00285	.00097	.00037	.00026	.00009
%RSD	6.0065	.09592	16.015	3.6729	18.207	18.656	2.7520	.47201	7.1912	2.7418	.99385

#1	.01201	.09918	.02140	.09499	.00785	.00089	.10139	.20678	.00484	.00946	.00955
#2	.01104	.09904	.01705	.10006	.00606	.00116	.10541	.20540	.00536	.00983	.00941

Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Fail	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Value					.01000						
Range					-30.000%						

Elem	Cu3247	Fe2599	K_7664	Li6707	Mg2790	Mn2576	Mo2020	Na5895	Ni2316	P_1782	Pb2203
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.01392	.11858	2.6856	F -.00075	.18589	.00958	.01827	.99823	.03987	2.8133	.00887
Stddev	.00000	.00524	.1402	.00097	.00024	.00010	.00089	.01875	.00006	.0406	.00142
%RSD	.01995	4.4155	5.2195	129.20	.13164	1.0115	4.8595	1.8788	.16191	1.4444	16.007

#1	.01392	.12228	2.7848	-.00007	.18572	.00965	.01764	.98497	.03982	2.7846	.00987
#2	.01392	.11488	2.5865	-.00144	.18606	.00951	.01890	1.0115	.03991	2.8421	.00787

Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Fail	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Value				.01000							
Range				-30.000%							

Elem	S_1820	Sb2068	Se1960	Si2881	SiO2	Sn1899	Sr4077	Th2837	Ti3349	Ti1908	U_3701
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	-.06120	.01796	.01195	.42706	.91390	.09783	.00978	.01329	.01054	.01275	F .07937
Stddev	.00298	.00031	.00202	.00251	.00537	.00083	.00017	.00058	.00041	.00080	.02628
%RSD	4.8640	1.7483	16.903	.58810	.58810	.84626	1.6944	4.3426	3.8644	6.2429	33.113

#1	-.06330	.01774	.01053	.42883	.91770	.09724	.00966	.01370	.01083	.01219	.06079
#2	-.05909	.01819	.01338	.42528	.91010	.09841	.00989	.01288	.01025	.01331	.09796

Check ?	None	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Fail
Value											.06000
Range											30.000%

Elem	V_2924	Zn2062	Zr3391
Units	ppm	ppm	ppm
Avg	.00966	.02011	.01512
Stddev	.00070	.00102	.00058
%RSD	7.2017	5.0788	3.8574

#1	.01015	.02083	.01553
#2	.00916	.01939	.01470

Check ?	Chk Pass	Chk Pass	Chk Pass
Value			
Range			

Int. Std.	Y_2243	Y_3600	Y_3774
Units	Cts/S	Cts/S	Cts/S
Avg	2704.1	39073.	2037.3
Stddev	55.4	99.	169.3
%RSD	2.0473	.25223	8.3119

#1	2664.9	39003.	1917.6
#2	2743.2	39142.	2157.1

Sample Name: MB 280-325382/1-A Acquired: 5/17/2016 17:25:47 Type: Unk

Method: 6500_025(v6) Mode: CONC Corr. Factor: 1.000000

User: CRHOADES Prep Date: 5/17 Custom ID2: Custom ID3:

Comment: 325382 6010C (Fe) Q5

Elem	Ag3280	Al1670	As1890	B_2089	Ba4554	Be3130	Bi2230	Ca3179	Cd2288
Line	328.068 {103}	167.079 {502}	189.042 {478}	208.959 {461}	455.403 { 74}	313.042 {108}	223.061 {451}	317.933 {106}	228.802 {447}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.00153	.00141	.00261	.00103	-.00137	.00026	.00092	.02218	-.00006
Stddev	.00030	.00005	.00477	.00035	.00015	.00022	.00468	.03145	.00003
%RSD	19.400	3.8287	182.71	34.282	10.691	84.950	507.24	141.81	51.745

#1	.00132	.00145	.00598	.00128	-.00127	.00042	-.00239	.04442	-.00008
#2	.00174	.00137	-.00076	.00078	-.00148	.00010	.00423	-.00006	-.00004

Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Elem	Co2286	Cr2055	Cu3247	Fe2599	K_7664	Li6707	Mg2790	Mn2576	Mo2020
Line	228.616 {447}	205.560 {464}	324.754 {104}	259.940 {130}	766.490 { 44}	670.784 { 50}	279.079 {121}2	257.610 {131}	202.030 {467}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	-.00025	-.00062	-.00019	.02369	-.21897	W -.00893	-.00776	.00012	-.00157
Stddev	.00008	.00004	.00021	.01476	.10144	.00130	.00671	.00003	.00016
%RSD	30.164	6.1349	111.42	62.318	46.325	14.504	86.435	25.430	9.9612

#1	-.00020	-.00059	-.00034	.03413	-.14724	-.00985	-.00302	.00010	-.00168
#2	-.00031	-.00064	-.00004	.01325	-.29070	-.00802	-.01250	.00014	-.00146

Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Warn	Chk Pass	Chk Pass	Chk Pass
High Limit						.00500			
Low Limit						-.00500			

Elem	Na5895	Ni2316	P_1782	Pb2203	S_1820	Sb2068	Se1960	Si2881	SiO2
Line	589.592 { 57}	231.604 {446}	178.284 {489}	220.353 {453}	182.034 {485}	206.833 {463}	196.090 {472}	288.158 {117}	288.158 {117}2
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.05547	.00022	.00419	-.00193	W -.07219	-.00294	-.00286	-.01185	-.02535
Stddev	.11686	.00058	.00147	.00082	.00318	.00076	.00148	.04301	.09203
%RSD	210.69	268.00	35.013	42.269	4.4013	25.713	51.666	363.04	363.04

#1	.13810	.00063	.00523	-.00250	-.06994	-.00347	-.00181	-.04226	-.09043
#2	-.02717	-.00019	.00315	-.00135	-.07443	-.00240	-.00390	.01856	.03973

Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Warn	Chk Pass	Chk Pass	Chk Pass	None
High Limit					.05000				
Low Limit					-.05000				

Elem	Sn1899	Sr4077	Th2837	Ti3349	Ti1908	U_3701	V_2924	Zn2062	Zr3391
Line	189.989 {477}	407.771 { 83}	283.730 {119}	334.904 {101}	190.856 {477}	370.152 { 91}	292.402 {115}	206.200 {163}	339.198 { 99}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	-.00233	.00025	-.00063	.00038	-.00033	.01755	.00022	-.00020	.00273
Stddev	.00006	.00051	.00157	.00096	.00040	.02110	.00007	.00002	.00287
%RSD	2.4920	207.40	248.16	256.49	121.61	120.26	34.184	10.304	105.36

#1	-.00237	.00061	-.00174	-.00031	-.00061	.03247	.00017	-.00019	.00476
#2	-.00229	-.00012	.00048	.00106	-.00005	.00263	.00027	-.00022	.00070

Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Int. Std.	Y_2243	Y_3600	Y_3774						
Line	224.306 {450}	360.073 { 94}	377.433 { 89}						
Units	Cts/S	Cts/S	Cts/S						
Avg	2692.7	39768.	1948.9						
Stddev	2.8	136.	121.8						
%RSD	.10442	.34302	6.2524						

#1	2690.7	39672.	1862.7						
#2	2694.7	39865.	2035.0						

Sample Name: LCS 280-325382/2-A Acquired: 5/17/2016 17:28:08 Type: Unk
Method: 6500_025(v6) Mode: CONC Corr. Factor: 1.000000
User: CRHOADES Prep Date: Custom ID2: Custom ID3:
Comment: 325382 6010C (Fe) Q5

Elem	Ag3280	Al1670	As1890	B_2089	Ba4554	Be3130	Bi2230	Ca3179	Cd2288
Line	328.068 {103}	167.079 {502}	189.042 {478}	208.959 {461}	455.403 { 74}	313.042 {108}	223.061 {451}	317.933 {106}	228.802 {447}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.04851	1.8928	.98531	1.0131	1.8975	.04894	2.0713	46.132	.10187
Stddev	.00028	.0070	.00543	.0030	.0035	.00004	.0053	.097	.00010
%RSD	.57754	.36778	.55128	.29612	.18480	.08811	.25689	.21069	.10249

#1	.04831	1.8879	.98147	1.0110	1.9000	.04897	2.0750	46.200	.10180
#2	.04871	1.8977	.98915	1.0152	1.8950	.04891	2.0675	46.063	.10194

Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	None	Chk Pass	Chk Pass
High Limit									
Low Limit									

Elem	Co2286	Cr2055	Cu3247	Fe2599	K_7664	Li6707	Mg2790	Mn2576	Mo2020
Line	228.616 {447}	205.560 {464}	324.754 {104}	259.940 {130}	766.490 { 44}	670.784 { 50}	279.079 {121}2	257.610 {131}	202.030 {467}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.48819	.20072	.23458	.97048	47.815	.93285	47.503	.46273	1.0206
Stddev	.00328	.00016	.00065	.00963	.206	.00441	.029	.00076	.0062
%RSD	.67280	.07852	.27531	.99187	.43030	.47231	.06149	.16441	.60735

#1	.49051	.20061	.23413	.97728	47.669	.93596	47.482	.46219	1.0250
#2	.48587	.20084	.23504	.96367	47.960	.92973	47.523	.46327	1.0162

Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Elem	Na8183	Ni2316	P_1782	Pb2203	S_1820	Sb2068	Se1960	Si2881	SiO2
Line	818.326 { 41}	231.604 {446}	178.284 {489}	220.353 {453}	182.034 {485}	206.833 {463}	196.090 {472}	288.158 {117}	288.158 {117}2
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	55.032	.48193	10.089	.49901	2.0427	.52895	2.0414	9.4334	20.187
Stddev	.510	.00169	.088	.00314	.0007	.00556	.0195	.1014	.217
%RSD	.92744	.35038	.87691	.62875	.03630	1.0513	.95688	1.0746	1.0746

#1	55.393	.48074	10.152	.49680	2.0432	.53289	2.0552	9.5050	20.341
#2	54.672	.48312	10.026	.50123	2.0422	.52502	2.0276	9.3617	20.034

Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	None	Chk Pass	Chk Pass	Chk Pass	None
High Limit									
Low Limit									

Elem	Sn1899	Sr4077	Th2837	Ti3349	Ti1908	U_3701	V_2924	Zn2062	Zr3391
Line	189.989 {477}	407.771 { 83}	283.730 {119}	334.904 {101}	190.856 {477}	370.152 { 91}	292.402 {115}	206.200 {163}	339.198 { 99}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	2.0087	.95718	.96905	.93792	1.8166	1.9966	.47091	.45187	.44855
Stddev	.0384	.00112	.00162	.00038	.0990	.0389	.00133	.00265	.00524
%RSD	1.9095	.11695	.16768	.04044	5.4476	1.9508	.28178	.58693	1.1684

#1	2.0358	.95797	.96790	.93765	1.8866	1.9691	.47184	.45375	.45225
#2	1.9815	.95639	.97020	.93818	1.7466	2.0242	.46997	.45000	.44484

Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Int. Std.	Y_2243	Y_3600	Y_3774
Line	224.306 {450}	360.073 { 94}	377.433 { 89}
Units	Cts/S	Cts/S	Cts/S
Avg	2616.6	38224.	1983.6
Stddev	2.3	107.	5.6
%RSD	.08802	.28101	.28092

#1	2618.2	38300.	1979.6
#2	2615.0	38148.	1987.5

Sample Name: 320-18796-C-1-A Acquired: 5/17/2016 17:30:33 Type: Unk

Method: 6500_025(v6) Mode: CONC Corr. Factor: 1.000000

User: CRHOADES Prep Date: Custom ID2: Custom ID3:

Comment: 325382 6010C (Fe) Q5

Elem	Ag3280	Al1670	As1890	B_2089	Ba4554	Be3130	Bi2230	Ca3179	Cd2288
Line	328.068 {103}	167.079 {502}	189.042 {478}	208.959 {461}	455.403 { 74}	313.042 {108}	223.061 {451}	317.933 {106}	228.802 {447}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.00169	.12710	.00608	.03392	.01893	.00001	-.00274	10.485	.00015
Stddev	.00099	.00062	.00507	.00063	.00007	.00023	.00299	.024	.00019
%RSD	58.352	.48728	83.464	1.8544	.35728	4487.7	109.01	.23323	120.78

#1	.00099	.12754	.00249	.03436	.01898	-.00016	-.00063	10.467	.00002
#2	.00239	.12666	.00967	.03347	.01888	.00017	-.00486	10.502	.00029

Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Elem	Co2286	Cr2055	Cu3247	Fe2599	K_7664	Li6707	Mg2790	Mn2576	Mo2020
Line	228.616 {447}	205.560 {464}	324.754 {104}	259.940 {130}	766.490 { 44}	670.784 { 50}	279.079 {121}2	257.610 {131}	202.030 {467}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	-.00012	-.00033	1.3412	1.3967	4.8132	-.00978	2.0417	.67668	.00258
Stddev	.00061	.00044	.0037	.0038	.1339	.00404	.0061	.00086	.00162
%RSD	520.52	131.97	.27725	.27284	2.7822	41.322	.29812	.12743	62.880

#1	.00032	-.00064	1.3385	1.3994	4.7185	-.01264	2.0460	.67729	.00143
#2	-.00055	-.00002	1.3438	1.3941	4.9079	-.00693	2.0374	.67607	.00373

Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Elem	Na8183	Ni2316	P_1782	Pb2203	S_1820	Sb2068	Se1960	Si2881	SiO2
Line	818.326 { 41}	231.604 {446}	178.284 {489}	220.353 {453}	182.034 {485}	206.833 {463}	196.090 {472}	288.158 {117}	288.158 {117}2
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	53.536	.00112	W 2.0881	-.00177	2.7594	-.00683	-.00287	3.7650	8.0572
Stddev	.179	.00048	.0079	.00049	.0152	.00337	.00415	.0298	.0638
%RSD	.33502	42.490	.37721	27.621	.54900	49.400	144.50	.79150	.79150

#1	53.409	.00079	2.0826	-.00142	2.7487	-.00444	-.00580	3.7861	8.1023
#2	53.662	.00146	2.0937	-.00212	2.7702	-.00921	.00006	3.7440	8.0121

Check ?	Chk Pass	Chk Pass	Chk Warn	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit			2.0000						
Low Limit			-1.0000						

Elem	Sn1899	Sr4077	Th2837	Ti3349	Ti1908	U_3701	V_2924	Zn2062	Zr3391
Line	189.989 {477}	407.771 { 83}	283.730 {119}	334.904 {101}	190.856 {477}	370.152 { 91}	292.402 {115}	206.200 {163}	339.198 { 99}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	-.00112	.06924	-.00263	.00278	.04017	.10403	.00049	.00621	.00169
Stddev	.00160	.00057	.00100	.00136	.00743	.00359	.00028	.00049	.00522
%RSD	142.58	.82994	37.898	49.085	18.506	3.4513	56.505	7.9084	309.50

#1	-.00226	.06883	-.00333	.00181	.03492	.10657	.00069	.00586	.00538
#2	.00001	.06965	-.00192	.00374	.04543	.10149	.00030	.00655	-.00201

Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Int. Std.	Y_2243	Y_3600	Y_3774
Line	224.306 {450}	360.073 { 94}	377.433 { 89}
Units	Cts/S	Cts/S	Cts/S
Avg	2670.4	39891.	1963.8
Stddev	32.2	112.	28.8
%RSD	1.2060	.28103	1.4655

#1	2693.2	39971.	1943.5
#2	2647.7	39812.	1984.2

Sample Name: 320-18796-C-2-A Acquired: 5/17/2016 17:33:11 Type: Unk

Method: 6500_025(v6) Mode: CONC Corr. Factor: 1.000000

User: CRHOADES Prep Date: Custom ID2: Custom ID3:

Comment: 325382 6010C (Fe) Q5

Elem	Ag3280	Al1670	As1890	B_2089	Ba4554	Be3130	Bi2230	Ca3179	Cd2288
Line	328.068 {103}	167.079 {502}	189.042 {478}	208.959 {461}	455.403 { 74}	313.042 {108}	223.061 {451}	317.933 {106}	228.802 {447}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.00135	.00702	.00191	.05547	-.00048	-.00017	-.00067	17.978	.00042
Stddev	.00023	.00047	.00401	.00198	.00025	.00008	.00077	.281	.00008
%RSD	17.193	6.6793	209.51	3.5756	51.394	44.456	113.95	1.5644	19.655

#1	.00119	.00735	-.00092	.05406	-.00030	-.00012	-.00121	18.177	.00037
#2	.00151	.00669	.00475	.05687	-.00065	-.00023	-.00013	17.779	.00048

Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Elem	Co2286	Cr2055	Cu3247	Fe2599	K_7664	Li6707	Mg2790	Mn2576	Mo2020
Line	228.616 {447}	205.560 {464}	324.754 {104}	259.940 {130}	766.490 { 44}	670.784 { 50}	279.079 {121}2	257.610 {131}	202.030 {467}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	-.00021	-.00029	.03912	.09767	7.9645	-.00073	3.5022	.03800	-.00070
Stddev	.00015	.00011	.00039	.00146	.0956	.00043	.0064	.00011	.00022
%RSD	72.344	38.863	.98481	1.4974	1.2004	58.997	.18350	.28730	31.170

#1	-.00032	-.00037	.03939	.09663	7.8969	-.00042	3.5067	.03792	-.00085
#2	-.00010	-.00021	.03885	.09870	8.0321	-.00103	3.4976	.03808	-.00055

Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Elem	Na8183	Ni2316	P_1782	Pb2203	S_1820	Sb2068	Se1960	Si2881	SiO2
Line	818.326 { 41}	231.604 {446}	178.284 {489}	220.353 {453}	182.034 {485}	206.833 {463}	196.090 {472}	288.158 {117}	288.158 {117}2
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	60.253	.00140	1.1717	-.00103	1.7302	-.00460	W -.00513	8.4817	18.151
Stddev	.031	.00009	.0154	.00008	.0133	.00090	.00503	.0741	.159
%RSD	.05104	6.0847	1.3116	8.0805	.76621	19.559	98.061	.87382	.87382

#1	60.274	.00134	1.1608	-.00109	1.7209	-.00396	-.00157	8.5341	18.263
#2	60.231	.00146	1.1826	-.00097	1.7396	-.00524	-.00869	8.4293	18.039

Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Warn	Chk Pass	Chk Pass
High Limit							5.0000		
Low Limit							-.00500		

Elem	Sn1899	Sr4077	Th2837	Ti3349	Ti1908	U_3701	V_2924	Zn2062	Zr3391
Line	189.989 {477}	407.771 { 83}	283.730 {119}	334.904 {101}	190.856 {477}	370.152 { 91}	292.402 {115}	206.200 {163}	339.198 { 99}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	-.00210	.10947	-.00151	.00057	.00238	.05741	.00080	.00467	-.00210
Stddev	.00117	.00015	.00134	.00023	.00270	.00816	.00105	.00015	.00036
%RSD	55.870	.13889	88.741	40.859	113.47	14.220	130.45	3.3141	17.212

#1	-.00127	.10958	-.00246	.00041	.00047	.06318	.00006	.00456	-.00185
#2	-.00293	.10937	-.00056	.00074	.00429	.05164	.00154	.00478	-.00236

Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Int. Std.	Y_2243	Y_3600	Y_3774
Line	224.306 {450}	360.073 { 94}	377.433 { 89}
Units	Cts/S	Cts/S	Cts/S
Avg	2720.9	39379.	2020.1
Stddev	7.5	61.	12.4
%RSD	.27637	.15574	.61350

#1	2715.6	39422.	2011.4
#2	2726.2	39335.	2028.9

Elem	Ag3280	Al1670	As1890	B_2089	Ba4554	Be3130	Bi2230	Ca3179	Cd2288
Line	328.068 {103}	167.079 {502}	189.042 {478}	208.959 {461}	455.403 {74}	313.042 {108}	223.061 {451}	317.933 {106}	228.802 {447}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.00174	.05931	.00323	.03400	.00827	.00002	-.00274	11.598	-.00002
Stddev	.00021	.00014	.00878	.00084	.00058	.00022	.00416	.309	.00006
%RSD	12.223	.23861	271.64	2.4767	6.9618	879.32	152.06	2.6617	375.14

#1	.00189	.05921	-.00298	.03460	.00787	.00018	.00021	11.380	.00003
#2	.00159	.05941	.00944	.03341	.00868	-.00013	-.00568	11.816	-.00006

Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Elem	Co2286	Cr2055	Cu3247	Fe2599	K_7664	Li6707	Mg2790	Mn2576	Mo2020
Line	228.616 {447}	205.560 {464}	324.754 {104}	259.940 {130}	766.490 {44}	670.784 {50}	279.079 {121}2	257.610 {131}	202.030 {467}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	-.00055	-.00003	.93815	.79892	4.8153	-.00241	2.1851	.35736	-.00103
Stddev	.00073	.00018	.00538	.01966	.1110	.00348	.0021	.00040	.00035
%RSD	131.97	566.59	.57338	2.4605	2.3043	144.10	.09438	.11306	34.311

#1	-.00107	-.00016	.94195	.78502	4.7368	-.00487	2.1836	.35707	-.00128
#2	-.00004	.00010	.93434	.81282	4.8938	.00005	2.1865	.35765	-.00078

Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Elem	Na8183	Ni2316	P_1782	Pb2203	S_1820	Sb2068	Se1960	Si2881	SiO2
Line	818.326 {41}	231.604 {446}	178.284 {489}	220.353 {453}	182.034 {485}	206.833 {463}	196.090 {472}	288.158 {117}	288.158 {117}2
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	53.338	.00085	1.3081	.00019	2.3347	-.00634	-.00392	4.3360	9.2791
Stddev	.019	.00025	.0167	.00177	.0378	.00218	.01057	.0617	.1321
%RSD	.03561	29.389	1.2747	930.49	1.6197	34.460	269.40	1.4235	1.4235

#1	53.324	.00068	1.3199	.00144	2.3615	-.00788	-.01139	4.2924	9.1857
#2	53.351	.00103	1.2964	-.00106	2.3080	-.00479	.00355	4.3797	9.3725

Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Elem	Sn1899	Sr4077	Th2837	Ti3349	Ti1908	U_3701	V_2924	Zn2062	Zr3391
Line	189.989 {477}	407.771 {83}	283.730 {119}	334.904 {101}	190.856 {477}	370.152 {91}	292.402 {115}	206.200 {163}	339.198 {99}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	-.00165	.07590	.00071	.00106	-.00218	.04497	.00094	.00345	.00080
Stddev	.00041	.00033	.00096	.00026	.00220	.00375	.00013	.00001	.00209
%RSD	24.905	.43675	135.21	24.095	100.89	8.3325	13.254	.24179	262.19

#1	-.00194	.07613	.00139	.00124	-.00062	.04762	.00085	.00345	.00228
#2	-.00136	.07566	.00003	.00088	-.00373	.04232	.00103	.00344	-.00068

Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Int. Std.	Y_2243	Y_3600	Y_3774						
Line	224.306 {450}	360.073 {94}	377.433 {89}						
Units	Cts/S	Cts/S	Cts/S						
Avg	2667.0	39045.	1995.3						
Stddev	16.7	126.	67.8						
%RSD	.62725	.32326	3.3988						

#1	2655.2	39134.	2043.2						
#2	2678.9	38956.	1947.3						

Sample Name: 320-18796-C-4-A Acquired: 5/17/2016 17:38:28 Type: Unk

Method: 6500_025(v6) Mode: CONC Corr. Factor: 1.000000

User: CRHOADES Prep Date: Custom ID2: Custom ID3:

Comment: 325382 6010C (Fe) Q5

Elem	Ag3280	Al1670	As1890	B_2089	Ba4554	Be3130	Bi2230	Ca3179	Cd2288
Line	328.068 {103}	167.079 {502}	189.042 {478}	208.959 {461}	455.403 {74}	313.042 {108}	223.061 {451}	317.933 {106}	228.802 {447}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.00133	.10890	-.00240	.03188	.01623	-.00020	.00343	11.280	.00023
Stddev	.00006	.00139	.00416	.00006	.00037	.00016	.00025	.014	.00004
%RSD	4.5391	1.2761	173.73	.20038	2.2799	78.053	7.3789	.12462	18.452

#1	.00128	.10988	.00055	.03184	.01597	-.00009	.00325	11.290	.00026
#2	.00137	.10792	-.00534	.03193	.01649	-.00031	.00361	11.270	.00020

Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Elem	Co2286	Cr2055	Cu3247	Fe2599	K_7664	Li6707	Mg2790	Mn2576	Mo2020
Line	228.616 {447}	205.560 {464}	324.754 {104}	259.940 {130}	766.490 {44}	670.784 {50}	279.079 {121}2	257.610 {131}	202.030 {467}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.00022	-.00041	1.6784	1.4700	5.0826	-.00214	2.1541	.63882	-.00093
Stddev	.00010	.00026	.0052	.0072	.0050	.00132	.0018	.00005	.00042
%RSD	45.091	62.960	.31024	.48875	.09761	61.388	.08425	.00825	45.235

#1	.00015	-.00059	1.6747	1.4751	5.0791	-.00308	2.1554	.63878	-.00123
#2	.00029	-.00022	1.6821	1.4649	5.0861	-.00121	2.1529	.63886	-.00063

Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Elem	Na8183	Ni2316	P_1782	Pb2203	S_1820	Sb2068	Se1960	Si2881	SiO2
Line	818.326 {41}	231.604 {446}	178.284 {489}	220.353 {453}	182.034 {485}	206.833 {463}	196.090 {472}	288.158 {117}	288.158 {117}2
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	53.007	.00070	W 2.1455	-.00088	2.8670	-.00750	F -.01192	4.0769	8.7246
Stddev	.572	.00044	.0563	.00091	.0714	.00624	.00114	.0131	.0281
%RSD	1.0785	63.163	2.6223	103.25	2.4912	83.275	9.5614	.32162	.32162

#1	53.412	.00039	2.1853	-.00152	2.9175	-.00308	-.01273	4.0862	8.7444
#2	52.603	.00101	2.1057	-.00024	2.8165	-.01191	-.01111	4.0676	8.7047

Check ?	Chk Pass	Chk Pass	Chk Warn	Chk Pass	Chk Pass	Chk Pass	Chk Fail	Chk Pass	Chk Pass
High Limit			2.0000				50.000		
Low Limit			-1.0000				-.01000		

Elem	Sn1899	Sr4077	Th2837	Ti3349	Ti1908	U_3701	V_2924	Zn2062	Zr3391
Line	189.989 {477}	407.771 {83}	283.730 {119}	334.904 {101}	190.856 {477}	370.152 {91}	292.402 {115}	206.200 {163}	339.198 {99}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	-.00192	.07296	-.00052	.00210	-.00209	.01308	.00070	.00722	.00463
Stddev	.00045	.00064	.00211	.00028	.00247	.00812	.00002	.00058	.00090
%RSD	23.317	.87355	405.80	13.574	118.34	62.057	3.1628	7.9874	19.496

#1	-.00160	.07341	.00097	.00230	-.00034	.00734	.00072	.00681	.00399
#2	-.00223	.07251	-.00201	.00190	-.00383	.01882	.00069	.00763	.00527

Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Int. Std.	Y_2243	Y_3600	Y_3774
Line	224.306 {450}	360.073 {94}	377.433 {89}
Units	Cts/S	Cts/S	Cts/S
Avg	2686.4	39653.	2029.1
Stddev	24.6	16.	28.6
%RSD	.91645	.04068	1.4098

#1	2669.0	39641.	2049.3
#2	2703.8	39664.	2008.9

Sample Name: 320-18796-C-4-A SD@5 Acquired: 5/17/2016 17:41:07 Type: Unk
Method: 6500_025(v6) Mode: CONC Corr. Factor: 1.000000
User: CRHOADES Prep Date: Custom ID2: Custom ID3:
Comment: 325382 6010C (Fe) Q5

Elem	Ag3280	Al1670	As1890	B_2089	Ba4554	Be3130	Bi2230	Ca3179	Cd2288
Line	328.068 {103}	167.079 {502}	189.042 {478}	208.959 {461}	455.403 {74}	313.042 {108}	223.061 {451}	317.933 {106}	228.802 {447}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.00176	.02283	.00484	.00679	.00155	.00011	-.00129	2.2087	.00030
Stddev	.00011	.00078	.00127	.00071	.00056	.00006	.00171	.0030	.00016
%RSD	6.0938	3.4057	26.151	10.417	36.057	56.720	132.27	.13495	53.472

#1	.00168	.02228	.00573	.00629	.00194	.00015	-.00250	2.2066	.00019
#2	.00184	.02338	.00394	.00729	.00115	.00006	-.00008	2.2108	.00041

Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Elem	Co2286	Cr2055	Cu3247	Fe2599	K_7664	Li6707	Mg2790	Mn2576	Mo2020
Line	228.616 {447}	205.560 {464}	324.754 {104}	259.940 {130}	766.490 {44}	670.784 {50}	279.079 {121}2	257.610 {131}	202.030 {467}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	-.00036	-.00068	.32896	.32806	.80382	-.00931	.42112	.12633	-.00128
Stddev	.00002	.00009	.00018	.00471	.07508	.00040	.00284	.00019	.00022
%RSD	5.6473	12.515	.05332	1.4346	9.3405	4.2978	.67398	.14679	17.519

#1	-.00037	-.00074	.32908	.33139	.75073	-.00959	.41911	.12620	-.00112
#2	-.00034	-.00062	.32884	.32473	.85691	-.00903	.42312	.12646	-.00144

Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Elem	Na5895	Na8183	Ni2316	P_1782	Pb2203	S_1820	Sb2068	Se1960	Si2881
Line	589.592 {57}	818.326 {41}	231.604 {446}	178.284 {489}	220.353 {453}	182.034 {485}	206.833 {463}	196.090 {472}	288.158 {117}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	9.4233	W 10.981	.00041	.40007	-.00234	.47847	-.00444	-.00282	.76321
Stddev	.0017	.132	.00051	.00702	.00051	.00247	.00173	.00460	.01136
%RSD	.01797	1.1998	125.34	1.7541	21.762	.51539	39.086	163.28	1.4890

#1	9.4245	10.888	.00077	.40504	-.00270	.48022	-.00321	.00044	.75517
#2	9.4221	11.074	.00005	.39511	-.00198	.47673	-.00566	-.00608	.77125

Check ?	Chk Pass	Chk Warn	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit		500.00							
Low Limit		11.000							

Elem	SiO2	Sn1899	Sr4077	Th2837	Ti3349	Ti1908	U_3701	V_2924	Zn2062
Line	288.158 {117}2	189.989 {477}	407.771 {83}	283.730 {119}	334.904 {101}	190.856 {477}	370.152 {91}	292.402 {115}	206.200 {163}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	1.6333	-.00278	.01426	-.00036	.00024	-.00307	-.00523	-.00010	.00454
Stddev	.0243	.00047	.00014	.00245	.00008	.00175	.02193	.00056	.00035
%RSD	1.4890	17.011	.96208	684.09	34.057	56.984	418.97	562.69	7.6486

#1	1.6161	-.00312	.01416	.00137	.00029	-.00430	-.02074	.00030	.00479
#2	1.6505	-.00245	.01435	-.00209	.00018	-.00183	.01027	-.00049	.00430

Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Elem	Zr3391								
Line	339.198 {99}								
Units	ppm								
Avg	-.00203								
Stddev	.00107								
%RSD	52.696								

#1	-.00127								
#2	-.00279								

Check ?	Chk Pass								
High Limit									
Low Limit									

Sample Name: 320-18796-C-4-A SD@5 Acquired: 5/17/2016 17:41:07 Type: Unk
Method: 6500_025(v6) Mode: CONC Corr. Factor: 1.000000
User: CRHOADES Prep Date: Custom ID2: Custom ID3:
Comment: 325382 6010C (Fe) Q5

Int. Std.	Y_2243	Y_3600	Y_3774
Line	224.306 {450}	360.073 { 94}	377.433 { 89}
Units	Cts/S	Cts/S	Cts/S
Avg	2711.8	39701.	2004.2
Stddev	39.9	239.	17.1
%RSD	1.4697	.60313	.85382
#1	2683.6	39871.	1992.1
#2	2740.0	39532.	2016.3

Sample Name: 320-18796-C-4-B MS Acquired: 5/17/2016 17:43:46 Type: Unk
Method: 6500_025(v6) Mode: CONC Corr. Factor: 1.000000
User: CRHOADES Prep Date: Custom ID2: Custom ID3:
Comment: 325382 6010C (Fe) Q5

Elem	Ag3280	Al1670	As1890	B_2089	Ba4554	Be3130	Bi2230	Ca3179	Cd2288
Line	328.068 {103}	167.079 {502}	189.042 {478}	208.959 {461}	455.403 {74}	313.042 {108}	223.061 {451}	317.933 {106}	228.802 {447}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.05175	2.0380	1.0204	1.0746	1.9609	.05058	F 2.0907	58.643	.10396
Stddev	.00063	.0004	.0053	.0022	.0045	.00032	.0141	.015	.00047
%RSD	1.2212	.01918	.52227	.20651	.23126	.62961	.67367	.02566	.44799

#1	.05220	2.0383	1.0241	1.0762	1.9641	.05036	2.1007	58.632	.10428
#2	.05130	2.0377	1.0166	1.0731	1.9577	.05081	2.0807	58.653	.10363

Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Fail	Chk Pass	Chk Pass
High Limit							.10000		
Low Limit							-.10000		

Elem	Co2286	Cr2055	Cu3247	Fe2599	K_7664	Li6707	Mg2790	Mn2576	Mo2020
Line	228.616 {447}	205.560 {464}	324.754 {104}	259.940 {130}	766.490 {44}	670.784 {50}	279.079 {121}2	257.610 {131}	202.030 {467}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.50695	.20608	1.9308	2.5683	53.987	.95609	51.076	1.1282	1.0562
Stddev	.00040	.00025	.0064	.0036	.138	.00173	.118	.0023	.0022
%RSD	.07936	.12297	.33185	.13840	.25633	.18105	.23159	.20173	.20467

#1	.50667	.20590	1.9353	2.5657	53.889	.95486	51.159	1.1298	1.0577
#2	.50724	.20626	1.9262	2.5708	54.085	.95731	50.992	1.1266	1.0546

Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Elem	Na8183	Ni2316	P_1782	Pb2203	S_1820	Sb2068	Se1960	Si2881	SiO2
Line	818.326 {41}	231.604 {446}	178.284 {489}	220.353 {453}	182.034 {485}	206.833 {463}	196.090 {472}	288.158 {117}	288.158 {117}2
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	110.16	.49685	W 12.743	.50655	5.1436	.54950	2.0874	14.063	30.096
Stddev	.23	.00040	.024	.00019	.0036	.00416	.0151	.049	.105
%RSD	.20989	.07979	.18711	.03702	.06963	.75684	.72502	.34786	.34786

#1	109.99	.49713	12.759	.50642	5.1411	.55244	2.0767	14.029	30.022
#2	110.32	.49657	12.726	.50669	5.1462	.54656	2.0981	14.098	30.170

Check ?	Chk Pass	Chk Pass	Chk Warn	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit			2.0000						
Low Limit			-1.0000						

Elem	Sn1899	Sr4077	Th2837	Ti3349	Ti1908	U_3701	V_2924	Zn2062	Zr3391
Line	189.989 {477}	407.771 {83}	283.730 {119}	334.904 {101}	190.856 {477}	370.152 {91}	292.402 {115}	206.200 {163}	339.198 {99}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	W 2.0637	1.0523	.98514	.97473	1.7186	2.0011	.48732	.47501	.45213
Stddev	.0190	.0028	.00254	.00084	.0660	.0091	.00299	.00491	.00494
%RSD	.92253	.26428	.25774	.08596	3.8390	.45575	.61268	1.0340	1.0919

#1	2.0503	1.0542	.98693	.97532	1.7653	2.0076	.48943	.47154	.44864
#2	2.0772	1.0503	.98334	.97414	1.6720	1.9947	.48520	.47848	.45562

Check ?	Chk Warn	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit	2.0000								
Low Limit	-.05000								

Int. Std.	Y_2243	Y_3600	Y_3774
Line	224.306 {450}	360.073 {94}	377.433 {89}
Units	Cts/S	Cts/S	Cts/S
Avg	2650.3	38782.	1983.8
Stddev	10.5	144.	34.8
%RSD	.39615	.37077	1.7544

#1	2657.7	38681.	2008.4
#2	2642.9	38884.	1959.2

Sample Name: 320-18796-C-4-C MSD Acquired: 5/17/2016 17:46:10 Type: Unk
Method: 6500_025(v6) Mode: CONC Corr. Factor: 1.000000
User: CRHOADES Prep Date: Custom ID2: Custom ID3:
Comment: 325382 6010C (Fe) Q5

Elem	Ag3280	Al1670	As1890	B_2089	Ba4554	Be3130	Bi2230	Ca3179	Cd2288
Line	328.068 {103}	167.079 {502}	189.042 {478}	208.959 {461}	455.403 {74}	313.042 {108}	223.061 {451}	317.933 {106}	228.802 {447}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.05124	2.0370	1.0293	1.0848	1.9517	.04993	F 2.0998	58.411	.10383
Stddev	.00028	.0036	.0001	.0011	.0558	.00132	.0125	1.806	.00010
%RSD	.55129	.17637	.01210	.10335	2.8583	2.6531	.59430	3.0921	.09703

#1	.05144	2.0395	1.0292	1.0840	1.9911	.05086	2.1086	59.688	.10376
#2	.05104	2.0344	1.0293	1.0856	1.9122	.04899	2.0910	57.134	.10390

Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Fail	Chk Pass	Chk Pass
High Limit							.10000		
Low Limit							-.10000		

Elem	Co2286	Cr2055	Cu3247	Fe2599	K_7664	Li6707	Mg2790	Mn2576	Mo2020
Line	228.616 {447}	205.560 {464}	324.754 {104}	259.940 {130}	766.490 {44}	670.784 {50}	279.079 {121}2	257.610 {131}	202.030 {467}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.50632	.20534	1.9503	2.5069	53.746	.95420	51.339	1.1390	1.0595
Stddev	.00106	.00045	.0023	.0449	1.503	.00212	.020	.0017	.0065
%RSD	.20979	.21932	.11752	1.7915	2.7964	.22241	.03817	.15194	.61317

#1	.50707	.20566	1.9487	2.5387	54.809	.95270	51.352	1.1402	1.0641
#2	.50557	.20502	1.9519	2.4752	52.683	.95570	51.325	1.1378	1.0550

Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Elem	Na8183	Ni2316	P_1782	Pb2203	S_1820	Sb2068	Se1960	Si2881	SiO2
Line	818.326 {41}	231.604 {446}	178.284 {489}	220.353 {453}	182.034 {485}	206.833 {463}	196.090 {472}	288.158 {117}	288.158 {117}2
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	111.85	.49654	W 12.828	.50836	5.2183	.54646	2.1213	14.194	30.376
Stddev	1.95	.00215	.035	.00128	.0067	.00340	.0173	.043	.092
%RSD	1.7421	.43299	.26985	.25150	.12801	.62276	.81615	.30281	.30281

#1	113.23	.49806	12.852	.50926	5.2230	.54887	2.1336	14.225	30.441
#2	110.47	.49502	12.803	.50745	5.2136	.54405	2.1091	14.164	30.311

Check ?	Chk Pass	Chk Pass	Chk Warn	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit			2.0000						
Low Limit			-1.0000						

Elem	Sn1899	Sr4077	Th2837	Ti3349	Ti1908	U_3701	V_2924	Zn2062	Zr3391
Line	189.989 {477}	407.771 {83}	283.730 {119}	334.904 {101}	190.856 {477}	370.152 {91}	292.402 {115}	206.200 {163}	339.198 {99}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	W 2.0711	1.0500	.99059	.97380	1.7603	2.0326	.48812	.47246	.45199
Stddev	.0136	.0308	.00040	.00015	.0673	.0186	.00041	.00034	.00744
%RSD	.65424	2.9289	.04041	.01543	3.8209	.91392	.08306	.07240	1.6451

#1	2.0807	1.0718	.99088	.97390	1.8078	2.0194	.48841	.47222	.44674
#2	2.0615	1.0283	.99031	.97369	1.7127	2.0457	.48783	.47270	.45725

Check ?	Chk Warn	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit	2.0000								
Low Limit	-.05000								

Int. Std.	Y_2243	Y_3600	Y_3774
Line	224.306 {450}	360.073 {94}	377.433 {89}
Units	Cts/S	Cts/S	Cts/S
Avg	2680.1	38660.	2059.1
Stddev	7.7	474.	51.2
%RSD	.28773	1.2270	2.4843

#1	2674.7	38324.	2022.9
#2	2685.6	38995.	2095.3

Sample Name: 320-18796-C-4-A PDS Acquired: 5/17/2016 17:48:34 Type: Unk
Method: 6500_025(v6) Mode: CONC Corr. Factor: 1.000000
User: CRHOADES Prep Date: Custom ID2: Custom ID3:
Comment: 325382 6010C (Fe) Q5

Elem	Ag3280	Al1670	As1890	B_2089	Ba4554	Be3130	Bi2230	Ca3179	Cd2288
Line	328.068 {103}	167.079 {502}	189.042 {478}	208.959 {461}	455.403 {74}	313.042 {108}	223.061 {451}	317.933 {106}	228.802 {447}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.04407	1.0500	.19951	.13756	.10957	.04777	.00130	28.609	.05116
Stddev	.00048	.0027	.00000	.00172	.00378	.00147	.00223	1.115	.00001
%RSD	1.0833	.25476	.00239	1.2532	3.4533	3.0733	170.93	3.8963	.01997

#1	.04373	1.0519	.19951	.13878	.11224	.04881	.00288	29.397	.05116
#2	.04440	1.0481	.19951	.13634	.10689	.04673	-.00027	27.821	.05117

Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Elem	Co2286	Cr2055	Cu3247	Fe2599	K_7664	Li6707	Mg2790	Mn2576	Mo2020
Line	228.616 {447}	205.560 {464}	324.754 {104}	259.940 {130}	766.490 {44}	670.784 {50}	279.079 {121}2	257.610 {131}	202.030 {467}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.04949	.05122	1.6599	2.4263	23.949	.08465	20.703	.66839	.05682
Stddev	.00016	.00000	.0062	.0514	.311	.00259	.008	.00050	.00109
%RSD	.32718	.00178	.37155	2.1165	1.3006	3.0572	.03662	.07409	1.9122

#1	.04938	.05122	1.6556	2.4626	24.170	.08648	20.697	.66804	.05605
#2	.04961	.05122	1.6643	2.3900	23.729	.08282	20.708	.66874	.05759

Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Elem	Na8183	Ni2316	P_1782	Pb2203	S_1820	Sb2068	Se1960	Si2881	SiO2
Line	818.326 {41}	231.604 {446}	178.284 {489}	220.353 {453}	182.034 {485}	206.833 {463}	196.090 {472}	288.158 {117}	288.158 {117}2
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	73.699	.05124	W 4.3446	.10488	2.9933	.10610	.21207	8.7801	18.789
Stddev	.258	.00016	.0285	.00183	.0405	.00306	.00179	.0186	.040
%RSD	.34941	.30783	.65558	1.7468	1.3539	2.8871	.84309	.21167	.21167

#1	73.517	.05135	4.3245	.10358	2.9647	.10393	.21080	8.7669	18.761
#2	73.881	.05113	4.3648	.10617	3.0220	.10827	.21333	8.7932	18.817

Check ?	Chk Pass	Chk Pass	Chk Warn	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit			2.0000						
Low Limit			-1.0000						

Elem	Sn1899	Sr4077	Th2837	Ti3349	Ti1908	U_3701	V_2924	Zn2062	Zr3391
Line	189.989 {477}	407.771 {83}	283.730 {119}	334.904 {101}	190.856 {477}	370.152 {91}	292.402 {115}	206.200 {163}	339.198 {99}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.10263	.12115	.19162	.04903	.24283	.53179	.04879	.19783	.04061
Stddev	.00060	.00067	.00274	.00115	.01066	.01071	.00029	.00005	.00418
%RSD	.58118	.55088	1.4278	2.3458	4.3879	2.0134	.60004	.02352	10.297

#1	.10305	.12068	.19355	.04822	.23529	.52422	.04900	.19780	.03765
#2	.10221	.12162	.18968	.04985	.25036	.53936	.04858	.19786	.04356

Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Int. Std.	Y_2243	Y_3600	Y_3774
Line	224.306 {450}	360.073 {94}	377.433 {89}
Units	Cts/S	Cts/S	Cts/S
Avg	2712.6	39519.	2076.9
Stddev	3.6	40.	75.7
%RSD	.13419	.10146	3.6469

#1	2715.2	39547.	2023.3
#2	2710.0	39491.	2130.4

Sample Name: CCVH-3883905 Acquired: 5/17/2016 17:51:07 Type: QC
Method: 6500_025(v6) Mode: CONC Corr. Factor: 1.000000
User: CRHOADES Prep Date: Custom ID2: Custom ID3:
Comment:

Elem	Ag3280	Al3092	As1890	B_2089	Ba4554	Be3130	Bi2230	Ca3179	Cd2288	Co2286	Cr2055
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	-.00444	49.269	-.00209	.00673	-.00158	.00024	.99876	.00095	.00001	-.00138	-.00021
Stddev	.00019	.947	.00616	.00049	.00029	.00003	.00571	.00041	.00008	.00021	.00027
%RSD	4.2517	1.9230	294.79	7.2422	18.166	10.807	.57127	42.713	993.80	15.412	126.92

#1	-.00431	49.939	-.00645	.00707	-.00179	.00022	1.0028	.00123	.00007	-.00123	-.00040
#2	-.00457	48.599	.00227	.00638	-.00138	.00025	.99473	.00066	-.00005	-.00153	-.00002

Check ?	None	Chk Pass	None	None	None	None	Chk Pass	None	None	None	None
Value											
Range											

Elem	Cu3247	Fe2714	K_7664	Li6707	Mg2790	Mn2576	Mo2020	Na8183	Ni2316	P_1782	Pb2203
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	-.01306	51.392	-.14841	-.00599	.01783	-.00201	-.00061	257.09	.00089	.00847	-.00066
Stddev	.00038	1.143	.05909	.00009	.00632	.00011	.00011	2.11	.00030	.00404	.00074
%RSD	2.8741	2.2235	39.814	1.5232	35.464	5.3800	17.873	.81978	33.548	47.613	111.96

#1	-.01280	52.200	-.19019	-.00606	.01336	-.00209	-.00053	258.58	.00068	.01133	-.00014
#2	-.01333	50.584	-.10663	-.00593	.02230	-.00194	-.00069	255.60	.00110	.00562	-.00119

Check ?	None	Chk Pass	None	None	None	None	None	Chk Pass	None	None	None
Value											
Range											

Elem	S_1820	Sb2068	Se1960	Si2881	SiO2	Sn1899	Sr4077	Th2837	Ti3349	Ti1908	U_3701
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	5.1301	-.01372	-.00608	-.04500	-.09629	-.00062	.00044	W 4.7253	-.00016	.00877	9.7136
Stddev	.1331	.00163	.00087	.01621	.03470	.00018	.00002	.0068	.00020	.00047	.1286
%RSD	2.5944	11.841	14.311	36.036	36.036	28.229	4.2915	.14410	126.74	5.3192	1.3237

#1	5.2242	-.01257	-.00547	-.03353	-.07176	-.00075	.00043	4.7301	-.00030	.00910	9.8045
#2	5.0359	-.01487	-.00670	-.05646	-.12083	-.00050	.00046	4.7204	-.00002	.00844	9.6226

Check ?	Chk Pass	None	None	None	None	None	None	Chk Warn	None	None	Chk Pass
Value								5.0000			
Range								-5.0000%			

Elem	V_2924	Zn2062	Zr3391
Units	ppm	ppm	ppm
Avg	.01247	.00081	-.13701
Stddev	.00018	.00028	.00071
%RSD	1.4626	34.771	.51559

#1	.01234	.00102	-.13751
#2	.01260	.00061	-.13651

Check ?	None	None	None
Value			
Range			

Int. Std.	Y_2243	Y_3600	Y_3774
Units	Cts/S	Cts/S	Cts/S
Avg	2634.9	38219.	2027.1
Stddev	2.3	32.	38.2
%RSD	.08710	.08447	1.8836

#1	2633.3	38197.	2000.1
#2	2636.5	38242.	2054.1

Sample Name: CCV-3888422 Acquired: 5/17/2016 17:53:43 Type: QC
Method: 6500_025(v6) Mode: CONC Corr. Factor: 1.000000
User: CRHOADES Prep Date: Custom ID2: Custom ID3:
Comment:

Elem	Ag3280	Al1670	As1890	B_2089	Ba4554	Be3130	Bi2230	Ca3179	Cd2288	Co2286	Cr2055	Cu3247	Fe2599
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.48636	.48795	.95302	.49304	.46922	.47924	-.00373	4.6775	.49392	.50039	.50320	.47163	2.4209
Stddev	.00307	.00023	.01228	.00920	.01090	.01217	.00143	.1123	.00073	.00945	.01156	.00213	.0394
%RSD	.63139	.04812	1.2886	1.8663	2.3222	2.5404	38.446	2.4009	.14789	1.8878	2.2982	.45192	1.6264

#1	.48418	.48779	.94433	.48653	.46151	.47063	-.00272	4.5981	.49341	.49371	.49502	.47013	2.3931
#2	.48853	.48812	.96170	.49955	.47692	.48785	-.00474	4.7570	.49444	.50707	.51138	.47314	2.4488

Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	None	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Value													
Range													

Elem	K_7664	Li6707	Mg2790	Mn2576	Mo2020	Na5895	Ni2316	P_1782	Pb2203	S_1820	Sb2068	Se1960	Si2881
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	47.170	.93809	18.948	.46789	.49173	5.0089	.48874	.98177	.99874	-.03883	.99423	.96765	4.7796
Stddev	1.157	.00815	.028	.00032	.00994	.0247	.01042	.02547	.02787	.00180	.03242	.05926	.0254
%RSD	2.4536	.86931	.15007	.06855	2.0208	.49239	2.1316	2.5948	2.7902	4.6319	3.2608	6.1244	.53102

#1	46.352	.93233	18.928	.46766	.48470	4.9914	.48137	.96376	.97904	-.03756	.97130	.92574	4.7616
#2	47.989	.94386	18.969	.46811	.49875	5.0263	.49611	.99979	1.0184	-.04010	1.0172	1.0096	4.7975

Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	None	Chk Pass	Chk Pass	Chk Pass
Value													
Range													

Elem	SiO2	Sn1899	Sr4077	Th2837	Ti3349	Ti1908	U_3701	V_2924	Zn2062	Zr3391
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	10.228	1.0179	.48003	-.00107	.46345	1.0261	.03911	.47811	.45669	.46838
Stddev	.054	.0567	.01063	.00182	.00185	.0611	.01823	.00416	.00112	.00222
%RSD	.53102	5.5704	2.2135	170.15	.40012	5.9516	46.615	.86955	.24611	.47360

#1	10.190	.97780	.47252	-.00236	.46214	.98289	.05200	.47517	.45589	.46681
#2	10.267	1.0580	.48755	.00022	.46476	1.0692	.02622	.48105	.45748	.46995

Check ?	Chk Pass	Chk Pass	Chk Pass	None	Chk Pass	Chk Pass	None	Chk Pass	Chk Pass	Chk Pass
Value										
Range										

Int. Std.	Y_2243	Y_3600	Y_3774
Units	Cts/S	Cts/S	Cts/S
Avg	2664.8	38586.	1958.6
Stddev	5.4	441.	114.9
%RSD	.20435	1.1418	5.8653

#1	2661.0	38274.	2039.8
#2	2668.7	38897.	1877.3

Sample Name: CCB Acquired: 5/17/2016 17:56:15 Type: QC
Method: 6500_025(v6) Mode: CONC Corr. Factor: 1.000000
User: CRHOADES Prep Date: Custom ID2: Custom ID3:
Comment:

Elem	Ag3280	Al1670	As1890	B_2089	Ba4554	Be3130	Bi2230	Ca3179	Cd2288	Co2286	Cr2055
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.00143	.00079	.00724	.00296	-.00193	.00039	-.00495	.01043	-.00005	.00007	-.00024
Stddev	.00018	.00040	.00478	.00159	.00020	.00008	.00286	.00972	.00004	.00013	.00015
%RSD	12.649	51.340	66.046	53.874	10.412	19.769	57.865	93.134	72.057	191.13	61.029

#1	.00130	.00107	.00386	.00408	-.00208	.00033	-.00292	.01730	-.00008	-.00002	-.00034
#2	.00156	.00050	.01063	.00183	-.00179	.00044	-.00698	.00356	-.00002	.00015	-.00014

Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit											
Low Limit											

Elem	Cu3247	Fe2599	K_7664	Li6707	Mg2790	Mn2576	Mo2020	Na5895	Ni2316	P_1782	Pb2203
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.00007	.02718	-.16862	F -.01051	-.00930	.00014	.00187	.00592	.00042	.00325	-.00007
Stddev	.00035	.00118	.00957	.00046	.00300	.00015	.00079	.02172	.00013	.00540	.00155
%RSD	520.48	4.3405	5.6771	4.3944	32.281	103.75	42.506	366.58	31.322	165.86	2217.9

#1	.00031	.02635	-.17539	-.01019	-.00718	.00004	.00131	-.00943	.00033	.00707	.00103
#2	-.00018	.02801	-.16185	-.01084	-.01142	.00025	.00243	.02128	.00052	-.00056	-.00117

Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Fail	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit				.01000							
Low Limit				-.01000							

Elem	S_1820	Sb2068	Se1960	Si2881	SiO2	Sn1899	Sr4077	Th2837	Ti3349	Ti1908	U_3701
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	-.07032	W .00537	-.00323	-.02385	-.05103	-.00185	-.00005	.00027	.00055	.00496	.05535
Stddev	.00161	.00047	.00696	.01253	.02682	.00283	.00004	.00254	.00015	.00289	.02918
%RSD	2.2935	8.7986	215.53	52.552	52.552	152.99	72.921	948.61	26.621	58.210	52.720

#1	-.07146	.00570	-.00815	-.03271	-.06999	.00015	-.00002	.00206	.00045	.00292	.03471
#2	-.06918	.00503	.00169	-.01498	-.03207	-.00385	-.00008	-.00153	.00065	.00700	.07598

Check ?	Chk Pass	Chk Warn	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit		.00100									
Low Limit		-.00100									

Elem	V_2924	Zn2062	Zr3391
Units	ppm	ppm	ppm
Avg	.00051	-.00063	-.00335
Stddev	.00000	.00046	.00251
%RSD	.37062	73.467	74.964

#1	.00051	-.00096	-.00512
#2	.00051	-.00030	-.00157

Check ?	Chk Pass	Chk Pass	Chk Pass
High Limit			
Low Limit			

Int. Std.	Y_2243	Y_3600	Y_3774
Units	Cts/S	Cts/S	Cts/S
Avg	2670.6	39249.	2018.3
Stddev	37.2	245.	1.4
%RSD	1.3919	.62439	.06897

#1	2696.9	39422.	2019.3
#2	2644.3	39076.	2017.3

Sample Name: CCVL-3894681 Acquired: 5/17/2016 17:58:37 Type: QC
Method: 6500_025(v6) Mode: CONC Corr. Factor: 1.000000
User: CRHOADES Prep Date: Custom ID2: Custom ID3:
Comment:

Elem	Ag3280	Al1670	As1890	B_2089	Ba4554	Be3130	Bi2230	Ca3179	Cd2288	Co2286	Cr2055	Cu3247
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.01046	.09834	.01944	.09747	.00721	.00099	.10105	.18682	.00497	.00960	.00942	.01401
Stddev	.00008	.00017	.00318	.00272	.00091	.00003	.00156	.00921	.00001	.00006	.00040	.00007
%RSD	.77004	.16881	16.380	2.7862	12.575	2.6550	1.5411	4.9312	.11171	.66864	4.2375	.49811
#1	.01052	.09845	.02170	.09939	.00785	.00097	.10215	.18030	.00496	.00964	.00914	.01396
#2	.01041	.09822	.01719	.09555	.00657	.00101	.09995	.19333	.00497	.00955	.00971	.01406
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Value												
Range												
Elem	Fe2599	K_7664	Li6707	Mg2790	Mn2576	Mo2020	Na5895	Ni2316	P_1782	Pb2203	S_1820	Sb2068
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.10504	2.6706	F .00266	.18560	.00943	.01886	.95166	.03926	2.7892	.01025	-.08371	.02239
Stddev	.00114	.0295	.00038	.00498	.00011	.00034	.01182	.00035	.0622	.00173	.00423	.00024
%RSD	1.0863	1.1037	14.123	2.6855	1.1791	1.8194	1.2425	.88914	2.2302	16.862	5.0581	1.0761
#1	.10423	2.6914	.00293	.18913	.00935	.01862	.96002	.03951	2.8332	.01147	-.08072	.02222
#2	.10584	2.6497	.00240	.18208	.00951	.01911	.94330	.03902	2.7453	.00903	-.08670	.02256
Check ?	Chk Pass	Chk Pass	Chk Fail	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	None	Chk Pass
Value			.01000									
Range			-30.000%									
Elem	Se1960	Si2881	SiO2	Sn1899	Sr4077	Th2837	Ti3349	Ti1908	U_3701	V_2924	Zn2062	Zr3391
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	F .00757	.45322	.96989	.09681	.00961	.01732	.00982	.01087	F .11062	.00903	.01871	.01302
Stddev	.00379	.00730	.01562	.00278	.00013	.00202	.00002	.00142	.00967	.00002	.00056	.00243
%RSD	50.043	1.6107	1.6107	2.8725	1.3674	11.667	.23247	13.064	8.7427	.26029	3.0183	18.680
#1	.00489	.44806	.95884	.09877	.00971	.01589	.00980	.01187	.10378	.00901	.01831	.01130
#2	.01024	.45838	.98094	.09484	.00952	.01875	.00984	.00986	.11746	.00905	.01911	.01474
Check ?	Chk Fail	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Fail	Chk Pass	Chk Pass	Chk Pass
Value	.01500								.06000			
Range	-30.000%								30.000%			
Int. Std.	Y_2243	Y_3600	Y_3774									
Units	Cts/S	Cts/S	Cts/S									
Avg	2681.2	39529.	1981.8									
Stddev	.8	69.	52.5									
%RSD	.03013	.17461	2.6500									
#1	2681.8	39480.	1944.7									
#2	2680.6	39578.	2019.0									

Sample Name: MB 280-325380/1-A Acquired: 5/17/2016 18:01:16 Type: Unk

Method: 6500_025(v6) Mode: CONC Corr. Factor: 1.000000

User: CRHOADES Prep Date: 5/17 Custom ID2: Custom ID3:

Comment: 325380 6010C Q5

Elem	Ag3280	Al1670	As1890	B_2089	Ba4554	Be3130	Bi2230	Ca3179	Cd2288
Line	328.068 {103}	167.079 {502}	189.042 {478}	208.959 {461}	455.403 { 74}	313.042 {108}	223.061 {451}	317.933 {106}	228.802 {447}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.00164	.00210	.00067	.00170	-.00192	-.00008	-.00088	.01261	.00013
Stddev	.00019	.00053	.00216	.00060	.00045	.00027	.00377	.00117	.00011
%RSD	11.721	25.301	324.00	35.320	23.220	338.48	428.09	9.2875	84.143

#1	.00151	.00172	.00219	.00212	-.00160	-.00027	.00179	.01344	.00005
#2	.00178	.00247	-.00086	.00127	-.00223	.00011	-.00355	.01178	.00021

Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Elem	Co2286	Cr2055	Cu3247	Fe2599	K_7664	Li6707	Mg2790	Mn2576	Mo2020
Line	228.616 {447}	205.560 {464}	324.754 {104}	259.940 {130}	766.490 { 44}	670.784 { 50}	279.079 {121}2	257.610 {131}	202.030 {467}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	-.00068	-.00034	-.00040	.01053	-.27575	F -.01095	-.00502	.00010	-.00057
Stddev	.00011	.00001	.00048	.00193	.07967	.00156	.00192	.00002	.00033
%RSD	16.003	1.5186	119.98	18.376	28.890	14.288	38.243	18.452	58.466

#1	-.00076	-.00034	-.00074	.01190	-.33208	-.01205	-.00638	.00011	-.00033
#2	-.00061	-.00034	-.00006	.00916	-.21942	-.00984	-.00366	.00008	-.00080

Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Fail	Chk Pass	Chk Pass	Chk Pass
High Limit						.01000			
Low Limit						-.01000			

Elem	Na5895	Ni2316	P_1782	Pb2203	S_1820	Sb2068	Se1960	Si2881	SiO2
Line	589.592 { 57}	231.604 {446}	178.284 {489}	220.353 {453}	182.034 {485}	206.833 {463}	196.090 {472}	288.158 {117}	288.158 {117}2
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	-.03880	.00074	.00276	-.00099	W -.07736	W -.00692	-.00385	-.03518	-.07527
Stddev	.01949	.00020	.00047	.00014	.00040	.00083	.00395	.00831	.01778
%RSD	50.224	27.803	17.059	14.636	.51633	11.932	102.69	23.622	23.622

#1	-.05258	.00088	.00243	-.00089	-.07707	-.00751	-.00664	-.02930	-.06270
#2	-.02502	.00059	.00310	-.00109	-.07764	-.00634	-.00105	-.04105	-.08785

Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Warn	Chk Warn	Chk Pass	Chk Pass	None
High Limit					.05000	.00500			
Low Limit					-.05000	-.00500			

Elem	Sn1899	Sr4077	Th2837	Ti3349	Ti1908	U_3701	V_2924	Zn2062	Zr3391
Line	189.989 {477}	407.771 { 83}	283.730 {119}	334.904 {101}	190.856 {477}	370.152 { 91}	292.402 {115}	206.200 {163}	339.198 { 99}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	-.00262	-.00008	-.00070	.00069	-.00157	.02604	.00009	.00048	-.00142
Stddev	.00039	.00008	.00038	.00057	.00088	.01272	.00039	.00014	.00001
%RSD	14.782	100.42	53.824	82.373	56.262	48.853	450.14	28.609	.36245

#1	-.00289	-.00002	-.00097	.00109	-.00094	.03504	.00037	.00058	-.00141
#2	-.00234	-.00013	-.00043	.00029	-.00219	.01705	-.00019	.00039	-.00142

Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Int. Std.	Y_2243	Y_3600	Y_3774						
Line	224.306 {450}	360.073 { 94}	377.433 { 89}						
Units	Cts/S	Cts/S	Cts/S						
Avg	2718.7	39915.	1969.4						
Stddev	10.3	61.	8.1						
%RSD	.37870	.15346	.41116						

#1	2711.5	39958.	1975.2						
#2	2726.0	39872.	1963.7						

Sample Name: LCS 280-325380/2-A Acquired: 5/17/2016 18:03:39 Type: Unk
Method: 6500_025(v6) Mode: CONC Corr. Factor: 1.000000
User: CRHOADES Prep Date: Custom ID2: Custom ID3:
Comment: 325380 6010C Q5

Elem	Ag3280	Al1670	As1890	B_2089	Ba4554	Be3130	Bi2230	Ca3179	Cd2288
Line	328.068 {103}	167.079 {502}	189.042 {478}	208.959 {461}	455.403 { 74}	313.042 {108}	223.061 {451}	317.933 {106}	228.802 {447}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.04910	1.8827	.97244	.98879	1.8349	.04712	2.0302	F 44.583	.10036
Stddev	.00076	.0021	.00628	.00428	.0065	.00033	.0127	.144	.00053
%RSD	1.5407	.11196	.64565	.43328	.35607	.69759	.62521	.32410	.52820

#1	.04964	1.8812	.96800	.98576	1.8396	.04735	2.0392	44.685	.10074
#2	.04857	1.8842	.97688	.99182	1.8303	.04688	2.0212	44.481	.09999

Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	None	Chk Fail	Chk Pass
High Limit								55.500	
Low Limit								44.750	

Elem	Co2286	Cr2055	Cu3247	Fe2599	K_7664	Li6707	Mg2790	Mn2576	Mo2020
Line	228.616 {447}	205.560 {464}	324.754 {104}	259.940 {130}	766.490 { 44}	670.784 { 50}	279.079 {121}2	257.610 {131}	202.030 {467}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.48950	.20076	.23154	.94781	46.030	.92097	47.558	.46264	1.0224
Stddev	.00067	.00001	.00015	.00438	.088	.00311	.159	.00138	.0033
%RSD	.13732	.00318	.06654	.46239	.19128	.33730	.33467	.29825	.32232

#1	.48902	.20077	.23164	.94471	46.092	.91877	47.671	.46362	1.0247
#2	.48997	.20076	.23143	.95091	45.968	.92317	47.446	.46167	1.0201

Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Elem	Na8183	Ni2316	P_1782	Pb2203	S_1820	Sb2068	Se1960	Si2881	SiO2
Line	818.326 { 41}	231.604 {446}	178.284 {489}	220.353 {453}	182.034 {485}	206.833 {463}	196.090 {472}	288.158 {117}	288.158 {117}2
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	54.244	.48034	10.062	.49901	1.9838	.51412	2.0052	9.3411	19.990
Stddev	.773	.00131	.014	.00240	.0034	.00718	.0210	.0846	.181
%RSD	1.4245	.27176	.14004	.48084	.17124	1.3969	1.0476	.90556	.90556

#1	54.790	.48126	10.072	.49732	1.9814	.50904	1.9903	9.4010	20.118
#2	53.697	.47941	10.052	.50071	1.9862	.51920	2.0200	9.2813	19.862

Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	None	Chk Pass	Chk Pass	Chk Pass	None
High Limit									
Low Limit									

Elem	Sn1899	Sr4077	Th2837	Ti3349	Ti1908	U_3701	V_2924	Zn2062	Zr3391
Line	189.989 {477}	407.771 { 83}	283.730 {119}	334.904 {101}	190.856 {477}	370.152 { 91}	292.402 {115}	206.200 {163}	339.198 { 99}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	2.0031	.92657	.97253	.93419	1.8520	1.9607	.47294	.45018	.45050
Stddev	.0359	.00454	.00005	.00298	.0147	.0300	.00232	.00070	.00594
%RSD	1.7935	.49036	.00480	.31911	.79321	1.5322	.49067	.15452	1.3192

#1	1.9777	.92979	.97256	.93630	1.8624	1.9819	.47458	.44969	.45470
#2	2.0285	.92336	.97249	.93208	1.8416	1.9394	.47130	.45067	.44630

Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Int. Std.	Y_2243	Y_3600	Y_3774
Line	224.306 {450}	360.073 { 94}	377.433 { 89}
Units	Cts/S	Cts/S	Cts/S
Avg	2610.6	38907.	2093.8
Stddev	.1	135.	1.7
%RSD	.00515	.34603	.08173

#1	2610.7	38812.	2095.0
#2	2610.5	39002.	2092.6

Sample Name: 320-18794-E-1-A Acquired: 5/17/2016 18:06:05 Type: Unk

Method: 6500_025(v6) Mode: CONC Corr. Factor: 1.000000

User: CRHOADES Prep Date: Custom ID2: Custom ID3:

Comment: 325380 6010C Q5

Elem	Ag3280	Al1670	As1890	B_2089	Ba4554	Be3130	Bi2230	Ca3179	Cd2288
Line	328.068 {103}	167.079 {502}	189.042 {478}	208.959 {461}	455.403 { 74}	313.042 {108}	223.061 {451}	317.933 {106}	228.802 {447}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.00114	.00936	.00845	.07285	.03351	-.00003	-.00525	41.360	.00023
Stddev	.00003	.00054	.00461	.00022	.00056	.00003	.00399	1.393	.00042
%RSD	2.5591	5.7605	54.587	.30087	1.6852	107.15	75.950	3.3684	187.41

#1	.00112	.00974	.01170	.07301	.03391	-.00005	-.00243	42.345	-.00007
#2	.00116	.00898	.00519	.07270	.03311	-.00001	-.00807	40.374	.00053

Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Elem	Co2286	Cr2055	Cu3247	Fe2599	K_7664	Li6707	Mg2790	Mn2576	Mo2020
Line	228.616 {447}	205.560 {464}	324.754 {104}	259.940 {130}	766.490 { 44}	670.784 { 50}	279.079 {121}2	257.610 {131}	202.030 {467}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	-.00010	-.00019	.00137	5.5114	4.9030	.00179	7.4917	.18356	.00228
Stddev	.00012	.00047	.00022	.0984	.0459	.00531	.0183	.00037	.00067
%RSD	124.17	244.60	16.114	1.7857	.93618	296.79	.24392	.19949	29.545

#1	-.00001	.00014	.00153	5.5810	4.9354	-.00197	7.5046	.18330	.00181
#2	-.00019	-.00052	.00122	5.4418	4.8705	.00554	7.4788	.18382	.00276

Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Elem	Na8183	Ni2316	P_1782	Pb2203	S_1820	Sb2068	Se1960	Si2881	SiO2
Line	818.326 { 41}	231.604 {446}	178.284 {489}	220.353 {453}	182.034 {485}	206.833 {463}	196.090 {472}	288.158 {117}	288.158 {117}2
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	36.319	.00390	.48911	-.00005	.68403	-.00662	-.00040	16.567	35.453
Stddev	.290	.00012	.02913	.00163	.04922	.00201	.00103	.051	.110
%RSD	.79742	3.1187	5.9563	3063.8	7.1963	30.336	254.25	.31029	.31029

#1	36.524	.00398	.50971	.00110	.71883	-.00520	.00032	16.603	35.531
#2	36.114	.00381	.46851	-.00121	.64922	-.00804	-.00113	16.530	35.375

Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Elem	Sn1899	Sr4077	Th2837	Ti3349	Ti1908	U_3701	V_2924	Zn2062	Zr3391
Line	189.989 {477}	407.771 { 83}	283.730 {119}	334.904 {101}	190.856 {477}	370.152 { 91}	292.402 {115}	206.200 {163}	339.198 { 99}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	-.00225	.30062	.00172	.00121	.04926	.00931	.00065	.00170	.00290
Stddev	.00169	.00961	.00046	.00126	.00478	.06252	.00036	.00076	.00042
%RSD	75.121	3.1954	26.612	103.76	9.7126	671.51	55.214	44.650	14.324

#1	-.00344	.30742	.00205	.00211	.04588	.05352	.00091	.00223	.00319
#2	-.00105	.29383	.00140	.00032	.05264	-.03490	.00040	.00116	.00261

Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Int. Std.	Y_2243	Y_3600	Y_3774
Line	224.306 {450}	360.073 { 94}	377.433 { 89}
Units	Cts/S	Cts/S	Cts/S
Avg	2670.2	39065.	1976.3
Stddev	9.7	98.	55.0
%RSD	.36291	.25047	2.7846

#1	2663.4	38996.	1937.4
#2	2677.1	39135.	2015.2

Elem	Ag3280	Al1670	As1890	B_2089	Ba4554	Be3130	Bi2230	Ca3179	Cd2288
Line	328.068 {103}	167.079 {502}	189.042 {478}	208.959 {461}	455.403 { 74}	313.042 {108}	223.061 {451}	317.933 {106}	228.802 {447}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.00213	.09449	.00758	.03220	.01388	.00006	-.00212	9.9594	.00026
Stddev	.00010	.00106	.00639	.00066	.00050	.00022	.00622	.0508	.00026
%RSD	4.5988	1.1237	84.389	2.0411	3.6210	391.75	293.80	.50990	101.11

#1	.00220	.09524	.00306	.03174	.01423	.00021	-.00651	9.9234	.00007
#2	.00206	.09373	.01210	.03267	.01352	-.00010	.00228	9.9953	.00045

Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Elem	Co2286	Cr2055	Cu3247	Fe2599	K_7664	Li6707	Mg2790	Mn2576	Mo2020
Line	228.616 {447}	205.560 {464}	324.754 {104}	259.940 {130}	766.490 { 44}	670.784 { 50}	279.079 {121}2	257.610 {131}	202.030 {467}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	-.00005	-.00054	1.0708	1.0484	4.4331	-.00624	1.9822	.49934	-.00043
Stddev	.00018	.00046	.0018	.0110	.0032	.00133	.0018	.00029	.00040
%RSD	368.77	86.347	.16599	1.0531	.07297	21.361	.08839	.05725	92.465

#1	-.00017	-.00021	1.0695	1.0406	4.4354	-.00530	1.9834	.49954	-.00015
#2	.00008	-.00086	1.0720	1.0562	4.4308	-.00718	1.9810	.49914	-.00071

Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Elem	Na8183	Ni2316	P_1782	Pb2203	S_1820	Sb2068	Se1960	Si2881	SiO2
Line	818.326 { 41}	231.604 {446}	178.284 {489}	220.353 {453}	182.034 {485}	206.833 {463}	196.090 {472}	288.158 {117}	288.158 {117}2
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	52.574	.00074	1.7015	-.00182	2.7035	-.00713	W -.00872	3.6611	7.8347
Stddev	.133	.00039	.0770	.00015	.1322	.00198	.00214	.0165	.0353
%RSD	.25380	53.567	4.5237	8.4428	4.8887	27.746	24.513	.45010	.45010

#1	52.669	.00102	1.7559	-.00171	2.7969	-.00853	-.01023	3.6727	7.8597
#2	52.480	.00046	1.6471	-.00193	2.6100	-.00573	-.00721	3.6494	7.8098

Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Warn	Chk Pass	Chk Pass
High Limit							5.0000		
Low Limit							-.00500		

Elem	Sn1899	Sr4077	Th2837	Ti3349	Ti1908	U_3701	V_2924	Zn2062	Zr3391
Line	189.989 {477}	407.771 { 83}	283.730 {119}	334.904 {101}	190.856 {477}	370.152 { 91}	292.402 {115}	206.200 {163}	339.198 { 99}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	-.00138	.06735	-.00091	.00110	.00537	.02978	.00117	.00454	.00007
Stddev	.00069	.00007	.00370	.00006	.00024	.05303	.00074	.00029	.00033
%RSD	50.219	.10389	404.70	5.4952	4.4205	178.06	63.908	6.4820	452.53

#1	-.00089	.06730	.00170	.00114	.00520	-.00771	.00064	.00474	-.00016
#2	-.00187	.06740	-.00353	.00106	.00554	.06728	.00169	.00433	.00030

Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Int. Std.	Y_2243	Y_3600	Y_3774						
Line	224.306 {450}	360.073 { 94}	377.433 { 89}						
Units	Cts/S	Cts/S	Cts/S						
Avg	2702.0	40303.	2108.9						
Stddev	33.0	329.	49.3						
%RSD	1.2212	.81508	2.3390						

#1	2725.4	40535.	2143.8						
#2	2678.7	40071.	2074.1						

Elem	Ag3280	Al1670	As1890	B_2089	Ba4554	Be3130	Bi2230	Ca3179	Cd2288
Line	328.068 {103}	167.079 {502}	189.042 {478}	208.959 {461}	455.403 { 74}	313.042 {108}	223.061 {451}	317.933 {106}	228.802 {447}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.00168	.00878	-.00092	.05595	.00126	.00016	-.00182	18.380	.00061
Stddev	.00014	.00076	.00123	.00095	.00035	.00005	.00026	.274	.00012
%RSD	8.5768	8.6622	134.17	1.6998	28.199	28.095	14.454	1.4920	19.064

#1	.00178	.00824	-.00179	.05528	.00151	.00013	-.00163	18.574	.00070
#2	.00158	.00932	-.00005	.05662	.00101	.00019	-.00200	18.186	.00053

Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Elem	Co2286	Cr2055	Cu3247	Fe2599	K_7664	Li6707	Mg2790	Mn2576	Mo2020
Line	228.616 {447}	205.560 {464}	324.754 {104}	259.940 {130}	766.490 { 44}	670.784 { 50}	279.079 {121}2	257.610 {131}	202.030 {467}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	-.00055	.00001	.04386	.33848	8.1942	-.00487	3.6865	.15025	-.00080
Stddev	.00013	.00009	.00010	.00317	.1770	.00019	.0159	.00033	.00033
%RSD	23.732	1665.2	.22625	.93758	2.1599	3.8526	.43229	.21671	41.127

#1	-.00046	-.00006	.04393	.34072	8.3193	-.00501	3.6978	.15048	-.00103
#2	-.00064	.00007	.04379	.33623	8.0690	-.00474	3.6753	.15002	-.00056

Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Elem	Na8183	Ni2316	P_1782	Pb2203	S_1820	Sb2068	Se1960	Si2881	SiO2
Line	818.326 { 41}	231.604 {446}	178.284 {489}	220.353 {453}	182.034 {485}	206.833 {463}	196.090 {472}	288.158 {117}	288.158 {117}2
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	62.086	.00079	1.8871	-.00044	2.0981	-.00611	F -.01403	8.7542	18.734
Stddev	.435	.00012	.1053	.00024	.1555	.00169	.01052	.0206	.044
%RSD	.70072	15.692	5.5778	55.113	7.4122	27.588	74.977	.23531	.23531

#1	62.393	.00070	1.8127	-.00027	1.9881	-.00730	-.00659	8.7687	18.765
#2	61.778	.00087	1.9615	-.00062	2.2081	-.00492	-.02147	8.7396	18.703

Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Fail	Chk Pass	Chk Pass
High Limit							50.000		
Low Limit							-.01000		

Elem	Sn1899	Sr4077	Th2837	Ti3349	Ti1908	U_3701	V_2924	Zn2062	Zr3391
Line	189.989 {477}	407.771 { 83}	283.730 {119}	334.904 {101}	190.856 {477}	370.152 { 91}	292.402 {115}	206.200 {163}	339.198 { 99}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.00050	.11683	-.00368	.00048	.00062	.05342	.00065	.00911	-.00258
Stddev	.00040	.00041	.00181	.00046	.00182	.02392	.00036	.00001	.00594
%RSD	81.422	.35458	49.207	95.912	294.53	44.777	55.506	.12219	230.71

#1	.00078	.11653	-.00240	.00080	.00191	.07033	.00090	.00912	-.00678
#2	.00021	.11712	-.00496	.00015	-.00067	.03651	.00039	.00910	.00163

Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Int. Std.	Y_2243	Y_3600	Y_3774						
Line	224.306 {450}	360.073 { 94}	377.433 { 89}						
Units	Cts/S	Cts/S	Cts/S						
Avg	2715.8	39553.	2110.1						
Stddev	9.2	102.	31.8						
%RSD	.33718	.25750	1.5085						

#1	2722.3	39481.	2087.6						
#2	2709.3	39625.	2132.7						

Elem	Ag3280	Al1670	As1890	B_2089	Ba4554	Be3130	Bi2230	Ca3179	Cd2288
Line	328.068 {103}	167.079 {502}	189.042 {478}	208.959 {461}	455.403 {74}	313.042 {108}	223.061 {451}	317.933 {106}	228.802 {447}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.00120	.08473	-.00127	.03406	.01389	.00026	-.00178	12.263	.00023
Stddev	.00008	.00017	.00059	.00018	.00127	.00020	.00305	.372	.00028
%RSD	6.3210	.19759	46.508	.52746	9.1586	76.295	171.66	3.0341	120.92

#1	.00125	.08485	-.00086	.03419	.01478	.00012	.00038	12.526	.00003
#2	.00114	.08461	-.00169	.03393	.01299	.00039	-.00394	12.000	.00043

Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Elem	Co2286	Cr2055	Cu3247	Fe2599	K_7664	Li6707	Mg2790	Mn2576	Mo2020
Line	228.616 {447}	205.560 {464}	324.754 {104}	259.940 {130}	766.490 {44}	670.784 {50}	279.079 {121}2	257.610 {131}	202.030 {467}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	-.00019	-.00034	1.5557	1.5029	5.3470	-.00789	2.3915	.70371	-.00124
Stddev	.00052	.00014	.0020	.0476	.0174	.00185	.0069	.00197	.00077
%RSD	265.05	40.322	.13139	3.1674	.32588	23.477	.28771	.28021	61.651

#1	-.00056	-.00043	1.5543	1.5366	5.3593	-.00658	2.3866	.70232	-.00070
#2	.00017	-.00024	1.5572	1.4693	5.3346	-.00921	2.3963	.70510	-.00178

Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Elem	Na8183	Ni2316	P_1782	Pb2203	S_1820	Sb2068	Se1960	Si2881	SiO2
Line	818.326 {41}	231.604 {446}	178.284 {489}	220.353 {453}	182.034 {485}	206.833 {463}	196.090 {472}	288.158 {117}	288.158 {117}2
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	54.896	.00070	W 2.3660	.00048	2.8191	-.00576	F -.01176	4.5348	9.7045
Stddev	.530	.00036	.0063	.00005	.0125	.00376	.00346	.0217	.0464
%RSD	.96581	51.454	.26680	10.998	.44229	65.224	29.472	.47803	.47803

#1	55.271	.00045	2.3616	.00051	2.8103	-.00842	-.01421	4.5195	9.6717
#2	54.521	.00096	2.3705	.00044	2.8279	-.00311	-.00931	4.5501	9.7373

Check ?	Chk Pass	Chk Pass	Chk Warn	Chk Pass	Chk Pass	Chk Pass	Chk Fail	Chk Pass	Chk Pass
High Limit			2.0000				50.000		
Low Limit			-1.0000				-.01000		

Elem	Sn1899	Sr4077	Th2837	Ti3349	Ti1908	U_3701	V_2924	Zn2062	Zr3391
Line	189.989 {477}	407.771 {83}	283.730 {119}	334.904 {101}	190.856 {477}	370.152 {91}	292.402 {115}	206.200 {163}	339.198 {99}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	-.00158	.08147	-.00182	.00182	.00201	-.00175	.00050	.00623	.00063
Stddev	.00298	.00022	.00138	.00003	.00125	.03869	.00032	.00016	.00426
%RSD	187.89	.27601	75.798	1.8148	62.284	2205.1	64.285	2.5123	680.54

#1	.00052	.08163	-.00085	.00180	.00289	-.02911	.00073	.00634	.00364
#2	-.00369	.08131	-.00280	.00185	.00112	.02560	.00027	.00612	-.00239

Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Int. Std.	Y_2243	Y_3600	Y_3774
Line	224.306 {450}	360.073 {94}	377.433 {89}
Units	Cts/S	Cts/S	Cts/S
Avg	2713.4	39727.	2066.8
Stddev	1.4	442.	82.0
%RSD	.05037	1.1115	3.9669

#1	2712.5	40040.	2008.8
#2	2714.4	39415.	2124.8

Elem	Ag3280	Al1670	As1890	B_2089	Ba4554	Be3130	Bi2230	Ca3179	Cd2288
Line	328.068 {103}	167.079 {502}	189.042 {478}	208.959 {461}	455.403 { 74}	313.042 {108}	223.061 {451}	317.933 {106}	228.802 {447}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.00125	.09253	-.00293	.03294	.01449	.00011	-.00057	11.320	.00002
Stddev	.00030	.00102	.00318	.00041	.00153	.00013	.00165	.287	.00025
%RSD	23.826	1.1009	108.43	1.2397	10.564	120.62	289.13	2.5324	1452.0

#1	.00104	.09181	-.00518	.03323	.01340	.00020	-.00174	11.117	.00020
#2	.00146	.09325	-.00068	.03265	.01557	.00002	.00060	11.522	-.00016

Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Elem	Co2286	Cr2055	Cu3247	Fe2599	K_7664	Li6707	Mg2790	Mn2576	Mo2020
Line	228.616 {447}	205.560 {464}	324.754 {104}	259.940 {130}	766.490 { 44}	670.784 { 50}	279.079 {121}2	257.610 {131}	202.030 {467}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	-.00053	-.00015	1.5431	1.3297	4.9487	-.00799	2.1724	.58466	-.00176
Stddev	.00025	.00013	.0073	.0228	.0570	.00367	.0043	.00173	.00002
%RSD	46.798	83.776	.47345	1.7175	1.1510	45.947	.19982	.29606	.90190

#1	-.00070	-.00025	1.5379	1.3135	4.9084	-.00539	2.1754	.58589	-.00177
#2	-.00035	-.00006	1.5483	1.3458	4.9890	-.01058	2.1693	.58344	-.00175

Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Elem	Na8183	Ni2316	P_1782	Pb2203	S_1820	Sb2068	Se1960	Si2881	SiO2
Line	818.326 { 41}	231.604 {446}	178.284 {489}	220.353 {453}	182.034 {485}	206.833 {463}	196.090 {472}	288.158 {117}	288.158 {117}2
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	54.338	.00043	W 2.1362	-.00106	3.0528	-.00752	W -.00813	4.1281	8.8342
Stddev	.063	.00005	.0207	.00196	.0918	.00345	.00072	.0355	.0759
%RSD	.11626	11.524	.96665	185.00	3.0060	45.850	8.9123	.85920	.85920

#1	54.382	.00047	2.1508	-.00245	3.1177	-.00508	-.00762	4.1030	8.7805
#2	54.293	.00040	2.1216	.00033	2.9879	-.00995	-.00865	4.1532	8.8878

Check ?	Chk Pass	Chk Pass	Chk Warn	Chk Pass	Chk Pass	Chk Pass	Chk Warn	Chk Pass	Chk Pass
High Limit			2.0000				5.0000		
Low Limit			-1.0000				-.00500		

Elem	Sn1899	Sr4077	Th2837	Ti3349	Ti1908	U_3701	V_2924	Zn2062	Zr3391
Line	189.989 {477}	407.771 { 83}	283.730 {119}	334.904 {101}	190.856 {477}	370.152 { 91}	292.402 {115}	206.200 {163}	339.198 { 99}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	-.00133	.07437	.00006	.00096	-.00111	.02787	.00095	.00634	-.00207
Stddev	.00044	.00037	.00048	.00010	.00195	.09496	.00055	.00018	.00070
%RSD	33.340	.49679	806.19	10.677	176.08	340.71	57.849	2.8217	33.789

#1	-.00102	.07463	.00040	.00103	-.00249	-.03928	.00056	.00647	-.00157
#2	-.00165	.07411	-.00028	.00089	.00027	.09502	.00133	.00621	-.00256

Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Int. Std.	Y_2243	Y_3600	Y_3774						
Line	224.306 {450}	360.073 { 94}	377.433 { 89}						
Units	Cts/S	Cts/S	Cts/S						
Avg	2689.8	39374.	2048.8						
Stddev	27.6	475.	65.2						
%RSD	1.0248	1.2052	3.1822						

#1	2709.3	39039.	2094.9						
#2	2670.3	39710.	2002.7						

Elem	Ag3280	Al1670	As1890	B_2089	Ba4554	Be3130	Bi2230	Ca3179	Cd2288
Line	328.068 {103}	167.079 {502}	189.042 {478}	208.959 {461}	455.403 {74}	313.042 {108}	223.061 {451}	317.933 {106}	228.802 {447}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.00185	1.0468	-0.00540	.06164	2.2689	.00297	-0.04048	91.642	.00072
Stddev	.00068	.0001	.00234	.00133	.0126	.00029	.00264	.444	.00003
%RSD	36.637	.01454	43.385	2.1611	.55311	9.9270	6.5324	.48402	4.6214

#1	.00233	1.0467	-.00706	.06069	2.2600	.00318	-.04235	91.328	.00075
#2	.00137	1.0469	-.00374	.06258	2.2777	.00276	-.03861	91.955	.00070

Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Elem	Co2286	Cr2055	Cu3247	Fe2714	K_7664	Li6707	Mg2790	Mn2576	Mo2020
Line	228.616 {447}	205.560 {464}	324.754 {104}	271.441 {124}	766.490 {44}	670.784 {50}	279.079 {121}2	257.610 {131}	202.030 {467}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	-0.00114	.00707	1.3884	W 639.80	5.7126	-0.00122	9.2443	F 48.707	-0.00487
Stddev	.00026	.00028	.0046	1.64	.0985	.00147	.0175	.255	.00019
%RSD	22.878	3.9293	.33500	.25706	1.7243	120.43	.18935	.52377	3.9557

#1	-.00096	.00727	1.3851	638.64	5.6430	-.00226	9.2319	48.527	-.00473
#2	-.00132	.00688	1.3917	640.96	5.7823	-.00018	9.2567	48.888	-.00500

Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Warn	Chk Pass	Chk Pass	Chk Pass	Chk Fail	Chk Pass
High Limit				500.00				20.000	
Low Limit				40.000				-.02000	

Elem	Na8183	Ni2316	P_1782	Pb2203	S_1820	Sb2068	Se1960	Si2881	SiO2
Line	818.326 {41}	231.604 {446}	178.284 {489}	220.353 {453}	182.034 {485}	206.833 {463}	196.090 {472}	288.158 {117}	288.158 {117}2
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	36.115	.00210	W 23.343	.01693	.79894	W -.01161	.00305	W 104.74	224.15
Stddev	.349	.00081	.033	.00099	.00829	.00745	.00487	.19	.40
%RSD	.96742	38.636	.14043	5.8638	1.0373	64.105	159.72	.17827	.17827

#1	36.362	.00267	23.320	.01763	.79308	-.01688	-.00039	104.87	224.43
#2	35.868	.00152	23.366	.01623	.80480	-.00635	.00649	104.61	223.86

Check ?	Chk Pass	Chk Pass	Chk Warn	Chk Pass	Chk Pass	Chk Warn	Chk Pass	Chk Warn	Chk Pass
High Limit			2.0000			2.0000		50.000	
Low Limit			-1.0000			-.01000		-.10000	

Elem	Sn1899	Sr4077	Th2837	Ti3349	Ti1908	U_3701	V_2924	Zn2062	Zr3391
Line	189.989 {477}	407.771 {83}	283.730 {119}	334.904 {101}	190.856 {477}	370.152 {91}	292.402 {115}	206.200 {163}	339.198 {99}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.00067	1.4162	F -.02571	.00753	.01227	.38605	.03278	.18946	-0.00092
Stddev	.00150	.0058	.00095	.00008	.00219	.02440	.00141	.00242	.00444
%RSD	222.19	.40953	3.6897	1.1127	17.808	6.3213	4.3043	1.2787	482.40

#1	-.00039	1.4121	-.02504	.00759	.01382	.40331	.03178	.19117	-.00406
#2	.00173	1.4203	-.02638	.00747	.01073	.36880	.03377	.18775	.00222

Check ?	Chk Pass	Chk Pass	Chk Fail	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit			50.000						
Low Limit			-.02000						

Int. Std.	Y_2243	Y_3600	Y_3774						
Line	224.306 {450}	360.073 {94}	377.433 {89}						
Units	Cts/S	Cts/S	Cts/S						
Avg	2649.5	38474.	2031.8						
Stddev	7.0	237.	15.6						
%RSD	.26493	.61664	.76599						

#1	2654.4	38642.	2042.8						
#2	2644.5	38306.	2020.8						

Elem	Ag3280	Al1670	As1890	B_2089	Ba4554	Be3130	Bi2230	Ca3179	Cd2288
Line	328.068 {103}	167.079 {502}	189.042 {478}	208.959 {461}	455.403 { 74}	313.042 {108}	223.061 {451}	317.933 {106}	228.802 {447}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.00075	.00167	.00017	.05874	.00440	-.00016	-.00145	33.313	.00042
Stddev	.00003	.00019	.00439	.00021	.00002	.00022	.00368	.257	.00013
%RSD	4.2038	11.111	2593.0	.35175	.34513	134.32	253.23	.77230	29.941

#1	.00077	.00180	-.00294	.05888	.00442	-.00032	.00115	33.495	.00051
#2	.00073	.00154	.00327	.05859	.00439	-.00001	-.00406	33.131	.00033

Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Elem	Co2286	Cr2055	Cu3247	Fe2599	K_7664	Li6707	Mg2790	Mn2576	Mo2020
Line	228.616 {447}	205.560 {464}	324.754 {104}	259.940 {130}	766.490 { 44}	670.784 { 50}	279.079 {121}2	257.610 {131}	202.030 {467}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	-.00048	-.00056	.01164	.24605	5.1306	-.00060	6.3944	.10883	-.00172
Stddev	.00028	.00019	.00000	.03155	.0045	.00478	.0155	.00002	.00011
%RSD	57.200	33.677	.03800	12.822	.08738	792.05	.24157	.02112	6.3439

#1	-.00068	-.00043	.01164	.26836	5.1338	.00278	6.3835	.10882	-.00164
#2	-.00029	-.00070	.01164	.22374	5.1275	-.00398	6.4054	.10885	-.00180

Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Elem	Na8183	Ni2316	P_1782	Pb2203	S_1820	Sb2068	Se1960	Si2881	SiO2
Line	818.326 { 41}	231.604 {446}	178.284 {489}	220.353 {453}	182.034 {485}	206.833 {463}	196.090 {472}	288.158 {117}	288.158 {117}2
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	31.176	.00002	.03578	.00327	.49455	-.00706	W -.00945	16.846	36.050
Stddev	.282	.00056	.00194	.00052	.00338	.00702	.00257	.058	.125
%RSD	.90386	3048.6	5.4340	15.796	.68363	99.466	27.215	.34609	.34609

#1	30.977	-.00038	.03715	.00364	.49216	-.01203	-.01127	16.887	36.138
#2	31.376	.00042	.03440	.00291	.49694	-.00209	-.00763	16.804	35.961

Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Warn	Chk Pass	Chk Pass
High Limit							5.0000		
Low Limit							-.00500		

Elem	Sn1899	Sr4077	Th2837	Ti3349	Ti1908	U_3701	V_2924	Zn2062	Zr3391
Line	189.989 {477}	407.771 { 83}	283.730 {119}	334.904 {101}	190.856 {477}	370.152 { 91}	292.402 {115}	206.200 {163}	339.198 { 99}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	-.00230	.23255	-.00026	.00070	-.00116	.04800	.00008	.01007	.00076
Stddev	.00125	.00202	.00207	.00028	.00440	.03693	.00018	.00094	.00214
%RSD	54.165	.86882	788.88	39.511	378.10	76.939	233.28	9.3749	280.16

#1	-.00142	.23398	.00120	.00090	.00195	.02189	.00021	.01074	-.00075
#2	-.00318	.23112	-.00172	.00050	-.00427	.07412	-.00005	.00941	.00228

Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Int. Std.	Y_2243	Y_3600	Y_3774						
Line	224.306 {450}	360.073 { 94}	377.433 { 89}						
Units	Cts/S	Cts/S	Cts/S						
Avg	2679.9	39304.	1989.8						
Stddev	.0	113.	13.6						
%RSD	.00054	.28810	.68215						

#1	2679.9	39384.	1980.2						
#2	2679.9	39224.	1999.4						

Sample Name: CCVH-3883905 Acquired: 5/17/2016 18:24:51 Type: QC
Method: 6500_025(v6) Mode: CONC Corr. Factor: 1.000000
User: CRHOADES Prep Date: Custom ID2: Custom ID3:
Comment:

Elem	Ag3280	Al3092	As1890	B_2089	Ba4554	Be3130	Bi2230	Ca3179	Cd2288	Co2286	Cr2055
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	-.00483	50.840	-.00213	.00248	-.00133	-.00005	.99501	.02765	-.00055	-.00119	-.00024
Stddev	.00076	.872	.00493	.00027	.00059	.00007	.01400	.03512	.00017	.00043	.00013
%RSD	15.698	1.7149	231.09	10.797	43.965	137.63	1.4069	126.99	30.977	36.325	55.763

#1	-.00430	50.223	-.00562	.00267	-.00092	.00000	1.0049	.05248	-.00067	-.00088	-.00033
#2	-.00537	51.456	.00135	.00229	-.00175	-.00011	.98511	.00282	-.00043	-.00149	-.00014

Check ?	None	Chk Pass	None	None	None	None	Chk Pass	None	None	None	None
Value											
Range											

Elem	Cu3247	Fe2714	K_7664	Li6707	Mg2790	Mn2576	Mo2020	Na8183	Ni2316	P_1782	Pb2203
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	-.01288	51.381	-.26871	-.00752	.01112	-.00045	-.00269	257.68	.00091	.00934	-.00139
Stddev	.00079	.344	.02298	.00180	.00592	.00020	.00040	.26	.00018	.00019	.00147
%RSD	6.1659	.67014	8.5515	23.942	53.283	45.152	14.826	.10190	19.947	2.0422	105.91

#1	-.01231	51.138	-.25246	-.00625	.00693	-.00030	-.00297	257.49	.00078	.00920	-.00244
#2	-.01344	51.625	-.28496	-.00879	.01530	-.00059	-.00241	257.86	.00104	.00947	-.00035

Check ?	None	Chk Pass	None	None	None	None	None	Chk Pass	None	None	None
Value											
Range											

Elem	S_1820	Sb2068	Se1960	Si2881	SiO2	Sn1899	Sr4077	Th2837	Ti3349	Ti1908	U_3701
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	4.9543	-.01238	-.00826	.03275	.07008	-.00159	.00067	W 4.7057	-.00098	-.00070	9.6087
Stddev	.0693	.00618	.00333	.01564	.03347	.00014	.00033	.0207	.00004	.00221	.0554
%RSD	1.3981	49.864	40.325	47.760	47.760	8.6450	49.553	.43994	3.5715	317.01	.57684

#1	5.0033	-.01675	-.00590	.04381	.09375	-.00149	.00090	4.7203	-.00096	.00087	9.6479
#2	4.9053	-.00802	-.01061	.02169	.04641	-.00169	.00043	4.6910	-.00101	-.00226	9.5695

Check ?	Chk Pass	None	None	None	None	None	None	Chk Warn	None	None	Chk Pass
Value								5.0000			
Range								-5.0000%			

Elem	V_2924	Zn2062	Zr3391
Units	ppm	ppm	ppm
Avg	.01203	.00021	-.13247
Stddev	.00100	.00067	.00136
%RSD	8.3358	321.35	1.0259

#1	.01132	.00068	-.13343
#2	.01274	-.00026	-.13151

Check ?	None	None	None
Value			
Range			

Int. Std.	Y_2243	Y_3600	Y_3774
Units	Cts/S	Cts/S	Cts/S
Avg	2617.1	37979.	1955.0
Stddev	22.9	186.	31.2
%RSD	.87471	.49060	1.5966

#1	2633.3	37847.	1977.1
#2	2600.9	38111.	1933.0

Sample Name: CCV-3888422 Acquired: 5/17/2016 18:27:27 Type: QC
Method: 6500_025(v6) Mode: CONC Corr. Factor: 1.000000
User: CRHOADES Prep Date: Custom ID2: Custom ID3:
Comment:

Elem	Ag3280	Al1670	As1890	B_2089	Ba4554	Be3130	Bi2230	Ca3179	Cd2288	Co2286	Cr2055	Cu3247	Fe2599
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.48464	.49325	.95825	.49577	.47766	.48490	-.00441	4.7208	.50683	.50646	.50819	.46987	2.4549
Stddev	.00078	.00063	.01127	.00020	.00383	.00139	.00463	.0213	.00303	.00434	.00248	.00407	.0052
%RSD	.16056	.12841	1.1760	.03935	.80230	.28725	105.00	.45057	.59758	.85652	.48752	.86683	.20994

#1	.48519	.49370	.96622	.49591	.47495	.48391	-.00114	4.7058	.50469	.50340	.50644	.47275	2.4586
#2	.48409	.49280	.95028	.49564	.48037	.48588	-.00769	4.7358	.50897	.50953	.50994	.46699	2.4513

Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	None	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Value													
Range													

Elem	K_7664	Li6707	Mg2790	Mn2576	Mo2020	Na5895	Ni2316	P_1782	Pb2203	S_1820	Sb2068	Se1960	Si2881
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	47.795	.93116	18.997	.46944	.49625	4.9696	.49587	.99673	1.0072	-.08185	1.0043	.98160	4.8287
Stddev	.377	.00053	.074	.00150	.00163	.0538	.00352	.01086	.0122	.01354	.0215	.03185	.1004
%RSD	.78861	.05698	.39059	.31961	.32867	1.0828	.70914	1.0892	1.2127	16.549	2.1363	3.2447	2.0785

#1	47.528	.93078	19.050	.47050	.49509	5.0076	.49339	.98906	.99854	-.09143	.98915	.95907	4.7578
#2	48.061	.93153	18.945	.46838	.49740	4.9315	.49836	1.0044	1.0158	-.07227	1.0195	1.0041	4.8997

Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	None	Chk Pass	Chk Pass	Chk Pass
Value													
Range													

Elem	SiO2	Sn1899	Sr4077	Th2837	Ti3349	Ti1908	U_3701	V_2924	Zn2062	Zr3391
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	10.334	1.0299	.48700	-.00294	.46463	1.0369	.04357	.47803	.45823	.46763
Stddev	.215	.0421	.00466	.00020	.00106	.0455	.00843	.00208	.00352	.00084
%RSD	2.0785	4.0895	.95684	6.8749	.22913	4.3890	19.353	.43560	.76735	.18065

#1	10.182	1.0001	.48370	-.00308	.46539	1.0047	.04953	.47656	.45575	.46703
#2	10.485	1.0597	.49029	-.00279	.46388	1.0690	.03761	.47950	.46072	.46823

Check ?	Chk Pass	Chk Pass	Chk Pass	None	Chk Pass	Chk Pass	None	Chk Pass	Chk Pass	Chk Pass
Value										
Range										

Int. Std.	Y_2243	Y_3600	Y_3774
Units	Cts/S	Cts/S	Cts/S
Avg	2660.9	38686.	1933.3
Stddev	10.1	111.	7.5
%RSD	.37847	.28817	.38782

#1	2653.7	38607.	1938.6
#2	2668.0	38765.	1928.0

Sample Name: CCB Acquired: 5/17/2016 18:29:56 Type: QC
 Method: 6500_025(v6) Mode: CONC Corr. Factor: 1.000000
 User: CRHOADES Prep Date: Custom ID2: Custom ID3:
 Comment:

Elem	Ag3280	Al1670	As1890	B_2089	Ba4554	Be3130	Bi2230	Ca3179	Cd2288	Co2286	Cr2055
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.00121	.00108	.00523	.00261	W -.00252	.00029	.00043	-.00164	.00028	-.00016	-.00024
Stddev	.00124	.00072	.00515	.00036	.00072	.00057	.00065	.01219	.00007	.00032	.00012
%RSD	102.80	66.209	98.363	13.718	28.341	198.48	150.13	745.27	25.983	195.74	49.272
#1	.00209	.00159	.00887	.00236	-.00202	.00069	.00090	.00698	.00033	.00006	-.00016
#2	.00033	.00058	.00159	.00286	-.00303	-.00012	-.00003	-.01025	.00023	-.00039	-.00033
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Warn	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit					.00200						
Low Limit					-.00200						
Elem	Cu3247	Fe2599	K_7664	Li6707	Mg2790	Mn2576	Mo2020	Na5895	Ni2316	P_1782	Pb2203
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	-.00175	F .18999	-20315	-.00687	-.00391	W .00133	.00098	.02002	.00027	.00241	-.00083
Stddev	.00115	.01929	.05571	.00293	.00445	.00014	.00009	.07619	.00009	.00365	.00049
%RSD	66.071	10.152	27.422	42.653	113.69	10.349	9.2044	380.61	35.031	151.32	59.600
#1	-.00093	.20363	-.16376	-.00480	-.00706	.00143	.00092	.07389	.00033	-.00017	-.00117
#2	-.00256	.17635	-.24254	-.00895	-.00077	.00124	.00105	-.03386	.00020	.00500	-.00048
Check ?	Chk Pass	Chk Fail	Chk Pass	Chk Pass	Chk Pass	Chk Warn	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit		.10000				.00100					
Low Limit		-.10000				-.01000					
Elem	S_1820	Sb2068	Se1960	Si2881	SiO2	Sn1899	Sr4077	Th2837	Ti3349	Ti1908	U_3701
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	-.08718	W .00567	-.00214	.04011	.08584	-.00178	.00028	-.00137	.00060	.00469	.04452
Stddev	.00276	.00260	.00058	.01446	.03094	.00083	.00009	.00072	.00007	.00119	.02365
%RSD	3.1662	45.826	27.327	36.040	36.040	46.507	30.256	52.694	11.292	25.328	53.122
#1	-.08523	.00383	-.00255	.02989	.06396	-.00236	.00022	-.00188	.00065	.00385	.06125
#2	-.08913	.00751	-.00172	.05033	.10771	-.00119	.00034	-.00086	.00056	.00553	.02780
Check ?	Chk Pass	Chk Warn	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit		.00100									
Low Limit		-.00100									
Elem	V_2924	Zn2062	Zr3391								
Units	ppm	ppm	ppm								
Avg	.00013	-.00047	-.00182								
Stddev	.00009	.00017	.00273								
%RSD	72.848	36.578	149.66								
#1	.00019	-.00035	.00011								
#2	.00006	-.00059	-.00376								
Check ?	Chk Pass	Chk Pass	Chk Pass								
High Limit											
Low Limit											
Int. Std.	Y_2243	Y_3600	Y_3774								
Units	Cts/S	Cts/S	Cts/S								
Avg	2685.5	39664.	2132.1								
Stddev	10.1	98.	7.4								
%RSD	.37551	.24762	.34714								
#1	2678.4	39594.	2126.9								
#2	2692.7	39733.	2137.4								

Sample Name: CCVL-3894681 Acquired: 5/17/2016 18:32:18 Type: QC
Method: 6500_025(v6) Mode: CONC Corr. Factor: 1.000000
User: CRHOADES Prep Date: Custom ID2: Custom ID3:
Comment:

Elem	Ag3280	Al1670	As1890	B_2089	Ba4554	Be3130	Bi2230	Ca3179	Cd2288	Co2286	Cr2055	Cu3247
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.00995	.09946	F .01050	.09607	F .00680	.00089	.10423	.17989	.00536	.00968	.01027	.01357
Stddev	.00043	.00064	.00135	.00065	.00114	.00028	.00268	.00436	.00005	.00006	.00018	.00051
%RSD	4.3211	.64051	12.826	.67543	16.806	31.541	2.5750	2.4233	1.0231	.65287	1.7708	3.7315
#1	.01026	.09901	.01145	.09561	.00599	.00109	.10233	.17681	.00532	.00963	.01040	.01321
#2	.00965	.09991	.00955	.09652	.00761	.00069	.10612	.18297	.00540	.00972	.01014	.01392
Check ?	Chk Pass	Chk Pass	Chk Fail	Chk Pass	Chk Fail	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Value			.01500		.01000							
Range			-30.000%		-30.000%							
Elem	Fe2599	K_7664	Li6707	Mg2790	Mn2576	Mo2020	Na5895	Ni2316	P_1782	Pb2203	S_1820	Sb2068
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.09536	2.5584	F .00187	.19044	.00997	.01892	.87968	.04043	2.8056	.00858	-.08300	.01726
Stddev	.00369	.0365	.00387	.00055	.00000	.00024	.01190	.00033	.0088	.00296	.01010	.00703
%RSD	3.8686	1.4273	206.58	.28639	.04981	1.2781	1.3523	.81944	.31201	34.544	12.167	40.747
#1	.09275	2.5325	.00461	.19005	.00997	.01909	.87127	.04020	2.7994	.01067	-.07586	.01229
#2	.09797	2.5842	-.00086	.19083	.00998	.01875	.88809	.04067	2.8118	.00648	-.09015	.02224
Check ?	Chk Pass	Chk Pass	Chk Fail	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	None	Chk Pass
Value			.01000									
Range			-30.000%									
Elem	Se1960	Si2881	SiO2	Sn1899	Sr4077	Th2837	Ti3349	Ti1908	U_3701	V_2924	Zn2062	Zr3391
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	F .00613	.47620	1.0191	.09676	.00958	.01544	.01018	.01057	F .10653	.00925	.01874	.01444
Stddev	.00030	.02708	.0579	.00184	.00004	.00170	.00010	.00199	.01103	.00006	.00060	.00125
%RSD	4.9611	5.6858	5.6858	1.9034	.38407	10.998	.95996	18.847	10.356	.66354	3.2101	8.6926
#1	.00635	.45706	.97811	.09807	.00961	.01664	.01011	.00916	.09873	.00920	.01917	.01355
#2	.00592	.49535	1.0600	.09546	.00956	.01424	.01024	.01198	.11434	.00929	.01832	.01532
Check ?	Chk Fail	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Fail	Chk Pass	Chk Pass	Chk Pass
Value	.01500								.06000			
Range	-30.000%								30.000%			
Int. Std.	Y_2243	Y_3600	Y_3774									
Units	Cts/S	Cts/S	Cts/S									
Avg	2654.0	39142.	2063.0									
Stddev	4.6	30.	94.4									
%RSD	.17440	.07628	4.5752									
#1	2657.2	39163.	2129.8									
#2	2650.7	39121.	1996.3									

Elem	Ag3280	Al1670	As1890	B_2089	Ba4554	Be3130	Bi2230	Ca3179	Cd2288
Line	328.068 {103}	167.079 {502}	189.042 {478}	208.959 {461}	455.403 {74}	313.042 {108}	223.061 {451}	317.933 {106}	228.802 {447}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.00120	.00330	-.00364	.00771	.00434	-.00006	.00082	9.8923	-.00007
Stddev	.00022	.00045	.00384	.00099	.00048	.00001	.00043	.2732	.00023
%RSD	18.760	13.618	105.53	12.808	11.049	24.278	52.849	2.7619	342.81

#1	.00104	.00298	-.00636	.00701	.00468	-.00005	.00112	9.6991	-.00023
#2	.00136	.00362	-.00092	.00841	.00400	-.00007	.00051	10.085	.00009

Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Elem	Co2286	Cr2055	Cu3247	Fe2599	K_7664	Li6707	Mg2790	Mn2576	Mo2020
Line	228.616 {447}	205.560 {464}	324.754 {104}	259.940 {130}	766.490 {44}	670.784 {50}	279.079 {121}2	257.610 {131}	202.030 {467}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	-.00040	-.00027	-.00032	.00463	.58043	W -.01056	1.2275	.00073	-.00159
Stddev	.00026	.00030	.00045	.00487	.00673	.00027	.0000	.00000	.00019
%RSD	65.570	110.29	141.76	105.12	1.1601	2.5994	.00102	.27311	11.865

#1	-.00021	-.00006	-.00063	.00119	.57567	-.01076	1.2275	.00073	-.00146
#2	-.00058	-.00049	.00000	.00807	.58520	-.01037	1.2275	.00073	-.00172

Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Warn	Chk Pass	Chk Pass	Chk Pass
High Limit						2.0000			
Low Limit						-.01000			

Elem	Na8183	Ni2316	P_1782	Pb2203	S_1820	Sb2068	Se1960	Si2881	SiO2
Line	818.326 {41}	231.604 {446}	178.284 {489}	220.353 {453}	182.034 {485}	206.833 {463}	196.090 {472}	288.158 {117}	288.158 {117}2
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	21.064	.00115	.00193	-.00123	2.8480	-.00305	-.00313	1.1581	2.4783
Stddev	.958	.00051	.00161	.00020	.0416	.00004	.00286	.0170	.0364
%RSD	4.5472	44.659	83.298	16.647	1.4605	1.4034	91.334	1.4679	1.4679

#1	21.741	.00078	.00307	-.00108	2.8186	-.00308	-.00516	1.1460	2.4525
#2	20.387	.00151	.00079	-.00137	2.8774	-.00302	-.00111	1.1701	2.5040

Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Elem	Sn1899	Sr4077	Th2837	Ti3349	Ti1908	U_3701	V_2924	Zn2062	Zr3391
Line	189.989 {477}	407.771 {83}	283.730 {119}	334.904 {101}	190.856 {477}	370.152 {91}	292.402 {115}	206.200 {163}	339.198 {99}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	-.00154	.05708	-.00072	.00045	-.00167	.04387	.00071	.00221	.00059
Stddev	.00087	.00002	.00016	.00047	.00286	.07931	.00000	.00015	.00006
%RSD	56.320	.02983	21.824	104.04	171.63	180.80	.63231	6.9720	9.9444

#1	-.00093	.05710	-.00083	.00079	.00036	.09995	.00071	.00232	.00063
#2	-.00215	.05707	-.00061	.00012	-.00369	-.01221	.00071	.00210	.00055

Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Int. Std.	Y_2243	Y_3600	Y_3774						
Line	224.306 {450}	360.073 {94}	377.433 {89}						
Units	Cts/S	Cts/S	Cts/S						
Avg	2654.8	38424.	1987.1						
Stddev	3.3	462.	63.4						
%RSD	.12365	1.2011	3.1895						

#1	2657.1	38751.	2031.9						
#2	2652.5	38098.	1942.3						

Sample Name: 200-33501-E-4-A SD@5 Acquired: 5/17/2016 18:37:37 Type: Unk
Method: 6500_025(v6) Mode: CONC Corr. Factor: 1.000000
User: CRHOADES Prep Date: Custom ID2: Custom ID3:
Comment: 325380 6010C Q5

Elem	Ag3280	Al1670	As1890	B_2089	Ba4554	Be3130	Bi2230	Ca3179	Cd2288
Line	328.068 {103}	167.079 {502}	189.042 {478}	208.959 {461}	455.403 { 74}	313.042 {108}	223.061 {451}	317.933 {106}	228.802 {447}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.00078	.00167	-.00256	.00200	.00070	-.00006	-.00066	3.3111	-.00016
Stddev	.00010	.00043	.00233	.00003	.00017	.00014	.00186	.0016	.00014
%RSD	13.181	26.074	90.994	1.4580	23.738	250.29	283.69	.04952	83.642

#1	.00085	.00136	-.00091	.00198	.00082	.00004	.00066	3.3123	-.00026
#2	.00071	.00197	-.00421	.00202	.00058	-.00016	-.00197	3.3100	-.00007

Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Elem	Co2286	Cr2055	Cu3247	Fe2599	K_7664	Li6707	Mg2790	Mn2576	Mo2020
Line	228.616 {447}	205.560 {464}	324.754 {104}	259.940 {130}	766.490 { 44}	670.784 { 50}	279.079 {121}2	257.610 {131}	202.030 {467}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	-.00006	-.00043	-.00068	.05954	.05845	W -.01230	.40491	.00095	-.00177
Stddev	.00073	.00003	.00061	.00136	.07645	.00182	.00342	.00000	.00031
%RSD	1315.7	7.6344	89.950	2.2850	130.79	14.799	.84491	.51836	17.524

#1	-.00057	-.00045	-.00111	.05857	.11251	-.01101	.40733	.00095	-.00198
#2	.00046	-.00041	-.00025	.06050	.00439	-.01359	.40249	.00095	-.00155

Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Warn	Chk Pass	Chk Pass	Chk Pass
High Limit						2.0000			
Low Limit						-.01000			

Elem	Na5895	Ni2316	P_1782	Pb2203	S_1820	Sb2068	Se1960	Si2881	SiO2
Line	589.592 { 57}	231.604 {446}	178.284 {489}	220.353 {453}	182.034 {485}	206.833 {463}	196.090 {472}	288.158 {117}	288.158 {117}2
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	6.2824	.00023	.00225	-.00070	.87155	-.00626	F -.01061	.37270	.79758
Stddev	.0057	.00026	.00360	.00050	.02327	.00383	.00156	.03578	.07657
%RSD	.09095	109.45	159.86	71.695	2.6703	61.118	14.702	9.6000	9.6000

#1	6.2865	.00041	.00480	-.00035	.85510	-.00897	-.00950	.39800	.85173
#2	6.2784	.00005	-.00029	-.00106	.88801	-.00356	-.01171	.34740	.74344

Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Fail	Chk Pass	Chk Pass
High Limit							50.000		
Low Limit							-.01000		

Elem	Sn1899	Sr4077	Th2837	Ti3349	Ti1908	U_3701	V_2924	Zn2062	Zr3391
Line	189.989 {477}	407.771 { 83}	283.730 {119}	334.904 {101}	190.856 {477}	370.152 { 91}	292.402 {115}	206.200 {163}	339.198 { 99}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	-.00150	.01881	-.00166	-.00009	-.00308	.08599	-.00015	.00241	-.00240
Stddev	.00010	.00002	.00063	.00028	.00174	.01225	.00017	.00017	.00232
%RSD	6.5678	.08265	37.608	298.22	56.460	14.245	112.23	7.0270	96.621

#1	-.00143	.01880	-.00122	-.00029	-.00185	.09465	-.00003	.00253	-.00404
#2	-.00156	.01882	-.00210	.00010	-.00430	.07733	-.00027	.00229	-.00076

Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Int. Std.	Y_2243	Y_3600	Y_3774
Line	224.306 {450}	360.073 { 94}	377.433 { 89}
Units	Cts/S	Cts/S	Cts/S
Avg	2655.8	37890.	1878.6
Stddev	8.4	22.	12.4
%RSD	.31746	.05902	.65804

#1	2661.8	37874.	1869.8
#2	2649.8	37906.	1887.3

Sample Name: 200-33501-E-4-B MS Acquired: 5/17/2016 18:40:16 Type: Unk
Method: 6500_025(v6) Mode: CONC Corr. Factor: 1.000000
User: CRHOADES Prep Date: Custom ID2: Custom ID3:
Comment: 325380 6010C Q5

Elem	Ag3280	Al1670	As1890	B_2089	Ba4554	Be3130	Bi2230	Ca3179	Cd2288
Line	328.068 {103}	167.079 {502}	189.042 {478}	208.959 {461}	455.403 {74}	313.042 {108}	223.061 {451}	317.933 {106}	228.802 {447}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.04890	1.9061	.99209	1.0076	1.8700	.04755	F 2.0448	55.131	.10102
Stddev	.00007	.0021	.00537	.0068	.0304	.00066	.0057	.813	.00012
%RSD	.14963	.11126	.54089	.67404	1.6266	1.3777	.28142	1.4747	.12289

#1	.04884	1.9046	.98829	1.0028	1.8485	.04709	2.0408	54.556	.10093
#2	.04895	1.9076	.99588	1.0124	1.8915	.04801	2.0489	55.706	.10111

Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Fail	Chk Pass	Chk Pass
High Limit							.10000		
Low Limit							-.10000		

Elem	Co2286	Cr2055	Cu3247	Fe2599	K_7664	Li6707	Mg2790	Mn2576	Mo2020
Line	228.616 {447}	205.560 {464}	324.754 {104}	259.940 {130}	766.490 {44}	670.784 {50}	279.079 {121}2	257.610 {131}	202.030 {467}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.49333	.20333	.23312	.98359	47.937	.92979	49.076	.46907	1.0350
Stddev	.00151	.00086	.00074	.01988	.836	.00728	.016	.00083	.0005
%RSD	.30685	.42135	.31671	2.0210	1.7439	.78285	.03208	.17681	.04815

#1	.49226	.20272	.23364	.96953	47.346	.92464	49.088	.46966	1.0354
#2	.49440	.20393	.23260	.99765	48.528	.93494	49.065	.46849	1.0347

Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Elem	Na8183	Ni2316	P_1782	Pb2203	S_1820	Sb2068	Se1960	Si2881	SiO2
Line	818.326 {41}	231.604 {446}	178.284 {489}	220.353 {453}	182.034 {485}	206.833 {463}	196.090 {472}	288.158 {117}	288.158 {117}2
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	75.470	.48461	W 10.176	.50294	5.0043	.52488	2.0082	10.622	22.730
Stddev	.104	.00187	.035	.00018	.0293	.00145	.0251	.042	.089
%RSD	.13777	.38532	.34042	.03591	.58601	.27625	1.2487	.39216	.39216

#1	75.543	.48329	10.152	.50281	4.9836	.52385	1.9904	10.651	22.793
#2	75.396	.48593	10.201	.50307	5.0250	.52590	2.0259	10.592	22.667

Check ?	Chk Pass	Chk Pass	Chk Warn	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit			2.0000						
Low Limit			-1.0000						

Elem	Sn1899	Sr4077	Th2837	Ti3349	Ti1908	U_3701	V_2924	Zn2062	Zr3391
Line	189.989 {477}	407.771 {83}	283.730 {119}	334.904 {101}	190.856 {477}	370.152 {91}	292.402 {115}	206.200 {163}	339.198 {99}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	W 2.0222	.99595	.98621	.95123	1.8313	2.0167	.47866	.46327	.45045
Stddev	.0267	.01808	.00301	.00221	.0301	.0146	.00118	.00223	.00697
%RSD	1.3191	1.8155	.30564	.23268	1.6422	.72144	.24700	.48089	1.5481

#1	2.0034	.98316	.98834	.94966	1.8526	2.0270	.47949	.46170	.45538
#2	2.0411	1.0087	.98408	.95279	1.8100	2.0064	.47782	.46485	.44552

Check ?	Chk Warn	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit	2.0000								
Low Limit	-.05000								

Int. Std.	Y_2243	Y_3600	Y_3774
Line	224.306 {450}	360.073 {94}	377.433 {89}
Units	Cts/S	Cts/S	Cts/S
Avg	2607.3	37763.	1996.4
Stddev	8.8	123.	25.8
%RSD	.33614	.32665	1.2933

#1	2601.1	37850.	2014.6
#2	2613.5	37676.	1978.1

Sample Name: 200-33501-E-4-C MSD Acquired: 5/17/2016 18:42:42 Type: Unk
Method: 6500_025(v6) Mode: CONC Corr. Factor: 1.000000
User: CRHOADES Prep Date: Custom ID2: Custom ID3:
Comment: 325380 6010C Q5

Elem	Ag3280	Al1670	As1890	B_2089	Ba4554	Be3130	Bi2230	Ca3179	Cd2288
Line	328.068 {103}	167.079 {502}	189.042 {478}	208.959 {461}	455.403 { 74}	313.042 {108}	223.061 {451}	317.933 {106}	228.802 {447}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.04773	1.8996	.99411	1.0059	1.9118	.04814	F 2.0270	56.251	.10011
Stddev	.00031	.0017	.00083	.0014	.0090	.00020	.0103	.257	.00007
%RSD	.65580	.09072	.08359	.14372	.47272	.42507	.50831	.45682	.06762

#1	.04751	1.8984	.99470	1.0069	1.9182	.04800	2.0342	56.433	.10006
#2	.04796	1.9008	.99352	1.0048	1.9054	.04829	2.0197	56.070	.10016

Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Fail	Chk Pass	Chk Pass
High Limit							.10000		
Low Limit							-.10000		

Elem	Co2286	Cr2055	Cu3247	Fe2599	K_7664	Li6707	Mg2790	Mn2576	Mo2020
Line	228.616 {447}	205.560 {464}	324.754 {104}	259.940 {130}	766.490 { 44}	670.784 { 50}	279.079 {121}2	257.610 {131}	202.030 {467}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.48779	.20025	.23150	.97385	49.236	.92044	48.942	.46857	1.0259
Stddev	.00037	.00036	.00059	.00164	.119	.00128	.099	.00167	.0035
%RSD	.07572	.18096	.25636	.16856	.24159	.13956	.20230	.35569	.34342

#1	.48753	.20000	.23108	.97501	49.320	.91953	48.872	.46739	1.0284
#2	.48806	.20051	.23192	.97269	49.152	.92135	49.012	.46974	1.0234

Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Elem	Na8183	Ni2316	P_1782	Pb2203	S_1820	Sb2068	Se1960	Si2881	SiO2
Line	818.326 { 41}	231.604 {446}	178.284 {489}	220.353 {453}	182.034 {485}	206.833 {463}	196.090 {472}	288.158 {117}	288.158 {117}2
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	74.307	.48047	W 10.095	.49811	4.9800	.51819	2.0222	10.403	22.263
Stddev	1.098	.00095	.012	.00098	.0076	.00120	.0162	.136	.291
%RSD	1.4771	.19713	.11779	.19757	.15184	.23090	.79877	1.3084	1.3084

#1	73.531	.47980	10.103	.49881	4.9746	.51904	2.0108	10.307	22.057
#2	75.083	.48114	10.086	.49742	4.9853	.51734	2.0337	10.499	22.469

Check ?	Chk Pass	Chk Pass	Chk Warn	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit			2.0000						
Low Limit			-1.0000						

Elem	Sn1899	Sr4077	Th2837	Ti3349	Ti1908	U_3701	V_2924	Zn2062	Zr3391
Line	189.989 {477}	407.771 { 83}	283.730 {119}	334.904 {101}	190.856 {477}	370.152 { 91}	292.402 {115}	206.200 {163}	339.198 { 99}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	1.9991	1.0153	.97181	.95059	1.8179	2.0149	.47413	.46133	.44006
Stddev	.0302	.0049	.00132	.00281	.0245	.0274	.00080	.00072	.00287
%RSD	1.5107	.47973	.13566	.29609	1.3492	1.3597	.16793	.15668	.65133

#1	1.9778	1.0188	.97088	.94860	1.8352	1.9955	.47357	.46184	.43803
#2	2.0205	1.0119	.97275	.95258	1.8005	2.0343	.47469	.46082	.44209

Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Int. Std.	Y_2243	Y_3600	Y_3774
Line	224.306 {450}	360.073 { 94}	377.433 { 89}
Units	Cts/S	Cts/S	Cts/S
Avg	2569.0	36477.	1898.3
Stddev	3.7	180.	7.8
%RSD	.14538	.49256	.41086

#1	2571.7	36350.	1903.8
#2	2566.4	36604.	1892.8

Sample Name: 200-33501-E-4-A PDS Acquired: 5/17/2016 18:45:08 Type: Unk
Method: 6500_025(v6) Mode: CONC Corr. Factor: 1.000000
User: CRHOADES Prep Date: Custom ID2: Custom ID3:
Comment: 325380 6010C Q5

Elem	Ag3280	Al1670	As1890	B_2089	Ba4554	Be3130	Bi2230	Ca3179	Cd2288
Line	328.068 {103}	167.079 {502}	189.042 {478}	208.959 {461}	455.403 { 74}	313.042 {108}	223.061 {451}	317.933 {106}	228.802 {447}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.04264	.96684	.19387	.11227	.10113	.04766	-.00060	27.826	.05034
Stddev	.00013	.00380	.00644	.00043	.00015	.00043	.00373	.152	.00061
%RSD	.30581	.39341	3.3241	.38279	.15113	.91127	620.16	.54525	1.2066

#1	.04255	.96415	.18931	.11258	.10123	.04797	.00203	27.934	.04991
#2	.04273	.96953	.19843	.11197	.10102	.04736	-.00324	27.719	.05077

Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Elem	Co2286	Cr2055	Cu3247	Fe2599	K_7664	Li6707	Mg2790	Mn2576	Mo2020
Line	228.616 {447}	205.560 {464}	324.754 {104}	259.940 {130}	766.490 { 44}	670.784 { 50}	279.079 {121}2	257.610 {131}	202.030 {467}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.04800	.04924	.04649	1.0755	20.013	.08268	19.842	.04921	.05372
Stddev	.00037	.00058	.00003	.0056	.151	.00370	.055	.00018	.00234
%RSD	.76083	1.1682	.06447	.52497	.75254	4.4711	.27698	.36879	4.3489

#1	.04826	.04884	.04647	1.0794	19.906	.08006	19.881	.04908	.05207
#2	.04775	.04965	.04652	1.0715	20.119	.08529	19.803	.04933	.05538

Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Elem	Na8183	Ni2316	P_1782	Pb2203	S_1820	Sb2068	Se1960	Si2881	SiO2
Line	818.326 { 41}	231.604 {446}	178.284 {489}	220.353 {453}	182.034 {485}	206.833 {463}	196.090 {472}	288.158 {117}	288.158 {117}2
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	43.036	.04879	1.9646	.09724	2.7894	.09123	.19111	5.8164	12.447
Stddev	.362	.00024	.0187	.00305	.0258	.00067	.00585	.0319	.068
%RSD	.84089	.48423	.94922	3.1405	.92424	.73548	3.0621	.54805	.54805

#1	42.780	.04863	1.9514	.09508	2.7711	.09075	.18697	5.8389	12.495
#2	43.292	.04896	1.9778	.09940	2.8076	.09170	.19524	5.7938	12.399

Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Elem	Sn1899	Sr4077	Th2837	Ti3349	Ti1908	U_3701	V_2924	Zn2062	Zr3391
Line	189.989 {477}	407.771 { 83}	283.730 {119}	334.904 {101}	190.856 {477}	370.152 { 91}	292.402 {115}	206.200 {163}	339.198 { 99}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.10053	.10441	.19382	.04799	.24094	.50631	.04832	.20943	.04196
Stddev	.00254	.00039	.00056	.00041	.01657	.00365	.00012	.00113	.00080
%RSD	2.5269	.37524	.28804	.84747	6.8761	.72124	.25771	.53986	1.8996

#1	.09873	.10413	.19343	.04828	.22923	.50889	.04840	.21023	.04253
#2	.10233	.10469	.19422	.04771	.25266	.50373	.04823	.20863	.04140

Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Int. Std.	Y_2243	Y_3600	Y_3774
Line	224.306 {450}	360.073 { 94}	377.433 { 89}
Units	Cts/S	Cts/S	Cts/S
Avg	2645.4	37920.	1870.5
Stddev	28.6	38.	2.1
%RSD	1.0812	.09981	.11381

#1	2665.6	37947.	1872.0
#2	2625.2	37894.	1869.0

Sample Name: CCVH-3883905 Acquired: 5/17/2016 18:47:43 Type: QC
Method: 6500_025(v6) Mode: CONC Corr. Factor: 1.000000
User: CRHOADES Prep Date: Custom ID2: Custom ID3:
Comment:

Elem	Ag3280	Al3092	As1890	B_2089	Ba4554	Be3130	Bi2230	Ca3179	Cd2288	Co2286	Cr2055
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	-0.00499	51.089	-0.00168	.00501	-0.00077	-0.00028	.99444	-0.00524	-0.00043	-0.00143	-0.00031
Stddev	.00050	1.101	.00093	.00026	.00037	.00046	.01182	.00008	.00022	.00085	.00023
%RSD	10.066	2.1547	55.564	5.1958	48.545	164.32	1.1882	1.4723	51.354	59.350	72.247

#1	-0.00535	51.868	-0.00102	.00482	-0.00051	-0.00060	1.0028	-0.00529	-0.00027	-0.00083	-0.00047
#2	-0.00464	50.311	-0.00234	.00519	-0.00103	.00005	.98609	-0.00518	-0.00058	-0.00203	-0.00015

Check ?	None	Chk Pass	None	None	None	None	Chk Pass	None	None	None	None
Value											
Range											

Elem	Cu3247	Fe2714	K_7664	Li6707	Mg2790	Mn2576	Mo2020	Na8183	Ni2316	P_1782	Pb2203
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	-0.01317	51.763	-0.08609	-0.00771	.01195	-0.00198	-0.00106	259.22	.00088	.00602	.00044
Stddev	.00100	.317	.01829	.00111	.00162	.00003	.00028	.20	.00058	.00339	.00096
%RSD	7.6105	.61314	21.242	14.402	13.527	1.5067	26.405	.07655	66.104	56.388	217.90

#1	-0.01388	51.539	-0.09902	-0.00693	.01309	-0.00195	-0.00126	259.36	.00047	.00842	-0.00024
#2	-0.01246	51.988	-0.07316	-0.00850	.01081	-0.00200	-0.00086	259.08	.00129	.00362	.00112

Check ?	None	Chk Pass	None	None	None	None	None	Chk Pass	None	None	None
Value											
Range											

Elem	S_1820	Sb2068	Se1960	Si2881	SiO2	Sn1899	Sr4077	Th2837	Ti3349	Ti1908	U_3701
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	4.9514	-0.01363	.00246	-0.01467	-0.03140	-0.00110	.00035	W 4.7310	-0.00111	.00818	9.6296
Stddev	.0249	.00319	.00038	.01356	.02903	.00147	.00014	.0037	.00019	.00076	.0726
%RSD	.50351	23.429	15.471	92.452	92.452	133.75	38.944	.07799	17.159	9.2484	.75376

#1	4.9690	-0.01137	.00219	-0.02426	-0.05192	-0.00214	.00045	4.7336	-0.00098	.00765	9.6810
#2	4.9338	-0.01589	.00273	-0.00508	-0.01087	-0.00006	.00025	4.7284	-0.00125	.00872	9.5783

Check ?	Chk Pass	None	None	None	None	None	None	Chk Warn	None	None	Chk Pass
Value								5.0000			
Range								-5.0000%			

Elem	V_2924	Zn2062	Zr3391
Units	ppm	ppm	ppm
Avg	.01293	.00032	-.13234
Stddev	.00040	.00021	.00537
%RSD	3.0773	65.918	4.0601

#1	.01264	.00017	-.12854
#2	.01321	.00047	-.13614

Check ?	None	None	None
Value			
Range			

Int. Std.	Y_2243	Y_3600	Y_3774
Units	Cts/S	Cts/S	Cts/S
Avg	2591.0	37472.	1919.6
Stddev	45.4	66.	61.5
%RSD	1.7541	.17545	3.2028

#1	2558.9	37519.	1876.1
#2	2623.1	37426.	1963.0

Sample Name: CCV-3888422 Acquired: 5/17/2016 18:50:18 Type: QC
Method: 6500_025(v6) Mode: CONC Corr. Factor: 1.000000
User: CRHOADES Prep Date: Custom ID2: Custom ID3:
Comment:

Elem	Ag3280	Al1670	As1890	B_2089	Ba4554	Be3130	Bi2230	Ca3179	Cd2288	Co2286	Cr2055	Cu3247
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.48423	.49696	.95919	.49277	.45199	.45968	.00035	F 4.4638	.50351	.50334	.50390	.46961
Stddev	.00254	.00228	.00537	.01219	.00037	.00090	.00197	.0194	.01210	.01247	.01171	.00156
%RSD	.52449	.45873	.55994	2.4734	.08260	.19481	561.04	.43449	2.4026	2.4766	2.3235	.33205

#1	.48603	.49857	.95539	.48415	.45173	.45904	.00174	4.4501	.49496	.49452	.49562	.47071
#2	.48244	.49535	.96299	.50139	.45226	.46031	-.00104	4.4775	.51207	.51215	.51218	.46851

Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	None	Chk Fail	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Value								5.0000				
Range								-10.490%				

Elem	Fe2599	K_7664	Li6707	Mg2790	Mn2576	Mo2020	Na5895	Ni2316	P_1782	Pb2203	S_1820	Sb2068
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	2.3345	45.492	.91236	19.007	.47039	.49476	4.8045	.49319	.98407	1.0024	-.08624	1.0054
Stddev	.0151	.200	.00169	.076	.00049	.01135	.0451	.01211	.03328	.0271	.00505	.0404
%RSD	.64560	.43925	.18516	.39784	.10342	2.2937	.93924	2.4552	3.3820	2.7012	5.8612	4.0219

#1	2.3239	45.350	.91356	19.061	.47005	.48673	4.8364	.48463	.96053	.98329	-.08266	.97684
#2	2.3452	45.633	.91117	18.954	.47073	.50278	4.7726	.50175	1.0076	1.0216	-.08981	1.0340

Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	None	Chk Pass
Value												
Range												

Elem	Se1960	Si2881	SiO2	Sn1899	Sr4077	Th2837	Ti3349	Ti1908	U_3701	V_2924	Zn2062	Zr3391
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.98086	4.5936	9.8304	1.0232	.45988	-.00346	.46789	1.0263	.08075	.47637	.46151	.47287
Stddev	.04963	.0317	.0678	.0636	.00042	.00026	.00055	.0543	.04088	.00171	.00794	.00309
%RSD	5.0602	.69013	.69013	6.2139	.09208	7.6397	.11664	5.2878	50.625	.35856	1.7200	.65400

#1	.94576	4.5712	9.7824	.97822	.45958	-.00327	.46750	.98793	.10966	.47516	.45589	.47506
#2	1.0160	4.6161	9.8784	1.0681	.46018	-.00365	.46827	1.0647	.05185	.47758	.46712	.47069

Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	None	Chk Pass	Chk Pass	None	Chk Pass	Chk Pass	Chk Pass
Value												
Range												

Int. Std.	Y_2243	Y_3600	Y_3774
Units	Cts/S	Cts/S	Cts/S
Avg	2619.4	38656.	2044.5
Stddev	42.3	681.	17.4
%RSD	1.6154	1.7627	.85054

#1	2589.4	39138.	2032.2
#2	2649.3	38174.	2056.8

Sample Name: CCB Acquired: 5/17/2016 18:52:48 Type: QC
 Method: 6500_025(v6) Mode: CONC Corr. Factor: 1.000000
 User: CRHOADES Prep Date: Custom ID2: Custom ID3:
 Comment:

Elem	Ag3280	Al1670	As1890	B_2089	Ba4554	Be3130	Bi2230	Ca3179	Cd2288	Co2286	Cr2055
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.00168	.00171	-.00372	.00345	W -.00246	.00006	-.00426	.00553	.00026	-.00009	-.00041
Stddev	.00018	.00107	.00132	.00021	.00050	.00011	.00446	.00501	.00027	.00026	.00007
%RSD	10.557	62.939	35.539	6.0381	20.430	194.03	104.88	90.620	102.63	300.09	17.504

#1	.00180	.00247	-.00279	.00331	-.00210	-.00002	-.00110	.00199	.00045	.00010	-.00036
#2	.00155	.00095	-.00466	.00360	-.00281	.00013	-.00741	.00908	.00007	-.00027	-.00046

Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Warn	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit					.00200						
Low Limit					-.00200						

Elem	Cu3247	Fe2599	K_7664	Li6707	Mg2790	Mn2576	Mo2020	Na5895	Ni2316	P_1782	Pb2203
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	-.00028	W .05925	-.10999	-.00848	-.00026	.00048	.00117	-.05032	-.00004	.00130	-.00131
Stddev	.00003	.00233	.12069	.00087	.00748	.00019	.00128	.02118	.00005	.00010	.00016
%RSD	11.911	3.9249	109.73	10.317	2861.6	39.247	109.45	42.089	144.95	7.9496	12.045

#1	-.00026	.05761	-.19533	-.00910	.00503	.00061	.00027	-.03534	.00000	.00123	-.00120
#2	-.00030	.06089	-.02465	-.00786	-.00555	.00034	.00208	-.06529	-.00008	.00137	-.00142

Check ?	Chk Pass	Chk Warn	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit		.05000									
Low Limit		-.05000									

Elem	S_1820	Sb2068	Se1960	Si2881	SiO2	Sn1899	Sr4077	Th2837	Ti3349	Tl1908	U_3701
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	-.08516	W .00771	-.00443	-.02138	-.04575	-.00233	.00022	.00047	.00048	.00704	.01273
Stddev	.00085	.00146	.00673	.02841	.06081	.00001	.00008	.00004	.00020	.00097	.02921
%RSD	.99633	18.951	151.77	132.90	132.90	.22612	36.554	8.5032	41.212	13.789	229.46

#1	-.08576	.00874	.00032	-.00129	-.00276	-.00233	.00027	.00050	.00062	.00773	.03338
#2	-.08456	.00667	-.00919	-.04147	-.08875	-.00232	.00016	.00044	.00034	.00635	-.00792

Check ?	Chk Pass	Chk Warn	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit		.00100									
Low Limit		-.00100									

Elem	V_2924	Zn2062	Zr3391
Units	ppm	ppm	ppm
Avg	.00101	-.00065	.00006
Stddev	.00043	.00021	.00280
%RSD	42.629	32.909	4567.9

#1	.00070	-.00080	-.00192
#2	.00131	-.00050	.00204

Check ?	Chk Pass	Chk Pass	Chk Pass
High Limit			
Low Limit			

Int. Std.	Y_2243	Y_3600	Y_3774
Units	Cts/S	Cts/S	Cts/S
Avg	2593.8	39107.	1939.1
Stddev	10.2	116.	29.4
%RSD	.39489	.29629	1.5148

#1	2601.0	39025.	1918.3
#2	2586.5	39189.	1959.9

Sample Name: CCVL-3894681 Acquired: 5/17/2016 18:55:09 Type: QC
Method: 6500_025(v6) Mode: CONC Corr. Factor: 1.000000
User: CRHOADES Prep Date: Custom ID2: Custom ID3:
Comment:

Elem	Ag3280	Al1670	As1890	B_2089	Ba4554	Be3130	Bi2230	Ca3179	Cd2288	Co2286	Cr2055
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.01081	.09938	.01261	.09709	.00758	.00084	.10109	.19466	.00527	.00967	.00992
Stddev	.00100	.00113	.00408	.00130	.00081	.00010	.00029	.00180	.00005	.00029	.00052
%RSD	9.2939	1.1396	32.322	1.3365	10.671	11.936	.28753	.92275	.91825	3.0448	5.2860
#1	.01152	.10018	.00973	.09801	.00816	.00091	.10088	.19593	.00523	.00988	.01029
#2	.01010	.09858	.01549	.09618	.00701	.00077	.10129	.19339	.00530	.00946	.00955
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Value											
Range											
Elem	Cu3247	Fe2599	K_7664	Li6707	Mg2790	Mn2576	Mo2020	Na5895	Ni2316	P_1782	Pb2203
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.01435	.09996	2.6978	F -.00110	.19124	.00971	.01866	.91972	.04047	2.7889	.00778
Stddev	.00031	.00175	.0310	.00008	.00206	.00007	.00065	.01014	.00008	.0204	.00083
%RSD	2.1825	1.7482	1.1483	6.9598	1.0790	.68769	3.5072	1.1021	.20567	.73193	10.735
#1	.01457	.09872	2.6759	-.00115	.19270	.00966	.01912	.91255	.04053	2.8033	.00837
#2	.01412	.10119	2.7197	-.00105	.18978	.00976	.01820	.92689	.04042	2.7744	.00719
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Fail	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Value				.01000							
Range				-30.000%							
Elem	S_1820	Sb2068	Se1960	Si2881	SiO2	Sn1899	Sr4077	Th2837	Ti3349	Ti1908	U_3701
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	-.09261	.02047	F .00532	.44996	.96292	.09675	.00980	.01359	.01019	.01361	F .10830
Stddev	.00238	.00088	.00763	.03553	.07602	.00214	.00005	.00061	.00006	.00024	.01332
%RSD	2.5706	4.2994	143.38	7.8951	7.8951	2.2160	.52282	4.5173	.56804	1.7956	12.299
#1	-.09429	.02109	-.00007	.47508	1.0167	.09827	.00984	.01316	.01023	.01343	.09888
#2	-.09092	.01985	.01072	.42484	.90916	.09524	.00976	.01403	.01015	.01378	.11772
Check ?	None	Chk Pass	Chk Fail	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Fail
Value			.01500								.06000
Range			-30.000%								30.000%
Elem	V_2924	Zn2062	Zr3391								
Units	ppm	ppm	ppm								
Avg	.00969	.01921	.01496								
Stddev	.00050	.00080	.00086								
%RSD	5.2027	4.1591	5.7742								
#1	.00933	.01977	.01435								
#2	.01005	.01864	.01557								
Check ?	Chk Pass	Chk Pass	Chk Pass								
Value											
Range											
Int. Std.	Y_2243	Y_3600	Y_3774								
Units	Cts/S	Cts/S	Cts/S								
Avg	2670.5	37980.	1997.5								
Stddev	13.5	42.	35.1								
%RSD	.50574	.11052	1.7587								
#1	2660.9	37950.	1972.7								
#2	2680.0	38009.	2022.3								

Sample Name: MB 280-325212/1-A Acquired: 5/17/2016 18:57:48 Type: Unk

Method: 6500_025(v6) Mode: CONC Corr. Factor: 1.000000

User: CRHOADES Prep Date: 5/17 Custom ID2: Custom ID3:

Comment: 325212 6010C Q4

Elem	Ag3280	Al1670	As1890	B_2089	Ba4554	Be3130	Bi2230	Ca3179	Cd2288
Line	328.068 {103}	167.079 {502}	189.042 {478}	208.959 {461}	455.403 { 74}	313.042 {108}	223.061 {451}	317.933 {106}	228.802 {447}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.00152	.00286	.00219	.00147	-.00171	-.00014	-.00204	.00644	.00015
Stddev	.00072	.00005	.00471	.00145	.00043	.00025	.00038	.00085	.00009
%RSD	47.323	1.7048	214.74	99.091	24.923	175.09	18.644	13.270	64.586

#1	.00101	.00289	-.00114	.00250	-.00141	.00003	-.00177	.00583	.00021
#2	.00203	.00282	.00552	.00044	-.00201	-.00032	-.00231	.00704	.00008

Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Elem	Co2286	Cr2055	Cu3247	Fe2599	K_7664	Li6707	Mg2790	Mn2576	Mo2020
Line	228.616 {447}	205.560 {464}	324.754 {104}	259.940 {130}	766.490 { 44}	670.784 { 50}	279.079 {121}2	257.610 {131}	202.030 {467}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	-.00026	-.00038	-.00033	.00373	-.26043	F -.01060	-.00364	.00005	-.00093
Stddev	.00018	.00018	.00045	.00765	.10973	.00113	.00074	.00007	.00007
%RSD	68.169	47.159	135.09	204.74	42.133	10.672	20.260	141.51	7.7224

#1	-.00014	-.00025	-.00064	-.00167	-.33802	-.00980	-.00416	.00000	-.00099
#2	-.00039	-.00050	-.00001	.00914	-.18284	-.01140	-.00312	.00010	-.00088

Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Fail	Chk Pass	Chk Pass	Chk Pass
High Limit						.01000			
Low Limit						-.01000			

Elem	Na5895	Ni2316	P_1782	Pb2203	S_1820	Sb2068	Se1960	Si2881	SiO2
Line	589.592 { 57}	231.604 {446}	178.284 {489}	220.353 {453}	182.034 {485}	206.833 {463}	196.090 {472}	288.158 {117}	288.158 {117}2
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	-.09949	.00010	.00318	-.00226	W -.09020	-.00364	-.00532	-.05518	-.11810
Stddev	.00173	.00012	.00124	.00055	.00409	.00145	.00059	.00528	.01131
%RSD	1.7370	114.63	39.062	24.454	4.5346	39.799	11.082	9.5743	9.5743

#1	-.09827	.00018	.00230	-.00266	-.09309	-.00466	-.00573	-.05892	-.12609
#2	-.10072	.00002	.00406	-.00187	-.08731	-.00262	-.00490	-.05145	-.11010

Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Warn	Chk Pass	Chk Pass	Chk Pass	None
High Limit					.05000				
Low Limit					-.05000				

Elem	Sn1899	Sr4077	Th2837	Ti3349	Ti1908	U_3701	V_2924	Zn2062	Zr3391
Line	189.989 {477}	407.771 { 83}	283.730 {119}	334.904 {101}	190.856 {477}	370.152 { 91}	292.402 {115}	206.200 {163}	339.198 { 99}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	-.00237	-.00003	.00087	.00102	-.00075	.04451	.00012	.00011	.00423
Stddev	.00112	.00018	.00138	.00062	.00389	.03309	.00053	.00026	.00028
%RSD	47.134	724.79	157.96	60.144	518.47	74.353	437.45	229.67	6.5622

#1	-.00317	.00010	.00185	.00146	-.00350	.02111	-.00025	.00030	.00443
#2	-.00158	-.00015	-.00010	.00059	.00200	.06791	.00049	-.00007	.00403

Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Int. Std.	Y_2243	Y_3600	Y_3774
Line	224.306 {450}	360.073 { 94}	377.433 { 89}
Units	Cts/S	Cts/S	Cts/S
Avg	2739.9	39769.	1960.7
Stddev	29.8	182.	41.9
%RSD	1.0882	.45822	2.1393

#1	2761.0	39641.	1931.1
#2	2718.8	39898.	1990.4

Sample Name: LCS 280-325212/2-A Acquired: 5/17/2016 19:00:09 Type: Unk
Method: 6500_025(v6) Mode: CONC Corr. Factor: 1.000000
User: CRHOADES Prep Date: Custom ID2: Custom ID3:
Comment: 325212 6010C Q4

Elem	Ag3280	Al1670	As1890	B_2089	Ba4554	Be3130	Bi2230	Ca3179	Cd2288
Line	328.068 {103}	167.079 {502}	189.042 {478}	208.959 {461}	455.403 { 74}	313.042 {108}	223.061 {451}	317.933 {106}	228.802 {447}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.04904	1.8981	.98610	.99459	1.8537	.04747	2.0460	45.125	.10079
Stddev	.00069	.0065	.00131	.00234	.0519	.00145	.0028	1.303	.00016
%RSD	1.4113	.34280	.13284	.23501	2.8012	3.0510	.13631	2.8884	.16311

#1	.04953	1.9027	.98518	.99294	1.8904	.04849	2.0480	46.047	.10090
#2	.04855	1.8935	.98703	.99625	1.8169	.04644	2.0440	44.204	.10067

Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	None	Chk Pass	Chk Pass
High Limit									
Low Limit									

Elem	Co2286	Cr2055	Cu3247	Fe2599	K_7664	Li6707	Mg2790	Mn2576	Mo2020
Line	228.616 {447}	205.560 {464}	324.754 {104}	259.940 {130}	766.490 { 44}	670.784 { 50}	279.079 {121}2	257.610 {131}	202.030 {467}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.48888	.20029	.23331	.95532	46.439	.91303	47.520	.46430	1.0227
Stddev	.00011	.00036	.00080	.02197	1.346	.01473	.124	.00034	.0001
%RSD	.02223	.17824	.34384	2.2993	2.8991	1.6136	.26108	.07247	.00605

#1	.48881	.20054	.23388	.97085	47.391	.92345	47.607	.46454	1.0227
#2	.48896	.20003	.23275	.93979	45.487	.90261	47.432	.46406	1.0226

Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Elem	Na8183	Ni2316	P_1782	Pb2203	S_1820	Sb2068	Se1960	Si2881	SiO2
Line	818.326 { 41}	231.604 {446}	178.284 {489}	220.353 {453}	182.034 {485}	206.833 {463}	196.090 {472}	288.158 {117}	288.158 {117}2
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	53.790	.47973	10.039	.49574	1.9830	.53137	2.0308	9.2974	19.897
Stddev	.238	.00004	.018	.00107	.0060	.00483	.0095	.0119	.025
%RSD	.44204	.00863	.18160	.21492	.30368	.90950	.46639	.12794	.12794

#1	53.958	.47976	10.052	.49499	1.9873	.53479	2.0375	9.2890	19.879
#2	53.622	.47970	10.026	.49649	1.9788	.52795	2.0241	9.3058	19.915

Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	None	Chk Pass	Chk Pass	Chk Pass	None
High Limit									
Low Limit									

Elem	Sn1899	Sr4077	Th2837	Ti3349	Ti1908	U_3701	V_2924	Zn2062	Zr3391
Line	189.989 {477}	407.771 { 83}	283.730 {119}	334.904 {101}	190.856 {477}	370.152 { 91}	292.402 {115}	206.200 {163}	339.198 { 99}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	2.0289	.93245	.97009	.94166	1.8499	2.0434	.47238	.45228	.44595
Stddev	.0105	.02626	.00405	.00078	.0543	.0110	.00254	.00011	.00010
%RSD	.51767	2.8166	.41726	.08249	2.9354	.53836	.53671	.02432	.02280

#1	2.0215	.95102	.97296	.94111	1.8883	2.0356	.47418	.45235	.44603
#2	2.0364	.91388	.96723	.94221	1.8115	2.0512	.47059	.45220	.44588

Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Int. Std.	Y_2243	Y_3600	Y_3774
Line	224.306 {450}	360.073 { 94}	377.433 { 89}
Units	Cts/S	Cts/S	Cts/S
Avg	2643.5	38496.	2058.0
Stddev	3.8	133.	66.8
%RSD	.14403	.34566	3.2436

#1	2646.2	38402.	2010.8
#2	2640.8	38590.	2105.2

Elem	Ag3280	Al1670	As1890	B_2089	Ba4554	Be3130	Bi2230	Ca3179	Cd2288
Line	328.068 {103}	167.079 {502}	189.042 {478}	208.959 {461}	455.403 { 74}	313.042 {108}	223.061 {451}	317.933 {106}	228.802 {447}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.00065	1.1655	.00210	.13909	.01798	-.00020	-.00085	473.63	.00111
Stddev	.00061	.0289	.00234	.00276	.00088	.00010	.00421	21.12	.00013
%RSD	94.433	2.4788	111.72	1.9869	4.9143	48.439	493.18	4.4600	11.525

#1	.00109	1.1451	.00375	.13714	.01736	-.00013	-.00383	458.70	.00102
#2	.00022	1.1859	.00044	.14105	.01861	-.00027	.00212	488.57	.00120

Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Elem	Co2286	Cr2055	Cu3247	Fe2599	K_7664	Li6707	Mg2790	Mn2576	Mo2020
Line	228.616 {447}	205.560 {464}	324.754 {104}	259.940 {130}	766.490 { 44}	670.784 { 50}	279.079 {121}2	257.610 {131}	202.030 {467}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.01902	.00245	.00489	10.137	8.9322	.08396	120.43	.91869	.00306
Stddev	.00068	.00001	.00068	.232	.3391	.00663	.05	.00016	.00150
%RSD	3.5839	.44603	13.944	2.2920	3.7964	7.8969	.03818	.01743	49.150

#1	.01854	.00244	.00441	9.9727	8.6924	.07928	120.39	.91881	.00199
#2	.01950	.00246	.00537	10.301	9.1720	.08865	120.46	.91858	.00412

Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Elem	Na8183	Ni2316	P_1782	Pb2203	S_1820	Sb2068	Se1960	Si2881	SiO2
Line	818.326 { 41}	231.604 {446}	178.284 {489}	220.353 {453}	182.034 {485}	206.833 {463}	196.090 {472}	288.158 {117}	288.158 {117}2
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	W 1026.5	.00868	.12081	.00031	F 1110.1	W -.01214	.04720	9.8874	21.159
Stddev	31.7	.00004	.00290	.00025	21.2	.00005	.00280	.0320	.069
%RSD	3.0922	.42902	2.4012	79.549	1.9117	.42331	5.9297	.32391	.32391

#1	1004.1	.00865	.11876	.00014	1095.1	-.01210	.04918	9.8648	21.111
#2	1049.0	.00871	.12286	.00049	1125.1	-.01217	.04522	9.9101	21.208

Check ?	Chk Warn	Chk Pass	Chk Pass	Chk Pass	Chk Fail	Chk Warn	Chk Pass	Chk Pass	Chk Pass
High Limit	500.00				200.00	2.0000			
Low Limit	11.000				-20000	-.01000			

Elem	Sn1899	Sr4077	Th2837	Ti3349	Ti1908	U_3701	V_2924	Zn2062	Zr3391
Line	189.989 {477}	407.771 { 83}	283.730 {119}	334.904 {101}	190.856 {477}	370.152 { 91}	292.402 {115}	206.200 {163}	339.198 { 99}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	-.00335	W 10.334	-.00210	.06159	.03460	.12084	.00755	.02377	.00372
Stddev	.00138	.269	.00227	.00206	.01069	.03501	.00039	.00071	.00080
%RSD	41.242	2.5992	107.87	3.3485	30.913	28.971	5.1577	2.9810	21.459

#1	-.00433	10.144	-.00050	.06013	.02703	.09609	.00782	.02327	.00428
#2	-.00237	10.524	-.00371	.06305	.04216	.14560	.00727	.02427	.00315

Check ?	Chk Pass	Chk Warn	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit		5.0000							
Low Limit		-.01000							

Int. Std.	Y_2243	Y_3600	Y_3774						
Line	224.306 {450}	360.073 { 94}	377.433 { 89}						
Units	Cts/S	Cts/S	Cts/S						
Avg	2480.3	35377.	1962.5						
Stddev	41.4	26.	94.8						
%RSD	1.6687	.07306	4.8318						

#1	2509.6	35396.	2029.6						
#2	2451.1	35359.	1895.5						

Sample Name: 280-83040-C-1-A SD@5 Acquired: 5/17/2016 19:05:41 Type: Unk
Method: 6500_025(v6) Mode: CONC Corr. Factor: 1.000000
User: CRHOADES Prep Date: Custom ID2: Custom ID3:
Comment: 325212 6010C Q4

Elem	Ag3280	Al1670	As1890	B_2089	Ba4554	Be3130	Bi2230	Ca3179	Cd2288
Line	328.068 {103}	167.079 {502}	189.042 {478}	208.959 {461}	455.403 { 74}	313.042 {108}	223.061 {451}	317.933 {106}	228.802 {447}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.00067	.34005	-.00090	.03605	.00293	.00014	.00161	107.61	.00052
Stddev	.00052	.00137	.00093	.00032	.00041	.00011	.00029	.26	.00015
%RSD	78.301	.40363	103.74	.88145	14.022	81.009	17.907	.24510	29.633

#1	.00030	.34102	-.00155	.03628	.00322	.00021	.00181	107.43	.00041
#2	.00104	.33908	-.00024	.03583	.00264	.00006	.00140	107.80	.00062

Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Elem	Co2286	Cr2055	Cu3247	Fe2599	K_7664	Li6707	Mg2790	Mn2576	Mo2020
Line	228.616 {447}	205.560 {464}	324.754 {104}	259.940 {130}	766.490 { 44}	670.784 { 50}	279.079 {121}2	257.610 {131}	202.030 {467}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.00445	.00043	.00245	2.7871	2.1085	.01465	28.354	.22222	-.00073
Stddev	.00003	.00038	.00006	.0131	.0071	.00186	.053	.00010	.00068
%RSD	.64211	89.857	2.4331	.46970	.33721	12.694	.18669	.04304	93.032

#1	.00447	.00016	.00241	2.7778	2.1135	.01333	28.317	.22215	-.00121
#2	.00443	.00070	.00249	2.7963	2.1034	.01596	28.391	.22228	-.00025

Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Elem	Na8183	Ni2316	P_1782	Pb2203	S_1820	Sb2068	Se1960	Si2881	SiO2
Line	818.326 { 41}	231.604 {446}	178.284 {489}	220.353 {453}	182.034 {485}	206.833 {463}	196.090 {472}	288.158 {117}	288.158 {117}2
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	248.07	.00226	.02999	-.00085	F 266.72	-.00629	.00212	2.3895	5.1135
Stddev	.70	.00011	.00470	.00193	.03	.00211	.00139	.0235	.0504
%RSD	.28201	5.0552	15.688	227.64	.01287	33.576	65.908	.98497	.98497

#1	247.57	.00234	.03332	-.00221	266.75	-.00778	.00310	2.3728	5.0779
#2	248.56	.00218	.02666	.00052	266.70	-.00479	.00113	2.4061	5.1491

Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Fail	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit					200.00				
Low Limit					-.20000				

Elem	Sn1899	Sr4077	Th2837	Ti3349	Ti1908	U_3701	V_2924	Zn2062	Zr3391
Line	189.989 {477}	407.771 { 83}	283.730 {119}	334.904 {101}	190.856 {477}	370.152 { 91}	292.402 {115}	206.200 {163}	339.198 { 99}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	-.00242	2.3612	.00224	.01747	.00444	-.02831	.00156	.01292	.00224
Stddev	.00048	.0034	.00100	.00137	.00082	.01237	.00058	.00038	.00171
%RSD	19.718	.14484	44.518	7.8435	18.505	43.691	37.291	2.9413	76.582

#1	-.00276	2.3588	.00153	.01843	.00386	-.03706	.00115	.01319	.00345
#2	-.00208	2.3636	.00294	.01650	.00502	-.01956	.00197	.01265	.00103

Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Int. Std.	Y_2243	Y_3600	Y_3774
Line	224.306 {450}	360.073 { 94}	377.433 { 89}
Units	Cts/S	Cts/S	Cts/S
Avg	2586.8	37218.	2073.2
Stddev	8.9	519.	36.3
%RSD	.34502	1.3954	1.7519

#1	2580.5	36850.	2098.8
#2	2593.1	37585.	2047.5

Sample Name: 280-83040-C-1-B MS Acquired: 5/17/2016 19:08:18 Type: Unk
Method: 6500_025(v6) Mode: CONC Corr. Factor: 1.000000
User: CRHOADES Prep Date: Custom ID2: Custom ID3:
Comment: 325212 6010C Q4

Elem	Ag3280	Al3092	As1890	B_2089	Ba4554	Be3130	Bi2230	Ca3179	Cd2288
Line	328.068 {103}	309.271 {109}	189.042 {478}	208.959 {461}	455.403 {74}	313.042 {108}	223.061 {451}	317.933 {106}	228.802 {447}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.05161	6.1084	1.0261	1.0851	1.9281	.04783	F 2.0120	W 519.77	.10317
Stddev	.00115	.1688	.0108	.0058	.0354	.00106	.0005	11.19	.00105
%RSD	2.2328	2.7637	1.0516	.53570	1.8339	2.2201	.02434	2.1519	1.0191

#1	.05080	5.9891	1.0185	1.0810	1.9031	.04708	2.0124	511.86	.10243
#2	.05243	6.2278	1.0337	1.0892	1.9531	.04858	2.0117	527.67	.10391

Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Fail	Chk Warn	Chk Pass
High Limit							.10000	500.00	
Low Limit							-.10000	-.05000	

Elem	Co2286	Cr2055	Cu3247	Fe2599	K_7664	Li6707	Mg2790	Mn2576	Mo2020
Line	228.616 {447}	205.560 {464}	324.754 {104}	259.940 {130}	766.490 {44}	670.784 {50}	279.079 {121}2	257.610 {131}	202.030 {467}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.49262	.19859	.24145	11.536	58.246	1.0441	144.18	1.3836	1.0127
Stddev	.00261	.00143	.00008	.202	1.039	.0034	33.96	.0018	.0074
%RSD	.52967	.71852	.03329	1.7533	1.7841	.32732	23.555	.12970	.73397

#1	.49077	.19758	.24150	11.393	57.511	1.0417	168.20	1.3849	1.0074
#2	.49446	.19959	.24139	11.679	58.981	1.0465	120.17	1.3823	1.0179

Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Elem	Na8183	Ni2316	P_1782	Pb2203	S_1820	Sb2068	Se1960	Si2881	SiO2
Line	818.326 {41}	231.604 {446}	178.284 {489}	220.353 {453}	182.034 {485}	206.833 {463}	196.090 {472}	288.158 {117}	288.158 {117}2
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	W 1087.5	.47124	W 10.888	.46362	F 1137.4	.52131	2.1181	22.793	48.777
Stddev	22.9	.00336	.088	.00005	3.6	.00374	.0217	.024	.051
%RSD	2.1103	.71329	.80405	.01106	.32069	.71652	1.0259	.10444	.10444

#1	1071.3	.46886	10.826	.46358	1140.0	.51867	2.1027	22.776	48.741
#2	1103.7	.47361	10.950	.46366	1134.8	.52396	2.1334	22.810	48.813

Check ?	Chk Warn	Chk Pass	Chk Warn	Chk Pass	Chk Fail	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit	500.00		2.0000		200.00				
Low Limit	11.000		-1.0000		-20000				

Elem	Sn1899	Sr4077	Th2837	Ti3349	Ti1908	U_3701	V_2924	Zn2062	Zr3391
Line	189.989 {477}	407.771 {83}	283.730 {119}	334.904 {101}	190.856 {477}	370.152 {91}	292.402 {115}	206.200 {163}	339.198 {99}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	1.8933	W 11.483	.98551	1.0290	1.5077	2.0670	.49236	.47637	.45875
Stddev	.0310	.267	.00894	.0003	.0246	.0102	.00215	.00138	.00308
%RSD	1.6384	2.3278	.90762	.02669	1.6287	.49206	.43720	.28943	.67046

#1	1.8713	11.294	.99183	1.0292	1.5250	2.0598	.49388	.47540	.45657
#2	1.9152	11.672	.97918	1.0288	1.4903	2.0742	.49084	.47735	.46092

Check ?	Chk Pass	Chk Warn	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit		5.0000							
Low Limit		-.01000							

Int. Std.	Y_2243	Y_3600	Y_3774
Line	224.306 {450}	360.073 {94}	377.433 {89}
Units	Cts/S	Cts/S	Cts/S
Avg	2427.8	34621.	1943.5
Stddev	7.9	418.	63.8
%RSD	.32344	1.2085	3.2843

#1	2422.2	34917.	1988.6
#2	2433.3	34325.	1898.3

Sample Name: 280-83040-C-1-C MSD Acquired: 5/17/2016 19:11:12 Type: Unk
Method: 6500_025(v6) Mode: CONC Corr. Factor: 1.000000
User: CRHOADES Prep Date: Custom ID2: Custom ID3:
Comment: 325212 6010C Q4

Elem	Ag3280	Al3092	As1890	B_2089	Ba4554	Be3130	Bi2230	Ca3179	Cd2288
Line	328.068 {103}	309.271 {109}	189.042 {478}	208.959 {461}	455.403 {74}	313.042 {108}	223.061 {451}	317.933 {106}	228.802 {447}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	k .05338	5.6797	k 1.0228	1.0872	k 1.8865	k .04737	kF 2.0224	^ *****	k .10593
Stddev	.00407	.0662	.0153	.0007	.0116	.00008	.0174	----	.00405
%RSD	7.6187	1.1662	1.4928	.06261	.61661	.17167	.85922	----	3.8271

#1	.05050	5.6329	1.0120	1.0867	1.8948	.04743	2.0347	511.88	.10307
#2	k .05625	5.7265	k 1.0336	1.0877	k 1.8783	k .04732	k 2.0101	^ ----	k .10880

Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Fail	Chk Pass	Chk Pass
High Limit							.10000		
Low Limit							-.10000		

Elem	Co2286	Cr2055	Cu3247	Fe2599	K_7664	Li6707	Mg2790	Mn2576	Mo2020
Line	228.616 {447}	205.560 {464}	324.754 {104}	259.940 {130}	766.490 {44}	670.784 {50}	279.079 {121}2	257.610 {131}	202.030 {467}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	k .49109	k .19804	k .23810	11.210	57.211	1.0408	143.11	k 1.3748	k 1.0177
Stddev	.00178	.00069	.00086	.039	.253	.0007	34.08	.0023	.0092
%RSD	.36175	.34617	.36272	.34958	.44155	.06299	23.814	.16486	.90408

#1	.49235	.19756	.23748	11.238	57.390	1.0403	167.21	1.3764	1.0242
#2	k .48983	k .19852	k .23871	11.183	57.033	1.0413	119.01	k 1.3732	k 1.0111

Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Elem	Na8183	Ni2316	P_1782	Pb2203	S_1820	Sb2068	Se1960	Si2881	SiO2
Line	818.326 {41}	231.604 {446}	178.284 {489}	220.353 {453}	182.034 {485}	206.833 {463}	196.090 {472}	288.158 {117}	288.158 {117}2
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	W 1076.4	k .47099	kW 10.764	k .46180	^ *****	k .52952	k 2.1188	k 22.255	k 47.627
Stddev	7.1	.00192	.115	.00201	----	.00003	.0150	.098	.209
%RSD	.65615	.40757	1.0689	.43615	----	.00517	.70992	.43955	.43955

#1	1081.4	.47235	10.846	.46322	1132.0	.52954	2.1294	22.325	47.775
#2	1071.4	k .46964	k 10.683	k .46038	^ ----	k .52950	k 2.1082	k 22.186	k 47.479

Check ?	Chk Warn	Chk Pass	Chk Warn	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit	500.00		2.0000						
Low Limit	11.000		-1.0000						

Elem	Sn1899	Sr4077	Th2837	Ti3349	Ti1908	U_3701	V_2924	Zn2062	Zr3391
Line	189.989 {477}	407.771 {83}	283.730 {119}	334.904 {101}	190.856 {477}	370.152 {91}	292.402 {115}	206.200 {163}	339.198 {99}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	1.9062	^ *****	k 1.0155	k 1.0224	k 1.5782	k 2.0179	k .48989	k .46927	k .47566
Stddev	.0233	----	.0317	.0092	.0670	.1146	.00184	.00186	.03562
%RSD	1.2234	----	3.1213	.89916	4.2474	5.6806	.37475	.39658	7.4887

#1	1.9227	11.306	.99308	1.0159	1.6256	1.9369	.49119	.47059	.45047
#2	1.8897	^ ----	k 1.0379	k 1.0289	k 1.5308	k 2.0990	k .48859	k .46796	k .50085

Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Int. Std.	Y_2243	Y_3600	Y_3774
Line	224.306 {450}	360.073 {94}	377.433 {89}
Units	Cts/S	Cts/S	Cts/S
Avg	2416.9	34770.	1969.3
Stddev	2.6	403.	63.7
%RSD	.10799	1.1580	3.2329

#1	2418.8	35055.	1924.3
#2	2415.1	34486.	2014.3

Sample Name: 280-83040-C-1-A PDS Acquired: 5/17/2016 19:14:04 Type: Unk
Method: 6500_025(v6) Mode: CONC Corr. Factor: 1.000000
User: CRHOADES Prep Date: Custom ID2: Custom ID3:
Comment: 325212 6010C Q4

Elem	Ag3280	Al1670	Al3092	As1890	B_2089	Ba4554	Be3130	Bi2230	Ca3179
Line	328.068 {103}	167.079 {502}	309.271 {109}	189.042 {478}	208.959 {461}	455.403 { 74}	313.042 {108}	223.061 {451}	317.933 {106}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.04251	2.2382	W 2.8582	.21023	.23617	.11705	.04879	-.00249	474.17
Stddev	.00020	.0010	.0406	.00950	.00108	.00032	.00035	.00354	1.60
%RSD	.46366	.04340	1.4195	4.5169	.45622	.27014	.71301	141.85	.33734

#1	.04237	2.2389	2.8295	.20351	.23693	.11728	.04904	.00001	475.31
#2	.04265	2.2375	2.8868	.21694	.23541	.11683	.04854	-.00500	473.04

Check ?	Chk Pass	Chk Pass	Chk Warn	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit			500.00						
Low Limit			3.2000						

Elem	Cd2288	Co2286	Cr2055	Cu3247	Fe2599	K_7664	Li6707	Mg2790	Mn2576
Line	228.802 {447}	228.616 {447}	205.560 {464}	324.754 {104}	259.940 {130}	766.490 { 44}	670.784 { 50}	279.079 {121}2	257.610 {131}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.05522	.06875	.05469	.05415	10.967	30.173	.18414	115.02	.94554
Stddev	.00009	.00031	.00013	.00006	.040	.016	.00398	30.13	.00334
%RSD	.16931	.44544	.24516	.11616	.36643	.05175	2.1605	26.197	.35302

#1	.05516	.06897	.05479	.05419	10.995	30.184	.18133	136.32	.94318
#2	.05529	.06853	.05460	.05410	10.938	30.162	.18696	93.711	.94790

Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Elem	Mo2020	Na8183	Ni2316	P_1782	Pb2203	S_1820	Sb2068	Se1960	Si2881
Line	202.030 {467}	818.326 { 41}	231.604 {446}	178.284 {489}	220.353 {453}	182.034 {485}	206.833 {463}	196.090 {472}	288.158 {117}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.05643	W 1021.7	.05959	W 2.4443	.09771	F 1102.3	.10127	.27497	14.993
Stddev	.00059	3.5	.00023	.0210	.00221	3.3	.00227	.00022	.014
%RSD	1.0399	.34201	.39355	.85697	2.2569	.29612	2.2463	.08172	.09477

#1	.05601	1024.1	.05975	2.4591	.09927	1100.0	.10288	.27513	14.983
#2	.05684	1019.2	.05942	2.4295	.09615	1104.6	.09966	.27481	15.003

Check ?	Chk Pass	Chk Warn	Chk Pass	Chk Warn	Chk Pass	Chk Fail	Chk Pass	Chk Pass	Chk Pass
High Limit		500.00		2.0000		200.00			
Low Limit		11.000		-1.0000		-.20000			

Elem	SiO2	Sn1899	Sr4077	Th2837	Ti3349	Ti1908	U_3701	V_2924	Zn2062
Line	288.158 {117}2	189.989 {477}	407.771 { 83}	283.730 {119}	334.904 {101}	190.856 {477}	370.152 { 91}	292.402 {115}	206.200 {163}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	32.085	.09849	W 10.294	.20366	.11961	.17922	.64201	.05977	.23221
Stddev	.030	.00268	.167	.00192	.00149	.00366	.02688	.00063	.00186
%RSD	.09477	2.7204	1.6200	.94093	1.2436	2.0441	4.1862	1.0472	.80263

#1	32.063	.10038	10.176	.20231	.11856	.17663	.66102	.06021	.23089
#2	32.106	.09659	10.412	.20502	.12066	.18181	.62301	.05932	.23352

Check ?	Chk Pass	Chk Pass	Chk Warn	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit			5.0000						
Low Limit			-.01000						

Elem	Zr3391
Line	339.198 { 99}
Units	ppm
Avg	.04859
Stddev	.00621
%RSD	12.772

#1	.05298
#2	.04421

Check ?	Chk Pass
High Limit	
Low Limit	

Sample Name: 280-83040-C-1-A PDS Acquired: 5/17/2016 19:14:04 Type: Unk
 Method: 6500_025(v6) Mode: CONC Corr. Factor: 1.000000
 User: CRHOADES Prep Date: Custom ID2: Custom ID3:
 Comment: 325212 6010C Q4

Int. Std.	Y_2243	Y_3600	Y_3774
Line	224.306 {450}	360.073 { 94}	377.433 { 89}
Units	Cts/S	Cts/S	Cts/S
Avg	2425.9	34644.	1995.4
Stddev	14.9	689.	13.7
%RSD	.61365	1.9877	.68767
#1	2415.4	35131.	2005.1
#2	2436.4	34157.	1985.7

Elem	Ag3280	Al1670	As1890	B_2089	Ba4554	Be3130	Bi2230	Ca3179	Cd2288
Line	328.068 {103}	167.079 {502}	189.042 {478}	208.959 {461}	455.403 { 74}	313.042 {108}	223.061 {451}	317.933 {106}	228.802 {447}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.00124	.10159	-.00798	.12450	.00575	-.00012	-.00308	410.57	.00154
Stddev	.00128	.00452	.00156	.00400	.00062	.00011	.00307	3.37	.00014
%RSD	103.43	4.4535	19.548	3.2099	10.812	87.351	99.662	.82181	9.1647

#1	.00214	.10479	-.00688	.12732	.00531	-.00020	-.00091	412.96	.00164
#2	.00033	.09839	-.00909	.12167	.00619	-.00005	-.00526	408.18	.00144

Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Elem	Co2286	Cr2055	Cu3247	Fe2599	K_7664	Li6707	Mg2790	Mn2576	Mo2020
Line	228.616 {447}	205.560 {464}	324.754 {104}	259.940 {130}	766.490 { 44}	670.784 { 50}	279.079 {121}2	257.610 {131}	202.030 {467}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	-.00154	.00049	.00344	.19593	8.0025	.11016	149.45	.00281	.00024
Stddev	.00044	.00056	.00083	.01585	.1189	.00300	36.16	.00001	.00001
%RSD	28.363	113.12	24.145	8.0898	1.4851	2.7218	24.193	.19107	3.4055

#1	-.00185	.00088	.00285	.18472	7.9184	.11228	175.02	.00282	.00024
#2	-.00123	.00010	.00402	.20713	8.0865	.10804	123.89	.00281	.00025

Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Elem	Na8183	Ni2316	P_1782	Pb2203	S_1820	Sb2068	Se1960	Si2881	SiO2
Line	818.326 { 41}	231.604 {446}	178.284 {489}	220.353 {453}	182.034 {485}	206.833 {463}	196.090 {472}	288.158 {117}	288.158 {117}2
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	W 1703.9	.00336	.03802	.00043	F 1457.7	-.00776	.03045	10.491	22.451
Stddev	12.6	.00040	.00058	.00181	39.1	.00522	.01083	.022	.048
%RSD	.73857	12.010	1.5269	422.13	2.6808	67.303	35.558	.21283	.21283

#1	1712.8	.00307	.03843	.00171	1485.4	-.01146	.03811	10.507	22.485
#2	1695.0	.00364	.03761	-.00085	1430.1	-.00407	.02279	10.475	22.417

Check ?	Chk Warn	Chk Pass	Chk Pass	Chk Pass	Chk Fail	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit	500.00				200.00				
Low Limit	11.000				-.20000				

Elem	Sn1899	Sr4077	Th2837	Ti3349	Ti1908	U_3701	V_2924	Zn2062	Zr3391
Line	189.989 {477}	407.771 { 83}	283.730 {119}	334.904 {101}	190.856 {477}	370.152 { 91}	292.402 {115}	206.200 {163}	339.198 { 99}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	-.00379	W 10.471	-.00393	.00557	.00450	.56743	.00013	.00196	.00480
Stddev	.00077	.067	.00002	.00006	.00037	.06705	.00075	.00101	.00284
%RSD	20.268	.64210	.59100	1.1639	8.2286	11.816	577.31	51.618	59.142

#1	-.00433	10.518	-.00395	.00561	.00424	.61484	.00066	.00268	.00279
#2	-.00324	10.423	-.00392	.00552	.00476	.52002	-.00040	.00125	.00681

Check ?	Chk Pass	Chk Warn	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit		5.0000							
Low Limit		-.01000							

Int. Std.	Y_2243	Y_3600	Y_3774						
Line	224.306 {450}	360.073 { 94}	377.433 { 89}						
Units	Cts/S	Cts/S	Cts/S						
Avg	2450.8	34199.	1903.6						
Stddev	47.9	472.	13.1						
%RSD	1.9530	1.3790	.68794						

#1	2416.9	34532.	1894.4						
#2	2484.6	33865.	1912.9						

Sample Name: 280-83044-A-1-A Acquired: 5/17/2016 19:20:08 Type: Unk

Method: 6500_025(v6) Mode: CONC Corr. Factor: 1.000000

User: CRHOADES Prep Date: Custom ID2: Custom ID3:

Comment: 325212 6010C Q4

Elem	Ag3280	Al3092	As1890	B_2089	Ba4554	Be3130	Bi2230	Ca3179	Cd2288
Line	328.068 {103}	309.271 {109}	189.042 {478}	208.959 {461}	455.403 {74}	313.042 {108}	223.061 {451}	317.933 {106}	228.802 {447}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	k .00038	k 112.65	k .01259	.28040	2.1014	k .00258	k -.01536	F 2071.8	k .00259
Stddev	.00118	1.77	.00532	.00069	.0332	.00040	.01603	7.7	.00006
%RSD	314.60	1.5753	42.296	.24535	1.5807	15.645	104.36	.37306	2.4605

#1	-.00046	111.39	.00882	.27991	2.0779	.00229	-.02669	2066.3	.00254
#2	k .00121	k 113.90	k .01635	.28088	2.1249	k .00286	k -.00402	2077.2	k .00263

Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Fail	Chk Pass
High Limit								1000.0	
Low Limit								-.10000	

Elem	Co2286	Cr2055	Cu3247	Fe2714	K_7664	Li6707	Mg2790	Mn2576	Mo2020
Line	228.616 {447}	205.560 {464}	324.754 {104}	271.441 {124}	766.490 {44}	670.784 {50}	279.079 {121}2	257.610 {131}	202.030 {467}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	k .05541	.31855	k .22640	k 154.28	W 174.58	.22468	k 97.856	^ *****	.03805
Stddev	.00420	.00460	.00135	2.06	2.00	.00204	1.606	----	.00071
%RSD	7.5878	1.4439	.59615	1.3327	1.1481	.90917	1.6410	----	1.8527

#1	.05243	.32180	.22544	152.82	173.16	.22324	96.721	7.0790	.03756
#2	k .05838	.31530	k .22735	k 155.73	175.99	.22613	k 98.992	^ ----	.03855

Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Warn	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit					100.00				
Low Limit					-.50000				

Elem	Na8183	Ni2316	P_1782	Pb2203	S_1820	Sb2068	Se1960	Si2881	SiO2
Line	818.326 {41}	231.604 {446}	178.284 {489}	220.353 {453}	182.034 {485}	206.833 {463}	196.090 {472}	288.158 {117}	288.158 {117}2
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	W 3987.6	k .15574	W 3.8107	k .05858	kF 258.36	k -.00405	k .02973	W 51.154	109.47
Stddev	62.1	.00063	.0276	.00334	.10	.00789	.00385	.133	.29
%RSD	1.5566	.40579	.72353	5.7050	.03991	194.74	12.962	.26050	.26050

#1	3943.7	.15619	3.8302	.06095	258.28	-.00964	.02700	51.248	109.67
#2	4031.5	k .15529	3.7912	k .05622	k 258.43	k .00153	k .03245	51.059	109.27

Check ?	Chk Warn	Chk Pass	Chk Warn	Chk Pass	Chk Fail	Chk Pass	Chk Pass	Chk Warn	Chk Pass
High Limit	500.00		2.0000		200.00			50.000	
Low Limit	11.000		-1.0000		-20000			-.10000	

Elem	Sn1899	Sr4077	Th2837	Ti3349	Ti1908	U_3701	V_2924	Zn2062	Zr3391
Line	189.989 {477}	407.771 {83}	283.730 {119}	334.904 {101}	190.856 {477}	370.152 {91}	292.402 {115}	206.200 {163}	339.198 {99}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	k -.00205	W 11.894	k .06913	k 3.9760	kW -.01582	k .00135	k .44930	3.8369	k .20136
Stddev	.00034	.242	.09076	.0075	.00488	.01315	.00850	.0038	.00492
%RSD	16.595	2.0352	131.29	.18919	30.846	976.77	1.8921	.09872	2.4416

#1	-.00229	11.723	.00495	3.9707	-.01237	.01065	.44329	3.8343	.20484
#2	k -.00181	12.065	k .13331	k 3.9813	k -.01927	k -.00795	k .45531	3.8396	k .19788

Check ?	Chk Pass	Chk Warn	Chk Pass	Chk Pass	Chk Warn	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit		5.0000			5.0000				
Low Limit		-.01000			-.01000				

Int. Std.	Y_2243	Y_3600	Y_3774						
Line	224.306 {450}	360.073 {94}	377.433 {89}						
Units	Cts/S	Cts/S	Cts/S						
Avg	2504.4	35415.	2064.7						
Stddev	4.4	143.	22.3						
%RSD	.17681	.40493	1.0784						

#1	2501.3	35516.	2080.4						
#2	2507.6	35313.	2048.9						

Sample Name: CCVH-3883905 Acquired: 5/17/2016 19:23:21 Type: QC
Method: 6500_025(v6) Mode: CONC Corr. Factor: 1.000000
User: CRHOADES Prep Date: Custom ID2: Custom ID3:
Comment:

Elem	Ag3280	Al3092	As1890	B_2089	Ba4554	Be3130	Bi2230	Ca3179	Cd2288	Co2286	Cr2055	Cu3247	Fe2714
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	-.00488	51.125	-.00076	.00333	-.00090	-.00003	.96775	.18973	-.00020	-.00136	.00014	-.01232	52.122
Stddev	.00062	.307	.00299	.00129	.00037	.00022	.00591	.00283	.00019	.00000	.00002	.00048	.178
%RSD	12.683	.59984	391.36	38.880	40.672	636.97	.61026	1.4904	92.934	.35260	11.977	3.8646	.34235

#1	-.00444	51.341	-.00288	.00424	-.00064	-.00019	.97192	.19173	-.00007	-.00135	.00015	-.01266	51.996
#2	-.00532	50.908	.00135	.00241	-.00116	.00012	.96357	.18773	-.00033	-.00136	.00013	-.01198	52.248

Check ?	None	Chk Pass	None	None	None	None	Chk Pass	None	None	None	None	None	Chk Pass
Value													
Range													

Elem	K_7664	Li6707	Mg2790	Mn2576	Mo2020	Na8183	Ni2316	P_1782	Pb2203	S_1820	Sb2068	Se1960	Si2881
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.44160	-.00505	.02207	-.00165	-.00214	263.00	.00116	.00787	-.00110	5.2219	-.01253	-.01051	.03450
Stddev	.11562	.00240	.00051	.00005	.00018	2.71	.00031	.00349	.00061	.0095	.00392	.00224	.03355
%RSD	26.183	47.651	2.3004	2.8519	8.4863	1.0310	26.354	44.313	55.290	.18091	31.266	21.307	97.238

#1	.52336	-.00675	.02171	-.00169	-.00201	261.08	.00095	.01033	-.00153	5.2285	-.01530	-.01209	.01078
#2	.35984	-.00335	.02243	-.00162	-.00226	264.92	.00138	.00540	-.00067	5.2152	-.00976	-.00893	.05822

Check ?	None	None	None	None	None	Chk Pass	None	None	None	Chk Pass	None	None	None
Value													
Range													

Elem	SiO2	Sn1899	Sr4077	Th2837	Ti3349	Ti1908	U_3701	V_2924	Zn2062	Zr3391
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.07383	-.00066	.00149	4.7523	.00031	-.00253	9.8030	.01312	.00068	-.13509
Stddev	.07179	.00036	.00008	.0009	.00011	.00132	.1713	.00021	.00007	.00131
%RSD	97.238	54.124	5.1808	.01884	34.399	52.250	1.7471	1.6373	10.467	.97300

#1	.02307	-.00041	.00154	4.7529	.00039	-.00347	9.9242	.01328	.00074	-.13416
#2	.12460	-.00091	.00143	4.7517	.00024	-.00160	9.6819	.01297	.00063	-.13602

Check ?	None	None	None	Chk Pass	None	None	Chk Pass	None	None	None
Value										
Range										

Int. Std.	Y_2243	Y_3600	Y_3774
Units	Cts/S	Cts/S	Cts/S
Avg	2603.4	37472.	1909.5
Stddev	3.9	217.	68.2
%RSD	.15062	.58011	3.5694

#1	2606.2	37626.	1861.3
#2	2600.6	37318.	1957.7

Sample Name: CCV-3888422 Acquired: 5/17/2016 19:25:57 Type: QC

Method: 6500_025(v6) Mode: CONC Corr. Factor: 1.000000

User: CRHOADES Prep Date: Custom ID2: Custom ID3:

Comment:

Elem	Ag3280	Al1670	As1890	B_2089	Ba4554	Be3130	Bi2230	Ca3179	Cd2288	Co2286	Cr2055	Cu3247	Fe2599
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.48265	.49593	.94322	.48688	.47507	.48265	-.00243	4.7194	.49058	.49875	.50134	.46508	2.4615
Stddev	.00053	.00304	.01185	.00355	.00206	.00251	.00288	.0160	.00115	.00737	.00655	.00196	.0115
%RSD	.10987	.61208	1.2559	.72908	.43299	.52096	118.48	.34000	.23522	1.4773	1.3057	.42183	.46767

#1	.48303	.49807	.95160	.48939	.47652	.48443	-.00039	4.7307	.48976	.50396	.50597	.46647	2.4697
#2	.48228	.49378	.93485	.48437	.47362	.48088	-.00446	4.7080	.49139	.49354	.49671	.46370	2.4534

Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	None	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Value													
Range													

Elem	K_7664	Li6707	Mg2790	Mn2576	Mo2020	Na5895	Ni2316	P_1782	Pb2203	S_1820	Sb2068	Se1960	Si2881
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	47.609	.94017	18.860	.46940	.48978	5.4440	.48788	.95952	.98225	.20268	.96345	.93793	4.7614
Stddev	.054	.00535	.102	.00077	.00648	.0122	.00482	.00127	.01750	.00663	.01618	.01991	.0251
%RSD	.11282	.56865	.54278	.16407	1.3238	.22383	.98701	.13202	1.7821	3.2688	1.6795	2.1228	.52826

#1	47.571	.93639	18.933	.46994	.49436	5.4354	.49128	.96042	.99462	.20737	.97489	.95201	4.7436
#2	47.647	.94395	18.788	.46885	.48519	5.4526	.48447	.95862	.96987	.19800	.95201	.92385	4.7792

Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	None	Chk Pass	Chk Pass	Chk Pass
Value													
Range													

Elem	SiO2	Sn1899	Sr4077	Th2837	Ti3349	Ti1908	U_3701	V_2924	Zn2062	Zr3391
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	10.189	.98601	.48368	-.00411	.46646	.97926	.08659	.48087	.45904	.47242
Stddev	.054	.01600	.00319	.00390	.00038	.01652	.00561	.00219	.00171	.00562
%RSD	.52826	1.6224	.65999	94.870	.08111	1.6865	6.4808	.45441	.37330	1.1904
#1	10.151	.99733	.48594	-.00135	.46619	.99094	.08262	.47933	.45783	.47639
#2	10.227	.97470	.48143	-.00687	.46672	.96759	.09056	.48242	.46025	.46844

Check ?	Chk Pass	Chk Pass	Chk Pass	None	Chk Pass	Chk Pass	None	Chk Pass	Chk Pass	Chk Pass
Value										
Range										

Int. Std.	Y_2243	Y_3600	Y_3774
Units	Cts/S	Cts/S	Cts/S
Avg	2555.2	37902.	1933.9
Stddev	2.0	117.	2.8
%RSD	.07922	.30744	.14590
#1	2553.7	37820.	1931.9
#2	2556.6	37985.	1935.9

Sample Name: CCB Acquired: 5/17/2016 19:28:27 Type: QC
 Method: 6500_025(v6) Mode: CONC Corr. Factor: 1.000000
 User: CRHOADES Prep Date: Custom ID2: Custom ID3:
 Comment:

Elem	Ag3280	Al1670	As1890	B_2089	Ba4554	Be3130	Bi2230	Ca3179	Cd2288	Co2286	Cr2055
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	F .00200	.00302	-.00031	.00245	-.00081	.00011	-.00247	W .10088	.00034	.00002	.00000
Stddev	.00051	.00082	.00073	.00124	.00031	.00015	.00064	.00238	.00013	.00014	.0002
%RSD	25.281	27.022	233.26	50.437	38.114	136.76	25.888	2.3553	39.780	632.05	8377.7
#1	.00236	.00360	-.00083	.00333	-.00059	.00022	-.00292	.09920	.00043	.00012	.00016
#2	.00165	.00244	.00020	.00158	-.00103	.00000	-.00202	.10256	.00024	-.00007	-.00017
Check ?	Chk Fail	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Warn	Chk Pass	Chk Pass	Chk Pass
High Limit	.00200							.10000			
Low Limit	-.01000							-.13500			
Elem	Cu3247	Fe2599	K_7664	Li6707	Mg2790	Mn2576	Mo2020	Na5895	Ni2316	P_1782	Pb2203
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	-.00060	.03626	.08881	F -.01040	.01205	.00044	.00088	F .54688	.00017	.00256	-.00049
Stddev	.00040	.00270	.00331	.00403	.00914	.00006	.00071	.00088	.00043	.00371	.00019
%RSD	66.805	7.4361	3.7284	38.785	75.876	12.701	81.073	.16139	250.76	145.12	38.670
#1	-.00032	.03817	.08647	-.00755	.01851	.00048	.00038	.54625	.00048	.00518	-.00035
#2	-.00089	.03435	.09115	-.01325	.00558	.00040	.00139	.54750	-.00013	-.00007	-.00062
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Fail	Chk Pass	Chk Pass	Chk Pass	Chk Fail	Chk Pass	Chk Pass	Chk Pass
High Limit				.01000				.50000			
Low Limit				-.01000				-.50000			
Elem	S_1820	Sb2068	Se1960	Si2881	SiO2	Sn1899	Sr4077	Th2837	Ti3349	Ti1908	U_3701
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	F .17590	W .00664	-.00271	-.01680	-.03595	-.00239	.00069	-.00036	.00072	W .00908	.04558
Stddev	.00588	.00165	.00772	.04213	.09015	.00118	.00014	.00190	.00049	.00341	.01902
%RSD	3.3412	24.826	284.42	250.76	250.76	49.237	20.605	533.85	68.208	37.597	41.737
#1	.18005	.00548	.00274	-.04659	-.09970	-.00322	.00059	.00099	.00107	.00667	.05903
#2	.17174	.00781	-.00817	.01299	.02780	-.00156	.00079	-.00170	.00037	.01150	.03213
Check ?	Chk Fail	Chk Warn	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Warn	Chk Pass
High Limit	.10000	.00100								.00750	
Low Limit	-.20000	-.00100								-.01900	
Elem	V_2924	Zn2062	Zr3391								
Units	ppm	ppm	ppm								
Avg	-.00035	-.00005	.00016								
Stddev	.00029	.00017	.00115								
%RSD	82.546	357.38	726.84								
#1	-.00014	-.00017	-.00065								
#2	-.00055	.00007	.00097								
Check ?	Chk Pass	Chk Pass	Chk Pass								
High Limit											
Low Limit											
Int. Std.	Y_2243	Y_3600	Y_3774								
Units	Cts/S	Cts/S	Cts/S								
Avg	2594.4	37822.	1805.3								
Stddev	11.0	778.	61.8								
%RSD	.42461	2.0574	3.4256								
#1	2602.2	37272.	1761.6								
#2	2586.6	38372.	1849.0								

Sample Name: CCVL-3894681 Acquired: 5/17/2016 19:30:49 Type: QC

Method: 6500_025(v6) Mode: CONC Corr. Factor: 1.000000

User: CRHOADES Prep Date: Custom ID2: Custom ID3:

Comment:

Elem	Ag3280	Al1670	As1890	B_2089	Ba4554	Be3130	Bi2230	Ca3179	Cd2288	Co2286	Cr2055	Cu3247
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.01036	.10013	.01319	.09607	.00814	.00094	.10548	.20764	.00530	.00977	.00969	.01328
Stddev	.00073	.00061	.00315	.00059	.00102	.00035	.00028	.00589	.00042	.00020	.00045	.00039
%RSD	7.0824	.60617	23.861	.61884	12.546	36.938	.26285	2.8343	7.9014	2.0152	4.6547	2.9593

#1	.01087	.10056	.01097	.09565	.00886	.00070	.10568	.20347	.00560	.00963	.01001	.01356
#2	.00984	.09970	.01542	.09649	.00741	.00119	.10529	.21180	.00500	.00991	.00937	.01300

Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Value												
Range												

Elem	Fe2599	K_7664	Li6707	Mg2790	Mn2576	Mo2020	Na5895	Ni2316	P_1782	Pb2203	S_1820	Sb2068
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.09979	2.8624	F .00229	.18890	.00965	.01894	1.2792	.03996	2.7664	.00981	.12466	.01879
Stddev	.00042	.0622	.00128	.00057	.00024	.00020	.0079	.00003	.0086	.00092	.02011	.00432
%RSD	.42199	2.1727	55.777	.30081	2.5254	1.0730	.61488	.08592	.30932	9.3881	16.130	22.980

#1	.10009	2.9064	.00320	.18931	.00982	.01908	1.2736	.03994	2.7725	.01046	.13888	.01573
#2	.09949	2.8185	.00139	.18850	.00948	.01880	1.2847	.03999	2.7604	.00916	.11044	.02184

Check ?	Chk Pass	Chk Pass	Chk Fail	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	None	Chk Pass
Value			.01000									
Range			-30.000%									

Elem	Se1960	Si2881	SiO2	Sn1899	Sr4077	Th2837	Ti3349	Ti1908	U_3701	V_2924	Zn2062	Zr3391
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.01512	.46693	.99923	.10003	.00981	.01447	.00997	F .00981	F .11852	.00931	.01946	.01244
Stddev	.00103	.01399	.02994	.00389	.00025	.00024	.00016	.00391	.04348	.00096	.00131	.00123
%RSD	6.8039	2.9968	2.9968	3.8937	2.5887	1.6577	1.6242	39.845	36.684	10.323	6.7452	9.8530

#1	.01585	.45703	.97805	.09727	.00999	.01464	.00986	.00705	.08778	.00999	.02038	.01157
#2	.01440	.47682	1.0204	.10278	.00963	.01430	.01009	.01258	.14927	.00863	.01853	.01331

Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Fail	Chk Fail	Chk Pass	Chk Pass	Chk Pass
Value								.01500	.06000			
Range								-30.000%	30.000%			

Int. Std.	Y_2243	Y_3600	Y_3774
Units	Cts/S	Cts/S	Cts/S
Avg	2599.7	38325.	1893.2
Stddev	1.8	12.	29.6
%RSD	.06798	.03146	1.5650

#1	2601.0	38316.	1872.2
#2	2598.5	38334.	1914.1

Sample Name: MB 280-325499/1-A Acquired: 5/17/2016 19:33:29 Type: Unk

Method: 6500_025(v6) Mode: CONC Corr. Factor: 1.000000

User: CRHOADES Prep Date: 5/17 Custom ID2: Custom ID3:

Comment: 325499 MI 6010C (As Cr Fe) Q4

Elem	Ag3280	Al1670	As1890	B_2089	Ba4554	Be3130	Bi2230	Ca3179	Cd2288
Line	328.068 {103}	167.079 {502}	189.042 {478}	208.959 {461}	455.403 { 74}	313.042 {108}	223.061 {451}	317.933 {106}	228.802 {447}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.00173	.03662	.00342	.02478	-.00131	.00024	-.00253	.07116	.00001
Stddev	.00016	.00086	.00977	.00084	.00002	.00025	.00341	.04674	.00012
%RSD	9.2375	2.3571	285.84	3.4073	1.4914	103.69	134.61	65.686	1487.9

#1	.00162	.03601	-.00349	.02419	-.00130	.00006	-.00012	.10422	.00010
#2	.00184	.03723	.01033	.02538	-.00133	.00041	-.00494	.03811	-.00008

Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Elem	Co2286	Cr2055	Cu3247	Fe2599	K_7664	Li6707	Mg2790	Mn2576	Mo2020
Line	228.616 {447}	205.560 {464}	324.754 {104}	259.940 {130}	766.490 { 44}	670.784 { 50}	279.079 {121}2	257.610 {131}	202.030 {467}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	-.00004	.00086	-.00088	.03379	-.10333	W -.00642	.00799	.00206	-.00135
Stddev	.00004	.00000	.00023	.00985	.03273	.00088	.00719	.00002	.00012
%RSD	110.69	.00836	25.864	29.147	31.671	13.771	90.036	.83950	9.1623

#1	-.00001	.00086	-.00104	.04076	-.08019	-.00705	.00290	.00205	-.00144
#2	-.00007	.00086	-.00072	.02683	-.12647	-.00580	.01308	.00207	-.00126

Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Warn	Chk Pass	Chk Pass	Chk Pass
High Limit						.00500			
Low Limit						-.00500			

Elem	Na5895	Ni2316	P_1782	Pb2203	S_1820	Sb2068	Se1960	Si2881	SiO2
Line	589.592 { 57}	231.604 {446}	178.284 {489}	220.353 {453}	182.034 {485}	206.833 {463}	196.090 {472}	288.158 {117}	288.158 {117}2
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.34325	.00069	.00730	-.00097	W .09105	W -.00624	W -.00905	-.00187	-.00399
Stddev	.12699	.00009	.00085	.00025	.00610	.00129	.00073	.02453	.05250
%RSD	36.998	13.165	11.668	26.063	6.6971	20.634	8.0451	1314.4	1314.4

#1	.43305	.00062	.00669	-.00079	.09536	-.00715	-.00854	.01548	.03313
#2	.25345	.00075	.00790	-.00115	.08674	-.00533	-.00957	-.01921	-.04112

Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Warn	Chk Warn	Chk Warn	Chk Pass	None
High Limit					.05000	.00500	.00750		
Low Limit					-.05000	-.00500	-.00750		

Elem	Sn1899	Sr4077	Th2837	Ti3349	Ti1908	U_3701	V_2924	Zn2062	Zr3391
Line	189.989 {477}	407.771 { 83}	283.730 {119}	334.904 {101}	190.856 {477}	370.152 { 91}	292.402 {115}	206.200 {163}	339.198 { 99}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	-.00213	.00040	-.00014	.00096	-.00060	.04546	-.00048	.00054	-.00023
Stddev	.00023	.00058	.00319	.00037	.00391	.05035	.00032	.00010	.00277
%RSD	10.570	146.07	2254.5	38.274	648.96	110.75	67.348	17.792	1199.4

#1	-.00197	.00081	.00212	.00070	.00216	.00986	-.00070	.00061	-.00219
#2	-.00229	-.00001	-.00240	.00122	-.00337	.08107	-.00025	.00047	.00173

Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Int. Std.	Y_2243	Y_3600	Y_3774
Line	224.306 {450}	360.073 { 94}	377.433 { 89}
Units	Cts/S	Cts/S	Cts/S
Avg	2619.8	38541.	1902.5
Stddev	2.4	146.	27.5
%RSD	.09157	.37966	1.4447

#1	2621.5	38644.	1883.1
#2	2618.1	38437.	1921.9

Sample Name: LCSD 280-325499/2-A Acquired: 5/17/2016 19:35:50 Type: Unk
Method: 6500_025(v6) Mode: CONC Corr. Factor: 1.000000
User: CRHOADES Prep Date: Custom ID2: Custom ID3:
Comment: 325499 MI 6010C (As Cr Fe) Q4

Elem	Ag3280	Al1670	As1890	B_2089	Ba4554	Be3130	Bi2230	Ca3179	Cd2288
Line	328.068 {103}	167.079 {502}	189.042 {478}	208.959 {461}	455.403 { 74}	313.042 {108}	223.061 {451}	317.933 {106}	228.802 {447}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.04807	1.9620	.96070	1.0965	1.9250	.04941	1.9947	46.878	.09900
Stddev	.00023	.0029	.00240	.0123	.0019	.00044	.0157	.039	.00122
%RSD	.47667	.15022	.24937	1.1241	.10078	.88402	.78885	.08306	1.2284

#1	.04823	1.9599	.95901	1.0878	1.9264	.04972	1.9836	46.905	.09814
#2	.04790	1.9641	.96240	1.1053	1.9237	.04910	2.0058	46.850	.09986

Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	None	Chk Pass	Chk Pass
High Limit									
Low Limit									

Elem	Co2286	Cr2055	Cu3247	Fe2599	K_7664	Li6707	Mg2790	Mn2576	Mo2020
Line	228.616 {447}	205.560 {464}	324.754 {104}	259.940 {130}	766.490 { 44}	670.784 { 50}	279.079 {121}2	257.610 {131}	202.030 {467}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.48648	.20005	.22792	1.0249	48.513	.94043	47.109	.46604	1.0328
Stddev	.00347	.00213	.00084	.0072	.155	.00157	.022	.00096	.0058
%RSD	.71234	1.0668	.37050	.69979	.31933	.16660	.04674	.20617	.56267

#1	.48403	.19854	.22852	1.0199	48.622	.93932	47.094	.46672	1.0286
#2	.48893	.20156	.22732	1.0300	48.403	.94154	47.125	.46536	1.0369

Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Elem	Na8183	Ni2316	P_1782	Pb2203	S_1820	Sb2068	Se1960	Si2881	SiO2
Line	818.326 { 41}	231.604 {446}	178.284 {489}	220.353 {453}	182.034 {485}	206.833 {463}	196.090 {472}	288.158 {117}	288.158 {117}2
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	55.220	.47660	9.8429	.49514	2.1090	.46600	1.9174	F 2.3463	5.0211
Stddev	.659	.00433	.1080	.00446	.0185	.00777	.0468	.0311	.0665
%RSD	1.1931	.90876	1.0971	.90063	.87812	1.6672	2.4404	1.3247	1.3247

#1	54.754	.47354	9.7665	.49199	2.0959	.46050	1.8843	2.3683	5.0681
#2	55.686	.47966	9.9192	.49829	2.1221	.47149	1.9505	2.3243	4.9740

Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	None	Chk Pass	Chk Pass	Chk Fail	None
High Limit								11.000	
Low Limit								9.0000	

Elem	Sn1899	Sr4077	Th2837	Ti3349	Ti1908	U_3701	V_2924	Zn2062	Zr3391
Line	189.989 {477}	407.771 { 83}	283.730 {119}	334.904 {101}	190.856 {477}	370.152 { 91}	292.402 {115}	206.200 {163}	339.198 { 99}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	1.9815	.97294	.97504	.94804	1.8673	1.9958	.47565	.45430	.44698
Stddev	.0524	.00223	.00111	.00050	.0019	.0333	.00102	.00382	.00140
%RSD	2.6444	.22887	.11370	.05277	.09979	1.6708	.21491	.84122	.31254

#1	1.9445	.97451	.97425	.94769	1.8686	2.0194	.47493	.45160	.44797
#2	2.0186	.97136	.97582	.94840	1.8660	1.9723	.47637	.45700	.44599

Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Int. Std.	Y_2243	Y_3600	Y_3774
Line	224.306 {450}	360.073 { 94}	377.433 { 89}
Units	Cts/S	Cts/S	Cts/S
Avg	2573.4	37327.	1875.1
Stddev	28.3	70.	.4
%RSD	1.0981	.18710	.02236

#1	2553.4	37376.	1875.4
#2	2593.4	37277.	1874.8

Sample Name: 280-82867-A-1-C Acquired: 5/17/2016 19:38:16 Type: Unk

Method: 6500_025(v6) Mode: CONC Corr. Factor: 1.000000

User: CRHOADES Prep Date: Custom ID2: Custom ID3:

Comment: 325499 MI 6010C (As Cr Fe) Q4

Elem	Ag3280	Al3092	As1890	B_2089	Ba4554	Be3130	Bi2230	Ca3179	Cd2288
Line	328.068 {103}	309.271 {109}	189.042 {478}	208.959 {461}	455.403 { 74}	313.042 {108}	223.061 {451}	317.933 {106}	228.802 {447}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	-.00133	W 503.32	.15520	.00300	1.2400	.00884	-.04243	20.606	.00231
Stddev	.00133	1.60	.00256	.00080	.0041	.00006	.00613	.043	.00016
%RSD	99.832	.31841	1.6524	26.515	.33035	.71692	14.460	.21021	6.9364

#1	-.00039	504.46	.15701	.00244	1.2429	.00888	-.03809	20.636	.00243
#2	-.00227	502.19	.15339	.00356	1.2371	.00879	-.04676	20.575	.00220

Check ?	Chk Pass	Chk Warn	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit		500.00							
Low Limit		3.2000							

Elem	Co2286	Cr2055	Cu3247	Fe2714	K_7664	Li6707	Mg2790	Mn2576	Mo2020
Line	228.616 {447}	205.560 {464}	324.754 {104}	271.441 {124}	766.490 { 44}	670.784 { 50}	279.079 {121}2	257.610 {131}	202.030 {467}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.20463	1.3800	.22748	W 726.46	10.195	.19103	8.9406	W 15.478	.05305
Stddev	.00081	.0006	.00006	3.63	.064	.00074	.0162	.050	.00055
%RSD	.39573	.04368	.02647	.50021	.63039	.38857	.18159	.32433	1.0379

#1	.20520	1.3796	.22743	729.03	10.241	.19051	8.9521	15.442	.05266
#2	.20406	1.3804	.22752	723.89	10.150	.19156	8.9291	15.513	.05344

Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Warn	Chk Pass	Chk Pass	Chk Pass	Chk Warn	Chk Pass
High Limit				500.00				10.000	
Low Limit				40.000				-.01000	

Elem	Na5895	Ni2316	P_1782	Pb2203	S_1820	Sb2068	Se1960	Si2881	SiO2
Line	589.592 { 57}	231.604 {446}	178.284 {489}	220.353 {453}	182.034 {485}	206.833 {463}	196.090 {472}	288.158 {117}	288.158 {117}2
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.62303	.26868	W 8.8411	.35545	.90335	-.00987	.00880	11.784	25.219
Stddev	.00939	.00042	.0023	.00358	.02653	.00038	.00715	.119	.254
%RSD	1.5077	.15510	.02558	1.0065	2.9373	3.8469	81.266	1.0081	1.0081

#1	.62967	.26838	8.8427	.35798	.88458	-.00960	.01385	11.700	25.039
#2	.61639	.26897	8.8395	.35292	.92211	-.01014	.00374	11.868	25.398

Check ?	Chk Pass	Chk Pass	Chk Warn	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit			2.0000						
Low Limit			-1.0000						

Elem	Sn1899	Sr4077	Th2837	Ti3349	Ti1908	U_3701	V_2924	Zn2062	Zr3391
Line	189.989 {477}	407.771 { 83}	283.730 {119}	334.904 {101}	190.856 {477}	370.152 { 91}	292.402 {115}	206.200 {163}	339.198 { 99}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.02163	.18831	.16765	1.5467	.03860	.33411	1.5014	1.4209	.38465
Stddev	.00399	.00251	.00098	.0225	.01016	.02090	.0034	.0013	.00190
%RSD	18.439	1.3324	.58550	1.4559	26.324	6.2543	.22786	.09063	.49429

#1	.02445	.19009	.16835	1.5626	.03142	.31934	1.4990	1.4199	.38599
#2	.01881	.18654	.16696	1.5308	.04579	.34889	1.5039	1.4218	.38330

Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Int. Std.	Y_2243	Y_3600	Y_3774
Line	224.306 {450}	360.073 { 94}	377.433 { 89}
Units	Cts/S	Cts/S	Cts/S
Avg	3060.9	42786.	2323.8
Stddev	2.1	4.	13.4
%RSD	.06922	.00893	.57709

#1	3059.5	42788.	2314.3
#2	3062.4	42783.	2333.3

Sample Name: 280-82867-A-2-C Acquired: 5/17/2016 19:41:11 Type: Unk

Method: 6500_025(v6) Mode: CONC Corr. Factor: 1.000000

User: CRHOADES Prep Date: Custom ID2: Custom ID3:

Comment: 325499 MI 6010C (As Cr Fe) Q4

Elem	Ag3280	Al3092	As1890	B_2089	Ba4554	Be3130	Bi2230	Ca3179	Cd2288
Line	328.068 {103}	309.271 {109}	189.042 {478}	208.959 {461}	455.403 { 74}	313.042 {108}	223.061 {451}	317.933 {106}	228.802 {447}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	-0.00199	496.44	.15021	.00069	2.2933	.00913	-.04956	21.820	.00318
Stddev	.00034	1.58	.00923	.00037	.0117	.00004	.00079	.021	.00021
%RSD	17.220	.31849	6.1463	52.974	.50948	.44448	1.5933	.09841	6.5684

#1	-.00175	495.32	.14368	.00043	2.2850	.00916	-.05012	21.805	.00332
#2	-.00224	497.56	.15673	.00095	2.3015	.00910	-.04900	21.835	.00303

Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Elem	Co2286	Cr2055	Cu3247	Fe2714	K_7664	Li6707	Mg2790	Mn2576	Mo2020
Line	228.616 {447}	205.560 {464}	324.754 {104}	271.441 {124}	766.490 { 44}	670.784 { 50}	279.079 {121}2	257.610 {131}	202.030 {467}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.20881	1.4234	.22126	W 781.40	9.6616	.18686	8.7286	F 20.911	.03714
Stddev	.00137	.0004	.00020	1.39	.0376	.00084	.0333	.231	.00104
%RSD	.65546	.02935	.09159	.17844	.38906	.44704	.38212	1.1071	2.7970

#1	.20978	1.4231	.22140	780.41	9.6350	.18627	8.7050	20.747	.03788
#2	.20784	1.4237	.22111	782.38	9.6882	.18745	8.7522	21.074	.03641

Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Warn	Chk Pass	Chk Pass	Chk Pass	Chk Fail	Chk Pass
High Limit				500.00				20.000	
Low Limit				40.000				-.02000	

Elem	Na5895	Ni2316	P_1782	Pb2203	S_1820	Sb2068	Se1960	Si2881	SiO2
Line	589.592 { 57}	231.604 {446}	178.284 {489}	220.353 {453}	182.034 {485}	206.833 {463}	196.090 {472}	288.158 {117}	288.158 {117}2
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.82137	.27920	W 8.8150	.36059	.82388	W -.01002	-.00097	12.896	27.598
Stddev	.29323	.00146	.0618	.00156	.01044	.00368	.00432	.133	.284
%RSD	35.700	.52272	.70132	.43222	1.2674	36.684	444.31	1.0275	1.0275

#1	1.0287	.28023	8.8588	.36169	.83126	-.01262	-.00403	12.803	27.398
#2	.61403	.27817	8.7713	.35948	.81649	-.00742	.00208	12.990	27.799

Check ?	Chk Pass	Chk Pass	Chk Warn	Chk Pass	Chk Pass	Chk Warn	Chk Pass	Chk Pass	Chk Pass
High Limit			2.0000			2.0000			
Low Limit			-1.0000			-.01000			

Elem	Sn1899	Sr4077	Th2837	Ti3349	Ti1908	U_3701	V_2924	Zn2062	Zr3391
Line	189.989 {477}	407.771 { 83}	283.730 {119}	334.904 {101}	190.856 {477}	370.152 { 91}	292.402 {115}	206.200 {163}	339.198 { 99}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.01791	.22379	.17702	1.4231	.01169	.33267	1.4899	1.3641	.37786
Stddev	.00225	.00073	.00004	.0033	.00231	.04825	.0053	.0128	.00243
%RSD	12.583	.32712	.02508	.23345	19.758	14.503	.35367	.93529	.64259

#1	.01631	.22431	.17706	1.4208	.01005	.36679	1.4862	1.3550	.37615
#2	.01950	.22327	.17699	1.4255	.01332	.29855	1.4936	1.3731	.37958

Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Int. Std.	Y_2243	Y_3600	Y_3774
Line	224.306 {450}	360.073 { 94}	377.433 { 89}
Units	Cts/S	Cts/S	Cts/S
Avg	3030.6	42746.	2300.7
Stddev	9.4	248.	4.5
%RSD	.30913	.58004	.19490

#1	3037.2	42921.	2297.5
#2	3024.0	42571.	2303.9

Sample Name: 280-82867-A-3-C Acquired: 5/17/2016 19:44:05 Type: Unk

Method: 6500_025(v6) Mode: CONC Corr. Factor: 1.000000

User: CRHOADES Prep Date: Custom ID2: Custom ID3:

Comment: 325499 MI 6010C (As Cr Fe) Q4

Elem	Ag3280	Al3092	As1890	B_2089	Ba4554	Be3130	Bi2230	Ca3179	Cd2288
Line	328.068 {103}	309.271 {109}	189.042 {478}	208.959 {461}	455.403 { 74}	313.042 {108}	223.061 {451}	317.933 {106}	228.802 {447}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.00269	199.18	.06456	.00286	1.5477	.00959	-.01321	47.263	.00184
Stddev	.00036	.85	.00083	.00093	.0107	.00013	.00072	.270	.00006
%RSD	13.334	.42877	1.2853	32.452	.68828	1.3402	5.4606	.57154	3.0188

#1	.00294	198.58	.06397	.00352	1.5401	.00950	-.01372	47.072	.00180
#2	.00243	199.79	.06514	.00221	1.5552	.00968	-.01270	47.454	.00188

Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Elem	Co2286	Cr2055	Cu3247	Fe2714	K_7664	Li6707	Mg2790	Mn2576	Mo2020
Line	228.616 {447}	205.560 {464}	324.754 {104}	271.441 {124}	766.490 { 44}	670.784 { 50}	279.079 {121}2	257.610 {131}	202.030 {467}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.09330	.49897	.13235	225.44	7.8413	.05490	5.5960	W 15.984	.00431
Stddev	.00216	.00024	.00052	1.65	.1394	.00043	.0081	.069	.00049
%RSD	2.3175	.04835	.39409	.73008	1.7776	.78452	.14564	.43091	11.374

#1	.09483	.49914	.13198	224.27	7.7428	.05520	5.6018	15.935	.00466
#2	.09177	.49880	.13272	226.60	7.9399	.05459	5.5902	16.033	.00397

Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Warn	Chk Pass
High Limit								10.000	
Low Limit								-.01000	

Elem	Na5895	Ni2316	P_1782	Pb2203	S_1820	Sb2068	Se1960	Si2881	SiO2
Line	589.592 { 57}	231.604 {446}	178.284 {489}	220.353 {453}	182.034 {485}	206.833 {463}	196.090 {472}	288.158 {117}	288.158 {117}2
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.21946	.16000	W 4.7452	.18978	1.5965	-.00775	-.00280	9.1799	19.645
Stddev	.00148	.00360	.1054	.00468	.0390	.00005	.00604	.0941	.201
%RSD	.67449	2.2487	2.2217	2.4654	2.4446	.67081	216.05	1.0256	1.0256

#1	.21841	.16254	4.8197	.19309	1.6241	-.00779	.00148	9.2465	19.787
#2	.22050	.15745	4.6706	.18647	1.5689	-.00771	-.00707	9.1133	19.503

Check ?	Chk Pass	Chk Pass	Chk Warn	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit			2.0000						
Low Limit			-1.0000						

Elem	Sn1899	Sr4077	Th2837	Ti3349	Ti1908	U_3701	V_2924	Zn2062	Zr3391
Line	189.989 {477}	407.771 { 83}	283.730 {119}	334.904 {101}	190.856 {477}	370.152 { 91}	292.402 {115}	206.200 {163}	339.198 { 99}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.00513	.14737	.04449	.90260	.00959	.09014	.44980	.55426	.10689
Stddev	.00043	.00086	.00113	.00992	.00071	.00389	.00018	.00186	.00474
%RSD	8.4606	.58644	2.5384	1.0986	7.4387	4.3102	.04106	.33532	4.4352

#1	.00482	.14676	.04529	.90962	.01009	.08739	.44994	.55557	.10354
#2	.00543	.14798	.04369	.89559	.00908	.09289	.44967	.55294	.11024

Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Int. Std.	Y_2243	Y_3600	Y_3774
Line	224.306 {450}	360.073 { 94}	377.433 { 89}
Units	Cts/S	Cts/S	Cts/S
Avg	6341.2	88199.	4726.1
Stddev	4.0	97.	11.0
%RSD	.06306	.10958	.23234

#1	6344.0	88131.	4733.9
#2	6338.4	88268.	4718.4

Sample Name: 280-82867-A-4-C Acquired: 5/17/2016 19:46:40 Type: Unk

Method: 6500_025(v6) Mode: CONC Corr. Factor: 1.000000

User: CRHOADES Prep Date: Custom ID2: Custom ID3:

Comment: 325499 MI 6010C (As Cr Fe) Q4

Elem	Ag3280	Al3092	As1890	B_2089	Ba4554	Be3130	Bi2230	Ca3179	Cd2288
Line	328.068 {103}	309.271 {109}	189.042 {478}	208.959 {461}	455.403 {74}	313.042 {108}	223.061 {451}	317.933 {106}	228.802 {447}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	-0.00011	358.73	.11043	.01136	1.4321	.00970	-0.02552	185.41	.00600
Stddev	.00009	.32	.00628	.00110	.0003	.00021	.00270	.07	.00021
%RSD	84.133	.08981	5.6878	9.6691	.02369	2.1545	10.595	.03932	3.5077

#1	-0.00004	358.50	.11487	.01058	1.4319	.00985	-.02744	185.36	.00615
#2	-0.00017	358.95	.10599	.01214	1.4323	.00955	-.02361	185.46	.00585

Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Elem	Co2286	Cr2055	Cu3247	Fe2714	K_7664	Li6707	Mg2790	Mn2576	Mo2020
Line	228.616 {447}	205.560 {464}	324.754 {104}	271.441 {124}	766.490 {44}	670.784 {50}	279.079 {121}2	257.610 {131}	202.030 {467}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.14507	.55446	.34342	399.05	12.585	.13075	17.932	W 18.974	.03474
Stddev	.00110	.00258	.00066	.68	.055	.00097	.028	.043	.00045
%RSD	.75903	.46613	.19163	.17095	.43715	.74177	.15770	.22410	1.2842

#1	.14585	.55629	.34388	398.57	12.546	.13143	17.952	19.004	.03442
#2	.14430	.55263	.34295	399.53	12.624	.13006	17.912	18.944	.03505

Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Warn	Chk Pass
High Limit								10.000	
Low Limit								-.01000	

Elem	Na5895	Ni2316	P_1782	Pb2203	S_1820	Sb2068	Se1960	Si2881	SiO2
Line	589.592 {57}	231.604 {446}	178.284 {489}	220.353 {453}	182.034 {485}	206.833 {463}	196.090 {472}	288.158 {117}	288.158 {117}2
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.70940	.27030	W 7.3995	.38471	3.8792	W -.01050	.00209	15.206	32.541
Stddev	.00821	.00043	.0134	.00430	.0047	.00266	.00223	.121	.260
%RSD	1.1574	.15955	.18083	1.1185	.12155	25.345	106.32	.79789	.79789

#1	.71521	.26999	7.3901	.38167	3.8759	-.01238	.00367	15.292	32.724
#2	.70359	.27060	7.4090	.38776	3.8826	-.00862	.00052	15.120	32.357

Check ?	Chk Pass	Chk Pass	Chk Warn	Chk Pass	Chk Pass	Chk Warn	Chk Pass	Chk Pass	Chk Pass
High Limit			2.0000			2.0000			
Low Limit			-1.0000			-.01000			

Elem	Sn1899	Sr4077	Th2837	Ti3349	Ti1908	U_3701	V_2924	Zn2062	Zr3391
Line	189.989 {477}	407.771 {83}	283.730 {119}	334.904 {101}	190.856 {477}	370.152 {91}	292.402 {115}	206.200 {163}	339.198 {99}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.01506	.43261	.08002	1.4671	.00846	.15845	.81117	1.3456	.19823
Stddev	.00028	.00093	.00428	.0055	.00291	.02037	.00149	.0017	.00381
%RSD	1.8426	.21532	5.3527	.37501	34.387	12.853	.18429	.12721	1.9239

#1	.01487	.43195	.08305	1.4710	.01052	.14405	.81012	1.3468	.19553
#2	.01526	.43327	.07700	1.4632	.00640	.17285	.81223	1.3444	.20092

Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Int. Std.	Y_2243	Y_3600	Y_3774
Line	224.306 {450}	360.073 {94}	377.433 {89}
Units	Cts/S	Cts/S	Cts/S
Avg	3731.6	53024.	2885.6
Stddev	18.9	166.	2.1
%RSD	.50554	.31253	.07432

#1	3718.2	53141.	2887.1
#2	3744.9	52906.	2884.0

Sample Name: 280-82867-A-4-C SD@5 Acquired: 5/17/2016 19:49:14 Type: Unk
Method: 6500_025(v6) Mode: CONC Corr. Factor: 1.000000
User: CRHOADES Prep Date: Custom ID2: Custom ID3:
Comment: 325499 MI 6010C (As Cr Fe) Q4

Elem	Ag3280	Al3092	As1890	B_2089	Ba4554	Be3130	Bi2230	Ca3179	Cd2288
Line	328.068 {103}	309.271 {109}	189.042 {478}	208.959 {461}	455.403 { 74}	313.042 {108}	223.061 {451}	317.933 {106}	228.802 {447}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.00049	100.25	.02711	.00389	.39785	.00282	-.00592	51.767	.00154
Stddev	.00007	.07	.00238	.00122	.00003	.00003	.00057	.017	.00023
%RSD	13.677	.07283	8.7621	31.435	.00675	1.2196	9.6475	.03243	15.005

#1	.00044	100.20	.02879	.00475	.39787	.00279	-.00551	51.778	.00138
#2	.00054	100.30	.02543	.00302	.39784	.00284	-.00632	51.755	.00171

Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Elem	Co2286	Cr2055	Cu3247	Fe2714	K_7664	Li6707	Mg2790	Mn2576	Mo2020
Line	228.616 {447}	205.560 {464}	324.754 {104}	271.441 {124}	766.490 { 44}	670.784 { 50}	279.079 {121}2	257.610 {131}	202.030 {467}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.04079	.15088	.09166	113.75	3.3149	.03340	5.1668	5.5409	.00807
Stddev	.00147	.00434	.00061	.18	.0553	.00416	.0047	.0416	.00026
%RSD	3.5976	2.8771	.66831	.16118	1.6672	12.453	.09192	.75136	3.2645

#1	.03975	.14781	.09209	113.88	3.2758	.03634	5.1702	5.5115	.00789
#2	.04183	.15395	.09122	113.62	3.3540	.03046	5.1634	5.5704	.00826

Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Elem	Na5895	Ni2316	P_1782	Pb2203	S_1820	Sb2068	Se1960	Si2881	SiO2
Line	589.592 { 57}	231.604 {446}	178.284 {489}	220.353 {453}	182.034 {485}	206.833 {463}	196.090 {472}	288.158 {117}	288.158 {117}2
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.25340	.07627	1.9928	.10912	1.0684	-.00199	-.00146	3.9243	8.3980
Stddev	.01062	.00166	.0491	.00479	.0251	.00047	.00165	.0257	.0551
%RSD	4.1926	2.1738	2.4618	4.3896	2.3485	23.804	113.00	.65558	.65558

#1	.24589	.07509	1.9581	.10573	1.0506	-.00233	-.00029	3.9425	8.4369
#2	.26091	.07744	2.0275	.11251	1.0861	-.00166	-.00262	3.9061	8.3591

Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Elem	Sn1899	Sr4077	Th2837	Ti3349	Ti1908	U_3701	V_2924	Zn2062	Zr3391
Line	189.989 {477}	407.771 { 83}	283.730 {119}	334.904 {101}	190.856 {477}	370.152 { 91}	292.402 {115}	206.200 {163}	339.198 { 99}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.00177	.12494	.02211	.39271	.00325	.04694	.22317	.38154	.05680
Stddev	.00036	.00031	.00085	.00248	.00262	.01058	.00008	.00450	.00207
%RSD	20.303	.25169	3.8223	.63057	80.604	22.535	.03378	1.1790	3.6458

#1	.00152	.12516	.02151	.39446	.00140	.03946	.22322	.38472	.05534
#2	.00203	.12472	.02271	.39096	.00511	.05442	.22311	.37836	.05827

Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Int. Std.	Y_2243	Y_3600	Y_3774
Line	224.306 {450}	360.073 { 94}	377.433 { 89}
Units	Cts/S	Cts/S	Cts/S
Avg	2906.2	41513.	2146.6
Stddev	4.9	65.	.1
%RSD	.16964	.15720	.00371

#1	2909.7	41467.	2146.7
#2	2902.7	41559.	2146.6

Sample Name: 280-82867-B-4-C MS Acquired: 5/17/2016 19:51:54 Type: Unk
Method: 6500_025(v6) Mode: CONC Corr. Factor: 1.000000
User: CRHOADES Prep Date: Custom ID2: Custom ID3:
Comment: 325499 MI 6010C (As Cr Fe) Q4

Elem	Ag3280	Al3092	As1890	B_2089	Ba4554	Be3130	Bi2230	Ca3179	Cd2288
Line	328.068 {103}	309.271 {109}	189.042 {478}	208.959 {461}	455.403 {74}	313.042 {108}	223.061 {451}	317.933 {106}	228.802 {447}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.03437	W 637.84	.75031	.53151	2.9960	.04369	F 1.3080	204.54	.07330
Stddev	.00000	8.13	.00929	.00086	.0383	.00014	.0112	2.34	.00043
%RSD	.00616	1.2742	1.2375	.16092	1.2775	.31504	.85256	1.1431	.59088

#1	.03437	643.59	.74375	.53090	3.0231	.04379	1.3159	206.19	.07300
#2	.03437	632.09	.75688	.53211	2.9690	.04360	1.3002	202.88	.07361

Check ?	Chk Pass	Chk Warn	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Fail	Chk Pass	Chk Pass
High Limit		500.00					.10000		
Low Limit		3.2000					-.10000		

Elem	Co2286	Cr2055	Cu3247	Fe2714	K_7664	Li6707	Mg2790	Mn2576	Mo2020
Line	228.616 {447}	205.560 {464}	324.754 {104}	271.441 {124}	766.490 {44}	670.784 {50}	279.079 {121}2	257.610 {131}	202.030 {467}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.46284	.84758	.58115	418.68	53.739	.90014	57.195	W 19.651	.64078
Stddev	.00109	.00267	.00104	5.34	.674	.00355	.047	.128	.00151
%RSD	.23454	.31486	.17819	1.2745	1.2535	.39396	.08233	.65031	.23616

#1	.46207	.84570	.58189	422.46	54.215	.90265	57.228	19.741	.63971
#2	.46360	.84947	.58042	414.91	53.262	.89764	57.161	19.560	.64185

Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Warn	Chk Pass
High Limit								10.000	
Low Limit								-.01000	

Elem	Na8183	Ni2316	P_1782	Pb2203	S_1820	Sb2068	Se1960	Si2881	SiO2
Line	818.326 {41}	231.604 {446}	178.284 {489}	220.353 {453}	182.034 {485}	206.833 {463}	196.090 {472}	288.158 {117}	288.158 {117}2
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	39.984	.71460	W 13.798	.71162	5.2336	.03064	1.2431	13.133	28.105
Stddev	.399	.00507	.120	.00043	.0268	.00482	.0070	.103	.221
%RSD	.99872	.70952	.86887	.06031	.51275	15.746	.56587	.78632	.78632

#1	39.702	.71818	13.883	.71131	5.2146	.03405	1.2481	13.206	28.262
#2	40.266	.71101	13.713	.71192	5.2525	.02722	1.2382	13.060	27.949

Check ?	Chk Pass	Chk Pass	Chk Warn	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit			2.0000						
Low Limit			-1.0000						

Elem	Sn1899	Sr4077	Th2837	Ti3349	Ti1908	U_3701	V_2924	Zn2062	Zr3391
Line	189.989 {477}	407.771 {83}	283.730 {119}	334.904 {101}	190.856 {477}	370.152 {91}	292.402 {115}	206.200 {163}	339.198 {99}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	1.1925	1.1113	.72181	2.6530	1.0671	1.4435	1.3159	2.4076	.49268
Stddev	.0129	.0139	.00094	.0373	.0443	.0150	.0046	.0074	.00322
%RSD	1.0824	1.2478	.13017	1.4051	4.1532	1.0400	.35046	.30756	.65432

#1	1.2016	1.1212	.72114	2.6793	1.0985	1.4329	1.3191	2.4128	.49040
#2	1.1833	1.1015	.72247	2.6266	1.0358	1.4541	1.3126	2.4023	.49496

Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Int. Std.	Y_2243	Y_3600	Y_3774						
Line	224.306 {450}	360.073 {94}	377.433 {89}						
Units	Cts/S	Cts/S	Cts/S						
Avg	3690.7	51486.	2927.5						
Stddev	10.1	81.	43.3						
%RSD	.27251	.15722	1.4805						

#1	3697.8	51543.	2896.8						
#2	3683.6	51429.	2958.1						

Sample Name: 280-82867-C-4-C MSD Acquired: 5/17/2016 19:54:42 Type: Unk
Method: 6500_025(v6) Mode: CONC Corr. Factor: 1.000000
User: CRHOADES Prep Date: Custom ID2: Custom ID3:
Comment: 325499 MI 6010C (As Cr Fe) Q4

Elem	Ag3280	Al3092	As1890	B_2089	Ba4554	Be3130	Bi2230	Ca3179	Cd2288
Line	328.068 {103}	309.271 {109}	189.042 {478}	208.959 {461}	455.403 {74}	313.042 {108}	223.061 {451}	317.933 {106}	228.802 {447}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	k .03357	kW 583.09	k .65770	.51556	k 2.7520	k .03978	kF 1.1703	186.07	k .06722
Stddev	.00350	1.35	.00651	.00226	.0054	.00003	.0240	.30	.00226
%RSD	10.440	.23130	.98914	.43742	.19544	.06756	2.0481	.15940	3.3619

#1	.03109	582.14	.66230	.51716	2.7482	.03976	1.1533	185.86	.06562
#2	k .03604	k 584.05	k .65310	.51397	k 2.7558	k .03980	k 1.1872	186.28	k .06882

Check ?	Chk Pass	Chk Warn	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Fail	Chk Pass	Chk Pass
High Limit		500.00					.10000		
Low Limit		3.2000					-.10000		

Elem	Co2286	Cr2055	Cu3247	Fe2714	K_7664	Li6707	Mg2790	Mn2576	Mo2020
Line	228.616 {447}	205.560 {464}	324.754 {104}	271.441 {124}	766.490 {44}	670.784 {50}	279.079 {121}2	257.610 {131}	202.030 {467}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	k .41658	.70882	k .52962	k 377.03	48.457	.81675	k 50.702	^ *****	k .59383
Stddev	.00042	.00014	.00147	.60	.013	.00475	.061	----	.00556
%RSD	.10121	.02017	.27753	.15842	.02683	.58106	.12054	----	.93698

#1	.41628	.70892	.52858	376.60	48.447	.81340	50.746	18.250	.59777
#2	k .41688	.70872	k .53066	k 377.45	48.466	.82011	k 50.659	^ ----	k .58990

Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Elem	Na8183	Ni2316	P_1782	Pb2203	S_1820	Sb2068	Se1960	Si2881	SiO2
Line	818.326 {41}	231.604 {446}	178.284 {489}	220.353 {453}	182.034 {485}	206.833 {463}	196.090 {472}	288.158 {117}	288.158 {117}2
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	36.324	k .64429	W 12.420	k .62940	k 4.6371	k .02765	k 1.0978	k 14.634	k 31.316
Stddev	.375	.00665	.095	.01818	.0888	.00340	.0184	.064	.137
%RSD	1.0315	1.0329	.76449	2.8880	1.9147	12.283	1.6765	.43696	.43696

#1	36.589	.64900	12.487	.64226	4.6999	.03006	1.1108	14.679	31.413
#2	36.059	k .63959	12.353	k .61655	k 4.5743	k .02525	k 1.0848	k 14.589	k 31.220

Check ?	Chk Pass	Chk Pass	Chk Warn	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit			2.0000						
Low Limit			-1.0000						

Elem	Sn1899	Sr4077	Th2837	Ti3349	Ti1908	U_3701	V_2924	Zn2062	Zr3391
Line	189.989 {477}	407.771 {83}	283.730 {119}	334.904 {101}	190.856 {477}	370.152 {91}	292.402 {115}	206.200 {163}	339.198 {99}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	k 1.1074	.99774	k .79842	k 2.9756	k .98959	k 1.2551	k 1.1838	k 2.1412	k .49605
Stddev	.0211	.00201	.23018	.0054	.04759	.0424	.0031	.0073	.01442
%RSD	1.9025	.20113	28.829	.18159	4.8094	3.3797	.26534	.33894	2.9061

#1	1.1223	.99632	.63566	2.9794	1.0232	1.2851	1.1860	2.1463	.48586
#2	k 1.0925	.99916	k .96118	k 2.9718	k .95594	k 1.2251	k 1.1816	k 2.1361	k .50624

Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Int. Std.	Y_2243	Y_3600	Y_3774
Line	224.306 {450}	360.073 {94}	377.433 {89}
Units	Cts/S	Cts/S	Cts/S
Avg	3558.0	49790.	2802.4
Stddev	13.3	126.	3.7
%RSD	.37384	.25394	.13165

#1	3548.6	49700.	2799.8
#2	3567.4	49879.	2805.0

Sample Name: 280-82867-A-4-C PDS Acquired: 5/17/2016 19:57:27 Type: Unk
Method: 6500_025(v6) Mode: CONC Corr. Factor: 1.000000
User: CRHOADES Prep Date: Custom ID2: Custom ID3:
Comment: 325499 MI 6010C (As Cr Fe) Q4

Elem	Ag3280	Al3092	As1890	B_2089	Ba4554	Be3130	Bi2230	Ca3179	Cd2288
Line	328.068 {103}	309.271 {109}	189.042 {478}	208.959 {461}	455.403 { 74}	313.042 {108}	223.061 {451}	317.933 {106}	228.802 {447}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.02497	354.04	.23040	.07383	1.4754	.04082	-.02599	195.26	.04013
Stddev	.00054	.20	.00294	.00187	.0005	.00035	.00318	.27	.00051
%RSD	2.1615	.05581	1.2745	2.5358	.03323	.86260	12.239	.13799	1.2806

#1	.02535	353.90	.23248	.07516	1.4751	.04106	-.02824	195.45	.04049
#2	.02459	354.18	.22832	.07251	1.4758	.04057	-.02374	195.07	.03976

Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Elem	Co2286	Cr2055	Cu3247	Fe2714	K_7664	Li6707	Mg2790	Mn2576	Mo2020
Line	228.616 {447}	205.560 {464}	324.754 {104}	271.441 {124}	766.490 { 44}	670.784 { 50}	279.079 {121}2	257.610 {131}	202.030 {467}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.17062	.56402	.37470	395.17	24.756	.18870	30.060	W 18.811	.06775
Stddev	.00397	.01322	.00138	.88	.018	.00268	.068	.115	.00206
%RSD	2.3258	2.3444	.36940	.22222	.07350	1.4201	.22499	.60991	3.0476

#1	.17342	.57337	.37567	395.79	24.743	.18680	30.012	18.730	.06921
#2	.16781	.55467	.37372	394.55	24.768	.19059	30.108	18.892	.06629

Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Warn	Chk Pass
High Limit								10.000	
Low Limit								-.01000	

Elem	Na8183	Ni2316	P_1782	Pb2203	S_1820	Sb2068	Se1960	Si2881	SiO2
Line	818.326 { 41}	231.604 {446}	178.284 {489}	220.353 {453}	182.034 {485}	206.833 {463}	196.090 {472}	288.158 {117}	288.158 {117}2
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	19.382	.29052	W 8.5005	.43210	3.6920	.06188	.13210	16.539	35.394
Stddev	.349	.00931	.2642	.01231	.1033	.00341	.00256	.190	.406
%RSD	1.7997	3.2042	3.1080	2.8489	2.7990	5.5065	1.9353	1.1465	1.1465

#1	19.628	.29710	8.6873	.44081	3.7651	.06429	.13391	16.405	35.107
#2	19.135	.28393	8.3137	.42340	3.6189	.05947	.13029	16.674	35.681

Check ?	Chk Pass	Chk Pass	Chk Warn	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit			2.0000						
Low Limit			-1.0000						

Elem	Sn1899	Sr4077	Th2837	Ti3349	Ti1908	U_3701	V_2924	Zn2062	Zr3391
Line	189.989 {477}	407.771 { 83}	283.730 {119}	334.904 {101}	190.856 {477}	370.152 { 91}	292.402 {115}	206.200 {163}	339.198 { 99}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.07491	.45876	.21334	1.4440	.12417	.46936	.83730	1.4446	.22622
Stddev	.00326	.00065	.00446	.0138	.00564	.02720	.00037	.0069	.00181
%RSD	4.3553	.14109	2.0884	.95225	4.5422	5.7950	.04415	.47407	.79984

#1	.07722	.45921	.21019	1.4537	.12816	.48859	.83704	1.4398	.22750
#2	.07260	.45830	.21649	1.4342	.12018	.45012	.83756	1.4495	.22494

Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Int. Std.	Y_2243	Y_3600	Y_3774
Line	224.306 {450}	360.073 { 94}	377.433 { 89}
Units	Cts/S	Cts/S	Cts/S
Avg	3761.0	50754.	2854.6
Stddev	6.2	950.	45.7
%RSD	.16379	1.8711	1.6009

#1	3765.4	51425.	2822.3
#2	3756.7	50082.	2886.9

Sample Name: CCVH-3883905 Acquired: 5/17/2016 20:00:01 Type: QC
Method: 6500_025(v6) Mode: CONC Corr. Factor: 1.000000
User: CRHOADES Prep Date: Custom ID2: Custom ID3:
Comment:

Elem	Ag3280	Al3092	As1890	B_2089	Ba4554	Be3130	Bi2230	Ca3179	Cd2288	Co2286	Cr2055	Cu3247	Fe2714
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	-.00473	51.370	-.00464	.00582	-.00084	.00005	.98368	.10389	-.00013	-.00128	-.00041	-.01376	52.618
Stddev	.00003	.272	.00626	.00037	.00034	.00009	.03017	.07252	.00001	.00003	.00014	.00010	.510
%RSD	.71835	.52937	134.90	6.3509	40.371	181.51	3.0670	69.806	7.3112	2.7035	34.258	.69996	.96843

#1	-.00476	51.563	-.00021	.00556	-.00060	-.00001	1.0050	.15516	-.00012	-.00131	-.00031	-.01383	52.978
#2	-.00471	51.178	-.00907	.00608	-.00107	.00011	.96235	.05261	-.00013	-.00126	-.00051	-.01369	52.258

Check ?	None	Chk Pass	None	None	None	None	Chk Pass	None	None	None	None	None	Chk Pass
Value													
Range													

Elem	K_7664	Li6707	Mg2790	Mn2576	Mo2020	Na8183	Ni2316	P_1782	Pb2203	S_1820	Sb2068	Se1960	Si2881
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	-.09717	-.00735	.01032	.00113	-.00127	268.01	.00119	.00698	-.00201	5.0825	-.01652	-.00814	-.03647
Stddev	.09231	.00148	.00257	.00075	.00050	.37	.00036	.00472	.00249	.1379	.00045	.00802	.03981
%RSD	94.997	20.151	24.940	66.822	39.369	.13842	30.176	67.607	124.22	2.7129	2.7317	98.449	109.17

#1	-.16244	-.00839	.00850	.00166	-.00162	268.27	.00094	.00365	-.00024	5.1800	-.01684	-.00247	-.00832
#2	-.03190	-.00630	.01214	.00060	-.00091	267.75	.00145	.01032	-.00377	4.9850	-.01621	-.01381	-.06462

Check ?	None	None	None	None	None	Chk Pass	None	None	None	Chk Pass	None	None	None
Value													
Range													

Elem	SiO2	Sn1899	Sr4077	Th2837	Ti3349	Ti1908	U_3701	V_2924	Zn2062	Zr3391
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	-.07805	-.00058	.00056	4.7614	.00001	.01208	9.7758	.01363	.00239	-.13528
Stddev	.08520	.00117	.00020	.0040	.00018	.00274	.0079	.00062	.00004	.00059
%RSD	109.17	200.57	35.245	.08501	2155.9	22.694	.08096	4.5135	1.5486	.43773

#1	-.01780	-.00141	.00070	4.7586	-.00012	.01014	9.7702	.01407	.00237	-.13486
#2	-.13829	.00024	.00042	4.7643	.00013	.01402	9.7814	.01320	.00242	-.13570

Check ?	None	None	None	Chk Pass	None	None	Chk Pass	None	None	None
Value										
Range										

Int. Std.	Y_2243	Y_3600	Y_3774
Units	Cts/S	Cts/S	Cts/S
Avg	2610.2	37626.	1896.8
Stddev	16.0	30.	35.3
%RSD	.61177	.07920	1.8617

#1	2598.9	37605.	1871.8
#2	2621.4	37647.	1921.7

Sample Name: CCV-3888422 Acquired: 5/17/2016 20:02:38 Type: QC
Method: 6500_025(v6) Mode: CONC Corr. Factor: 1.000000
User: CRHOADES Prep Date: Custom ID2: Custom ID3:
Comment:

Elem	Ag3280	Al1670	As1890	B_2089	Ba4554	Be3130	Bi2230	Ca3179	Cd2288	Co2286	Cr2055	Cu3247	Fe2599
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.48537	.50729	.94230	.49109	.48039	.48901	-.00278	4.7700	.49987	.49969	.50328	.46742	2.4946
Stddev	.00037	.00533	.00238	.00697	.01315	.00941	.00344	.0608	.01095	.01068	.01047	.00006	.0477
%RSD	.07607	1.0507	.25233	1.4202	2.7376	1.9236	123.53	1.2756	2.1901	2.1372	2.0807	.01244	1.9104

#1	.48511	.51106	.94398	.49602	.48969	.49566	-.00521	4.8130	.50761	.50724	.51068	.46738	2.5283
#2	.48563	.50352	.94062	.48616	.47109	.48236	-.00035	4.7269	.49213	.49214	.49587	.46746	2.4609

Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	None	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Value													
Range													

Elem	K_7664	Li6707	Mg2790	Mn2576	Mo2020	Na5895	Ni2316	P_1782	Pb2203	S_1820	Sb2068	Se1960	Si2881
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	48.109	.95483	18.958	.46568	.49129	5.2285	.48707	.96866	.99414	.01261	.97629	.94358	4.8462
Stddev	1.052	.00695	.027	.00018	.01264	.0375	.01151	.01631	.03281	.01190	.02917	.02907	.0735
%RSD	2.1869	.72765	.14029	.03904	2.5738	.71672	2.3632	1.6842	3.2999	94.328	2.9874	3.0805	1.5175

#1	48.853	.95975	18.939	.46555	.50023	5.2550	.49520	.98020	1.0173	.02103	.99692	.96414	4.8982
#2	47.366	.94992	18.977	.46581	.48235	5.2020	.47893	.95713	.97094	.00420	.95567	.92303	4.7942

Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	None	Chk Pass	Chk Pass	Chk Pass
Value													
Range													

Elem	SiO2	Sn1899	Sr4077	Th2837	Ti3349	Ti1908	U_3701	V_2924	Zn2062	Zr3391
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	10.371	.99376	.49075	-.00157	.45963	1.0122	.03684	.47979	.46353	.46830
Stddev	.157	.02429	.01200	.00101	.00078	.0224	.01986	.00403	.00086	.00112
%RSD	1.5175	2.4442	2.4448	64.204	.16931	2.2162	53.898	.84052	.18504	.23916

#1	10.482	1.0109	.49923	-.00229	.46018	1.0280	.02280	.48264	.46414	.46909
#2	10.260	.97659	.48226	-.00086	.45908	.99631	.05088	.47693	.46292	.46751

Check ?	Chk Pass	Chk Pass	Chk Pass	None	Chk Pass	Chk Pass	None	Chk Pass	Chk Pass	Chk Pass
Value										
Range										

Int. Std.	Y_2243	Y_3600	Y_3774
Units	Cts/S	Cts/S	Cts/S
Avg	2611.1	38029.	1866.5
Stddev	4.9	181.	41.3
%RSD	.18947	.47534	2.2105

#1	2614.6	38156.	1837.3
#2	2607.6	37901.	1895.7

Sample Name: CCB Acquired: 5/17/2016 20:05:11 Type: QC
 Method: 6500_025(v6) Mode: CONC Corr. Factor: 1.000000
 User: CRHOADES Prep Date: Custom ID2: Custom ID3:
 Comment:

Elem	Ag3280	Al1670	As1890	B_2089	Ba4554	Be3130	Bi2230	Ca3179	Cd2288	Co2286	Cr2055
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	F .00249	.02334	.00491	.00366	-.00174	-.00008	.00057	.00501	.00004	-.00035	-.00056
Stddev	.00012	.00213	.00535	.00139	.00015	.00007	.00266	.00806	.00003	.00017	.00013
%RSD	4.9868	9.1378	108.92	37.885	8.3786	87.821	466.46	160.94	84.270	47.942	23.497

#1	.00257	.02484	.00113	.00464	-.00164	-.00003	-.00131	-.00069	.00001	-.00023	-.00047
#2	.00240	.02183	.00869	.00268	-.00184	-.00013	.00245	.01070	.00006	-.00047	-.00065

Check ?	Chk Fail	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit	.00200										
Low Limit	-.01000										

Elem	Cu3247	Fe2599	K_7664	Li6707	Mg2790	Mn2576	Mo2020	Na5895	Ni2316	P_1782	Pb2203
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.00013	.02044	-.03117	-.00539	-.00453	W .00137	.00126	.14419	-.00002	.00120	.00065
Stddev	.00003	.00137	.19333	.00408	.00795	.00004	.00002	.01818	.00053	.00078	.00101
%RSD	20.755	6.6843	620.26	75.716	175.49	3.2745	1.6143	12.611	2211.9	64.668	154.53

#1	.00011	.02140	-.16788	-.00250	-.01015	.00134	.00125	.15705	.00035	.00175	.00136
#2	.00014	.01947	.10554	-.00827	.00109	.00141	.00128	.13133	-.00040	.00065	-.00006

Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Warn	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit						.00100					
Low Limit						-.01000					

Elem	S_1820	Sb2068	Se1960	Si2881	SiO2	Sn1899	Sr4077	Th2837	Ti3349	Ti1908	U_3701
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	-.01297	W .00260	-.00618	-.00237	-.00507	-.00029	-.00020	-.00099	.00083	.00327	.09673
Stddev	.00021	.00519	.00245	.02905	.06216	.00013	.00015	.00196	.00063	.00119	.02389
%RSD	1.6475	199.60	39.657	1225.7	1225.7	45.640	71.909	197.57	75.292	36.370	24.696

#1	-.01282	-.00107	-.00791	-.02291	-.04903	-.00039	-.00010	-.00237	.00039	.00411	.11362
#2	-.01312	.00627	-.00444	.01817	.03889	-.00020	-.00031	.00039	.00128	.00243	.07983

Check ?	Chk Pass	Chk Warn	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit		.00100									
Low Limit		-.00100									

Elem	V_2924	Zn2062	Zr3391
Units	ppm	ppm	ppm
Avg	.00014	.00016	-.00084
Stddev	.00011	.00011	.00216
%RSD	77.697	67.680	257.49

#1	.00021	.00024	-.00237
#2	.00006	.00009	.00069

Check ?	Chk Pass	Chk Pass	Chk Pass
High Limit			
Low Limit			

Int. Std.	Y_2243	Y_3600	Y_3774
Units	Cts/S	Cts/S	Cts/S
Avg	2604.6	38262.	1877.0
Stddev	2.2	195.	4.4
%RSD	.08311	.50924	.23483

#1	2606.1	38124.	1873.9
#2	2603.0	38400.	1880.1

Sample Name: CCVL-3894681 Acquired: 5/17/2016 20:07:33 Type: QC
Method: 6500_025(v6) Mode: CONC Corr. Factor: 1.000000
User: CRHOADES Prep Date: Custom ID2: Custom ID3:
Comment:

Elem	Ag3280	Al1670	As1890	B_2089	Ba4554	Be3130	Bi2230	Ca3179	Cd2288	Co2286	Cr2055	Cu3247
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.01120	.10997	.01647	.09962	.00838	F .00070	.11200	.19198	.00556	.01022	.00965	.01418
Stddev	.00040	.00160	.00093	.00041	.00056	.00025	.00071	.00535	.00005	.00030	.00004	.00075
%RSD	3.5824	1.4569	5.6475	.40974	6.6937	36.149	.63588	2.7863	.95330	2.9722	.38124	5.3130
#1	.01148	.10884	.01713	.09933	.00878	.00052	.11149	.19576	.00560	.01043	.00962	.01471
#2	.01091	.11111	.01581	.09991	.00798	.00088	.11250	.18820	.00552	.01000	.00968	.01365
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Fail	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Value						.00100						
Range						-30.000%						
Elem	Fe2599	K_7664	Li6707	Mg2790	Mn2576	Mo2020	Na5895	Ni2316	P_1782	Pb2203	S_1820	Sb2068
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.10396	2.9443	F .00221	.19305	.00996	.01888	1.1446	.04061	2.9042	.00700	-.01441	.01709
Stddev	.00259	.1092	.00443	.00260	.00006	.00112	.0155	.00002	.0361	.00119	.00118	.00107
%RSD	2.4909	3.7098	200.52	1.3484	.65111	5.9101	1.3524	.04268	1.2418	17.018	8.2155	6.2667
#1	.10579	2.8670	.00534	.19121	.00991	.01809	1.1555	.04060	2.8787	.00616	-.01525	.01785
#2	.10213	3.0215	-.00092	.19489	.01001	.01967	1.1336	.04062	2.9297	.00784	-.01358	.01634
Check ?	Chk Pass	Chk Pass	Chk Fail	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	None	Chk Pass
Value			.01000									
Range			-30.000%									
Elem	Se1960	Si2881	SiO2	Sn1899	Sr4077	Th2837	Ti3349	Ti1908	U_3701	V_2924	Zn2062	Zr3391
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	F .00890	.47822	1.0234	.10016	.00986	.01354	.01016	.01810	F .11975	.00989	.01892	.01663
Stddev	.00248	.03580	.0766	.00383	.00010	.00030	.00005	.00113	.00465	.00037	.00050	.00133
%RSD	27.908	7.4870	7.4870	3.8266	1.0065	2.2044	.48662	6.2464	3.8820	3.7870	2.6547	7.9720
#1	.00714	.50353	1.0776	.09745	.00979	.01333	.01019	.01730	.11646	.01015	.01927	.01757
#2	.01066	.45290	.96920	.10287	.00993	.01375	.01012	.01890	.12304	.00962	.01856	.01570
Check ?	Chk Fail	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Fail	Chk Pass	Chk Pass	Chk Pass
Value	.01500								.06000			
Range	-30.000%								30.000%			
Int. Std.	Y_2243	Y_3600	Y_3774									
Units	Cts/S	Cts/S	Cts/S									
Avg	2697.0	39667.	1860.3									
Stddev	19.5	111.	36.0									
%RSD	.72240	.28045	1.9329									
#1	2710.8	39745.	1885.7									
#2	2683.2	39588.	1834.9									

Sample Name: MB 280-325228/1-A Acquired: 5/17/2016 20:10:12 Type: Unk

Method: 6500_025(v6) Mode: CONC Corr. Factor: 1.000000

User: CRHOADES Prep Date: 5/16 Custom ID2: Custom ID3:

Comment: 325228 6010B (As Cd Fe)

Elem	Ag3280	Al1670	As1890	B_2089	Ba4554	Be3130	Bi2230	Ca3179	Cd2288
Line	328.068 {103}	167.079 {502}	189.042 {478}	208.959 {461}	455.403 { 74}	313.042 {108}	223.061 {451}	317.933 {106}	228.802 {447}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.00154	.01060	.00066	.00052	-.00144	-.00009	-.00044	.01949	.00032
Stddev	.00030	.00072	.00100	.00012	.00048	.00003	.00032	.00075	.00032
%RSD	19.511	6.8038	151.73	22.562	33.307	28.595	73.501	3.8274	97.778

#1	.00133	.01009	-.00005	.00060	-.00110	-.00007	-.00067	.02002	.00010
#2	.00176	.01111	.00137	.00043	-.00177	-.00011	-.00021	.01896	.00055

Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Elem	Co2286	Cr2055	Cu3247	Fe2599	K_7664	Li6707	Mg2790	Mn2576	Mo2020
Line	228.616 {447}	205.560 {464}	324.754 {104}	259.940 {130}	766.490 { 44}	670.784 { 50}	279.079 {121}2	257.610 {131}	202.030 {467}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	-.00047	-.00034	-.00061	.02467	-.17779	W -.00680	-.00013	.00048	-.00114
Stddev	.00026	.00017	.00095	.00704	.16402	.00120	.00650	.00007	.00054
%RSD	54.996	49.390	155.59	28.550	92.256	17.599	5147.4	14.092	47.296

#1	-.00029	-.00046	-.00128	.02966	-.06181	-.00596	-.00472	.00053	-.00152
#2	-.00066	-.00022	.00006	.01969	-.29377	-.00765	.00447	.00043	-.00076

Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Warn	Chk Pass	Chk Pass	Chk Pass
High Limit						.00500			
Low Limit						-.00500			

Elem	Na5895	Ni2316	P_1782	Pb2203	S_1820	Sb2068	Se1960	Si2881	SiO2
Line	589.592 { 57}	231.604 {446}	178.284 {489}	220.353 {453}	182.034 {485}	206.833 {463}	196.090 {472}	288.158 {117}	288.158 {117}2
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.13798	.00041	.00099	.00093	-.01930	-.00254	-.00614	-.01347	-.02884
Stddev	.00100	.00015	.00167	.00167	.00447	.00043	.00600	.01857	.03974
%RSD	.72458	35.577	169.64	179.43	23.134	16.845	97.765	137.83	137.83

#1	.13868	.00051	-.00020	.00211	-.01615	-.00284	-.01038	-.02661	-.05694
#2	.13727	.00031	.00217	-.00025	-.02246	-.00224	-.00190	-.00034	-.00073

Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	None
High Limit									
Low Limit									

Elem	Sn1899	Sr4077	Th2837	Ti3349	Ti1908	U_3701	V_2924	Zn2062	Zr3391
Line	189.989 {477}	407.771 { 83}	283.730 {119}	334.904 {101}	190.856 {477}	370.152 { 91}	292.402 {115}	206.200 {163}	339.198 { 99}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	-.00246	.00004	.00265	.00055	.00003	F .06409	.00054	.00064	.00252
Stddev	.00040	.00027	.00228	.00033	.00042	.00095	.00039	.00021	.00341
%RSD	16.367	668.31	85.924	59.646	1502.5	1.4757	73.424	32.883	135.27

#1	-.00217	-.00015	.00427	.00032	-.00027	.06342	.00081	.00049	.00011
#2	-.00274	.00023	.00104	.00078	.00032	.06476	.00026	.00079	.00493

Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Fail	Chk Pass	Chk Pass	Chk Pass
High Limit						.06000			
Low Limit						-.06000			

Int. Std.	Y_2243	Y_3600	Y_3774						
Line	224.306 {450}	360.073 { 94}	377.433 { 89}						
Units	Cts/S	Cts/S	Cts/S						
Avg	2685.6	39472.	1922.5						
Stddev	16.9	365.	50.1						
%RSD	.63087	.92392	2.6070						

#1	2697.6	39730.	1887.1						
#2	2673.7	39214.	1958.0						

Sample Name: LCS 280-325228/2-A Acquired: 5/17/2016 20:12:34 Type: Unk
Method: 6500_025(v6) Mode: CONC Corr. Factor: 1.000000
User: CRHOADES Prep Date: Custom ID2: Custom ID3:
Comment: 325228 6010B (As Cd Fe)

Elem	Ag3280	Al1670	As1890	B_2089	Ba4554	Be3130	Bi2230	Ca3179	Cd2288
Line	328.068 {103}	167.079 {502}	189.042 {478}	208.959 {461}	455.403 {74}	313.042 {108}	223.061 {451}	317.933 {106}	228.802 {447}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.04947	1.8740	.95322	.98434	1.9137	.04927	1.9937	46.609	.09897
Stddev	.00059	.0074	.00423	.00058	.0196	.00004	.0113	.504	.00004
%RSD	1.1976	.39397	.44391	.05865	1.0225	.08575	.56458	1.0806	.03589

#1	.04905	1.8792	.95621	.98475	1.8999	.04924	2.0017	46.253	.09900
#2	.04989	1.8688	.95023	.98393	1.9275	.04930	1.9858	46.965	.09895

Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	None	Chk Pass	Chk Pass
High Limit									
Low Limit									

Elem	Co2286	Cr2055	Cu3247	Fe2599	K_7664	Li6707	Mg2790	Mn2576	Mo2020
Line	228.616 {447}	205.560 {464}	324.754 {104}	259.940 {130}	766.490 {44}	670.784 {50}	279.079 {121}2	257.610 {131}	202.030 {467}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.47963	.19781	.23071	1.0025	47.959	.94244	47.646	.45884	1.0112
Stddev	.00040	.00011	.00116	.0043	.509	.00597	.004	.00054	.0022
%RSD	.08252	.05368	.50286	.43406	1.0605	.63300	.00923	.11744	.21317

#1	.47935	.19773	.22989	1.0055	47.599	.94666	47.643	.45846	1.0127
#2	.47991	.19788	.23153	.99938	48.318	.93822	47.649	.45922	1.0096

Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Elem	Na8183	Ni2316	P_1782	Pb2203	S_1820	Sb2068	Se1960	Si2881	SiO2
Line	818.326 {41}	231.604 {446}	178.284 {489}	220.353 {453}	182.034 {485}	206.833 {463}	196.090 {472}	288.158 {117}	288.158 {117}2
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	F 56.364	.46880	9.8303	.49263	2.0352	.50902	1.9263	9.6967	20.751
Stddev	.065	.00154	.0242	.00065	.0034	.00136	.0026	.1254	.268
%RSD	.11475	.32919	.24568	.13285	.16703	.26693	.13465	1.2935	1.2935

#1	56.410	.46989	9.8473	.49309	2.0376	.50806	1.9244	9.7854	20.941
#2	56.319	.46771	9.8132	.49216	2.0328	.50998	1.9281	9.6080	20.561

Check ?	Chk Fail	Chk Pass	Chk Pass	Chk Pass	None	Chk Pass	Chk Pass	Chk Pass	None
High Limit	56.000								
Low Limit	45.500								

Elem	Sn1899	Sr4077	Th2837	Ti3349	Ti1908	U_3701	V_2924	Zn2062	Zr3391
Line	189.989 {477}	407.771 {83}	283.730 {119}	334.904 {101}	190.856 {477}	370.152 {91}	292.402 {115}	206.200 {163}	339.198 {99}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	1.9447	.96796	.97081	.92914	F 1.7471	1.9638	.47350	.45293	.44560
Stddev	.0034	.00912	.00338	.00380	.0697	.0525	.00019	.00307	.00459
%RSD	.17391	.94238	.34859	.40902	3.9883	2.6722	.04099	.67774	1.0302

#1	1.9471	.96151	.97320	.92645	1.7963	1.9267	.47336	.45510	.44235
#2	1.9423	.97441	.96841	.93182	1.6978	2.0009	.47364	.45076	.44885

Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Fail	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit					2.2000				
Low Limit					1.7600				

Int. Std.	Y_2243	Y_3600	Y_3774						
Line	224.306 {450}	360.073 {94}	377.433 {89}						
Units	Cts/S	Cts/S	Cts/S						
Avg	2623.7	38275.	1955.5						
Stddev	2.1	204.	29.3						
%RSD	.07948	.53341	1.4985						

#1	2622.2	38419.	1976.3						
#2	2625.1	38130.	1934.8						

Sample Name: 280-82937-A-1-A Acquired: 5/17/2016 20:15:02 Type: Unk

Method: 6500_025(v6) Mode: CONC Corr. Factor: 1.000000

User: CRHOADES Prep Date: Custom ID2: Custom ID3:

Comment: 325228 6010B (As Cd Fe)

Elem	Ag3280	Al1670	As1890	B_2089	Ba4554	Be3130	Bi2230	Ca3179	Cd2288
Line	328.068 {103}	167.079 {502}	189.042 {478}	208.959 {461}	455.403 { 74}	313.042 {108}	223.061 {451}	317.933 {106}	228.802 {447}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.00054	.03060	-.00327	.12682	.01232	-.00015	.00221	341.81	.00094
Stddev	.00014	.00024	.00907	.00080	.00028	.00022	.00082	1.36	.00031
%RSD	26.254	.79399	277.25	.62690	2.3073	147.09	37.224	.39774	32.688

#1	.00044	.03077	-.00969	.12626	.01252	-.00030	.00162	342.77	.00116
#2	.00063	.03043	.00314	.12738	.01212	.00001	.00279	340.85	.00072

Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Elem	Co2286	Cr2055	Cu3247	Fe2599	K_7664	Li6707	Mg2790	Mn2576	Mo2020
Line	228.616 {447}	205.560 {464}	324.754 {104}	259.940 {130}	766.490 { 44}	670.784 { 50}	279.079 {121}2	257.610 {131}	202.030 {467}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	-.00129	.00020	.00094	.02389	1.9747	.01901	65.120	.00090	.00332
Stddev	.00017	.00016	.00030	.00489	.0889	.00256	.099	.00009	.00101
%RSD	13.187	81.232	32.093	20.459	4.5033	13.442	.15241	9.5090	30.267

#1	-.00117	.00008	.00115	.02043	1.9119	.02081	65.190	.00084	.00261
#2	-.00141	.00031	.00073	.02735	2.0376	.01720	65.049	.00096	.00403

Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Elem	Na8183	Ni2316	P_1782	Pb2203	S_1820	Sb2068	Se1960	Si2881	SiO2
Line	818.326 { 41}	231.604 {446}	178.284 {489}	220.353 {453}	182.034 {485}	206.833 {463}	196.090 {472}	288.158 {117}	288.158 {117}2
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	309.88	.00280	.01697	-.00053	F 425.86	-.00288	.02006	10.223	21.876
Stddev	1.68	.00105	.00098	.00138	1.91	.00121	.00570	.039	.084
%RSD	.54075	37.491	5.7628	260.97	.44901	41.984	28.435	.38228	.38228

#1	311.07	.00354	.01766	.00045	424.51	-.00203	.01603	10.250	21.935
#2	308.70	.00206	.01628	-.00150	427.21	-.00374	.02410	10.195	21.817

Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Fail	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit					200.00				
Low Limit					-.20000				

Elem	Sn1899	Sr4077	Th2837	Ti3349	Ti1908	U_3701	V_2924	Zn2062	Zr3391
Line	189.989 {477}	407.771 { 83}	283.730 {119}	334.904 {101}	190.856 {477}	370.152 { 91}	292.402 {115}	206.200 {163}	339.198 { 99}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	-.00171	W 6.6899	-.00343	.00097	.04712	.02563	.00006	.00255	.00290
Stddev	.00022	.0330	.00088	.00026	.00877	.01330	.00008	.00054	.00579
%RSD	13.092	.49358	25.580	26.736	18.605	51.883	130.33	21.065	199.70

#1	-.00187	6.7133	-.00281	.00116	.04092	.03503	.00000	.00217	-.00119
#2	-.00156	6.6666	-.00405	.00079	.05331	.01623	.00011	.00293	.00699

Check ?	Chk Pass	Chk Warn	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit		5.0000							
Low Limit		-.01000							

Int. Std.	Y_2243	Y_3600	Y_3774
Line	224.306 {450}	360.073 { 94}	377.433 { 89}
Units	Cts/S	Cts/S	Cts/S
Avg	2519.9	36285.	1869.1
Stddev	4.0	64.	19.9
%RSD	.15714	.17695	1.0672

#1	2517.1	36240.	1883.2
#2	2522.7	36331.	1855.0

Sample Name: 280-82937-A-2-A Acquired: 5/17/2016 20:17:40 Type: Unk

Method: 6500_025(v6) Mode: CONC Corr. Factor: 1.000000

User: CRHOADES Prep Date: Custom ID2: Custom ID3:

Comment: 325228 6010B (As Cd Fe)

Elem	Ag3280	Al1670	As1890	B_2089	Ba4554	Be3130	Bi2230	Ca3179	Cd2288
Line	328.068 {103}	167.079 {502}	189.042 {478}	208.959 {461}	455.403 { 74}	313.042 {108}	223.061 {451}	317.933 {106}	228.802 {447}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.00121	.00539	-.00406	.05151	.00998	-.00065	.00185	76.468	.00040
Stddev	.00051	.00012	.00236	.00012	.00042	.00009	.00091	.241	.00032
%RSD	42.102	2.1724	57.975	.23384	4.2042	13.142	49.284	.31563	80.313

#1	.00157	.00531	-.00240	.05159	.00969	-.00059	.00250	76.297	.00063
#2	.00085	.00548	-.00573	.05142	.01028	-.00071	.00121	76.638	.00017

Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Elem	Co2286	Cr2055	Cu3247	Fe2599	K_7664	Li6707	Mg2790	Mn2576	Mo2020
Line	228.616 {447}	205.560 {464}	324.754 {104}	259.940 {130}	766.490 { 44}	670.784 { 50}	279.079 {121}2	257.610 {131}	202.030 {467}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	-.00082	-.00023	.00027	.04269	3.4322	-.00149	4.8870	.10449	.00010
Stddev	.00032	.00005	.00047	.00380	.0218	.00012	.0134	.00010	.00019
%RSD	39.547	23.626	172.39	8.9125	.63431	7.9590	.27379	.09296	195.23

#1	-.00059	-.00027	.00061	.04000	3.4476	-.00141	4.8775	.10442	-.00004
#2	-.00105	-.00019	-.00006	.04538	3.4168	-.00157	4.8964	.10456	.00023

Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Elem	Na8183	Ni2316	P_1782	Pb2203	S_1820	Sb2068	Se1960	Si2881	SiO2
Line	818.326 { 41}	231.604 {446}	178.284 {489}	220.353 {453}	182.034 {485}	206.833 {463}	196.090 {472}	288.158 {117}	288.158 {117}2
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	108.65	.00035	.00385	-.00062	93.773	-.00513	W -.00517	4.7305	10.123
Stddev	.34	.00116	.00391	.00001	.059	.00256	.00574	.0351	.075
%RSD	.30959	326.75	101.36	.97380	.06280	49.975	111.03	.74223	.74223

#1	108.41	-.00046	.00109	-.00063	93.815	-.00694	-.00924	4.7553	10.176
#2	108.89	.00117	.00662	-.00062	93.732	-.00332	-.00111	4.7056	10.070

Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Warn	Chk Pass	Chk Pass
High Limit							5.0000		
Low Limit							-.00500		

Elem	Sn1899	Sr4077	Th2837	Ti3349	Ti1908	U_3701	V_2924	Zn2062	Zr3391
Line	189.989 {477}	407.771 { 83}	283.730 {119}	334.904 {101}	190.856 {477}	370.152 { 91}	292.402 {115}	206.200 {163}	339.198 { 99}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	-.00193	1.8832	.00091	.00049	.00904	-.00077	-.00053	.00223	-.00068
Stddev	.00249	.0075	.00305	.00032	.00004	.01840	.00003	.00002	.00064
%RSD	128.86	.40047	336.34	65.452	.42030	2386.1	4.8292	.90233	93.666

#1	-.00370	1.8778	-.00125	.00072	.00901	-.01379	-.00055	.00222	-.00113
#2	-.00017	1.8885	.00306	.00026	.00906	.01224	-.00051	.00225	-.00023

Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Int. Std.	Y_2243	Y_3600	Y_3774
Line	224.306 {450}	360.073 { 94}	377.433 { 89}
Units	Cts/S	Cts/S	Cts/S
Avg	2586.9	37947.	1900.4
Stddev	14.9	20.	9.5
%RSD	.57548	.05277	.50172

#1	2597.5	37933.	1907.1
#2	2576.4	37961.	1893.7

Sample Name: 280-82988-B-1-A Acquired: 5/17/2016 20:20:18 Type: Unk

Method: 6500_025(v6) Mode: CONC Corr. Factor: 1.000000

User: CRHOADES Prep Date: Custom ID2: Custom ID3:

Comment: 325228 6010B (As Cd Fe)

Elem	Ag3280	Al1670	As1890	B_2089	Ba4554	Be3130	Bi2230	Ca3179	Cd2288
Line	328.068 {103}	167.079 {502}	189.042 {478}	208.959 {461}	455.403 { 74}	313.042 {108}	223.061 {451}	317.933 {106}	228.802 {447}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.00125	.00430	.00065	.06386	.06371	-.00028	-.00159	223.24	.00042
Stddev	.00113	.00009	.00079	.00093	.00061	.00053	.00198	2.07	.00040
%RSD	89.883	2.1476	120.62	1.4615	.96123	187.84	124.43	.92526	94.488

#1	.00046	.00436	.00010	.06452	.06327	.00009	-.00299	221.78	.00070
#2	.00205	.00423	.00121	.06320	.06414	-.00066	-.00019	224.70	.00014

Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Elem	Co2286	Cr2055	Cu3247	Fe2599	K_7664	Li6707	Mg2790	Mn2576	Mo2020
Line	228.616 {447}	205.560 {464}	324.754 {104}	259.940 {130}	766.490 { 44}	670.784 { 50}	279.079 {121}2	257.610 {131}	202.030 {467}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	-.00054	-.00016	.00128	.03734	5.7197	.05155	30.578	.09834	.00094
Stddev	.00005	.00039	.00016	.00087	.0723	.00135	.066	.00053	.00061
%RSD	8.8675	245.82	12.258	2.3366	1.2649	2.6282	.21572	.53534	64.258

#1	-.00050	.00012	.00117	.03796	5.6685	.05251	30.624	.09871	.00051
#2	-.00057	-.00044	.00139	.03673	5.7709	.05059	30.531	.09797	.00137

Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Elem	Na8183	Ni2316	P_1782	Pb2203	S_1820	Sb2068	Se1960	Si2881	SiO2
Line	818.326 { 41}	231.604 {446}	178.284 {489}	220.353 {453}	182.034 {485}	206.833 {463}	196.090 {472}	288.158 {117}	288.158 {117}2
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	185.40	.00274	.02599	.00013	160.56	-.00730	W -.00987	5.2238	11.179
Stddev	.27	.00017	.00095	.00296	.10	.00222	.00217	.0191	.041
%RSD	.14333	6.1143	3.6498	2245.5	.06206	30.417	21.983	.36497	.36497

#1	185.59	.00286	.02532	.00223	160.49	-.00573	-.01140	5.2103	11.150
#2	185.21	.00262	.02666	-.00196	160.63	-.00887	-.00834	5.2373	11.208

Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Warn	Chk Pass	Chk Pass
High Limit							5.0000		
Low Limit							-.00500		

Elem	Sn1899	Sr4077	Th2837	Ti3349	Ti1908	U_3701	V_2924	Zn2062	Zr3391
Line	189.989 {477}	407.771 { 83}	283.730 {119}	334.904 {101}	190.856 {477}	370.152 { 91}	292.402 {115}	206.200 {163}	339.198 { 99}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	-.00220	3.3474	.00092	.00048	-.00380	.01246	.00108	.00693	-.00126
Stddev	.00221	.0234	.00184	.00039	.00251	.05654	.00027	.00054	.00545
%RSD	100.42	.69775	201.20	80.340	66.062	453.91	25.205	7.7892	434.08

#1	-.00064	3.3309	-.00039	.00076	-.00557	-.02752	.00089	.00731	.00260
#2	-.00376	3.3639	.00222	.00021	-.00202	.05243	.00127	.00655	-.00511

Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Int. Std.	Y_2243	Y_3600	Y_3774						
Line	224.306 {450}	360.073 { 94}	377.433 { 89}						
Units	Cts/S	Cts/S	Cts/S						
Avg	2557.6	37197.	1884.6						
Stddev	9.7	218.	18.4						
%RSD	.38115	.58501	.97866						

#1	2550.7	37043.	1897.6						
#2	2564.5	37351.	1871.5						

Sample Name: 280-82988-B-1-A SD@5 Acquired: 5/17/2016 20:22:56 Type: Unk
Method: 6500_025(v6) Mode: CONC Corr. Factor: 1.000000
User: CRHOADES Prep Date: Custom ID2: Custom ID3:
Comment: 325228 6010B (As Cd Fe)

Elem	Ag3280	Al1670	As1890	B_2089	Ba4554	Be3130	Bi2230	Ca3179	Cd2288
Line	328.068 {103}	167.079 {502}	189.042 {478}	208.959 {461}	455.403 {74}	313.042 {108}	223.061 {451}	317.933 {106}	228.802 {447}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.00128	.00452	.00905	.01255	.01196	-.00057	.00239	44.073	.00048
Stddev	.00014	.00030	.00026	.00045	.00000	.00030	.00302	.796	.00015
%RSD	10.909	6.5411	2.9165	3.5989	.01862	52.592	126.25	1.8059	32.556

#1	.00118	.00473	.00924	.01287	.01197	-.00036	.00453	43.510	.00037
#2	.00138	.00431	.00886	.01223	.01196	-.00078	.00026	44.636	.00059

Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Elem	Co2286	Cr2055	Cu3247	Fe2599	K_7664	Li6707	Mg2790	Mn2576	Mo2020
Line	228.616 {447}	205.560 {464}	324.754 {104}	259.940 {130}	766.490 {44}	670.784 {50}	279.079 {121}2	257.610 {131}	202.030 {467}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	-.00016	-.00060	.00043	.01646	1.0638	-.00083	6.2725	.02023	-.00138
Stddev	.00008	.00009	.00012	.00335	.0150	.00169	.0124	.00006	.00004
%RSD	48.758	15.503	27.294	20.350	1.4071	202.76	.19755	.30580	2.7830

#1	-.00010	-.00053	.00034	.01409	1.0532	.00036	6.2637	.02028	-.00136
#2	-.00021	-.00067	.00051	.01883	1.0744	-.00203	6.2813	.02019	-.00141

Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Elem	Na8183	Ni2316	P_1782	Pb2203	S_1820	Sb2068	Se1960	Si2881	SiO2
Line	818.326 {41}	231.604 {446}	178.284 {489}	220.353 {453}	182.034 {485}	206.833 {463}	196.090 {472}	288.158 {117}	288.158 {117}2
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	38.212	.00041	.00699	-.00175	31.466	-.00221	-.00463	1.0123	2.1663
Stddev	.117	.00055	.00277	.00149	.456	.00342	.00441	.0230	.0493
%RSD	.30721	135.48	39.564	85.051	1.4501	154.79	95.296	2.2761	2.2761

#1	38.129	.00002	.00894	-.00070	31.789	-.00463	-.00151	.99601	2.1315
#2	38.295	.00080	.00503	-.00280	31.143	.00021	-.00775	1.0286	2.2012

Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Elem	Sn1899	Sr4077	Th2837	Ti3349	Ti1908	U_3701	V_2924	Zn2062	Zr3391
Line	189.989 {477}	407.771 {83}	283.730 {119}	334.904 {101}	190.856 {477}	370.152 {91}	292.402 {115}	206.200 {163}	339.198 {99}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	-.00270	.66207	-.00217	.00040	-.00056	.03054	.00050	.00177	-.00074
Stddev	.00052	.01352	.00078	.00009	.00009	.00780	.00004	.00038	.00043
%RSD	19.353	2.0422	36.199	23.113	16.175	25.544	7.7071	21.688	58.031

#1	-.00233	.65251	-.00161	.00034	-.00049	.02502	.00053	.00204	-.00105
#2	-.00307	.67163	-.00272	.00047	-.00062	.03605	.00047	.00150	-.00044

Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Int. Std.	Y_2243	Y_3600	Y_3774
Line	224.306 {450}	360.073 {94}	377.433 {89}
Units	Cts/S	Cts/S	Cts/S
Avg	2638.4	38579.	1847.3
Stddev	10.9	103.	11.8
%RSD	.41466	.26752	.63663

#1	2646.2	38506.	1855.6
#2	2630.7	38652.	1839.0

Sample Name: 280-82988-B-1-B MS Acquired: 5/17/2016 20:25:34 Type: Unk
Method: 6500_025(v6) Mode: CONC Corr. Factor: 1.000000
User: CRHOADES Prep Date: Custom ID2: Custom ID3:
Comment: 325228 6010B (As Cd Fe)

Elem	Ag3280	Al1670	As1890	B_2089	Ba4554	Be3130	Bi2230	Ca3179	Cd2288
Line	328.068 {103}	167.079 {502}	189.042 {478}	208.959 {461}	455.403 {74}	313.042 {108}	223.061 {451}	317.933 {106}	228.802 {447}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.04896	1.7681	.96367	1.0317	2.0432	.04923	F 1.9470	279.32	.09907
Stddev	.00025	.0475	.02861	.0258	.0064	.00038	.0585	1.14	.00247
%RSD	.50081	2.6856	2.9690	2.4997	.31254	.77560	3.0066	.40697	2.4888

#1	.04913	1.8016	.98390	1.0500	2.0477	.04950	1.9883	280.13	.10081
#2	.04878	1.7345	.94344	1.0135	2.0387	.04896	1.9056	278.52	.09733

Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Fail	Chk Pass	Chk Pass
High Limit							.10000		
Low Limit							-.10000		

Elem	Co2286	Cr2055	Cu3247	Fe2599	K_7664	Li6707	Mg2790	Mn2576	Mo2020
Line	228.616 {447}	205.560 {464}	324.754 {104}	259.940 {130}	766.490 {44}	670.784 {50}	279.079 {121}2	257.610 {131}	202.030 {467}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.46433	.19393	.23012	1.0194	56.068	1.0042	77.064	.54732	1.0035
Stddev	.01157	.00482	.00070	.0111	.133	.0002	.266	.00246	.0236
%RSD	2.4913	2.4852	.30214	1.0879	.23728	.02062	.34472	.45000	2.3469

#1	.47251	.19734	.22963	1.0116	56.162	1.0041	76.876	.54558	1.0201
#2	.45615	.19052	.23061	1.0273	55.974	1.0044	77.251	.54906	.98683

Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Elem	Na8183	Ni2316	P_1782	Pb2203	S_1820	Sb2068	Se1960	Si2881	SiO2
Line	818.326 {41}	231.604 {446}	178.284 {489}	220.353 {453}	182.034 {485}	206.833 {463}	196.090 {472}	288.158 {117}	288.158 {117}2
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	242.67	.45614	W 10.078	.47007	162.23	.50670	1.9416	15.170	32.463
Stddev	.17	.01150	.226	.01234	4.36	.00768	.0149	.064	.138
%RSD	.07190	2.5206	2.2409	2.6261	2.6899	1.5148	.76474	.42373	.42373

#1	242.55	.46427	10.238	.47880	165.32	.51213	1.9521	15.124	32.366
#2	242.80	.44801	9.9183	.46135	159.14	.50127	1.9311	15.215	32.561

Check ?	Chk Pass	Chk Pass	Chk Warn	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit			2.0000						
Low Limit			-1.0000						

Elem	Sn1899	Sr4077	Th2837	Ti3349	Ti1908	U_3701	V_2924	Zn2062	Zr3391
Line	189.989 {477}	407.771 {83}	283.730 {119}	334.904 {101}	190.856 {477}	370.152 {91}	292.402 {115}	206.200 {163}	339.198 {99}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	1.9286	4.4867	.96670	.92149	1.6314	1.9844	.47454	.44670	.44605
Stddev	.0171	.0138	.00174	.00338	.0720	.0318	.00032	.00348	.00304
%RSD	.88597	.30849	.17969	.36646	4.4161	1.6017	.06833	.77984	.68147

#1	1.9407	4.4965	.96792	.91910	1.6824	1.9620	.47431	.44423	.44391
#2	1.9165	4.4769	.96547	.92387	1.5805	2.0069	.47477	.44916	.44820

Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Int. Std.	Y_2243	Y_3600	Y_3774
Line	224.306 {450}	360.073 {94}	377.433 {89}
Units	Cts/S	Cts/S	Cts/S
Avg	2575.1	36674.	1828.2
Stddev	66.2	91.	15.0
%RSD	2.5710	.24837	.82135

#1	2528.3	36738.	1817.6
#2	2622.0	36609.	1838.9

Sample Name: 280-82988-B-1-C MSD Acquired: 5/17/2016 20:27:59 Type: Unk
Method: 6500_025(v6) Mode: CONC Corr. Factor: 1.000000
User: CRHOADES Prep Date: Custom ID2: Custom ID3:
Comment: 325228 6010B (As Cd Fe)

Elem	Ag3280	Al1670	As1890	B_2089	Ba4554	Be3130	Bi2230	Ca3179	Cd2288
Line	328.068 {103}	167.079 {502}	189.042 {478}	208.959 {461}	455.403 { 74}	313.042 {108}	223.061 {451}	317.933 {106}	228.802 {447}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.05050	1.8224	.99057	1.0599	1.9719	.04884	F 1.9992	265.07	.10123
Stddev	.00059	.0112	.00640	.0053	.0177	.00015	.0088	2.34	.00055
%RSD	1.1774	.61537	.64659	.50204	.89987	.30532	.43943	.88469	.54663

#1	.05008	1.8304	.98604	1.0562	1.9594	.04873	2.0054	263.41	.10084
#2	.05092	1.8145	.99509	1.0637	1.9845	.04894	1.9930	266.73	.10163

Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Fail	Chk Pass	Chk Pass
High Limit							.10000		
Low Limit							-.10000		

Elem	Co2286	Cr2055	Cu3247	Fe2599	K_7664	Li6707	Mg2790	Mn2576	Mo2020
Line	228.616 {447}	205.560 {464}	324.754 {104}	259.940 {130}	766.490 { 44}	670.784 { 50}	279.079 {121}2	257.610 {131}	202.030 {467}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.47732	.19940	.23390	1.0464	54.268	1.0190	77.454	.55225	1.0338
Stddev	.00218	.00094	.00153	.0039	.549	.0031	.143	.00046	.0044
%RSD	.45598	.47350	.65444	.37452	1.0117	.30103	.18511	.08279	.42910

#1	.47578	.19873	.23499	1.0436	53.880	1.0168	77.556	.55192	1.0306
#2	.47885	.20006	.23282	1.0491	54.656	1.0212	77.353	.55257	1.0369

Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Elem	Na8183	Ni2316	P_1782	Pb2203	S_1820	Sb2068	Se1960	Si2881	SiO2
Line	818.326 { 41}	231.604 {446}	178.284 {489}	220.353 {453}	182.034 {485}	206.833 {463}	196.090 {472}	288.158 {117}	288.158 {117}2
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	242.92	.46805	W 10.321	.48188	163.78	.51947	1.9912	15.327	32.800
Stddev	.21	.00286	.062	.00068	.80	.01255	.0349	.102	.219
%RSD	.08823	.61175	.59667	.14108	.48982	2.4155	1.7528	.66838	.66838

#1	243.07	.46602	10.277	.48140	164.35	.51060	1.9665	15.399	32.955
#2	242.77	.47007	10.364	.48236	163.22	.52835	2.0159	15.255	32.645

Check ?	Chk Pass	Chk Pass	Chk Warn	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit			2.0000						
Low Limit			-1.0000						

Elem	Sn1899	Sr4077	Th2837	Ti3349	Ti1908	U_3701	V_2924	Zn2062	Zr3391
Line	189.989 {477}	407.771 { 83}	283.730 {119}	334.904 {101}	190.856 {477}	370.152 { 91}	292.402 {115}	206.200 {163}	339.198 { 99}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	1.9806	4.2653	.98251	.93318	1.7048	2.0314	.48023	.44644	.45273
Stddev	.0372	.0341	.00449	.00026	.0170	.0326	.00152	.00081	.00692
%RSD	1.8775	.79917	.45746	.02798	.99751	1.6051	.31588	.18138	1.5296

#1	1.9543	4.2412	.98568	.93299	1.7168	2.0083	.48130	.44587	.45762
#2	2.0069	4.2894	.97933	.93336	1.6927	2.0544	.47916	.44701	.44783

Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Int. Std.	Y_2243	Y_3600	Y_3774
Line	224.306 {450}	360.073 { 94}	377.433 { 89}
Units	Cts/S	Cts/S	Cts/S
Avg	2516.5	36661.	1913.2
Stddev	3.6	6.	27.8
%RSD	.14486	.01721	1.4547

#1	2519.1	36666.	1932.9
#2	2514.0	36657.	1893.5

Sample Name: CCVH-3883905 Acquired: 5/17/2016 20:30:25 Type: QC
Method: 6500_025(v6) Mode: CONC Corr. Factor: 1.000000
User: CRHOADES Prep Date: Custom ID2: Custom ID3:
Comment:

Elem	Ag3280	Al3092	As1890	B_2089	Ba4554	Be3130	Bi2230	Ca3179	Cd2288	Co2286	Cr2055
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	-.00480	49.825	.00124	.00846	-.00085	-.00008	.98473	.04505	-.00026	-.00076	-.00046
Stddev	.00074	.091	.00204	.00008	.00039	.00005	.00931	.02535	.00040	.00002	.00011
%RSD	15.423	.18276	164.76	.94182	46.584	67.788	.94529	56.261	155.18	3.0212	24.887

#1	-.00533	49.889	.00268	.00852	-.00057	-.00004	.99131	.06298	.00003	-.00078	-.00038
#2	-.00428	49.761	-.00020	.00841	-.00113	-.00011	.97815	.02713	-.00054	-.00075	-.00054

Check ?	None	Chk Pass	None	None	None	None	Chk Pass	None	None	None	None
Value											
Range											

Elem	Cu3247	Fe2714	K_7664	Li6707	Mg2790	Mn2576	Mo2020	Na8183	Ni2316	P_1782	Pb2203
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	-.01415	51.828	-.00070	-.00802	.01443	-.00195	.00279	266.62	.00103	.00440	-.00018
Stddev	.00025	.238	.01504	.00295	.00060	.00011	.00149	.45	.00016	.00398	.00262
%RSD	1.7711	.45926	2141.6	36.781	4.1738	5.6356	53.356	.16796	15.435	90.362	1456.0

#1	-.01397	51.660	-.01134	-.01011	.01485	-.00188	.00174	266.31	.00092	.00722	.00167
#2	-.01433	51.997	.00993	-.00594	.01400	-.00203	.00384	266.94	.00114	.00159	-.00203

Check ?	None	Chk Pass	None	None	None	None	None	Chk Pass	None	None	None
Value											
Range											

Elem	S_1820	Sb2068	Se1960	Si2881	SiO2	Sn1899	Sr4077	Th2837	Ti3349	Ti1908	U_3701
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	W 5.2822	-.01452	-.00371	-.06686	-.14307	-.00048	.00096	W 4.7004	.00002	.05287	9.9224
Stddev	.1890	.00488	.00530	.11980	.25637	.00191	.00051	.0133	.00018	.01260	.0109
%RSD	3.5777	33.634	143.15	179.19	179.19	396.97	53.123	.28272	937.08	23.825	.10977

#1	5.4158	-.01797	-.00746	-.15157	-.32435	-.00183	.00132	4.6910	.00015	.04397	9.9301
#2	5.1485	-.01107	.00005	.01786	.03821	.00087	.00060	4.7098	-.00011	.06178	9.9147

Check ?	Chk Warn	None	None	None	None	None	None	Chk Warn	None	None	Chk Pass
Value	5.0000							5.0000			
Range	5.0000%							-5.0000%			

Elem	V_2924	Zn2062	Zr3391
Units	ppm	ppm	ppm
Avg	.01350	-.00004	-.13560
Stddev	.00127	.00028	.00186
%RSD	9.3728	630.85	1.3753

#1	.01261	.00015	-.13692
#2	.01440	-.00024	-.13428

Check ?	None	None	None
Value			
Range			

Int. Std.	Y_2243	Y_3600	Y_3774
Units	Cts/S	Cts/S	Cts/S
Avg	2598.6	37484.	1902.0
Stddev	16.3	134.	23.9
%RSD	.62546	.35819	1.2557

#1	2587.1	37389.	1918.9
#2	2610.1	37579.	1885.1

Sample Name: CCV-3888422 Acquired: 5/17/2016 20:33:02 Type: QC
Method: 6500_025(v6) Mode: CONC Corr. Factor: 1.000000
User: CRHOADES Prep Date: Custom ID2: Custom ID3:
Comment:

Elem	Ag3280	Al1670	As1890	B_2089	Ba4554	Be3130	Bi2230	Ca3179	Cd2288	Co2286	Cr2055
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.48468	.46215	F .88729	.46649	.47490	.48663	-.00066	4.7049	.47605	.47594	.48122
Stddev	.00137	.03262	.04556	.02324	.00930	.00895	.00234	.0607	.02147	.02357	.02374
%RSD	.28287	7.0578	5.1351	4.9825	1.9578	1.8401	352.72	1.2892	4.5098	4.9533	4.9325

#1	.48371	.43909	.85507	.45005	.48147	.49296	.00099	4.7478	.46087	.45927	.46443
#2	.48565	.48522	.91950	.48292	.46833	.48030	-.00231	4.6620	.49123	.49261	.49800

Check ?	Chk Pass	Chk Pass	Chk Fail	Chk Pass	Chk Pass	Chk Pass	None	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Value			1.0000								
Range			-10.490%								

Elem	Cu3247	Fe2599	K_7664	Li6707	Mg2790	Mn2576	Mo2020	Na5895	Ni2316	P_1782	Pb2203
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.46335	2.4758	47.521	.94905	18.866	.46254	.46891	5.1619	.46395	.92188	.95051
Stddev	.00233	.0255	1.047	.00171	.006	.00020	.02336	.0031	.02006	.03205	.03862
%RSD	.50192	1.0314	2.2030	.18067	.03122	.04268	4.9815	.05949	4.3233	3.4763	4.0632

#1	.46170	2.4939	48.262	.94783	18.870	.46268	.45239	5.1597	.44977	.89922	.92320
#2	.46499	2.4578	46.781	.95026	18.861	.46241	.48543	5.1641	.47814	.94454	.97781

Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Value											
Range											

Elem	S_1820	Sb2068	Se1960	Si2881	SiO2	Sn1899	Sr4077	Th2837	Ti3349	Ti1908	U_3701
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	-.03361	.93553	W .89962	4.8957	10.477	.96846	.48552	-.00090	.45656	.99481	.07270
Stddev	.00275	.02077	.00088	.0704	.151	.01181	.01075	.00354	.00059	.00652	.01057
%RSD	8.1854	2.2206	.09798	1.4376	1.4376	1.2196	2.2145	393.49	.13023	.65510	14.547

#1	-.03167	.92084	.90025	4.8460	10.370	.96011	.49312	-.00340	.45614	.99020	.08018
#2	-.03556	.95022	.89900	4.9455	10.583	.97681	.47791	.00160	.45698	.99942	.06522

Check ?	None	Chk Pass	Chk Warn	Chk Pass	Chk Pass	Chk Pass	Chk Pass	None	Chk Pass	Chk Pass	None
Value			1.0000								
Range			-10.000%								

Elem	V_2924	Zn2062	Zr3391
Units	ppm	ppm	ppm
Avg	.48118	.45638	.47087
Stddev	.00130	.00528	.00490
%RSD	.27005	1.1575	1.0404

#1	.48210	.46012	.47433
#2	.48026	.45265	.46740

Check ?	Chk Pass	Chk Pass	Chk Pass
Value			
Range			

Int. Std.	Y_2243	Y_3600	Y_3774
Units	Cts/S	Cts/S	Cts/S
Avg	2735.4	37681.	1851.5
Stddev	241.0	431.	20.3
%RSD	8.8104	1.1429	1.0937

#1	2905.8	37377.	1837.2
#2	2565.0	37986.	1865.8

Sample Name: CCB Acquired: 5/17/2016 20:35:33 Type: QC
Method: 6500_025(v6) Mode: CONC Corr. Factor: 1.000000
User: CRHOADES Prep Date: Custom ID2: Custom ID3:
Comment:

Elem	Ag3280	Al1670	As1890	B_2089	Ba4554	Be3130	Bi2230	Ca3179	Cd2288	Co2286	Cr2055
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.00156	.01028	.00309	.00501	-.00165	-.00016	-.00089	.00414	.00023	.00037	-.00014
Stddev	.00054	.01285	.00664	.00095	.00011	.00019	.00177	.00458	.00007	.00005	.00043
%RSD	34.605	124.95	215.02	18.980	6.5264	116.57	198.38	110.77	29.209	12.364	313.76

#1	.00194	.00120	-.00161	.00434	-.00157	-.00029	.00036	.00738	.00028	.00034	-.00044
#2	.00118	.01937	.00778	.00568	-.00172	-.00003	-.00215	.00090	.00019	.00041	.00017

Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit											
Low Limit											

Elem	Cu3247	Fe2599	K_7664	Li6707	Mg2790	Mn2576	Mo2020	Na5895	Ni2316	P_1782	Pb2203
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	-.00092	.01440	-.13073	F -.01087	-.00309	.00011	.00102	.08466	.00008	.00454	.00076
Stddev	.00045	.00566	.05501	.00015	.00052	.00005	.00150	.01273	.00098	.00135	.00071
%RSD	48.816	39.304	42.082	1.3808	16.711	48.729	146.40	15.036	1268.2	29.701	93.263

#1	-.00124	.01840	-.16963	-.01098	-.00346	.00015	-.00004	.07566	-.00062	.00359	.00126
#2	-.00060	.01040	-.09183	-.01077	-.00273	.00007	.00209	.09366	.00077	.00550	.00026

Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Fail	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit				.01000							
Low Limit				-.01000							

Elem	S_1820	Sb2068	Se1960	Si2881	SiO2	Sn1899	Sr4077	Th2837	Ti3349	Ti1908	U_3701
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	-.02927	W .00480	.00058	-.00594	-.01270	-.00094	-.00004	.00091	.00068	W .00849	.04484
Stddev	.00270	.00221	.00426	.02653	.05677	.00320	.00028	.00131	.00114	.00302	.00382
%RSD	9.2331	46.039	728.79	446.94	446.94	340.38	639.30	143.29	168.21	35.534	8.5124

#1	-.03118	.00636	.00360	-.02470	-.05285	-.00320	.00016	-.00001	.00149	.00636	.04754
#2	-.02736	.00324	-.00243	.01282	.02744	.00132	-.00025	.00184	-.00013	.01062	.04214

Check ?	Chk Pass	Chk Warn	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Warn	Chk Pass
High Limit		.00100								.00750	
Low Limit		-.00100								-.01900	

Elem	V_2924	Zn2062	Zr3391
Units	ppm	ppm	ppm
Avg	.00011	-.00005	.00217
Stddev	.00042	.00158	.00228
%RSD	394.28	3218.8	105.10

#1	-.00019	-.00116	.00378
#2	.00040	.00107	.00056

Check ?	Chk Pass	Chk Pass	Chk Pass
High Limit			
Low Limit			

Int. Std.	Y_2243	Y_3600	Y_3774
Units	Cts/S	Cts/S	Cts/S
Avg	2651.3	38325.	1849.1
Stddev	22.2	271.	58.6
%RSD	.83558	.70791	3.1664

#1	2635.6	38517.	1807.7
#2	2667.0	38134.	1890.5

Sample Name: CCVL-3894681 Acquired: 5/17/2016 20:37:56 Type: QC
Method: 6500_025(v6) Mode: CONC Corr. Factor: 1.000000
User: CRHOADES Prep Date: Custom ID2: Custom ID3:
Comment:

Elem	Ag3280	Al1670	As1890	B_2089	Ba4554	Be3130	Bi2230	Ca3179	Cd2288	Co2286	Cr2055
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.01112	.09906	.01379	.09881	.00744	.00083	.10278	.19040	.00529	.01002	.00935
Stddev	.00060	.00077	.00236	.00255	.00015	.00021	.00062	.00705	.00010	.00072	.00042
%RSD	5.3908	.77481	17.114	2.5837	1.9624	25.505	.59919	3.7012	1.8372	7.2039	4.4993

#1	.01070	.09960	.01212	.10062	.00733	.00098	.10322	.19539	.00522	.01053	.00906
#2	.01155	.09852	.01545	.09701	.00754	.00068	.10235	.18542	.00536	.00951	.00965

Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Value											
Range											

Elem	Cu3247	Fe2599	K_7664	Li6707	Mg2790	Mn2576	Mo2020	Na5895	Ni2316	P_1782	Pb2203
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.01343	.11125	2.8814	F -.00039	.19777	.00967	.01918	1.0871	.03981	2.8396	.00763
Stddev	.00031	.00873	.0577	.00383	.00230	.00014	.00074	.0080	.00135	.0616	.00022
%RSD	2.2918	7.8427	2.0011	978.35	1.1609	1.4070	3.8450	.73995	3.3805	2.1674	2.9367

#1	.01365	.10508	2.9221	-.00310	.19615	.00976	.01970	1.0928	.04076	2.8832	.00747
#2	.01321	.11742	2.8406	.00232	.19939	.00957	.01866	1.0814	.03886	2.7961	.00779

Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Fail	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Value				.01000							
Range				-30.000%							

Elem	S_1820	Sb2068	Se1960	Si2881	SiO2	Sn1899	Sr4077	Th2837	Ti3349	Ti1908	U_3701
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	-.06120	.01687	F .00145	.44532	.95298	.09877	.00993	.01575	.00988	.01701	F .13407
Stddev	.00174	.00028	.00132	.01574	.03368	.00373	.00017	.00067	.00010	.00198	.05834
%RSD	2.8462	1.6682	90.663	3.5338	3.5338	3.7809	1.7415	4.2225	1.0426	11.613	43.519

#1	-.05997	.01667	.00239	.43419	.92917	.10141	.01006	.01622	.00996	.01562	.09281
#2	-.06243	.01707	.00052	.45645	.97679	.09613	.00981	.01528	.00981	.01841	.17532

Check ?	None	Chk Pass	Chk Fail	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Fail
Value			.01500								.06000
Range			-30.000%								30.000%

Elem	V_2924	Zn2062	Zr3391
Units	ppm	ppm	ppm
Avg	.00959	.01889	.01608
Stddev	.00040	.00049	.00780
%RSD	4.1763	2.5949	48.528

#1	.00988	.01854	.01056
#2	.00931	.01924	.02159

Check ?	Chk Pass	Chk Pass	Chk Pass
Value			
Range			

Int. Std.	Y_2243	Y_3600	Y_3774
Units	Cts/S	Cts/S	Cts/S
Avg	2653.1	38915.	1922.5
Stddev	7.3	748.	2.1
%RSD	.27574	1.9231	.10975

#1	2658.3	38386.	1921.0
#2	2647.9	39445.	1924.0

Sample Name: 280-82988-B-2-A Acquired: 5/17/2016 20:40:37 Type: Unk

Method: 6500_025(v6) Mode: CONC Corr. Factor: 1.000000

User: CRHOADES Prep Date: Custom ID2: Custom ID3:

Comment: 325228 6010B (As Cd Fe)

Elem	Ag3280	Al1670	As1890	B_2089	Ba4554	Be3130	Bi2230	Ca3179	Cd2288
Line	328.068 {103}	167.079 {502}	189.042 {478}	208.959 {461}	455.403 { 74}	313.042 {108}	223.061 {451}	317.933 {106}	228.802 {447}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.00167	.00834	-.00327	.06009	.06503	-.00023	-.00062	215.73	.00037
Stddev	.00023	.00035	.00544	.00076	.00076	.00007	.00059	.75	.00002
%RSD	13.741	4.1831	166.24	1.2673	1.1755	29.176	95.239	.34901	6.2484

#1	.00151	.00809	.00057	.06063	.06449	-.00027	-.00104	215.20	.00038
#2	.00183	.00859	-.00712	.05955	.06557	-.00018	-.00020	216.26	.00035

Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Elem	Co2286	Cr2055	Cu3247	Fe2599	K_7664	Li6707	Mg2790	Mn2576	Mo2020
Line	228.616 {447}	205.560 {464}	324.754 {104}	259.940 {130}	766.490 { 44}	670.784 { 50}	279.079 {121}2	257.610 {131}	202.030 {467}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	-.00010	.00013	.00209	.04948	5.4817	.04294	29.807	.11971	.00050
Stddev	.00003	.00038	.00004	.00344	.0086	.00682	.171	.00072	.00022
%RSD	26.747	294.63	2.1252	6.9497	.15699	15.874	.57358	.60444	44.718

#1	-.00008	-.00014	.00206	.04705	5.4878	.03812	29.686	.11920	.00065
#2	-.00012	.00040	.00212	.05191	5.4757	.04776	29.928	.12023	.00034

Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Elem	Na8183	Ni2316	P_1782	Pb2203	S_1820	Sb2068	Se1960	Si2881	SiO2
Line	818.326 { 41}	231.604 {446}	178.284 {489}	220.353 {453}	182.034 {485}	206.833 {463}	196.090 {472}	288.158 {117}	288.158 {117}2
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	184.27	.00222	.01592	-.00106	155.76	-.00812	W -.00714	4.3312	9.2688
Stddev	.66	.00027	.00372	.00011	.40	.00268	.00438	.0200	.0428
%RSD	.36017	12.299	23.365	10.087	.25502	32.957	61.283	.46160	.46160

#1	183.80	.00241	.01329	-.00099	155.48	-.01001	-.01024	4.3171	9.2386
#2	184.74	.00202	.01855	-.00114	156.04	-.00623	-.00405	4.3454	9.2991

Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Warn	Chk Pass	Chk Pass
High Limit							5.0000		
Low Limit							-.00500		

Elem	Sn1899	Sr4077	Th2837	Ti3349	Ti1908	U_3701	V_2924	Zn2062	Zr3391
Line	189.989 {477}	407.771 { 83}	283.730 {119}	334.904 {101}	190.856 {477}	370.152 { 91}	292.402 {115}	206.200 {163}	339.198 { 99}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	-.00251	3.3043	.00186	.00057	.00020	-.01270	.00048	.00168	.00332
Stddev	.00242	.0156	.00434	.00056	.00334	.04181	.00007	.00024	.00308
%RSD	96.440	.47308	232.98	98.437	1637.6	329.25	14.324	14.339	92.713

#1	-.00080	3.2933	-.00121	.00097	-.00216	.01687	.00043	.00185	.00550
#2	-.00423	3.3154	.00494	.00017	.00256	-.04227	.00053	.00151	.00114

Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Int. Std.	Y_2243	Y_3600	Y_3774
Line	224.306 {450}	360.073 { 94}	377.433 { 89}
Units	Cts/S	Cts/S	Cts/S
Avg	2526.9	36453.	1791.6
Stddev	.1	490.	86.9
%RSD	.00275	1.3451	4.8496

#1	2526.9	36800.	1730.2
#2	2527.0	36106.	1853.0

Sample Name: 280-82988-B-3-A Acquired: 5/17/2016 20:43:15 Type: Unk

Method: 6500_025(v6) Mode: CONC Corr. Factor: 1.000000

User: CRHOADES Prep Date: Custom ID2: Custom ID3:

Comment: 325228 6010B (As Cd Fe)

Elem	Ag3280	Al1670	As1890	B_2089	Ba4554	Be3130	Bi2230	Ca3179	Cd2288
Line	328.068 {103}	167.079 {502}	189.042 {478}	208.959 {461}	455.403 { 74}	313.042 {108}	223.061 {451}	317.933 {106}	228.802 {447}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.00122	.00138	.00338	.06450	.05987	-.00045	-.00403	245.83	.00101
Stddev	.00001	.00022	.00253	.00095	.00062	.00046	.00081	.54	.00014
%RSD	.82106	15.915	74.752	1.4681	1.0361	101.86	20.135	.21860	13.985

#1	.00122	.00122	.00159	.06517	.05943	-.00077	-.00346	245.45	.00111
#2	.00123	.00153	.00517	.06383	.06031	-.00013	-.00461	246.21	.00091

Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Elem	Co2286	Cr2055	Cu3247	Fe2599	K_7664	Li6707	Mg2790	Mn2576	Mo2020
Line	228.616 {447}	205.560 {464}	324.754 {104}	259.940 {130}	766.490 { 44}	670.784 { 50}	279.079 {121}2	257.610 {131}	202.030 {467}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	-.00058	-.00044	.00121	.07349	5.4920	.04262	34.618	.10387	.00053
Stddev	.00001	.00056	.00086	.00270	.1182	.00630	.061	.00000	.00100
%RSD	2.0712	125.86	71.276	3.6731	2.1526	14.784	.17573	.00104	188.54

#1	-.00058	-.00084	.00182	.07159	5.4084	.03817	34.661	.10387	-.00018
#2	-.00057	-.00005	.00060	.07540	5.5756	.04708	34.575	.10387	.00124

Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Elem	Na8183	Ni2316	P_1782	Pb2203	S_1820	Sb2068	Se1960	Si2881	SiO2
Line	818.326 { 41}	231.604 {446}	178.284 {489}	220.353 {453}	182.034 {485}	206.833 {463}	196.090 {472}	288.158 {117}	288.158 {117}2
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	193.57	.00280	.02271	.00043	178.20	-.00061	W -.00577	4.1427	8.8653
Stddev	1.62	.00050	.00007	.00154	.22	.00129	.00037	.0509	.1090
%RSD	.83742	17.803	.32922	356.17	.12551	211.18	6.4847	1.2290	1.2290

#1	192.42	.00316	.02266	-.00066	178.36	-.00152	-.00603	4.1067	8.7883
#2	194.72	.00245	.02277	.00152	178.04	.00030	-.00550	4.1787	8.9424

Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Warn	Chk Pass	Chk Pass
High Limit							5.0000		
Low Limit							-.00500		

Elem	Sn1899	Sr4077	Th2837	Ti3349	Ti1908	U_3701	V_2924	Zn2062	Zr3391
Line	189.989 {477}	407.771 { 83}	283.730 {119}	334.904 {101}	190.856 {477}	370.152 { 91}	292.402 {115}	206.200 {163}	339.198 { 99}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	-.00280	3.7261	-.00295	.00076	-.00230	.04921	.00049	.00315	-.00056
Stddev	.00096	.0120	.00516	.00026	.00083	.04662	.00068	.00057	.00431
%RSD	34.470	.32176	175.05	34.587	36.252	94.737	139.82	17.975	775.59

#1	-.00211	3.7176	-.00660	.00057	-.00289	.08217	.00097	.00356	-.00360
#2	-.00348	3.7346	.00070	.00094	-.00171	.01624	.00001	.00275	.00249

Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Int. Std.	Y_2243	Y_3600	Y_3774
Line	224.306 {450}	360.073 { 94}	377.433 { 89}
Units	Cts/S	Cts/S	Cts/S
Avg	2547.9	37311.	1862.8
Stddev	9.4	65.	9.6
%RSD	.36954	.17368	.51684

#1	2554.6	37265.	1869.6
#2	2541.3	37357.	1856.0

Sample Name: 280-82988-B-4-A Acquired: 5/17/2016 20:45:53 Type: Unk

Method: 6500_025(v6) Mode: CONC Corr. Factor: 1.000000

User: CRHOADES Prep Date: Custom ID2: Custom ID3:

Comment: 325228 6010B (As Cd Fe)

Elem	Ag3280	Al1670	As1890	B_2089	Ba4554	Be3130	Bi2230	Ca3179	Cd2288
Line	328.068 {103}	167.079 {502}	189.042 {478}	208.959 {461}	455.403 { 74}	313.042 {108}	223.061 {451}	317.933 {106}	228.802 {447}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.00098	.00029	-.00204	.07198	.05315	-.00031	-.00186	465.09	.00084
Stddev	.00019	.00008	.00412	.00169	.00024	.00000	.00001	1.02	.00047
%RSD	19.743	28.093	201.82	2.3463	.45813	1.5496	.63659	.22016	55.711

#1	.00084	.00023	-.00496	.07317	.05298	-.00031	-.00187	465.82	.00118
#2	.00112	.00035	.00087	.07079	.05332	-.00031	-.00185	464.37	.00051

Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Elem	Co2286	Cr2055	Cu3247	Fe2599	K_7664	Li6707	Mg2790	Mn2576	Mo2020
Line	228.616 {447}	205.560 {464}	324.754 {104}	259.940 {130}	766.490 { 44}	670.784 { 50}	279.079 {121}2	257.610 {131}	202.030 {467}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	-.00054	.00012	.00019	.02813	4.3243	.03449	60.549	.60951	-.00020
Stddev	.00028	.00004	.00059	.00340	.0728	.00014	.003	.00038	.00061
%RSD	51.192	31.743	315.94	12.094	1.6845	.41367	.00546	.06252	310.26

#1	-.00035	.00015	-.00023	.03054	4.3758	.03459	60.546	.60978	.00023
#2	-.00074	.00009	.00061	.02572	4.2727	.03439	60.551	.60924	-.00063

Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Elem	Na8183	Ni2316	P_1782	Pb2203	S_1820	Sb2068	Se1960	Si2881	SiO2
Line	818.326 { 41}	231.604 {446}	178.284 {489}	220.353 {453}	182.034 {485}	206.833 {463}	196.090 {472}	288.158 {117}	288.158 {117}2
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	236.29	.00503	.08748	-.00056	F 390.65	-.00580	W -.00615	11.725	25.091
Stddev	1.73	.00014	.00217	.00157	.34	.00257	.00382	.080	.171
%RSD	.73063	2.7463	2.4783	281.82	.08690	44.222	62.104	.67963	.67963

#1	235.07	.00513	.08595	-.00166	390.41	-.00399	-.00885	11.668	24.970
#2	237.51	.00493	.08901	.00055	390.89	-.00761	-.00345	11.781	25.211

Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Fail	Chk Pass	Chk Warn	Chk Pass	Chk Pass
High Limit					200.00		5.0000		
Low Limit					-.20000		-.00500		

Elem	Sn1899	Sr4077	Th2837	Ti3349	Ti1908	U_3701	V_2924	Zn2062	Zr3391
Line	189.989 {477}	407.771 { 83}	283.730 {119}	334.904 {101}	190.856 {477}	370.152 { 91}	292.402 {115}	206.200 {163}	339.198 { 99}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	-.00271	W 7.3108	-.00088	.00116	-.00288	.00756	-.00042	.00070	-.00071
Stddev	.00102	.0175	.00224	.00010	.00092	.04571	.00019	.00061	.00281
%RSD	37.750	.23939	255.81	8.8783	32.081	604.56	44.739	87.318	396.37

#1	-.00344	7.3232	-.00246	.00109	-.00353	.03989	-.00029	.00027	.00128
#2	-.00199	7.2985	.00071	.00124	-.00223	-.02476	-.00055	.00113	-.00269

Check ?	Chk Pass	Chk Warn	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit		5.0000							
Low Limit		-.01000							

Int. Std.	Y_2243	Y_3600	Y_3774
Line	224.306 {450}	360.073 { 94}	377.433 { 89}
Units	Cts/S	Cts/S	Cts/S
Avg	2456.8	36165.	1736.6
Stddev	21.4	39.	24.4
%RSD	.87263	.10721	1.4054

#1	2441.6	36192.	1753.9
#2	2471.9	36137.	1719.4

Sample Name: 280-82988-B-5-A Acquired: 5/17/2016 20:48:31 Type: Unk

Method: 6500_025(v6) Mode: CONC Corr. Factor: 1.000000

User: CRHOADES Prep Date: Custom ID2: Custom ID3:

Comment: 325228 6010B (As Cd Fe)

Elem	Ag3280	Al1670	As1890	B_2089	Ba4554	Be3130	Bi2230	Ca3179	Cd2288
Line	328.068 {103}	167.079 {502}	189.042 {478}	208.959 {461}	455.403 { 74}	313.042 {108}	223.061 {451}	317.933 {106}	228.802 {447}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.00145	.00143	-.00306	.06081	.06391	-.00024	-.00621	251.92	.00077
Stddev	.00026	.00015	.00209	.00006	.00026	.00009	.00215	.18	.00021
%RSD	17.954	10.801	68.378	.10408	.40347	37.328	34.593	.07315	27.101

#1	.00163	.00154	-.00158	.06086	.06373	-.00018	-.00469	251.79	.00062
#2	.00126	.00132	-.00453	.06077	.06409	-.00031	-.00773	252.05	.00092

Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Elem	Co2286	Cr2055	Cu3247	Fe2599	K_7664	Li6707	Mg2790	Mn2576	Mo2020
Line	228.616 {447}	205.560 {464}	324.754 {104}	259.940 {130}	766.490 { 44}	670.784 { 50}	279.079 {121}2	257.610 {131}	202.030 {467}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	-.00032	-.00015	.00061	.04952	5.3654	.04882	34.641	.26697	.00021
Stddev	.00017	.00008	.00038	.00117	.0946	.00278	.061	.00022	.00043
%RSD	52.653	54.470	62.348	2.3683	1.7637	5.6909	.17662	.08080	206.30

#1	-.00045	-.00021	.00034	.05035	5.4323	.05078	34.598	.26682	-.00010
#2	-.00020	-.00009	.00087	.04869	5.2985	.04685	34.684	.26713	.00051

Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Elem	Na8183	Ni2316	P_1782	Pb2203	S_1820	Sb2068	Se1960	Si2881	SiO2
Line	818.326 { 41}	231.604 {446}	178.284 {489}	220.353 {453}	182.034 {485}	206.833 {463}	196.090 {472}	288.158 {117}	288.158 {117}2
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	192.29	.00276	.02603	-.00140	171.65	-.00930	W -.00711	3.4813	7.4499
Stddev	.40	.00026	.00386	.00196	.07	.00101	.00675	.0062	.0133
%RSD	.20587	9.4038	14.828	140.14	.04289	10.842	94.988	.17835	.17835

#1	192.57	.00258	.02876	-.00278	171.60	-.01001	-.00233	3.4769	7.4405
#2	192.01	.00294	.02330	-.00001	171.70	-.00858	-.01188	3.4856	7.4593

Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Warn	Chk Pass	Chk Pass
High Limit							5.0000		
Low Limit							-.00500		

Elem	Sn1899	Sr4077	Th2837	Ti3349	Ti1908	U_3701	V_2924	Zn2062	Zr3391
Line	189.989 {477}	407.771 { 83}	283.730 {119}	334.904 {101}	190.856 {477}	370.152 { 91}	292.402 {115}	206.200 {163}	339.198 { 99}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	-.00315	3.7438	-.00260	.00105	-.00449	.03245	-.00040	.00102	.00281
Stddev	.00078	.0066	.00101	.00029	.00999	.01298	.00078	.00068	.00075
%RSD	24.847	.17524	38.936	27.347	222.39	40.001	194.69	66.194	26.800

#1	-.00260	3.7392	-.00332	.00085	-.01156	.04163	.00015	.00150	.00228
#2	-.00371	3.7485	-.00189	.00125	.00257	.02327	-.00095	.00054	.00334

Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Int. Std.	Y_2243	Y_3600	Y_3774
Line	224.306 {450}	360.073 { 94}	377.433 { 89}
Units	Cts/S	Cts/S	Cts/S
Avg	2527.2	36866.	1814.4
Stddev	8.1	246.	5.5
%RSD	.32201	.66810	.30483

#1	2532.9	37040.	1810.5
#2	2521.4	36691.	1818.3

Sample Name: 280-82988-B-6-A Acquired: 5/17/2016 20:51:09 Type: Unk

Method: 6500_025(v6) Mode: CONC Corr. Factor: 1.000000

User: CRHOADES Prep Date: Custom ID2: Custom ID3:

Comment: 325228 6010B (As Cd Fe)

Elem	Ag3280	Al1670	As1890	B_2089	Ba4554	Be3130	Bi2230	Ca3179	Cd2288
Line	328.068 {103}	167.079 {502}	189.042 {478}	208.959 {461}	455.403 {74}	313.042 {108}	223.061 {451}	317.933 {106}	228.802 {447}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.00123	.00214	.00100	.06157	.06300	-.00047	-.00199	267.06	.00075
Stddev	.00006	.00016	.00351	.00177	.00012	.00009	.00416	2.47	.00020
%RSD	5.0669	7.4521	349.80	2.8687	.19424	18.169	208.69	.92419	26.016

#1	.00128	.00225	.00348	.06282	.06291	-.00041	-.00493	268.80	.00089
#2	.00119	.00203	-.00148	.06032	.06308	-.00054	.00095	265.31	.00061

Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Elem	Co2286	Cr2055	Cu3247	Fe2599	K_7664	Li6707	Mg2790	Mn2576	Mo2020
Line	228.616 {447}	205.560 {464}	324.754 {104}	259.940 {130}	766.490 {44}	670.784 {50}	279.079 {121}2	257.610 {131}	202.030 {467}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	-.00071	-.00013	.00145	.03569	5.3037	.04209	37.106	.21015	-.00051
Stddev	.00054	.00035	.00044	.00096	.0136	.00189	.027	.00023	.00038
%RSD	75.376	258.27	30.399	2.6803	.25674	4.4864	.07312	.10875	73.687

#1	-.00033	-.00038	.00114	.03637	5.3133	.04076	37.125	.20999	-.00024
#2	-.00110	.00011	.00176	.03502	5.2941	.04343	37.087	.21031	-.00077

Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Elem	Na8183	Ni2316	P_1782	Pb2203	S_1820	Sb2068	Se1960	Si2881	SiO2
Line	818.326 {41}	231.604 {446}	178.284 {489}	220.353 {453}	182.034 {485}	206.833 {463}	196.090 {472}	288.158 {117}	288.158 {117}2
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	204.51	.00318	.02069	-.00140	W 186.32	-.00968	W -.00918	3.4571	7.3982
Stddev	1.68	.00012	.00202	.00102	1.39	.00049	.00514	.0189	.0404
%RSD	.82215	3.6859	9.7610	72.642	.74538	5.0912	56.005	.54565	.54565

#1	203.32	.00309	.01927	-.00212	187.31	-.00933	-.00555	3.4438	7.3697
#2	205.70	.00326	.02212	-.00068	185.34	-.01003	-.01282	3.4704	7.4267

Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Warn	Chk Pass	Chk Warn	Chk Pass	Chk Pass
High Limit					180.00		5.0000		
Low Limit					-.15000		-.00500		

Elem	Sn1899	Sr4077	Th2837	Ti3349	Ti1908	U_3701	V_2924	Zn2062	Zr3391
Line	189.989 {477}	407.771 {83}	283.730 {119}	334.904 {101}	190.856 {477}	370.152 {91}	292.402 {115}	206.200 {163}	339.198 {99}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	-.00024	4.0510	-.00078	.00067	-.00298	.02246	.00002	.00141	.00120
Stddev	.00061	.0389	.00017	.00047	.00367	.06945	.00039	.00033	.00248
%RSD	250.22	.95958	21.326	69.615	123.23	309.22	2107.6	23.555	206.91

#1	-.00068	4.0784	-.00066	.00034	-.00038	-.02665	-.00026	.00165	.00295
#2	.00019	4.0235	-.00090	.00100	-.00558	.07157	.00029	.00118	-.00056

Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Int. Std.	Y_2243	Y_3600	Y_3774
Line	224.306 {450}	360.073 {94}	377.433 {89}
Units	Cts/S	Cts/S	Cts/S
Avg	2494.7	35294.	1741.4
Stddev	5.0	553.	33.7
%RSD	.20129	1.5660	1.9341

#1	2491.1	34903.	1765.2
#2	2498.2	35685.	1717.6

Sample Name: 280-82988-B-7-A Acquired: 5/17/2016 20:53:47 Type: Unk

Method: 6500_025(v6) Mode: CONC Corr. Factor: 1.000000

User: CRHOADES Prep Date: Custom ID2: Custom ID3:

Comment: 325228 6010B (As Cd Fe)

Elem	Ag3280	Al1670	As1890	B_2089	Ba4554	Be3130	Bi2230	Ca3179	Cd2288
Line	328.068 {103}	167.079 {502}	189.042 {478}	208.959 {461}	455.403 { 74}	313.042 {108}	223.061 {451}	317.933 {106}	228.802 {447}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.00207	.00039	-.00393	.05932	.05576	-.00032	-.00042	243.18	.00075
Stddev	.00035	.00001	.00366	.00055	.00160	.00011	.00666	6.62	.00020
%RSD	17.001	1.6787	93.141	.92134	2.8706	33.284	1572.4	2.7214	27.342

#1	.00182	.00039	-.00134	.05970	.05689	-.00025	-.00513	247.86	.00089
#2	.00231	.00040	-.00652	.05893	.05463	-.00040	.00428	238.50	.00060

Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Elem	Co2286	Cr2055	Cu3247	Fe2599	K_7664	Li6707	Mg2790	Mn2576	Mo2020
Line	228.616 {447}	205.560 {464}	324.754 {104}	259.940 {130}	766.490 { 44}	670.784 { 50}	279.079 {121}2	257.610 {131}	202.030 {467}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	-.00045	-.00002	.00115	.04572	4.9410	.04145	35.443	.16602	-.00014
Stddev	.00023	.00007	.00017	.00131	.0076	.00428	.038	.00021	.00116
%RSD	50.065	440.62	14.606	2.8589	.15368	10.331	.10798	.12449	835.89

#1	-.00029	-.00007	.00127	.04479	4.9357	.03842	35.470	.16587	.00068
#2	-.00061	.00004	.00103	.04664	4.9464	.04447	35.416	.16616	-.00096

Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Elem	Na8183	Ni2316	P_1782	Pb2203	S_1820	Sb2068	Se1960	Si2881	SiO2
Line	818.326 { 41}	231.604 {446}	178.284 {489}	220.353 {453}	182.034 {485}	206.833 {463}	196.090 {472}	288.158 {117}	288.158 {117}2
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	194.53	.00287	.01792	.00004	W 188.09	-.00828	.00275	3.1785	6.8019
Stddev	.71	.00040	.00288	.00101	.12	.00194	.00623	.0133	.0284
%RSD	.36672	13.923	16.082	2740.7	.06305	23.404	226.83	.41810	.41810

#1	195.03	.00259	.01588	-.00068	188.00	-.00691	-.00166	3.1691	6.7818
#2	194.03	.00315	.01996	.00075	188.17	-.00965	.00715	3.1879	6.8221

Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Warn	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit					180.00				
Low Limit					-.15000				

Elem	Sn1899	Sr4077	Th2837	Ti3349	Ti1908	U_3701	V_2924	Zn2062	Zr3391
Line	189.989 {477}	407.771 { 83}	283.730 {119}	334.904 {101}	190.856 {477}	370.152 { 91}	292.402 {115}	206.200 {163}	339.198 { 99}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	-.00120	3.7364	-.00158	.00071	-.00421	-.00063	-.00026	.00109	.00161
Stddev	.00244	.0988	.00281	.00114	.00380	.03962	.00017	.00020	.00103
%RSD	203.80	2.6447	177.11	160.80	90.416	6321.4	64.443	18.009	63.776

#1	-.00292	3.8063	-.00357	.00152	-.00689	.02739	-.00014	.00123	.00088
#2	.00053	3.6666	.00040	-.00010	-.00152	-.02864	-.00037	.00095	.00234

Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Int. Std.	Y_2243	Y_3600	Y_3774
Line	224.306 {450}	360.073 { 94}	377.433 { 89}
Units	Cts/S	Cts/S	Cts/S
Avg	2556.4	37677.	1826.8
Stddev	.9	85.	4.5
%RSD	.03632	.22639	.24750

#1	2557.1	37737.	1823.6
#2	2555.8	37617.	1830.0

Sample Name: 280-82988-B-8-A Acquired: 5/17/2016 20:56:25 Type: Unk

Method: 6500_025(v6) Mode: CONC Corr. Factor: 1.000000

User: CRHOADES Prep Date: Custom ID2: Custom ID3:

Comment: 325228 6010B (As Cd Fe)

Elem	Ag3280	Al1670	As1890	B_2089	Ba4554	Be3130	Bi2230	Ca3179	Cd2288
Line	328.068 {103}	167.079 {502}	189.042 {478}	208.959 {461}	455.403 {74}	313.042 {108}	223.061 {451}	317.933 {106}	228.802 {447}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.00130	.00169	-.00501	.05906	.05486	-.00009	-.00074	240.56	.00041
Stddev	.00006	.00060	.00059	.00076	.00122	.00013	.00330	5.62	.00001
%RSD	4.3582	35.873	11.795	1.2907	2.2307	137.18	445.94	2.3357	3.0738

#1	.00134	.00126	-.00542	.05852	.05573	.00000	.00159	244.53	.00040
#2	.00126	.00211	-.00459	.05960	.05399	-.00018	-.00307	236.59	.00042

Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Elem	Co2286	Cr2055	Cu3247	Fe2599	K_7664	Li6707	Mg2790	Mn2576	Mo2020
Line	228.616 {447}	205.560 {464}	324.754 {104}	259.940 {130}	766.490 {44}	670.784 {50}	279.079 {121}2	257.610 {131}	202.030 {467}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	-.00044	-.00066	.00144	.04470	4.7666	.03985	35.392	.17403	-.00028
Stddev	.00023	.00038	.00053	.00454	.0223	.00215	.047	.00047	.00017
%RSD	52.720	58.177	36.980	10.152	.46881	5.3934	.13357	.26783	62.073

#1	-.00027	-.00093	.00181	.04791	4.7824	.04136	35.426	.17370	-.00040
#2	-.00060	-.00039	.00106	.04149	4.7508	.03833	35.359	.17436	-.00015

Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Elem	Na8183	Ni2316	P_1782	Pb2203	S_1820	Sb2068	Se1960	Si2881	SiO2
Line	818.326 {41}	231.604 {446}	178.284 {489}	220.353 {453}	182.034 {485}	206.833 {463}	196.090 {472}	288.158 {117}	288.158 {117}2
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	192.39	.00326	.01611	-.00103	W 189.25	-.00991	W -.00663	3.1409	6.7215
Stddev	.67	.00035	.00400	.00134	.32	.00247	.00350	.0371	.0794
%RSD	.34928	10.885	24.830	130.42	.17046	24.965	52.823	1.1812	1.1812

#1	192.86	.00301	.01894	-.00198	189.02	-.00816	-.00415	3.1671	6.7777
#2	191.91	.00351	.01328	-.00008	189.48	-.01166	-.00911	3.1147	6.6654

Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Warn	Chk Pass	Chk Warn	Chk Pass	Chk Pass
High Limit					180.00		5.0000		
Low Limit					-.15000		-.00500		

Elem	Sn1899	Sr4077	Th2837	Ti3349	Ti1908	U_3701	V_2924	Zn2062	Zr3391
Line	189.989 {477}	407.771 {83}	283.730 {119}	334.904 {101}	190.856 {477}	370.152 {91}	292.402 {115}	206.200 {163}	339.198 {99}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	-.00293	3.7060	-.00075	.00037	-.00256	-.01159	.00009	-.00005	.00154
Stddev	.00176	.0843	.00395	.00003	.00073	.00491	.00071	.00108	.00137
%RSD	60.125	2.2753	528.10	7.1576	28.555	42.376	776.62	2003.9	88.600

#1	-.00169	3.7656	-.00354	.00035	-.00204	-.00811	.00059	-.00082	.00251
#2	-.00418	3.6464	.00205	.00038	-.00307	-.01506	-.00041	.00071	.00058

Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Int. Std.	Y_2243	Y_3600	Y_3774
Line	224.306 {450}	360.073 {94}	377.433 {89}
Units	Cts/S	Cts/S	Cts/S
Avg	2564.6	37068.	1928.1
Stddev	.0	354.	57.0
%RSD	.00059	.95477	2.9547

#1	2564.6	37318.	1887.8
#2	2564.6	36818.	1968.3

Sample Name: 280-83043-A-1-A Acquired: 5/17/2016 20:59:03 Type: Unk

Method: 6500_025(v6) Mode: CONC Corr. Factor: 1.000000

User: CRHOADES Prep Date: Custom ID2: Custom ID3:

Comment: 325228 6010B (As Cd Fe)

Elem	Ag3280	Al1670	As1890	B_2089	Ba4554	Be3130	Bi2230	Ca3179	Cd2288
Line	328.068 {103}	167.079 {502}	189.042 {478}	208.959 {461}	455.403 {74}	313.042 {108}	223.061 {451}	317.933 {106}	228.802 {447}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.00175	.00240	-.00657	.03285	.03512	-.00056	-.00367	W 564.53	.00098
Stddev	.00012	.00132	.00078	.00019	.00063	.00015	.00358	2.54	.00026
%RSD	7.0307	55.081	11.809	.56614	1.7851	26.804	97.501	.44908	26.530

#1	.00184	.00147	-.00603	.03298	.03468	-.00066	-.00620	566.33	.00079
#2	.00167	.00334	-.00712	.03272	.03556	-.00045	-.00114	562.74	.00116

Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Warn	Chk Pass
High Limit								500.00	
Low Limit								-.05000	

Elem	Co2286	Cr2055	Cu3247	Fe2599	K_7664	Li6707	Mg2790	Mn2576	Mo2020
Line	228.616 {447}	205.560 {464}	324.754 {104}	259.940 {130}	766.490 {44}	670.784 {50}	279.079 {121}2	257.610 {131}	202.030 {467}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	-.00164	.00083	.00179	.02482	18.064	.16129	49.813	.00370	-.00059
Stddev	.00005	.00001	.00048	.00424	.071	.00421	.067	.00019	.00060
%RSD	2.8013	.79035	27.011	17.064	.39074	2.6076	.13421	5.1965	100.71

#1	-.00161	.00083	.00213	.02183	18.113	.15831	49.766	.00356	-.00102
#2	-.00168	.00084	.00145	.02782	18.014	.16426	49.861	.00383	-.00017

Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Elem	Na8183	Ni2316	P_1782	Pb2203	S_1820	Sb2068	Se1960	Si2881	SiO2
Line	818.326 {41}	231.604 {446}	178.284 {489}	220.353 {453}	182.034 {485}	206.833 {463}	196.090 {472}	288.158 {117}	288.158 {117}2
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	482.94	.00400	.04258	-.00063	F 596.25	-.00760	.21214	12.095	25.884
Stddev	3.13	.00008	.00210	.00008	1.25	.00072	.01283	.065	.140
%RSD	.64862	1.9281	4.9412	12.338	.20889	9.5157	6.0469	.53935	.53935

#1	485.16	.00406	.04109	-.00068	597.13	-.00811	.22121	12.141	25.983
#2	480.73	.00395	.04407	-.00057	595.36	-.00709	.20307	12.049	25.785

Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Fail	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit					200.00				
Low Limit					-.20000				

Elem	Sn1899	Sr4077	Th2837	Ti3349	Ti1908	U_3701	V_2924	Zn2062	Zr3391
Line	189.989 {477}	407.771 {83}	283.730 {119}	334.904 {101}	190.856 {477}	370.152 {91}	292.402 {115}	206.200 {163}	339.198 {99}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	-.00373	W 13.884	-.00327	.00229	-.00569	.07916	.00099	.00320	-.00085
Stddev	.00061	.032	.00187	.00008	.00242	.02119	.00014	.00017	.00658
%RSD	16.428	.23236	57.246	3.4121	42.585	26.765	14.262	5.2612	771.74

#1	-.00417	13.861	-.00459	.00224	-.00740	.09415	.00108	.00332	-.00551
#2	-.00330	13.907	-.00195	.00235	-.00398	.06418	.00089	.00308	.00380

Check ?	Chk Pass	Chk Warn	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit		5.0000							
Low Limit		-.01000							

Int. Std.	Y_2243	Y_3600	Y_3774
Line	224.306 {450}	360.073 {94}	377.433 {89}
Units	Cts/S	Cts/S	Cts/S
Avg	2477.6	36204.	1916.0
Stddev	2.0	168.	5.5
%RSD	.08025	.46269	.28655

#1	2476.2	36323.	1919.9
#2	2479.0	36086.	1912.1

Sample Name: 280-83043-A-2-A Acquired: 5/17/2016 21:01:47 Type: Unk

Method: 6500_025(v6) Mode: CONC Corr. Factor: 1.000000

User: CRHOADES Prep Date: Custom ID2: Custom ID3:

Comment: 325228 6010B (As Cd Fe)

Elem	Ag3280	Al1670	As1890	B_2089	Ba4554	Be3130	Bi2230	Ca3179	Cd2288
Line	328.068 {103}	167.079 {502}	189.042 {478}	208.959 {461}	455.403 {74}	313.042 {108}	223.061 {451}	317.933 {106}	228.802 {447}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.00180	.00131	.00284	.02329	.01491	-.00010	.00107	84.571	-.00001
Stddev	.00067	.00055	.01043	.00062	.00068	.00006	.00120	1.407	.00021
%RSD	37.387	41.990	366.68	2.6738	4.5538	52.889	112.26	1.6634	2414.6

#1	.00132	.00092	.01022	.02285	.01443	-.00007	.00192	83.576	-.00015
#2	.00227	.00169	-.00453	.02373	.01539	-.00014	.00022	85.566	.00014

Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Elem	Co2286	Cr2055	Cu3247	Fe2599	K_7664	Li6707	Mg2790	Mn2576	Mo2020
Line	228.616 {447}	205.560 {464}	324.754 {104}	259.940 {130}	766.490 {44}	670.784 {50}	279.079 {121}2	257.610 {131}	202.030 {467}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	-.00039	-.00055	.00007	.20023	3.1722	-.00225	8.8499	.39312	-.00151
Stddev	.00015	.00003	.00111	.00483	.0590	.00259	.0346	.00072	.00017
%RSD	39.413	6.2573	1617.0	2.4098	1.8599	114.84	.39065	.18338	11.506

#1	-.00050	-.00052	.00085	.19682	3.2139	-.00409	8.8254	.39261	-.00139
#2	-.00028	-.00057	-.00071	.20364	3.1305	-.00042	8.8743	.39363	-.00163

Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Elem	Na8183	Ni2316	P_1782	Pb2203	S_1820	Sb2068	Se1960	Si2881	SiO2
Line	818.326 {41}	231.604 {446}	178.284 {489}	220.353 {453}	182.034 {485}	206.833 {463}	196.090 {472}	288.158 {117}	288.158 {117}2
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	98.481	.00043	.00136	-.00159	82.187	-.00395	F -.01555	6.9616	14.898
Stddev	1.073	.00022	.00165	.00030	.349	.00049	.00942	.0056	.012
%RSD	1.0899	50.666	120.94	18.665	.42410	12.409	60.580	.08047	.08047

#1	97.722	.00028	.00020	-.00180	82.434	-.00360	-.02222	6.9655	14.906
#2	99.240	.00059	.00253	-.00138	81.941	-.00429	-.00889	6.9576	14.889

Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Fail	Chk Pass	Chk Pass
High Limit							50.000		
Low Limit							-.01000		

Elem	Sn1899	Sr4077	Th2837	Ti3349	Ti1908	U_3701	V_2924	Zn2062	Zr3391
Line	189.989 {477}	407.771 {83}	283.730 {119}	334.904 {101}	190.856 {477}	370.152 {91}	292.402 {115}	206.200 {163}	339.198 {99}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	-.00232	1.7582	-.00094	.00072	-.00209	.04318	.00026	.00090	.00189
Stddev	.00045	.0301	.00240	.00020	.00094	.03546	.00008	.00066	.00037
%RSD	19.268	1.7144	254.14	27.503	45.021	82.130	29.488	72.868	19.491

#1	-.00263	1.7369	-.00264	.00087	-.00143	.06826	.00032	.00044	.00215
#2	-.00200	1.7795	.00075	.00058	-.00276	.01810	.00021	.00136	.00163

Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Int. Std.	Y_2243	Y_3600	Y_3774						
Line	224.306 {450}	360.073 {94}	377.433 {89}						
Units	Cts/S	Cts/S	Cts/S						
Avg	2612.5	37584.	1822.6						
Stddev	2.5	1086.	89.7						
%RSD	.09381	2.8889	4.9238						

#1	2614.2	36816.	1886.1						
#2	2610.7	38352.	1759.2						

Sample Name: CCVH-3883905 Acquired: 5/17/2016 21:04:24 Type: QC
Method: 6500_025(v6) Mode: CONC Corr. Factor: 1.000000
User: CRHOADES Prep Date: Custom ID2: Custom ID3:
Comment:

Elem	Ag3280	Al3092	As1890	B_2089	Ba4554	Be3130	Bi2230	Ca3179	Cd2288	Co2286	Cr2055
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	-.00543	52.422	-.00266	.00210	-.00081	.00002	.96928	.06651	-.00046	-.00118	-.00049
Stddev	.00084	.146	.00123	.00012	.00052	.00004	.01475	.03057	.00005	.00037	.00026
%RSD	15.537	.27885	46.355	5.8534	64.700	215.07	1.5217	45.969	10.572	31.124	53.702

#1	-.00484	52.319	-.00179	.00219	-.00044	-.00001	.97971	.04489	-.00042	-.00092	-.00068
#2	-.00603	52.526	-.00353	.00201	-.00117	.00005	.95885	.08812	-.00049	-.00144	-.00030

Check ?	None	Chk Pass	None	None	None	None	Chk Pass	None	None	None	None
Value											
Range											

Elem	Cu3247	Fe2714	K_7664	Li6707	Mg2790	Mn2576	Mo2020	Na8183	Ni2316	P_1782	Pb2203
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	-.01418	53.607	-.06488	-.00684	.01505	-.00217	-.00218	273.22	.00087	.00519	-.00196
Stddev	.00096	.030	.04414	.00270	.00164	.00001	.00024	.55	.00003	.00001	.00204
%RSD	6.7440	.05573	68.036	39.398	10.913	.60844	11.047	.20216	3.0325	.15118	104.28

#1	-.01485	53.586	-.09609	-.00494	.01389	-.00216	-.00235	272.83	.00089	.00519	-.00340
#2	-.01350	53.629	-.03367	-.00875	.01621	-.00218	-.00201	273.61	.00085	.00520	-.00051

Check ?	None	Chk Pass	None	None	None	None	None	Chk Pass	None	None	None
Value											
Range											

Elem	S_1820	Sb2068	Se1960	Si2881	SiO2	Sn1899	Sr4077	Th2837	Ti3349	Ti1908	U_3701
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	5.0681	-.01903	-.00765	-.02306	-.04934	-.00251	.00153	W 4.7018	-.00013	-.00386	9.6823
Stddev	.0606	.00222	.01072	.02869	.06139	.00065	.00034	.0072	.00012	.00503	.0585
%RSD	1.1951	11.657	140.07	124.41	124.41	25.863	21.978	.15374	94.283	130.23	.60366

#1	5.1109	-.02060	-.00007	-.04334	-.09275	-.00296	.00129	4.6967	-.00004	-.00031	9.6410
#2	5.0253	-.01746	-.01524	-.00277	-.00593	-.00205	.00176	4.7069	-.00022	-.00742	9.7236

Check ?	Chk Pass	None	None	None	None	None	None	Chk Warn	None	None	Chk Pass
Value								5.0000			
Range								-5.0000%			

Elem	V_2924	Zn2062	Zr3391
Units	ppm	ppm	ppm
Avg	.01184	-.00077	-.13590
Stddev	.00049	.00001	.00702
%RSD	4.1020	1.6890	5.1641

#1	.01219	-.00078	-.14086
#2	.01150	-.00076	-.13094

Check ?	None	None	None
Value			
Range			

Int. Std.	Y_2243	Y_3600	Y_3774
Units	Cts/S	Cts/S	Cts/S
Avg	2560.0	38110.	1813.2
Stddev	52.9	516.	76.5
%RSD	2.0678	1.3535	4.2206

#1	2522.6	38475.	1759.1
#2	2597.4	37745.	1867.3

Sample Name: CCV-3888422 Acquired: 5/17/2016 21:07:00 Type: QC
Method: 6500_025(v6) Mode: CONC Corr. Factor: 1.000000
User: CRHOADES Prep Date: Custom ID2: Custom ID3:
Comment:

Elem	Ag3280	Al1670	As1890	B_2089	Ba4554	Be3130	Bi2230	Ca3179	Cd2288	Co2286	Cr2055	Cu3247	Fe2599
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.48406	.47969	.92882	.48724	.47852	.49256	-.00170	4.7532	.49446	.49880	.50518	.46246	2.5110
Stddev	.00197	.00383	.00996	.00261	.00164	.00291	.00432	.0002	.00743	.00010	.00043	.00355	.0260
%RSD	.40751	.79881	1.0724	.53505	.34174	.59178	254.41	.00342	1.5030	.02058	.08503	.76698	1.0353

#1	.48266	.47698	.92178	.48540	.47967	.49462	-.00475	4.7531	.48920	.49888	.50548	.45995	2.5294
#2	.48545	.48240	.93586	.48909	.47736	.49050	.00136	4.7533	.49971	.49873	.50487	.46497	2.4927

Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	None	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Value													
Range													

Elem	K_7664	Li6707	Mg2790	Mn2576	Mo2020	Na5895	Ni2316	P_1782	Pb2203	S_1820	Sb2068	Se1960	Si2881
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	48.067	.95889	18.810	.46131	.49409	5.2397	.48625	.96895	.99628	.01112	.97305	.92992	4.9721
Stddev	.070	.00168	.019	.00031	.00150	.0481	.00194	.00617	.01007	.00314	.02371	.01210	.0827
%RSD	.14555	.17509	.10096	.06811	.30380	.91752	.39861	.63713	1.0109	28.268	2.4365	1.3008	1.6629

#1	48.018	.96007	18.797	.46109	.49515	5.2737	.48762	.97332	1.0034	.01334	.98982	.93848	5.0306
#2	48.117	.95770	18.824	.46153	.49303	5.2057	.48488	.96459	.98916	.00889	.95629	.92137	4.9137

Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	None	Chk Pass	Chk Pass	Chk Pass
Value													
Range													

Elem	SiO2	Sn1899	Sr4077	Th2837	Ti3349	Ti1908	U_3701	V_2924	Zn2062	Zr3391
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	10.640	1.0008	.49095	-.00153	.45401	1.0063	-.02482	.48174	.46034	.47198
Stddev	.177	.0099	.00261	.00076	.00061	.0128	.07164	.00221	.00418	.00159
%RSD	1.6629	.99230	.53205	49.694	.13528	1.2713	288.61	.45795	.90785	.33631
#1	10.765	1.0079	.49280	-.00207	.45357	1.0153	-.07547	.48018	.46330	.47310
#2	10.515	.99382	.48910	-.00099	.45444	.99725	.02583	.48330	.45739	.47085

Check ?	Chk Pass	Chk Pass	Chk Pass	None	Chk Pass	Chk Pass	None	Chk Pass	Chk Pass	Chk Pass
Value										
Range										

Int. Std.	Y_2243	Y_3600	Y_3774
Units	Cts/S	Cts/S	Cts/S
Avg	2584.6	37571.	1833.1
Stddev	12.6	921.	34.8
%RSD	.48906	2.4523	1.8964
#1	2575.7	36920.	1808.5
#2	2593.6	38223.	1857.7

Sample Name: CCB Acquired: 5/17/2016 21:09:32 Type: QC
 Method: 6500_025(v6) Mode: CONC Corr. Factor: 1.000000
 User: CRHOADES Prep Date: Custom ID2: Custom ID3:
 Comment:

Elem	Ag3280	Al1670	As1890	B_2089	Ba4554	Be3130	Bi2230	Ca3179	Cd2288	Co2286	Cr2055
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.00117	.00785	.00111	.00243	-.00052	-.00034	-.00256	.00234	.00027	-.00011	-.00011
Stddev	.00062	.00977	.00107	.00053	.00048	.00022	.00273	.00406	.00018	.00060	.00018
%RSD	53.196	124.46	96.036	21.779	91.162	66.478	106.89	173.30	68.247	532.11	157.35

#1	.00160	.01476	.00187	.00280	-.00086	-.00018	-.00449	-.00053	.00040	.00031	.00001
#2	.00073	.00094	.00036	.00206	-.00019	-.00049	-.00062	.00522	.00014	-.00054	-.00024

Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit											
Low Limit											

Elem	Cu3247	Fe2599	K_7664	Li6707	Mg2790	Mn2576	Mo2020	Na5895	Ni2316	P_1782	Pb2203
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	-.00049	.00085	-.15392	-.00761	.00240	.00000	.00052	.06277	-.00023	-.00146	-.00111
Stddev	.00061	.00570	.10763	.00337	.00310	.0001	.00040	.00620	.00036	.00199	.00004
%RSD	123.75	670.36	69.926	44.333	129.16	69721.	77.782	9.8747	152.95	135.98	3.2213

#1	-.00092	-.00318	-.07781	-.00523	.00460	.00007	.00023	.05838	.00002	-.00006	-.00114
#2	-.00006	.00488	-.23002	-.01000	.00021	-.00007	.00080	.06715	-.00049	-.00286	-.00109

Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit											
Low Limit											

Elem	S_1820	Sb2068	Se1960	Si2881	SiO2	Sn1899	Sr4077	Th2837	Ti3349	Ti1908	U_3701
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	-.01281	W .00115	.00139	-.02816	-.06026	-.00180	.00021	.00000	.00041	.00554	.02060
Stddev	.00265	.00166	.00099	.02950	.06312	.00152	.00014	.00174	.00027	.00442	.00469
%RSD	20.664	144.23	70.824	104.75	104.75	84.344	68.432	47167.	65.529	79.761	22.772

#1	-.01094	.00232	.00209	-.04902	-.10489	-.00073	.00011	.00124	.00022	.00242	.02392
#2	-.01468	-.00002	.00069	-.00730	-.01562	-.00287	.00031	-.00123	.00059	.00867	.01729

Check ?	Chk Pass	Chk Warn	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit		.00100									
Low Limit		-.00100									

Elem	V_2924	Zn2062	Zr3391
Units	ppm	ppm	ppm
Avg	.00015	.00004	-.00159
Stddev	.00023	.00107	.00071
%RSD	159.74	2396.6	44.752

#1	-.00002	-.00071	-.00210
#2	.00031	.00080	-.00109

Check ?	Chk Pass	Chk Pass	Chk Pass
High Limit			
Low Limit			

Int. Std.	Y_2243	Y_3600	Y_3774
Units	Cts/S	Cts/S	Cts/S
Avg	2619.1	37324.	1756.2
Stddev	100.3	81.	20.9
%RSD	3.8310	.21635	1.1908

#1	2690.0	37381.	1741.4
#2	2548.1	37267.	1771.0

Sample Name: CCVL-3894681 Acquired: 5/17/2016 21:11:56 Type: QC
Method: 6500_025(v6) Mode: CONC Corr. Factor: 1.000000
User: CRHOADES Prep Date: Custom ID2: Custom ID3:
Comment:

Elem	Ag3280	Al1670	As1890	B_2089	Ba4554	Be3130	Bi2230	Ca3179	Cd2288	Co2286	Cr2055
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.01060	.09950	.01605	.09800	.00856	F .00063	.10801	.19661	.00522	.00955	.00964
Stddev	.00054	.00062	.00484	.00269	.00004	.00019	.00643	.00684	.00016	.00035	.00057
%RSD	5.1383	.62059	30.144	2.7415	.42488	30.183	5.9548	3.4766	3.0469	3.6260	5.8838
#1	.01022	.09907	.01947	.09990	.00859	.00050	.11256	.20145	.00533	.00980	.01004
#2	.01099	.09994	.01263	.09610	.00854	.00076	.10347	.19178	.00510	.00931	.00924
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Fail	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Value						.00100					
Range						-30.000%					
Elem	Cu3247	Fe2599	K_7664	Li6707	Mg2790	Mn2576	Mo2020	Na5895	Ni2316	P_1782	Pb2203
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.01318	.11694	2.8627	F -.00235	.19391	.00961	.01871	1.0640	.04024	2.8662	.00774
Stddev	.00009	.00196	.0860	.00268	.00001	.00016	.00017	.0255	.00092	.0527	.00093
%RSD	.70817	1.6770	3.0051	114.01	.00508	1.6490	.89445	2.3991	2.2834	1.8392	12.067
#1	.01312	.11555	2.8018	-.00046	.19391	.00973	.01883	1.0459	.04089	2.9035	.00840
#2	.01325	.11832	2.9235	-.00425	.19392	.00950	.01859	1.0820	.03959	2.8290	.00708
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Fail	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Value				.01000							
Range				-30.000%							
Elem	S_1820	Sb2068	Se1960	Si2881	SiO2	Sn1899	Sr4077	Th2837	Ti3349	Tl1908	U_3701
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	-.03770	.01909	F .00602	.45940	.98312	.09872	.00985	.01471	.01031	.01693	F .12244
Stddev	.00444	.00202	.00044	.03514	.07520	.00155	.00016	.00295	.00014	.00004	.06026
%RSD	11.769	10.594	7.3296	7.6492	7.6492	1.5665	1.6747	20.065	1.3908	.23302	49.215
#1	-.04083	.01766	.00633	.43455	.92995	.09982	.00974	.01262	.01041	.01690	.16505
#2	-.03456	.02052	.00571	.48425	1.0363	.09763	.00997	.01679	.01021	.01696	.07983
Check ?	None	Chk Pass	Chk Fail	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Fail
Value			.01500								.06000
Range			-30.000%								30.000%
Elem	V_2924	Zn2062	Zr3391								
Units	ppm	ppm	ppm								
Avg	.00979	.01891	.01254								
Stddev	.00007	.00013	.00261								
%RSD	.75912	.69383	20.839								
#1	.00974	.01881	.01069								
#2	.00984	.01900	.01439								
Check ?	Chk Pass	Chk Pass	Chk Pass								
Value											
Range											
Int. Std.	Y_2243	Y_3600	Y_3774								
Units	Cts/S	Cts/S	Cts/S								
Avg	2595.7	37975.	1773.2								
Stddev	8.5	553.	21.0								
%RSD	.32571	1.4566	1.1868								
#1	2589.7	37583.	1758.3								
#2	2601.6	38366.	1788.1								

Sample Name: MB 280-325217/1-A Acquired: 5/17/2016 21:14:36 Type: Unk

Method: 6500_025(v6) Mode: CONC Corr. Factor: 1.000000

User: CRHOADES Prep Date: 5/16 Custom ID2: Custom ID3:

Comment: 325217 6010B

Elem	Ag3280	Al1670	As1890	B_2089	Ba4554	Be3130	Bi2230	Ca3179	Cd2288
Line	328.068 {103}	167.079 {502}	189.042 {478}	208.959 {461}	455.403 { 74}	313.042 {108}	223.061 {451}	317.933 {106}	228.802 {447}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.00145	.01184	.00489	.00107	-.00083	-.00023	-.00242	.01629	.00007
Stddev	.00111	.00013	.00017	.00107	.00006	.00030	.00328	.00291	.00048
%RSD	76.631	1.1091	3.4512	99.437	7.4063	127.31	135.06	17.856	649.36

#1	.00224	.01175	.00477	.00182	-.00087	-.00045	-.00011	.01835	-.00027
#2	.00067	.01193	.00500	.00032	-.00078	-.00002	-.00474	.01424	.00042

Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Elem	Co2286	Cr2055	Cu3247	Fe2599	K_7664	Li6707	Mg2790	Mn2576	Mo2020
Line	228.616 {447}	205.560 {464}	324.754 {104}	259.940 {130}	766.490 { 44}	670.784 { 50}	279.079 {121}2	257.610 {131}	202.030 {467}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.00009	-.00062	-.00004	F 1.6087	-.23678	F -.01130	.00117	W .00512	-.00111
Stddev	.00028	.00001	.00022	.0053	.02313	.00180	.00739	.00010	.00079
%RSD	318.88	1.2333	562.82	.32735	9.7684	15.940	632.75	1.9216	71.201

#1	.00028	-.00063	-.00020	1.6124	-.22042	-.01003	-.00406	.00505	-.00168
#2	-.00011	-.00062	.00012	1.6050	-.25313	-.01258	.00640	.00519	-.00055

Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Fail	Chk Pass	Chk Fail	Chk Pass	Chk Warn	Chk Pass
High Limit				.10000		.01000		.00500	
Low Limit				-.10000		-.01000		-.00500	

Elem	Na5895	Ni2316	P_1782	Pb2203	S_1820	Sb2068	Se1960	Si2881	SiO2
Line	589.592 { 57}	231.604 {446}	178.284 {489}	220.353 {453}	182.034 {485}	206.833 {463}	196.090 {472}	288.158 {117}	288.158 {117}2
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.05565	.00075	.00215	-.00149	-.03141	-.00068	-.00429	.01253	.02681
Stddev	.01349	.00025	.00265	.00063	.00041	.00573	.00459	.02927	.06264
%RSD	24.243	33.701	123.15	42.266	1.3003	840.09	107.06	233.69	233.69

#1	.06519	.00057	.00403	-.00193	-.03112	-.00474	-.00104	-.00817	-.01749
#2	.04611	.00093	.00028	-.00104	-.03170	.00337	-.00754	.03322	.07110

Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	None
High Limit									
Low Limit									

Elem	Sn1899	Sr4077	Th2837	Ti3349	Ti1908	U_3701	V_2924	Zn2062	Zr3391
Line	189.989 {477}	407.771 { 83}	283.730 {119}	334.904 {101}	190.856 {477}	370.152 { 91}	292.402 {115}	206.200 {163}	339.198 { 99}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	-.00182	.00009	.00050	.00091	-.00176	W .05013	.00019	.00252	-.00092
Stddev	.00157	.00022	.00015	.00003	.00141	.00351	.00071	.00091	.00160
%RSD	85.887	231.64	29.805	3.5533	80.193	6.9925	372.60	36.267	174.09

#1	-.00293	-.00006	.00040	.00093	-.00276	.04765	-.00031	.00187	.00021
#2	-.00072	.00025	.00061	.00089	-.00076	.05261	.00069	.00316	-.00205

Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Warn	Chk Pass	Chk Pass	Chk Pass
High Limit						.05000			
Low Limit						-.05000			

Int. Std.	Y_2243	Y_3600	Y_3774						
Line	224.306 {450}	360.073 { 94}	377.433 { 89}						
Units	Cts/S	Cts/S	Cts/S						
Avg	2537.5	37976.	1721.3						
Stddev	38.7	720.	8.2						
%RSD	1.5252	1.8968	.47366						

#1	2510.1	38485.	1715.5						
#2	2564.9	37467.	1727.0						

Sample Name: LCS 280-325217/2-A Acquired: 5/17/2016 21:17:18 Type: Unk
 Method: 6500_025(v6) Mode: CONC Corr. Factor: 1.000000
 User: CRHOADES Prep Date: Custom ID2: Custom ID3:
 Comment: 325217 6010B

Elem	Ag3280	Al1670	As1890	B_2089	Ba4554	Be3130	Bi2230	Ca3179	Cd2288
Line	328.068 {103}	167.079 {502}	189.042 {478}	208.959 {461}	455.403 {74}	313.042 {108}	223.061 {451}	317.933 {106}	228.802 {447}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.04966	1.8609	.94384	.98853	2.0014	.05146	1.9964	48.748	.10019
Stddev	.00087	.0530	.02417	.02616	.0253	.00055	.0459	.711	.00256
%RSD	1.7480	2.8485	2.5606	2.6462	1.2648	1.0592	2.2972	1.4579	2.5520

#1	.05027	1.8235	.92675	.97003	2.0193	.05184	1.9640	49.250	.09838
#2	.04904	1.8984	.96093	1.0070	1.9835	.05107	2.0288	48.245	.10200

Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	None	Chk Pass	Chk Pass
High Limit									
Low Limit									

Elem	Co2286	Cr2055	Cu3247	Fe2599	K_7664	Li6707	Mg2790	Mn2576	Mo2020
Line	228.616 {447}	205.560 {464}	324.754 {104}	259.940 {130}	766.490 {44}	670.784 {50}	279.079 {121}2	257.610 {131}	202.030 {467}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.48842	.20252	.22849	1.0701	50.342	.98001	47.867	.46380	1.0409
Stddev	.01248	.00379	.00180	.0075	.641	.00167	.037	.00005	.0241
%RSD	2.5560	1.8735	.78622	.69763	1.2741	.17058	.07646	.01106	2.3152

#1	.47959	.19984	.22722	1.0754	50.796	.98119	47.841	.46377	1.0239
#2	.49725	.20520	.22976	1.0649	49.888	.97882	47.893	.46384	1.0580

Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Elem	Na8183	Ni2316	P_1782	Pb2203	S_1820	Sb2068	Se1960	Si2881	SiO2
Line	818.326 {41}	231.604 {446}	178.284 {489}	220.353 {453}	182.034 {485}	206.833 {463}	196.090 {472}	288.158 {117}	288.158 {117}2
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	F 59.275	.47736	9.8955	.49893	2.0326	.51959	1.9260	10.241	21.915
Stddev	.795	.01253	.2425	.01025	.0444	.00824	.0370	.037	.080
%RSD	1.3419	2.6248	2.4505	2.0546	2.1857	1.5864	1.9191	.36298	.36298

#1	59.837	.46850	9.7241	.49169	2.0012	.51376	1.8999	10.214	21.859
#2	58.712	.48622	10.067	.50618	2.0640	.52542	1.9521	10.267	21.971

Check ?	Chk Fail	Chk Pass	Chk Pass	Chk Pass	None	Chk Pass	Chk Pass	Chk Pass	None
High Limit	56.000								
Low Limit	45.500								

Elem	Sn1899	Sr4077	Th2837	Ti3349	Ti1908	U_3701	V_2924	Zn2062	Zr3391
Line	189.989 {477}	407.771 {83}	283.730 {119}	334.904 {101}	190.856 {477}	370.152 {91}	292.402 {115}	206.200 {163}	339.198 {99}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	2.0205	1.0174	.98837	.93897	1.8189	2.0187	.48462	.46134	.45870
Stddev	.0385	.0142	.00177	.00041	.0292	.0480	.00065	.00474	.00014
%RSD	1.9062	1.3953	.17904	.04386	1.6037	2.3775	.13450	1.0273	.03025

#1	1.9933	1.0275	.98962	.93868	1.8395	1.9847	.48508	.46469	.45860
#2	2.0478	1.0074	.98712	.93926	1.7983	2.0526	.48416	.45799	.45880

Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Int. Std.	Y_2243	Y_3600	Y_3774
Line	224.306 {450}	360.073 {94}	377.433 {89}
Units	Cts/S	Cts/S	Cts/S
Avg	2547.3	36689.	1741.4
Stddev	40.3	74.	25.2
%RSD	1.5836	.20101	1.4472

#1	2575.9	36741.	1759.3
#2	2518.8	36637.	1723.6

Sample Name: 280-82975-A-1-A Acquired: 5/17/2016 21:19:45 Type: Unk

Method: 6500_025(v6) Mode: CONC Corr. Factor: 1.000000

User: CRHOADES Prep Date: Custom ID2: Custom ID3:

Comment: 325217 6010B

Elem	Ag3280	Al1670	As1890	B_2089	Ba4554	Be3130	Bi2230	Ca3179	Cd2288
Line	328.068 {103}	167.079 {502}	189.042 {478}	208.959 {461}	455.403 { 74}	313.042 {108}	223.061 {451}	317.933 {106}	228.802 {447}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.00137	.06783	.00921	.22622	.04786	-.00008	-.00015	60.177	.00066
Stddev	.00063	.00172	.00057	.00083	.00015	.00028	.00298	.080	.00028
%RSD	45.725	2.5290	6.1683	.36606	.31536	331.43	2001.5	.13265	42.756

#1	.00181	.06662	.00961	.22563	.04775	-.00028	-.00225	60.120	.00086
#2	.00093	.06905	.00881	.22681	.04797	.00011	.00196	60.233	.00046

Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Elem	Co2286	Cr2055	Cu3247	Fe2599	K_7664	Li6707	Mg2790	Mn2576	Mo2020
Line	228.616 {447}	205.560 {464}	324.754 {104}	259.940 {130}	766.490 { 44}	670.784 { 50}	279.079 {121}2	257.610 {131}	202.030 {467}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.01036	.00123	.00552	.53903	.98024	-.00401	22.456	.41289	.31775
Stddev	.00063	.00069	.00052	.01003	.06288	.00070	.005	.00038	.00320
%RSD	6.0914	55.837	9.3771	1.8615	6.4143	17.496	.02370	.09182	1.0076

#1	.00991	.00171	.00515	.53193	.93578	-.00351	22.460	.41263	.31549
#2	.01081	.00074	.00589	.54612	1.0247	-.00450	22.452	.41316	.32001

Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Elem	Na8183	Ni2316	P_1782	Pb2203	S_1820	Sb2068	Se1960	Si2881	SiO2
Line	818.326 { 41}	231.604 {446}	178.284 {489}	220.353 {453}	182.034 {485}	206.833 {463}	196.090 {472}	288.158 {117}	288.158 {117}2
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	118.48	.02878	.06199	.00166	55.975	-.00558	.00019	6.0868	13.026
Stddev	1.19	.00024	.00166	.00029	.121	.00142	.00565	.0224	.048
%RSD	1.0056	.84056	2.6849	17.709	.21573	25.486	2919.1	.36783	.36783

#1	119.33	.02861	.06081	.00145	56.060	-.00458	-.00380	6.0709	12.992
#2	117.64	.02895	.06317	.00187	55.889	-.00659	.00419	6.1026	13.060

Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Elem	Sn1899	Sr4077	Th2837	Ti3349	Ti1908	U_3701	V_2924	Zn2062	Zr3391
Line	189.989 {477}	407.771 { 83}	283.730 {119}	334.904 {101}	190.856 {477}	370.152 { 91}	292.402 {115}	206.200 {163}	339.198 { 99}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	-.00059	.46471	.00432	.00239	.03960	.01201	-.00388	.01918	-.00293
Stddev	.00081	.00013	.00139	.00031	.00826	.01858	.00041	.00025	.00016
%RSD	136.35	.02867	32.098	12.784	20.855	154.72	10.662	1.3118	5.6002

#1	-.00117	.46461	.00334	.00260	.03376	-.00113	-.00358	.01900	-.00281
#2	-.00002	.46480	.00530	.00217	.04544	.02515	-.00417	.01936	-.00304

Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Int. Std.	Y_2243	Y_3600	Y_3774
Line	224.306 {450}	360.073 { 94}	377.433 { 89}
Units	Cts/S	Cts/S	Cts/S
Avg	2531.8	37209.	1815.8
Stddev	1.1	505.	26.3
%RSD	.04506	1.3584	1.4491

#1	2532.6	37566.	1834.4
#2	2531.0	36851.	1797.2

Sample Name: 280-82975-A-2-B Acquired: 5/17/2016 21:22:23 Type: Unk

Method: 6500_025(v6) Mode: CONC Corr. Factor: 1.000000

User: CRHOADES Prep Date: Custom ID2: Custom ID3:

Comment: 325217 6010B

Elem	Ag3280	Al1670	As1890	B_2089	Ba4554	Be3130	Bi2230	Ca3179	Cd2288
Line	328.068 {103}	167.079 {502}	189.042 {478}	208.959 {461}	455.403 {74}	313.042 {108}	223.061 {451}	317.933 {106}	228.802 {447}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.00198	.13351	.33370	.23236	.40069	-.00007	-.00317	226.69	.00019
Stddev	.00048	.00059	.00878	.00546	.00742	.00011	.00178	4.16	.00007
%RSD	24.151	.44268	2.6316	2.3490	1.8512	166.06	56.092	1.8372	38.989

#1	.00164	.13309	.32749	.22850	.40594	-.00014	-.00191	229.63	.00024
#2	.00232	.13393	.33991	.23622	.39544	.00001	-.00442	223.74	.00014

Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Elem	Co2286	Cr2055	Cu3247	Fe2599	K_7664	Li6707	Mg2790	Mn2576	Mo2020
Line	228.616 {447}	205.560 {464}	324.754 {104}	259.940 {130}	766.490 {44}	670.784 {50}	279.079 {121}2	257.610 {131}	202.030 {467}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.00427	.00211	.00521	10.951	W 136.84	.00819	28.764	.98132	.22898
Stddev	.00018	.00007	.00019	.011	1.63	.00312	.040	.00094	.00829
%RSD	4.2968	3.4558	3.6780	.09888	1.1922	38.064	.14058	.09624	3.6186

#1	.00415	.00206	.00535	10.944	138.00	.01039	28.735	.98065	.22312
#2	.00440	.00217	.00508	10.959	135.69	.00598	28.792	.98198	.23484

Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Warn	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit					100.00				
Low Limit					-.50000				

Elem	Na8183	Ni2316	P_1782	Pb2203	S_1820	Sb2068	Se1960	Si2881	SiO2
Line	818.326 {41}	231.604 {446}	178.284 {489}	220.353 {453}	182.034 {485}	206.833 {463}	196.090 {472}	288.158 {117}	288.158 {117}2
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	440.52	.03157	1.8910	.00102	74.633	-.00326	W -.00611	9.0339	19.333
Stddev	7.32	.00131	.0590	.00171	.648	.00344	.00071	.0437	.094
%RSD	1.6620	4.1347	3.1183	167.85	.86790	105.52	11.647	.48425	.48425

#1	445.69	.03065	1.8493	-.00019	74.175	-.00569	-.00661	9.0030	19.266
#2	435.34	.03250	1.9327	.00223	75.091	-.00083	-.00560	9.0649	19.399

Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Warn	Chk Pass	Chk Pass
High Limit							5.0000		
Low Limit							-.00500		

Elem	Sn1899	Sr4077	Th2837	Ti3349	Ti1908	U_3701	V_2924	Zn2062	Zr3391
Line	189.989 {477}	407.771 {83}	283.730 {119}	334.904 {101}	190.856 {477}	370.152 {91}	292.402 {115}	206.200 {163}	339.198 {99}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	-.00194	2.7793	-.00256	.00331	.00382	.11449	.00551	.01293	-.00061
Stddev	.00028	.0516	.00064	.00011	.00405	.01180	.00059	.00056	.00393
%RSD	14.427	1.8571	24.936	3.2865	105.94	10.310	10.701	4.3635	646.56

#1	-.00213	2.8158	-.00301	.00323	.00096	.10614	.00509	.01254	.00217
#2	-.00174	2.7428	-.00211	.00338	.00669	.12283	.00593	.01333	-.00339

Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Int. Std.	Y_2243	Y_3600	Y_3774						
Line	224.306 {450}	360.073 {94}	377.433 {89}						
Units	Cts/S	Cts/S	Cts/S						
Avg	2515.1	36354.	1810.7						
Stddev	24.7	167.	.5						
%RSD	.98098	.46041	.02869						

#1	2532.6	36472.	1810.4						
#2	2497.7	36235.	1811.1						

Sample Name: 280-82975-A-4-A Acquired: 5/17/2016 21:25:00 Type: Unk

Method: 6500_025(v6) Mode: CONC Corr. Factor: 1.000000

User: CRHOADES Prep Date: Custom ID2: Custom ID3:

Comment: 325217 6010B

Elem	Ag3280	Al1670	As1890	B_2089	Ba4554	Be3130	Bi2230	Ca3179	Cd2288
Line	328.068 {103}	167.079 {502}	189.042 {478}	208.959 {461}	455.403 { 74}	313.042 {108}	223.061 {451}	317.933 {106}	228.802 {447}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.00020	.25066	.04979	.23165	.71304	-.00073	-.00989	W 889.24	.00172
Stddev	.00094	.00234	.00397	.00012	.01285	.00042	.00511	19.36	.00007
%RSD	467.27	.93507	7.9711	.05092	1.8018	57.095	51.691	2.1769	4.0037

#1	.00087	.25232	.05259	.23157	.72212	-.00102	-.01350	902.93	.00167
#2	-.00046	.24900	.04698	.23173	.70395	-.00043	-.00627	875.55	.00177

Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Warn	Chk Pass
High Limit								500.00	
Low Limit								-.05000	

Elem	Co2286	Cr2055	Cu3247	Fe2599	K_7664	Li6707	Mg2790	Mn2576	Mo2020
Line	228.616 {447}	205.560 {464}	324.754 {104}	259.940 {130}	766.490 { 44}	670.784 { 50}	279.079 {121}2	257.610 {131}	202.030 {467}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.01693	.00112	.00319	14.255	80.984	.02771	167.05	5.7827	.38121
Stddev	.00034	.00004	.00092	.000	1.328	.00603	.16	.0038	.00261
%RSD	1.9825	3.5655	28.925	.00137	1.6395	21.779	.09374	.06630	.68344

#1	.01717	.00115	.00385	14.255	81.923	.02344	167.16	5.7854	.38306
#2	.01669	.00109	.00254	14.255	80.045	.03198	166.94	5.7800	.37937

Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Elem	Na8183	Ni2316	P_1782	Pb2203	S_1820	Sb2068	Se1960	Si2881	SiO2
Line	818.326 { 41}	231.604 {446}	178.284 {489}	220.353 {453}	182.034 {485}	206.833 {463}	196.090 {472}	288.158 {117}	288.158 {117}2
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	W 1135.8	.05872	.36580	-.00108	73.098	-.00541	.00218	9.4492	20.221
Stddev	20.9	.00006	.00479	.00137	.521	.00210	.00089	.0639	.137
%RSD	1.8374	.10714	1.3097	126.33	.71299	38.855	40.694	.67670	.67670

#1	1150.5	.05868	.36919	-.00205	73.467	-.00690	.00155	9.4040	20.124
#2	1121.0	.05876	.36241	-.00012	72.730	-.00393	.00281	9.4944	20.318

Check ?	Chk Warn	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit	500.00								
Low Limit	11.000								

Elem	Sn1899	Sr4077	Th2837	Ti3349	Ti1908	U_3701	V_2924	Zn2062	Zr3391
Line	189.989 {477}	407.771 { 83}	283.730 {119}	334.904 {101}	190.856 {477}	370.152 { 91}	292.402 {115}	206.200 {163}	339.198 { 99}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	-.00392	W 8.0391	-.00417	.00448	-.00096	.00038	-.00030	.01376	-.00067
Stddev	.00257	.1321	.00321	.00079	.00401	.07785	.00052	.00095	.00379
%RSD	65.456	1.6436	77.071	17.684	417.01	20513.	177.19	6.9235	565.12

#1	-.00211	8.1325	-.00644	.00392	-.00380	.05543	.00007	.01308	-.00335
#2	-.00574	7.9457	-.00190	.00504	.00187	-.05467	-.00067	.01443	.00201

Check ?	Chk Pass	Chk Warn	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit		5.0000							
Low Limit		-.01000							

Int. Std.	Y_2243	Y_3600	Y_3774
Line	224.306 {450}	360.073 { 94}	377.433 { 89}
Units	Cts/S	Cts/S	Cts/S
Avg	2336.3	33883.	1737.2
Stddev	30.9	5.	48.8
%RSD	1.3207	.01542	2.8089

#1	2314.5	33879.	1702.7
#2	2358.1	33887.	1771.7

Sample Name: 280-82975-A-5-A Acquired: 5/17/2016 21:28:14 Type: Unk

Method: 6500_025(v6) Mode: CONC Corr. Factor: 1.000000

User: CRHOADES Prep Date: Custom ID2: Custom ID3:

Comment: 325217 6010B

Elem	Ag3280	Al1670	As1890	B_2089	Ba4554	Be3130	Bi2230	Ca3179	Cd2288
Line	328.068 {103}	167.079 {502}	189.042 {478}	208.959 {461}	455.403 { 74}	313.042 {108}	223.061 {451}	317.933 {106}	228.802 {447}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.00114	.15160	.08078	.12105	.83548	-.00019	-.00645	266.73	.00064
Stddev	.00102	.00023	.01236	.00142	.01348	.00001	.00012	3.91	.00016
%RSD	90.008	.15137	15.295	1.1698	1.6139	7.7618	1.8669	1.4646	24.734

#1	.00186	.15144	.07205	.12005	.84501	-.00018	-.00653	269.49	.00053
#2	.00041	.15176	.08952	.12205	.82594	-.00020	-.00636	263.97	.00075

Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Elem	Co2286	Cr2055	Cu3247	Fe2599	K_7664	Li6707	Mg2790	Mn2576	Mo2020
Line	228.616 {447}	205.560 {464}	324.754 {104}	259.940 {130}	766.490 { 44}	670.784 { 50}	279.079 {121}2	257.610 {131}	202.030 {467}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.00185	.03223	.02837	17.270	W 291.03	.01258	27.216	.82193	.43646
Stddev	.00011	.00039	.00015	.074	4.74	.00177	.025	.00125	.00762
%RSD	5.7621	1.2035	.54149	.42712	1.6290	14.092	.09331	.15193	1.7466

#1	.00178	.03196	.02826	17.322	294.38	.01383	27.234	.82105	.43107
#2	.00193	.03251	.02847	17.218	287.67	.01132	27.198	.82282	.44185

Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Warn	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit					100.00				
Low Limit					-.50000				

Elem	Na8183	Ni2316	P_1782	Pb2203	S_1820	Sb2068	Se1960	Si2881	SiO2
Line	818.326 { 41}	231.604 {446}	178.284 {489}	220.353 {453}	182.034 {485}	206.833 {463}	196.090 {472}	288.158 {117}	288.158 {117}2
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	408.16	.04406	1.4191	.00358	40.235	-.00668	.00157	9.3440	19.996
Stddev	6.47	.00120	.0263	.00015	.071	.00316	.00466	.0990	.212
%RSD	1.5846	2.7225	1.8564	4.2509	.17685	47.307	296.61	1.0592	1.0592

#1	412.73	.04321	1.4005	.00369	40.185	-.00444	-.00172	9.2740	19.846
#2	403.58	.04491	1.4377	.00347	40.285	-.00891	.00487	9.4139	20.146

Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Elem	Sn1899	Sr4077	Th2837	Ti3349	Ti1908	U_3701	V_2924	Zn2062	Zr3391
Line	189.989 {477}	407.771 { 83}	283.730 {119}	334.904 {101}	190.856 {477}	370.152 { 91}	292.402 {115}	206.200 {163}	339.198 { 99}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	-.00269	4.0704	-.00015	.00442	-.00234	-.02527	.01832	.03491	.00201
Stddev	.00036	.0539	.00215	.00051	.00216	.01215	.00047	.00151	.00024
%RSD	13.266	1.3233	1425.8	11.440	92.312	48.077	2.5683	4.3267	11.965

#1	-.00295	4.1084	.00137	.00406	-.00387	-.03386	.01799	.03598	.00184
#2	-.00244	4.0323	-.00167	.00478	-.00081	-.01668	.01866	.03384	.00218

Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Int. Std.	Y_2243	Y_3600	Y_3774						
Line	224.306 {450}	360.073 { 94}	377.433 { 89}						
Units	Cts/S	Cts/S	Cts/S						
Avg	2499.8	36171.	1812.0						
Stddev	5.1	179.	48.6						
%RSD	.20457	.49500	2.6823						

#1	2496.2	36298.	1777.7						
#2	2503.4	36045.	1846.4						

Sample Name: 280-83024-A-2-G Acquired: 5/17/2016 21:30:50 Type: Unk
Method: 6500_025(v6) Mode: CONC Corr. Factor: 1.000000
User: CRHOADES Prep Date: Custom ID2: Custom ID3:
Comment: 325217 6010B

Elem	Ag3280	Al1670	As1890	B_2089	Ba4554	Be3130	Bi2230	Ca3179	Cd2288
Line	328.068 {103}	167.079 {502}	189.042 {478}	208.959 {461}	455.403 { 74}	313.042 {108}	223.061 {451}	317.933 {106}	228.802 {447}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.00133	.03475	.01092	.56703	.42234	.00018	-.00876	164.27	.00032
Stddev	.00068	.00043	.00582	.01020	.00668	.00014	.00482	2.48	.00018
%RSD	51.135	1.2422	53.341	1.7982	1.5824	81.616	55.041	1.5122	56.597

#1	.00085	.03444	.01504	.55982	.42706	.00007	-.01217	166.02	.00045
#2	.00182	.03505	.00680	.57424	.41761	.00028	-.00535	162.51	.00019

Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Elem	Co2286	Cr2055	Cu3247	Fe2599	K_7664	Li6707	Mg2790	Mn2576	Mo2020
Line	228.616 {447}	205.560 {464}	324.754 {104}	259.940 {130}	766.490 { 44}	670.784 { 50}	279.079 {121}2	257.610 {131}	202.030 {467}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.00379	.00029	-.00025	29.890	5.3471	.00414	29.579	2.2621	.00079
Stddev	.00044	.00025	.00021	.064	.1664	.00150	.037	.0059	.00078
%RSD	11.695	86.230	82.160	.21265	3.1114	36.085	.12382	.26131	98.678

#1	.00410	.00011	-.00011	29.935	5.4647	.00309	29.605	2.2662	.00024
#2	.00347	.00047	-.00040	29.845	5.2295	.00520	29.553	2.2579	.00135

Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Elem	Na8183	Ni2316	P_1782	Pb2203	S_1820	Sb2068	Se1960	Si2881	SiO2
Line	818.326 { 41}	231.604 {446}	178.284 {489}	220.353 {453}	182.034 {485}	206.833 {463}	196.090 {472}	288.158 {117}	288.158 {117}2
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	74.058	.00527	.04994	.00104	1.6013	-.00682	-.00016	10.375	22.202
Stddev	.013	.00032	.00069	.00051	.0439	.00111	.00170	.039	.085
%RSD	.01778	5.9851	1.3741	49.632	2.7410	16.261	1085.4	.38066	.38066

#1	74.068	.00504	.04945	.00067	1.5703	-.00760	-.00136	10.347	22.142
#2	74.049	.00549	.05042	.00140	1.6324	-.00604	.00104	10.403	22.261

Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Elem	Sn1899	Sr4077	Th2837	Ti3349	Ti1908	U_3701	V_2924	Zn2062	Zr3391
Line	189.989 {477}	407.771 { 83}	283.730 {119}	334.904 {101}	190.856 {477}	370.152 { 91}	292.402 {115}	206.200 {163}	339.198 { 99}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	-.00289	.96826	-.00136	.00081	-.00135	.00792	.00124	.03827	-.00008
Stddev	.00059	.01033	.00275	.00006	.00021	.03376	.00031	.00099	.00047
%RSD	20.567	1.0671	202.43	7.4922	15.572	426.11	25.271	2.5842	571.23

#1	-.00331	.97557	-.00330	.00085	-.00150	.03180	.00102	.03897	.00025
#2	-.00247	.96096	.00059	.00077	-.00121	-.01595	.00146	.03757	-.00041

Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Int. Std.	Y_2243	Y_3600	Y_3774
Line	224.306 {450}	360.073 { 94}	377.433 { 89}
Units	Cts/S	Cts/S	Cts/S
Avg	2582.6	37406.	1791.3
Stddev	61.3	279.	51.8
%RSD	2.3740	.74516	2.8936

#1	2625.9	37209.	1754.6
#2	2539.2	37603.	1827.9

Sample Name: 280-83024-A-2-G SD@5 Acquired: 5/17/2016 21:33:28 Type: Unk
 Method: 6500_025(v6) Mode: CONC Corr. Factor: 1.000000
 User: CRHOADES Prep Date: Custom ID2: Custom ID3:
 Comment: 325217 6010B

Elem	Ag3280	Al1670	As1890	B_2089	Ba4554	Be3130	Bi2230	Ca3179	Cd2288
Line	328.068 {103}	167.079 {502}	189.042 {478}	208.959 {461}	455.403 {74}	313.042 {108}	223.061 {451}	317.933 {106}	228.802 {447}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.00186	.00735	-.00071	.11576	.08519	-.00023	.00012	32.842	.00015
Stddev	.00057	.00075	.00722	.00145	.00018	.00062	.00163	.202	.00017
%RSD	30.326	10.148	1020.1	1.2491	.20555	272.83	1350.7	.61654	115.78

#1	.00146	.00682	-.00581	.11679	.08506	-.00067	-.00103	32.985	.00027
#2	.00226	.00788	.00440	.11474	.08531	.00021	.00127	32.699	.00003

Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Elem	Co2286	Cr2055	Cu3247	Fe2599	K_7664	Li6707	Mg2790	Mn2576	Mo2020
Line	228.616 {447}	205.560 {464}	324.754 {104}	259.940 {130}	766.490 {44}	670.784 {50}	279.079 {121}2	257.610 {131}	202.030 {467}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.00051	-.00045	-.00055	6.0704	.98465	-.00813	6.0267	.45509	-.00103
Stddev	.00032	.00031	.00061	.0088	.05201	.00118	.0146	.00078	.00025
%RSD	62.739	69.661	111.51	.14506	5.2823	14.470	.24170	.17125	24.443

#1	.00074	-.00067	-.00099	6.0766	1.0214	-.00730	6.0370	.45564	-.00120
#2	.00029	-.00023	-.00012	6.0642	.94787	-.00896	6.0164	.45454	-.00085

Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Elem	Na8183	Ni2316	P_1782	Pb2203	S_1820	Sb2068	Se1960	Si2881	SiO2
Line	818.326 {41}	231.604 {446}	178.284 {489}	220.353 {453}	182.034 {485}	206.833 {463}	196.090 {472}	288.158 {117}	288.158 {117}2
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	15.603	.00108	.01706	-.00155	.26858	-.00147	F -.01064	2.0595	4.4073
Stddev	.492	.00012	.00075	.00187	.01807	.00236	.00236	.0064	.0138
%RSD	3.1532	11.518	4.4107	120.44	6.7280	160.99	22.170	.31190	.31190

#1	15.256	.00116	.01759	-.00287	.28135	.00020	-.00897	2.0640	4.4170
#2	15.951	.00099	.01653	-.00023	.25580	-.00313	-.01231	2.0549	4.3976

Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Fail	Chk Pass	Chk Pass
High Limit							50.000		
Low Limit							-.01000		

Elem	Sn1899	Sr4077	Th2837	Ti3349	Ti1908	U_3701	V_2924	Zn2062	Zr3391
Line	189.989 {477}	407.771 {83}	283.730 {119}	334.904 {101}	190.856 {477}	370.152 {91}	292.402 {115}	206.200 {163}	339.198 {99}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	-.00168	.20026	-.00142	.00036	-.00092	.01038	.00022	.00805	-.00071
Stddev	.00131	.00016	.00170	.00012	.00376	.04727	.00068	.00026	.00470
%RSD	78.213	.08042	119.63	31.900	411.03	455.21	307.61	3.1827	658.38

#1	-.00260	.20015	-.00022	.00028	-.00358	-.02304	-.00026	.00786	.00261
#2	-.00075	.20038	-.00262	.00044	.00175	.04381	.00071	.00823	-.00404

Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Int. Std.	Y_2243	Y_3600	Y_3774
Line	224.306 {450}	360.073 {94}	377.433 {89}
Units	Cts/S	Cts/S	Cts/S
Avg	2598.2	38249.	1816.6
Stddev	1.5	206.	7.9
%RSD	.05679	.53838	.43276

#1	2599.2	38104.	1811.0
#2	2597.1	38395.	1822.1

Sample Name: 280-83024-A-2-H MS Acquired: 5/17/2016 21:36:07 Type: Unk
Method: 6500_025(v6) Mode: CONC Corr. Factor: 1.000000
User: CRHOADES Prep Date: Custom ID2: Custom ID3:
Comment: 325217 6010B

Elem	Ag3280	Al1670	As1890	B_2089	Ba4554	Be3130	Bi2230	Ca3179	Cd2288
Line	328.068 {103}	167.079 {502}	189.042 {478}	208.959 {461}	455.403 { 74}	313.042 {108}	223.061 {451}	317.933 {106}	228.802 {447}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.04919	1.8006	.92873	1.4919	2.3638	.05135	F 1.9436	205.15	.09852
Stddev	.00043	.0465	.01480	.0233	.0149	.00059	.0199	1.34	.00175
%RSD	.87293	2.5839	1.5931	1.5616	.62903	1.1486	1.0255	.65326	1.7772

#1	.04950	1.7677	.91827	1.4754	2.3743	.05176	1.9295	206.09	.09728
#2	.04889	1.8335	.93919	1.5084	2.3532	.05093	1.9577	204.20	.09976

Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Fail	Chk Pass	Chk Pass
High Limit							.10000		
Low Limit							-.10000		

Elem	Co2286	Cr2055	Cu3247	Fe2599	K_7664	Li6707	Mg2790	Mn2576	Mo2020
Line	228.616 {447}	205.560 {464}	324.754 {104}	259.940 {130}	766.490 { 44}	670.784 { 50}	279.079 {121}2	257.610 {131}	202.030 {467}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.47452	.19899	.22922	29.901	54.320	.99053	74.675	2.6346	1.0331
Stddev	.00615	.00227	.00107	.200	.291	.00018	.106	.0081	.0134
%RSD	1.2964	1.1432	.46616	.66908	.53587	.01851	.14165	.30785	1.2972

#1	.47017	.19738	.22998	30.042	54.525	.99040	74.600	2.6288	1.0236
#2	.47887	.20060	.22847	29.759	54.114	.99066	74.750	2.6403	1.0426

Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Elem	Na8183	Ni2316	P_1782	Pb2203	S_1820	Sb2068	Se1960	Si2881	SiO2
Line	818.326 { 41}	231.604 {446}	178.284 {489}	220.353 {453}	182.034 {485}	206.833 {463}	196.090 {472}	288.158 {117}	288.158 {117}2
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	129.96	.46350	W 9.8366	.47653	3.5584	.51228	1.8640	19.959	42.712
Stddev	.96	.00504	.1194	.00633	.0327	.00395	.0001	.091	.195
%RSD	.73521	1.0884	1.2137	1.3294	.91879	.77064	.00730	.45564	.45564

#1	129.28	.45993	9.7522	.47205	3.5353	.50949	1.8641	20.023	42.849
#2	130.63	.46706	9.9210	.48101	3.5815	.51508	1.8639	19.894	42.574

Check ?	Chk Pass	Chk Pass	Chk Warn	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit			2.0000						
Low Limit			-1.0000						

Elem	Sn1899	Sr4077	Th2837	Ti3349	Ti1908	U_3701	V_2924	Zn2062	Zr3391
Line	189.989 {477}	407.771 { 83}	283.730 {119}	334.904 {101}	190.856 {477}	370.152 { 91}	292.402 {115}	206.200 {163}	339.198 { 99}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	1.9487	1.9388	.98040	.93670	1.8040	1.9953	.48365	.46939	.46564
Stddev	.0014	.0097	.00854	.00147	.0462	.0434	.00003	.00101	.00682
%RSD	.07360	.50058	.87089	.15663	2.5617	2.1733	.00660	.21531	1.4640

#1	1.9477	1.9456	.97436	.93566	1.8367	2.0260	.48368	.46868	.47046
#2	1.9498	1.9319	.98644	.93773	1.7713	1.9647	.48363	.47011	.46082

Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Int. Std.	Y_2243	Y_3600	Y_3774
Line	224.306 {450}	360.073 { 94}	377.433 { 89}
Units	Cts/S	Cts/S	Cts/S
Avg	2532.0	36279.	1827.0
Stddev	45.1	428.	3.3
%RSD	1.7828	1.1801	.17968

#1	2564.0	36581.	1824.7
#2	2500.1	35976.	1829.3

Sample Name: 280-83024-A-2-I MSD Acquired: 5/17/2016 21:38:33 Type: Unk
 Method: 6500_025(v6) Mode: CONC Corr. Factor: 1.000000
 User: CRHOADES Prep Date: Custom ID2: Custom ID3:
 Comment: 325217 6010B

Elem	Ag3280	Al1670	As1890	B_2089	Ba4554	Be3130	Bi2230	Ca3179	Cd2288
Line	328.068 {103}	167.079 {502}	189.042 {478}	208.959 {461}	455.403 {74}	313.042 {108}	223.061 {451}	317.933 {106}	228.802 {447}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.05094	1.8803	.98545	1.5756	2.4388	.05234	F 2.0393	211.68	.10346
Stddev	.00007	.0017	.00795	.0059	.0734	.00085	.0077	6.01	.00004
%RSD	.14084	.08862	.80699	.37393	3.0111	1.6184	.37851	2.8397	.03607

#1	.05099	1.8814	.99108	1.5715	2.4907	.05294	2.0339	215.94	.10349
#2	.05089	1.8791	.97983	1.5798	2.3868	.05174	2.0448	207.43	.10344

Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Fail	Chk Pass	Chk Pass
High Limit							.10000		
Low Limit							-.10000		

Elem	Co2286	Cr2055	Cu3247	Fe2599	K_7664	Li6707	Mg2790	Mn2576	Mo2020
Line	228.616 {447}	205.560 {464}	324.754 {104}	259.940 {130}	766.490 {44}	670.784 {50}	279.079 {121}2	257.610 {131}	202.030 {467}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.49589	.20657	.23572	30.186	55.888	1.0122	76.776	2.6738	1.0729
Stddev	.00136	.00064	.00049	1.039	1.563	.0092	.116	.0053	.0032
%RSD	.27428	.30978	.20967	3.4402	2.7963	.91320	.15068	.19886	.29476

#1	.49493	.20611	.23607	30.920	56.993	1.0188	76.694	2.6700	1.0707
#2	.49685	.20702	.23537	29.452	54.783	1.0057	76.858	2.6776	1.0751

Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Elem	Na8183	Ni2316	P_1782	Pb2203	S_1820	Sb2068	Se1960	Si2881	SiO2
Line	818.326 {41}	231.604 {446}	178.284 {489}	220.353 {453}	182.034 {485}	206.833 {463}	196.090 {472}	288.158 {117}	288.158 {117}2
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	131.57	.48342	W 10.414	.50094	3.7355	.53937	2.0072	20.409	43.674
Stddev	2.28	.00167	.062	.00349	.0088	.00144	.0145	.170	.364
%RSD	1.7307	.34619	.59187	.69610	.23533	.26779	.72417	.83260	.83260

#1	133.18	.48224	10.371	.49847	3.7293	.54039	2.0175	20.529	43.932
#2	129.96	.48460	10.458	.50341	3.7417	.53835	1.9969	20.288	43.417

Check ?	Chk Pass	Chk Pass	Chk Warn	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit			2.0000						
Low Limit			-1.0000						

Elem	Sn1899	Sr4077	Th2837	Ti3349	Ti1908	U_3701	V_2924	Zn2062	Zr3391
Line	189.989 {477}	407.771 {83}	283.730 {119}	334.904 {101}	190.856 {477}	370.152 {91}	292.402 {115}	206.200 {163}	339.198 {99}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	W 2.0550	2.0023	.99805	.94741	1.8843	2.0472	.49211	.47936	.46580
Stddev	.0017	.0606	.00592	.00288	.0400	.0386	.00156	.00125	.00335
%RSD	.08060	3.0250	.59329	.30363	2.1211	1.8852	.31666	.26155	.71980

#1	2.0538	2.0451	.99386	.94538	1.9125	2.0745	.49322	.47847	.46817
#2	2.0561	1.9595	1.0022	.94945	1.8560	2.0199	.49101	.48024	.46343

Check ?	Chk Warn	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit	2.0000								
Low Limit	-.05000								

Int. Std.	Y_2243	Y_3600	Y_3774						
Line	224.306 {450}	360.073 {94}	377.433 {89}						
Units	Cts/S	Cts/S	Cts/S						
Avg	2528.6	37254.	1834.0						
Stddev	6.1	4.	58.9						
%RSD	.24096	.01131	3.2130						

#1	2532.9	37257.	1792.3						
#2	2524.3	37251.	1875.6						

Sample Name: CCVH-3883905 Acquired: 5/17/2016 21:40:58 Type: QC
Method: 6500_025(v6) Mode: CONC Corr. Factor: 1.000000
User: CRHOADES Prep Date: Custom ID2: Custom ID3:
Comment:

Elem	Ag3280	Al3092	As1890	B_2089	Ba4554	Be3130	Bi2230	Ca3179	Cd2288	Co2286	Cr2055
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	-.00569	52.435	.00336	.01084	-.00053	-.00019	.96376	.00140	-.00023	-.00134	-.00015
Stddev	.00063	.909	.00395	.00012	.00041	.00025	.00716	.00665	.00004	.00027	.00027
%RSD	11.022	1.7337	117.56	1.1137	78.322	129.20	.74295	474.88	16.377	20.280	178.08

#1	-.00524	53.078	.00615	.01093	-.00082	-.00037	.96882	.00610	-.00020	-.00153	-.00035
#2	-.00613	51.792	.00057	.01076	-.00024	-.00002	.95870	-.00330	-.00025	-.00115	.00004

Check ?	None	Chk Pass	None	None	None	None	Chk Pass	None	None	None	None
Value											
Range											

Elem	Cu3247	Fe2714	K_7664	Li6707	Mg2790	Mn2576	Mo2020	Na8183	Ni2316	P_1782	Pb2203
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	-.01576	54.124	.03972	-.00993	.01655	-.00184	.00103	F 276.87	.00116	.00954	-.00010
Stddev	.00064	.570	.06637	.00425	.00708	.00015	.00085	1.22	.00003	.00120	.00029
%RSD	4.0385	1.0533	167.08	42.801	42.766	8.0687	82.218	.44136	2.7991	12.562	285.67

#1	-.01531	54.527	.08665	-.01294	.01154	-.00194	.00043	277.73	.00118	.01039	-.00031
#2	-.01621	53.721	-.00721	-.00693	.02155	-.00173	.00163	276.00	.00113	.00869	.00010

Check ?	None	Chk Pass	None	None	None	None	None	Chk Fail	None	None	None
Value								250.00			
Range								10.490%			

Elem	S_1820	Sb2068	Se1960	Si2881	SiO2	Sn1899	Sr4077	Th2837	Ti3349	Ti1908	U_3701
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	5.0955	-.01272	-.00080	-.05951	-.12734	.00005	.00029	W 4.6462	.00118	.04707	9.6423
Stddev	.0228	.00037	.00643	.01272	.02723	.00190	.00004	.0263	.00025	.00682	.1295
%RSD	.44853	2.9355	805.14	21.382	21.382	3573.9	13.752	.56526	21.300	14.487	1.3432

#1	5.0793	-.01246	-.00534	-.05051	-.10809	-.00129	.00032	4.6648	.00136	.04225	9.7339
#2	5.1116	-.01299	.00375	-.06850	-.14660	.00140	.00026	4.6276	.00100	.05189	9.5507

Check ?	Chk Pass	None	None	None	None	None	None	Chk Warn	None	None	Chk Pass
Value								5.0000			
Range								-5.0000%			

Elem	V_2924	Zn2062	Zr3391
Units	ppm	ppm	ppm
Avg	.01213	-.00021	-.13252
Stddev	.00057	.00040	.00000
%RSD	4.7191	194.57	.00326

#1	.01254	.00008	-.13252
#2	.01173	-.00049	-.13253

Check ?	None	None	None
Value			
Range			

Int. Std.	Y_2243	Y_3600	Y_3774
Units	Cts/S	Cts/S	Cts/S
Avg	2589.0	37559.	1798.5
Stddev	12.0	518.	45.9
%RSD	.46278	1.3799	2.5527

#1	2580.5	37192.	1766.0
#2	2597.4	37925.	1830.9

Sample Name: CCV-3888422 Acquired: 5/17/2016 21:43:35 Type: QC
Method: 6500_025(v6) Mode: CONC Corr. Factor: 1.000000
User: CRHOADES Prep Date: Custom ID2: Custom ID3:
Comment:

Elem	Ag3280	Al1670	As1890	B_2089	Ba4554	Be3130	Bi2230	Ca3179	Cd2288	Co2286	Cr2055
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.48265	.47610	.92277	.48618	.48133	.49335	-.00104	4.7381	.49199	.48904	.49545
Stddev	.00340	.00203	.01000	.00007	.00968	.00822	.00117	.1191	.00222	.00133	.00101
%RSD	.70539	.42592	1.0840	.01457	2.0103	1.6655	112.04	2.5130	.45156	.27249	.20365

#1	.48506	.47754	.92984	.48623	.48818	.49916	-.00022	4.8223	.49356	.48998	.49616
#2	.48024	.47467	.91570	.48613	.47449	.48754	-.00187	4.6539	.49042	.48810	.49474

Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	None	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Value											
Range											

Elem	Cu3247	Fe2599	K_7664	Li6707	Mg2790	Mn2576	Mo2020	Na5895	Ni2316	P_1782	Pb2203
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.45787	2.5172	48.455	.96212	18.657	.45667	.48609	5.2460	.47664	.94822	.96924
Stddev	.00240	.0336	1.064	.00569	.061	.00132	.00359	.0325	.00138	.00211	.00460
%RSD	.52451	1.3332	2.1952	.59174	.32611	.29009	.73753	.61878	.28882	.22280	.47447

#1	.45957	2.5409	49.207	.95809	18.701	.45761	.48862	5.2231	.47761	.94972	.97249
#2	.45617	2.4935	47.703	.96614	18.614	.45573	.48355	5.2690	.47567	.94673	.96599

Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Value											
Range											

Elem	S_1820	Sb2068	Se1960	Si2881	SiO2	Sn1899	Sr4077	Th2837	Ti3349	Ti1908	U_3701
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	-.05962	.95050	.91127	4.8972	10.480	.97995	.49518	.00021	W .44901	.98793	.02324
Stddev	.00716	.01047	.00070	.1293	.277	.00612	.01172	.00120	.00073	.00252	.06361
%RSD	12.010	1.1018	.07695	2.6412	2.6412	.62431	2.3663	570.28	.16288	.25480	273.66

#1	-.05456	.95791	.91177	4.8057	10.284	.98427	.50347	.00106	.44953	.98971	-.02173
#2	-.06469	.94310	.91077	4.9886	10.676	.97562	.48690	-.00064	.44849	.98615	.06822

Check ?	None	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	None	Chk Warn	Chk Pass	None
Value									.50000		
Range									-10.000%		

Elem	V_2924	Zn2062	Zr3391
Units	ppm	ppm	ppm
Avg	.47650	W .44998	.46884
Stddev	.00708	.00392	.00578
%RSD	1.4866	.87117	1.2327

#1	.48151	.45275	.46475
#2	.47149	.44721	.47292

Check ?	Chk Pass	Chk Warn	Chk Pass
Value		.50000	
Range		-10.000%	

Int. Std.	Y_2243	Y_3600	Y_3774
Units	Cts/S	Cts/S	Cts/S
Avg	2637.5	38532.	1866.4
Stddev	9.8	249.	44.1
%RSD	.37097	.64520	2.3641

#1	2644.4	38356.	1835.2
#2	2630.6	38708.	1897.6

Sample Name: CCB Acquired: 5/17/2016 21:46:06 Type: QC
 Method: 6500_025(v6) Mode: CONC Corr. Factor: 1.000000
 User: CRHOADES Prep Date: Custom ID2: Custom ID3:
 Comment:

Elem	Ag3280	Al1670	As1890	B_2089	Ba4554	Be3130	Bi2230	Ca3179	Cd2288	Co2286	Cr2055
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	F .00270	.00097	.00467	.00473	-.00055	-.00065	-.00120	.00885	.00003	-.00033	-.00017
Stddev	.00022	.00024	.00823	.00035	.00024	.00007	.00384	.00115	.00008	.00051	.00033
%RSD	8.2857	24.814	176.37	7.3575	42.567	10.594	320.67	13.009	298.47	152.56	196.09

#1	.00286	.00114	.01049	.00449	-.00072	-.00060	-.00392	.00966	-.00003	.00003	.00006
#2	.00254	.00080	-.00115	.00498	-.00039	-.00070	.00152	.00803	.00008	-.00069	-.00040

Check ?	Chk Fail	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit	.00200										
Low Limit	-.01000										

Elem	Cu3247	Fe2599	K_7664	Li6707	Mg2790	Mn2576	Mo2020	Na5895	Ni2316	P_1782	Pb2203
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	-.00086	.00689	-.07273	-.00983	-.00680	.00016	.00133	.03554	.00004	.00043	-.00038
Stddev	.00070	.00482	.03721	.00091	.00060	.00009	.00069	.01203	.00048	.00182	.00476
%RSD	81.409	70.045	51.154	9.2134	8.8494	59.616	52.093	33.839	1146.4	426.60	1266.8

#1	-.00037	.01030	-.09904	-.00919	-.00723	.00022	.00084	.02703	.00038	-.00086	-.00374
#2	-.00136	.00348	-.04642	-.01047	-.00638	.00009	.00181	.04404	-.00030	.00171	.00299

Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit											
Low Limit											

Elem	S_1820	Sb2068	Se1960	Si2881	SiO2	Sn1899	Sr4077	Th2837	Ti3349	Ti1908	U_3701
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	-.06678	W .00200	-.00090	-.04252	-.09100	-.00075	-.00008	.00017	.00100	W .00914	.02240
Stddev	.00887	.00248	.00247	.02553	.05463	.00123	.00002	.00212	.00020	.00244	.02926
%RSD	13.282	124.07	276.03	60.036	60.036	163.28	29.399	1253.2	19.617	26.688	130.64

#1	-.06051	.00025	.00085	-.02447	-.05237	-.00162	-.00007	.00167	.00086	.00742	.00171
#2	-.07306	.00376	-.00264	-.06058	-.12964	.00012	-.00010	-.00133	.00114	.01086	.04308

Check ?	Chk Pass	Chk Warn	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Warn	Chk Pass
High Limit		.00100								.00750	
Low Limit		-.00100								-.01900	

Elem	V_2924	Zn2062	Zr3391
Units	ppm	ppm	ppm
Avg	.00023	-.00067	-.00069
Stddev	.00009	.00065	.00520
%RSD	37.659	96.749	757.26

#1	.00017	-.00113	.00299
#2	.00029	-.00021	-.00436

Check ?	Chk Pass	Chk Pass	Chk Pass
High Limit			
Low Limit			

Int. Std.	Y_2243	Y_3600	Y_3774
Units	Cts/S	Cts/S	Cts/S
Avg	2615.9	38033.	1764.1
Stddev	33.6	143.	1.8
%RSD	1.2828	.37635	.10019

#1	2639.6	38135.	1762.9
#2	2592.1	37932.	1765.4

Sample Name: CCVL-3894681 Acquired: 5/17/2016 21:48:28 Type: QC
Method: 6500_025(v6) Mode: CONC Corr. Factor: 1.000000
User: CRHOADES Prep Date: Custom ID2: Custom ID3:
Comment:

Elem	Ag3280	Al1670	As1890	B_2089	Ba4554	Be3130	Bi2230	Ca3179	Cd2288	Co2286	Cr2055	Cu3247
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.01095	.09744	.01234	.09930	.00922	.00103	.10296	.20203	.00524	.00984	.00953	.01293
Stddev	.00055	.00038	.00317	.00231	.00087	.00027	.00073	.01197	.00043	.00040	.00003	.00007
%RSD	5.0060	.38963	25.678	2.3218	9.4660	26.408	.71241	5.9256	8.3076	4.0167	.27417	.56289

#1	.01134	.09717	.01458	.09767	.00860	.00084	.10348	.19356	.00493	.00956	.00951	.01288
#2	.01056	.09771	.01010	.10093	.00984	.00122	.10244	.21049	.00554	.01012	.00955	.01299

Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Value												
Range												

Elem	Fe2599	K_7664	Li6707	Mg2790	Mn2576	Mo2020	Na5895	Ni2316	P_1782	Pb2203	S_1820	Sb2068
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	F .14239	2.9129	F .00120	.19130	.00976	.01874	1.0368	.03917	2.8222	.00722	-.06717	.01954
Stddev	.00729	.0238	.00054	.00264	.00004	.00019	.0207	.00038	.0511	.00090	.00369	.00593
%RSD	5.1211	.81610	44.566	1.3822	.41518	1.0192	1.9924	.97718	1.8120	12.526	5.4960	30.368

#1	.13724	2.8961	.00158	.19317	.00973	.01860	1.0222	.03890	2.7861	.00786	-.06978	.01534
#2	.14755	2.9297	.00082	.18943	.00979	.01887	1.0514	.03945	2.8584	.00658	-.06456	.02373

Check ?	Chk Fail	Chk Pass	Chk Fail	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	None	Chk Pass
Value	.10000		.01000									
Range	30.000%		-30.000%									

Elem	Se1960	Si2881	SiO2	Sn1899	Sr4077	Th2837	Ti3349	Ti1908	U_3701	V_2924	Zn2062	Zr3391
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	F .00824	.44327	.94861	.09857	.00981	.01569	.00947	.01781	F .09013	.01018	.01881	.01433
Stddev	.00376	.02795	.05981	.00203	.00022	.00122	.00018	.00086	.07559	.00034	.00011	.00088
%RSD	45.701	6.3053	6.3053	2.0578	2.1938	7.7947	1.8504	4.8456	83.866	3.3668	.58447	6.1235

#1	.00557	.46304	.99090	.09713	.00966	.01483	.00959	.01842	.14358	.01042	.01889	.01495
#2	.01090	.42351	.90631	.10000	.00996	.01656	.00935	.01720	.03668	.00993	.01873	.01371

Check ?	Chk Fail	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Fail	Chk Pass	Chk Pass	Chk Pass
Value	.01500								.06000			
Range	-30.000%								30.000%			

Int. Std.	Y_2243	Y_3600	Y_3774
Units	Cts/S	Cts/S	Cts/S
Avg	2632.6	37847.	1760.0
Stddev	51.6	375.	29.3
%RSD	1.9587	.99007	1.6634

#1	2669.1	37582.	1780.7
#2	2596.1	38112.	1739.3

Elem	Ag3280	Al1670	As1890	B_2089	Ba4554	Be3130	Bi2230	Ca3179	Cd2288
Line	328.068 {103}	167.079 {502}	189.042 {478}	208.959 {461}	455.403 {74}	313.042 {108}	223.061 {451}	317.933 {106}	228.802 {447}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.00152	1.7091	-.00081	.03603	.04210	.00504	-.00590	46.828	.00122
Stddev	.00027	.0220	.00629	.00004	.00153	.00004	.00299	1.508	.00003
%RSD	17.774	1.2861	776.10	.10320	3.6410	.84772	50.700	3.2204	2.3655

#1	.00171	1.6935	-.00526	.03600	.04102	.00507	-.00379	45.762	.00120
#2	.00133	1.7246	.00364	.03605	.04319	.00501	-.00802	47.895	.00124

Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Elem	Co2286	Cr2055	Cu3247	Fe2599	K_7664	Li6707	Mg2790	Mn2576	Mo2020
Line	228.616 {447}	205.560 {464}	324.754 {104}	259.940 {130}	766.490 {44}	670.784 {50}	279.079 {121}2	257.610 {131}	202.030 {467}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.02597	.00109	.00107	4.1618	9.7468	.05983	20.305	.37429	-.00086
Stddev	.00012	.00010	.00036	.0810	.1309	.00282	.018	.00025	.00048
%RSD	.46445	9.5352	33.916	1.9455	1.3433	4.7146	.08965	.06723	55.907

#1	.02588	.00116	.00132	4.1045	9.6542	.06183	20.318	.37411	-.00052
#2	.02605	.00102	.00081	4.2190	9.8394	.05784	20.292	.37446	-.00120

Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Elem	Na8183	Ni2316	P_1782	Pb2203	S_1820	Sb2068	Se1960	Si2881	SiO2
Line	818.326 {41}	231.604 {446}	178.284 {489}	220.353 {453}	182.034 {485}	206.833 {463}	196.090 {472}	288.158 {117}	288.158 {117}2
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	57.005	.02144	.01704	.00048	98.612	-.00244	W -.00643	36.014	77.070
Stddev	.689	.00046	.00238	.00142	1.390	.00442	.00748	.101	.216
%RSD	1.2083	2.1317	13.995	297.33	1.4094	181.18	116.35	.28087	.28087

#1	56.518	.02112	.01872	.00148	97.629	-.00557	-.00114	35.942	76.917
#2	57.492	.02176	.01535	-.00053	99.594	.00069	-.01172	36.085	77.223

Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Warn	Chk Pass	Chk Pass
High Limit							5.0000		
Low Limit							-.00500		

Elem	Sn1899	Sr4077	Th2837	Ti3349	Ti1908	U_3701	V_2924	Zn2062	Zr3391
Line	189.989 {477}	407.771 {83}	283.730 {119}	334.904 {101}	190.856 {477}	370.152 {91}	292.402 {115}	206.200 {163}	339.198 {99}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	-.00166	.88705	.00150	.00561	.00133	.01971	.00060	.16005	.00324
Stddev	.00075	.02877	.00022	.00010	.00137	.04481	.00111	.00068	.00262
%RSD	45.133	3.2435	14.935	1.7724	102.89	227.31	185.54	.42407	80.843

#1	-.00113	.86670	.00134	.00554	.00230	.05139	.00138	.15957	.00139
#2	-.00219	.90739	.00166	.00569	.00036	-.01197	-.00019	.16053	.00509

Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Int. Std.	Y_2243	Y_3600	Y_3774						
Line	224.306 {450}	360.073 {94}	377.433 {89}						
Units	Cts/S	Cts/S	Cts/S						
Avg	2729.3	37733.	1844.2						
Stddev	31.7	388.	20.3						
%RSD	1.1620	1.0287	1.1022						

#1	2751.7	38008.	1858.5						
#2	2706.8	37459.	1829.8						

Sample Name: MB 280-325213/1-A Acquired: 5/17/2016 21:53:46 Type: Unk

Method: 6500_025(v6) Mode: CONC Corr. Factor: 1.000000

User: CRHOADES Prep Date: 5/17 Custom ID2: Custom ID3:

Comment: 325213 6010B

Elem	Ag3280	Al1670	As1890	B_2089	Ba4554	Be3130	Bi2230	Ca3179	Cd2288
Line	328.068 {103}	167.079 {502}	189.042 {478}	208.959 {461}	455.403 {74}	313.042 {108}	223.061 {451}	317.933 {106}	228.802 {447}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.00207	.00309	.00145	.00129	-.00103	-.00007	-.00215	.00677	.00011
Stddev	.00091	.00002	.00451	.00025	.00031	.00015	.00238	.00025	.00020
%RSD	44.023	.62197	311.08	19.755	29.553	221.15	110.60	3.6912	189.70

#1	.00143	.00310	.00464	.00147	-.00082	.00004	-.00384	.00659	.00025
#2	.00272	.00308	-.00174	.00111	-.00125	-.00017	-.00047	.00695	-.00004

Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Elem	Co2286	Cr2055	Cu3247	Fe2599	K_7664	Li6707	Mg2790	Mn2576	Mo2020
Line	228.616 {447}	205.560 {464}	324.754 {104}	259.940 {130}	766.490 {44}	670.784 {50}	279.079 {121}2	257.610 {131}	202.030 {467}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	-.00017	-.00006	-.00089	F .26344	-.16618	F -.01346	.00061	.00224	-.00161
Stddev	.00011	.00031	.00023	.01026	.02984	.00382	.00643	.00023	.00001
%RSD	63.789	519.31	25.639	3.8964	17.957	28.395	1048.6	10.073	.38641

#1	-.00024	.00016	-.00105	.25618	-.14508	-.01616	.00516	.00240	-.00161
#2	-.00009	-.00028	-.00073	.27070	-.18729	-.01075	-.00393	.00208	-.00160

Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Fail	Chk Pass	Chk Fail	Chk Pass	Chk Pass	Chk Pass
High Limit				.10000		.01000			
Low Limit				-.10000		-.01000			

Elem	Na5895	Ni2316	P_1782	Pb2203	S_1820	Sb2068	Se1960	Si2881	SiO2
Line	589.592 {57}	231.604 {446}	178.284 {489}	220.353 {453}	182.034 {485}	206.833 {463}	196.090 {472}	288.158 {117}	288.158 {117}2
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.06373	-.00005	.00415	-.00155	W -.05239	-.00476	-.00688	-.00344	-.00736
Stddev	.00279	.00011	.00486	.00084	.00174	.00273	.00458	.00613	.01312
%RSD	4.3794	242.13	117.26	53.908	3.3167	57.411	66.560	178.24	178.24

#1	.06570	.00003	.00758	-.00096	-.05116	-.00283	-.01013	.00090	.00192
#2	.06176	-.00012	.00071	-.00214	-.05362	-.00669	-.00364	-.00777	-.01663

Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Warn	Chk Pass	Chk Pass	Chk Pass	None
High Limit					.05000				
Low Limit					-.05000				

Elem	Sn1899	Sr4077	Th2837	Ti3349	Ti1908	U_3701	V_2924	Zn2062	Zr3391
Line	189.989 {477}	407.771 {83}	283.730 {119}	334.904 {101}	190.856 {477}	370.152 {91}	292.402 {115}	206.200 {163}	339.198 {99}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	-.00081	-.00016	.00264	.00045	-.00512	.04622	.00037	.00560	.00125
Stddev	.00086	.00010	.00196	.00078	.00008	.02169	.00060	.00058	.00842
%RSD	106.57	62.572	74.197	174.45	1.5568	46.922	161.50	10.423	675.12

#1	-.00142	-.00009	.00403	.00100	-.00506	.06155	-.00005	.00602	.00720
#2	-.00020	-.00023	.00126	-.00010	-.00517	.03088	.00079	.00519	-.00471

Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Int. Std.	Y_2243	Y_3600	Y_3774
Line	224.306 {450}	360.073 {94}	377.433 {89}
Units	Cts/S	Cts/S	Cts/S
Avg	2645.5	38082.	1786.1
Stddev	53.9	125.	4.2
%RSD	2.0380	.32779	.23380

#1	2607.4	37994.	1789.0
#2	2683.6	38170.	1783.1

Sample Name: LCS 280-325213/2-A Acquired: 5/17/2016 21:56:08 Type: Unk
Method: 6500_025(v6) Mode: CONC Corr. Factor: 1.000000
User: CRHOADES Prep Date: Custom ID2: Custom ID3:
Comment: 325213 6010B

Elem	Ag3280	Al1670	As1890	B_2089	Ba4554	Be3130	Bi2230	Ca3179	Cd2288
Line	328.068 {103}	167.079 {502}	189.042 {478}	208.959 {461}	455.403 {74}	313.042 {108}	223.061 {451}	317.933 {106}	228.802 {447}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.04884	1.8103	.92545	.96456	1.8870	.04901	1.9539	45.946	.09783
Stddev	.00053	.0019	.01210	.00838	.0715	.00144	.0092	1.736	.00106
%RSD	1.0826	.10382	1.3077	.86931	3.7890	2.9416	.47361	3.7779	1.0833

#1	.04921	1.8090	.91689	.95863	1.9376	.05003	1.9473	47.173	.09708
#2	.04847	1.8116	.93400	.97049	1.8364	.04799	1.9604	44.718	.09858

Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	None	Chk Pass	Chk Pass
High Limit									
Low Limit									

Elem	Co2286	Cr2055	Cu3247	Fe2599	K_7664	Li6707	Mg2790	Mn2576	Mo2020
Line	228.616 {447}	205.560 {464}	324.754 {104}	259.940 {130}	766.490 {44}	670.784 {50}	279.079 {121}2	257.610 {131}	202.030 {467}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.47482	.19681	.22313	1.0247	47.504	.93092	46.378	F .44496	.99994
Stddev	.00339	.00137	.00015	.0234	1.776	.00486	.060	.00080	.00424
%RSD	.71350	.69465	.06790	2.2870	3.7382	.52258	.12955	.17917	.42416

#1	.47242	.19584	.22302	1.0413	48.760	.93436	46.420	.44552	.99694
#2	.47721	.19778	.22324	1.0081	46.249	.92748	46.335	.44439	1.0029

Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Fail	Chk Pass
High Limit								.55000	
Low Limit								.45000	

Elem	Na8183	Ni2316	P_1782	Pb2203	S_1820	Sb2068	Se1960	Si2881	SiO2
Line	818.326 {41}	231.604 {446}	178.284 {489}	220.353 {453}	182.034 {485}	206.833 {463}	196.090 {472}	288.158 {117}	288.158 {117}2
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	F 57.283	.46276	9.6780	.48529	1.9687	.49963	1.8897	9.6773	20.709
Stddev	.054	.00291	.0795	.00651	.0189	.00842	.0389	.0179	.038
%RSD	.09453	.62791	.82093	1.3411	.95987	1.6844	2.0583	.18516	.18516

#1	57.245	.46070	9.6218	.48068	1.9553	.49367	1.8622	9.6900	20.737
#2	57.321	.46481	9.7342	.48989	1.9820	.50558	1.9172	9.6646	20.682

Check ?	Chk Fail	Chk Pass	Chk Pass	Chk Pass	None	Chk Pass	Chk Pass	Chk Pass	None
High Limit	56.000								
Low Limit	45.500								

Elem	Sn1899	Sr4077	Th2837	Ti3349	Ti1908	U_3701	V_2924	Zn2062	Zr3391
Line	189.989 {477}	407.771 {83}	283.730 {119}	334.904 {101}	190.856 {477}	370.152 {91}	292.402 {115}	206.200 {163}	339.198 {99}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	1.9432	.96048	.94243	F .89603	F 1.7572	1.9375	.46520	.43807	.44007
Stddev	.0393	.03423	.00142	.00157	.0260	.0432	.00061	.00329	.00565
%RSD	2.0234	3.5641	.15116	.17567	1.4815	2.2295	.13030	.75102	1.2831

#1	1.9154	.98469	.94143	.89714	1.7756	1.9070	.46563	.44040	.43608
#2	1.9710	.93627	.94344	.89491	1.7388	1.9681	.46477	.43575	.44406

Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Fail	Chk Fail	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit				1.1100	2.2000				
Low Limit				.90000	1.7600				

Int. Std.	Y_2243	Y_3600	Y_3774						
Line	224.306 {450}	360.073 {94}	377.433 {89}						
Units	Cts/S	Cts/S	Cts/S						
Avg	2633.1	38521.	1882.1						
Stddev	2.0	117.	120.9						
%RSD	.07768	.30428	6.4234						

#1	2634.5	38438.	1796.6						
#2	2631.6	38604.	1967.6						

Sample Name: LCSD 280-325213/3-A Acquired: 5/17/2016 21:58:35 Type: Unk
Method: 6500_025(v6) Mode: CONC Corr. Factor: 1.000000
User: CRHOADES Prep Date: Custom ID2: Custom ID3:
Comment: 325213 6010B

Elem	Ag3280	Al1670	Al3092	As1890	B_2089	Ba4554	Be3130	Bi2230	Ca3179
Line	328.068 {103}	167.079 {502}	309.271 {109}	189.042 {478}	208.959 {461}	455.403 { 74}	313.042 {108}	223.061 {451}	317.933 {106}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.05583	2.0397	F 2.4689	1.0591	1.1040	2.1834	F .05653	2.2183	52.960
Stddev	.00061	.0068	.0330	.0017	.0139	.0790	.00147	.0087	1.997
%RSD	1.0984	.33301	1.3350	.15989	1.2585	3.6202	2.6019	.39408	3.7705

#1	.05540	2.0349	2.4922	1.0579	1.0942	2.2393	.05757	2.2121	54.372
#2	.05626	2.0445	2.4456	1.0603	1.1138	2.1275	.05549	2.2244	51.548

Check ?	Chk Pass	Chk Pass	Chk Fail	Chk Pass	Chk Pass	Chk Pass	Chk Fail	None	Chk Pass
High Limit			2.2250				.05650		
Low Limit			1.7300				.04450		

Elem	Cd2288	Co2286	Cr2055	Cu3247	Fe2599	K_7664	Li6707	Mg2790	Mn2576
Line	228.802 {447}	228.616 {447}	205.560 {464}	324.754 {104}	259.940 {130}	766.490 { 44}	670.784 { 50}	279.079 {121}2	257.610 {131}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.11087	.54012	F .22533	.27785	F 1.1531	54.817	1.0824	52.463	.50437
Stddev	.00127	.00467	.00265	.00024	.0084	1.853	.0048	.051	.00055
%RSD	1.1468	.86442	1.1740	.08575	.72860	3.3802	.43946	.09817	.10856

#1	.10997	.53681	.22346	.27801	1.1590	56.127	1.0858	52.499	.50476
#2	.11177	.54342	.22720	.27768	1.1472	53.507	1.0791	52.426	.50398

Check ?	Chk Pass	Chk Pass	Chk Fail	Chk Pass	Chk Fail	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit			.22000		1.1500				
Low Limit			.18000		.89000				

Elem	Mo2020	Na8183	Ni2316	P_1782	Pb2203	S_1820	Sb2068	Se1960	Si2881
Line	202.030 {467}	818.326 { 41}	231.604 {446}	178.284 {489}	220.353 {453}	182.034 {485}	206.833 {463}	196.090 {472}	288.158 {117}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	F 1.1578	F 64.716	.52563	11.020	.54609	2.2285	F .56735	2.1333	F 11.105
Stddev	.0134	.974	.00537	.107	.00571	.0219	.01105	.0344	.025
%RSD	1.1592	1.5053	1.0215	.97087	1.0458	.98311	1.9482	1.6109	.22372

#1	1.1483	64.027	.52183	10.945	.54206	2.2130	.55953	2.1090	11.087
#2	1.1673	65.405	.52943	11.096	.55013	2.2440	.57516	2.1576	11.122

Check ?	Chk Fail	Chk Fail	Chk Pass	Chk Pass	Chk Pass	None	Chk Fail	Chk Pass	Chk Fail
High Limit	1.1000	56.000					.55499		11.000
Low Limit	.90000	45.500					.44000		9.0000

Elem	SiO2	Sn1899	Sr4077	Th2837	Ti3349	Ti1908	U_3701	V_2924	Zn2062
Line	288.158 {117}2	189.989 {477}	407.771 { 83}	283.730 {119}	334.904 {101}	190.856 {477}	370.152 { 91}	292.402 {115}	206.200 {163}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	23.765	2.2090	F 1.1131	1.0610	1.0209	2.0933	2.1709	.52791	.50139
Stddev	.053	.0273	.0411	.0014	.0027	.0198	.0536	.00211	.00132
%RSD	.22372	1.2380	3.6958	.13489	.26296	.94340	2.4668	.40063	.26374

#1	23.727	2.1897	1.1422	1.0600	1.0228	2.1072	2.2088	.52940	.50046
#2	23.802	2.2284	1.0841	1.0620	1.0190	2.0793	2.1330	.52641	.50233

Check ?	None	Chk Pass	Chk Fail	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit			1.1100						
Low Limit			.90000						

Elem	Zr3391								
Line	339.198 { 99}								
Units	ppm								
Avg	.50633								
Stddev	.00072								
%RSD	.14241								

#1	.50582								
#2	.50684								

Check ?	Chk Pass								
High Limit									
Low Limit									

Sample Name: LCSD 280-325213/3-A Acquired: 5/17/2016 21:58:35 Type: Unk
 Method: 6500_025(v6) Mode: CONC Corr. Factor: 1.000000
 User: CRHOADES Prep Date: Custom ID2: Custom ID3:
 Comment: 325213 6010B

Int. Std.	Y_2243	Y_3600	Y_3774
Line	224.306 {450}	360.073 { 94}	377.433 { 89}
Units	Cts/S	Cts/S	Cts/S
Avg	2598.1	38115.	1890.3
Stddev	.6	169.	67.7
%RSD	.02324	.44462	3.5822
#1	2598.5	38235.	1842.4
#2	2597.7	37995.	1938.1

Sample Name: 280-83008-I-3-E Acquired: 5/17/2016 22:01:02 Type: Unk
Method: 6500_025(v6) Mode: CONC Corr. Factor: 1.000000
User: CRHOADES Prep Date: Custom ID2: Custom ID3:
Comment: 325213 6010B

Elem	Ag3280	Al1670	As1890	B_2089	Ba4554	Be3130	Bi2230	Ca3179	Cd2288
Line	328.068 {103}	167.079 {502}	189.042 {478}	208.959 {461}	455.403 { 74}	313.042 {108}	223.061 {451}	317.933 {106}	228.802 {447}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.00099	.00649	.02719	W 10.723	.33690	-.00033	-.00245	389.64	.00111
Stddev	.00030	.00033	.00681	.141	.00038	.00015	.00276	.80	.00028
%RSD	30.408	5.1192	25.052	1.3103	.11249	45.090	112.78	.20649	25.407

#1	.00120	.00673	.03200	10.823	.33717	-.00044	-.00440	390.21	.00091
#2	.00078	.00626	.02237	10.624	.33663	-.00023	-.00050	389.07	.00131

Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Warn	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit				10.000					
Low Limit				-.01000					

Elem	Co2286	Cr2055	Cu3247	Fe2599	K_7664	Li6707	Mg2790	Mn2576	Mo2020
Line	228.616 {447}	205.560 {464}	324.754 {104}	259.940 {130}	766.490 { 44}	670.784 { 50}	279.079 {121}2	257.610 {131}	202.030 {467}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.00204	.01291	.00097	.30931	W 136.91	.11400	122.11	.26434	.04020
Stddev	.00006	.00024	.00006	.00994	.36	.00140	.04	.00029	.00072
%RSD	3.1000	1.8747	6.3983	3.2151	.26473	1.2269	.03102	.11099	1.7916

#1	.00208	.01308	.00092	.30228	137.16	.11301	122.14	.26414	.03969
#2	.00199	.01274	.00101	.31634	136.65	.11499	122.09	.26455	.04071

Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Warn	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit					100.00				
Low Limit					-.50000				

Elem	Na8183	Ni2316	P_1782	Pb2203	S_1820	Sb2068	Se1960	Si2881	SiO2
Line	818.326 { 41}	231.604 {446}	178.284 {489}	220.353 {453}	182.034 {485}	206.833 {463}	196.090 {472}	288.158 {117}	288.158 {117}2
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	W 1234.8	.03877	W 3.5148	-.00037	F 246.44	.02011	-.00003	23.489	50.267
Stddev	2.5	.00032	.0292	.00094	3.37	.00184	.00195	.047	.100
%RSD	.19917	.81511	.82983	252.19	1.3684	9.1759	6324.4	.19824	.19824

#1	1236.5	.03899	3.5354	.00029	248.83	.01880	-.00141	23.456	50.197
#2	1233.1	.03855	3.4942	-.00103	244.06	.02141	.00135	23.522	50.338

Check ?	Chk Warn	Chk Pass	Chk Warn	Chk Pass	Chk Fail	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit	500.00		2.0000		200.00				
Low Limit	11.000		-1.0000		-.20000				

Elem	Sn1899	Sr4077	Th2837	Ti3349	Ti1908	U_3701	V_2924	Zn2062	Zr3391
Line	189.989 {477}	407.771 { 83}	283.730 {119}	334.904 {101}	190.856 {477}	370.152 { 91}	292.402 {115}	206.200 {163}	339.198 { 99}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	-.00460	3.9959	-.00489	.00120	.04778	.02697	.00597	.01976	-.00193
Stddev	.00218	.0105	.00087	.00001	.01386	.03703	.00040	.00127	.00083
%RSD	47.312	.26344	17.850	1.0032	29.012	137.31	6.6193	6.4303	42.999

#1	-.00614	4.0034	-.00427	.00121	.03798	.00078	.00569	.01886	-.00134
#2	-.00306	3.9885	-.00550	.00119	.05758	.05315	.00625	.02066	-.00251

Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Int. Std.	Y_2243	Y_3600	Y_3774
Line	224.306 {450}	360.073 { 94}	377.433 { 89}
Units	Cts/S	Cts/S	Cts/S
Avg	2459.1	35305.	1810.6
Stddev	41.6	108.	6.1
%RSD	1.6935	.30522	.33900

#1	2429.7	35381.	1815.0
#2	2488.6	35229.	1806.3

Sample Name: 280-83008-I-4-C Acquired: 5/17/2016 22:04:05 Type: Unk
Method: 6500_025(v6) Mode: CONC Corr. Factor: 1.000000
User: CRHOADES Prep Date: Custom ID2: Custom ID3:
Comment: 325213 6010B

Elem	Ag3280	Al1670	As1890	B_2089	Ba4554	Be3130	Bi2230	Ca3179	Cd2288
Line	328.068 {103}	167.079 {502}	189.042 {478}	208.959 {461}	455.403 { 74}	313.042 {108}	223.061 {451}	317.933 {106}	228.802 {447}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.00178	.15242	.04958	W 10.873	.76513	-.00018	-.00186	409.23	.00109
Stddev	.00005	.00082	.00616	.146	.00531	.00007	.00609	2.27	.00023
%RSD	2.7504	.53545	12.417	1.3445	.69430	38.287	327.26	.55490	20.696

#1	.00175	.15185	.04523	10.769	.76137	-.00023	.00245	407.62	.00093
#2	.00182	.15300	.05393	10.976	.76888	-.00013	-.00617	410.83	.00125

Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Warn	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit				10.000					
Low Limit				-.01000					

Elem	Co2286	Cr2055	Cu3247	Fe2599	K_7664	Li6707	Mg2790	Mn2576	Mo2020
Line	228.616 {447}	205.560 {464}	324.754 {104}	259.940 {130}	766.490 { 44}	670.784 { 50}	279.079 {121}2	257.610 {131}	202.030 {467}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.00341	.03444	.00436	10.157	W 132.22	.11130	125.46	.79425	.04189
Stddev	.00083	.00016	.00007	.028	.30	.00184	.14	.00023	.00042
%RSD	24.453	.45927	1.6651	.27311	.22439	1.6548	.10794	.02887	1.0011

#1	.00400	.03433	.00431	10.177	132.01	.11000	125.37	.79409	.04159
#2	.00282	.03456	.00441	10.138	132.43	.11260	125.56	.79441	.04219

Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Warn	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit					100.00				
Low Limit					-.50000				

Elem	Na8183	Ni2316	P_1782	Pb2203	S_1820	Sb2068	Se1960	Si2881	SiO2
Line	818.326 { 41}	231.604 {446}	178.284 {489}	220.353 {453}	182.034 {485}	206.833 {463}	196.090 {472}	288.158 {117}	288.158 {117}2
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	W 940.98	.04704	1.1685	-.00221	F 262.74	.02006	W -.00668	22.501	48.153
Stddev	6.17	.00035	.0168	.00347	3.61	.00231	.00487	.261	.558
%RSD	.65525	.74814	1.4336	156.81	1.3752	11.510	72.862	1.1579	1.1579

#1	936.62	.04729	1.1566	-.00467	260.18	.01843	-.01012	22.685	48.547
#2	945.34	.04679	1.1803	.00024	265.29	.02169	-.00324	22.317	47.758

Check ?	Chk Warn	Chk Pass	Chk Pass	Chk Pass	Chk Fail	Chk Pass	Chk Warn	Chk Pass	Chk Pass
High Limit	500.00				200.00		5.0000		
Low Limit	11.000				-.20000		-.00500		

Elem	Sn1899	Sr4077	Th2837	Ti3349	Ti1908	U_3701	V_2924	Zn2062	Zr3391
Line	189.989 {477}	407.771 { 83}	283.730 {119}	334.904 {101}	190.856 {477}	370.152 { 91}	292.402 {115}	206.200 {163}	339.198 { 99}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	-.00118	4.2858	-.00131	.01389	.00367	-.00094	.00981	.04021	.00081
Stddev	.00074	.0240	.00263	.00007	.00363	.05318	.00013	.00034	.00255
%RSD	62.827	.56025	201.42	.48633	98.928	5669.9	1.3422	.84769	314.73

#1	-.00066	4.2688	-.00317	.01384	.00623	-.03854	.00991	.04045	.00261
#2	-.00170	4.3027	.00055	.01393	.00110	.03667	.00972	.03997	-.00099

Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Int. Std.	Y_2243	Y_3600	Y_3774
Line	224.306 {450}	360.073 { 94}	377.433 { 89}
Units	Cts/S	Cts/S	Cts/S
Avg	2512.3	36060.	1846.7
Stddev	27.1	50.	7.0
%RSD	1.0775	.13887	.38089

#1	2531.4	36095.	1841.8
#2	2493.1	36024.	1851.7

Sample Name: 280-83008-I-5-C Acquired: 5/17/2016 22:07:07 Type: Unk
Method: 6500_025(v6) Mode: CONC Corr. Factor: 1.000000
User: CRHOADES Prep Date: Custom ID2: Custom ID3:
Comment: 325213 6010B

Elem	Ag3280	Al1670	As1890	B_2089	Ba4554	Be3130	Bi2230	Ca3179	Cd2288
Line	328.068 {103}	167.079 {502}	189.042 {478}	208.959 {461}	455.403 { 74}	313.042 {108}	223.061 {451}	317.933 {106}	228.802 {447}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.00053	.04689	.04653	W 11.424	.45254	-.00040	-.00658	400.94	.00128
Stddev	.00078	.00153	.00221	.020	.00572	.00006	.00239	6.04	.00034
%RSD	146.61	3.2654	4.7598	.17468	1.2633	14.631	36.244	1.5076	26.590

#1	-.00002	.04797	.04809	11.410	.45659	-.00036	-.00827	405.21	.00153
#2	.00108	.04580	.04496	11.438	.44850	-.00044	-.00489	396.66	.00104

Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Warn	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit				10.000					
Low Limit				-.01000					

Elem	Co2286	Cr2055	Cu3247	Fe2599	K_7664	Li6707	Mg2790	Mn2576	Mo2020
Line	228.616 {447}	205.560 {464}	324.754 {104}	259.940 {130}	766.490 { 44}	670.784 { 50}	279.079 {121}2	257.610 {131}	202.030 {467}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.00334	.02205	.00241	4.1573	W 138.32	.10951	127.60	.57290	.04253
Stddev	.00006	.00037	.00069	.0748	2.41	.00346	.44	.00140	.00073
%RSD	1.7543	1.6648	28.823	1.7988	1.7393	3.1616	.34404	.24447	1.7248

#1	.00330	.02231	.00192	4.2102	140.02	.11196	127.29	.57191	.04305
#2	.00338	.02179	.00290	4.1044	136.62	.10706	127.91	.57389	.04201

Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Warn	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit					100.00				
Low Limit					-.50000				

Elem	Na8183	Ni2316	P_1782	Pb2203	S_1820	Sb2068	Se1960	Si2881	SiO2
Line	818.326 { 41}	231.604 {446}	178.284 {489}	220.353 {453}	182.034 {485}	206.833 {463}	196.090 {472}	288.158 {117}	288.158 {117}2
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	W 1084.2	.04511	W 24.184	.00033	F 262.55	.02192	-.00344	25.052	53.611
Stddev	14.9	.00012	.001	.00091	.05	.00528	.00756	.229	.490
%RSD	1.3748	.26045	.00593	279.36	.01770	24.075	219.91	.91359	.91359

#1	1094.7	.04519	24.185	-.00032	262.58	.01819	.00191	24.890	53.264
#2	1073.6	.04502	24.183	.00097	262.51	.02565	-.00878	25.214	53.957

Check ?	Chk Warn	Chk Pass	Chk Warn	Chk Pass	Chk Fail	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit	500.00		2.0000		200.00				
Low Limit	11.000		-1.0000		-.20000				

Elem	Sn1899	Sr4077	Th2837	Ti3349	Ti1908	U_3701	V_2924	Zn2062	Zr3391
Line	189.989 {477}	407.771 { 83}	283.730 {119}	334.904 {101}	190.856 {477}	370.152 { 91}	292.402 {115}	206.200 {163}	339.198 { 99}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	-.00230	4.1451	-.00211	.00493	.00256	.01986	.00693	.02916	-.00104
Stddev	.00237	.0595	.00240	.00053	.00242	.00562	.00013	.00075	.00220
%RSD	102.83	1.4351	113.85	10.756	94.550	28.305	1.8694	2.5734	211.75

#1	-.00398	4.1871	-.00041	.00531	.00428	.02384	.00684	.02863	.00052
#2	-.00063	4.1030	-.00381	.00456	.00085	.01589	.00702	.02969	-.00259

Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Int. Std.	Y_2243	Y_3600	Y_3774						
Line	224.306 {450}	360.073 { 94}	377.433 { 89}						
Units	Cts/S	Cts/S	Cts/S						
Avg	2431.8	34910.	1808.8						
Stddev	4.9	239.	27.3						
%RSD	.20319	.68509	1.5065						

#1	2435.3	34741.	1789.6						
#2	2428.3	35079.	1828.1						

Sample Name: 280-83008-I-5-C SD@5 Acquired: 5/17/2016 22:10:09 Type: Unk
Method: 6500_025(v6) Mode: CONC Corr. Factor: 1.000000
User: CRHOADES Prep Date: Custom ID2: Custom ID3:
Comment: 325213 6010B

Elem	Ag3280	Al1670	As1890	B_2089	Ba4554	Be3130	Bi2230	Ca3179	Cd2288
Line	328.068 {103}	167.079 {502}	189.042 {478}	208.959 {461}	455.403 { 74}	313.042 {108}	223.061 {451}	317.933 {106}	228.802 {447}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.00357	.00257	.00518	.07156	-.00296	.00049	.00451	.09880	.00000
Stddev	.00065	.00498	.00072	.00187	.00089	.00015	.00168	.04805	.00011
%RSD	18.142	193.67	13.866	2.6142	30.072	31.376	37.174	48.631	5151.4

#1	.00403	-.00095	.00468	.07288	-.00233	.00038	.00333	.06482	.00008
#2	.00311	.00609	.00569	.07024	-.00359	.00059	.00570	.13277	-.00008

Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Elem	Co2286	Cr2055	Cu3247	Fe2599	K_7664	Li6707	Mg2790	Mn2576	Mo2020
Line	228.616 {447}	205.560 {464}	324.754 {104}	259.940 {130}	766.490 { 44}	670.784 { 50}	279.079 {121}2	257.610 {131}	202.030 {467}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.00033	-.00038	-.00161	-.00250	.19765	-.00992	.02920	.00018	-.00123
Stddev	.00008	.00020	.00061	.00455	.04609	.00038	.00190	.00022	.00024
%RSD	24.699	54.165	37.740	181.91	23.319	3.8732	6.5161	121.15	19.566

#1	.00039	-.00023	-.00118	.00072	.16506	-.01019	.02786	.00003	-.00140
#2	.00028	-.00052	-.00203	-.00571	.23025	-.00964	.03055	.00033	-.00106

Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Elem	Na5895	Ni2316	P_1782	Pb2203	S_1820	Sb2068	Se1960	Si2881	SiO2
Line	589.592 { 57}	231.604 {446}	178.284 {489}	220.353 {453}	182.034 {485}	206.833 {463}	196.090 {472}	288.158 {117}	288.158 {117}2
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.59617	.00063	.02194	-.00209	.17108	-.00688	-.00457	.02970	.06356
Stddev	.08675	.00006	.00597	.00143	.06110	.00144	.00188	.02474	.05294
%RSD	14.551	8.7401	27.219	68.228	35.711	20.989	41.136	83.297	83.297

#1	.53483	.00067	.01772	-.00108	.12788	-.00790	-.00324	.04720	.10100
#2	.65751	.00059	.02617	-.00311	.21428	-.00586	-.00590	.01221	.02612

Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Elem	Sn1899	Sr4077	Th2837	Ti3349	Ti1908	U_3701	V_2924	Zn2062	Zr3391
Line	189.989 {477}	407.771 { 83}	283.730 {119}	334.904 {101}	190.856 {477}	370.152 { 91}	292.402 {115}	206.200 {163}	339.198 { 99}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	-.00286	.00114	.00317	.00050	.00208	.06301	.00068	-.00081	.00064
Stddev	.00101	.00047	.00027	.00006	.00195	.09145	.00008	.00001	.00222
%RSD	35.335	41.540	8.5806	12.931	93.519	145.13	11.267	1.6845	344.81

#1	-.00357	.00080	.00297	.00055	.00346	.12768	.00074	-.00080	.00221
#2	-.00215	.00147	.00336	.00045	.00071	-.00165	.00063	-.00082	-.00093

Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Int. Std.	Y_2243	Y_3600	Y_3774
Line	224.306 {450}	360.073 { 94}	377.433 { 89}
Units	Cts/S	Cts/S	Cts/S
Avg	3203.6	46982.	2271.6
Stddev	22.6	267.	57.7
%RSD	.70436	.56774	2.5415

#1	3219.5	46794.	2230.8
#2	3187.6	47171.	2312.4

Sample Name: CCVH-3883905 Acquired: 5/17/2016 22:15:33 Type: QC
Method: 6500_025(v6) Mode: CONC Corr. Factor: 1.000000
User: CRHOADES Prep Date: Custom ID2: Custom ID3:
Comment:

Elem	Ag3280	Al3092	As1890	B_2089	Ba4554	Be3130	Bi2230	Ca3179	Cd2288	Co2286	Cr2055
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	-.00571	52.184	-.00391	.04174	-.00026	-.00002	.96613	.01087	-.00037	-.00160	-.00017
Stddev	.00029	.718	.00210	.00581	.00065	.00005	.01590	.00779	.00019	.00033	.00036
%RSD	5.1003	1.3751	53.690	13.927	252.45	214.90	1.6455	71.670	51.330	20.683	213.30

#1	-.00550	51.677	-.00540	.04585	.00020	.00001	.97737	.00536	-.00050	-.00137	.00009
#2	-.00591	52.692	-.00243	.03763	-.00071	-.00005	.95489	.01638	-.00024	-.00183	-.00043

Check ?	None	Chk Pass	None	None	None	None	Chk Pass	None	None	None	None
Value											
Range											

Elem	Cu3247	Fe2714	K_7664	Li6707	Mg2790	Mn2576	Mo2020	Na8183	Ni2316	P_1782	Pb2203
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	-.01516	54.923	.06898	-.00799	.01560	-.00204	-.00217	F 278.84	.00143	.01126	.00034
Stddev	.00065	.389	.05349	.00312	.00010	.00001	.00040	.79	.00001	.00593	.00039
%RSD	4.2548	.70779	77.543	39.044	.63456	.65414	18.542	.28478	.74922	52.645	115.22

#1	-.01562	54.649	.10680	-.00579	.01553	-.00203	-.00246	278.28	.00142	.01545	.00061
#2	-.01471	55.198	.03116	-.01020	.01567	-.00205	-.00189	279.40	.00143	.00707	.00006

Check ?	None	Chk Pass	None	None	None	None	None	Chk Fail	None	None	None
Value								250.00			
Range								10.490%			

Elem	S_1820	Sb2068	Se1960	Si2881	SiO2	Sn1899	Sr4077	Th2837	Ti3349	Ti1908	U_3701
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	5.0835	-.01438	-.00841	-.01196	-.02560	-.00120	.00028	W 4.6654	.00061	-.00179	W 9.4256
Stddev	.1765	.00057	.00323	.02013	.04307	.00093	.00010	.0048	.00011	.00166	.0869
%RSD	3.4723	3.9566	38.340	168.26	168.26	77.495	36.103	.10299	17.841	92.740	.92243

#1	5.2083	-.01478	-.00613	-.02619	-.05605	-.00054	.00021	4.6688	.00068	-.00062	9.4871
#2	4.9587	-.01398	-.01070	.00227	.00486	-.00186	.00036	4.6620	.00053	-.00297	9.3641

Check ?	Chk Pass	None	None	None	None	None	None	Chk Warn	None	None	Chk Warn
Value								5.0000			10.000
Range								-5.0000%			-5.0000%

Elem	V_2924	Zn2062	Zr3391
Units	ppm	ppm	ppm
Avg	.01244	.00051	-.13585
Stddev	.00061	.00133	.00743
%RSD	4.9278	259.43	5.4706

#1	.01288	-.00043	-.14110
#2	.01201	.00145	-.13059

Check ?	None	None	None
Value			
Range			

Int. Std.	Y_2243	Y_3600	Y_3774
Units	Cts/S	Cts/S	Cts/S
Avg	2558.4	36770.	1774.5
Stddev	10.4	618.	41.9
%RSD	.40540	1.6813	2.3613

#1	2565.7	37207.	1744.9
#2	2551.1	36333.	1804.1

Sample Name: CCV-3888422 Acquired: 5/17/2016 22:18:09 Type: QC
Method: 6500_025(v6) Mode: CONC Corr. Factor: 1.000000
User: CRHOADES Prep Date: Custom ID2: Custom ID3:
Comment:

Elem	Ag3280	Al1670	As1890	B_2089	Ba4554	Be3130	Bi2230	Ca3179	Cd2288	Co2286	Cr2055
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.48079	.47159	.90489	.50360	.48067	.49451	-.00337	4.7554	.48732	.48652	.49330
Stddev	.00310	.00443	.00524	.00346	.00541	.00496	.00374	.0254	.00019	.00042	.00215
%RSD	.64553	.93972	.57886	.68766	1.1265	1.0038	111.05	.53497	.03869	.08695	.43551
#1	.48299	.47473	.90859	.50605	.48450	.49802	-.00601	4.7734	.48719	.48682	.49482
#2	.47860	.46846	.90119	.50116	.47684	.49100	-.00072	4.7374	.48745	.48622	.49178
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	None	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Value											
Range											
Elem	Cu3247	Fe2599	K_7664	Li6707	Mg2790	Mn2576	Mo2020	Na5895	Ni2316	P_1782	Pb2203
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.45537	2.5305	48.458	.95870	18.592	.45500	.48172	5.2529	.47360	.94319	.96430
Stddev	.00606	.0270	.620	.00280	.165	.00233	.00281	.0267	.00069	.00269	.00250
%RSD	1.3309	1.0667	1.2791	.29256	.88664	.51132	.58250	.50847	.14557	.28553	.25968
#1	.45965	2.5496	48.896	.96068	18.708	.45664	.48370	5.2718	.47408	.94129	.96253
#2	.45108	2.5114	48.020	.95672	18.475	.45335	.47973	5.2340	.47311	.94510	.96607
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Value											
Range											
Elem	S_1820	Sb2068	Se1960	Si2881	SiO2	Sn1899	Sr4077	Th2837	Ti3349	Ti1908	U_3701
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	-.04033	.94346	F .89435	4.9158	10.520	.96773	.49492	.00014	W .44877	.97421	.01954
Stddev	.00221	.00521	.01167	.0869	.186	.00241	.00681	.00047	.00333	.00865	.00306
%RSD	5.4924	.55175	1.3050	1.7669	1.7669	.24911	1.3757	331.53	.74277	.88812	15.653
#1	-.03876	.94714	.90261	4.8544	10.388	.96943	.49974	-.00019	.45113	.98033	.01738
#2	-.04189	.93978	.88610	4.9772	10.651	.96602	.49011	.00047	.44641	.96810	.02170
Check ?	None	Chk Pass	Chk Fail	Chk Pass	Chk Pass	Chk Pass	Chk Pass	None	Chk Warn	Chk Pass	None
Value			1.0000						.50000		
Range			-10.490%						-10.000%		
Elem	V_2924	Zn2062	Zr3391								
Units	ppm	ppm	ppm								
Avg	.47831	F .44666	.46927								
Stddev	.00238	.00176	.00062								
%RSD	.49685	.39338	.13311								
#1	.47999	.44790	.46971								
#2	.47663	.44542	.46882								
Check ?	Chk Pass	Chk Fail	Chk Pass								
Value		.50000									
Range		-10.490%									
Int. Std.	Y_2243	Y_3600	Y_3774								
Units	Cts/S	Cts/S	Cts/S								
Avg	2629.5	38250.	1780.2								
Stddev	71.3	190.	17.4								
%RSD	2.7106	.49595	.97860								
#1	2579.1	38385.	1767.9								
#2	2679.9	38116.	1792.6								

Sample Name: CCB Acquired: 5/17/2016 22:20:40 Type: QC
 Method: 6500_025(v6) Mode: CONC Corr. Factor: 1.000000
 User: CRHOADES Prep Date: Custom ID2: Custom ID3:
 Comment:

Elem	Ag3280	Al1670	As1890	B_2089	Ba4554	Be3130	Bi2230	Ca3179	Cd2288	Co2286	Cr2055
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.00199	.00075	W .00761	W .02384	-.00073	-.00009	.00041	.00759	.00007	-.00040	-.00031
Stddev	.00058	.00024	.00137	.00076	.00034	.00010	.00040	.00279	.00039	.00017	.00004
%RSD	29.223	32.495	18.053	3.1708	45.990	114.62	97.887	36.764	575.64	43.008	12.751

#1	.00240	.00092	.00664	.02438	-.00097	-.00002	.00013	.00562	.00035	-.00052	-.00028
#2	.00158	.00058	.00858	.02331	-.00049	-.00017	.00070	.00957	-.00021	-.00028	-.00034

Check ?	Chk Pass	Chk Pass	Chk Warn	Chk Warn	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit			.00750	.01500							
Low Limit			-.01500	-.01500							

Elem	Cu3247	Fe2599	K_7664	Li6707	Mg2790	Mn2576	Mo2020	Na5895	Ni2316	P_1782	Pb2203
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	-.00031	.00886	-.11714	F -.01281	.00363	.00027	.00128	.04900	.00034	.00321	-.00280
Stddev	.00012	.00098	.04552	.00095	.01529	.00029	.00097	.02400	.00059	.00083	.00146
%RSD	38.291	11.037	38.860	7.4318	421.43	108.87	75.831	48.988	174.85	25.838	51.915

#1	-.00022	.00817	-.14932	-.01214	.01444	.00047	.00059	.03202	.00075	.00379	-.00383
#2	-.00039	.00955	-.08495	-.01349	-.00718	.00006	.00196	.06597	-.00008	.00262	-.00178

Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Fail	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit				.01000							
Low Limit				-.01000							

Elem	S_1820	Sb2068	Se1960	Si2881	SiO2	Sn1899	Sr4077	Th2837	Ti3349	Ti1908	U_3701
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	-.04517	W .00434	-.00586	-.02150	-.04602	.00051	-.00016	.00130	.00077	.00635	.03424
Stddev	.00014	.00316	.00208	.03283	.07025	.00126	.00013	.00294	.00023	.00458	.04653
%RSD	.31656	72.725	35.513	152.66	152.66	248.68	78.976	226.50	29.666	72.162	135.89

#1	-.04507	.00657	-.00733	-.04472	-.09569	.00140	-.00007	.00338	.00061	.00311	.00134
#2	-.04527	.00211	-.00439	.00171	.00366	-.00038	-.00026	-.00078	.00093	.00959	.06714

Check ?	Chk Pass	Chk Warn	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit		.00100									
Low Limit		-.00100									

Elem	V_2924	Zn2062	Zr3391
Units	ppm	ppm	ppm
Avg	.00050	-.00002	.00045
Stddev	.00003	.00043	.00140
%RSD	6.2055	2101.0	308.27

#1	.00047	.00029	.00145
#2	.00052	-.00033	-.00054

Check ?	Chk Pass	Chk Pass	Chk Pass
High Limit			
Low Limit			

Int. Std.	Y_2243	Y_3600	Y_3774
Units	Cts/S	Cts/S	Cts/S
Avg	2549.4	37739.	1767.0
Stddev	.4	.	4.7
%RSD	.01487	.00083	.26634

#1	2549.1	37739.	1763.6
#2	2549.6	37739.	1770.3

Sample Name: CCVL-3894681 Acquired: 5/17/2016 22:23:03 Type: QC

Method: 6500_025(v6) Mode: CONC Corr. Factor: 1.000000

User: CRHOADES Prep Date: Custom ID2: Custom ID3:

Comment:

Elem	Ag3280	Al1670	As1890	B_2089	Ba4554	Be3130	Bi2230	Ca3179	Cd2288	Co2286	Cr2055	Cu3247
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.01106	.09805	.01884	.11479	.00863	.00078	.10719	.18810	.00549	.01046	.01045	.01289
Stddev	.00078	.00079	.00120	.00035	.00081	.00015	.00187	.00163	.00018	.00012	.00022	.00021
%RSD	7.0855	.80113	6.3882	.30685	9.3395	19.903	1.7479	.86544	3.2141	1.1119	2.0765	1.6393

#1	.01161	.09749	.01969	.11504	.00920	.00067	.10586	.18926	.00536	.01055	.01029	.01275
#2	.01050	.09860	.01799	.11454	.00806	.00089	.10851	.18695	.00561	.01038	.01060	.01304

Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Value												
Range												

Elem	Fe2599	K_7664	Li6707	Mg2790	Mn2576	Mo2020	Na5895	Ni2316	P_1782	Pb2203	S_1820	Sb2068
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.11126	2.9400	F .00251	.18563	.00946	.01984	1.0720	.04244	3.0253	.01042	-.06576	.02035
Stddev	.00410	.1646	.00262	.00361	.00003	.00029	.0052	.00063	.0418	.00088	.00587	.00283
%RSD	3.6889	5.5970	104.45	1.9435	.29139	1.4507	.48482	1.4864	1.3812	8.4269	8.9257	13.911

#1	.11416	3.0563	.00436	.18818	.00948	.02004	1.0683	.04289	3.0548	.01104	-.06161	.01835
#2	.10836	2.8236	.00066	.18308	.00945	.01964	1.0757	.04200	2.9957	.00980	-.06991	.02235

Check ?	Chk Pass	Chk Pass	Chk Fail	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	None	Chk Pass
Value			.01000									
Range			-30.000%									

Elem	Se1960	Si2881	SiO2	Sn1899	Sr4077	Th2837	Ti3349	Ti1908	U_3701	V_2924	Zn2062	Zr3391
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	F .00819	.49087	1.0505	.11087	.01015	.01413	.00986	.01773	F .09323	.00938	.01917	F .00957
Stddev	.00085	.02986	.0639	.00497	.00005	.00114	.00035	.00060	.06147	.00078	.00007	.00191
%RSD	10.363	6.0839	6.0839	4.4841	.49070	8.0528	3.5357	3.3569	65.932	8.3716	.38174	19.915

#1	.00759	.46975	1.0053	.11439	.01019	.01493	.01010	.01815	.13670	.00882	.01923	.00822
#2	.00879	.51198	1.0956	.10736	.01012	.01332	.00961	.01731	.04977	.00993	.01912	.01092

Check ?	Chk Fail	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Fail	Chk Pass	Chk Pass	Chk Fail
Value	.01500								.06000			.01500
Range	-30.000%								30.000%			-30.000%

Int. Std.	Y_2243	Y_3600	Y_3774
Units	Cts/S	Cts/S	Cts/S
Avg	2636.6	38606.	1843.4
Stddev	3.0	456.	95.8
%RSD	.11356	1.1807	5.1988

#1	2634.5	38928.	1775.6
#2	2638.7	38284.	1911.2

Sample Name: MB 280-325684/1-A Acquired: 5/17/2016 22:25:42 Type: Unk

Method: 6500_025(v6) Mode: CONC Corr. Factor: 1.000000

User: CRHOADES Prep Date: 5/17 Custom ID2: Custom ID3:

Comment: 323702 6010C Q5 soil (B)

Elem	Ag3280	Al1670	As1890	B_2089	Ba4554	Be3130	Bi2230	Ca3179	Cd2288
Line	328.068 {103}	167.079 {502}	189.042 {478}	208.959 {461}	455.403 { 74}	313.042 {108}	223.061 {451}	317.933 {106}	228.802 {447}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.00190	.01372	-.00349	.02807	-.00098	-.00034	.00064	W .10393	.00031
Stddev	.00049	.00022	.00006	.00033	.00017	.00025	.00179	.00470	.00013
%RSD	25.962	1.5842	1.8379	1.1850	17.804	73.839	281.11	4.5271	43.152

#1	.00225	.01356	-.00354	.02784	-.00110	-.00051	.00190	.10725	.00022
#2	.00155	.01387	-.00345	.02831	-.00085	-.00016	-.00063	.10060	.00041

Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Warn	Chk Pass
High Limit								.10000	
Low Limit								-.10000	

Elem	Co2286	Cr2055	Cu3247	Fe2599	K_7664	Li6707	Mg2790	Mn2576	Mo2020
Line	228.616 {447}	205.560 {464}	324.754 {104}	259.940 {130}	766.490 { 44}	670.784 { 50}	279.079 {121}2	257.610 {131}	202.030 {467}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	-.00009	.00027	-.00080	.01586	-.05662	F -.01058	-.00023	.00023	-.00144
Stddev	.00010	.00024	.00131	.00122	.04829	.00492	.00184	.00001	.00066
%RSD	122.65	91.512	163.29	7.7057	85.285	46.492	814.57	3.1121	45.667

#1	-.00016	.00009	-.00172	.01672	-.02247	-.00710	-.00153	.00022	-.00191
#2	-.00001	.00044	.00012	.01499	-.09076	-.01406	.00108	.00023	-.00098

Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Fail	Chk Pass	Chk Pass	Chk Pass
High Limit						.01000			
Low Limit						-.01000			

Elem	Na5895	Ni2316	P_1782	Pb2203	S_1820	Sb2068	Se1960	Si2881	SiO2
Line	589.592 { 57}	231.604 {446}	178.284 {489}	220.353 {453}	182.034 {485}	206.833 {463}	196.090 {472}	288.158 {117}	288.158 {117}2
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.07807	.00043	.00754	-.00016	W -.06842	-.00403	W -.00999	.00662	.01416
Stddev	.03156	.00053	.00333	.00163	.01693	.00049	.00066	.04895	.10475
%RSD	40.427	121.24	44.155	995.70	24.743	12.090	6.5802	739.54	739.54

#1	.05575	.00006	.00989	-.00131	-.05645	-.00369	-.01046	-.02799	-.05991
#2	.10038	.00081	.00519	.00099	-.08039	-.00437	-.00953	.04123	.08823

Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Warn	Chk Pass	Chk Warn	Chk Pass	None
High Limit					.05000		.00750		
Low Limit					-.05000		-.00750		

Elem	Sn1899	Sr4077	Th2837	Ti3349	Ti1908	U_3701	V_2924	Zn2062	Zr3391
Line	189.989 {477}	407.771 { 83}	283.730 {119}	334.904 {101}	190.856 {477}	370.152 { 91}	292.402 {115}	206.200 {163}	339.198 { 99}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	-.00067	.00008	.00213	.00096	.00141	.02630	.00003	.00044	.00280
Stddev	.00143	.00008	.00116	.00034	.00096	.01709	.00068	.00017	.00045
%RSD	212.55	104.38	54.327	35.083	68.183	64.980	1989.0	39.166	16.121

#1	-.00168	.00014	.00131	.00120	.00209	.03839	-.00045	.00056	.00248
#2	.00034	.00002	.00295	.00072	.00073	.01422	.00052	.00032	.00312

Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Int. Std.	Y_2243	Y_3600	Y_3774						
Line	224.306 {450}	360.073 { 94}	377.433 { 89}						
Units	Cts/S	Cts/S	Cts/S						
Avg	2696.1	39054.	1811.6						
Stddev	.7	256.	56.6						
%RSD	.02590	.65456	3.1258						

#1	2696.6	39235.	1771.6						
#2	2695.6	38873.	1851.6						

Sample Name: LCS 280-325684/2-A Acquired: 5/17/2016 22:28:05 Type: Unk
Method: 6500_025(v6) Mode: CONC Corr. Factor: 1.000000
User: CRHOADES Prep Date: Custom ID2: Custom ID3:
Comment: 323702 6010C Q5 soil (B)

Elem	Ag3280	Al1670	As1890	B_2089	Ba4554	Be3130	Bi2230	Ca3179	Cd2288
Line	328.068 {103}	167.079 {502}	189.042 {478}	208.959 {461}	455.403 { 74}	313.042 {108}	223.061 {451}	317.933 {106}	228.802 {447}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.04677	1.8390	.91933	F 1.1126	1.8985	.04926	1.9396	46.367	.09707
Stddev	.00045	.0005	.00347	.0017	.0619	.00090	.0015	1.582	.00037
%RSD	.97200	.02782	.37702	.15254	3.2627	1.8176	.07737	3.4109	.38462

#1	.04645	1.8386	.92178	1.1114	1.9423	.04990	1.9386	47.485	.09733
#2	.04709	1.8393	.91688	1.1138	1.8547	.04863	1.9407	45.249	.09680

Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Fail	Chk Pass	Chk Pass	None	Chk Pass	Chk Pass
High Limit				1.1000					
Low Limit				.81000					

Elem	Co2286	Cr2055	Cu3247	Fe2599	K_7664	Li6707	Mg2790	Mn2576	Mo2020
Line	228.616 {447}	205.560 {464}	324.754 {104}	259.940 {130}	766.490 { 44}	670.784 { 50}	279.079 {121}2	257.610 {131}	202.030 {467}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.47598	.19754	.22029	1.0191	47.993	.94654	45.661	.44119	1.0265
Stddev	.00060	.00051	.00032	.0191	1.656	.00013	.118	.00072	.0042
%RSD	.12660	.25860	.14546	1.8718	3.4510	.01406	.25901	.16370	.41096

#1	.47640	.19790	.22006	1.0326	49.165	.94664	45.578	.44068	1.0294
#2	.47555	.19718	.22051	1.0056	46.822	.94645	45.745	.44170	1.0235

Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Elem	Na8183	Ni2316	P_1782	Pb2203	S_1820	Sb2068	Se1960	Si2881	SiO2
Line	818.326 { 41}	231.604 {446}	178.284 {489}	220.353 {453}	182.034 {485}	206.833 {463}	196.090 {472}	288.158 {117}	288.158 {117}2
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	F 57.485	.46485	9.6591	.48371	1.9898	.50146	1.8679	2.1447	4.5896
Stddev	.623	.00055	.0067	.00081	.0036	.00322	.0112	.0186	.0398
%RSD	1.0834	.11882	.06968	.16719	.17965	.64210	.60119	.86601	.86601

#1	57.045	.46524	9.6543	.48428	1.9873	.49919	1.8600	2.1316	4.5615
#2	57.926	.46445	9.6638	.48314	1.9923	.50374	1.8758	2.1578	4.6177

Check ?	Chk Fail	Chk Pass	Chk Pass	Chk Pass	None	Chk Pass	Chk Pass	Chk Pass	None
High Limit	56.000								
Low Limit	45.000								

Elem	Sn1899	Sr4077	Th2837	Ti3349	Ti1908	U_3701	V_2924	Zn2062	Zr3391
Line	189.989 {477}	407.771 { 83}	283.730 {119}	334.904 {101}	190.856 {477}	370.152 { 91}	292.402 {115}	206.200 {163}	339.198 { 99}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	2.0128	.97185	.94668	.90301	1.8408	1.9377	.46465	.43316	.45369
Stddev	.0233	.03128	.00085	.00192	.0297	.0376	.00015	.00261	.00247
%RSD	1.1600	3.2191	.08974	.21282	1.6125	1.9381	.03155	.60206	.54476

#1	1.9963	.99397	.94608	.90165	1.8617	1.9642	.46476	.43500	.45194
#2	2.0293	.94972	.94728	.90437	1.8198	1.9111	.46455	.43132	.45543

Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Int. Std.	Y_2243	Y_3600	Y_3774						
Line	224.306 {450}	360.073 { 94}	377.433 { 89}						
Units	Cts/S	Cts/S	Cts/S						
Avg	2584.4	37611.	1852.3						
Stddev	8.8	32.	41.7						
%RSD	.33866	.08598	2.2528						

#1	2578.2	37634.	1822.8						
#2	2590.6	37588.	1881.8						

Sample Name: 280-82566-A-1-C Acquired: 5/17/2016 22:30:31 Type: Unk

Method: 6500_025(v6) Mode: CONC Corr. Factor: 1.000000

User: CRHOADES Prep Date: Custom ID2: Custom ID3:

Comment: 323702 6010C Q5 soil (B)

Elem	Ag3280	Al3092	As1890	B_2089	Ba4554	Be3130	Bi2230	Ca3179	Cd2288
Line	328.068 {103}	309.271 {109}	189.042 {478}	208.959 {461}	455.403 { 74}	313.042 {108}	223.061 {451}	317.933 {106}	228.802 {447}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.00092	75.524	.01816	.06403	.74244	.00384	-.02063	F 1126.8	.00239
Stddev	.00040	.400	.01746	.00027	.00199	.00006	.00253	.7	.00002
%RSD	43.723	.53023	96.154	.41691	.26837	1.5041	12.251	.06117	.70997

#1	.00064	75.241	.03050	.06422	.74103	.00388	-.02241	1126.3	.00240
#2	.00120	75.807	.00581	.06384	.74385	.00380	-.01884	1127.2	.00237

Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Fail	Chk Pass
High Limit								1000.0	
Low Limit								-.10000	

Elem	Co2286	Cr2055	Cu3247	Fe2714	K_7664	Li6707	Mg2790	Mn2576	Mo2020
Line	228.616 {447}	205.560 {464}	324.754 {104}	271.441 {124}	766.490 { 44}	670.784 { 50}	279.079 {121}2	257.610 {131}	202.030 {467}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.03314	.09932	.04758	99.043	12.653	.08123	41.305	1.8610	.00558
Stddev	.00008	.00009	.00018	.781	.015	.00297	.221	.0003	.00029
%RSD	.23265	.08965	.38598	.78827	.12035	3.6517	.53589	.01756	5.2033

#1	.03309	.09938	.04745	98.491	12.663	.07914	41.462	1.8608	.00537
#2	.03320	.09925	.04771	99.595	12.642	.08333	41.149	1.8612	.00578

Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Elem	Na5895	Ni2316	P_1782	Pb2203	S_1820	Sb2068	Se1960	Si2881	SiO2
Line	589.592 { 57}	231.604 {446}	178.284 {489}	220.353 {453}	182.034 {485}	206.833 {463}	196.090 {472}	288.158 {117}	288.158 {117}2
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	2.0895	.07831	W 2.1095	.04370	5.3926	-.00666	.00504	9.3236	19.952
Stddev	.0056	.00037	.0035	.00028	.0058	.00526	.00311	.2675	.573
%RSD	.26944	.46687	.16722	.63042	.10826	78.971	61.726	2.8695	2.8695

#1	2.0855	.07805	2.1070	.04390	5.3967	-.00294	.00724	9.5127	20.357
#2	2.0935	.07857	2.1120	.04351	5.3885	-.01037	.00284	9.1344	19.548

Check ?	Chk Pass	Chk Pass	Chk Warn	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit			2.0000						
Low Limit			-1.0000						

Elem	Sn1899	Sr4077	Th2837	Ti3349	Ti1908	U_3701	V_2924	Zn2062	Zr3391
Line	189.989 {477}	407.771 { 83}	283.730 {119}	334.904 {101}	190.856 {477}	370.152 { 91}	292.402 {115}	206.200 {163}	339.198 { 99}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.00216	1.3580	.01399	1.3637	.02181	-.01692	.19365	.21904	.05195
Stddev	.00302	.0057	.00036	.0049	.00601	.01968	.00070	.00076	.00192
%RSD	139.72	.41793	2.6054	.36175	27.567	116.32	.36265	.34891	3.6914

#1	.00003	1.3540	.01374	1.3603	.01756	-.03084	.19415	.21850	.05059
#2	.00430	1.3620	.01425	1.3672	.02606	-.00300	.19316	.21959	.05331

Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Int. Std.	Y_2243	Y_3600	Y_3774
Line	224.306 {450}	360.073 { 94}	377.433 { 89}
Units	Cts/S	Cts/S	Cts/S
Avg	2608.6	37290.	1946.4
Stddev	12.9	18.	1.5
%RSD	.49550	.04831	.07471

#1	2599.5	37302.	1947.4
#2	2617.8	37277.	1945.3

Sample Name: 280-82566-A-2-C Acquired: 5/17/2016 22:33:34 Type: Unk

Method: 6500_025(v6) Mode: CONC Corr. Factor: 1.000000

User: CRHOADES Prep Date: Custom ID2: Custom ID3:

Comment: 323702 6010C Q5 soil (B)

Elem	Ag3280	Al3092	As1890	B_2089	Ba4554	Be3130	Bi2230	Ca3179	Cd2288
Line	328.068 {103}	309.271 {109}	189.042 {478}	208.959 {461}	455.403 {74}	313.042 {108}	223.061 {451}	317.933 {106}	228.802 {447}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	k .00069	80.406	k .01461	.06789	.70983	k .00384	k -.01378	^ *****	k .00334
Stddev	.00011	.487	.00220	.00159	.00725	.00020	.01497	----	.00019
%RSD	15.761	.60530	15.066	2.3387	1.0207	5.1023	108.67	----	5.8081

#1	.00077	80.062	.01616	.06902	.70471	.00370	-.02436	1327.2	.00320
#2	k .00061	80.750	k .01305	.06677	.71496	k .00398	k -.00319	^ ----	k .00347

Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Elem	Co2286	Cr2055	Cu3247	Fe2714	K_7664	Li6707	Mg2790	Mn2576	Mo2020
Line	228.616 {447}	205.560 {464}	324.754 {104}	271.441 {124}	766.490 {44}	670.784 {50}	279.079 {121}2	257.610 {131}	202.030 {467}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	k .03640	.10566	k .05259	k 109.90	13.964	.09389	k 53.558	2.2740	k .00438
Stddev	.00122	.00175	.00022	1.23	.082	.00565	.160	.0063	.00024
%RSD	3.3651	1.6567	.42634	1.1231	.58603	6.0143	.29854	.27708	5.4052

#1	.03553	.10689	.05243	109.03	13.907	.08989	53.671	2.2784	.00421
#2	k .03727	.10442	k .05275	k 110.78	14.022	.09788	k 53.445	2.2695	k .00455

Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Elem	Na5895	Ni2316	P_1782	Pb2203	S_1820	Sb2068	Se1960	Si2881	SiO2
Line	589.592 {57}	231.604 {446}	178.284 {489}	220.353 {453}	182.034 {485}	206.833 {463}	196.090 {472}	288.158 {117}	288.158 {117}2
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	2.2337	k .07802	W 2.3439	k .04326	k 12.822	k -.00278	k -.00068	k 12.287	k 26.293
Stddev	.0133	.00747	.0318	.00703	.292	.00525	.00111	.323	.692
%RSD	.59604	9.5754	1.3562	16.242	2.2772	188.95	162.90	2.6315	2.6315

#1	2.2243	.08330	2.3664	.04823	13.029	.00093	-.00146	12.515	26.782
#2	2.2431	k .07274	2.3215	k .03829	k 12.616	k -.00649	k .00010	k 12.058	k 25.804

Check ?	Chk Pass	Chk Pass	Chk Warn	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit			2.0000						
Low Limit			-1.0000						

Elem	Sn1899	Sr4077	Th2837	Ti3349	Ti1908	U_3701	V_2924	Zn2062	Zr3391
Line	189.989 {477}	407.771 {83}	283.730 {119}	334.904 {101}	190.856 {477}	370.152 {91}	292.402 {115}	206.200 {163}	339.198 {99}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	k .00073	k 1.7028	k .05884	k 1.5003	k -.00304	k .00764	k .21773	k .23129	k .05739
Stddev	.00107	.0087	.06257	.0096	.00062	.07499	.00064	.00025	.00671
%RSD	145.52	.50964	106.34	.64097	20.262	980.97	.29208	.11003	11.691

#1	-.00002	1.6967	.01460	1.5071	-.00348	-.04538	.21818	.23111	.06214
#2	k .00149	k 1.7090	k .10309	k 1.4935	k -.00261	k .06067	k .21728	k .23147	k .05265

Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Int. Std.	Y_2243	Y_3600	Y_3774
Line	224.306 {450}	360.073 {94}	377.433 {89}
Units	Cts/S	Cts/S	Cts/S
Avg	2640.3	37094.	1833.4
Stddev	82.7	97.	74.7
%RSD	3.1319	.26226	4.0748

#1	2581.8	37162.	1886.2
#2	2698.8	37025.	1780.6

Sample Name: 280-82566-A-3-C Acquired: 5/17/2016 22:36:11 Type: Unk

Method: 6500_025(v6) Mode: CONC Corr. Factor: 1.000000

User: CRHOADES Prep Date: Custom ID2: Custom ID3:

Comment: 323702 6010C Q5 soil (B)

Elem	Ag3280	Al3092	As1890	B_2089	Ba4554	Be3130	Bi2230	Ca3179	Cd2288
Line	328.068 {103}	309.271 {109}	189.042 {478}	208.959 {461}	455.403 { 74}	313.042 {108}	223.061 {451}	317.933 {106}	228.802 {447}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.00081	76.723	.01065	.06811	.71915	.00397	-.02094	F 1724.6	.00414
Stddev	.00002	.020	.00000	.00066	.00062	.00030	.00200	27.1	.00034
%RSD	2.0560	.02653	.01435	.97455	.08627	7.5296	9.5580	1.5740	8.1455

#1	.00082	76.738	.01065	.06858	.71872	.00418	-.01953	1743.7	.00390
#2	.00080	76.709	.01066	.06764	.71959	.00376	-.02236	1705.4	.00438

Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Fail	Chk Pass
High Limit								1000.0	
Low Limit								-.10000	

Elem	Co2286	Cr2055	Cu3247	Fe2714	K_7664	Li6707	Mg2790	Mn2576	Mo2020
Line	228.616 {447}	205.560 {464}	324.754 {104}	271.441 {124}	766.490 { 44}	670.784 { 50}	279.079 {121}2	257.610 {131}	202.030 {467}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.03359	.10778	.05096	101.87	13.463	.09713	53.743	2.1682	.00470
Stddev	.00005	.00032	.00061	.20	.049	.00491	.078	.0041	.00049
%RSD	.13897	.30140	1.1897	.19621	.36060	5.0520	.14506	.18720	10.479

#1	.03355	.10801	.05054	102.01	13.497	.09366	53.799	2.1711	.00504
#2	.03362	.10755	.05139	101.73	13.428	.10060	53.688	2.1653	.00435

Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Elem	Na5895	Ni2316	P_1782	Pb2203	S_1820	Sb2068	Se1960	Si2881	SiO2
Line	589.592 { 57}	231.604 {446}	178.284 {489}	220.353 {453}	182.034 {485}	206.833 {463}	196.090 {472}	288.158 {117}	288.158 {117}2
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	2.2925	.08346	W 2.2464	.04549	14.789	-.00545	.00253	10.502	22.474
Stddev	.0082	.00137	.0018	.00092	.001	.00277	.00406	.348	.745
%RSD	.35792	1.6442	.08128	2.0152	.00736	50.886	160.33	3.3127	3.3127

#1	2.2983	.08443	2.2451	.04613	14.788	-.00349	.00540	10.748	23.000
#2	2.2867	.08249	2.2477	.04484	14.790	-.00741	-.00034	10.256	21.947

Check ?	Chk Pass	Chk Pass	Chk Warn	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit			2.0000						
Low Limit			-1.0000						

Elem	Sn1899	Sr4077	Th2837	Ti3349	Ti1908	U_3701	V_2924	Zn2062	Zr3391
Line	189.989 {477}	407.771 { 83}	283.730 {119}	334.904 {101}	190.856 {477}	370.152 { 91}	292.402 {115}	206.200 {163}	339.198 { 99}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.00010	2.0281	.01758	1.3523	-.00366	W -.09795	.19651	.25641	.05756
Stddev	.00324	.0008	.00638	.0003	.00104	.05041	.00104	.00066	.00617
%RSD	3102.6	.03781	36.319	.02001	28.292	51.468	.52967	.25604	10.726

#1	.00240	2.0287	.02209	1.3524	-.00293	-.13359	.19725	.25595	.06193
#2	-.00219	2.0276	.01306	1.3521	-.00440	-.06230	.19577	.25688	.05319

Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Warn	Chk Pass	Chk Pass	Chk Pass
High Limit						45.000			
Low Limit						-.05000			

Int. Std.	Y_2243	Y_3600	Y_3774						
Line	224.306 {450}	360.073 { 94}	377.433 { 89}						
Units	Cts/S	Cts/S	Cts/S						
Avg	2594.2	36196.	1910.5						
Stddev	11.5	73.	8.6						
%RSD	.44433	.20253	.45163						

#1	2586.0	36144.	1904.4						
#2	2602.3	36248.	1916.6						

Sample Name: 280-82566-A-4-C Acquired: 5/17/2016 22:39:10 Type: Unk

Method: 6500_025(v6) Mode: CONC Corr. Factor: 1.000000

User: CRHOADES Prep Date: Custom ID2: Custom ID3:

Comment: 323702 6010C Q5 soil (B)

Elem	Ag3280	Al3092	As1890	B_2089	Ba4554	Be3130	Bi2230	Ca3179	Cd2288
Line	328.068 {103}	309.271 {109}	189.042 {478}	208.959 {461}	455.403 {74}	313.042 {108}	223.061 {451}	317.933 {106}	228.802 {447}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.00021	75.989	.01192	.06455	.89635	.00371	-.02241	F 1597.4	.00383
Stddev	.00023	.045	.00199	.00284	.00385	.00009	.00436	37.7	.00019
%RSD	109.96	.05972	16.709	4.4009	.42948	2.5436	19.463	2.3613	5.0376

#1	.00005	75.957	.01333	.06656	.89362	.00364	-.01933	1570.7	.00397
#2	.00037	76.021	.01051	.06254	.89907	.00377	-.02550	1624.1	.00370

Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Fail	Chk Pass
High Limit								1000.0	
Low Limit								-.10000	

Elem	Co2286	Cr2055	Cu3247	Fe2714	K_7664	Li6707	Mg2790	Mn2576	Mo2020
Line	228.616 {447}	205.560 {464}	324.754 {104}	271.441 {124}	766.490 {44}	670.784 {50}	279.079 {121}2	257.610 {131}	202.030 {467}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.03237	.10576	.04936	95.872	13.338	.09340	51.882	2.0727	.00458
Stddev	.00038	.00010	.00095	.701	.069	.00238	.004	.0002	.00056
%RSD	1.1798	.09130	1.9249	.73145	.51670	2.5435	.00844	.00929	12.341

#1	.03264	.10570	.05003	95.377	13.289	.09172	51.879	2.0726	.00418
#2	.03210	.10583	.04869	96.368	13.386	.09508	51.885	2.0729	.00497

Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Elem	Na5895	Ni2316	P_1782	Pb2203	S_1820	Sb2068	Se1960	Si2881	SiO2
Line	589.592 {57}	231.604 {446}	178.284 {489}	220.353 {453}	182.034 {485}	206.833 {463}	196.090 {472}	288.158 {117}	288.158 {117}2
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	2.2680	.08737	W 2.2935	.04711	16.746	-.00920	-.00100	9.2845	19.869
Stddev	.0076	.00192	.0025	.00222	.003	.00261	.01261	.3057	.654
%RSD	.33267	2.1950	.10765	4.7055	.01647	28.332	1256.9	3.2927	3.2927

#1	2.2627	.08872	2.2953	.04867	16.744	-.00736	.00791	9.5006	20.331
#2	2.2734	.08601	2.2918	.04554	16.748	-.01105	-.00992	9.0683	19.406

Check ?	Chk Pass	Chk Pass	Chk Warn	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit			2.0000						
Low Limit			-1.0000						

Elem	Sn1899	Sr4077	Th2837	Ti3349	Ti1908	U_3701	V_2924	Zn2062	Zr3391
Line	189.989 {477}	407.771 {83}	283.730 {119}	334.904 {101}	190.856 {477}	370.152 {91}	292.402 {115}	206.200 {163}	339.198 {99}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	-.00202	1.8949	.01419	1.3172	-.00554	W -.06161	.19500	.27150	.05165
Stddev	.00046	.0141	.00270	.0102	.00460	.00498	.00118	.00137	.00102
%RSD	22.554	.74128	19.002	.77382	83.028	8.0749	.60382	.50368	1.9813

#1	-.00234	1.8849	.01610	1.3244	-.00879	-.06513	.19416	.27053	.05237
#2	-.00170	1.9048	.01228	1.3100	-.00229	-.05809	.19583	.27246	.05092

Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Warn	Chk Pass	Chk Pass	Chk Pass
High Limit						45.000			
Low Limit						-.05000			

Int. Std.	Y_2243	Y_3600	Y_3774
Line	224.306 {450}	360.073 {94}	377.433 {89}
Units	Cts/S	Cts/S	Cts/S
Avg	2592.3	37130.	1895.8
Stddev	84.5	310.	44.3
%RSD	3.2588	.83414	2.3352

#1	2532.6	37350.	1927.1
#2	2652.1	36911.	1864.5

Elem	Ag3280	Al3092	As1890	B_2089	Ba4554	Be3130	Bi2230	Ca3179	Cd2288
Line	328.068 {103}	309.271 {109}	189.042 {478}	208.959 {461}	455.403 {74}	313.042 {108}	223.061 {451}	317.933 {106}	228.802 {447}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.00017	77.709	.01215	.06584	.75569	.00382	-.02006	F 1425.3	.00337
Stddev	.00014	.769	.00524	.00035	.00821	.00004	.00611	16.6	.00016
%RSD	85.611	.98946	43.106	.53302	1.0861	1.1000	30.463	1.1613	4.7685

#1	.00007	78.252	.00845	.06559	.76149	.00379	-.02438	1413.6	.00326
#2	.00027	77.165	.01585	.06608	.74988	.00385	-.01574	1437.0	.00349

Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Fail	Chk Pass
High Limit								1000.0	
Low Limit								-.10000	

Elem	Co2286	Cr2055	Cu3247	Fe2714	K_7664	Li6707	Mg2790	Mn2576	Mo2020
Line	228.616 {447}	205.560 {464}	324.754 {104}	271.441 {124}	766.490 {44}	670.784 {50}	279.079 {121}2	257.610 {131}	202.030 {467}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.03555	.10142	.04826	99.797	13.368	.09152	49.573	2.0026	.00451
Stddev	.00099	.00144	.00043	.284	.124	.00210	.086	.0045	.00030
%RSD	2.7945	1.4207	.90000	.28469	.92784	2.2961	.17407	.22506	6.7297

#1	.03626	.10243	.04857	99.998	13.456	.09301	49.512	1.9994	.00473
#2	.03485	.10040	.04795	99.596	13.280	.09003	49.634	2.0058	.00430

Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Elem	Na5895	Ni2316	P_1782	Pb2203	S_1820	Sb2068	Se1960	Si2881	SiO2
Line	589.592 {57}	231.604 {446}	178.284 {489}	220.353 {453}	182.034 {485}	206.833 {463}	196.090 {472}	288.158 {117}	288.158 {117}2
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	2.1932	.08191	W 3.3437	.04634	10.909	-.00569	-.00309	9.5272	20.388
Stddev	.0089	.00108	.0580	.00070	.278	.00178	.00076	.3075	.658
%RSD	.40648	1.3141	1.7357	1.5159	2.5456	31.202	24.730	3.2272	3.2272

#1	2.1995	.08267	3.3847	.04584	11.105	-.00444	-.00255	9.7447	20.854
#2	2.1869	.08114	3.3026	.04683	10.713	-.00695	-.00363	9.3098	19.923

Check ?	Chk Pass	Chk Pass	Chk Warn	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit			2.0000						
Low Limit			-1.0000						

Elem	Sn1899	Sr4077	Th2837	Ti3349	Ti1908	U_3701	V_2924	Zn2062	Zr3391
Line	189.989 {477}	407.771 {83}	283.730 {119}	334.904 {101}	190.856 {477}	370.152 {91}	292.402 {115}	206.200 {163}	339.198 {99}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.00002	1.8054	.02152	1.4893	-.00290	W -.06659	.19840	.23267	.05277
Stddev	.00040	.0138	.00106	.0001	.00023	.02660	.00146	.00157	.00124
%RSD	2633.0	.76523	4.9264	.01020	7.8227	39.944	.73795	.67407	2.3468

#1	.00030	1.8152	.02077	1.4892	-.00306	-.04778	.19943	.23378	.05190
#2	-.00027	1.7956	.02227	1.4894	-.00274	-.08539	.19736	.23156	.05365

Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Warn	Chk Pass	Chk Pass	Chk Pass
High Limit						45.000			
Low Limit						-.05000			

Int. Std.	Y_2243	Y_3600	Y_3774						
Line	224.306 {450}	360.073 {94}	377.433 {89}						
Units	Cts/S	Cts/S	Cts/S						
Avg	2570.1	36325.	1858.0						
Stddev	34.2	915.	20.3						
%RSD	1.3294	2.5177	1.0911						

#1	2594.3	36972.	1872.3						
#2	2546.0	35679.	1843.6						

Sample Name: 280-82566-A-6-C Acquired: 5/17/2016 22:45:07 Type: Unk

Method: 6500_025(v6) Mode: CONC Corr. Factor: 1.000000

User: CRHOADES Prep Date: Custom ID2: Custom ID3:

Comment: 323702 6010C Q5 soil (B)

Elem	Ag3280	Al3092	As1890	B_2089	Ba4554	Be3130	Bi2230	Ca3179	Cd2288
Line	328.068 {103}	309.271 {109}	189.042 {478}	208.959 {461}	455.403 {74}	313.042 {108}	223.061 {451}	317.933 {106}	228.802 {447}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	-.00040	96.552	.01725	.07925	.90131	.00461	-.02742	F 1803.5	.00520
Stddev	.00063	1.714	.00254	.00137	.01692	.00030	.00183	47.0	.00017
%RSD	157.16	1.7747	14.742	1.7307	1.8778	6.5656	6.6887	2.6044	3.2818

#1	-.00084	97.764	.01905	.07828	.91327	.00482	-.02612	1836.7	.00508
#2	.00004	95.341	.01545	.08022	.88934	.00440	-.02872	1770.3	.00533

Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Fail	Chk Pass
High Limit								1000.0	
Low Limit								-.10000	

Elem	Co2286	Cr2055	Cu3247	Fe2714	K_7664	Li6707	Mg2790	Mn2576	Mo2020
Line	228.616 {447}	205.560 {464}	324.754 {104}	271.441 {124}	766.490 {44}	670.784 {50}	279.079 {121}2	257.610 {131}	202.030 {467}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.04075	.12775	.05914	123.61	16.855	.11473	63.088	2.5467	.00563
Stddev	.00031	.00098	.00039	.73	.159	.00151	.001	.0076	.00046
%RSD	.76762	.76729	.66373	.58879	.94497	1.3137	.00220	.29750	8.1728

#1	.04097	.12706	.05886	124.12	16.967	.11366	63.087	2.5414	.00531
#2	.04053	.12844	.05942	123.09	16.742	.11580	63.089	2.5521	.00596

Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Elem	Na5895	Ni2316	P_1782	Pb2203	S_1820	Sb2068	Se1960	Si2881	SiO2
Line	589.592 {57}	231.604 {446}	178.284 {489}	220.353 {453}	182.034 {485}	206.833 {463}	196.090 {472}	288.158 {117}	288.158 {117}2
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	2.8297	.10223	W 2.8440	.05824	15.127	-.00280	.00772	13.728	29.377
Stddev	.0616	.00016	.0123	.00182	.017	.00674	.00217	1.060	2.268
%RSD	2.1766	.15225	.43385	3.1174	.11155	240.37	28.099	7.7185	7.7185

#1	2.8732	.10212	2.8353	.05953	15.115	.00196	.00619	14.477	30.981
#2	2.7861	.10234	2.8528	.05696	15.139	-.00757	.00925	12.979	27.774

Check ?	Chk Pass	Chk Pass	Chk Warn	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit			2.0000						
Low Limit			-1.0000						

Elem	Sn1899	Sr4077	Th2837	Ti3349	Ti1908	U_3701	V_2924	Zn2062	Zr3391
Line	189.989 {477}	407.771 {83}	283.730 {119}	334.904 {101}	190.856 {477}	370.152 {91}	292.402 {115}	206.200 {163}	339.198 {99}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.00041	2.4999	.01898	1.6964	-.00715	F -.10479	.24750	.27682	.06542
Stddev	.00010	.0387	.00196	.0054	.00222	.04283	.00024	.00337	.00040
%RSD	23.522	1.5495	10.319	.31698	30.992	40.878	.09698	1.2190	.60713

#1	.00034	2.5273	.01760	1.7002	-.00559	-.13507	.24767	.27443	.06514
#2	.00048	2.4725	.02037	1.6926	-.00872	-.07450	.24733	.27920	.06570

Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Fail	Chk Pass	Chk Pass	Chk Pass
High Limit						50.000			
Low Limit						-.10000			

Int. Std.	Y_2243	Y_3600	Y_3774						
Line	224.306 {450}	360.073 {94}	377.433 {89}						
Units	Cts/S	Cts/S	Cts/S						
Avg	2597.9	36595.	1919.8						
Stddev	10.4	234.	71.3						
%RSD	.40187	.63917	3.7152						

#1	2590.5	36760.	1869.4						
#2	2605.3	36430.	1970.3						

Sample Name: CCVH-3883905 Acquired: 5/17/2016 22:48:05 Type: QC
Method: 6500_025(v6) Mode: CONC Corr. Factor: 1.000000
User: CRHOADES Prep Date: Custom ID2: Custom ID3:
Comment:

Elem	Ag3280	Al3092	As1890	B_2089	Ba4554	Be3130	Bi2230	Ca3179	Cd2288	Co2286	Cr2055
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	-.00545	53.117	.00098	.00759	-.00045	-.00016	.96005	.16075	-.00034	-.00116	.00007
Stddev	.00069	.225	.00273	.00009	.00115	.00002	.01398	.02141	.00019	.00024	.00021
%RSD	12.746	.42442	277.91	1.1203	255.75	10.860	1.4565	13.318	54.313	20.739	310.39
#1	-.00496	53.277	-.00095	.00753	.00036	-.00017	.96994	.17589	-.00048	-.00099	.00022
#2	-.00594	52.958	.00292	.00765	-.00126	-.00015	.95016	.14561	-.00021	-.00133	-.00008
Check ?	None	Chk Pass	None	None	None	None	Chk Pass	None	None	None	None
Value											
Range											
Elem	Cu3247	Fe2714	K_7664	Li6707	Mg2790	Mn2576	Mo2020	Na8183	Ni2316	P_1782	Pb2203
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	-.01602	W 55.002	-.12598	-.01040	.01353	-.00190	-.00282	F 282.41	.00121	.00634	-.00096
Stddev	.00027	.108	.02303	.00158	.00137	.00009	.00016	1.92	.00003	.00005	.00389
%RSD	1.6918	.19605	18.278	15.178	10.158	4.9577	5.7289	.67942	2.1256	.73169	403.75
#1	-.01583	54.926	-.14226	-.00928	.01450	-.00184	-.00294	283.77	.00120	.00637	.00179
#2	-.01621	55.078	-.10970	-.01151	.01256	-.00197	-.00271	281.05	.00123	.00630	-.00372
Check ?	None	Chk Warn	None	None	None	None	None	Chk Fail	None	None	None
Value		50.000						250.00			
Range		10.000%						10.490%			
Elem	S_1820	Sb2068	Se1960	Si2881	SiO2	Sn1899	Sr4077	Th2837	Ti3349	Ti1908	U_3701
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	5.0230	-.01567	-.00587	-.06686	-.14307	-.00056	.00025	W 4.5943	.00152	-.00479	9.5280
Stddev	.0644	.00151	.00499	.02066	.04421	.00019	.00018	.0112	.00041	.00102	.0665
%RSD	1.2814	9.6441	84.976	30.901	30.901	34.088	70.579	.24382	26.818	21.282	.69752
#1	5.0685	-.01460	-.00940	-.05225	-.11181	-.00043	.00013	4.6022	.00123	-.00551	9.5750
#2	4.9775	-.01673	-.00234	-.08147	-.17434	-.00070	.00038	4.5863	.00181	-.00407	9.4810
Check ?	Chk Pass	None	None	None	None	None	None	Chk Warn	None	None	Chk Pass
Value								5.0000			
Range								-5.0000%			
Elem	V_2924	Zn2062	Zr3391								
Units	ppm	ppm	ppm								
Avg	.01216	.00085	-.13345								
Stddev	.00069	.00032	.00276								
%RSD	5.6780	37.139	2.0655								
#1	.01265	.00063	-.13150								
#2	.01167	.00108	-.13540								
Check ?	None	None	None								
Value											
Range											
Int. Std.	Y_2243	Y_3600	Y_3774								
Units	Cts/S	Cts/S	Cts/S								
Avg	2560.3	37774.	1771.2								
Stddev	1.1	669.	53.3								
%RSD	.04442	1.7720	3.0095								
#1	2561.1	37301.	1733.5								
#2	2559.5	38248.	1808.9								

Sample Name: CCV-3888422 Acquired: 5/17/2016 22:50:42 Type: QC
Method: 6500_025(v6) Mode: CONC Corr. Factor: 1.000000
User: CRHOADES Prep Date: Custom ID2: Custom ID3:
Comment:

Elem	Ag3280	Al1670	As1890	B_2089	Ba4554	Be3130	Bi2230	Ca3179	Cd2288	Co2286	Cr2055
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.47898	.47190	.90376	.48279	.47138	.48927	-.00072	4.7723	.49292	.49202	.50249
Stddev	.00080	.00077	.00491	.00882	.00392	.00541	.00049	.0526	.01257	.01094	.01275
%RSD	.16800	.16257	.54292	1.8259	.83235	1.1058	68.950	1.1022	2.5500	2.2228	2.5376
#1	.47955	.47136	.90029	.47656	.47416	.49310	-.00107	4.8095	.48404	.48429	.49348
#2	.47841	.47245	.90723	.48903	.46861	.48545	-.00037	4.7352	.50181	.49975	.51151
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	None	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Value											
Range											
Elem	Cu3247	Fe2599	K_7664	Li6707	Mg2790	Mn2576	Mo2020	Na5895	Ni2316	P_1782	Pb2203
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	W .44989	2.5051	47.645	.95680	18.525	.45129	.49041	5.2453	.47905	.95138	.97169
Stddev	.00043	.0400	.389	.00719	.018	.00123	.01047	.0938	.01153	.02267	.02386
%RSD	.09489	1.5953	.81724	.75152	.09836	.27172	2.1348	1.7888	2.4067	2.3831	2.4553
#1	.44959	2.5334	47.921	.96188	18.512	.45042	.48301	5.3116	.47090	.93535	.95482
#2	.45019	2.4769	47.370	.95172	18.538	.45216	.49781	5.1790	.48720	.96741	.98856
Check ?	Chk Warn	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Value	.50000										
Range	-10.000%										
Elem	S_1820	Sb2068	Se1960	Si2881	SiO2	Sn1899	Sr4077	Th2837	Ti3349	Ti1908	U_3701
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	-.07207	.95714	F .89324	4.9563	10.606	.98848	.48838	.00017	F .44511	.99702	.00920
Stddev	.00212	.02168	.02446	.0230	.049	.02292	.00565	.00120	.00071	.02461	.02162
%RSD	2.9355	2.2648	2.7379	.46362	.46362	2.3188	1.1568	724.58	.16015	2.4679	234.88
#1	-.07357	.94182	.87595	4.9400	10.572	.97227	.49238	.00101	.44461	.97962	-.00608
#2	-.07058	.97247	.91053	4.9725	10.641	1.0047	.48439	-.00068	.44561	1.0144	.02449
Check ?	None	Chk Pass	Chk Fail	Chk Pass	Chk Pass	Chk Pass	Chk Pass	None	Chk Fail	Chk Pass	None
Value			1.0000						.50000		
Range			-10.490%						-10.490%		
Elem	V_2924	Zn2062	Zr3391								
Units	ppm	ppm	ppm								
Avg	.47451	F .44594	.47210								
Stddev	.00113	.00114	.00838								
%RSD	.23749	.25652	1.7748								
#1	.47371	.44513	.46618								
#2	.47531	.44675	.47803								
Check ?	Chk Pass	Chk Fail	Chk Pass								
Value		.50000									
Range		-10.490%									
Int. Std.	Y_2243	Y_3600	Y_3774								
Units	Cts/S	Cts/S	Cts/S								
Avg	2597.6	37941.	1849.1								
Stddev	10.2	353.	.3								
%RSD	.39114	.93138	.01486								
#1	2590.4	38191.	1849.2								
#2	2604.8	37691.	1848.9								

Sample Name: CCB Acquired: 5/17/2016 22:53:14 Type: QC
Method: 6500_025(v6) Mode: CONC Corr. Factor: 1.000000
User: CRHOADES Prep Date: Custom ID2: Custom ID3:
Comment:

Elem	Ag3280	Al1670	As1890	B_2089	Ba4554	Be3130	Bi2230	Ca3179	Cd2288	Co2286	Cr2055
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.00147	.00230	.00289	.00474	-.00079	-.00011	-.00494	.03272	.00006	-.00012	-.00109
Stddev	.00015	.00004	.00426	.00024	.00055	.00045	.00278	.02065	.00008	.00005	.00023
%RSD	9.8983	1.5737	147.26	5.0437	69.988	424.96	56.330	63.106	144.13	42.337	20.710

#1	.00137	.00227	-.00012	.00457	-.00118	-.00043	-.00297	.01812	.00000	-.00016	-.00093
#2	.00157	.00232	.00591	.00491	-.00040	.00021	-.00690	.04733	.00011	-.00009	-.00125

Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit											
Low Limit											

Elem	Cu3247	Fe2599	K_7664	Li6707	Mg2790	Mn2576	Mo2020	Na5895	Ni2316	P_1782	Pb2203
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	-.00041	.01590	-.08416	F -.01104	.00161	.00040	.00042	.00031	-.00004	.00158	-.00131
Stddev	.00019	.00080	.07404	.00276	.00169	.00001	.00069	.02057	.00037	.00123	.00062
%RSD	47.401	5.0350	87.971	25.044	104.74	3.0386	164.74	6658.4	952.33	77.541	47.205

#1	-.00027	.01533	-.03181	-.01299	.00042	.00039	-.00007	-.01424	.00022	.00245	-.00174
#2	-.00055	.01646	-.13651	-.00908	.00281	.00040	.00090	.01486	-.00030	.00072	-.00087

Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Fail	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit				.01000							
Low Limit				-.01000							

Elem	S_1820	Sb2068	Se1960	Si2881	SiO2	Sn1899	Sr4077	Th2837	Ti3349	Ti1908	U_3701
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	-.07288	.00011	-.00614	-.05498	-.11765	-.00126	-.00001	-.00158	.00011	.00162	.01362
Stddev	.00688	.00492	.00662	.04296	.09193	.00156	.00022	.00070	.00024	.00176	.01722
%RSD	9.4352	4599.5	107.85	78.132	78.132	123.79	1457.0	44.273	215.70	109.03	126.40

#1	-.07774	-.00337	-.00146	-.08535	-.18266	-.00236	-.00017	-.00208	-.00006	.00037	.02580
#2	-.06802	.00358	-.01082	-.02460	-.05265	-.00016	.00014	-.00109	.00028	.00286	.00145

Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit											
Low Limit											

Elem	V_2924	Zn2062	Zr3391
Units	ppm	ppm	ppm
Avg	-.00011	-.00064	-.00202
Stddev	.00023	.00014	.00264
%RSD	215.38	22.135	131.06

#1	.00006	-.00074	-.00015
#2	-.00027	-.00054	-.00389

Check ?	Chk Pass	Chk Pass	Chk Pass
High Limit			
Low Limit			

Int. Std.	Y_2243	Y_3600	Y_3774
Units	Cts/S	Cts/S	Cts/S
Avg	2600.0	38249.	1782.3
Stddev	6.6	910.	4.5
%RSD	.25375	2.3782	.25165

#1	2595.3	37606.	1779.1
#2	2604.7	38892.	1785.5

Sample Name: CCVL-3894681 Acquired: 5/17/2016 22:55:36 Type: QC
Method: 6500_025(v6) Mode: CONC Corr. Factor: 1.000000
User: CRHOADES Prep Date: Custom ID2: Custom ID3:
Comment:

Elem	Ag3280	Al1670	As1890	B_2089	Ba4554	Be3130	Bi2230	Ca3179	Cd2288	Co2286	Cr2055
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.01166	.09813	.01451	.10145	.00907	.00094	.10294	.21111	.00538	.01003	.00941
Stddev	.00109	.00012	.00474	.00011	.00063	.00006	.00423	.00188	.00026	.00053	.00022
%RSD	9.3388	.11893	32.657	.11265	6.9920	6.1872	4.1116	.88839	4.8233	5.2828	2.2998
#1	.01089	.09821	.01116	.10153	.00862	.00098	.09995	.20978	.00520	.01040	.00957
#2	.01243	.09804	.01785	.10137	.00952	.00090	.10594	.21243	.00556	.00965	.00926
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Value											
Range											
Elem	Cu3247	Fe2599	K_7664	Li6707	Mg2790	Mn2576	Mo2020	Na5895	Ni2316	P_1782	Pb2203
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.01339	.11582	2.9161	F -.00035	.19144	.00940	.01878	1.0443	.04034	2.9228	.00852
Stddev	.00102	.00202	.0693	.00179	.00541	.00007	.00046	.0252	.00086	.0606	.00212
%RSD	7.6111	1.7438	2.3756	506.77	2.8251	.75951	2.4567	2.4113	2.1302	2.0724	24.834
#1	.01267	.11725	2.9651	.00091	.19526	.00935	.01846	1.0265	.03974	2.8800	.00702
#2	.01411	.11439	2.8672	-.00162	.18761	.00946	.01911	1.0621	.04095	2.9656	.01002
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Fail	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Value				.01000							
Range				-30.000%							
Elem	S_1820	Sb2068	Se1960	Si2881	SiO2	Sn1899	Sr4077	Th2837	Ti3349	Ti1908	U_3701
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	-.08056	.01453	F .00708	.48865	1.0457	.10346	.01001	.01562	.00927	.01216	F .09279
Stddev	.01434	.00697	.00073	.01320	.0282	.00122	.00008	.00065	.00040	.00130	.03725
%RSD	17.800	47.959	10.338	2.7010	2.7010	1.1833	.84252	4.1572	4.2978	10.720	40.144
#1	-.07042	.01946	.00656	.49798	1.0657	.10259	.00995	.01516	.00899	.01123	.11913
#2	-.09070	.00960	.00759	.47931	1.0257	.10432	.01007	.01608	.00955	.01308	.06645
Check ?	None	Chk Pass	Chk Fail	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Fail
Value			.01500								.06000
Range			-30.000%								30.000%
Elem	V_2924	Zn2062	Zr3391								
Units	ppm	ppm	ppm								
Avg	.00941	.01849	.01237								
Stddev	.00066	.00075	.00029								
%RSD	6.9620	4.0716	2.3147								
#1	.00988	.01796	.01217								
#2	.00895	.01902	.01258								
Check ?	Chk Pass	Chk Pass	Chk Pass								
Value											
Range											
Int. Std.	Y_2243	Y_3600	Y_3774								
Units	Cts/S	Cts/S	Cts/S								
Avg	2635.8	38913.	1800.5								
Stddev	.4	697.	8.6								
%RSD	.01392	1.7902	.47796								
#1	2636.1	38421.	1806.6								
#2	2635.6	39406.	1794.4								

Elem	Ag3280	Al3092	As1890	B_2089	Ba4554	Be3130	Bi2230	Ca3179	Cd2288
Line	328.068 {103}	309.271 {109}	189.042 {478}	208.959 {461}	455.403 {74}	313.042 {108}	223.061 {451}	317.933 {106}	228.802 {447}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	-.00027	81.287	.01600	.06533	1.7883	.00390	-.02416	F 1735.2	.00494
Stddev	.00066	.417	.00129	.00052	.0116	.00029	.00265	53.6	.00022
%RSD	247.37	.51282	8.0332	.79913	.64705	7.3440	10.953	3.0897	4.3554

#1	.00020	81.581	.01509	.06570	1.7965	.00411	-.02603	1773.1	.00509
#2	-.00074	80.992	.01690	.06496	1.7801	.00370	-.02229	1697.3	.00479

Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Fail	Chk Pass
High Limit								1000.0	
Low Limit								-.10000	

Elem	Co2286	Cr2055	Cu3247	Fe2714	K_7664	Li6707	Mg2790	Mn2576	Mo2020
Line	228.616 {447}	205.560 {464}	324.754 {104}	271.441 {124}	766.490 {44}	670.784 {50}	279.079 {121}2	257.610 {131}	202.030 {467}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.03426	.11635	.05359	109.91	14.288	.09791	51.914	2.7306	.00862
Stddev	.00028	.00028	.00004	1.12	.049	.00212	.095	.0005	.00006
%RSD	.81448	.24477	.07847	1.0173	.34173	2.1676	.18316	.01927	.73883

#1	.03407	.11615	.05356	110.70	14.322	.09641	51.981	2.7302	.00867
#2	.03446	.11655	.05362	109.12	14.253	.09941	51.846	2.7309	.00858

Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Elem	Na5895	Ni2316	P_1782	Pb2203	S_1820	Sb2068	Se1960	Si2881	SiO2
Line	589.592 {57}	231.604 {446}	178.284 {489}	220.353 {453}	182.034 {485}	206.833 {463}	196.090 {472}	288.158 {117}	288.158 {117}2
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	2.3156	.09347	W 2.4185	.05448	10.604	-.00796	.01324	11.788	25.226
Stddev	.0113	.00081	.0110	.00320	.050	.00233	.00220	.731	1.564
%RSD	.48805	.87095	.45363	5.8720	.47153	29.275	16.588	6.2011	6.2011

#1	2.3236	.09405	2.4263	.05674	10.640	-.00631	.01479	12.305	26.332
#2	2.3076	.09290	2.4108	.05222	10.569	-.00961	.01168	11.271	24.120

Check ?	Chk Pass	Chk Pass	Chk Warn	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit			2.0000						
Low Limit			-1.0000						

Elem	Sn1899	Sr4077	Th2837	Ti3349	Ti1908	U_3701	V_2924	Zn2062	Zr3391
Line	189.989 {477}	407.771 {83}	283.730 {119}	334.904 {101}	190.856 {477}	370.152 {91}	292.402 {115}	206.200 {163}	339.198 {99}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.00092	2.1188	.01461	1.4216	-.00054	.03245	.22389	.25426	.05412
Stddev	.00197	.0176	.00157	.0089	.00088	.03868	.00086	.00021	.00344
%RSD	213.55	.83242	10.729	.62517	164.59	119.20	.38350	.08280	6.3577

#1	-.00047	2.1313	.01350	1.4154	.00009	.05980	.22449	.25411	.05655
#2	.00231	2.1063	.01572	1.4279	-.00116	.00510	.22328	.25441	.05169

Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Int. Std.	Y_2243	Y_3600	Y_3774						
Line	224.306 {450}	360.073 {94}	377.433 {89}						
Units	Cts/S	Cts/S	Cts/S						
Avg	2515.6	36052.	1872.0						
Stddev	19.7	585.	8.2						
%RSD	.78344	1.6221	.43615						

#1	2529.5	36466.	1877.7						
#2	2501.7	35639.	1866.2						

Sample Name: 280-82566-A-7-C SD@5 Acquired: 5/17/2016 23:01:16 Type: Unk
Method: 6500_025(v6) Mode: CONC Corr. Factor: 1.000000
User: CRHOADES Prep Date: Custom ID2: Custom ID3:
Comment: 323702 6010C Q5 soil (B)

Elem	Ag3280	Al3092	As1890	B_2089	Ba4554	Be3130	Bi2230	Ca3179	Cd2288
Line	328.068 {103}	309.271 {109}	189.042 {478}	208.959 {461}	455.403 {74}	313.042 {108}	223.061 {451}	317.933 {106}	228.802 {447}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.00165	16.691	.00289	.01514	.36849	.00055	-.00196	382.85	.00123
Stddev	.00047	.291	.00327	.00108	.00600	.00022	.00027	5.40	.00010
%RSD	28.583	1.7446	113.23	7.1480	1.6280	39.583	13.925	1.4097	7.9945

#1	.00199	16.897	.00520	.01590	.37274	.00070	-.00216	386.66	.00130
#2	.00132	16.485	.00058	.01437	.36425	.00039	-.00177	379.03	.00116

Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Elem	Co2286	Cr2055	Cu3247	Fe2599	K_7664	Li6707	Mg2790	Mn2576	Mo2020
Line	228.616 {447}	205.560 {464}	324.754 {104}	259.940 {130}	766.490 {44}	670.784 {50}	279.079 {121}2	257.610 {131}	202.030 {467}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.00676	.02368	.01096	21.399	2.7321	.01289	11.136	.56747	-.00033
Stddev	.00033	.00199	.00036	.276	.0717	.00032	.008	.00018	.00047
%RSD	4.8707	8.4060	3.2904	1.2890	2.6235	2.4446	.07566	.03195	140.40

#1	.00699	.02508	.01070	21.594	2.7828	.01267	11.130	.56734	.00000
#2	.00652	.02227	.01121	21.204	2.6814	.01311	11.142	.56760	-.00066

Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Elem	Na5895	Ni2316	P_1782	Pb2203	S_1820	Sb2068	Se1960	Si2881	SiO2
Line	589.592 {57}	231.604 {446}	178.284 {489}	220.353 {453}	182.034 {485}	206.833 {463}	196.090 {472}	288.158 {117}	288.158 {117}2
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.43509	.01946	.47814	.01075	1.9939	-.00866	W -.00851	2.1669	4.6371
Stddev	.01913	.00108	.02993	.00027	.0846	.00381	.00122	.0793	.1698
%RSD	4.3974	5.5484	6.2598	2.5118	4.2427	44.028	14.328	3.6615	3.6615

#1	.44861	.02022	.49930	.01094	2.0537	-.00596	-.00765	2.2230	4.7572
#2	.42156	.01869	.45697	.01056	1.9341	-.01136	-.00938	2.1108	4.5170

Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Warn	Chk Pass	Chk Pass
High Limit							5.0000		
Low Limit							-.00500		

Elem	Sn1899	Sr4077	Th2837	Ti3349	Ti1908	U_3701	V_2924	Zn2062	Zr3391
Line	189.989 {477}	407.771 {83}	283.730 {119}	334.904 {101}	190.856 {477}	370.152 {91}	292.402 {115}	206.200 {163}	339.198 {99}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	-.00056	.43821	.00691	.29130	-.00090	.00574	.04475	.05345	.01284
Stddev	.00170	.00598	.00170	.00357	.00095	.04082	.00011	.00094	.00076
%RSD	301.89	1.3651	24.596	1.2258	104.76	710.63	.25574	1.7633	5.8799

#1	-.00177	.44244	.00571	.29383	-.00157	.03461	.04483	.05412	.01338
#2	.00064	.43398	.00811	.28878	-.00023	-.02312	.04467	.05279	.01231

Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Int. Std.	Y_2243	Y_3600	Y_3774
Line	224.306 {450}	360.073 {94}	377.433 {89}
Units	Cts/S	Cts/S	Cts/S
Avg	2670.5	36511.	1725.0
Stddev	196.7	1029.	22.5
%RSD	7.3650	2.8175	1.3045

#1	2531.5	37238.	1740.9
#2	2809.6	35783.	1709.1

Sample Name: 280-82566-A-7-D MS Acquired: 5/17/2016 23:03:53 Type: Unk
Method: 6500_025(v6) Mode: CONC Corr. Factor: 1.000000
User: CRHOADES Prep Date: Custom ID2: Custom ID3:
Comment: 323702 6010C Q5 soil (B)

Elem	Ag3280	Al3092	As1890	B_2089	Ba4554	Be3130	Bi2230	Ca3179	Cd2288
Line	328.068 {103}	309.271 {109}	189.042 {478}	208.959 {461}	455.403 { 74}	313.042 {108}	223.061 {451}	317.933 {106}	228.802 {447}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.04412	117.25	.86292	.93382	2.4758	.04971	F 1.7392	F 1505.9	.09417
Stddev	.00014	.34	.00297	.00033	.0045	.00020	.0153	89.8	.00012
%RSD	.32441	.28639	.34410	.03576	.18028	.41071	.88173	5.9616	.13150

#1	.04401	117.02	.86502	.93406	2.4726	.04956	1.7500	1442.4	.09409
#2	.04422	117.49	.86082	.93359	2.4789	.04985	1.7283	1569.4	.09426

Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Fail	Chk Fail	Chk Pass
High Limit							.10000	1000.0	
Low Limit							-.10000	-.10000	

Elem	Co2286	Cr2055	Cu3247	Fe2714	K_7664	Li6707	Mg2790	Mn2576	Mo2020
Line	228.616 {447}	205.560 {464}	324.754 {104}	271.441 {124}	766.490 { 44}	670.784 { 50}	279.079 {121}2	257.610 {131}	202.030 {467}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.44195	.30027	.24872	104.86	69.815	1.0172	93.086	2.4387	.91123
Stddev	.00029	.00086	.00250	.42	.285	.0020	.302	.0055	.00102
%RSD	.06549	.28501	1.0040	.40065	.40759	.19610	.32413	.22693	.11164

#1	.44175	.29966	.24696	104.56	69.613	1.0158	92.873	2.4348	.91195
#2	.44216	.30087	.25049	105.15	70.016	1.0186	93.300	2.4426	.91051

Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Elem	Na8183	Ni2316	P_1782	Pb2203	S_1820	Sb2068	Se1960	Si2881	SiO2
Line	818.326 { 41}	231.604 {446}	178.284 {489}	220.353 {453}	182.034 {485}	206.833 {463}	196.090 {472}	288.158 {117}	288.158 {117}2
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	58.457	.47826	W 11.250	.45455	12.995	.29233	1.6866	13.241	28.335
Stddev	.529	.00152	.110	.00287	.058	.00115	.0474	.027	.058
%RSD	.90503	.31883	.97554	.63218	.44564	.39353	2.8132	.20640	.20640

#1	58.082	.47718	11.328	.45252	13.036	.29314	1.7201	13.221	28.294
#2	58.831	.47934	11.173	.45658	12.954	.29152	1.6530	13.260	28.377

Check ?	Chk Pass	Chk Pass	Chk Warn	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit			2.0000						
Low Limit			-1.0000						

Elem	Sn1899	Sr4077	Th2837	Ti3349	Ti1908	U_3701	V_2924	Zn2062	Zr3391
Line	189.989 {477}	407.771 { 83}	283.730 {119}	334.904 {101}	190.856 {477}	370.152 { 91}	292.402 {115}	206.200 {163}	339.198 { 99}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	1.6932	2.8148	.88201	2.8523	1.3448	1.6223	.65028	.59936	.47518
Stddev	.0205	.0098	.00397	.0139	.0746	.0845	.00208	.00202	.00060
%RSD	1.2092	.34883	.45055	.48834	5.5441	5.2082	.31971	.33649	.12723

#1	1.7077	2.8078	.88482	2.8425	1.3975	1.5626	.64881	.60079	.47560
#2	1.6787	2.8217	.87920	2.8622	1.2921	1.6820	.65175	.59794	.47475

Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Int. Std.	Y_2243	Y_3600	Y_3774						
Line	224.306 {450}	360.073 { 94}	377.433 { 89}						
Units	Cts/S	Cts/S	Cts/S						
Avg	2480.6	35839.	1861.2						
Stddev	51.0	191.	24.2						
%RSD	2.0543	.53275	1.2977						

#1	2516.6	35974.	1878.3						
#2	2444.6	35704.	1844.2						

Sample Name: 280-82566-A-7-E MSD Acquired: 5/17/2016 23:06:41 Type: Unk
Method: 6500_025(v6) Mode: CONC Corr. Factor: 1.000000
User: CRHOADES Prep Date: Custom ID2: Custom ID3:
Comment: 323702 6010C Q5 soil (B)

Elem	Ag3280	Al3092	As1890	B_2089	Ba4554	Be3130	Bi2230	Ca3179	Cd2288
Line	328.068 {103}	309.271 {109}	189.042 {478}	208.959 {461}	455.403 {74}	313.042 {108}	223.061 {451}	317.933 {106}	228.802 {447}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.04429	.97.024	.84892	.89966	.2.4314	.04748	F 1.7058	F 2045.8	.09277
Stddev	.00024	.988	.00211	.00116	.0220	.00056	.0057	105.8	.00024
%RSD	.54034	1.0187	.24811	.12852	.90455	1.1866	.33661	5.1710	.25557

#1	.04446	97.723	.85041	.90047	2.4470	.04787	1.7099	2120.6	.09260
#2	.04412	96.326	.84743	.89884	2.4159	.04708	1.7018	1971.0	.09294

Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Fail	Chk Fail	Chk Pass
High Limit							.10000	1000.0	
Low Limit							-.10000	-.10000	

Elem	Co2286	Cr2055	Cu3247	Fe2714	K_7664	Li6707	Mg2790	Mn2576	Mo2020
Line	228.616 {447}	205.560 {464}	324.754 {104}	271.441 {124}	766.490 {44}	670.784 {50}	279.079 {121}2	257.610 {131}	202.030 {467}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.42329	.28735	.23653	.106.13	.65.072	.98460	.83.525	.2.7664	.89961
Stddev	.00038	.00136	.00046	1.41	.520	.00916	.023	.0018	.00631
%RSD	.08888	.47398	.19533	1.3269	.79968	.92996	.02741	.06569	.70183

#1	.42302	.28831	.23620	107.12	65.440	.99108	83.541	2.7677	.90408
#2	.42355	.28639	.23685	105.13	64.704	.97813	83.509	2.7651	.89515

Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Elem	Na8183	Ni2316	P_1782	Pb2203	S_1820	Sb2068	Se1960	Si2881	SiO2
Line	818.326 {41}	231.604 {446}	178.284 {489}	220.353 {453}	182.034 {485}	206.833 {463}	196.090 {472}	288.158 {117}	288.158 {117}2
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.56.748	.46228	W 11.477	.43723	.8.7510	.31081	.1.6910	.11.301	.24.185
Stddev	1.061	.00217	.030	.00305	.0463	.00772	.0077	.004	.008
%RSD	1.8688	.46995	.26386	.69667	.52915	2.4831	.45580	.03415	.03415

#1	57.498	.46382	11.498	.43938	8.7837	.31627	1.6964	11.304	24.191
#2	55.998	.46075	11.456	.43508	8.7182	.30535	1.6855	11.299	24.179

Check ?	Chk Pass	Chk Pass	Chk Warn	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit			2.0000						
Low Limit			-1.0000						

Elem	Sn1899	Sr4077	Th2837	Ti3349	Ti1908	U_3701	V_2924	Zn2062	Zr3391
Line	189.989 {477}	407.771 {83}	283.730 {119}	334.904 {101}	190.856 {477}	370.152 {91}	292.402 {115}	206.200 {163}	339.198 {99}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.1.6552	.2.7245	.86244	.2.4664	.1.3670	.1.6084	.60416	.59435	.46022
Stddev	.0094	.0268	.00351	.0120	.0367	.0072	.00026	.00289	.00040
%RSD	.56723	.98246	.40698	.48752	2.6821	.44901	.04233	.48654	.08708

#1	1.6486	2.7435	.86492	2.4749	1.3929	1.6033	.60434	.59640	.45994
#2	1.6619	2.7056	.85996	2.4579	1.3411	1.6135	.60398	.59231	.46051

Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Int. Std.	Y_2243	Y_3600	Y_3774						
Line	224.306 {450}	360.073 {94}	377.433 {89}						
Units	Cts/S	Cts/S	Cts/S						
Avg	.2514.3	.35952.	.1867.6						
Stddev	10.0	174.	80.0						
%RSD	.39937	.48447	4.2818						

#1	2507.2	36075.	1811.0						
#2	2521.4	35829.	1924.1						

Sample Name: 280-82566-A-7-C PDS Acquired: 5/17/2016 23:09:32 Type: Unk
Method: 6500_025(v6) Mode: CONC Corr. Factor: 1.000000
User: CRHOADES Prep Date: Custom ID2: Custom ID3:
Comment: 323702 6010C Q5 soil (B)

Elem	Ag3280	Al3092	As1890	B_2089	Ba4554	Be3130	Bi2230	Ca3179	Cd2288
Line	328.068 {103}	309.271 {109}	189.042 {478}	208.959 {461}	455.403 {74}	313.042 {108}	223.061 {451}	317.933 {106}	228.802 {447}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.02857	81.273	.19514	.14841	1.8436	.04882	-.01851	F 1708.0	.05059
Stddev	.00003	.272	.00881	.00112	.0019	.00009	.00396	62.9	.00087
%RSD	.09351	.33440	4.5133	.75277	.10221	.18669	21.389	3.6807	1.7240

#1	.02859	81.465	.20137	.14762	1.8449	.04876	-.01571	1663.6	.04998
#2	.02855	81.081	.18891	.14920	1.8423	.04889	-.02131	1752.5	.05121

Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Fail	Chk Pass
High Limit								1000.0	
Low Limit								-.10000	

Elem	Co2286	Cr2055	Cu3247	Fe2714	K_7664	Li6707	Mg2790	Mn2576	Mo2020
Line	228.616 {447}	205.560 {464}	324.754 {104}	271.441 {124}	766.490 {44}	670.784 {50}	279.079 {121}2	257.610 {131}	202.030 {467}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.07354	.15611	.09087	109.57	33.571	.18683	66.879	2.7122	.05580
Stddev	.00072	.00205	.00060	.75	.023	.00428	.073	.0023	.00195
%RSD	.98431	1.3122	.66299	.68809	.06762	2.2886	.10954	.08371	3.4950

#1	.07303	.15466	.09045	110.10	33.587	.18381	66.827	2.7106	.05442
#2	.07405	.15755	.09130	109.04	33.555	.18985	66.930	2.7138	.05718

Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Elem	Na8183	Ni2316	P_1782	Pb2203	S_1820	Sb2068	Se1960	Si2881	SiO2
Line	818.326 {41}	231.604 {446}	178.284 {489}	220.353 {453}	182.034 {485}	206.833 {463}	196.090 {472}	288.158 {117}	288.158 {117}2
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	26.311	.12926	W 4.1878	.13458	10.385	.08741	.17957	18.404	39.385
Stddev	.307	.00157	.0554	.00328	.104	.00032	.00412	.152	.326
%RSD	1.1657	1.2184	1.3237	2.4371	1.0028	.36190	2.2926	.82734	.82734

#1	26.527	.12815	4.1486	.13226	10.311	.08763	.17666	18.512	39.616
#2	26.094	.13037	4.2270	.13690	10.459	.08719	.18248	18.297	39.155

Check ?	Chk Pass	Chk Pass	Chk Warn	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit			2.0000						
Low Limit			-1.0000						

Elem	Sn1899	Sr4077	Th2837	Ti3349	Ti1908	U_3701	V_2924	Zn2062	Zr3391
Line	189.989 {477}	407.771 {83}	283.730 {119}	334.904 {101}	190.856 {477}	370.152 {91}	292.402 {115}	206.200 {163}	339.198 {99}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.08164	2.1279	.19454	1.4653	.13119	.35163	.26269	.39901	.09646
Stddev	.00003	.0062	.00364	.0104	.00642	.04133	.00027	.00459	.00030
%RSD	.03152	.29023	1.8733	.71263	4.8923	11.755	.10439	1.1511	.31032

#1	.08166	2.1322	.19197	1.4727	.13573	.32240	.26289	.39577	.09625
#2	.08162	2.1235	.19712	1.4579	.12666	.38086	.26250	.40226	.09667

Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Int. Std.	Y_2243	Y_3600	Y_3774						
Line	224.306 {450}	360.073 {94}	377.433 {89}						
Units	Cts/S	Cts/S	Cts/S						
Avg	2581.0	35311.	1861.8						
Stddev	5.0	563.	5.9						
%RSD	.19467	1.5942	.31765						

#1	2577.4	35709.	1866.0						
#2	2584.5	34913.	1857.6						

Sample Name: CCVH-3883905 Acquired: 5/17/2016 23:12:27 Type: QC
Method: 6500_025(v6) Mode: CONC Corr. Factor: 1.000000
User: CRHOADES Prep Date: Custom ID2: Custom ID3:
Comment:

Elem	Ag3280	Al3092	As1890	B_2089	Ba4554	Be3130	Bi2230	Ca3179	Cd2288	Co2286	Cr2055
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	-.00547	51.749	.00036	.00759	-.00073	.00002	.96457	.14457	-.00014	-.00119	-.00006
Stddev	.00014	.523	.00772	.00075	.00043	.00017	.00813	.01316	.00058	.00056	.00003
%RSD	2.5872	1.0111	2156.8	9.8363	58.433	1054.6	.84334	9.1043	417.20	47.279	42.673

#1	-.00537	52.119	-.00510	.00706	-.00104	-.00011	.97032	.15388	-.00055	-.00079	-.00004
#2	-.00557	51.379	.00582	.00812	-.00043	.00014	.95882	.13526	.00027	-.00158	-.00008

Check ?	None	Chk Pass	None	None	None	None	Chk Pass	None	None	None	None
Value											
Range											

Elem	Cu3247	Fe2714	K_7664	Li6707	Mg2790	Mn2576	Mo2020	Na8183	Ni2316	P_1782	Pb2203
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	-.01626	54.750	-.20516	-.01124	.01975	-.00199	-.00113	F 280.45	.00155	.01011	-.00116
Stddev	.00080	.492	.14501	.00018	.00288	.00015	.00065	.16	.00035	.00596	.00053
%RSD	4.9376	.89847	70.683	1.6331	14.578	7.7737	57.119	.05577	22.713	58.881	45.776

#1	-.01570	55.098	-.30770	-.01137	.02179	-.00188	-.00159	280.34	.00130	.00590	-.00078
#2	-.01683	54.402	-.10262	-.01111	.01772	-.00210	-.00068	280.56	.00180	.01433	-.00153

Check ?	None	Chk Pass	None	None	None	None	None	Chk Fail	None	None	None
Value								250.00			
Range								10.490%			

Elem	S_1820	Sb2068	Se1960	Si2881	SiO2	Sn1899	Sr4077	Th2837	Ti3349	Ti1908	U_3701
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	5.1235	-.01504	-.00229	-.00071	-.00152	-.00088	.00038	W 4.5884	.00204	.00315	W 9.3919
Stddev	.0010	.00387	.00640	.00474	.01014	.00011	.00005	.0027	.00123	.00390	.0897
%RSD	.01946	25.703	279.60	668.39	668.39	12.130	14.378	.05780	60.252	124.02	.95460

#1	5.1228	-.01231	-.00682	-.00406	-.00869	-.00095	.00034	4.5902	.00117	.00039	9.4553
#2	5.1242	-.01777	.00224	.00264	.00566	-.00080	.00041	4.5865	.00291	.00591	9.3285

Check ?	Chk Pass	None	None	None	None	None	None	Chk Warn	None	None	Chk Warn
Value								5.0000			10.000
Range								-5.0000%			-5.0000%

Elem	V_2924	Zn2062	Zr3391
Units	ppm	ppm	ppm
Avg	.01263	-.00017	-.13062
Stddev	.00065	.00012	.00053
%RSD	5.1663	68.600	.40834

#1	.01217	-.00026	-.13024
#2	.01310	-.00009	-.13099

Check ?	None	None	None
Value			
Range			

Int. Std.	Y_2243	Y_3600	Y_3774
Units	Cts/S	Cts/S	Cts/S
Avg	2542.4	36863.	1806.9
Stddev	8.7	333.	17.2
%RSD	.34245	.90268	.95127

#1	2536.2	37098.	1794.7
#2	2548.5	36628.	1819.0

Sample Name: CCV-3888422 Acquired: 5/17/2016 23:15:04 Type: QC

Method: 6500_025(v6) Mode: CONC Corr. Factor: 1.000000

User: CRHOADES Prep Date: Custom ID2: Custom ID3:

Comment:

Elem	Ag3280	Al1670	As1890	B_2089	Ba4554	Be3130	Bi2230	Ca3179	Cd2288	Co2286	Cr2055	Cu3247
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.47711	.46600	F .89205	.47907	.47673	.49521	-.00014	4.7911	.48441	.49227	.50323	F .44582
Stddev	.00088	.01416	.01551	.01063	.01044	.00676	.00335	.0527	.00073	.01116	.01284	.00066
%RSD	.18354	3.0390	1.7386	2.2189	2.1905	1.3643	2313.0	1.0990	.14983	2.2661	2.5513	.14915

#1	.47773	.47601	.90301	.48659	.48412	.49999	-.00252	4.8283	.48389	.50016	.51231	.44629
#2	.47649	.45598	.88108	.47155	.46935	.49044	.00223	4.7539	.48492	.48438	.49415	.44535

Check ?	Chk Pass	Chk Pass	Chk Fail	Chk Pass	Chk Pass	Chk Pass	None	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Fail
Value			1.0000									.50000
Range			-10.490%									-10.490%

Elem	Fe2599	K_7664	Li6707	Mg2790	Mn2576	Mo2020	Na5895	Ni2316	P_1782	Pb2203	S_1820	Sb2068
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	2.5741	48.543	.97111	18.434	.45070	.49308	5.2791	.47977	.95398	.98230	-.07555	.95642
Stddev	.0403	1.136	.00895	.004	.00037	.01469	.0402	.01155	.02146	.03305	.00117	.02688
%RSD	1.5671	2.3399	.92190	.02254	.08135	2.9798	.76075	2.4076	2.2499	3.3648	1.5541	2.8102

#1	2.6026	49.346	.97744	18.437	.45044	.50347	5.3075	.48794	.96916	1.0057	-.07472	.97542
#2	2.5456	47.739	.96478	18.431	.45096	.48269	5.2507	.47160	.93880	.95893	-.07638	.93741

Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	None	Chk Pass
Value												
Range												

Elem	Se1960	Si2881	SiO2	Sn1899	Sr4077	Th2837	Ti3349	Ti1908	U_3701	V_2924	Zn2062	Zr3391
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.90165	5.0337	10.772	.99206	.49629	-.00095	F .44257	1.0105	.08708	.47213	F .43286	.47237
Stddev	.03326	.0163	.035	.03108	.00953	.00155	.00055	.0342	.00525	.00478	.00755	.00762
%RSD	3.6890	.32448	.32448	3.1329	1.9206	162.28	.12336	3.3793	6.0266	1.0132	1.7438	1.6139

#1	.92517	5.0452	10.797	1.0140	.50303	.00014	.44295	1.0346	.08337	.46875	.42752	.46698
#2	.87813	5.0221	10.747	.97009	.48955	-.00205	.44218	.98631	.09079	.47551	.43820	.47777

Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	None	Chk Fail	Chk Pass	None	Chk Pass	Chk Fail	Chk Pass
Value							.50000				.50000	
Range							-10.490%				-10.490%	

Int. Std.	Y_2243	Y_3600	Y_3774
Units	Cts/S	Cts/S	Cts/S
Avg	2610.1	37797.	1778.7
Stddev	79.1	97.	90.4
%RSD	3.0300	.25789	5.0827

#1	2554.2	37728.	1714.8
#2	2666.1	37866.	1842.7

Sample Name: CCB Acquired: 5/17/2016 23:17:35 Type: QC
 Method: 6500_025(v6) Mode: CONC Corr. Factor: 1.000000
 User: CRHOADES Prep Date: Custom ID2: Custom ID3:
 Comment:

Elem	Ag3280	Al1670	As1890	B_2089	Ba4554	Be3130	Bi2230	Ca3179	Cd2288	Co2286	Cr2055
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	F .00209	.00236	.00373	.00410	-.00132	.00008	-.00512	.02080	.00021	.00031	-.00062
Stddev	.00049	.00063	.00698	.00030	.00007	.00035	.00346	.00305	.00046	.00010	.00003
%RSD	23.497	26.532	187.24	7.3608	5.2979	443.78	67.585	14.668	225.30	33.097	4.8013

#1	.00175	.00192	.00867	.00389	-.00137	.00033	-.00756	.01864	.00053	.00038	-.00060
#2	.00244	.00280	-.00121	.00431	-.00128	-.00017	-.00267	.02296	-.00012	.00024	-.00065

Check ?	Chk Fail	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit	.00200										
Low Limit	-.01000										

Elem	Cu3247	Fe2599	K_7664	Li6707	Mg2790	Mn2576	Mo2020	Na5895	Ni2316	P_1782	Pb2203
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	-.00093	.03177	-.06111	F -.01075	-.00726	.00029	.00062	.00830	.00021	.00235	-.00146
Stddev	.00021	.00433	.10119	.00596	.00235	.00005	.00114	.00281	.00009	.00023	.00208
%RSD	22.355	13.626	165.59	55.496	32.358	17.072	184.11	33.841	42.311	9.9556	142.36

#1	-.00078	.02870	.01044	-.00653	-.00893	.00026	-.00019	.01028	.00027	.00251	-.00293
#2	-.00107	.03483	-.13266	-.01496	-.00560	.00033	.00142	.00631	.00014	.00218	.00001

Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Fail	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit				.01000							
Low Limit				-.01000							

Elem	S_1820	Sb2068	Se1960	Si2881	SiO2	Sn1899	Sr4077	Th2837	Ti3349	Ti1908	U_3701
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	-.08244	W .00385	-.01025	-.00660	-.01412	-.00132	.00010	.00051	.00074	-.00057	.04784
Stddev	.01214	.00055	.00138	.00591	.01265	.00108	.00007	.00118	.00026	.00386	.02974
%RSD	14.723	14.334	13.464	89.589	89.589	81.576	69.959	229.65	35.268	671.91	62.163

#1	-.09102	.00424	-.01123	-.00242	-.00518	-.00209	.00014	-.00032	.00055	-.00330	.02681
#2	-.07386	.00346	-.00928	-.01078	-.02307	-.00056	.00005	.00135	.00092	.00215	.06886

Check ?	Chk Pass	Chk Warn	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit		.00100									
Low Limit		-.00100									

Elem	V_2924	Zn2062	Zr3391
Units	ppm	ppm	ppm
Avg	-.00040	-.00035	-.00256
Stddev	.00026	.00029	.00288
%RSD	64.355	82.068	112.40

#1	-.00058	-.00015	-.00053
#2	-.00022	-.00056	-.00460

Check ?	Chk Pass	Chk Pass	Chk Pass
High Limit			
Low Limit			

Int. Std.	Y_2243	Y_3600	Y_3774
Units	Cts/S	Cts/S	Cts/S
Avg	2580.4	38325.	1790.3
Stddev	76.8	20.	19.2
%RSD	2.9757	.05188	1.0731

#1	2634.7	38339.	1803.9
#2	2526.1	38311.	1776.7

Sample Name: CCVL-3894681 Acquired: 5/17/2016 23:19:58 Type: QC
Method: 6500_025(v6) Mode: CONC Corr. Factor: 1.000000
User: CRHOADES Prep Date: Custom ID2: Custom ID3:
Comment:

Elem	Ag3280	Al1670	As1890	B_2089	Ba4554	Be3130	Bi2230	Ca3179	Cd2288	Co2286	Cr2055
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.01280	.09697	.01881	.10017	.00861	.00077	.10722	.20117	.00520	.01018	.00976
Stddev	.00066	.00027	.00060	.00038	.00021	.00011	.00382	.00357	.00003	.00026	.00019
%RSD	5.1450	.27787	3.1721	.37517	2.4268	14.020	3.5608	1.7738	.64014	2.5958	1.9320

#1	.01234	.09678	.01923	.09991	.00846	.00069	.10452	.20370	.00522	.00999	.00990
#2	.01327	.09716	.01839	.10044	.00876	.00085	.10992	.19865	.00518	.01037	.00963

Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Value											
Range											

Elem	Cu3247	Fe2599	K_7664	Li6707	Mg2790	Mn2576	Mo2020	Na5895	Ni2316	P_1782	Pb2203
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.01296	.12163	2.9490	F -.00066	.18449	.00939	.01940	1.0642	.04022	2.8933	.00699
Stddev	.00060	.00640	.0715	.00418	.00529	.00006	.00082	.0212	.00091	.0703	.00119
%RSD	4.6463	5.2609	2.4240	630.00	2.8661	.68820	4.2073	1.9943	2.2654	2.4308	16.995

#1	.01339	.12615	2.9996	.00229	.18075	.00935	.01882	1.0492	.03957	2.8436	.00615
#2	.01253	.11710	2.8985	-.00362	.18823	.00944	.01998	1.0793	.04086	2.9430	.00783

Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Fail	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Value				.01000							
Range				-30.000%							

Elem	S_1820	Sb2068	Se1960	Si2881	SiO2	Sn1899	Sr4077	Th2837	Ti3349	Ti1908	U_3701
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	-.07665	.01695	F .00712	.46767	1.0008	.10232	.01025	.01571	.00919	.01455	F .08071
Stddev	.01085	.00426	.00266	.00485	.0104	.00439	.00003	.00205	.00015	.00118	.01788
%RSD	14.156	25.138	37.327	1.0380	1.0380	4.2941	.31995	13.065	1.6586	8.0796	22.154

#1	-.06898	.01393	.00524	.46424	.99348	.09921	.01023	.01426	.00908	.01538	.09335
#2	-.08433	.01996	.00900	.47111	1.0082	.10543	.01027	.01716	.00930	.01372	.06807

Check ?	None	Chk Pass	Chk Fail	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Fail
Value			.01500								.06000
Range			-30.000%								30.000%

Elem	V_2924	Zn2062	Zr3391
Units	ppm	ppm	ppm
Avg	.00950	.01850	.01187
Stddev	.00064	.00064	.00057
%RSD	6.7839	3.4665	4.8237

#1	.00905	.01804	.01146
#2	.00996	.01895	.01227

Check ?	Chk Pass	Chk Pass	Chk Pass
Value			
Range			

Int. Std.	Y_2243	Y_3600	Y_3774
Units	Cts/S	Cts/S	Cts/S
Avg	2606.4	38756.	1772.6
Stddev	9.6	529.	4.6
%RSD	.36956	1.3656	.25676

#1	2599.6	39130.	1775.9
#2	2613.2	38382.	1769.4

Sample Name: MB 280-325218/1-A Acquired: 5/17/2016 23:22:38 Type: Unk

Method: 6500_025(v6) Mode: CONC Corr. Factor: 1.000000

User: CRHOADES Prep Date: 5/17 Custom ID2: Custom ID3:

Comment: 325218 200.7 FG (Ca Mg)

Elem	Ag3280	Al1670	As1890	B_2089	Ba4554	Be3130	Bi2230	Ca3179	Cd2288
Line	328.068 {103}	167.079 {502}	189.042 {478}	208.959 {461}	455.403 { 74}	313.042 {108}	223.061 {451}	317.933 {106}	228.802 {447}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.00159	.00281	.00107	.00396	-.00148	-.00001	.00394	.02318	.00024
Stddev	.00010	.00020	.00923	.00018	.00050	.00009	.00284	.00812	.00001
%RSD	6.2688	7.2284	864.71	4.5537	33.475	1410.2	72.109	35.014	6.0448

#1	.00166	.00267	-.00546	.00409	-.00183	-.00007	.00193	.02892	.00023
#2	.00152	.00296	.00759	.00383	-.00113	.00006	.00595	.01744	.00025

Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Elem	Co2286	Cr2055	Cu3247	Fe2599	K_7664	Li6707	Mg2790	Mn2576	Mo2020
Line	228.616 {447}	205.560 {464}	324.754 {104}	259.940 {130}	766.490 { 44}	670.784 { 50}	279.079 {121}2	257.610 {131}	202.030 {467}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	-.00032	-.00030	-.00063	.04163	-.18116	F -.01038	-.00264	.00018	-.00146
Stddev	.00022	.00004	.00014	.00006	.02484	.00113	.00054	.00002	.00011
%RSD	70.693	12.917	22.283	.14635	13.709	10.884	20.488	11.181	7.4320

#1	-.00016	-.00033	-.00053	.04159	-.19872	-.00958	-.00226	.00016	-.00139
#2	-.00048	-.00027	-.00073	.04168	-.16360	-.01118	-.00303	.00019	-.00154

Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Fail	Chk Pass	Chk Pass	Chk Pass
High Limit						.01000			
Low Limit						-.01000			

Elem	Na5895	Ni2316	P_1782	Pb2203	S_1820	Sb2068	Se1960	Si2881	SiO2
Line	589.592 { 57}	231.604 {446}	178.284 {489}	220.353 {453}	182.034 {485}	206.833 {463}	196.090 {472}	288.158 {117}	288.158 {117}2
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.00287	-.00011	.00332	-.00064	W -.08980	W -.00668	-.00624	-.00808	-.01728
Stddev	.01391	.00020	.00379	.00151	.00327	.00076	.00697	.02021	.04324
%RSD	483.99	176.42	114.40	238.08	3.6376	11.329	111.58	250.20	250.20

#1	-.00696	.00003	.00063	.00043	-.08749	-.00722	-.00132	-.02237	-.04786
#2	.01271	-.00025	.00600	-.00170	-.09211	-.00615	-.01117	.00621	.01329

Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Warn	Chk Warn	Chk Pass	Chk Pass	None
High Limit					.05000	.00500			
Low Limit					-.05000	-.00500			

Elem	Sn1899	Sr4077	Th2837	Ti3349	Ti1908	U_3701	V_2924	Zn2062	Zr3391
Line	189.989 {477}	407.771 { 83}	283.730 {119}	334.904 {101}	190.856 {477}	370.152 { 91}	292.402 {115}	206.200 {163}	339.198 { 99}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	-.00149	-.00020	-.00017	.00060	-.00176	F .07177	.00011	.00027	-.00012
Stddev	.00032	.00005	.00152	.00029	.00442	.01566	.00049	.00038	.00108
%RSD	21.488	24.557	917.92	48.511	251.56	21.814	468.29	142.19	894.03

#1	-.00172	-.00017	-.00124	.00039	-.00488	.06070	.00045	.00053	.00064
#2	-.00127	-.00024	.00091	.00080	.00137	.08284	-.00024	.00000	-.00088

Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Fail	Chk Pass	Chk Pass	Chk Pass
High Limit						.06000			
Low Limit						-.06000			

Int. Std.	Y_2243	Y_3600	Y_3774						
Line	224.306 {450}	360.073 { 94}	377.433 { 89}						
Units	Cts/S	Cts/S	Cts/S						
Avg	2580.9	37975.	1846.9						
Stddev	64.1	1091.	137.9						
%RSD	2.4842	2.8715	7.4642						

#1	2626.3	38746.	1944.4						
#2	2535.6	37204.	1749.4						

Sample Name: LCS 280-325218/2-A Acquired: 5/17/2016 23:25:01 Type: Unk
Method: 6500_025(v6) Mode: CONC Corr. Factor: 1.000000
User: CRHOADES Prep Date: Custom ID2: Custom ID3:
Comment: 325218 200.7 FG (Ca Mg)

Elem	Ag3280	Al1670	As1890	B_2089	Ba4554	Be3130	Bi2230	Ca3179	Cd2288
Line	328.068 {103}	167.079 {502}	189.042 {478}	208.959 {461}	455.403 {74}	313.042 {108}	223.061 {451}	317.933 {106}	228.802 {447}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.04826	1.7568	.89591	.94755	1.8790	.04957	1.8967	45.659	.09506
Stddev	.00061	.0616	.04403	.03415	.0399	.00125	.0866	.921	.00371
%RSD	1.2602	3.5079	4.9143	3.6036	2.1235	2.5116	4.5638	2.0168	3.9004
#1	.04783	1.8004	.92705	.97169	1.9072	.05045	1.9579	46.310	.09768
#2	.04869	1.7133	.86478	.92340	1.8508	.04869	1.8355	45.008	.09244

Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	None	Chk Pass	Chk Pass
High Limit									
Low Limit									

Elem	Co2286	Cr2055	Cu3247	Fe2599	K_7664	Li6707	Mg2790	Mn2576	Mo2020
Line	228.616 {447}	205.560 {464}	324.754 {104}	259.940 {130}	766.490 {44}	670.784 {50}	279.079 {121}2	257.610 {131}	202.030 {467}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.46582	.19297	.21850	1.0175	47.926	.95118	46.183	F .44457	.99084
Stddev	.01709	.00643	.00068	.0264	1.157	.01244	.047	.00004	.03720
%RSD	3.6680	3.3329	.31296	2.5967	2.4134	1.3074	.10274	.01010	3.7546
#1	.47790	.19752	.21802	1.0362	48.743	.95997	46.149	.44460	1.0171
#2	.45374	.18842	.21899	.99885	47.108	.94238	46.216	.44454	.96453

Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Fail	Chk Pass
High Limit								.55000	
Low Limit								.45000	

Elem	Na8183	Ni2316	P_1782	Pb2203	S_1820	Sb2068	Se1960	Si2881	SiO2
Line	818.326 {41}	231.604 {446}	178.284 {489}	220.353 {453}	182.034 {485}	206.833 {463}	196.090 {472}	288.158 {117}	288.158 {117}2
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	F 58.958	.45438	9.4627	.47537	1.9052	.49071	1.8633	9.6490	20.649
Stddev	.075	.01665	.3491	.02139	.0715	.02341	.0764	.0779	.167
%RSD	.12713	3.6649	3.6889	4.4991	3.7529	4.7717	4.0984	.80712	.80712
#1	58.905	.46616	9.7096	.49049	1.9558	.50726	1.9173	9.7041	20.767
#2	59.011	.44261	9.2159	.46025	1.8546	.47415	1.8093	9.5939	20.531

Check ?	Chk Fail	Chk Pass	Chk Pass	Chk Pass	None	Chk Pass	Chk Pass	Chk Pass	None
High Limit	56.000								
Low Limit	45.500								

Elem	Sn1899	Sr4077	Th2837	Ti3349	Ti1908	U_3701	V_2924	Zn2062	Zr3391
Line	189.989 {477}	407.771 {83}	283.730 {119}	334.904 {101}	190.856 {477}	370.152 {91}	292.402 {115}	206.200 {163}	339.198 {99}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	1.9709	.96400	.93660	F .89519	1.7763	1.8573	.46544	.43749	.44170
Stddev	.0676	.02270	.00410	.00342	.1326	.0326	.00045	.00154	.00046
%RSD	3.4302	2.3547	.43825	.38246	7.4675	1.7528	.09571	.35137	.10382
#1	2.0188	.98005	.93370	.89277	1.8701	1.8343	.46513	.43858	.44202
#2	1.9231	.94795	.93951	.89761	1.6825	1.8803	.46576	.43641	.44137

Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Fail	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit				1.1100					
Low Limit				.90000					

Int. Std.	Y_2243	Y_3600	Y_3774						
Line	224.306 {450}	360.073 {94}	377.433 {89}						
Units	Cts/S	Cts/S	Cts/S						
Avg	2597.1	37042.	1827.1						
Stddev	34.7	291.	24.5						
%RSD	1.3352	.78673	1.3409						
#1	2572.6	36836.	1809.7						
#2	2621.6	37248.	1844.4						

Sample Name: 83014-F-1-A @2 Acquired: 5/17/2016 23:27:28 Type: Unk
Method: 6500_025(v6) Mode: CONC Corr. Factor: 1.000000
User: CRHOADES Prep Date: Custom ID2: Custom ID3:
Comment: 325218 200.7 FG (Ca Mg) 2x

Elem	Ag3280	Al1670	As1890	B_2089	Ba4554	Be3130	Bi2230	Ca3179	Cd2288
Line	328.068 {103}	167.079 {502}	189.042 {478}	208.959 {461}	455.403 { 74}	313.042 {108}	223.061 {451}	317.933 {106}	228.802 {447}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.00072	.01099	.00926	W 25.730	.01168	-.00031	.00375	197.81	.00144
Stddev	.00005	.00004	.00604	.026	.00057	.00018	.00159	4.51	.00033
%RSD	6.9386	.31915	65.265	.10222	4.9162	57.561	42.449	2.2808	23.191

#1	.00075	.01096	.00499	25.712	.01128	-.00043	.00263	194.62	.00120
#2	.00068	.01101	.01353	25.749	.01209	-.00018	.00488	201.00	.00168

Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Warn	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit				10.000					
Low Limit				-.01000					

Elem	Co2286	Cr2055	Cu3247	Fe2599	K_7664	Li6707	Mg2790	Mn2576	Mo2020
Line	228.616 {447}	205.560 {464}	324.754 {104}	259.940 {130}	766.490 { 44}	670.784 { 50}	279.079 {121}2	257.610 {131}	202.030 {467}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.00105	-.00055	-.00040	.09131	60.306	1.6532	160.93	1.0629	3.3153
Stddev	.00012	.00026	.00065	.00576	1.354	.0110	.31	.0000	.0100
%RSD	11.622	47.188	165.22	6.3121	2.2454	.66598	.19036	.00414	.30113

#1	.00113	-.00073	-.00086	.09539	59.348	1.6610	161.15	1.0629	3.3223
#2	.00096	-.00037	.00007	.08724	61.263	1.6454	160.71	1.0630	3.3082

Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Elem	Na8183	Ni2316	P_1782	Pb2203	S_1820	Sb2068	Se1960	Si2881	SiO2
Line	818.326 { 41}	231.604 {446}	178.284 {489}	220.353 {453}	182.034 {485}	206.833 {463}	196.090 {472}	288.158 {117}	288.158 {117}2
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	W 1180.2	.00787	.02928	-.00044	F 934.70	-.00321	.09895	.54416	1.1645
Stddev	23.4	.00029	.00073	.00042	.53	.00021	.00267	.06837	.1463
%RSD	1.9815	3.6471	2.5061	96.108	.05678	6.6556	2.6950	12.565	12.565

#1	1163.7	.00808	.02876	-.00073	935.07	-.00337	.10083	.59250	1.2680
#2	1196.8	.00767	.02980	-.00014	934.32	-.00306	.09706	.49581	1.0610

Check ?	Chk Warn	Chk Pass	Chk Pass	Chk Pass	Chk Fail	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit	500.00				200.00				
Low Limit	11.000				-.20000				

Elem	Sn1899	Sr4077	Th2837	Ti3349	Ti1908	U_3701	V_2924	Zn2062	Zr3391
Line	189.989 {477}	407.771 { 83}	283.730 {119}	334.904 {101}	190.856 {477}	370.152 { 91}	292.402 {115}	206.200 {163}	339.198 { 99}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	-.00152	3.1381	-.00182	.00195	.03071	.04355	F -.03428	.00391	.00041
Stddev	.00017	.0741	.00238	.00057	.00003	.01297	.00022	.00011	.00029
%RSD	11.372	2.3613	130.81	29.316	.08304	29.783	.63942	2.8998	69.676

#1	-.00164	3.0857	-.00014	.00235	.03069	.05272	-.03444	.00399	.00021
#2	-.00140	3.1905	-.00350	.00154	.03073	.03438	-.03413	.00383	.00061

Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Fail	Chk Pass	Chk Pass
High Limit							50.000		
Low Limit							-.02000		

Int. Std.	Y_2243	Y_3600	Y_3774
Line	224.306 {450}	360.073 { 94}	377.433 { 89}
Units	Cts/S	Cts/S	Cts/S
Avg	2354.8	33258.	1672.0
Stddev	17.2	402.	13.3
%RSD	.73022	1.2075	.79732

#1	2342.7	33542.	1662.5
#2	2367.0	32974.	1681.4

Sample Name: 83014-F-1-A SD@10 Acquired: 5/17/2016 23:30:31 Type: Unk
 Method: 6500_025(v6) Mode: CONC Corr. Factor: 1.000000
 User: CRHOADES Prep Date: Custom ID2: Custom ID3:
 Comment: 325218 200.7 FG (Ca Mg) 2x

Elem	Ag3280	Al1670	As1890	B_2089	Ba4554	Be3130	Bi2230	Ca3179	Cd2288
Line	328.068 {103}	167.079 {502}	189.042 {478}	208.959 {461}	455.403 { 74}	313.042 {108}	223.061 {451}	317.933 {106}	228.802 {447}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.00221	.00156	.00179	5.4254	.00139	-.00001	.00227	38.122	.00061
Stddev	.00016	.00028	.00212	.0102	.00104	.00015	.00144	1.657	.00003
%RSD	7.3828	17.833	118.93	.18803	74.811	1654.5	63.360	4.3461	5.1244

#1	.00209	.00137	.00329	5.4181	.00213	.00010	.00329	39.293	.00059
#2	.00232	.00176	.00028	5.4326	.00066	-.00012	.00125	36.950	.00063

Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Elem	Co2286	Cr2055	Cu3247	Fe2599	K_7664	Li6707	Mg2790	Mn2576	Mo2020
Line	228.616 {447}	205.560 {464}	324.754 {104}	259.940 {130}	766.490 { 44}	670.784 { 50}	279.079 {121}2	257.610 {131}	202.030 {467}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	-.00015	-.00049	-.00100	.01900	11.782	.31250	31.841	.21298	.67962
Stddev	.00030	.00013	.00034	.00921	.133	.00070	.109	.00114	.00879
%RSD	200.95	27.167	34.097	48.494	1.1289	.22332	.34343	.53557	1.2941

#1	.00006	-.00040	-.00076	.02551	11.876	.31201	31.918	.21379	.68584
#2	-.00036	-.00058	-.00124	.01248	11.688	.31300	31.764	.21217	.67340

Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Elem	Na8183	Ni2316	P_1782	Pb2203	S_1820	Sb2068	Se1960	Si2881	SiO2
Line	818.326 { 41}	231.604 {446}	178.284 {489}	220.353 {453}	182.034 {485}	206.833 {463}	196.090 {472}	288.158 {117}	288.158 {117}2
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	235.86	.00163	.00691	-.00021	W 185.66	-.00362	.01351	.12634	.27037
Stddev	3.54	.00020	.00233	.00042	.86	.00356	.00121	.01251	.02677
%RSD	1.5001	12.109	33.702	202.76	.46494	98.438	8.9293	9.9013	9.9013

#1	238.36	.00176	.00527	-.00050	185.05	-.00110	.01266	.13519	.28930
#2	233.36	.00149	.00856	.00009	186.27	-.00613	.01436	.11750	.25145

Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Warn	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit					180.00				
Low Limit					-.15000				

Elem	Sn1899	Sr4077	Th2837	Ti3349	Ti1908	U_3701	V_2924	Zn2062	Zr3391
Line	189.989 {477}	407.771 { 83}	283.730 {119}	334.904 {101}	190.856 {477}	370.152 { 91}	292.402 {115}	206.200 {163}	339.198 { 99}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	-.00269	.60397	-.00196	.00090	.00529	.02864	-.00727	.00152	-.00369
Stddev	.00089	.02804	.00317	.00053	.00181	.00619	.00037	.00121	.00158
%RSD	32.894	4.6431	162.08	59.651	34.102	21.625	5.0979	79.095	42.800

#1	-.00207	.62380	.00029	.00127	.00402	.03302	-.00753	.00238	-.00481
#2	-.00332	.58415	-.00420	.00052	.00657	.02426	-.00701	.00067	-.00258

Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Int. Std.	Y_2243	Y_3600	Y_3774
Line	224.306 {450}	360.073 { 94}	377.433 { 89}
Units	Cts/S	Cts/S	Cts/S
Avg	2480.0	36606.	1774.8
Stddev	19.4	653.	74.2
%RSD	.78389	1.7836	4.1822

#1	2466.3	36144.	1722.3
#2	2493.8	37068.	1827.2

Sample Name: 83014-F-1-B MS @2 Acquired: 5/17/2016 23:33:07 Type: Unk
 Method: 6500_025(v6) Mode: CONC Corr. Factor: 1.000000
 User: CRHOADES Prep Date: Custom ID2: Custom ID3:
 Comment: 325218 200.7 FG (Ca Mg) 2x

Elem	Ag3280	Al1670	As1890	B_2089	Ba4554	Be3130	Bi2230	Ca3179	Cd2288
Line	328.068 {103}	167.079 {502}	189.042 {478}	208.959 {461}	455.403 { 74}	313.042 {108}	223.061 {451}	317.933 {106}	228.802 {447}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.02573	.87537	.48088	W 25.665	.95551	.02447	F .94815	209.28	.05101
Stddev	.00044	.01475	.00515	.494	.01024	.00072	.01173	2.03	.00061
%RSD	1.7177	1.6849	1.0718	1.9238	1.0719	2.9364	1.2373	.97156	1.2042

#1	.02541	.86494	.48452	25.316	.94827	.02396	.93986	207.85	.05057
#2	.02604	.88580	.47723	26.015	.96276	.02498	.95645	210.72	.05144

Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Warn	Chk Pass	Chk Pass	Chk Fail	Chk Pass	Chk Pass
High Limit				10.000			.10000		
Low Limit				-.01000			-.10000		

Elem	Co2286	Cr2055	Cu3247	Fe2599	K_7664	Li6707	Mg2790	Mn2576	Mo2020
Line	228.616 {447}	205.560 {464}	324.754 {104}	259.940 {130}	766.490 { 44}	670.784 { 50}	279.079 {121}2	257.610 {131}	202.030 {467}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.23524	.09682	.10823	.57364	81.155	W 2.0990	182.20	1.2710	3.7301
Stddev	.00568	.00153	.00073	.00524	.472	.0185	.63	.0047	.0600
%RSD	2.4149	1.5840	.67366	.91387	.58178	.88158	.34850	.36991	1.6076

#1	.23122	.09574	.10771	.56993	80.821	2.0860	181.75	1.2677	3.6877
#2	.23926	.09791	.10874	.57734	81.488	2.1121	182.65	1.2744	3.7725

Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Warn	Chk Pass	Chk Pass	Chk Pass
High Limit						2.0000			
Low Limit						-.01000			

Elem	Na8183	Ni2316	P_1782	Pb2203	S_1820	Sb2068	Se1960	Si2881	SiO2
Line	818.326 { 41}	231.604 {446}	178.284 {489}	220.353 {453}	182.034 {485}	206.833 {463}	196.090 {472}	288.158 {117}	288.158 {117}2
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	W 1134.5	.23762	W 5.2948	.23131	F 917.16	.25400	1.0684	5.6558	12.103
Stddev	12.9	.00292	.0696	.00276	14.60	.01094	.0260	.0373	.080
%RSD	1.1347	1.2307	1.3150	1.1916	1.5915	4.3076	2.4298	.65967	.65967

#1	1125.4	.23555	5.2455	.22936	906.84	.24627	1.0501	5.6294	12.047
#2	1143.6	.23968	5.3440	.23326	927.48	.26174	1.0868	5.6822	12.160

Check ?	Chk Warn	Chk Pass	Chk Warn	Chk Pass	Chk Fail	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit	500.00		2.0000		200.00				
Low Limit	11.000		-1.0000		-2.0000				

Elem	Sn1899	Sr4077	Th2837	Ti3349	Ti1908	U_3701	V_2924	Zn2062	Zr3391
Line	189.989 {477}	407.771 { 83}	283.730 {119}	334.904 {101}	190.856 {477}	370.152 { 91}	292.402 {115}	206.200 {163}	339.198 { 99}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.96757	3.4460	.47939	.45505	.69676	.94883	.20761	.22806	.22948
Stddev	.02815	.0326	.00303	.00037	.00697	.08257	.00153	.00099	.00355
%RSD	2.9092	.94700	.63155	.08079	1.0000	8.7018	.73478	.43392	1.5472

#1	.94766	3.4229	.47725	.45479	.70168	1.0072	.20653	.22876	.22696
#2	.98747	3.4691	.48153	.45531	.69183	.89045	.20869	.22736	.23199

Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Int. Std.	Y_2243	Y_3600	Y_3774						
Line	224.306 {450}	360.073 { 94}	377.433 { 89}						
Units	Cts/S	Cts/S	Cts/S						
Avg	2409.9	33946.	1814.1						
Stddev	79.2	774.	11.6						
%RSD	3.2879	2.2810	.63981						

#1	2465.9	33398.	1822.3						
#2	2353.9	34493.	1805.9						

Sample Name: 83014-F-1-C MSD @2 Acquired: 5/17/2016 23:36:03 Type: Unk
Method: 6500_025(v6) Mode: CONC Corr. Factor: 1.000000
User: CRHOADES Prep Date: Custom ID2: Custom ID3:
Comment: 325218 200.7 FG (Ca Mg) 2x

Elem	Ag3280	Al1670	As1890	B_2089	Ba4554	Be3130	Bi2230	Ca3179	Cd2288
Line	328.068 {103}	167.079 {502}	189.042 {478}	208.959 {461}	455.403 { 74}	313.042 {108}	223.061 {451}	317.933 {106}	228.802 {447}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.02627	.86953	.47904	W 25.826	1.0097	.02528	F .94949	222.97	.05072
Stddev	.00035	.02132	.00664	.551	.0013	.00006	.01130	.03	.00141
%RSD	1.3217	2.4521	1.3863	2.1334	.12460	.24963	1.1899	.01248	2.7837

#1	.02651	.85445	.48374	25.436	1.0106	.02532	.94150	222.99	.04972
#2	.02602	.88460	.47435	26.216	1.0088	.02523	.95748	222.95	.05171

Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Warn	Chk Pass	Chk Pass	Chk Fail	Chk Pass	Chk Pass
High Limit				10.000			.10000		
Low Limit				-.01000			-.10000		

Elem	Co2286	Cr2055	Cu3247	Fe2599	K_7664	Li6707	Mg2790	Mn2576	Mo2020
Line	228.616 {447}	205.560 {464}	324.754 {104}	259.940 {130}	766.490 { 44}	670.784 { 50}	279.079 {121}2	257.610 {131}	202.030 {467}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.23419	.09715	.10850	.58380	86.345	W 2.1443	182.64	1.2774	3.7494
Stddev	.00616	.00142	.00036	.01354	.196	.0034	.32	.0025	.0799
%RSD	2.6323	1.4616	.33074	2.3201	.22664	.15847	.17704	.19342	2.1304

#1	.22983	.09615	.10876	.57422	86.207	2.1419	182.41	1.2756	3.6930
#2	.23855	.09816	.10825	.59337	86.484	2.1467	182.87	1.2791	3.8059

Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Warn	Chk Pass	Chk Pass	Chk Pass
High Limit						2.0000			
Low Limit						-.01000			

Elem	Na8183	Ni2316	P_1782	Pb2203	S_1820	Sb2068	Se1960	Si2881	SiO2
Line	818.326 { 41}	231.604 {446}	178.284 {489}	220.353 {453}	182.034 {485}	206.833 {463}	196.090 {472}	288.158 {117}	288.158 {117}2
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	W 1206.8	.23680	W 5.2651	.23036	F 918.43	.25399	1.0660	5.8144	12.443
Stddev	.5	.00462	.0826	.00327	19.35	.00707	.0126	.0670	.143
%RSD	.03898	1.9496	1.5692	1.4193	2.1072	2.7836	1.1794	1.1521	1.1521

#1	1206.5	.23353	5.2067	.22805	904.74	.24899	1.0571	5.7670	12.341
#2	1207.2	.24006	5.3235	.23267	932.11	.25899	1.0749	5.8617	12.544

Check ?	Chk Warn	Chk Pass	Chk Warn	Chk Pass	Chk Fail	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit	500.00		2.0000		200.00				
Low Limit	11.000		-1.0000		-.20000				

Elem	Sn1899	Sr4077	Th2837	Ti3349	Ti1908	U_3701	V_2924	Zn2062	Zr3391
Line	189.989 {477}	407.771 { 83}	283.730 {119}	334.904 {101}	190.856 {477}	370.152 { 91}	292.402 {115}	206.200 {163}	339.198 { 99}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.96403	3.6703	.47405	.45395	.75330	.98961	.20508	.22962	.22785
Stddev	.02474	.0050	.00410	.00048	.00105	.05687	.00065	.00021	.00342
%RSD	2.5667	.13614	.86426	.10609	.13903	5.7470	.31822	.09300	1.5019

#1	.94653	3.6667	.47115	.45361	.75256	1.0298	.20462	.22977	.23027
#2	.98152	3.6738	.47694	.45429	.75404	.94939	.20554	.22947	.22544

Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Int. Std.	Y_2243	Y_3600	Y_3774
Line	224.306 {450}	360.073 { 94}	377.433 { 89}
Units	Cts/S	Cts/S	Cts/S
Avg	2404.5	34374.	1705.4
Stddev	86.1	811.	12.1
%RSD	3.5824	2.3579	.71233

#1	2465.4	33801.	1714.0
#2	2343.6	34947.	1696.8

Sample Name: 83014-F-1-A PDS @2 Acquired: 5/17/2016 23:38:58 Type: Unk
Method: 6500_025(v6) Mode: CONC Corr. Factor: 1.000000
User: CRHOADES Prep Date: Custom ID2: Custom ID3:
Comment: 325218 200.7 FG (Ca Mg) 2x

Elem	Ag3280	Al1670	As1890	B_2089	Ba4554	Be3130	Bi2230	Ca3179	Cd2288
Line	328.068 {103}	167.079 {502}	189.042 {478}	208.959 {461}	455.403 { 74}	313.042 {108}	223.061 {451}	317.933 {106}	228.802 {447}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.03525	.83176	.18671	W 24.813	.10990	.04921	.00088	213.31	.04978
Stddev	.00005	.01501	.00068	.466	.00014	.00025	.00657	1.20	.00041
%RSD	.13509	1.8051	.36604	1.8783	.12354	.51325	745.02	.56164	.83173

#1	.03521	.84238	.18720	25.143	.10999	.04939	-.00376	214.16	.05007
#2	.03528	.82115	.18623	24.484	.10980	.04904	.00553	212.47	.04949

Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Warn	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit				10.000					
Low Limit				-.01000					

Elem	Co2286	Cr2055	Cu3247	Fe2599	K_7664	Li6707	Mg2790	Mn2576	Mo2020
Line	228.616 {447}	205.560 {464}	324.754 {104}	259.940 {130}	766.490 { 44}	670.784 { 50}	279.079 {121}2	257.610 {131}	202.030 {467}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.04550	.04663	.04137	1.1001	79.455	1.7038	173.90	1.0727	3.2200
Stddev	.00111	.00010	.00066	.0219	.687	.0055	.62	.0027	.0568
%RSD	2.4420	.22219	1.6032	1.9943	.86451	.32341	.35820	.25371	1.7642

#1	.04628	.04656	.04184	1.0846	79.941	1.7077	174.34	1.0746	3.2602
#2	.04471	.04671	.04090	1.1156	78.969	1.6999	173.46	1.0707	3.1798

Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Elem	Na8183	Ni2316	P_1782	Pb2203	S_1820	Sb2068	Se1960	Si2881	SiO2
Line	818.326 { 41}	231.604 {446}	178.284 {489}	220.353 {453}	182.034 {485}	206.833 {463}	196.090 {472}	288.158 {117}	288.158 {117}2
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	W 1184.3	.05183	W 2.0415	.08777	F 892.39	.09719	.26303	5.7411	12.286
Stddev	6.9	.00016	.0148	.00019	19.66	.00152	.00439	.0629	.135
%RSD	.58151	.30117	.72622	.22110	2.2031	1.5646	1.6698	1.0959	1.0959

#1	1189.1	.05172	2.0520	.08791	906.29	.09826	.25992	5.6967	12.191
#2	1179.4	.05194	2.0310	.08764	878.49	.09611	.26614	5.7856	12.381

Check ?	Chk Warn	Chk Pass	Chk Warn	Chk Pass	Chk Fail	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit	500.00		2.0000		200.00				
Low Limit	11.000		-1.0000		-2.0000				

Elem	Sn1899	Sr4077	Th2837	Ti3349	Ti1908	U_3701	V_2924	Zn2062	Zr3391
Line	189.989 {477}	407.771 { 83}	283.730 {119}	334.904 {101}	190.856 {477}	370.152 { 91}	292.402 {115}	206.200 {163}	339.198 { 99}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.09013	3.1471	.18488	.04733	.13298	.52969	.01311	.17887	.04492
Stddev	.00096	.0167	.00282	.00064	.00604	.03806	.00002	.00159	.00232
%RSD	1.0644	.53091	1.5266	1.3525	4.5401	7.1861	.15623	.88681	5.1705

#1	.09081	3.1589	.18688	.04688	.13725	.55660	.01313	.17999	.04328
#2	.08945	3.1353	.18289	.04778	.12872	.50277	.01310	.17774	.04656

Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Int. Std.	Y_2243	Y_3600	Y_3774						
Line	224.306 {450}	360.073 { 94}	377.433 { 89}						
Units	Cts/S	Cts/S	Cts/S						
Avg	2399.2	34298.	1673.3						
Stddev	20.4	255.	38.0						
%RSD	.85167	.74269	2.2715						

#1	2413.6	34478.	1646.5						
#2	2384.7	34117.	1700.2						

Sample Name: 83014-F-4-A @2 Acquired: 5/17/2016 23:41:58 Type: Unk
Method: 6500_025(v6) Mode: CONC Corr. Factor: 1.000000
User: CRHOADES Prep Date: Custom ID2: Custom ID3:
Comment: 325218 200.7 FG (Ca Mg) 2x

Elem	Ag3280	Al1670	As1890	B_2089	Ba4554	Be3130	Bi2230	Ca3179	Cd2288
Line	328.068 {103}	167.079 {502}	189.042 {478}	208.959 {461}	455.403 { 74}	313.042 {108}	223.061 {451}	317.933 {106}	228.802 {447}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.00071	.01102	.00316	W 28.158	.01219	-.00017	.00300	195.83	.00106
Stddev	.00025	.00123	.00618	.850	.00060	.00005	.00125	5.02	.00017
%RSD	35.112	11.157	195.66	3.0170	4.8935	29.557	41.647	2.5656	15.868

#1	.00053	.01189	.00753	28.759	.01177	-.00014	.00389	192.28	.00094
#2	.00088	.01015	-.00121	27.558	.01262	-.00021	.00212	199.39	.00118

Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Warn	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit				10.000					
Low Limit				-.01000					

Elem	Co2286	Cr2055	Cu3247	Fe2599	K_7664	Li6707	Mg2790	Mn2576	Mo2020
Line	228.616 {447}	205.560 {464}	324.754 {104}	259.940 {130}	766.490 { 44}	670.784 { 50}	279.079 {121}2	257.610 {131}	202.030 {467}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	-.00019	-.00057	.02754	.05218	56.800	1.5648	190.35	1.6224	2.7383
Stddev	.00043	.00028	.00060	.01053	1.527	.0023	.19	.0003	.0705
%RSD	226.28	50.254	2.1626	20.185	2.6882	.14789	.09763	.01526	2.5748

#1	.00011	-.00037	.02711	.04474	55.721	1.5664	190.49	1.6226	2.7882
#2	-.00050	-.00077	.02796	.05963	57.880	1.5631	190.22	1.6222	2.6884

Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Elem	Na8183	Ni2316	P_1782	Pb2203	S_1820	Sb2068	Se1960	Si2881	SiO2
Line	818.326 { 41}	231.604 {446}	178.284 {489}	220.353 {453}	182.034 {485}	206.833 {463}	196.090 {472}	288.158 {117}	288.158 {117}2
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	W 1105.1	.00248	.01818	.00051	F 894.77	-.00854	.00458	.66804	1.4296
Stddev	28.8	.00009	.00084	.00054	28.52	.00276	.00404	.00888	.0190
%RSD	2.6023	3.5234	4.6328	104.74	3.1870	32.307	88.052	1.3287	1.3287

#1	1084.7	.00242	.01877	.00013	914.94	-.01049	.00173	.66176	1.4162
#2	1125.4	.00254	.01758	.00089	874.61	-.00659	.00744	.67431	1.4430

Check ?	Chk Warn	Chk Pass	Chk Pass	Chk Pass	Chk Fail	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit	500.00				200.00				
Low Limit	11.000				-.20000				

Elem	Sn1899	Sr4077	Th2837	Ti3349	Ti1908	U_3701	V_2924	Zn2062	Zr3391
Line	189.989 {477}	407.771 { 83}	283.730 {119}	334.904 {101}	190.856 {477}	370.152 { 91}	292.402 {115}	206.200 {163}	339.198 { 99}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	-.00435	3.0521	-.00350	.00162	.00935	.04371	F -.04230	.00675	.00209
Stddev	.00121	.0814	.00077	.00002	.00527	.04988	.00004	.00005	.00133
%RSD	27.735	2.6668	21.989	1.4556	56.347	114.13	.09159	.77917	63.870

#1	-.00350	2.9946	-.00404	.00161	.00563	.00843	-.04233	.00679	.00115
#2	-.00520	3.1097	-.00296	.00164	.01308	.07898	-.04227	.00671	.00303

Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Fail	Chk Pass	Chk Pass
High Limit							50.000		
Low Limit							-.02000		

Int. Std.	Y_2243	Y_3600	Y_3774						
Line	224.306 {450}	360.073 { 94}	377.433 { 89}						
Units	Cts/S	Cts/S	Cts/S						
Avg	2354.9	33770.	1674.4						
Stddev	23.5	411.	50.8						
%RSD	.99885	1.2181	3.0318						

#1	2371.5	34061.	1710.2						
#2	2338.2	33480.	1638.5						

Sample Name: CCVH-3883905 Acquired: 5/17/2016 23:45:01 Type: QC
Method: 6500_025(v6) Mode: CONC Corr. Factor: 1.000000
User: CRHOADES Prep Date: Custom ID2: Custom ID3:
Comment:

Elem	Ag3280	Al3092	As1890	B_2089	Ba4554	Be3130	Bi2230	Ca3179	Cd2288	Co2286	Cr2055
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	-.00624	52.207	-.00061	.20771	-.00082	.00013	W .94566	.02291	-.00029	-.00120	-.00019
Stddev	.00046	.105	.00321	.01425	.00007	.00013	.00565	.00114	.00002	.00058	.00003
%RSD	7.3270	.20126	528.78	6.8602	8.2034	101.30	.59752	4.9911	7.2993	48.317	14.125

#1	-.00657	52.133	.00166	.21779	-.00087	.00023	.94966	.02372	-.00027	-.00079	-.00017
#2	-.00592	52.282	-.00288	.19764	-.00077	.00004	.94167	.02211	-.00030	-.00161	-.00021

Check ?	None	Chk Pass	None	None	None	None	Chk Warn	None	None	None	None
Value							1.0000				
Range							-5.0000%				

Elem	Cu3247	Fe2714	K_7664	Li6707	Mg2790	Mn2576	Mo2020	Na8183	Ni2316	P_1782	Pb2203
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	-.01609	F 55.543	.13929	-.01022	.02452	-.00199	.00472	F 284.18	.00082	.00513	.00038
Stddev	.00139	.060	.02377	.00238	.00497	.00013	.00191	.41	.00015	.00280	.00001
%RSD	8.6352	.10774	17.067	23.267	20.284	6.5554	40.538	.14517	18.545	54.503	2.4138

#1	-.01707	55.585	.15610	-.00854	.02100	-.00208	.00337	284.47	.00071	.00316	.00038
#2	-.01511	55.501	.12248	-.01191	.02803	-.00190	.00607	283.89	.00093	.00711	.00039

Check ?	None	Chk Fail	None	None	None	None	None	Chk Fail	None	None	None
Value		50.000						250.00			
Range		10.490%						10.490%			

Elem	S_1820	Sb2068	Se1960	Si2881	SiO2	Sn1899	Sr4077	Th2837	Ti3349	Ti1908	U_3701
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	5.1024	-.01430	-.00838	-.02887	-.06178	-.00190	.00065	W 4.5712	.00148	.00413	W 9.4309
Stddev	.0302	.00005	.00003	.03179	.06803	.00189	.00017	.0043	.00012	.00015	.1998
%RSD	.59117	.33235	.40977	110.12	110.12	99.475	26.540	.09429	8.2024	3.5144	2.1181

#1	5.1237	-.01433	-.00836	-.05135	-.10988	-.00324	.00077	4.5742	.00157	.00423	9.2896
#2	5.0810	-.01426	-.00840	-.00639	-.01368	-.00056	.00052	4.5682	.00140	.00403	9.5721

Check ?	Chk Pass	None	None	None	None	None	None	Chk Warn	None	None	Chk Warn
Value								5.0000			10.000
Range								-5.0000%			-5.0000%

Elem	V_2924	Zn2062	Zr3391
Units	ppm	ppm	ppm
Avg	.01182	.00018	-.13257
Stddev	.00069	.00023	.00045
%RSD	5.8625	128.44	.34205

#1	.01133	.00002	-.13289
#2	.01231	.00035	-.13225

Check ?	None	None	None
Value			
Range			

Int. Std.	Y_2243	Y_3600	Y_3774
Units	Cts/S	Cts/S	Cts/S
Avg	2510.3	37066.	1758.5
Stddev	7.4	642.	10.0
%RSD	.29591	1.7324	.56676

#1	2515.5	37520.	1765.6
#2	2505.0	36612.	1751.5

Sample Name: CCV-3888422 Acquired: 5/17/2016 23:47:38 Type: QC
Method: 6500_025(v6) Mode: CONC Corr. Factor: 1.000000
User: CRHOADES Prep Date: Custom ID2: Custom ID3:
Comment:

Elem	Ag3280	Al1670	As1890	B_2089	Ba4554	Be3130	Bi2230	Ca3179	Cd2288	Co2286	Cr2055
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.47940	.47045	.90220	F .61635	.48895	.50287	-.00166	4.7786	.49231	.49372	.50423
Stddev	.00045	.00340	.02402	.01687	.00550	.00338	.00382	.0383	.01221	.01165	.01055
%RSD	.09471	.72212	2.6623	2.7378	1.1258	.67288	230.06	.80157	2.4808	2.3594	2.0922
#1	.47972	.47285	.91918	.62828	.49284	.50526	.00104	4.8057	.50095	.50196	.51169
#2	.47908	.46805	.88521	.60442	.48506	.50048	-.00436	4.7515	.48367	.48548	.49678
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Fail	Chk Pass	Chk Pass	None	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Value				.50000							
Range				10.490%							
Elem	Cu3247	Fe2599	K_7664	Li6707	Mg2790	Mn2576	Mo2020	Na5895	Ni2316	P_1782	Pb2203
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	W .44815	2.5845	49.714	.97846	18.568	.45512	.49507	5.4688	.48006	.94918	.97434
Stddev	.00031	.0227	.618	.00248	.028	.00055	.01057	.0267	.01061	.01916	.01754
%RSD	.06960	.87900	1.2425	.25320	.15340	.11997	2.1347	.48869	2.2098	2.0189	1.8003
#1	.44793	2.6006	50.151	.97671	18.548	.45473	.50254	5.4877	.48756	.96273	.98674
#2	.44837	2.5684	49.277	.98021	18.589	.45550	.48760	5.4499	.47256	.93563	.96194
Check ?	Chk Warn	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Value	.50000										
Range	-10.000%										
Elem	S_1820	Sb2068	Se1960	Si2881	SiO2	Sn1899	Sr4077	Th2837	Ti3349	Ti1908	U_3701
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.09905	.95342	F .89433	5.0475	10.802	.99141	.50572	-.00219	F .44620	.99572	.03251
Stddev	.00119	.02352	.02673	.0474	.102	.01837	.00648	.00050	.00111	.02677	.00062
%RSD	1.2048	2.4674	2.9890	.94005	.94005	1.8524	1.2807	22.828	.24861	2.6884	1.9042
#1	.09820	.97005	.91323	5.0811	10.873	1.0044	.51030	-.00184	.44542	1.0146	.03207
#2	.09989	.93678	.87542	5.0140	10.730	.97843	.50114	-.00255	.44699	.97679	.03295
Check ?	None	Chk Pass	Chk Fail	Chk Pass	Chk Pass	Chk Pass	Chk Pass	None	Chk Fail	Chk Pass	None
Value			1.0000						.50000		
Range			-10.490%						-10.490%		
Elem	V_2924	Zn2062	Zr3391								
Units	ppm	ppm	ppm								
Avg	.48028	F .44579	.47541								
Stddev	.00089	.00624	.00186								
%RSD	.18435	1.4006	.39194								
#1	.47965	.44138	.47672								
#2	.48090	.45021	.47409								
Check ?	Chk Pass	Chk Fail	Chk Pass								
Value		.50000									
Range		-10.490%									
Int. Std.	Y_2243	Y_3600	Y_3774								
Units	Cts/S	Cts/S	Cts/S								
Avg	2536.3	36782.	1704.4								
Stddev	5.8	624.	65.0								
%RSD	.22940	1.6967	3.8109								
#1	2532.2	37223.	1658.4								
#2	2540.4	36341.	1750.3								

Sample Name: CCB Acquired: 5/17/2016 23:50:09 Type: QC
 Method: 6500_025(v6) Mode: CONC Corr. Factor: 1.000000
 User: CRHOADES Prep Date: Custom ID2: Custom ID3:
 Comment:

Elem	Ag3280	Al1670	As1890	B_2089	Ba4554	Be3130	Bi2230	Ca3179	Cd2288	Co2286	Cr2055
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	F .00201	.00119	.00410	F .09868	-.00091	.00003	-.00371	.00059	-.00017	-.00020	-.00062
Stddev	.00058	.00034	.00401	.00475	.00047	.00015	.00053	.00798	.00004	.00012	.00061
%RSD	28.757	28.391	97.833	4.8097	52.206	499.85	14.388	1345.8	23.667	60.004	98.716

#1	.00160	.00143	.00694	.10203	-.00057	-.00008	-.00333	-.00505	-.00019	-.00011	-.00019
#2	.00242	.00095	.00126	.09532	-.00125	.00014	-.00408	.00624	-.00014	-.00028	-.00105

Check ?	Chk Fail	Chk Pass	Chk Pass	Chk Fail	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit	.00200			.05000							
Low Limit	-.01000			-.10000							

Elem	Cu3247	Fe2599	K_7664	Li6707	Mg2790	Mn2576	Mo2020	Na5895	Ni2316	P_1782	Pb2203
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	-.00097	-.00707	.05354	F -.01118	.00015	.00007	.00202	.15595	-.00015	.00321	.00053
Stddev	.00045	.00522	.04956	.00152	.00823	.00003	.00075	.01843	.00006	.00127	.00084
%RSD	46.446	73.721	92.567	13.589	5593.2	48.479	36.938	11.821	43.460	39.692	158.30

#1	-.00065	-.00339	.08859	-.01225	-.00567	.00004	.00149	.14292	-.00020	.00411	-.00006
#2	-.00129	-.01076	.01850	-.01011	.00597	.00009	.00255	.16899	-.00010	.00231	.00112

Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Fail	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit				.01000							
Low Limit				-.01000							

Elem	S_1820	Sb2068	Se1960	Si2881	SiO2	Sn1899	Sr4077	Th2837	Ti3349	Ti1908	U_3701
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	W .05901	-.00080	-.00093	-.00795	-.01701	-.00065	-.00016	.00109	.00071	W .00788	-.01812
Stddev	.00024	.00031	.00676	.02865	.06130	.00003	.00002	.00242	.00012	.00069	.03939
%RSD	.40746	39.469	724.83	360.41	360.41	5.1429	13.037	220.74	17.165	8.7196	217.34

#1	.05884	-.00102	-.00571	.01231	.02634	-.00068	-.00017	-.00061	.00062	.00836	.00973
#2	.05918	-.00057	.00385	-.02820	-.06036	-.00063	-.00014	.00280	.00079	.00739	-.04598

Check ?	Chk Warn	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Warn	Chk Pass
High Limit	.05000									.00750	
Low Limit	-.20000									-.01900	

Elem	V_2924	Zn2062	Zr3391
Units	ppm	ppm	ppm
Avg	-.00013	-.00061	.00227
Stddev	.00006	.00020	.00179
%RSD	43.561	33.016	78.911

#1	-.00018	-.00047	.00100
#2	-.00009	-.00075	.00353

Check ?	Chk Pass	Chk Pass	Chk Pass
High Limit			
Low Limit			

Int. Std.	Y_2243	Y_3600	Y_3774
Units	Cts/S	Cts/S	Cts/S
Avg	2535.2	38199.	1733.5
Stddev	26.0	517.	78.5
%RSD	1.0263	1.3540	4.5296

#1	2516.8	38564.	1678.0
#2	2553.6	37833.	1789.1

Sample Name: CCVL-3894681 Acquired: 5/17/2016 23:52:32 Type: QC
Method: 6500_025(v6) Mode: CONC Corr. Factor: 1.000000
User: CRHOADES Prep Date: Custom ID2: Custom ID3:
Comment:

Elem	Ag3280	Al1670	As1890	B_2089	Ba4554	Be3130	Bi2230	Ca3179	Cd2288	Co2286	Cr2055
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.01286	.09629	.01248	F .17374	.00814	F .00135	.10031	.18980	.00518	.00959	.00952
Stddev	.00118	.00003	.00298	.00050	.00019	.00020	.00023	.01321	.00026	.00031	.00006
%RSD	9.1868	.03273	23.859	.28824	2.3887	14.892	.22477	6.9615	5.0874	3.2288	.65719
#1	.01369	.09627	.01459	.17338	.00801	.00121	.10015	.18045	.00499	.00981	.00948
#2	.01202	.09631	.01037	.17409	.00828	.00149	.10047	.19914	.00537	.00937	.00957
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Fail	Chk Pass	Chk Fail	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Value				.10000		.00100					
Range				30.000%		30.000%					
Elem	Cu3247	Fe2599	K_7664	Li6707	Mg2790	Mn2576	Mo2020	Na5895	Ni2316	P_1782	Pb2203
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.01295	.10726	3.0128	F -.00453	.19073	.00933	.02028	1.1518	.03992	2.8267	.00919
Stddev	.00000	.00299	.0376	.00015	.00611	.00001	.00042	.0114	.00019	.0416	.00108
%RSD	.02786	2.7854	1.2490	3.2064	3.2044	.07042	2.0635	.99139	.46369	1.4729	11.791
#1	.01295	.10515	3.0394	-.00463	.18640	.00934	.01999	1.1437	.03979	2.7973	.00996
#2	.01295	.10937	2.9862	-.00443	.19505	.00933	.02058	1.1599	.04005	2.8561	.00842
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Fail	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Value				.01000							
Range				-30.000%							
Elem	S_1820	Sb2068	Se1960	Si2881	SiO2	Sn1899	Sr4077	Th2837	Ti3349	Ti1908	U_3701
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.02566	.01744	F .00422	.50063	1.0713	.10065	.01009	.01376	.00963	.01892	F .08164
Stddev	.00037	.00169	.00289	.03623	.0775	.00031	.00009	.00201	.00052	.00352	.02567
%RSD	1.4458	9.7130	68.424	7.2371	7.2371	.30549	.85345	14.634	5.3820	18.589	31.440
#1	.02539	.01864	.00626	.47501	1.0165	.10043	.01003	.01234	.00926	.01644	.09979
#2	.02592	.01625	.00218	.52624	1.1262	.10087	.01015	.01519	.00999	.02141	.06349
Check ?	None	Chk Pass	Chk Fail	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Fail
Value			.01500								.06000
Range			-30.000%								30.000%
Elem	V_2924	Zn2062	Zr3391								
Units	ppm	ppm	ppm								
Avg	.00943	.01745	.01456								
Stddev	.00042	.00106	.00069								
%RSD	4.4368	6.0776	4.7662								
#1	.00914	.01670	.01407								
#2	.00973	.01820	.01506								
Check ?	Chk Pass	Chk Pass	Chk Pass								
Value											
Range											
Int. Std.	Y_2243	Y_3600	Y_3774								
Units	Cts/S	Cts/S	Cts/S								
Avg	2577.5	38253.	1786.1								
Stddev	8.5	111.	84.5								
%RSD	.32812	.29032	4.7335								
#1	2583.5	38332.	1726.3								
#2	2571.5	38175.	1845.8								

Sample Name: MB 280-324504/1-A Acquired: 5/17/2016 23:55:12 Type: Unk
Method: 6500_025(v6) Mode: CONC Corr. Factor: 1.000000
User: CRHOADES Prep Date: 5/13 Custom ID2: Custom ID3:
Comment: 324504 6010B

Elem	Ag3280	Al1670	As1890	B_2089	Ba4554	Be3130	Bi2230	Ca3179	Cd2288
Line	328.068 {103}	167.079 {502}	189.042 {478}	208.959 {461}	455.403 {74}	313.042 {108}	223.061 {451}	317.933 {106}	228.802 {447}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.00249	.00421	.00403	W .06131	-.00159	-.00004	.00450	.01745	.00024
Stddev	.00022	.00076	.00015	.00502	.00018	.00014	.00272	.01128	.00008
%RSD	8.8463	18.150	3.7845	8.1816	11.121	320.44	60.300	64.649	34.717

#1	.00264	.00475	.00414	.06486	-.00171	-.00014	.00642	.02542	.00030
#2	.00233	.00367	.00392	.05776	-.00146	.00005	.00258	.00947	.00018

Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Warn	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit				.05000					
Low Limit				-.05000					

Elem	Co2286	Cr2055	Cu3247	Fe2599	K_7664	Li6707	Mg2790	Mn2576	Mo2020
Line	228.616 {447}	205.560 {464}	324.754 {104}	259.940 {130}	766.490 {44}	670.784 {50}	279.079 {121}2	257.610 {131}	202.030 {467}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.00003	-.00060	-.00098	W .08334	-.09870	F -.01486	-.00196	.00066	-.00070
Stddev	.00024	.00051	.00052	.00289	.12646	.00513	.00310	.00005	.00013
%RSD	931.60	84.876	52.965	3.4622	128.13	34.517	158.55	6.7937	18.976

#1	-.00015	-.00095	-.00061	.08130	-.00928	-.01123	-.00415	.00070	-.00061
#2	.00020	-.00024	-.00135	.08538	-.18812	-.01849	.00024	.00063	-.00080

Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Warn	Chk Pass	Chk Fail	Chk Pass	Chk Pass	Chk Pass
High Limit				.05000		.01000			
Low Limit				-.05000		-.01000			

Elem	Na5895	Ni2316	P_1782	Pb2203	S_1820	Sb2068	Se1960	Si2881	SiO2
Line	589.592 {57}	231.604 {446}	178.284 {489}	220.353 {453}	182.034 {485}	206.833 {463}	196.090 {472}	288.158 {117}	288.158 {117}2
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.09319	.00028	.00369	-.00137	.02027	-.00492	-.00341	-.01124	-.02406
Stddev	.02076	.00029	.00156	.00067	.00014	.00289	.00171	.03469	.07424
%RSD	22.272	104.01	42.366	48.866	.68366	58.662	50.118	308.58	308.58

#1	.10786	.00007	.00480	-.00090	.02036	-.00288	-.00220	-.03577	-.07655
#2	.07851	.00048	.00259	-.00185	.02017	-.00696	-.00462	.01329	.02844

Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	None
High Limit									
Low Limit									

Elem	Sn1899	Sr4077	Th2837	Ti3349	Ti1908	U_3701	V_2924	Zn2062	Zr3391
Line	189.989 {477}	407.771 {83}	283.730 {119}	334.904 {101}	190.856 {477}	370.152 {91}	292.402 {115}	206.200 {163}	339.198 {99}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	-.00230	.00013	-.00032	.00121	.00186	F .06897	.00032	.00170	-.00108
Stddev	.00119	.00007	.00205	.00026	.00062	.02635	.00017	.00012	.00016
%RSD	51.827	52.449	647.41	21.646	33.321	38.209	52.606	6.9692	14.775

#1	-.00145	.00017	.00113	.00103	.00142	.08760	.00043	.00162	-.00120
#2	-.00314	.00008	-.00177	.00140	.00230	.05034	.00020	.00178	-.00097

Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Fail	Chk Pass	Chk Pass	Chk Pass
High Limit						.06000			
Low Limit						-.06000			

Int. Std.	Y_2243	Y_3600	Y_3774						
Line	224.306 {450}	360.073 {94}	377.433 {89}						
Units	Cts/S	Cts/S	Cts/S						
Avg	2697.8	39915.	1783.9						
Stddev	82.8	282.	75.6						
%RSD	3.0688	.70632	4.2377						

#1	2639.3	39715.	1730.4						
#2	2756.3	40114.	1837.3						

Sample Name: LCS 280-324504/2-A Acquired: 5/17/2016 23:57:35 Type: Unk
Method: 6500_025(v6) Mode: CONC Corr. Factor: 1.000000
User: CRHOADES Prep Date: Custom ID2: Custom ID3:
Comment: 324504 6010B

Elem	Ag3280	Al1670	As1890	B_2089	Ba4554	Be3130	Bi2230	Ca3179	Cd2288
Line	328.068 {103}	167.079 {502}	189.042 {478}	208.959 {461}	455.403 {74}	313.042 {108}	223.061 {451}	317.933 {106}	228.802 {447}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.04866	1.7890	.91787	1.0387	1.9555	.05090	1.9506	47.476	.09774
Stddev	.00001	.0435	.01778	.0249	.0408	.00002	.0543	1.023	.00218
%RSD	.02840	2.4332	1.9366	2.3982	2.0871	.04577	2.7842	2.1556	2.2312
#1	.04865	1.8197	.93044	1.0564	1.9844	.05092	1.9890	48.200	.09928
#2	.04867	1.7582	.90530	1.0211	1.9267	.05089	1.9122	46.753	.09619

Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	None	Chk Pass	Chk Pass
High Limit									
Low Limit									

Elem	Co2286	Cr2055	Cu3247	Fe2599	K_7664	Li6707	Mg2790	Mn2576	Mo2020
Line	228.616 {447}	205.560 {464}	324.754 {104}	259.940 {130}	766.490 {44}	670.784 {50}	279.079 {121}2	257.610 {131}	202.030 {467}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.47687	.19802	.22014	1.0532	49.894	.97272	46.541	F .44494	1.0164
Stddev	.01024	.00426	.00084	.0067	.902	.00452	.091	.00070	.0236
%RSD	2.1476	2.1501	.38357	.63376	1.8080	.46435	.19635	.15811	2.3261
#1	.48411	.20103	.21954	1.0485	50.532	.96952	46.476	.44445	1.0331
#2	.46963	.19501	.22073	1.0579	49.257	.97591	46.605	.44544	.99968

Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Fail	Chk Pass
High Limit								.55000	
Low Limit								.45000	

Elem	Na8183	Ni2316	P_1782	Pb2203	S_1820	Sb2068	Se1960	Si2881	SiO2
Line	818.326 {41}	231.604 {446}	178.284 {489}	220.353 {453}	182.034 {485}	206.833 {463}	196.090 {472}	288.158 {117}	288.158 {117}2
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	F 59.153	.46452	9.7708	.48603	2.0778	.51042	1.9218	10.173	21.771
Stddev	.261	.00943	.2163	.01197	.0573	.01550	.0639	.001	.001
%RSD	.44205	2.0310	2.2137	2.4621	2.7567	3.0369	3.3272	.00529	.00529
#1	59.338	.47119	9.9238	.49449	2.1184	.52138	1.9671	10.173	21.770
#2	58.968	.45785	9.6179	.47757	2.0373	.49946	1.8766	10.174	21.772

Check ?	Chk Fail	Chk Pass	Chk Pass	Chk Pass	None	Chk Pass	Chk Pass	Chk Pass	None
High Limit	56.000								
Low Limit	45.500								

Elem	Sn1899	Sr4077	Th2837	Ti3349	Ti1908	U_3701	V_2924	Zn2062	Zr3391
Line	189.989 {477}	407.771 {83}	283.730 {119}	334.904 {101}	190.856 {477}	370.152 {91}	292.402 {115}	206.200 {163}	339.198 {99}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	2.0021	1.0048	.94550	F .89783	1.7750	1.8508	.46773	.43561	.44760
Stddev	.0684	.0176	.00375	.00002	.1280	.0372	.00106	.00010	.00107
%RSD	3.4146	1.7526	.39671	.00255	7.2136	2.0119	.22766	.02349	.23976
#1	2.0505	1.0172	.94815	.89785	1.8655	1.8245	.46848	.43568	.44685
#2	1.9538	.99232	.94284	.89782	1.6844	1.8771	.46697	.43554	.44836

Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Fail	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit				1.1100					
Low Limit				.90000					

Int. Std.	Y_2243	Y_3600	Y_3774						
Line	224.306 {450}	360.073 {94}	377.433 {89}						
Units	Cts/S	Cts/S	Cts/S						
Avg	2610.9	38294.	1743.2						
Stddev	73.1	57.	118.8						
%RSD	2.8009	.14894	6.8152						
#1	2559.2	38254.	1659.2						
#2	2662.6	38334.	1827.2						

Sample Name: 280-82833-D-1-A Acquired: 5/18/2016 0:00:02 Type: Unk
Method: 6500_025(v6) Mode: CONC Corr. Factor: 1.000000
User: CRHOADES Prep Date: Custom ID2: Custom ID3:
Comment: 324504 6010B

Elem	Ag3280	Al1670	As1890	B_2089	Ba4554	Be3130	Bi2230	Ca3179	Cd2288
Line	328.068 {103}	167.079 {502}	189.042 {478}	208.959 {461}	455.403 { 74}	313.042 {108}	223.061 {451}	317.933 {106}	228.802 {447}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.00197	1.9569	.00107	.06351	.00367	.00030	.00141	5.6324	.00023
Stddev	.00004	.0091	.00516	.00320	.00006	.00021	.00249	.1466	.00006
%RSD	2.1393	.46694	482.09	5.0381	1.6037	70.260	176.78	2.6026	25.046

#1	.00200	1.9633	.00472	.06578	.00371	.00015	.00317	5.7360	.00027
#2	.00194	1.9504	-.00258	.06125	.00362	.00045	-.00035	5.5287	.00019

Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Elem	Co2286	Cr2055	Cu3247	Fe2599	K_7664	Li6707	Mg2790	Mn2576	Mo2020
Line	228.616 {447}	205.560 {464}	324.754 {104}	259.940 {130}	766.490 { 44}	670.784 { 50}	279.079 {121}2	257.610 {131}	202.030 {467}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.00004	.00201	-.00013	1.6781	.20873	-.00972	2.0928	.00817	.00346
Stddev	.00007	.00001	.00072	.0518	.06872	.00314	.0087	.00005	.00159
%RSD	194.88	.64341	569.48	3.0862	32.921	32.306	.41406	.65904	45.833

#1	-.00001	.00202	-.00064	1.7147	.25732	-.00750	2.0989	.00813	.00234
#2	.00009	.00200	.00038	1.6415	.16014	-.01194	2.0867	.00821	.00458

Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Elem	Na5895	Ni2316	P_1782	Pb2203	S_1820	Sb2068	Se1960	Si2881	SiO2
Line	589.592 { 57}	231.604 {446}	178.284 {489}	220.353 {453}	182.034 {485}	206.833 {463}	196.090 {472}	288.158 {117}	288.158 {117}2
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	4.0018	.00077	.17668	-.00197	4.9218	-.00885	.00257	4.0602	8.6889
Stddev	.0741	.00023	.00515	.00254	.1785	.00419	.00079	.0882	.1887
%RSD	1.8514	30.303	2.9146	128.51	3.6277	47.346	30.744	2.1722	2.1722

#1	4.0542	.00060	.18032	-.00377	5.0481	-.00588	.00313	4.1226	8.8223
#2	3.9494	.00093	.17304	-.00018	4.7956	-.01181	.00201	3.9979	8.5554

Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Elem	Sn1899	Sr4077	Th2837	Ti3349	Ti1908	U_3701	V_2924	Zn2062	Zr3391
Line	189.989 {477}	407.771 { 83}	283.730 {119}	334.904 {101}	190.856 {477}	370.152 { 91}	292.402 {115}	206.200 {163}	339.198 { 99}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	-.00236	.08249	.00068	.00525	.04162	.03951	.00363	.00360	.00035
Stddev	.00012	.00013	.00379	.00017	.00639	.01774	.00071	.00012	.00072
%RSD	5.0442	.15602	559.51	3.2911	15.344	44.901	19.544	3.3798	203.81

#1	-.00245	.08240	-.00200	.00513	.03710	.05206	.00313	.00351	-.00016
#2	-.00228	.08258	.00336	.00537	.04614	.02697	.00413	.00368	.00086

Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Int. Std.	Y_2243	Y_3600	Y_3774
Line	224.306 {450}	360.073 { 94}	377.433 { 89}
Units	Cts/S	Cts/S	Cts/S
Avg	2671.9	39418.	1843.4
Stddev	42.5	216.	86.6
%RSD	1.5922	.54693	4.6971

#1	2641.8	39571.	1782.2
#2	2702.0	39266.	1904.6

Sample Name: 280-82833-D-1-A SD@5 Acquired: 5/18/2016 0:02:39 Type: Unk
Method: 6500_025(v6) Mode: CONC Corr. Factor: 1.000000
User: CRHOADES Prep Date: Custom ID2: Custom ID3:
Comment: 324504 6010B

Elem	Ag3280	Al1670	As1890	B_2089	Ba4554	Be3130	Bi2230	Ca3179	Cd2288
Line	328.068 {103}	167.079 {502}	189.042 {478}	208.959 {461}	455.403 {74}	313.042 {108}	223.061 {451}	317.933 {106}	228.802 {447}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.00360	.41453	-.00338	.04359	-.00022	-.00009	.00244	1.1359	-.00010
Stddev	.00091	.00259	.00034	.00155	.00028	.00008	.00129	.0265	.00003
%RSD	25.179	.62558	10.163	3.5629	130.41	95.384	52.857	2.3293	30.276

#1	.00424	.41637	-.00314	.04469	-.00042	-.00003	.00335	1.1546	-.00013
#2	.00296	.41270	-.00363	.04250	-.00002	-.00015	.00153	1.1171	-.00008

Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Elem	Co2286	Cr2055	Cu3247	Fe2599	K_7664	Li6707	Mg2790	Mn2576	Mo2020
Line	228.616 {447}	205.560 {464}	324.754 {104}	259.940 {130}	766.490 {44}	670.784 {50}	279.079 {121}2	257.610 {131}	202.030 {467}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.00005	-.00019	-.00096	.35657	-.01198	W -.01351	.40156	.00190	-.00040
Stddev	.00059	.00037	.00013	.00773	.10480	.00246	.00372	.00006	.00067
%RSD	1114.7	193.88	13.964	2.1668	874.63	18.205	.92575	2.9734	168.07

#1	-.00036	.00007	-.00087	.36203	-.08609	-.01525	.40419	.00194	-.00087
#2	.00047	-.00046	-.00106	.35110	.06212	-.01177	.39893	.00186	.00007

Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Warn	Chk Pass	Chk Pass	Chk Pass
High Limit						2.0000			
Low Limit						-.01000			

Elem	Na5895	Ni2316	P_1782	Pb2203	S_1820	Sb2068	Se1960	Si2881	SiO2
Line	589.592 {57}	231.604 {446}	178.284 {489}	220.353 {453}	182.034 {485}	206.833 {463}	196.090 {472}	288.158 {117}	288.158 {117}2
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.82052	.00080	.03715	.00057	.87985	-.00457	-.00271	.82335	1.7620
Stddev	.00635	.00004	.00199	.00126	.01256	.00085	.00037	.00156	.0033
%RSD	.77341	4.6010	5.3677	220.64	1.4278	18.655	13.624	.18909	.18909

#1	.82500	.00078	.03856	.00146	.88873	-.00396	-.00297	.82224	1.7596
#2	.81603	.00083	.03574	-.00032	.87097	-.00517	-.00245	.82445	1.7643

Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Elem	Sn1899	Sr4077	Th2837	Ti3349	Ti1908	U_3701	V_2924	Zn2062	Zr3391
Line	189.989 {477}	407.771 {83}	283.730 {119}	334.904 {101}	190.856 {477}	370.152 {91}	292.402 {115}	206.200 {163}	339.198 {99}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	-.00264	.01620	-.00021	.00608	.00494	.01850	.00079	.00134	-.00365
Stddev	.00042	.00020	.00167	.00038	.00142	.06899	.00023	.00009	.00514
%RSD	15.776	1.2558	779.66	6.3180	28.740	372.88	28.831	6.8662	140.79

#1	-.00293	.01606	.00096	.00581	.00393	-.03028	.00063	.00128	-.00728
#2	-.00234	.01634	-.00139	.00636	.00594	.06729	.00095	.00141	-.00002

Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Int. Std.	Y_2243	Y_3600	Y_3774
Line	224.306 {450}	360.073 {94}	377.433 {89}
Units	Cts/S	Cts/S	Cts/S
Avg	2681.5	40081.	1766.4
Stddev	6.9	358.	20.9
%RSD	.25812	.89392	1.1814

#1	2676.6	39828.	1781.2
#2	2686.4	40335.	1751.7

Sample Name: 280-82833-D-1-B MS Acquired: 5/18/2016 0:05:19 Type: Unk
Method: 6500_025(v6) Mode: CONC Corr. Factor: 1.000000
User: CRHOADES Prep Date: Custom ID2: Custom ID3:
Comment: 324504 6010B

Elem	Ag3280	Al3092	As1890	B_2089	Ba4554	Be3130	Bi2230	Ca3179	Cd2288
Line	328.068 {103}	309.271 {109}	189.042 {478}	208.959 {461}	455.403 {74}	313.042 {108}	223.061 {451}	317.933 {106}	228.802 {447}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.04976	4.6900	.93566	1.0515	1.9862	.05122	F 1.9552	53.447	.09938
Stddev	.00028	.0205	.00190	.0014	.0085	.00014	.0136	.177	.00014
%RSD	.56215	.43694	.20332	.13786	.42721	.27952	.69752	.33102	.13941

#1	.04957	4.7044	.93700	1.0504	1.9802	.05132	1.9648	53.322	.09947
#2	.04996	4.6755	.93431	1.0525	1.9922	.05112	1.9456	53.572	.09928

Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Fail	Chk Pass	Chk Pass
High Limit							.10000		
Low Limit							-.10000		

Elem	Co2286	Cr2055	Cu3247	Fe2599	K_7664	Li6707	Mg2790	Mn2576	Mo2020
Line	228.616 {447}	205.560 {464}	324.754 {104}	259.940 {130}	766.490 {44}	670.784 {50}	279.079 {121}2	257.610 {131}	202.030 {467}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.48311	.20131	.22436	2.6044	50.930	.96278	48.983	.45364	1.0210
Stddev	.00089	.00123	.00061	.0015	.285	.00428	.097	.00028	.0013
%RSD	.18319	.61015	.27336	.05759	.55892	.44435	.19870	.06120	.12361

#1	.48249	.20044	.22393	2.6034	50.728	.95976	48.914	.45344	1.0201
#2	.48374	.20218	.22479	2.6055	51.131	.96581	49.052	.45384	1.0218

Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Elem	Na8183	Ni2316	P_1782	Pb2203	S_1820	Sb2068	Se1960	Si2881	SiO2
Line	818.326 {41}	231.604 {446}	178.284 {489}	220.353 {453}	182.034 {485}	206.833 {463}	196.090 {472}	288.158 {117}	288.158 {117}2
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	62.925	.46975	W 10.089	.48612	6.6477	.51179	1.8864	14.161	30.304
Stddev	.176	.00257	.048	.00115	.0298	.00153	.0013	.058	.123
%RSD	.27940	.54605	.47787	.23677	.44833	.29950	.07062	.40723	.40723

#1	63.049	.46794	10.055	.48531	6.6266	.51071	1.8855	14.202	30.392
#2	62.800	.47156	10.123	.48693	6.6688	.51287	1.8873	14.120	30.217

Check ?	Chk Pass	Chk Pass	Chk Warn	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit			2.0000						
Low Limit			-1.0000						

Elem	Sn1899	Sr4077	Th2837	Ti3349	Ti1908	U_3701	V_2924	Zn2062	Zr3391
Line	189.989 {477}	407.771 {83}	283.730 {119}	334.904 {101}	190.856 {477}	370.152 {91}	292.402 {115}	206.200 {163}	339.198 {99}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	1.9709	1.0973	.94369	.90702	1.6261	1.9436	.47270	.43803	.45062
Stddev	.0064	.0037	.00487	.00092	.0709	.0108	.00056	.00278	.00192
%RSD	.32322	.33739	.51561	.10154	4.3595	.55535	.11900	.63520	.42567

#1	1.9664	1.0947	.94025	.90637	1.6762	1.9512	.47231	.44000	.44926
#2	1.9754	1.0999	.94713	.90767	1.5759	1.9359	.47310	.43607	.45198

Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Int. Std.	Y_2243	Y_3600	Y_3774						
Line	224.306 {450}	360.073 {94}	377.433 {89}						
Units	Cts/S	Cts/S	Cts/S						
Avg	2623.2	38256.	1805.0						
Stddev	5.4	63.	13.7						
%RSD	.20634	.16572	.75898						

#1	2627.0	38211.	1814.7						
#2	2619.4	38301.	1795.4						

Sample Name: 280-82833-D-1-C MSD Acquired: 5/18/2016 0:07:45 Type: Unk
Method: 6500_025(v6) Mode: CONC Corr. Factor: 1.000000
User: CRHOADES Prep Date: Custom ID2: Custom ID3:
Comment: 324504 6010B

Elem	Ag3280	Al3092	As1890	B_2089	Ba4554	Be3130	Bi2230	Ca3179	Cd2288
Line	328.068 {103}	309.271 {109}	189.042 {478}	208.959 {461}	455.403 {74}	313.042 {108}	223.061 {451}	317.933 {106}	228.802 {447}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.04943	4.6872	.91941	1.0311	1.9474	.05143	F 1.9309	52.562	.09757
Stddev	.00023	.0385	.02715	.0339	.0088	.00062	.0481	.183	.00320
%RSD	.46140	.82129	2.9530	3.2862	.45308	1.2118	2.4888	.34818	3.2807

#1	.04927	4.7144	.90021	1.0072	1.9536	.05187	1.8969	52.691	.09531
#2	.04959	4.6600	.93861	1.0551	1.9411	.05099	1.9649	52.432	.09983

Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Fail	Chk Pass	Chk Pass
High Limit							.10000		
Low Limit							-.10000		

Elem	Co2286	Cr2055	Cu3247	Fe2599	K_7664	Li6707	Mg2790	Mn2576	Mo2020
Line	228.616 {447}	205.560 {464}	324.754 {104}	259.940 {130}	766.490 {44}	670.784 {50}	279.079 {121}2	257.610 {131}	202.030 {467}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.47706	.19831	.22496	2.6673	49.870	.96486	48.720	.45185	1.0140
Stddev	.01534	.00543	.00102	.0167	.235	.00139	.023	.00016	.0311
%RSD	3.2154	2.7405	.45377	.62558	.47049	.14387	.04710	.03476	3.0648

#1	.46622	.19447	.22423	2.6791	50.036	.96584	48.704	.45196	.99200
#2	.48791	.20215	.22568	2.6555	49.704	.96388	48.736	.45174	1.0359

Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Elem	Na8183	Ni2316	P_1782	Pb2203	S_1820	Sb2068	Se1960	Si2881	SiO2
Line	818.326 {41}	231.604 {446}	178.284 {489}	220.353 {453}	182.034 {485}	206.833 {463}	196.090 {472}	288.158 {117}	288.158 {117}2
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	63.469	.46584	W 9.9320	.47936	6.6434	.50981	1.8746	14.290	30.580
Stddev	.772	.01417	.3092	.01648	.1823	.01949	.0390	.030	.064
%RSD	1.2170	3.0420	3.1131	3.4382	2.7436	3.8231	2.0788	.20947	.20947

#1	64.015	.45582	9.7133	.46771	6.5145	.49603	1.8470	14.311	30.626
#2	62.922	.47586	10.151	.49101	6.7723	.52359	1.9021	14.269	30.535

Check ?	Chk Pass	Chk Pass	Chk Warn	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit			2.0000						
Low Limit			-1.0000						

Elem	Sn1899	Sr4077	Th2837	Ti3349	Ti1908	U_3701	V_2924	Zn2062	Zr3391
Line	189.989 {477}	407.771 {83}	283.730 {119}	334.904 {101}	190.856 {477}	370.152 {91}	292.402 {115}	206.200 {163}	339.198 {99}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	1.9829	1.0799	.93149	.90729	1.7374	1.8837	.46903	.43311	.45232
Stddev	.0531	.0069	.00322	.00102	.0103	.0384	.00001	.00278	.00565
%RSD	2.6772	.63456	.34542	.11203	.59449	2.0398	.00157	.64132	1.2497

#1	1.9453	1.0847	.93376	.90657	1.7447	1.8565	.46903	.43507	.44833
#2	2.0204	1.0750	.92921	.90801	1.7301	1.9109	.46902	.43115	.45632

Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Int. Std.	Y_2243	Y_3600	Y_3774						
Line	224.306 {450}	360.073 {94}	377.433 {89}						
Units	Cts/S	Cts/S	Cts/S						
Avg	2663.5	38825.	1851.4						
Stddev	80.4	378.	21.5						
%RSD	3.0182	.97310	1.1597						

#1	2720.3	38557.	1836.2						
#2	2606.6	39092.	1866.6						

Sample Name: 280-82833-D-2-A Acquired: 5/18/2016 0:10:10 Type: Unk
Method: 6500_025(v6) Mode: CONC Corr. Factor: 1.000000
User: CRHOADES Prep Date: Custom ID2: Custom ID3:
Comment: 324504 6010B

Elem	Ag3280	Al1670	As1890	B_2089	Ba4554	Be3130	Bi2230	Ca3179	Cd2288
Line	328.068 {103}	167.079 {502}	189.042 {478}	208.959 {461}	455.403 { 74}	313.042 {108}	223.061 {451}	317.933 {106}	228.802 {447}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.00233	.19366	.00418	.04698	.01135	.00017	.00212	17.050	-.00012
Stddev	.00006	.00625	.00115	.00317	.00317	.00022	.00293	.486	.00000
%RSD	2.7703	3.2259	27.475	6.7519	27.911	132.91	138.19	2.8524	3.9623

#1	.00238	.19808	.00337	.04923	.00911	.00001	.00420	16.706	-.00012
#2	.00228	.18924	.00499	.04474	.01359	.00032	.00005	17.394	-.00013

Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Elem	Co2286	Cr2055	Cu3247	Fe2599	K_7664	Li6707	Mg2790	Mn2576	Mo2020
Line	228.616 {447}	205.560 {464}	324.754 {104}	259.940 {130}	766.490 { 44}	670.784 { 50}	279.079 {121}2	257.610 {131}	202.030 {467}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	-.00015	.00119	.00018	11.136	1.3309	-.00581	3.3701	.01893	.00379
Stddev	.00050	.00004	.00072	.088	.0592	.00573	.0180	.00022	.00126
%RSD	341.59	3.3126	394.37	.79186	4.4493	98.776	.53358	1.1771	33.197

#1	-.00050	.00122	-.00033	11.074	1.2890	-.00986	3.3828	.01908	.00290
#2	.00021	.00117	.00069	11.198	1.3728	-.00175	3.3574	.01877	.00468

Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Elem	Na5895	Ni2316	P_1782	Pb2203	S_1820	Sb2068	Se1960	Si2881	SiO2
Line	589.592 { 57}	231.604 {446}	178.284 {489}	220.353 {453}	182.034 {485}	206.833 {463}	196.090 {472}	288.158 {117}	288.158 {117}2
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	6.0506	.00024	.04374	-.00073	1.2386	-.00409	.00098	3.5555	7.6087
Stddev	.0912	.00020	.00104	.00041	.0330	.00032	.00063	.0291	.0624
%RSD	1.5079	84.658	2.3722	56.214	2.6615	7.8318	64.279	.81950	.81950

#1	5.9861	.00010	.04448	-.00102	1.2619	-.00387	.00054	3.5349	7.5646
#2	6.1151	.00038	.04301	-.00044	1.2153	-.00432	.00143	3.5761	7.6528

Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Elem	Sn1899	Sr4077	Th2837	Ti3349	Ti1908	U_3701	V_2924	Zn2062	Zr3391
Line	189.989 {477}	407.771 { 83}	283.730 {119}	334.904 {101}	190.856 {477}	370.152 { 91}	292.402 {115}	206.200 {163}	339.198 { 99}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	-.00025	.22969	-.00005	.00134	.03460	.04668	.00629	.00334	.00292
Stddev	.00082	.00060	.00247	.00015	.01024	.02503	.00013	.00002	.00030
%RSD	326.24	.26020	5469.0	11.165	29.604	53.611	2.0870	.73785	10.283

#1	.00033	.22927	.00170	.00145	.02736	.02898	.00620	.00332	.00271
#2	-.00083	.23011	-.00179	.00123	.04184	.06437	.00638	.00335	.00314

Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Int. Std.	Y_2243	Y_3600	Y_3774
Line	224.306 {450}	360.073 { 94}	377.433 { 89}
Units	Cts/S	Cts/S	Cts/S
Avg	2752.5	40058.	1888.6
Stddev	83.1	173.	48.9
%RSD	3.0203	.43295	2.5908

#1	2693.7	39936.	1923.2
#2	2811.3	40181.	1854.0

Sample Name: 280-82833-D-3-A Acquired: 5/18/2016 0:12:48 Type: Unk
Method: 6500_025(v6) Mode: CONC Corr. Factor: 1.000000
User: CRHOADES Prep Date: Custom ID2: Custom ID3:
Comment: 324504 6010B

Elem	Ag3280	Al1670	As1890	B_2089	Ba4554	Be3130	Bi2230	Ca3179	Cd2288
Line	328.068 {103}	167.079 {502}	189.042 {478}	208.959 {461}	455.403 {74}	313.042 {108}	223.061 {451}	317.933 {106}	228.802 {447}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.00272	.18463	.00256	.04722	.00564	.00011	.00018	28.070	.00001
Stddev	.00010	.00091	.00728	.00017	.00091	.00001	.00160	.596	.00006
%RSD	3.7841	.49338	284.10	.35615	16.179	7.6724	866.90	2.1233	448.25

#1	.00280	.18398	.00771	.04710	.00628	.00011	-.00094	28.492	.00006
#2	.00265	.18527	-.00259	.04734	.00499	.00010	.00131	27.649	-.00003

Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Elem	Co2286	Cr2055	Cu3247	Fe2599	K_7664	Li6707	Mg2790	Mn2576	Mo2020
Line	228.616 {447}	205.560 {464}	324.754 {104}	259.940 {130}	766.490 {44}	670.784 {50}	279.079 {121}2	257.610 {131}	202.030 {467}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	-.00043	.00123	-.00012	.46693	2.1224	W -.01013	5.1451	.01174	-.00003
Stddev	.00079	.00008	.00049	.00783	.0901	.00292	.0479	.00002	.00077
%RSD	182.75	6.1341	395.87	1.6768	4.2461	28.843	.93172	.14169	2355.2

#1	.00013	.00117	-.00047	.47247	2.1861	-.01219	5.1112	.01175	-.00058
#2	-.00099	.00128	.00022	.46139	2.0586	-.00806	5.1790	.01172	.00051

Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Warn	Chk Pass	Chk Pass	Chk Pass
High Limit						2.0000			
Low Limit						-.01000			

Elem	Na8183	Ni2316	P_1782	Pb2203	S_1820	Sb2068	Se1960	Si2881	SiO2
Line	818.326 {41}	231.604 {446}	178.284 {489}	220.353 {453}	182.034 {485}	206.833 {463}	196.090 {472}	288.158 {117}	288.158 {117}2
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	16.468	.00062	.02015	-.00158	11.102	-.00532	-.00282	3.0770	6.5847
Stddev	.789	.00021	.00057	.00144	.172	.00252	.00611	.0269	.0576
%RSD	4.7905	34.259	2.8184	91.293	1.5464	47.390	217.02	.87500	.87500

#1	17.026	.00078	.01974	-.00260	10.981	-.00710	-.00714	3.0960	6.6255
#2	15.911	.00047	.02055	-.00056	11.224	-.00354	.00151	3.0579	6.5440

Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Elem	Sn1899	Sr4077	Th2837	Ti3349	Ti1908	U_3701	V_2924	Zn2062	Zr3391
Line	189.989 {477}	407.771 {83}	283.730 {119}	334.904 {101}	190.856 {477}	370.152 {91}	292.402 {115}	206.200 {163}	339.198 {99}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	-.00154	.03872	.00028	.00083	.00529	.03321	.00372	.00074	.00158
Stddev	.00107	.00013	.00062	.00004	.00073	.01651	.00057	.00004	.00191
%RSD	69.362	.34560	223.41	5.0369	13.754	49.710	15.292	5.5218	120.79

#1	-.00078	.03882	-.00016	.00080	.00478	.02154	.00332	.00071	.00023
#2	-.00229	.03863	.00072	.00086	.00581	.04488	.00412	.00077	.00294

Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Int. Std.	Y_2243	Y_3600	Y_3774
Line	224.306 {450}	360.073 {94}	377.433 {89}
Units	Cts/S	Cts/S	Cts/S
Avg	2652.8	39532.	1848.9
Stddev	4.9	68.	27.2
%RSD	.18585	.17147	1.4726

#1	2656.3	39484.	1829.6
#2	2649.3	39580.	1868.1

Sample Name: 280-82833-D-4-A Acquired: 5/18/2016 0:15:26 Type: Unk
Method: 6500_025(v6) Mode: CONC Corr. Factor: 1.000000
User: CRHOADES Prep Date: Custom ID2: Custom ID3:
Comment: 324504 6010B

Elem	Ag3280	Al3092	As1890	B_2089	Ba4554	Be3130	Bi2230	Ca3179	Cd2288
Line	328.068 {103}	309.271 {109}	189.042 {478}	208.959 {461}	455.403 { 74}	313.042 {108}	223.061 {451}	317.933 {106}	228.802 {447}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.00248	3.5244	.00055	.04286	.02263	.00042	-.00032	4.2279	.00008
Stddev	.00006	.0259	.00365	.00100	.00084	.00005	.00055	.0241	.00014
%RSD	2.5489	.73373	668.33	2.3342	3.7203	11.763	173.95	.57006	170.17

#1	.00243	3.5427	.00313	.04215	.02322	.00039	-.00071	4.2449	.00018
#2	.00252	3.5061	-.00204	.04357	.02203	.00046	.00007	4.2109	-.00002

Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Elem	Co2286	Cr2055	Cu3247	Fe2599	K_7664	Li6707	Mg2790	Mn2576	Mo2020
Line	228.616 {447}	205.560 {464}	324.754 {104}	259.940 {130}	766.490 { 44}	670.784 { 50}	279.079 {121}2	257.610 {131}	202.030 {467}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	-.00017	-.00024	-.00097	1.3467	6.4502	W -.01402	4.6071	.00229	-.00057
Stddev	.00017	.00013	.00018	.0105	.0225	.00033	.0278	.00002	.00046
%RSD	97.599	52.995	18.021	.78188	.34937	2.3474	.60395	.99100	80.660

#1	-.00005	-.00015	-.00085	1.3541	6.4661	-.01379	4.6268	.00227	-.00089
#2	-.00029	-.00033	-.00110	1.3393	6.4342	-.01425	4.5874	.00230	-.00024

Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Warn	Chk Pass	Chk Pass	Chk Pass
High Limit						2.0000			
Low Limit						-.01000			

Elem	Na8183	Ni2316	P_1782	Pb2203	S_1820	Sb2068	Se1960	Si2881	SiO2
Line	818.326 { 41}	231.604 {446}	178.284 {489}	220.353 {453}	182.034 {485}	206.833 {463}	196.090 {472}	288.158 {117}	288.158 {117}2
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	61.616	.00051	.04692	-.00076	48.237	-.00475	-.00056	1.4215	3.0421
Stddev	.066	.00001	.00144	.00150	1.179	.00334	.00221	.0359	.0768
%RSD	.10789	2.4404	3.0770	198.54	2.4440	70.304	396.66	2.5248	2.5248

#1	61.663	.00052	.04590	-.00182	47.403	-.00239	.00101	1.3962	2.9878
#2	61.569	.00051	.04794	.00031	49.071	-.00712	-.00212	1.4469	3.0964

Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Elem	Sn1899	Sr4077	Th2837	Ti3349	Ti1908	U_3701	V_2924	Zn2062	Zr3391
Line	189.989 {477}	407.771 { 83}	283.730 {119}	334.904 {101}	190.856 {477}	370.152 { 91}	292.402 {115}	206.200 {163}	339.198 { 99}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	-.00246	.17893	.00076	.00156	.00049	.05928	.00172	.00024	-.00108
Stddev	.00068	.00012	.00074	.00007	.00635	.04741	.00006	.00029	.00318
%RSD	27.757	.06572	97.964	4.2967	1301.3	79.986	3.5987	122.70	294.92

#1	-.00197	.17901	.00128	.00151	-.00400	.02575	.00177	.00044	-.00333
#2	-.00294	.17885	.00023	.00160	.00498	.09280	.00168	.00003	.00117

Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Int. Std.	Y_2243	Y_3600	Y_3774
Line	224.306 {450}	360.073 { 94}	377.433 { 89}
Units	Cts/S	Cts/S	Cts/S
Avg	2649.9	38907.	1872.6
Stddev	69.2	98.	38.8
%RSD	2.6108	.25124	2.0711

#1	2698.8	38976.	1845.1
#2	2601.0	38838.	1900.0

Sample Name: CCVH-3883905 Acquired: 5/18/2016 0:18:02 Type: QC
Method: 6500_025(v6) Mode: CONC Corr. Factor: 1.000000
User: CRHOADES Prep Date: Custom ID2: Custom ID3:
Comment:

Elem	Ag3280	Al3092	As1890	B_2089	Ba4554	Be3130	Bi2230	Ca3179	Cd2288	Co2286	Cr2055
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	-.00638	52.209	.00146	.02475	-.00089	.00021	W .94765	-.01171	-.00075	-.00128	-.00021
Stddev	.00095	1.061	.00087	.00112	.00014	.00022	.00403	.00146	.00017	.00035	.00027
%RSD	14.961	2.0320	59.989	4.5307	16.060	105.26	.42511	12.431	23.009	27.346	124.31

#1	-.00570	51.459	.00207	.02395	-.00099	.00036	.94481	-.01068	-.00063	-.00103	-.00040
#2	-.00705	52.960	.00084	.02554	-.00079	.00005	.95050	-.01274	-.00088	-.00153	-.00003

Check ?	None	Chk Pass	None	None	None	None	Chk Warn	None	None	None	None
Value							1.0000				
Range							-5.0000%				

Elem	Cu3247	Fe2714	K_7664	Li6707	Mg2790	Mn2576	Mo2020	Na8183	Ni2316	P_1782	Pb2203
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	-.01497	54.765	-.17942	-.01310	.01578	-.00211	-.00198	F 281.12	.00202	.00716	-.00135
Stddev	.00074	.349	.12723	.00129	.00692	.00002	.00077	1.93	.00033	.00140	.00090
%RSD	4.9564	.63681	70.909	9.8512	43.836	.88866	38.750	.68807	16.261	19.516	66.574

#1	-.01444	55.012	-.08946	-.01219	.01089	-.00210	-.00252	279.76	.00226	.00617	-.00071
#2	-.01549	54.519	-.26938	-.01402	.02066	-.00213	-.00143	282.49	.00179	.00815	-.00199

Check ?	None	Chk Pass	None	None	None	None	None	Chk Fail	None	None	None
Value								250.00			
Range								10.490%			

Elem	S_1820	Sb2068	Se1960	Si2881	SiO2	Sn1899	Sr4077	Th2837	Ti3349	Ti1908	U_3701
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	5.0113	-.01721	-.00513	-.04278	-.09155	-.00228	.00005	W 4.5312	.00157	-.00019	W 9.4587
Stddev	.0706	.00299	.00395	.00494	.01057	.00050	.00000	.0071	.00089	.00304	.0806
%RSD	1.4080	17.358	76.937	11.541	11.541	21.741	6.6117	.15722	56.705	1606.8	.85251

#1	4.9614	-.01510	-.00234	-.03929	-.08407	-.00193	.00005	4.5262	.00220	-.00234	9.4017
#2	5.0612	-.01933	-.00792	-.04627	-.09902	-.00263	.00005	4.5362	.00094	.00196	9.5157

Check ?	Chk Pass	None	None	None	None	None	None	Chk Warn	None	None	Chk Warn
Value								5.0000			10.000
Range								-5.0000%			-5.0000%

Elem	V_2924	Zn2062	Zr3391
Units	ppm	ppm	ppm
Avg	.01213	-.00023	-.13436
Stddev	.00000	.00000	.00095
%RSD	.04041	.64825	.70487

#1	.01213	-.00023	-.13369
#2	.01212	-.00024	-.13503

Check ?	None	None	None
Value			
Range			

Int. Std.	Y_2243	Y_3600	Y_3774
Units	Cts/S	Cts/S	Cts/S
Avg	2565.6	38017.	1767.7
Stddev	4.7	16.	27.3
%RSD	.18316	.04115	1.5447

#1	2569.0	38028.	1748.4
#2	2562.3	38006.	1787.0

Sample Name: CCV-3888422 Acquired: 5/18/2016 0:20:38 Type: QC
Method: 6500_025(v6) Mode: CONC Corr. Factor: 1.000000
User: CRHOADES Prep Date: Custom ID2: Custom ID3:
Comment:

Elem	Ag3280	Al1670	As1890	B_2089	Ba4554	Be3130	Bi2230	Ca3179	Cd2288	Co2286	Cr2055
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.47554	.46557	W .89836	.49684	.48416	.50053	.00184	4.7551	.48567	.49480	.50349
Stddev	.00130	.00743	.02209	.01244	.00454	.00244	.00080	.0376	.00053	.01182	.01247
%RSD	.27343	1.5965	2.4588	2.5029	.93743	.48690	43.294	.79050	.10830	2.3894	2.4774
#1	.47646	.46031	.88274	.48805	.48737	.50226	.00240	4.7817	.48529	.48644	.49467
#2	.47462	.47082	.91397	.50563	.48095	.49881	.00127	4.7285	.48604	.50316	.51231
Check ?	Chk Pass	Chk Pass	Chk Warn	Chk Pass	Chk Pass	Chk Pass	None	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Value			1.0000								
Range			-10.000%								
Elem	Cu3247	Fe2599	K_7664	Li6707	Mg2790	Mn2576	Mo2020	Na5895	Ni2316	P_1782	Pb2203
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	F .44404	2.5442	49.332	.97516	18.424	W .44954	.49470	5.3736	.48112	.95906	.98056
Stddev	.00120	.0069	.341	.00015	.021	.00081	.01138	.0171	.01448	.02445	.03073
%RSD	.26917	.27001	.69022	.01497	.11581	.18075	2.3000	.31787	3.0100	2.5490	3.1336
#1	.44320	2.5393	49.572	.97506	18.409	.44897	.48665	5.3615	.47088	.94177	.95883
#2	.44489	2.5491	49.091	.97527	18.439	.45012	.50274	5.3857	.49136	.97634	1.0023
Check ?	Chk Fail	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Warn	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Value	.50000					.50000					
Range	-10.490%					-10.000%					
Elem	S_1820	Sb2068	Se1960	Si2881	SiO2	Sn1899	Sr4077	Th2837	Ti3349	Ti1908	U_3701
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	-.04771	.95319	.90758	4.9872	10.673	.99311	.50288	.00007	F .44301	1.0085	.02340
Stddev	.00341	.02440	.02587	.0764	.164	.02635	.00397	.00012	.00325	.0247	.00501
%RSD	7.1492	2.5601	2.8508	1.5325	1.5325	2.6534	.79014	164.75	.73444	2.4460	21.431
#1	-.04530	.93594	.88928	5.0412	10.788	.97448	.50569	-.00001	.44071	.99110	.01985
#2	-.05013	.97045	.92587	4.9332	10.557	1.0117	.50007	.00016	.44531	1.0260	.02694
Check ?	None	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	None	Chk Fail	Chk Pass	None
Value									.50000		
Range									-10.490%		
Elem	V_2924	Zn2062	Zr3391								
Units	ppm	ppm	ppm								
Avg	.47128	F .43873	.46607								
Stddev	.00287	.00452	.00142								
%RSD	.60945	1.0292	.30407								
#1	.46925	.43554	.46507								
#2	.47331	.44192	.46707								
Check ?	Chk Pass	Chk Fail	Chk Pass								
Value		.50000									
Range		-10.490%									
Int. Std.	Y_2243	Y_3600	Y_3774								
Units	Cts/S	Cts/S	Cts/S								
Avg	2613.4	38304.	1772.4								
Stddev	68.4	21.	23.3								
%RSD	2.6171	.05544	1.3126								
#1	2661.7	38319.	1756.0								
#2	2565.0	38289.	1788.9								

Sample Name: CCB Acquired: 5/18/2016 0:23:09 Type: QC
 Method: 6500_025(v6) Mode: CONC Corr. Factor: 1.000000
 User: CRHOADES Prep Date: Custom ID2: Custom ID3:
 Comment:

Elem	Ag3280	Al1670	As1890	B_2089	Ba4554	Be3130	Bi2230	Ca3179	Cd2288	Co2286	Cr2055
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	F .00207	.00095	.00128	W .01973	-.00107	.00012	-.00145	-.00510	.00006	.00005	-.00058
Stddev	.00033	.00015	.00265	.00010	.00036	.00010	.00115	.01267	.00018	.00009	.00014
%RSD	16.114	15.707	206.93	.52080	33.928	84.365	79.523	248.34	312.62	174.90	23.556
#1	.00183	.00085	.00315	.01980	-.00081	.00019	-.00227	.00386	.00018	.00012	-.00049
#2	.00231	.00106	-.00059	.01966	-.00133	.00005	-.00063	-.01406	-.00007	-.00001	-.00068
Check ?	Chk Fail	Chk Pass	Chk Pass	Chk Warn	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit	.00200			.01500							
Low Limit	-.01000			-.01500							
Elem	Cu3247	Fe2599	K_7664	Li6707	Mg2790	Mn2576	Mo2020	Na5895	Ni2316	P_1782	Pb2203
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	-.00041	.04203	-.15036	F -.01182	-.00229	.00045	.00063	-.02052	.00049	.00034	-.00002
Stddev	.00055	.00521	.07362	.00651	.00175	.00018	.00078	.01485	.00071	.00543	.00027
%RSD	133.03	12.384	48.960	55.078	76.631	41.097	125.12	72.359	143.51	1618.7	1795.9
#1	-.00002	.03835	-.20241	-.01642	-.00105	.00032	.00007	-.03102	-.00001	-.00350	-.00021
#2	-.00080	.04571	-.09830	-.00722	-.00353	.00058	.00118	-.01002	.00100	.00418	.00018
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Fail	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit				.01000							
Low Limit				-.01000							
Elem	S_1820	Sb2068	Se1960	Si2881	SiO2	Sn1899	Sr4077	Th2837	Ti3349	Tl1908	U_3701
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	-.04106	W -.00110	-.01070	-.02080	-.04451	-.00172	.00008	.00115	.00072	.00392	.06689
Stddev	.00131	.00116	.00063	.01089	.02330	.00053	.00034	.00211	.00020	.00312	.04148
%RSD	3.1926	105.39	5.8697	52.351	52.351	30.765	419.25	183.31	27.285	79.531	62.005
#1	-.04014	-.00192	-.01114	-.01310	-.02803	-.00209	.00032	-.00034	.00086	.00171	.09622
#2	-.04199	-.00028	-.01025	-.02850	-.06099	-.00134	-.00016	.00264	.00058	.00612	.03756
Check ?	Chk Pass	Chk Warn	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit		.00100									
Low Limit		-.00100									
Elem	V_2924	Zn2062	Zr3391								
Units	ppm	ppm	ppm								
Avg	-.00025	.00000	-.00003								
Stddev	.00012	.00067	.00040								
%RSD	48.163	14462.	1335.9								
#1	-.00033	-.00047	.00025								
#2	-.00016	.00048	-.00031								
Check ?	Chk Pass	Chk Pass	Chk Pass								
High Limit											
Low Limit											
Int. Std.	Y_2243	Y_3600	Y_3774								
Units	Cts/S	Cts/S	Cts/S								
Avg	2566.7	37760.	1795.7								
Stddev	27.1	1132.	20.8								
%RSD	1.0566	2.9969	1.1609								
#1	2585.9	36960.	1780.9								
#2	2547.5	38560.	1810.4								

Sample Name: CCVL-3894681 Acquired: 5/18/2016 0:25:31 Type: QC
Method: 6500_025(v6) Mode: CONC Corr. Factor: 1.000000
User: CRHOADES Prep Date: Custom ID2: Custom ID3:
Comment:

Elem	Ag3280	Al1670	As1890	B_2089	Ba4554	Be3130	Bi2230	Ca3179	Cd2288	Co2286	Cr2055	Cu3247
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.01190	.09758	F .00895	.11355	.00903	.00082	.10359	.19391	.00495	.00970	.01017	.01226
Stddev	.00066	.00089	.00087	.00244	.00001	.00022	.01001	.00788	.00003	.00021	.00002	.00006
%RSD	5.5611	.91166	9.6696	2.1505	.10522	27.374	9.6598	4.0638	.57386	2.1629	.22452	.45019

#1	.01143	.09821	.00833	.11527	.00903	.00066	.11067	.18834	.00497	.00985	.01019	.01230
#2	.01237	.09695	.00956	.11182	.00902	.00098	.09652	.19948	.00493	.00955	.01016	.01223

Check ?	Chk Pass	Chk Pass	Chk Fail	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Value			.01500									
Range			-30.000%									

Elem	Fe2599	K_7664	Li6707	Mg2790	Mn2576	Mo2020	Na5895	Ni2316	P_1782	Pb2203	S_1820	Sb2068
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.10804	2.8345	F .00110	.18794	.00941	.01932	1.0280	.04009	2.8307	.00857	-.05066	.02155
Stddev	.00917	.0172	.00368	.00080	.00002	.00054	.0072	.00184	.0700	.00424	.00098	.00485
%RSD	8.4915	.60819	335.49	.42666	.19507	2.7803	.70023	4.5877	2.4740	49.482	1.9359	22.506

#1	.11453	2.8466	.00370	.18851	.00940	.01970	1.0331	.04139	2.8803	.01157	-.04997	.01812
#2	.10155	2.8223	-.00150	.18737	.00943	.01894	1.0229	.03879	2.7812	.00557	-.05135	.02498

Check ?	Chk Pass	Chk Pass	Chk Fail	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	None	Chk Pass
Value			.01000									
Range			-30.000%									

Elem	Se1960	Si2881	SiO2	Sn1899	Sr4077	Th2837	Ti3349	Ti1908	U_3701	V_2924	Zn2062	Zr3391
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	F .00606	.41491	.88790	.10118	.00985	.01524	.00975	.01512	.07345	.00854	.01792	F .00937
Stddev	.00352	.03417	.07312	.00193	.00018	.00125	.00045	.00282	.04146	.00065	.00012	.00094
%RSD	58.174	8.2354	8.2354	1.9046	1.8542	8.2066	4.6484	18.676	56.444	7.6138	.67839	10.050

#1	.00855	.43907	.93961	.10255	.00998	.01612	.00942	.01711	.04413	.00808	.01783	.00870
#2	.00357	.39075	.83620	.09982	.00972	.01435	.01007	.01312	.10276	.00900	.01800	.01003

Check ?	Chk Fail	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Fail
Value	.01500											.01500
Range	-30.000%											-30.000%

Int. Std.	Y_2243	Y_3600	Y_3774
Units	Cts/S	Cts/S	Cts/S
Avg	2596.3	38728.	1740.6
Stddev	.2	343.	7.2
%RSD	.00947	.88443	.41634

#1	2596.2	38970.	1745.7
#2	2596.5	38485.	1735.5

Sample Name: 280-82833-D-5-A Acquired: 5/18/2016 0:28:11 Type: Unk
Method: 6500_025(v6) Mode: CONC Corr. Factor: 1.000000
User: CRHOADES Prep Date: Custom ID2: Custom ID3:
Comment: 324504 6010B

Elem	Ag3280	Al1670	As1890	B_2089	Ba4554	Be3130	Bi2230	Ca3179	Cd2288
Line	328.068 {103}	167.079 {502}	189.042 {478}	208.959 {461}	455.403 { 74}	313.042 {108}	223.061 {451}	317.933 {106}	228.802 {447}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.00286	.86971	-.00082	.03122	.00301	.00009	.00198	19.653	.00029
Stddev	.00001	.00118	.00403	.00150	.00026	.00009	.00123	.441	.00020
%RSD	.29908	.13514	489.78	4.8191	8.6555	104.80	62.378	2.2442	69.138

#1	.00286	.86887	-.00367	.03016	.00319	.00002	.00111	19.965	.00043
#2	.00287	.87054	.00203	.03228	.00282	.00015	.00285	19.341	.00015

Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Elem	Co2286	Cr2055	Cu3247	Fe2599	K_7664	Li6707	Mg2790	Mn2576	Mo2020
Line	228.616 {447}	205.560 {464}	324.754 {104}	259.940 {130}	766.490 { 44}	670.784 { 50}	279.079 {121}2	257.610 {131}	202.030 {467}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.00003	.00212	.00093	.32200	1.4755	W -.01112	2.8938	.00257	-.00021
Stddev	.00003	.00005	.00078	.01629	.0294	.00150	.0021	.00005	.00033
%RSD	86.902	2.1509	83.840	5.0597	1.9943	13.487	.07250	2.0905	158.76

#1	.00005	.00209	.00148	.33352	1.4963	-.01218	2.8924	.00261	-.00044
#2	.00001	.00215	.00038	.31048	1.4547	-.01006	2.8953	.00253	.00003

Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Warn	Chk Pass	Chk Pass	Chk Pass
High Limit						2.0000			
Low Limit						-.01000			

Elem	Na5895	Ni2316	P_1782	Pb2203	S_1820	Sb2068	Se1960	Si2881	SiO2
Line	589.592 { 57}	231.604 {446}	178.284 {489}	220.353 {453}	182.034 {485}	206.833 {463}	196.090 {472}	288.158 {117}	288.158 {117}2
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	3.6032	.00057	.03436	-.00056	3.5222	-.00660	-.00239	2.4204	5.1796
Stddev	.0046	.00012	.00151	.00025	.1845	.00212	.00309	.0062	.0132
%RSD	.12776	21.104	4.3812	45.026	5.2372	32.157	129.50	.25547	.25547

#1	3.6064	.00065	.03543	-.00073	3.3917	-.00810	-.00020	2.4247	5.1889
#2	3.5999	.00048	.03330	-.00038	3.6526	-.00510	-.00457	2.4160	5.1702

Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Elem	Sn1899	Sr4077	Th2837	Ti3349	Ti1908	U_3701	V_2924	Zn2062	Zr3391
Line	189.989 {477}	407.771 { 83}	283.730 {119}	334.904 {101}	190.856 {477}	370.152 { 91}	292.402 {115}	206.200 {163}	339.198 { 99}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	-.00049	.25938	.00015	.00166	-.00089	.01951	.00620	.00134	-.00194
Stddev	.00060	.00554	.00403	.00059	.00278	.06403	.00039	.00041	.00160
%RSD	123.08	2.1365	2745.3	35.494	311.42	328.15	6.3305	30.675	82.551

#1	-.00006	.26330	-.00270	.00208	-.00286	.06479	.00592	.00164	-.00081
#2	-.00091	.25547	.00300	.00125	.00107	-.02577	.00648	.00105	-.00307

Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Int. Std.	Y_2243	Y_3600	Y_3774
Line	224.306 {450}	360.073 { 94}	377.433 { 89}
Units	Cts/S	Cts/S	Cts/S
Avg	2690.1	40052.	1924.1
Stddev	5.3	161.	33.0
%RSD	.19760	.40265	1.7161

#1	2693.9	39938.	1900.8
#2	2686.3	40166.	1947.5

Sample Name: 280-82833-D-6-A Acquired: 5/18/2016 0:30:50 Type: Unk
Method: 6500_025(v6) Mode: CONC Corr. Factor: 1.000000
User: CRHOADES Prep Date: Custom ID2: Custom ID3:
Comment: 324504 6010B

Elem	Ag3280	Al1670	As1890	B_2089	Ba4554	Be3130	Bi2230	Ca3179	Cd2288
Line	328.068 {103}	167.079 {502}	189.042 {478}	208.959 {461}	455.403 {74}	313.042 {108}	223.061 {451}	317.933 {106}	228.802 {447}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.00216	1.8828	.00710	.10765	.01330	.00001	.00462	30.221	.00059
Stddev	.00028	.0062	.00441	.00237	.00024	.00009	.00153	.216	.00017
%RSD	12.883	.33032	62.097	2.2057	1.8033	634.51	33.106	.71373	28.593

#1	.00236	1.8784	.00398	.10597	.01347	-.00005	.00354	30.374	.00070
#2	.00197	1.8872	.01021	.10933	.01313	.00008	.00570	30.069	.00047

Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Elem	Co2286	Cr2055	Cu3247	Fe2599	K_7664	Li6707	Mg2790	Mn2576	Mo2020
Line	228.616 {447}	205.560 {464}	324.754 {104}	259.940 {130}	766.490 {44}	670.784 {50}	279.079 {121}2	257.610 {131}	202.030 {467}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.00246	.00327	.00216	1.0569	39.249	-.00940	5.2232	.15941	-.00114
Stddev	.00019	.00000	.00007	.0053	.222	.00149	.0415	.00031	.00002
%RSD	7.5731	.05982	3.3774	.50201	.56554	15.904	.79471	.19630	1.3659

#1	.00259	.00328	.00221	1.0606	39.406	-.00834	5.2526	.15963	-.00115
#2	.00233	.00327	.00211	1.0531	39.092	-.01045	5.1939	.15919	-.00113

Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Elem	Na5895	Na8183	Ni2316	P_1782	Pb2203	S_1820	Sb2068	Se1960	Si2881
Line	589.592 {57}	818.326 {41}	231.604 {446}	178.284 {489}	220.353 {453}	182.034 {485}	206.833 {463}	196.090 {472}	288.158 {117}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	9.0059	11.363	.00248	1.8368	.00031	48.832	-.00645	-.00439	4.0205
Stddev	.0375	.811	.00005	.0350	.00196	.422	.00045	.00025	.0142
%RSD	.41615	7.1388	1.9196	1.9072	627.23	.86517	7.0276	5.7445	.35266

#1	8.9794	10.790	.00244	1.8120	-.00107	48.533	-.00677	-.00421	4.0305
#2	9.0324	11.937	.00251	1.8616	.00170	49.130	-.00613	-.00457	4.0104

Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Elem	SiO2	Sn1899	Sr4077	Th2837	Ti3349	Ti1908	U_3701	V_2924	Zn2062
Line	288.158 {117}2	189.989 {477}	407.771 {83}	283.730 {119}	334.904 {101}	190.856 {477}	370.152 {91}	292.402 {115}	206.200 {163}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	8.6038	-.00266	.09723	-.00023	.00708	-.00223	.00955	.00324	.32381
Stddev	.0303	.00015	.00003	.00067	.00050	.00340	.00012	.00066	.00090
%RSD	.35266	5.6577	.02756	296.50	7.0556	152.95	1.2630	20.399	.27814

#1	8.6253	-.00276	.09721	.00025	.00672	-.00463	.00946	.00371	.32444
#2	8.5823	-.00255	.09725	-.00070	.00743	.00018	.00963	.00277	.32317

Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Elem	Zr3391								
Line	339.198 {99}								
Units	ppm								
Avg	.00079								
Stddev	.00417								
%RSD	528.17								

#1	-.00216								
#2	.00374								

Check ?	Chk Pass								
High Limit									
Low Limit									

Sample Name: 280-82833-D-6-A Acquired: 5/18/2016 0:30:50 Type: Unk
Method: 6500_025(v6) Mode: CONC Corr. Factor: 1.000000
User: CRHOADES Prep Date: Custom ID2: Custom ID3:
Comment: 324504 6010B

Int. Std.	Y_2243	Y_3600	Y_3774
Line	224.306 {450}	360.073 { 94}	377.433 { 89}
Units	Cts/S	Cts/S	Cts/S
Avg	2648.4	39126.	1844.8
Stddev	11.6	35.	3.2
%RSD	.43766	.08830	.17418
#1	2640.2	39101.	1847.1
#2	2656.6	39150.	1842.5

Sample Name: 280-82833-D-7-A Acquired: 5/18/2016 0:33:27 Type: Unk
Method: 6500_025(v6) Mode: CONC Corr. Factor: 1.000000
User: CRHOADES Prep Date: Custom ID2: Custom ID3:
Comment: 324504 6010B

Elem	Ag3280	Al1670	As1890	B_2089	Ba4554	Be3130	Bi2230	Ca3179	Cd2288
Line	328.068 {103}	167.079 {502}	189.042 {478}	208.959 {461}	455.403 { 74}	313.042 {108}	223.061 {451}	317.933 {106}	228.802 {447}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.00298	1.2187	.00296	.21049	.01593	.00004	-.00013	33.431	.00006
Stddev	.00002	.0329	.00535	.00750	.00098	.00025	.00115	.213	.00033
%RSD	.74683	2.7022	180.58	3.5650	6.1754	574.78	876.22	.63571	554.67

#1	.00296	1.1954	-.00082	.20518	.01662	-.00013	.00068	33.581	-.00017
#2	.00300	1.2420	.00675	.21579	.01523	.00022	-.00094	33.281	.00029

Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Elem	Co2286	Cr2055	Cu3247	Fe2599	K_7664	Li6707	Mg2790	Mn2576	Mo2020
Line	228.616 {447}	205.560 {464}	324.754 {104}	259.940 {130}	766.490 { 44}	670.784 { 50}	279.079 {121}2	257.610 {131}	202.030 {467}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.00032	.00221	.00194	.84462	40.481	W -.01070	4.4708	.05216	-.00150
Stddev	.00004	.00005	.00088	.00633	1.213	.00018	.0119	.00009	.00021
%RSD	13.559	2.2462	45.453	.74909	2.9957	1.6455	.26652	.17603	13.921

#1	.00035	.00224	.00132	.84909	41.339	-.01082	4.4624	.05223	-.00135
#2	.00029	.00217	.00256	.84014	39.624	-.01057	4.4793	.05210	-.00165

Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Warn	Chk Pass	Chk Pass	Chk Pass
High Limit						2.0000			
Low Limit						-.01000			

Elem	Na8183	Ni2316	P_1782	Pb2203	S_1820	Sb2068	Se1960	Si2881	SiO2
Line	818.326 { 41}	231.604 {446}	178.284 {489}	220.353 {453}	182.034 {485}	206.833 {463}	196.090 {472}	288.158 {117}	288.158 {117}2
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	20.636	.00182	.30964	-.00006	54.595	-.00722	W -.00935	5.5568	11.892
Stddev	.669	.00029	.00431	.00023	1.730	.00611	.00164	.0258	.055
%RSD	3.2424	15.756	1.3933	351.73	3.1685	84.568	17.532	.46469	.46469

#1	20.163	.00162	.30658	.00010	53.372	-.00290	-.01051	5.5386	11.853
#2	21.109	.00203	.31269	-.00023	55.818	-.01155	-.00819	5.5751	11.931

Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Warn	Chk Pass	Chk Pass
High Limit							5.0000		
Low Limit							-.00500		

Elem	Sn1899	Sr4077	Th2837	Ti3349	Ti1908	U_3701	V_2924	Zn2062	Zr3391
Line	189.989 {477}	407.771 { 83}	283.730 {119}	334.904 {101}	190.856 {477}	370.152 { 91}	292.402 {115}	206.200 {163}	339.198 { 99}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	-.00319	.19211	.00070	.00309	-.00213	-.00774	.00171	.01028	.00410
Stddev	.00116	.00023	.00087	.00038	.00079	.02353	.00033	.00041	.00005
%RSD	36.424	.11752	124.68	12.254	37.231	303.83	19.085	4.0057	1.2083

#1	-.00401	.19195	.00008	.00336	-.00270	-.02438	.00148	.01057	.00414
#2	-.00237	.19227	.00131	.00282	-.00157	.00889	.00194	.00998	.00407

Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Int. Std.	Y_2243	Y_3600	Y_3774
Line	224.306 {450}	360.073 { 94}	377.433 { 89}
Units	Cts/S	Cts/S	Cts/S
Avg	2683.4	39253.	1813.8
Stddev	53.8	42.	12.7
%RSD	2.0066	.10574	.70090

#1	2721.5	39224.	1804.8
#2	2645.3	39282.	1822.8

Sample Name: 280-82833-D-8-A Acquired: 5/18/2016 0:36:04 Type: Unk
Method: 6500_025(v6) Mode: CONC Corr. Factor: 1.000000
User: CRHOADES Prep Date: Custom ID2: Custom ID3:
Comment: 324504 6010B

Elem	Ag3280	Al1670	As1890	B_2089	Ba4554	Be3130	Bi2230	Ca3179	Cd2288
Line	328.068 {103}	167.079 {502}	189.042 {478}	208.959 {461}	455.403 { 74}	313.042 {108}	223.061 {451}	317.933 {106}	228.802 {447}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.00237	1.1453	-.00056	.15215	.01864	.00020	-.00180	46.315	.00037
Stddev	.00052	.0070	.00434	.00247	.00030	.00007	.00005	.067	.00003
%RSD	21.927	.61583	775.05	1.6215	1.6041	37.117	2.6508	.14504	9.3222

#1	.00274	1.1503	-.00363	.15390	.01843	.00025	-.00183	46.267	.00039
#2	.00200	1.1403	.00251	.15041	.01885	.00015	-.00177	46.362	.00034

Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Elem	Co2286	Cr2055	Cu3247	Fe2599	K_7664	Li6707	Mg2790	Mn2576	Mo2020
Line	228.616 {447}	205.560 {464}	324.754 {104}	259.940 {130}	766.490 { 44}	670.784 { 50}	279.079 {121}2	257.610 {131}	202.030 {467}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.00022	.00128	.00183	1.0642	4.5514	W -.01329	3.6359	.02455	-.00186
Stddev	.00015	.00041	.00075	.0139	.0381	.00126	.0149	.00015	.00066
%RSD	65.810	32.255	41.087	1.3079	.83795	9.5063	.41024	.60503	35.341

#1	.00033	.00099	.00130	1.0740	4.5783	-.01240	3.6254	.02445	-.00139
#2	.00012	.00157	.00236	1.0543	4.5244	-.01418	3.6465	.02466	-.00232

Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Warn	Chk Pass	Chk Pass	Chk Pass
High Limit						2.0000			
Low Limit						-.01000			

Elem	Na5895	Ni2316	P_1782	Pb2203	S_1820	Sb2068	Se1960	Si2881	SiO2
Line	589.592 { 57}	231.604 {446}	178.284 {489}	220.353 {453}	182.034 {485}	206.833 {463}	196.090 {472}	288.158 {117}	288.158 {117}2
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	6.2219	.00184	.07585	-.00061	47.142	-.00442	W -.00709	5.3188	11.382
Stddev	.0703	.00027	.00387	.00036	.203	.00304	.00344	.0859	.184
%RSD	1.1291	14.522	5.0994	58.619	.43086	68.922	48.462	1.6152	1.6152

#1	6.2715	.00203	.07311	-.00036	47.285	-.00657	-.00466	5.3796	11.512
#2	6.1722	.00165	.07858	-.00087	46.998	-.00226	-.00952	5.2581	11.252

Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Warn	Chk Pass	Chk Pass
High Limit							5.0000		
Low Limit							-.00500		

Elem	Sn1899	Sr4077	Th2837	Ti3349	Ti1908	U_3701	V_2924	Zn2062	Zr3391
Line	189.989 {477}	407.771 { 83}	283.730 {119}	334.904 {101}	190.856 {477}	370.152 { 91}	292.402 {115}	206.200 {163}	339.198 { 99}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	-.00414	.15404	-.00039	.00308	-.00088	.02497	.00209	.01192	.00301
Stddev	.00080	.00069	.00190	.00022	.00037	.02477	.00022	.00032	.00042
%RSD	19.319	.44604	486.56	7.2652	41.661	99.192	10.334	2.6616	13.864

#1	-.00358	.15453	-.00173	.00324	-.00062	.00746	.00224	.01214	.00330
#2	-.00471	.15356	.00095	.00293	-.00114	.04248	.00193	.01170	.00271

Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Int. Std.	Y_2243	Y_3600	Y_3774
Line	224.306 {450}	360.073 { 94}	377.433 { 89}
Units	Cts/S	Cts/S	Cts/S
Avg	2671.8	38611.	1849.1
Stddev	.4	289.	1.2
%RSD	.01336	.74742	.06246

#1	2672.0	38407.	1849.9
#2	2671.5	38815.	1848.3

Sample Name: 280-82833-D-9-A Acquired: 5/18/2016 0:38:41 Type: Unk
Method: 6500_025(v6) Mode: CONC Corr. Factor: 1.000000
User: CRHOADES Prep Date: Custom ID2: Custom ID3:
Comment: 324504 6010B

Elem	Ag3280	Al1670	As1890	B_2089	Ba4554	Be3130	Bi2230	Ca3179	Cd2288
Line	328.068 {103}	167.079 {502}	189.042 {478}	208.959 {461}	455.403 { 74}	313.042 {108}	223.061 {451}	317.933 {106}	228.802 {447}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.00233	1.4583	.00337	.08769	.00751	.00020	.00046	14.996	.00028
Stddev	.00004	.0055	.00076	.00024	.00041	.00015	.00260	.217	.00003
%RSD	1.8136	.37700	22.651	.26984	5.4326	74.207	562.57	1.4472	10.982

#1	.00230	1.4622	.00390	.08753	.00780	.00031	.00230	15.150	.00030
#2	.00236	1.4544	.00283	.08786	.00723	.00010	-.00137	14.843	.00026

Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Elem	Co2286	Cr2055	Cu3247	Fe2599	K_7664	Li6707	Mg2790	Mn2576	Mo2020
Line	228.616 {447}	205.560 {464}	324.754 {104}	259.940 {130}	766.490 { 44}	670.784 { 50}	279.079 {121}2	257.610 {131}	202.030 {467}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	-.00029	.00267	.00173	.21052	3.1158	W -.01080	2.2542	.03600	-.00083
Stddev	.00001	.00041	.00060	.00413	.0196	.00244	.0046	.00008	.00026
%RSD	3.5417	15.451	35.040	1.9640	.62744	22.581	.20630	.22282	30.859

#1	-.00029	.00238	.00215	.21344	3.1296	-.00908	2.2575	.03605	-.00101
#2	-.00030	.00297	.00130	.20760	3.1020	-.01253	2.2509	.03594	-.00065

Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Warn	Chk Pass	Chk Pass	Chk Pass
High Limit						2.0000			
Low Limit						-.01000			

Elem	Na5895	Ni2316	P_1782	Pb2203	S_1820	Sb2068	Se1960	Si2881	SiO2
Line	589.592 { 57}	231.604 {446}	178.284 {489}	220.353 {453}	182.034 {485}	206.833 {463}	196.090 {472}	288.158 {117}	288.158 {117}2
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	3.0215	.00052	.25312	.00169	11.645	-.00622	W -.00673	7.3110	15.646
Stddev	.0203	.00023	.00172	.00125	.102	.00164	.00051	.0636	.136
%RSD	.67145	43.651	.67878	73.988	.87690	26.379	7.5144	.87048	.87048

#1	3.0358	.00036	.25433	.00081	11.717	-.00506	-.00709	7.3560	15.742
#2	3.0071	.00068	.25190	.00258	11.573	-.00738	-.00638	7.2660	15.549

Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Warn	Chk Pass	Chk Pass
High Limit							5.0000		
Low Limit							-.00500		

Elem	Sn1899	Sr4077	Th2837	Ti3349	Ti1908	U_3701	V_2924	Zn2062	Zr3391
Line	189.989 {477}	407.771 { 83}	283.730 {119}	334.904 {101}	190.856 {477}	370.152 { 91}	292.402 {115}	206.200 {163}	339.198 { 99}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	-.00084	.05365	.00220	.00594	-.00300	-.01231	.00380	.00410	.00171
Stddev	.00110	.00016	.00043	.00018	.00012	.06354	.00006	.00054	.00157
%RSD	131.23	.29397	19.702	3.0580	3.8408	516.32	1.6189	13.124	91.677

#1	-.00162	.05354	.00189	.00607	-.00292	.03262	.00375	.00372	.00060
#2	-.00006	.05376	.00250	.00581	-.00308	-.05724	.00384	.00448	.00282

Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Int. Std.	Y_2243	Y_3600	Y_3774
Line	224.306 {450}	360.073 { 94}	377.433 { 89}
Units	Cts/S	Cts/S	Cts/S
Avg	2696.6	40039.	1923.4
Stddev	3.6	207.	40.1
%RSD	.13329	.51644	2.0840

#1	2694.1	39893.	1895.0
#2	2699.2	40185.	1951.7

Sample Name: CCVH-3883905 Acquired: 5/18/2016 0:41:19 Type: QC
Method: 6500_025(v6) Mode: CONC Corr. Factor: 1.000000
User: CRHOADES Prep Date: Custom ID2: Custom ID3:
Comment:

Elem	Ag3280	Al3092	As1890	B_2089	Ba4554	Be3130	Bi2230	Ca3179	Cd2288	Co2286	Cr2055
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	-0.00603	51.379	-0.00695	.01214	-0.00099	-0.00011	.96662	-0.01417	-0.00059	-0.00137	-0.00022
Stddev	.00030	.860	.00198	.00034	.00037	.00025	.01122	.00178	.00024	.00033	.00014
%RSD	5.0433	1.6741	28.517	2.7663	36.727	234.64	1.1604	12.581	40.708	23.882	63.843

#1	-0.00582	51.987	-0.00555	.01238	-0.00074	.00007	.97455	-.01291	-.00076	-.00161	-.00032
#2	-0.00625	50.771	-0.00835	.01190	-0.00125	-0.00029	.95869	-.01543	-.00042	-.00114	-.00012

Check ?	None	Chk Pass	None	None	None	None	Chk Pass	None	None	None	None
Value											
Range											

Elem	Cu3247	Fe2714	K_7664	Li6707	Mg2790	Mn2576	Mo2020	Na8183	Ni2316	P_1782	Pb2203
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	-0.01545	54.400	-1.18207	-0.01041	.00951	-0.00210	-0.00283	F 277.00	.00084	.00743	.00006
Stddev	.00012	.363	.00353	.00221	.00185	.00006	.00019	.40	.00010	.00244	.00028
%RSD	.76863	.66647	1.9395	21.263	19.458	2.7397	6.8554	.14288	12.285	32.848	450.19

#1	-0.01536	54.656	-.17957	-.01198	.01082	-.00206	-.00270	277.28	.00091	.00916	.00026
#2	-0.01553	54.143	-.18457	-.00885	.00820	-.00214	-.00297	276.72	.00077	.00571	-.00014

Check ?	None	Chk Pass	None	None	None	None	None	Chk Fail	None	None	None
Value								250.00			
Range								10.490%			

Elem	S_1820	Sb2068	Se1960	Si2881	SiO2	Sn1899	Sr4077	Th2837	Ti3349	Ti1908	U_3701
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	5.1294	-0.01735	-0.00410	-0.02351	-0.05032	.00148	-0.00003	W 4.5279	.00252	-0.00114	W 9.4618
Stddev	.0413	.00116	.00895	.00541	.01158	.00004	.00010	.0191	.00057	.00038	.0492
%RSD	.80582	6.6887	218.35	23.019	23.019	2.8391	316.58	.42174	22.653	33.474	.52043

#1	5.1002	-.01817	-.01043	-.02734	-.05851	.00145	-.00010	4.5414	.00212	-.00141	9.4967
#2	5.1587	-.01653	.00223	-.01969	-.04213	.00151	.00004	4.5144	.00292	-.00087	9.4270

Check ?	Chk Pass	None	None	None	None	None	None	Chk Warn	None	None	Chk Warn
Value								5.0000			10.000
Range								-5.0000%			-5.0000%

Elem	V_2924	Zn2062	Zr3391
Units	ppm	ppm	ppm
Avg	.01170	.00032	-.13042
Stddev	.00094	.00009	.00240
%RSD	8.0452	28.538	1.8371

#1	.01236	.00039	-.12873
#2	.01103	.00026	-.13211

Check ?	None	None	None
Value			
Range			

Int. Std.	Y_2243	Y_3600	Y_3774
Units	Cts/S	Cts/S	Cts/S
Avg	2591.8	38452.	1872.5
Stddev	4.7	44.	40.2
%RSD	.18023	.11547	2.1489

#1	2595.1	38483.	1844.1
#2	2588.5	38420.	1901.0

Sample Name: CCV-3888422 Acquired: 5/18/2016 0:43:55 Type: QC
Method: 6500_025(v6) Mode: CONC Corr. Factor: 1.000000
User: CRHOADES Prep Date: Custom ID2: Custom ID3:
Comment:

Elem	Ag3280	Al1670	As1890	B_2089	Ba4554	Be3130	Bi2230	Ca3179	Cd2288	Co2286	Cr2055	Cu3247
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.47870	.47155	.90671	.49704	.47908	.49574	-.00064	4.7164	.49346	.50025	.50951	F .44751
Stddev	.00297	.00052	.00156	.00097	.00507	.00426	.00006	.0340	.00994	.00230	.00367	.00244
%RSD	.62040	.11061	.17169	.19502	1.0590	.85979	9.5933	.72084	2.0139	.45886	.71962	.54495

#1	.48080	.47192	.90561	.49773	.48267	.49875	-.00068	4.7404	.48643	.50187	.51210	.44923
#2	.47660	.47118	.90781	.49636	.47549	.49273	-.00059	4.6924	.50048	.49862	.50692	.44578

Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	None	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Fail
Value												.50000
Range												-10.490%

Elem	Fe2599	K_7664	Li6707	Mg2790	Mn2576	Mo2020	Na5895	Ni2316	P_1782	Pb2203	S_1820	Sb2068
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	F 2.7660	48.784	.97262	18.444	.45067	.49873	5.3060	.48626	.96335	.98706	-.05506	.97397
Stddev	.0460	.516	.00493	.041	.00161	.00123	.0353	.00115	.00538	.00260	.00257	.00772
%RSD	1.6630	1.0575	.50683	.22464	.35670	.24635	.66513	.23629	.55816	.26344	4.6606	.79266

#1	2.7986	49.149	.96914	18.474	.45181	.49960	5.3310	.48708	.95955	.98890	-.05687	.97943
#2	2.7335	48.419	.97611	18.415	.44953	.49786	5.2810	.48545	.96715	.98522	-.05324	.96851

Check ?	Chk Fail	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	None	Chk Pass
Value	2.5000											
Range	10.490%											

Elem	Se1960	Si2881	SiO2	Sn1899	Sr4077	Th2837	Ti3349	Ti1908	U_3701	V_2924	Zn2062	Zr3391
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.91591	4.9591	10.613	1.0017	.49747	.00235	F .44239	1.0136	.01714	.47106	F .43497	.46980
Stddev	.00355	.0347	.074	.0046	.00645	.00376	.00092	.0056	.02324	.00057	.00202	.00656
%RSD	.38767	.69883	.69883	.46310	1.2962	160.33	.20838	.55710	135.56	.12115	.46503	1.3967

#1	.91842	4.9346	10.560	1.0050	.50203	.00501	.44304	1.0176	.00071	.47146	.43640	.46516
#2	.91340	4.9836	10.665	.99846	.49291	-.00031	.44174	1.0096	.03357	.47066	.43354	.47444

Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	None	Chk Fail	Chk Pass	None	Chk Pass	Chk Fail	Chk Pass
Value							.50000				.50000	
Range							-10.490%				-10.490%	

Int. Std.	Y_2243	Y_3600	Y_3774
Units	Cts/S	Cts/S	Cts/S
Avg	2631.1	38979.	1839.4
Stddev	7.1	216.	20.7
%RSD	.27165	.55375	1.1259

#1	2626.0	38826.	1824.7
#2	2636.1	39132.	1854.0

Sample Name: CCB Acquired: 5/18/2016 0:46:26 Type: QC
 Method: 6500_025(v6) Mode: CONC Corr. Factor: 1.000000
 User: CRHOADES Prep Date: Custom ID2: Custom ID3:
 Comment:

Elem	Ag3280	Al1670	As1890	B_2089	Ba4554	Be3130	Bi2230	Ca3179	Cd2288	Co2286	Cr2055
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	F .00279	.00139	.00265	.01088	-.00174	.00013	.00559	-.00933	.00017	-.00041	-.00017
Stddev	.00058	.00031	.00075	.00052	.00029	.00022	.00045	.00007	.00041	.00017	.00025
%RSD	20.727	22.415	28.263	4.7485	16.605	169.89	8.0170	.76722	241.42	41.077	140.71
#1	.00238	.00117	.00212	.01124	-.00154	-.00003	.00527	-.00928	-.00012	-.00029	-.00035
#2	.00320	.00160	.00318	.01051	-.00194	.00028	.00591	-.00938	.00046	-.00054	.00000
Check ?	Chk Fail	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit	.00200										
Low Limit	-.01000										
Elem	Cu3247	Fe2599	K_7664	Li6707	Mg2790	Mn2576	Mo2020	Na5895	Ni2316	P_1782	Pb2203
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	-.00089	.00844	-.22338	F -.01152	-.00505	.00009	.00060	-.01173	-.00004	-.00012	-.00071
Stddev	.00052	.00545	.07990	.00163	.00095	.00002	.00059	.00287	.00023	.00239	.00027
%RSD	58.255	64.539	35.768	14.192	18.908	23.071	99.000	24.432	546.35	1969.0	37.738
#1	-.00052	.01229	-.27988	-.01267	-.00572	.00007	.00018	-.00970	-.00020	.00157	-.00091
#2	-.00126	.00459	-.16688	-.01036	-.00437	.00010	.00101	-.01376	.00012	-.00181	-.00052
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Fail	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit				.01000							
Low Limit				-.01000							
Elem	S_1820	Sb2068	Se1960	Si2881	SiO2	Sn1899	Sr4077	Th2837	Ti3349	Ti1908	U_3701
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	-.06351	W .00396	-.00231	-.04648	-.09946	-.00155	-.00024	-.00181	.00066	.00705	.07112
Stddev	.00270	.00492	.00682	.05281	.11301	.00136	.00005	.00258	.00023	.00182	.02909
%RSD	4.2554	124.24	295.25	113.62	113.62	88.127	19.650	142.42	34.865	25.829	40.896
#1	-.06160	.00048	.00251	-.00914	-.01956	-.00251	-.00027	-.00363	.00082	.00576	.09169
#2	-.06543	.00744	-.00713	-.08382	-.17937	-.00058	-.00021	.00001	.00050	.00834	.05055
Check ?	Chk Pass	Chk Warn	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit		.00100									
Low Limit		-.00100									
Elem	V_2924	Zn2062	Zr3391								
Units	ppm	ppm	ppm								
Avg	.00051	-.00073	.00115								
Stddev	.00015	.00008	.00125								
%RSD	29.948	10.812	108.57								
#1	.00040	-.00068	.00204								
#2	.00062	-.00079	.00027								
Check ?	Chk Pass	Chk Pass	Chk Pass								
High Limit											
Low Limit											
Int. Std.	Y_2243	Y_3600	Y_3774								
Units	Cts/S	Cts/S	Cts/S								
Avg	2643.9	39796.	1828.4								
Stddev	2.1	280.	73.6								
%RSD	.08111	.70380	4.0240								
#1	2642.4	39598.	1776.3								
#2	2645.4	39994.	1880.4								

Sample Name: CCVL-3894681 Acquired: 5/18/2016 0:48:47 Type: QC
Method: 6500_025(v6) Mode: CONC Corr. Factor: 1.000000
User: CRHOADES Prep Date: Custom ID2: Custom ID3:
Comment:

Elem	Ag3280	Al1670	As1890	B_2089	Ba4554	Be3130	Bi2230	Ca3179	Cd2288	Co2286	Cr2055
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.01205	.09365	.01380	.10350	.00772	.00088	.10675	.18507	.00511	.00998	.00985
Stddev	.00012	.00530	.00883	.00530	.00024	.00000	.00839	.01441	.00008	.00094	.00032
%RSD	1.0016	5.6601	64.003	5.1195	3.1440	.28554	7.8557	7.7885	1.5212	9.4533	3.2705
#1	.01197	.09740	.02004	.10725	.00755	.00088	.11268	.17488	.00517	.01065	.01007
#2	.01214	.08991	.00755	.09975	.00789	.00088	.10082	.19526	.00506	.00931	.00962
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Value											
Range											
Elem	Cu3247	Fe2599	K_7664	Li6707	Mg2790	Mn2576	Mo2020	Na5895	Ni2316	P_1782	Pb2203
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.01256	.11093	2.8477	F -.00372	.18756	.00929	.01871	1.0460	.04038	2.8932	.00787
Stddev	.00022	.00843	.0487	.00004	.00318	.00001	.00068	.0036	.00182	.1023	.00012
%RSD	1.7669	7.5958	1.7094	1.2051	1.6953	.08066	3.6319	.34604	4.5086	3.5369	1.5632
#1	.01240	.11689	2.8821	-.00375	.18981	.00930	.01919	1.0485	.04167	2.9655	.00778
#2	.01272	.10497	2.8133	-.00369	.18531	.00929	.01823	1.0434	.03909	2.8208	.00796
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Fail	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Value				.01000							
Range				-30.000%							
Elem	S_1820	Sb2068	Se1960	Si2881	SiO2	Sn1899	Sr4077	Th2837	Ti3349	Ti1908	U_3701
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	-.05573	.01890	.01224	.49772	1.0651	.10255	.01007	.01473	.00960	F .00971	.06468
Stddev	.00260	.00132	.01045	.02631	.0563	.00427	.00023	.00090	.00071	.00029	.02255
%RSD	4.6718	6.9983	85.392	5.2857	5.2857	4.1655	2.3317	6.1181	7.4290	2.9402	34.862
#1	-.05388	.01796	.00485	.51632	1.1049	.10557	.01024	.01409	.00909	.00950	.04873
#2	-.05757	.01983	.01963	.47912	1.0253	.09953	.00990	.01536	.01010	.00991	.08062
Check ?	None	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Fail	Chk Pass
Value										.01500	
Range										-30.000%	
Elem	V_2924	Zn2062	Zr3391								
Units	ppm	ppm	ppm								
Avg	.00939	.01743	.01591								
Stddev	.00008	.00060	.00023								
%RSD	.90200	3.4551	1.4351								
#1	.00945	.01700	.01575								
#2	.00933	.01785	.01607								
Check ?	Chk Pass	Chk Pass	Chk Pass								
Value											
Range											
Int. Std.	Y_2243	Y_3600	Y_3774								
Units	Cts/S	Cts/S	Cts/S								
Avg	2792.8	40457.	1920.9								
Stddev	134.0	293.	4.9								
%RSD	4.7986	.72463	.25649								
#1	2698.1	40664.	1917.5								
#2	2887.6	40250.	1924.4								

Sample Name: MB 280-325612/1-A Acquired: 5/18/2016 0:51:26 Type: Unk

Method: 6500_025(v6) Mode: CONC Corr. Factor: 1.000000

User: CRHOADES Prep Date: 5/17 Custom ID2: Custom ID3:

Comment: 325612 6010C (Fe)

Elem	Ag3280	Al1670	As1890	B_2089	Ba4554	Be3130	Bi2230	Ca3179	Cd2288
Line	328.068 {103}	167.079 {502}	189.042 {478}	208.959 {461}	455.403 { 74}	313.042 {108}	223.061 {451}	317.933 {106}	228.802 {447}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.00351	.00141	.00018	.00715	-.00129	.00023	.00069	-.00005	-.00003
Stddev	.00059	.00037	.00498	.00016	.00023	.00016	.00338	.00429	.00022
%RSD	16.827	26.251	2836.4	2.1671	18.196	68.632	492.48	9233.5	640.70

#1	.00393	.00168	.00370	.00726	-.00145	.00012	.00308	-.00308	-.00019
#2	.00309	.00115	-.00335	.00704	-.00112	.00035	-.00171	.00299	.00012

Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Elem	Co2286	Cr2055	Cu3247	Fe2599	K_7664	Li6707	Mg2790	Mn2576	Mo2020
Line	228.616 {447}	205.560 {464}	324.754 {104}	259.940 {130}	766.490 { 44}	670.784 { 50}	279.079 {121}2	257.610 {131}	202.030 {467}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	-.00009	-.00021	-.00114	.00064	-.16659	F -.01349	-.00515	.00005	-.00086
Stddev	.00032	.00023	.00046	.00339	.02488	.00227	.00061	.00007	.00032
%RSD	343.41	108.75	40.123	531.79	14.935	16.815	11.894	143.14	36.870

#1	.00013	-.00005	-.00146	.00303	-.18418	-.01510	-.00558	.00000	-.00109
#2	-.00031	-.00037	-.00082	-.00176	-.14899	-.01189	-.00471	.00010	-.00064

Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Fail	Chk Pass	Chk Pass	Chk Pass
High Limit						.01000			
Low Limit						-.01000			

Elem	Na5895	Ni2316	P_1782	Pb2203	S_1820	Sb2068	Se1960	Si2881	SiO2
Line	589.592 { 57}	231.604 {446}	178.284 {489}	220.353 {453}	182.034 {485}	206.833 {463}	196.090 {472}	288.158 {117}	288.158 {117}2
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	-.02172	.00000	.00295	-.00050	W -.06216	-.00319	-.00473	-.00958	-.02050
Stddev	.01326	.00040	.00208	.00298	.00119	.00190	.00221	.03901	.08349
%RSD	61.044	9343.2	70.549	597.75	1.9210	59.446	46.731	407.19	407.19

#1	-.03109	-.00028	.00148	-.00261	-.06301	-.00185	-.00316	-.03717	-.07954
#2	-.01234	.00029	.00443	.00161	-.06132	-.00453	-.00629	.01801	.03853

Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Warn	Chk Pass	Chk Pass	Chk Pass	None
High Limit					.05000				
Low Limit					-.05000				

Elem	Sn1899	Sr4077	Th2837	Ti3349	Ti1908	U_3701	V_2924	Zn2062	Zr3391
Line	189.989 {477}	407.771 { 83}	283.730 {119}	334.904 {101}	190.856 {477}	370.152 { 91}	292.402 {115}	206.200 {163}	339.198 { 99}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	-.00271	-.00009	-.00068	.00106	-.00184	.04019	-.00035	.00078	.00221
Stddev	.00112	.00006	.00013	.00055	.00101	.02901	.00036	.00040	.00427
%RSD	41.456	71.375	19.669	51.718	54.662	72.181	102.62	50.541	193.44

#1	-.00191	-.00013	-.00078	.00067	-.00256	.01968	-.00061	.00106	-.00081
#2	-.00350	-.00004	-.00059	.00145	-.00113	.06070	-.00010	.00050	.00522

Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Int. Std.	Y_2243	Y_3600	Y_3774						
Line	224.306 {450}	360.073 { 94}	377.433 { 89}						
Units	Cts/S	Cts/S	Cts/S						
Avg	2726.6	40929.	1880.4						
Stddev	12.1	81.	18.7						
%RSD	.44554	.19728	.99696						

#1	2718.1	40986.	1867.2						
#2	2735.2	40872.	1893.7						

Sample Name: LCS 280-325612/2-A Acquired: 5/18/2016 0:53:48 Type: Unk

Method: 6500_025(v6) Mode: CONC Corr. Factor: 1.000000

User: CRHOADES Prep Date: Custom ID2: Custom ID3:

Comment: 325612 6010C (Fe)

Elem	Ag3280	Al1670	As1890	B_2089	Ba4554	Be3130	Bi2230	Ca3179	Cd2288
Line	328.068 {103}	167.079 {502}	189.042 {478}	208.959 {461}	455.403 { 74}	313.042 {108}	223.061 {451}	317.933 {106}	228.802 {447}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.04876	1.7849	.92897	1.0015	1.8932	.05000	1.9652	45.544	.09897
Stddev	.00039	.0084	.00273	.0066	.0256	.00092	.0070	.762	.00078
%RSD	.80279	.46958	.29432	.66018	1.3533	1.8306	.35643	1.6729	.78429

#1	.04848	1.7789	.93090	.99681	1.9113	.05064	1.9702	46.083	.09842
#2	.04903	1.7908	.92704	1.0062	1.8751	.04935	1.9603	45.005	.09952

Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	None	Chk Pass	Chk Pass
High Limit									
Low Limit									

Elem	Co2286	Cr2055	Cu3247	Fe2599	K_7664	Li6707	Mg2790	Mn2576	Mo2020
Line	228.616 {447}	205.560 {464}	324.754 {104}	259.940 {130}	766.490 { 44}	670.784 { 50}	279.079 {121}2	257.610 {131}	202.030 {467}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.47694	.19784	.21842	1.0178	48.147	.95598	F 45.767	F .43723	1.0257
Stddev	.00056	.00018	.00021	.0039	.693	.00522	.087	.00049	.0001
%RSD	.11837	.09285	.09565	.38241	1.4396	.54616	.19022	.11269	.00608

#1	.47654	.19771	.21857	1.0206	48.637	.95228	45.829	.43758	1.0256
#2	.47734	.19797	.21827	1.0151	47.657	.95967	45.706	.43688	1.0257

Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Fail	Chk Fail	Chk Pass
High Limit							56.500	.55000	
Low Limit							46.000	.45000	

Elem	Na8183	Ni2316	P_1782	Pb2203	S_1820	Sb2068	Se1960	Si2881	SiO2
Line	818.326 { 41}	231.604 {446}	178.284 {489}	220.353 {453}	182.034 {485}	206.833 {463}	196.090 {472}	288.158 {117}	288.158 {117}2
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	F 58.504	.46550	9.8198	.48389	2.0420	.51764	1.9393	9.8907	21.166
Stddev	.172	.00212	.0218	.00035	.0193	.00023	.0087	.0435	.093
%RSD	.29477	.45515	.22177	.07131	.94338	.04499	.44975	.43995	.43995

#1	58.626	.46400	9.8044	.48364	2.0284	.51781	1.9332	9.8599	21.100
#2	58.382	.46700	9.8352	.48413	2.0556	.51748	1.9455	9.9214	21.232

Check ?	Chk Fail	Chk Pass	Chk Pass	Chk Pass	None	Chk Pass	Chk Pass	Chk Pass	None
High Limit	56.000								
Low Limit	45.500								

Elem	Sn1899	Sr4077	Th2837	Ti3349	Ti1908	U_3701	V_2924	Zn2062	Zr3391
Line	189.989 {477}	407.771 { 83}	283.730 {119}	334.904 {101}	190.856 {477}	370.152 { 91}	292.402 {115}	206.200 {163}	339.198 { 99}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	2.0478	.97387	.91835	F .89038	1.8284	1.8538	.45822	.42649	.44923
Stddev	.0089	.01481	.00013	.00215	.0747	.0024	.00021	.00371	.00618
%RSD	.43445	1.5206	.01370	.24155	4.0882	.13137	.04493	.86969	1.3765

#1	2.0415	.98434	.91826	.89190	1.8813	1.8521	.45837	.42912	.44485
#2	2.0541	.96340	.91844	.88886	1.7756	1.8555	.45808	.42387	.45360

Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Fail	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit				1.1100					
Low Limit				.90000					

Int. Std.	Y_2243	Y_3600	Y_3774						
Line	224.306 {450}	360.073 { 94}	377.433 { 89}						
Units	Cts/S	Cts/S	Cts/S						
Avg	2642.4	39573.	1930.7						
Stddev	6.3	53.	26.5						
%RSD	.23862	.13406	1.3725						

#1	2637.9	39611.	1912.0						
#2	2646.8	39536.	1949.4						

Sample Name: 280-83031-B-1-A Acquired: 5/18/2016 0:56:14 Type: Unk
Method: 6500_025(v6) Mode: CONC Corr. Factor: 1.000000
User: CRHOADES Prep Date: Custom ID2: Custom ID3:
Comment: 325612 6010C (Fe)

Elem	Ag3280	Al1670	As1890	B_2089	Ba4554	Be3130	Bi2230	Ca3179	Cd2288
Line	328.068 {103}	167.079 {502}	189.042 {478}	208.959 {461}	455.403 {74}	313.042 {108}	223.061 {451}	317.933 {106}	228.802 {447}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.00232	.00459	.00431	.30523	.20652	-.00020	-.00272	176.73	.00061
Stddev	.00004	.00032	.00980	.00397	.00329	.00007	.00256	3.67	.00038
%RSD	1.5852	6.8976	227.47	1.2992	1.5910	33.162	94.254	2.0754	62.845

#1	.00235	.00437	-.00262	.30243	.20420	-.00025	-.00453	174.14	.00088
#2	.00230	.00482	.01124	.30803	.20885	-.00015	-.00091	179.32	.00034

Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Elem	Co2286	Cr2055	Cu3247	Fe2599	K_7664	Li6707	Mg2790	Mn2576	Mo2020
Line	228.616 {447}	205.560 {464}	324.754 {104}	259.940 {130}	766.490 {44}	670.784 {50}	279.079 {121}2	257.610 {131}	202.030 {467}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.00408	-.00008	.00126	3.4782	10.963	.01410	14.306	.66512	.00692
Stddev	.00002	.00021	.00037	.0528	.026	.00146	.028	.00121	.00105
%RSD	.48606	276.37	29.313	1.5172	.23953	10.389	.19866	.18181	15.125

#1	.00407	.00007	.00152	3.4409	10.944	.01306	14.326	.66597	.00618
#2	.00409	-.00022	.00100	3.5156	10.981	.01513	14.286	.66426	.00767

Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Elem	Na8183	Ni2316	P_1782	Pb2203	S_1820	Sb2068	Se1960	Si2881	SiO2
Line	818.326 {41}	231.604 {446}	178.284 {489}	220.353 {453}	182.034 {485}	206.833 {463}	196.090 {472}	288.158 {117}	288.158 {117}2
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	64.791	.01007	.10235	-.00061	47.234	-.00518	-.00426	13.940	29.832
Stddev	.753	.00003	.00077	.00056	.013	.00254	.00087	.023	.048
%RSD	1.1624	.29341	.75286	92.302	.02856	49.051	20.492	.16240	.16240

#1	64.259	.01009	.10289	-.00021	47.244	-.00338	-.00364	13.924	29.798
#2	65.324	.01005	.10180	-.00101	47.225	-.00697	-.00488	13.956	29.867

Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Elem	Sn1899	Sr4077	Th2837	Ti3349	Ti1908	U_3701	V_2924	Zn2062	Zr3391
Line	189.989 {477}	407.771 {83}	283.730 {119}	334.904 {101}	190.856 {477}	370.152 {91}	292.402 {115}	206.200 {163}	339.198 {99}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	-.00254	.64543	.00185	.00096	.03159	-.01087	.00070	.00676	.00153
Stddev	.00047	.01189	.00178	.00019	.01423	.01020	.00033	.00018	.00471
%RSD	18.345	1.8427	96.442	19.440	45.045	93.816	47.432	2.6578	308.13

#1	-.00221	.63702	.00311	.00083	.02153	-.01809	.00047	.00689	.00486
#2	-.00287	.65384	.00059	.00109	.04166	-.00366	.00094	.00663	-.00180

Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Int. Std.	Y_2243	Y_3600	Y_3774
Line	224.306 {450}	360.073 {94}	377.433 {89}
Units	Cts/S	Cts/S	Cts/S
Avg	2618.0	39218.	1933.2
Stddev	3.1	118.	33.4
%RSD	.11733	.30079	1.7252

#1	2615.9	39301.	1956.8
#2	2620.2	39134.	1909.6

Sample Name: 280-83031-B-1-A SD@5 Acquired: 5/18/2016 0:58:52 Type: Unk
Method: 6500_025(v6) Mode: CONC Corr. Factor: 1.000000
User: CRHOADES Prep Date: Custom ID2: Custom ID3:
Comment: 325612 6010C (Fe)

Elem	Ag3280	Al1670	As1890	B_2089	Ba4554	Be3130	Bi2230	Ca3179	Cd2288
Line	328.068 {103}	167.079 {502}	189.042 {478}	208.959 {461}	455.403 { 74}	313.042 {108}	223.061 {451}	317.933 {106}	228.802 {447}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.00269	.00161	.00708	.06691	.04037	.00004	-.00096	35.445	.00020
Stddev	.00063	.00000	.00603	.00169	.00042	.00035	.00157	.193	.00019
%RSD	23.438	.28189	85.079	2.5186	1.0487	952.89	163.02	.54474	92.008

#1	.00314	.00161	.00282	.06572	.04067	-.00021	.00015	35.308	.00033
#2	.00224	.00161	.01135	.06811	.04007	.00028	-.00207	35.581	.00007

Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Elem	Co2286	Cr2055	Cu3247	Fe2599	K_7664	Li6707	Mg2790	Mn2576	Mo2020
Line	228.616 {447}	205.560 {464}	324.754 {104}	259.940 {130}	766.490 { 44}	670.784 { 50}	279.079 {121}2	257.610 {131}	202.030 {467}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.00073	-.00045	-.00066	.72852	2.0352	-.00903	2.9727	.13652	.00016
Stddev	.00025	.00047	.00019	.00368	.0073	.00192	.0177	.00029	.00045
%RSD	34.457	106.03	28.876	.50485	.36095	21.238	.59471	.21427	286.58

#1	.00055	-.00078	-.00052	.73112	2.0404	-.01038	2.9602	.13673	-.00016
#2	.00090	-.00011	-.00079	.72592	2.0300	-.00767	2.9852	.13631	.00047

Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Elem	Na8183	Ni2316	P_1782	Pb2203	S_1820	Sb2068	Se1960	Si2881	SiO2
Line	818.326 { 41}	231.604 {446}	178.284 {489}	220.353 {453}	182.034 {485}	206.833 {463}	196.090 {472}	288.158 {117}	288.158 {117}2
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	14.559	.00192	.02435	-.00125	9.2934	-.00514	W -.00616	2.8009	5.9938
Stddev	.312	.00079	.00371	.00021	.2175	.00333	.00521	.0275	.0589
%RSD	2.1425	41.009	15.224	16.795	2.3405	64.751	84.612	.98334	.98334

#1	14.338	.00248	.02173	-.00140	9.1396	-.00750	-.00984	2.8203	6.0355
#2	14.779	.00136	.02697	-.00110	9.4472	-.00279	-.00247	2.7814	5.9522

Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Warn	Chk Pass	Chk Pass
High Limit							5.0000		
Low Limit							-.00500		

Elem	Sn1899	Sr4077	Th2837	Ti3349	Ti1908	U_3701	V_2924	Zn2062	Zr3391
Line	189.989 {477}	407.771 { 83}	283.730 {119}	334.904 {101}	190.856 {477}	370.152 { 91}	292.402 {115}	206.200 {163}	339.198 { 99}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	-.00291	.13677	.00107	.00054	.00458	-.00595	.00039	.00158	-.00134
Stddev	.00074	.00001	.00047	.00001	.00019	.05786	.00029	.00007	.00360
%RSD	25.325	.00869	44.315	2.1058	4.0873	972.35	74.270	4.4572	268.23

#1	-.00344	.13676	.00073	.00055	.00445	.03496	.00059	.00163	-.00389
#2	-.00239	.13678	.00140	.00053	.00472	-.04686	.00018	.00153	.00120

Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Int. Std.	Y_2243	Y_3600	Y_3774
Line	224.306 {450}	360.073 { 94}	377.433 { 89}
Units	Cts/S	Cts/S	Cts/S
Avg	2697.0	40339.	1898.9
Stddev	7.5	35.	34.5
%RSD	.27816	.08735	1.8184

#1	2702.3	40315.	1874.5
#2	2691.7	40364.	1923.3

Sample Name: 280-83031-B-1-B MS Acquired: 5/18/2016 1:01:30 Type: Unk

Method: 6500_025(v6) Mode: CONC Corr. Factor: 1.000000

User: CRHOADES Prep Date: Custom ID2: Custom ID3:

Comment: 325612 6010C (Fe)

Elem	Ag3280	Al1670	As1890	B_2089	Ba4554	Be3130	Bi2230	Ca3179	Cd2288
Line	328.068 {103}	167.079 {502}	189.042 {478}	208.959 {461}	455.403 {74}	313.042 {108}	223.061 {451}	317.933 {106}	228.802 {447}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.04971	1.7288	.93726	1.2827	2.1390	.05004	F 1.9210	226.69	.09874
Stddev	.00135	.0535	.01923	.0383	.0533	.00060	.0488	5.81	.00254
%RSD	2.7256	3.0942	2.0514	2.9824	2.4919	1.1977	2.5430	2.5608	2.5771

#1	.05066	1.6910	.92367	1.2557	2.1013	.04961	1.8864	222.59	.09694
#2	.04875	1.7667	.95086	1.3098	2.1766	.05046	1.9555	230.80	.10054

Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Fail	Chk Pass	Chk Pass
High Limit							.10000		
Low Limit							-.10000		

Elem	Co2286	Cr2055	Cu3247	Fe2599	K_7664	Li6707	Mg2790	Mn2576	Mo2020
Line	228.616 {447}	205.560 {464}	324.754 {104}	259.940 {130}	766.490 {44}	670.784 {50}	279.079 {121}2	257.610 {131}	202.030 {467}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.46842	.19497	.22326	4.5038	60.375	.99541	60.423	1.1129	1.0110
Stddev	.01484	.00679	.00099	.0775	1.463	.00611	.019	.0014	.0280
%RSD	3.1681	3.4812	.44274	1.7205	2.4226	.61344	.03170	.12852	2.7722

#1	.45792	.19017	.22256	4.4490	59.340	.99109	60.409	1.1139	.99122
#2	.47891	.19977	.22395	4.5586	61.409	.99973	60.436	1.1119	1.0309

Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Elem	Na8183	Ni2316	P_1782	Pb2203	S_1820	Sb2068	Se1960	Si2881	SiO2
Line	818.326 {41}	231.604 {446}	178.284 {489}	220.353 {453}	182.034 {485}	206.833 {463}	196.090 {472}	288.158 {117}	288.158 {117}2
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	122.35	.46076	W 10.133	.47109	49.499	.51343	1.9267	24.086	51.543
Stddev	1.19	.01280	.314	.01192	1.478	.01270	.0641	.209	.448
%RSD	.97560	2.7782	3.0983	2.5303	2.9851	2.4742	3.3284	.86950	.86950

#1	121.51	.45171	9.9114	.46266	48.454	.50445	1.8813	23.938	51.226
#2	123.20	.46981	10.355	.47951	50.544	.52241	1.9720	24.234	51.860

Check ?	Chk Pass	Chk Pass	Chk Warn	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit			2.0000						
Low Limit			-1.0000						

Elem	Sn1899	Sr4077	Th2837	Ti3349	Ti1908	U_3701	V_2924	Zn2062	Zr3391
Line	189.989 {477}	407.771 {83}	283.730 {119}	334.904 {101}	190.856 {477}	370.152 {91}	292.402 {115}	206.200 {163}	339.198 {99}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	1.9819	1.6531	.92939	.89863	1.6265	1.9243	.46773	.42961	.44890
Stddev	.0552	.0426	.00022	.00196	.0199	.0308	.00050	.00194	.00334
%RSD	2.7869	2.5768	.02335	.21788	1.2244	1.6003	.10626	.45272	.74440

#1	1.9429	1.6230	.92924	.90002	1.6405	1.9025	.46809	.43099	.44654
#2	2.0210	1.6832	.92955	.89725	1.6124	1.9461	.46738	.42824	.45126

Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Int. Std.	Y_2243	Y_3600	Y_3774						
Line	224.306 {450}	360.073 {94}	377.433 {89}						
Units	Cts/S	Cts/S	Cts/S						
Avg	2643.2	38644.	1917.4						
Stddev	90.1	98.	55.2						
%RSD	3.4078	.25338	2.8774						

#1	2706.9	38575.	1956.4						
#2	2579.5	38714.	1878.4						

Sample Name: 280-83031-B-1-C MSD Acquired: 5/18/2016 1:03:56 Type: Unk
Method: 6500_025(v6) Mode: CONC Corr. Factor: 1.000000
User: CRHOADES Prep Date: Custom ID2: Custom ID3:
Comment: 325612 6010C (Fe)

Elem	Ag3280	Al1670	As1890	B_2089	Ba4554	Be3130	Bi2230	Ca3179	Cd2288
Line	328.068 {103}	167.079 {502}	189.042 {478}	208.959 {461}	455.403 { 74}	313.042 {108}	223.061 {451}	317.933 {106}	228.802 {447}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.04970	1.7563	.95766	1.3089	2.1740	.05065	F 1.9632	233.82	.10024
Stddev	.00011	.0254	.02078	.0277	.0556	.00068	.0323	5.72	.00254
%RSD	.21626	1.4461	2.1702	2.1182	2.5598	1.3385	1.6463	2.4482	2.5299
#1	.04963	1.7383	.94296	1.2893	2.1346	.05017	1.9403	229.77	.09845
#2	.04978	1.7743	.97235	1.3285	2.2133	.05113	1.9860	237.87	.10203

Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Fail	Chk Pass	Chk Pass
High Limit							.10000		
Low Limit							-.10000		

Elem	Co2286	Cr2055	Cu3247	Fe2599	K_7664	Li6707	Mg2790	Mn2576	Mo2020
Line	228.616 {447}	205.560 {464}	324.754 {104}	259.940 {130}	766.490 { 44}	670.784 { 50}	279.079 {121}2	257.610 {131}	202.030 {467}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.47746	.19933	.22718	4.6332	61.463	1.0017	61.163	1.1390	1.0388
Stddev	.01121	.00392	.00040	.0251	1.464	.0015	.147	.0019	.0195
%RSD	2.3485	1.9656	.17537	.54096	2.3826	.15202	.24061	.17123	1.8810
#1	.46953	.19656	.22747	4.6155	60.428	1.0006	61.059	1.1376	1.0250
#2	.48538	.20210	.22690	4.6510	62.499	1.0028	61.267	1.1404	1.0526

Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Elem	Na8183	Ni2316	P_1782	Pb2203	S_1820	Sb2068	Se1960	Si2881	SiO2
Line	818.326 { 41}	231.604 {446}	178.284 {489}	220.353 {453}	182.034 {485}	206.833 {463}	196.090 {472}	288.158 {117}	288.158 {117}2
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	124.87	.46960	W 10.273	.48040	51.002	.51342	1.9394	24.518	52.468
Stddev	.67	.01016	.211	.00837	1.317	.01010	.0399	.063	.135
%RSD	.53706	2.1628	2.0569	1.7424	2.5826	1.9676	2.0593	.25709	.25709
#1	124.39	.46242	10.124	.47448	50.071	.50628	1.9111	24.562	52.564
#2	125.34	.47678	10.423	.48632	51.934	.52057	1.9676	24.473	52.373

Check ?	Chk Pass	Chk Pass	Chk Warn	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit			2.0000						
Low Limit			-1.0000						

Elem	Sn1899	Sr4077	Th2837	Ti3349	Ti1908	U_3701	V_2924	Zn2062	Zr3391
Line	189.989 {477}	407.771 { 83}	283.730 {119}	334.904 {101}	190.856 {477}	370.152 { 91}	292.402 {115}	206.200 {163}	339.198 { 99}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	1.9944	1.6933	.94884	.91362	1.7146	1.9323	.47325	.43664	.45162
Stddev	.0274	.0419	.00357	.00001	.0268	.0673	.00092	.00076	.00143
%RSD	1.3722	2.4755	.37648	.00160	1.5663	3.4816	.19421	.17364	.31624
#1	1.9750	1.6637	.95137	.91361	1.7336	1.8848	.47390	.43718	.45263
#2	2.0137	1.7230	.94631	.91363	1.6956	1.9799	.47260	.43611	.45061

Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Int. Std.	Y_2243	Y_3600	Y_3774						
Line	224.306 {450}	360.073 { 94}	377.433 { 89}						
Units	Cts/S	Cts/S	Cts/S						
Avg	2613.5	38041.	1877.5						
Stddev	23.5	84.	54.5						
%RSD	.90072	.22117	2.9050						
#1	2630.2	38100.	1916.1						
#2	2596.9	37981.	1838.9						

Sample Name: 280-83031-B-1-A PDS Acquired: 5/18/2016 1:06:20 Type: Unk
 Method: 6500_025(v6) Mode: CONC Corr. Factor: 1.000000
 User: CRHOADES Prep Date: Custom ID2: Custom ID3:
 Comment: 325612 6010C (Fe)

Elem	Ag3280	Al1670	As1890	B_2089	Ba4554	Be3130	Bi2230	Ca3179	Cd2288
Line	328.068 {103}	167.079 {502}	189.042 {478}	208.959 {461}	455.403 {74}	313.042 {108}	223.061 {451}	317.933 {106}	228.802 {447}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.03137	.86269	.18746	.38647	.29458	.04926	-.00212	191.69	.04999
Stddev	.00046	.04454	.00438	.01659	.00207	.00003	.00392	.77	.00232
%RSD	1.4583	5.1634	2.3341	4.2921	.70304	.06642	184.31	.39985	4.6505

#1	.03105	.89419	.19056	.39820	.29312	.04929	-.00489	191.15	.05163
#2	.03170	.83120	.18437	.37474	.29605	.04924	.00064	192.23	.04834

Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Elem	Co2286	Cr2055	Cu3247	Fe2599	K_7664	Li6707	Mg2790	Mn2576	Mo2020
Line	228.616 {447}	205.560 {464}	324.754 {104}	259.940 {130}	766.490 {44}	670.784 {50}	279.079 {121}2	257.610 {131}	202.030 {467}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.05106	.04967	.04428	4.4690	31.006	.10919	31.703	.68958	.05770
Stddev	.00213	.00222	.00032	.0541	.146	.00093	.121	.00182	.00019
%RSD	4.1801	4.4745	.73246	1.2095	.47183	.85121	.38118	.26378	.33488

#1	.05256	.05124	.04405	4.4308	30.902	.10985	31.789	.69087	.05784
#2	.04955	.04810	.04451	4.5072	31.109	.10853	31.618	.68829	.05757

Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Elem	Na8183	Ni2316	P_1782	Pb2203	S_1820	Sb2068	Se1960	Si2881	SiO2
Line	818.326 {41}	231.604 {446}	178.284 {489}	220.353 {453}	182.034 {485}	206.833 {463}	196.090 {472}	288.158 {117}	288.158 {117}2
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	86.764	.05597	W 2.1023	.09411	44.516	.09778	.18705	18.682	39.979
Stddev	.181	.00150	.0602	.00026	1.977	.00230	.00277	.056	.120
%RSD	.20911	2.6742	2.8618	.28028	4.4415	2.3525	1.4801	.29968	.29968

#1	86.636	.05703	2.1449	.09429	45.914	.09941	.18900	18.642	39.895
#2	86.893	.05491	2.0598	.09392	43.118	.09615	.18509	18.722	40.064

Check ?	Chk Pass	Chk Pass	Chk Warn	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit			2.0000						
Low Limit			-1.0000						

Elem	Sn1899	Sr4077	Th2837	Ti3349	Ti1908	U_3701	V_2924	Zn2062	Zr3391
Line	189.989 {477}	407.771 {83}	283.730 {119}	334.904 {101}	190.856 {477}	370.152 {91}	292.402 {115}	206.200 {163}	339.198 {99}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.09502	.68330	.18643	.04508	.18173	.48876	.04845	.17859	.04118
Stddev	.00281	.00172	.00027	.00012	.00001	.02170	.00044	.00103	.00169
%RSD	2.9569	.25102	.14274	.27091	.00777	4.4393	.90353	.57777	4.0940

#1	.09701	.68209	.18661	.04500	.18172	.47342	.04876	.17932	.03999
#2	.09304	.68452	.18624	.04517	.18174	.50410	.04814	.17786	.04238

Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Int. Std.	Y_2243	Y_3600	Y_3774
Line	224.306 {450}	360.073 {94}	377.433 {89}
Units	Cts/S	Cts/S	Cts/S
Avg	2656.1	38428.	1908.6
Stddev	150.7	173.	17.8
%RSD	5.6729	.45051	.93438

#1	2549.5	38305.	1921.3
#2	2762.6	38550.	1896.0

Sample Name: CCVH-3883905 Acquired: 5/18/2016 1:08:54 Type: QC
Method: 6500_025(v6) Mode: CONC Corr. Factor: 1.000000
User: CRHOADES Prep Date: Custom ID2: Custom ID3:
Comment:

Elem	Ag3280	Al3092	As1890	B_2089	Ba4554	Be3130	Bi2230	Ca3179	Cd2288	Co2286	Cr2055
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	-.00535	52.103	.00339	.01178	-.00095	.00012	.96590	.06488	-.00062	-.00104	-.00080
Stddev	.00074	.089	.00536	.00107	.00041	.00006	.00534	.06762	.00015	.00029	.00049
%RSD	13.768	.17004	158.19	9.0505	42.466	51.699	.55264	104.23	24.830	27.747	61.160

#1	-.00587	52.040	.00717	.01253	-.00124	.00016	.96967	.01706	-.00051	-.00084	-.00046
#2	-.00483	52.165	-.00040	.01102	-.00067	.00008	.96212	.11269	-.00073	-.00125	-.00115

Check ?	None	Chk Pass	None	None	None	None	Chk Pass	None	None	None	None
Value											
Range											

Elem	Cu3247	Fe2714	K_7664	Li6707	Mg2790	Mn2576	Mo2020	Na8183	Ni2316	P_1782	Pb2203
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	-.01610	54.075	.00194	-.00921	.01089	-.00204	-.00096	F 277.84	.00130	.00862	-.00062
Stddev	.00033	.112	.02090	.00193	.00629	.00010	.00117	1.59	.00013	.00024	.00275
%RSD	2.0722	.20749	1076.5	20.916	57.750	4.7654	121.52	.57190	9.7436	2.8406	442.99

#1	-.01586	54.155	-.01284	-.01057	.01534	-.00197	-.00179	278.96	.00139	.00879	.00133
#2	-.01633	53.996	.01672	-.00785	.00644	-.00211	-.00014	276.72	.00121	.00845	-.00257

Check ?	None	Chk Pass	None	None	None	None	None	Chk Fail	None	None	None
Value								250.00			
Range								10.490%			

Elem	S_1820	Sb2068	Se1960	Si2881	SiO2	Sn1899	Sr4077	Th2837	Ti3349	Ti1908	U_3701
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	5.1687	-.01796	-.01223	.02148	.04596	.00020	.00043	W 4.5536	.00167	.01065	W 9.4009
Stddev	.0254	.00216	.00335	.02411	.05160	.00110	.00024	.0024	.00055	.00404	.2882
%RSD	.49221	12.048	27.429	112.26	112.26	564.81	55.132	.05269	33.193	37.938	3.0661

#1	5.1867	-.01949	-.00986	.00443	.00948	.00098	.00026	4.5553	.00206	.00779	9.6047
#2	5.1507	-.01643	-.01460	.03853	.08244	-.00058	.00060	4.5519	.00128	.01351	9.1971

Check ?	Chk Pass	None	None	None	None	None	None	Chk Warn	None	None	Chk Warn
Value								5.0000			10.000
Range								-5.0000%			-5.0000%

Elem	V_2924	Zn2062	Zr3391
Units	ppm	ppm	ppm
Avg	.01311	.00033	-.13434
Stddev	.00055	.00060	.00914
%RSD	4.1928	182.34	6.8048

#1	.01350	-.00009	-.14080
#2	.01272	.00075	-.12787

Check ?	None	None	None
Value			
Range			

Int. Std.	Y_2243	Y_3600	Y_3774
Units	Cts/S	Cts/S	Cts/S
Avg	2627.2	39197.	1846.4
Stddev	6.3	2.	33.7
%RSD	.23821	.00477	1.8237

#1	2622.7	39199.	1822.6
#2	2631.6	39196.	1870.2

Sample Name: CCV-3888422 Acquired: 5/18/2016 1:11:30 Type: QC
Method: 6500_025(v6) Mode: CONC Corr. Factor: 1.000000
User: CRHOADES Prep Date: Custom ID2: Custom ID3:
Comment:

Elem	Ag3280	Al1670	As1890	B_2089	Ba4554	Be3130	Bi2230	Ca3179	Cd2288	Co2286	Cr2055
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.48109	.46976	.90789	.49559	.48464	.50236	-.00082	4.7359	.48900	.49727	.50844
Stddev	.00020	.00102	.00109	.00316	.00075	.00117	.00008	.0432	.00092	.00664	.00616
%RSD	.04129	.21657	.12057	.63711	.15392	.23233	9.5304	.91120	.18875	1.3361	1.2123
#1	.48123	.46904	.90867	.49782	.48516	.50319	-.00087	4.7664	.48835	.50197	.51280
#2	.48095	.47048	.90712	.49336	.48411	.50154	-.00076	4.7054	.48965	.49258	.50408
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	None	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Value											
Range											
Elem	Cu3247	Fe2599	K_7664	Li6707	Mg2790	Mn2576	Mo2020	Na5895	Ni2316	P_1782	Pb2203
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	W .44892	2.5606	49.248	.97136	18.403	W .44888	.49937	5.2753	.48454	.97444	.98979
Stddev	.00088	.0064	.066	.00529	.022	.00076	.00833	.0262	.00646	.01972	.01536
%RSD	.19605	.25117	.13398	.54506	.11710	.17030	1.6678	.49724	1.3325	2.0239	1.5519
#1	.44954	2.5561	49.202	.96762	18.419	.44942	.50525	5.2939	.48910	.98838	1.0006
#2	.44829	2.5652	49.295	.97511	18.388	.44834	.49348	5.2568	.47997	.96049	.97893
Check ?	Chk Warn	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Warn	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Value	.50000					.50000					
Range	-10.000%					-10.000%					
Elem	S_1820	Sb2068	Se1960	Si2881	SiO2	Sn1899	Sr4077	Th2837	Ti3349	Ti1908	U_3701
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	-.06249	.97448	.92095	4.9610	10.617	1.0065	.50348	-.00338	F .44183	1.0172	.07460
Stddev	.00102	.02441	.01338	.0686	.147	.0273	.00136	.00101	.00080	.0208	.00131
%RSD	1.6302	2.5048	1.4527	1.3831	1.3831	2.7073	.27081	29.880	.18051	2.0445	1.7560
#1	-.06321	.99174	.93041	4.9125	10.513	1.0257	.50445	-.00410	.44239	1.0319	.07368
#2	-.06177	.95722	.91149	5.0095	10.720	.98721	.50252	-.00267	.44126	1.0025	.07553
Check ?	None	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	None	Chk Fail	Chk Pass	None
Value									.50000		
Range									-10.490%		
Elem	V_2924	Zn2062	Zr3391								
Units	ppm	ppm	ppm								
Avg	.47434	F .43519	.46522								
Stddev	.00060	.00386	.00071								
%RSD	.12676	.88805	.15339								
#1	.47476	.43792	.46471								
#2	.47391	.43246	.46572								
Check ?	Chk Pass	Chk Fail	Chk Pass								
Value		.50000									
Range		-10.490%									
Int. Std.	Y_2243	Y_3600	Y_3774								
Units	Cts/S	Cts/S	Cts/S								
Avg	2651.9	39479.	1858.3								
Stddev	5.7	91.	3.3								
%RSD	.21534	.22948	.17732								
#1	2655.9	39415.	1856.0								
#2	2647.8	39543.	1860.7								

Sample Name: CCB Acquired: 5/18/2016 1:13:58 Type: QC
 Method: 6500_025(v6) Mode: CONC Corr. Factor: 1.000000
 User: CRHOADES Prep Date: Custom ID2: Custom ID3:
 Comment:

Elem	Ag3280	Al1670	As1890	B_2089	Ba4554	Be3130	Bi2230	Ca3179	Cd2288	Co2286	Cr2055
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	F .00321	.00054	.00657	.00842	W -.00209	.00011	-.00475	-.01446	.00000	-.00017	-.00040
Stddev	.00034	.00124	.00394	.00089	.00036	.00022	.00212	.00991	.00008	.00045	.00062
%RSD	10.629	227.40	59.925	10.622	17.055	203.57	44.600	68.498	2369.0	260.61	156.23
#1	.00345	.00142	.00379	.00905	-.00184	.00026	-.00625	-.00746	.00006	-.00049	.00004
#2	.00297	-.00033	.00936	.00778	-.00235	-.00005	-.00325	-.02147	-.00005	.00015	-.00084
Check ?	Chk Fail	Chk Pass	Chk Pass	Chk Pass	Chk Warn	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit	.00200				.00200						
Low Limit	-.01000				-.00200						
Elem	Cu3247	Fe2599	K_7664	Li6707	Mg2790	Mn2576	Mo2020	Na5895	Ni2316	P_1782	Pb2203
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	-.00028	.01983	-.13185	F -.01232	W .05298	W .00141	.00087	-.00003	.00056	.00417	-.00064
Stddev	.00194	.00088	.00073	.00053	.08116	.00168	.00072	.00133	.00001	.00168	.00190
%RSD	684.79	4.4174	.55296	4.2958	153.17	118.86	83.018	4383.7	1.2541	40.398	296.14
#1	.00109	.01921	-.13134	-.01195	.11037	.00260	.00036	.00091	.00056	.00536	-.00198
#2	-.00165	.02045	-.13237	-.01270	-.00440	.00023	.00138	-.00097	.00055	.00298	.00070
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Fail	Chk Warn	Chk Warn	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit				.01000	.04000	.00100					
Low Limit				-.01000	-.04000	-.01000					
Elem	S_1820	Sb2068	Se1960	Si2881	SiO2	Sn1899	Sr4077	Th2837	Ti3349	Ti1908	U_3701
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	-.06716	W .00153	-.00097	.00131	.00281	-.00082	-.00027	.00405	.00127	.00682	.03240
Stddev	.00590	.00043	.00022	.07912	.16932	.00003	.00005	.00606	.00164	.00179	.00764
%RSD	8.7877	28.275	22.582	6018.3	6018.3	3.5820	18.703	149.71	129.28	26.326	23.590
#1	-.07133	.00123	-.00113	.05726	.12254	-.00080	-.00030	.00833	.00243	.00555	.02700
#2	-.06299	.00184	-.00082	-.05463	-.11691	-.00084	-.00023	-.00024	.00011	.00809	.03781
Check ?	Chk Pass	Chk Warn	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit		.00100									
Low Limit		-.00100									
Elem	V_2924	Zn2062	Zr3391								
Units	ppm	ppm	ppm								
Avg	.00072	.00061	.00092								
Stddev	.00107	.00066	.00339								
%RSD	148.08	106.90	366.88								
#1	.00147	.00108	-.00147								
#2	-.00003	.00015	.00332								
Check ?	Chk Pass	Chk Pass	Chk Pass								
High Limit											
Low Limit											
Int. Std.	Y_2243	Y_3600	Y_3774								
Units	Cts/S	Cts/S	Cts/S								
Avg	2667.5	40307.	1889.1								
Stddev	9.1	100.	10.3								
%RSD	.34016	.24800	.54561								
#1	2673.9	40378.	1896.4								
#2	2661.1	40236.	1881.8								

Sample Name: CCVL-3894681 Acquired: 5/18/2016 1:16:20 Type: QC
Method: 6500_025(v6) Mode: CONC Corr. Factor: 1.000000
User: CRHOADES Prep Date: Custom ID2: Custom ID3:
Comment:

Elem	Ag3280	Al1670	As1890	B_2089	Ba4554	Be3130	Bi2230	Ca3179	Cd2288	Co2286	Cr2055
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.01209	.09557	.01170	.10485	.00715	.00103	.10608	.18114	.00544	.01032	.00988
Stddev	.00070	.00110	.00119	.00037	.00053	.00026	.00319	.00081	.00000	.00005	.00057
%RSD	5.7927	1.1489	10.208	.34979	7.3674	25.660	3.0065	.44957	.01503	.52620	5.7839
#1	.01259	.09635	.01085	.10460	.00752	.00084	.10834	.18056	.00544	.01036	.00947
#2	.01160	.09479	.01254	.10511	.00677	.00121	.10383	.18172	.00544	.01028	.01028
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Value											
Range											
Elem	Cu3247	Fe2599	K_7664	Li6707	Mg2790	Mn2576	Mo2020	Na5895	Ni2316	P_1782	Pb2203
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.01242	.10781	2.8261	F -.00195	.17954	.00922	.01972	1.0350	.04110	2.9753	.00714
Stddev	.00036	.00475	.0442	.00268	.01053	.00015	.00087	.0160	.00141	.0897	.00087
%RSD	2.8905	4.4063	1.5658	137.27	5.8640	1.5959	4.3972	1.5459	3.4348	3.0164	12.207
#1	.01267	.10445	2.7948	-.00384	.18699	.00933	.02033	1.0237	.04210	3.0387	.00652
#2	.01217	.11116	2.8574	-.00006	.17210	.00912	.01911	1.0463	.04010	2.9118	.00776
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Fail	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Value				.01000							
Range				-30.000%							
Elem	S_1820	Sb2068	Se1960	Si2881	SiO2	Sn1899	Sr4077	Th2837	Ti3349	Ti1908	U_3701
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	-.06843	.01609	F .00622	.44214	.94619	.10542	.01007	.01513	.00949	.01468	F .10050
Stddev	.00097	.00567	.00207	.01566	.03352	.00312	.00003	.00038	.00010	.00311	.01670
%RSD	1.4123	35.254	33.304	3.5427	3.5427	2.9632	.27463	2.4930	1.0800	21.185	16.616
#1	-.06774	.02010	.00769	.43107	.92248	.10762	.01005	.01487	.00956	.01688	.08869
#2	-.06911	.01208	.00476	.45322	.96989	.10321	.01008	.01540	.00941	.01248	.11231
Check ?	None	Chk Pass	Chk Fail	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Fail
Value			.01500								.06000
Range			-30.000%								30.000%
Elem	V_2924	Zn2062	Zr3391								
Units	ppm	ppm	ppm								
Avg	.00916	.01755	.01315								
Stddev	.00049	.00040	.00063								
%RSD	5.3391	2.2822	4.7573								
#1	.00950	.01727	.01360								
#2	.00881	.01783	.01271								
Check ?	Chk Pass	Chk Pass	Chk Pass								
Value											
Range											
Int. Std.	Y_2243	Y_3600	Y_3774								
Units	Cts/S	Cts/S	Cts/S								
Avg	2704.2	40291.	1990.4								
Stddev	1.3	98.	14.1								
%RSD	.04625	.24265	.70932								
#1	2703.3	40360.	2000.4								
#2	2705.1	40222.	1980.4								

Sample Name: MB 280-325683/1-A Acquired: 5/18/2016 1:18:59 Type: Unk

Method: 6500_025(v6) Mode: CONC Corr. Factor: 1.000000

User: CRHOADES Prep Date: 5/17 Custom ID2: Custom ID3:

Comment: 325683 6010B (Fe)

Elem	Ag3280	Al1670	As1890	B_2089	Ba4554	Be3130	Bi2230	Ca3179	Cd2288
Line	328.068 {103}	167.079 {502}	189.042 {478}	208.959 {461}	455.403 {74}	313.042 {108}	223.061 {451}	317.933 {106}	228.802 {447}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.00296	.00373	.00373	.00489	-.00228	-.00007	-.00195	.00196	.00035
Stddev	.00088	.00345	.00723	.00102	.00022	.00015	.00336	.01085	.00002
%RSD	29.756	92.265	193.67	20.898	9.8580	225.09	171.90	553.10	7.1178

#1	.00234	.00617	.00885	.00561	-.00212	.00004	.00042	-.00571	.00033
#2	.00359	.00130	-.00138	.00416	-.00243	-.00017	-.00433	.00963	.00036

Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Elem	Co2286	Cr2055	Cu3247	Fe2599	K_7664	Li6707	Mg2790	Mn2576	Mo2020
Line	228.616 {447}	205.560 {464}	324.754 {104}	259.940 {130}	766.490 {44}	670.784 {50}	279.079 {121}2	257.610 {131}	202.030 {467}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	-.00001	-.00059	-.00097	-.00203	-.26007	F -.01052	-.00251	.00002	-.00068
Stddev	.00029	.00016	.00022	.00282	.04848	.00310	.00518	.00014	.00040
%RSD	3070.5	27.985	23.055	139.23	18.640	29.475	206.16	623.87	58.594

#1	.00019	-.00047	-.00113	-.00003	-.29435	-.01271	.00115	-.00008	-.00096
#2	-.00021	-.00071	-.00081	-.00403	-.22579	-.00833	-.00617	.00012	-.00040

Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Fail	Chk Pass	Chk Pass	Chk Pass
High Limit						.01000			
Low Limit						-.01000			

Elem	Na5895	Ni2316	P_1782	Pb2203	S_1820	Sb2068	Se1960	Si2881	SiO2
Line	589.592 {57}	231.604 {446}	178.284 {489}	220.353 {453}	182.034 {485}	206.833 {463}	196.090 {472}	288.158 {117}	288.158 {117}2
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	-.03116	.00052	.00840	-.00081	W -.06097	-.00337	W -.00838	.00541	.01157
Stddev	.02744	.00048	.00005	.00053	.00765	.00458	.00803	.00459	.00983
%RSD	88.045	92.171	.60234	64.810	12.542	135.85	95.774	84.995	84.995

#1	-.05056	.00018	.00837	-.00044	-.05556	-.00013	-.01406	.00216	.00462
#2	-.01176	.00086	.00844	-.00118	-.06637	-.00661	-.00271	.00865	.01852

Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Warn	Chk Pass	Chk Warn	Chk Pass	None
High Limit					.05000		.00750		
Low Limit					-.05000		-.00750		

Elem	Sn1899	Sr4077	Th2837	Ti3349	Ti1908	U_3701	V_2924	Zn2062	Zr3391
Line	189.989 {477}	407.771 {83}	283.730 {119}	334.904 {101}	190.856 {477}	370.152 {91}	292.402 {115}	206.200 {163}	339.198 {99}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	-.00155	-.00012	-.00112	.00066	.00080	.03495	-.00015	.00003	.00112
Stddev	.00031	.00033	.00328	.00054	.00747	.02998	.00005	.00021	.00231
%RSD	20.232	270.24	293.91	81.047	935.91	85.778	34.187	660.66	205.29

#1	-.00133	-.00036	-.00344	.00028	-.00448	.05615	-.00011	-.00012	-.00051
#2	-.00177	.00011	.00120	.00104	.00608	.01375	-.00018	.00018	.00276

Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Int. Std.	Y_2243	Y_3600	Y_3774
Line	224.306 {450}	360.073 {94}	377.433 {89}
Units	Cts/S	Cts/S	Cts/S
Avg	2674.9	40323.	1890.7
Stddev	42.6	742.	2.1
%RSD	1.5933	1.8394	.10985

#1	2705.1	39799.	1889.2
#2	2644.8	40848.	1892.2

Sample Name: LCS 280-325683/2-A Acquired: 5/18/2016 1:21:21 Type: Unk

Method: 6500_025(v6) Mode: CONC Corr. Factor: 1.000000

User: CRHOADES Prep Date: Custom ID2: Custom ID3:

Comment: 325683 6010B (Fe)

Elem	Ag3280	Al1670	As1890	B_2089	Ba4554	Be3130	Bi2230	Ca3179	Cd2288
Line	328.068 {103}	167.079 {502}	189.042 {478}	208.959 {461}	455.403 { 74}	313.042 {108}	223.061 {451}	317.933 {106}	228.802 {447}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.04915	1.7806	.92165	.98792	1.8891	.04935	1.9549	45.460	.09877
Stddev	.00105	.0015	.00550	.00034	.0563	.00146	.0136	1.179	.00004
%RSD	2.1369	.08304	.59664	.03482	2.9807	2.9495	.69727	2.5937	.04366

#1	.04841	1.7817	.92554	.98817	1.8493	.04832	1.9645	44.627	.09874
#2	.04990	1.7796	.91776	.98768	1.9289	.05038	1.9453	46.294	.09880

Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	None	Chk Pass	Chk Pass
High Limit									
Low Limit									

Elem	Co2286	Cr2055	Cu3247	Fe2599	K_7664	Li6707	Mg2790	Mn2576	Mo2020
Line	228.616 {447}	205.560 {464}	324.754 {104}	259.940 {130}	766.490 { 44}	670.784 { 50}	279.079 {121}2	257.610 {131}	202.030 {467}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.47777	.19916	.21719	1.0236	48.193	.95850	F 45.757	F .43763	1.0218
Stddev	.00027	.00061	.00015	.0223	1.269	.00927	.156	.00138	.0015
%RSD	.05603	.30427	.07100	2.1755	2.6336	.96755	.34152	.31474	.14909

#1	.47758	.19873	.21730	1.0078	47.296	.95194	45.647	.43666	1.0228
#2	.47796	.19959	.21708	1.0393	49.090	.96505	45.868	.43860	1.0207

Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Fail	Chk Fail	Chk Pass
High Limit							56.500	.55000	
Low Limit							46.000	.45000	

Elem	Na8183	Ni2316	P_1782	Pb2203	S_1820	Sb2068	Se1960	Si2881	SiO2
Line	818.326 { 41}	231.604 {446}	178.284 {489}	220.353 {453}	182.034 {485}	206.833 {463}	196.090 {472}	288.158 {117}	288.158 {117}2
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	F 58.738	.46576	9.8478	.48635	2.0372	.51550	1.9104	9.9166	21.222
Stddev	.209	.00006	.0008	.00173	.0017	.00209	.0052	.0798	.171
%RSD	.35654	.01259	.00796	.35543	.08507	.40500	.27412	.80452	.80452

#1	58.590	.46580	9.8473	.48512	2.0385	.51698	1.9141	9.8602	21.101
#2	58.886	.46572	9.8484	.48757	2.0360	.51402	1.9067	9.9730	21.342

Check ?	Chk Fail	Chk Pass	Chk Pass	Chk Pass	None	Chk Pass	Chk Pass	Chk Pass	None
High Limit	56.000								
Low Limit	45.500								

Elem	Sn1899	Sr4077	Th2837	Ti3349	Ti1908	U_3701	V_2924	Zn2062	Zr3391
Line	189.989 {477}	407.771 { 83}	283.730 {119}	334.904 {101}	190.856 {477}	370.152 { 91}	292.402 {115}	206.200 {163}	339.198 { 99}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	2.0008	.97247	.92056	F .88106	1.8078	1.8867	.46032	.42585	.44687
Stddev	.0154	.02746	.00221	.00173	.0879	.0103	.00329	.00510	.00209
%RSD	.77045	2.8237	.23980	.19664	4.8605	.54589	.71423	1.1970	.46762

#1	2.0117	.95305	.92212	.87983	1.8699	1.8795	.45800	.42225	.44834
#2	1.9899	.99189	.91900	.88228	1.7456	1.8940	.46265	.42946	.44539

Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Fail	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit				1.1100					
Low Limit				.90000					

Int. Std.	Y_2243	Y_3600	Y_3774						
Line	224.306 {450}	360.073 { 94}	377.433 { 89}						
Units	Cts/S	Cts/S	Cts/S						
Avg	2627.5	39084.	1916.9						
Stddev	5.9	503.	49.2						
%RSD	.22550	1.2881	2.5657						

#1	2623.3	39440.	1951.6						
#2	2631.6	38728.	1882.1						

Sample Name: 280-82947-B-1-B Acquired: 5/18/2016 1:23:48 Type: Unk
Method: 6500_025(v6) Mode: CONC Corr. Factor: 1.000000
User: CRHOADES Prep Date: Custom ID2: Custom ID3:
Comment: 325683 6010B (Fe)

Elem	Ag3280	Al1670	As1890	B_2089	Ba4554	Be3130	Bi2230	Ca3179	Cd2288
Line	328.068 {103}	167.079 {502}	189.042 {478}	208.959 {461}	455.403 { 74}	313.042 {108}	223.061 {451}	317.933 {106}	228.802 {447}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.00329	.00290	.01022	.00977	.04862	.00010	-.00298	35.414	.00024
Stddev	.00026	.00019	.00300	.00013	.00015	.00023	.00097	.467	.00018
%RSD	7.7629	6.5782	29.379	1.3607	.30170	235.46	32.683	1.3193	78.106

#1	.00347	.00303	.01235	.00986	.04873	.00025	-.00229	35.744	.00037
#2	.00311	.00276	.00810	.00967	.04852	-.00006	-.00367	35.084	.00011

Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Elem	Co2286	Cr2055	Cu3247	Fe2599	K_7664	Li6707	Mg2790	Mn2576	Mo2020
Line	228.616 {447}	205.560 {464}	324.754 {104}	259.940 {130}	766.490 { 44}	670.784 { 50}	279.079 {121}2	257.610 {131}	202.030 {467}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	-.00033	.00069	-.00065	.12665	.98198	-.00489	12.261	.07541	.00192
Stddev	.00036	.00016	.00005	.00429	.00485	.00059	.003	.00026	.00074
%RSD	108.84	22.478	7.4308	3.3839	.49364	12.119	.02846	.34121	38.440

#1	-.00008	.00080	-.00061	.12968	.98540	-.00531	12.264	.07560	.00140
#2	-.00059	.00058	-.00068	.12362	.97855	-.00448	12.259	.07523	.00245

Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Elem	Na8183	Ni2316	P_1782	Pb2203	S_1820	Sb2068	Se1960	Si2881	SiO2
Line	818.326 { 41}	231.604 {446}	178.284 {489}	220.353 {453}	182.034 {485}	206.833 {463}	196.090 {472}	288.158 {117}	288.158 {117}2
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	14.345	.00018	.29338	-.00048	2.9145	-.00775	-.00140	16.761	35.869
Stddev	.694	.00006	.00287	.00030	.0274	.00227	.00129	.031	.066
%RSD	4.8383	32.071	.97896	61.281	.94134	29.267	92.423	.18269	.18269

#1	13.855	.00014	.29541	-.00069	2.9339	-.00936	-.00231	16.740	35.823
#2	14.836	.00022	.29135	-.00027	2.8951	-.00615	-.00048	16.783	35.916

Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Elem	Sn1899	Sr4077	Th2837	Ti3349	Ti1908	U_3701	V_2924	Zn2062	Zr3391
Line	189.989 {477}	407.771 { 83}	283.730 {119}	334.904 {101}	190.856 {477}	370.152 { 91}	292.402 {115}	206.200 {163}	339.198 { 99}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	-.00275	.08517	.00036	.00054	.03374	.00729	.00036	.00831	.00348
Stddev	.00187	.00019	.00199	.00002	.00375	.04494	.00050	.00033	.00059
%RSD	67.881	.21841	552.46	3.2936	11.108	616.32	138.96	3.9649	17.057

#1	-.00143	.08504	-.00105	.00056	.03109	.03906	.00001	.00808	.00306
#2	-.00407	.08530	.00177	.00053	.03640	-.02448	.00072	.00854	.00390

Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Int. Std.	Y_2243	Y_3600	Y_3774
Line	224.306 {450}	360.073 { 94}	377.433 { 89}
Units	Cts/S	Cts/S	Cts/S
Avg	2739.8	39941.	1876.2
Stddev	83.1	34.	19.2
%RSD	3.0342	.08565	1.0208

#1	2798.6	39917.	1862.6
#2	2681.0	39965.	1889.7

Sample Name: 280-82947-B-2-B Acquired: 5/18/2016 1:26:26 Type: Unk
Method: 6500_025(v6) Mode: CONC Corr. Factor: 1.000000
User: CRHOADES Prep Date: Custom ID2: Custom ID3:
Comment: 325683 6010B (Fe)

Elem	Ag3280	Al1670	As1890	B_2089	Ba4554	Be3130	Bi2230	Ca3179	Cd2288
Line	328.068 {103}	167.079 {502}	189.042 {478}	208.959 {461}	455.403 { 74}	313.042 {108}	223.061 {451}	317.933 {106}	228.802 {447}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.00252	.00211	-.00337	.01840	.10714	-.00011	-.00186	105.63	.00062
Stddev	.00004	.00068	.00656	.00121	.00157	.00006	.00156	1.72	.00012
%RSD	1.3898	32.163	194.66	6.5694	1.4630	55.184	83.547	1.6246	19.930

#1	.00250	.00259	-.00801	.01755	.10825	-.00007	-.00296	106.84	.00054
#2	.00255	.00163	.00127	.01926	.10603	-.00015	-.00076	104.41	.00071

Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Elem	Co2286	Cr2055	Cu3247	Fe2599	K_7664	Li6707	Mg2790	Mn2576	Mo2020
Line	228.616 {447}	205.560 {464}	324.754 {104}	259.940 {130}	766.490 { 44}	670.784 { 50}	279.079 {121}2	257.610 {131}	202.030 {467}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.00260	-.00001	-.00021	.87271	.24283	-.00368	39.896	3.0447	-.00063
Stddev	.00013	.00023	.00053	.01174	.02862	.00228	.033	.0003	.00016
%RSD	4.8262	1802.2	251.85	1.3452	11.785	62.012	.08337	.00925	24.662

#1	.00251	.00015	-.00058	.88101	.22259	-.00530	39.919	3.0445	-.00074
#2	.00268	-.00017	.00016	.86440	.26306	-.00207	39.872	3.0449	-.00052

Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Elem	Na8183	Ni2316	P_1782	Pb2203	S_1820	Sb2068	Se1960	Si2881	SiO2
Line	818.326 { 41}	231.604 {446}	178.284 {489}	220.353 {453}	182.034 {485}	206.833 {463}	196.090 {472}	288.158 {117}	288.158 {117}2
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	44.524	.00238	.02467	-.00164	2.8958	-.00730	W -.00850	16.819	35.992
Stddev	.231	.00015	.00019	.00083	.0156	.00204	.00216	.035	.074
%RSD	.51772	6.1955	.76846	50.537	.54018	28.025	25.382	.20676	.20676

#1	44.361	.00249	.02454	-.00105	2.9069	-.00874	-.00697	16.794	35.940
#2	44.687	.00228	.02480	-.00222	2.8848	-.00585	-.01003	16.843	36.045

Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Warn	Chk Pass	Chk Pass
High Limit							5.0000		
Low Limit							-.00500		

Elem	Sn1899	Sr4077	Th2837	Ti3349	Ti1908	U_3701	V_2924	Zn2062	Zr3391
Line	189.989 {477}	407.771 { 83}	283.730 {119}	334.904 {101}	190.856 {477}	370.152 { 91}	292.402 {115}	206.200 {163}	339.198 { 99}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	-.00254	.65414	-.00019	.00088	.00468	-.01506	.00023	.00147	-.00081
Stddev	.00297	.00996	.00253	.00057	.00092	.02621	.00042	.00060	.00062
%RSD	116.76	1.5227	1337.6	64.451	19.726	174.05	187.27	40.594	75.668

#1	-.00465	.66118	.00160	.00048	.00533	-.03359	.00052	.00189	-.00038
#2	-.00044	.64709	-.00197	.00128	.00402	.00347	-.00007	.00105	-.00125

Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Int. Std.	Y_2243	Y_3600	Y_3774
Line	224.306 {450}	360.073 { 94}	377.433 { 89}
Units	Cts/S	Cts/S	Cts/S
Avg	2569.0	38462.	1833.8
Stddev	15.2	120.	22.3
%RSD	.59140	.31258	1.2171

#1	2579.8	38377.	1818.1
#2	2558.3	38547.	1849.6

Sample Name: 280-82947-B-2-B SD@5 Acquired: 5/18/2016 1:29:04 Type: Unk
Method: 6500_025(v6) Mode: CONC Corr. Factor: 1.000000
User: CRHOADES Prep Date: Custom ID2: Custom ID3:
Comment: 325683 6010B (Fe)

Elem	Ag3280	Al1670	As1890	B_2089	Ba4554	Be3130	Bi2230	Ca3179	Cd2288
Line	328.068 {103}	167.079 {502}	189.042 {478}	208.959 {461}	455.403 {74}	313.042 {108}	223.061 {451}	317.933 {106}	228.802 {447}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.00211	.00151	-.00068	.00739	.02031	.00012	.00121	21.578	.00024
Stddev	.00041	.00018	.00003	.00034	.00007	.00024	.00389	.397	.00009
%RSD	19.305	11.625	3.8193	4.5705	.35353	210.64	320.45	1.8391	36.828

#1	.00182	.00163	-.00070	.00716	.02026	.00029	.00397	21.859	.00018
#2	.00239	.00138	-.00067	.00763	.02037	-.00006	-.00154	21.297	.00030

Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Elem	Co2286	Cr2055	Cu3247	Fe2599	K_7664	Li6707	Mg2790	Mn2576	Mo2020
Line	228.616 {447}	205.560 {464}	324.754 {104}	259.940 {130}	766.490 {44}	670.784 {50}	279.079 {121}2	257.610 {131}	202.030 {467}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.00030	-.00052	-.00086	.32242	-.01856	W -.01199	8.1249	.62125	-.00129
Stddev	.00039	.00030	.00019	.00368	.05366	.00078	.0606	.00013	.00019
%RSD	130.28	57.092	21.972	1.1401	289.06	6.4732	.74521	.02018	14.470

#1	.00058	-.00031	-.00073	.32501	-.05651	-.01254	8.0821	.62116	-.00116
#2	.00002	-.00073	-.00100	.31982	.01938	-.01144	8.1677	.62134	-.00142

Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Warn	Chk Pass	Chk Pass	Chk Pass
High Limit						2.0000			
Low Limit						-.01000			

Elem	Na5895	Na8183	Ni2316	P_1782	Pb2203	S_1820	Sb2068	Se1960	Si2881
Line	589.592 {57}	818.326 {41}	231.604 {446}	178.284 {489}	220.353 {453}	182.034 {485}	206.833 {463}	196.090 {472}	288.158 {117}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	7.7749	W 10.095	.00060	.00783	-.00070	.50458	-.00789	.00163	3.3213
Stddev	.0254	.086	.00006	.00087	.00266	.00092	.00133	.00291	.0100
%RSD	.32636	.85188	10.290	11.089	380.45	.18177	16.835	177.93	.30209

#1	7.7928	10.156	.00065	.00721	-.00258	.50523	-.00883	-.00042	3.3142
#2	7.7569	10.034	.00056	.00844	.00118	.50393	-.00695	.00369	3.3284

Check ?	Chk Pass	Chk Warn	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit		500.00							
Low Limit		11.000							

Elem	SiO2	Sn1899	Sr4077	Th2837	Ti3349	Ti1908	U_3701	V_2924	Zn2062
Line	288.158 {117}2	189.989 {477}	407.771 {83}	283.730 {119}	334.904 {101}	190.856 {477}	370.152 {91}	292.402 {115}	206.200 {163}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	7.1075	-.00181	.13662	.00137	.00077	-.00274	.05841	.00022	.00038
Stddev	.0215	.00288	.00013	.00340	.00035	.00201	.00951	.00076	.00080
%RSD	.30209	159.39	.09551	247.50	45.355	73.499	16.282	340.50	211.41

#1	7.0923	-.00384	.13653	-.00103	.00053	-.00131	.05168	-.00031	.00095
#2	7.1227	.00023	.13671	.00377	.00102	-.00416	.06513	.00076	-.00019

Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Elem	Zr3391								
Line	339.198 {99}								
Units	ppm								
Avg	-.00117								
Stddev	.00104								
%RSD	89.170								

#1	-.00190								
#2	-.00043								

Check ?	Chk Pass								
High Limit									
Low Limit									

Sample Name: 280-82947-B-2-B SD@5 Acquired: 5/18/2016 1:29:04 Type: Unk
 Method: 6500_025(v6) Mode: CONC Corr. Factor: 1.000000
 User: CRHOADES Prep Date: Custom ID2: Custom ID3:
 Comment: 325683 6010B (Fe)

Int. Std.	Y_2243	Y_3600	Y_3774
Line	224.306 {450}	360.073 { 94}	377.433 { 89}
Units	Cts/S	Cts/S	Cts/S
Avg	2609.2	38957.	1793.9
Stddev	2.9	175.	43.5
%RSD	.11172	.44804	2.4251
#1	2611.3	38833.	1763.1
#2	2607.2	39080.	1824.6

Sample Name: 280-82947-B-2-C MS Acquired: 5/18/2016 1:31:43 Type: Unk
Method: 6500_025(v6) Mode: CONC Corr. Factor: 1.000000
User: CRHOADES Prep Date: Custom ID2: Custom ID3:
Comment: 325683 6010B (Fe)

Elem	Ag3280	Al1670	As1890	B_2089	Ba4554	Be3130	Bi2230	Ca3179	Cd2288
Line	328.068 {103}	167.079 {502}	189.042 {478}	208.959 {461}	455.403 {74}	313.042 {108}	223.061 {451}	317.933 {106}	228.802 {447}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.04831	1.7817	.93233	1.0087	2.0293	.05035	F 1.9390	151.35	.10020
Stddev	.00033	.0074	.00234	.0051	.0466	.00140	.0037	3.32	.00019
%RSD	.68662	.41632	.25144	.50652	2.2955	2.7768	.19035	2.1903	.18983

#1	.04808	1.7764	.93399	1.0050	2.0622	.05134	1.9363	153.69	.10006
#2	.04855	1.7869	.93068	1.0123	1.9964	.04936	1.9416	149.00	.10033

Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Fail	Chk Pass	Chk Pass
High Limit							.10000		
Low Limit							-.10000		

Elem	Co2286	Cr2055	Cu3247	Fe2599	K_7664	Li6707	Mg2790	Mn2576	Mo2020
Line	228.616 {447}	205.560 {464}	324.754 {104}	259.940 {130}	766.490 {44}	670.784 {50}	279.079 {121}2	257.610 {131}	202.030 {467}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.47657	.20098	.21694	1.8857	50.207	.98177	85.816	3.4411	1.0294
Stddev	.00309	.00067	.00173	.0164	1.117	.00634	.303	.0129	.0083
%RSD	.64890	.33298	.79633	.87258	2.2241	.64604	.35257	.37390	.80277

#1	.47876	.20145	.21571	1.8973	50.996	.97729	85.602	3.4320	1.0352
#2	.47438	.20050	.21816	1.8740	49.417	.98626	86.030	3.4502	1.0235

Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Elem	Na8183	Ni2316	P_1782	Pb2203	S_1820	Sb2068	Se1960	Si2881	SiO2
Line	818.326 {41}	231.604 {446}	178.284 {489}	220.353 {453}	182.034 {485}	206.833 {463}	196.090 {472}	288.158 {117}	288.158 {117}2
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	101.59	.46603	W 10.067	.48152	5.0054	.51042	1.9032	26.571	56.862
Stddev	.72	.00107	.023	.00182	.0069	.00395	.0167	.034	.073
%RSD	.70674	.23000	.22539	.37762	.13832	.77289	.87589	.12893	.12893

#1	101.09	.46527	10.051	.48024	5.0005	.51321	1.9150	26.595	56.914
#2	102.10	.46679	10.083	.48281	5.0103	.50763	1.8914	26.547	56.811

Check ?	Chk Pass	Chk Pass	Chk Warn	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit			2.0000						
Low Limit			-1.0000						

Elem	Sn1899	Sr4077	Th2837	Ti3349	Ti1908	U_3701	V_2924	Zn2062	Zr3391
Line	189.989 {477}	407.771 {83}	283.730 {119}	334.904 {101}	190.856 {477}	370.152 {91}	292.402 {115}	206.200 {163}	339.198 {99}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	W 2.0040	1.6443	.93143	.89571	1.6829	1.8322	.46875	.42971	.45308
Stddev	.0293	.0367	.00266	.00439	.0857	.0073	.00361	.00032	.00409
%RSD	1.4634	2.2350	.28544	.48988	5.0909	.39908	.77014	.07392	.90219

#1	2.0247	1.6703	.92955	.89261	1.7435	1.8270	.46620	.42948	.45597
#2	1.9832	1.6183	.93331	.89882	1.6224	1.8374	.47130	.42993	.45019

Check ?	Chk Warn	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit	2.0000								
Low Limit	-.05000								

Int. Std.	Y_2243	Y_3600	Y_3774
Line	224.306 {450}	360.073 {94}	377.433 {89}
Units	Cts/S	Cts/S	Cts/S
Avg	2502.0	37362.	1785.0
Stddev	2.7	.	36.0
%RSD	.10988	.00094	2.0153

#1	2504.0	37362.	1759.5
#2	2500.1	37362.	1810.4

Sample Name: 280-82947-B-2-D MSD Acquired: 5/18/2016 1:34:08 Type: Unk
Method: 6500_025(v6) Mode: CONC Corr. Factor: 1.000000
User: CRHOADES Prep Date: Custom ID2: Custom ID3:
Comment: 325683 6010B (Fe)

Elem	Ag3280	Al1670	As1890	B_2089	Ba4554	Be3130	Bi2230	Ca3179	Cd2288
Line	328.068 {103}	167.079 {502}	189.042 {478}	208.959 {461}	455.403 {74}	313.042 {108}	223.061 {451}	317.933 {106}	228.802 {447}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.04788	1.7315	.91328	.98544	2.0160	.05092	F 1.9001	151.39	.09756
Stddev	.00051	.0154	.01038	.00890	.0339	.00116	.0013	2.65	.00086
%RSD	1.0565	.88701	1.1363	.90279	1.6826	2.2737	.06740	1.7491	.87934

#1	.04824	1.7207	.90594	.97915	1.9920	.05010	1.8992	149.52	.09695
#2	.04753	1.7424	.92061	.99173	2.0399	.05174	1.9010	153.26	.09816

Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Fail	Chk Pass	Chk Pass
High Limit							.10000		
Low Limit							-.10000		

Elem	Co2286	Cr2055	Cu3247	Fe2599	K_7664	Li6707	Mg2790	Mn2576	Mo2020
Line	228.616 {447}	205.560 {464}	324.754 {104}	259.940 {130}	766.490 {44}	670.784 {50}	279.079 {121}2	257.610 {131}	202.030 {467}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.46702	.19633	.21301	1.8891	49.895	.97906	84.959	3.4093	1.0188
Stddev	.00492	.00186	.00001	.0105	.666	.00119	.151	.0166	.0084
%RSD	1.0529	.94756	.00668	.55488	1.3344	.12153	.17792	.48730	.82347

#1	.46354	.19502	.21300	1.8817	49.424	.97990	85.066	3.4210	1.0129
#2	.47050	.19765	.21302	1.8965	50.366	.97822	84.852	3.3975	1.0248

Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Elem	Na8183	Ni2316	P_1782	Pb2203	S_1820	Sb2068	Se1960	Si2881	SiO2
Line	818.326 {41}	231.604 {446}	178.284 {489}	220.353 {453}	182.034 {485}	206.833 {463}	196.090 {472}	288.158 {117}	288.158 {117}2
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	102.74	.45559	W 9.8361	.47282	4.9084	.49413	1.8613	26.809	57.372
Stddev	.86	.00594	.0972	.00299	.0176	.00234	.0323	.147	.314
%RSD	.83368	1.3044	.98846	.63280	.35935	.47406	1.7350	.54748	.54748

#1	103.35	.45139	9.7674	.47070	4.8959	.49578	1.8385	26.913	57.594
#2	102.14	.45980	9.9049	.47494	4.9209	.49247	1.8842	26.706	57.150

Check ?	Chk Pass	Chk Pass	Chk Warn	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit			2.0000						
Low Limit			-1.0000						

Elem	Sn1899	Sr4077	Th2837	Ti3349	Ti1908	U_3701	V_2924	Zn2062	Zr3391
Line	189.989 {477}	407.771 {83}	283.730 {119}	334.904 {101}	190.856 {477}	370.152 {91}	292.402 {115}	206.200 {163}	339.198 {99}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	1.9625	1.6429	.92379	.88237	1.7292	1.8894	.46252	.42311	.44759
Stddev	.0493	.0237	.00335	.00188	.0176	.0171	.00012	.00582	.00391
%RSD	2.5131	1.4401	.36235	.21329	1.0164	.90649	.02631	1.3763	.87337

#1	1.9277	1.6261	.92142	.88104	1.7417	1.9016	.46260	.41900	.45035
#2	1.9974	1.6596	.92616	.88370	1.7168	1.8773	.46243	.42723	.44482

Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Int. Std.	Y_2243	Y_3600	Y_3774
Line	224.306 {450}	360.073 {94}	377.433 {89}
Units	Cts/S	Cts/S	Cts/S
Avg	2529.6	37222.	1784.7
Stddev	28.4	19.	2.6
%RSD	1.1209	.05123	.14763

#1	2549.6	37236.	1786.5
#2	2509.5	37209.	1782.8

Sample Name: CCVH-3883905 Acquired: 5/18/2016 1:36:36 Type: QC
Method: 6500_025(v6) Mode: CONC Corr. Factor: 1.000000
User: CRHOADES Prep Date: Custom ID2: Custom ID3:
Comment:

Elem	Ag3280	Al3092	As1890	B_2089	Ba4554	Be3130	Bi2230	Ca3179	Cd2288	Co2286	Cr2055
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	-.00584	52.596	-.00274	.01144	-.00057	-.00010	W .92880	.01134	-.00034	-.00153	-.00014
Stddev	.00014	1.161	.00086	.00146	.00029	.00001	.02148	.00751	.00014	.00050	.00015
%RSD	2.3669	2.2069	31.322	12.717	50.723	6.3672	2.3126	66.203	41.522	32.523	103.14

#1	-.00574	53.417	-.00214	.01247	-.00036	-.00010	.94399	.01665	-.00024	-.00188	-.00004
#2	-.00594	51.775	-.00335	.01042	-.00077	-.00011	.91361	.00603	-.00044	-.00118	-.00025

Check ?	None	Chk Pass	None	None	None	None	Chk Warn	None	None	None	None
Value							1.0000				
Range							-5.0000%				

Elem	Cu3247	Fe2714	K_7664	Li6707	Mg2790	Mn2576	Mo2020	Na8183	Ni2316	P_1782	Pb2203
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	-.01561	W 55.056	-.09964	-.01064	.01321	-.00177	.00128	F 284.51	.00134	.00649	.00026
Stddev	.00118	.083	.10163	.00162	.01220	.00003	.00110	1.75	.00001	.00423	.00137
%RSD	7.5829	.14985	102.00	15.234	92.331	1.7746	86.316	.61534	.53959	65.272	519.48

#1	-.01477	54.998	-.17150	-.01179	.02184	-.00174	.00050	283.27	.00133	.00349	-.00070
#2	-.01644	55.114	-.02777	-.00950	.00459	-.00179	.00206	285.75	.00134	.00948	.00123

Check ?	None	Chk Warn	None	None	None	None	None	Chk Fail	None	None	None
Value		50.000						250.00			
Range		10.000%						10.490%			

Elem	S_1820	Sb2068	Se1960	Si2881	SiO2	Sn1899	Sr4077	Th2837	Ti3349	Ti1908	U_3701
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	4.9019	-.01665	-.00283	-.00772	-.01651	-.00188	.00044	W 4.5431	.00178	.04097	W 9.2592
Stddev	.0127	.00129	.00141	.04866	.10412	.00215	.00015	.0124	.00019	.00428	.1786
%RSD	.25831	7.7551	49.767	630.62	630.62	114.22	33.728	.27299	10.461	10.455	1.9289

#1	4.9109	-.01574	-.00184	-.04212	-.09014	-.00036	.00054	4.5343	.00192	.03794	9.3855
#2	4.8930	-.01756	-.00383	.02669	.05712	-.00341	.00033	4.5519	.00165	.04400	9.1329

Check ?	Chk Pass	None	None	None	None	None	None	Chk Warn	None	None	Chk Warn
Value								5.0000			10.000
Range								-5.0000%			-5.0000%

Elem	V_2924	Zn2062	Zr3391
Units	ppm	ppm	ppm
Avg	.01172	-.00052	-.12881
Stddev	.00083	.00034	.00071
%RSD	7.1131	66.523	.54853

#1	.01113	-.00076	-.12931
#2	.01231	-.00027	-.12831

Check ?	None	None	None
Value			
Range			

Int. Std.	Y_2243	Y_3600	Y_3774
Units	Cts/S	Cts/S	Cts/S
Avg	2582.9	38278.	1786.6
Stddev	68.9	73.	64.3
%RSD	2.6670	.19049	3.5969

#1	2534.2	38226.	1741.1
#2	2631.6	38329.	1832.0

Sample Name: CCV-3888422 Acquired: 5/18/2016 1:39:12 Type: QC
Method: 6500_025(v6) Mode: CONC Corr. Factor: 1.000000
User: CRHOADES Prep Date: Custom ID2: Custom ID3:
Comment:

Elem	Ag3280	Al1670	As1890	B_2089	Ba4554	Be3130	Bi2230	Ca3179	Cd2288	Co2286	Cr2055
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.47171	.45264	F .87304	.47662	.49190	.50852	-.00005	4.8134	.48529	.48662	.49779
Stddev	.00381	.01521	.02647	.01435	.00005	.00216	.00433	.0186	.01464	.01392	.01528
%RSD	.80837	3.3606	3.0316	3.0103	.01005	.42454	8797.0	.38700	3.0159	2.8605	3.0694
#1	.47441	.46340	.89176	.48677	.49187	.50700	-.00311	4.8002	.49564	.49646	.50859
#2	.46901	.44189	.85433	.46648	.49194	.51005	.00301	4.8266	.47494	.47678	.48698
Check ?	Chk Pass	Chk Pass	Chk Fail	Chk Pass	Chk Pass	Chk Pass	None	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Value			1.0000								
Range			-10.490%								
Elem	Cu3247	Fe2599	K_7664	Li6707	Mg2790	Mn2576	Mo2020	Na5895	Ni2316	P_1782	Pb2203
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	F .43823	2.6109	50.042	.98501	18.196	F .44725	.49004	5.3950	.47441	.94303	.97243
Stddev	.00183	.0003	.092	.00631	.075	.00098	.01640	.0116	.01357	.02209	.02579
%RSD	.41751	.00996	.18384	.64033	.41102	.21965	3.3464	.21559	2.8610	2.3423	2.6526
#1	.43953	2.6111	49.977	.98055	18.249	.44795	.50164	5.4032	.48400	.95865	.99067
#2	.43694	2.6107	50.107	.98947	18.143	.44656	.47845	5.3868	.46481	.92741	.95419
Check ?	Chk Fail	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Fail	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Value	.50000					.50000					
Range	-10.490%					-10.490%					
Elem	S_1820	Sb2068	Se1960	Si2881	SiO2	Sn1899	Sr4077	Th2837	Ti3349	Ti1908	U_3701
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	-.07140	.95169	W .89961	5.1011	10.916	.98941	.51265	-.00067	F .43881	1.0089	.06857
Stddev	.00867	.04231	.02174	.0481	.103	.02734	.00139	.00096	.00090	.0316	.04878
%RSD	12.143	4.4457	2.4169	.94281	.94281	2.7631	.27019	144.78	.20466	3.1307	71.142
#1	-.06527	.98161	.91499	5.0671	10.844	1.0087	.51167	-.00135	.43944	1.0313	.03407
#2	-.07753	.92177	.88424	5.1351	10.989	.97008	.51363	.00002	.43817	.98660	.10306
Check ?	None	Chk Pass	Chk Warn	Chk Pass	Chk Pass	Chk Pass	Chk Pass	None	Chk Fail	Chk Pass	None
Value			1.0000						.50000		
Range			-10.000%						-10.490%		
Elem	V_2924	Zn2062	Zr3391								
Units	ppm	ppm	ppm								
Avg	.46936	F .43412	.46976								
Stddev	.00274	.00869	.00544								
%RSD	.58443	2.0023	1.1583								
#1	.46742	.42797	.46591								
#2	.47130	.44026	.47360								
Check ?	Chk Pass	Chk Fail	Chk Pass								
Value		.50000									
Range		-10.490%									
Int. Std.	Y_2243	Y_3600	Y_3774								
Units	Cts/S	Cts/S	Cts/S								
Avg	2644.5	37416.	1695.2								
Stddev	67.8	478.	12.5								
%RSD	2.5633	1.2766	.73609								
#1	2596.6	37753.	1686.4								
#2	2692.5	37078.	1704.0								

Sample Name: CCB Acquired: 5/18/2016 1:41:43 Type: QC
 Method: 6500_025(v6) Mode: CONC Corr. Factor: 1.000000
 User: CRHOADES Prep Date: Custom ID2: Custom ID3:
 Comment:

Elem	Ag3280	Al1670	As1890	B_2089	Ba4554	Be3130	Bi2230	Ca3179	Cd2288	Co2286	Cr2055
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.00156	.00107	.00210	.00631	-.00140	.00009	-.00140	.00234	-.00013	-.00004	-.00031
Stddev	.00011	.00003	.00148	.00050	.00014	.00017	.00357	.00079	.00020	.00022	.00019
%RSD	7.1223	3.1439	70.717	7.8636	9.9145	197.85	254.74	33.650	154.50	625.78	60.410

#1	.00148	.00105	.00315	.00666	-.00131	-.00003	.00112	.00289	-.00027	.00012	-.00018
#2	.00164	.00110	.00105	.00596	-.00150	.00021	-.00393	.00178	.00001	-.00019	-.00045

Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit											
Low Limit											

Elem	Cu3247	Fe2599	K_7664	Li6707	Mg2790	Mn2576	Mo2020	Na5895	Ni2316	P_1782	Pb2203
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	-.00114	-.00195	-.14036	F -.01166	-.00110	.00011	.00128	-.02795	-.00016	.00056	.00120
Stddev	.00006	.00292	.01606	.00108	.00402	.00007	.00057	.02742	.00034	.00058	.00059
%RSD	5.0509	149.54	11.439	9.2650	364.63	57.642	44.396	98.105	204.37	103.98	49.628

#1	-.00110	-.00401	-.12900	-.01242	-.00395	.00007	.00088	-.00856	.00007	.00015	.00161
#2	-.00118	.00011	-.15171	-.01089	.00174	.00016	.00168	-.04734	-.00040	.00098	.00078

Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Fail	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit				.01000							
Low Limit				-.01000							

Elem	S_1820	Sb2068	Se1960	Si2881	SiO2	Sn1899	Sr4077	Th2837	Ti3349	Ti1908	U_3701
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	-.07628	-.00072	.00021	-.02452	-.05247	-.00079	-.00001	-.00171	.00025	.00412	.07642
Stddev	.00830	.00071	.00629	.01148	.02457	.00048	.00027	.00395	.00045	.00260	.06278
%RSD	10.885	99.058	2995.8	46.820	46.820	60.772	2039.6	230.12	176.34	63.033	82.159

#1	-.08215	-.00022	-.00424	-.01640	-.03510	-.00045	.00018	-.00450	.00057	.00228	.12081
#2	-.07041	-.00123	.00466	-.03264	-.06984	-.00113	-.00020	.00108	-.00006	.00595	.03202

Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit											
Low Limit											

Elem	V_2924	Zn2062	Zr3391
Units	ppm	ppm	ppm
Avg	.00069	-.00078	-.00125
Stddev	.00006	.00020	.00002
%RSD	9.4376	25.912	1.2658

#1	.00073	-.00063	-.00126
#2	.00064	-.00092	-.00124

Check ?	Chk Pass	Chk Pass	Chk Pass
High Limit			
Low Limit			

Int. Std.	Y_2243	Y_3600	Y_3774
Units	Cts/S	Cts/S	Cts/S
Avg	2525.8	38847.	1736.2
Stddev	32.8	730.	43.0
%RSD	1.2999	1.8782	2.4752

#1	2549.0	38331.	1766.6
#2	2502.6	39363.	1705.8

Sample Name: CCVL-3894681 Acquired: 5/18/2016 1:44:05 Type: QC
Method: 6500_025(v6) Mode: CONC Corr. Factor: 1.000000
User: CRHOADES Prep Date: Custom ID2: Custom ID3:
Comment:

Elem	Ag3280	Al1670	As1890	B_2089	Ba4554	Be3130	Bi2230	Ca3179	Cd2288	Co2286	Cr2055
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.01202	.09499	.01672	.09610	.00872	.00105	.09701	.19868	.00501	.00916	.00927
Stddev	.00083	.00054	.00424	.00098	.00031	.00023	.00057	.00928	.00039	.00003	.00067
%RSD	6.9375	.56816	25.349	1.0161	3.5299	21.569	.58393	4.6720	7.7525	.34070	7.2641

#1	.01143	.09461	.01972	.09541	.00894	.00089	.09741	.19212	.00473	.00919	.00880
#2	.01261	.09537	.01372	.09679	.00851	.00121	.09661	.20524	.00528	.00914	.00975

Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Value											
Range											

Elem	Cu3247	Fe2599	K_7664	Li6707	Mg2790	Mn2576	Mo2020	Na5895	Ni2316	P_1782	Pb2203
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.01220	F .21397	2.9133	F -.00191	.18523	.00971	.01861	1.0606	.03831	2.6870	.00713
Stddev	.00018	.00279	.0066	.00283	.00097	.00011	.00054	.0187	.00030	.0058	.00018
%RSD	1.5136	1.3040	.22664	148.33	.52337	1.1190	2.8988	1.7673	.77325	.21579	2.5646

#1	.01207	.21199	2.9180	.00009	.18592	.00979	.01823	1.0738	.03852	2.6829	.00726
#2	.01233	.21594	2.9086	-.00391	.18455	.00964	.01899	1.0473	.03810	2.6911	.00700

Check ?	Chk Pass	Chk Fail	Chk Pass	Chk Fail	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Value		.10000		.01000							
Range		30.000%		-30.000%							

Elem	S_1820	Sb2068	Se1960	Si2881	SiO2	Sn1899	Sr4077	Th2837	Ti3349	Ti1908	U_3701
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	-.07742	.01851	.01241	.49957	1.0691	.09731	.01036	.01450	.00952	.01294	F .11594
Stddev	.00581	.00618	.01323	.05322	.1139	.00037	.00019	.00336	.00002	.00424	.01012
%RSD	7.5105	33.361	106.57	10.653	10.653	.38179	1.8713	23.172	.15782	32.733	8.7317

#1	-.08153	.01414	.02176	.53720	1.1496	.09705	.01022	.01212	.00953	.01594	.12310
#2	-.07331	.02288	.00306	.46194	.98855	.09758	.01050	.01687	.00951	.00995	.10879

Check ?	None	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Fail
Value											.06000
Range											30.000%

Elem	V_2924	Zn2062	Zr3391
Units	ppm	ppm	ppm
Avg	.00960	.01986	F .00898
Stddev	.00041	.00014	.00435
%RSD	4.3140	.71041	48.442

#1	.00990	.01976	.00591
#2	.00931	.01996	.01206

Check ?	Chk Pass	Chk Pass	Chk Fail
Value			.01500
Range			-30.000%

Int. Std.	Y_2243	Y_3600	Y_3774
Units	Cts/S	Cts/S	Cts/S
Avg	2564.7	38954.	1726.1
Stddev	10.5	823.	15.2
%RSD	.41097	2.1118	.88064

#1	2572.1	38372.	1715.4
#2	2557.2	39535.	1736.9

Sample Name: MB 280-325403/1-A Acquired: 5/18/2016 1:46:44 Type: Unk

Method: 6500_025(v6) Mode: CONC Corr. Factor: 1.000000

User: CRHOADES Prep Date: 5/17 Custom ID2: Custom ID3:

Comment: 325403 6010C soil Q4

Elem	Ag3280	Al1670	As1890	B_2089	Ba4554	Be3130	Bi2230	Ca3179	Cd2288
Line	328.068 {103}	167.079 {502}	189.042 {478}	208.959 {461}	455.403 { 74}	313.042 {108}	223.061 {451}	317.933 {106}	228.802 {447}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.00272	.00770	-.00011	.01515	-.00116	.00012	-.00240	.01012	.00007
Stddev	.00042	.00047	.00251	.00003	.00004	.00020	.00478	.00388	.00018
%RSD	15.417	6.0458	2284.3	.21569	3.1040	164.64	199.57	38.391	280.47

#1	.00301	.00802	.00166	.01517	-.00118	.00027	-.00578	.00737	-.00006
#2	.00242	.00737	-.00188	.01513	-.00113	-.00002	.00098	.01287	.00019

Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Elem	Co2286	Cr2055	Cu3247	Fe2599	K_7664	Li6707	Mg2790	Mn2576	Mo2020
Line	228.616 {447}	205.560 {464}	324.754 {104}	259.940 {130}	766.490 { 44}	670.784 { 50}	279.079 {121}2	257.610 {131}	202.030 {467}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	-.00022	.00005	-.00068	.01556	-.15778	F -.01577	-.00376	.00014	-.00086
Stddev	.00031	.00022	.00052	.00550	.03315	.00680	.00545	.00005	.00002
%RSD	136.65	484.16	76.067	35.318	21.010	43.125	145.06	33.662	2.6974

#1	-.00001	.00020	-.00031	.01168	-.13434	-.01096	-.00761	.00017	-.00084
#2	-.00044	-.00011	-.00105	.01945	-.18122	-.02058	.00010	.00011	-.00087

Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Fail	Chk Pass	Chk Pass	Chk Pass
High Limit						.01000			
Low Limit						-.01000			

Elem	Na5895	Ni2316	P_1782	Pb2203	S_1820	Sb2068	Se1960	Si2881	SiO2
Line	589.592 { 57}	231.604 {446}	178.284 {489}	220.353 {453}	182.034 {485}	206.833 {463}	196.090 {472}	288.158 {117}	288.158 {117}2
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.00338	.00048	.00610	-.00012	W -.07804	W -.00567	W -.00834	.14197	.30382
Stddev	.00109	.00035	.00417	.00114	.00400	.00019	.00116	.03729	.07980
%RSD	32.150	73.685	68.401	961.54	5.1226	3.3315	13.872	26.265	26.265

#1	.00414	.00072	.00315	-.00092	-.08086	-.00553	-.00752	.11560	.24739
#2	.00261	.00023	.00905	.00069	-.07521	-.00580	-.00915	.16834	.36024

Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Warn	Chk Warn	Chk Warn	Chk Pass	None
High Limit					.05000	.00500	.00750		
Low Limit					-.05000	-.00500	-.00750		

Elem	Sn1899	Sr4077	Th2837	Ti3349	Ti1908	U_3701	V_2924	Zn2062	Zr3391
Line	189.989 {477}	407.771 { 83}	283.730 {119}	334.904 {101}	190.856 {477}	370.152 { 91}	292.402 {115}	206.200 {163}	339.198 { 99}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	-.00193	.00007	.00189	.00073	.00361	.03491	.00021	.00153	-.00119
Stddev	.00026	.00003	.00050	.00025	.00416	.04933	.00021	.00034	.00404
%RSD	13.709	45.796	26.583	34.707	114.98	141.32	98.563	22.336	341.21

#1	-.00174	.00005	.00153	.00055	.00655	.06979	.00006	.00129	-.00405
#2	-.00212	.00009	.00224	.00090	.00068	.00002	.00036	.00177	.00167

Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Int. Std.	Y_2243	Y_3600	Y_3774
Line	224.306 {450}	360.073 { 94}	377.433 { 89}
Units	Cts/S	Cts/S	Cts/S
Avg	2692.0	39694.	1740.9
Stddev	54.8	32.	39.9
%RSD	2.0372	.08145	2.2926

#1	2730.7	39671.	1769.2
#2	2653.2	39717.	1712.7

Sample Name: LCS 280-325403/2-A Acquired: 5/18/2016 1:49:07 Type: Unk
Method: 6500_025(v6) Mode: CONC Corr. Factor: 1.000000
User: CRHOADES Prep Date: Custom ID2: Custom ID3:
Comment: 325403 6010C soil Q4

Elem	Ag3280	Al1670	As1890	B_2089	Ba4554	Be3130	Bi2230	Ca3179	Cd2288
Line	328.068 {103}	167.079 {502}	189.042 {478}	208.959 {461}	455.403 { 74}	313.042 {108}	223.061 {451}	317.933 {106}	228.802 {447}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.04642	1.7552	.88805	1.0695	1.8947	.04915	1.8585	45.640	.09382
Stddev	.00001	.0294	.02141	.0193	.0425	.00057	.0443	.927	.00176
%RSD	.01308	1.6765	2.4106	1.8081	2.2423	1.1617	2.3829	2.0316	1.8784
#1	.04642	1.7760	.90319	1.0832	1.8647	.04875	1.8898	44.985	.09506
#2	.04642	1.7344	.87292	1.0558	1.9247	.04955	1.8272	46.296	.09257

Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	None	Chk Pass	Chk Pass
High Limit									
Low Limit									

Elem	Co2286	Cr2055	Cu3247	Fe2599	K_7664	Li6707	Mg2790	Mn2576	Mo2020
Line	228.616 {447}	205.560 {464}	324.754 {104}	259.940 {130}	766.490 { 44}	670.784 { 50}	279.079 {121}2	257.610 {131}	202.030 {467}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.46280	.19305	F .20881	1.0157	48.837	.94739	F 44.360	F .42804	1.0081
Stddev	.00693	.00414	.00141	.0126	1.152	.00291	.076	.00008	.0221
%RSD	1.4967	2.1464	.67680	1.2423	2.3580	.30666	.17101	.01817	2.1960
#1	.46770	.19598	.20781	1.0068	48.023	.94945	44.414	.42799	1.0238
#2	.45791	.19012	.20981	1.0246	49.651	.94534	44.307	.42810	.99247

Check ?	Chk Pass	Chk Pass	Chk Fail	Chk Pass	Chk Pass	Chk Pass	Chk Fail	Chk Fail	Chk Pass
High Limit			.28000				56.500	.55000	
Low Limit			.21500				46.000	.45000	

Elem	Na8183	Ni2316	P_1782	Pb2203	S_1820	Sb2068	Se1960	Si2881	SiO2
Line	818.326 { 41}	231.604 {446}	178.284 {489}	220.353 {453}	182.034 {485}	206.833 {463}	196.090 {472}	288.158 {117}	288.158 {117}2
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	F 58.277	.45144	9.3612	.47069	1.9396	.47996	1.7807	F 2.3942	5.1236
Stddev	.115	.00724	.1553	.00976	.0286	.00350	.0605	.0207	.0442
%RSD	.19668	1.6031	1.6590	2.0726	1.4745	.72973	3.3971	.86263	.86263
#1	58.358	.45656	9.4710	.47759	1.9598	.48243	1.8235	2.3796	5.0923
#2	58.196	.44632	9.2514	.46379	1.9194	.47748	1.7379	2.4088	5.1548

Check ?	Chk Fail	Chk Pass	Chk Pass	Chk Pass	None	Chk Pass	Chk Pass	Chk Fail	None
High Limit	56.000							11.000	
Low Limit	45.500							9.0000	

Elem	Sn1899	Sr4077	Th2837	Ti3349	Ti1908	U_3701	V_2924	Zn2062	Zr3391
Line	189.989 {477}	407.771 { 83}	283.730 {119}	334.904 {101}	190.856 {477}	370.152 { 91}	292.402 {115}	206.200 {163}	339.198 { 99}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	1.9597	.97949	.90334	F .87661	1.8082	1.8313	F .44913	F .41509	.44059
Stddev	.0552	.01969	.00042	.00200	.0981	.0334	.00113	.00061	.00492
%RSD	2.8175	2.0098	.04683	.22792	5.4244	1.8260	.25212	.14671	1.1157
#1	1.9987	.96557	.90304	.87520	1.8776	1.8077	.44993	.41466	.43711
#2	1.9206	.99342	.90364	.87802	1.7389	1.8550	.44833	.41552	.44406

Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Fail	Chk Pass	Chk Pass	Chk Fail	Chk Fail	Chk Pass
High Limit				1.1100			.55500	.55500	
Low Limit				.90000			.45000	.42500	

Int. Std.	Y_2243	Y_3600	Y_3774						
Line	224.306 {450}	360.073 { 94}	377.433 { 89}						
Units	Cts/S	Cts/S	Cts/S						
Avg	2575.3	37816.	1741.4						
Stddev	52.5	63.	54.6						
%RSD	2.0403	.16718	3.1341						
#1	2538.2	37771.	1779.9						
#2	2612.5	37861.	1702.8						

Sample Name: 280-82954-A-1-A Acquired: 5/18/2016 1:51:34 Type: Unk
Method: 6500_025(v6) Mode: CONC Corr. Factor: 1.000000
User: CRHOADES Prep Date: Custom ID2: Custom ID3:
Comment: 325403 6010C soil Q4

Elem	Ag3280	Al3092	As1890	B_2089	Ba4554	Be3130	Bi2230	Ca3179	Cd2288
Line	328.068 {103}	309.271 {109}	189.042 {478}	208.959 {461}	455.403 {74}	313.042 {108}	223.061 {451}	317.933 {106}	228.802 {447}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.00270	22.471	.00820	.00777	.08378	.00009	-.00279	.70745	.01351
Stddev	.00031	.346	.00093	.00032	.00101	.00018	.00198	.00368	.00056
%RSD	11.359	1.5385	11.351	4.1518	1.2094	199.71	71.075	.51977	4.1805

#1	.00248	22.226	.00886	.00800	.08307	-.00004	-.00139	.71005	.01311
#2	.00292	22.715	.00754	.00755	.08450	.00021	-.00419	.70485	.01391

Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Elem	Co2286	Cr2055	Cu3247	Fe2599	K_7664	Li6707	Mg2790	Mn2576	Mo2020
Line	228.616 {447}	205.560 {464}	324.754 {104}	259.940 {130}	766.490 {44}	670.784 {50}	279.079 {121}2	257.610 {131}	202.030 {467}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.00063	.02515	.22651	9.1719	.10744	-.00672	.47295	.02975	.00341
Stddev	.00025	.00071	.00092	.0144	.05488	.00263	.06253	.00113	.00123
%RSD	39.062	2.8338	.40813	.15724	51.077	39.158	13.222	3.8000	35.976

#1	.00081	.02464	.22586	9.1617	.14625	-.00486	.51716	.03055	.00254
#2	.00046	.02565	.22717	9.1821	.06864	-.00858	.42873	.02895	.00428

Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Elem	Na5895	Ni2316	P_1782	Pb2203	S_1820	Sb2068	Se1960	Si2881	SiO2
Line	589.592 {57}	231.604 {446}	178.284 {489}	220.353 {453}	182.034 {485}	206.833 {463}	196.090 {472}	288.158 {117}	288.158 {117}2
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.03875	.00877	.20726	.24665	.49685	-.00161	W -.00653	3.2160	6.8822
Stddev	.00622	.00034	.01126	.00580	.02320	.00195	.00315	.0653	.1398
%RSD	16.052	3.8913	5.4348	2.3500	4.6698	121.01	48.171	2.0315	2.0315

#1	.04315	.00853	.19930	.24256	.48044	-.00023	-.00876	3.2622	6.9811
#2	.03435	.00902	.21523	.25075	.51326	-.00298	-.00431	3.1698	6.7834

Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Warn	Chk Pass	Chk Pass
High Limit							5.0000		
Low Limit							-.00500		

Elem	Sn1899	Sr4077	Th2837	Ti3349	Ti1908	U_3701	V_2924	Zn2062	Zr3391
Line	189.989 {477}	407.771 {83}	283.730 {119}	334.904 {101}	190.856 {477}	370.152 {91}	292.402 {115}	206.200 {163}	339.198 {99}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.00279	.00762	.00559	.18314	.03434	.02109	.01449	.58928	.00880
Stddev	.00070	.00033	.00309	.00554	.01108	.00991	.00072	.00029	.00075
%RSD	25.119	4.3294	55.223	3.0249	32.257	46.985	4.9474	.04855	8.5672

#1	.00230	.00785	.00777	.17922	.02651	.02809	.01500	.58948	.00827
#2	.00329	.00739	.00341	.18706	.04217	.01408	.01398	.58907	.00933

Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Int. Std.	Y_2243	Y_3600	Y_3774
Line	224.306 {450}	360.073 {94}	377.433 {89}
Units	Cts/S	Cts/S	Cts/S
Avg	2684.1	40035.	1801.3
Stddev	8.6	278.	28.4
%RSD	.31998	.69467	1.5774

#1	2690.2	39838.	1821.4
#2	2678.0	40231.	1781.2

Sample Name: 280-82954-A-1-A SD@5 Acquired: 5/18/2016 1:54:11 Type: Unk
Method: 6500_025(v6) Mode: CONC Corr. Factor: 1.000000
User: CRHOADES Prep Date: Custom ID2: Custom ID3:
Comment: 325403 6010C soil Q4

Elem	Ag3280	Al3092	As1890	B_2089	Ba4554	Be3130	Bi2230	Ca3179	Cd2288
Line	328.068 {103}	309.271 {109}	189.042 {478}	208.959 {461}	455.403 { 74}	313.042 {108}	223.061 {451}	317.933 {106}	228.802 {447}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.00250	4.6756	.00552	.00454	.01588	.00026	-.00100	.10582	.00287
Stddev	.00026	.0436	.00051	.00116	.00028	.00003	.00016	.00460	.00001
%RSD	10.489	.93214	9.2682	25.501	1.7395	11.489	15.729	4.3493	.33693

#1	.00232	4.7064	.00516	.00536	.01607	.00028	-.00111	.10908	.00286
#2	.00269	4.6448	.00588	.00372	.01568	.00024	-.00089	.10257	.00287

Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Elem	Co2286	Cr2055	Cu3247	Fe2599	K_7664	Li6707	Mg2790	Mn2576	Mo2020
Line	228.616 {447}	205.560 {464}	324.754 {104}	259.940 {130}	766.490 { 44}	670.784 { 50}	279.079 {121}2	257.610 {131}	202.030 {467}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	-.00003	.00458	.04415	1.8808	-.10154	W -.01094	.08794	.00585	-.00017
Stddev	.00018	.00023	.00015	.0154	.06814	.00347	.00417	.00007	.00067
%RSD	699.05	5.0824	.32952	.81613	67.106	31.710	4.7385	1.1380	385.11

#1	.00010	.00442	.04405	1.8700	-.14973	-.00849	.09088	.00580	-.00065
#2	-.00016	.00475	.04425	1.8917	-.05336	-.01340	.08499	.00590	.00030

Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Warn	Chk Pass	Chk Pass	Chk Pass
High Limit						2.0000			
Low Limit						-.01000			

Elem	Na5895	Ni2316	P_1782	Pb2203	S_1820	Sb2068	Se1960	Si2881	SiO2
Line	589.592 { 57}	231.604 {446}	178.284 {489}	220.353 {453}	182.034 {485}	206.833 {463}	196.090 {472}	288.158 {117}	288.158 {117}2
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	-.04054	.00176	.04191	.04831	.03726	-.00497	-.00286	.59903	1.2819
Stddev	.01758	.00088	.00189	.00216	.00315	.00135	.00032	.02491	.0533
%RSD	43.366	49.942	4.5118	4.4703	8.4492	27.194	11.357	4.1591	4.1591

#1	-.02811	.00114	.04325	.04983	.03949	-.00401	-.00308	.61664	1.3196
#2	-.05297	.00239	.04057	.04678	.03504	-.00592	-.00263	.58141	1.2442

Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Elem	Sn1899	Sr4077	Th2837	Ti3349	Ti1908	U_3701	V_2924	Zn2062	Zr3391
Line	189.989 {477}	407.771 { 83}	283.730 {119}	334.904 {101}	190.856 {477}	370.152 { 91}	292.402 {115}	206.200 {163}	339.198 { 99}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	-.00178	.00147	.00198	.03779	.00460	.01085	.00305	.12074	.00324
Stddev	.00130	.00015	.00155	.00078	.00044	.01918	.00013	.00305	.00089
%RSD	73.018	9.8829	78.198	2.0611	9.5599	176.83	4.2244	2.5227	27.551

#1	-.00270	.00137	.00089	.03834	.00491	-.00272	.00315	.11859	.00387
#2	-.00086	.00157	.00308	.03724	.00429	.02441	.00296	.12290	.00261

Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Int. Std.	Y_2243	Y_3600	Y_3774
Line	224.306 {450}	360.073 { 94}	377.433 { 89}
Units	Cts/S	Cts/S	Cts/S
Avg	2655.5	39167.	1794.6
Stddev	10.5	143.	3.9
%RSD	.39573	.36402	.21792

#1	2648.1	39067.	1797.4
#2	2662.9	39268.	1791.8

Sample Name: 280-82954-A-1-B MS Acquired: 5/18/2016 1:56:52 Type: Unk
Method: 6500_025(v6) Mode: CONC Corr. Factor: 1.000000
User: CRHOADES Prep Date: Custom ID2: Custom ID3:
Comment: 325403 6010C soil Q4

Elem	Ag3280	Al3092	As1890	B_2089	Ba4554	Be3130	Bi2230	Ca3179	Cd2288
Line	328.068 {103}	309.271 {109}	189.042 {478}	208.959 {461}	455.403 { 74}	313.042 {108}	223.061 {451}	317.933 {106}	228.802 {447}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.04562	21.266	.84199	.86990	1.8929	.04610	F 1.7397	43.978	.10012
Stddev	.00021	.325	.00166	.00553	.0145	.00000	.0158	.464	.00003
%RSD	.45264	1.5285	.19743	.63610	.76486	.00115	.90834	1.0545	.03017

#1	.04547	21.496	.84317	.87381	1.9031	.04610	1.7509	44.306	.10014
#2	.04576	21.036	.84082	.86598	1.8826	.04609	1.7285	43.650	.10010

Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Fail	Chk Pass	Chk Pass
High Limit							.10000		
Low Limit							-.10000		

Elem	Co2286	Cr2055	Cu3247	Fe2714	K_7664	Li6707	Mg2790	Mn2576	Mo2020
Line	228.616 {447}	205.560 {464}	324.754 {104}	271.441 {124}	766.490 { 44}	670.784 { 50}	279.079 {121}2	257.610 {131}	202.030 {467}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.44590	.29466	.61982	102.41	46.602	.89193	42.736	.74848	.95614
Stddev	.00200	.00388	.00026	.77	.359	.00426	.022	.00066	.00796
%RSD	.44840	1.3184	.04150	.74755	.76996	.47791	.05103	.08774	.83200

#1	.44732	.29741	.61964	102.95	46.856	.89495	42.721	.74802	.96176
#2	.44449	.29191	.62000	101.87	46.349	.88892	42.752	.74894	.95051

Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Elem	Na8183	Ni2316	P_1782	Pb2203	S_1820	Sb2068	Se1960	Si2881	SiO2
Line	818.326 { 41}	231.604 {446}	178.284 {489}	220.353 {453}	182.034 {485}	206.833 {463}	196.090 {472}	288.158 {117}	288.158 {117}2
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	55.105	.50995	W 8.9603	.70570	2.4767	.44889	1.6308	6.9927	14.964
Stddev	1.124	.00354	.0551	.00140	.0200	.00137	.0074	.0488	.104
%RSD	2.0406	.69409	.61524	.19820	.80776	.30602	.45284	.69760	.69760

#1	55.900	.51245	8.9992	.70669	2.4908	.44986	1.6255	6.9582	14.890
#2	54.310	.50745	8.9213	.70471	2.4625	.44792	1.6360	7.0272	15.038

Check ?	Chk Pass	Chk Pass	Chk Warn	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit			2.0000						
Low Limit			-1.0000						

Elem	Sn1899	Sr4077	Th2837	Ti3349	Ti1908	U_3701	V_2924	Zn2062	Zr3391
Line	189.989 {477}	407.771 { 83}	283.730 {119}	334.904 {101}	190.856 {477}	370.152 { 91}	292.402 {115}	206.200 {163}	339.198 { 99}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	1.8416	.93510	.84056	1.1441	1.6093	1.7559	.44327	.84415	.42732
Stddev	.0008	.00567	.00837	.0112	.0542	.0296	.00165	.00153	.00375
%RSD	.04061	.60601	.99616	.97689	3.3680	1.6883	.37174	.18118	.87693

#1	1.8421	.93911	.83464	1.1362	1.6476	1.7768	.44210	.84307	.42997
#2	1.8410	.93109	.84649	1.1520	1.5709	1.7349	.44444	.84524	.42467

Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Int. Std.	Y_2243	Y_3600	Y_3774
Line	224.306 {450}	360.073 { 94}	377.433 { 89}
Units	Cts/S	Cts/S	Cts/S
Avg	2601.1	38443.	1782.7
Stddev	35.5	105.	9.1
%RSD	1.3660	.27324	.50956

#1	2576.0	38369.	1776.3
#2	2626.3	38517.	1789.2

Sample Name: 280-82954-A-1-C MSD Acquired: 5/18/2016 1:59:17 Type: Unk
Method: 6500_025(v6) Mode: CONC Corr. Factor: 1.000000
User: CRHOADES Prep Date: Custom ID2: Custom ID3:
Comment: 325403 6010C soil Q4

Elem	Ag3280	Al3092	As1890	B_2089	Ba4554	Be3130	Bi2230	Ca3179	Cd2288
Line	328.068 {103}	309.271 {109}	189.042 {478}	208.959 {461}	455.403 { 74}	313.042 {108}	223.061 {451}	317.933 {106}	228.802 {447}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.04585	22.989	.85961	.92113	1.9856	.04880	F 1.8287	46.056	.10564
Stddev	.00097	.509	.00442	.00511	.0309	.00074	.0215	.701	.00004
%RSD	2.1053	2.2154	.51435	.55491	1.5549	1.5101	1.1750	1.5228	.03378

#1	.04653	23.349	.86274	.92474	2.0075	.04932	1.8439	46.552	.10561
#2	.04517	22.629	.85648	.91751	1.9638	.04828	1.8135	45.561	.10566

Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Fail	Chk Pass	Chk Pass
High Limit							.10000		
Low Limit							-.10000		

Elem	Co2286	Cr2055	Cu3247	Fe2599	K_7664	Li6707	Mg2790	Mn2576	Mo2020
Line	228.616 {447}	205.560 {464}	324.754 {104}	259.940 {130}	766.490 { 44}	670.784 { 50}	279.079 {121}2	257.610 {131}	202.030 {467}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.45661	.21139	.40150	11.447	48.920	.93979	44.767	.45592	.99300
Stddev	.00149	.00061	.00046	.073	.755	.00603	.040	.00048	.00644
%RSD	.32637	.28865	.11490	.63384	1.5434	.64140	.08885	.10492	.64834

#1	.45766	.21182	.40117	11.498	49.454	.93553	44.795	.45626	.99755
#2	.45556	.21095	.40182	11.395	48.387	.94405	44.739	.45559	.98845

Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Elem	Na8183	Ni2316	P_1782	Pb2203	S_1820	Sb2068	Se1960	Si2881	SiO2
Line	818.326 { 41}	231.604 {446}	178.284 {489}	220.353 {453}	182.034 {485}	206.833 {463}	196.090 {472}	288.158 {117}	288.158 {117}2
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	58.093	.45119	W 9.2709	.66281	2.5439	.46598	1.7200	7.5592	16.177
Stddev	1.084	.00347	.0329	.00353	.0092	.00443	.0224	.0414	.089
%RSD	1.8655	.76921	.35523	.53235	.36312	.95144	1.3038	.54767	.54767

#1	58.859	.45364	9.2942	.66531	2.5504	.46912	1.7359	7.5300	16.114
#2	57.327	.44873	9.2476	.66032	2.5373	.46285	1.7042	7.5885	16.239

Check ?	Chk Pass	Chk Pass	Chk Warn	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit			2.0000						
Low Limit			-1.0000						

Elem	Sn1899	Sr4077	Th2837	Ti3349	Ti1908	U_3701	V_2924	Zn2062	Zr3391
Line	189.989 {477}	407.771 { 83}	283.730 {119}	334.904 {101}	190.856 {477}	370.152 { 91}	292.402 {115}	206.200 {163}	339.198 { 99}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	1.8803	.98623	.89080	1.1495	1.7245	1.8447	.45880	.79260	.45702
Stddev	.0127	.01590	.00783	.0025	.0576	.0027	.00114	.00541	.00716
%RSD	.67585	1.6126	.87937	.21484	3.3406	.14757	.24890	.68208	1.5662

#1	1.8893	.99747	.89634	1.1513	1.7652	1.8428	.45960	.79642	.45196
#2	1.8713	.97498	.88526	1.1478	1.6837	1.8466	.45799	.78878	.46208

Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Int. Std.	Y_2243	Y_3600	Y_3774
Line	224.306 {450}	360.073 { 94}	377.433 { 89}
Units	Cts/S	Cts/S	Cts/S
Avg	2521.7	38249.	1765.7
Stddev	4.8	976.	44.0
%RSD	.18915	2.5523	2.4903

#1	2525.1	37559.	1734.6
#2	2518.4	38939.	1796.8

Sample Name: 280-82954-A-1-A PDS Acquired: 5/18/2016 2:01:43 Type: Unk
Method: 6500_025(v6) Mode: CONC Corr. Factor: 1.000000
User: CRHOADES Prep Date: Custom ID2: Custom ID3:
Comment: 325403 6010C soil Q4

Elem	Ag3280	Al3092	As1890	B_2089	Ba4554	Be3130	Bi2230	Ca3179	Cd2288
Line	328.068 {103}	309.271 {109}	189.042 {478}	208.959 {461}	455.403 { 74}	313.042 {108}	223.061 {451}	317.933 {106}	228.802 {447}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.03010	22.893	.17705	.10091	.17587	.04908	-.00113	18.822	.05992
Stddev	.00024	.113	.00323	.00263	.00114	.00048	.00209	.092	.00125
%RSD	.78552	.49552	1.8236	2.6076	.65084	.97435	185.50	.48996	2.0905

#1	.03026	22.973	.17477	.09905	.17668	.04942	.00035	18.888	.05903
#2	.02993	22.813	.17934	.10277	.17506	.04874	-.00261	18.757	.06080

Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Elem	Co2286	Cr2055	Cu3247	Fe2599	K_7664	Li6707	Mg2790	Mn2576	Mo2020
Line	228.616 {447}	205.560 {464}	324.754 {104}	259.940 {130}	766.490 { 44}	670.784 { 50}	279.079 {121}2	257.610 {131}	202.030 {467}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.04750	.07261	.25634	9.7948	20.146	.09191	18.585	.07146	.05288
Stddev	.00060	.00050	.00068	.0694	.099	.00458	.030	.00004	.00108
%RSD	1.2603	.68545	.26652	.70842	.49340	4.9868	.15937	.05663	2.0367

#1	.04708	.07225	.25586	9.8439	20.216	.09515	18.606	.07143	.05212
#2	.04792	.07296	.25682	9.7458	20.075	.08867	18.564	.07149	.05364

Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Elem	Na8183	Ni2316	P_1782	Pb2203	S_1820	Sb2068	Se1960	Si2881	SiO2
Line	818.326 { 41}	231.604 {446}	178.284 {489}	220.353 {453}	182.034 {485}	206.833 {463}	196.090 {472}	288.158 {117}	288.158 {117}2
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	24.898	.05414	W 2.0332	.32594	.48563	.09406	.17048	8.6213	18.450
Stddev	.399	.00035	.0051	.00058	.00764	.00299	.00337	.0242	.052
%RSD	1.6033	.64864	.24898	.17928	1.5732	3.1786	1.9795	.28060	.28060

#1	24.616	.05439	2.0296	.32636	.49104	.09194	.16810	8.6384	18.486
#2	25.181	.05389	2.0367	.32553	.48023	.09617	.17287	8.6042	18.413

Check ?	Chk Pass	Chk Pass	Chk Warn	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit			2.0000						
Low Limit			-1.0000						

Elem	Sn1899	Sr4077	Th2837	Ti3349	Ti1908	U_3701	V_2924	Zn2062	Zr3391
Line	189.989 {477}	407.771 { 83}	283.730 {119}	334.904 {101}	190.856 {477}	370.152 { 91}	292.402 {115}	206.200 {163}	339.198 { 99}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.10004	.05838	.18724	.24218	.19814	.46628	.06059	.73146	.05154
Stddev	.00055	.00012	.00038	.00521	.00676	.02062	.00023	.00186	.00094
%RSD	.55223	.20317	.20546	2.1514	3.4121	4.4225	.37971	.25381	1.8183

#1	.10043	.05829	.18697	.23849	.19336	.48086	.06075	.73278	.05220
#2	.09965	.05846	.18751	.24586	.20292	.45170	.06042	.73015	.05088

Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Int. Std.	Y_2243	Y_3600	Y_3774
Line	224.306 {450}	360.073 { 94}	377.433 { 89}
Units	Cts/S	Cts/S	Cts/S
Avg	2601.4	37369.	1759.5
Stddev	74.7	298.	18.2
%RSD	2.8723	.79733	1.0347

#1	2654.3	37159.	1746.6
#2	2548.6	37580.	1772.3

Sample Name: 280-82954-A-2-A Acquired: 5/18/2016 2:04:16 Type: Unk
Method: 6500_025(v6) Mode: CONC Corr. Factor: 1.000000
User: CRHOADES Prep Date: Custom ID2: Custom ID3:
Comment: 325403 6010C soil Q4

Elem	Ag3280	Al3092	As1890	B_2089	Ba4554	Be3130	Bi2230	Ca3179	Cd2288
Line	328.068 {103}	309.271 {109}	189.042 {478}	208.959 {461}	455.403 {74}	313.042 {108}	223.061 {451}	317.933 {106}	228.802 {447}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.00165	19.449	.00033	.00882	.13168	.00006	-.00190	.66677	.00708
Stddev	.00042	.521	.00383	.00030	.00383	.00017	.00558	.00022	.00005
%RSD	25.476	2.6802	1167.7	3.3806	2.9074	291.61	293.41	.03341	.73774

#1	.00135	19.818	-.00238	.00861	.13439	-.00006	-.00585	.66693	.00704
#2	.00194	19.081	.00304	.00903	.12898	.00018	.00204	.66662	.00711

Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Elem	Co2286	Cr2055	Cu3247	Fe2599	K_7664	Li6707	Mg2790	Mn2576	Mo2020
Line	228.616 {447}	205.560 {464}	324.754 {104}	259.940 {130}	766.490 {44}	670.784 {50}	279.079 {121}2	257.610 {131}	202.030 {467}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.00142	.01814	.13584	17.544	.24045	-.00312	.57169	.07280	.00161
Stddev	.00007	.00041	.00098	.534	.09047	.00297	.00332	.00032	.00016
%RSD	4.6696	2.2772	.72471	3.0438	37.626	95.274	.58132	.43622	9.6719

#1	.00137	.01844	.13514	17.922	.17648	-.00102	.57404	.07302	.00150
#2	.00146	.01785	.13654	17.167	.30442	-.00523	.56934	.07258	.00172

Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Elem	Na5895	Ni2316	P_1782	Pb2203	S_1820	Sb2068	Se1960	Si2881	SiO2
Line	589.592 {57}	231.604 {446}	178.284 {489}	220.353 {453}	182.034 {485}	206.833 {463}	196.090 {472}	288.158 {117}	288.158 {117}2
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.03382	.01032	.29264	.20453	.14283	-.00214	-.00325	4.7589	10.184
Stddev	.01182	.00098	.01247	.01212	.01008	.00001	.00196	.0865	.185
%RSD	34.945	9.5041	4.2624	5.9249	7.0609	.27317	60.281	1.8177	1.8177

#1	.02546	.01101	.30146	.21310	.14996	-.00214	-.00186	4.6978	10.053
#2	.04218	.00962	.28382	.19596	.13570	-.00213	-.00464	4.8201	10.315

Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Elem	Sn1899	Sr4077	Th2837	Ti3349	Ti1908	U_3701	V_2924	Zn2062	Zr3391
Line	189.989 {477}	407.771 {83}	283.730 {119}	334.904 {101}	190.856 {477}	370.152 {91}	292.402 {115}	206.200 {163}	339.198 {99}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.00610	.00819	.00273	.26195	.00999	.07170	.02028	.26420	.01085
Stddev	.00029	.00060	.00036	.00953	.00475	.02251	.00070	.00018	.00671
%RSD	4.7298	7.3577	13.025	3.6389	47.517	31.398	3.4408	.06945	61.860

#1	.00631	.00776	.00248	.25521	.00664	.08762	.01979	.26433	.00611
#2	.00590	.00862	.00298	.26869	.01335	.05578	.02077	.26407	.01560

Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Int. Std.	Y_2243	Y_3600	Y_3774
Line	224.306 {450}	360.073 {94}	377.433 {89}
Units	Cts/S	Cts/S	Cts/S
Avg	2583.2	38188.	1771.9
Stddev	73.8	490.	116.8
%RSD	2.8578	1.2820	6.5945

#1	2531.0	37842.	1689.3
#2	2635.4	38534.	1854.5

Sample Name: 280-82954-A-3-A Acquired: 5/18/2016 2:06:53 Type: Unk
Method: 6500_025(v6) Mode: CONC Corr. Factor: 1.000000
User: CRHOADES Prep Date: Custom ID2: Custom ID3:
Comment: 325403 6010C soil Q4

Elem	Ag3280	Al3092	As1890	B_2089	Ba4554	Be3130	Bi2230	Ca3179	Cd2288
Line	328.068 {103}	309.271 {109}	189.042 {478}	208.959 {461}	455.403 {74}	313.042 {108}	223.061 {451}	317.933 {106}	228.802 {447}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.00283	30.788	.00564	.00718	.14188	.00025	-.00256	1.1011	.03259
Stddev	.00092	.133	.00704	.00125	.00042	.00011	.00097	.0049	.00324
%RSD	32.661	.43149	124.81	17.370	.29911	44.438	37.762	.44272	9.9281

#1	.00348	30.694	.00066	.00630	.14158	.00033	-.00325	1.1046	.03031
#2	.00218	30.882	.01061	.00806	.14218	.00017	-.00188	1.0977	.03488

Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Elem	Co2286	Cr2055	Cu3247	Fe2599	K_7664	Li6707	Mg2790	Mn2576	Mo2020
Line	228.616 {447}	205.560 {464}	324.754 {104}	259.940 {130}	766.490 {44}	670.784 {50}	279.079 {121}2	257.610 {131}	202.030 {467}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.00172	.02943	.75330	13.097	.15113	-.00642	.61787	.09873	.00063
Stddev	.00056	.00287	.00008	.051	.01746	.00251	.00361	.00020	.00076
%RSD	32.234	9.7454	.01118	.39254	11.556	39.181	.58347	.20717	120.65

#1	.00133	.02740	.75336	13.060	.16348	-.00820	.62042	.09888	.00009
#2	.00212	.03146	.75324	13.133	.13878	-.00464	.61532	.09859	.00117

Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Elem	Na5895	Ni2316	P_1782	Pb2203	S_1820	Sb2068	Se1960	Si2881	SiO2
Line	589.592 {57}	231.604 {446}	178.284 {489}	220.353 {453}	182.034 {485}	206.833 {463}	196.090 {472}	288.158 {117}	288.158 {117}2
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.03598	.01156	.32265	.47113	.36173	.00349	W -.00511	5.2854	11.311
Stddev	.01837	.00131	.01935	.03047	.03197	.00362	.00132	.0078	.017
%RSD	51.048	11.314	5.9985	6.4681	8.8384	103.83	25.902	.14762	.14762

#1	.04897	.01064	.30897	.44958	.33912	.00605	-.00604	5.2799	11.299
#2	.02299	.01248	.33634	.49267	.38434	.00093	-.00417	5.2909	11.323

Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Warn	Chk Pass	Chk Pass
High Limit							5.0000		
Low Limit							-.00500		

Elem	Sn1899	Sr4077	Th2837	Ti3349	Ti1908	U_3701	V_2924	Zn2062	Zr3391
Line	189.989 {477}	407.771 {83}	283.730 {119}	334.904 {101}	190.856 {477}	370.152 {91}	292.402 {115}	206.200 {163}	339.198 {99}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.01988	.02500	.00132	.26541	.00164	.06820	.02214	.75720	.00965
Stddev	.00006	.00016	.00101	.00174	.00234	.04936	.00076	.00204	.00145
%RSD	.28277	.63386	76.093	.65715	142.45	72.380	3.4152	.26988	14.991

#1	.01992	.02511	.00204	.26665	-.00001	.10310	.02267	.75864	.01067
#2	.01984	.02489	.00061	.26418	.00329	.03329	.02160	.75575	.00862

Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Int. Std.	Y_2243	Y_3600	Y_3774
Line	224.306 {450}	360.073 {94}	377.433 {89}
Units	Cts/S	Cts/S	Cts/S
Avg	2724.0	38438.	1755.4
Stddev	303.0	100.	1.8
%RSD	11.123	.26014	.10132

#1	2938.2	38367.	1756.7
#2	2509.7	38509.	1754.2

Sample Name: 280-82954-A-4-A Acquired: 5/18/2016 2:09:28 Type: Unk
Method: 6500_025(v6) Mode: CONC Corr. Factor: 1.000000
User: CRHOADES Prep Date: Custom ID2: Custom ID3:
Comment: 325403 6010C soil Q4

Elem	Ag3280	Al3092	As1890	B_2089	Ba4554	Be3130	Bi2230	Ca3179	Cd2288
Line	328.068 {103}	309.271 {109}	189.042 {478}	208.959 {461}	455.403 {74}	313.042 {108}	223.061 {451}	317.933 {106}	228.802 {447}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.00281	44.064	.01245	.00991	.13073	.00054	-.00635	1.2107	.00833
Stddev	.00077	.163	.00475	.00250	.00131	.00009	.00167	.0155	.00031
%RSD	27.455	.37085	38.132	25.269	1.0011	15.834	26.348	1.2835	3.7069

#1	.00336	44.180	.00909	.01168	.13166	.00048	-.00517	1.2217	.00855
#2	.00227	43.948	.01580	.00814	.12981	.00060	-.00753	1.1997	.00811

Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Elem	Co2286	Cr2055	Cu3247	Fe2599	K_7664	Li6707	Mg2790	Mn2576	Mo2020
Line	228.616 {447}	205.560 {464}	324.754 {104}	259.940 {130}	766.490 {44}	670.784 {50}	279.079 {121}2	257.610 {131}	202.030 {467}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.00182	.03914	.50981	19.330	.57349	.00186	1.2762	.10591	.00081
Stddev	.00000	.00079	.00080	.127	.07405	.00284	.0059	.00004	.00013
%RSD	.25866	2.0177	.15640	.65835	12.913	152.41	.46354	.04214	16.385

#1	.00182	.03969	.51037	19.420	.62585	-.00014	1.2804	.10588	.00071
#2	.00182	.03858	.50925	19.240	.52112	.00387	1.2720	.10595	.00090

Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Elem	Na5895	Ni2316	P_1782	Pb2203	S_1820	Sb2068	Se1960	Si2881	SiO2
Line	589.592 {57}	231.604 {446}	178.284 {489}	220.353 {453}	182.034 {485}	206.833 {463}	196.090 {472}	288.158 {117}	288.158 {117}2
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.06150	.01712	.39443	.83345	.42282	.00758	-.00472	7.3018	15.626
Stddev	.00142	.00005	.01103	.01561	.01666	.00401	.00517	.0966	.207
%RSD	2.3158	.29281	2.7953	1.8727	3.9399	52.887	109.34	1.3235	1.3235

#1	.06049	.01708	.40223	.84449	.43460	.01042	-.00107	7.2334	15.480
#2	.06251	.01715	.38664	.82242	.41104	.00475	-.00838	7.3701	15.772

Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Elem	Sn1899	Sr4077	Th2837	Ti3349	Ti1908	U_3701	V_2924	Zn2062	Zr3391
Line	189.989 {477}	407.771 {83}	283.730 {119}	334.904 {101}	190.856 {477}	370.152 {91}	292.402 {115}	206.200 {163}	339.198 {99}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.01401	.01392	.00830	.41723	.00069	.04221	.04264	.45853	.02072
Stddev	.00298	.00140	.00264	.00629	.00060	.02473	.00056	.00389	.00648
%RSD	21.288	10.026	31.762	1.5068	87.690	58.592	1.3242	.84898	31.283

#1	.01612	.01490	.01016	.42167	.00112	.02472	.04224	.45577	.02530
#2	.01190	.01293	.00643	.41278	.00026	.05970	.04304	.46128	.01614

Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Int. Std.	Y_2243	Y_3600	Y_3774
Line	224.306 {450}	360.073 {94}	377.433 {89}
Units	Cts/S	Cts/S	Cts/S
Avg	2581.1	37917.	1735.4
Stddev	110.3	89.	8.1
%RSD	4.2720	.23402	.46916

#1	2503.2	37979.	1741.2
#2	2659.1	37854.	1729.6

Sample Name: CCVH-3883905 Acquired: 5/18/2016 2:12:03 Type: QC
Method: 6500_025(v6) Mode: CONC Corr. Factor: 1.000000
User: CRHOADES Prep Date: Custom ID2: Custom ID3:
Comment:

Elem	Ag3280	Al3092	As1890	B_2089	Ba4554	Be3130	Bi2230	Ca3179	Cd2288	Co2286	Cr2055
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	-0.00701	50.848	-0.00228	.00596	-0.00043	.00014	W .92364	-0.00909	-0.00077	-0.00153	-0.00035
Stddev	.00006	.117	.00013	.00204	.00039	.00027	.00246	.00022	.00022	.00040	.00006
%RSD	.86677	.22915	5.6108	34.124	92.708	194.39	.26590	2.4144	28.845	26.212	16.108
#1	-0.00705	50.931	-0.00237	.00453	-0.00015	.00033	.92537	-0.00894	-0.00061	-0.00124	-0.00039
#2	-0.00696	50.766	-0.00219	.00740	-0.00070	-0.00005	.92190	-0.00925	-0.00093	-0.00181	-0.00031
Check ?	None	Chk Pass	None	None	None	None	Chk Warn	None	None	None	None
Value							1.0000				
Range							-5.0000%				
Elem	Cu3247	Fe2714	K_7664	Li6707	Mg2790	Mn2576	Mo2020	Na8183	Ni2316	P_1782	Pb2203
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	-0.01653	54.449	-0.25735	-0.01291	.01707	-0.00203	-0.00225	F 278.58	.00129	.00375	.00047
Stddev	.00033	.220	.04917	.00867	.00422	.00008	.00069	.30	.00046	.00105	.00140
%RSD	2.0255	.40342	19.105	67.152	24.703	3.7292	30.683	.10657	35.874	27.911	300.27
#1	-0.01629	54.294	-.29211	-0.01904	.02005	-0.00198	-0.00273	278.79	.00096	.00301	.00145
#2	-0.01677	54.604	-.22258	-0.00678	.01409	-0.00209	-0.00176	278.37	.00162	.00449	-.00052
Check ?	None	Chk Pass	None	None	None	None	None	Chk Fail	None	None	None
Value								250.00			
Range								10.490%			
Elem	S_1820	Sb2068	Se1960	Si2881	SiO2	Sn1899	Sr4077	Th2837	Ti3349	Ti1908	U_3701
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	4.8264	-0.01476	-0.00228	-0.02098	-0.04491	-0.00265	.00018	F 4.4636	.00270	-0.00075	W 9.2557
Stddev	.0065	.00335	.00687	.03227	.06905	.00034	.00036	.0434	.00068	.00061	.0954
%RSD	.13430	22.708	300.94	153.76	153.76	12.878	203.39	.97249	25.269	81.386	1.0303
#1	4.8310	-.01713	-0.00714	.00183	.00392	-0.00289	-0.00008	4.4943	.00222	-0.00032	9.3231
#2	4.8218	-.01239	.00258	-.04380	-.09373	-0.00241	.00043	4.4329	.00318	-0.00117	9.1883
Check ?	Chk Pass	None	None	None	None	None	None	Chk Fail	None	None	Chk Warn
Value								5.0000			10.000
Range								-10.490%			-5.0000%
Elem	V_2924	Zn2062	Zr3391								
Units	ppm	ppm	ppm								
Avg	.01137	-0.00022	-.12867								
Stddev	.00109	.00067	.00027								
%RSD	9.5514	300.63	.20870								
#1	.01213	-0.00070	-.12848								
#2	.01060	.00025	-.12886								
Check ?	None	None	None								
Value											
Range											
Int. Std.	Y_2243	Y_3600	Y_3774								
Units	Cts/S	Cts/S	Cts/S								
Avg	2490.5	35967.	1732.6								
Stddev	4.0	338.	34.3								
%RSD	.16073	.93995	1.9813								
#1	2493.3	35728.	1708.3								
#2	2487.7	36206.	1756.8								

Sample Name: CCV-3888422 Acquired: 5/18/2016 2:14:39 Type: QC
Method: 6500_025(v6) Mode: CONC Corr. Factor: 1.000000
User: CRHOADES Prep Date: Custom ID2: Custom ID3:
Comment:

Elem	Ag3280	Al1670	As1890	B_2089	Ba4554	Be3130	Bi2230	Ca3179	Cd2288	Co2286	Cr2055	Cu3247
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.47192	.46545	F .89260	.47742	.47087	.49270	-.00326	4.6462	.48980	.49166	.50279	F .43122
Stddev	.00103	.00343	.00191	.00942	.00637	.00530	.00219	.0647	.00879	.00963	.00829	.00118
%RSD	.21768	.73707	.21372	1.9722	1.3524	1.0757	67.226	1.3928	1.7945	1.9577	1.6497	.27434
#1	.47119	.46303	.89125	.47076	.46637	.48896	-.00482	4.6005	.48359	.48486	.49692	.43039
#2	.47265	.46788	.89395	.48408	.47538	.49645	-.00171	4.6920	.49602	.49847	.50865	.43206
Check ?	Chk Pass	Chk Pass	Chk Fail	Chk Pass	Chk Pass	Chk Pass	None	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Fail
Value			1.0000									.50000
Range			-10.490%									-10.490%
Elem	Fe2599	K_7664	Li6707	Mg2790	Mn2576	Mo2020	Na5895	Ni2316	P_1782	Pb2203	S_1820	Sb2068
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	2.5310	48.610	.97897	18.250	F .44617	.49407	5.3457	.47780	.94929	.96859	-.07776	.93813
Stddev	.0179	.360	.01507	.043	.00043	.00466	.0724	.00867	.01123	.01350	.00921	.00902
%RSD	.70547	.74118	1.5390	.23314	.09718	.94345	1.3546	1.8143	1.1825	1.3934	11.842	.96148
#1	2.5184	48.355	.96832	18.280	.44586	.49077	5.2945	.47167	.94135	.95905	-.08427	.93175
#2	2.5436	48.864	.98962	18.220	.44647	.49737	5.3969	.48393	.95723	.97813	-.07125	.94451
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Fail	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	None	Chk Pass
Value					.50000							
Range					-10.490%							
Elem	Se1960	Si2881	SiO2	Sn1899	Sr4077	Th2837	Ti3349	Ti1908	U_3701	V_2924	Zn2062	Zr3391
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	F .87685	5.1045	10.924	.98962	.49344	.00175	F .43577	.99480	.02261	.46922	F .43750	.46787
Stddev	.00973	.0500	.107	.01887	.00622	.00247	.00042	.01519	.04385	.00097	.00341	.00321
%RSD	1.1102	.97935	.97935	1.9072	1.2615	141.20	.09618	1.5271	193.98	.20665	.77896	.68519
#1	.86996	5.0691	10.848	.97628	.48904	.00000	.43606	.98406	-.00840	.46853	.43509	.46560
#2	.88373	5.1398	10.999	1.0030	.49784	.00349	.43547	1.0055	.05362	.46990	.43991	.47014
Check ?	Chk Fail	Chk Pass	Chk Pass	Chk Pass	Chk Pass	None	Chk Fail	Chk Pass	None	Chk Pass	Chk Fail	Chk Pass
Value	1.0000						.50000				.50000	
Range	-10.490%						-10.490%				-10.490%	
Int. Std.	Y_2243	Y_3600	Y_3774									
Units	Cts/S	Cts/S	Cts/S									
Avg	2446.4	36272.	1660.1									
Stddev	21.4	58.	12.6									
%RSD	.87365	.16040	.75846									
#1	2461.5	36314.	1669.0									
#2	2431.3	36231.	1651.2									

Sample Name: CCB Acquired: 5/18/2016 2:17:11 Type: QC
Method: 6500_025(v6) Mode: CONC Corr. Factor: 1.000000
User: CRHOADES Prep Date: Custom ID2: Custom ID3:
Comment:

Elem	Ag3280	Al1670	As1890	B_2089	Ba4554	Be3130	Bi2230	Ca3179	Cd2288	Co2286	Cr2055
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.00161	.00136	.00446	.00443	-.00050	.00002	.00221	.00140	.00014	-.00030	-.00057
Stddev	.00037	.00023	.00951	.00088	.00032	.00004	.00034	.00406	.00011	.00037	.00017
%RSD	22.966	17.084	213.04	19.816	63.587	211.71	15.381	289.34	79.493	123.77	29.472

#1	.00135	.00152	.01118	.00381	-.00028	.00005	.00245	.00427	.00022	-.00055	-.00045
#2	.00187	.00119	-.00226	.00505	-.00073	-.00001	.00197	-.00147	.00006	-.00004	-.00069

Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit											
Low Limit											

Elem	Cu3247	Fe2599	K_7664	Li6707	Mg2790	Mn2576	Mo2020	Na5895	Ni2316	P_1782	Pb2203
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	-.00122	.04079	-.17870	F -.01054	-.00262	.00034	.00068	-.04448	.00006	.00078	-.00134
Stddev	.00000	.00383	.14279	.00471	.00041	.00001	.00049	.00917	.00011	.00149	.00108
%RSD	.06186	9.3997	79.905	44.695	15.498	2.0824	71.482	20.620	194.80	190.87	80.288

#1	-.00122	.04350	-.07773	-.00721	-.00291	.00033	.00034	-.03800	-.00002	-.00027	-.00058
#2	-.00122	.03808	-.27967	-.01387	-.00234	.00034	.00103	-.05097	.00013	.00183	-.00211

Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Fail	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit				.01000							
Low Limit				-.01000							

Elem	S_1820	Sb2068	Se1960	Si2881	SiO2	Sn1899	Sr4077	Th2837	Ti3349	Ti1908	U_3701
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	-.08342	W .00346	-.00556	-.03397	-.07270	-.00116	-.00041	-.00016	.00049	.00611	.06809
Stddev	.00828	.00284	.00204	.05096	.10905	.00005	.00028	.00225	.00031	.00141	.04486
%RSD	9.9289	82.259	36.754	149.99	149.99	4.4402	67.280	1412.2	63.617	23.030	65.880

#1	-.08927	.00547	-.00412	.00206	.00441	-.00112	-.00061	-.00175	.00027	.00511	.09981
#2	-.07756	.00145	-.00701	-.07000	-.14981	-.00119	-.00022	.00143	.00071	.00710	.03637

Check ?	Chk Pass	Chk Warn	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit		.00100									
Low Limit		-.00100									

Elem	V_2924	Zn2062	Zr3391
Units	ppm	ppm	ppm
Avg	.00038	-.00061	-.00463
Stddev	.00028	.00009	.00973
%RSD	74.756	14.008	209.98

#1	.00018	-.00067	-.01152
#2	.00057	-.00055	.00225

Check ?	Chk Pass	Chk Pass	Chk Pass
High Limit			
Low Limit			

Int. Std.	Y_2243	Y_3600	Y_3774
Units	Cts/S	Cts/S	Cts/S
Avg	2479.5	36516.	1671.0
Stddev	51.0	88.	80.1
%RSD	2.0551	.24118	4.7949

#1	2515.5	36454.	1614.4
#2	2443.5	36578.	1727.7

Sample Name: CCVL-3894681 Acquired: 5/18/2016 2:19:33 Type: QC
Method: 6500_025(v6) Mode: CONC Corr. Factor: 1.000000
User: CRHOADES Prep Date: Custom ID2: Custom ID3:
Comment:

Elem	Ag3280	Al1670	As1890	B_2089	Ba4554	Be3130	Bi2230	Ca3179	Cd2288	Co2286	Cr2055
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.01095	.08946	.01470	.08924	.00947	.00106	.09081	.19329	.00464	.00950	.00962
Stddev	.00094	.00901	.00399	.00824	.00067	.00006	.00332	.01555	.00013	.00060	.00032
%RSD	8.5961	10.074	27.115	9.2386	7.0729	6.0328	3.6532	8.0428	2.7469	6.3399	3.3504

#1	.01162	.09583	.01752	.09507	.00995	.00101	.09316	.20428	.00455	.00993	.00985
#2	.01029	.08309	.01188	.08341	.00900	.00110	.08847	.18230	.00473	.00908	.00939

Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Value											
Range											

Elem	Cu3247	Fe2599	K_7664	Li6707	Mg2790	Mn2576	Mo2020	Na5895	Ni2316	P_1782	Pb2203
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.01150	F .23155	2.8857	F -.00146	.18165	.01003	.01779	1.0439	.03794	2.6470	.00823
Stddev	.00011	.00042	.1812	.00188	.00270	.00009	.00054	.0295	.00160	.0960	.00062
%RSD	.97005	.18198	6.2800	129.06	1.4850	.85084	3.0275	2.8229	4.2171	3.6258	7.5575

#1	.01158	.23125	2.7576	-.00279	.17974	.00997	.01817	1.0231	.03907	2.7148	.00779
#2	.01142	.23185	3.0139	-.00013	.18356	.01009	.01741	1.0647	.03681	2.5791	.00867

Check ?	Chk Pass	Chk Fail	Chk Pass	Chk Fail	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Value		.10000		.01000							
Range		30.000%		-30.000%							

Elem	S_1820	Sb2068	Se1960	Si2881	SiO2	Sn1899	Sr4077	Th2837	Ti3349	Ti1908	U_3701
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	-.08690	.01732	F .00123	.45766	.97940	.09875	.01029	.01423	.00987	.01293	F .10504
Stddev	.00215	.00247	.00173	.02683	.05741	.00159	.00015	.00212	.00019	.00035	.01308
%RSD	2.4729	14.254	139.73	5.8621	5.8621	1.6099	1.4711	14.907	1.9484	2.7364	12.453

#1	-.08538	.01558	.00001	.43869	.93880	.09987	.01018	.01273	.01001	.01268	.11429
#2	-.08842	.01907	.00245	.47663	1.0200	.09762	.01040	.01573	.00974	.01319	.09579

Check ?	None	Chk Pass	Chk Fail	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Fail
Value			.01500								.06000
Range			-30.000%								30.000%

Elem	V_2924	Zn2062	Zr3391
Units	ppm	ppm	ppm
Avg	.00972	.02108	.01382
Stddev	.00033	.00067	.00639
%RSD	3.3841	3.1867	46.229

#1	.00948	.02155	.00930
#2	.00995	.02060	.01833

Check ?	Chk Pass	Chk Pass	Chk Pass
Value			
Range			

Int. Std.	Y_2243	Y_3600	Y_3774
Units	Cts/S	Cts/S	Cts/S
Avg	2631.1	37116.	1642.5
Stddev	245.1	104.	3.4
%RSD	9.3163	.28085	.20850

#1	2457.8	37189.	1644.9
#2	2804.5	37042.	1640.1

Sample Name: 280-82954-A-6-A Acquired: 5/18/2016 2:22:14 Type: Unk
Method: 6500_025(v6) Mode: CONC Corr. Factor: 1.000000
User: CRHOADES Prep Date: Custom ID2: Custom ID3:
Comment: 325403 6010C soil Q4

Elem	Ag3280	Al3092	As1890	B_2089	Ba4554	Be3130	Bi2230	Ca3179	Cd2288
Line	328.068 {103}	309.271 {109}	189.042 {478}	208.959 {461}	455.403 { 74}	313.042 {108}	223.061 {451}	317.933 {106}	228.802 {447}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.00195	31.562	.00908	.00604	.06310	.00025	-.00362	.17722	.00114
Stddev	.00004	.252	.00797	.00183	.00046	.00003	.00052	.00532	.00005
%RSD	2.0639	.79831	87.797	30.353	.72161	13.794	14.261	3.0040	4.4727

#1	.00192	31.384	.01472	.00733	.06278	.00028	-.00326	.17345	.00118
#2	.00197	31.740	.00344	.00474	.06342	.00023	-.00399	.18098	.00110

Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Elem	Co2286	Cr2055	Cu3247	Fe2599	K_7664	Li6707	Mg2790	Mn2576	Mo2020
Line	228.616 {447}	205.560 {464}	324.754 {104}	259.940 {130}	766.490 { 44}	670.784 { 50}	279.079 {121}2	257.610 {131}	202.030 {467}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.00137	.02733	.11090	22.064	.42816	.00296	1.0714	.04466	.00034
Stddev	.00044	.00085	.00051	.330	.02427	.00172	.0071	.00003	.00047
%RSD	32.275	3.1149	.46414	1.4974	5.6678	58.122	.66542	.06236	138.18

#1	.00168	.02673	.11054	21.830	.41100	.00418	1.0663	.04464	.00067
#2	.00106	.02793	.11127	22.297	.44532	.00175	1.0764	.04468	.00001

Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Elem	Na5895	Ni2316	P_1782	Pb2203	S_1820	Sb2068	Se1960	Si2881	SiO2
Line	589.592 { 57}	231.604 {446}	178.284 {489}	220.353 {453}	182.034 {485}	206.833 {463}	196.090 {472}	288.158 {117}	288.158 {117}2
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.04756	.01159	.29691	.14102	.42588	-.00119	W -.00596	5.1517	11.025
Stddev	.00755	.00045	.00132	.00127	.00029	.00560	.00398	.0985	.211
%RSD	15.879	3.9164	.44586	.89726	.06833	470.75	66.790	1.9112	1.9112

#1	.04222	.01191	.29784	.14012	.42609	.00277	-.00878	5.2213	11.174
#2	.05290	.01127	.29597	.14191	.42567	-.00515	-.00315	5.0820	10.876

Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Warn	Chk Pass	Chk Pass
High Limit							5.0000		
Low Limit							-.00500		

Elem	Sn1899	Sr4077	Th2837	Ti3349	Ti1908	U_3701	V_2924	Zn2062	Zr3391
Line	189.989 {477}	407.771 { 83}	283.730 {119}	334.904 {101}	190.856 {477}	370.152 { 91}	292.402 {115}	206.200 {163}	339.198 { 99}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.00182	.00524	.00762	.36006	-.00207	.06593	.04060	.18566	.01844
Stddev	.00091	.00027	.00282	.00618	.00020	.01171	.00051	.00120	.00190
%RSD	50.088	5.0954	37.018	1.7156	9.8282	17.755	1.2552	.64876	10.327

#1	.00246	.00542	.00961	.36443	-.00192	.07421	.04096	.18651	.01709
#2	.00117	.00505	.00562	.35569	-.00221	.05766	.04024	.18481	.01978

Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Int. Std.	Y_2243	Y_3600	Y_3774
Line	224.306 {450}	360.073 { 94}	377.433 { 89}
Units	Cts/S	Cts/S	Cts/S
Avg	2503.2	37306.	1763.1
Stddev	9.6	54.	5.6
%RSD	.38418	.14533	.31580

#1	2496.4	37344.	1767.0
#2	2510.0	37267.	1759.2

Sample Name: 280-82954-A-7-A Acquired: 5/18/2016 2:24:51 Type: Unk
Method: 6500_025(v6) Mode: CONC Corr. Factor: 1.000000
User: CRHOADES Prep Date: Custom ID2: Custom ID3:
Comment: 325403 6010C soil Q4

Elem	Ag3280	Al3092	As1890	B_2089	Ba4554	Be3130	Bi2230	Ca3179	Cd2288
Line	328.068 {103}	309.271 {109}	189.042 {478}	208.959 {461}	455.403 { 74}	313.042 {108}	223.061 {451}	317.933 {106}	228.802 {447}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.00141	17.477	.00134	.00440	.05822	.00006	-.00339	.53998	.00608
Stddev	.00010	.228	.00341	.00000	.00026	.00028	.00747	.00104	.00001
%RSD	6.9901	1.3028	254.36	.04135	.45395	440.93	220.46	.19338	.20628

#1	.00134	17.316	-.00107	.00440	.05804	.00026	.00189	.54072	.00608
#2	.00148	17.638	.00375	.00440	.05841	-.00013	-.00867	.53924	.00609

Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Elem	Co2286	Cr2055	Cu3247	Fe2599	K_7664	Li6707	Mg2790	Mn2576	Mo2020
Line	228.616 {447}	205.560 {464}	324.754 {104}	259.940 {130}	766.490 { 44}	670.784 { 50}	279.079 {121}2	257.610 {131}	202.030 {467}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.00055	.01597	.24432	9.6494	-.05604	-.00503	.46681	.09287	.00066
Stddev	.00042	.00016	.00004	.1346	.04400	.00042	.00191	.00002	.00015
%RSD	76.700	1.0030	.01621	1.3953	78.519	8.4103	.40901	.01709	22.480

#1	.00085	.01609	.24435	9.5542	-.02493	-.00473	.46546	.09285	.00056
#2	.00025	.01586	.24429	9.7446	-.08715	-.00533	.46816	.09288	.00077

Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Elem	Na5895	Ni2316	P_1782	Pb2203	S_1820	Sb2068	Se1960	Si2881	SiO2
Line	589.592 { 57}	231.604 {446}	178.284 {489}	220.353 {453}	182.034 {485}	206.833 {463}	196.090 {472}	288.158 {117}	288.158 {117}2
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.00890	.01718	.23680	.23141	.14201	.00042	W -.00724	4.0892	8.7510
Stddev	.03518	.00089	.00758	.00625	.02026	.00477	.00425	.0068	.0146
%RSD	395.11	5.1648	3.1990	2.6993	14.267	1134.6	58.710	.16731	.16731

#1	.03378	.01780	.24216	.23583	.15633	.00379	-.00424	4.0941	8.7613
#2	-.01597	.01655	.23145	.22699	.12768	-.00295	-.01025	4.0844	8.7406

Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Warn	Chk Pass	Chk Pass
High Limit							5.0000		
Low Limit							-.00500		

Elem	Sn1899	Sr4077	Th2837	Ti3349	Ti1908	U_3701	V_2924	Zn2062	Zr3391
Line	189.989 {477}	407.771 { 83}	283.730 {119}	334.904 {101}	190.856 {477}	370.152 { 91}	292.402 {115}	206.200 {163}	339.198 { 99}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.00377	.00536	.00448	.23956	-.00133	.03422	.01928	.52141	.01072
Stddev	.00145	.00014	.00038	.01067	.00172	.02018	.00041	.00631	.00662
%RSD	38.526	2.6183	8.3695	4.4545	128.91	58.982	2.1256	1.2105	61.720

#1	.00274	.00545	.00475	.24711	-.00012	.01995	.01899	.52587	.00604
#2	.00480	.00526	.00422	.23202	-.00255	.04849	.01957	.51695	.01540

Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Int. Std.	Y_2243	Y_3600	Y_3774
Line	224.306 {450}	360.073 { 94}	377.433 { 89}
Units	Cts/S	Cts/S	Cts/S
Avg	2534.2	37443.	1754.8
Stddev	33.0	19.	23.0
%RSD	1.3009	.05179	1.3088

#1	2510.9	37429.	1771.0
#2	2557.6	37456.	1738.5

Sample Name: 280-82954-A-8-A Acquired: 5/18/2016 2:27:28 Type: Unk
Method: 6500_025(v6) Mode: CONC Corr. Factor: 1.000000
User: CRHOADES Prep Date: Custom ID2: Custom ID3:
Comment: 325403 6010C soil Q4

Elem	Ag3280	Al3092	As1890	B_2089	Ba4554	Be3130	Bi2230	Ca3179	Cd2288
Line	328.068 {103}	309.271 {109}	189.042 {478}	208.959 {461}	455.403 { 74}	313.042 {108}	223.061 {451}	317.933 {106}	228.802 {447}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.00188	23.155	.00608	.00671	.07719	-.00022	-.00306	.98279	.00646
Stddev	.00058	.110	.00001	.00072	.00021	.00005	.00391	.00937	.00011
%RSD	31.110	.47536	.08955	10.691	.26834	21.671	127.93	.95305	1.7112

#1	.00146	23.233	.00608	.00620	.07734	-.00018	-.00029	.97616	.00654
#2	.00229	23.077	.00607	.00722	.07704	-.00025	-.00583	.98941	.00638

Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Elem	Co2286	Cr2055	Cu3247	Fe2599	K_7664	Li6707	Mg2790	Mn2576	Mo2020
Line	228.616 {447}	205.560 {464}	324.754 {104}	259.940 {130}	766.490 { 44}	670.784 { 50}	279.079 {121}2	257.610 {131}	202.030 {467}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.00080	.02887	.23714	10.449	.13762	-.00661	.57086	.07760	-.00023
Stddev	.00059	.00025	.00021	.118	.01921	.00332	.00711	.00011	.00034
%RSD	74.031	.85609	.08688	1.1307	13.961	50.264	1.2456	.14270	150.19

#1	.00122	.02905	.23728	10.366	.15120	-.00426	.56583	.07768	-.00047
#2	.00038	.02870	.23699	10.533	.12403	-.00896	.57589	.07753	.00001

Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Elem	Na5895	Ni2316	P_1782	Pb2203	S_1820	Sb2068	Se1960	Si2881	SiO2
Line	589.592 { 57}	231.604 {446}	178.284 {489}	220.353 {453}	182.034 {485}	206.833 {463}	196.090 {472}	288.158 {117}	288.158 {117}2
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.00467	.01083	.26828	.31576	.39857	.00108	-.00419	4.6925	10.042
Stddev	.02487	.00022	.00284	.00157	.00219	.00091	.00375	.0108	.023
%RSD	532.16	1.9908	1.0599	.49586	.55017	84.227	89.322	.23020	.23020

#1	.02226	.01098	.26626	.31687	.40012	.00043	-.00684	4.7001	10.058
#2	-.01291	.01068	.27029	.31465	.39702	.00172	-.00155	4.6848	10.026

Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Elem	Sn1899	Sr4077	Th2837	Ti3349	Ti1908	U_3701	V_2924	Zn2062	Zr3391
Line	189.989 {477}	407.771 { 83}	283.730 {119}	334.904 {101}	190.856 {477}	370.152 { 91}	292.402 {115}	206.200 {163}	339.198 { 99}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.00611	.00709	.00432	.27106	-.00209	.02971	.02238	.37505	.00842
Stddev	.00201	.00030	.00071	.00306	.00050	.02196	.00083	.00712	.00262
%RSD	32.823	4.1675	16.444	1.1298	24.059	73.921	3.7236	1.8991	31.094

#1	.00753	.00688	.00381	.26889	-.00173	.04524	.02179	.38009	.01027
#2	.00469	.00730	.00482	.27322	-.00244	.01418	.02297	.37001	.00657

Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Int. Std.	Y_2243	Y_3600	Y_3774
Line	224.306 {450}	360.073 { 94}	377.433 { 89}
Units	Cts/S	Cts/S	Cts/S
Avg	2522.2	37355.	1656.2
Stddev	13.1	82.	10.7
%RSD	.52108	.21847	.64500

#1	2531.5	37297.	1663.8
#2	2512.9	37413.	1648.7

Sample Name: 280-82954-A-9-A Acquired: 5/18/2016 2:30:06 Type: Unk
Method: 6500_025(v6) Mode: CONC Corr. Factor: 1.000000
User: CRHOADES Prep Date: Custom ID2: Custom ID3:
Comment: 325403 6010C soil Q4

Elem	Ag3280	Al3092	As1890	B_2089	Ba4554	Be3130	Bi2230	Ca3179	Cd2288
Line	328.068 {103}	309.271 {109}	189.042 {478}	208.959 {461}	455.403 { 74}	313.042 {108}	223.061 {451}	317.933 {106}	228.802 {447}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.00132	36.082	.00667	.00540	.06349	-.00007	-.00279	.67171	.02204
Stddev	.00030	1.269	.00165	.00061	.00340	.00024	.00339	.02131	.00004
%RSD	23.079	3.5163	24.721	11.291	5.3472	322.42	121.38	3.1732	.19037

#1	.00153	36.979	.00784	.00583	.06589	.00009	-.00518	.68678	.02207
#2	.00110	35.185	.00550	.00497	.06109	-.00024	-.00040	.65664	.02201

Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Elem	Co2286	Cr2055	Cu3247	Fe2599	K_7664	Li6707	Mg2790	Mn2576	Mo2020
Line	228.616 {447}	205.560 {464}	324.754 {104}	259.940 {130}	766.490 { 44}	670.784 { 50}	279.079 {121}2	257.610 {131}	202.030 {467}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.00118	.02249	.56945	10.902	.15031	.00183	.70846	.04326	.00023
Stddev	.00046	.00060	.00168	.309	.01764	.00215	.00417	.00012	.00068
%RSD	38.844	2.6485	.29562	2.8361	11.739	117.21	.58839	.28680	294.50

#1	.00151	.02291	.56826	11.121	.16278	.00031	.71141	.04335	.00071
#2	.00086	.02207	.57065	10.683	.13783	.00335	.70552	.04317	-.00025

Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Elem	Na5895	Ni2316	P_1782	Pb2203	S_1820	Sb2068	Se1960	Si2881	SiO2
Line	589.592 { 57}	231.604 {446}	178.284 {489}	220.353 {453}	182.034 {485}	206.833 {463}	196.090 {472}	288.158 {117}	288.158 {117}2
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.05496	.01621	.28913	.26461	.45278	.00025	-.00187	5.1702	11.064
Stddev	.01050	.00033	.00327	.00609	.00081	.00228	.00329	.0532	.114
%RSD	19.103	2.0065	1.1318	2.3028	.17970	920.05	176.07	1.0291	1.0291

#1	.06238	.01644	.29144	.26892	.45220	.00186	.00046	5.1325	10.984
#2	.04754	.01598	.28681	.26030	.45335	-.00136	-.00420	5.2078	11.145

Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Elem	Sn1899	Sr4077	Th2837	Ti3349	Ti1908	U_3701	V_2924	Zn2062	Zr3391
Line	189.989 {477}	407.771 { 83}	283.730 {119}	334.904 {101}	190.856 {477}	370.152 { 91}	292.402 {115}	206.200 {163}	339.198 { 99}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.00496	.00732	.10949	.27258	-.00185	.03635	.03024	.32719	.00868
Stddev	.00075	.00022	.00224	.00239	.00141	.05461	.00009	.00091	.00286
%RSD	15.127	3.0554	2.0467	.87686	76.108	150.24	.29438	.27940	32.984

#1	.00549	.00748	.10791	.27089	-.00285	.07497	.03030	.32654	.00665
#2	.00443	.00716	.11108	.27427	-.00085	-.00227	.03018	.32784	.01070

Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Int. Std.	Y_2243	Y_3600	Y_3774
Line	224.306 {450}	360.073 { 94}	377.433 { 89}
Units	Cts/S	Cts/S	Cts/S
Avg	2565.4	37553.	1712.1
Stddev	60.9	35.	70.6
%RSD	2.3721	.09222	4.1219

#1	2522.4	37529.	1662.2
#2	2608.4	37578.	1762.0

Sample Name: 280-82954-A-10-A Acquired: 5/18/2016 2:32:43 Type: Unk

Method: 6500_025(v6) Mode: CONC Corr. Factor: 1.000000

User: CRHOADES Prep Date: Custom ID2: Custom ID3:

Comment: 325403 6010C soil Q4

Elem	Ag3280	Al3092	As1890	B_2089	Ba4554	Be3130	Bi2230	Ca3179	Cd2288
Line	328.068 {103}	309.271 {109}	189.042 {478}	208.959 {461}	455.403 {74}	313.042 {108}	223.061 {451}	317.933 {106}	228.802 {447}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.00253	25.158	.00354	.00518	.15237	.00038	-.00392	5.0593	.01280
Stddev	.00141	.083	.00098	.00081	.00012	.00057	.00069	.0157	.00026
%RSD	55.779	.32909	27.653	15.676	.07591	148.22	17.672	.31087	2.0135

#1	.00353	25.099	.00424	.00576	.15245	-.00002	-.00343	5.0482	.01262
#2	.00153	25.216	.00285	.00461	.15229	.00079	-.00441	5.0704	.01299

Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Elem	Co2286	Cr2055	Cu3247	Fe2599	K_7664	Li6707	Mg2790	Mn2576	Mo2020
Line	228.616 {447}	205.560 {464}	324.754 {104}	259.940 {130}	766.490 {44}	670.784 {50}	279.079 {121}2	257.610 {131}	202.030 {467}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.00153	.02346	.45643	12.315	.00488	.00882	.57411	.08017	.00078
Stddev	.00012	.00059	.00222	.042	.03137	.00346	.00339	.00006	.00038
%RSD	8.1471	2.5107	.48660	.34273	643.32	39.184	.59010	.07182	49.052

#1	.00162	.02388	.45486	12.285	-.01731	.00638	.57172	.08013	.00051
#2	.00144	.02305	.45800	12.345	.02706	.01127	.57651	.08021	.00105

Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Elem	Na5895	Ni2316	P_1782	Pb2203	S_1820	Sb2068	Se1960	Si2881	SiO2
Line	589.592 {57}	231.604 {446}	178.284 {489}	220.353 {453}	182.034 {485}	206.833 {463}	196.090 {472}	288.158 {117}	288.158 {117}2
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.05633	.03049	.27192	.45494	.35290	.00005	-.00367	4.9194	10.528
Stddev	.00381	.00057	.00188	.00496	.00598	.00268	.00211	.1544	.330
%RSD	6.7677	1.8765	.69040	1.0899	1.6932	5663.3	57.482	3.1388	3.1388

#1	.05364	.03008	.27059	.45143	.34867	-.00184	-.00218	5.0286	10.761
#2	.05903	.03089	.27325	.45844	.35712	.00194	-.00517	4.8102	10.294

Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Elem	Sn1899	Sr4077	Th2837	Ti3349	Ti1908	U_3701	V_2924	Zn2062	Zr3391
Line	189.989 {477}	407.771 {83}	283.730 {119}	334.904 {101}	190.856 {477}	370.152 {91}	292.402 {115}	206.200 {163}	339.198 {99}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.00633	.03845	.00273	.28117	-.00246	.02601	.02097	.79274	.01121
Stddev	.00079	.00015	.00251	.01010	.00484	.08144	.00020	.00225	.00171
%RSD	12.493	.39631	92.059	3.5912	196.95	313.08	.94635	.28333	15.245

#1	.00577	.03834	.00095	.28831	-.00588	.08360	.02083	.79432	.01242
#2	.00689	.03856	.00451	.27403	.00097	-.03158	.02111	.79115	.01000

Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Int. Std.	Y_2243	Y_3600	Y_3774
Line	224.306 {450}	360.073 {94}	377.433 {89}
Units	Cts/S	Cts/S	Cts/S
Avg	2691.0	40247.	1801.3
Stddev	17.9	563.	18.8
%RSD	.66624	1.3988	1.0463

#1	2678.3	39849.	1787.9
#2	2703.7	40645.	1814.6

Sample Name: 280-82954-A-11-A Acquired: 5/18/2016 2:35:18 Type: Unk

Method: 6500_025(v6) Mode: CONC Corr. Factor: 1.000000

User: CRHOADES Prep Date: Custom ID2: Custom ID3:

Comment: 325403 6010C soil Q4

Elem	Ag3280	Al3092	As1890	B_2089	Ba4554	Be3130	Bi2230	Ca3179	Cd2288
Line	328.068 {103}	309.271 {109}	189.042 {478}	208.959 {461}	455.403 { 74}	313.042 {108}	223.061 {451}	317.933 {106}	228.802 {447}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.00214	19.123	.00897	.00409	.05202	-.00021	-.00559	.76953	.00424
Stddev	.00088	.442	.00618	.00094	.00122	.00006	.00531	.00087	.00007
%RSD	41.279	2.3093	68.967	23.064	2.3394	26.366	95.040	.11258	1.5524

#1	.00151	19.435	.01334	.00342	.05288	-.00025	-.00183	.76891	.00429
#2	.00276	18.811	.00459	.00475	.05116	-.00017	-.00934	.77014	.00419

Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Elem	Co2286	Cr2055	Cu3247	Fe2599	K_7664	Li6707	Mg2790	Mn2576	Mo2020
Line	228.616 {447}	205.560 {464}	324.754 {104}	259.940 {130}	766.490 { 44}	670.784 { 50}	279.079 {121}2	257.610 {131}	202.030 {467}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.00055	.01750	.46928	10.346	.12447	-.00505	.46500	.03780	.00068
Stddev	.00078	.00031	.00015	.051	.09850	.00479	.00190	.00025	.00039
%RSD	142.70	1.7617	.03123	.49515	79.135	94.983	.40755	.65731	57.139

#1	.00110	.01772	.46938	10.382	.19411	-.00843	.46366	.03762	.00041
#2	.00000	.01728	.46917	10.310	.05482	-.00166	.46634	.03797	.00096

Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Elem	Na5895	Ni2316	P_1782	Pb2203	S_1820	Sb2068	Se1960	Si2881	SiO2
Line	589.592 { 57}	231.604 {446}	178.284 {489}	220.353 {453}	182.034 {485}	206.833 {463}	196.090 {472}	288.158 {117}	288.158 {117}2
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.02192	.03149	.24990	.48768	.20036	-.00373	W -.00921	4.7684	10.204
Stddev	.01032	.00081	.00200	.00689	.00181	.00048	.00620	.0268	.057
%RSD	47.061	2.5575	.79833	1.4119	.90386	12.934	67.252	.56199	.56199

#1	.02922	.03092	.25131	.49255	.19908	-.00339	-.01359	4.7495	10.164
#2	.01463	.03206	.24849	.48281	.20164	-.00407	-.00483	4.7874	10.245

Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Warn	Chk Pass	Chk Pass
High Limit							5.0000		
Low Limit							-.00500		

Elem	Sn1899	Sr4077	Th2837	Ti3349	Ti1908	U_3701	V_2924	Zn2062	Zr3391
Line	189.989 {477}	407.771 { 83}	283.730 {119}	334.904 {101}	190.856 {477}	370.152 { 91}	292.402 {115}	206.200 {163}	339.198 { 99}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.00568	.00959	.00302	.28722	-.00133	.06756	.02068	.36712	.00959
Stddev	.00039	.00011	.00471	.00825	.00040	.02593	.00013	.00284	.00197
%RSD	6.9286	1.1164	156.05	2.8714	30.181	38.383	.64078	.77336	20.507

#1	.00596	.00967	.00634	.28139	-.00162	.04922	.02077	.36511	.01098
#2	.00540	.00951	-.00031	.29305	-.00105	.08590	.02059	.36913	.00820

Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Int. Std.	Y_2243	Y_3600	Y_3774
Line	224.306 {450}	360.073 { 94}	377.433 { 89}
Units	Cts/S	Cts/S	Cts/S
Avg	2564.1	38586.	1725.5
Stddev	24.7	1192.	67.3
%RSD	.96488	3.0884	3.8977

#1	2581.6	39429.	1677.9
#2	2546.6	37743.	1773.1

Sample Name: 280-82954-A-12-A Acquired: 5/18/2016 2:37:55 Type: Unk

Method: 6500_025(v6) Mode: CONC Corr. Factor: 1.000000

User: CRHOADES Prep Date: Custom ID2: Custom ID3:

Comment: 325403 6010C soil Q4

Elem	Ag3280	Al3092	As1890	B_2089	Ba4554	Be3130	Bi2230	Ca3179	Cd2288
Line	328.068 {103}	309.271 {109}	189.042 {478}	208.959 {461}	455.403 {74}	313.042 {108}	223.061 {451}	317.933 {106}	228.802 {447}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.00237	22.403	.00132	.01708	.09216	.00018	-.00751	.58483	.00546
Stddev	.00016	.729	.00052	.00073	.00272	.00008	.00620	.00410	.00010
%RSD	6.8552	3.2539	39.521	4.2695	2.9479	47.077	82.574	.70053	1.7610

#1	.00249	22.919	.00095	.01657	.09408	.00023	-.01190	.58772	.00539
#2	.00226	21.888	.00168	.01760	.09024	.00012	-.00313	.58193	.00553

Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Elem	Co2286	Cr2055	Cu3247	Fe2599	K_7664	Li6707	Mg2790	Mn2576	Mo2020
Line	228.616 {447}	205.560 {464}	324.754 {104}	259.940 {130}	766.490 {44}	670.784 {50}	279.079 {121}2	257.610 {131}	202.030 {467}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.00069	.01663	.13256	10.757	.20367	.00119	.76447	.07947	-.00006
Stddev	.00019	.00054	.00008	.169	.01389	.00479	.00854	.00031	.00002
%RSD	26.792	3.2457	.06085	1.5731	6.8189	402.41	1.1175	.39177	24.874

#1	.00056	.01625	.13250	10.876	.21349	.00458	.75843	.07925	-.00005
#2	.00083	.01701	.13262	10.637	.19385	-.00220	.77051	.07969	-.00007

Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Elem	Na5895	Ni2316	P_1782	Pb2203	S_1820	Sb2068	Se1960	Si2881	SiO2
Line	589.592 {57}	231.604 {446}	178.284 {489}	220.353 {453}	182.034 {485}	206.833 {463}	196.090 {472}	288.158 {117}	288.158 {117}2
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.04824	.01024	.23195	.17604	.12102	-.00617	-.00293	5.6860	12.168
Stddev	.00962	.00026	.00165	.00190	.00335	.00391	.00428	.0575	.123
%RSD	19.943	2.5860	.71155	1.0783	2.7642	63.334	145.99	1.0106	1.0106

#1	.04144	.01043	.23312	.17738	.11865	-.00340	-.00596	5.7266	12.255
#2	.05504	.01005	.23079	.17470	.12338	-.00893	.00009	5.6453	12.081

Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Elem	Sn1899	Sr4077	Th2837	Ti3349	Ti1908	U_3701	V_2924	Zn2062	Zr3391
Line	189.989 {477}	407.771 {83}	283.730 {119}	334.904 {101}	190.856 {477}	370.152 {91}	292.402 {115}	206.200 {163}	339.198 {99}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.00109	.00716	.00505	.31062	-.00185	.02038	.02468	.24754	.00970
Stddev	.00123	.00016	.00181	.01247	.00241	.02359	.00005	.00026	.00305
%RSD	113.22	2.2846	35.727	4.0144	130.48	115.72	.18381	.10305	31.403

#1	.00022	.00705	.00633	.31943	-.00355	.00370	.02465	.24736	.00754
#2	.00196	.00728	.00378	.30180	-.00014	.03706	.02471	.24772	.01185

Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Int. Std.	Y_2243	Y_3600	Y_3774
Line	224.306 {450}	360.073 {94}	377.433 {89}
Units	Cts/S	Cts/S	Cts/S
Avg	2542.5	39845.	1860.3
Stddev	65.5	420.	65.6
%RSD	2.5769	1.0534	3.5244

#1	2588.8	40142.	1814.0
#2	2496.2	39548.	1906.7

Sample Name: CCVH-3883905 Acquired: 5/18/2016 2:40:33 Type: QC
Method: 6500_025(v6) Mode: CONC Corr. Factor: 1.000000
User: CRHOADES Prep Date: Custom ID2: Custom ID3:
Comment:

Elem	Ag3280	Al3092	As1890	B_2089	Ba4554	Be3130	Bi2230	Ca3179	Cd2288	Co2286	Cr2055
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	-0.00759	51.650	-0.00481	.00342	-0.00038	.00009	W .92795	-0.01006	-0.00041	-0.00135	-0.00031
Stddev	.00000	2.458	.00056	.00034	.00060	.00010	.01457	.00686	.00014	.00010	.00019
%RSD	.04548	4.7596	11.749	10.016	158.41	108.08	1.5705	68.206	34.782	7.4995	61.440

#1	-0.00759	53.389	-0.00441	.00367	.00005	.00016	.93826	-.01491	-.00051	-.00128	-.00018
#2	-0.00758	49.912	-0.00521	.00318	-.00081	.00002	.91765	-.00521	-.00031	-.00143	-.00045

Check ?	None	Chk Pass	None	None	None	None	Chk Warn	None	None	None	None
Value							1.0000				
Range							-5.0000%				

Elem	Cu3247	Fe2714	K_7664	Li6707	Mg2790	Mn2576	Mo2020	Na8183	Ni2316	P_1782	Pb2203
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	-0.01610	54.850	-0.27387	-0.01324	.01081	-0.00144	-0.00267	F 278.85	.00123	.00556	.00048
Stddev	.00038	1.161	.00348	.00014	.00348	.00002	.00054	6.32	.00021	.00020	.00011
%RSD	2.3560	2.1160	1.2723	1.0262	32.211	1.3264	20.360	2.2654	17.094	3.6346	23.589

#1	-0.01637	55.671	-.27141	-.01314	.01327	-.00146	-.00229	283.31	.00138	.00542	.00040
#2	-0.01583	54.030	-.27633	-.01333	.00834	-.00143	-.00306	274.38	.00109	.00570	.00057

Check ?	None	Chk Pass	None	None	None	None	None	Chk Fail	None	None	None
Value								250.00			
Range								10.490%			

Elem	S_1820	Sb2068	Se1960	Si2881	SiO2	Sn1899	Sr4077	Th2837	Ti3349	Ti1908	U_3701
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	4.8707	-0.01296	-0.00802	-0.03405	-0.07287	-0.00100	-0.00018	W 4.4861	.00300	-0.00332	W 9.2375
Stddev	.0274	.00638	.00731	.01675	.03584	.00032	.00010	.0049	.00013	.00071	.0968
%RSD	.56335	49.219	91.212	49.183	49.183	32.446	58.330	.10924	4.4126	21.266	1.0480

#1	4.8901	-.01747	-.01319	-.02221	-.04753	-.00122	-.00010	4.4895	.00309	-.00382	9.3059
#2	4.8513	-.00845	-.00285	-.04589	-.09821	-.00077	-.00025	4.4826	.00290	-.00282	9.1690

Check ?	Chk Pass	None	None	None	None	None	None	Chk Warn	None	None	Chk Warn
Value								5.0000			10.000
Range								-5.0000%			-5.0000%

Elem	V_2924	Zn2062	Zr3391
Units	ppm	ppm	ppm
Avg	.01118	.00140	-.13062
Stddev	.00064	.00062	.00250
%RSD	5.7046	44.287	1.9177

#1	.01163	.00184	-.13239
#2	.01073	.00096	-.12885

Check ?	None	None	None
Value			
Range			

Int. Std.	Y_2243	Y_3600	Y_3774
Units	Cts/S	Cts/S	Cts/S
Avg	2516.0	36212.	1784.4
Stddev	37.9	160.	64.6
%RSD	1.5059	.44095	3.6199

#1	2542.8	36099.	1738.7
#2	2489.3	36325.	1830.1

Sample Name: CCV-3888422 Acquired: 5/18/2016 2:43:09 Type: QC
Method: 6500_025(v6) Mode: CONC Corr. Factor: 1.000000
User: CRHOADES Prep Date: Custom ID2: Custom ID3:
Comment:

Elem	Ag3280	Al1670	As1890	B_2089	Ba4554	Be3130	Bi2230	Ca3179	Cd2288	Co2286	Cr2055	Cu3247
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.47082	.46143	F .87702	.47696	.48198	.49944	-.00318	4.7141	.48309	.49279	.50489	F .42991
Stddev	.00034	.00899	.01702	.01212	.01858	.01686	.00360	.1578	.00091	.00810	.00873	.00006
%RSD	.07180	1.9483	1.9404	2.5404	3.8544	3.3749	113.14	3.3469	.18909	1.6446	1.7288	.01449
#1	.47106	.45507	.86499	.46839	.49512	.51136	-.00064	4.8256	.48244	.48706	.49872	.42987
#2	.47058	.46778	.88906	.48553	.46884	.48752	-.00572	4.6025	.48374	.49852	.51106	.42996
Check ?	Chk Pass	Chk Pass	Chk Fail	Chk Pass	Chk Pass	Chk Pass	None	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Fail
Value			1.0000									.50000
Range			-10.490%									-10.490%
Elem	Fe2599	K_7664	Li6707	Mg2790	Mn2576	Mo2020	Na5895	Ni2316	P_1782	Pb2203	S_1820	Sb2068
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	2.5837	49.649	.97808	18.309	F .44681	.49372	5.4022	.48012	.94997	.97275	-.08302	.93775
Stddev	.0699	1.897	.01164	.027	.00096	.00709	.0706	.00812	.00792	.01468	.00386	.00934
%RSD	2.7050	3.8207	1.1904	.14868	.21536	1.4370	1.3066	1.6915	.83327	1.5091	4.6544	.99601
#1	2.6331	50.990	.98631	18.289	.44613	.48871	5.4521	.47438	.94437	.96237	-.08575	.93115
#2	2.5343	48.308	.96985	18.328	.44749	.49874	5.3522	.48586	.95557	.98313	-.08028	.94436
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Fail	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	None	Chk Pass
Value					.50000							
Range					-10.490%							
Elem	Se1960	Si2881	SiO2	Sn1899	Sr4077	Th2837	Ti3349	Ti1908	U_3701	V_2924	Zn2062	Zr3391
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	F .88268	5.1014	10.917	.99162	.50266	.00127	F .43807	1.0065	.00597	.46919	F .43708	.46581
Stddev	.01898	.0835	.179	.01725	.01908	.00100	.00077	.0113	.04023	.00228	.00160	.00757
%RSD	2.1497	1.6370	1.6370	1.7398	3.7956	79.022	.17605	1.1210	673.88	.48645	.36492	1.6257
#1	.86927	5.1604	11.043	.97942	.51615	.00056	.43752	.99853	.03442	.46758	.43821	.46045
#2	.89610	5.0423	10.791	1.0038	.48917	.00198	.43861	1.0145	-.02248	.47081	.43596	.47116
Check ?	Chk Fail	Chk Pass	Chk Pass	Chk Pass	Chk Pass	None	Chk Fail	Chk Pass	None	Chk Pass	Chk Fail	Chk Pass
Value	1.0000						.50000				.50000	
Range	-10.490%						-10.490%				-10.490%	
Int. Std.	Y_2243	Y_3600	Y_3774									
Units	Cts/S	Cts/S	Cts/S									
Avg	2489.6	36571.	1685.4									
Stddev	63.8	200.	122.4									
%RSD	2.5607	.54821	7.2639									
#1	2534.7	36713.	1598.8									
#2	2444.5	36429.	1771.9									

Sample Name: CCB Acquired: 5/18/2016 2:45:40 Type: QC
 Method: 6500_025(v6) Mode: CONC Corr. Factor: 1.000000
 User: CRHOADES Prep Date: Custom ID2: Custom ID3:
 Comment:

Elem	Ag3280	Al1670	As1890	B_2089	Ba4554	Be3130	Bi2230	Ca3179	Cd2288	Co2286	Cr2055
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.00191	.00131	.00101	.00238	-.00034	-.00032	-.00072	-.00232	-.00002	.00000	-.00030
Stddev	.00082	.00005	.00344	.00071	.00049	.00027	.00443	.01056	.00021	.00008	.00051
%RSD	42.638	4.0706	341.86	30.004	141.75	83.953	616.32	454.39	1289.7	7829.6	172.50

#1	.00134	.00127	-.00143	.00288	-.00069	-.00013	.00242	.00514	-.00016	.00006	.00007
#2	.00249	.00135	.00344	.00187	.00000	-.00050	-.00386	-.00979	.00013	-.00006	-.00066

Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit											
Low Limit											

Elem	Cu3247	Fe2599	K_7664	Li6707	Mg2790	Mn2576	Mo2020	Na5895	Ni2316	P_1782	Pb2203
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	-.00095	-.00151	-.30313	F -.01365	-.00237	.00010	.00077	-.06501	.00009	.00164	-.00035
Stddev	.00114	.00187	.03829	.00303	.00531	.00005	.00046	.01513	.00019	.00002	.00212
%RSD	119.89	124.07	12.630	22.223	224.28	53.964	60.102	23.277	208.66	1.2161	612.62

#1	-.00175	-.00283	-.33020	-.01579	.00139	.00014	.00044	-.05431	-.00004	.00162	.00115
#2	-.00014	-.00019	-.27606	-.01150	-.00612	.00006	.00109	-.07571	.00023	.00165	-.00184

Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Fail	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit				.01000							
Low Limit				-.01000							

Elem	S_1820	Sb2068	Se1960	Si2881	SiO2	Sn1899	Sr4077	Th2837	Ti3349	Ti1908	U_3701
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	-.08206	W .00121	-.00584	-.01947	-.04166	-.00205	-.00048	-.00254	.00048	.00270	.08175
Stddev	.00389	.00070	.00344	.00705	.01508	.00100	.00005	.00143	.00003	.00238	.01162
%RSD	4.7370	57.834	58.900	36.193	36.193	48.987	11.440	56.193	7.0193	88.367	14.209

#1	-.07931	.00071	-.00341	-.02445	-.05233	-.00134	-.00044	-.00354	.00046	.00101	.08996
#2	-.08481	.00170	-.00827	-.01449	-.03100	-.00276	-.00051	-.00153	.00051	.00438	.07354

Check ?	Chk Pass	Chk Warn	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit		.00100									
Low Limit		-.00100									

Elem	V_2924	Zn2062	Zr3391
Units	ppm	ppm	ppm
Avg	.00043	-.00043	-.00245
Stddev	.00020	.00075	.00428
%RSD	46.888	174.88	175.18

#1	.00058	.00010	-.00547
#2	.00029	-.00096	.00058

Check ?	Chk Pass	Chk Pass	Chk Pass
High Limit			
Low Limit			

Int. Std.	Y_2243	Y_3600	Y_3774
Units	Cts/S	Cts/S	Cts/S
Avg	2532.3	37186.	1616.1
Stddev	14.2	2.	8.7
%RSD	.56084	.00663	.54138

#1	2522.2	37185.	1622.3
#2	2542.3	37188.	1609.9

Sample Name: CCVL-3894681 Acquired: 5/18/2016 2:48:02 Type: QC
Method: 6500_025(v6) Mode: CONC Corr. Factor: 1.000000
User: CRHOADES Prep Date: Custom ID2: Custom ID3:
Comment:

Elem	Ag3280	Al1670	As1890	B_2089	Ba4554	Be3130	Bi2230	Ca3179	Cd2288	Co2286	Cr2055
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.01110	.09454	.01694	.09425	.00862	F .00063	.09709	.18913	.00520	.00954	.00924
Stddev	.00076	.00038	.00768	.00167	.00002	.00022	.00417	.00404	.00005	.00019	.00005
%RSD	6.8562	.40312	45.349	1.7668	.23151	35.323	4.2904	2.1359	.89582	2.0178	.58413
#1	.01056	.09427	.02238	.09307	.00861	.00047	.10003	.19199	.00517	.00968	.00920
#2	.01164	.09481	.01151	.09542	.00864	.00079	.09414	.18627	.00524	.00940	.00928
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Fail	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Value						.00100					
Range						-30.000%					
Elem	Cu3247	Fe2599	K_7664	Li6707	Mg2790	Mn2576	Mo2020	Na5895	Ni2316	P_1782	Pb2203
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.01215	F .13642	2.8129	F -.00402	.20024	.00979	.01874	1.0545	.03878	2.6943	.00737
Stddev	.00004	.01137	.0245	.00217	.00937	.00022	.00022	.0361	.00044	.0031	.00037
%RSD	.30107	8.3330	.86937	53.933	4.6805	2.1990	1.1845	3.4228	1.1431	.11456	5.0309
#1	.01212	.12838	2.7956	-.00249	.19361	.00964	.01859	1.0290	.03847	2.6964	.00763
#2	.01217	.14446	2.8302	-.00556	.20687	.00994	.01890	1.0800	.03909	2.6921	.00711
Check ?	Chk Pass	Chk Fail	Chk Pass	Chk Fail	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Value		.10000		.01000							
Range		30.000%		-30.000%							
Elem	S_1820	Sb2068	Se1960	Si2881	SiO2	Sn1899	Sr4077	Th2837	Ti3349	Ti1908	U_3701
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	-.08760	.02046	F .00600	.43663	.93438	.09766	.01014	.01421	.01015	.01185	F .11118
Stddev	.00240	.00241	.00301	.07423	.15884	.00213	.00022	.00048	.00056	.00396	.04329
%RSD	2.7350	11.787	50.122	17.000	17.000	2.1797	2.1320	3.3565	5.5336	33.408	38.933
#1	-.08929	.01875	.00812	.48911	1.0467	.09615	.01029	.01455	.00975	.01465	.08057
#2	-.08590	.02216	.00387	.38414	.82206	.09916	.00998	.01388	.01055	.00905	.14179
Check ?	None	Chk Pass	Chk Fail	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Fail
Value			.01500								.06000
Range			-30.000%								30.000%
Elem	V_2924	Zn2062	Zr3391								
Units	ppm	ppm	ppm								
Avg	.00919	.01833	.01194								
Stddev	.00057	.00064	.00487								
%RSD	6.1582	3.4901	40.825								
#1	.00879	.01788	.00849								
#2	.00959	.01879	.01539								
Check ?	Chk Pass	Chk Pass	Chk Pass								
Value											
Range											
Int. Std.	Y_2243	Y_3600	Y_3774								
Units	Cts/S	Cts/S	Cts/S								
Avg	2473.6	36953.	1673.4								
Stddev	31.2	183.	54.8								
%RSD	1.2594	.49560	3.2737								
#1	2451.6	37083.	1712.2								
#2	2495.7	36824.	1634.7								

Sample Name: 280-82954-A-20-A Acquired: 5/18/2016 2:50:41 Type: Unk

Method: 6500_025(v6) Mode: CONC Corr. Factor: 1.000000

User: CRHOADES Prep Date: Custom ID2: Custom ID3:

Comment: 325403 6010C soil Q4

Elem	Ag3280	Al3092	As1890	B_2089	Ba4554	Be3130	Bi2230	Ca3179	Cd2288
Line	328.068 {103}	309.271 {109}	189.042 {478}	208.959 {461}	455.403 { 74}	313.042 {108}	223.061 {451}	317.933 {106}	228.802 {447}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.00245	21.679	.00287	.00433	.07180	.00014	.00016	.69973	.00443
Stddev	.00032	.372	.00144	.00004	.00232	.00000	.00081	.00944	.00002
%RSD	12.999	1.7166	49.979	.87525	3.2335	2.0868	520.34	1.3493	.43194

#1	.00268	21.943	.00389	.00436	.07344	.00014	-.00042	.70640	.00445
#2	.00223	21.416	.00186	.00430	.07016	.00014	.00073	.69305	.00442

Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Elem	Co2286	Cr2055	Cu3247	Fe2599	K_7664	Li6707	Mg2790	Mn2576	Mo2020
Line	228.616 {447}	205.560 {464}	324.754 {104}	259.940 {130}	766.490 { 44}	670.784 { 50}	279.079 {121}2	257.610 {131}	202.030 {467}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.00134	.01851	.31111	12.152	.14807	-.00488	.57219	.12173	.00120
Stddev	.00007	.00005	.00116	.058	.02320	.00370	.00287	.00063	.00042
%RSD	5.4437	.24946	.37223	.47680	15.670	75.871	.50134	.51497	34.983

#1	.00129	.01854	.31192	12.111	.13166	-.00750	.57016	.12217	.00091
#2	.00139	.01847	.31029	12.193	.16448	-.00226	.57422	.12129	.00150

Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Elem	Na5895	Ni2316	P_1782	Pb2203	S_1820	Sb2068	Se1960	Si2881	SiO2
Line	589.592 { 57}	231.604 {446}	178.284 {489}	220.353 {453}	182.034 {485}	206.833 {463}	196.090 {472}	288.158 {117}	288.158 {117}2
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.00030	.02079	.26713	.29108	.19236	-.00184	-.00430	4.1285	8.8349
Stddev	.03009	.00018	.00038	.00020	.00363	.00401	.00492	.0156	.0333
%RSD	9987.6	.88852	.14307	.06803	1.8860	217.94	114.56	.37752	.37752

#1	.02158	.02092	.26740	.29122	.19493	-.00468	-.00778	4.1174	8.8113
#2	-.02097	.02066	.26686	.29094	.18980	.00100	-.00082	4.1395	8.8585

Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Elem	Sn1899	Sr4077	Th2837	Ti3349	Ti1908	U_3701	V_2924	Zn2062	Zr3391
Line	189.989 {477}	407.771 { 83}	283.730 {119}	334.904 {101}	190.856 {477}	370.152 { 91}	292.402 {115}	206.200 {163}	339.198 { 99}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.01403	.00691	.00115	.28647	-.00355	.11154	.02408	.59258	.01098
Stddev	.00095	.00041	.00157	.00511	.00136	.02981	.00007	.00347	.00130
%RSD	6.8048	5.8842	137.37	1.7838	38.319	26.729	.30394	.58637	11.876

#1	.01470	.00720	.00226	.29008	-.00259	.13263	.02403	.59503	.01006
#2	.01335	.00662	.00003	.28285	-.00452	.09046	.02413	.59012	.01190

Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Int. Std.	Y_2243	Y_3600	Y_3774
Line	224.306 {450}	360.073 { 94}	377.433 { 89}
Units	Cts/S	Cts/S	Cts/S
Avg	2579.6	38170.	1697.8
Stddev	25.1	75.	44.6
%RSD	.97297	.19685	2.6268

#1	2597.4	38223.	1666.2
#2	2561.9	38117.	1729.3

Sample Name: 280-82954-A-21-A Acquired: 5/18/2016 2:53:17 Type: Unk

Method: 6500_025(v6) Mode: CONC Corr. Factor: 1.000000

User: CRHOADES Prep Date: Custom ID2: Custom ID3:

Comment: 325403 6010C soil Q4

Elem	Ag3280	Al3092	As1890	B_2089	Ba4554	Be3130	Bi2230	Ca3179	Cd2288
Line	328.068 {103}	309.271 {109}	189.042 {478}	208.959 {461}	455.403 {74}	313.042 {108}	223.061 {451}	317.933 {106}	228.802 {447}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.00234	19.369	.00161	.00345	.06700	-.00001	-.00533	.41163	.00454
Stddev	.00005	.430	.00424	.00053	.00164	.00004	.00469	.00678	.00026
%RSD	1.9598	2.2191	263.87	15.215	2.4450	491.44	88.009	1.6471	5.7689

#1	.00231	19.673	.00460	.00308	.06815	.00002	-.00864	.40683	.00436
#2	.00237	19.065	-.00139	.00383	.06584	-.00004	-.00201	.41642	.00473

Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Elem	Co2286	Cr2055	Cu3247	Fe2599	K_7664	Li6707	Mg2790	Mn2576	Mo2020
Line	228.616 {447}	205.560 {464}	324.754 {104}	259.940 {130}	766.490 {44}	670.784 {50}	279.079 {121}2	257.610 {131}	202.030 {467}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.00063	.02176	.45691	11.200	-.01726	-.00208	.46215	.06096	.00137
Stddev	.00043	.00110	.00041	.060	.06280	.00011	.00583	.00014	.00002
%RSD	68.477	5.0574	.09040	.53575	363.87	5.3064	1.2623	.22844	1.7318

#1	.00093	.02098	.45662	11.243	-.06166	-.00216	.46627	.06106	.00135
#2	.00032	.02254	.45721	11.158	.02715	-.00200	.45802	.06086	.00138

Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Elem	Na5895	Ni2316	P_1782	Pb2203	S_1820	Sb2068	Se1960	Si2881	SiO2
Line	589.592 {57}	231.604 {446}	178.284 {489}	220.353 {453}	182.034 {485}	206.833 {463}	196.090 {472}	288.158 {117}	288.158 {117}2
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.00412	.02812	.24374	.55510	.22417	.00117	W -.00737	5.1470	11.015
Stddev	.00122	.00185	.00774	.02268	.01361	.00287	.00896	.0083	.018
%RSD	29.654	6.5709	3.1776	4.0853	6.0716	244.54	121.47	.16071	.16071

#1	.00326	.02681	.23826	.53906	.21454	-.00086	-.00104	5.1412	11.002
#2	.00498	.02942	.24922	.57113	.23379	.00320	-.01370	5.1529	11.027

Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Warn	Chk Pass	Chk Pass
High Limit							5.0000		
Low Limit							-.00500		

Elem	Sn1899	Sr4077	Th2837	Ti3349	Ti1908	U_3701	V_2924	Zn2062	Zr3391
Line	189.989 {477}	407.771 {83}	283.730 {119}	334.904 {101}	190.856 {477}	370.152 {91}	292.402 {115}	206.200 {163}	339.198 {99}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.00557	.00967	.00474	.31165	.00070	.04438	.02048	.39120	.00940
Stddev	.00210	.00002	.00068	.01040	.00459	.00496	.00095	.00054	.00016
%RSD	37.667	.23994	14.361	3.3355	655.13	11.166	4.6488	.13897	1.7005

#1	.00408	.00969	.00522	.30430	-.00254	.04088	.02116	.39082	.00928
#2	.00705	.00966	.00426	.31900	.00394	.04789	.01981	.39159	.00951

Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Int. Std.	Y_2243	Y_3600	Y_3774
Line	224.306 {450}	360.073 {94}	377.433 {89}
Units	Cts/S	Cts/S	Cts/S
Avg	2637.3	39104.	1742.7
Stddev	108.3	90.	65.0
%RSD	4.1057	.23124	3.7274

#1	2713.8	39168.	1696.8
#2	2560.7	39040.	1788.7

Sample Name: 280-82954-A-5-A Acquired: 5/18/2016 2:55:54 Type: Unk
Method: 6500_025(v6) Mode: CONC Corr. Factor: 1.000000
User: CRHOADES Prep Date: Custom ID2: Custom ID3:
Comment: 325403 6010C soil Q4

Elem	Ag3280	Al3092	As1890	B_2089	Ba4554	Be3130	Bi2230	Ca3179	Cd2288
Line	328.068 {103}	309.271 {109}	189.042 {478}	208.959 {461}	455.403 {74}	313.042 {108}	223.061 {451}	317.933 {106}	228.802 {447}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.00194	19.290	.00853	.00364	.06174	-.00006	-.00440	.87982	.00496
Stddev	.00034	.240	.00239	.00045	.00099	.00034	.00528	.00799	.00016
%RSD	17.293	1.2419	27.994	12.234	1.5994	541.53	120.12	.90821	3.1851

#1	.00170	19.121	.00684	.00396	.06105	.00018	-.00813	.87417	.00484
#2	.00217	19.460	.01022	.00333	.06244	-.00031	-.00066	.88547	.00507

Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Elem	Co2286	Cr2055	Cu3247	Fe2599	K_7664	Li6707	Mg2790	Mn2576	Mo2020
Line	228.616 {447}	205.560 {464}	324.754 {104}	259.940 {130}	766.490 {44}	670.784 {50}	279.079 {121}2	257.610 {131}	202.030 {467}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.00085	.01962	.22569	11.044	.05899	-.00335	.48962	.05046	-.00016
Stddev	.00015	.00067	.00068	.047	.03818	.00095	.00408	.00008	.00035
%RSD	17.162	3.4108	.30199	.42793	64.720	28.503	.83347	.15645	219.56

#1	.00096	.01914	.22521	11.078	.03200	-.00267	.49251	.05051	-.00041
#2	.00075	.02009	.22617	11.011	.08599	-.00402	.48674	.05040	.00009

Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Elem	Na5895	Ni2316	P_1782	Pb2203	S_1820	Sb2068	Se1960	Si2881	SiO2
Line	589.592 {57}	231.604 {446}	178.284 {489}	220.353 {453}	182.034 {485}	206.833 {463}	196.090 {472}	288.158 {117}	288.158 {117}2
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.03716	.00887	.25598	.28621	.40480	-.00088	-.00317	4.0259	8.6155
Stddev	.01301	.00024	.00568	.00200	.00693	.00029	.00405	.0799	.1709
%RSD	35.011	2.7519	2.2207	.69938	1.7125	32.924	127.77	1.9842	1.9842

#1	.02796	.00904	.25196	.28479	.39990	-.00068	-.00603	4.0824	8.7364
#2	.04635	.00870	.26000	.28762	.40970	-.00109	-.00031	3.9695	8.4946

Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Elem	Sn1899	Sr4077	Th2837	Ti3349	Ti1908	U_3701	V_2924	Zn2062	Zr3391
Line	189.989 {477}	407.771 {83}	283.730 {119}	334.904 {101}	190.856 {477}	370.152 {91}	292.402 {115}	206.200 {163}	339.198 {99}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.00355	.00735	.00413	.20427	-.00267	.06563	.01800	.31414	.00611
Stddev	.00080	.00007	.00056	.00382	.00410	.08330	.00013	.00439	.00006
%RSD	22.570	.99584	13.464	1.8715	153.95	126.92	.74512	1.3980	1.0171

#1	.00298	.00740	.00452	.20156	.00024	.00673	.01790	.31103	.00607
#2	.00411	.00730	.00373	.20697	-.00557	.12453	.01809	.31724	.00615

Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Int. Std.	Y_2243	Y_3600	Y_3774
Line	224.306 {450}	360.073 {94}	377.433 {89}
Units	Cts/S	Cts/S	Cts/S
Avg	2523.9	37783.	1656.7
Stddev	1.7	4.	9.5
%RSD	.06799	.00969	.57412

#1	2525.2	37780.	1663.5
#2	2522.7	37785.	1650.0

Sample Name: 280-82954-A-5-B MS Acquired: 5/18/2016 2:58:32 Type: Unk
Method: 6500_025(v6) Mode: CONC Corr. Factor: 1.000000
User: CRHOADES Prep Date: Custom ID2: Custom ID3:
Comment: 325403 6010C soil Q4

Elem	Ag3280	Al3092	As1890	B_2089	Ba4554	Be3130	Bi2230	Ca3179	Cd2288
Line	328.068 {103}	309.271 {109}	189.042 {478}	208.959 {461}	455.403 {74}	313.042 {108}	223.061 {451}	317.933 {106}	228.802 {447}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.04394	27.147	.85893	.90206	1.9191	.04734	F 1.8191	45.370	.09793
Stddev	.00078	.340	.00302	.00490	.0213	.00053	.0031	.512	.00007
%RSD	1.7720	1.2522	.35147	.54323	1.1087	1.1252	.16810	1.1279	.06663

#1	.04339	27.387	.86106	.89860	1.9341	.04772	1.8169	45.732	.09788
#2	.04449	26.906	.85679	.90553	1.9040	.04696	1.8213	45.008	.09797

Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Fail	Chk Pass	Chk Pass
High Limit							.10000		
Low Limit							-.10000		

Elem	Co2286	Cr2055	Cu3247	Fe2599	K_7664	Li6707	Mg2790	Mn2576	Mo2020
Line	228.616 {447}	205.560 {464}	324.754 {104}	259.940 {130}	766.490 {44}	670.784 {50}	279.079 {121}2	257.610 {131}	202.030 {467}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.45539	.21237	.44332	11.984	48.199	.92081	44.342	.46883	.97550
Stddev	.00193	.00014	.00182	.057	.508	.00541	.046	.00008	.00405
%RSD	.42272	.06799	.40941	.47815	1.0545	.58767	.10267	.01761	.41544

#1	.45675	.21227	.44204	12.024	48.558	.91699	44.375	.46877	.97837
#2	.45402	.21248	.44461	11.943	47.839	.92464	44.310	.46888	.97264

Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Elem	Na8183	Ni2316	P_1782	Pb2203	S_1820	Sb2068	Se1960	Si2881	SiO2
Line	818.326 {41}	231.604 {446}	178.284 {489}	220.353 {453}	182.034 {485}	206.833 {463}	196.090 {472}	288.158 {117}	288.158 {117}2
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	57.636	.45514	W 9.3027	.79031	2.3783	.45691	1.7207	7.1112	15.218
Stddev	.971	.00022	.0067	.00362	.0167	.00305	.0276	.0135	.029
%RSD	1.6840	.04755	.07221	.45807	.70297	.66806	1.6041	.18964	.18964

#1	56.950	.45499	9.2979	.78775	2.3665	.45907	1.7402	7.1016	15.198
#2	58.322	.45530	9.3074	.79286	2.3902	.45475	1.7012	7.1207	15.238

Check ?	Chk Pass	Chk Pass	Chk Warn	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit			2.0000						
Low Limit			-1.0000						

Elem	Sn1899	Sr4077	Th2837	Ti3349	Ti1908	U_3701	V_2924	Zn2062	Zr3391
Line	189.989 {477}	407.771 {83}	283.730 {119}	334.904 {101}	190.856 {477}	370.152 {91}	292.402 {115}	206.200 {163}	339.198 {99}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	1.8901	.96033	.86683	1.2443	1.7087	1.7740	.45929	.75692	.43582
Stddev	.0161	.01091	.00171	.0028	.0720	.0538	.00134	.00045	.00021
%RSD	.85015	1.1362	.19733	.22373	4.2114	3.0330	.29214	.05904	.04817

#1	1.9015	.96805	.86804	1.2462	1.7596	1.7360	.46024	.75724	.43596
#2	1.8787	.95262	.86562	1.2423	1.6578	1.8120	.45834	.75660	.43567

Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Int. Std.	Y_2243	Y_3600	Y_3774						
Line	224.306 {450}	360.073 {94}	377.433 {89}						
Units	Cts/S	Cts/S	Cts/S						
Avg	2462.5	36100.	1646.4						
Stddev	23.8	220.	18.0						
%RSD	.96462	.60827	1.0912						

#1	2445.8	35945.	1633.7						
#2	2479.3	36255.	1659.1						

Sample Name: 280-82954-A-5-C MSD Acquired: 5/18/2016 3:00:58 Type: Unk
Method: 6500_025(v6) Mode: CONC Corr. Factor: 1.000000
User: CRHOADES Prep Date: Custom ID2: Custom ID3:
Comment: 325403 6010C soil Q4

Elem	Ag3280	Al3092	As1890	B_2089	Ba4554	Be3130	Bi2230	Ca3179	Cd2288
Line	328.068 {103}	309.271 {109}	189.042 {478}	208.959 {461}	455.403 {74}	313.042 {108}	223.061 {451}	317.933 {106}	228.802 {447}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.04636	37.227	.87183	.92861	1.9432	.04798	F 1.8604	45.299	.10035
Stddev	.00087	.674	.00047	.00024	.0379	.00073	.0184	.975	.00061
%RSD	1.8809	1.8107	.05397	.02553	1.9501	1.5146	.98858	2.1522	.61166

#1	.04574	37.704	.87217	.92878	1.9700	.04850	1.8734	45.988	.10078
#2	.04698	36.750	.87150	.92844	1.9164	.04747	1.8474	44.609	.09992

Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Fail	Chk Pass	Chk Pass
High Limit							.10000		
Low Limit							-.10000		

Elem	Co2286	Cr2055	Cu3247	Fe2599	K_7664	Li6707	Mg2790	Mn2576	Mo2020
Line	228.616 {447}	205.560 {464}	324.754 {104}	259.940 {130}	766.490 {44}	670.784 {50}	279.079 {121}2	257.610 {131}	202.030 {467}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.46222	.22347	.57541	14.205	48.571	.92728	45.369	.47800	.99728
Stddev	.00018	.00083	.00106	.248	1.007	.01218	.108	.00154	.00438
%RSD	.03880	.37207	.18467	1.7461	2.0724	1.3135	.23813	.32159	.43935

#1	.46234	.22405	.57616	14.381	49.283	.93590	45.293	.47691	1.0004
#2	.46209	.22288	.57466	14.030	47.859	.91867	45.446	.47909	.99418

Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Elem	Na8183	Ni2316	P_1782	Pb2203	S_1820	Sb2068	Se1960	Si2881	SiO2
Line	818.326 {41}	231.604 {446}	178.284 {489}	220.353 {453}	182.034 {485}	206.833 {463}	196.090 {472}	288.158 {117}	288.158 {117}2
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	55.779	.46487	W 9.5396	1.0449	2.5130	.47993	1.7877	8.4115	18.001
Stddev	.524	.00156	.0269	.0006	.0021	.00108	.0269	.0535	.115
%RSD	.93947	.33550	.28151	.06212	.08268	.22557	1.5051	.63611	.63611

#1	56.149	.46597	9.5586	1.0454	2.5115	.48069	1.8068	8.3737	17.920
#2	55.408	.46377	9.5206	1.0444	2.5145	.47916	1.7687	8.4494	18.082

Check ?	Chk Pass	Chk Pass	Chk Warn	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit			2.0000						
Low Limit			-1.0000						

Elem	Sn1899	Sr4077	Th2837	Ti3349	Ti1908	U_3701	V_2924	Zn2062	Zr3391
Line	189.989 {477}	407.771 {83}	283.730 {119}	334.904 {101}	190.856 {477}	370.152 {91}	292.402 {115}	206.200 {163}	339.198 {99}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	1.9452	.96142	.87763	1.3603	1.7712	1.8282	.47289	.90156	.45648
Stddev	.0289	.01755	.00126	.0163	.0894	.0084	.00109	.00880	.00278
%RSD	1.4868	1.8252	.14335	1.1988	5.0459	.46028	.23008	.97585	.60958

#1	1.9657	.97383	.87675	1.3719	1.8344	1.8222	.47213	.89534	.45451
#2	1.9248	.94902	.87852	1.3488	1.7080	1.8341	.47366	.90778	.45845

Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Int. Std.	Y_2243	Y_3600	Y_3774						
Line	224.306 {450}	360.073 {94}	377.433 {89}						
Units	Cts/S	Cts/S	Cts/S						
Avg	2620.0	39008.	1806.9						
Stddev	1.3	316.	39.2						
%RSD	.04899	.81110	2.1686						

#1	2620.9	39232.	1779.2						
#2	2619.1	38784.	1834.6						

Sample Name: CCVH-3883905 Acquired: 5/18/2016 3:03:24 Type: QC
Method: 6500_025(v6) Mode: CONC Corr. Factor: 1.000000
User: CRHOADES Prep Date: Custom ID2: Custom ID3:
Comment:

Elem	Ag3280	Al3092	As1890	B_2089	Ba4554	Be3130	Bi2230	Ca3179	Cd2288	Co2286	Cr2055
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	-0.00636	50.826	.00126	.00858	-0.00086	-0.00021	W .92909	-0.00265	-0.00066	-0.00063	-0.00027
Stddev	.00076	1.077	.00399	.00022	.00020	.00014	.01127	.00466	.00039	.00003	.00021
%RSD	12.001	2.1190	317.21	2.5557	23.766	66.783	1.2128	175.83	58.802	4.9861	75.058
#1	-.00582	50.065	-.00156	.00843	-.00100	-.00011	.93706	-.00595	-.00039	-.00065	-.00013
#2	-.00690	51.588	.00408	.00874	-.00071	-.00031	.92113	.00064	-.00094	-.00061	-.00042
Check ?	None	Chk Pass	None	None	None	None	Chk Warn	None	None	None	None
Value							1.0000				
Range							-5.0000%				
Elem	Cu3247	Fe2714	K_7664	Li6707	Mg2790	Mn2576	Mo2020	Na8183	Ni2316	P_1782	Pb2203
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	-0.01589	54.535	-1.14525	-0.00890	.02776	-0.00199	.00232	F 278.07	.00105	.00951	-0.00185
Stddev	.00049	1.083	.10087	.00321	.01299	.00020	.00091	3.66	.00054	.00019	.00106
%RSD	3.0777	1.9859	69.442	36.098	46.776	9.9360	39.328	1.3152	51.669	1.9911	57.324
#1	-.01624	53.770	-.21658	-.00663	.01858	-.00213	.00167	275.48	.00143	.00964	-.00110
#2	-.01555	55.301	-.07393	-.01117	.03695	-.00185	.00296	280.65	.00067	.00937	-.00260
Check ?	None	Chk Pass	None	None	None	None	None	Chk Fail	None	None	None
Value								250.00			
Range								10.490%			
Elem	S_1820	Sb2068	Se1960	Si2881	SiO2	Sn1899	Sr4077	Th2837	Ti3349	Ti1908	U_3701
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	4.8652	-0.01210	.00104	-0.04795	-1.10260	-0.00035	.00005	W 4.4943	.00359	.03492	W 9.3354
Stddev	.0211	.00075	.00088	.02047	.04380	.00053	.00010	.0295	.00005	.00796	.0111
%RSD	.43448	6.2229	84.606	42.684	42.684	149.14	204.30	.65710	1.3589	22.793	.11871
#1	4.8802	-.01263	.00167	-.06242	-.13357	.00002	-.00002	4.5151	.00355	.02929	9.3433
#2	4.8503	-.01157	.00042	-.03347	-.07164	-.00073	.00012	4.4734	.00362	.04055	9.3276
Check ?	Chk Pass	None	None	None	None	None	None	Chk Warn	None	None	Chk Warn
Value								5.0000			10.000
Range								-5.0000%			-5.0000%
Elem	V_2924	Zn2062	Zr3391								
Units	ppm	ppm	ppm								
Avg	.01229	.00019	-.13013								
Stddev	.00043	.00021	.00036								
%RSD	3.4863	111.55	.27608								
#1	.01259	.00004	-.13039								
#2	.01199	.00034	-.12988								
Check ?	None	None	None								
Value											
Range											
Int. Std.	Y_2243	Y_3600	Y_3774								
Units	Cts/S	Cts/S	Cts/S								
Avg	2546.7	37379.	1786.2								
Stddev	48.4	37.	52.4								
%RSD	1.8998	.09849	2.9313								
#1	2580.9	37353.	1823.2								
#2	2512.5	37405.	1749.2								

Sample Name: CCV-3888422 Acquired: 5/18/2016 3:06:01 Type: QC
Method: 6500_025(v6) Mode: CONC Corr. Factor: 1.000000
User: CRHOADES Prep Date: Custom ID2: Custom ID3:
Comment:

Elem	Ag3280	Al1670	As1890	B_2089	Ba4554	Be3130	Bi2230	Ca3179	Cd2288	Co2286	Cr2055
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.47102	.46918	F .88840	.48183	.47728	.49559	.00097	4.6928	.49295	.49794	.50802
Stddev	.00157	.00274	.00479	.01063	.00410	.00253	.00334	.0295	.01431	.01452	.01508
%RSD	.33377	.58365	.53894	2.2054	.85873	.51053	344.97	.62789	2.9034	2.9159	2.9680
#1	.46991	.47112	.89179	.48934	.48018	.49738	.00333	4.7137	.50307	.50821	.51868
#2	.47213	.46725	.88501	.47431	.47439	.49380	-.00139	4.6720	.48283	.48767	.49736
Check ?	Chk Pass	Chk Pass	Chk Fail	Chk Pass	Chk Pass	Chk Pass	None	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Value			1.0000								
Range			-10.490%								
Elem	Cu3247	Fe2599	K_7664	Li6707	Mg2790	Mn2576	Mo2020	Na5895	Ni2316	P_1782	Pb2203
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	F .43238	2.5398	49.088	.97420	18.332	W .44807	.50019	5.2922	.48425	.95470	.98179
Stddev	.00150	.0310	.443	.00022	.035	.00087	.01538	.0323	.01263	.03273	.02855
%RSD	.34614	1.2190	.90288	.02207	.19025	.19337	3.0757	.61112	2.6088	3.4287	2.9076
#1	.43133	2.5617	49.402	.97405	18.307	.44746	.51106	5.2693	.49318	.97785	1.0020
#2	.43344	2.5179	48.775	.97436	18.356	.44869	.48931	5.3151	.47532	.93156	.96160
Check ?	Chk Fail	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Warn	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Value	.50000					.50000					
Range	-10.490%					-10.000%					
Elem	S_1820	Sb2068	Se1960	Si2881	SiO2	Sn1899	Sr4077	Th2837	Ti3349	Ti1908	U_3701
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	-.08067	.95057	F .88850	4.9866	10.671	1.0020	.49642	-.00083	F .44016	1.0098	.05236
Stddev	.00632	.02484	.02049	.0327	.070	.0275	.00469	.00635	.00073	.0284	.02482
%RSD	7.8319	2.6136	2.3067	.65620	.65620	2.7468	.94514	767.75	.16623	2.8128	47.397
#1	-.08514	.96814	.90299	4.9635	10.622	1.0215	.49974	.00366	.43965	1.0299	.03481
#2	-.07620	.93301	.87401	5.0098	10.721	.98258	.49311	-.00532	.44068	.98969	.06990
Check ?	None	Chk Pass	Chk Fail	Chk Pass	Chk Pass	Chk Pass	Chk Pass	None	Chk Fail	Chk Pass	None
Value			1.0000						.50000		
Range			-10.490%						-10.490%		
Elem	V_2924	Zn2062	Zr3391								
Units	ppm	ppm	ppm								
Avg	.46862	F .44374	.46750								
Stddev	.00129	.00106	.00130								
%RSD	.27546	.23877	.27821								
#1	.46771	.44299	.46842								
#2	.46953	.44449	.46658								
Check ?	Chk Pass	Chk Fail	Chk Pass								
Value		.50000									
Range		-10.490%									
Int. Std.	Y_2243	Y_3600	Y_3774								
Units	Cts/S	Cts/S	Cts/S								
Avg	2449.2	37509.	1729.2								
Stddev	.7	191.	13.0								
%RSD	.02845	.50974	.75100								
#1	2449.7	37644.	1720.0								
#2	2448.7	37373.	1738.4								

Sample Name: CCB Acquired: 5/18/2016 3:08:32 Type: QC
Method: 6500_025(v6) Mode: CONC Corr. Factor: 1.000000
User: CRHOADES Prep Date: Custom ID2: Custom ID3:
Comment:

Elem	Ag3280	Al1670	As1890	B_2089	Ba4554	Be3130	Bi2230	Ca3179	Cd2288	Co2286	Cr2055
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.00126	.00108	.00247	.00448	-.00088	.00001	-.00408	-.00223	.00012	-.00032	-.00056
Stddev	.00118	.00011	.00723	.00134	.00096	.00012	.00255	.00082	.00024	.00059	.00004
%RSD	93.242	10.214	293.08	29.962	108.50	888.55	62.640	36.785	200.61	187.73	6.2114

#1	.00209	.00116	.00758	.00543	-.00021	.00010	-.00227	-.00165	-.00005	-.00074	-.00059
#2	.00043	.00100	-.00265	.00353	-.00156	-.00007	-.00588	-.00281	.00029	.00010	-.00054

Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit											
Low Limit											

Elem	Cu3247	Fe2599	K_7664	Li6707	Mg2790	Mn2576	Mo2020	Na5895	Ni2316	P_1782	Pb2203
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	-.00072	.00382	-.24413	F -.01070	-.00243	.00002	.00068	-.05028	-.00015	.00344	.00196
Stddev	.00046	.00218	.07793	.00132	.00103	.00012	.00047	.00214	.00035	.00167	.00294
%RSD	63.199	56.985	31.920	12.307	42.229	549.31	68.660	4.2507	227.55	48.501	149.86

#1	-.00040	.00228	-.18903	-.01164	-.00316	-.00006	.00035	-.05179	-.00040	.00226	.00404
#2	-.00104	.00536	-.29923	-.00977	-.00170	.00010	.00101	-.04877	.00009	.00462	-.00012

Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Fail	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit				.01000							
Low Limit				-.01000							

Elem	S_1820	Sb2068	Se1960	Si2881	SiO2	Sn1899	Sr4077	Th2837	Ti3349	Ti1908	U_3701
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	-.09014	W .00175	.00014	-.04726	-.10114	-.00038	-.00014	.00147	.00074	.00575	.01713
Stddev	.00017	.00392	.00102	.05406	.11570	.00028	.00000	.00469	.00045	.00203	.06311
%RSD	.18911	223.78	741.54	114.40	114.40	74.768	.16247	318.91	61.360	35.376	368.44

#1	-.09002	-.00102	.00086	-.08549	-.18295	-.00018	-.00014	.00479	.00106	.00431	-.02750
#2	-.09026	.00453	-.00058	-.00903	-.01932	-.00058	-.00014	-.00185	.00042	.00719	.06175

Check ?	Chk Pass	Chk Warn	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit		.00100									
Low Limit		-.00100									

Elem	V_2924	Zn2062	Zr3391
Units	ppm	ppm	ppm
Avg	.00015	-.00099	-.00181
Stddev	.00001	.00046	.00039
%RSD	7.9693	46.490	21.682

#1	.00016	-.00067	-.00154
#2	.00014	-.00132	-.00209

Check ?	Chk Pass	Chk Pass	Chk Pass
High Limit			
Low Limit			

Int. Std.	Y_2243	Y_3600	Y_3774
Units	Cts/S	Cts/S	Cts/S
Avg	2419.7	37055.	1725.6
Stddev	6.0	953.	108.2
%RSD	.24700	2.5707	6.2712

#1	2415.5	37729.	1649.1
#2	2424.0	36382.	1802.2

Sample Name: CCVL-3894681 Acquired: 5/18/2016 3:10:54 Type: QC
Method: 6500_025(v6) Mode: CONC Corr. Factor: 1.000000
User: CRHOADES Prep Date: Custom ID2: Custom ID3:
Comment:

Elem	Ag3280	Al1670	As1890	B_2089	Ba4554	Be3130	Bi2230	Ca3179	Cd2288	Co2286	Cr2055
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.01100	.09620	.01172	.09715	.00935	.00108	.09967	.20396	.00503	.00977	.01030
Stddev	.00094	.00147	.01648	.00066	.00038	.00015	.00328	.01247	.00042	.00037	.00019
%RSD	8.5553	1.5241	140.61	.67638	4.0756	13.763	3.2936	6.1163	8.2886	3.7869	1.8478
#1	.01034	.09516	.00007	.09669	.00908	.00098	.09735	.19514	.00532	.00951	.01017
#2	.01167	.09723	.02338	.09762	.00962	.00119	.10199	.21278	.00473	.01003	.01044
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Value											
Range											
Elem	Cu3247	Fe2599	K_7664	Li6707	Mg2790	Mn2576	Mo2020	Na5895	Ni2316	P_1782	Pb2203
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.01183	.10612	2.8519	F -.00397	.18148	.00927	.01982	1.0252	.04011	2.7864	.00895
Stddev	.00077	.00555	.0398	.00303	.00999	.00006	.00008	.0021	.00047	.0124	.00060
%RSD	6.5400	5.2304	1.3962	76.420	5.5032	.66658	.40970	.19973	1.1792	.44636	6.6550
#1	.01238	.11005	2.8800	-.00183	.18855	.00923	.01977	1.0267	.04044	2.7776	.00937
#2	.01128	.10220	2.8237	-.00612	.17442	.00932	.01988	1.0238	.03977	2.7952	.00853
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Fail	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Value				.01000							
Range				-30.000%							
Elem	S_1820	Sb2068	Se1960	Si2881	SiO2	Sn1899	Sr4077	Th2837	Ti3349	Ti1908	U_3701
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	-.09241	.02117	F .00422	.45196	.96719	.10255	.00977	.01331	.00972	.01282	F .10319
Stddev	.01367	.00025	.01085	.02989	.06396	.00262	.00013	.00254	.00073	.00399	.02114
%RSD	14.793	1.1887	257.23	6.6131	6.6131	2.5576	1.3229	19.073	7.4665	31.158	20.489
#1	-.08274	.02099	-.00345	.43082	.92196	.10440	.00986	.01151	.01023	.01564	.11814
#2	-.10207	.02135	.01189	.47309	1.0124	.10069	.00967	.01510	.00920	.01000	.08824
Check ?	None	Chk Pass	Chk Fail	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Fail
Value			.01500								.06000
Range			-30.000%								30.000%
Elem	V_2924	Zn2062	Zr3391								
Units	ppm	ppm	ppm								
Avg	.00936	.01833	.01147								
Stddev	.00040	.00052	.00453								
%RSD	4.2949	2.8290	39.497								
#1	.00907	.01796	.00827								
#2	.00964	.01869	.01468								
Check ?	Chk Pass	Chk Pass	Chk Pass								
Value											
Range											
Int. Std.	Y_2243	Y_3600	Y_3774								
Units	Cts/S	Cts/S	Cts/S								
Avg	2444.2	36880.	1651.2								
Stddev	27.2	184.	11.7								
%RSD	1.1118	.49861	.70984								
#1	2463.4	37010.	1642.9								
#2	2425.0	36750.	1659.5								

Sample Name: MB 280-325590/1-A Acquired: 5/18/2016 3:13:35 Type: Unk
Method: 6500_025(v6) Mode: CONC Corr. Factor: 1.000000
User: CRHOADES Prep Date: 5/17 Custom ID2: Custom ID3:
Comment: 325590 6010B Q4 soil (AI)

Elem	Ag3280	Al1670	As1890	B_2089	Ba4554	Be3130	Bi2230	Ca3179	Cd2288
Line	328.068 {103}	167.079 {502}	189.042 {478}	208.959 {461}	455.403 { 74}	313.042 {108}	223.061 {451}	317.933 {106}	228.802 {447}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.00164	.00828	.00012	.01073	-.00236	-.00004	-.00433	.01281	.00011
Stddev	.00024	.00131	.00289	.00008	.00048	.00012	.00133	.00965	.00029
%RSD	14.395	15.816	2446.8	.70415	20.423	298.88	30.775	75.313	255.19

#1	.00180	.00736	.00216	.01078	-.00270	.00004	-.00527	.01964	-.00009
#2	.00147	.00921	-.00193	.01067	-.00202	-.00012	-.00339	.00599	.00032

Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Elem	Co2286	Cr2055	Cu3247	Fe2599	K_7664	Li6707	Mg2790	Mn2576	Mo2020
Line	228.616 {447}	205.560 {464}	324.754 {104}	259.940 {130}	766.490 { 44}	670.784 { 50}	279.079 {121}2	257.610 {131}	202.030 {467}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	-.00009	.00010	-.00132	.00622	-.29405	F -.01419	.00028	.00009	-.00111
Stddev	.00038	.00028	.00015	.00222	.06514	.00301	.00226	.00011	.00062
%RSD	419.32	282.98	11.502	35.765	22.151	21.250	820.10	121.24	56.506

#1	.00018	.00029	-.00142	.00465	-.34011	-.01632	-.00132	.00001	-.00155
#2	-.00036	-.00010	-.00121	.00779	-.24800	-.01206	.00187	.00016	-.00066

Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Fail	Chk Pass	Chk Pass	Chk Pass
High Limit						.01000			
Low Limit						-.01000			

Elem	Na5895	Ni2316	P_1782	Pb2203	S_1820	Sb2068	Se1960	Si2881	SiO2
Line	589.592 { 57}	231.604 {446}	178.284 {489}	220.353 {453}	182.034 {485}	206.833 {463}	196.090 {472}	288.158 {117}	288.158 {117}2
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	-.04148	.00007	.00529	-.00169	W -.08256	-.00449	.00161	.03638	.07786
Stddev	.00730	.00001	.00346	.00051	.00305	.00492	.00082	.02509	.05369
%RSD	17.604	19.135	65.429	30.468	3.6908	109.59	50.900	68.960	68.960

#1	-.04664	.00006	.00284	-.00132	-.08041	-.00101	.00219	.05412	.11582
#2	-.03631	.00008	.00774	-.00205	-.08472	-.00797	.00103	.01864	.03989

Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Warn	Chk Pass	Chk Pass	Chk Pass	None
High Limit					.05000				
Low Limit					-.05000				

Elem	Sn1899	Sr4077	Th2837	Ti3349	Ti1908	U_3701	V_2924	Zn2062	Zr3391
Line	189.989 {477}	407.771 { 83}	283.730 {119}	334.904 {101}	190.856 {477}	370.152 { 91}	292.402 {115}	206.200 {163}	339.198 { 99}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	-.00114	-.00014	.00132	.00123	.00112	F .06638	.00044	.00002	.00125
Stddev	.00138	.00013	.00141	.00072	.00178	.01524	.00050	.00021	.00360
%RSD	120.73	96.207	107.28	58.958	159.34	22.955	113.66	1075.8	287.54

#1	-.00212	-.00023	.00232	.00174	-.00014	.05560	.00009	.00017	-.00129
#2	-.00017	-.00004	.00032	.00072	.00237	.07715	.00079	-.00013	.00380

Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Fail	Chk Pass	Chk Pass	Chk Pass
High Limit						.06000			
Low Limit						-.06000			

Int. Std.	Y_2243	Y_3600	Y_3774						
Line	224.306 {450}	360.073 { 94}	377.433 { 89}						
Units	Cts/S	Cts/S	Cts/S						
Avg	2625.4	38508.	1828.8						
Stddev	19.8	453.	2.0						
%RSD	.75275	1.1753	.10813						

#1	2639.4	38828.	1827.4						
#2	2611.4	38188.	1830.2						

Sample Name: LCS 280-325590/2-A Acquired: 5/18/2016 3:15:59 Type: Unk
Method: 6500_025(v6) Mode: CONC Corr. Factor: 1.000000
User: CRHOADES Prep Date: Custom ID2: Custom ID3:
Comment: 325590 6010B Q4 soil (AI)

Elem	Ag3280	Al1670	As1890	B_2089	Ba4554	Be3130	Bi2230	Ca3179	Cd2288
Line	328.068 {103}	167.079 {502}	189.042 {478}	208.959 {461}	455.403 { 74}	313.042 {108}	223.061 {451}	317.933 {106}	228.802 {447}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.04832	1.8107	.90060	F 1.1128	1.9360	.05036	1.9120	46.693	.09602
Stddev	.00058	.0449	.01587	.0282	.0396	.00030	.0483	1.013	.00268
%RSD	1.2049	2.4773	1.7623	2.5341	2.0427	.60110	2.5274	2.1695	2.7941

#1	.04791	1.7790	.88938	1.0928	1.9081	.05057	1.8778	45.976	.09412
#2	.04873	1.8424	.91182	1.1327	1.9640	.05014	1.9462	47.409	.09792

Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Fail	Chk Pass	Chk Pass	None	Chk Pass	Chk Pass
High Limit				1.1000					
Low Limit				.81000					

Elem	Co2286	Cr2055	Cu3247	Fe2599	K_7664	Li6707	Mg2790	Mn2576	Mo2020
Line	228.616 {447}	205.560 {464}	324.754 {104}	259.940 {130}	766.490 { 44}	670.784 { 50}	279.079 {121}2	257.610 {131}	202.030 {467}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.47346	.19635	F .21511	1.0434	49.962	.96379	45.827	.44210	1.0312
Stddev	.01204	.00522	.00010	.0090	.898	.00546	.027	.00027	.0252
%RSD	2.5426	2.6590	.04609	.85859	1.7968	.56610	.05959	.06204	2.4463

#1	.46495	.19266	.21504	1.0371	49.328	.96764	45.808	.44190	1.0133
#2	.48198	.20004	.21518	1.0497	50.597	.95993	45.846	.44229	1.0490

Check ?	Chk Pass	Chk Pass	Chk Fail	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit			.27500						
Low Limit			.22000						

Elem	Na8183	Ni2316	P_1782	Pb2203	S_1820	Sb2068	Se1960	Si2881	SiO2
Line	818.326 { 41}	231.604 {446}	178.284 {489}	220.353 {453}	182.034 {485}	206.833 {463}	196.090 {472}	288.158 {117}	288.158 {117}2
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	F 59.851	.46209	9.6224	.47854	1.9741	.48431	1.8392	2.4929	5.3348
Stddev	.460	.01259	.2605	.00992	.0663	.01426	.0356	.0472	.1010
%RSD	.76779	2.7249	2.7076	2.0724	3.3575	2.9449	1.9350	1.8931	1.8931

#1	60.176	.45319	9.4382	.47152	1.9272	.47423	1.8140	2.4595	5.2634
#2	59.526	.47100	9.8067	.48555	2.0209	.49440	1.8644	2.5263	5.4062

Check ?	Chk Fail	Chk Pass	Chk Pass	Chk Pass	None	Chk Pass	Chk Pass	Chk Pass	None
High Limit	56.000								
Low Limit	45.000								

Elem	Sn1899	Sr4077	Th2837	Ti3349	Ti1908	U_3701	V_2924	Zn2062	Zr3391
Line	189.989 {477}	407.771 { 83}	283.730 {119}	334.904 {101}	190.856 {477}	370.152 { 91}	292.402 {115}	206.200 {163}	339.198 { 99}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	2.0051	1.0005	.92552	.90922	1.8686	1.8790	.45937	.42896	.45700
Stddev	.0473	.0229	.00194	.00009	.0157	.0113	.00064	.00272	.00318
%RSD	2.3591	2.2933	.20934	.01022	.84170	.60370	.13836	.63448	.69622

#1	1.9717	.98425	.92415	.90915	1.8797	1.8709	.45892	.43088	.45475
#2	2.0386	1.0167	.92689	.90928	1.8575	1.8870	.45982	.42703	.45925

Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Int. Std.	Y_2243	Y_3600	Y_3774						
Line	224.306 {450}	360.073 { 94}	377.433 { 89}						
Units	Cts/S	Cts/S	Cts/S						
Avg	2624.7	38602.	1776.0						
Stddev	64.4	105.	14.6						
%RSD	2.4525	.27088	.82371						

#1	2670.2	38676.	1786.4						
#2	2579.2	38529.	1765.7						

Sample Name: 280-83115-A-3-D Acquired: 5/18/2016 3:18:26 Type: Unk
Method: 6500_025(v6) Mode: CONC Corr. Factor: 1.000000
User: CRHOADES Prep Date: Custom ID2: Custom ID3:
Comment: 325590 6010B Q4 soil (Al)

Elem	Ag3280	Al3092	As1890	B_2089	Ba4554	Be3130	Bi2230	Ca3179	Cd2288
Line	328.068 {103}	309.271 {109}	189.042 {478}	208.959 {461}	455.403 {74}	313.042 {108}	223.061 {451}	317.933 {106}	228.802 {447}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.00056	258.44	.04518	.42193	2.0314	.01055	-.03413	185.59	.00237
Stddev	.00032	1.55	.00881	.00082	.0166	.00005	.00597	1.37	.00046
%RSD	56.752	.60145	19.489	.19542	.81648	.50928	17.507	.73746	19.303

#1	.00033	259.54	.03896	.42134	2.0431	.01051	-.03835	186.56	.00269
#2	.00078	257.34	.05141	.42251	2.0197	.01059	-.02990	184.62	.00205

Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Elem	Co2286	Cr2055	Cu3247	Fe2714	K_7664	Li6707	Mg2790	Mn2576	Mo2020
Line	228.616 {447}	205.560 {464}	324.754 {104}	271.441 {124}	766.490 {44}	670.784 {50}	279.079 {121}2	257.610 {131}	202.030 {467}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.11273	.31517	.17549	290.97	63.360	.40605	201.06	4.9097	.00913
Stddev	.00026	.00167	.00025	.04	.315	.00366	.76	.0204	.00111
%RSD	.23061	.53127	.14074	.01481	.49711	.90024	.37631	.41627	12.109

#1	.11291	.31635	.17531	291.00	63.583	.40347	200.53	4.9241	.00835
#2	.11255	.31399	.17566	290.94	63.137	.40864	201.60	4.8952	.00991

Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Elem	Na5895	Ni2316	P_1782	Pb2203	S_1820	Sb2068	Se1960	Si2881	SiO2
Line	589.592 {57}	231.604 {446}	178.284 {489}	220.353 {453}	182.034 {485}	206.833 {463}	196.090 {472}	288.158 {117}	288.158 {117}2
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	4.0084	.26267	W 4.4574	.12309	1.1658	-.00713	.00566	14.565	31.168
Stddev	.0006	.00200	.0253	.00110	.0086	.00558	.01273	.066	.142
%RSD	.01408	.76172	.56727	.89349	.73975	78.321	224.79	.45445	.45445

#1	4.0088	.26409	4.4752	.12387	1.1719	-.00318	-.00334	14.518	31.068
#2	4.0080	.26126	4.4395	.12231	1.1597	-.01108	.01467	14.611	31.268

Check ?	Chk Pass	Chk Pass	Chk Warn	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit			2.0000						
Low Limit			-1.0000						

Elem	Sn1899	Sr4077	Th2837	Ti3349	Ti1908	U_3701	V_2924	Zn2062	Zr3391
Line	189.989 {477}	407.771 {83}	283.730 {119}	334.904 {101}	190.856 {477}	370.152 {91}	292.402 {115}	206.200 {163}	339.198 {99}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.00560	.65713	.02245	1.8672	.02534	.10785	.35084	.47425	.12929
Stddev	.00056	.00396	.00129	.0017	.00561	.02071	.00265	.00122	.00030
%RSD	9.9373	.60227	5.7531	.08968	22.152	19.199	.75464	.25698	.22987

#1	.00521	.65993	.02153	1.8660	.02137	.09321	.34897	.47511	.12908
#2	.00600	.65433	.02336	1.8684	.02931	.12250	.35271	.47338	.12950

Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Int. Std.	Y_2243	Y_3600	Y_3774
Line	224.306 {450}	360.073 {94}	377.433 {89}
Units	Cts/S	Cts/S	Cts/S
Avg	2744.2	39891.	1956.1
Stddev	4.5	59.	.1
%RSD	.16312	.14690	.00561

#1	2741.0	39933.	1956.2
#2	2747.3	39850.	1956.0

Sample Name: 280-83115-A-3-D SD@5 Acquired: 5/18/2016 3:21:03 Type: Unk
Method: 6500_025(v6) Mode: CONC Corr. Factor: 1.000000
User: CRHOADES Prep Date: Custom ID2: Custom ID3:
Comment: 325590 6010B Q4 soil (AI)

Elem	Ag3280	Al3092	As1890	B_2089	Ba4554	Be3130	Bi2230	Ca3179	Cd2288
Line	328.068 {103}	309.271 {109}	189.042 {478}	208.959 {461}	455.403 { 74}	313.042 {108}	223.061 {451}	317.933 {106}	228.802 {447}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.00159	56.306	.01275	.09850	.43734	.00204	-.00773	40.119	.00068
Stddev	.00053	1.240	.00156	.00274	.01150	.00035	.00071	.866	.00015
%RSD	33.451	2.2030	12.272	2.7770	2.6284	16.942	9.2489	2.1596	21.764

#1	.00121	57.183	.01386	.10044	.44547	.00229	-.00722	40.731	.00079
#2	.00197	55.429	.01164	.09657	.42922	.00180	-.00823	39.506	.00058

Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Elem	Co2286	Cr2055	Cu3247	Fe2714	K_7664	Li6707	Mg2790	Mn2576	Mo2020
Line	228.616 {447}	205.560 {464}	324.754 {104}	271.441 {124}	766.490 { 44}	670.784 { 50}	279.079 {121}2	257.610 {131}	202.030 {467}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.02462	.06744	.03628	64.396	13.638	.07710	43.048	1.0811	.00091
Stddev	.00022	.00099	.00079	.633	.004	.00004	.057	.0037	.00103
%RSD	.88614	1.4731	2.1667	.98241	.03199	.04683	.13254	.34006	113.34

#1	.02447	.06814	.03573	64.843	13.635	.07713	43.008	1.0785	.00018
#2	.02478	.06673	.03684	63.948	13.641	.07708	43.088	1.0837	.00164

Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Elem	Na5895	Ni2316	P_1782	Pb2203	S_1820	Sb2068	Se1960	Si2881	SiO2
Line	589.592 { 57}	231.604 {446}	178.284 {489}	220.353 {453}	182.034 {485}	206.833 {463}	196.090 {472}	288.158 {117}	288.158 {117}2
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.83547	.05760	.94507	.02737	.17466	-.00542	-.00283	3.2351	6.9231
Stddev	.01921	.00079	.01076	.00024	.00400	.00619	.00329	.0383	.0820
%RSD	2.2992	1.3634	1.1389	.88355	2.2929	114.26	116.04	1.1845	1.1845

#1	.82189	.05815	.95268	.02720	.17749	-.00104	-.00051	3.2622	6.9811
#2	.84905	.05704	.93745	.02755	.17182	-.00979	-.00516	3.2080	6.8652

Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Elem	Sn1899	Sr4077	Th2837	Ti3349	Ti1908	U_3701	V_2924	Zn2062	Zr3391
Line	189.989 {477}	407.771 { 83}	283.730 {119}	334.904 {101}	190.856 {477}	370.152 { 91}	292.402 {115}	206.200 {163}	339.198 { 99}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	-.00041	.14604	.00627	.40009	.00540	.04178	.07585	.10793	.02357
Stddev	.00119	.00012	.00493	.00036	.00157	.05285	.00054	.00089	.00094
%RSD	292.09	.07942	78.613	.09029	29.102	126.49	.71483	.82048	3.9921

#1	.00043	.14596	.00278	.39984	.00651	.07915	.07623	.10730	.02424
#2	-.00125	.14613	.00975	.40035	.00428	.00441	.07546	.10856	.02291

Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Int. Std.	Y_2243	Y_3600	Y_3774
Line	224.306 {450}	360.073 { 94}	377.433 { 89}
Units	Cts/S	Cts/S	Cts/S
Avg	2548.0	37989.	1808.6
Stddev	14.7	633.	14.7
%RSD	.57660	1.6659	.81008

#1	2558.4	38437.	1798.3
#2	2537.6	37542.	1819.0

Sample Name: 280-83115-A-3-E MS Acquired: 5/18/2016 3:23:39 Type: Unk
Method: 6500_025(v6) Mode: CONC Corr. Factor: 1.000000
User: CRHOADES Prep Date: Custom ID2: Custom ID3:
Comment: 325590 6010B Q4 soil (AI)

Elem	Ag3280	Al3092	As1890	B_2089	Ba4554	Be3130	Bi2230	Ca3179	Cd2288
Line	328.068 {103}	309.271 {109}	189.042 {478}	208.959 {461}	455.403 {74}	313.042 {108}	223.061 {451}	317.933 {106}	228.802 {447}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.04315	289.40	.86907	1.3332	3.8742	.05475	F 1.7039	200.51	.08988
Stddev	.00078	1.88	.00989	.0006	.0416	.00081	.0078	1.75	.00070
%RSD	1.8091	.65059	1.1379	.04257	1.0737	1.4773	.45739	.87494	.77389

#1	.04260	290.74	.87607	1.3336	3.9036	.05532	1.7094	201.75	.09038
#2	.04370	288.07	.86208	1.3328	3.8448	.05417	1.6984	199.27	.08939

Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Fail	Chk Pass	Chk Pass
High Limit							.10000		
Low Limit							-.10000		

Elem	Co2286	Cr2055	Cu3247	Fe2714	K_7664	Li6707	Mg2790	Mn2576	Mo2020
Line	228.616 {447}	205.560 {464}	324.754 {104}	271.441 {124}	766.490 {44}	670.784 {50}	279.079 {121}2	257.610 {131}	202.030 {467}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.50669	.48551	.34696	250.60	W 121.37	1.2262	214.33	4.4973	.90205
Stddev	.00090	.00201	.00018	.53	.77	.0001	.34	.0587	.00191
%RSD	.17771	.41491	.05308	.21059	.63571	.00530	.15965	1.3048	.21123

#1	.50732	.48694	.34683	250.23	121.91	1.2262	214.09	4.5388	.90340
#2	.50605	.48409	.34709	250.97	120.82	1.2263	214.57	4.4559	.90070

Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Warn	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit					100.00				
Low Limit					-.50000				

Elem	Na8183	Ni2316	P_1782	Pb2203	S_1820	Sb2068	Se1960	Si2881	SiO2
Line	818.326 {41}	231.604 {446}	178.284 {489}	220.353 {453}	182.034 {485}	206.833 {463}	196.090 {472}	288.158 {117}	288.158 {117}2
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	59.555	.61813	W 12.342	.51705	2.9558	.19637	1.6370	19.870	42.522
Stddev	1.148	.00412	.084	.00041	.0356	.00213	.0313	.411	.880
%RSD	1.9280	.66685	.68132	.07968	1.2038	1.0857	1.9097	2.0695	2.0695

#1	60.367	.62104	12.402	.51734	2.9810	.19788	1.6591	20.161	43.144
#2	58.743	.61521	12.283	.51676	2.9307	.19486	1.6149	19.579	41.899

Check ?	Chk Pass	Chk Pass	Chk Warn	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit			2.0000						
Low Limit			-1.0000						

Elem	Sn1899	Sr4077	Th2837	Ti3349	Ti1908	U_3701	V_2924	Zn2062	Zr3391
Line	189.989 {477}	407.771 {83}	283.730 {119}	334.904 {101}	190.856 {477}	370.152 {91}	292.402 {115}	206.200 {163}	339.198 {99}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	1.6853	1.5064	.87259	3.4970	1.4828	1.7487	.77923	.78899	.56778
Stddev	.0216	.0141	.00921	.0084	.0749	.0273	.00163	.00499	.00983
%RSD	1.2784	.93481	1.0557	.23976	5.0513	1.5604	.20940	.63260	1.7318

#1	1.7005	1.5164	.86607	3.4910	1.5358	1.7294	.77807	.78547	.56082
#2	1.6701	1.4965	.87910	3.5029	1.4298	1.7680	.78038	.79252	.57473

Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Int. Std.	Y_2243	Y_3600	Y_3774
Line	224.306 {450}	360.073 {94}	377.433 {89}
Units	Cts/S	Cts/S	Cts/S
Avg	2600.9	37887.	1839.7
Stddev	8.5	7.	2.5
%RSD	.32571	.01917	.13495

#1	2594.9	37892.	1838.0
#2	2606.9	37882.	1841.5

Sample Name: 280-83115-A-3-F MSD Acquired: 5/18/2016 3:26:11 Type: Unk
Method: 6500_025(v6) Mode: CONC Corr. Factor: 1.000000
User: CRHOADES Prep Date: Custom ID2: Custom ID3:
Comment: 325590 6010B Q4 soil (AI)

Elem	Ag3280	Al3092	As1890	B_2089	Ba4554	Be3130	Bi2230	Ca3179	Cd2288
Line	328.068 {103}	309.271 {109}	189.042 {478}	208.959 {461}	455.403 {74}	313.042 {108}	223.061 {451}	317.933 {106}	228.802 {447}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.04092	296.26	.83098	1.3055	3.7352	.05230	F 1.6191	210.35	.08573
Stddev	.00045	3.54	.00130	.0044	.0461	.00022	.0100	2.49	.00081
%RSD	1.1115	1.1959	.15694	.33666	1.2354	.42862	.61767	1.1852	.94551

#1	.04059	298.77	.83190	1.3086	3.7679	.05246	1.6261	212.11	.08630
#2	.04124	293.76	.83005	1.3024	3.7026	.05214	1.6120	208.59	.08515

Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Fail	Chk Pass	Chk Pass
High Limit							.10000		
Low Limit							-.10000		

Elem	Co2286	Cr2055	Cu3247	Fe2714	K_7664	Li6707	Mg2790	Mn2576	Mo2020
Line	228.616 {447}	205.560 {464}	324.754 {104}	271.441 {124}	766.490 {44}	670.784 {50}	279.079 {121}2	257.610 {131}	202.030 {467}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.49126	.48740	.34880	261.49	W 120.14	1.2087	233.53	4.9890	.86208
Stddev	.00443	.00418	.00144	1.11	1.62	.0049	.32	.0788	.00943
%RSD	.90209	.85856	.41294	.42498	1.3450	.40489	.13881	1.5796	1.0940

#1	.49439	.49036	.34778	262.28	121.29	1.2122	233.30	5.0448	.86875
#2	.48812	.48444	.34982	260.71	119.00	1.2052	233.76	4.9333	.85541

Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Warn	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit					100.00				
Low Limit					-.50000				

Elem	Na8183	Ni2316	P_1782	Pb2203	S_1820	Sb2068	Se1960	Si2881	SiO2
Line	818.326 {41}	231.604 {446}	178.284 {489}	220.353 {453}	182.034 {485}	206.833 {463}	196.090 {472}	288.158 {117}	288.158 {117}2
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	56.474	.61094	W 12.057	.50169	2.8713	.17998	1.5482	16.897	36.160
Stddev	.741	.00640	.049	.00616	.0094	.00003	.0023	.193	.412
%RSD	1.3122	1.0480	.40318	1.2284	.32804	.01477	.14625	1.1401	1.1401

#1	56.998	.61546	12.091	.50605	2.8647	.18000	1.5498	17.034	36.452
#2	55.950	.60641	12.022	.49733	2.8780	.17996	1.5466	16.761	35.869

Check ?	Chk Pass	Chk Pass	Chk Warn	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit			2.0000						
Low Limit			-1.0000						

Elem	Sn1899	Sr4077	Th2837	Ti3349	Ti1908	U_3701	V_2924	Zn2062	Zr3391
Line	189.989 {477}	407.771 {83}	283.730 {119}	334.904 {101}	190.856 {477}	370.152 {91}	292.402 {115}	206.200 {163}	339.198 {99}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	1.5996	1.4744	.82384	3.4209	1.4349	1.6322	.76987	.80052	.54183
Stddev	.0181	.0202	.00556	.0068	.0551	.0061	.00050	.00045	.00087
%RSD	1.1285	1.3727	.67439	.19851	3.8372	.37622	.06531	.05650	.16069

#1	1.6124	1.4887	.81991	3.4161	1.4738	1.6278	.77022	.80084	.54121
#2	1.5869	1.4601	.82777	3.4257	1.3960	1.6365	.76951	.80020	.54244

Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Int. Std.	Y_2243	Y_3600	Y_3774
Line	224.306 {450}	360.073 {94}	377.433 {89}
Units	Cts/S	Cts/S	Cts/S
Avg	2613.3	37383.	1835.1
Stddev	74.2	374.	32.9
%RSD	2.8403	.99978	1.7902

#1	2560.9	37119.	1811.9
#2	2665.8	37647.	1858.4

Sample Name: 280-83115-A-3-D PDS Acquired: 5/18/2016 3:28:41 Type: Unk
Method: 6500_025(v6) Mode: CONC Corr. Factor: 1.000000
User: CRHOADES Prep Date: Custom ID2: Custom ID3:
Comment: 325590 6010B Q4 soil (AI)

Elem	Ag3280	Al3092	As1890	B_2089	Ba4554	Be3130	Bi2230	Ca3179	Cd2288
Line	328.068 {103}	309.271 {109}	189.042 {478}	208.959 {461}	455.403 {74}	313.042 {108}	223.061 {451}	317.933 {106}	228.802 {447}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.02687	.255.74	.20514	.49802	.20860	.05451	-.02830	198.84	.04642
Stddev	.00096	1.62	.00000	.01034	.0214	.00029	.00349	2.09	.00144
%RSD	3.5673	.63432	.00032	2.0762	1.0272	.52527	12.348	1.0491	3.1082

#1	.02619	256.89	.20514	.49071	2.1011	.05431	-.02583	200.31	.04540
#2	.02754	254.59	.20514	.50533	2.0708	.05472	-.03077	197.36	.04744

Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Elem	Co2286	Cr2055	Cu3247	Fe2714	K_7664	Li6707	Mg2790	Mn2576	Mo2020
Line	228.616 {447}	205.560 {464}	324.754 {104}	271.441 {124}	766.490 {44}	670.784 {50}	279.079 {121}2	257.610 {131}	202.030 {467}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.14976	.34591	.21363	.284.97	.80.386	.48683	.214.36	4.8765	.05387
Stddev	.00362	.00872	.00134	1.01	.465	.00073	.59	.0045	.00117
%RSD	2.4154	2.5205	.62888	.35422	.57838	.14961	.27392	.09140	2.1674

#1	.14720	.33974	.21268	284.25	80.714	.48734	213.95	4.8734	.05304
#2	.15232	.35207	.21458	285.68	80.057	.48631	214.78	4.8797	.05469

Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Elem	Na8183	Ni2316	P_1782	Pb2203	S_1820	Sb2068	Se1960	Si2881	SiO2
Line	818.326 {41}	231.604 {446}	178.284 {489}	220.353 {453}	182.034 {485}	206.833 {463}	196.090 {472}	288.158 {117}	288.158 {117}2
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.28.122	.29405	W 6.0192	.20134	1.1290	.07815	.16473	18.670	39.954
Stddev	.106	.00506	.1310	.00607	.0319	.00398	.00010	.128	.274
%RSD	.37593	1.7206	2.1767	3.0153	2.8240	5.0986	.06117	.68691	.68691

#1	28.047	.29048	5.9265	.19705	1.1065	.07533	.16466	18.580	39.760
#2	28.197	.29763	6.1118	.20563	1.1516	.08097	.16480	18.761	40.148

Check ?	Chk Pass	Chk Pass	Chk Warn	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit			2.0000						
Low Limit			-1.0000						

Elem	Sn1899	Sr4077	Th2837	Ti3349	Ti1908	U_3701	V_2924	Zn2062	Zr3391
Line	189.989 {477}	407.771 {83}	283.730 {119}	334.904 {101}	190.856 {477}	370.152 {91}	292.402 {115}	206.200 {163}	339.198 {99}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.09280	.68906	.19357	1.8794	.16021	.50670	.38942	.61905	.16206
Stddev	.00296	.00635	.00110	.0003	.00405	.04389	.00149	.00315	.00173
%RSD	3.1926	.92159	.56708	.01310	2.5248	8.6615	.38133	.50922	1.0661

#1	.09070	.69355	.19435	1.8792	.15735	.47567	.38837	.61682	.16328
#2	.09489	.68457	.19280	1.8796	.16308	.53774	.39047	.62128	.16084

Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Int. Std.	Y_2243	Y_3600	Y_3774
Line	224.306 {450}	360.073 {94}	377.433 {89}
Units	Cts/S	Cts/S	Cts/S
Avg	2686.3	38503.	1862.9
Stddev	67.5	143.	25.4
%RSD	2.5127	.37129	1.3649

#1	2734.1	38604.	1845.0
#2	2638.6	38402.	1880.9

Sample Name: CCVH-3883905 Acquired: 5/18/2016 3:31:16 Type: QC
Method: 6500_025(v6) Mode: CONC Corr. Factor: 1.000000
User: CRHOADES Prep Date: Custom ID2: Custom ID3:
Comment:

Elem	Ag3280	Al3092	As1890	B_2089	Ba4554	Be3130	Bi2230	Ca3179	Cd2288	Co2286	Cr2055
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	-.00674	53.338	.00144	.01013	-.00043	-.00013	.95047	.03786	-.00036	-.00088	.00007
Stddev	.00020	.703	.00323	.00160	.00041	.00025	.00712	.00685	.00011	.00054	.00035
%RSD	2.9182	1.3186	223.81	15.817	96.594	198.89	.74934	18.101	29.741	61.574	481.25

#1	-.00660	52.841	-.00084	.01127	-.00014	-.00030	.95550	.04270	-.00028	-.00127	.00032
#2	-.00688	53.836	.00373	.00900	-.00072	.00005	.94543	.03301	-.00043	-.00050	-.00018

Check ?	None	Chk Pass	None	None	None	None	Chk Pass	None	None	None	None
Value											
Range											

Elem	Cu3247	Fe2714	K_7664	Li6707	Mg2790	Mn2576	Mo2020	Na8183	Ni2316	P_1782	Pb2203
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	-.01641	F 55.331	.05037	-.00845	.04815	-.00123	-.00081	F 280.56	.00082	.00834	.00010
Stddev	.00030	.496	.02003	.00161	.02193	.00070	.00027	1.07	.00025	.00237	.00128
%RSD	1.8010	.89575	39.766	19.020	45.535	57.143	33.363	.38086	30.604	28.461	1302.3

#1	-.01620	55.682	.06454	-.00959	.06365	-.00074	-.00101	281.31	.00099	.01002	-.00081
#2	-.01662	54.981	.03621	-.00731	.03265	-.00173	-.00062	279.80	.00064	.00666	.00100

Check ?	None	Chk Fail	None	None	None	None	None	Chk Fail	None	None	None
Value		50.000						250.00			
Range		10.490%						10.490%			

Elem	S_1820	Sb2068	Se1960	Si2881	SiO2	Sn1899	Sr4077	Th2837	Ti3349	Ti1908	U_3701
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	4.9491	-.01324	.00060	-.04774	-.10216	.00076	.00020	W 4.5169	.00231	.00678	W 9.1326
Stddev	.0521	.00056	.00601	.00200	.00429	.00211	.00028	.0003	.00013	.00226	.0301
%RSD	1.0519	4.2087	1008.1	4.1995	4.1995	278.22	140.25	.00719	5.6299	33.314	.32947

#1	4.9859	-.01363	-.00365	-.04916	-.10520	-.00073	.00040	4.5167	.00240	.00518	9.1114
#2	4.9123	-.01284	.00484	-.04632	-.09913	.00225	.00000	4.5171	.00222	.00838	9.1539

Check ?	Chk Pass	None	None	None	None	None	None	Chk Warn	None	None	Chk Warn
Value								5.0000			10.000
Range								-5.0000%			-5.0000%

Elem	V_2924	Zn2062	Zr3391
Units	ppm	ppm	ppm
Avg	.01188	-.00014	-.13451
Stddev	.00018	.00019	.00187
%RSD	1.5197	132.85	1.3888

#1	.01175	-.00001	-.13583
#2	.01200	-.00027	-.13319

Check ?	None	None	None
Value			
Range			

Int. Std.	Y_2243	Y_3600	Y_3774
Units	Cts/S	Cts/S	Cts/S
Avg	2483.5	36798.	1695.5
Stddev	18.4	29.	2.1
%RSD	.74163	.07933	.12557

#1	2470.5	36819.	1697.0
#2	2496.6	36777.	1694.0

Sample Name: CCV-3888422 Acquired: 5/18/2016 3:33:52 Type: QC
Method: 6500_025(v6) Mode: CONC Corr. Factor: 1.000000
User: CRHOADES Prep Date: Custom ID2: Custom ID3:
Comment:

Elem	Ag3280	Al1670	As1890	B_2089	Ba4554	Be3130	Bi2230	Ca3179	Cd2288	Co2286	Cr2055
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.47710	.48352	.90934	.48718	.48897	.50223	-.00058	4.7775	.48960	.49574	.50437
Stddev	.00086	.00242	.00348	.00441	.00361	.00199	.00086	.0198	.00262	.00541	.00279
%RSD	.18126	.49961	.38236	.90509	.73854	.39654	146.98	.41451	.53612	1.0922	.55309
#1	.47771	.48181	.90688	.48406	.49152	.50363	-.00119	4.7915	.49146	.49191	.50239
#2	.47648	.48523	.91180	.49030	.48642	.50082	.00002	4.7635	.48774	.49957	.50634
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	None	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Value											
Range											
Elem	Cu3247	Fe2599	K_7664	Li6707	Mg2790	Mn2576	Mo2020	Na5895	Ni2316	P_1782	Pb2203
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	F .44289	2.5583	50.376	.97308	18.584	.45522	.49492	5.3365	.48310	.96159	.97968
Stddev	.00081	.0270	.403	.00941	.068	.00166	.00208	.0129	.00511	.00218	.00506
%RSD	.18395	1.0537	.80021	.96687	.36743	.36512	.42113	.24229	1.0583	.22636	.51618
#1	.44346	2.5774	50.661	.97973	18.632	.45640	.49345	5.3274	.47948	.96005	.97610
#2	.44231	2.5392	50.091	.96643	18.536	.45405	.49640	5.3457	.48671	.96313	.98325
Check ?	Chk Fail	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Value	.50000										
Range	-10.490%										
Elem	S_1820	Sb2068	Se1960	Si2881	SiO2	Sn1899	Sr4077	Th2837	Ti3349	Ti1908	U_3701
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	-.08133	.95220	W .89659	4.9874	10.673	.99799	.50915	-.00137	F .44718	1.0017	.05147
Stddev	.00376	.00161	.00214	.0268	.057	.00594	.00437	.00134	.00159	.0074	.05960
%RSD	4.6252	.16941	.23887	.53807	.53807	.59524	.85761	98.066	.35604	.73793	115.79
#1	-.07867	.95106	.89508	5.0064	10.714	.99379	.51224	-.00042	.44830	.99645	.00933
#2	-.08399	.95334	.89810	4.9684	10.632	1.0022	.50606	-.00232	.44605	1.0069	.09361
Check ?	None	Chk Pass	Chk Warn	Chk Pass	Chk Pass	Chk Pass	Chk Pass	None	Chk Fail	Chk Pass	None
Value			1.0000						.50000		
Range			-10.000%						-10.490%		
Elem	V_2924	Zn2062	Zr3391								
Units	ppm	ppm	ppm								
Avg	.46974	F .44423	.47203								
Stddev	.00128	.00101	.00505								
%RSD	.27311	.22671	1.0691								
#1	.47065	.44494	.47559								
#2	.46884	.44351	.46846								
Check ?	Chk Pass	Chk Fail	Chk Pass								
Value		.50000									
Range		-10.490%									
Int. Std.	Y_2243	Y_3600	Y_3774								
Units	Cts/S	Cts/S	Cts/S								
Avg	2523.1	37637.	1688.8								
Stddev	30.1	93.	1.6								
%RSD	1.1916	.24743	.09208								
#1	2544.3	37571.	1687.7								
#2	2501.8	37703.	1689.9								

Sample Name: CCB Acquired: 5/18/2016 3:36:24 Type: QC
 Method: 6500_025(v6) Mode: CONC Corr. Factor: 1.000000
 User: CRHOADES Prep Date: Custom ID2: Custom ID3:
 Comment:

Elem	Ag3280	Al1670	As1890	B_2089	Ba4554	Be3130	Bi2230	Ca3179	Cd2288	Co2286	Cr2055
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	F .00259	.00435	.00047	.00576	-.00194	.00021	-.00361	-.00177	.00021	-.00068	-.00069
Stddev	.00004	.00006	.00456	.00157	.00022	.00030	.00402	.00956	.00020	.00002	.00019
%RSD	1.3583	1.4146	980.84	27.187	11.444	143.69	111.41	540.42	95.567	2.3802	27.043

#1	.00261	.00430	.00369	.00465	-.00178	.00000	-.00077	-.00853	.00007	-.00067	-.00082
#2	.00256	.00439	-.00276	.00686	-.00209	.00042	-.00646	.00499	.00036	-.00069	-.00056

Check ?	Chk Fail	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit	.00200										
Low Limit	-.01000										

Elem	Cu3247	Fe2599	K_7664	Li6707	Mg2790	Mn2576	Mo2020	Na5895	Ni2316	P_1782	Pb2203
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	-.00067	.01182	-.10592	F -.01425	-.00052	.00015	.00113	-.05287	.00043	.00338	.00060
Stddev	.00016	.00268	.08876	.00086	.00148	.00004	.00022	.00315	.00030	.00088	.00229
%RSD	24.554	22.640	83.800	6.0285	282.70	29.407	19.982	5.9612	71.255	26.044	379.24

#1	-.00055	.01371	-.04316	-.01486	-.00157	.00012	.00097	-.05510	.00021	.00276	.00222
#2	-.00079	.00993	-.16869	-.01364	.00052	.00018	.00128	-.05064	.00064	.00401	-.00102

Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Fail	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit				.01000							
Low Limit				-.01000							

Elem	S_1820	Sb2068	Se1960	Si2881	SiO2	Sn1899	Sr4077	Th2837	Ti3349	Ti1908	U_3701
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	-.08471	W .00185	-.00026	-.00070	-.00149	.00049	.00001	.00221	.00081	.00497	.05329
Stddev	.00496	.00088	.00183	.01357	.02904	.00076	.00026	.00167	.00005	.00407	.01904
%RSD	5.8550	47.614	694.82	1943.3	1943.3	153.49	1903.3	75.671	5.8093	81.730	35.722

#1	-.08121	.00247	-.00156	-.01029	-.02203	-.00004	-.00017	.00103	.00078	.00210	.06675
#2	-.08822	.00123	.00103	.00890	.01904	.00103	.00020	.00339	.00085	.00785	.03983

Check ?	Chk Pass	Chk Warn	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit		.00100									
Low Limit		-.00100									

Elem	V_2924	Zn2062	Zr3391
Units	ppm	ppm	ppm
Avg	.00084	-.00007	-.00176
Stddev	.00065	.00068	.00331
%RSD	76.918	1000.6	187.84

#1	.00038	-.00055	-.00410
#2	.00130	.00041	.00058

Check ?	Chk Pass	Chk Pass	Chk Pass
High Limit			
Low Limit			

Int. Std.	Y_2243	Y_3600	Y_3774
Units	Cts/S	Cts/S	Cts/S
Avg	2508.3	37795.	1727.9
Stddev	10.0	169.	32.5
%RSD	.39805	.44758	1.8797

#1	2501.2	37915.	1704.9
#2	2515.3	37676.	1750.9

Sample Name: CCVL-3894681 Acquired: 5/18/2016 3:38:47 Type: QC
Method: 6500_025(v6) Mode: CONC Corr. Factor: 1.000000
User: CRHOADES Prep Date: Custom ID2: Custom ID3:
Comment:

Elem	Ag3280	Al1670	As1890	B_2089	Ba4554	Be3130	Bi2230	Ca3179	Cd2288	Co2286	Cr2055	Cu3247
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.01069	.10127	.01525	.09489	.00703	.00107	.09563	.19198	.00487	.00946	.00940	.01279
Stddev	.00033	.00500	.00371	.00072	.00011	.00020	.00037	.00347	.00003	.00059	.00042	.00109
%RSD	3.0694	4.9359	24.361	.75718	1.5796	18.222	.38494	1.8077	.65296	6.2699	4.5124	8.5574

#1	.01046	.10480	.01787	.09540	.00695	.00121	.09589	.19444	.00484	.00904	.00910	.01356
#2	.01092	.09773	.01262	.09438	.00711	.00094	.09537	.18953	.00489	.00988	.00970	.01201

Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Value												
Range												

Elem	Fe2599	K_7664	Li6707	Mg2790	Mn2576	Mo2020	Na5895	Ni2316	P_1782	Pb2203	S_1820	Sb2068
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.11498	2.8155	F .00104	.19645	.00951	.01842	1.0023	.03894	2.7146	.00833	-.08608	.01955
Stddev	.00071	.0045	.00031	.00068	.00010	.00008	.0270	.00011	.0065	.00158	.00440	.00099
%RSD	.61390	.15874	29.390	.34638	1.0365	.42428	2.6948	.27501	.23906	18.946	5.1101	5.0482

#1	.11448	2.8187	.00126	.19693	.00958	.01848	1.0214	.03902	2.7192	.00721	-.08297	.02025
#2	.11548	2.8123	.00082	.19597	.00944	.01837	.98323	.03887	2.7100	.00944	-.08919	.01885

Check ?	Chk Pass	Chk Pass	Chk Fail	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	None	Chk Pass
Value			.01000									
Range			-30.000%									

Elem	Se1960	Si2881	SiO2	Sn1899	Sr4077	Th2837	Ti3349	Ti1908	U_3701	V_2924	Zn2062	Zr3391
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.01501	.45366	.97083	.09741	.00958	.01386	.01007	F .01039	F .14462	.01016	.01935	F .00716
Stddev	.00648	.05873	.12567	.00114	.00034	.00188	.00022	.00081	.05545	.00028	.00054	.00137
%RSD	43.150	12.945	12.945	1.1752	3.5871	13.561	2.1885	7.7690	38.342	2.7647	2.7784	19.098

#1	.01959	.41213	.88197	.09660	.00982	.01253	.01023	.01096	.18382	.01036	.01897	.00813
#2	.01043	.49518	1.0597	.09822	.00933	.01519	.00991	.00982	.10541	.00996	.01973	.00620

Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Fail	Chk Fail	Chk Pass	Chk Pass	Chk Fail
Value								.01500	.06000			.01500
Range								-30.000%	30.000%			-30.000%

Int. Std.	Y_2243	Y_3600	Y_3774
Units	Cts/S	Cts/S	Cts/S
Avg	2562.8	37768.	1818.9
Stddev	93.4	217.	27.4
%RSD	3.6425	.57350	1.5038

#1	2496.8	37922.	1799.6
#2	2628.8	37615.	1838.2

Comment: 325504 200.7

Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Warn	Chk Pass	Chk Pass	Chk Pass
High Limit						.00500			
Low Limit						- .00500			

Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Warn	Chk Pass	Chk Warn	Chk Pass	None
High Limit					.05000		.00750		
Low Limit					-.05000		-.00750		

Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Fail	Chk Pass	Chk Pass	Chk Pass
High Limit						.06000			
Low Limit						- .06000			

#1	2679.4	39110.	1830.7
#2	2693.9	40749.	1936.8

Sample Name: LCS 280-325504/2-A Acquired: 5/18/2016 3:43:49 Type: Unk
Method: 6500_025(v6) Mode: CONC Corr. Factor: 1.000000
User: CRHOADES Prep Date: Custom ID2: Custom ID3:
Comment: 325504 200.7

Elem	Ag3280	Al1670	As1890	B_2089	Ba4554	Be3130	Bi2230	Ca3179	Cd2288
Line	328.068 {103}	167.079 {502}	189.042 {478}	208.959 {461}	455.403 { 74}	313.042 {108}	223.061 {451}	317.933 {106}	228.802 {447}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.04953	1.8406	.94248	1.0164	1.8919	.04906	1.9853	45.601	.09947
Stddev	.00043	.0046	.00815	.0071	.0363	.00141	.0117	.952	.00141
%RSD	.87321	.25229	.86437	.69518	1.9188	2.8765	.59046	2.0871	1.4126

#1	.04922	1.8439	.93672	1.0114	1.8662	.04806	1.9770	44.928	.09848
#2	.04983	1.8374	.94824	1.0214	1.9175	.05005	1.9935	46.274	.10046

Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	None	Chk Pass	Chk Pass
High Limit									
Low Limit									

Elem	Co2286	Cr2055	Cu3247	Fe2599	K_7664	Li6707	Mg2790	Mn2576	Mo2020
Line	228.616 {447}	205.560 {464}	324.754 {104}	259.940 {130}	766.490 { 44}	670.784 { 50}	279.079 {121}2	257.610 {131}	202.030 {467}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.48713	.20194	.22073	1.0202	48.835	.96490	46.955	.45004	1.0572
Stddev	.00500	.00251	.00011	.0197	.848	.01236	.009	.00002	.0071
%RSD	1.0271	1.2425	.05067	1.9329	1.7373	1.2809	.01847	.00376	.66743

#1	.48359	.20017	.22065	1.0062	48.235	.95616	46.949	.45002	1.0523
#2	.49067	.20372	.22081	1.0341	49.435	.97364	46.961	.45005	1.0622

Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Elem	Na8183	Ni2316	P_1782	Pb2203	S_1820	Sb2068	Se1960	Si2881	SiO2
Line	818.326 { 41}	231.604 {446}	178.284 {489}	220.353 {453}	182.034 {485}	206.833 {463}	196.090 {472}	288.158 {117}	288.158 {117}2
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	F 58.965	.47627	10.012	.49627	2.0677	.52682	1.9408	10.161	21.744
Stddev	.346	.00532	.128	.00204	.0312	.01186	.0362	.133	.285
%RSD	.58741	1.1174	1.2770	.41071	1.5077	2.2511	1.8674	1.3110	1.3110

#1	59.210	.47251	9.9213	.49483	2.0457	.51843	1.9152	10.066	21.542
#2	58.720	.48004	10.102	.49771	2.0898	.53521	1.9665	10.255	21.945

Check ?	Chk Fail	Chk Pass	Chk Pass	Chk Pass	None	Chk Pass	Chk Pass	Chk Pass	None
High Limit	56.000								
Low Limit	45.500								

Elem	Sn1899	Sr4077	Th2837	Ti3349	Ti1908	U_3701	V_2924	Zn2062	Zr3391
Line	189.989 {477}	407.771 { 83}	283.730 {119}	334.904 {101}	190.856 {477}	370.152 { 91}	292.402 {115}	206.200 {163}	339.198 { 99}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	2.0492	.97325	.93439	.92263	1.8437	1.9002	.46441	.43833	.46375
Stddev	.0400	.01925	.00082	.00137	.0215	.0432	.00122	.00496	.00155
%RSD	1.9499	1.9783	.08748	.14813	1.1662	2.2753	.26185	1.1313	.33345

#1	2.0210	.95964	.93382	.92166	1.8589	1.9308	.46527	.44184	.46484
#2	2.0775	.98687	.93497	.92359	1.8285	1.8696	.46355	.43483	.46266

Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Int. Std.	Y_2243	Y_3600	Y_3774
Line	224.306 {450}	360.073 { 94}	377.433 { 89}
Units	Cts/S	Cts/S	Cts/S
Avg	2577.8	39009.	1752.0
Stddev	8.4	77.	78.3
%RSD	.32397	.19783	4.4686

#1	2583.7	38955.	1807.3
#2	2571.9	39064.	1696.6

Sample Name: 280-83179-C-7-B Acquired: 5/18/2016 3:46:16 Type: Unk
Method: 6500_025(v6) Mode: CONC Corr. Factor: 1.000000
User: CRHOADES Prep Date: Custom ID2: Custom ID3:
Comment: 325504 200.7

Elem	Ag3280	Al1670	As1890	B_2089	Ba4554	Be3130	Bi2230	Ca3179	Cd2288
Line	328.068 {103}	167.079 {502}	189.042 {478}	208.959 {461}	455.403 { 74}	313.042 {108}	223.061 {451}	317.933 {106}	228.802 {447}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.00288	.73910	-.00429	.02508	.07774	-.00017	.00000	77.638	.00060
Stddev	.00001	.00182	.00041	.00122	.00004	.00003	.0005	.239	.00039
%RSD	.18230	.24626	9.6052	4.8602	.05624	20.280	22529.	.30768	65.423

#1	.00288	.73781	-.00458	.02594	.07778	-.00019	-.00034	77.469	.00032
#2	.00288	.74038	-.00400	.02422	.07771	-.00014	.00034	77.807	.00088

Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Elem	Co2286	Cr2055	Cu3247	Fe2599	K_7664	Li6707	Mg2790	Mn2576	Mo2020
Line	228.616 {447}	205.560 {464}	324.754 {104}	259.940 {130}	766.490 { 44}	670.784 { 50}	279.079 {121}2	257.610 {131}	202.030 {467}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.00023	.00040	.00058	.75947	1.6026	-.00710	18.784	.09727	.00224
Stddev	.00039	.00053	.00073	.00336	.0253	.00163	.004	.00038	.00110
%RSD	169.67	131.50	126.79	.44255	1.5797	23.012	.02205	.38597	49.251

#1	.00050	.00003	.00109	.76185	1.6205	-.00826	18.781	.09754	.00146
#2	-.00005	.00078	.00006	.75709	1.5847	-.00595	18.787	.09700	.00302

Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Elem	Na8183	Ni2316	P_1782	Pb2203	S_1820	Sb2068	Se1960	Si2881	SiO2
Line	818.326 { 41}	231.604 {446}	178.284 {489}	220.353 {453}	182.034 {485}	206.833 {463}	196.090 {472}	288.158 {117}	288.158 {117}2
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	58.557	.00106	.03983	-.00194	26.855	-.00190	-.00205	3.8764	8.2954
Stddev	1.246	.00070	.00143	.00075	.125	.00510	.00062	.0621	.1329
%RSD	2.1276	65.574	3.5809	38.864	.46401	268.29	30.418	1.6019	1.6019

#1	59.438	.00057	.04084	-.00247	26.767	.00170	-.00249	3.9203	8.3894
#2	57.676	.00156	.03882	-.00141	26.943	-.00550	-.00161	3.8325	8.2015

Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Elem	Sn1899	Sr4077	Th2837	Ti3349	Ti1908	U_3701	V_2924	Zn2062	Zr3391
Line	189.989 {477}	407.771 { 83}	283.730 {119}	334.904 {101}	190.856 {477}	370.152 { 91}	292.402 {115}	206.200 {163}	339.198 { 99}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	-.00163	1.3904	.00139	.02006	.03323	.01724	.00225	.03044	.00192
Stddev	.00003	.0028	.00039	.00146	.01050	.02341	.00010	.00071	.00022
%RSD	1.7913	.19981	27.716	7.2847	31.595	135.77	4.2600	2.3244	11.381

#1	-.00165	1.3884	.00166	.02109	.02581	.00069	.00232	.03094	.00207
#2	-.00161	1.3923	.00112	.01902	.04065	.03380	.00218	.02994	.00176

Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Int. Std.	Y_2243	Y_3600	Y_3774
Line	224.306 {450}	360.073 { 94}	377.433 { 89}
Units	Cts/S	Cts/S	Cts/S
Avg	2637.3	39382.	1767.5
Stddev	1.6	127.	22.4
%RSD	.06114	.32329	1.2657

#1	2636.1	39292.	1751.7
#2	2638.4	39473.	1783.3

Sample Name: 280-83179-C-7-B SD@5 Acquired: 5/18/2016 3:48:54 Type: Unk
Method: 6500_025(v6) Mode: CONC Corr. Factor: 1.000000
User: CRHOADES Prep Date: Custom ID2: Custom ID3:
Comment: 325504 200.7

Elem	Ag3280	Al1670	As1890	B_2089	Ba4554	Be3130	Bi2230	Ca3179	Cd2288
Line	328.068 {103}	167.079 {502}	189.042 {478}	208.959 {461}	455.403 {74}	313.042 {108}	223.061 {451}	317.933 {106}	228.802 {447}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.00157	.15547	-.00221	.00902	.01417	-.00027	-.00001	15.587	.00006
Stddev	.00118	.00177	.00492	.00003	.00019	.00020	.00136	.005	.00004
%RSD	74.918	1.1400	222.37	.29619	1.3407	74.872	22065.	.03475	61.802

#1	.00074	.15422	.00127	.00903	.01431	-.00041	.00095	15.583	.00004
#2	.00241	.15672	-.00569	.00900	.01404	-.00013	-.00097	15.590	.00009

Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Elem	Co2286	Cr2055	Cu3247	Fe2599	K_7664	Li6707	Mg2790	Mn2576	Mo2020
Line	228.616 {447}	205.560 {464}	324.754 {104}	259.940 {130}	766.490 {44}	670.784 {50}	279.079 {121}2	257.610 {131}	202.030 {467}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	-.00018	-.00023	-.00048	.20930	.13560	W -.01103	3.8548	.02030	-.00030
Stddev	.00031	.00012	.00012	.00166	.09925	.00306	.0364	.00018	.00083
%RSD	171.86	51.336	25.349	.79123	73.192	27.709	.94294	.87846	278.22

#1	-.00040	-.00031	-.00039	.20813	.06542	-.00887	3.8291	.02017	-.00089
#2	.00004	-.00015	-.00056	.21047	.20577	-.01320	3.8805	.02042	.00029

Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Warn	Chk Pass	Chk Pass	Chk Pass
High Limit						2.0000			
Low Limit						-.01000			

Elem	Na5895	Na8183	Ni2316	P_1782	Pb2203	S_1820	Sb2068	Se1960	Si2881
Line	589.592 {57}	818.326 {41}	231.604 {446}	178.284 {489}	220.353 {453}	182.034 {485}	206.833 {463}	196.090 {472}	288.158 {117}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	10.287	13.535	.00097	.00891	-.00066	5.2611	-.00094	W -.00813	.73063
Stddev	.052	.657	.00015	.00275	.00270	.0061	.00384	.00006	.01472
%RSD	.50785	4.8506	15.298	30.819	409.58	.11675	408.54	.79316	2.0153

#1	10.250	13.071	.00087	.01086	-.00256	5.2654	-.00365	-.00818	.72022
#2	10.324	13.999	.00108	.00697	.00125	5.2567	.00177	-.00809	.74105

Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Warn	Chk Pass
High Limit								5.0000	
Low Limit								-.00500	

Elem	SiO2	Sn1899	Sr4077	Th2837	Ti3349	Ti1908	U_3701	V_2924	Zn2062
Line	288.158 {117}2	189.989 {477}	407.771 {83}	283.730 {119}	334.904 {101}	190.856 {477}	370.152 {91}	292.402 {115}	206.200 {163}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	1.5636	-.00153	.27546	-.00116	.00737	.00223	.07565	.00043	.00102
Stddev	.0315	.00178	.00572	.00046	.00185	.00289	.04298	.00034	.00047
%RSD	2.0153	116.46	2.0756	39.702	25.045	129.68	56.813	78.871	46.173

#1	1.5413	-.00027	.27950	-.00083	.00868	.00019	.04526	.00019	.00069
#2	1.5858	-.00279	.27142	-.00148	.00607	.00428	.10604	.00067	.00135

Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Elem	Zr3391								
Line	339.198 {99}								
Units	ppm								
Avg	-.00281								
Stddev	.00077								
%RSD	27.263								

#1	-.00335								
#2	-.00227								

Check ?	Chk Pass								
High Limit									
Low Limit									

Sample Name: 280-83179-C-7-B SD@5 Acquired: 5/18/2016 3:48:54 Type: Unk
 Method: 6500_025(v6) Mode: CONC Corr. Factor: 1.000000
 User: CRHOADES Prep Date: Custom ID2: Custom ID3:
 Comment: 325504 200.7

Int. Std.	Y_2243	Y_3600	Y_3774
Line	224.306 {450}	360.073 { 94}	377.433 { 89}
Units	Cts/S	Cts/S	Cts/S
Avg	2520.5	37556.	1763.3
Stddev	8.6	166.	30.6
%RSD	.34268	.44246	1.7330
#1	2514.4	37673.	1784.9
#2	2526.6	37438.	1741.7

Sample Name: 280-83179-C-7-C MS Acquired: 5/18/2016 3:51:33 Type: Unk
Method: 6500_025(v6) Mode: CONC Corr. Factor: 1.000000
User: CRHOADES Prep Date: Custom ID2: Custom ID3:
Comment: 325504 200.7

Elem	Ag3280	Al3092	As1890	B_2089	Ba4554	Be3130	Bi2230	Ca3179	Cd2288
Line	328.068 {103}	309.271 {109}	189.042 {478}	208.959 {461}	455.403 {74}	313.042 {108}	223.061 {451}	317.933 {106}	228.802 {447}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.04839	3.3754	.95409	1.0289	1.9654	.04978	F 1.9606	122.06	.09956
Stddev	.00131	.1229	.00543	.0049	.0655	.00120	.0183	3.79	.00072
%RSD	2.7166	3.6421	.56918	.47597	3.3326	2.4099	.93154	3.1031	.72138

#1	.04746	3.4623	.95025	1.0324	2.0117	.05063	1.9736	124.74	.10007
#2	.04932	3.2884	.95793	1.0255	1.9191	.04894	1.9477	119.38	.09906

Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Fail	Chk Pass	Chk Pass
High Limit							.10000		
Low Limit							-.10000		

Elem	Co2286	Cr2055	Cu3247	Fe2599	K_7664	Li6707	Mg2790	Mn2576	Mo2020
Line	228.616 {447}	205.560 {464}	324.754 {104}	259.940 {130}	766.490 {44}	670.784 {50}	279.079 {121}2	257.610 {131}	202.030 {467}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.48122	.20124	.21978	1.7845	50.688	.95408	65.589	.54361	1.0512
Stddev	.00129	.00036	.00014	.0539	1.706	.00968	.077	.00006	.0042
%RSD	.26762	.17684	.06563	3.0194	3.3649	1.0146	.11721	.01088	.40013

#1	.48213	.20149	.21968	1.8226	51.894	.96092	65.644	.54365	1.0542
#2	.48031	.20098	.21988	1.7464	49.482	.94723	65.535	.54357	1.0482

Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Elem	Na8183	Ni2316	P_1782	Pb2203	S_1820	Sb2068	Se1960	Si2881	SiO2
Line	818.326 {41}	231.604 {446}	178.284 {489}	220.353 {453}	182.034 {485}	206.833 {463}	196.090 {472}	288.158 {117}	288.158 {117}2
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	116.48	.46979	W 10.229	.49048	30.074	.52537	1.9402	14.339	30.685
Stddev	.05	.00210	.037	.00433	.540	.00021	.0010	.020	.042
%RSD	.03984	.44668	.36281	.88253	1.7963	.03964	.05198	.13740	.13740

#1	116.51	.47128	10.255	.49354	30.456	.52523	1.9395	14.353	30.715
#2	116.45	.46831	10.203	.48742	29.692	.52552	1.9409	14.325	30.656

Check ?	Chk Pass	Chk Pass	Chk Warn	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit			2.0000						
Low Limit			-1.0000						

Elem	Sn1899	Sr4077	Th2837	Ti3349	Ti1908	U_3701	V_2924	Zn2062	Zr3391
Line	189.989 {477}	407.771 {83}	283.730 {119}	334.904 {101}	190.856 {477}	370.152 {91}	292.402 {115}	206.200 {163}	339.198 {99}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	W 2.0465	2.3426	.93237	.94129	1.7199	1.8779	.46805	.43784	.45913
Stddev	.0058	.0731	.00691	.00007	.0609	.0575	.00032	.00314	.00880
%RSD	.28509	3.1222	.74130	.00712	3.5403	3.0609	.06942	.71795	1.9169

#1	2.0423	2.3943	.92748	.94134	1.7630	1.9186	.46828	.43562	.46536
#2	2.0506	2.2909	.93725	.94124	1.6768	1.8373	.46782	.44006	.45291

Check ?	Chk Warn	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit	2.0000								
Low Limit	-.05000								

Int. Std.	Y_2243	Y_3600	Y_3774						
Line	224.306 {450}	360.073 {94}	377.433 {89}						
Units	Cts/S	Cts/S	Cts/S						
Avg	2567.8	37817.	1787.7						
Stddev	16.7	893.	115.5						
%RSD	.64932	2.3610	6.4610						

#1	2579.6	37186.	1706.0						
#2	2556.1	38449.	1869.3						

Sample Name: 280-83179-C-7-D MSD Acquired: 5/18/2016 3:53:59 Type: Unk
Method: 6500_025(v6) Mode: CONC Corr. Factor: 1.000000
User: CRHOADES Prep Date: Custom ID2: Custom ID3:
Comment: 325504 200.7

Elem	Ag3280	Al3092	As1890	B_2089	Ba4554	Be3130	Bi2230	Ca3179	Cd2288
Line	328.068 {103}	309.271 {109}	189.042 {478}	208.959 {461}	455.403 {74}	313.042 {108}	223.061 {451}	317.933 {106}	228.802 {447}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.04822	3.4305	.92411	.99491	1.9901	.04944	F 1.8863	125.15	.09607
Stddev	.00172	.0390	.03307	.03259	.0264	.00023	.0461	1.55	.00295
%RSD	3.5615	1.1368	3.5783	3.2754	1.3264	.46885	2.4457	1.2364	3.0659

#1	.04700	3.4581	.90073	.97187	2.0088	.04927	1.8537	126.25	.09399
#2	.04943	3.4030	.94750	1.0180	1.9715	.04960	1.9190	124.06	.09816

Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Fail	Chk Pass	Chk Pass
High Limit							.10000		
Low Limit							-.10000		

Elem	Co2286	Cr2055	Cu3247	Fe2599	K_7664	Li6707	Mg2790	Mn2576	Mo2020
Line	228.616 {447}	205.560 {464}	324.754 {104}	259.940 {130}	766.490 {44}	670.784 {50}	279.079 {121}2	257.610 {131}	202.030 {467}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.46013	.19460	.21659	1.8019	51.311	.94107	64.812	.53775	1.0103
Stddev	.01045	.00555	.00027	.0204	.676	.00152	.349	.00221	.0207
%RSD	2.2704	2.8527	.12663	1.1308	1.3172	.16125	.53828	.41059	2.0476

#1	.45275	.19068	.21678	1.7875	51.789	.94000	65.059	.53931	.99568
#2	.46752	.19853	.21639	1.8163	50.833	.94214	64.565	.53619	1.0249

Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Elem	Na8183	Ni2316	P_1782	Pb2203	S_1820	Sb2068	Se1960	Si2881	SiO2
Line	818.326 {41}	231.604 {446}	178.284 {489}	220.353 {453}	182.034 {485}	206.833 {463}	196.090 {472}	288.158 {117}	288.158 {117}2
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	115.60	.45421	W 9.8542	.46801	29.533	.50202	1.8575	14.170	30.324
Stddev	.13	.01444	.2863	.01687	.612	.01897	.0312	.028	.060
%RSD	.11115	3.1786	2.9058	3.6053	2.0738	3.7791	1.6787	.19689	.19689

#1	115.51	.44400	9.6517	.45608	29.100	.48860	1.8355	14.151	30.282
#2	115.69	.46442	10.057	.47994	29.966	.51543	1.8796	14.190	30.367

Check ?	Chk Pass	Chk Pass	Chk Warn	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit			2.0000						
Low Limit			-1.0000						

Elem	Sn1899	Sr4077	Th2837	Ti3349	Ti1908	U_3701	V_2924	Zn2062	Zr3391
Line	189.989 {477}	407.771 {83}	283.730 {119}	334.904 {101}	190.856 {477}	370.152 {91}	292.402 {115}	206.200 {163}	339.198 {99}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	1.9683	2.4060	.92287	.92471	1.7084	1.8244	.45936	.43031	.44794
Stddev	.0265	.0334	.00336	.00297	.0386	.0098	.00248	.00226	.00294
%RSD	1.3471	1.3889	.36417	.32125	2.2613	.53455	.54043	.52511	.65684

#1	1.9496	2.4296	.92525	.92681	1.7357	1.8313	.46111	.43191	.44586
#2	1.9871	2.3824	.92050	.92261	1.6810	1.8175	.45760	.42871	.45002

Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Int. Std.	Y_2243	Y_3600	Y_3774
Line	224.306 {450}	360.073 {94}	377.433 {89}
Units	Cts/S	Cts/S	Cts/S
Avg	2604.5	37513.	1781.0
Stddev	76.2	248.	36.0
%RSD	2.9241	.66199	2.0210

#1	2658.4	37337.	1755.6
#2	2550.7	37688.	1806.5

Sample Name: 280-83179-C-8-B Acquired: 5/18/2016 3:56:24 Type: Unk
Method: 6500_025(v6) Mode: CONC Corr. Factor: 1.000000
User: CRHOADES Prep Date: Custom ID2: Custom ID3:
Comment: 325504 200.7

Elem	Ag3280	Al1670	As1890	B_2089	Ba4554	Be3130	Bi2230	Ca3179	Cd2288
Line	328.068 {103}	167.079 {502}	189.042 {478}	208.959 {461}	455.403 { 74}	313.042 {108}	223.061 {451}	317.933 {106}	228.802 {447}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.00156	.14503	.00149	.07394	.06036	-.00017	-.00227	36.738	.00026
Stddev	.00024	.00215	.00878	.00119	.00101	.00013	.00230	.426	.00005
%RSD	15.427	1.4806	587.98	1.6160	1.6744	77.664	101.23	1.1607	19.046

#1	.00139	.14655	-.00471	.07479	.06107	-.00008	-.00390	37.040	.00022
#2	.00173	.14351	.00770	.07310	.05964	-.00027	-.00065	36.437	.00029

Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Elem	Co2286	Cr2055	Cu3247	Fe2599	K_7664	Li6707	Mg2790	Mn2576	Mo2020
Line	228.616 {447}	205.560 {464}	324.754 {104}	259.940 {130}	766.490 { 44}	670.784 { 50}	279.079 {121}2	257.610 {131}	202.030 {467}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	-.00061	-.00039	.00112	.16610	4.0583	-.00194	19.523	.01011	.00459
Stddev	.00011	.00045	.00009	.00677	.0346	.00141	.081	.00001	.00097
%RSD	18.255	114.31	8.0058	4.0742	.85203	72.859	.41277	.13408	21.030

#1	-.00053	-.00071	.00105	.17088	4.0338	-.00294	19.580	.01010	.00391
#2	-.00069	-.00007	.00118	.16131	4.0827	-.00094	19.466	.01012	.00527

Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Elem	Na8183	Ni2316	P_1782	Pb2203	S_1820	Sb2068	Se1960	Si2881	SiO2
Line	818.326 { 41}	231.604 {446}	178.284 {489}	220.353 {453}	182.034 {485}	206.833 {463}	196.090 {472}	288.158 {117}	288.158 {117}2
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	280.82	.00091	.01750	-.00167	91.212	-.00598	W -.00573	4.2245	9.0404
Stddev	2.10	.00032	.00071	.00085	.146	.00537	.01000	.0560	.1199
%RSD	.74934	34.705	4.0666	51.111	.15975	89.815	174.52	1.3260	1.3260

#1	282.31	.00069	.01700	-.00227	91.109	-.00978	-.01280	4.2641	9.1252
#2	279.33	.00113	.01800	-.00107	91.315	-.00218	.00134	4.1849	8.9556

Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Warn	Chk Pass	Chk Pass
High Limit							5.0000		
Low Limit							-.00500		

Elem	Sn1899	Sr4077	Th2837	Ti3349	Ti1908	U_3701	V_2924	Zn2062	Zr3391
Line	189.989 {477}	407.771 { 83}	283.730 {119}	334.904 {101}	190.856 {477}	370.152 { 91}	292.402 {115}	206.200 {163}	339.198 { 99}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	-.00174	.98310	-.00062	.00488	.02935	.03299	.00111	.00169	-.00057
Stddev	.00179	.01120	.00319	.00042	.00124	.06765	.00051	.00073	.00243
%RSD	103.35	1.1393	515.92	8.6416	4.2166	205.05	46.027	43.172	429.64

#1	-.00300	.99102	.00164	.00518	.02848	-.01484	.00148	.00221	-.00229
#2	-.00047	.97518	-.00287	.00458	.03023	.08083	.00075	.00118	.00115

Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Int. Std.	Y_2243	Y_3600	Y_3774
Line	224.306 {450}	360.073 { 94}	377.433 { 89}
Units	Cts/S	Cts/S	Cts/S
Avg	2600.4	38258.	1694.0
Stddev	.6	172.	20.0
%RSD	.02370	.44976	1.1813

#1	2600.9	38380.	1679.9
#2	2600.0	38137.	1708.2

Sample Name: 280-83179-C-9-B Acquired: 5/18/2016 3:59:02 Type: Unk
Method: 6500_025(v6) Mode: CONC Corr. Factor: 1.000000
User: CRHOADES Prep Date: Custom ID2: Custom ID3:
Comment: 325504 200.7

Elem	Ag3280	Al1670	As1890	B_2089	Ba4554	Be3130	Bi2230	Ca3179	Cd2288
Line	328.068 {103}	167.079 {502}	189.042 {478}	208.959 {461}	455.403 { 74}	313.042 {108}	223.061 {451}	317.933 {106}	228.802 {447}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.00236	.16958	.00145	.15746	.27679	.00010	.00010	2.5100	.00022
Stddev	.00014	.00015	.00123	.00184	.00315	.00014	.00129	.2048	.00013
%RSD	5.8062	.08599	85.219	1.1710	1.1378	134.74	1242.2	8.1576	57.899

#1	.00226	.16968	.00232	.15616	.27901	.00020	.00102	2.6548	.00013
#2	.00245	.16947	.00057	.15877	.27456	.00000	-.00081	2.3652	.00031

Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Elem	Co2286	Cr2055	Cu3247	Fe2599	K_7664	Li6707	Mg2790	Mn2576	Mo2020
Line	228.616 {447}	205.560 {464}	324.754 {104}	259.940 {130}	766.490 { 44}	670.784 { 50}	279.079 {121}2	257.610 {131}	202.030 {467}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	-.00101	.00067	.00109	.68382	1.9347	.05795	.31580	.01081	.00093
Stddev	.00026	.00017	.00012	.09362	.1832	.00179	.00222	.00012	.00063
%RSD	25.846	25.473	10.789	13.690	9.4700	3.0829	.70385	1.0665	67.994

#1	-.00120	.00079	.00100	.75001	2.0643	.05921	.31423	.01073	.00048
#2	-.00083	.00055	.00117	.61762	1.8052	.05668	.31737	.01089	.00138

Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Elem	Na8183	Ni2316	P_1782	Pb2203	S_1820	Sb2068	Se1960	Si2881	SiO2
Line	818.326 { 41}	231.604 {446}	178.284 {489}	220.353 {453}	182.034 {485}	206.833 {463}	196.090 {472}	288.158 {117}	288.158 {117}2
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	420.76	.00018	.02958	-.00078	.04982	-.00704	W -.00977	9.2502	19.795
Stddev	2.01	.00038	.00035	.00098	.00696	.00757	.00693	.0021	.004
%RSD	.47849	205.79	1.1819	125.47	13.961	107.54	70.981	.02219	.02219

#1	419.34	.00045	.02982	-.00148	.05474	-.01240	-.00487	9.2517	19.799
#2	422.19	-.00008	.02933	-.00009	.04490	-.00169	-.01467	9.2488	19.792

Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Warn	Chk Pass	Chk Pass
High Limit							5.0000		
Low Limit							-.00500		

Elem	Sn1899	Sr4077	Th2837	Ti3349	Ti1908	U_3701	V_2924	Zn2062	Zr3391
Line	189.989 {477}	407.771 { 83}	283.730 {119}	334.904 {101}	190.856 {477}	370.152 { 91}	292.402 {115}	206.200 {163}	339.198 { 99}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	-.00226	.37352	-.00074	.00058	.00293	.03596	.00038	.06368	-.00127
Stddev	.00164	.00390	.00121	.00019	.00718	.03881	.00033	.00281	.00456
%RSD	72.591	1.0453	164.37	32.834	244.74	107.90	86.933	4.4202	358.11

#1	-.00342	.37628	.00012	.00045	-.00214	.06340	.00062	.06169	.00195
#2	-.00110	.37076	-.00159	.00072	.00801	.00852	.00015	.06567	-.00450

Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Int. Std.	Y_2243	Y_3600	Y_3774
Line	224.306 {450}	360.073 { 94}	377.433 { 89}
Units	Cts/S	Cts/S	Cts/S
Avg	2573.7	38262.	1781.3
Stddev	12.0	167.	35.4
%RSD	.46505	.43692	1.9863

#1	2565.2	38143.	1756.3
#2	2582.2	38380.	1806.4

Sample Name: CCVH-3883905 Acquired: 5/18/2016 4:01:43 Type: QC
Method: 6500_025(v6) Mode: CONC Corr. Factor: 1.000000
User: CRHOADES Prep Date: Custom ID2: Custom ID3:
Comment:

Elem	Ag3280	Al3092	As1890	B_2089	Ba4554	Be3130	Bi2230	Ca3179	Cd2288	Co2286	Cr2055
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	-.00634	53.022	-.00254	.00534	-.00094	.00007	W .94314	-.00386	-.00063	-.00134	-.00041
Stddev	.00016	.124	.00065	.00001	.00130	.00018	.01037	.00301	.00061	.00002	.00022
%RSD	2.4524	.23375	25.715	.11539	138.35	245.63	1.0991	77.836	96.126	1.4971	53.123

#1	-.00645	52.934	-.00208	.00534	-.00185	-.00005	.95047	-.00599	-.00020	-.00135	-.00025
#2	-.00623	53.109	-.00300	.00535	-.00002	.00020	.93581	-.00174	-.00107	-.00132	-.00056

Check ?	None	Chk Pass	None	None	None	None	Chk Warn	None	None	None	None
Value							1.0000				
Range							-5.0000%				

Elem	Cu3247	Fe2714	K_7664	Li6707	Mg2790	Mn2576	Mo2020	Na8183	Ni2316	P_1782	Pb2203
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	-.01613	F 55.448	.02952	-.00681	.01381	-.00211	-.00195	F 280.35	.00183	.00745	-.00002
Stddev	.00031	.024	.11463	.00202	.00199	.00009	.00093	1.10	.00025	.00134	.00116
%RSD	1.9170	.04301	388.37	29.589	14.382	4.1382	47.586	.39239	13.690	17.954	4806.0

#1	-.01635	55.431	-.05154	-.00824	.01522	-.00204	-.00260	279.57	.00200	.00840	.00079
#2	-.01591	55.464	.11058	-.00539	.01241	-.00217	-.00129	281.12	.00165	.00651	-.00084

Check ?	None	Chk Fail	None	None	None	None	None	Chk Fail	None	None	None
Value		50.000						250.00			
Range		10.490%						10.490%			

Elem	S_1820	Sb2068	Se1960	Si2881	SiO2	Sn1899	Sr4077	Th2837	Ti3349	Ti1908	U_3701
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	4.8921	-.01464	-.00404	-.01690	-.03616	-.00118	.00006	W 4.5650	.00209	.00199	W 9.3261
Stddev	.0070	.00065	.00486	.05127	.10971	.00038	.00014	.0055	.00112	.00040	.0281
%RSD	.14258	4.4554	120.15	303.41	303.41	31.877	218.37	.12018	53.647	20.152	.30100

#1	4.8871	-.01418	-.00061	-.05315	-.11374	-.00091	.00016	4.5689	.00288	.00170	9.3063
#2	4.8970	-.01510	-.00748	.01935	.04142	-.00144	-.00003	4.5611	.00130	.00227	9.3460

Check ?	Chk Pass	None	None	None	None	None	None	Chk Warn	None	None	Chk Warn
Value								5.0000			10.000
Range								-5.0000%			-5.0000%

Elem	V_2924	Zn2062	Zr3391
Units	ppm	ppm	ppm
Avg	.01145	.00063	-.12969
Stddev	.00119	.00019	.00125
%RSD	10.350	30.181	.96310

#1	.01061	.00050	-.13058
#2	.01229	.00077	-.12881

Check ?	None	None	None
Value			
Range			

Int. Std.	Y_2243	Y_3600	Y_3774
Units	Cts/S	Cts/S	Cts/S
Avg	2450.4	36272.	1701.3
Stddev	7.7	278.	48.9
%RSD	.31324	.76566	2.8747

#1	2455.8	36075.	1735.9
#2	2444.9	36468.	1666.7

Sample Name: CCV-3888422 Acquired: 5/18/2016 4:04:21 Type: QC
Method: 6500_025(v6) Mode: CONC Corr. Factor: 1.000000
User: CRHOADES Prep Date: Custom ID2: Custom ID3:
Comment:

Elem	Ag3280	Al1670	As1890	B_2089	Ba4554	Be3130	Bi2230	Ca3179	Cd2288	Co2286	Cr2055	Cu3247
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.47368	.47371	.90557	.48207	.48138	.49385	-.00400	4.7096	.48589	.49668	.50411	F .44124
Stddev	.00032	.01269	.01726	.01073	.00413	.00365	.00103	.0476	.00042	.01032	.01066	.00343
%RSD	.06811	2.6781	1.9062	2.2265	.85802	.73902	25.632	1.0112	.08563	2.0778	2.1138	.77696

#1	.47391	.48268	.91778	.48966	.48430	.49126	-.00328	4.6759	.48618	.50398	.51165	.44366
#2	.47346	.46474	.89337	.47448	.47845	.49643	-.00473	4.7432	.48559	.48939	.49658	.43882

Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	None	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Fail
Value												.50000
Range												-10.490%

Elem	Fe2599	K_7664	Li6707	Mg2790	Mn2576	Mo2020	Na5895	Ni2316	P_1782	Pb2203	S_1820	Sb2068
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	2.5023	49.519	.95701	18.509	.45524	.49503	5.2609	.48369	.95712	.98089	-.08629	.95637
Stddev	.0179	.396	.00968	.053	.00070	.01286	.0194	.00801	.01759	.01888	.00336	.01958
%RSD	.71323	.80056	1.0115	.28851	.15424	2.5974	.36796	1.6557	1.8381	1.9247	3.8917	2.0470

#1	2.4896	49.799	.95016	18.547	.45573	.50412	5.2473	.48936	.96956	.99424	-.08392	.97022
#2	2.5149	49.239	.96385	18.471	.45474	.48594	5.2746	.47803	.94468	.96754	-.08867	.94253

Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	None	Chk Pass
Value												
Range												

Elem	Se1960	Si2881	SiO2	Sn1899	Sr4077	Th2837	Ti3349	Ti1908	U_3701	V_2924	Zn2062	Zr3391
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.90567	4.8959	10.477	.99404	.49772	.00183	F .44658	1.0031	.02990	.46653	F .44236	.47063
Stddev	.01168	.0531	.114	.02137	.00365	.00087	.00228	.0301	.01290	.00496	.00866	.00660
%RSD	1.2902	1.0841	1.0841	2.1502	.73387	47.338	.50956	2.9956	43.163	1.0622	1.9566	1.4024

#1	.91394	4.8583	10.397	1.0092	.50030	.00244	.44819	1.0243	.03902	.47003	.44848	.46596
#2	.89741	4.9334	10.557	.97892	.49513	.00122	.44497	.98184	.02077	.46302	.43624	.47530

Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	None	Chk Fail	Chk Pass	None	Chk Pass	Chk Fail	Chk Pass
Value							.50000				.50000	
Range							-10.490%				-10.490%	

Int. Std.	Y_2243	Y_3600	Y_3774
Units	Cts/S	Cts/S	Cts/S
Avg	2513.9	37218.	1719.6
Stddev	53.7	27.	53.3
%RSD	2.1353	.07262	3.0990

#1	2476.0	37237.	1681.9
#2	2551.9	37199.	1757.3

Sample Name: CCB Acquired: 5/18/2016 4:06:53 Type: QC
 Method: 6500_025(v6) Mode: CONC Corr. Factor: 1.000000
 User: CRHOADES Prep Date: Custom ID2: Custom ID3:
 Comment:

Elem	Ag3280	Al1670	As1890	B_2089	Ba4554	Be3130	Bi2230	Ca3179	Cd2288	Co2286	Cr2055
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.00126	.00111	-.00005	.00500	-.00123	-.00003	-.00455	-.00724	.00019	-.00015	.00011
Stddev	.00047	.00099	.00358	.00086	.00043	.00019	.00735	.00760	.00002	.00054	.00015
%RSD	37.341	89.195	7892.7	17.121	34.908	625.67	161.78	104.93	8.1577	355.65	135.10

#1	.00093	.00182	.00248	.00439	-.00153	-.00017	.00065	-.00187	.00018	.00023	.00000
#2	.00159	.00041	-.00257	.00560	-.00092	.00010	-.00975	-.01262	.00021	-.00053	.00021

Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit											
Low Limit											

Elem	Cu3247	Fe2599	K_7664	Li6707	Mg2790	Mn2576	Mo2020	Na5895	Ni2316	P_1782	Pb2203
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	-.00113	.00511	-.19491	F -.01696	-.00267	-.00003	.00080	.01325	.00021	.00323	-.00053
Stddev	.00035	.00563	.01308	.00066	.00294	.00002	.00071	.00089	.00005	.00158	.00090
%RSD	30.615	110.32	6.7108	3.8771	110.13	71.802	88.376	6.7153	23.531	48.946	169.14

#1	-.00088	.00909	-.20415	-.01650	-.00059	-.00004	.00030	.01388	.00025	.00434	.00010
#2	-.00137	.00112	-.18566	-.01743	-.00475	-.00001	.00130	.01262	.00018	.00211	-.00117

Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Fail	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit				.01000							
Low Limit				-.01000							

Elem	S_1820	Sb2068	Se1960	Si2881	SiO2	Sn1899	Sr4077	Th2837	Ti3349	Ti1908	U_3701
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	-.08250	W .00368	-.00490	.00641	.01371	-.00097	-.00026	-.00062	.00020	.00485	.05957
Stddev	.00478	.00292	.00509	.07649	.16368	.00082	.00009	.00423	.00017	.00200	.04898
%RSD	5.7957	79.308	104.00	1193.6	1193.6	84.922	35.209	682.73	85.270	41.225	82.224

#1	-.08588	.00162	-.00850	-.04768	-.10203	-.00155	-.00020	-.00361	.00032	.00344	.09420
#2	-.07912	.00574	-.00130	.06049	.12945	-.00039	-.00033	.00237	.00008	.00626	.02493

Check ?	Chk Pass	Chk Warn	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit		.00100									
Low Limit		-.00100									

Elem	V_2924	Zn2062	Zr3391
Units	ppm	ppm	ppm
Avg	.00043	-.00031	-.00259
Stddev	.00103	.00074	.00287
%RSD	238.57	238.51	110.93

#1	.00116	.00021	-.00462
#2	-.00030	-.00084	-.00056

Check ?	Chk Pass	Chk Pass	Chk Pass
High Limit			
Low Limit			

Int. Std.	Y_2243	Y_3600	Y_3774
Units	Cts/S	Cts/S	Cts/S
Avg	2526.7	37334.	1679.0
Stddev	60.4	28.	20.3
%RSD	2.3924	.07424	1.2074

#1	2569.5	37353.	1693.3
#2	2484.0	37314.	1664.7

Sample Name: CCVL-3894681 Acquired: 5/18/2016 4:09:16 Type: QC
Method: 6500_025(v6) Mode: CONC Corr. Factor: 1.000000
User: CRHOADES Prep Date: Custom ID2: Custom ID3:
Comment:

Elem	Ag3280	Al1670	As1890	B_2089	Ba4554	Be3130	Bi2230	Ca3179	Cd2288	Co2286	Cr2055
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.01098	.11050	.01902	.09419	.00782	.00098	.09772	.20445	.00497	.00963	.00993
Stddev	.00088	.02090	.00053	.00080	.00042	.00035	.00476	.00727	.00000	.00017	.00029
%RSD	8.0294	18.916	2.7855	.84584	5.3335	36.032	4.8698	3.5574	.09050	1.7562	2.9473

#1	.01035	.12528	.01940	.09475	.00752	.00123	.10108	.20960	.00498	.00975	.01014
#2	.01160	.09572	.01865	.09363	.00811	.00073	.09435	.19931	.00497	.00951	.00973

Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Value											
Range											

Elem	Cu3247	Fe2599	K_7664	Li6707	Mg2790	Mn2576	Mo2020	Na5895	Ni2316	P_1782	Pb2203
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.01335	F .23871	2.7272	F -.00271	.18417	.01025	.01875	1.0170	.03896	2.7046	.00805
Stddev	.00006	.00052	.0414	.00347	.00094	.00006	.00070	.0147	.00028	.0003	.00070
%RSD	.45384	.21718	1.5183	128.29	.51026	.55712	3.7100	1.4424	.71752	.01016	8.6872

#1	.01331	.23908	2.6979	-.00025	.18351	.01029	.01924	1.0066	.03876	2.7048	.00756
#2	.01339	.23834	2.7565	-.00517	.18484	.01021	.01825	1.0274	.03916	2.7044	.00855

Check ?	Chk Pass	Chk Fail	Chk Pass	Chk Fail	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Value		.10000		.01000							
Range		30.000%		-30.000%							

Elem	S_1820	Sb2068	Se1960	Si2881	SiO2	Sn1899	Sr4077	Th2837	Ti3349	Ti1908	U_3701
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	-.07313	.02136	F -.00321	.45139	.96597	.09764	.00958	.01622	.00926	.01310	F .08644
Stddev	.01348	.00013	.00423	.06061	.12970	.00123	.00021	.00092	.00041	.00364	.01837
%RSD	18.435	.59088	131.70	13.427	13.427	1.2555	2.1602	5.6656	4.3943	27.821	21.250

#1	-.06360	.02145	-.00022	.40853	.87425	.09851	.00943	.01687	.00955	.01567	.07346
#2	-.08266	.02127	-.00621	.49424	1.0577	.09678	.00972	.01557	.00898	.01052	.09943

Check ?	None	Chk Pass	Chk Fail	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Fail
Value			.01500								.06000
Range			-30.000%								30.000%

Elem	V_2924	Zn2062	Zr3391
Units	ppm	ppm	ppm
Avg	.00892	.01908	.01309
Stddev	.00046	.00093	.00028
%RSD	5.1128	4.8803	2.1716

#1	.00924	.01973	.01289
#2	.00860	.01842	.01329

Check ?	Chk Pass	Chk Pass	Chk Pass
Value			
Range			

Int. Std.	Y_2243	Y_3600	Y_3774
Units	Cts/S	Cts/S	Cts/S
Avg	2527.3	37172.	1714.0
Stddev	43.0	2.	9.1
%RSD	1.7023	.00504	.53044

#1	2496.9	37173.	1707.6
#2	2557.8	37170.	1720.4

Sample Name: 280-83179-C-10-D Acquired: 5/18/2016 4:11:57 Type: Unk
Method: 6500_025(v6) Mode: CONC Corr. Factor: 1.000000
User: CRHOADES Prep Date: Custom ID2: Custom ID3:
Comment: 325504 200.7

Elem	Ag3280	Al3092	As1890	B_2089	Ba4554	Be3130	Bi2230	Ca3179	Cd2288
Line	328.068 {103}	309.271 {109}	189.042 {478}	208.959 {461}	455.403 {74}	313.042 {108}	223.061 {451}	317.933 {106}	228.802 {447}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.00223	4.0019	.00283	.00866	.05871	.00019	-.00411	15.135	.00031
Stddev	.00030	.0124	.00447	.00122	.00053	.00026	.00427	.023	.00008
%RSD	13.223	.31056	157.85	14.075	.90639	138.23	103.87	.14875	24.702

#1	.00244	4.0107	-.00033	.00952	.05909	.00038	-.00109	15.151	.00025
#2	.00203	3.9931	.00600	.00780	.05833	.00000	-.00713	15.120	.00036

Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Elem	Co2286	Cr2055	Cu3247	Fe2599	K_7664	Li6707	Mg2790	Mn2576	Mo2020
Line	228.616 {447}	205.560 {464}	324.754 {104}	259.940 {130}	766.490 {44}	670.784 {50}	279.079 {121}2	257.610 {131}	202.030 {467}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.00095	.00231	.00304	2.3346	1.5705	W -.01157	2.9731	.06517	-.00014
Stddev	.00053	.00011	.00019	.0029	.1035	.00097	.0031	.00006	.00070
%RSD	56.228	4.7919	6.3069	.12467	6.5915	8.4203	.10534	.08733	493.58

#1	.00132	.00239	.00290	2.3326	1.4973	-.01088	2.9709	.06521	-.00064
#2	.00057	.00224	.00317	2.3367	1.6437	-.01226	2.9753	.06513	.00036

Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Warn	Chk Pass	Chk Pass	Chk Pass
High Limit						2.0000			
Low Limit						-.01000			

Elem	Na5895	Ni2316	P_1782	Pb2203	S_1820	Sb2068	Se1960	Si2881	SiO2
Line	589.592 {57}	231.604 {446}	178.284 {489}	220.353 {453}	182.034 {485}	206.833 {463}	196.090 {472}	288.158 {117}	288.158 {117}2
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	4.1255	.00225	.07932	.00152	3.1182	-.00388	-.00355	10.777	23.063
Stddev	.0272	.00005	.00214	.00068	.0136	.00081	.00632	.008	.017
%RSD	.65850	2.0723	2.7028	44.724	.43691	20.873	178.30	.07382	.07382

#1	4.1447	.00229	.08084	.00104	3.1278	-.00446	-.00802	10.771	23.051
#2	4.1063	.00222	.07781	.00200	3.1086	-.00331	.00092	10.783	23.075

Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Elem	Sn1899	Sr4077	Th2837	Ti3349	Ti1908	U_3701	V_2924	Zn2062	Zr3391
Line	189.989 {477}	407.771 {83}	283.730 {119}	334.904 {101}	190.856 {477}	370.152 {91}	292.402 {115}	206.200 {163}	339.198 {99}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	-.00198	.12625	-.00225	.09365	-.00069	.04243	.00495	.00718	.00540
Stddev	.00081	.00005	.00319	.00071	.00896	.03398	.00062	.00014	.00663
%RSD	40.786	.04129	141.84	.75401	1292.3	80.090	12.611	1.9014	122.74

#1	-.00255	.12629	-.00450	.09415	.00564	.06645	.00539	.00728	.01008
#2	-.00141	.12621	.00001	.09315	-.00703	.01840	.00451	.00709	.00071

Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Int. Std.	Y_2243	Y_3600	Y_3774
Line	224.306 {450}	360.073 {94}	377.433 {89}
Units	Cts/S	Cts/S	Cts/S
Avg	2659.2	39945.	1849.1
Stddev	12.9	276.	1.9
%RSD	.48561	.69009	.10157

#1	2650.1	40140.	1847.7
#2	2668.3	39750.	1850.4

Sample Name: 280-83179-C-11-B Acquired: 5/18/2016 4:14:35 Type: Unk

Method: 6500_025(v6) Mode: CONC Corr. Factor: 1.000000

User: CRHOADES Prep Date: Custom ID2: Custom ID3:

Comment: 325504 200.7

Elem	Ag3280	Al3092	As1890	B_2089	Ba4554	Be3130	Bi2230	Ca3179	Cd2288
Line	328.068 {103}	309.271 {109}	189.042 {478}	208.959 {461}	455.403 {74}	313.042 {108}	223.061 {451}	317.933 {106}	228.802 {447}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.00188	4.2977	.00271	.00823	.05481	.00040	-.00357	13.026	.00033
Stddev	.00075	.0112	.00420	.00086	.00047	.00018	.00054	.106	.00004
%RSD	40.020	.26146	155.05	10.480	.86298	45.017	15.141	.81549	12.718

#1	.00241	4.3056	.00568	.00884	.05514	.00053	-.00395	13.101	.00037
#2	.00135	4.2898	-.00026	.00762	.05448	.00027	-.00319	12.951	.00030

Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Elem	Co2286	Cr2055	Cu3247	Fe2599	K_7664	Li6707	Mg2790	Mn2576	Mo2020
Line	228.616 {447}	205.560 {464}	324.754 {104}	259.940 {130}	766.490 {44}	670.784 {50}	279.079 {121}2	257.610 {131}	202.030 {467}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.00036	.00287	.00397	1.9943	1.2553	-.00873	2.0347	.03173	-.00114
Stddev	.00005	.00008	.00009	.0067	.1519	.00480	.0044	.00004	.00030
%RSD	14.600	2.7742	2.2067	.33624	12.104	54.977	.21810	.13121	26.636

#1	.00033	.00293	.00390	1.9896	1.1478	-.00534	2.0316	.03176	-.00135
#2	.00040	.00281	.00403	1.9990	1.3627	-.01212	2.0378	.03170	-.00092

Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Elem	Na5895	Ni2316	P_1782	Pb2203	S_1820	Sb2068	Se1960	Si2881	SiO2
Line	589.592 {57}	231.604 {446}	178.284 {489}	220.353 {453}	182.034 {485}	206.833 {463}	196.090 {472}	288.158 {117}	288.158 {117}2
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	2.8193	.00163	.07194	.00142	1.9210	-.00656	-.00192	11.388	24.371
Stddev	.0008	.00000	.00405	.00034	.0023	.00045	.00418	.052	.110
%RSD	.02730	.23295	5.6286	23.789	.12155	6.8753	217.47	.45278	.45278

#1	2.8199	.00163	.06907	.00165	1.9194	-.00688	-.00488	11.352	24.293
#2	2.8188	.00163	.07480	.00118	1.9227	-.00624	.00103	11.425	24.449

Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Elem	Sn1899	Sr4077	Th2837	Ti3349	Ti1908	U_3701	V_2924	Zn2062	Zr3391
Line	189.989 {477}	407.771 {83}	283.730 {119}	334.904 {101}	190.856 {477}	370.152 {91}	292.402 {115}	206.200 {163}	339.198 {99}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	-.00235	.10186	.00338	.10179	-.00078	.05382	.00456	.00596	.00330
Stddev	.00146	.00073	.00107	.00009	.00055	.04033	.00026	.00041	.00097
%RSD	61.838	.71349	31.618	.09125	70.570	74.930	5.7682	6.8837	29.407

#1	-.00338	.10135	.00262	.10173	-.00039	.08234	.00438	.00625	.00261
#2	-.00132	.10238	.00413	.10186	-.00118	.02530	.00475	.00567	.00398

Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Int. Std.	Y_2243	Y_3600	Y_3774
Line	224.306 {450}	360.073 {94}	377.433 {89}
Units	Cts/S	Cts/S	Cts/S
Avg	2674.8	39285.	1823.6
Stddev	2.1	59.	.0
%RSD	.07679	.14975	.00000

#1	2676.3	39327.	1823.6
#2	2673.4	39243.	1823.6

Elem	Ag3280	Al3092	As1890	B_2089	Ba4554	Be3130	Bi2230	Ca3179	Cd2288
Line	328.068 {103}	309.271 {109}	189.042 {478}	208.959 {461}	455.403 {74}	313.042 {108}	223.061 {451}	317.933 {106}	228.802 {447}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.00134	4.4265	-.00054	.01017	.06993	.00011	-.00341	17.564	-.00023
Stddev	.00044	.0202	.00514	.00039	.00131	.00013	.00100	.304	.00005
%RSD	32.791	.45605	945.06	3.8123	1.8726	114.41	29.458	1.7325	20.394

#1	.00103	4.4407	-.00418	.01045	.07086	.00002	-.00412	17.779	-.00027
#2	.00166	4.4122	.00309	.00990	.06901	.00020	-.00270	17.349	-.00020

Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Elem	Co2286	Cr2055	Cu3247	Fe2599	K_7664	Li6707	Mg2790	Mn2576	Mo2020
Line	228.616 {447}	205.560 {464}	324.754 {104}	259.940 {130}	766.490 {44}	670.784 {50}	279.079 {121}2	257.610 {131}	202.030 {467}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.00078	.00286	.00307	3.6520	1.3866	W -.01040	3.8987	.12215	-.00118
Stddev	.00033	.00015	.00025	.0189	.0479	.00087	.0141	.00040	.00057
%RSD	42.874	5.2734	8.2124	.51698	3.4566	8.3522	.36285	.32707	48.466

#1	.00054	.00297	.00289	3.6653	1.3527	-.00978	3.8887	.12186	-.00078
#2	.00102	.00276	.00325	3.6386	1.4205	-.01101	3.9087	.12243	-.00159

Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Warn	Chk Pass	Chk Pass	Chk Pass
High Limit						2.0000			
Low Limit						-.01000			

Elem	Na5895	Ni2316	P_1782	Pb2203	S_1820	Sb2068	Se1960	Si2881	SiO2
Line	589.592 {57}	231.604 {446}	178.284 {489}	220.353 {453}	182.034 {485}	206.833 {463}	196.090 {472}	288.158 {117}	288.158 {117}2
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	6.5176	.00279	.11574	.00179	3.1743	-.00455	W -.00542	12.918	27.643
Stddev	.0262	.00022	.00164	.00003	.0501	.00191	.00608	.221	.472
%RSD	.40214	8.0243	1.4195	1.9364	1.5772	41.901	112.23	1.7072	1.7072

#1	6.5361	.00263	.11690	.00181	3.2097	-.00320	-.00112	13.073	27.977
#2	6.4991	.00294	.11458	.00176	3.1389	-.00589	-.00972	12.762	27.310

Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Warn	Chk Pass	Chk Pass
High Limit							5.0000		
Low Limit							-.00500		

Elem	Sn1899	Sr4077	Th2837	Ti3349	Ti1908	U_3701	V_2924	Zn2062	Zr3391
Line	189.989 {477}	407.771 {83}	283.730 {119}	334.904 {101}	190.856 {477}	370.152 {91}	292.402 {115}	206.200 {163}	339.198 {99}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	-.00164	.15390	.00024	.11765	-.00259	.03260	.00619	.01058	.00390
Stddev	.00144	.00089	.00138	.00460	.00172	.00534	.00029	.00031	.00101
%RSD	87.814	.57549	565.93	3.9095	66.593	16.383	4.7608	2.9587	25.824

#1	-.00062	.15453	-.00073	.12090	-.00137	.03638	.00640	.01036	.00319
#2	-.00266	.15328	.00122	.11439	-.00381	.02883	.00599	.01080	.00462

Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Int. Std.	Y_2243	Y_3600	Y_3774						
Line	224.306 {450}	360.073 {94}	377.433 {89}						
Units	Cts/S	Cts/S	Cts/S						
Avg	2628.5	39046.	1838.8						
Stddev	6.2	152.	32.7						
%RSD	.23581	.38858	1.7765						

#1	2624.1	38938.	1815.7						
#2	2632.8	39153.	1861.9						

Elem	Ag3280	Al3092	As1890	B_2089	Ba4554	Be3130	Bi2230	Ca3179	Cd2288
Line	328.068 {103}	309.271 {109}	189.042 {478}	208.959 {461}	455.403 {74}	313.042 {108}	223.061 {451}	317.933 {106}	228.802 {447}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.00220	6.8059	.00086	.01149	.10230	.00029	-.00357	24.146	.00023
Stddev	.00065	.0431	.00623	.00155	.00121	.00006	.00061	.123	.00019
%RSD	29.531	.63353	722.13	13.482	1.1829	21.535	17.161	.50868	80.182

#1	.00174	6.8364	-.00354	.01259	.10315	.00024	-.00400	24.233	.00010
#2	.00265	6.7754	.00527	.01040	.10144	.00033	-.00314	24.059	.00036

Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Elem	Co2286	Cr2055	Cu3247	Fe2599	K_7664	Li6707	Mg2790	Mn2576	Mo2020
Line	228.616 {447}	205.560 {464}	324.754 {104}	259.940 {130}	766.490 {44}	670.784 {50}	279.079 {121}2	257.610 {131}	202.030 {467}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.00204	.00487	.00462	5.9513	2.0332	-.00833	5.7123	.14666	-.00141
Stddev	.00074	.00011	.00014	.0112	.0355	.00275	.0014	.00082	.00023
%RSD	36.381	2.2597	3.0596	.18887	1.7433	33.011	.02391	.55877	16.431

#1	.00256	.00479	.00452	5.9592	2.0583	-.01028	5.7113	.14724	-.00125
#2	.00152	.00495	.00472	5.9433	2.0082	-.00639	5.7132	.14608	-.00158

Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Elem	Na5895	Na8183	Ni2316	P_1782	Pb2203	S_1820	Sb2068	Se1960	Si2881
Line	589.592 {57}	818.326 {41}	231.604 {446}	178.284 {489}	220.353 {453}	182.034 {485}	206.833 {463}	196.090 {472}	288.158 {117}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	8.2876	W 10.716	.00393	.17274	.00204	5.9395	-.00727	W -.00883	16.562
Stddev	.0653	.247	.00016	.00716	.00019	.1172	.00381	.00051	.011
%RSD	.78812	2.3096	4.1511	4.1422	9.0687	1.9740	52.465	5.8113	.06909

#1	8.3338	10.891	.00404	.17780	.00218	6.0224	-.00457	-.00919	16.554
#2	8.2414	10.541	.00381	.16769	.00191	5.8566	-.00997	-.00847	16.570

Check ?	Chk Pass	Chk Warn	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Warn	Chk Pass
High Limit		500.00						5.0000	
Low Limit		11.000						-.00500	

Elem	SiO2	Sn1899	Sr4077	Th2837	Ti3349	Ti1908	U_3701	V_2924	Zn2062
Line	288.158 {117}2	189.989 {477}	407.771 {83}	283.730 {119}	334.904 {101}	190.856 {477}	370.152 {91}	292.402 {115}	206.200 {163}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	35.443	-.00327	.22797	.00135	.16527	-.00081	.01895	.01010	.01616
Stddev	.024	.00148	.00176	.00012	.00235	.00208	.01486	.00001	.00076
%RSD	.06909	45.179	.77198	8.9890	1.4216	256.68	78.423	.11796	4.7284

#1	35.426	-.00223	.22922	.00127	.16693	-.00228	.02946	.01009	.01670
#2	35.460	-.00432	.22673	.00144	.16361	.00066	.00844	.01010	.01562

Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Elem	Zr3391								
Line	339.198 {99}								
Units	ppm								
Avg	.00147								
Stddev	.00632								
%RSD	431.13								

#1	-.00300								
#2	.00594								

Check ?	Chk Pass								
High Limit									
Low Limit									

Sample Name: 280-83179-C-13-A Acquired: 5/18/2016 4:19:50 Type: Unk
 Method: 6500_025(v6) Mode: CONC Corr. Factor: 1.000000
 User: CRHOADES Prep Date: Custom ID2: Custom ID3:
 Comment: 325504 200.7

Int. Std.	Y_2243	Y_3600	Y_3774
Line	224.306 {450}	360.073 { 94}	377.433 { 89}
Units	Cts/S	Cts/S	Cts/S
Avg	2637.8	38848.	1833.5
Stddev	16.0	193.	28.3
%RSD	.60713	.49627	1.5451
#1	2626.4	38712.	1813.5
#2	2649.1	38984.	1853.5

Sample Name: 280-83059-B-1-A Acquired: 5/18/2016 4:22:26 Type: Unk
Method: 6500_025(v6) Mode: CONC Corr. Factor: 1.000000
User: CRHOADES Prep Date: Custom ID2: Custom ID3:
Comment: 325504 200.7

Elem	Ag3280	Al1670	As1890	B_2089	Ba4554	Be3130	Bi2230	Ca3179	Cd2288
Line	328.068 {103}	167.079 {502}	189.042 {478}	208.959 {461}	455.403 { 74}	313.042 {108}	223.061 {451}	317.933 {106}	228.802 {447}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.00141	.00274	.00134	.03127	.11928	.00000	-.00012	7.1219	.00023
Stddev	.00011	.00035	.00095	.00038	.00250	.0003	.00140	.0224	.00031
%RSD	7.6468	12.694	70.754	1.2121	2.0974	10206.	1212.5	.31451	133.97

#1	.00148	.00249	.00202	.03154	.12105	-.00020	.00088	7.1378	.00001
#2	.00133	.00298	.00067	.03100	.11752	.00019	-.00111	7.1061	.00045

Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Elem	Co2286	Cr2055	Cu3247	Fe2599	K_7664	Li6707	Mg2790	Mn2576	Mo2020
Line	228.616 {447}	205.560 {464}	324.754 {104}	259.940 {130}	766.490 { 44}	670.784 { 50}	279.079 {121}2	257.610 {131}	202.030 {467}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	-.00005	.00024	.00502	.01702	2.4259	-.00942	1.8777	.00042	-.00206
Stddev	.00032	.00015	.00025	.00123	.0136	.00233	.0053	.00004	.00022
%RSD	589.47	65.186	5.0506	7.2496	.56107	24.726	.28161	8.2793	10.555

#1	.00017	.00013	.00484	.01789	2.4163	-.01106	1.8739	.00045	-.00190
#2	-.00028	.00035	.00520	.01615	2.4356	-.00777	1.8814	.00040	-.00221

Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Elem	Na8183	Ni2316	P_1782	Pb2203	S_1820	Sb2068	Se1960	Si2881	SiO2
Line	818.326 { 41}	231.604 {446}	178.284 {489}	220.353 {453}	182.034 {485}	206.833 {463}	196.090 {472}	288.158 {117}	288.158 {117}2
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	16.790	.00099	.04108	.00149	.24832	-.00606	F -.01007	13.317	28.499
Stddev	.549	.00059	.00182	.00182	.00297	.00246	.00338	.078	.166
%RSD	3.2676	59.752	4.4336	122.10	1.1941	40.662	33.517	.58223	.58223

#1	17.178	.00140	.03979	.00020	.24623	-.00780	-.01246	13.372	28.616
#2	16.402	.00057	.04237	.00278	.25042	-.00432	-.00768	13.262	28.382

Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Fail	Chk Pass	Chk Pass
High Limit							50.000		
Low Limit							-.01000		

Elem	Sn1899	Sr4077	Th2837	Ti3349	Ti1908	U_3701	V_2924	Zn2062	Zr3391
Line	189.989 {477}	407.771 { 83}	283.730 {119}	334.904 {101}	190.856 {477}	370.152 { 91}	292.402 {115}	206.200 {163}	339.198 { 99}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	-.00124	.04012	.00118	.00063	-.00306	.03009	.00020	.01084	-.00334
Stddev	.00006	.00007	.00195	.00054	.00088	.00580	.00046	.00041	.00132
%RSD	4.6497	.16680	165.48	85.144	28.686	19.259	227.85	3.7560	39.453

#1	-.00129	.04007	.00255	.00101	-.00368	.02599	-.00012	.01056	-.00241
#2	-.00120	.04016	-.00020	.00025	-.00244	.03419	.00053	.01113	-.00427

Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Int. Std.	Y_2243	Y_3600	Y_3774
Line	224.306 {450}	360.073 { 94}	377.433 { 89}
Units	Cts/S	Cts/S	Cts/S
Avg	2678.6	39812.	1808.0
Stddev	6.2	427.	124.0
%RSD	.23302	1.0730	6.8598

#1	2683.0	39509.	1720.3
#2	2674.2	40114.	1895.7

Sample Name: CCVH-3883905 Acquired: 5/18/2016 4:25:06 Type: QC
Method: 6500_025(v6) Mode: CONC Corr. Factor: 1.000000
User: CRHOADES Prep Date: Custom ID2: Custom ID3:
Comment:

Elem	Ag3280	Al3092	As1890	B_2089	Ba4554	Be3130	Bi2230	Ca3179	Cd2288	Co2286	Cr2055
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	-.00661	52.244	.00283	.00283	-.00103	.00004	.95342	-.01370	-.00083	-.00092	.00000
Stddev	.00028	.087	.00082	.00022	.00041	.00008	.00235	.01672	.00013	.00013	.00039
%RSD	4.2139	.16733	29.073	7.7704	40.003	202.22	.24620	122.05	15.872	14.564	10590.

#1	-.00641	52.305	.00341	.00299	-.00132	.00010	.95508	-.00188	-.00092	-.00102	-.00027
#2	-.00681	52.182	.00224	.00268	-.00074	-.00002	.95176	-.02552	-.00074	-.00083	.00028

Check ?	None	Chk Pass	None	None	None	None	Chk Pass	None	None	None	None
Value											
Range											

Elem	Cu3247	Fe2714	K_7664	Li6707	Mg2790	Mn2576	Mo2020	Na8183	Ni2316	P_1782	Pb2203
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	-.01579	53.995	-.23951	-.01269	.01321	-.00203	-.00246	273.59	.00086	.00684	-.00157
Stddev	.00003	.498	.00100	.00011	.00414	.00006	.00024	2.74	.00048	.00079	.00117
%RSD	.18815	.92194	.41742	.86416	31.384	2.7645	9.8939	1.0016	56.422	11.503	74.484

#1	-.01577	53.643	-.24022	-.01261	.01027	-.00199	-.00229	271.65	.00051	.00739	-.00240
#2	-.01581	54.347	-.23880	-.01276	.01614	-.00207	-.00263	275.53	.00120	.00628	-.00074

Check ?	None	Chk Pass	None	None	None	None	None	Chk Pass	None	None	None
Value											
Range											

Elem	S_1820	Sb2068	Se1960	Si2881	SiO2	Sn1899	Sr4077	Th2837	Ti3349	Ti1908	U_3701
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	4.8666	-.02077	-.00231	-.02132	-.04562	-.00291	-.00007	W 4.5648	.00021	-.00190	W 9.3214
Stddev	.0238	.00419	.00280	.03616	.07738	.00188	.00010	.0139	.00002	.00126	.0803
%RSD	.48842	20.176	121.08	169.63	169.63	64.499	145.77	.30378	7.9160	66.006	.86176

#1	4.8498	-.01781	-.00033	.00425	.00910	-.00158	-.00014	4.5550	.00020	-.00101	9.3782
#2	4.8834	-.02373	-.00429	-.04689	-.10033	-.00424	.00000	4.5746	.00022	-.00279	9.2646

Check ?	Chk Pass	None	None	None	None	None	None	Chk Warn	None	None	Chk Warn
Value								5.0000			10.000
Range								-5.0000%			-5.0000%

Elem	V_2924	Zn2062	Zr3391
Units	ppm	ppm	ppm
Avg	.01177	.00037	-.13243
Stddev	.00048	.00026	.00440
%RSD	4.0709	69.576	3.3244

#1	.01210	.00019	-.13554
#2	.01143	.00055	-.12932

Check ?	None	None	None
Value			
Range			

Int. Std.	Y_2243	Y_3600	Y_3774
Units	Cts/S	Cts/S	Cts/S
Avg	2473.5	36291.	1720.5
Stddev	32.4	408.	13.3
%RSD	1.3083	1.1237	.77466

#1	2496.4	36579.	1730.0
#2	2450.7	36002.	1711.1

Sample Name: CCV-3888422 Acquired: 5/18/2016 4:27:43 Type: QC
Method: 6500_025(v6) Mode: CONC Corr. Factor: 1.000000
User: CRHOADES Prep Date: Custom ID2: Custom ID3:
Comment:

Elem	Ag3280	Al1670	As1890	B_2089	Ba4554	Be3130	Bi2230	Ca3179	Cd2288	Co2286	Cr2055
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.47238	.47897	.92443	.48060	.47612	.48945	-.00109	4.6885	.49338	.50052	.50568
Stddev	.00249	.00038	.01268	.00412	.00051	.00150	.00158	.0379	.00940	.00787	.00842
%RSD	.52748	.07906	1.3714	.85746	.10755	.30679	145.88	.80771	1.9052	1.5726	1.6650

#1	.47062	.47870	.91546	.47769	.47648	.49051	.00003	4.7153	.48673	.49495	.49972
#2	.47415	.47923	.93339	.48352	.47576	.48838	-.00221	4.6617	.50002	.50609	.51163

Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	None	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Value											
Range											

Elem	Cu3247	Fe2599	K_7664	Li6707	Mg2790	Mn2576	Mo2020	Na5895	Ni2316	P_1782	Pb2203
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	F .44643	2.4780	48.723	.94995	18.530	.45797	.49306	5.1639	.48904	.96262	.98431
Stddev	.00215	.0018	.043	.00091	.063	.00110	.00524	.0589	.00761	.01665	.02293
%RSD	.48117	.07322	.08805	.09567	.34118	.23936	1.0619	1.1402	1.5564	1.7301	2.3298

#1	.44491	2.4768	48.754	.95059	18.485	.45719	.48936	5.1222	.48366	.95085	.96809
#2	.44795	2.4793	48.693	.94930	18.575	.45874	.49676	5.2055	.49442	.97440	1.0005

Check ?	Chk Fail	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Value	.50000										
Range	-10.490%										

Elem	S_1820	Sb2068	Se1960	Si2881	SiO2	Sn1899	Sr4077	Th2837	Ti3349	Ti1908	U_3701
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	-.08658	.96058	.91209	4.7700	10.208	.99424	.49001	-.00075	.45097	1.0013	.03174
Stddev	.00499	.01314	.00921	.0221	.047	.01233	.00084	.00259	.00117	.0092	.04760
%RSD	5.7594	1.3677	1.0096	.46219	.46219	1.2400	.17108	343.32	.26021	.91349	149.97

#1	-.09011	.95129	.90558	4.7856	10.241	.98552	.48942	-.00259	.45180	.99480	.06540
#2	-.08306	.96987	.91861	4.7545	10.175	1.0030	.49061	.00108	.45014	1.0077	-.00192

Check ?	None	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	None	Chk Pass	Chk Pass	None
Value											
Range											

Elem	V_2924	Zn2062	Zr3391
Units	ppm	ppm	ppm
Avg	.47004	W .44800	.46971
Stddev	.00207	.00614	.00071
%RSD	.44105	1.3701	.15215

#1	.46857	.44366	.47022
#2	.47150	.45234	.46921

Check ?	Chk Pass	Chk Warn	Chk Pass
Value		.50000	
Range		-10.000%	

Int. Std.	Y_2243	Y_3600	Y_3774
Units	Cts/S	Cts/S	Cts/S
Avg	2484.6	37024.	1704.6
Stddev	3.8	103.	1.3
%RSD	.15206	.27914	.07438

#1	2481.9	36950.	1703.7
#2	2487.2	37097.	1705.5

Sample Name: CCB Acquired: 5/18/2016 4:30:14 Type: QC
 Method: 6500_025(v6) Mode: CONC Corr. Factor: 1.000000
 User: CRHOADES Prep Date: Custom ID2: Custom ID3:
 Comment:

Elem	Ag3280	Al1670	As1890	B_2089	Ba4554	Be3130	Bi2230	Ca3179	Cd2288	Co2286	Cr2055
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.00102	.00518	.00644	.00363	-.00176	.00006	-.00260	.00488	-.00008	.00011	-.00047
Stddev	.00022	.00029	.00264	.00024	.00002	.00024	.00087	.01028	.00016	.00006	.00008
%RSD	21.452	5.5223	40.964	6.6972	1.2106	384.27	33.423	210.50	210.59	51.765	17.197

#1	.00118	.00538	.00830	.00346	-.00177	-.00011	-.00322	.01215	-.00019	.00007	-.00052
#2	.00087	.00498	.00457	.00380	-.00174	.00023	-.00199	-.00238	.00004	.00015	-.00041

Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit											
Low Limit											

Elem	Cu3247	Fe2599	K_7664	Li6707	Mg2790	Mn2576	Mo2020	Na5895	Ni2316	P_1782	Pb2203
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	-.00068	F .10030	-.32200	F -.01436	.03186	.00097	.00055	-.03446	-.00023	.00114	-.00327
Stddev	.00017	.00206	.05338	.00371	.03945	.00085	.00038	.04010	.00041	.00222	.00175
%RSD	24.744	2.0572	16.578	25.865	123.84	87.833	68.712	116.37	178.89	194.16	53.587

#1	-.00056	.10176	-.35975	-.01173	.05976	.00158	.00028	-.06281	.00006	.00271	-.00451
#2	-.00080	.09884	-.28426	-.01698	.00396	.00037	.00082	-.00610	-.00052	-.00043	-.00203

Check ?	Chk Pass	Chk Fail	Chk Pass	Chk Fail	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit		.10000		.01000							
Low Limit		-.10000		-.01000							

Elem	S_1820	Sb2068	Se1960	Si2881	SiO2	Sn1899	Sr4077	Th2837	Ti3349	Tl1908	U_3701
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	-.09323	W -.00138	-.00265	.02410	.05157	-.00122	-.00062	.00063	.00139	.00268	.04764
Stddev	.00913	.00042	.00466	.00472	.01010	.00091	.00027	.00802	.00027	.00077	.06661
%RSD	9.7917	30.385	175.41	19.585	19.585	74.249	43.135	1272.0	19.523	28.614	139.82

#1	-.08678	-.00168	-.00595	.02744	.05871	-.00187	-.00043	.00630	.00158	.00214	.00054
#2	-.09969	-.00109	.00064	.02076	.04443	-.00058	-.00081	-.00504	.00119	.00322	.09474

Check ?	Chk Pass	Chk Warn	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit		.00100									
Low Limit		-.00100									

Elem	V_2924	Zn2062	Zr3391
Units	ppm	ppm	ppm
Avg	.00044	.00202	.00018
Stddev	.00004	.00067	.00430
%RSD	9.5364	33.098	2380.4

#1	.00041	.00249	-.00286
#2	.00047	.00155	.00322

Check ?	Chk Pass	Chk Pass	Chk Pass
High Limit			
Low Limit			

Int. Std.	Y_2243	Y_3600	Y_3774
Units	Cts/S	Cts/S	Cts/S
Avg	2522.3	37419.	1698.8
Stddev	2.4	78.	18.5
%RSD	.09470	.20775	1.0918

#1	2520.6	37364.	1711.9
#2	2524.0	37474.	1685.7

Sample Name: CCVL-3894681 Acquired: 5/18/2016 4:32:37 Type: QC
Method: 6500_025(v6) Mode: CONC Corr. Factor: 1.000000
User: CRHOADES Prep Date: Custom ID2: Custom ID3:
Comment:

Elem	Ag3280	Al1670	As1890	B_2089	Ba4554	Be3130	Bi2230	Ca3179	Cd2288	Co2286	Cr2055
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.01044	.09685	F .01047	.09588	.00787	.00088	.10239	.19521	.00513	.01015	.00994
Stddev	.00015	.00051	.00387	.00148	.00064	.00041	.00192	.00480	.00031	.00003	.00050
%RSD	1.4396	.52894	36.908	1.5482	8.1641	47.383	1.8733	2.4566	5.9486	.32036	5.0577
#1	.01055	.09649	.01321	.09483	.00832	.00117	.10103	.19182	.00492	.01017	.00959
#2	.01033	.09721	.00774	.09693	.00741	.00058	.10375	.19861	.00535	.01013	.01030
Check ?	Chk Pass	Chk Pass	Chk Fail	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Value			.01500								
Range			-30.000%								
Elem	Cu3247	Fe2599	K_7664	Li6707	Mg2790	Mn2576	Mo2020	Na5895	Ni2316	P_1782	Pb2203
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.01225	.10563	2.6805	F -.00355	.18929	.00938	.01859	.99799	.03993	2.7680	.00908
Stddev	.00035	.00190	.0952	.00039	.00025	.00001	.00046	.00599	.00043	.0410	.00102
%RSD	2.8874	1.8025	3.5502	10.904	.13050	.06688	2.4838	.60070	1.0707	1.4796	11.250
#1	.01250	.10428	2.7478	-.00382	.18946	.00938	.01826	.99375	.03963	2.7390	.00980
#2	.01200	.10698	2.6132	-.00328	.18911	.00938	.01891	1.0022	.04023	2.7970	.00836
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Fail	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Value				.01000							
Range				-30.000%							
Elem	S_1820	Sb2068	Se1960	Si2881	SiO2	Sn1899	Sr4077	Th2837	Ti3349	Ti1908	U_3701
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	-.09321	.01780	F .00849	.45212	.96754	.09792	.00950	.01296	.00947	.01248	.06917
Stddev	.01194	.00211	.00212	.02029	.04342	.00345	.00009	.00040	.00036	.00012	.04512
%RSD	12.809	11.847	24.951	4.4878	4.4878	3.5193	.91000	3.0697	3.7925	.94496	65.232
#1	-.10165	.01631	.00700	.46647	.99824	.09548	.00956	.01324	.00972	.01256	.10108
#2	-.08477	.01929	.00999	.43777	.93684	.10035	.00944	.01268	.00921	.01239	.03727
Check ?	None	Chk Pass	Chk Fail	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Value			.01500								
Range			-30.000%								
Elem	V_2924	Zn2062	Zr3391								
Units	ppm	ppm	ppm								
Avg	.00971	.02000	.01512								
Stddev	.00055	.00029	.00007								
%RSD	5.6814	1.4519	.46601								
#1	.01010	.01979	.01517								
#2	.00932	.02020	.01507								
Check ?	Chk Pass	Chk Pass	Chk Pass								
Value											
Range											
Int. Std.	Y_2243	Y_3600	Y_3774								
Units	Cts/S	Cts/S	Cts/S								
Avg	2501.0	37349.	1722.6								
Stddev	10.2	135.	20.4								
%RSD	.40751	.36083	1.1845								
#1	2508.2	37444.	1708.1								
#2	2493.8	37254.	1737.0								

Sample Name: MB 280-325556/1-A Acquired: 5/18/2016 4:35:18 Type: Unk
Method: 6500_025(v6) Mode: CONC Corr. Factor: 1.000000
User: CRHOADES Prep Date: 5/17 Custom ID2: Custom ID3:
Comment: 325556 6010B dupont

Elem	Ag3280	Al1670	As1890	B_2089	Ba4554	Be3130	Bi2230	Ca3179	Cd2288
Line	328.068 {103}	167.079 {502}	189.042 {478}	208.959 {461}	455.403 { 74}	313.042 {108}	223.061 {451}	317.933 {106}	228.802 {447}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.00165	.00235	.00169	.00186	-.00200	-.00016	.00037	.01161	.00013
Stddev	.00015	.00007	.00033	.00086	.00014	.00009	.00236	.00874	.00001
%RSD	9.4133	2.9518	19.614	46.397	6.8404	52.802	638.63	75.273	10.216
#1	.00176	.00240	.00146	.00247	-.00210	-.00010	.00204	.00543	.00012
#2	.00154	.00230	.00193	.00125	-.00190	-.00022	-.00130	.01779	.00014

Check ? Chk Pass Chk Pass Chk Pass Chk Pass Chk Pass Chk Pass Chk Pass Chk Pass Chk Pass
High Limit
Low Limit

Elem	Co2286	Cr2055	Cu3247	Fe2599	K_7664	Li6707	Mg2790	Mn2576	Mo2020
Line	228.616 {447}	205.560 {464}	324.754 {104}	259.940 {130}	766.490 { 44}	670.784 { 50}	279.079 {121}2	257.610 {131}	202.030 {467}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	-.00033	-.00021	-.00012	F .15894	-.27265	F -.01428	-.00559	.00036	-.00133
Stddev	.00048	.00027	.00027	.00347	.04374	.00172	.00139	.00007	.00016
%RSD	148.68	131.87	227.57	2.1802	16.042	12.078	24.818	18.453	12.177
#1	-.00067	-.00001	-.00031	.16139	-.24172	-.01306	-.00657	.00041	-.00145
#2	.00002	-.00040	.00007	.15649	-.30358	-.01550	-.00461	.00031	-.00122

Check ? Chk Pass Chk Pass Chk Pass Chk Fail Chk Pass Chk Fail Chk Pass Chk Pass Chk Pass
High Limit .10000
Low Limit -.10000

Elem	Na5895	Ni2316	P_1782	Pb2203	S_1820	Sb2068	Se1960	Si2881	SiO2
Line	589.592 { 57}	231.604 {446}	178.284 {489}	220.353 {453}	182.034 {485}	206.833 {463}	196.090 {472}	288.158 {117}	288.158 {117}2
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	-.04137	.00026	.00404	-.00003	W -.08308	-.00373	-.00522	-.03508	-.07507
Stddev	.01848	.00061	.00110	.00011	.00178	.00584	.00193	.00063	.00134
%RSD	44.670	232.53	27.226	405.73	2.1388	156.62	37.072	1.7897	1.7897
#1	-.02830	-.00017	.00326	.00005	-.08433	.00040	-.00658	-.03464	-.07412
#2	-.05444	.00069	.00482	-.00010	-.08182	-.00786	-.00385	-.03552	-.07602

Check ? Chk Pass Chk Pass Chk Pass Chk Pass Chk Warn Chk Pass Chk Pass Chk Pass None
High Limit .05000
Low Limit -.05000

Elem	Sn1899	Sr4077	Th2837	Ti3349	Ti1908	U_3701	V_2924	Zn2062	Zr3391
Line	189.989 {477}	407.771 { 83}	283.730 {119}	334.904 {101}	190.856 {477}	370.152 { 91}	292.402 {115}	206.200 {163}	339.198 { 99}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	-.00169	-.00045	.00115	.00059	-.00027	W .05459	-.00002	.00175	-.00267
Stddev	.00104	.00010	.00031	.00034	.00231	.01856	.00043	.00023	.00456
%RSD	61.826	23.135	26.567	57.961	843.03	33.991	2549.3	13.338	170.50
#1	-.00095	-.00052	.00094	.00084	-.00191	.04147	-.00032	.00192	-.00589
#2	-.00243	-.00038	.00137	.00035	.00136	.06772	.00029	.00159	.00055

Check ? Chk Pass Chk Pass Chk Pass Chk Pass Chk Pass Chk Warn Chk Pass Chk Pass Chk Pass
High Limit .05000
Low Limit -.05000

Int. Std.	Y_2243	Y_3600	Y_3774						
Line	224.306 {450}	360.073 { 94}	377.433 { 89}						
Units	Cts/S	Cts/S	Cts/S						
Avg	2670.2	39562.	1702.0						
Stddev	2.2	360.	42.5						
%RSD	.08420	.90899	2.4957						
#1	2671.7	39817.	1672.0						
#2	2668.6	39308.	1732.0						

Sample Name: LCS 280-325556/2-A Acquired: 5/18/2016 4:37:41 Type: Unk

Method: 6500_025(v6) Mode: CONC Corr. Factor: 1.000000

User: CRHOADES Prep Date: Custom ID2: Custom ID3:

Comment: 325556 6010B dupont

Elem	Ag3280	Al1670	As1890	B_2089	Ba4554	Be3130	Bi2230	Ca3179	Cd2288
Line	328.068 {103}	167.079 {502}	189.042 {478}	208.959 {461}	455.403 { 74}	313.042 {108}	223.061 {451}	317.933 {106}	228.802 {447}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.04752	1.8471	.94299	.99140	1.8899	.04886	1.9704	49.836	.09801
Stddev	.00012	.0008	.00407	.00224	.0180	.00045	.0010	.581	.00028
%RSD	.24831	.04063	.43193	.22559	.95437	.91345	.05270	1.1666	.28544

#1	.04744	1.8476	.94011	.98982	1.8772	.04854	1.9711	49.425	.09821
#2	.04760	1.8466	.94587	.99298	1.9027	.04917	1.9697	50.247	.09781

Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	None	Chk Pass	Chk Pass
High Limit									
Low Limit									

Elem	Co2286	Cr2055	Cu3247	Fe2599	K_7664	Li6707	Mg2790	Mn2576	Mo2020
Line	228.616 {447}	205.560 {464}	324.754 {104}	259.940 {130}	766.490 { 44}	670.784 { 50}	279.079 {121}2	257.610 {131}	202.030 {467}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.48075	.19845	.21983	1.0054	48.250	.92410	52.477	F .44803	1.0331
Stddev	.00195	.00087	.00078	.0040	.409	.00118	.143	.00050	.0020
%RSD	.40658	.44065	.35554	.40027	.84690	.12773	.27198	.11198	.19783

#1	.47937	.19783	.21928	1.0025	47.961	.92494	52.577	.44838	1.0345
#2	.48213	.19907	.22038	1.0082	48.539	.92327	52.376	.44767	1.0316

Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Fail	Chk Pass
High Limit								.55000	
Low Limit								.45000	

Elem	Na8183	Ni2316	P_1782	Pb2203	S_1820	Sb2068	Se1960	Si2881	SiO2
Line	818.326 { 41}	231.604 {446}	178.284 {489}	220.353 {453}	182.034 {485}	206.833 {463}	196.090 {472}	288.158 {117}	288.158 {117}2
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	F 61.185	.47006	9.9276	.49071	14.888	.51351	1.9169	9.6948	20.747
Stddev	.179	.00166	.0149	.00189	.005	.00537	.0228	.0675	.144
%RSD	.29253	.35381	.14973	.38447	.03622	1.0465	1.1877	.69627	.69627

#1	61.058	.46888	9.9171	.48937	14.884	.51731	1.9329	9.6471	20.645
#2	61.311	.47124	9.9381	.49204	14.892	.50971	1.9008	9.7425	20.849

Check ?	Chk Fail	Chk Pass	Chk Pass	Chk Pass	None	Chk Pass	Chk Pass	Chk Pass	None
High Limit	56.000								
Low Limit	45.500								

Elem	Sn1899	Sr4077	Th2837	Ti3349	Ti1908	U_3701	V_2924	Zn2062	Zr3391
Line	189.989 {477}	407.771 { 83}	283.730 {119}	334.904 {101}	190.856 {477}	370.152 { 91}	292.402 {115}	206.200 {163}	339.198 { 99}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	2.0086	1.0564	.93031	.91863	1.8558	1.9192	.46008	.43621	.44045
Stddev	.0274	.0084	.00318	.00021	.0777	.0348	.00069	.00147	.00081
%RSD	1.3623	.79525	.34147	.02263	4.1852	1.8105	.14896	.33629	.18310

#1	2.0280	1.0505	.92807	.91848	1.9107	1.9438	.45959	.43725	.44102
#2	1.9893	1.0623	.93256	.91878	1.8008	1.8947	.46056	.43518	.43988

Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Int. Std.	Y_2243	Y_3600	Y_3774						
Line	224.306 {450}	360.073 { 94}	377.433 { 89}						
Units	Cts/S	Cts/S	Cts/S						
Avg	2595.4	38776.	1878.6						
Stddev	9.7	162.	21.8						
%RSD	.37452	.41692	1.1593						

#1	2602.2	38662.	1894.0						
#2	2588.5	38891.	1863.2						

Sample Name: 280-83149-A-2-A Acquired: 5/18/2016 4:40:07 Type: Unk
Method: 6500_025(v6) Mode: CONC Corr. Factor: 1.000000
User: CRHOADES Prep Date: Custom ID2: Custom ID3:
Comment: 325556 6010B dupont

Elem	Ag3280	Al1670	As1890	B_2089	Ba4554	Be3130	Bi2230	Ca3179	Cd2288
Line	328.068 {103}	167.079 {502}	189.042 {478}	208.959 {461}	455.403 { 74}	313.042 {108}	223.061 {451}	317.933 {106}	228.802 {447}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.00150	.00340	.00715	.49085	.00957	.00022	-.00052	11.796	.00064
Stddev	.00019	.00025	.00409	.00815	.00020	.00025	.00150	.344	.00009
%RSD	12.479	7.3150	57.219	1.6605	2.0627	113.94	289.86	2.9178	13.693

#1	.00163	.00357	.00426	.49662	.00943	.00004	.00054	12.040	.00058
#2	.00137	.00322	.01005	.48509	.00971	.00039	-.00158	11.553	.00071

Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Elem	Co2286	Cr2055	Cu3247	Fe2599	K_7664	Li6707	Mg2790	Mn2576	Mo2020
Line	228.616 {447}	205.560 {464}	324.754 {104}	259.940 {130}	766.490 { 44}	670.784 { 50}	279.079 {121}2	257.610 {131}	202.030 {467}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	-.00031	.00014	.01406	.01226	12.140	-.00055	33.521	.00083	.01947
Stddev	.00038	.00034	.00015	.01138	.083	.00043	.028	.00040	.00004
%RSD	121.38	234.99	1.0614	92.840	.68228	77.172	.08415	47.953	.22217

#1	-.00058	-.00010	.01417	.00421	12.198	-.00085	33.501	.00055	.01944
#2	-.00004	.00038	.01396	.02030	12.081	-.00025	33.541	.00112	.01951

Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Elem	Na8183	Ni2316	P_1782	Pb2203	S_1820	Sb2068	Se1960	Si2881	SiO2
Line	818.326 { 41}	231.604 {446}	178.284 {489}	220.353 {453}	182.034 {485}	206.833 {463}	196.090 {472}	288.158 {117}	288.158 {117}2
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	122.61	.00303	.04901	-.00107	64.992	.00042	.00420	3.4883	7.4650
Stddev	1.01	.00017	.00174	.00006	.080	.00302	.00483	.0102	.0218
%RSD	.82649	5.7481	3.5456	6.0121	.12276	718.16	115.02	.29181	.29181

#1	123.33	.00290	.04778	-.00103	65.049	.00255	.00762	3.4811	7.4496
#2	121.90	.00315	.05024	-.00112	64.936	-.00171	.00078	3.4955	7.4804

Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Elem	Sn1899	Sr4077	Th2837	Ti3349	Ti1908	U_3701	V_2924	Zn2062	Zr3391
Line	189.989 {477}	407.771 { 83}	283.730 {119}	334.904 {101}	190.856 {477}	370.152 { 91}	292.402 {115}	206.200 {163}	339.198 { 99}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.00383	.10109	-.00073	.00139	.02829	.02996	.01389	.00444	-.00039
Stddev	.00331	.00072	.00042	.00087	.00140	.03160	.00064	.00026	.00408
%RSD	86.370	.70786	57.506	62.243	4.9602	105.47	4.6127	5.8523	1040.0

#1	.00617	.10058	-.00043	.00078	.02730	.00762	.01343	.00426	.00249
#2	.00149	.10159	-.00102	.00201	.02929	.05230	.01434	.00463	-.00328

Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Int. Std.	Y_2243	Y_3600	Y_3774
Line	224.306 {450}	360.073 { 94}	377.433 { 89}
Units	Cts/S	Cts/S	Cts/S
Avg	2635.9	38662.	1900.7
Stddev	3.9	685.	86.9
%RSD	.14868	1.7730	4.5717

#1	2638.6	38177.	1839.2
#2	2633.1	39146.	1962.1

Sample Name: 280-82821-G-1-A Acquired: 5/18/2016 4:42:45 Type: Unk
Method: 6500_025(v6) Mode: CONC Corr. Factor: 1.000000
User: CRHOADES Prep Date: Custom ID2: Custom ID3:
Comment: 325556 6010B dupont

Elem	Ag3280	Al1670	Al3092	As1890	B_2089	Ba4554	Be3130	Bi2230	Ca3179
Line	328.068 {103}	167.079 {502}	309.271 {109}	189.042 {478}	208.959 {461}	455.403 { 74}	313.042 {108}	223.061 {451}	317.933 {106}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.00119	1.7627	W 2.4750	.00248	.16566	.06618	-.00029	-.00521	464.78
Stddev	.00129	.0124	.0273	.00250	.00017	.00136	.00004	.00287	7.02
%RSD	108.76	.70206	1.1027	100.65	.10018	2.0523	14.643	55.145	1.5111

#1	.00027	1.7714	2.4943	.00425	.16578	.06714	-.00032	-.00318	469.75
#2	.00210	1.7539	2.4557	.00072	.16555	.06522	-.00026	-.00724	459.81

Check ?	Chk Pass	Chk Pass	Chk Warn	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit			500.00						
Low Limit			3.2000						

Elem	Cd2288	Co2286	Cr2055	Cu3247	Fe2599	K_7664	Li6707	Mg2790	Mn2576
Line	228.802 {447}	228.616 {447}	205.560 {464}	324.754 {104}	259.940 {130}	766.490 { 44}	670.784 { 50}	279.079 {121}2	257.610 {131}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.00198	-.00053	.00553	.00255	2.1955	10.185	.06565	409.44	.06308
Stddev	.00007	.00034	.00019	.00007	.0098	.059	.00026	.68	.00001
%RSD	3.5910	63.809	3.3451	2.6733	.44793	.57518	.39282	.16585	.01042

#1	.00203	-.00076	.00566	.00250	2.2025	10.143	.06584	409.92	.06308
#2	.00193	-.00029	.00540	.00259	2.1886	10.226	.06547	408.96	.06307

Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Elem	Mo2020	Na8183	Ni2316	P_1782	Pb2203	S_1820	Sb2068	Se1960	Si2881
Line	202.030 {467}	818.326 { 41}	231.604 {446}	178.284 {489}	220.353 {453}	182.034 {485}	206.833 {463}	196.090 {472}	288.158 {117}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.00221	405.60	.00712	.08203	-.00001	F 947.28	-.00987	.02466	9.1076
Stddev	.00019	5.64	.00014	.01007	.00038	1.35	.00050	.00184	.0020
%RSD	8.7152	1.3912	1.9910	12.274	5250.8	.14285	5.0724	7.4546	.02190

#1	.00208	409.59	.00702	.08915	-.00027	948.24	-.01022	.02596	9.1090
#2	.00235	401.61	.00722	.07491	.00026	946.32	-.00952	.02336	9.1062

Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Fail	Chk Pass	Chk Pass	Chk Pass
High Limit						200.00			
Low Limit						-.20000			

Elem	SiO2	Sn1899	Sr4077	Th2837	Ti3349	Ti1908	U_3701	V_2924	Zn2062
Line	288.158 {117}2	189.989 {477}	407.771 { 83}	283.730 {119}	334.904 {101}	190.856 {477}	370.152 { 91}	292.402 {115}	206.200 {163}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	19.490	-.00177	W 6.1455	-.00019	.09051	-.00102	-.01980	.00194	.01520
Stddev	.004	.00007	.0929	.00160	.00002	.00324	.02111	.00007	.00015
%RSD	.02190	3.9083	1.5119	848.66	.02737	317.20	106.63	3.4422	1.0135

#1	19.493	-.00182	6.2112	-.00132	.09052	-.00331	-.03473	.00189	.01531
#2	19.487	-.00172	6.0798	.00094	.09049	.00127	-.00487	.00199	.01509

Check ?	Chk Pass	Chk Pass	Chk Warn	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit			5.0000						
Low Limit			-.01000						

Elem	Zr3391								
Line	339.198 { 99}								
Units	ppm								
Avg	.00226								
Stddev	.00158								
%RSD	69.990								

#1	.00338								
#2	.00114								

Check ?	Chk Pass								
High Limit									
Low Limit									

Sample Name: 280-82821-G-1-A Acquired: 5/18/2016 4:42:45 Type: Unk
 Method: 6500_025(v6) Mode: CONC Corr. Factor: 1.000000
 User: CRHOADES Prep Date: Custom ID2: Custom ID3:
 Comment: 325556 6010B dupont

Int. Std.	Y_2243	Y_3600	Y_3774
Line	224.306 {450}	360.073 { 94}	377.433 { 89}
Units	Cts/S	Cts/S	Cts/S
Avg	2372.1	35465.	1746.0
Stddev	8.8	220.	16.8
%RSD	.37049	.61958	.96299
#1	2365.9	35310.	1734.1
#2	2378.3	35620.	1757.9

Sample Name: 280-82821-G-2-A Acquired: 5/18/2016 4:45:28 Type: Unk
Method: 6500_025(v6) Mode: CONC Corr. Factor: 1.000000
User: CRHOADES Prep Date: Custom ID2: Custom ID3:
Comment: 325556 6010B dupont

Elem	Ag3280	Al3092	As1890	B_2089	Ba4554	Be3130	Bi2230	Ca3179	Cd2288
Line	328.068 {103}	309.271 {109}	189.042 {478}	208.959 {461}	455.403 {74}	313.042 {108}	223.061 {451}	317.933 {106}	228.802 {447}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.00157	59.302	.00222	.05727	-.00162	.01602	-.00716	336.61	.00936
Stddev	.00013	.739	.00363	.00107	.00085	.00002	.00298	4.78	.00015
%RSD	8.0258	1.2468	163.57	1.8749	52.776	.09733	41.534	1.4192	1.5899

#1	.00148	59.825	.00479	.05803	-.00101	.01603	-.00506	339.98	.00925
#2	.00166	58.779	-.00035	.05651	-.00222	.01601	-.00927	333.23	.00946

Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Elem	Co2286	Cr2055	Cu3247	Fe2599	K_7664	Li6707	Mg2790	Mn2576	Mo2020
Line	228.616 {447}	205.560 {464}	324.754 {104}	259.940 {130}	766.490 {44}	670.784 {50}	279.079 {121}2	257.610 {131}	202.030 {467}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.08487	.00104	.00633	26.223	4.4664	.19223	143.47	4.2533	-.00022
Stddev	.00128	.00027	.00019	.458	.0350	.00192	.08	.0102	.00061
%RSD	1.5065	26.077	3.0467	1.7452	.78352	.99804	.05278	.24001	269.80

#1	.08577	.00123	.00619	26.546	4.4417	.19358	143.52	4.2605	-.00065
#2	.08397	.00084	.00646	25.899	4.4912	.19087	143.42	4.2461	.00020

Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Elem	Na8183	Ni2316	P_1782	Pb2203	S_1820	Sb2068	Se1960	Si2881	SiO2
Line	818.326 {41}	231.604 {446}	178.284 {489}	220.353 {453}	182.034 {485}	206.833 {463}	196.090 {472}	288.158 {117}	288.158 {117}2
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	203.96	.16929	.05589	.00417	F 908.80	-.00334	-.00135	35.244	75.423
Stddev	.56	.00325	.00011	.00093	.92	.00673	.00234	.002	.004
%RSD	.27280	1.9175	.19013	22.349	.10119	201.29	172.98	.00470	.00470

#1	203.57	.17159	.05582	.00351	908.15	-.00810	.00030	35.246	75.426
#2	204.36	.16700	.05597	.00483	909.45	.00142	-.00301	35.243	75.421

Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Fail	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit					200.00				
Low Limit					-.20000				

Elem	Sn1899	Sr4077	Th2837	Ti3349	Ti1908	U_3701	V_2924	Zn2062	Zr3391
Line	189.989 {477}	407.771 {83}	283.730 {119}	334.904 {101}	190.856 {477}	370.152 {91}	292.402 {115}	206.200 {163}	339.198 {99}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	-.00277	.06103	-.00103	.00144	.00205	-.01744	.00555	1.2822	.00557
Stddev	.00071	.00005	.00032	.00005	.00251	.00733	.00015	.0012	.00166
%RSD	25.643	.07666	30.624	3.6533	122.18	42.038	2.6640	.09476	29.796

#1	-.00327	.06106	-.00081	.00141	.00382	-.02262	.00545	1.2813	.00675
#2	-.00227	.06100	-.00126	.00148	.00028	-.01225	.00566	1.2830	.00440

Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Int. Std.	Y_2243	Y_3600	Y_3774
Line	224.306 {450}	360.073 {94}	377.433 {89}
Units	Cts/S	Cts/S	Cts/S
Avg	3077.7	45282.	2300.2
Stddev	4.1	2.	42.8
%RSD	.13346	.00520	1.8620

#1	3074.8	45281.	2269.9
#2	3080.6	45284.	2330.5

Sample Name: 280-82821-G-3-A Acquired: 5/18/2016 4:48:07 Type: Unk
Method: 6500_025(v6) Mode: CONC Corr. Factor: 1.000000
User: CRHOADES Prep Date: Custom ID2: Custom ID3:
Comment: 325556 6010B dupont

Elem	Ag3280	Al3092	As1890	B_2089	Ba4554	Be3130	Bi2230	Ca3179	Cd2288
Line	328.068 {103}	309.271 {109}	189.042 {478}	208.959 {461}	455.403 {74}	313.042 {108}	223.061 {451}	317.933 {106}	228.802 {447}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.00168	14.558	.00123	.14979	.00805	.00326	-.00632	410.22	.00815
Stddev	.00053	.108	.00069	.00101	.00028	.00018	.00004	.69	.00003
%RSD	31.366	.73893	56.170	.67708	3.4296	5.5472	.65626	.16757	.32299

#1	.00131	14.634	.00172	.15051	.00786	.00339	-.00635	410.70	.00813
#2	.00206	14.482	.00074	.14908	.00825	.00313	-.00629	409.73	.00817

Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Elem	Co2286	Cr2055	Cu3247	Fe2599	K_7664	Li6707	Mg2790	Mn2576	Mo2020
Line	228.616 {447}	205.560 {464}	324.754 {104}	259.940 {130}	766.490 {44}	670.784 {50}	279.079 {121}2	257.610 {131}	202.030 {467}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.05843	.00497	.00863	.69082	18.012	.23303	357.91	4.3128	.00173
Stddev	.00089	.00190	.00041	.01203	.034	.00108	.24	.0013	.00023
%RSD	1.5236	38.316	4.7251	1.7419	.19014	.46365	.06589	.03041	13.400

#1	.05906	.00362	.00834	.69933	18.036	.23227	357.75	4.3137	.00156
#2	.05780	.00632	.00892	.68231	17.988	.23379	358.08	4.3119	.00189

Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Elem	Na8183	Ni2316	P_1782	Pb2203	S_1820	Sb2068	Se1960	Si2881	SiO2
Line	818.326 {41}	231.604 {446}	178.284 {489}	220.353 {453}	182.034 {485}	206.833 {463}	196.090 {472}	288.158 {117}	288.158 {117}2
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	W 537.37	.13370	.04777	.00030	F 907.44	-.00479	.00853	13.920	29.788
Stddev	1.42	.00089	.00216	.00261	2.02	.00205	.00202	.057	.123
%RSD	.26515	.66240	4.5169	881.60	.22233	42.776	23.622	.41279	.41279

#1	538.38	.13432	.04929	-.00155	908.87	-.00623	.00711	13.960	29.875
#2	536.36	.13307	.04624	.00214	906.01	-.00334	.00996	13.879	29.701

Check ?	Chk Warn	Chk Pass	Chk Pass	Chk Pass	Chk Fail	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit	500.00				200.00				
Low Limit	11.000				-.20000				

Elem	Sn1899	Sr4077	Th2837	Ti3349	Ti1908	U_3701	V_2924	Zn2062	Zr3391
Line	189.989 {477}	407.771 {83}	283.730 {119}	334.904 {101}	190.856 {477}	370.152 {91}	292.402 {115}	206.200 {163}	339.198 {99}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	-.00291	.65992	-.00209	.01144	-.00034	-.00257	.00039	.24320	.00398
Stddev	.00089	.00116	.00122	.00016	.00005	.05042	.00028	.00039	.00014
%RSD	30.717	.17611	58.657	1.3907	13.382	1959.4	71.833	.16106	3.5987

#1	-.00354	.66074	-.00295	.01132	-.00037	.03308	.00019	.24348	.00408
#2	-.00228	.65909	-.00122	.01155	-.00031	-.03822	.00059	.24292	.00388

Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Int. Std.	Y_2243	Y_3600	Y_3774
Line	224.306 {450}	360.073 {94}	377.433 {89}
Units	Cts/S	Cts/S	Cts/S
Avg	2901.9	43016.	2135.5
Stddev	12.5	16.	39.5
%RSD	.43091	.03678	1.8518

#1	2893.0	43027.	2107.6
#2	2910.7	43005.	2163.5

Sample Name: 280-82821-G-4-A Acquired: 5/18/2016 4:50:51 Type: Unk
Method: 6500_025(v6) Mode: CONC Corr. Factor: 1.000000
User: CRHOADES Prep Date: Custom ID2: Custom ID3:
Comment: 325556 6010B dupont

Elem	Ag3280	Al1670	Al3092	As1890	B_2089	Ba4554	Be3130	Bi2230	Ca3179
Line	328.068 {103}	167.079 {502}	309.271 {109}	189.042 {478}	208.959 {461}	455.403 { 74}	313.042 {108}	223.061 {451}	317.933 {106}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.00170	1.9392	W 3.0728	-.00812	.23529	.02557	-.00026	-.00639	482.29
Stddev	.00061	.0503	.0353	.00297	.00336	.00037	.00002	.00099	3.10
%RSD	35.993	2.5923	1.1493	36.552	1.4289	1.4289	7.8125	15.474	.64187

#1	.00213	1.9036	3.0479	-.00602	.23292	.02582	-.00025	-.00709	480.10
#2	.00127	1.9747	3.0978	-.01022	.23767	.02531	-.00028	-.00569	484.48

Check ?	Chk Pass	Chk Pass	Chk Warn	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit			500.00						
Low Limit			3.2000						

Elem	Cd2288	Co2286	Cr2055	Cu3247	Fe2599	K_7664	Li6707	Mg2790	Mn2576
Line	228.802 {447}	228.616 {447}	205.560 {464}	324.754 {104}	259.940 {130}	766.490 { 44}	670.784 { 50}	279.079 {121}2	257.610 {131}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.00200	.01790	.00410	.00417	2.9750	95.102	.48732	W 1101.4	3.2058
Stddev	.00039	.00009	.00016	.00065	.0039	.358	.00141	5.2	.0077
%RSD	19.652	.52800	3.7784	15.597	.13085	.37696	.28889	.47313	.24181

#1	.00228	.01784	.00399	.00463	2.9723	94.848	.48632	1105.1	3.2113
#2	.00173	.01797	.00421	.00371	2.9778	95.355	.48831	1097.7	3.2003

Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Warn	Chk Pass
High Limit								500.00	
Low Limit								-.10000	

Elem	Mo2020	Na8183	Ni2316	P_1782	Pb2203	S_1820	Sb2068	Se1960	Si2881
Line	202.030 {467}	818.326 { 41}	231.604 {446}	178.284 {489}	220.353 {453}	182.034 {485}	206.833 {463}	196.090 {472}	288.158 {117}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.02024	W 2053.2	.04402	.10139	.00301	F 2095.3	-.00301	W -.00868	10.196
Stddev	.00042	11.7	.00066	.00193	.00130	43.7	.00910	.00546	.011
%RSD	2.0597	.56755	1.5040	1.9079	43.065	2.0836	302.83	62.889	.10639

#1	.01994	2045.0	.04356	.10002	.00210	2064.4	.00343	-.01253	10.189
#2	.02053	2061.5	.04449	.10275	.00393	2126.2	-.00944	-.00482	10.204

Check ?	Chk Pass	Chk Warn	Chk Pass	Chk Pass	Chk Pass	Chk Fail	Chk Pass	Chk Warn	Chk Pass
High Limit		500.00				200.00		5.0000	
Low Limit		11.000				-.20000		-.00500	

Elem	SiO2	Sn1899	Sr4077	Th2837	Ti3349	Ti1908	U_3701	V_2924	Zn2062
Line	288.158 {117}2	189.989 {477}	407.771 { 83}	283.730 {119}	334.904 {101}	190.856 {477}	370.152 { 91}	292.402 {115}	206.200 {163}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	21.820	-.00259	W 8.2211	.00253	.10096	-.00008	.48812	.00386	.01284
Stddev	.023	.00019	.0505	.00651	.00108	.00319	.03316	.00108	.00063
%RSD	.10639	7.3458	.61457	257.60	1.0648	4086.2	6.7932	28.111	4.9016

#1	21.804	-.00246	8.1854	-.00208	.10172	.00218	.46468	.00309	.01239
#2	21.837	-.00273	8.2569	.00713	.10020	-.00234	.51157	.00462	.01328

Check ?	Chk Pass	Chk Pass	Chk Warn	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit			5.0000						
Low Limit			-.01000						

Elem	Zr3391								
Line	339.198 { 99}								
Units	ppm								
Avg	.00473								
Stddev	.00017								
%RSD	3.6844								

#1	.00460								
#2	.00485								

Check ?	Chk Pass								
High Limit									
Low Limit									

Sample Name: 280-82821-G-4-A Acquired: 5/18/2016 4:50:51 Type: Unk
Method: 6500_025(v6) Mode: CONC Corr. Factor: 1.000000
User: CRHOADES Prep Date: Custom ID2: Custom ID3:
Comment: 325556 6010B dupont

Int. Std.	Y_2243	Y_3600	Y_3774
Line	224.306 {450}	360.073 { 94}	377.433 { 89}
Units	Cts/S	Cts/S	Cts/S
Avg	2290.0	33338.	1725.0
Stddev	53.1	30.	11.3
%RSD	2.3183	.08968	.65552
#1	2327.5	33359.	1717.0
#2	2252.4	33316.	1733.0

Sample Name: 280-82821-G-5-A Acquired: 5/18/2016 4:53:59 Type: Unk
Method: 6500_025(v6) Mode: CONC Corr. Factor: 1.000000
User: CRHOADES Prep Date: Custom ID2: Custom ID3:
Comment: 325556 6010B dupont

Elem	Ag3280	Al1670	As1890	B_2089	Ba4554	Be3130	Bi2230	Ca3179	Cd2288
Line	328.068 {103}	167.079 {502}	189.042 {478}	208.959 {461}	455.403 { 74}	313.042 {108}	223.061 {451}	317.933 {106}	228.802 {447}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.00134	.02434	-.00231	.09204	.00702	-.00024	-.00435	465.76	.00151
Stddev	.00088	.00620	.01071	.00191	.00007	.00012	.00289	11.50	.00002
%RSD	65.550	25.466	464.55	2.0735	.99595	49.592	66.370	2.4690	1.2840

#1	.00196	.01996	-.00988	.09339	.00707	-.00032	-.00639	457.63	.00150
#2	.00072	.02873	.00527	.09070	.00697	-.00015	-.00231	473.89	.00153

Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Elem	Co2286	Cr2055	Cu3247	Fe2599	K_7664	Li6707	Mg2790	Mn2576	Mo2020
Line	228.616 {447}	205.560 {464}	324.754 {104}	259.940 {130}	766.490 { 44}	670.784 { 50}	279.079 {121}2	257.610 {131}	202.030 {467}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	-.00031	.00064	.00060	.37583	8.5897	.03042	317.84	.09871	-.00039
Stddev	.00056	.00080	.00065	.00039	.0332	.00200	.91	.00008	.00026
%RSD	177.58	125.74	108.22	.10272	.38612	6.5742	.28721	.07913	65.770

#1	.00008	.00007	.00014	.37611	8.5663	.03184	318.49	.09865	-.00058
#2	-.00071	.00120	.00106	.37556	8.6132	.02901	317.20	.09876	-.00021

Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Elem	Na8183	Ni2316	P_1782	Pb2203	S_1820	Sb2068	Se1960	Si2881	SiO2
Line	818.326 { 41}	231.604 {446}	178.284 {489}	220.353 {453}	182.034 {485}	206.833 {463}	196.090 {472}	288.158 {117}	288.158 {117}2
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	280.68	.00393	.01464	.00087	F 831.69	-.00606	F -.01292	4.6198	9.8864
Stddev	.19	.00043	.00419	.00042	6.02	.00022	.00635	.0642	.1374
%RSD	.06753	10.817	28.634	48.344	.72395	3.6555	49.118	1.3902	1.3902

#1	280.82	.00423	.01760	.00058	835.94	-.00590	-.01741	4.6652	9.9835
#2	280.55	.00363	.01167	.00117	827.43	-.00621	-.00843	4.5744	9.7892

Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Fail	Chk Pass	Chk Fail	Chk Pass	Chk Pass
High Limit					200.00		50.000		
Low Limit					-.20000		-.01000		

Elem	Sn1899	Sr4077	Th2837	Ti3349	Ti1908	U_3701	V_2924	Zn2062	Zr3391
Line	189.989 {477}	407.771 { 83}	283.730 {119}	334.904 {101}	190.856 {477}	370.152 { 91}	292.402 {115}	206.200 {163}	339.198 { 99}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	-.00301	2.7155	-.00123	.00192	-.00516	.02881	-.00078	.00137	.00248
Stddev	.00250	.0678	.00254	.00018	.00595	.06686	.00031	.00084	.00236
%RSD	83.303	2.4957	207.28	9.2962	115.31	232.10	39.741	61.157	95.458

#1	-.00124	2.6676	.00057	.00179	-.00095	-.01847	-.00056	.00078	.00415
#2	-.00478	2.7635	-.00303	.00204	-.00937	.07608	-.00101	.00196	.00081

Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Int. Std.	Y_2243	Y_3600	Y_3774
Line	224.306 {450}	360.073 { 94}	377.433 { 89}
Units	Cts/S	Cts/S	Cts/S
Avg	2394.4	35658.	1764.0
Stddev	10.1	78.	66.8
%RSD	.42338	.21943	3.7875

#1	2387.3	35713.	1811.3
#2	2401.6	35602.	1716.8

Sample Name: 280-82821-G-6-A Acquired: 5/18/2016 4:56:43 Type: Unk
Method: 6500_025(v6) Mode: CONC Corr. Factor: 1.000000
User: CRHOADES Prep Date: Custom ID2: Custom ID3:
Comment: 325556 6010B dupont

Elem	Ag3280	Al1670	As1890	B_2089	Ba4554	Be3130	Bi2230	Ca3179	Cd2288
Line	328.068 {103}	167.079 {502}	189.042 {478}	208.959 {461}	455.403 { 74}	313.042 {108}	223.061 {451}	317.933 {106}	228.802 {447}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.00131	.04617	.00170	.09475	.00639	-.00014	-.00983	472.30	.00177
Stddev	.00010	.00035	.00272	.00041	.00048	.00005	.00276	8.34	.00016
%RSD	7.5821	.75374	159.86	.43024	7.5102	38.670	28.084	1.7655	8.8628

#1	.00138	.04593	.00363	.09446	.00673	-.00017	-.00787	478.20	.00188
#2	.00124	.04642	-.00022	.09503	.00605	-.00010	-.01178	466.41	.00166

Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Elem	Co2286	Cr2055	Cu3247	Fe2599	K_7664	Li6707	Mg2790	Mn2576	Mo2020
Line	228.616 {447}	205.560 {464}	324.754 {104}	259.940 {130}	766.490 { 44}	670.784 { 50}	279.079 {121}2	257.610 {131}	202.030 {467}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	-.00030	.00049	.00122	.38304	8.4446	.03212	323.25	.09631	-.00074
Stddev	.00006	.00023	.00101	.00220	.1096	.00014	1.89	.00061	.00024
%RSD	20.919	47.330	82.971	.57474	1.2984	.43622	.58547	.63341	32.048

#1	-.00026	.00065	.00051	.38459	8.5221	.03222	324.59	.09674	-.00057
#2	-.00035	.00033	.00194	.38148	8.3671	.03202	321.91	.09588	-.00091

Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Elem	Na8183	Ni2316	P_1782	Pb2203	S_1820	Sb2068	Se1960	Si2881	SiO2
Line	818.326 { 41}	231.604 {446}	178.284 {489}	220.353 {453}	182.034 {485}	206.833 {463}	196.090 {472}	288.158 {117}	288.158 {117}2
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	284.70	.00467	.01342	-.00172	F 861.38	-.00690	F -.01146	4.6513	9.9537
Stddev	.32	.00008	.00153	.00175	.77	.00496	.00404	.1428	.3056
%RSD	.11196	1.7412	11.381	101.34	.08989	71.910	35.261	3.0705	3.0705

#1	284.92	.00462	.01234	-.00296	860.84	-.00339	-.00861	4.7522	10.170
#2	284.47	.00473	.01449	-.00049	861.93	-.01041	-.01432	4.5503	9.7376

Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Fail	Chk Pass	Chk Fail	Chk Pass	Chk Pass
High Limit					200.00		50.000		
Low Limit					-.20000		-.01000		

Elem	Sn1899	Sr4077	Th2837	Ti3349	Ti1908	U_3701	V_2924	Zn2062	Zr3391
Line	189.989 {477}	407.771 { 83}	283.730 {119}	334.904 {101}	190.856 {477}	370.152 { 91}	292.402 {115}	206.200 {163}	339.198 { 99}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	-.00331	2.7574	-.00303	.00220	-.00520	-.00266	-.00115	.00074	-.00017
Stddev	.00043	.0431	.00020	.00061	.00246	.01134	.00006	.00029	.00163
%RSD	13.081	1.5643	6.4617	27.669	47.175	426.22	5.0866	39.829	987.38

#1	-.00300	2.7879	-.00317	.00177	-.00347	-.01068	-.00119	.00053	.00099
#2	-.00361	2.7269	-.00289	.00263	-.00694	.00536	-.00111	.00094	-.00132

Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Int. Std.	Y_2243	Y_3600	Y_3774
Line	224.306 {450}	360.073 { 94}	377.433 { 89}
Units	Cts/S	Cts/S	Cts/S
Avg	2425.5	36706.	1789.5
Stddev	14.1	137.	54.1
%RSD	.58245	.37217	3.0249

#1	2435.5	36610.	1751.2
#2	2415.5	36803.	1827.8

Sample Name: CCVH-3883905 Acquired: 5/18/2016 4:59:27 Type: QC
Method: 6500_025(v6) Mode: CONC Corr. Factor: 1.000000
User: CRHOADES Prep Date: Custom ID2: Custom ID3:
Comment:

Elem	Ag3280	Al3092	As1890	B_2089	Ba4554	Be3130	Bi2230	Ca3179	Cd2288	Co2286	Cr2055
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	-.00603	52.009	.00298	.00357	-.00223	.00031	.99123	.03551	-.00043	-.00182	-.00045
Stddev	.00024	.353	.00672	.00116	.00013	.00018	.00172	.00494	.00043	.00037	.00020
%RSD	3.9612	.67827	225.35	32.406	5.6227	56.499	.17387	13.909	99.532	20.579	44.028

#1	-.00620	52.258	.00773	.00438	-.00232	.00044	.99245	.03900	-.00074	-.00155	-.00031
#2	-.00587	51.759	-.00177	.00275	-.00214	.00019	.99001	.03202	-.00013	-.00208	-.00059

Check ?	None	Chk Pass	None	None	None	None	Chk Pass	None	None	None	None
Value											
Range											

Elem	Cu3247	Fe2714	K_7664	Li6707	Mg2790	Mn2576	Mo2020	Na8183	Ni2316	P_1782	Pb2203
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	-.01472	53.473	-.10430	-.01211	.04391	-.00201	-.00290	273.16	.00116	.00564	.00185
Stddev	.00008	.283	.07474	.00260	.00685	.00006	.00033	1.12	.00064	.00026	.00053
%RSD	.56145	.52930	71.661	21.474	15.589	3.1227	11.522	.40841	54.757	4.6773	28.716

#1	-.01466	53.273	-.15715	-.01395	.03907	-.00196	-.00313	273.95	.00071	.00545	.00223
#2	-.01478	53.673	-.05145	-.01027	.04875	-.00205	-.00266	272.37	.00162	.00583	.00147

Check ?	None	Chk Pass	None	None	None	None	None	Chk Pass	None	None	None
Value											
Range											

Elem	S_1820	Sb2068	Se1960	Si2881	SiO2	Sn1899	Sr4077	Th2837	Ti3349	Ti1908	U_3701
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	F 5.8623	-.01829	-.01047	-.04729	-.10121	-.00194	.00016	W 4.5955	.00065	-.00342	9.5128
Stddev	.1390	.00473	.00484	.03278	.07016	.00018	.00007	.0031	.00049	.00004	.2472
%RSD	2.3713	25.869	46.257	69.320	69.320	9.2647	43.090	.06808	75.586	1.3131	2.5984

#1	5.9606	-.02164	-.01389	-.02411	-.05160	-.00207	.00021	4.5933	.00100	-.00339	9.3380
#2	5.7640	-.01495	-.00705	-.07048	-.15082	-.00181	.00011	4.5977	.00030	-.00346	9.6876

Check ?	Chk Fail	None	None	None	None	None	None	Chk Warn	None	None	Chk Pass
Value	5.0000							5.0000			
Range	10.490%							-5.0000%			

Elem	V_2924	Zn2062	Zr3391
Units	ppm	ppm	ppm
Avg	.01202	-.00007	-.13273
Stddev	.00102	.00010	.00050
%RSD	8.5200	128.86	.37361

#1	.01129	-.00001	-.13238
#2	.01274	-.00014	-.13309

Check ?	None	None	None
Value			
Range			

Int. Std.	Y_2243	Y_3600	Y_3774
Units	Cts/S	Cts/S	Cts/S
Avg	2490.0	37444.	1864.4
Stddev	2.5	627.	6.2
%RSD	.10189	1.6755	.33216

#1	2491.8	37888.	1860.0
#2	2488.2	37000.	1868.8

Sample Name: CCV-3888422 Acquired: 5/18/2016 5:02:03 Type: QC
Method: 6500_025(v6) Mode: CONC Corr. Factor: 1.000000
User: CRHOADES Prep Date: Custom ID2: Custom ID3:
Comment:

Elem	Ag3280	Al1670	As1890	B_2089	Ba4554	Be3130	Bi2230	Ca3179	Cd2288	Co2286	Cr2055	Cu3247	Fe2599
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.47896	.48179	.92899	.48816	.46736	.48015	-.00570	4.6153	.49829	.49825	.50416	.45649	2.6736
Stddev	.00216	.00401	.00712	.00781	.00742	.00902	.00006	.0782	.00839	.00757	.00896	.00067	.0408
%RSD	.45001	.83181	.76596	1.5995	1.5883	1.8791	.96663	1.6943	1.6828	1.5193	1.7764	.14692	1.5243

#1	.48048	.48462	.93402	.49368	.47261	.48653	-.00566	4.6706	.50422	.50361	.51050	.45697	2.7024
#2	.47743	.47895	.92396	.48264	.46211	.47377	-.00574	4.5600	.49236	.49290	.49783	.45602	2.6448

Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	None	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Value													
Range													

Elem	K_7664	Li6707	Mg2790	Mn2576	Mo2020	Na5895	Ni2316	P_1782	Pb2203	S_1820	Sb2068	Se1960	Si2881
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	47.517	.93785	18.606	.46011	.49141	5.1598	.48678	.97187	.98009	.24199	.97561	.92660	4.7617
Stddev	1.015	.00179	.017	.00021	.00928	.0183	.00748	.01648	.01868	.02247	.02367	.02216	.0444
%RSD	2.1349	.19112	.09178	.04478	1.8893	.35384	1.5377	1.6953	1.9056	9.2845	2.4266	2.3920	.93209

#1	48.235	.93911	18.619	.45996	.49798	5.1727	.49207	.98352	.99330	.25788	.99235	.94227	4.7303
#2	46.800	.93658	18.594	.46025	.48485	5.1468	.48148	.96022	.96688	.22610	.95887	.91093	4.7931

Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	None	Chk Pass	Chk Pass	Chk Pass
Value													
Range													

Elem	SiO2	Sn1899	Sr4077	Th2837	Ti3349	Ti1908	U_3701	V_2924	Zn2062	Zr3391
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	10.190	.98960	.48114	.00073	.45453	.99782	.01142	.47001	.45395	.47017
Stddev	.095	.02656	.00990	.00154	.00080	.02102	.00412	.00053	.00087	.00208
%RSD	.93209	2.6843	2.0576	210.18	.17570	2.1062	36.082	.11335	.19149	.44207

#1	10.123	1.0084	.48814	-.00036	.45510	1.0127	.00851	.46963	.45456	.46870
#2	10.257	.97082	.47414	.00182	.45397	.98296	.01434	.47038	.45333	.47164

Check ?	Chk Pass	Chk Pass	Chk Pass	None	Chk Pass	Chk Pass	None	Chk Pass	Chk Pass	Chk Pass
Value										
Range										

Int. Std.	Y_2243	Y_3600	Y_3774
Units	Cts/S	Cts/S	Cts/S
Avg	2522.2	37421.	1820.7
Stddev	20.0	40.	57.3
%RSD	.79456	.10697	3.1467

#1	2508.1	37393.	1780.2
#2	2536.4	37449.	1861.2

Sample Name: CCB Acquired: 5/18/2016 5:04:35 Type: QC
 Method: 6500_025(v6) Mode: CONC Corr. Factor: 1.000000
 User: CRHOADES Prep Date: Custom ID2: Custom ID3:
 Comment:

Elem	Ag3280	Al1670	As1890	B_2089	Ba4554	Be3130	Bi2230	Ca3179	Cd2288	Co2286	Cr2055
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.00140	.00584	.00563	.00345	W -.00256	.00028	-.00144	.00682	-.00002	-.00032	-.00028
Stddev	.00010	.00670	.00320	.00106	.00034	.00008	.00229	.00009	.00000	.00005	.00024
%RSD	7.2377	114.75	56.804	30.610	13.355	29.573	158.87	1.2713	3.4085	14.911	86.397
#1	.00148	.01058	.00337	.00420	-.00280	.00033	.00018	.00676	-.00002	-.00029	-.00011
#2	.00133	.00110	.00790	.00270	-.00232	.00022	-.00306	.00688	-.00002	-.00036	-.00045
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Warn	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit					.00200						
Low Limit					-.00200						
Elem	Cu3247	Fe2599	K_7664	Li6707	Mg2790	Mn2576	Mo2020	Na5895	Ni2316	P_1782	Pb2203
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	-.00078	W .08526	-.16832	F -.01675	.01001	.00046	.00038	.08258	.00028	.00328	-.00174
Stddev	.00046	.00617	.10280	.00188	.00059	.00002	.00044	.01423	.00032	.00293	.00233
%RSD	58.427	7.2314	61.074	11.218	5.9246	5.0332	114.67	17.231	117.28	89.429	134.04
#1	-.00046	.08962	-.24102	-.01808	.01043	.00045	.00007	.07251	.00005	.00535	-.00009
#2	-.00111	.08090	-.09563	-.01542	.00960	.00048	.00069	.09264	.00050	.00121	-.00339
Check ?	Chk Pass	Chk Warn	Chk Pass	Chk Fail	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit		.05000		.01000							
Low Limit		-.05000		-.01000							
Elem	S_1820	Sb2068	Se1960	Si2881	SiO2	Sn1899	Sr4077	Th2837	Ti3349	Tl1908	U_3701
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	F .18083	W .00223	-.00810	-.01708	-.03654	-.00051	-.00013	-.00160	.00076	.00316	.06267
Stddev	.02647	.00322	.00296	.02710	.05799	.00058	.00017	.00025	.00121	.00436	.03120
%RSD	14.639	144.52	36.537	158.69	158.69	114.18	125.73	15.794	159.24	137.98	49.784
#1	.19955	.00451	-.00601	.00209	.00446	-.00092	-.00001	-.00142	.00161	.00008	.08473
#2	.16212	-.00005	-.01020	-.03624	-.07755	-.00010	-.00025	-.00178	-.00010	.00624	.04061
Check ?	Chk Fail	Chk Warn	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit	.10000	.00100									
Low Limit	-.20000	-.00100									
Elem	V_2924	Zn2062	Zr3391								
Units	ppm	ppm	ppm								
Avg	.00046	.00014	.00211								
Stddev	.00090	.00024	.00194								
%RSD	195.18	173.85	92.239								
#1	.00109	.00030	.00073								
#2	-.00017	-.00003	.00348								
Check ?	Chk Pass	Chk Pass	Chk Pass								
High Limit											
Low Limit											
Int. Std.	Y_2243	Y_3600	Y_3774								
Units	Cts/S	Cts/S	Cts/S								
Avg	2526.5	37626.	1832.7								
Stddev	2.5	157.	12.9								
%RSD	.09913	.41735	.70586								
#1	2528.3	37737.	1841.8								
#2	2524.7	37515.	1823.6								

Sample Name: CCVL-3894681 Acquired: 5/18/2016 5:06:58 Type: QC
Method: 6500_025(v6) Mode: CONC Corr. Factor: 1.000000
User: CRHOADES Prep Date: Custom ID2: Custom ID3:
Comment:

Elem	Ag3280	Al1670	As1890	B_2089	Ba4554	Be3130	Bi2230	Ca3179	Cd2288	Co2286	Cr2055
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.01098	.09812	.01906	.09581	.00743	.00088	.10213	.22487	.00484	.00992	.00987
Stddev	.00007	.00105	.00208	.00177	.00018	.00003	.00543	.01210	.00006	.00011	.00005
%RSD	.63391	1.0750	10.898	1.8497	2.4822	3.1740	5.3193	5.3814	1.2645	1.0913	.53863
#1	.01093	.09737	.02053	.09456	.00756	.00086	.09829	.21632	.00480	.00984	.00983
#2	.01103	.09886	.01759	.09706	.00730	.00090	.10598	.23343	.00489	.00999	.00991
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Value											
Range											
Elem	Cu3247	Fe2599	K_7664	Li6707	Mg2790	Mn2576	Mo2020	Na5895	Ni2316	P_1782	Pb2203
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.01312	.10957	2.7238	F -.00700	.21315	.00962	.01848	1.0803	.03962	2.7964	.00728
Stddev	.00006	.00472	.0511	.00011	.00221	.00009	.00102	.0041	.00131	.0773	.00016
%RSD	.46930	4.3073	1.8767	1.5241	1.0347	.91105	5.5353	.37950	3.3140	2.7639	2.1904
#1	.01308	.11290	2.7600	-.00708	.21159	.00968	.01776	1.0774	.03869	2.7417	.00739
#2	.01317	.10623	2.6877	-.00693	.21471	.00955	.01920	1.0832	.04054	2.8511	.00717
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Fail	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Value				.01000							
Range				-30.000%							
Elem	S_1820	Sb2068	Se1960	Si2881	SiO2	Sn1899	Sr4077	Th2837	Ti3349	Ti1908	U_3701
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.14265	.02075	F .00391	.45382	.97118	.10018	.00981	.01244	.01010	.01807	F .13344
Stddev	.00405	.00021	.00455	.04155	.08892	.00318	.00005	.00455	.00029	.00039	.04429
%RSD	2.8357	1.0097	116.46	9.1556	9.1556	3.1778	.55232	36.561	2.8708	2.1752	33.194
#1	.14551	.02060	.00712	.42444	.90831	.09793	.00977	.01566	.00990	.01835	.10212
#2	.13979	.02090	.00069	.48320	1.0341	.10243	.00984	.00923	.01031	.01779	.16476
Check ?	None	Chk Pass	Chk Fail	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Fail
Value			.01500								.06000
Range			-30.000%								30.000%
Elem	V_2924	Zn2062	Zr3391								
Units	ppm	ppm	ppm								
Avg	.00986	.01934	.01495								
Stddev	.00057	.00038	.00144								
%RSD	5.8235	1.9789	9.6624								
#1	.00946	.01907	.01393								
#2	.01027	.01961	.01597								
Check ?	Chk Pass	Chk Pass	Chk Pass								
Value											
Range											
Int. Std.	Y_2243	Y_3600	Y_3774								
Units	Cts/S	Cts/S	Cts/S								
Avg	2527.2	37923.	1798.4								
Stddev	6.1	112.	36.5								
%RSD	.23952	.29462	2.0271								
#1	2531.4	38002.	1772.7								
#2	2522.9	37844.	1824.2								

Sample Name: 280-82821-M-7-A Acquired: 5/18/2016 5:09:38 Type: Unk
Method: 6500_025(v6) Mode: CONC Corr. Factor: 1.000000
User: CRHOADES Prep Date: Custom ID2: Custom ID3:
Comment: 325556 6010B dupont

Elem	Ag3280	Al1670	As1890	B_2089	Ba4554	Be3130	Bi2230	Ca3179	Cd2288
Line	328.068 {103}	167.079 {502}	189.042 {478}	208.959 {461}	455.403 { 74}	313.042 {108}	223.061 {451}	317.933 {106}	228.802 {447}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.00179	.16381	-.00077	.10833	.00505	-.00006	-.00504	381.71	.00202
Stddev	.00043	.00303	.00306	.00279	.00068	.00004	.00063	8.13	.00043
%RSD	24.152	1.8471	397.62	2.5796	13.495	65.165	12.485	2.1289	21.227

#1	.00210	.16595	.00139	.11031	.00553	-.00003	-.00548	387.46	.00172
#2	.00148	.16167	-.00293	.10636	.00456	-.00009	-.00459	375.97	.00233

Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Elem	Co2286	Cr2055	Cu3247	Fe2599	K_7664	Li6707	Mg2790	Mn2576	Mo2020
Line	228.616 {447}	205.560 {464}	324.754 {104}	259.940 {130}	766.490 { 44}	670.784 { 50}	279.079 {121}2	257.610 {131}	202.030 {467}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	-.00215	.00012	.00149	.30719	15.662	.05277	495.62	.00470	.00010
Stddev	.00010	.00014	.00081	.00283	.053	.00003	1.30	.00004	.00036
%RSD	4.6104	115.12	54.313	.92249	.33893	.05045	.26180	.76738	361.97

#1	-.00208	.00022	.00092	.30919	15.699	.05279	494.70	.00468	.00035
#2	-.00222	.00002	.00206	.30518	15.624	.05275	496.54	.00473	-.00015

Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Elem	Na8183	Ni2316	P_1782	Pb2203	S_1820	Sb2068	Se1960	Si2881	SiO2
Line	818.326 { 41}	231.604 {446}	178.284 {489}	220.353 {453}	182.034 {485}	206.833 {463}	196.090 {472}	288.158 {117}	288.158 {117}2
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	W 1836.3	.00328	.01714	-.00036	F 1910.0	-.00951	.15317	3.3703	7.2124
Stddev	41.4	.00013	.00101	.00059	17.7	.00531	.00170	.0015	.0032
%RSD	2.2567	3.8148	5.8983	161.38	.92618	55.870	1.1111	.04474	.04474

#1	1865.6	.00337	.01642	-.00078	1922.5	-.00575	.15197	3.3714	7.2147
#2	1807.0	.00319	.01785	.00005	1897.5	-.01326	.15437	3.3692	7.2101

Check ?	Chk Warn	Chk Pass	Chk Pass	Chk Pass	Chk Fail	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit	500.00				200.00				
Low Limit	11.000				-.20000				

Elem	Sn1899	Sr4077	Th2837	Ti3349	Ti1908	U_3701	V_2924	Zn2062	Zr3391
Line	189.989 {477}	407.771 { 83}	283.730 {119}	334.904 {101}	190.856 {477}	370.152 { 91}	292.402 {115}	206.200 {163}	339.198 { 99}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	-.00328	W 11.478	-.00451	.00803	-.00294	-.00738	-.00046	.00292	.00205
Stddev	.00037	.251	.00102	.00004	.00237	.01194	.00003	.00030	.00127
%RSD	11.336	2.1902	22.651	.54227	80.755	161.75	6.1803	10.351	62.097

#1	-.00355	11.656	-.00378	.00800	-.00126	.00106	-.00048	.00271	.00295
#2	-.00302	11.300	-.00523	.00806	-.00462	-.01583	-.00044	.00313	.00115

Check ?	Chk Pass	Chk Warn	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit		5.0000							
Low Limit		-.01000							

Int. Std.	Y_2243	Y_3600	Y_3774						
Line	224.306 {450}	360.073 { 94}	377.433 { 89}						
Units	Cts/S	Cts/S	Cts/S						
Avg	2368.5	34608.	1863.5						
Stddev	22.0	13.	55.0						
%RSD	.92939	.03652	2.9510						

#1	2352.9	34617.	1824.6						
#2	2384.1	34599.	1902.4						

Sample Name: 280-82821-M-7-A SD@5 Acquired: 5/18/2016 5:12:49 Type: Unk
Method: 6500_025(v6) Mode: CONC Corr. Factor: 1.000000
User: CRHOADES Prep Date: Custom ID2: Custom ID3:
Comment: 325556 6010B dupont

Elem	Ag3280	Al1670	As1890	B_2089	Ba4554	Be3130	Bi2230	Ca3179	Cd2288
Line	328.068 {103}	167.079 {502}	189.042 {478}	208.959 {461}	455.403 { 74}	313.042 {108}	223.061 {451}	317.933 {106}	228.802 {447}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.00123	.03263	-.00457	.02217	-.00081	.00006	-.00136	78.859	.00091
Stddev	.00047	.00088	.00343	.00065	.00020	.00020	.00436	.453	.00020
%RSD	38.148	2.6994	75.074	2.9225	24.233	329.38	321.01	.57493	22.046

#1	.00156	.03326	-.00214	.02263	-.00095	.00020	-.00444	78.538	.00105
#2	.00090	.03201	-.00699	.02171	-.00067	-.00008	.00173	79.179	.00077

Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Elem	Co2286	Cr2055	Cu3247	Fe2599	K_7664	Li6707	Mg2790	Mn2576	Mo2020
Line	228.616 {447}	205.560 {464}	324.754 {104}	259.940 {130}	766.490 { 44}	670.784 { 50}	279.079 {121}2	257.610 {131}	202.030 {467}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	-.00085	-.00032	.00052	.07933	3.1087	-.00050	98.697	.00102	-.00155
Stddev	.00009	.00033	.00120	.00538	.0221	.00222	.009	.00009	.00023
%RSD	10.788	103.27	232.39	6.7876	.71060	445.44	.00916	9.0172	15.052

#1	-.00079	-.00056	-.00033	.07552	3.0931	-.00207	98.691	.00108	-.00138
#2	-.00092	-.00009	.00136	.08314	3.1243	.00107	98.703	.00095	-.00171

Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Elem	Na8183	Ni2316	P_1782	Pb2203	S_1820	Sb2068	Se1960	Si2881	SiO2
Line	818.326 { 41}	231.604 {446}	178.284 {489}	220.353 {453}	182.034 {485}	206.833 {463}	196.090 {472}	288.158 {117}	288.158 {117}2
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	376.56	.00022	.00606	-.00013	F 393.23	-.00303	.02053	.63993	1.3694
Stddev	1.95	.00007	.00240	.00348	1.36	.00453	.00534	.06989	.1496
%RSD	.51684	32.073	39.652	2609.4	.34532	149.47	26.012	10.922	10.922

#1	375.18	.00017	.00436	-.00260	394.19	-.00623	.01676	.59051	1.2637
#2	377.94	.00027	.00775	.00233	392.27	.00017	.02431	.68935	1.4752

Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Fail	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit					200.00				
Low Limit					-.20000				

Elem	Sn1899	Sr4077	Th2837	Ti3349	Ti1908	U_3701	V_2924	Zn2062	Zr3391
Line	189.989 {477}	407.771 { 83}	283.730 {119}	334.904 {101}	190.856 {477}	370.152 { 91}	292.402 {115}	206.200 {163}	339.198 { 99}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	-.00277	2.3478	-.00265	.00139	-.00384	-.01752	-.00051	.00063	-.00034
Stddev	.00026	.0125	.00099	.00009	.00303	.03949	.00021	.00048	.00083
%RSD	9.3031	.53316	37.217	6.1618	79.065	225.46	41.882	75.545	240.96

#1	-.00259	2.3390	-.00195	.00145	-.00169	-.04544	-.00066	.00097	-.00093
#2	-.00295	2.3567	-.00334	.00133	-.00598	.01041	-.00036	.00030	.00024

Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Int. Std.	Y_2243	Y_3600	Y_3774
Line	224.306 {450}	360.073 { 94}	377.433 { 89}
Units	Cts/S	Cts/S	Cts/S
Avg	2624.9	37226.	1815.6
Stddev	9.5	114.	9.9
%RSD	.36247	.30536	.54417

#1	2631.6	37146.	1822.6
#2	2618.2	37306.	1808.7

Sample Name: 280-82821-M-7-B MS Acquired: 5/18/2016 5:15:28 Type: Unk
Method: 6500_025(v6) Mode: CONC Corr. Factor: 1.000000
User: CRHOADES Prep Date: Custom ID2: Custom ID3:
Comment: 325556 6010B dupont

Elem	Ag3280	Al1670	Al3092	As1890	B_2089	Ba4554	Be3130	Bi2230	Ca3179
Line	328.068 {103}	167.079 {502}	309.271 {109}	189.042 {478}	208.959 {461}	455.403 { 74}	313.042 {108}	223.061 {451}	317.933 {106}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.04986	1.9805	W 2.8147	.96704	1.0128	1.9092	.04799	F 1.9486	430.51
Stddev	.00005	.0256	.0458	.00324	.0125	.0297	.00058	.0161	6.70
%RSD	.10705	1.2947	1.6282	.33466	1.2327	1.5534	1.2055	.82532	1.5562

#1	.04990	1.9623	2.8472	.96475	1.0040	1.9301	.04840	1.9372	435.25
#2	.04983	1.9986	2.7823	.96933	1.0217	1.8882	.04758	1.9600	425.77

Check ?	Chk Pass	Chk Pass	Chk Warn	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Fail	Chk Pass
High Limit			500.00					.10000	
Low Limit			3.2000					-.10000	

Elem	Cd2288	Co2286	Cr2055	Cu3247	Fe2599	K_7664	Li6707	Mg2790	Mn2576
Line	228.802 {447}	228.616 {447}	205.560 {464}	324.754 {104}	259.940 {130}	766.490 { 44}	670.784 { 50}	279.079 {121}2	257.610 {131}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.10071	.45029	.18991	.22585	1.2741	66.151	1.0407	W 545.25	.44878
Stddev	.00158	.00664	.00176	.00003	.0009	.797	.0019	7.14	.00272
%RSD	1.5655	1.4755	.92414	.01536	.06764	1.2052	.18276	1.3086	.60578

#1	.09959	.44559	.18867	.22582	1.2747	66.715	1.0394	540.20	.44685
#2	.10182	.45499	.19115	.22587	1.2735	65.587	1.0421	550.29	.45070

Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Warn	Chk Pass
High Limit								500.00	
Low Limit								-.10000	

Elem	Mo2020	Na8183	Ni2316	P_1782	Pb2203	S_1820	Sb2068	Se1960	Si2881
Line	202.030 {467}	818.326 { 41}	231.604 {446}	178.284 {489}	220.353 {453}	182.034 {485}	206.833 {463}	196.090 {472}	288.158 {117}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.98694	W 1919.0	.44302	W 10.668	.44026	F 1896.9	.51779	2.1885	13.736
Stddev	.01360	30.5	.00641	.135	.00737	24.4	.00741	.0045	.012
%RSD	1.3782	1.5882	1.4468	1.2617	1.6747	1.2866	1.4309	.20398	.08677

#1	.97732	1940.5	.43848	10.573	.43505	1879.6	.51255	2.1916	13.745
#2	.99655	1897.4	.44755	10.763	.44547	1914.2	.52303	2.1853	13.728

Check ?	Chk Pass	Chk Warn	Chk Pass	Chk Warn	Chk Pass	Chk Fail	Chk Pass	Chk Pass	Chk Pass
High Limit		500.00		2.0000		200.00			
Low Limit		11.000		-1.0000		-.20000			

Elem	SiO2	Sn1899	Sr4077	Th2837	Ti3349	Ti1908	U_3701	V_2924	Zn2062
Line	288.158 {117}2	189.989 {477}	407.771 { 83}	283.730 {119}	334.904 {101}	190.856 {477}	370.152 { 91}	292.402 {115}	206.200 {163}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	29.396	1.8535	W 12.564	.95068	.94004	1.4438	1.8593	.46836	.43354
Stddev	.026	.0025	.251	.00232	.00668	.0475	.0002	.00221	.00381
%RSD	.08677	.13307	1.9974	.24422	.71054	3.2880	.01095	.47241	.87907

#1	29.414	1.8553	12.742	.94904	.93531	1.4773	1.8594	.46680	.43085
#2	29.378	1.8518	12.387	.95232	.94476	1.4102	1.8592	.46993	.43624

Check ?	Chk Pass	Chk Pass	Chk Warn	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit			5.0000						
Low Limit			-.01000						

Elem	Zr3391								
Line	339.198 { 99}								
Units	ppm								
Avg	.45144								
Stddev	.00484								
%RSD	1.0710								

#1	.44802								
#2	.45486								

Check ?	Chk Pass								
High Limit									
Low Limit									

Sample Name: 280-82821-M-7-B MS Acquired: 5/18/2016 5:15:28 Type: Unk
 Method: 6500_025(v6) Mode: CONC Corr. Factor: 1.000000
 User: CRHOADES Prep Date: Custom ID2: Custom ID3:
 Comment: 325556 6010B dupont

Int. Std.	Y_2243	Y_3600	Y_3774
Line	224.306 {450}	360.073 { 94}	377.433 { 89}
Units	Cts/S	Cts/S	Cts/S
Avg	2382.7	34326.	1834.2
Stddev	37.4	218.	41.0
%RSD	1.5701	.63371	2.2326
#1	2409.2	34480.	1805.3
#2	2356.2	34172.	1863.2

Sample Name: 280-82821-M-7-C MSD Acquired: 5/18/2016 5:18:28 Type: Unk
Method: 6500_025(v6) Mode: CONC Corr. Factor: 1.000000
User: CRHOADES Prep Date: Custom ID2: Custom ID3:
Comment: 325556 6010B dupont

Elem	Ag3280	Al1670	Al3092	As1890	B_2089	Ba4554	Be3130	Bi2230	Ca3179
Line	328.068 {103}	167.079 {502}	309.271 {109}	189.042 {478}	208.959 {461}	455.403 { 74}	313.042 {108}	223.061 {451}	317.933 {106}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.04939	1.9959	W 2.7311	.96371	1.0138	1.8425	.04643	F 1.9554	413.86
Stddev	.00028	.0227	.0979	.00543	.0065	.0121	.00045	.0092	3.25
%RSD	.57634	1.1385	3.5847	.56358	.63857	.65543	.96887	.47192	.78580

#1	.04919	1.9799	2.8004	.95987	1.0092	1.8510	.04674	1.9489	416.16
#2	.04959	2.0120	2.6619	.96755	1.0183	1.8339	.04611	1.9620	411.56

Check ?	Chk Pass	Chk Pass	Chk Warn	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Fail	Chk Pass
High Limit			500.00					.10000	
Low Limit			3.2000					-.10000	

Elem	Cd2288	Co2286	Cr2055	Cu3247	Fe2599	K_7664	Li6707	Mg2790	Mn2576
Line	228.802 {447}	228.616 {447}	205.560 {464}	324.754 {104}	259.940 {130}	766.490 { 44}	670.784 { 50}	279.079 {121}2	257.610 {131}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.10078	.45028	.18986	.22239	1.2299	63.999	1.0149	W 532.08	.44338
Stddev	.00038	.00173	.00122	.00196	.0009	.211	.0008	2.56	.00074
%RSD	.37245	.38330	.64502	.88190	.07100	.33029	.07663	.48076	.16647

#1	.10051	.44906	.18899	.22100	1.2293	64.149	1.0144	530.27	.44285
#2	.10104	.45150	.19072	.22377	1.2305	63.850	1.0155	533.89	.44390

Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Warn	Chk Pass
High Limit								500.00	
Low Limit								-.10000	

Elem	Mo2020	Na8183	Ni2316	P_1782	Pb2203	S_1820	Sb2068	Se1960	Si2881
Line	202.030 {467}	818.326 { 41}	231.604 {446}	178.284 {489}	220.353 {453}	182.034 {485}	206.833 {463}	196.090 {472}	288.158 {117}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.99087	W 1838.5	.44260	W 10.594	.43897	F 1885.5	.51993	2.1622	13.537
Stddev	.00367	12.6	.00324	.057	.00008	19.2	.00550	.0091	.106
%RSD	.36988	.68770	.73107	.54043	.01865	1.0206	1.0576	.42276	.78226

#1	.98827	1847.4	.44031	10.553	.43891	1871.9	.51604	2.1557	13.462
#2	.99346	1829.6	.44488	10.634	.43903	1899.1	.52382	2.1686	13.612

Check ?	Chk Pass	Chk Warn	Chk Pass	Chk Warn	Chk Pass	Chk Fail	Chk Pass	Chk Pass	Chk Pass
High Limit		500.00		2.0000		200.00			
Low Limit		11.000		-1.0000		-.20000			

Elem	SiO2	Sn1899	Sr4077	Th2837	Ti3349	Ti1908	U_3701	V_2924	Zn2062
Line	288.158 {117}2	189.989 {477}	407.771 { 83}	283.730 {119}	334.904 {101}	190.856 {477}	370.152 { 91}	292.402 {115}	206.200 {163}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	28.969	1.8238	W 11.991	.94214	.92958	1.4673	1.8588	.46351	.43156
Stddev	.227	.0073	.197	.00262	.00120	.0345	.0355	.00035	.00094
%RSD	.78226	.40207	1.6438	.27818	.12859	2.3525	1.9119	.07480	.21874

#1	28.809	1.8186	12.130	.94029	.92874	1.4917	1.8839	.46327	.43089
#2	29.130	1.8290	11.852	.94400	.93043	1.4429	1.8337	.46376	.43223

Check ?	Chk Pass	Chk Pass	Chk Warn	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit			5.0000						
Low Limit			-.01000						

Elem	Zr3391								
Line	339.198 { 99}								
Units	ppm								
Avg	.44558								
Stddev	.00462								
%RSD	1.0360								

#1	.44884								
#2	.44232								

Check ?	Chk Pass								
High Limit									
Low Limit									

Sample Name: 280-82821-M-7-C MSD Acquired: 5/18/2016 5:18:28 Type: Unk
 Method: 6500_025(v6) Mode: CONC Corr. Factor: 1.000000
 User: CRHOADES Prep Date: Custom ID2: Custom ID3:
 Comment: 325556 6010B dupont

Int. Std.	Y_2243	Y_3600	Y_3774
Line	224.306 {450}	360.073 { 94}	377.433 { 89}
Units	Cts/S	Cts/S	Cts/S
Avg	2340.4	33121.	1759.8
Stddev	25.7	721.	5.9
%RSD	1.0960	2.1758	.33373
#1	2358.6	32612.	1764.0
#2	2322.3	33631.	1755.7

Sample Name: 280-82821-M-7-A PDS Acquired: 5/18/2016 5:21:31 Type: Unk
Method: 6500_025(v6) Mode: CONC Corr. Factor: 1.000000
User: CRHOADES Prep Date: Custom ID2: Custom ID3:
Comment: 325556 6010B dupont

Elem	Ag3280	Al1670	As1890	B_2089	Ba4554	Be3130	Bi2230	Ca3179	Cd2288
Line	328.068 {103}	167.079 {502}	189.042 {478}	208.959 {461}	455.403 {74}	313.042 {108}	223.061 {451}	317.933 {106}	228.802 {447}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.03081	1.0026	.17831	.19544	.10152	.04730	-.00124	399.21	.05204
Stddev	.00035	.0225	.00982	.00206	.00146	.00051	.00148	9.32	.00026
%RSD	1.1475	2.2469	5.5088	1.0525	1.4429	1.0875	119.42	2.3343	.49436

#1	.03106	.98669	.17136	.19398	.10049	.04694	-.00019	392.62	.05222
#2	.03056	1.0185	.18525	.19689	.10256	.04767	-.00228	405.80	.05186

Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Elem	Co2286	Cr2055	Cu3247	Fe2599	K_7664	Li6707	Mg2790	Mn2576	Mo2020
Line	228.616 {447}	205.560 {464}	324.754 {104}	259.940 {130}	766.490 {44}	670.784 {50}	279.079 {121}2	257.610 {131}	202.030 {467}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.04236	.04743	.04564	1.2221	36.360	.15040	W 510.20	.04861	.05105
Stddev	.00010	.00028	.00007	.0227	.171	.00271	6.48	.00026	.00096
%RSD	.24404	.59729	.15228	1.8573	.47143	1.8006	1.2703	.54141	1.8793

#1	.04229	.04723	.04569	1.2060	36.239	.14848	505.62	.04842	.05037
#2	.04244	.04763	.04559	1.2381	36.481	.15231	514.79	.04880	.05173

Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Warn	Chk Pass	Chk Pass
High Limit							500.00		
Low Limit							-.10000		

Elem	Na8183	Ni2316	P_1782	Pb2203	S_1820	Sb2068	Se1960	Si2881	SiO2
Line	818.326 {41}	231.604 {446}	178.284 {489}	220.353 {453}	182.034 {485}	206.833 {463}	196.090 {472}	288.158 {117}	288.158 {117}2
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	W 1859.2	.04800	W 2.1156	.08734	F 1851.2	.09111	.34965	8.2332	17.619
Stddev	42.9	.00011	.0049	.00268	34.3	.00801	.00441	.0601	.129
%RSD	2.3049	.23949	.23073	3.0717	1.8552	8.7958	1.2606	.73046	.73046

#1	1828.9	.04792	2.1121	.08924	1826.9	.08544	.34654	8.1906	17.528
#2	1889.5	.04808	2.1190	.08544	1875.5	.09677	.35277	8.2757	17.710

Check ?	Chk Warn	Chk Pass	Chk Warn	Chk Pass	Chk Fail	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit	500.00		2.0000		200.00				
Low Limit	11.000		-1.0000		-20000				

Elem	Sn1899	Sr4077	Th2837	Ti3349	Ti1908	U_3701	V_2924	Zn2062	Zr3391
Line	189.989 {477}	407.771 {83}	283.730 {119}	334.904 {101}	190.856 {477}	370.152 {91}	292.402 {115}	206.200 {163}	339.198 {99}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.08820	W 11.509	.18687	.05505	.15117	.51787	.04625	.17530	.04373
Stddev	.00238	.265	.00445	.00043	.00249	.03806	.00165	.00170	.00013
%RSD	2.6965	2.2992	2.3835	.78840	1.6471	7.3493	3.5612	.97085	.28979

#1	.08988	11.322	.18372	.05474	.14941	.54478	.04509	.17410	.04382
#2	.08652	11.696	.19002	.05536	.15293	.49096	.04742	.17651	.04364

Check ?	Chk Pass	Chk Warn	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit		5.0000							
Low Limit		-.01000							

Int. Std.	Y_2243	Y_3600	Y_3774
Line	224.306 {450}	360.073 {94}	377.433 {89}
Units	Cts/S	Cts/S	Cts/S
Avg	2207.4	32432.	1707.9
Stddev	34.4	30.	61.8
%RSD	1.5595	.09303	3.6183

#1	2231.7	32454.	1751.6
#2	2183.0	32411.	1664.2

Sample Name: 280-82821-G-8-A Acquired: 5/18/2016 5:24:38 Type: Unk
Method: 6500_025(v6) Mode: CONC Corr. Factor: 1.000000
User: CRHOADES Prep Date: Custom ID2: Custom ID3:
Comment: 325556 6010B dupont

Elem	Ag3280	Al1670	As1890	B_2089	Ba4554	Be3130	Bi2230	Ca3179	Cd2288
Line	328.068 {103}	167.079 {502}	189.042 {478}	208.959 {461}	455.403 { 74}	313.042 {108}	223.061 {451}	317.933 {106}	228.802 {447}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.00140	1.2541	-.00708	.11712	.01448	-.00011	-.00414	410.45	.00191
Stddev	.00027	.0039	.00404	.00065	.00017	.00007	.00239	6.00	.00028
%RSD	18.931	.30728	57.048	.55541	1.1804	66.335	57.873	1.4624	14.460

#1	.00121	1.2514	-.00993	.11666	.01460	-.00016	-.00244	414.69	.00172
#2	.00159	1.2568	-.00422	.11758	.01436	-.00006	-.00583	406.20	.00211

Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Elem	Co2286	Cr2055	Cu3247	Fe2599	K_7664	Li6707	Mg2790	Mn2576	Mo2020
Line	228.616 {447}	205.560 {464}	324.754 {104}	259.940 {130}	766.490 { 44}	670.784 { 50}	279.079 {121}2	257.610 {131}	202.030 {467}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	-.00010	.00253	.00210	1.9141	12.384	.06456	W 631.28	.03990	.00370
Stddev	.00013	.00030	.00022	.0106	.127	.00434	7.28	.00019	.00045
%RSD	133.75	11.749	10.588	.55486	1.0223	6.7229	1.1540	.48363	12.052

#1	-.00019	.00274	.00194	1.9066	12.295	.06149	636.43	.04003	.00339
#2	-.00001	.00232	.00226	1.9216	12.474	.06763	626.13	.03976	.00402

Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Warn	Chk Pass	Chk Pass
High Limit							500.00		
Low Limit							-.10000		

Elem	Na8183	Ni2316	P_1782	Pb2203	S_1820	Sb2068	Se1960	Si2881	SiO2
Line	818.326 { 41}	231.604 {446}	178.284 {489}	220.353 {453}	182.034 {485}	206.833 {463}	196.090 {472}	288.158 {117}	288.158 {117}2
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	373.06	.00601	.08952	-.00073	F 1160.3	-.00624	.20438	5.8487	12.516
Stddev	5.45	.00018	.00019	.00086	6.6	.00542	.00180	.0022	.005
%RSD	1.4602	3.0409	.20875	118.23	.56905	86.802	.88022	.03822	.03822

#1	376.91	.00614	.08938	-.00012	1155.6	-.01007	.20565	5.8503	12.520
#2	369.20	.00588	.08965	-.00134	1165.0	-.00241	.20310	5.8471	12.513

Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Fail	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit					200.00				
Low Limit					-.20000				

Elem	Sn1899	Sr4077	Th2837	Ti3349	Ti1908	U_3701	V_2924	Zn2062	Zr3391
Line	189.989 {477}	407.771 { 83}	283.730 {119}	334.904 {101}	190.856 {477}	370.152 { 91}	292.402 {115}	206.200 {163}	339.198 { 99}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	-.00353	W 9.0953	.00317	.06395	.00288	.18218	.00194	.00677	.00069
Stddev	.00033	.1481	.00182	.00025	.00257	.06827	.00070	.00112	.00044
%RSD	9.2013	1.6280	57.221	.39432	89.348	37.474	35.925	16.615	64.638

#1	-.00376	9.2000	.00189	.06413	.00106	.13391	.00243	.00756	.00037
#2	-.00330	8.9906	.00446	.06377	.00470	.23046	.00144	.00597	.00100

Check ?	Chk Pass	Chk Warn	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit		5.0000							
Low Limit		-.01000							

Int. Std.	Y_2243	Y_3600	Y_3774
Line	224.306 {450}	360.073 { 94}	377.433 { 89}
Units	Cts/S	Cts/S	Cts/S
Avg	2383.6	33999.	1719.2
Stddev	2.0	382.	8.0
%RSD	.08363	1.1241	.46449

#1	2382.2	33729.	1713.5
#2	2385.0	34270.	1724.8

Sample Name: 280-82821-G-9-A Acquired: 5/18/2016 5:27:20 Type: Unk
Method: 6500_025(v6) Mode: CONC Corr. Factor: 1.000000
User: CRHOADES Prep Date: Custom ID2: Custom ID3:
Comment: 325556 6010B dupont

Elem	Ag3280	Al1670	As1890	B_2089	Ba4554	Be3130	Bi2230	Ca3179	Cd2288
Line	328.068 {103}	167.079 {502}	189.042 {478}	208.959 {461}	455.403 { 74}	313.042 {108}	223.061 {451}	317.933 {106}	228.802 {447}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.00069	.46727	-.00488	.10288	.01021	.00021	-.00503	104.41	.00135
Stddev	.00029	.00385	.00332	.00035	.00038	.00005	.00322	2.49	.00036
%RSD	42.114	.82430	67.984	.34431	3.7529	25.238	64.062	2.3861	26.679

#1	.00049	.46999	-.00723	.10263	.01048	.00017	-.00275	106.17	.00161
#2	.00090	.46454	-.00253	.10313	.00994	.00024	-.00731	102.65	.00110

Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Elem	Co2286	Cr2055	Cu3247	Fe2599	K_7664	Li6707	Mg2790	Mn2576	Mo2020
Line	228.616 {447}	205.560 {464}	324.754 {104}	259.940 {130}	766.490 { 44}	670.784 { 50}	279.079 {121}2	257.610 {131}	202.030 {467}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	-.00129	.00146	.00131	.60190	7.7596	.01502	140.45	.01076	.05921
Stddev	.00002	.00032	.00006	.00296	.0876	.00147	.24	.00008	.00041
%RSD	1.3889	22.005	4.6465	.49206	1.1293	9.7850	.16927	.77230	.68456

#1	-.00131	.00123	.00126	.59981	7.8215	.01398	140.28	.01082	.05949
#2	-.00128	.00169	.00135	.60400	7.6976	.01606	140.62	.01070	.05892

Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Elem	Na8183	Ni2316	P_1782	Pb2203	S_1820	Sb2068	Se1960	Si2881	SiO2
Line	818.326 { 41}	231.604 {446}	178.284 {489}	220.353 {453}	182.034 {485}	206.833 {463}	196.090 {472}	288.158 {117}	288.158 {117}2
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	W 922.09	.00113	.02220	.00035	F 781.46	-.00372	.00137	4.4509	9.5250
Stddev	22.90	.00074	.00394	.00061	1.00	.00942	.00164	.0225	.0481
%RSD	2.4829	65.451	17.748	174.34	.12815	252.92	119.74	.50543	.50543

#1	938.27	.00166	.01941	.00079	780.75	-.01038	.00021	4.4668	9.5590
#2	905.90	.00061	.02498	-.00008	782.16	.00294	.00252	4.4350	9.4910

Check ?	Chk Warn	Chk Pass	Chk Pass	Chk Pass	Chk Fail	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit	500.00				200.00				
Low Limit	11.000				-.20000				

Elem	Sn1899	Sr4077	Th2837	Ti3349	Ti1908	U_3701	V_2924	Zn2062	Zr3391
Line	189.989 {477}	407.771 { 83}	283.730 {119}	334.904 {101}	190.856 {477}	370.152 { 91}	292.402 {115}	206.200 {163}	339.198 { 99}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	-.00189	3.9486	-.00495	.02253	.00090	.03387	.00011	.00316	.00165
Stddev	.00262	.0914	.00012	.00015	.00213	.00567	.00038	.00138	.00095
%RSD	139.05	2.3144	2.3818	.64418	237.41	16.733	341.34	43.752	57.698

#1	-.00003	4.0133	-.00487	.02242	.00241	.02986	-.00016	.00414	.00233
#2	-.00374	3.8840	-.00504	.02263	-.00061	.03787	.00038	.00218	.00098

Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Int. Std.	Y_2243	Y_3600	Y_3774
Line	224.306 {450}	360.073 { 94}	377.433 { 89}
Units	Cts/S	Cts/S	Cts/S
Avg	2487.4	35791.	1819.7
Stddev	20.6	182.	57.6
%RSD	.82623	.50983	3.1627

#1	2472.8	35921.	1779.0
#2	2501.9	35662.	1860.4

Sample Name: 280-82821-G-10-A Acquired: 5/18/2016 5:30:04 Type: Unk

Method: 6500_025(v6) Mode: CONC Corr. Factor: 1.000000

User: CRHOADES Prep Date: Custom ID2: Custom ID3:

Comment: 325556 6010B dupont

Elem	Ag3280	Al1670	As1890	B_2089	Ba4554	Be3130	Bi2230	Ca3179	Cd2288
Line	328.068 {103}	167.079 {502}	189.042 {478}	208.959 {461}	455.403 { 74}	313.042 {108}	223.061 {451}	317.933 {106}	228.802 {447}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.00155	.00269	-.00049	.00148	-.00268	.00016	.00427	.06325	-.00023
Stddev	.00014	.00011	.00115	.00099	.00047	.00020	.00143	.01205	.00018
%RSD	9.2041	4.2254	234.87	66.990	17.401	126.29	33.608	19.051	76.148

#1	.00145	.00277	.00032	.00078	-.00235	.00030	.00528	.05473	-.00011
#2	.00165	.00261	-.00130	.00218	-.00301	.00002	.00325	.07177	-.00036

Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Elem	Co2286	Cr2055	Cu3247	Fe2599	K_7664	Li6707	Mg2790	Mn2576	Mo2020
Line	228.616 {447}	205.560 {464}	324.754 {104}	259.940 {130}	766.490 { 44}	670.784 { 50}	279.079 {121}2	257.610 {131}	202.030 {467}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	-.00035	-.00038	-.00068	.00902	-.08710	W -.01580	.07407	.00006	-.00066
Stddev	.00009	.00022	.00017	.00100	.00623	.00023	.00795	.00012	.00042
%RSD	24.568	56.438	24.761	11.085	7.1509	1.4250	10.730	179.23	64.534

#1	-.00029	-.00023	-.00080	.00831	-.09151	-.01596	.07969	-.00002	-.00096
#2	-.00041	-.00054	-.00056	.00973	-.08270	-.01564	.06845	.00015	-.00036

Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Warn	Chk Pass	Chk Pass	Chk Pass
High Limit						2.0000			
Low Limit						-.01000			

Elem	Na5895	Ni2316	P_1782	Pb2203	S_1820	Sb2068	Se1960	Si2881	SiO2
Line	589.592 { 57}	231.604 {446}	178.284 {489}	220.353 {453}	182.034 {485}	206.833 {463}	196.090 {472}	288.158 {117}	288.158 {117}2
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.71378	.00034	.00249	-.00043	.56389	-.00370	W -.00505	-.03848	-.08234
Stddev	.02369	.00008	.00171	.00183	.04042	.00312	.00426	.00821	.01757
%RSD	3.3183	23.908	68.621	424.09	7.1684	84.298	84.379	21.339	21.339

#1	.73053	.00028	.00370	-.00172	.59248	-.00591	-.00204	-.04428	-.09477
#2	.69703	.00039	.00128	.00086	.53531	-.00150	-.00806	-.03267	-.06992

Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Warn	Chk Pass	Chk Pass
High Limit							5.0000		
Low Limit							-.00500		

Elem	Sn1899	Sr4077	Th2837	Ti3349	Ti1908	U_3701	V_2924	Zn2062	Zr3391
Line	189.989 {477}	407.771 { 83}	283.730 {119}	334.904 {101}	190.856 {477}	370.152 { 91}	292.402 {115}	206.200 {163}	339.198 { 99}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	-.00138	.00163	.00245	.00068	-.00172	.03938	.00033	-.00001	.00136
Stddev	.00064	.00029	.00298	.00015	.00020	.02575	.00020	.00009	.00082
%RSD	46.820	17.551	121.27	22.733	11.667	65.392	62.525	906.56	60.038

#1	-.00183	.00142	.00456	.00057	-.00186	.02117	.00047	.00005	.00078
#2	-.00092	.00183	.00035	.00078	-.00158	.05758	.00018	-.00007	.00193

Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Int. Std.	Y_2243	Y_3600	Y_3774
Line	224.306 {450}	360.073 { 94}	377.433 { 89}
Units	Cts/S	Cts/S	Cts/S
Avg	2610.3	39425.	1902.2
Stddev	92.3	32.	37.5
%RSD	3.5353	.07995	1.9705

#1	2675.5	39448.	1875.7
#2	2545.0	39403.	1928.7

Sample Name: CCVH-3883905 Acquired: 5/18/2016 5:32:26 Type: QC
Method: 6500_025(v6) Mode: CONC Corr. Factor: 1.000000
User: CRHOADES Prep Date: Custom ID2: Custom ID3:
Comment:

Elem	Ag3280	Al3092	As1890	B_2089	Ba4554	Be3130	Bi2230	Ca3179	Cd2288	Co2286	Cr2055
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	-.00582	50.867	.00128	.00411	-.00173	.00010	.95319	.19646	-.00040	-.00136	-.00041
Stddev	.00019	1.170	.00173	.00011	.00063	.00007	.00623	.28757	.00000	.00014	.00071
%RSD	3.2691	2.2993	134.96	2.7203	36.239	65.774	.65334	146.37	1.0859	10.024	172.92

#1	-.00569	51.695	.00006	.00403	-.00128	.00005	.95759	-.00688	-.00040	-.00126	-.00091
#2	-.00596	50.040	.00251	.00419	-.00217	.00015	.94878	.39980	-.00040	-.00145	.00009

Check ?	None	Chk Pass	None	None	None	None	Chk Pass	None	None	None	None
Value											
Range											

Elem	Cu3247	Fe2714	K_7664	Li6707	Mg2790	Mn2576	Mo2020	Na8183	Ni2316	P_1782	Pb2203
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	-.01511	52.813	-.19815	-.01261	.01493	-.00219	-.00169	271.84	.00145	.00708	-.00041
Stddev	.00108	.710	.06510	.00092	.00406	.00005	.00041	2.14	.00049	.00192	.00219
%RSD	7.1670	1.3443	32.851	7.2688	27.165	2.2395	24.289	.78670	33.729	27.071	531.92

#1	-.01588	53.315	-.24418	-.01196	.01206	-.00223	-.00198	273.36	.00179	.00843	.00113
#2	-.01434	52.311	-.15212	-.01326	.01780	-.00216	-.00140	270.33	.00110	.00572	-.00196

Check ?	None	Chk Pass	None	None	None	None	None	Chk Pass	None	None	None
Value											
Range											

Elem	S_1820	Sb2068	Se1960	Si2881	SiO2	Sn1899	Sr4077	Th2837	Ti3349	Ti1908	U_3701
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	W 5.3567	-.01366	-.00773	-.03317	-.07098	-.00203	.00556	W 4.6431	.00095	-.00094	9.6330
Stddev	.0551	.00305	.00109	.01495	.03199	.00024	.00724	.0014	.00185	.00201	.3181
%RSD	1.0278	22.349	14.072	45.063	45.063	11.860	130.29	.03024	194.33	213.02	3.3025

#1	5.3956	-.01582	-.00850	-.04374	-.09360	-.00220	.00044	4.6421	-.00036	.00048	9.4080
#2	5.3178	-.01150	-.00696	-.02260	-.04837	-.00186	.01068	4.6441	.00227	-.00237	9.8579

Check ?	Chk Warn	None	None	None	None	None	None	Chk Warn	None	None	Chk Pass
Value	5.0000							5.0000			
Range	5.0000%							-5.0000%			

Elem	V_2924	Zn2062	Zr3391
Units	ppm	ppm	ppm
Avg	.01235	-.00041	-.12988
Stddev	.00110	.00016	.00419
%RSD	8.8880	39.269	3.2293

#1	.01158	-.00029	-.13284
#2	.01313	-.00052	-.12691

Check ?	None	None	None
Value			
Range			

Int. Std.	Y_2243	Y_3600	Y_3774
Units	Cts/S	Cts/S	Cts/S
Avg	2564.5	36625.	1800.5
Stddev	14.3	299.	70.2
%RSD	.55857	.81518	3.9007

#1	2554.3	36836.	1750.8
#2	2574.6	36413.	1850.2

Sample Name: CCV-3888422 Acquired: 5/18/2016 5:35:03 Type: QC
Method: 6500_025(v6) Mode: CONC Corr. Factor: 1.000000
User: CRHOADES Prep Date: Custom ID2: Custom ID3:
Comment:

Elem	Ag3280	Al1670	As1890	B_2089	Ba4554	Be3130	Bi2230	Ca3179	Cd2288	Co2286	Cr2055	Cu3247	Fe2599
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.48072	.49187	.93989	.49277	.46884	.47808	.00058	4.6189	.50081	.51217	.51803	.45678	2.4074
Stddev	.00061	.00727	.00138	.00303	.00059	.00371	.00107	.0266	.01496	.00309	.00205	.00048	.0165
%RSD	.12791	1.4784	.14650	.61445	.12601	.77537	182.68	.57546	2.9869	.60279	.39586	.10496	.68514

#1	.48028	.48673	.93891	.49491	.46925	.48070	-.00017	4.6377	.51139	.51436	.51948	.45644	2.4190
#2	.48115	.49701	.94086	.49062	.46842	.47545	.00134	4.6001	.49023	.50999	.51658	.45712	2.3957

Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	None	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Value													
Range													

Elem	K_7664	Li6707	Mg2790	Mn2576	Mo2020	Na5895	Ni2316	P_1782	Pb2203	S_1820	Sb2068	Se1960	Si2881
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	47.466	.93834	18.658	.46246	.50645	5.2022	.50122	.98891	1.0163	.24673	1.0036	.95423	4.7164
Stddev	.146	.00084	.033	.00008	.00412	.0133	.00292	.00815	.0022	.00811	.0033	.00786	.0184
%RSD	.30799	.08978	.17690	.01692	.81283	.25470	.58346	.82372	.21537	3.2884	.32834	.82321	.39054

#1	47.570	.93775	18.635	.46251	.50936	5.1929	.50329	.99467	1.0148	.24099	1.0059	.94867	4.7033
#2	47.363	.93894	18.682	.46240	.50354	5.2116	.49915	.98315	1.0179	.25247	1.0013	.95978	4.7294

Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	None	Chk Pass	Chk Pass	Chk Pass
Value													
Range													

Elem	SiO2	Sn1899	Sr4077	Th2837	Ti3349	Ti1908	U_3701	V_2924	Zn2062	Zr3391
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	10.093	1.0214	.48137	-.00042	.45702	1.0287	.01441	.47376	.45399	.47079
Stddev	.039	.0033	.00378	.00317	.00041	.0008	.00454	.00302	.00407	.00166
%RSD	.39054	.32061	.78531	746.99	.08874	.07407	31.490	.63754	.89743	.35155
#1	10.065	1.0191	.48404	-.00267	.45674	1.0292	.01762	.47163	.45687	.47196
#2	10.121	1.0238	.47870	.00182	.45731	1.0281	.01120	.47590	.45111	.46961

Check ?	Chk Pass	Chk Pass	Chk Pass	None	Chk Pass	Chk Pass	None	Chk Pass	Chk Pass	Chk Pass
Value										
Range										

Int. Std.	Y_2243	Y_3600	Y_3774
Units	Cts/S	Cts/S	Cts/S
Avg	2485.6	38167.	1899.6
Stddev	3.2	208.	10.0
%RSD	.12790	.54487	.52729
#1	2487.8	38314.	1892.5
#2	2483.3	38020.	1906.7

Sample Name: CCB Acquired: 5/18/2016 5:37:34 Type: QC
 Method: 6500_025(v6) Mode: CONC Corr. Factor: 1.000000
 User: CRHOADES Prep Date: Custom ID2: Custom ID3:
 Comment:

Elem	Ag3280	Al1670	As1890	B_2089	Ba4554	Be3130	Bi2230	Ca3179	Cd2288	Co2286	Cr2055
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.00155	.00175	.00404	.00317	W -.00229	.00018	-.00215	.00554	-.00008	-.00022	-.00064
Stddev	.00057	.00047	.00015	.00047	.00047	.00028	.00216	.00004	.00000	.00005	.00011
%RSD	36.609	26.816	3.6306	14.819	20.422	154.91	100.40	.67559	2.1879	22.187	16.779
#1	.00115	.00142	.00394	.00284	-.00196	.00037	-.00062	.00551	-.00008	-.00025	-.00057
#2	.00196	.00208	.00414	.00351	-.00262	-.00002	-.00368	.00556	-.00008	-.00018	-.00072
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Warn	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit					.00200						
Low Limit					-.00200						
Elem	Cu3247	Fe2599	K_7664	Li6707	Mg2790	Mn2576	Mo2020	Na5895	Ni2316	P_1782	Pb2203
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	-.00066	.02443	-.12863	F -.01479	-.00155	.00007	.00112	.17472	.00015	.00243	-.00066
Stddev	.00029	.00562	.08939	.00084	.00407	.00003	.00051	.02334	.00010	.00114	.00025
%RSD	43.626	22.993	69.492	5.7051	262.32	41.627	45.790	13.357	64.500	46.784	37.988
#1	-.00046	.02840	-.19184	-.01539	.00132	.00009	.00148	.15822	.00022	.00162	-.00083
#2	-.00086	.02045	-.06542	-.01420	-.00442	.00005	.00076	.19122	.00008	.00323	-.00048
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Fail	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit				.01000							
Low Limit				-.01000							
Elem	S_1820	Sb2068	Se1960	Si2881	SiO2	Sn1899	Sr4077	Th2837	Ti3349	Tl1908	U_3701
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	F .16754	W .00143	-.00062	-.03004	-.06428	-.00094	.00001	-.00122	.00065	.00360	.05116
Stddev	.01635	.00415	.00952	.04427	.09475	.00024	.00007	.00140	.00016	.00041	.01082
%RSD	9.7588	289.94	1534.1	147.39	147.39	25.896	580.70	114.37	23.748	11.460	21.159
#1	.17910	-.00150	-.00735	.00127	.00271	-.00076	.00006	-.00221	.00054	.00389	.04350
#2	.15598	.00437	.00611	-.06135	-.13128	-.00111	-.00004	-.00023	.00076	.00331	.05881
Check ?	Chk Fail	Chk Warn	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit	.10000	.00100									
Low Limit	-.20000	-.00100									
Elem	V_2924	Zn2062	Zr3391								
Units	ppm	ppm	ppm								
Avg	.00006	-.00036	.00258								
Stddev	.00024	.00042	.00129								
%RSD	399.65	117.56	49.966								
#1	-.00011	-.00006	.00167								
#2	.00023	-.00065	.00350								
Check ?	Chk Pass	Chk Pass	Chk Pass								
High Limit											
Low Limit											
Int. Std.	Y_2243	Y_3600	Y_3774								
Units	Cts/S	Cts/S	Cts/S								
Avg	2497.7	37321.	1782.6								
Stddev	2.0	70.	12.1								
%RSD	.08185	.18800	.68106								
#1	2496.2	37370.	1774.1								
#2	2499.1	37271.	1791.2								

Sample Name: CCVL-3894681 Acquired: 5/18/2016 5:39:56 Type: QC
Method: 6500_025(v6) Mode: CONC Corr. Factor: 1.000000
User: CRHOADES Prep Date: Custom ID2: Custom ID3:
Comment:

Elem	Ag3280	Al1670	As1890	B_2089	Ba4554	Be3130	Bi2230	Ca3179	Cd2288	Co2286	Cr2055
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.01070	.10506	.01591	.09573	.00749	.00100	.10022	.20021	.00501	.00966	.00985
Stddev	.00038	.00269	.00444	.00028	.00067	.00033	.00677	.00470	.00010	.00049	.00035
%RSD	3.5547	2.5611	27.891	.29209	8.9940	33.184	6.7512	2.3463	1.9912	5.1089	3.5158

#1	.01043	.10697	.01277	.09592	.00796	.00123	.09544	.19689	.00508	.01001	.00961
#2	.01097	.10316	.01904	.09553	.00701	.00077	.10501	.20353	.00494	.00931	.01010

Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Value											
Range											

Elem	Cu3247	Fe2599	K_7664	Li6707	Mg2790	Mn2576	Mo2020	Na5895	Ni2316	P_1782	Pb2203
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.01328	.10071	2.7666	F -.00860	.19070	.00944	.01798	1.1509	.03860	2.7292	.00823
Stddev	.00048	.00286	.1014	.00080	.00476	.00007	.00040	.0089	.00054	.0064	.00218
%RSD	3.6011	2.8441	3.6639	9.3176	2.4966	.73677	2.2203	.77408	1.3913	.23365	26.547

#1	.01295	.10274	2.8383	-.00803	.18734	.00949	.01770	1.1446	.03898	2.7337	.00669
#2	.01362	.09869	2.6949	-.00917	.19407	.00939	.01826	1.1572	.03822	2.7247	.00978

Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Fail	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Value				.01000							
Range				-30.000%							

Elem	S_1820	Sb2068	Se1960	Si2881	SiO2	Sn1899	Sr4077	Th2837	Ti3349	Ti1908	U_3701
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.14852	.01968	F .00359	.46207	.98884	.09838	.00965	.01428	.00980	.01310	F .08934
Stddev	.00160	.00221	.00074	.04310	.09224	.00255	.00002	.00051	.00063	.00013	.05457
%RSD	1.0791	11.212	20.698	9.3278	9.3278	2.5902	.17987	3.5756	6.4076	.99748	61.078

#1	.14965	.02124	.00411	.49255	1.0541	.10018	.00964	.01464	.00935	.01301	.12793
#2	.14739	.01812	.00306	.43160	.92362	.09657	.00967	.01392	.01024	.01320	.05076

Check ?	None	Chk Pass	Chk Fail	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Fail
Value			.01500								.06000
Range			-30.000%								30.000%

Elem	V_2924	Zn2062	Zr3391
Units	ppm	ppm	ppm
Avg	.00966	.02052	.01483
Stddev	.00095	.00058	.00256
%RSD	9.7884	2.8224	17.245

#1	.00899	.02093	.01664
#2	.01033	.02011	.01302

Check ?	Chk Pass	Chk Pass	Chk Pass
Value			
Range			

Int. Std.	Y_2243	Y_3600	Y_3774
Units	Cts/S	Cts/S	Cts/S
Avg	2503.1	37324.	1789.2
Stddev	4.5	222.	31.3
%RSD	.17828	.59364	1.7474

#1	2499.9	37481.	1767.1
#2	2506.2	37168.	1811.3

Sample Name: bottle 82925-A-2 Acquired: 5/18/2016 5:42:35 Type: Unk
Method: 6500_025(v6) Mode: CONC Corr. Factor: 1.000000
User: CRHOADES Prep Date: Custom ID2: Custom ID3:
Comment: bottle check Ba Co TOT

Elem	Ag3280	Al1670	As1890	B_2089	Ba4554	Be3130	Bi2230	Ca3179	Cd2288
Line	328.068 {103}	167.079 {502}	189.042 {478}	208.959 {461}	455.403 { 74}	313.042 {108}	223.061 {451}	317.933 {106}	228.802 {447}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	-.00007	.03927	.00037	.90934	.20335	-.00020	.00343	W 568.42	.00043
Stddev	.00103	.00165	.00428	.00376	.00122	.00013	.00034	2.91	.00005
%RSD	1377.7	4.1899	1149.8	.41347	.60058	66.037	9.9275	.51154	12.318

#1	.00065	.04044	-.00265	.90668	.20248	-.00011	.00319	566.37	.00039
#2	-.00080	.03811	.00340	.91200	.20421	-.00030	.00367	570.48	.00046

Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Warn	Chk Pass
High Limit								500.00	
Low Limit								-.05000	

Elem	Co2286	Cr2055	Cu3247	Fe2599	K_7664	Li6707	Mg2790	Mn2576	Mo2020
Line	228.616 {447}	205.560 {464}	324.754 {104}	259.940 {130}	766.490 { 44}	670.784 { 50}	279.079 {121}2	257.610 {131}	202.030 {467}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.00503	-.00009	.00146	.18535	58.816	.59213	30.578	.06969	-.00045
Stddev	.00014	.00095	.00086	.00833	.049	.00264	.099	.00024	.00043
%RSD	2.8149	996.51	59.150	4.4958	.08365	.44593	.32343	.34281	94.702

#1	.00493	.00057	.00085	.19125	58.781	.59400	30.508	.06952	-.00015
#2	.00513	-.00076	.00206	.17946	58.851	.59027	30.648	.06986	-.00076

Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Elem	Na8183	Ni2316	P_1782	Pb2203	S_1820	Sb2068	Se1960	Si2881	SiO2
Line	818.326 { 41}	231.604 {446}	178.284 {489}	220.353 {453}	182.034 {485}	206.833 {463}	196.090 {472}	288.158 {117}	288.158 {117}2
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	270.62	.01399	.04449	-.00087	F 284.08	-.00635	W -.00620	2.9126	6.2329
Stddev	.62	.00051	.00144	.00329	4.36	.00359	.00417	.0577	.1234
%RSD	.22739	3.6271	3.2475	378.29	1.5357	56.474	67.281	1.9797	1.9797

#1	270.18	.01363	.04346	-.00320	287.16	-.00889	-.00915	2.9533	6.3202
#2	271.05	.01434	.04551	.00146	280.99	-.00381	-.00325	2.8718	6.1457

Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Fail	Chk Pass	Chk Warn	Chk Pass	Chk Pass
High Limit					200.00		5.0000		
Low Limit					-.20000		-.00500		

Elem	Sn1899	Sr4077	Th2837	Ti3349	Ti1908	U_3701	V_2924	Zn2062	Zr3391
Line	189.989 {477}	407.771 { 83}	283.730 {119}	334.904 {101}	190.856 {477}	370.152 { 91}	292.402 {115}	206.200 {163}	339.198 { 99}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	-.00476	W 9.2544	-.00009	.00069	-.00042	.00137	.00000	.00030	.00338
Stddev	.00057	.0403	.00070	.00077	.00031	.03411	.00037	.00070	.00482
%RSD	12.013	.43525	795.82	112.01	72.851	2484.3	27885.	233.25	142.56

#1	-.00435	9.2259	.00041	.00014	-.00021	-.02275	-.00026	.00079	.00679
#2	-.00516	9.2829	-.00058	.00124	-.00064	.02549	.00026	-.00019	-.00003

Check ?	Chk Pass	Chk Warn	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit		5.0000							
Low Limit		-.01000							

Int. Std.	Y_2243	Y_3600	Y_3774
Line	224.306 {450}	360.073 { 94}	377.433 { 89}
Units	Cts/S	Cts/S	Cts/S
Avg	2447.8	35715.	1720.2
Stddev	44.8	137.	9.5
%RSD	1.8315	.38386	.55150

#1	2416.1	35812.	1726.9
#2	2479.5	35618.	1713.5

Sample Name: bottle 82925-A-3 Acquired: 5/18/2016 5:45:13 Type: Unk
Method: 6500_025(v6) Mode: CONC Corr. Factor: 1.000000
User: CRHOADES Prep Date: Custom ID2: Custom ID3:
Comment: bottle check Ba Co TOT

Elem	Ag3280	Al1670	As1890	B_2089	Ba4554	Be3130	Bi2230	Ca3179	Cd2288
Line	328.068 {103}	167.079 {502}	189.042 {478}	208.959 {461}	455.403 { 74}	313.042 {108}	223.061 {451}	317.933 {106}	228.802 {447}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.00036	.09359	-.00021	1.7916	.14620	-.00004	.00050	451.32	.00045
Stddev	.00031	.00007	.00315	.0137	.00096	.00024	.00247	1.70	.00003
%RSD	86.083	.06991	1518.5	.76578	.65823	543.59	497.66	.37700	5.6891

#1	.00014	.09364	.00202	1.7819	.14688	-.00022	-.00125	452.52	.00047
#2	.00058	.09355	-.00243	1.8013	.14552	.00013	.00224	450.12	.00044

Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Elem	Co2286	Cr2055	Cu3247	Fe2599	K_7664	Li6707	Mg2790	Mn2576	Mo2020
Line	228.616 {447}	205.560 {464}	324.754 {104}	259.940 {130}	766.490 { 44}	670.784 { 50}	279.079 {121}2	257.610 {131}	202.030 {467}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.00495	.00027	.00344	.05843	86.157	.57994	54.586	.02989	-.00032
Stddev	.00022	.00046	.00010	.00178	.476	.00139	.089	.00019	.00075
%RSD	4.4947	171.78	2.7869	3.0382	.55227	.23970	.16275	.62111	237.01

#1	.00511	-.00006	.00337	.05718	86.494	.58092	54.523	.02976	.00021
#2	.00480	.00059	.00350	.05969	85.821	.57896	54.648	.03003	-.00085

Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Elem	Na8183	Ni2316	P_1782	Pb2203	S_1820	Sb2068	Se1960	Si2881	SiO2
Line	818.326 { 41}	231.604 {446}	178.284 {489}	220.353 {453}	182.034 {485}	206.833 {463}	196.090 {472}	288.158 {117}	288.158 {117}2
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	W 541.98	.01292	.02893	-.00132	F 571.57	-.00961	W -.00511	9.0108	19.283
Stddev	2.15	.00015	.00612	.00080	11.14	.00261	.00448	.0210	.045
%RSD	.39628	1.1348	21.149	60.434	1.9488	27.152	87.662	.23329	.23329

#1	543.50	.01282	.03326	-.00188	563.69	-.00776	-.00828	9.0257	19.315
#2	540.47	.01303	.02461	-.00075	579.44	-.01145	-.00194	8.9959	19.251

Check ?	Chk Warn	Chk Pass	Chk Pass	Chk Pass	Chk Fail	Chk Pass	Chk Warn	Chk Pass	Chk Pass
High Limit	500.00				200.00		5.0000		
Low Limit	11.000				-.20000		-.00500		

Elem	Sn1899	Sr4077	Th2837	Ti3349	Ti1908	U_3701	V_2924	Zn2062	Zr3391
Line	189.989 {477}	407.771 { 83}	283.730 {119}	334.904 {101}	190.856 {477}	370.152 { 91}	292.402 {115}	206.200 {163}	339.198 { 99}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	-.00552	W 8.9345	-.00323	.00094	-.00205	.04376	.00300	.00105	.00683
Stddev	.00054	.0307	.00015	.00060	.00140	.02812	.00025	.00082	.00238
%RSD	9.7700	.34309	4.5455	63.419	68.324	64.265	8.4909	78.274	34.789

#1	-.00590	8.9562	-.00333	.00052	-.00305	.02387	.00282	.00163	.00851
#2	-.00514	8.9129	-.00312	.00136	-.00106	.06364	.00318	.00047	.00515

Check ?	Chk Pass	Chk Warn	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit		5.0000							
Low Limit		-.01000							

Int. Std.	Y_2243	Y_3600	Y_3774
Line	224.306 {450}	360.073 { 94}	377.433 { 89}
Units	Cts/S	Cts/S	Cts/S
Avg	2447.7	35191.	1759.3
Stddev	54.2	97.	32.2
%RSD	2.2139	.27617	1.8297

#1	2486.0	35260.	1736.5
#2	2409.4	35122.	1782.0

Sample Name: bottle 82948-C-1 Acquired: 5/18/2016 5:47:49 Type: Unk
Method: 6500_025(v6) Mode: CONC Corr. Factor: 1.000000
User: CRHOADES Prep Date: Custom ID2: Custom ID3:
Comment: bottle check Zn TOT

Elem	Ag3280	Al1670	As1890	B_2089	Ba4554	Be3130	Bi2230	Ca3179	Cd2288
Line	328.068 {103}	167.079 {502}	189.042 {478}	208.959 {461}	455.403 { 74}	313.042 {108}	223.061 {451}	317.933 {106}	228.802 {447}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.00180	.82219	.07206	W 10.485	1.2703	.00004	.00171	123.10	.00129
Stddev	.00087	.00387	.00047	.031	.0167	.00010	.00001	1.57	.00026
%RSD	48.488	.47079	.65349	.29962	1.3154	262.51	.76146	1.2741	20.091

#1	.00242	.81946	.07239	10.463	1.2821	.00011	.00170	124.21	.00147
#2	.00118	.82493	.07173	10.508	1.2585	-.00003	.00172	121.99	.00111

Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Warn	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit				10.000					
Low Limit				-.01000					

Elem	Co2286	Cr2055	Cu3247	Fe2599	K_7664	Li6707	Mg2790	Mn2576	Mo2020
Line	228.616 {447}	205.560 {464}	324.754 {104}	259.940 {130}	766.490 { 44}	670.784 { 50}	279.079 {121}2	257.610 {131}	202.030 {467}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.02591	.10977	.01304	15.441	W 449.64	.00784	272.15	1.7182	.00188
Stddev	.00016	.00001	.00014	.078	9.80	.00094	.19	.0004	.00005
%RSD	.60503	.00953	1.0560	.50232	2.1792	12.037	.06817	.02421	2.7551

#1	.02602	.10976	.01314	15.386	456.57	.00718	272.28	1.7185	.00191
#2	.02580	.10978	.01294	15.496	442.71	.00851	272.02	1.7179	.00184

Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Warn	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit					100.00				
Low Limit					-.50000				

Elem	Na8183	Ni2316	P_1782	Pb2203	S_1820	Sb2068	Se1960	Si2881	SiO2
Line	818.326 { 41}	231.604 {446}	178.284 {489}	220.353 {453}	182.034 {485}	206.833 {463}	196.090 {472}	288.158 {117}	288.158 {117}2
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	W 1942.0	.14754	W 6.0429	.01063	24.157	-.00076	.00556	26.681	57.097
Stddev	29.9	.00102	.0361	.00124	.200	.00047	.00625	.039	.083
%RSD	1.5403	.69444	.59688	11.669	.82817	62.532	112.39	.14549	.14549

#1	1963.1	.14826	6.0684	.00975	24.298	-.00110	.00114	26.653	57.038
#2	1920.8	.14681	6.0174	.01151	24.015	-.00042	.00998	26.708	57.155

Check ?	Chk Warn	Chk Pass	Chk Warn	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit	500.00		2.0000						
Low Limit	11.000		-1.0000						

Elem	Sn1899	Sr4077	Th2837	Ti3349	Ti1908	U_3701	V_2924	Zn2062	Zr3391
Line	189.989 {477}	407.771 { 83}	283.730 {119}	334.904 {101}	190.856 {477}	370.152 { 91}	292.402 {115}	206.200 {163}	339.198 { 99}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.00818	2.5318	-.00658	.32814	-.00280	.03445	.18384	.16750	.19445
Stddev	.00284	.0395	.00005	.00084	.00319	.10261	.00031	.00368	.00165
%RSD	34.749	1.5585	.69251	.25721	113.93	297.88	.16957	2.1969	.85034

#1	.01019	2.5597	-.00655	.32754	-.00054	-.03811	.18362	.17010	.19562
#2	.00617	2.5039	-.00662	.32874	-.00505	.10700	.18406	.16489	.19328

Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Int. Std.	Y_2243	Y_3600	Y_3774						
Line	224.306 {450}	360.073 { 94}	377.433 { 89}						
Units	Cts/S	Cts/S	Cts/S						
Avg	2507.6	35465.	1907.4						
Stddev	8.8	89.	15.4						
%RSD	.35123	.25231	.80699						

#1	2513.9	35402.	1896.5						
#2	2501.4	35528.	1918.2						

Sample Name: bottle 82948-C-2 Acquired: 5/18/2016 5:50:49 Type: Unk
Method: 6500_025(v6) Mode: CONC Corr. Factor: 1.000000
User: CRHOADES Prep Date: Custom ID2: Custom ID3:
Comment: bottle check Zn TOT

Elem	Ag3280	Al1670	As1890	B_2089	Ba4554	Be3130	Bi2230	Ca3179	Cd2288
Line	328.068 {103}	167.079 {502}	189.042 {478}	208.959 {461}	455.403 { 74}	313.042 {108}	223.061 {451}	317.933 {106}	228.802 {447}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.00088	.95863	.06893	W 10.618	1.2527	.00015	.00256	121.61	.00155
Stddev	.00022	.00637	.00428	.025	.0140	.00010	.00164	1.32	.00032
%RSD	25.140	.66458	6.2018	.23155	1.1143	68.670	64.031	1.0843	20.669

#1	.00073	.96314	.07196	10.635	1.2428	.00008	.00140	120.68	.00132
#2	.00104	.95413	.06591	10.600	1.2626	.00022	.00372	122.54	.00177

Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Warn	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit				10.000					
Low Limit				-.01000					

Elem	Co2286	Cr2055	Cu3247	Fe2599	K_7664	Li6707	Mg2790	Mn2576	Mo2020
Line	228.616 {447}	205.560 {464}	324.754 {104}	259.940 {130}	766.490 { 44}	670.784 { 50}	279.079 {121}2	257.610 {131}	202.030 {467}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.02663	.11173	.01837	15.521	W 435.27	.01023	267.78	1.6975	.00246
Stddev	.00068	.00310	.00125	.060	2.10	.00181	1.10	.0083	.00005
%RSD	2.5392	2.7712	6.8103	.38839	.48199	17.685	.41187	.48689	2.2243

#1	.02711	.11392	.01748	15.563	433.78	.00895	268.56	1.7034	.00242
#2	.02615	.10954	.01925	15.478	436.75	.01150	267.00	1.6917	.00250

Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Warn	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit					100.00				
Low Limit					-.50000				

Elem	Na8183	Ni2316	P_1782	Pb2203	S_1820	Sb2068	Se1960	Si2881	SiO2
Line	818.326 { 41}	231.604 {446}	178.284 {489}	220.353 {453}	182.034 {485}	206.833 {463}	196.090 {472}	288.158 {117}	288.158 {117}2
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	W 1911.1	.14777	W 6.1002	.01141	24.671	-.00003	W -.00511	27.149	58.100
Stddev	18.8	.00398	.1525	.00257	.703	.00478	.00714	.069	.147
%RSD	.98430	2.6917	2.5007	22.528	2.8501	15339.	139.74	.25348	.25348

#1	1897.8	.15058	6.2081	.01323	25.168	.00335	-.00006	27.101	57.995
#2	1924.4	.14496	5.9923	.00959	24.174	-.00341	-.01016	27.198	58.204

Check ?	Chk Warn	Chk Pass	Chk Warn	Chk Pass	Chk Pass	Chk Pass	Chk Warn	Chk Pass	Chk Pass
High Limit	500.00		2.0000				5.0000		
Low Limit	11.000		-1.0000				-.00500		

Elem	Sn1899	Sr4077	Th2837	Ti3349	Ti1908	U_3701	V_2924	Zn2062	Zr3391
Line	189.989 {477}	407.771 { 83}	283.730 {119}	334.904 {101}	190.856 {477}	370.152 { 91}	292.402 {115}	206.200 {163}	339.198 { 99}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.00593	2.4953	-.00609	.36393	-.00059	.01044	.18083	.17168	.18735
Stddev	.00016	.0283	.00208	.00683	.00180	.03386	.00435	.00441	.00082
%RSD	2.6307	1.1335	34.095	1.8768	303.44	324.38	2.4044	2.5662	.43720

#1	.00604	2.4753	-.00756	.36876	-.00187	.03438	.18390	.17480	.18793
#2	.00582	2.5153	-.00462	.35910	.00068	-.01350	.17775	.16857	.18677

Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Int. Std.	Y_2243	Y_3600	Y_3774						
Line	224.306 {450}	360.073 { 94}	377.433 { 89}						
Units	Cts/S	Cts/S	Cts/S						
Avg	2475.9	35509.	1936.6						
Stddev	16.6	219.	38.7						
%RSD	.66868	.61544	1.9980						

#1	2464.2	35663.	1964.0						
#2	2487.6	35354.	1909.3						

Sample Name: bottle 82948-C-3 Acquired: 5/18/2016 5:53:53 Type: Unk
Method: 6500_025(v6) Mode: CONC Corr. Factor: 1.000000
User: CRHOADES Prep Date: Custom ID2: Custom ID3:
Comment: bottle check Zn TOT

Elem	Ag3280	Al1670	As1890	B_2089	Ba4554	Be3130	Bi2230	Ca3179	Cd2288
Line	328.068 {103}	167.079 {502}	189.042 {478}	208.959 {461}	455.403 { 74}	313.042 {108}	223.061 {451}	317.933 {106}	228.802 {447}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.00191	.00013	.00351	.06532	-.00284	.00018	.00929	.03605	-.00005
Stddev	.00000	.00053	.00098	.00590	.00003	.00017	.00297	.00010	.00010
%RSD	.08332	420.84	27.903	9.0376	1.0930	95.242	31.995	.28646	209.24

#1	.00191	-.00025	.00282	.06949	-.00282	.00030	.01139	.03598	.00002
#2	.00190	.00050	.00421	.06114	-.00286	.00006	.00719	.03612	-.00012

Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Elem	Co2286	Cr2055	Cu3247	Fe2599	K_7664	Li6707	Mg2790	Mn2576	Mo2020
Line	228.616 {447}	205.560 {464}	324.754 {104}	259.940 {130}	766.490 { 44}	670.784 { 50}	279.079 {121}2	257.610 {131}	202.030 {467}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	-.00014	-.00048	-.00055	.01473	.84456	W -.01187	.02106	.00018	-.00174
Stddev	.00029	.00050	.00044	.00662	.10472	.00141	.00059	.00006	.00020
%RSD	210.51	103.15	80.041	44.962	12.400	11.909	2.8026	32.398	11.754

#1	-.00034	-.00013	-.00086	.01005	.91861	-.01287	.02148	.00023	-.00188
#2	.00007	-.00084	-.00024	.01941	.77051	-.01087	.02064	.00014	-.00159

Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Warn	Chk Pass	Chk Pass	Chk Pass
High Limit						2.0000			
Low Limit						-.01000			

Elem	Na5895	Ni2316	P_1782	Pb2203	S_1820	Sb2068	Se1960	Si2881	SiO2
Line	589.592 { 57}	231.604 {446}	178.284 {489}	220.353 {453}	182.034 {485}	206.833 {463}	196.090 {472}	288.158 {117}	288.158 {117}2
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.73152	.00024	.00518	.00046	.26770	-.00420	F -.01044	.26490	.56688
Stddev	.00590	.00002	.00254	.00042	.01160	.00001	.00309	.05226	.11183
%RSD	.80685	7.7750	48.987	92.749	4.3334	.16942	29.651	19.727	19.727

#1	.72735	.00023	.00697	.00016	.27590	-.00419	-.00825	.30185	.64596
#2	.73569	.00025	.00339	.00076	.25950	-.00420	-.01263	.22795	.48781

Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Fail	Chk Pass	Chk Pass
High Limit							50.000		
Low Limit							-.01000		

Elem	Sn1899	Sr4077	Th2837	Ti3349	Ti1908	U_3701	V_2924	Zn2062	Zr3391
Line	189.989 {477}	407.771 { 83}	283.730 {119}	334.904 {101}	190.856 {477}	370.152 { 91}	292.402 {115}	206.200 {163}	339.198 { 99}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	-.00350	.00044	.00030	.00051	.00226	.05265	.00069	.00051	.00424
Stddev	.00036	.00000	.00249	.00048	.00204	.03765	.00046	.00072	.00423
%RSD	10.154	.42188	819.16	93.152	90.101	71.509	67.715	139.80	99.862

#1	-.00325	.00043	-.00145	.00085	.00370	.02603	.00036	.00001	.00724
#2	-.00376	.00044	.00206	.00018	.00082	.07928	.00101	.00102	.00125

Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Int. Std.	Y_2243	Y_3600	Y_3774
Line	224.306 {450}	360.073 { 94}	377.433 { 89}
Units	Cts/S	Cts/S	Cts/S
Avg	2760.9	41131.	2016.5
Stddev	2.6	125.	14.2
%RSD	.09442	.30369	.70562

#1	2759.1	41043.	2006.4
#2	2762.8	41220.	2026.5

Sample Name: bottle 82948-C-4 Acquired: 5/18/2016 5:56:14 Type: Unk
Method: 6500_025(v6) Mode: CONC Corr. Factor: 1.000000
User: CRHOADES Prep Date: Custom ID2: Custom ID3:
Comment: bottle check Zn TOT

Elem	Ag3280	Al1670	As1890	B_2089	Ba4554	Be3130	Bi2230	Ca3179	Cd2288
Line	328.068 {103}	167.079 {502}	189.042 {478}	208.959 {461}	455.403 { 74}	313.042 {108}	223.061 {451}	317.933 {106}	228.802 {447}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.00149	.00505	.00093	.14954	.12765	-.00011	.00525	113.81	.00089
Stddev	.00010	.00043	.00269	.00400	.00122	.00007	.00338	1.15	.00021
%RSD	6.7572	8.5432	289.78	2.6735	.95887	61.645	64.320	1.0097	23.621

#1	.00157	.00535	-.00097	.15237	.12852	-.00016	.00286	114.62	.00074
#2	.00142	.00474	.00283	.14671	.12679	-.00006	.00764	113.00	.00103

Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Elem	Co2286	Cr2055	Cu3247	Fe2599	K_7664	Li6707	Mg2790	Mn2576	Mo2020
Line	228.616 {447}	205.560 {464}	324.754 {104}	259.940 {130}	766.490 { 44}	670.784 { 50}	279.079 {121}2	257.610 {131}	202.030 {467}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.00096	-.00023	.00332	2.9885	4.6426	-.00805	52.334	7.0143	-.00168
Stddev	.00010	.00041	.00016	.0002	.0028	.00040	.232	.0278	.00014
%RSD	10.369	178.32	4.9460	.00755	.05982	4.9880	.44285	.39628	8.1452

#1	.00089	-.00052	.00343	2.9883	4.6406	-.00777	52.498	7.0339	-.00158
#2	.00103	.00006	.00320	2.9886	4.6446	-.00833	52.170	6.9946	-.00178

Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Elem	Na8183	Ni2316	P_1782	Pb2203	S_1820	Sb2068	Se1960	Si2881	SiO2
Line	818.326 { 41}	231.604 {446}	178.284 {489}	220.353 {453}	182.034 {485}	206.833 {463}	196.090 {472}	288.158 {117}	288.158 {117}2
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	87.496	.00908	.26354	.00148	1.1582	-.00874	-.00331	30.008	64.216
Stddev	.406	.00086	.00093	.00124	.0466	.00319	.00317	.062	.133
%RSD	.46364	9.5127	.35153	83.802	4.0206	36.472	96.032	.20712	.20712

#1	87.783	.00969	.26419	.00236	1.1911	-.00648	-.00555	29.964	64.122
#2	87.209	.00847	.26288	.00060	1.1253	-.01099	-.00106	30.051	64.310

Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Elem	Sn1899	Sr4077	Th2837	Ti3349	Ti1908	U_3701	V_2924	Zn2062	Zr3391
Line	189.989 {477}	407.771 { 83}	283.730 {119}	334.904 {101}	190.856 {477}	370.152 { 91}	292.402 {115}	206.200 {163}	339.198 { 99}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	-.00245	.69058	-.00191	.00126	.00242	.02806	.00109	.03731	.00248
Stddev	.00116	.00491	.00142	.00011	.00239	.04317	.00037	.00071	.00015
%RSD	47.256	.71147	74.270	8.8863	98.681	153.86	33.616	1.9095	5.9795

#1	-.00163	.69406	-.00090	.00134	.00073	.05859	.00134	.03680	.00259
#2	-.00327	.68711	-.00291	.00118	.00410	-.00247	.00083	.03781	.00238

Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Int. Std.	Y_2243	Y_3600	Y_3774
Line	224.306 {450}	360.073 { 94}	377.433 { 89}
Units	Cts/S	Cts/S	Cts/S
Avg	2674.9	39178.	1974.4
Stddev	3.9	234.	4.1
%RSD	.14690	.59667	.20889

#1	2677.7	39012.	1977.4
#2	2672.1	39343.	1971.5

Sample Name: bottle 82948-C-5 Acquired: 5/18/2016 5:59:01 Type: Unk
Method: 6500_025(v6) Mode: CONC Corr. Factor: 1.000000
User: CRHOADES Prep Date: Custom ID2: Custom ID3:
Comment: bottle check Zn TOT

Elem	Ag3280	Al1670	As1890	B_2089	Ba4554	Be3130	Bi2230	Ca3179	Cd2288
Line	328.068 {103}	167.079 {502}	189.042 {478}	208.959 {461}	455.403 { 74}	313.042 {108}	223.061 {451}	317.933 {106}	228.802 {447}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.00100	.05020	.00971	4.8717	.56096	-.00006	-.00234	214.07	.00151
Stddev	.00018	.00037	.00115	.0141	.00630	.00005	.00374	2.10	.00030
%RSD	18.315	.73253	11.823	.28946	1.1228	77.636	159.93	.98055	19.929

#1	.00087	.05046	.00890	4.8617	.56541	-.00009	.00031	215.55	.00130
#2	.00113	.04994	.01052	4.8816	.55650	-.00003	-.00499	212.58	.00172

Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Elem	Co2286	Cr2055	Cu3247	Fe2599	K_7664	Li6707	Mg2790	Mn2576	Mo2020
Line	228.616 {447}	205.560 {464}	324.754 {104}	259.940 {130}	766.490 { 44}	670.784 { 50}	279.079 {121}2	257.610 {131}	202.030 {467}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.01444	.02818	.00358	6.3313	W 185.58	.00411	234.52	3.5743	-.00036
Stddev	.00041	.00005	.00008	.0630	2.30	.00228	.15	.0042	.00001
%RSD	2.8682	.18423	2.3437	.99546	1.2418	55.482	.06602	.11827	3.9131

#1	.01474	.02821	.00364	6.3758	187.21	.00572	234.63	3.5773	-.00037
#2	.01415	.02814	.00353	6.2867	183.95	.00250	234.41	3.5713	-.00035

Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Warn	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit					100.00				
Low Limit					-.50000				

Elem	Na8183	Ni2316	P_1782	Pb2203	S_1820	Sb2068	Se1960	Si2881	SiO2
Line	818.326 { 41}	231.604 {446}	178.284 {489}	220.353 {453}	182.034 {485}	206.833 {463}	196.090 {472}	288.158 {117}	288.158 {117}2
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	W 985.42	.18313	W 3.9098	.00149	12.460	-.00246	W -.00569	27.212	58.233
Stddev	10.08	.00039	.0047	.00222	.009	.00219	.00192	.132	.282
%RSD	1.0229	.21336	.12059	149.43	.07506	89.060	33.680	.48386	.48386

#1	992.55	.18285	3.9064	.00306	12.466	-.00091	-.00705	27.119	58.034
#2	978.30	.18341	3.9131	-.00008	12.453	-.00401	-.00434	27.305	58.433

Check ?	Chk Warn	Chk Pass	Chk Warn	Chk Pass	Chk Pass	Chk Pass	Chk Warn	Chk Pass	Chk Pass
High Limit	500.00		2.0000				5.0000		
Low Limit	11.000		-1.0000				-.00500		

Elem	Sn1899	Sr4077	Th2837	Ti3349	Ti1908	U_3701	V_2924	Zn2062	Zr3391
Line	189.989 {477}	407.771 { 83}	283.730 {119}	334.904 {101}	190.856 {477}	370.152 { 91}	292.402 {115}	206.200 {163}	339.198 { 99}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	-.00001	2.5970	-.00931	.06672	.00004	.02889	.06089	.11126	.03717
Stddev	.00192	.0220	.00056	.00073	.00085	.01399	.00039	.00015	.00090
%RSD	14999.	.84853	6.0564	1.0940	1913.4	48.419	.63318	.13217	2.4150

#1	-.00137	2.6126	-.00971	.06723	-.00056	.01900	.06116	.11136	.03654
#2	.00135	2.5814	-.00892	.06620	.00065	.03879	.06062	.11115	.03781

Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Int. Std.	Y_2243	Y_3600	Y_3774						
Line	224.306 {450}	360.073 { 94}	377.433 { 89}						
Units	Cts/S	Cts/S	Cts/S						
Avg	2508.4	36426.	1976.8						
Stddev	3.4	179.	8.1						
%RSD	.13412	.49066	.41103						

#1	2506.0	36552.	1971.0						
#2	2510.8	36299.	1982.5						

Sample Name: bottle 82948-C-6 Acquired: 5/18/2016 6:01:40 Type: Unk
Method: 6500_025(v6) Mode: CONC Corr. Factor: 1.000000
User: CRHOADES Prep Date: Custom ID2: Custom ID3:
Comment: bottle check Zn TOT

Elem	Ag3280	Al1670	As1890	B_2089	Ba4554	Be3130	Bi2230	Ca3179	Cd2288
Line	328.068 {103}	167.079 {502}	189.042 {478}	208.959 {461}	455.403 { 74}	313.042 {108}	223.061 {451}	317.933 {106}	228.802 {447}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.00164	.03543	.06278	4.7111	.61866	-.00008	-.00364	272.90	.00113
Stddev	.00009	.00084	.00012	.0013	.00082	.00028	.00194	.28	.00016
%RSD	5.3890	2.3743	.18778	.02714	.13293	362.22	53.419	.10111	14.344

#1	.00158	.03603	.06286	4.7102	.61808	.00012	-.00226	272.71	.00125
#2	.00171	.03484	.06270	4.7120	.61924	-.00028	-.00501	273.10	.00102

Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Elem	Co2286	Cr2055	Cu3247	Fe2599	K_7664	Li6707	Mg2790	Mn2576	Mo2020
Line	228.616 {447}	205.560 {464}	324.754 {104}	259.940 {130}	766.490 { 44}	670.784 { 50}	279.079 {121}2	257.610 {131}	202.030 {467}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.01628	.06535	.06605	3.4982	W 113.77	.00405	145.67	3.9005	-.00045
Stddev	.00047	.00050	.00039	.0434	.22	.00146	.06	.0059	.00011
%RSD	2.8893	.76960	.59717	1.2402	.19498	35.918	.03966	.15134	24.946

#1	.01595	.06499	.06578	3.5289	113.93	.00302	145.71	3.8963	-.00054
#2	.01661	.06570	.06633	3.4675	113.62	.00508	145.63	3.9047	-.00037

Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Warn	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit					100.00				
Low Limit					-.50000				

Elem	Na8183	Ni2316	P_1782	Pb2203	S_1820	Sb2068	Se1960	Si2881	SiO2
Line	818.326 { 41}	231.604 {446}	178.284 {489}	220.353 {453}	182.034 {485}	206.833 {463}	196.090 {472}	288.158 {117}	288.158 {117}2
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	W 1201.0	.07808	W 2.0409	.00067	12.896	-.00451	-.00332	28.818	61.671
Stddev	1.4	.00050	.0248	.00081	.062	.00356	.00327	.080	.171
%RSD	.11498	.63446	1.2147	120.45	.48271	79.100	98.378	.27697	.27697

#1	1200.0	.07773	2.0234	.00124	12.852	-.00199	-.00563	28.875	61.792
#2	1202.0	.07843	2.0584	.00010	12.940	-.00703	-.00101	28.762	61.550

Check ?	Chk Warn	Chk Pass	Chk Warn	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit	500.00		2.0000						
Low Limit	11.000		-1.0000						

Elem	Sn1899	Sr4077	Th2837	Ti3349	Ti1908	U_3701	V_2924	Zn2062	Zr3391
Line	189.989 {477}	407.771 { 83}	283.730 {119}	334.904 {101}	190.856 {477}	370.152 { 91}	292.402 {115}	206.200 {163}	339.198 { 99}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	-.00031	2.8378	-.00393	.06670	-.00091	-.01419	.08401	.07739	.04122
Stddev	.00036	.0001	.00092	.00026	.00211	.02723	.00058	.00054	.00131
%RSD	116.02	.00336	23.290	.39078	231.41	191.90	.69210	.70194	3.1767

#1	-.00056	2.8378	-.00328	.06689	-.00240	.00506	.08360	.07701	.04214
#2	-.00006	2.8377	-.00458	.06652	.00058	-.03344	.08443	.07777	.04029

Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Int. Std.	Y_2243	Y_3600	Y_3774
Line	224.306 {450}	360.073 { 94}	377.433 { 89}
Units	Cts/S	Cts/S	Cts/S
Avg	2568.5	37664.	1976.8
Stddev	2.5	363.	5.1
%RSD	.09839	.96276	.25602

#1	2570.3	37921.	1973.3
#2	2566.7	37408.	1980.4

Sample Name: bottle 82948-C-6 Acquired: 5/18/2016 6:01:40 Type: Unk
Method: 6500_025(v6) Mode: CONC Corr. Factor: 1.000000
User: CRHOADES Prep Date: Custom ID2: Custom ID3:
Comment: bottle check Zn TOT

Elem	Ag3280	Al1670	As1890	B_2089	Ba4554	Be3130	Bi2230	Ca3179	Cd2288
Line	328.068 {103}	167.079 {502}	189.042 {478}	208.959 {461}	455.403 { 74}	313.042 {108}	223.061 {451}	317.933 {106}	228.802 {447}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.00164	.03543	.06278	4.7111	.61866	-.00008	-.00364	272.90	.00113
Stddev	.00009	.00084	.00012	.0013	.00082	.00028	.00194	.28	.00016
%RSD	5.3890	2.3743	.18778	.02714	.13293	362.22	53.419	.10111	14.344

#1	.00158	.03603	.06286	4.7102	.61808	.00012	-.00226	272.71	.00125
#2	.00171	.03484	.06270	4.7120	.61924	-.00028	-.00501	273.10	.00102

Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Elem	Co2286	Cr2055	Cu3247	Fe2599	K_7664	Li6707	Mg2790	Mn2576	Mo2020
Line	228.616 {447}	205.560 {464}	324.754 {104}	259.940 {130}	766.490 { 44}	670.784 { 50}	279.079 {121}2	257.610 {131}	202.030 {467}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.01628	.06535	.06605	3.4982	W 113.77	.00405	145.67	3.9005	-.00045
Stddev	.00047	.00050	.00039	.0434	.22	.00146	.06	.0059	.00011
%RSD	2.8893	.76960	.59717	1.2402	.19498	35.918	.03966	.15134	24.946

#1	.01595	.06499	.06578	3.5289	113.93	.00302	145.71	3.8963	-.00054
#2	.01661	.06570	.06633	3.4675	113.62	.00508	145.63	3.9047	-.00037

Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Warn	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit					100.00				
Low Limit					-.50000				

Elem	Na8183	Ni2316	P_1782	Pb2203	S_1820	Sb2068	Se1960	Si2881	SiO2
Line	818.326 { 41}	231.604 {446}	178.284 {489}	220.353 {453}	182.034 {485}	206.833 {463}	196.090 {472}	288.158 {117}	288.158 {117}2
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	RW 1201.0	.07808	W 2.0409	.00067	12.896	-.00451	-.00332	28.818	61.671
Stddev	1.4	.00050	.0248	.00081	.062	.00356	.00327	.080	.171
%RSD	.11498	.63446	1.2147	120.45	.48271	79.100	98.378	.27697	.27697

#1	1200.0	.07773	2.0234	.00124	12.852	-.00199	-.00563	28.875	61.792
#2	1202.0	.07843	2.0584	.00010	12.940	-.00703	-.00101	28.762	61.550

Check ?	Chk Warn	Chk Pass	Chk Warn	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit	500.00		2.0000						
Low Limit	11.000		-1.0000						

Elem	Sn1899	Sr4077	Th2837	Ti3349	Ti1908	U_3701	V_2924	Zn2062	Zr3391
Line	189.989 {477}	407.771 { 83}	283.730 {119}	334.904 {101}	190.856 {477}	370.152 { 91}	292.402 {115}	206.200 {163}	339.198 { 99}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	-.00031	2.8378	-.00393	.06670	-.00091	-.01419	.08401	.07739	.04122
Stddev	.00036	.0001	.00092	.00026	.00211	.02723	.00058	.00054	.00131
%RSD	116.02	.00336	23.290	.39078	231.41	191.90	.69210	.70194	3.1767

#1	-.00056	2.8378	-.00328	.06689	-.00240	.00506	.08360	.07701	.04214
#2	-.00006	2.8377	-.00458	.06652	.00058	-.03344	.08443	.07777	.04029

Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Int. Std.	Y_2243	Y_3600	Y_3774
Line	224.306 {450}	360.073 { 94}	377.433 { 89}
Units	Cts/S	Cts/S	Cts/S
Avg	2568.5	37664.	1976.8
Stddev	2.5	363.	5.1
%RSD	.09839	.96276	.25602

#1	2570.3	37921.	1973.3
#2	2566.7	37408.	1980.4

Review Items	Yes	No	NA	2 nd Rev	If No, why is data not acceptable?
A. Calibration/Instrument Run QC					
1. Instrument calibrated per lab SOP?	<input checked="" type="checkbox"/>			<input checked="" type="checkbox"/>	
2. Reanalysis of Calibration Standards before samples:				<input checked="" type="checkbox"/>	
3. TCD/CDB: run before samples, 10% frequency, & closing	<input checked="" type="checkbox"/>			<input checked="" type="checkbox"/>	If no, list details:
Result < 1% RL (routine)	<input checked="" type="checkbox"/>			<input checked="" type="checkbox"/>	
4. ICV/CCV: frequency initial, 10%, & closing 90-110% recovery, 5% RSD (60/10) 95-105% recovery, 3% RSD (20/7)	<input checked="" type="checkbox"/>			<input checked="" type="checkbox"/>	If no, list details:
5. ICM/CCV: 70-130% recovery (60/10C)	<input checked="" type="checkbox"/>			<input checked="" type="checkbox"/>	If no, list details:
6. ICSA/ICSB: ICSA detections for non-spiked < 2x RL (< LOD/2x MDL for DOD or special project) ICSAB for spiked elements 80-120% If no, list details:	<input checked="" type="checkbox"/>			<input checked="" type="checkbox"/>	o Results outside limits due to contamination, o Concentration of affected analyte in sample is less than RL.
7. RL-level check standard (CRI): 50-150% (routine) 80-120% recovery (DOD or special projects)	<input checked="" type="checkbox"/>			<input checked="" type="checkbox"/>	If no, list details:
B. Client Sample and QC Sample Results					
1. Samples with target element concentrations > 90% linear range diluted and reanalyzed? (200.7)	<input checked="" type="checkbox"/>			<input checked="" type="checkbox"/>	Comments:
2. Were all lists reported from a run with interfering elements < linear range? (i.e. flags investigated)	<input checked="" type="checkbox"/>			<input checked="" type="checkbox"/>	Comments:
3. Internal standard (IS) response \pm 50% of ITR IS? If no, list details:	<input checked="" type="checkbox"/>			<input checked="" type="checkbox"/>	o High IS response. Sample(s) return at dilution. o Low IS response. Sample(s) return at dilution.
C. Preparation/Matrix QC					
1. Method blank: one per preparation batch result < 1/2 RL (routine)	<input checked="" type="checkbox"/>			<input checked="" type="checkbox"/>	o No analyte > RL in associated samples o Sample results > 10x blank o Insufficient sample for reanalysis
2. LCS: one per preparation batch 80-120% recovery or historical (routine) 85-115% recovery or historical (200.7); Project limits (other)	<input checked="" type="checkbox"/>			<input checked="" type="checkbox"/>	o Insufficient sample for reanalysis o LCS %R > QC limits & samples < RL
3. MS/MSD or MS/Dup frequency: a pair per batch (routine) a pair per 10 samples (200.7)	<input checked="" type="checkbox"/>			<input checked="" type="checkbox"/>	o Insufficient sample – LCS/MSD analyzed
C. Preparation/Matrix QC (cont.)					
4. MS/MSD recovery & RPD: 75-125% recovery or historical (routine) 70-130% recovery or historical (200.7) 20% RPD project limits (other)	<input checked="" type="checkbox"/>			<input checked="" type="checkbox"/>	o LCS acceptable – matrix effects o Relative analyte > 4x spike level o Matrix effect and native analyte > 4x spike

Page 1 of 2

If No, why is data reportable?

Review Items	Yes	No	NA	2 nd Rev	If No, why is data reportable?
5. If TO, P, MS <50% and sample result 80-100% of toxicity characteristic limit, was MS/MS run?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	Comments:
6. Serial dilution: _____ present (for each prep batch, routine) Required if MS/MSD fail (DoQvs) run at 5x dilution of parent sample ≤ 10% difference	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	□ Sample result < 50 x M/DL
7. Post digestion spike: required if MS/MSD fail (DoD and DoUC) or by client request 75-125% recovery	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	
D. Raw Data & TALS Data Entry	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	
1. TALS Sample List Tab	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	
a. LIMS Sample IDs / Containers are correct	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	
b. Method and matrix are correct	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	
c. Date and time are correct	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	
d. Dilutions are correct	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	
e. Correct suffix designated, e.g., DU, (where applicable)	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	
2. TALS Sample Results Tab	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	
a. All reported analytes are marked Primary or Secondary	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	
b. All unused data are marked Rejected or Accepted	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	
c. Unused data are clearly identified with reason not used	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	
d. Out of control QC is clearly identified	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	
e. Any data that has a qualifier is reviewed with appropriate action taken (NCRM if needed)	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	
f. The attached data file includes the filename, instrument, and analyst initials	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	
3. TALS Worksheet Tab is complete and correct	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	
4. TALS Reagent Tab is complete and correct	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	
5. TALS QC Links Tab is correct	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	
6. TALS Batch Information Screen documentation is complete	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	
7. TALS Status set to appropriate review level	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	
E. Final Report and NCRs (2 nd level review only)	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	
1. Were all pb/project requirements met?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	
2. Results for samples and QC correct on final report?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	
3. Are all necessary scanned documents in TALS?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	
4. NCRs reviewed for applicability, correct references to batches, grammar/typographical errors?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	
5. Raw Data not attached as document	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	

5/18/16

Page 2 of 2

Sample Name: ICIS Acquired: 5/18/2016 9:51:22 Type: Cal
Method: 6500_025(v6) Mode: IR Corr. Factor: 1.000000
User: CRHOADES Prep Date: Custom ID2: Custom ID3:
Comment:

Elem	Ag3280	Al1670	Al3092	As1890	B_2089	Ba4554	Be3130	Bi2230	Ca3179	Cd2288	Co2286	Cr2055
Units	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S
Avg	-.00291	.00094	-.00363	-.00006	.00130	.02094	-.00370	-.00021	.01039	-.00037	.00002	.00051
Stddev	.00011	.00014	.00157	.00007	.00027	.00154	.00080	.00036	.00005	.00033	.00032	.00046
%RSD	3.6229	14.882	43.308	122.59	20.517	7.3702	21.593	170.77	.45849	90.541	2065.2	90.421
#1	-.00298	.00084	-.00252	-.00011	.00111	.01985	-.00314	.00004	.01036	-.00013	.00024	.00018
#2	-.00283	.00104	-.00475	-.00001	.00149	.02204	-.00427	-.00047	.01043	-.00060	-.00021	.00084
Elem	Cu3247	Fe2599	Fe2714	K_7664	Li6707	Mg2790	Mn2576	Mo2020	Na5895	Na8183	Ni2316	P_1782
Units	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S
Avg	.00480	.00059	-.00028	.01988	.00144	.00100	.00054	.00097	.00326	-.03728	.00007	.00029
Stddev	.00035	.00060	.00020	.00278	.00351	.00029	.00003	.00027	.00155	.00103	.00012	.00011
%RSD	7.3449	102.61	71.089	13.995	243.28	28.580	5.1522	27.671	47.700	2.7609	168.58	37.847
#1	.00505	.00016	-.00042	.02184	.00392	.00120	.00056	.00078	.00436	-.03801	-.00001	.00037
#2	.00455	.00102	-.00014	.01791	-.00104	.00080	.00052	.00115	.00216	-.03656	.00015	.00022
Elem	Pb2203	S_1820	Sb2068	Se1960	Si2881	SiO2	Sn1899	Sr4077	Th2837	Ti3349	Tl1908	U_3701
Units	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S
Avg	.00142	.00070	-.00028	-.00006	.00032	.00032	.00029	-.02001	-.00037	-.00029	.00011	.00115
Stddev	.00041	.00001	.00033	.00019	.00021	.00021	.00015	.00077	.00007	.00014	.00017	.00005
%RSD	28.849	.87053	116.27	287.30	65.497	65.497	51.762	3.8678	19.842	48.640	158.97	4.1148
#1	.00113	.00070	-.00051	.00007	.00047	.00047	.00018	-.02056	-.00032	-.00019	-.00001	.00112
#2	.00171	.00070	-.00005	-.00020	.00017	.00017	.00040	-.01946	-.00042	-.00039	.00023	.00118
Elem	V_2924	Zn2062	Zr3391									
Units	Cts/S	Cts/S	Cts/S									
Avg	-.00076	.00003	-.00316									
Stddev	.00025	.00001	.00039									
%RSD	32.808	32.571	12.208									
#1	-.00094	.00003	-.00343									
#2	-.00059	.00002	-.00289									
Int. Std.	Y_2243	Y_3600	Y_3774									
Units	Cts/S	Cts/S	Cts/S									
Avg	2610.9	40602.	2039.5									
Stddev	2.3	1780.	10.3									
%RSD	.08973	4.3836	.50569									
#1	2609.3	39344.	2032.2									
#2	2612.6	41861.	2046.8									

Sample Name: ICAL1 Acquired: 5/18/2016 9:54:07 Type: Cal
Method: 6500_025(v6) Mode: IR Corr. Factor: 1.000000
User: CRHOADES Prep Date: Custom ID2: Custom ID3:
Comment:

Elem	Ag3280	Al1670	As1890	B_2089	Ba4554	Be3130	Ca3179	Cd2288	Co2286	Cr2055	Cu3247	Fe2599	K_7664
Units	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S
Avg	.25632	.18087	.07046	.28019	5.6449	4.6164	1.3678	1.8184	1.0817	.92943	.34823	.52153	4.3828
Stddev	.00011	.00026	.00032	.00011	.0512	.0192	.0101	.0066	.0128	.00346	.00050	.00524	.0270
%RSD	.04317	.14613	.45438	.04097	.90746	.41607	.74169	.36205	1.1856	.37225	.14330	1.0047	.61551
#1	.25640	.18069	.07023	.28010	5.6087	4.6028	1.3606	1.8138	1.0727	.92698	.34858	.51782	4.3637
#2	.25624	.18106	.07068	.28027	5.6812	4.6300	1.3750	1.8231	1.0908	.93188	.34788	.52523	4.4018
Elem	Li6707	Mg2790	Mn2576	Mo2020	Na5895	Ni2316	P_1782	Pb2203	Sb2068	Se1960	Si2881	SiO2	Sn1899
Units	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S
Avg	2.1629	1.0795	1.4071	.47546	1.7206	.83090	.11039	.52815	.16959	.05994	.22824	.22824	.19978
Stddev	.0157	.0013	.0007	.00097	.0116	.00415	.00092	.00354	.00030	.00009	.00167	.00167	.00086
%RSD	.72720	.11882	.05235	.20481	.67615	.49902	.83454	.66964	.17609	.15028	.73048	.73048	.43205
#1	2.1518	1.0804	1.4076	.47477	1.7123	.82797	.10974	.52565	.16937	.06000	.22706	.22706	.19917
#2	2.1741	1.0786	1.4065	.47615	1.7288	.83383	.11104	.53065	.16980	.05987	.22942	.22942	.20039
Elem	Sr4077	Ti3349	Tl1908	V_2924	Zn2062	Zr3391							
Units	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S							
Avg	9.7053	.31679	.15172	.22242	.03074	.30783							
Stddev	.0580	.00011	.00025	.00024	.00011	.00342							
%RSD	.59753	.03396	.16500	.10668	.35733	1.1124							
#1	9.6643	.31671	.15154	.22259	.03066	.30540							
#2	9.7463	.31686	.15189	.22226	.03082	.31025							
Int. Std.	Y_2243	Y_3600	Y_3774										
Units	Cts/S	Cts/S	Cts/S										
Avg	2580.2	39162.	2095.8										
Stddev	1.7	28.	24.4										
%RSD	.06591	.07269	1.1644										
#1	2579.0	39141.	2113.0										
#2	2581.4	39182.	2078.5										

Sample Name: ICAL2 Acquired: 5/18/2016 9:56:41 Type: Cal
Method: 6500_025(v6) Mode: IR Corr. Factor: 1.000000
User: CRHOADES Prep Date: Custom ID2: Custom ID3:
Comment:

Elem	Al3092	Bi2230	Fe2714	Na8183	S_1820	Th2837	U_3701
Units	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S
Avg	3.5446	.22058	.51663	2.4541	.27834	.51069	.11481
Stddev	.0763	.00164	.00376	.0613	.00201	.00082	.00035
%RSD	2.1531	.74311	.72725	2.4988	.72209	.16064	.30248
#1	3.5985	.21942	.51928	2.4974	.27691	.51011	.11506
#2	3.4906	.22174	.51397	2.4107	.27976	.51127	.11456
Int. Std.	Y_2243	Y_3600	Y_3774				
Units	Cts/S	Cts/S	Cts/S				
Avg	2635.2	39657.	2201.9				
Stddev	21.9	190.	42.8				
%RSD	.83048	.48030	1.9428				
#1	2650.7	39523.	2171.7				
#2	2619.7	39792.	2232.2				

Sample Name: s1-3894250 Acquired: 5/18/2016 9:59:18 Type: QC
Method: 6500_025(v6) Mode: CONC Corr. Factor: 1.000000
User: CRHOADES Prep Date: Custom ID2: Custom ID3:
Comment:

Elem	Ag3280	Al1670	As1890	B_2089	Ba4554	Be3130	Bi2230	Ca3179	Cd2288	Co2286	Cr2055	Cu3247	Fe2599
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	1.0043	1.0170	2.0079	.99500	.99089	.98484	.00164	10.000	1.0037	.99869	.99402	1.0072	5.0055
Stddev	.0021	.0042	.0059	.00011	.01419	.00981	.00141	.003	.0000	.00099	.00174	.0011	.0159
%RSD	.20705	.41376	.29119	.01095	1.4318	.99571	86.005	.02946	.00100	.09961	.17497	.10917	.31853

#1	1.0058	1.0140	2.0120	.99508	.98085	.97790	.00064	9.9980	1.0037	.99940	.99525	1.0080	4.9942
#2	1.0029	1.0200	2.0037	.99493	1.0009	.99177	.00264	10.002	1.0037	.99799	.99279	1.0064	5.0168

Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	None	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Value													
Range													

Elem	K_7664	Li6707	Mg2790	Mn2576	Mo2020	Na5895	Na8183	Ni2316	P_1782	Pb2203	S_1820	Sb2068	Se1960
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	98.858	1.9985	40.089	1.0009	.99467	10.125	11.805	.99165	1.9914	1.9931	.00139	1.9890	1.9919
Stddev	1.275	.0011	.076	.0000	.00491	.039	1.355	.00027	.0020	.0061	.00508	.0166	.0012
%RSD	1.2894	.05591	.19059	.00409	.49336	.38410	11.476	.02713	.10095	.30730	364.52	.83541	.05922

#1	97.956	1.9993	40.035	1.0009	.99814	10.152	12.763	.99184	1.9929	1.9975	-.00220	2.0007	1.9911
#2	99.759	1.9977	40.143	1.0009	.99120	10.097	10.847	.99146	1.9900	1.9888	.00498	1.9772	1.9928

Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	None	Chk Pass	Chk Pass	Chk Pass	None	Chk Pass	Chk Pass
Value													
Range													

Elem	Si2881	SiO2	Sn1899	Sr4077	Th2837	Ti3349	Ti1908	U_3701	V_2924	Zn2062	Zr3391
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	9.9049	21.197	1.9870	.99211	-.00441	1.0015	1.9926	.05598	1.0026	1.0068	1.0031
Stddev	.0716	.153	.0025	.01129	.00167	.0022	.0230	.00952	.0001	.0042	.0069
%RSD	.72311	.72311	.12614	1.1376	37.803	.21954	1.1531	16.999	.01131	.41676	.68764

#1	9.8543	21.088	1.9888	.98413	-.00559	.99995	2.0088	.06271	1.0027	1.0038	1.0080
#2	9.9556	21.305	1.9853	1.0001	-.00323	1.0031	1.9763	.04925	1.0026	1.0097	.99823

Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	None	Chk Pass	Chk Pass	None	Chk Pass	Chk Pass	Chk Pass
Value											
Range											

Int. Std.	Y_2243	Y_3600	Y_3774
Units	Cts/S	Cts/S	Cts/S
Avg	2604.7	39824.	2185.9
Stddev	8.1	231.	51.1
%RSD	.30962	.58045	2.3366

#1	2610.4	39988.	2222.0
#2	2599.0	39661.	2149.8

Sample Name: s2-3894252 Acquired: 5/18/2016 10:01:45 Type: QC
Method: 6500_025(v6) Mode: CONC Corr. Factor: 1.000000
User: CRHOADES Prep Date: Custom ID2: Custom ID3:
Comment:

Elem	Ag3280	Al3092	As1890	B_2089	Ba4554	Be3130	Bi2230	Ca3179	Cd2288	Co2286	Cr2055	Cu3247	Fe2714
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	-.00039	101.91	-.00774	.00783	.00025	.00134	1.9767	.04198	-.00039	-.00128	.00125	.00519	100.07
Stddev	.00144	.52	.01005	.00114	.00040	.00032	.0004	.00125	.00050	.00017	.00011	.00032	.16
%RSD	366.06	.50908	129.91	14.556	158.90	24.320	.02044	2.9882	128.20	13.553	8.5751	6.1662	.16013

#1	.00062	101.54	-.00063	.00864	-.00003	.00156	1.9764	.04109	-.00074	-.00141	.00118	.00496	100.19
#2	-.00141	102.28	-.01484	.00703	.00054	.00111	1.9770	.04287	-.00004	-.00116	.00133	.00541	99.960

Check ?	None	Chk Pass	None	None	None	None	Chk Pass	None	None	None	None	None	Chk Pass
Value													
Range													

Elem	K_7664	Li6707	Mg2790	Mn2576	Mo2020	Na8183	Ni2316	P_1782	Pb2203	S_1820	Sb2068	Se1960	Si2881
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.19871	-.00006	.05075	.00070	.00326	507.16	.00336	.01199	-.00167	9.9482	-.00800	.01602	.00202
Stddev	.04432	.00245	.00421	.00001	.00114	1.45	.00010	.00159	.00086	.0422	.00143	.00763	.00983
%RSD	22.304	4090.8	8.2932	1.7589	34.950	.28584	3.0581	13.301	51.658	.42420	17.835	47.630	486.51

#1	.16737	.00168	.04777	.00071	.00246	506.14	.00329	.01311	-.00228	9.9780	-.00901	.02142	.00897
#2	.23005	-.00180	.05372	.00069	.00407	508.19	.00344	.01086	-.00106	9.9184	-.00699	.01063	-.00493

Check ?	None	None	None	None	None	Chk Pass	None	None	None	Chk Pass	None	None	None
Value													
Range													

Elem	SiO2	Sn1899	Sr4077	Th2837	Ti3349	Ti1908	U_3701	V_2924	Zn2062	Zr3391
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.00432	.00423	.00101	9.8697	.00115	.00405	19.922	.01553	.00729	.12334
Stddev	.02104	.00101	.00020	.0190	.00079	.00502	.036	.00073	.00158	.00329
%RSD	486.51	23.833	19.827	.19228	68.469	124.09	.18319	4.7158	21.620	2.6654

#1	.01920	.00494	.00087	9.8831	.00060	.00050	19.948	.01501	.00618	.12566
#2	-.01055	.00352	.00115	9.8562	.00171	.00759	19.897	.01605	.00841	.12102

Check ?	None	None	None	Chk Pass	None	None	Chk Pass	None	None	None
Value										
Range										

Int. Std.	Y_2243	Y_3600	Y_3774
Units	Cts/S	Cts/S	Cts/S
Avg	2598.0	39485.	2191.9
Stddev	4.9	42.	4.7
%RSD	.18908	.10684	.21346

#1	2594.5	39515.	2195.2
#2	2601.4	39455.	2188.6

Sample Name: ICVH-3897651 Acquired: 5/18/2016 10:04:43 Type: QC
Method: 6500_025(v6) Mode: CONC Corr. Factor: 1.000000
User: CRHOADES Prep Date: Custom ID2: Custom ID3:
Comment:

Elem	Ag3280	Al3092	As1890	B_2089	Ba4554	Be3130	Bi2230	Ca3179	Cd2288	Co2286	Cr2055
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	-.00138	W 42.709	-.00665	.00231	-.00019	.00012	.52107	-.00799	-.00049	.00016	.00076
Stddev	.00139	.282	.00294	.00069	.00023	.00017	.00379	.00415	.00000	.00009	.00060
%RSD	100.24	.66093	44.276	29.892	120.68	139.18	.72674	51.892	1.0033	56.971	78.844
#1	-.00236	42.908	-.00873	.00182	-.00003	.00000	.52375	-.01093	-.00048	.00022	.00033
#2	-.00040	42.509	-.00457	.00280	-.00036	.00024	.51839	-.00506	-.00049	.00010	.00118
Check ?	None	Chk Warn	None	None	None	None	Chk Pass	None	None	None	None
Value		40.000									
Range		5.4900%									
Elem	Cu3247	Fe2714	K_7664	Li6707	Mg2790	Mn2576	Mo2020	Na8183	Ni2316	P_1782	Pb2203
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.00107	82.344	.08924	.00193	.01010	-.00003	-.00029	W 43.176	.00189	.00282	-.00269
Stddev	.00029	.464	.03067	.00316	.00465	.00003	.00059	.542	.00051	.00256	.00151
%RSD	27.494	.56396	34.369	163.59	46.034	112.03	204.51	1.2554	26.740	90.706	56.064
#1	.00086	82.672	.11093	.00417	.00682	-.00001	-.00070	43.559	.00225	.00101	-.00162
#2	.00128	82.015	.06755	-.00030	.01339	-.00005	.00013	42.793	.00153	.00464	-.00375
Check ?	None	Chk Pass	None	None	None	None	None	Chk Warn	None	None	None
Value								40.000			
Range								5.4900%			
Elem	S_1820	Sb2068	Se1960	Si2881	SiO2	Sn1899	Sr4077	Th2837	Ti3349	Ti1908	U_3701
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	3.8687	-.00113	.00930	.02392	.05119	-.00151	.00000	3.0289	.00059	-.00421	5.2159
Stddev	.0129	.01129	.00308	.03949	.08451	.00217	.0001	.0120	.00059	.00032	.0152
%RSD	.33244	1000.4	33.091	165.09	165.09	143.71	3125.1	.39697	99.855	7.6251	.29106
#1	3.8778	-.00911	.00712	-.00400	-.00857	.00002	.00009	3.0374	.00100	-.00444	5.2051
#2	3.8597	.00685	.01148	.05185	.11095	-.00304	-.00010	3.0204	.00017	-.00398	5.2266
Check ?	Chk Pass	None	None	None	None	None	None	Chk Pass	None	None	Chk Pass
Value											
Range											
Elem	V_2924	Zn2062	Zr3391								
Units	ppm	ppm	ppm								
Avg	.00554	-.00056	.03299								
Stddev	.00013	.00020	.00862								
%RSD	2.2934	34.840	26.136								
#1	.00545	-.00042	.03908								
#2	.00563	-.00070	.02689								
Check ?	None	None	None								
Value											
Range											
Int. Std.	Y_2243	Y_3600	Y_3774								
Units	Cts/S	Cts/S	Cts/S								
Avg	2609.0	39166.	2042.8								
Stddev	4.1	201.	22.1								
%RSD	.15645	.51214	1.0806								
#1	2611.9	39025.	2027.2								
#2	2606.1	39308.	2058.4								

Sample Name: ICVH-3897651 Acquired: 5/18/2016 10:10:28 Type: QC
Method: 6500_025(v6) Mode: CONC Corr. Factor: 1.000000
User: CRHOADES Prep Date: Custom ID2: Custom ID3:
Comment:

Elem	Ag3280	Al3092	As1890	B_2089	Ba4554	Be3130	Bi2230	Ca3179	Cd2288	Co2286	Cr2055
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	-.00175	W 42.989	-.00201	.00127	-.00037	.00024	.52043	-.01057	-.00065	.00013	.00074
Stddev	.00050	.294	.00185	.00046	.00005	.00036	.01112	.01142	.00004	.00012	.00001
%RSD	28.574	.68427	91.773	36.517	12.466	148.47	2.1368	107.99	6.6221	97.229	1.0936
#1	-.00139	42.781	-.00332	.00159	-.00040	-.00001	.51257	-.01865	-.00069	.00004	.00073
#2	-.00210	43.197	-.00071	.00094	-.00033	.00050	.52829	-.00250	-.00062	.00021	.00074
Check ?	None	Chk Warn	None	None	None	None	Chk Pass	None	None	None	None
Value		40.000									
Range		5.4900%									
Elem	Cu3247	Fe2714	K_7664	Li6707	Mg2790	Mn2576	Mo2020	Na8183	Ni2316	P_1782	Pb2203
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.00113	82.520	.10213	-.00214	.01661	-.00008	-.00123	W 43.706	.00195	.00409	-.00237
Stddev	.00022	.033	.01585	.00587	.00408	.00005	.00024	.100	.00034	.00256	.00257
%RSD	19.175	.03968	15.520	274.24	24.564	64.165	19.773	.22914	17.385	62.565	108.55
#1	.00129	82.543	.09093	-.00629	.01950	-.00005	-.00105	43.777	.00219	.00228	-.00418
#2	.00098	82.497	.11334	.00201	.01372	-.00012	-.00140	43.635	.00171	.00590	-.00055
Check ?	None	Chk Pass	None	None	None	None	None	Chk Warn	None	None	None
Value								40.000			
Range								5.4900%			
Elem	S_1820	Sb2068	Se1960	Si2881	SiO2	Sn1899	Sr4077	Th2837	Ti3349	Ti1908	U_3701
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	3.8586	-.00348	-.00075	-.02561	-.05480	-.00094	-.00005	3.0604	-.00090	-.00367	5.2671
Stddev	.0258	.00019	.00035	.02216	.04743	.00149	.00027	.0032	.00021	.00123	.0165
%RSD	.66817	5.4714	46.575	86.553	86.553	158.67	524.21	.10327	23.194	33.578	.31381
#1	3.8768	-.00334	-.00100	-.04128	-.08833	.00011	.00014	3.0627	-.00075	-.00280	5.2788
#2	3.8404	-.00361	-.00050	-.00993	-.02126	-.00200	-.00025	3.0582	-.00105	-.00454	5.2554
Check ?	Chk Pass	None	None	None	None	None	None	Chk Pass	None	None	Chk Pass
Value											
Range											
Elem	V_2924	Zn2062	Zr3391								
Units	ppm	ppm	ppm								
Avg	.00545	-.00046	.03347								
Stddev	.00036	.00075	.00237								
%RSD	6.6400	164.47	7.0865								
#1	.00570	-.00099	.03179								
#2	.00519	.00007	.03515								
Check ?	None	None	None								
Value											
Range											
Int. Std.	Y_2243	Y_3600	Y_3774								
Units	Cts/S	Cts/S	Cts/S								
Avg	2546.3	37978.	1990.3								
Stddev	4.0	78.	33.9								
%RSD	.15891	.20486	1.7008								
#1	2549.2	37923.	2014.3								
#2	2543.4	38033.	1966.4								

Sample Name: ICV-3888207 Acquired: 5/18/2016 10:15:39 Type: QC
Method: 6500_025(v6) Mode: CONC Corr. Factor: 1.000000
User: CRHOADES Prep Date: Custom ID2: Custom ID3:
Comment:

Elem	Ag3280	Al1670	As1890	B_2089	Ba4554	Be3130	Bi2230	Ca3179	Cd2288	Co2286	Cr2055
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.25245	W .26972	.24578	.25146	.25410	.24932	-.00034	W 2.1144	.25547	.25160	.25104
Stddev	.00055	.00067	.00336	.00068	.00072	.00178	.00204	.0330	.00014	.00041	.00052
%RSD	.21887	.24953	1.3652	.27202	.28201	.71332	606.92	1.5604	.05514	.16461	.20882
#1	.25206	.27020	.24341	.25194	.25359	.24806	.00111	2.0911	.25537	.25131	.25067
#2	.25284	.26925	.24815	.25097	.25461	.25058	-.00178	2.1378	.25557	.25189	.25141
Check ?	Chk Pass	Chk Warn	Chk Pass	Chk Pass	Chk Pass	Chk Pass	None	Chk Warn	Chk Pass	Chk Pass	Chk Pass
Value		.25000						2.0000			
Range		5.4900%						5.4900%			
Elem	Cu3247	Fe2599	K_7664	Li6707	Mg2790	Mn2576	Mo2020	Na5895	Ni2316	P_1782	Pb2203
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.25872	F .28511	20.446	.25942	10.152	.25498	.24725	2.0578	.25273	1.9833	.25823
Stddev	.00107	.00517	.171	.00286	.015	.00056	.00021	.0024	.00122	.0060	.00070
%RSD	.41384	1.8150	.83814	1.1028	.14285	.21816	.08676	.11650	.48388	.30402	.27241
#1	.25796	.28145	20.324	.25740	10.141	.25537	.24710	2.0561	.25186	1.9790	.25873
#2	.25947	.28876	20.567	.26144	10.162	.25458	.24740	2.0595	.25359	1.9875	.25773
Check ?	Chk Pass	Chk Fail	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Value		.25000									
Range		10.490%									
Elem	S_1820	Sb2068	Se1960	Si2881	SiO2	Sn1899	Sr4077	Th2837	Ti3349	Ti1908	U_3701
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.00221	W .26817	.50547	2.0408	4.3673	.49362	.25998	-.00168	.25044	.50029	.02080
Stddev	.00045	.00085	.00102	.0045	.0097	.00346	.00180	.00206	.00008	.01069	.05585
%RSD	20.110	.31512	.20089	.22108	.22108	.70000	.69403	122.80	.03084	2.1372	268.52
#1	.00190	.26757	.50475	2.0376	4.3605	.49118	.25870	-.00022	.25050	.50785	-.01869
#2	.00253	.26876	.50618	2.0440	4.3742	.49607	.26125	-.00314	.25039	.49273	.06030
Check ?	None	Chk Warn	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	None	Chk Pass	Chk Pass	None
Value		.25000									
Range		5.4900%									
Elem	V_2924	Zn2062	Zr3391								
Units	ppm	ppm	ppm								
Avg	.24841	.25844	.25137								
Stddev	.00103	.00008	.00274								
%RSD	.41611	.03162	1.0913								
#1	.24914	.25850	.25331								
#2	.24768	.25838	.24943								
Check ?	Chk Pass	Chk Pass	Chk Pass								
Value											
Range											
Int. Std.	Y_2243	Y_3600	Y_3774								
Units	Cts/S	Cts/S	Cts/S								
Avg	2757.7	41146.	2162.4								
Stddev	3.4	177.	6.7								
%RSD	.12269	.43061	.31143								
#1	2760.1	41021.	2157.7								
#2	2755.3	41271.	2167.2								

Sample Name: ICV-3888207 Acquired: 5/18/2016 10:21:30 Type: QC
Method: 6500_025(v6) Mode: CONC Corr. Factor: 1.000000
User: CRHOADES Prep Date: Custom ID2: Custom ID3:
Comment:

Elem	Ag3280	Al1670	As1890	B_2089	Ba4554	Be3130	Bi2230	Ca3179	Cd2288	Co2286	Cr2055
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.25298	.26286	.26089	.25595	.25061	.24794	-.00139	1.9687	.25754	.25386	.25121
Stddev	.00022	.00038	.00151	.00241	.00075	.00017	.00541	.0131	.00114	.00149	.00262
%RSD	.08585	.14318	.57822	.94250	.30060	.06826	389.78	.66687	.44329	.58661	1.0425

#1	.25282	.26313	.25982	.25425	.25114	.24806	-.00521	1.9779	.25673	.25281	.24936
#2	.25313	.26260	.26195	.25766	.25008	.24782	.00244	1.9594	.25835	.25491	.25306

Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	None	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Value											
Range											

Elem	Cu3247	Fe2599	K_7664	Li6707	Mg2790	Mn2576	Mo2020	Na5895	Ni2316	P_1782	Pb2203
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.25478	.26093	20.084	.25438	10.054	.25252	.25382	2.0035	.25483	2.0132	.26031
Stddev	.00136	.00729	.194	.00082	.009	.00016	.00246	.0231	.00161	.0100	.00154
%RSD	.53521	2.7931	.96717	.32431	.08578	.06165	.96762	1.1504	.63366	.49662	.59123

#1	.25574	.25578	20.221	.25497	10.060	.25263	.25208	2.0198	.25369	2.0061	.25922
#2	.25382	.26609	19.946	.25380	10.048	.25241	.25556	1.9872	.25597	2.0203	.26140

Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Value											
Range											

Elem	S_1820	Sb2068	Se1960	Si2881	SiO2	Sn1899	Sr4077	Th2837	Ti3349	Ti1908	U_3701
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	-.01483	W .26695	.52648	2.0111	4.3037	.50293	.25721	-.00261	.25020	W .54736	-.00715
Stddev	.00264	.00326	.00896	.0157	.0335	.00101	.00136	.00243	.00104	.00197	.02343
%RSD	17.815	1.2221	1.7023	.77856	.77856	.20091	.52965	93.184	.41415	.36065	327.55

#1	-.01670	.26465	.52014	2.0221	4.3274	.50222	.25817	-.00089	.25093	.54876	-.02372
#2	-.01296	.26926	.53281	2.0000	4.2800	.50365	.25624	-.00432	.24947	.54596	.00941

Check ?	None	Chk Warn	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	None	Chk Pass	Chk Warn	None
Value		.25000								.50000	
Range		5.4900%								5.4900%	

Elem	V_2924	Zn2062	Zr3391
Units	ppm	ppm	ppm
Avg	.24611	.24843	.24965
Stddev	.00075	.00423	.00240
%RSD	.30403	1.7041	.96093

#1	.24558	.25142	.25135
#2	.24663	.24543	.24796

Check ?	Chk Pass	Chk Pass	Chk Pass
Value			
Range			

Int. Std.	Y_2243	Y_3600	Y_3774
Units	Cts/S	Cts/S	Cts/S
Avg	2734.7	40856.	2180.6
Stddev	8.3	250.	33.1
%RSD	.30440	.61188	1.5160

#1	2728.8	41033.	2157.2
#2	2740.6	40679.	2204.0

Sample Name: ICV-3888207 Acquired: 5/18/2016 10:24:46 Type: QC
Method: 6500_025(v6) Mode: CONC Corr. Factor: 1.000000
User: CRHOADES Prep Date: Custom ID2: Custom ID3:
Comment:

Elem	Ag3280	Al1670	As1890	B_2089	Ba4554	Be3130	Bi2230	Ca3179	Cd2288	Co2286	Cr2055
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.25434	.26197	.25451	.25815	.25179	.24959	.00208	1.9908	.25860	.25473	.25317
Stddev	.00244	.00064	.00011	.00231	.00005	.00020	.00366	.0018	.00280	.00140	.00280
%RSD	.95910	.24564	.04205	.89424	.01973	.08014	175.46	.08767	1.0813	.54954	1.1055

#1	.25262	.26152	.25444	.25651	.25183	.24945	.00467	1.9896	.25663	.25374	.25119
#2	.25607	.26243	.25459	.25978	.25176	.24973	-.00050	1.9920	.26058	.25572	.25515

Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	None	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Value											
Range											

Elem	Cu3247	Fe2599	K_7664	Li6707	Mg2790	Mn2576	Mo2020	Na5895	Ni2316	P_1782	Pb2203
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.25610	.26084	20.262	.25401	10.065	.25276	.25475	2.0409	.25505	2.0294	.26076
Stddev	.00218	.00204	.084	.00226	.024	.00036	.00272	.0058	.00216	.0284	.00536
%RSD	.85230	.78289	.41526	.89048	.24193	.14152	1.0660	.28525	.84593	1.4008	2.0549

#1	.25456	.25939	20.202	.25561	10.048	.25250	.25283	2.0367	.25353	2.0093	.25697
#2	.25765	.26228	20.321	.25241	10.082	.25301	.25667	2.0450	.25658	2.0495	.26455

Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Value											
Range											

Elem	S_1820	Sb2068	Se1960	Si2881	SiO2	Sn1899	Sr4077	Th2837	Ti3349	Ti1908	U_3701
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	-.01980	W .27610	W .52746	2.0252	4.3339	.50401	.25984	-.00390	.25076	W .54583	-.00325
Stddev	.00056	.00832	.00371	.0415	.0888	.00747	.00017	.00138	.00324	.00099	.08024
%RSD	2.8135	3.0150	.70402	2.0480	2.0480	1.4827	.06482	35.306	1.2924	.18051	2470.2

#1	-.02020	.27021	.52483	2.0545	4.3967	.49873	.25996	-.00488	.24847	.54514	.05349
#2	-.01941	.28198	.53009	1.9959	4.2712	.50930	.25972	-.00293	.25305	.54653	-.05998

Check ?	None	Chk Warn	Chk Warn	Chk Pass	Chk Pass	Chk Pass	Chk Pass	None	Chk Pass	Chk Warn	None
Value		.25000	.50000							.50000	
Range		5.4900%	5.4900%							5.4900%	

Elem	V_2924	Zn2062	Zr3391
Units	ppm	ppm	ppm
Avg	.24786	.24910	.24983
Stddev	.00199	.00074	.00338
%RSD	.80110	.29686	1.3545

#1	.24646	.24858	.25222
#2	.24927	.24963	.24744

Check ?	Chk Pass	Chk Pass	Chk Pass
Value			
Range			

Int. Std.	Y_2243	Y_3600	Y_3774
Units	Cts/S	Cts/S	Cts/S
Avg	2749.2	41253.	2204.9
Stddev	10.7	745.	16.1
%RSD	.38876	1.8068	.73150

#1	2741.6	40726.	2193.5
#2	2756.7	41780.	2216.3

Sample Name: ICVL-3897520 Acquired: 5/18/2016 10:29:18 Type: QC
Method: 6500_025(v6) Mode: CONC Corr. Factor: 1.000000
User: CRHOADES Prep Date: Custom ID2: Custom ID3:
Comment:

Elem	Ag3280	Al1670	As1890	B_2089	Ba4554	Be3130	Bi2230	Ca3179	Cd2288	Co2286	Cr2055	Cu3247
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.00923	.10355	.01234	.09719	.00951	.00106	.11070	.19176	.00469	.01009	.00969	.01559
Stddev	.00039	.00069	.00347	.00000	.00008	.00012	.00315	.00458	.00004	.00000	.00020	.00021
%RSD	4.1991	.66656	28.140	.00145	.88163	11.257	2.8440	2.3868	.87438	.01812	2.0618	1.3176

#1	.00895	.10306	.01479	.09718	.00945	.00115	.11293	.19499	.00466	.01009	.00955	.01574
#2	.00950	.10404	.00988	.09719	.00957	.00098	.10847	.18852	.00472	.01009	.00983	.01545

Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Value												
Range												

Elem	Fe2599	K_7664	Li6707	Mg2790	Mn2576	Mo2020	Na5895	Ni2316	P_1782	Pb2203	S_1820	Sb2068
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.10482	2.9056	F .01446	.20126	.01013	.02024	.98566	.04038	2.8617	.00941	-.00703	.02293
Stddev	.00864	.0170	.00123	.00998	.00013	.00110	.02594	.00035	.0002	.00152	.00229	.00300
%RSD	8.2456	.58550	8.5252	4.9568	1.3008	5.4208	2.6320	.87283	.00739	16.195	32.501	13.063

#1	.09871	2.9176	.01533	.19421	.01004	.01946	.96732	.04063	2.8618	.01049	-.00542	.02082
#2	.11093	2.8935	.01359	.20831	.01022	.02101	1.0040	.04013	2.8615	.00833	-.00865	.02505

Check ?	Chk Pass	Chk Pass	Chk Fail	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	None	Chk Pass
Value			.01000									
Range			30.000%									

Elem	Se1960	Si2881	SiO2	Sn1899	Sr4077	Th2837	Ti3349	Ti1908	U_3701	V_2924	Zn2062	Zr3391
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.01445	.51386	1.0997	.10047	.01037	.01428	.00939	.01516	F .01971	.01038	.01972	F .02134
Stddev	.00962	.03347	.0716	.00018	.00004	.00213	.00004	.00373	.00477	.00066	.00044	.00036
%RSD	66.557	6.5128	6.5128	.18327	.39138	14.891	.38778	24.597	24.216	6.3556	2.2479	1.6989

#1	.00765	.49019	1.0490	.10060	.01040	.01278	.00941	.01252	.01633	.00991	.02003	.02108
#2	.02125	.53752	1.1503	.10034	.01034	.01578	.00936	.01779	.02308	.01085	.01940	.02159

Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Fail	Chk Pass	Chk Pass	Chk Fail
Value									.06000			.01500
Range									-30.000%			30.000%

Int. Std.	Y_2243	Y_3600	Y_3774
Units	Cts/S	Cts/S	Cts/S
Avg	2711.2	41169.	2150.2
Stddev	2.4	122.	18.9
%RSD	.08807	.29686	.88103

#1	2712.9	41256.	2136.8
#2	2709.5	41083.	2163.6

Sample Name: CCVH-3894253 Acquired: 5/18/2016 10:31:59 Type: QC
Method: 6500_025(v6) Mode: CONC Corr. Factor: 1.000000
User: CRHOADES Prep Date: Custom ID2: Custom ID3:
Comment:

Elem	Ag3280	Al3092	As1890	B_2089	Ba4554	Be3130	Bi2230	Ca3179	Cd2288	Co2286	Cr2055	Cu3247	Fe2714
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	-.00056	51.499	-.00368	.00282	-.00121	.00047	1.0252	-.00848	-.00094	-.00120	.00071	.00278	50.064
Stddev	.00121	.262	.00133	.00065	.00003	.00000	.0059	.00208	.00045	.00015	.00008	.00011	.063
%RSD	217.56	.50885	36.146	23.037	2.1806	.79416	.57633	24.578	47.564	12.617	10.894	3.7844	.12523

#1	-.00141	51.684	-.00462	.00327	-.00123	.00048	1.0294	-.00995	-.00063	-.00131	.00066	.00270	50.108
#2	.00030	51.313	-.00274	.00236	-.00119	.00047	1.0210	-.00700	-.00126	-.00109	.00077	.00285	50.020

Check ?	None	Chk Pass	None	None	None	None	Chk Pass	None	None	None	None	None	Chk Pass
Value													
Range													

Elem	K_7664	Li6707	Mg2790	Mn2576	Mo2020	Na8183	Ni2316	P_1782	Pb2203	S_1820	Sb2068	Se1960	Si2881
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.02101	.00007	.01746	.00019	-.00148	257.00	.00147	.00560	-.00103	5.0868	-.01052	.00291	-.05139
Stddev	.00699	.00447	.00774	.00008	.00055	.07	.00067	.00017	.00002	.0047	.00392	.00521	.00754
%RSD	33.251	6616.2	44.310	41.737	37.362	.02911	46.024	2.9861	2.1665	.09182	37.291	179.00	14.667

#1	.01607	.00323	.02294	.00013	-.00187	256.95	.00194	.00548	-.00101	5.0835	-.00775	-.00077	-.04606
#2	.02595	-.00310	.01199	.00024	-.00109	257.06	.00099	.00572	-.00104	5.0901	-.01329	.00659	-.05672

Check ?	None	None	None	None	None	Chk Pass	None	None	None	Chk Pass	None	None	None
Value													
Range													

Elem	SiO2	Sn1899	Sr4077	Th2837	Ti3349	Ti1908	U_3701	V_2924	Zn2062	Zr3391
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	-.10997	-.00102	.00042	4.9789	-.00024	-.00274	10.184	.00741	-.00046	.06267
Stddev	.01613	.00012	.00011	.0227	.00011	.00229	.076	.00037	.00022	.00536
%RSD	14.667	11.593	25.824	.45600	45.965	83.299	.74569	4.9552	47.237	8.5538

#1	-.09857	-.00094	.00049	4.9628	-.00032	-.00113	10.238	.00715	-.00062	.06646
#2	-.12138	-.00110	.00034	4.9949	-.00016	-.00436	10.131	.00767	-.00031	.05888

Check ?	None	None	None	Chk Pass	None	None	Chk Pass	None	None	None
Value										
Range										

Int. Std.	Y_2243	Y_3600	Y_3774
Units	Cts/S	Cts/S	Cts/S
Avg	2657.6	39966.	2177.6
Stddev	27.6	294.	8.2
%RSD	1.0402	.73676	.37785

#1	2677.1	39758.	2183.4
#2	2638.0	40174.	2171.8

Sample Name: CCV-3894251 Acquired: 5/18/2016 10:34:35 Type: QC
Method: 6500_025(v6) Mode: CONC Corr. Factor: 1.000000
User: CRHOADES Prep Date: Custom ID2: Custom ID3:
Comment:

Elem	Ag3280	Al1670	As1890	B_2089	Ba4554	Be3130	Bi2230	Ca3179	Cd2288	Co2286	Cr2055	Cu3247	Fe2599
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.49640	.50768	1.0068	.50084	.49064	.49032	-.00147	4.8917	.50092	.51459	.50787	.50660	2.4721
Stddev	.00085	.00174	.0088	.00084	.00985	.00508	.00048	.0389	.00343	.00040	.00056	.00247	.0123
%RSD	.17106	.34304	.87085	.16785	2.0066	1.0355	32.397	.79533	.68404	.07708	.11125	.48751	.49599

#1	.49580	.50892	1.0006	.50024	.49760	.49391	-.00113	4.9192	.50335	.51431	.50827	.50485	2.4808
#2	.49700	.50645	1.0130	.50143	.48367	.48673	-.00181	4.8642	.49850	.51487	.50747	.50834	2.4634

Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	None	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Value													
Range													

Elem	K_7664	Li6707	Mg2790	Mn2576	Mo2020	Na5895	Ni2316	P_1782	Pb2203	S_1820	Sb2068	Se1960	Si2881
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	49.273	1.0142	19.579	.49383	.50726	4.9780	.51106	.99986	1.0289	-.00694	1.0177	1.0130	4.8942
Stddev	1.206	.0059	.006	.00056	.00165	.0239	.00007	.00057	.0027	.00046	.0047	.0007	.0225
%RSD	2.4479	.57997	.03151	.11304	.32582	.48094	.01359	.05655	.26241	6.5882	.45881	.07237	.46052

#1	50.126	1.0184	19.575	.49344	.50843	4.9949	.51111	.99946	1.0270	-.00662	1.0210	1.0135	4.9102
#2	48.420	1.0101	19.583	.49423	.50610	4.9611	.51101	1.0003	1.0308	-.00726	1.0144	1.0125	4.8783

Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	None	Chk Pass	Chk Pass	Chk Pass
Value													
Range													

Elem	SiO2	Sn1899	Sr4077	Th2837	Ti3349	Ti1908	U_3701	V_2924	Zn2062	Zr3391
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	10.474	1.0139	.50613	-.00188	.49239	1.0322	.01746	.49139	.48867	.49589
Stddev	.048	.0003	.01208	.00423	.00102	.0015	.03734	.00461	.00414	.00399
%RSD	.46052	.02755	2.3870	225.29	.20763	.14965	213.92	.93821	.84648	.80458

#1	10.508	1.0137	.51468	-.00487	.49167	1.0333	.04386	.48813	.48574	.49871
#2	10.440	1.0141	.49759	.00111	.49311	1.0311	-.00895	.49465	.49159	.49307

Check ?	Chk Pass	Chk Pass	Chk Pass	None	Chk Pass	Chk Pass	None	Chk Pass	Chk Pass	Chk Pass
Value										
Range										

Int. Std.	Y_2243	Y_3600	Y_3774
Units	Cts/S	Cts/S	Cts/S
Avg	2661.5	40317.	2208.5
Stddev	23.3	151.	21.7
%RSD	.87578	.37487	.98225

#1	2645.1	40424.	2193.2
#2	2678.0	40210.	2223.9

Sample Name: ICB Acquired: 5/18/2016 10:39:24 Type: QC
Method: 6500_025(v6) Mode: CONC Corr. Factor: 1.000000
User: CRHOADES Prep Date: Custom ID2: Custom ID3:
Comment:

Elem	Ag3280	Al1670	As1890	B_2089	Ba4554	Be3130	Bi2230	Ca3179	Cd2288	Co2286	Cr2055
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	-.00086	-.00085	-.00528	.00029	-.00085	.00054	.00384	-.01545	-.00019	-.00063	-.00038
Stddev	.00019	.00036	.00134	.00062	.00046	.00011	.00029	.00477	.00021	.00002	.00021
%RSD	21.986	42.719	25.379	214.13	54.371	19.995	7.5247	30.848	114.42	3.9486	56.380

#1	-.00073	-.00110	-.00433	.00072	-.00052	.00061	.00363	-.01208	-.00034	-.00065	-.00052
#2	-.00099	-.00059	-.00623	-.00015	-.00118	.00046	.00404	-.01882	-.00004	-.00061	-.00023

Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit											
Low Limit											

Elem	Cu3247	Fe2599	K_7664	Li6707	Mg2790	Mn2576	Mo2020	Na5895	Ni2316	P_1782	Pb2203
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	-.00052	-.00078	.03183	.00058	.00900	-.00004	.00020	.00135	.00030	.00020	.00015
Stddev	.00002	.00835	.05306	.00378	.00135	.00005	.00034	.02067	.00040	.00513	.00140
%RSD	4.7520	1074.0	166.70	655.77	14.984	123.19	170.57	1529.5	131.39	2547.1	912.40

#1	-.00050	.00513	-.00569	-.00210	.00995	-.00007	-.00004	-.01327	.00058	-.00342	-.00083
#2	-.00054	-.00668	.06935	.00325	.00804	-.00001	.00044	.01597	.00002	.00383	.00114

Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit											
Low Limit											

Elem	S_1820	Sb2068	Se1960	Si2881	SiO2	Sn1899	Sr4077	Th2837	Ti3349	Ti1908	U_3701
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	-.01724	W .00160	W .00758	-.00556	-.01189	-.00056	-.00001	-.00270	-.00039	-.00393	.02137
Stddev	.01019	.00230	.00679	.01147	.02454	.00042	.00013	.00008	.00001	.00150	.05135
%RSD	59.144	143.74	89.544	206.39	206.39	75.739	1645.4	2.8639	3.1244	38.158	240.31

#1	-.02444	-.00003	.00278	-.01367	-.02925	-.00086	.00008	-.00264	-.00038	-.00287	.05768
#2	-.01003	.00322	.01239	.00255	.00546	-.00026	-.00010	-.00275	-.00040	-.00498	-.01494

Check ?	Chk Pass	Chk Warn	Chk Warn	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit		.00100	.00750								
Low Limit		-.00100	-.01500								

Elem	V_2924	Zn2062	Zr3391
Units	ppm	ppm	ppm
Avg	.00109	-.00068	.00267
Stddev	.00048	.00024	.00052
%RSD	43.627	35.158	19.327

#1	.00076	-.00084	.00230
#2	.00143	-.00051	.00303

Check ?	Chk Pass	Chk Pass	Chk Pass
High Limit			
Low Limit			

Int. Std.	Y_2243	Y_3600	Y_3774
Units	Cts/S	Cts/S	Cts/S
Avg	2643.1	39260.	2007.6
Stddev	37.7	906.	24.7
%RSD	1.4266	2.3075	1.2319

#1	2616.4	38620.	1990.1
#2	2669.7	39901.	2025.1

Sample Name: ICB Acquired: 5/18/2016 10:42:01 Type: QC
 Method: 6500_025(v6) Mode: CONC Corr. Factor: 1.000000
 User: CRHOADES Prep Date: Custom ID2: Custom ID3:
 Comment:

Elem	Ag3280	Al1670	As1890	B_2089	Ba4554	Be3130	Bi2230	Ca3179	Cd2288	Co2286	Cr2055	Cu3247	Fe2599
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	-.00148	.00050	.00385	.00007	-.00043	.00033	.00315	-.00940	-.00038	-.00026	.00024	.00065	.00053
Stddev	.00064	.00004	.00344	.00060	.00037	.00003	.00073	.00767	.00013	.00083	.00034	.00068	.00166
%RSD	43.141	8.8679	89.435	819.17	87.038	8.0049	23.038	81.616	35.244	326.00	138.69	104.40	311.59

#1	-.00103	.00053	.00629	.00050	-.00016	.00035	.00366	-.00398	-.00047	.00033	.00048	.00017	-.00064
#2	-.00193	.00047	.00142	-.00035	-.00069	.00031	.00264	-.01483	-.00028	-.00085	.00000	.00114	.00171

Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit													
Low Limit													

Elem	K_7664	Li6707	Mg2790	Mn2576	Mo2020	Na5895	Ni2316	P_1782	Pb2203	S_1820	Sb2068	Se1960	Si2881
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	-.01647	.00060	.00008	.00007	-.00054	-.03566	-.00040	-.00018	-.00088	-.01762	-.00033	.00279	.02365
Stddev	.03445	.00179	.00459	.00009	.00048	.00414	.00051	.00317	.00241	.00030	.00005	.00208	.05461
%RSD	209.10	300.96	5624.4	135.53	89.074	11.617	128.41	1783.5	274.92	1.6830	15.550	74.434	230.90

#1	.00788	-.00067	.00333	.00013	-.00020	-.03273	-.00075	.00206	.00083	-.01741	-.00037	.00132	.06226
#2	-.04083	.00186	-.00316	.00000	-.00088	-.03859	-.00004	-.00242	-.00258	-.01783	-.00029	.00427	-.01496

Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit													
Low Limit													

Elem	SiO2	Sn1899	Sr4077	Th2837	Ti3349	Ti1908	U_3701	V_2924	Zn2062	Zr3391
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.05061	.00000	-.00007	-.00158	.00031	-.00162	.02800	.00013	-.00023	-.00097
Stddev	.11686	.00053	.00011	.00119	.00004	.00190	.01301	.00006	.00015	.00339
%RSD	230.90	47573.	160.34	75.538	11.659	117.36	46.466	42.516	65.984	347.67

#1	.13324	.00037	-.00014	-.00074	.00029	-.00296	.03720	.00017	-.00012	-.00337
#2	-.03202	-.00037	.00001	-.00242	.00034	-.00027	.01880	.00009	-.00034	.00142

Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit										
Low Limit										

Int. Std.	Y_2243	Y_3600	Y_3774
Units	Cts/S	Cts/S	Cts/S
Avg	2658.1	40263.	2129.3
Stddev	30.4	601.	45.8
%RSD	1.1447	1.4920	2.1489

#1	2679.6	40687.	2096.9
#2	2636.6	39838.	2161.7

Sample Name: CRI-3897521 Acquired: 5/18/2016 10:44:25 Type: QC
Method: 6500_025(v6) Mode: CONC Corr. Factor: 1.000000
User: CRHOADES Prep Date: Custom ID2: Custom ID3:
Comment:

Elem	Ag3280	Al1670	As1890	B_2089	Ba4554	Be3130	Bi2230	Ca3179	Cd2288	Co2286	Cr2055
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.00842	.10450	W .01346	.09986	.00428	.00107	.11801	.20748	.00469	.00526	.01024
Stddev	.00016	.00023	.01264	.00091	.00020	.00025	.00487	.01119	.00012	.00007	.00022
%RSD	1.9488	.21745	93.923	.91418	4.7662	23.312	4.1228	5.3933	2.5898	1.4042	2.1239
#1	.00830	.10466	.00452	.10050	.00413	.00124	.11457	.21539	.00477	.00531	.01009
#2	.00854	.10434	.02240	.09921	.00442	.00089	.12145	.19957	.00460	.00521	.01039
Check ?	Chk Pass	Chk Pass	Chk Warn	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Value			.01000								
Range			20.490%								
Elem	Cu3247	Fe2599	K_7664	Li6707	Mg2790	Mn2576	Mo2020	Na5895	Ni2316	P_1782	Pb2203
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.01065	W .04173	.94790	.00877	.20600	.00311	.00999	.99227	.00993	.97090	.00254
Stddev	.00073	.00555	.04657	.00247	.00367	.00008	.00061	.00805	.00002	.00590	.00130
%RSD	6.8515	13.297	4.9131	28.205	1.7812	2.4957	6.1371	.81166	.19777	.60743	51.294
#1	.01116	.03780	.91497	.01052	.20860	.00317	.00956	.98658	.00991	.97507	.00347
#2	.01013	.04565	.98083	.00702	.20341	.00306	.01042	.99797	.00994	.96673	.00162
Check ?	Chk Pass	Chk Warn	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Value		.03000									
Range		20.490%									
Elem	S_1820	Sb2068	Se1960	Si2881	SiO2	Sn1899	Sr4077	Th2837	Ti3349	Ti1908	U_3701
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.08516	W .01497	W .01494	.49048	1.0496	.02125	.00498	.00910	.01024	W .00639	W .08101
Stddev	.00063	.00205	.00412	.04504	.0964	.00016	.00007	.00283	.00045	.00193	.08021
%RSD	.74483	13.688	27.566	9.1823	9.1823	.76717	1.3119	31.139	4.3652	30.184	99.012
#1	.08471	.01352	.01203	.52232	1.1178	.02114	.00503	.01110	.00992	.00775	.02429
#2	.08561	.01642	.01786	.45863	.98147	.02137	.00494	.00709	.01055	.00503	.13773
Check ?	Chk Pass	Chk Warn	Chk Warn	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Warn	Chk Warn
Value		.01000	.01000							.01000	.06000
Range		20.490%	20.490%							-20.490%	20.490%
Elem	V_2924	Zn2062	Zr3391								
Units	ppm	ppm	ppm								
Avg	.01040	.01104	.00875								
Stddev	.00008	.00045	.00344								
%RSD	.80922	4.0709	39.368								
#1	.01046	.01073	.00631								
#2	.01034	.01136	.01118								
Check ?	Chk Pass	Chk Pass	Chk Pass								
Value											
Range											
Int. Std.	Y_2243	Y_3600	Y_3774								
Units	Cts/S	Cts/S	Cts/S								
Avg	2641.2	40502.	2096.0								
Stddev	1.2	185.	16.4								
%RSD	.04730	.45722	.78172								
#1	2642.0	40633.	2084.5								
#2	2640.3	40371.	2107.6								

Sample Name: CRI- Acquired: 5/18/2016 10:51:45 Type: QC
 Method: 6500_025(v6) Mode: CONC Corr. Factor: 1.000000
 User: CRHOADES Prep Date: Custom ID2: Custom ID3:
 Comment:

Elem	Ag3280	Al1670	As1890	B_2089	Ba4554	Be3130	Bi2230	Ca3179	Cd2288	Co2286	Cr2055
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	-.00099	-.00059	.00732	-.00075	-.00075	.00042	.00921	-.00853	.00008	.00005	.00049
Stddev	.00013	.00017	.00048	.00058	.00049	.00002	.00054	.00284	.00009	.00019	.00016
%RSD	12.717	29.377	6.5308	77.165	65.456	4.4300	5.8333	33.243	119.70	368.44	32.938

#1	-.00108	-.00047	.00698	-.00115	-.00110	.00041	.00883	-.01054	.00001	.00019	.00060
#2	-.00090	-.00072	.00766	-.00034	-.00040	.00044	.00959	-.00653	.00014	-.00008	.00037

Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit											
Low Limit											

Elem	Cu3247	Fe2599	K_7664	Li6707	Mg2790	Mn2576	Mo2020	Na5895	Ni2316	P_1782	Pb2203
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.00052	W .09507	-.04848	-.00141	.00650	.00005	-.00064	-.02063	-.00009	-.00137	.00006
Stddev	.00062	.00132	.01673	.00142	.00312	.00002	.00030	.00700	.00067	.00165	.00011
%RSD	118.95	1.3921	34.508	101.26	48.062	38.962	46.447	33.918	734.47	120.00	186.63

#1	.00096	.09600	-.06031	-.00241	.00871	.00004	-.00043	-.01569	.00038	-.00254	-.00002
#2	.00008	.09413	-.03665	-.00040	.00429	.00006	-.00085	-.02558	-.00057	-.00021	.00014

Check ?	Chk Pass	Chk Warn	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit		.05000									
Low Limit		-.05000									

Elem	S_1820	Sb2068	Se1960	Si2881	SiO2	Sn1899	Sr4077	Th2837	Ti3349	Ti1908	U_3701
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	-.01886	F .01312	W .01167	.02415	.05168	-.00123	.00016	-.00093	-.00053	-.00201	.02917
Stddev	.00137	.00392	.00419	.01091	.02334	.00016	.00004	.00115	.00018	.00065	.02069
%RSD	7.2651	29.897	35.875	45.156	45.156	13.281	27.537	123.37	33.441	32.558	70.915

#1	-.01982	.01035	.00871	.03186	.06818	-.00111	.00013	-.00012	-.00040	-.00155	.01454
#2	-.01789	.01590	.01463	.01644	.03518	-.00134	.00019	-.00175	-.00065	-.00247	.04380

Check ?	Chk Pass	Chk Fail	Chk Warn	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit		.01200	.00750								
Low Limit		-.01200	-.01500								

Elem	V_2924	Zn2062	Zr3391
Units	ppm	ppm	ppm
Avg	.00002	.00034	-.00005
Stddev	.00028	.00056	.00184
%RSD	1356.0	166.51	4012.2

#1	-.00018	-.00006	-.00135
#2	.00022	.00074	.00125

Check ?	Chk Pass	Chk Pass	Chk Pass
High Limit			
Low Limit			

Int. Std.	Y_2243	Y_3600	Y_3774
Units	Cts/S	Cts/S	Cts/S
Avg	2692.9	40602.	2144.6
Stddev	20.5	80.	12.9
%RSD	.76303	.19603	.60041

#1	2678.4	40659.	2153.7
#2	2707.5	40546.	2135.5

Sample Name: CRI- Acquired: 5/18/2016 11:03:27 Type: QC
Method: 6500_025(v6) Mode: CONC Corr. Factor: 1.000000
User: CRHOADES Prep Date: Custom ID2: Custom ID3:
Comment:

Elem	Ag3280	Al1670	As1890	B_2089	Ba4554	Be3130	Bi2230	Ca3179	Cd2288	Co2286	Cr2055	Cu3247
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	-.00097	-.00114	F .01560	-.00070	-.00066	.00036	.00194	-.00303	-.00014	.00000	.00040	.00086
Stddev	.00106	.00045	.00960	.00004	.00016	.00026	.00503	.00292	.00004	.00009	.00002	.00001
%RSD	109.27	39.157	61.497	5.8751	23.958	73.395	259.44	96.241	31.155	3772.3	5.4713	1.3400

#1	-.00022	-.00146	.00882	-.00067	-.00055	.00017	-.00162	-.00510	-.00017	.00006	.00039	.00086
#2	-.00173	-.00083	.02239	-.00073	-.00078	.00055	.00549	-.00097	-.00011	-.00006	.00042	.00087

Check ?	Chk Pass	Chk Pass	Chk Fail	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit			.01500									
Low Limit			-.01500									

Elem	Fe2599	K_7664	Li6707	Mg2790	Mn2576	Mo2020	Na5895	Ni2316	P_1782	Pb2203	S_1820	Sb2068
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	-.00649	.01556	-.00022	.00823	.00001	-.00078	-.04648	-.00027	-.00060	.00042	-.01601	F .01389
Stddev	.00847	.03110	.00258	.00063	.00003	.00005	.01432	.00120	.00227	.00044	.00344	.00510
%RSD	130.57	199.92	1181.4	7.7174	491.66	6.0559	30.800	437.47	379.88	105.77	21.490	36.729

#1	-.01247	.03755	.00161	.00778	-.00002	-.00081	-.03635	.00057	-.00221	.00073	-.01845	.01028
#2	-.00050	-.00644	-.00204	.00868	.00003	-.00074	-.05660	-.00112	.00101	.00011	-.01358	.01750

Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Fail
High Limit												.01200
Low Limit												-.01200

Elem	Se1960	Si2881	SiO2	Sn1899	Sr4077	Th2837	Ti3349	Ti1908	U_3701	V_2924	Zn2062	Zr3391
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	-.00078	-.01019	-.02182	-.00040	-.00030	-.00110	-.00021	.00033	.01141	-.00025	.00027	-.00104
Stddev	.00003	.00490	.01049	.00044	.00058	.00104	.00009	.00098	.01613	.00037	.00089	.00072
%RSD	3.3892	48.101	48.101	111.48	194.10	95.157	43.431	296.36	141.42	146.90	335.25	69.081

#1	-.00080	-.01366	-.02924	-.00008	-.00071	-.00036	-.00028	.00102	.00000	-.00051	-.00036	-.00155
#2	-.00076	-.00673	-.01440	-.00071	.00011	-.00184	-.00015	-.00036	.02282	.00001	.00090	-.00053

Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit												
Low Limit												

Int. Std.	Y_2243	Y_3600	Y_3774
Units	Cts/S	Cts/S	Cts/S
Avg	2593.5	39180.	2029.9
Stddev	13.6	357.	12.4
%RSD	.52618	.91090	.60932

#1	2583.9	39432.	2021.1
#2	2603.2	38927.	2038.6

Sample Name: ICSA-38594254 Acquired: 5/18/2016 11:08:27 Type: QC
 Method: 6500_025(v6) Mode: CONC Corr. Factor: 1.000000
 User: CRHOADES Prep Date: Custom ID2: Custom ID3:
 Comment:

Elem	Ag3280	Al3092	As1890	B_2089	Ba4554	Be3130	Bi2230	Ca3179	Cd2288	Co2286	Cr2055
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	W -.00200	533.68	W -.00983	-.00393	-.00083	.00037	W .02459	486.23	W .00155	-.00121	W .00283
Stddev	.00060	17.21	.00027	.00091	.00018	.00007	.00197	15.52	.00000	.00006	.00000
%RSD	30.090	3.2239	2.7856	23.074	22.165	18.955	8.0280	3.1915	.22101	5.2983	.06305
#1	-.00243	545.85	-.00964	-.00458	-.00070	.00042	.02599	497.20	.00155	-.00117	.00284
#2	-.00157	521.51	-.01003	-.00329	-.00097	.00032	.02319	475.25	.00155	-.00126	.00283
Check ?	Chk Warn	Chk Pass	Chk Warn	Chk Pass	Chk Pass	Chk Pass	Chk Warn	Chk Pass	Chk Warn	Chk Pass	Chk Warn
High Limit	.00186		.00882				.01200		.00080		.00186
Low Limit	-.00186		-.00882				-.01200		-.00080		-.00186
Elem	Cu3247	Fe2714	K_7664	Li6707	Mg2790	Mn2576	Mo2020	Na5895	Ni2316	P_1782	Pb2203
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	W .00308	198.02	-.15907	W .00929	513.05	W .00200	.00050	.04378	W .00551	.00323	-.00100
Stddev	.00021	6.93	.05480	.00407	5.11	.00002	.00050	.00169	.00098	.00119	.00031
%RSD	6.8002	3.5001	34.451	43.814	.99668	.94708	99.743	3.8709	17.866	36.858	31.178
#1	.00293	202.92	-.12032	.01217	516.66	.00198	.00085	.04498	.00482	.00408	-.00078
#2	.00323	193.12	-.19782	.00641	509.43	.00201	.00015	.04258	.00621	.00239	-.00123
Check ?	Chk Warn	Chk Pass	Chk Pass	Chk Warn	Chk Pass	Chk Warn	Chk Pass	Chk Pass	Chk Warn	Chk Pass	Chk Pass
High Limit	.00272			.00522		.00050			.00258		
Low Limit	-.00272			-.00522		-.00050			-.00258		
Elem	S_1820	Sb2068	Se1960	Si2881	SiO2	Sn1899	Sr4077	Th2837	Ti3349	Tl1908	U_3701
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	-.01475	-.00255	.00554	-.02173	-.04651	-.00110	W .00429	.00457	-.00014	-.00204	-.03966
Stddev	.00164	.00534	.01755	.02262	.04841	.00301	.00012	.00602	.00033	.00296	.00361
%RSD	11.129	209.34	317.10	104.10	104.10	273.00	2.8772	131.80	237.16	145.39	9.0932
#1	-.01591	-.00633	.01795	-.00574	-.01227	-.00324	.00420	.00031	.00009	.00006	-.03711
#2	-.01359	.00123	-.00688	-.03773	-.08074	.00103	.00437	.00882	-.00037	-.00414	-.04221
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	None	Chk Pass	Chk Warn	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit							.00050				
Low Limit							-.00050				
Elem	V_2924	Zn2062	Zr3391								
Units	ppm	ppm	ppm								
Avg	.00181	-.00017	-.00234								
Stddev	.00011	.00017	.00277								
%RSD	6.2037	96.765	118.25								
#1	.00173	-.00005	-.00430								
#2	.00189	-.00029	-.00038								
Check ?	Chk Pass	Chk Pass	Chk Pass								
High Limit											
Low Limit											
Int. Std.	Y_2243	Y_3600	Y_3774								
Units	Cts/S	Cts/S	Cts/S								
Avg	2490.4	35710.	2062.3								
Stddev	46.1	519.	55.1								
%RSD	1.8505	1.4528	2.6737								
#1	2457.8	35343.	2023.3								
#2	2523.0	36077.	2101.3								

Sample Name: ICSAB-3868570 Acquired: 5/18/2016 11:11:30 Type: QC
Method: 6500_025(v6) Mode: CONC Corr. Factor: 1.000000
User: CRHOADES Prep Date: Custom ID2: Custom ID3:
Comment:

Elem	Ag3280	Al3092	As1890	B_2089	Ba4554	Be3130	Bi2230	Ca3179	Cd2288	Co2286	Cr2055	Cu3247	Fe2714
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	1.1147	505.43	2.0648	1.9795	.48996	.48153	1.0270	460.37	1.0567	.47314	.49180	.54448	187.62
Stddev	.0039	1.85	.0153	.0061	.00130	.00279	.0092	1.91	.0005	.00099	.00235	.00432	1.09
%RSD	.35304	.36558	.74128	.31009	.26505	.57974	.89608	.41564	.04407	.20920	.47717	.79263	.58067

#1	1.1175	506.74	2.0756	1.9752	.49088	.48351	1.0335	461.73	1.0564	.47384	.49346	.54754	188.39
#2	1.1119	504.12	2.0540	1.9838	.48904	.47956	1.0205	459.02	1.0570	.47244	.49014	.54143	186.85

Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Value													
Range													

Elem	K_7664	Li6707	Mg2790	Mn2576	Mo2020	Na8183	Ni2316	P_1782	Pb2203	S_1820	Sb2068	Se1960	Si2881
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	50.789	1.0320	509.47	.50243	.98067	52.839	.94595	2.0457	.99089	1.0770	1.0779	5.1574	10.114
Stddev	.270	.0101	7.19	.00234	.00257	1.364	.01116	.0043	.00551	.0064	.0051	.0717	.042
%RSD	.53087	.97485	1.4119	.46505	.26243	2.5809	1.1803	.20811	.55639	.59764	.47501	1.3903	.41123

#1	50.980	1.0391	504.38	.50078	.98249	53.804	.95385	2.0487	.99479	1.0815	1.0816	5.2081	10.144
#2	50.599	1.0249	514.55	.50408	.97885	51.875	.93806	2.0427	.98699	1.0724	1.0743	5.1067	10.085

Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Value													
Range													

Elem	SiO2	Sn1899	Sr4077	Th2837	Ti3349	Ti1908	U_3701	V_2924	Zn2062	Zr3391
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	21.644	9.4060	.98394	2.0777	1.0204	9.1062	-.06059	.50482	.97167	1.0441
Stddev	.089	.2597	.00586	.0111	.0031	.3906	.01212	.00031	.00620	.0150
%RSD	.41123	2.7608	.59596	.53217	.30450	4.2892	20.003	.06178	.63785	1.4394

#1	21.707	9.5896	.98808	2.0699	1.0182	9.3824	-.06916	.50504	.96729	1.0547
#2	21.581	9.2224	.97979	2.0855	1.0226	8.8301	-.05202	.50460	.97605	1.0334

Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	None	Chk Pass	Chk Pass	Chk Pass
Value										
Range										

Int. Std.	Y_2243	Y_3600	Y_3774
Units	Cts/S	Cts/S	Cts/S
Avg	2415.7	35602.	2145.8
Stddev	20.0	879.	10.3
%RSD	.82791	2.4694	.47863

#1	2401.5	36224.	2138.5
#2	2429.8	34980.	2153.0

Sample Name: LRA-3827717 Acquired: 5/18/2016 11:14:18 Type: QC

Method: 6500_025(v6) Mode: CONC Corr. Factor: 1.000000

User: CRHOADES Prep Date: Custom ID2: Custom ID3:

Comment:

Elem	Ag3280	Al1670	As1890	B_2089	Ba4554	Be3130	Bi2230	Ca3179	Cd2288	Co2286	Cr2055	Cu3247	Fe2714
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.00259	.02791	10.096	9.6996	12.229	.00014	.02973	.07099	2.0358	4.9508	9.9043	10.440	517.38
Stddev	.00022	.00608	.038	.0431	.058	.00022	.00359	.00729	.0083	.0108	.0250	.020	4.02
%RSD	8.6357	21.773	.37724	.44408	.47093	155.05	12.069	10.265	.40736	.21805	.25258	.18910	.77704

#1	.00243	.03221	10.123	9.7301	12.270	-.00001	.02719	.07614	2.0416	4.9584	9.9220	10.426	514.53
#2	.00274	.02361	10.069	9.6692	12.189	.00030	.03226	.06584	2.0299	4.9432	9.8866	10.454	520.22

Check ?	None	None	Chk Pass	Chk Pass	Chk Pass	None	None	None	Chk Pass	Chk Pass	None	Chk Pass	Chk Pass
Value													
Range													

Elem	K_7664	Li6707	Mg2790	Mn2576	Mo2020	Na5895	Ni2316	P_1782	Pb2203	S_1820	Sb2068	Se1960	Si2881
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	-.18449	-.00220	.03581	9.6183	5.1566	.00746	9.8510	-.01223	10.128	.00745	-.01302	5.1008	47.652
Stddev	.05475	.00221	.00188	.0858	.0168	.01457	.0277	.00383	.037	.00217	.00472	.0350	.217
%RSD	29.675	100.73	5.2540	.89157	.32535	195.21	.28065	31.289	.36111	29.177	36.218	.68530	.45473

#1	-.14578	-.00376	.03448	9.5577	5.1685	-.00284	9.8705	-.00953	10.154	.00591	-.01635	5.1255	47.499
#2	-.22320	-.00063	.03714	9.6790	5.1447	.01776	9.8314	-.01494	10.102	.00898	-.00969	5.0761	47.805

Check ?	None	None	None	Chk Pass	Chk Pass	None	Chk Pass	None	Chk Pass	None	None	Chk Pass	Chk Pass
Value													
Range													

Elem	SiO2	Sn1899	Sr4077	Th2837	Ti3349	Ti1908	U_3701	V_2924	Zn2062	Zr3391
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	101.98	-.00074	10.312	.02295	10.071	5.1469	.06190	9.9948	9.4163	-.01104
Stddev	.46	.00128	.049	.00543	.030	.1061	.02846	.0423	.0520	.00718
%RSD	.45473	173.13	.47620	23.660	.29840	2.0624	45.974	.42345	.55205	65.031

#1	101.65	-.00165	10.346	.02678	10.050	5.2219	.04178	9.9649	9.3796	-.00597
#2	102.30	.00017	10.277	.01911	10.093	5.0718	.08202	10.025	9.4531	-.01612

Check ?	None	None	Chk Pass	None	Chk Pass	None	None	Chk Pass	Chk Pass	None
Value										
Range										

Int. Std.	Y_2243	Y_3600	Y_3774
Units	Cts/S	Cts/S	Cts/S
Avg	2648.5	40582.	2143.4
Stddev	1.5	464.	23.1
%RSD	.05824	1.1432	1.0779

#1	2649.6	40910.	2127.1
#2	2647.4	40254.	2159.7

Sample Name: CCVH-3894253 Acquired: 5/18/2016 11:17:12 Type: QC
Method: 6500_025(v6) Mode: CONC Corr. Factor: 1.000000
User: CRHOADES Prep Date: Custom ID2: Custom ID3:
Comment:

Elem	Ag3280	Al3092	As1890	B_2089	Ba4554	Be3130	Bi2230	Ca3179	Cd2288	Co2286	Cr2055	Cu3247	Fe2714
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	-0.00091	49.964	.00312	.03657	-0.00028	.00062	1.0279	-0.01045	-0.00047	-0.00073	.00074	.00427	49.720
Stddev	.00033	.764	.00830	.00420	.00014	.00006	.0083	.00322	.00030	.00019	.00002	.00087	.113
%RSD	36.822	1.5296	266.25	11.483	51.164	9.3823	.80861	30.832	63.703	26.229	3.0765	20.454	.22729

#1	-0.0114	50.505	.00899	.03954	-0.00038	.00058	1.0337	-.01273	-.00068	-.00087	.00073	.00365	49.800
#2	-0.0067	49.424	-.00275	.03360	-0.00018	.00067	1.0220	-.00817	-.00026	-.00059	.00076	.00488	49.640

Check ?	None	Chk Pass	None	None	None	None	Chk Pass	None	None	None	None	None	Chk Pass
Value													
Range													

Elem	K_7664	Li6707	Mg2790	Mn2576	Mo2020	Na8183	Ni2316	P_1782	Pb2203	S_1820	Sb2068	Se1960	Si2881
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	-0.03732	.00096	.01653	.00065	.00728	257.37	.00172	.00564	-0.00189	5.1240	-0.00835	.01191	.04646
Stddev	.00387	.00029	.00163	.00020	.00222	.13	.00037	.00175	.00006	.0019	.00341	.01087	.00702
%RSD	10.358	30.842	9.8632	31.283	30.528	.05054	21.587	31.014	3.1956	.03717	40.783	91.212	15.104

#1	-.04006	.00116	.01538	.00079	.00571	257.47	.00198	.00440	-.00184	5.1226	-.01076	.00423	.05142
#2	-.03459	.00075	.01769	.00050	.00886	257.28	.00146	.00688	-.00193	5.1253	-.00594	.01960	.04150

Check ?	None	None	None	None	None	Chk Pass	None	None	None	Chk Pass	None	None	None
Value													
Range													

Elem	SiO2	Sn1899	Sr4077	Th2837	Ti3349	Ti1908	U_3701	V_2924	Zn2062	Zr3391
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.09943	.00006	.00078	4.9924	.00132	.02064	10.391	.00921	.00029	.06674
Stddev	.01502	.00000	.00018	.0136	.00075	.00140	.303	.00005	.00085	.00204
%RSD	15.104	1.8461	22.549	.27186	56.915	6.7629	2.9180	.53986	288.97	3.0627

#1	.11004	.00006	.00090	4.9828	.00079	.01966	10.176	.00917	.00089	.06819
#2	.08881	.00006	.00065	5.0020	.00186	.02163	10.605	.00924	-.00031	.06530

Check ?	None	None	None	Chk Pass	None	None	Chk Pass	None	None	None
Value										
Range										

Int. Std.	Y_2243	Y_3600	Y_3774
Units	Cts/S	Cts/S	Cts/S
Avg	2622.8	39570.	2184.3
Stddev	4.8	192.	42.2
%RSD	.18468	.48539	1.9319

#1	2626.3	39435.	2154.5
#2	2619.4	39706.	2214.1

Sample Name: CCV-3894251 Acquired: 5/18/2016 11:19:48 Type: QC
Method: 6500_025(v6) Mode: CONC Corr. Factor: 1.000000
User: CRHOADES Prep Date: Custom ID2: Custom ID3:
Comment:

Elem	Ag3280	Al1670	As1890	B_2089	Ba4554	Be3130	Bi2230	Ca3179	Cd2288	Co2286	Cr2055	Cu3247	Fe2599
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.50519	.51514	1.0079	.52130	.49309	.49668	.00440	4.9212	.50439	.51155	.50579	.51275	2.5296
Stddev	.00337	.00124	.0014	.00381	.00590	.00475	.00409	.0433	.00102	.00887	.00706	.00471	.0199
%RSD	.66749	.24071	.13662	.73069	1.1955	.95702	92.973	.88017	.20267	1.7337	1.3963	.91791	.78696

#1	.50280	.51601	1.0089	.52399	.49726	.50004	.00151	4.9518	.50366	.51782	.51078	.50942	2.5436
#2	.50757	.51426	1.0070	.51860	.48892	.49331	.00730	4.8906	.50511	.50528	.50080	.51608	2.5155

Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	None	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Value													
Range													

Elem	K_7664	Li6707	Mg2790	Mn2576	Mo2020	Na5895	Ni2316	P_1782	Pb2203	S_1820	Sb2068	Se1960	Si2881
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	49.484	1.0292	19.812	.49978	.50770	5.0590	.50635	1.0049	1.0188	-.01482	1.0175	1.0036	5.0354
Stddev	.773	.0010	.108	.00185	.00867	.0251	.00697	.0145	.0164	.01123	.0260	.0215	.0134
%RSD	1.5619	.09395	.54286	.37043	1.7081	.49683	1.3759	1.4387	1.6149	75.752	2.5513	2.1441	.26567

#1	50.031	1.0285	19.736	.49847	.51383	5.0768	.51128	1.0151	1.0304	-.00688	1.0358	1.0188	5.0259
#2	48.938	1.0299	19.888	.50109	.50157	5.0412	.50143	.99470	1.0072	-.02276	.99912	.98841	5.0448

Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	None	Chk Pass	Chk Pass	Chk Pass
Value													
Range													

Elem	SiO2	Sn1899	Sr4077	Th2837	Ti3349	Ti1908	U_3701	V_2924	Zn2062	Zr3391
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	10.776	1.0068	.50855	-.00273	.49862	1.0267	.01326	.50001	.49601	.50402
Stddev	.029	.0132	.00635	.00067	.00140	.0277	.00911	.00331	.00407	.00352
%RSD	.26567	1.3143	1.2493	24.446	.28062	2.6933	68.748	.66192	.82065	.69851

#1	10.755	1.0162	.51305	-.00320	.49763	1.0463	.00681	.50235	.49889	.50153
#2	10.796	.99747	.50406	-.00226	.49961	1.0072	.01970	.49767	.49314	.50650

Check ?	Chk Pass	Chk Pass	Chk Pass	None	Chk Pass	Chk Pass	None	Chk Pass	Chk Pass	Chk Pass
Value										
Range										

Int. Std.	Y_2243	Y_3600	Y_3774
Units	Cts/S	Cts/S	Cts/S
Avg	2644.8	40593.	2214.3
Stddev	31.6	340.	16.1
%RSD	1.1954	.83690	.72768

#1	2667.2	40353.	2202.9
#2	2622.5	40833.	2225.7

Sample Name: CCB Acquired: 5/18/2016 11:22:17 Type: QC
 Method: 6500_025(v6) Mode: CONC Corr. Factor: 1.000000
 User: CRHOADES Prep Date: Custom ID2: Custom ID3:
 Comment:

Elem	Ag3280	Al1670	As1890	B_2089	Ba4554	Be3130	Bi2230	Ca3179	Cd2288	Co2286	Cr2055
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	-.00084	-.00015	-.00054	.01264	-.00065	.00022	.00443	-.00293	-.00032	-.00004	.00008
Stddev	.00005	.00013	.00983	.00132	.00032	.00020	.00106	.00564	.00030	.00005	.00003
%RSD	6.0900	85.343	1816.1	10.462	48.761	93.451	23.852	192.74	94.319	107.75	41.387

#1	-.00081	-.00006	-.00749	.01357	-.00043	.00036	.00368	-.00691	-.00011	-.00001	.00006
#2	-.00088	-.00025	.00641	.01170	-.00087	.00007	.00517	.00106	-.00053	-.00008	.00011

Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit											
Low Limit											

Elem	Cu3247	Fe2599	K_7664	Li6707	Mg2790	Mn2576	Mo2020	Na5895	Ni2316	P_1782	Pb2203
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	F .01560	.00174	.04942	.00113	.00946	.00017	.00305	.00207	-.00004	.00052	-.00080
Stddev	.00029	.00938	.00805	.00460	.00098	.00001	.00067	.01290	.00006	.00121	.00068
%RSD	1.8740	539.54	16.281	405.74	10.407	5.4890	21.831	622.92	151.78	230.16	84.814

#1	.01581	.00837	.04373	-.00212	.00876	.00016	.00258	-.00705	-.00008	.00138	-.00128
#2	.01540	-.00489	.05511	.00439	.01015	.00017	.00352	.01119	.00000	-.00033	-.00032

Check ?	Chk Fail	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit	.00750										
Low Limit	-.01500										

Elem	S_1820	Sb2068	Se1960	Si2881	SiO2	Sn1899	Sr4077	Th2837	Ti3349	Ti1908	U_3701
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	-.01887	W .00495	.00733	.01775	.03798	.00014	.00006	.00038	.00007	.00218	.00916
Stddev	.00091	.00307	.00695	.00384	.00823	.00029	.00006	.00147	.00053	.00379	.00353
%RSD	4.8042	62.069	94.745	21.660	21.660	207.39	89.781	385.10	729.38	173.45	38.576

#1	-.01823	.00712	.00242	.02047	.04380	.00035	.00010	.00142	.00044	-.00049	.00666
#2	-.01951	.00278	.01224	.01503	.03216	-.00007	.00002	-.00066	-.00030	.00486	.01165

Check ?	Chk Pass	Chk Warn	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit		.00100									
Low Limit		-.00100									

Elem	V_2924	Zn2062	Zr3391
Units	ppm	ppm	ppm
Avg	.00046	-.00092	-.00222
Stddev	.00083	.00032	.00009
%RSD	182.23	34.364	3.9720

#1	-.00013	-.00115	-.00215
#2	.00104	-.00070	-.00228

Check ?	Chk Pass	Chk Pass	Chk Pass
High Limit			
Low Limit			

Int. Std.	Y_2243	Y_3600	Y_3774
Units	Cts/S	Cts/S	Cts/S
Avg	2694.5	40708.	2197.9
Stddev	5.4	245.	8.1
%RSD	.20175	.60262	.36913

#1	2690.6	40534.	2203.6
#2	2698.3	40881.	2192.1

Sample Name: CCVL-3897520 Acquired: 5/18/2016 11:24:39 Type: QC
Method: 6500_025(v6) Mode: CONC Corr. Factor: 1.000000
User: CRHOADES Prep Date: Custom ID2: Custom ID3:
Comment:

Elem	Ag3280	Al1670	As1890	B_2089	Ba4554	Be3130	Bi2230	Ca3179	Cd2288	Co2286	Cr2055	Cu3247
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.00955	.10593	F .00774	.10848	.00899	.00117	.11079	.18926	.00540	.01038	.01054	.01596
Stddev	.00031	.00180	.00194	.00119	.00063	.00005	.00055	.00878	.00013	.00008	.00012	.00043
%RSD	3.2045	1.6976	25.121	1.0940	7.0518	4.2230	.49675	4.6371	2.4513	.81037	1.1447	2.6865

#1	.00933	.10720	.00636	.10932	.00855	.00120	.11040	.19547	.00549	.01032	.01046	.01566
#2	.00976	.10466	.00911	.10764	.00944	.00113	.11118	.18305	.00530	.01044	.01063	.01626

Check ?	Chk Pass	Chk Pass	Chk Fail	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Value			.01500									
Range			-30.000%									

Elem	Fe2599	K_7664	Li6707	Mg2790	Mn2576	Mo2020	Na5895	Ni2316	P_1782	Pb2203	S_1820	Sb2068
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.11845	2.9490	.01073	.20568	.01027	.02141	.98683	.04101	2.9582	.01036	-.02362	.02571
Stddev	.00458	.0393	.00140	.00282	.00014	.00083	.00351	.00105	.0433	.00046	.00092	.00906
%RSD	3.8664	1.3326	13.084	1.3689	1.3328	3.8842	.35606	2.5694	1.4638	4.4658	3.8788	35.229

#1	.12169	2.9212	.01172	.20767	.01037	.02082	.98931	.04026	2.9275	.01003	-.02297	.01930
#2	.11521	2.9768	.00974	.20369	.01017	.02200	.98434	.04175	2.9888	.01069	-.02427	.03211

Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	None	Chk Pass
Value												
Range												

Elem	Se1960	Si2881	SiO2	Sn1899	Sr4077	Th2837	Ti3349	Ti1908	U_3701	V_2924	Zn2062	Zr3391
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	F .02159	.49151	1.0518	.10604	.01059	.01622	.00981	.01599	.05599	.01047	.01915	.01504
Stddev	.00101	.03916	.0838	.00002	.00005	.00745	.00025	.00115	.04048	.00099	.00030	.00004
%RSD	4.6680	7.9671	7.9671	.01442	.50671	45.910	2.5395	7.1626	72.289	9.4660	1.5739	.28587

#1	.02087	.51920	1.1111	.10603	.01055	.02148	.00963	.01518	.02737	.00977	.01936	.01507
#2	.02230	.46382	.99258	.10606	.01063	.01095	.00999	.01680	.08461	.01117	.01893	.01501

Check ?	Chk Fail	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Value	.01500											
Range	30.000%											

Int. Std.	Y_2243	Y_3600	Y_3774
Units	Cts/S	Cts/S	Cts/S
Avg	2735.3	41567.	2250.1
Stddev	17.1	141.	20.3
%RSD	.62683	.33825	.90416

#1	2747.4	41468.	2264.5
#2	2723.1	41666.	2235.7

Sample Name: CCVH-3894253 Acquired: 5/18/2016 11:40:08 Type: QC
Method: 6500_025(v6) Mode: CONC Corr. Factor: 1.000000
User: CRHOADES Prep Date: Custom ID2: Custom ID3:
Comment:

Elem	Ag3280	Al3092	As1890	B_2089	Ba4554	Be3130	Bi2230	Ca3179	Cd2288	Co2286	Cr2055	Cu3247	Fe2714
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.00004	50.864	-.00784	.00342	-.00084	.00039	1.0248	-.01632	-.00056	-.00079	-.00012	.00355	50.000
Stddev	.00005	.701	.00209	.00024	.00019	.00016	.0134	.00087	.00008	.00068	.00034	.00092	.269
%RSD	133.74	1.3781	26.625	6.9098	22.449	40.079	1.3037	5.3176	13.791	86.083	284.90	26.064	.53850

#1	.00000	50.368	-.00636	.00358	-.00070	.00050	1.0342	-.01571	-.00050	-.00031	.00012	.00420	49.810
#2	.00007	51.359	-.00931	.00325	-.00097	.00028	1.0153	-.01694	-.00061	-.00127	-.00036	.00289	50.190

Check ?	None	Chk Pass	None	None	None	None	Chk Pass	None	None	None	None	None	Chk Pass
Value													
Range													

Elem	K_7664	Li6707	Mg2790	Mn2576	Mo2020	Na8183	Ni2316	P_1782	Pb2203	S_1820	Sb2068	Se1960	Si2881
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	-.01237	.00147	.02205	.00019	-.00131	256.10	.00085	.00427	-.00180	5.0425	-.00379	.00739	-.02044
Stddev	.06302	.00020	.00121	.00009	.00033	3.34	.00007	.00205	.00140	.0235	.00261	.00211	.00983
%RSD	509.26	13.932	5.4872	48.636	25.285	1.3027	8.4724	48.048	78.163	.46659	68.796	28.614	48.069

#1	-.05693	.00162	.02120	.00026	-.00154	253.75	.00090	.00282	-.00279	5.0592	-.00564	.00590	-.01349
#2	.03219	.00133	.02291	.00013	-.00107	258.46	.00080	.00573	-.00080	5.0259	-.00195	.00889	-.02739

Check ?	None	None	None	None	None	Chk Pass	None	None	None	Chk Pass	None	None	None
Value													
Range													

Elem	SiO2	Sn1899	Sr4077	Th2837	Ti3349	Ti1908	U_3701	V_2924	Zn2062	Zr3391
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	-.04375	.00103	.00042	4.9384	.00059	-.00152	10.434	.00784	-.00017	.06662
Stddev	.02103	.00013	.00013	.0167	.00066	.00060	.001	.00048	.00107	.00892
%RSD	48.069	12.747	29.537	.33849	111.79	39.368	.01145	6.1020	639.79	13.393

#1	-.02888	.00112	.00051	4.9503	.00012	-.00109	10.433	.00750	.00059	.06031
#2	-.05862	.00094	.00034	4.9266	.00105	-.00194	10.435	.00818	-.00092	.07293

Check ?	None	None	None	Chk Pass	None	None	Chk Pass	None	None	None
Value										
Range										

Int. Std.	Y_2243	Y_3600	Y_3774
Units	Cts/S	Cts/S	Cts/S
Avg	2665.5	40020.	2144.9
Stddev	27.6	200.	69.0
%RSD	1.0370	.49902	3.2176

#1	2685.1	39879.	2193.7
#2	2646.0	40161.	2096.1

Sample Name: CCV-3894251 Acquired: 5/18/2016 11:42:45 Type: QC
Method: 6500_025(v6) Mode: CONC Corr. Factor: 1.000000
User: CRHOADES Prep Date: Custom ID2: Custom ID3:
Comment:

Elem	Ag3280	Al1670	As1890	B_2089	Ba4554	Be3130	Bi2230	Ca3179	Cd2288	Co2286	Cr2055	Cu3247	Fe2599
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.49999	.51436	1.0156	.51337	.48564	.49229	.00044	4.8998	.51416	.51966	.51343	.51124	2.4811
Stddev	.00336	.00009	.0036	.00037	.00553	.00548	.00447	.0435	.00977	.00179	.00196	.00035	.0010
%RSD	.67119	.01682	.35330	.07295	1.1397	1.1133	1006.7	.88815	1.9007	.34515	.38256	.06930	.04057

#1	.49762	.51430	1.0182	.51364	.48955	.49616	-.00271	4.9306	.50725	.52093	.51482	.51099	2.4804
#2	.50236	.51442	1.0131	.51311	.48172	.48841	.00360	4.8690	.52107	.51839	.51204	.51149	2.4818

Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	None	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Value													
Range													

Elem	K_7664	Li6707	Mg2790	Mn2576	Mo2020	Na5895	Ni2316	P_1782	Pb2203	S_1820	Sb2068	Se1960	Si2881
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	48.995	1.0198	19.499	.49265	.51263	5.0189	.51445	1.0173	1.0368	-.01079	1.0434	1.0272	4.9460
Stddev	.497	.0008	.068	.00310	.00415	.0248	.00160	.0059	.0006	.00973	.0068	.0099	.0177
%RSD	1.0142	.07630	.34815	.62940	.81019	.49444	.31145	.58416	.06211	90.186	.65309	.96106	.35760

#1	49.347	1.0193	19.451	.49046	.51557	5.0013	.51558	1.0215	1.0372	-.01767	1.0482	1.0342	4.9335
#2	48.644	1.0204	19.547	.49485	.50970	5.0364	.51332	1.0131	1.0363	-.00391	1.0385	1.0202	4.9585

Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	None	Chk Pass	Chk Pass	Chk Pass
Value													
Range													

Elem	SiO2	Sn1899	Sr4077	Th2837	Ti3349	Ti1908	U_3701	V_2924	Zn2062	Zr3391
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	10.584	1.0237	.50248	-.00372	.49182	1.0415	.00153	.49881	.49078	.49887
Stddev	.038	.0054	.00534	.00010	.00311	.0121	.04440	.00204	.00485	.00221
%RSD	.35760	.52510	1.0634	2.7689	.63164	1.1630	2904.5	.40969	.98733	.44265

#1	10.558	1.0275	.50626	-.00365	.48962	1.0501	.03292	.49737	.48735	.50043
#2	10.611	1.0199	.49870	-.00379	.49402	1.0329	-.02987	.50026	.49420	.49731

Check ?	Chk Pass	Chk Pass	Chk Pass	None	Chk Pass	Chk Pass	None	Chk Pass	Chk Pass	Chk Pass
Value										
Range										

Int. Std.	Y_2243	Y_3600	Y_3774
Units	Cts/S	Cts/S	Cts/S
Avg	2684.3	41486.	2267.6
Stddev	17.7	586.	1.2
%RSD	.65923	1.4125	.05116

#1	2696.8	41900.	2266.8
#2	2671.8	41071.	2268.5

Sample Name: CCB Acquired: 5/18/2016 11:45:17 Type: QC
 Method: 6500_025(v6) Mode: CONC Corr. Factor: 1.000000
 User: CRHOADES Prep Date: Custom ID2: Custom ID3:
 Comment:

Elem	Ag3280	Al1670	As1890	B_2089	Ba4554	Be3130	Bi2230	Ca3179	Cd2288	Co2286	Cr2055
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.00020	-.00047	-.00228	.00260	-.00069	.00025	.00198	-.00686	-.00001	-.00011	.00010
Stddev	.00125	.00078	.00243	.00030	.00047	.00002	.00166	.00273	.00019	.00014	.00035
%RSD	636.72	165.05	106.20	11.605	68.259	7.9528	84.082	39.842	2150.3	134.89	362.11

#1	-.00069	.00008	-.00400	.00238	-.00103	.00023	.00315	-.00880	.00013	.00000	-.00015
#2	.00108	-.00102	-.00057	.00281	-.00036	.00026	.00080	-.00493	-.00015	-.00021	.00035

Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit											
Low Limit											

Elem	Cu3247	Fe2599	K_7664	Li6707	Mg2790	Mn2576	Mo2020	Na5895	Ni2316	P_1782	Pb2203
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	-.00004	-.00368	-.02663	.00071	.00203	.00004	.00202	.01923	-.00041	-.00016	-.00019
Stddev	.00027	.00002	.04617	.00073	.00021	.00003	.00021	.00288	.00080	.00119	.00014
%RSD	627.18	.60397	173.39	103.63	10.346	57.781	10.593	14.972	194.74	743.11	74.400

#1	-.00023	-.00370	.00602	.00123	.00188	.00006	.00217	.01719	-.00098	.00068	-.00009
#2	.00015	-.00366	-.05927	.00019	.00218	.00003	.00187	.02126	.00016	-.00100	-.00030

Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit											
Low Limit											

Elem	S_1820	Sb2068	Se1960	Si2881	SiO2	Sn1899	Sr4077	Th2837	Ti3349	Ti1908	U_3701
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	-.02036	W .00770	W .00934	.00478	.01022	.00096	.00041	-.00031	-.00051	.00185	.00474
Stddev	.00262	.00327	.00054	.03496	.07482	.00079	.00006	.00223	.00053	.00154	.05736
%RSD	12.857	42.468	5.7476	732.20	732.20	82.551	14.766	715.46	102.71	83.354	1209.5

#1	-.01851	.00539	.00972	.02950	.06313	.00152	.00045	-.00189	-.00014	.00076	.04530
#2	-.02221	.01001	.00896	-.01995	-.04269	.00040	.00037	.00126	-.00088	.00293	-.03582

Check ?	Chk Pass	Chk Warn	Chk Warn	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit		.00100	.00750								
Low Limit		-.00100	-.01500								

Elem	V_2924	Zn2062	Zr3391
Units	ppm	ppm	ppm
Avg	.00017	-.00088	-.00067
Stddev	.00067	.00014	.00060
%RSD	399.66	15.825	90.637

#1	.00064	-.00098	-.00109
#2	-.00030	-.00078	-.00024

Check ?	Chk Pass	Chk Pass	Chk Pass
High Limit			
Low Limit			

Int. Std.	Y_2243	Y_3600	Y_3774
Units	Cts/S	Cts/S	Cts/S
Avg	2728.6	41999.	2286.2
Stddev	24.7	35.	82.0
%RSD	.90405	.08257	3.5854

#1	2746.0	41975.	2228.2
#2	2711.1	42024.	2344.2

Sample Name: CCVL-3897520 Acquired: 5/18/2016 11:48:10 Type: QC
Method: 6500_025(v6) Mode: CONC Corr. Factor: 1.000000
User: CRHOADES Prep Date: Custom ID2: Custom ID3:
Comment:

Elem	Ag3280	Al1670	As1890	B_2089	Ba4554	Be3130	Bi2230	Ca3179	Cd2288	Co2286	Cr2055	Cu3247
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.01014	.10478	.01236	.09938	.00916	F .00138	.10820	.19008	.00542	.01034	.00997	.01606
Stddev	.00088	.00113	.00007	.00005	.00044	.00041	.00217	.00299	.00005	.00045	.00078	.00021
%RSD	8.6712	1.0806	.53267	.05281	4.8216	29.554	2.0014	1.5733	1.0109	4.3361	7.8232	1.2765

#1	.01076	.10398	.01240	.09934	.00948	.00166	.10667	.18797	.00538	.01002	.00942	.01592
#2	.00951	.10558	.01231	.09942	.00885	.00109	.10974	.19220	.00545	.01065	.01052	.01621

Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Fail	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Value						.00100						
Range						30.000%						

Elem	Fe2599	K_7664	Li6707	Mg2790	Mn2576	Mo2020	Na5895	Ni2316	P_1782	Pb2203	S_1820	Sb2068
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.09636	2.8368	.00945	.20998	.01029	.01972	.98187	.04091	2.9110	.00964	-.02085	.02255
Stddev	.00129	.0426	.00523	.00259	.00006	.00032	.01013	.00037	.0260	.00035	.00185	.00080
%RSD	1.3380	1.5028	55.411	1.2357	.59333	1.6324	1.0316	.91387	.89228	3.6824	8.8716	3.5570

#1	.09728	2.8067	.00575	.20815	.01024	.01949	.97471	.04064	2.8926	.00939	-.02215	.02199
#2	.09545	2.8670	.01315	.21182	.01033	.01995	.98903	.04117	2.9293	.00989	-.01954	.02312

Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	None	Chk Pass
Value												
Range												

Elem	Se1960	Si2881	SiO2	Sn1899	Sr4077	Th2837	Ti3349	Ti1908	U_3701	V_2924	Zn2062	Zr3391
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	F .02212	.46490	.99489	.10390	.01038	.01176	.00958	.01391	F .09769	.01036	.01942	.01409
Stddev	.00069	.03835	.08207	.00328	.00025	.00188	.00001	.00009	.06773	.00096	.00031	.00342
%RSD	3.1328	8.2490	8.2490	3.1609	2.4447	15.983	.07998	.65769	69.335	9.2568	1.6114	24.266

#1	.02261	.49202	1.0529	.10158	.01020	.01309	.00958	.01384	.04979	.00968	.01964	.01651
#2	.02163	.43778	.93685	.10622	.01056	.01044	.00959	.01397	.14558	.01104	.01920	.01167

Check ?	Chk Fail	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Fail	Chk Pass	Chk Pass	Chk Pass
Value	.01500								.06000			
Range	30.000%								30.000%			

Int. Std.	Y_2243	Y_3600	Y_3774
Units	Cts/S	Cts/S	Cts/S
Avg	2677.8	40955.	2250.1
Stddev	34.6	424.	60.9
%RSD	1.2925	1.0353	2.7087

#1	2653.3	41255.	2293.2
#2	2702.3	40655.	2207.0

Sample Name: MB 280-325499/1-A Acquired: 5/18/2016 11:51:30 Type: Unk

Method: 6500_025(v6) Mode: CONC Corr. Factor: 1.000000

User: CRHOADES Prep Date: 5/17 Custom ID2: Custom ID3:

Comment: 325499 MI 6010C (As Cr Fe) Q4

Elem	Ag3280	Al1670	As1890	B_2089	Ba4554	Be3130	Bi2230	Ca3179	Cd2288
Line	328.068 {103}	167.079 {502}	189.042 {478}	208.959 {461}	455.403 { 74}	313.042 {108}	223.061 {451}	317.933 {106}	228.802 {447}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	-0.00030	.03889	-0.00022	.02623	-0.00048	.00031	-0.00085	.01918	-0.00031
Stddev	.00027	.00034	.00712	.00142	.00020	.00004	.00047	.01160	.00029
%RSD	90.435	.87015	3212.0	5.4250	40.974	11.768	55.561	60.487	92.794

#1	-0.00048	.03913	.00481	.02723	-0.00034	.00029	-0.00052	.01098	-0.00051
#2	-0.00011	.03866	-.00526	.02522	-0.00062	.00034	-.00119	.02739	-0.00011

Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Elem	Co2286	Cr2055	Cu3247	Fe2599	K_7664	Li6707	Mg2790	Mn2576	Mo2020
Line	228.616 {447}	205.560 {464}	324.754 {104}	259.940 {130}	766.490 { 44}	670.784 { 50}	279.079 {121}2	257.610 {131}	202.030 {467}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	-0.00011	.00043	.00053	.03607	-.04343	-0.00238	.01675	.00224	-0.00039
Stddev	.00008	.00020	.00024	.00144	.00860	.00369	.00402	.00001	.00045
%RSD	70.581	47.538	44.428	3.9985	19.798	155.06	23.988	.53223	115.92

#1	-0.00016	.00057	.00037	.03505	-.03735	-.00499	.01959	.00224	-0.00071
#2	-0.00005	.00028	.00070	.03709	-.04951	.00023	.01391	.00225	-0.00007

Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Elem	Na5895	Ni2316	P_1782	Pb2203	S_1820	Sb2068	Se1960	Si2881	SiO2
Line	589.592 { 57}	231.604 {446}	178.284 {489}	220.353 {453}	182.034 {485}	206.833 {463}	196.090 {472}	288.158 {117}	288.158 {117}2
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.03117	-0.00016	.00198	.00213	-.01669	.00543	.00470	.04855	.10390
Stddev	.01190	.00003	.00251	.00316	.00147	.00405	.00790	.02172	.04648
%RSD	38.187	21.144	126.62	148.00	8.7893	74.668	167.98	44.730	44.730

#1	.02275	-0.00014	.00021	.00436	-.01772	.00256	-0.00088	.03320	.07104
#2	.03958	-0.00019	.00375	-0.00010	-.01565	.00830	.01029	.06391	.13677

Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Elem	Sn1899	Sr4077	Th2837	Ti3349	Ti1908	U_3701	V_2924	Zn2062	Zr3391
Line	189.989 {477}	407.771 { 83}	283.730 {119}	334.904 {101}	190.856 {477}	370.152 { 91}	292.402 {115}	206.200 {163}	339.198 { 99}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.00072	.00044	.00104	-0.00071	-0.00353	-0.01942	.00033	-0.00024	.00219
Stddev	.00146	.00020	.00280	.00029	.00117	.03661	.00010	.00029	.00101
%RSD	202.21	44.771	268.42	40.213	33.016	188.54	30.061	120.83	46.286

#1	.00175	.00058	-0.00094	-0.00051	-0.00271	.00647	.00026	-0.00004	.00290
#2	-0.00031	.00030	.00302	-0.00091	-0.00436	-.04531	.00040	-0.00045	.00147

Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Int. Std.	Y_2243	Y_3600	Y_3774
Line	224.306 {450}	360.073 { 94}	377.433 { 89}
Units	Cts/S	Cts/S	Cts/S
Avg	2686.0	40857.	2253.0
Stddev	17.3	985.	60.1
%RSD	.64474	2.4106	2.6676

#1	2673.7	41554.	2295.5
#2	2698.2	40161.	2210.5

Sample Name: LCS 280-325499/2-A Acquired: 5/18/2016 11:53:52 Type: Unk
Method: 6500_025(v6) Mode: CONC Corr. Factor: 1.000000
User: CRHOADES Prep Date: Custom ID2: Custom ID3:
Comment: 325499 MI 6010C (As Cr Fe) Q4

Elem	Ag3280	Al1670	As1890	B_2089	Ba4554	Be3130	Bi2230	Ca3179	Cd2288
Line	328.068 {103}	167.079 {502}	189.042 {478}	208.959 {461}	455.403 { 74}	313.042 {108}	223.061 {451}	317.933 {106}	228.802 {447}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.05065	2.0610	1.0404	1.1389	2.0170	.05125	F 2.0770	49.890	.10127
Stddev	.00104	.0010	.0129	.0050	.0223	.00040	.0163	.474	.00048
%RSD	2.0607	.04942	1.2429	.44328	1.1047	.77928	.78628	.95025	.46971

#1	.05139	2.0617	1.0495	1.1424	2.0328	.05097	2.0886	50.225	.10160
#2	.04991	2.0603	1.0313	1.1353	2.0013	.05153	2.0655	49.554	.10093

Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Fail	Chk Pass	Chk Pass
High Limit							.10000		
Low Limit							-.10000		

Elem	Co2286	Cr2055	Cu3247	Fe2599	K_7664	Li6707	Mg2790	Mn2576	Mo2020
Line	228.616 {447}	205.560 {464}	324.754 {104}	259.940 {130}	766.490 { 44}	670.784 { 50}	279.079 {121}2	257.610 {131}	202.030 {467}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.49602	.20066	.25947	1.0617	50.773	1.0372	49.592	.49729	1.0557
Stddev	.00261	.00048	.00067	.0081	.489	.0037	.084	.00060	.0082
%RSD	.52548	.23793	.25725	.76026	.96257	.35276	.16978	.12079	.77430

#1	.49787	.20100	.25994	1.0560	51.118	1.0346	49.532	.49686	1.0615
#2	.49418	.20032	.25900	1.0675	50.427	1.0397	49.652	.49771	1.0499

Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Elem	Na8183	Ni2316	P_1782	Pb2203	S_1820	Sb2068	Se1960	Si2881	SiO2
Line	818.326 { 41}	231.604 {446}	178.284 {489}	220.353 {453}	182.034 {485}	206.833 {463}	196.090 {472}	288.158 {117}	288.158 {117}2
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	54.861	.49347	W 10.284	.51092	2.0317	.52602	2.0560	2.4367	5.2145
Stddev	.528	.00174	.068	.00048	.0087	.01051	.0163	.0408	.0873
%RSD	.96227	.35308	.66083	.09301	.42605	1.9971	.79091	1.6746	1.6746

#1	55.234	.49470	10.332	.51126	2.0378	.53345	2.0675	2.4656	5.2763
#2	54.488	.49223	10.235	.51058	2.0255	.51859	2.0445	2.4078	5.1528

Check ?	Chk Pass	Chk Pass	Chk Warn	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit			2.0000						
Low Limit			-1.0000						

Elem	Sn1899	Sr4077	Th2837	Ti3349	Ti1908	U_3701	V_2924	Zn2062	Zr3391
Line	189.989 {477}	407.771 { 83}	283.730 {119}	334.904 {101}	190.856 {477}	370.152 { 91}	292.402 {115}	206.200 {163}	339.198 { 99}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	1.9908	1.0251	1.0315	1.0179	1.9570	2.0838	.49871	.49126	.52336
Stddev	.0076	.0102	.0022	.0016	.0547	.0208	.00128	.00310	.00244
%RSD	.38202	.99751	.21108	.15360	2.7951	.99620	.25684	.63161	.46652

#1	1.9962	1.0323	1.0300	1.0168	1.9957	2.0985	.49781	.48906	.52509
#2	1.9854	1.0178	1.0331	1.0190	1.9184	2.0691	.49962	.49345	.52164

Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Int. Std.	Y_2243	Y_3600	Y_3774
Line	224.306 {450}	360.073 { 94}	377.433 { 89}
Units	Cts/S	Cts/S	Cts/S
Avg	2664.1	40172.	2148.7
Stddev	10.2	167.	18.1
%RSD	.38429	.41598	.84354

#1	2671.4	40290.	2135.9
#2	2656.9	40054.	2161.5

Sample Name: 280-82867-A-1-C Acquired: 5/18/2016 11:56:23 Type: Unk

Method: 6500_025(v6) Mode: CONC Corr. Factor: 1.000000

User: CRHOADES Prep Date: Custom ID2: Custom ID3:

Comment: 325499 MI 6010C (As Cr Fe) Q4

Elem	Ag3280	Al3092	As1890	B_2089	Ba4554	Be3130	Bi2230	Ca3179	Cd2288
Line	328.068 {103}	309.271 {109}	189.042 {478}	208.959 {461}	455.403 {74}	313.042 {108}	223.061 {451}	317.933 {106}	228.802 {447}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	-.00266	496.25	.15044	.00613	1.3033	.00939	W .08101	21.848	.00216
Stddev	.00008	4.52	.00205	.00230	.0134	.00015	.00187	.172	.00018
%RSD	3.0240	.91008	1.3629	37.519	1.0315	1.6385	2.3106	.78550	8.2014

#1	-.00261	493.05	.14899	.00776	1.2938	.00950	.08233	21.727	.00203
#2	-.00272	499.44	.15189	.00450	1.3129	.00928	.07968	21.969	.00228

Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Warn	Chk Pass	Chk Pass
High Limit							.05000		
Low Limit							-.05000		

Elem	Co2286	Cr2055	Cu3247	Fe2714	K_7664	Li6707	Mg2790	Mn2576	Mo2020
Line	228.616 {447}	205.560 {464}	324.754 {104}	271.441 {124}	766.490 {44}	670.784 {50}	279.079 {121}2	257.610 {131}	202.030 {467}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.20846	1.3927	.25524	W 701.32	10.529	.21550	9.4340	W 16.733	.05484
Stddev	.00172	.0040	.00062	6.25	.051	.00058	.0375	.060	.00053
%RSD	.82345	.28641	.24117	.89114	.48045	.26822	.39760	.35610	.95941

#1	.20725	1.3955	.25568	696.90	10.494	.21509	9.4075	16.691	.05447
#2	.20968	1.3899	.25481	705.74	10.565	.21591	9.4605	16.775	.05521

Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Warn	Chk Pass	Chk Pass	Chk Pass	Chk Warn	Chk Pass
High Limit				500.00				10.000	
Low Limit				40.000				-.01000	

Elem	Na5895	Ni2316	P_1782	Pb2203	S_1820	Sb2068	Se1960	Si2881	SiO2
Line	589.592 {57}	231.604 {446}	178.284 {489}	220.353 {453}	182.034 {485}	206.833 {463}	196.090 {472}	288.158 {117}	288.158 {117}2
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.54277	.29618	W 9.4429	.36335	.68821	.00150	.01924	7.0741	15.139
Stddev	.01623	.00291	.1338	.00343	.01052	.00156	.00922	.0161	.034
%RSD	2.9911	.98104	1.4166	.94325	1.5279	103.69	47.895	.22744	.22744

#1	.53129	.29412	9.3484	.36092	.68078	.00040	.02576	7.0855	15.163
#2	.55425	.29823	9.5375	.36577	.69565	.00260	.01273	7.0627	15.114

Check ?	Chk Pass	Chk Pass	Chk Warn	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit			2.0000						
Low Limit			-1.0000						

Elem	Sn1899	Sr4077	Th2837	Ti3349	Ti1908	U_3701	V_2924	Zn2062	Zr3391
Line	189.989 {477}	407.771 {83}	283.730 {119}	334.904 {101}	190.856 {477}	370.152 {91}	292.402 {115}	206.200 {163}	339.198 {99}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.02185	.19670	.24124	1.5743	.02259	W -.09338	1.5800	1.5533	.39351
Stddev	.00189	.00069	.00588	.0050	.00430	.00028	.0027	.0024	.00148
%RSD	8.6359	.34996	2.4360	.31863	19.025	.30129	.16917	.15407	.37687

#1	.02318	.19621	.24539	1.5708	.01956	-.09318	1.5781	1.5550	.39246
#2	.02051	.19718	.23708	1.5779	.02563	-.09358	1.5819	1.5516	.39456

Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Warn	Chk Pass	Chk Pass	Chk Pass
High Limit						45.000			
Low Limit						-.05000			

Int. Std.	Y_2243	Y_3600	Y_3774						
Line	224.306 {450}	360.073 {94}	377.433 {89}						
Units	Cts/S	Cts/S	Cts/S						
Avg	3097.6	45068.	2691.7						
Stddev	9.9	122.	15.7						
%RSD	.31877	.27059	.58407						

#1	3090.6	45154.	2702.8						
#2	3104.6	44981.	2680.6						

Sample Name: 280-82867-A-2-C Acquired: 5/18/2016 11:59:18 Type: Unk

Method: 6500_025(v6) Mode: CONC Corr. Factor: 1.000000

User: CRHOADES Prep Date: Custom ID2: Custom ID3:

Comment: 325499 MI 6010C (As Cr Fe) Q4

Elem	Ag3280	Al3092	As1890	B_2089	Ba4554	Be3130	Bi2230	Ca3179	Cd2288
Line	328.068 {103}	309.271 {109}	189.042 {478}	208.959 {461}	455.403 {74}	313.042 {108}	223.061 {451}	317.933 {106}	228.802 {447}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	-.00205	489.89	.14887	.00179	2.4524	.00936	W .08940	23.111	.00347
Stddev	.00006	.71	.00090	.00036	.0053	.00013	.00661	.124	.00028
%RSD	3.0177	.14406	.60585	20.020	.21503	1.3580	7.3913	.53605	7.9385

#1	-.00200	489.39	.14823	.00153	2.4487	.00945	.09407	23.023	.00328
#2	-.00209	490.39	.14951	.00204	2.4562	.00927	.08473	23.198	.00367

Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Warn	Chk Pass	Chk Pass
High Limit							.05000		
Low Limit							-.05000		

Elem	Co2286	Cr2055	Cu3247	Fe2714	K_7664	Li6707	Mg2790	Mn2576	Mo2020
Line	228.616 {447}	205.560 {464}	324.754 {104}	271.441 {124}	766.490 {44}	670.784 {50}	279.079 {121}2	257.610 {131}	202.030 {467}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.21437	1.4331	.24863	W 758.01	10.061	.20887	9.1655	F 22.872	.03837
Stddev	.00060	.0025	.00088	2.56	.050	.00009	.0460	.219	.00001
%RSD	.28114	.17604	.35473	.33717	.49868	.04487	.50165	.95957	.02379

#1	.21395	1.4349	.24926	756.20	10.026	.20881	9.1980	23.027	.03837
#2	.21480	1.4313	.24801	759.82	10.097	.20894	9.1330	22.717	.03838

Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Warn	Chk Pass	Chk Pass	Chk Pass	Chk Fail	Chk Pass
High Limit				500.00				20.000	
Low Limit				40.000				-.02000	

Elem	Na5895	Ni2316	P_1782	Pb2203	S_1820	Sb2068	Se1960	Si2881	SiO2
Line	589.592 {57}	231.604 {446}	178.284 {489}	220.353 {453}	182.034 {485}	206.833 {463}	196.090 {472}	288.158 {117}	288.158 {117}2
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.53732	.31208	W 9.4898	.36575	.62396	-.00529	.01735	8.6235	18.454
Stddev	.01927	.00179	.0183	.00159	.01228	.00128	.00010	.0779	.167
%RSD	3.5869	.57279	.19298	.43580	1.9687	24.219	.59270	.90341	.90341

#1	.55095	.31082	9.4768	.36688	.61527	-.00620	.01742	8.6786	18.572
#2	.52369	.31334	9.5027	.36462	.63264	-.00439	.01728	8.5684	18.336

Check ?	Chk Pass	Chk Pass	Chk Warn	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit			2.0000						
Low Limit			-1.0000						

Elem	Sn1899	Sr4077	Th2837	Ti3349	Ti1908	U_3701	V_2924	Zn2062	Zr3391
Line	189.989 {477}	407.771 {83}	283.730 {119}	334.904 {101}	190.856 {477}	370.152 {91}	292.402 {115}	206.200 {163}	339.198 {99}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.02064	.23649	.24442	1.3986	.01185	F -.11990	1.5805	1.4850	.39159
Stddev	.00062	.00077	.00451	.0133	.00001	.10655	.0006	.0043	.00486
%RSD	2.9879	.32534	1.8454	.95294	.07483	88.863	.03876	.29181	1.2403

#1	.02021	.23594	.24761	1.4080	.01185	-.19524	1.5810	1.4881	.38816
#2	.02108	.23703	.24123	1.3892	.01184	-.04456	1.5801	1.4820	.39503

Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Fail	Chk Pass	Chk Pass	Chk Pass
High Limit						50.000			
Low Limit						-.10000			

Int. Std.	Y_2243	Y_3600	Y_3774
Line	224.306 {450}	360.073 {94}	377.433 {89}
Units	Cts/S	Cts/S	Cts/S
Avg	3075.4	44596.	2630.8
Stddev	.6	117.	4.6
%RSD	.01904	.26134	.17653

#1	3075.0	44514.	2634.0
#2	3075.8	44679.	2627.5

Sample Name: 280-82867-A-3-C @2 Acquired: 5/18/2016 12:02:14 Type: Unk
Method: 6500_025(v6) Mode: CONC Corr. Factor: 1.000000
User: CRHOADES Prep Date: Custom ID2: Custom ID3:
Comment: 325499 MI 6010C (As Cr Fe) Q4 2x

Elem	Ag3280	Al3092	As1890	B_2089	Ba4554	Be3130	Bi2230	Ca3179	Cd2288
Line	328.068 {103}	309.271 {109}	189.042 {478}	208.959 {461}	455.403 { 74}	313.042 {108}	223.061 {451}	317.933 {106}	228.802 {447}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	-.00006	110.13	.04588	.00204	.89959	.00530	.01789	27.910	.00082
Stddev	.00003	1.47	.00347	.00030	.01296	.00013	.00157	.395	.00014
%RSD	48.754	1.3384	7.5619	14.887	1.4410	2.4145	8.7835	1.4151	16.827

#1	-.00009	109.09	.04833	.00225	.89042	.00520	.01900	27.630	.00072
#2	-.00004	111.18	.04342	.00182	.90876	.00539	.01678	28.189	.00092

Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Elem	Co2286	Cr2055	Cu3247	Fe2714	K_7664	Li6707	Mg2790	Mn2576	Mo2020
Line	228.616 {447}	205.560 {464}	324.754 {104}	271.441 {124}	766.490 { 44}	670.784 { 50}	279.079 {121}2	257.610 {131}	202.030 {467}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.06141	.32879	.08544	123.29	4.4694	.03715	3.5905	W 10.661	.00293
Stddev	.00245	.01532	.00147	1.51	.0046	.00156	.0491	.138	.00079
%RSD	3.9835	4.6592	1.7221	1.2288	.10399	4.1997	1.3687	1.2982	26.851

#1	.05968	.31796	.08440	122.21	4.4661	.03605	3.5557	10.564	.00237
#2	.06314	.33963	.08648	124.36	4.4727	.03826	3.6252	10.759	.00348

Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Warn	Chk Pass
High Limit								10.000	
Low Limit								-.01000	

Elem	Na5895	Ni2316	P_1782	Pb2203	S_1820	Sb2068	Se1960	Si2881	SiO2
Line	589.592 { 57}	231.604 {446}	178.284 {489}	220.353 {453}	182.034 {485}	206.833 {463}	196.090 {472}	288.158 {117}	288.158 {117}2
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.10134	.11062	W 3.1802	.12705	1.0040	-.00330	.00453	3.2505	6.9561
Stddev	.00561	.00519	.1414	.00373	.0440	.00226	.00063	.0277	.0594
%RSD	5.5315	4.6932	4.4469	2.9322	4.3781	68.679	13.849	.85344	.85344

#1	.09737	.10695	3.0802	.12442	.97296	-.00170	.00409	3.2701	6.9980
#2	.10530	.11429	3.2803	.12968	1.0351	-.00490	.00498	3.2309	6.9141

Check ?	Chk Pass	Chk Pass	Chk Warn	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit			2.0000						
Low Limit			-1.0000						

Elem	Sn1899	Sr4077	Th2837	Ti3349	Ti1908	U_3701	V_2924	Zn2062	Zr3391
Line	189.989 {477}	407.771 { 83}	283.730 {119}	334.904 {101}	190.856 {477}	370.152 { 91}	292.402 {115}	206.200 {163}	339.198 { 99}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.00300	.08738	.04337	.49946	.00483	W -.06925	.27774	.35931	.05990
Stddev	.00036	.00126	.00178	.01059	.00031	.00543	.00447	.00609	.00441
%RSD	11.967	1.4389	4.1078	2.1203	6.4774	7.8396	1.6087	1.6937	7.3562

#1	.00325	.08649	.04463	.49197	.00505	-.06541	.27458	.35500	.05678
#2	.00274	.08827	.04211	.50695	.00461	-.07308	.28090	.36361	.06302

Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Warn	Chk Pass	Chk Pass	Chk Pass
High Limit						45.000			
Low Limit						-.05000			

Int. Std.	Y_2243	Y_3600	Y_3774
Line	224.306 {450}	360.073 { 94}	377.433 { 89}
Units	Cts/S	Cts/S	Cts/S
Avg	4259.4	60904.	3434.2
Stddev	66.2	566.	16.9
%RSD	1.5545	.92903	.49274

#1	4212.6	60504.	3422.3
#2	4306.2	61304.	3446.2

Elem	Ag3280	Al3092	As1890	B_2089	Ba4554	Be3130	Bi2230	Ca3179	Cd2288
Line	328.068 {103}	309.271 {109}	189.042 {478}	208.959 {461}	455.403 {74}	313.042 {108}	223.061 {451}	317.933 {106}	228.802 {447}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	-.00113	210.52	.06320	.00658	.89094	.00603	.02869	117.24	.00337
Stddev	.00024	.78	.00708	.00176	.00238	.00028	.00266	.57	.00023
%RSD	21.437	.37133	11.198	26.831	.26755	4.7027	9.2605	.48662	6.8961

#1	-.00096	209.96	.05820	.00782	.88926	.00583	.02681	116.83	.00353
#2	-.00130	211.07	.06821	.00533	.89263	.00623	.03057	117.64	.00321

Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Elem	Co2286	Cr2055	Cu3247	Fe2714	K_7664	Li6707	Mg2790	Mn2576	Mo2020
Line	228.616 {447}	205.560 {464}	324.754 {104}	271.441 {124}	766.490 {44}	670.784 {50}	279.079 {121}2	257.610 {131}	202.030 {467}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.08860	.32848	.22795	230.93	7.5035	.08636	11.549	W 12.619	.02110
Stddev	.00167	.00656	.00149	1.55	.0623	.00257	.004	.031	.00067
%RSD	1.8845	1.9970	.65379	.67319	.82983	2.9754	.03200	.24399	3.1695

#1	.08742	.32384	.22900	229.83	7.4595	.08454	11.546	12.641	.02062
#2	.08978	.33312	.22689	232.03	7.5476	.08818	11.552	12.598	.02157

Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Warn	Chk Pass
High Limit								10.000	
Low Limit								-.01000	

Elem	Na5895	Ni2316	P_1782	Pb2203	S_1820	Sb2068	Se1960	Si2881	SiO2
Line	589.592 {57}	231.604 {446}	178.284 {489}	220.353 {453}	182.034 {485}	206.833 {463}	196.090 {472}	288.158 {117}	288.158 {117}2
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.36038	.17386	W 4.5852	.23655	2.2196	.00228	.00352	3.4041	7.2847
Stddev	.01061	.00440	.0880	.00563	.0570	.00202	.00510	.0316	.0677
%RSD	2.9451	2.5335	1.9184	2.3780	2.5663	88.727	144.81	.92983	.92983

#1	.35288	.17074	4.5230	.23257	2.1794	.00085	-.00008	3.4264	7.3326
#2	.36789	.17697	4.6474	.24052	2.2599	.00371	.00713	3.3817	7.2368

Check ?	Chk Pass	Chk Pass	Chk Warn	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit			2.0000						
Low Limit			-1.0000						

Elem	Sn1899	Sr4077	Th2837	Ti3349	Ti1908	U_3701	V_2924	Zn2062	Zr3391
Line	189.989 {477}	407.771 {83}	283.730 {119}	334.904 {101}	190.856 {477}	370.152 {91}	292.402 {115}	206.200 {163}	339.198 {99}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.01060	.27133	.07069	.75249	.00521	W -.06758	.50426	.88425	.11740
Stddev	.00145	.00087	.00309	.00450	.00120	.00088	.00105	.00114	.00029
%RSD	13.668	.32114	4.3644	.59832	23.108	1.2965	.20738	.12896	.24528

#1	.01162	.27071	.07288	.74930	.00606	-.06820	.50500	.88505	.11720
#2	.00958	.27195	.06851	.75567	.00435	-.06696	.50352	.88344	.11761

Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Warn	Chk Pass	Chk Pass	Chk Pass
High Limit						45.000			
Low Limit						-.05000			

Int. Std.	Y_2243	Y_3600	Y_3774						
Line	224.306 {450}	360.073 {94}	377.433 {89}						
Units	Cts/S	Cts/S	Cts/S						
Avg	3217.1	47620.	2783.1						
Stddev	8.9	199.	20.2						
%RSD	.27662	.41743	.72705						

#1	3210.8	47761.	2797.4						
#2	3223.4	47479.	2768.8						

Sample Name: 82867-A-4-C SD@10 Acquired: 5/18/2016 12:07:28 Type: Unk
Method: 6500_025(v6) Mode: CONC Corr. Factor: 1.000000
User: CRHOADES Prep Date: Custom ID2: Custom ID3:
Comment: 325499 MI 6010C (As Cr Fe) Q4 2x

Elem	Ag3280	Al3092	As1890	B_2089	Ba4554	Be3130	Bi2230	Ca3179	Cd2288
Line	328.068 {103}	309.271 {109}	189.042 {478}	208.959 {461}	455.403 { 74}	313.042 {108}	223.061 {451}	317.933 {106}	228.802 {447}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	-.00111	50.574	.01851	.00159	.21092	.00169	.01002	28.041	.00056
Stddev	.00059	.228	.00074	.00010	.00027	.00016	.00403	.202	.00024
%RSD	53.051	.45169	4.0164	6.3002	.12878	9.6514	40.185	.71975	42.241

#1	-.00152	50.413	.01799	.00167	.21073	.00181	.00717	27.899	.00039
#2	-.00069	50.736	.01904	.00152	.21111	.00158	.01287	28.184	.00073

Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Elem	Co2286	Cr2055	Cu3247	Fe2714	K_7664	Li6707	Mg2790	Mn2576	Mo2020
Line	228.616 {447}	205.560 {464}	324.754 {104}	271.441 {124}	766.490 { 44}	670.784 { 50}	279.079 {121}2	257.610 {131}	202.030 {467}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.02160	.07743	.05266	56.142	1.6606	.02133	2.8015	3.0685	.00466
Stddev	.00036	.00009	.00028	.184	.0562	.00003	.0054	.0070	.00005
%RSD	1.6526	.12132	.53192	.32756	3.3845	.12209	.19244	.22729	1.1624

#1	.02186	.07737	.05246	56.012	1.7003	.02135	2.8054	3.0735	.00462
#2	.02135	.07750	.05286	56.272	1.6209	.02131	2.7977	3.0636	.00470

Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Elem	Na5895	Ni2316	P_1782	Pb2203	S_1820	Sb2068	Se1960	Si2881	SiO2
Line	589.592 { 57}	231.604 {446}	178.284 {489}	220.353 {453}	182.034 {485}	206.833 {463}	196.090 {472}	288.158 {117}	288.158 {117}2
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.06595	.04128	1.0664	.05895	.50262	.00362	.00885	.80075	1.7136
Stddev	.02953	.00017	.0098	.00070	.00943	.00001	.00366	.02364	.0506
%RSD	44.766	.40376	.91393	1.1830	1.8770	.28040	41.409	2.9525	2.9525

#1	.08683	.04139	1.0596	.05846	.49595	.00361	.00626	.81747	1.7494
#2	.04508	.04116	1.0733	.05944	.50929	.00363	.01144	.78403	1.6778

Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Elem	Sn1899	Sr4077	Th2837	Ti3349	Ti1908	U_3701	V_2924	Zn2062	Zr3391
Line	189.989 {477}	407.771 { 83}	283.730 {119}	334.904 {101}	190.856 {477}	370.152 { 91}	292.402 {115}	206.200 {163}	339.198 { 99}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.00250	.06544	.01588	.17838	-.00188	.00192	.11905	.21347	.02700
Stddev	.00170	.00030	.00005	.00042	.00321	.05577	.00109	.00184	.00238
%RSD	67.949	.46446	.29115	.23751	170.49	2904.0	.91953	.86062	8.8218

#1	.00370	.06565	.01584	.17808	-.00415	-.03752	.11828	.21217	.02868
#2	.00130	.06522	.01591	.17868	.00039	.04136	.11983	.21476	.02532

Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Int. Std.	Y_2243	Y_3600	Y_3774
Line	224.306 {450}	360.073 { 94}	377.433 { 89}
Units	Cts/S	Cts/S	Cts/S
Avg	2823.5	41911.	2292.9
Stddev	35.7	82.	25.2
%RSD	1.2655	.19684	1.0972

#1	2798.3	41853.	2310.7
#2	2848.8	41969.	2275.2

Sample Name: 82867-B-4-C MS @2 Acquired: 5/18/2016 12:10:04 Type: Unk
Method: 6500_025(v6) Mode: CONC Corr. Factor: 1.000000
User: CRHOADES Prep Date: Custom ID2: Custom ID3:
Comment: 325499 MI 6010C (As Cr Fe) Q4 2x

Elem	Ag3280	Al3092	As1890	B_2089	Ba4554	Be3130	Bi2230	Ca3179	Cd2288
Line	328.068 {103}	309.271 {109}	189.042 {478}	208.959 {461}	455.403 { 74}	313.042 {108}	223.061 {451}	317.933 {106}	228.802 {447}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.01723	292.60	.42538	.31320	1.4465	.02115	F .78570	99.726	.04026
Stddev	.00057	2.12	.01640	.00872	.0115	.00022	.01964	.668	.00114
%RSD	3.3114	.72568	3.8550	2.7839	.79391	1.0424	2.4994	.66953	2.8299

#1	.01764	291.09	.41379	.30703	1.4384	.02100	.77181	99.254	.03945
#2	.01683	294.10	.43698	.31936	1.4547	.02131	.79959	100.20	.04106

Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Fail	Chk Pass	Chk Pass
High Limit							.10000		
Low Limit							-.10000		

Elem	Co2286	Cr2055	Cu3247	Fe2714	K_7664	Li6707	Mg2790	Mn2576	Mo2020
Line	228.616 {447}	205.560 {464}	324.754 {104}	271.441 {124}	766.490 { 44}	670.784 { 50}	279.079 {121}2	257.610 {131}	202.030 {467}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.25895	.46499	.32170	191.70	25.916	.45720	29.752	W 10.550	.34912
Stddev	.00836	.01531	.00466	3.68	.247	.00865	.514	.005	.00944
%RSD	3.2290	3.2921	1.4493	1.9202	.95250	1.8925	1.7268	.04923	2.7028

#1	.25304	.45417	.31840	189.10	25.742	.45108	29.389	10.554	.34245
#2	.26486	.47581	.32500	194.31	26.091	.46332	30.115	10.546	.35579

Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Warn	Chk Pass
High Limit								10.000	
Low Limit								-.01000	

Elem	Na8183	Ni2316	P_1782	Pb2203	S_1820	Sb2068	Se1960	Si2881	SiO2
Line	818.326 { 41}	231.604 {446}	178.284 {489}	220.353 {453}	182.034 {485}	206.833 {463}	196.090 {472}	288.158 {117}	288.158 {117}2
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	19.494	.41548	W 7.8717	.40829	2.7828	.02378	.71194	3.5449	7.5861
Stddev	.620	.01375	.2607	.01152	.1040	.00577	.02886	.0288	.0617
%RSD	3.1781	3.3100	3.3120	2.8226	3.7356	24.267	4.0539	.81330	.81330

#1	19.932	.40575	7.6874	.40014	2.7093	.02786	.69153	3.5653	7.6298
#2	19.056	.42520	8.0561	.41644	2.8563	.01970	.73235	3.5245	7.5425

Check ?	Chk Pass	Chk Pass	Chk Warn	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit			2.0000						
Low Limit			-1.0000						

Elem	Sn1899	Sr4077	Th2837	Ti3349	Ti1908	U_3701	V_2924	Zn2062	Zr3391
Line	189.989 {477}	407.771 { 83}	283.730 {119}	334.904 {101}	190.856 {477}	370.152 { 91}	292.402 {115}	206.200 {163}	339.198 { 99}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.66850	.53723	.38857	1.3415	.63243	.59827	.66449	1.2963	.25745
Stddev	.03198	.00581	.00933	.0221	.00785	.00948	.01401	.0232	.00182
%RSD	4.7844	1.0810	2.4021	1.6434	1.2420	1.5842	2.1077	1.7908	.70645

#1	.64588	.53313	.38197	1.3259	.63798	.60497	.65459	1.2799	.25616
#2	.69112	.54134	.39517	1.3571	.62687	.59157	.67440	1.3128	.25873

Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Int. Std.	Y_2243	Y_3600	Y_3774
Line	224.306 {450}	360.073 { 94}	377.433 { 89}
Units	Cts/S	Cts/S	Cts/S
Avg	3197.5	46479.	2694.9
Stddev	26.2	480.	47.7
%RSD	.81907	1.0326	1.7702

#1	3179.0	46139.	2661.2
#2	3216.0	46818.	2728.7

Sample Name: 82867-C-4-C MSD @2 Acquired: 5/18/2016 12:12:36 Type: Unk
Method: 6500_025(v6) Mode: CONC Corr. Factor: 1.000000
User: CRHOADES Prep Date: Custom ID2: Custom ID3:
Comment: 325499 MI 6010C (As Cr Fe) Q4 2x

Elem	Ag3280	Al3092	As1890	B_2089	Ba4554	Be3130	Bi2230	Ca3179	Cd2288
Line	328.068 {103}	309.271 {109}	189.042 {478}	208.959 {461}	455.403 {74}	313.042 {108}	223.061 {451}	317.933 {106}	228.802 {447}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.01501	265.03	.40947	.31600	1.3114	.01862	F .72175	89.299	.03769
Stddev	.00084	12.22	.01751	.01250	.0563	.00077	.02021	3.901	.00162
%RSD	5.5909	4.6121	4.2771	3.9560	4.2955	4.1444	2.8007	4.3685	4.2968

#1	.01441	256.38	.39709	.30716	1.2715	.01808	.70746	86.541	.03654
#2	.01560	273.67	.42186	.32484	1.3512	.01917	.73604	92.058	.03883

Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Fail	Chk Pass	Chk Pass
High Limit							.10000		
Low Limit							-.10000		

Elem	Co2286	Cr2055	Cu3247	Fe2714	K_7664	Li6707	Mg2790	Mn2576	Mo2020
Line	228.616 {447}	205.560 {464}	324.754 {104}	271.441 {124}	766.490 {44}	670.784 {50}	279.079 {121}2	257.610 {131}	202.030 {467}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.24517	.40810	.29213	167.99	23.337	.40655	27.131	9.9355	.34489
Stddev	.00879	.01500	.00898	5.86	.786	.01190	.831	.4194	.01198
%RSD	3.5871	3.6752	3.0736	3.4890	3.3682	2.9264	3.0623	4.2213	3.4740

#1	.23895	.39750	.28578	163.85	22.782	.39814	26.544	9.6389	.33642
#2	.25138	.41871	.29848	172.14	23.893	.41496	27.719	10.232	.35336

Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Elem	Na8183	Ni2316	P_1782	Pb2203	S_1820	Sb2068	Se1960	Si2881	SiO2
Line	818.326 {41}	231.604 {446}	178.284 {489}	220.353 {453}	182.034 {485}	206.833 {463}	196.090 {472}	288.158 {117}	288.158 {117}2
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	16.714	.39478	W 7.3910	.38216	2.6095	.01680	.68507	3.0967	6.6269
Stddev	.895	.01390	.2865	.01296	.0896	.00190	.02301	.0641	.1372
%RSD	5.3523	3.5213	3.8762	3.3917	3.4332	11.300	3.3591	2.0709	2.0709

#1	16.081	.38495	7.1884	.37300	2.5461	.01546	.66880	3.0513	6.5299
#2	17.346	.40461	7.5936	.39133	2.6728	.01815	.70134	3.1420	6.7240

Check ?	Chk Pass	Chk Pass	Chk Warn	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit			2.0000						
Low Limit			-1.0000						

Elem	Sn1899	Sr4077	Th2837	Ti3349	Ti1908	U_3701	V_2924	Zn2062	Zr3391
Line	189.989 {477}	407.771 {83}	283.730 {119}	334.904 {101}	190.856 {477}	370.152 {91}	292.402 {115}	206.200 {163}	339.198 {99}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.67075	.47578	.36090	1.5103	.59309	.52832	.61544	1.1988	.24929
Stddev	.02769	.02146	.00833	.0520	.00383	.00297	.01918	.0331	.00975
%RSD	4.1286	4.5113	2.3073	3.4421	.64541	.56151	3.1166	2.7646	3.9117

#1	.65117	.46060	.35501	1.4735	.59580	.53041	.60188	1.1753	.24239
#2	.69033	.49096	.36679	1.5471	.59038	.52622	.62900	1.2222	.25618

Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Int. Std.	Y_2243	Y_3600	Y_3774
Line	224.306 {450}	360.073 {94}	377.433 {89}
Units	Cts/S	Cts/S	Cts/S
Avg	3108.8	45344.	2628.5
Stddev	24.1	88.	24.7
%RSD	.77393	.19359	.94105

#1	3091.8	45406.	2646.0
#2	3125.8	45282.	2611.0

Sample Name: 82867-A-4-C PDS @2 Acquired: 5/18/2016 12:15:09 Type: Unk

Method: 6500_025(v6) Mode: CONC Corr. Factor: 1.000000

User: CRHOADES Prep Date: Custom ID2: Custom ID3:

Comment: 325499 MI 6010C (As Cr Fe) Q4 2x

Elem	Ag3280	Al3092	As1890	B_2089	Ba4554	Be3130	Bi2230	Ca3179	Cd2288
Line	328.068 {103}	309.271 {109}	189.042 {478}	208.959 {461}	455.403 {74}	313.042 {108}	223.061 {451}	317.933 {106}	228.802 {447}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.04206	205.23	.23189	.09032	.93879	.04516	.02800	128.42	.04622
Stddev	.00024	1.84	.01155	.00042	.00867	.00058	.00261	.96	.00003
%RSD	.58051	.89480	4.9822	.46284	.92314	1.2892	9.3035	.74744	.07203

#1	.04189	203.93	.24006	.09002	.93266	.04474	.02984	127.74	.04620
#2	.04223	206.53	.22372	.09061	.94491	.04557	.02616	129.10	.04624

Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Elem	Co2286	Cr2055	Cu3247	Fe2714	K_7664	Li6707	Mg2790	Mn2576	Mo2020
Line	228.616 {447}	205.560 {464}	324.754 {104}	271.441 {124}	766.490 {44}	670.784 {50}	279.079 {121}2	257.610 {131}	202.030 {467}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.12583	.36184	.26624	227.48	23.466	.16866	27.256	W 12.434	.06322
Stddev	.00084	.00091	.00149	2.05	.139	.00269	.041	.175	.00010
%RSD	.66908	.25204	.55868	.89942	.59305	1.5922	.15180	1.4059	.15421

#1	.12523	.36120	.26519	226.03	23.367	.16676	27.227	12.311	.06315
#2	.12642	.36249	.26729	228.93	23.564	.17056	27.285	12.558	.06329

Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Warn	Chk Pass
High Limit								10.000	
Low Limit								-.01000	

Elem	Na8183	Ni2316	P_1782	Pb2203	S_1820	Sb2068	Se1960	Si2881	SiO2
Line	818.326 {41}	231.604 {446}	178.284 {489}	220.353 {453}	182.034 {485}	206.833 {463}	196.090 {472}	288.158 {117}	288.158 {117}2
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	19.544	.20865	W 6.1594	.31078	2.1947	.08755	.17665	7.3791	15.791
Stddev	.066	.00085	.0074	.00044	.0154	.00345	.00797	.0130	.028
%RSD	.33872	.40694	.11961	.14013	.69983	3.9409	4.5132	.17558	.17558

#1	19.591	.20805	6.1542	.31048	2.2056	.08511	.18229	7.3699	15.772
#2	19.497	.20925	6.1646	.31109	2.1839	.08999	.17102	7.3882	15.811

Check ?	Chk Pass	Chk Pass	Chk Warn	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit			2.0000						
Low Limit			-1.0000						

Elem	Sn1899	Sr4077	Th2837	Ti3349	Ti1908	U_3701	V_2924	Zn2062	Zr3391
Line	189.989 {477}	407.771 {83}	283.730 {119}	334.904 {101}	190.856 {477}	370.152 {91}	292.402 {115}	206.200 {163}	339.198 {99}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.09089	.30142	.23812	.78601	.15117	.35282	.54122	1.0305	.16134
Stddev	.00075	.00200	.00144	.00287	.00101	.03195	.00150	.0006	.00205
%RSD	.82033	.66369	.60385	.36455	.67026	9.0554	.27693	.05372	1.2703

#1	.09141	.30000	.23710	.78398	.15189	.33023	.54016	1.0309	.15989
#2	.09036	.30283	.23913	.78803	.15046	.37541	.54228	1.0301	.16279

Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Int. Std.	Y_2243	Y_3600	Y_3774
Line	224.306 {450}	360.073 {94}	377.433 {89}
Units	Cts/S	Cts/S	Cts/S
Avg	3204.0	45867.	2686.9
Stddev	29.6	7.	21.4
%RSD	.92260	.01456	.79556

#1	3224.9	45871.	2702.0
#2	3183.1	45862.	2671.7

Sample Name: CCVH-3894253 Acquired: 5/18/2016 12:17:44 Type: QC
Method: 6500_025(v6) Mode: CONC Corr. Factor: 1.000000
User: CRHOADES Prep Date: Custom ID2: Custom ID3:
Comment:

Elem	Ag3280	Al3092	As1890	B_2089	Ba4554	Be3130	Bi2230	Ca3179	Cd2288	Co2286	Cr2055	Cu3247	Fe2714
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	-.00068	50.488	-.00277	.00242	-.00055	.00028	1.0487	.01061	-.00068	-.00096	.00011	.00430	50.141
Stddev	.00060	.777	.00394	.00141	.00062	.00004	.0070	.00157	.00005	.00058	.00033	.00075	.022
%RSD	87.082	1.5392	142.36	58.388	113.29	14.121	.66936	14.809	8.0322	60.342	299.16	17.325	.04450

#1	-.00110	51.038	.00002	.00142	-.00011	.00025	1.0438	.00950	-.00064	-.00137	.00034	.00483	50.125
#2	-.00026	49.939	-.00555	.00342	-.00099	.00031	1.0537	.01172	-.00072	-.00055	-.00012	.00377	50.157

Check ?	None	Chk Pass	None	None	None	None	Chk Pass	None	None	None	None	None	Chk Pass
Value													
Range													

Elem	K_7664	Li6707	Mg2790	Mn2576	Mo2020	Na8183	Ni2316	P_1782	Pb2203	S_1820	Sb2068	Se1960	Si2881
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.06895	.00009	.01498	.00137	-.00125	257.62	.00115	.00550	-.00182	5.2359	-.00590	.00742	.03261
Stddev	.00203	.00184	.00530	.00013	.00046	.41	.00024	.00359	.00251	.1009	.00698	.00327	.00410
%RSD	2.9403	2051.3	35.391	9.4602	37.016	.15759	20.998	65.226	138.33	1.9271	118.24	44.031	12.581

#1	.06752	.00139	.01123	.00147	-.00158	257.90	.00132	.00803	-.00360	5.1645	-.01083	.00973	.02971
#2	.07039	-.00121	.01872	.00128	-.00093	257.33	.00098	.00296	-.00004	5.3072	-.00097	.00511	.03551

Check ?	None	None	None	None	None	Chk Pass	None	None	None	Chk Pass	None	None	None
Value													
Range													

Elem	SiO2	Sn1899	Sr4077	Th2837	Ti3349	Ti1908	U_3701	V_2924	Zn2062	Zr3391
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.06979	-.00146	.00053	4.9218	.00153	.00503	10.281	.00818	-.00014	.06397
Stddev	.00878	.00045	.00030	.0073	.00080	.00219	.224	.00058	.00033	.00029
%RSD	12.581	31.176	57.028	.14920	51.928	43.575	2.1771	7.0386	236.77	.45867

#1	.06358	-.00178	.00074	4.9270	.00097	.00657	10.123	.00777	.00009	.06418
#2	.07600	-.00114	.00032	4.9166	.00210	.00348	10.439	.00858	-.00037	.06376

Check ?	None	None	None	Chk Pass	None	None	Chk Pass	None	None	None
Value										
Range										

Int. Std.	Y_2243	Y_3600	Y_3774
Units	Cts/S	Cts/S	Cts/S
Avg	2660.3	40566.	2241.4
Stddev	4.5	94.	21.7
%RSD	.16729	.23137	.96621

#1	2663.4	40499.	2226.1
#2	2657.2	40632.	2256.7

Sample Name: CCV-3894251 Acquired: 5/18/2016 12:20:20 Type: QC
Method: 6500_025(v6) Mode: CONC Corr. Factor: 1.000000
User: CRHOADES Prep Date: Custom ID2: Custom ID3:
Comment:

Elem	Ag3280	Al1670	As1890	B_2089	Ba4554	Be3130	Bi2230	Ca3179	Cd2288	Co2286	Cr2055	Cu3247	Fe2599
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.50859	.53934	1.0261	.51212	.50069	.49380	.00158	4.9619	.50941	.51748	.51354	.52117	2.5021
Stddev	.00077	.00658	.0064	.00204	.00097	.00144	.00140	.0040	.00118	.00232	.00333	.00102	.0101
%RSD	.15185	1.2192	.62444	.39891	.19315	.29234	89.064	.08027	.23080	.44774	.64832	.19627	.40291

#1	.50805	.54399	1.0306	.51068	.50138	.49482	.00257	4.9591	.51024	.51584	.51119	.52045	2.5093
#2	.50914	.53469	1.0216	.51357	.50001	.49278	.00058	4.9647	.50857	.51911	.51590	.52189	2.4950

Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	None	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Value													
Range													

Elem	K_7664	Li6707	Mg2790	Mn2576	Mo2020	Na5895	Ni2316	P_1782	Pb2203	S_1820	Sb2068	Se1960	Si2881
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	50.199	1.0246	19.798	.49917	.51300	5.0453	.51452	1.0237	1.0418	-.00567	1.0466	1.0303	4.9256
Stddev	.086	.0057	.028	.00098	.00155	.0143	.00355	.0092	.0118	.00114	.0097	.0088	.0060
%RSD	.17232	.56002	.14010	.19698	.30213	.28399	.69027	.89719	1.1336	20.143	.92934	.84922	.12271

#1	50.138	1.0286	19.779	.49847	.51191	5.0555	.51201	1.0172	1.0335	-.00486	1.0397	1.0241	4.9213
#2	50.260	1.0205	19.818	.49986	.51410	5.0352	.51704	1.0301	1.0502	-.00648	1.0535	1.0365	4.9298

Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	None	Chk Pass	Chk Pass	Chk Pass
Value													
Range													

Elem	SiO2	Sn1899	Sr4077	Th2837	Ti3349	Ti1908	U_3701	V_2924	Zn2062	Zr3391
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	10.541	1.0226	.51167	-.00299	.49615	1.0521	-.02269	.50118	.49066	.50116
Stddev	.013	.0093	.00186	.00052	.00086	.0041	.01320	.00521	.01019	.00153
%RSD	.12271	.91342	.36364	17.314	.17379	.39240	58.204	1.0388	2.0772	.30431
#1	10.532	1.0160	.51298	-.00262	.49554	1.0491	-.03202	.49750	.48345	.50224
#2	10.550	1.0292	.51035	-.00335	.49676	1.0550	-.01335	.50486	.49786	.50008

Check ?	Chk Pass	Chk Pass	Chk Pass	None	Chk Pass	Chk Pass	None	Chk Pass	Chk Pass	Chk Pass
Value										
Range										

Int. Std.	Y_2243	Y_3600	Y_3774
Units	Cts/S	Cts/S	Cts/S
Avg	2703.1	41168.	2163.0
Stddev	21.8	28.	13.8
%RSD	.80580	.06732	.63825
#1	2687.7	41148.	2153.2
#2	2718.5	41187.	2172.8

Sample Name: CCB Acquired: 5/18/2016 12:22:50 Type: QC
 Method: 6500_025(v6) Mode: CONC Corr. Factor: 1.000000
 User: CRHOADES Prep Date: Custom ID2: Custom ID3:
 Comment:

Elem	Ag3280	Al1670	As1890	B_2089	Ba4554	Be3130	Bi2230	Ca3179	Cd2288	Co2286	Cr2055
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	-.00091	.00152	-.00241	.00139	-.00062	.00015	.00075	-.00446	.00001	-.00008	-.00015
Stddev	.00030	.00004	.00760	.00078	.00041	.00016	.00904	.00724	.00040	.00015	.00020
%RSD	32.851	2.5160	315.56	55.917	66.421	104.60	1203.1	162.25	2932.8	194.87	133.59

#1	-.00070	.00150	-.00778	.00195	-.00092	.00027	.00715	-.00958	.00029	-.00019	-.00029
#2	-.00113	.00155	.00296	.00084	-.00033	.00004	-.00564	.00066	-.00027	.00003	-.00001

Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit											
Low Limit											

Elem	Cu3247	Fe2599	K_7664	Li6707	Mg2790	Mn2576	Mo2020	Na5895	Ni2316	P_1782	Pb2203
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.00016	-.00099	-.07530	.00148	-.00157	.00013	.00210	.00319	-.00058	.00113	.00034
Stddev	.00068	.00199	.08010	.00209	.00063	.00004	.00093	.02583	.00020	.00059	.00032
%RSD	423.91	200.18	106.38	141.21	39.817	29.157	44.555	810.24	33.932	52.280	94.658

#1	.00065	.00041	-.13194	.00296	-.00113	.00016	.00144	.02146	-.00071	.00071	.00011
#2	-.00032	-.00240	-.01866	.00000	-.00202	.00011	.00276	-.01508	-.00044	.00155	.00057

Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit											
Low Limit											

Elem	S_1820	Sb2068	Se1960	Si2881	SiO2	Sn1899	Sr4077	Th2837	Ti3349	Ti1908	U_3701
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	-.01843	W .00286	.00061	-.00761	-.01628	-.00120	.00046	-.00205	-.00018	.00500	.00247
Stddev	.00346	.00110	.00439	.01034	.02214	.00101	.00016	.00250	.00028	.00076	.02212
%RSD	18.796	38.552	721.99	136.00	136.00	84.517	34.406	121.88	154.06	15.125	896.73

#1	-.02088	.00208	.00371	-.00029	-.00062	-.00192	.00035	-.00382	.00002	.00553	.01810
#2	-.01598	.00364	-.00250	-.01492	-.03193	-.00048	.00058	-.00028	-.00038	.00446	-.01317

Check ?	Chk Pass	Chk Warn	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit		.00100									
Low Limit		-.00100									

Elem	V_2924	Zn2062	Zr3391
Units	ppm	ppm	ppm
Avg	.00003	-.00043	.00453
Stddev	.00027	.00057	.00429
%RSD	871.21	133.58	94.819

#1	-.00016	-.00083	.00149
#2	.00022	-.00002	.00757

Check ?	Chk Pass	Chk Pass	Chk Pass
High Limit			
Low Limit			

Int. Std.	Y_2243	Y_3600	Y_3774
Units	Cts/S	Cts/S	Cts/S
Avg	2735.1	41533.	2219.8
Stddev	32.1	550.	59.3
%RSD	1.1736	1.3233	2.6735

#1	2712.4	41145.	2177.8
#2	2757.8	41922.	2261.8

Sample Name: CCVL-3897520 Acquired: 5/18/2016 12:25:28 Type: QC
Method: 6500_025(v6) Mode: CONC Corr. Factor: 1.000000
User: CRHOADES Prep Date: Custom ID2: Custom ID3:
Comment:

Elem	Ag3280	Al1670	As1890	B_2089	Ba4554	Be3130	Bi2230	Ca3179	Cd2288	Co2286	Cr2055	Cu3247
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.00929	.11364	.01597	.09867	.00895	.00117	.10746	.18862	.00493	.01001	.00995	.01681
Stddev	.00019	.00037	.00030	.00119	.00007	.00002	.00648	.00119	.00005	.00019	.00029	.00000
%RSD	2.0860	.32379	1.8516	1.2043	.74587	1.3594	6.0343	.63001	.97919	1.8516	2.8934	.02503

#1	.00943	.11390	.01618	.09783	.00899	.00116	.10288	.18946	.00490	.01014	.00975	.01681
#2	.00915	.11338	.01576	.09951	.00890	.00118	.11205	.18778	.00497	.00988	.01016	.01681

Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Value												
Range												

Elem	Fe2599	K_7664	Li6707	Mg2790	Mn2576	Mo2020	Na5895	Ni2316	P_1782	Pb2203	S_1820	Sb2068
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.10286	2.9292	.01029	.20179	.01044	.01953	.95705	.04061	2.8812	.00939	-.01610	.02478
Stddev	.00252	.0068	.00172	.00242	.00004	.00066	.01068	.00061	.0455	.00194	.00007	.00173
%RSD	2.4513	.23286	16.671	1.1981	.40054	3.3578	1.1160	1.5116	1.5790	20.633	.42765	6.9750

#1	.10108	2.9341	.01150	.20008	.01042	.01907	.94950	.04017	2.8490	.01076	-.01605	.02356
#2	.10465	2.9244	.00908	.20350	.01047	.02000	.96460	.04104	2.9134	.00802	-.01615	.02600

Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	None	Chk Pass
Value												
Range												

Elem	Se1960	Si2881	SiO2	Sn1899	Sr4077	Th2837	Ti3349	Ti1908	U_3701	V_2924	Zn2062	Zr3391
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.01571	.47547	1.0175	.10256	.01015	.01250	.00976	F .01019	F .09982	.00976	.01859	F .00823
Stddev	.00709	.04970	.1064	.00230	.00001	.00012	.00013	.00213	.03904	.00015	.00003	.00207
%RSD	45.140	10.454	10.454	2.2424	.06184	.99772	1.3788	20.898	39.108	1.5270	.14272	25.119

#1	.02073	.51061	1.0927	.10094	.01015	.01259	.00985	.01170	.07221	.00965	.01857	.00677
#2	.01070	.44032	.94229	.10419	.01016	.01242	.00966	.00869	.12742	.00987	.01861	.00969

Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Fail	Chk Fail	Chk Pass	Chk Pass	Chk Fail
Value								.01500	.06000			.01500
Range								-30.000%	30.000%			-30.000%

Int. Std.	Y_2243	Y_3600	Y_3774
Units	Cts/S	Cts/S	Cts/S
Avg	2759.8	42073.	2219.4
Stddev	7.5	74.	6.6
%RSD	.27071	.17645	.29845

#1	2754.5	42125.	2224.1
#2	2765.1	42020.	2214.7

Sample Name: 280-82867-A-3-C @5 Acquired: 5/18/2016 12:28:14 Type: Unk
Method: 6500_025(v6) Mode: CONC Corr. Factor: 1.000000
User: CRHOADES Prep Date: Custom ID2: Custom ID3:
Comment: 325499 MI 6010C (As Cr Fe) Q4 5x

Elem	Ag3280	Al3092	As1890	B_2089	Ba4554	Be3130	Bi2230	Ca3179	Cd2288
Line	328.068 {103}	309.271 {109}	189.042 {478}	208.959 {461}	455.403 { 74}	313.042 {108}	223.061 {451}	317.933 {106}	228.802 {447}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	-.00021	64.972	.02078	.00048	.52332	.00315	.00902	16.307	.00045
Stddev	.00051	.090	.00983	.00041	.00110	.00005	.00046	.037	.00004
%RSD	246.40	.13868	47.299	85.118	.20941	1.6375	5.0514	.22387	9.1954

#1	.00015	65.036	.01383	.00076	.52255	.00318	.00870	16.333	.00048
#2	-.00057	64.908	.02773	.00019	.52410	.00311	.00934	16.281	.00042

Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Elem	Co2286	Cr2055	Cu3247	Fe2714	K_7664	Li6707	Mg2790	Mn2576	Mo2020
Line	228.616 {447}	205.560 {464}	324.754 {104}	271.441 {124}	766.490 { 44}	670.784 { 50}	279.079 {121}2	257.610 {131}	202.030 {467}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.03408	.18165	.04873	71.207	2.5268	.02113	2.0449	6.0994	.00139
Stddev	.00125	.00631	.00097	.722	.0304	.00022	.0222	.0306	.00053
%RSD	3.6609	3.4748	1.9926	1.0144	1.2042	1.0550	1.0844	.50102	38.365

#1	.03320	.17719	.04805	70.696	2.5053	.02097	2.0292	6.1210	.00101
#2	.03496	.18612	.04942	71.718	2.5483	.02128	2.0605	6.0778	.00177

Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Elem	Na5895	Ni2316	P_1782	Pb2203	S_1820	Sb2068	Se1960	Si2881	SiO2
Line	589.592 { 57}	231.604 {446}	178.284 {489}	220.353 {453}	182.034 {485}	206.833 {463}	196.090 {472}	288.158 {117}	288.158 {117}2
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.06422	.06206	1.7438	.07025	.54689	-.00134	.00510	2.0288	4.3417
Stddev	.02132	.00222	.0648	.00290	.02378	.00121	.00034	.0186	.0397
%RSD	33.199	3.5728	3.7163	4.1238	4.3483	90.872	6.6646	.91462	.91462

#1	.07930	.06049	1.6980	.06820	.53008	-.00220	.00486	2.0157	4.3136
#2	.04914	.06363	1.7896	.07230	.56371	-.00048	.00534	2.0419	4.3698

Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Elem	Sn1899	Sr4077	Th2837	Ti3349	Ti1908	U_3701	V_2924	Zn2062	Zr3391
Line	189.989 {477}	407.771 { 83}	283.730 {119}	334.904 {101}	190.856 {477}	370.152 { 91}	292.402 {115}	206.200 {163}	339.198 { 99}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.00172	.05060	.02288	.28683	.00067	W -.06320	.15694	.20581	.03561
Stddev	.00175	.00080	.00141	.00954	.00084	.00644	.00192	.00242	.00013
%RSD	101.90	1.5778	6.1424	3.3274	125.24	10.183	1.2208	1.1748	.37703

#1	.00296	.05004	.02188	.28008	.00008	-.06775	.15558	.20410	.03551
#2	.00048	.05117	.02387	.29358	.00126	-.05865	.15829	.20752	.03570

Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Warn	Chk Pass	Chk Pass	Chk Pass
High Limit						45.000			
Low Limit						-.05000			

Int. Std.	Y_2243	Y_3600	Y_3774
Line	224.306 {450}	360.073 { 94}	377.433 { 89}
Units	Cts/S	Cts/S	Cts/S
Avg	3376.2	50187.	2747.6
Stddev	16.0	78.	16.3
%RSD	.47432	.15529	.59464

#1	3364.9	50132.	2736.1
#2	3387.5	50242.	2759.2

Sample Name: LB3 280-325248/1-B Acquired: 5/18/2016 12:30:56 Type: Unk

Method: 6500_025(v6) Mode: CONC Corr. Factor: 1.000000

User: CRHOADES Prep Date: 5/16 Custom ID2: Custom ID3:

Comment: 325268 TCLP 6010C (Se) Q5

Elem	Ag3280	Al1670	As1890	B_2089	Ba4554	Be3130	Bi2230	Ca3179	Cd2288
Line	328.068 {103}	167.079 {502}	189.042 {478}	208.959 {461}	455.403 { 74}	313.042 {108}	223.061 {451}	317.933 {106}	228.802 {447}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	-0.00018	.01184	.00215	.03695	-0.00100	.00027	-0.00476	.02116	-0.00024
Stddev	.00109	.00069	.00326	.00027	.00004	.00001	.00109	.00103	.00005
%RSD	619.75	5.8204	151.78	.73021	3.8843	4.2058	22.985	4.8653	19.816

#1	.00059	.01233	-.00016	.03676	-.00102	.00028	-.00554	.02044	-.00021
#2	-.00094	.01135	.00445	.03714	-.00097	.00026	-.00399	.02189	-.00028

Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Elem	Co2286	Cr2055	Cu3247	Fe2599	K_7664	Li6707	Mg2790	Mn2576	Mo2020
Line	228.616 {447}	205.560 {464}	324.754 {104}	259.940 {130}	766.490 { 44}	670.784 { 50}	279.079 {121}2	257.610 {131}	202.030 {467}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	-0.00013	.00034	.00086	.01069	-0.05631	-0.00163	.00678	.00055	-0.00061
Stddev	.00055	.00013	.00065	.00527	.03781	.00075	.00038	.00012	.00011
%RSD	414.65	38.304	74.874	49.359	67.146	45.747	5.5651	21.877	17.818

#1	.00026	.00044	.00041	.01442	-.08305	-.00216	.00652	.00046	-.00068
#2	-.00052	.00025	.00132	.00696	-.02958	-.00111	.00705	.00063	-.00053

Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Elem	Na5895	Ni2316	P_1782	Pb2203	S_1820	Sb2068	Se1960	Si2881	SiO2
Line	589.592 { 57}	231.604 {446}	178.284 {489}	220.353 {453}	182.034 {485}	206.833 {463}	196.090 {472}	288.158 {117}	288.158 {117}2
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	F 2.4831	-0.00040	.00045	.00135	-0.00777	.00304	.00672	.10871	.23263
Stddev	.0065	.00014	.00098	.00047	.00506	.00359	.01124	.00328	.00702
%RSD	.25993	33.904	216.95	34.946	65.223	117.87	167.37	3.0194	3.0194

#1	2.4876	-.00050	.00115	.00102	-.00418	.00051	.01466	.11103	.23760
#2	2.4785	-.00031	-.00024	.00169	-.01135	.00558	-.00123	.10638	.22766

Check ?	Chk Fail	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	None
High Limit	1.0000								
Low Limit	-1.0000								

Elem	Sn1899	Sr4077	Th2837	Ti3349	Ti1908	U_3701	V_2924	Zn2062	Zr3391
Line	189.989 {477}	407.771 { 83}	283.730 {119}	334.904 {101}	190.856 {477}	370.152 { 91}	292.402 {115}	206.200 {163}	339.198 { 99}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.00343	.00017	-0.00211	.00050	-0.00171	-0.00712	.00091	.00037	.00583
Stddev	.00039	.00000	.00090	.00002	.00135	.07010	.00104	.00035	.00288
%RSD	11.459	1.2366	42.515	3.9875	78.688	984.80	114.60	95.287	49.359

#1	.00316	.00017	-.00275	.00051	-.00076	-.05669	.00164	.00062	.00379
#2	.00371	.00017	-.00148	.00048	-.00267	.04245	.00017	.00012	.00786

Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Int. Std.	Y_2243	Y_3600	Y_3774
Line	224.306 {450}	360.073 { 94}	377.433 { 89}
Units	Cts/S	Cts/S	Cts/S
Avg	2773.3	42674.	2296.7
Stddev	5.5	260.	66.6
%RSD	.19857	.60892	2.8998

#1	2777.2	42858.	2249.6
#2	2769.4	42490.	2343.8

Sample Name: LCS 280-325248/2-B Acquired: 5/18/2016 12:33:47 Type: Unk
Method: 6500_025(v6) Mode: CONC Corr. Factor: 1.000000
User: CRHOADES Prep Date: Custom ID2: Custom ID3:
Comment: 325268 TCLP 6010C (Se) Q5

Elem	Ag3280	Al1670	As1890	B_2089	Ba4554	Be3130	Bi2230	Ca3179	Cd2288
Line	328.068 {103}	167.079 {502}	189.042 {478}	208.959 {461}	455.403 { 74}	313.042 {108}	223.061 {451}	317.933 {106}	228.802 {447}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.19857	W .40328	.77638	F .22442	2.2709	.00933	.41037	9.2851	.21824
Stddev	.00022	.00177	.00318	.00038	.0157	.00000	.01145	.0122	.00331
%RSD	.10998	.43868	.41012	.16989	.69205	.01255	2.7893	.13181	1.5153

#1	.19842	.40453	.77863	.22469	2.2598	.00933	.40227	9.2765	.21590
#2	.19872	.40203	.77413	.22415	2.2820	.00933	.41846	9.2938	.22057

Check ?	Chk Pass	Chk Warn	Chk Pass	Chk Fail	Chk Pass	Chk Pass	None	Chk Pass	Chk Pass
High Limit		.43200		.22000					
Low Limit		1.7200		.17800					

Elem	Co2286	Cr2055	Cu3247	Fe2599	K_7664	Li6707	Mg2790	Mn2576	Mo2020
Line	228.616 {447}	205.560 {464}	324.754 {104}	259.940 {130}	766.490 { 44}	670.784 { 50}	279.079 {121}2	257.610 {131}	202.030 {467}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.09503	F .97964	.44249	F .24482	9.3378	.19136	F 9.0566	.09164	.19631
Stddev	.00169	.00149	.00088	.00625	.1351	.00107	.0281	.00019	.00204
%RSD	1.7831	.15197	.19892	2.5546	1.4467	.55845	.31063	.20955	1.0383

#1	.09383	.98069	.44311	.24039	9.4333	.19212	9.0367	.09151	.19487
#2	.09623	.97859	.44187	.24924	9.2422	.19061	9.0765	.09178	.19775

Check ?	Chk Pass	Chk Fail	Chk Pass	Chk Fail	Chk Pass	Chk Pass	Chk Fail	Chk Pass	Chk Pass
High Limit		.25200		.22800			11.300		
Low Limit		.16800		.17600			9.2000		

Elem	Na8183	Ni2316	P_1782	Pb2203	S_1820	Sb2068	Se1960	Si2881	SiO2
Line	818.326 { 41}	231.604 {446}	178.284 {489}	220.353 {453}	182.034 {485}	206.833 {463}	196.090 {472}	288.158 {117}	288.158 {117}2
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	F 13.755	.09321	1.8910	1.1051	.37198	.10553	.59419	1.9122	F 4.0922
Stddev	.033	.00215	.0399	.0140	.01083	.00279	.00876	.0161	.0345
%RSD	.24283	2.3070	2.1079	1.2631	2.9110	2.6438	1.4735	.84223	.84223

#1	13.732	.09169	1.8628	1.0953	.36432	.10356	.58800	1.9009	4.0678
#2	13.779	.09473	1.9192	1.1150	.37964	.10750	.60038	1.9236	4.1166

Check ?	Chk Fail	Chk Pass	Chk Pass	Chk Pass	None	Chk Pass	Chk Pass	Chk Pass	Chk Fail
High Limit	11.200								4.9220
Low Limit	9.1000								4.0200

Elem	Sn1899	Sr4077	Th2837	Ti3349	Ti1908	U_3701	V_2924	Zn2062	Zr3391
Line	189.989 {477}	407.771 { 83}	283.730 {119}	334.904 {101}	190.856 {477}	370.152 { 91}	292.402 {115}	206.200 {163}	339.198 { 99}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.37774	.19108	.17729	.18029	F .34451	.37269	.08868	.45975	.09284
Stddev	.00449	.00003	.00062	.00135	.00858	.08119	.00011	.00425	.00165
%RSD	1.1886	.01714	.35020	.74605	2.4900	21.784	.12814	.92378	1.7744

#1	.37456	.19105	.17685	.17934	.35058	.31528	.08860	.45674	.09401
#2	.38091	.19110	.17773	.18124	.33845	.43010	.08876	.46275	.09168

Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Fail	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit					.43200				
Low Limit					.35200				

Int. Std.	Y_2243	Y_3600	Y_3774
Line	224.306 {450}	360.073 { 94}	377.433 { 89}
Units	Cts/S	Cts/S	Cts/S
Avg	2742.6	42344.	2227.3
Stddev	25.5	288.	.1
%RSD	.93072	.67956	.00247

#1	2724.6	42547.	2227.3
#2	2760.7	42140.	2227.2

Sample Name: 280-82584-A-1-B Acquired: 5/18/2016 12:36:22 Type: Unk

Method: 6500_025(v6) Mode: CONC Corr. Factor: 1.000000

User: CRHOADES Prep Date: Custom ID2: Custom ID3:

Comment: 325268 TCLP 6010C (Se) Q5

Elem	Ag3280	Al1670	As1890	B_2089	Ba4554	Be3130	Bi2230	Ca3179	Cd2288
Line	328.068 {103}	167.079 {502}	189.042 {478}	208.959 {461}	455.403 {74}	313.042 {108}	223.061 {451}	317.933 {106}	228.802 {447}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.00230	.00320	.03545	W 38.369	.00026	-.00005	.00674	1.4958	.00201
Stddev	.00002	.00024	.00401	.083	.00021	.00006	.00201	.0009	.00020
%RSD	.97704	7.6336	11.313	.21743	79.995	107.00	29.895	.06259	9.8019

#1	.00228	.00337	.03262	38.428	.00011	-.00009	.00816	1.4951	.00215
#2	.00231	.00303	.03829	38.310	.00041	-.00001	.00531	1.4965	.00187

Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Warn	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit				10.000					
Low Limit				-.01000					

Elem	Co2286	Cr2055	Cu3247	Fe2599	K_7664	Li6707	Mg2790	Mn2576	Mo2020
Line	228.616 {447}	205.560 {464}	324.754 {104}	259.940 {130}	766.490 {44}	670.784 {50}	279.079 {121}2	257.610 {131}	202.030 {467}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	-.00230	-.00905	.17621	.03883	W 389.43	.02485	.17329	.00231	W 5.2927
Stddev	.00028	.00034	.00063	.00141	5.11	.00191	.00040	.00002	.0831
%RSD	12.285	3.8010	.35955	3.6194	1.3126	7.6756	.23215	.84637	1.5702

#1	-.00210	-.00929	.17576	.03784	393.05	.02350	.17301	.00229	5.3515
#2	-.00250	-.00880	.17665	.03983	385.82	.02620	.17358	.00232	5.2339

Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Warn	Chk Pass	Chk Pass	Chk Pass	Chk Warn
High Limit					100.00				5.0000
Low Limit					-.50000				-.01000

Elem	Na8183	Ni2316	P_1782	Pb2203	S_1820	Sb2068	Se1960	Si2881	SiO2
Line	818.326 {41}	231.604 {446}	178.284 {489}	220.353 {453}	182.034 {485}	206.833 {463}	196.090 {472}	288.158 {117}	288.158 {117}2
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	386.91	.00344	F 173.86	.17734	32.780	.08639	.28960	3.1164	6.6692
Stddev	4.79	.00020	.63	.00569	.199	.00574	.00280	.0039	.0083
%RSD	1.2393	5.9569	.36278	3.2091	.60709	6.6453	.96544	.12487	.12487

#1	390.30	.00329	174.30	.18137	32.921	.09045	.28762	3.1137	6.6633
#2	383.52	.00358	173.41	.17332	32.639	.08233	.29158	3.1192	6.6751

Check ?	Chk Pass	Chk Pass	Chk Fail	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit			50.000						
Low Limit			-2.0000						

Elem	Sn1899	Sr4077	Th2837	Ti3349	Ti1908	U_3701	V_2924	Zn2062	Zr3391
Line	189.989 {477}	407.771 {83}	283.730 {119}	334.904 {101}	190.856 {477}	370.152 {91}	292.402 {115}	206.200 {163}	339.198 {99}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.11526	.00164	-.00585	.00286	.00655	-.02863	F -.07159	.42856	.00136
Stddev	.00266	.00011	.00040	.00074	.00284	.04845	.00096	.00803	.00595
%RSD	2.3094	6.9070	6.8476	25.943	43.391	169.26	1.3419	1.8733	439.01

#1	.11714	.00172	-.00557	.00234	.00454	-.06289	-.07091	.42288	.00556
#2	.11338	.00156	-.00613	.00339	.00856	.00564	-.07227	.43424	-.00285

Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Fail	Chk Pass	Chk Pass
High Limit							50.000		
Low Limit							-.02000		

Int. Std.	Y_2243	Y_3600	Y_3774
Line	224.306 {450}	360.073 {94}	377.433 {89}
Units	Cts/S	Cts/S	Cts/S
Avg	2551.9	39832.	2433.1
Stddev	3.5	88.	8.6
%RSD	.13861	.22142	.35391

#1	2554.4	39770.	2427.0
#2	2549.4	39894.	2439.2

Sample Name: 280-82584-A-1-B SD@5 Acquired: 5/18/2016 12:39:21 Type: Unk
Method: 6500_025(v6) Mode: CONC Corr. Factor: 1.000000
User: CRHOADES Prep Date: Custom ID2: Custom ID3:
Comment: 325268 TCLP 6010C (Se) Q5

Elem	Ag3280	Al1670	As1890	B_2089	Ba4554	Be3130	Bi2230	Ca3179	Cd2288
Line	328.068 {103}	167.079 {502}	189.042 {478}	208.959 {461}	455.403 { 74}	313.042 {108}	223.061 {451}	317.933 {106}	228.802 {447}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.00037	.00124	-.00053	7.4400	-.00139	.00018	-.00288	.23593	.00055
Stddev	.00019	.00050	.00513	.2109	.00048	.00011	.00076	.00155	.00019
%RSD	50.440	40.321	964.32	2.8341	34.699	62.110	26.462	.65666	35.274

#1	.00051	.00089	.00309	7.2909	-.00105	.00026	-.00234	.23703	.00069
#2	.00024	.00160	-.00416	7.5891	-.00173	.00010	-.00341	.23483	.00041

Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Elem	Co2286	Cr2055	Cu3247	Fe2599	K_7664	Li6707	Mg2790	Mn2576	Mo2020
Line	228.616 {447}	205.560 {464}	324.754 {104}	259.940 {130}	766.490 { 44}	670.784 { 50}	279.079 {121}2	257.610 {131}	202.030 {467}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	-.00057	-.00158	.03389	.01044	66.138	.00694	.02873	.00044	1.0308
Stddev	.00016	.00017	.00096	.00093	.900	.00070	.00096	.00005	.0193
%RSD	27.831	10.937	2.8306	8.9491	1.3601	10.020	3.3399	11.120	1.8769

#1	-.00045	-.00171	.03321	.01110	66.774	.00743	.02806	.00041	1.0171
#2	-.00068	-.00146	.03457	.00978	65.502	.00645	.02941	.00048	1.0444

Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Elem	Na8183	Ni2316	P_1782	Pb2203	S_1820	Sb2068	Se1960	Si2881	SiO2
Line	818.326 { 41}	231.604 {446}	178.284 {489}	220.353 {453}	182.034 {485}	206.833 {463}	196.090 {472}	288.158 {117}	288.158 {117}2
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	70.115	.00014	W 27.996	.03526	6.3759	.01901	.06493	.53599	1.1470
Stddev	.449	.00001	.847	.00220	.1272	.00328	.00322	.01094	.0234
%RSD	.63969	5.1719	3.0260	6.2366	1.9944	17.248	4.9623	2.0417	2.0417

#1	69.798	.00014	27.397	.03681	6.2860	.01669	.06720	.52825	1.1305
#2	70.432	.00013	28.595	.03370	6.4658	.02133	.06265	.54373	1.1636

Check ?	Chk Pass	Chk Pass	Chk Warn	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit			2.0000						
Low Limit			-1.0000						

Elem	Sn1899	Sr4077	Th2837	Ti3349	Ti1908	U_3701	V_2924	Zn2062	Zr3391
Line	189.989 {477}	407.771 { 83}	283.730 {119}	334.904 {101}	190.856 {477}	370.152 { 91}	292.402 {115}	206.200 {163}	339.198 { 99}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.02442	.00044	-.00223	-.00015	-.00846	.01524	W -.01198	.06520	.00137
Stddev	.00351	.00003	.00213	.00045	.00011	.02050	.00106	.00012	.00035
%RSD	14.376	6.7920	95.348	295.03	1.3566	134.52	8.8508	.17663	25.738

#1	.02194	.00046	-.00073	-.00047	-.00838	.00074	-.01273	.06528	.00112
#2	.02690	.00042	-.00374	.00017	-.00854	.02973	-.01123	.06511	.00161

Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Warn	Chk Pass	Chk Pass
High Limit							10.000		
Low Limit							-.01000		

Int. Std.	Y_2243	Y_3600	Y_3774						
Line	224.306 {450}	360.073 { 94}	377.433 { 89}						
Units	Cts/S	Cts/S	Cts/S						
Avg	2782.9	43410.	2420.4						
Stddev	21.3	50.	61.8						
%RSD	.76382	.11504	2.5547						

#1	2767.8	43374.	2376.7						
#2	2797.9	43445.	2464.1						

Sample Name: 280-82584-A-1-C MS Acquired: 5/18/2016 12:42:00 Type: Unk
Method: 6500_025(v6) Mode: CONC Corr. Factor: 1.000000
User: CRHOADES Prep Date: Custom ID2: Custom ID3:
Comment: 325268 TCLP 6010C (Se) Q5

Elem	Ag3280	Al1670	As1890	B_2089	Ba4554	Be3130	Bi2230	Ca3179	Cd2288
Line	328.068 {103}	167.079 {502}	189.042 {478}	208.959 {461}	455.403 {74}	313.042 {108}	223.061 {451}	317.933 {106}	228.802 {447}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	W .18704	.36482	1.0033	W 32.884	2.3361	.00981	F .22526	10.596	.20183
Stddev	.00015	.00410	.0109	.222	.0483	.00005	.01624	.030	.00828
%RSD	.08047	1.1234	1.0895	.67429	2.0697	.54350	7.2077	.28514	4.1026

#1	.18694	.36772	1.0111	33.041	2.3703	.00984	.23674	10.618	.20769
#2	.18715	.36192	.99560	32.728	2.3019	.00977	.21378	10.575	.19598

Check ?	Chk Warn	Chk Pass	Chk Pass	Chk Warn	Chk Pass	Chk Pass	Chk Fail	Chk Pass	Chk Pass
High Limit	.10000			10.000			.10000		
Low Limit	-.01000			-.01000			-.10000		

Elem	Co2286	Cr2055	Cu3247	Fe2599	K_7664	Li6707	Mg2790	Mn2576	Mo2020
Line	228.616 {447}	205.560 {464}	324.754 {104}	259.940 {130}	766.490 {44}	670.784 {50}	279.079 {121}2	257.610 {131}	202.030 {467}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.09372	1.0379	.57004	.23468	W 347.90	.21105	7.6571	.09344	4.7069
Stddev	.00265	.0020	.00313	.00041	7.34	.00150	.0212	.00010	.1261
%RSD	2.8274	.19137	.54958	.17614	2.1094	.70888	.27694	.10858	2.6796

#1	.09559	1.0393	.56782	.23439	353.09	.21000	7.6721	.09337	4.7961
#2	.09184	1.0365	.57225	.23497	342.71	.21211	7.6421	.09351	4.6177

Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Warn	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit					100.00				
Low Limit					-.50000				

Elem	Na8183	Ni2316	P_1782	Pb2203	S_1820	Sb2068	Se1960	Si2881	SiO2
Line	818.326 {41}	231.604 {446}	178.284 {489}	220.353 {453}	182.034 {485}	206.833 {463}	196.090 {472}	288.158 {117}	288.158 {117}2
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	348.23	.09964	F 149.21	1.1449	30.824	.16246	.58266	4.4164	9.4510
Stddev	7.63	.00366	1.23	.0328	1.046	.00665	.02637	.0163	.0349
%RSD	2.1914	3.6759	.82433	2.8648	3.3932	4.0951	4.5254	.36935	.36935

#1	353.62	.10223	150.08	1.1681	31.564	.16716	.60130	4.4279	9.4757
#2	342.83	.09705	148.34	1.1217	30.085	.15775	.56401	4.4048	9.4263

Check ?	Chk Pass	Chk Pass	Chk Fail	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit			50.000						
Low Limit			-2.0000						

Elem	Sn1899	Sr4077	Th2837	Ti3349	Ti1908	U_3701	V_2924	Zn2062	Zr3391
Line	189.989 {477}	407.771 {83}	283.730 {119}	334.904 {101}	190.856 {477}	370.152 {91}	292.402 {115}	206.200 {163}	339.198 {99}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.30464	.19704	.16529	.18944	.36080	.36588	.03457	.85602	.09621
Stddev	.02885	.00072	.00121	.00010	.00988	.00630	.00043	.00138	.00017
%RSD	9.4692	.36433	.72961	.05526	2.7388	1.7212	1.2449	.16097	.17795

#1	.32504	.19653	.16443	.18937	.36779	.37034	.03427	.85699	.09633
#2	.28424	.19755	.16614	.18951	.35381	.36143	.03487	.85504	.09609

Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Int. Std.	Y_2243	Y_3600	Y_3774
Line	224.306 {450}	360.073 {94}	377.433 {89}
Units	Cts/S	Cts/S	Cts/S
Avg	2573.1	40686.	2440.7
Stddev	8.9	107.	30.8
%RSD	.34467	.26420	1.2621

#1	2579.4	40610.	2419.0
#2	2566.9	40762.	2462.5

Sample Name: 280-82584-A-1-D MSD Acquired: 5/18/2016 12:44:53 Type: Unk
Method: 6500_025(v6) Mode: CONC Corr. Factor: 1.000000
User: CRHOADES Prep Date: Custom ID2: Custom ID3:
Comment: 325268 TCLP 6010C (Se) Q5

Elem	Ag3280	Al1670	As1890	B_2089	Ba4554	Be3130	Bi2230	Ca3179	Cd2288
Line	328.068 {103}	167.079 {502}	189.042 {478}	208.959 {461}	455.403 {74}	313.042 {108}	223.061 {451}	317.933 {106}	228.802 {447}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	W .19144	.36667	.98881	W 33.288	2.3305	.00936	F .24230	10.654	.20421
Stddev	.00022	.00437	.00748	.003	.0346	.00002	.01961	.039	.00206
%RSD	.11343	1.1912	.75600	.00886	1.4837	.20296	8.0915	.36375	1.0091

#1	.19159	.36358	.98352	33.286	2.3061	.00935	.25616	10.626	.20567
#2	.19128	.36976	.99409	33.290	2.3550	.00938	.22844	10.681	.20275

Check ?	Chk Warn	Chk Pass	Chk Pass	Chk Warn	Chk Pass	Chk Pass	Chk Fail	Chk Pass	Chk Pass
High Limit	.10000			10.000			.10000		
Low Limit	-.01000			-.01000			-.10000		

Elem	Co2286	Cr2055	Cu3247	Fe2599	K_7664	Li6707	Mg2790	Mn2576	Mo2020
Line	228.616 {447}	205.560 {464}	324.754 {104}	259.940 {130}	766.490 {44}	670.784 {50}	279.079 {121}2	257.610 {131}	202.030 {467}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.09367	1.0442	.57596	.24000	W 345.71	.21324	7.7611	.09418	4.9094
Stddev	.00075	.0021	.00248	.00623	3.77	.00061	.0084	.00007	.0634
%RSD	.79816	.20055	.43008	2.5951	1.0905	.28568	.10872	.07559	1.2906

#1	.09315	1.0457	.57421	.24440	343.04	.21367	7.7551	.09413	4.9542
#2	.09420	1.0428	.57771	.23559	348.38	.21281	7.7671	.09423	4.8646

Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Warn	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit					100.00				
Low Limit					-.50000				

Elem	Na8183	Ni2316	P_1782	Pb2203	S_1820	Sb2068	Se1960	Si2881	SiO2
Line	818.326 {41}	231.604 {446}	178.284 {489}	220.353 {453}	182.034 {485}	206.833 {463}	196.090 {472}	288.158 {117}	288.158 {117}2
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	349.16	.09870	F 150.62	1.1423	30.831	.16114	.70047	4.4556	9.5350
Stddev	5.64	.00085	.06	.0050	.304	.00177	.00155	.0600	.1284
%RSD	1.6148	.86112	.03664	.43674	.98466	1.0978	.22179	1.3468	1.3468

#1	345.17	.09810	150.58	1.1387	30.617	.15989	.69937	4.4132	9.4442
#2	353.14	.09930	150.66	1.1458	31.046	.16239	.70157	4.4980	9.6258

Check ?	Chk Pass	Chk Pass	Chk Fail	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit			50.000						
Low Limit			-2.0000						

Elem	Sn1899	Sr4077	Th2837	Ti3349	Ti1908	U_3701	V_2924	Zn2062	Zr3391
Line	189.989 {477}	407.771 {83}	283.730 {119}	334.904 {101}	190.856 {477}	370.152 {91}	292.402 {115}	206.200 {163}	339.198 {99}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.32461	.19766	.16611	.19291	.36217	.32384	.03305	.86349	.09667
Stddev	.01704	.00049	.00201	.00318	.00234	.00304	.00105	.01113	.00092
%RSD	5.2498	.24598	1.2124	1.6489	.64689	.93870	3.1827	1.2894	.95646

#1	.33666	.19800	.16754	.19516	.36382	.32169	.03380	.87137	.09602
#2	.31256	.19732	.16469	.19066	.36051	.32599	.03231	.85562	.09732

Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Int. Std.	Y_2243	Y_3600	Y_3774
Line	224.306 {450}	360.073 {94}	377.433 {89}
Units	Cts/S	Cts/S	Cts/S
Avg	2541.6	39814.	2374.4
Stddev	.3	72.	9.0
%RSD	.01042	.18088	.38032

#1	2541.4	39763.	2380.8
#2	2541.8	39865.	2368.0

Sample Name: 280-82584-A-1-B PDS Acquired: 5/18/2016 12:47:45 Type: Unk
Method: 6500_025(v6) Mode: CONC Corr. Factor: 1.000000
User: CRHOADES Prep Date: Custom ID2: Custom ID3:
Comment: 325268 TCLP 6010C (Se) Q5

Elem	Ag3280	Al1670	As1890	B_2089	Ba4554	Be3130	Bi2230	Ca3179	Cd2288
Line	328.068 {103}	167.079 {502}	189.042 {478}	208.959 {461}	455.403 { 74}	313.042 {108}	223.061 {451}	317.933 {106}	228.802 {447}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.04986	.97097	.32263	W 38.002	.10463	.05113	.01162	20.921	.05009
Stddev	.00085	.00198	.00438	.013	.00101	.00082	.00261	.248	.00011
%RSD	1.7006	.20380	1.3589	.03393	.96129	1.5988	22.489	1.1841	.22694

#1	.04926	.97237	.32573	38.011	.10392	.05055	.00977	20.746	.05017
#2	.05046	.96958	.31953	37.992	.10534	.05171	.01346	21.096	.05000

Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Warn	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit				10.000					
Low Limit				-.01000					

Elem	Co2286	Cr2055	Cu3247	Fe2599	K_7664	Li6707	Mg2790	Mn2576	Mo2020
Line	228.616 {447}	205.560 {464}	324.754 {104}	259.940 {130}	766.490 { 44}	670.784 { 50}	279.079 {121}2	257.610 {131}	202.030 {467}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.04919	.04407	.22540	1.0502	W 398.70	.13457	16.377	.05209	W 5.4512
Stddev	.00080	.00134	.00012	.0095	2.77	.00308	.001	.00005	.0575
%RSD	1.6321	3.0383	.05366	.89958	.69477	2.2905	.00732	.09856	1.0556

#1	.04862	.04312	.22532	1.0435	396.74	.13239	16.377	.05205	5.4919
#2	.04976	.04501	.22549	1.0569	400.66	.13675	16.376	.05212	5.4105

Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Warn	Chk Pass	Chk Pass	Chk Pass	Chk Warn
High Limit					100.00				5.0000
Low Limit					-.50000				-.01000

Elem	Na8183	Ni2316	P_1782	Pb2203	S_1820	Sb2068	Se1960	Si2881	SiO2
Line	818.326 { 41}	231.604 {446}	178.284 {489}	220.353 {453}	182.034 {485}	206.833 {463}	196.090 {472}	288.158 {117}	288.158 {117}2
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	404.56	.05496	F 174.35	.26878	32.817	.18816	.67438	8.3771	17.927
Stddev	4.10	.00084	.27	.00609	.019	.00181	.00031	.1139	.244
%RSD	1.0134	1.5283	.15463	2.2675	.05768	.96107	.04595	1.3599	1.3599

#1	401.66	.05436	174.54	.26447	32.831	.18944	.67460	8.2965	17.755
#2	407.45	.05555	174.16	.27309	32.804	.18688	.67417	8.4576	18.099

Check ?	Chk Pass	Chk Pass	Chk Fail	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit			50.000						
Low Limit			-2.0000						

Elem	Sn1899	Sr4077	Th2837	Ti3349	Ti1908	U_3701	V_2924	Zn2062	Zr3391
Line	189.989 {477}	407.771 { 83}	283.730 {119}	334.904 {101}	190.856 {477}	370.152 { 91}	292.402 {115}	206.200 {163}	339.198 { 99}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.18146	.05448	.20296	.05242	.19555	.46792	W -.01806	.61707	.05381
Stddev	.00354	.00022	.00085	.00016	.00183	.02735	.00044	.00114	.00587
%RSD	1.9487	.39590	.41695	.30318	.93515	5.8452	2.4447	.18527	10.900

#1	.18396	.05433	.20356	.05230	.19426	.48726	-.01837	.61787	.05796
#2	.17896	.05464	.20237	.05253	.19684	.44858	-.01774	.61626	.04967

Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Warn	Chk Pass	Chk Pass
High Limit							10.000		
Low Limit							-.01000		

Int. Std.	Y_2243	Y_3600	Y_3774						
Line	224.306 {450}	360.073 { 94}	377.433 { 89}						
Units	Cts/S	Cts/S	Cts/S						
Avg	2507.0	39396.	2388.0						
Stddev	10.3	65.	11.6						
%RSD	.41141	.16500	.48474						

#1	2514.3	39442.	2396.2						
#2	2499.7	39350.	2379.8						

Sample Name: 280-83055-A-1-B Acquired: 5/18/2016 12:50:38 Type: Unk

Method: 6500_025(v6) Mode: CONC Corr. Factor: 1.000000

User: CRHOADES Prep Date: Custom ID2: Custom ID3:

Comment: 325268 TCLP 6010C (Se) Q5

Elem	Ag3280	Al1670	As1890	B_2089	Ba4554	Be3130	Bi2230	Ca3179	Cd2288
Line	328.068 {103}	167.079 {502}	189.042 {478}	208.959 {461}	455.403 { 74}	313.042 {108}	223.061 {451}	317.933 {106}	228.802 {447}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	-.00118	.10330	.00287	.26566	.00615	.00035	-.00157	20.669	.01229
Stddev	.00001	.00032	.00283	.01362	.00033	.00008	.00113	.217	.00044
%RSD	.78237	.31181	98.673	5.1278	5.3125	23.708	71.691	1.0516	3.6221

#1	-.00119	.10353	.00087	.27529	.00639	.00041	-.00078	20.823	.01260
#2	-.00117	.10307	.00487	.25602	.00592	.00029	-.00237	20.516	.01197

Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Elem	Co2286	Cr2055	Cu3247	Fe2599	K_7664	Li6707	Mg2790	Mn2576	Mo2020
Line	228.616 {447}	205.560 {464}	324.754 {104}	259.940 {130}	766.490 { 44}	670.784 { 50}	279.079 {121}2	257.610 {131}	202.030 {467}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.00235	.00652	.13019	.15326	5.3744	.10178	2.0343	.05447	.00768
Stddev	.00013	.00004	.00022	.00219	.0325	.00104	.0006	.00005	.00156
%RSD	5.6747	.55778	.16762	1.4287	.60417	1.0259	.03162	.08757	20.302

#1	.00225	.00650	.13003	.15481	5.3974	.10104	2.0348	.05444	.00658
#2	.00244	.00655	.13034	.15171	5.3514	.10252	2.0339	.05451	.00878

Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Elem	Na8183	Ni2316	P_1782	Pb2203	S_1820	Sb2068	Se1960	Si2881	SiO2
Line	818.326 { 41}	231.604 {446}	178.284 {489}	220.353 {453}	182.034 {485}	206.833 {463}	196.090 {472}	288.158 {117}	288.158 {117}2
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	40.795	.08114	.80431	.00618	15.586	.01626	.01943	1.0566	2.2611
Stddev	.174	.00024	.00237	.00036	.067	.00269	.00625	.0049	.0104
%RSD	.42583	.29601	.29528	5.7636	.43136	16.529	32.167	.45921	.45921

#1	40.918	.08131	.80599	.00593	15.633	.01436	.01501	1.0600	2.2684
#2	40.672	.08097	.80263	.00643	15.538	.01816	.02385	1.0531	2.2537

Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Elem	Sn1899	Sr4077	Th2837	Ti3349	Ti1908	U_3701	V_2924	Zn2062	Zr3391
Line	189.989 {477}	407.771 { 83}	283.730 {119}	334.904 {101}	190.856 {477}	370.152 { 91}	292.402 {115}	206.200 {163}	339.198 { 99}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.01072	.06766	-.00032	-.00002	-.00466	.00578	.00248	1.2209	-.00242
Stddev	.00007	.00003	.00163	.00056	.00262	.00604	.00012	.0003	.00035
%RSD	.65009	.05027	508.79	3043.0	56.133	104.58	4.7490	.02721	14.494

#1	.01077	.06764	.00083	-.00042	-.00281	.01005	.00240	1.2211	-.00267
#2	.01067	.06769	-.00148	.00038	-.00651	.00151	.00257	1.2206	-.00217

Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Int. Std.	Y_2243	Y_3600	Y_3774
Line	224.306 {450}	360.073 { 94}	377.433 { 89}
Units	Cts/S	Cts/S	Cts/S
Avg	2761.8	42678.	2343.3
Stddev	1.8	43.	29.8
%RSD	.06616	.10098	1.2721

#1	2760.5	42708.	2322.2
#2	2763.1	42647.	2364.3

Sample Name: 280-83055-A-2-B Acquired: 5/18/2016 12:53:16 Type: Unk

Method: 6500_025(v6) Mode: CONC Corr. Factor: 1.000000

User: CRHOADES Prep Date: Custom ID2: Custom ID3:

Comment: 325268 TCLP 6010C (Se) Q5

Elem	Ag3280	Al1670	As1890	B_2089	Ba4554	Be3130	Bi2230	Ca3179	Cd2288
Line	328.068 {103}	167.079 {502}	189.042 {478}	208.959 {461}	455.403 {74}	313.042 {108}	223.061 {451}	317.933 {106}	228.802 {447}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.00026	.00274	.00159	.18412	.00742	.00012	-.00063	6.6076	-.00016
Stddev	.00069	.00021	.00036	.00519	.00050	.00010	.00454	.1138	.00009
%RSD	270.02	7.5378	22.445	2.8180	6.7738	81.782	715.37	1.7222	61.193

#1	-.00023	.00259	.00185	.18779	.00777	.00005	-.00385	6.6881	-.00009
#2	.00074	.00288	.00134	.18045	.00706	.00019	.00258	6.5272	-.00022

Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Elem	Co2286	Cr2055	Cu3247	Fe2599	K_7664	Li6707	Mg2790	Mn2576	Mo2020
Line	228.616 {447}	205.560 {464}	324.754 {104}	259.940 {130}	766.490 {44}	670.784 {50}	279.079 {121}2	257.610 {131}	202.030 {467}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.00419	.00153	.02315	.04360	1.2237	.00556	1.4183	.06076	.01060
Stddev	.00012	.00056	.00023	.00783	.0128	.00220	.0121	.00025	.00079
%RSD	2.7689	36.325	.98241	17.952	1.0465	39.565	.85324	.40361	7.4885

#1	.00411	.00192	.02299	.04913	1.2146	.00712	1.4098	.06094	.01004
#2	.00428	.00114	.02331	.03806	1.2328	.00401	1.4269	.06059	.01116

Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Elem	Na5895	Na8183	Ni2316	P_1782	Pb2203	S_1820	Sb2068	Se1960	Si2881
Line	589.592 {57}	818.326 {41}	231.604 {446}	178.284 {489}	220.353 {453}	182.034 {485}	206.833 {463}	196.090 {472}	288.158 {117}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	8.5739	W 10.457	.24390	.01598	.00013	4.8152	.00643	.01347	.97865
Stddev	.0217	.027	.00747	.00025	.00003	.1326	.00090	.00056	.02477
%RSD	.25324	.26258	3.0625	1.5671	25.100	2.7533	13.920	4.1929	2.5308

#1	8.5892	10.438	.23862	.01616	.00016	4.7214	.00706	.01387	.99616
#2	8.5585	10.476	.24919	.01580	.00011	4.9089	.00580	.01307	.96114

Check ?	Chk Pass	Chk Warn	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit		500.00							
Low Limit		11.000							

Elem	SiO2	Sn1899	Sr4077	Th2837	Ti3349	Ti1908	U_3701	V_2924	Zn2062
Line	288.158 {117}2	189.989 {477}	407.771 {83}	283.730 {119}	334.904 {101}	190.856 {477}	370.152 {91}	292.402 {115}	206.200 {163}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	2.0943	.00041	.03755	.00057	-.00005	-.00108	-.02954	.00122	.00314
Stddev	.0530	.00107	.00029	.00124	.00038	.00088	.05469	.00012	.00024
%RSD	2.5308	260.83	.76223	216.64	824.07	81.368	185.16	10.083	7.7887

#1	2.1318	.00116	.03775	.00145	-.00031	-.00171	.00913	.00130	.00332
#2	2.0568	-.00035	.03734	-.00031	.00022	-.00046	-.06821	.00113	.00297

Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Elem	Zr3391								
Line	339.198 {99}								
Units	ppm								
Avg	-.00122								
Stddev	.00081								
%RSD	66.278								

#1	-.00065								
#2	-.00179								

Check ?	Chk Pass								
High Limit									
Low Limit									

Sample Name: 280-83055-A-2-B Acquired: 5/18/2016 12:53:16 Type: Unk
 Method: 6500_025(v6) Mode: CONC Corr. Factor: 1.000000
 User: CRHOADES Prep Date: Custom ID2: Custom ID3:
 Comment: 325268 TCLP 6010C (Se) Q5

Int. Std.	Y_2243	Y_3600	Y_3774
Line	224.306 {450}	360.073 { 94}	377.433 { 89}
Units	Cts/S	Cts/S	Cts/S
Avg	2806.9	43027.	2355.8
Stddev	4.4	38.	25.6
%RSD	.15522	.08838	1.0872
#1	2803.9	43054.	2337.7
#2	2810.0	43000.	2373.9

Sample Name: CCVH-3894253 Acquired: 5/18/2016 12:55:54 Type: QC
Method: 6500_025(v6) Mode: CONC Corr. Factor: 1.000000
User: CRHOADES Prep Date: Custom ID2: Custom ID3:
Comment:

Elem	Ag3280	Al3092	As1890	B_2089	Ba4554	Be3130	Bi2230	Ca3179	Cd2288	Co2286	Cr2055
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	-.00008	51.890	-.00415	.10334	-.00081	.00033	W 1.0674	-.01768	-.00039	-.00087	-.00005
Stddev	.00039	1.026	.00556	.00338	.00026	.00019	.0031	.00397	.00006	.00083	.00018
%RSD	518.75	1.9769	134.11	3.2723	32.864	57.585	.28975	22.465	14.199	95.540	391.88

#1	.00020	52.616	-.00021	.10573	-.00062	.00019	1.0652	-.01487	-.00043	-.00028	.00008
#2	-.00035	51.165	-.00808	.10095	-.00099	.00046	1.0696	-.02049	-.00035	-.00145	-.00017

Check ?	None	Chk Pass	None	None	None	None	Chk Warn	None	None	None	None
Value							1.0000				
Range							5.0000%				

Elem	Cu3247	Fe2714	K_7664	Li6707	Mg2790	Mn2576	Mo2020	Na8183	Ni2316	P_1782	Pb2203
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.00179	50.189	.39197	.00225	.02121	.00003	-.00091	256.40	.00180	.01156	.00036
Stddev	.00043	.061	.08181	.00283	.00145	.00001	.00038	.45	.00001	.00255	.00228
%RSD	23.844	.12240	20.870	125.75	6.8568	50.405	41.731	.17372	.62506	22.079	638.53

#1	.00149	50.233	.33413	.00025	.02018	.00004	-.00064	256.71	.00181	.01336	-.00126
#2	.00209	50.146	.44982	.00426	.02223	.00002	-.00117	256.08	.00180	.00975	.00197

Check ?	None	Chk Pass	None	None	None	None	None	Chk Pass	None	None	None
Value											
Range											

Elem	S_1820	Sb2068	Se1960	Si2881	SiO2	Sn1899	Sr4077	Th2837	Ti3349	Ti1908	U_3701
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	W 5.2793	-.00549	.02317	.00144	.00307	.00191	.00084	4.8110	.00278	-.00381	10.403
Stddev	.1322	.00403	.00441	.02347	.05023	.00071	.00006	.0107	.00136	.00219	.139
%RSD	2.5038	73.339	19.022	1634.1	1634.1	37.178	6.6255	.22156	49.105	57.370	1.3379

#1	5.1858	-.00264	.02005	.01803	.03859	.00141	.00088	4.8186	.00181	-.00536	10.304
#2	5.3727	-.00834	.02629	-.01516	-.03244	.00241	.00080	4.8035	.00374	-.00226	10.501

Check ?	Chk Warn	None	None	None	None	None	None	Chk Pass	None	None	Chk Pass
Value	5.0000										
Range	5.0000%										

Elem	V_2924	Zn2062	Zr3391
Units	ppm	ppm	ppm
Avg	.00833	-.00020	.05787
Stddev	.00046	.00019	.00012
%RSD	5.5311	91.663	.21053

#1	.00801	-.00034	.05795
#2	.00866	-.00007	.05778

Check ?	None	None	None
Value			
Range			

Int. Std.	Y_2243	Y_3600	Y_3774
Units	Cts/S	Cts/S	Cts/S
Avg	2687.2	41102.	2208.7
Stddev	4.6	489.	24.8
%RSD	.17288	1.1906	1.1229

#1	2683.9	40756.	2226.3
#2	2690.5	41448.	2191.2

Sample Name: CCV-3894251 Acquired: 5/18/2016 12:58:32 Type: QC

Method: 6500_025(v6) Mode: CONC Corr. Factor: 1.000000

User: CRHOADES Prep Date: Custom ID2: Custom ID3:

Comment:

Elem	Ag3280	Al1670	As1890	B_2089	Ba4554	Be3130	Bi2230	Ca3179	Cd2288	Co2286	Cr2055	Cu3247
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.50142	.52573	1.0103	F .56752	.49288	.47741	.00094	4.9075	.50339	.50328	.50180	.52240
Stddev	.00157	.01780	.0360	.01317	.01092	.00981	.00349	.1126	.00503	.00870	.00881	.00124
%RSD	.31374	3.3858	3.5677	2.3210	2.2153	2.0541	372.81	2.2948	.99869	1.7283	1.7550	.23784

#1	.50253	.51314	.98482	.55821	.50060	.48435	.00341	4.9871	.49984	.49713	.49557	.52153
#2	.50031	.53832	1.0358	.57684	.48516	.47048	-.00153	4.8278	.50695	.50943	.50803	.52328

Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Fail	Chk Pass	Chk Pass	None	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Value				.50000								
Range				10.490%								

Elem	Fe2599	K_7664	Li6707	Mg2790	Mn2576	Mo2020	Na5895	Ni2316	P_1782	Pb2203	S_1820	Sb2068
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	2.4508	48.838	1.0135	19.568	.48729	.50445	5.1422	.49576	.99143	1.0133	.00068	1.0111
Stddev	.0617	.990	.0046	.026	.00033	.00642	.0555	.00941	.01527	.0097	.00439	.0049
%RSD	2.5174	2.0267	.44987	.13416	.06701	1.2720	1.0802	1.8986	1.5406	.95460	644.05	.48176

#1	2.4944	49.538	1.0167	19.549	.48706	.49991	5.1815	.48911	.98063	1.0065	-.00242	1.0076
#2	2.4071	48.138	1.0103	19.587	.48752	.50899	5.1029	.50242	1.0022	1.0201	.00378	1.0145

Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	None	Chk Pass
Value												
Range												

Elem	Se1960	Si2881	SiO2	Sn1899	Sr4077	Th2837	Ti3349	Ti1908	U_3701	V_2924	Zn2062	Zr3391
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	1.0249	4.8947	10.475	1.0111	.49200	.00165	.47993	1.0237	-.00713	.49633	.48813	.50925
Stddev	.0065	.0108	.023	.0082	.00911	.00067	.00054	.0003	.00122	.00109	.00349	.00072
%RSD	.63396	.22142	.22142	.80741	1.8526	40.497	.11271	.03050	17.134	.21897	.71577	.14048

#1	1.0203	4.9024	10.491	1.0053	.49844	.00212	.47955	1.0240	-.00627	.49710	.49060	.50975
#2	1.0295	4.8871	10.458	1.0169	.48555	.00118	.48032	1.0235	-.00799	.49557	.48566	.50874

Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	None	Chk Pass	Chk Pass	None	Chk Pass	Chk Pass	Chk Pass
Value												
Range												

Int. Std.	Y_2243	Y_3600	Y_3774
Units	Cts/S	Cts/S	Cts/S
Avg	2763.0	41057.	2226.0
Stddev	96.1	409.	7.1
%RSD	3.4776	.99513	.31859

#1	2830.9	40768.	2221.0
#2	2695.1	41346.	2231.0

Sample Name: CCB Acquired: 5/18/2016 13:01:04 Type: QC
 Method: 6500_025(v6) Mode: CONC Corr. Factor: 1.000000
 User: CRHOADES Prep Date: Custom ID2: Custom ID3:
 Comment:

Elem	Ag3280	Al1670	As1890	B_2089	Ba4554	Be3130	Bi2230	Ca3179	Cd2288	Co2286	Cr2055
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	-.00075	-.00072	.00444	F .06275	-.00066	.00022	.00381	-.02399	-.00031	-.00009	-.00005
Stddev	.00040	.00015	.00340	.00043	.00017	.00010	.00583	.00269	.00025	.00000	.00004
%RSD	53.673	20.275	76.629	.68699	25.021	46.174	153.09	11.234	79.654	4.4109	80.803

#1	-.00047	-.00082	.00203	.06305	-.00078	.00029	-.00031	-.02589	-.00049	-.00009	-.00009
#2	-.00104	-.00062	.00685	.06244	-.00054	.00015	.00793	-.02208	-.00014	-.00009	-.00002

Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Fail	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit				.05000							
Low Limit				-.10000							

Elem	Cu3247	Fe2599	K_7664	Li6707	Mg2790	Mn2576	Mo2020	Na5895	Ni2316	P_1782	Pb2203
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.00023	-.00377	.20775	.00292	-.00153	-.00001	.00174	.10581	-.00079	.00297	-.00061
Stddev	.00081	.00536	.13412	.00317	.00526	.00002	.00093	.01920	.00021	.00284	.00073
%RSD	344.93	142.30	64.555	108.52	344.16	265.88	53.552	18.142	26.150	95.541	119.48

#1	-.00034	-.00756	.11292	.00516	-.00525	.00001	.00108	.11938	-.00064	.00498	-.00009
#2	.00080	.00002	.30259	.00068	.00219	-.00002	.00240	.09223	-.00093	.00096	-.00112

Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit											
Low Limit											

Elem	S_1820	Sb2068	Se1960	Si2881	SiO2	Sn1899	Sr4077	Th2837	Ti3349	Ti1908	U_3701
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	-.00668	W .01028	W .01604	.02168	.04640	.00059	-.00001	-.00104	-.00046	.00284	-.03638
Stddev	.00456	.00476	.00217	.01424	.03047	.00208	.00024	.00191	.00006	.00153	.03680
%RSD	68.293	46.297	13.538	65.672	65.672	354.99	3984.5	183.37	13.539	53.812	101.14

#1	-.00345	.01364	.01757	.01161	.02486	-.00088	.00016	-.00239	-.00042	.00176	-.01036
#2	-.00991	.00691	.01450	.03175	.06795	.00205	-.00017	.00031	-.00051	.00391	-.06241

Check ?	Chk Pass	Chk Warn	Chk Warn	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit		.00100	.00750								
Low Limit		-.00100	-.01500								

Elem	V_2924	Zn2062	Zr3391
Units	ppm	ppm	ppm
Avg	.00021	-.00080	-.00163
Stddev	.00017	.00031	.00459
%RSD	78.773	38.652	281.75

#1	.00033	-.00058	-.00487
#2	.00009	-.00102	.00162

Check ?	Chk Pass	Chk Pass	Chk Pass
High Limit			
Low Limit			

Int. Std.	Y_2243	Y_3600	Y_3774
Units	Cts/S	Cts/S	Cts/S
Avg	2772.5	42574.	2183.6
Stddev	38.8	1478.	21.3
%RSD	1.3995	3.4706	.97761

#1	2800.0	41529.	2198.7
#2	2745.1	43618.	2168.5

Sample Name: CCVL-3897520 Acquired: 5/18/2016 13:04:14 Type: QC
Method: 6500_025(v6) Mode: CONC Corr. Factor: 1.000000
User: CRHOADES Prep Date: Custom ID2: Custom ID3:
Comment:

Elem	Ag3280	Al1670	As1890	B_2089	Ba4554	Be3130	Bi2230	Ca3179	Cd2288	Co2286	Cr2055	Cu3247
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.00960	.10940	.01221	F .14752	.00932	.00129	.10958	.18800	.00496	.00988	.01003	.01563
Stddev	.00046	.00105	.00030	.00104	.00037	.00013	.00582	.00315	.00000	.00038	.00033	.00086
%RSD	4.7609	.95582	2.4396	.70309	3.9358	10.026	5.3141	1.6769	.01215	3.8920	3.2484	5.5308

#1	.00992	.10866	.01242	.14679	.00906	.00139	.10546	.18577	.00496	.00961	.00980	.01502
#2	.00927	.11014	.01200	.14825	.00958	.00120	.11370	.19023	.00496	.01016	.01026	.01625

Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Fail	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Value				.10000								
Range				30.000%								

Elem	Fe2599	K_7664	Li6707	Mg2790	Mn2576	Mo2020	Na5895	Ni2316	P_1782	Pb2203	S_1820	Sb2068
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.09809	3.1239	.01231	.20334	.00999	.02010	1.0571	.03954	2.8485	.00995	-.00815	.02276
Stddev	.00156	.0948	.00254	.00617	.00004	.00069	.0198	.00020	.0232	.00157	.01165	.00221
%RSD	1.5889	3.0344	20.661	3.0337	.35515	3.4197	1.8751	.50253	.81450	15.727	142.91	9.7086

#1	.09920	3.1909	.01411	.20771	.00997	.01962	1.0431	.03940	2.8321	.01106	.00009	.02433
#2	.09699	3.0568	.01051	.19898	.01002	.02059	1.0711	.03968	2.8649	.00885	-.01638	.02120

Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	None	Chk Pass
Value												
Range												

Elem	Se1960	Si2881	SiO2	Sn1899	Sr4077	Th2837	Ti3349	Ti1908	U_3701	V_2924	Zn2062	Zr3391
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	F .02758	.50654	1.0840	.09963	.01022	.01586	.00896	F .00946	.04340	.01086	.01817	.01516
Stddev	.00641	.03960	.0847	.00134	.00011	.00213	.00001	.00109	.02146	.00020	.00050	.00057
%RSD	23.246	7.8174	7.8174	1.3496	1.0423	13.444	.08623	11.552	49.436	1.8448	2.7394	3.7571

#1	.02305	.47854	1.0241	.09868	.01014	.01435	.00896	.00868	.02823	.01071	.01782	.01556
#2	.03212	.53454	1.1439	.10058	.01029	.01737	.00897	.01023	.05857	.01100	.01853	.01476

Check ?	Chk Fail	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Fail	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Value	.01500							.01500				
Range	30.000%							-30.000%				

Int. Std.	Y_2243	Y_3600	Y_3774
Units	Cts/S	Cts/S	Cts/S
Avg	2757.0	42402.	2271.7
Stddev	.1	24.	24.9
%RSD	.00260	.05656	1.0975

#1	2756.9	42419.	2254.1
#2	2757.0	42385.	2289.3

Sample Name: CCVL-3897520 Acquired: 5/18/2016 13:09:39 Type: QC

Method: 6500_025(v6) Mode: CONC Corr. Factor: 1.000000

User: CRHOADES Prep Date: Custom ID2: Custom ID3:

Comment:

Elem	Ag3280	Al1670	As1890	B_2089	Ba4554	Be3130	Bi2230	Ca3179	Cd2288	Co2286	Cr2055	Cu3247
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.00895	.10640	.01305	F .13700	.00944	.00118	.11169	.18158	.00497	.01032	.00984	.01518
Stddev	.00017	.00015	.00467	.00068	.00010	.00010	.00311	.00651	.00007	.00006	.00014	.00005
%RSD	1.9263	.14070	35.830	.49925	1.0936	8.6784	2.7848	3.5860	1.4325	.57521	1.4426	.31582

#1	.00883	.10629	.01635	.13652	.00951	.00110	.11389	.18618	.00502	.01036	.00994	.01522
#2	.00907	.10650	.00974	.13748	.00937	.00125	.10949	.17698	.00492	.01028	.00973	.01515

Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Fail	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Value				.10000								
Range				30.000%								

Elem	Fe2599	K_7664	Li6707	Mg2790	Mn2576	Mo2020	Na5895	Ni2316	P_1782	Pb2203	S_1820	Sb2068
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.09286	2.9944	.01064	.19676	.00970	.01969	1.0025	.04009	2.8614	.01056	-.01414	.02251
Stddev	.00374	.0541	.00093	.00307	.00007	.00023	.0095	.00009	.0197	.00163	.00371	.00187
%RSD	4.0233	1.8061	8.7856	1.5614	.75207	1.1744	.95198	.21287	.68991	15.429	26.271	8.3177

#1	.09022	3.0326	.00998	.19458	.00965	.01953	1.0093	.04015	2.8474	.01171	-.01151	.02118
#2	.09550	2.9561	.01130	.19893	.00975	.01985	.99577	.04003	2.8753	.00941	-.01676	.02383

Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	None	Chk Pass
Value												
Range												

Elem	Se1960	Si2881	SiO2	Sn1899	Sr4077	Th2837	Ti3349	Ti1908	U_3701	V_2924	Zn2062	Zr3391
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	F .02169	.52669	1.1271	.10113	.00978	.01316	.00903	.01227	.05205	.00947	.01830	.01367
Stddev	.00529	.03501	.0749	.00027	.00006	.00291	.00014	.00429	.00887	.00011	.00038	.00135
%RSD	24.402	6.6464	6.6464	.26655	.59701	22.127	1.5619	34.961	17.051	1.1376	2.0907	9.8683

#1	.02543	.50194	1.0742	.10094	.00982	.01522	.00913	.00923	.04577	.00954	.01857	.01462
#2	.01795	.55145	1.1801	.10132	.00973	.01110	.00893	.01530	.05832	.00939	.01803	.01272

Check ?	Chk Fail	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Value	.01500											
Range	30.000%											

Int. Std.	Y_2243	Y_3600	Y_3774
Units	Cts/S	Cts/S	Cts/S
Avg	2767.2	42722.	2270.0
Stddev	7.6	57.	18.3
%RSD	.27368	.13253	.80668

#1	2761.9	42762.	2257.1
#2	2772.6	42682.	2283.0

Sample Name: CCVL-3897520 Acquired: 5/18/2016 13:12:05 Type: QC

Method: 6500_025(v6) Mode: CONC Corr. Factor: 1.000000

User: CRHOADES Prep Date: Custom ID2: Custom ID3:

Comment:

Elem	Ag3280	Al1670	As1890	B_2089	Ba4554	Be3130	Bi2230	Ca3179	Cd2288	Co2286	Cr2055	Cu3247
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.00933	.10631	.01558	F .13225	.00873	.00127	.10851	.18824	.00516	.01002	.01005	.01595
Stddev	.00007	.00127	.00049	.00049	.00061	.00007	.00331	.01192	.00015	.00011	.00023	.00023
%RSD	.71675	1.1912	3.1201	.37272	6.9641	5.7961	3.0475	6.3328	2.9372	1.0647	2.3258	1.4208

#1	.00928	.10541	.01524	.13260	.00830	.00132	.11085	.19667	.00527	.00994	.01021	.01611
#2	.00937	.10720	.01593	.13191	.00916	.00122	.10618	.17981	.00505	.01009	.00988	.01579

Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Fail	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Value				.10000								
Range				30.000%								

Elem	Fe2599	K_7664	Li6707	Mg2790	Mn2576	Mo2020	Na5895	Ni2316	P_1782	Pb2203	S_1820	Sb2068
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.09707	3.0525	.01095	.19721	.00991	.02000	1.0197	.03969	2.8626	.00810	-.00648	.02428
Stddev	.00068	.1580	.00156	.00204	.00018	.00077	.0045	.00027	.0477	.00054	.00058	.00040
%RSD	.70450	5.1759	14.225	1.0360	1.7826	3.8567	.44041	.67446	1.6655	6.6731	8.9314	1.6433

#1	.09659	3.1643	.01205	.19865	.00978	.01946	1.0165	.03988	2.8963	.00771	-.00607	.02400
#2	.09755	2.9408	.00985	.19576	.01003	.02055	1.0229	.03950	2.8288	.00848	-.00689	.02456

Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	None	Chk Pass
Value												
Range												

Elem	Se1960	Si2881	SiO2	Sn1899	Sr4077	Th2837	Ti3349	Ti1908	U_3701	V_2924	Zn2062	Zr3391
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.01886	.47173	1.0095	.10458	.01019	.01314	.00965	F .01021	F .09168	.01016	.01797	.01720
Stddev	.00414	.00909	.0194	.00082	.00009	.00078	.00079	.00096	.04531	.00056	.00090	.00306
%RSD	21.944	1.9269	1.9269	.78023	.86950	5.9670	8.1707	9.3770	49.420	5.4637	5.0247	17.774

#1	.02179	.46530	.99574	.10516	.01012	.01370	.00909	.00953	.05964	.00977	.01733	.01936
#2	.01593	.47816	1.0233	.10401	.01025	.01259	.01020	.01089	.12371	.01055	.01861	.01504

Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Fail	Chk Fail	Chk Pass	Chk Pass	Chk Pass
Value								.01500	.06000			
Range								-30.000%	30.000%			

Int. Std.	Y_2243	Y_3600	Y_3774
Units	Cts/S	Cts/S	Cts/S
Avg	2755.8	42688.	2335.6
Stddev	4.4	121.	34.0
%RSD	.15900	.28269	1.4557

#1	2758.9	42773.	2311.6
#2	2752.7	42602.	2359.7

Sample Name: MB 280-324888/1-A Acquired: 5/18/2016 13:19:40 Type: Unk

Method: 6500_025(v6) Mode: CONC Corr. Factor: 1.000000

User: CRHOADES Prep Date: 5/13 Custom ID2: Custom ID3:

Comment: 324888 SOIL 6010C (Be) Q5

Elem	Ag3280	Al1670	As1890	B_2089	Ba4554	Be3130	Bi2230	Ca3179	Cd2288
Line	328.068 {103}	167.079 {502}	189.042 {478}	208.959 {461}	455.403 { 74}	313.042 {108}	223.061 {451}	317.933 {106}	228.802 {447}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	-0.00056	.03654	-0.00250	.03718	-0.00036	.00009	-0.00227	.01787	-0.00007
Stddev	.00100	.00029	.00528	.00232	.00072	.00006	.00069	.00064	.00013
%RSD	179.52	.78461	210.75	6.2358	201.03	73.383	30.470	3.5770	191.85

#1	-0.00126	.03633	-0.00624	.03882	-0.00087	.00004	-0.00276	.01832	-0.00016
#2	.00015	.03674	.00123	.03555	.00015	.00013	-0.00178	.01742	.00002

Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Elem	Co2286	Cr2055	Cu3247	Fe2599	K_7664	Li6707	Mg2790	Mn2576	Mo2020
Line	228.616 {447}	205.560 {464}	324.754 {104}	259.940 {130}	766.490 { 44}	670.784 { 50}	279.079 {121}2	257.610 {131}	202.030 {467}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	-0.00040	.00005	.00035	W .07614	-0.01585	-0.00184	.01057	.00089	-0.00042
Stddev	.00014	.00002	.00034	.00034	.04763	.00208	.00599	.00003	.00000
%RSD	34.101	42.174	94.951	.45070	300.59	112.92	56.645	3.5899	.74887

#1	-0.00050	.00004	.00012	.07589	-0.04952	-0.00331	.00634	.00087	-0.00042
#2	-0.00031	.00007	.00059	.07638	.01783	-0.00037	.01481	.00092	-0.00042

Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Warn	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit				.05000					
Low Limit				-.05000					

Elem	Na5895	Ni2316	P_1782	Pb2203	S_1820	Sb2068	Se1960	Si2881	SiO2
Line	589.592 { 57}	231.604 {446}	178.284 {489}	220.353 {453}	182.034 {485}	206.833 {463}	196.090 {472}	288.158 {117}	288.158 {117}2
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.05303	-0.00057	.00252	.00062	-0.00152	W .00542	.00463	.10604	.22692
Stddev	.00369	.00049	.00184	.00011	.00042	.00060	.00140	.00274	.00587
%RSD	6.9619	85.846	73.041	17.137	27.432	11.056	30.261	2.5874	2.5874

#1	.05042	-0.00022	.00122	.00055	-0.00182	.00500	.00562	.10410	.22277
#2	.05565	-0.00091	.00382	.00070	-0.00123	.00584	.00364	.10798	.23107

Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Warn	Chk Pass	Chk Pass	None
High Limit						.00500			
Low Limit						-.00500			

Elem	Sn1899	Sr4077	Th2837	Ti3349	Ti1908	U_3701	V_2924	Zn2062	Zr3391
Line	189.989 {477}	407.771 { 83}	283.730 {119}	334.904 {101}	190.856 {477}	370.152 { 91}	292.402 {115}	206.200 {163}	339.198 { 99}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.00139	.00030	-0.00434	.00315	-0.00356	.01343	.00032	.00153	.00090
Stddev	.00021	.00000	.00102	.00020	.00076	.02134	.00056	.00012	.00174
%RSD	15.109	1.3294	23.639	6.2574	21.336	158.93	176.38	7.9273	192.99

#1	.00124	.00030	-0.00361	.00329	-0.00302	.02852	-0.00008	.00145	.00213
#2	.00154	.00030	-0.00506	.00301	-0.00410	-0.00166	.00071	.00162	-0.00033

Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Int. Std.	Y_2243	Y_3600	Y_3774
Line	224.306 {450}	360.073 { 94}	377.433 { 89}
Units	Cts/S	Cts/S	Cts/S
Avg	2813.7	43445.	2255.2
Stddev	4.0	45.	39.8
%RSD	.14293	.10304	1.7651

#1	2810.9	43413.	2227.0
#2	2816.5	43476.	2283.3

Sample Name: LCS 280-324888/2-A Acquired: 5/18/2016 13:22:47 Type: Unk
Method: 6500_025(v6) Mode: CONC Corr. Factor: 1.000000
User: CRHOADES Prep Date: Custom ID2: Custom ID3:
Comment: 324888 SOIL 6010C (Be) Q5

Elem	Ag3280	Al1670	Al3092	As1890	B_2089	Ba4554	Be3130	Bi2230	Ca3179
Line	328.068 {103}	167.079 {502}	309.271 {109}	189.042 {478}	208.959 {461}	455.403 { 74}	313.042 {108}	223.061 {451}	317.933 {106}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.04877	2.1638	F 2.4191	1.0210	F 1.1156	1.9592	.04717	2.0634	48.185
Stddev	.00002	.0077	.0043	.0080	.0024	.0043	.00012	.0106	.126
%RSD	.03553	.35793	.17899	.78089	.21460	.22050	.25971	.51497	.26058

#1	.04878	2.1693	2.4160	1.0154	1.1173	1.9623	.04726	2.0710	48.273
#2	.04876	2.1583	2.4221	1.0267	1.1139	1.9562	.04709	2.0559	48.096

Check ?	Chk Pass	Chk Pass	Chk Fail	Chk Pass	Chk Fail	Chk Pass	Chk Pass	None	Chk Pass
High Limit			2.3200		1.1000				
Low Limit			1.6400		.81000				

Elem	Cd2288	Co2286	Cr2055	Cu3247	Fe2599	K_7664	Li6707	Mg2790	Mn2576
Line	228.802 {447}	228.616 {447}	205.560 {464}	324.754 {104}	259.940 {130}	766.490 { 44}	670.784 { 50}	279.079 {121}2	257.610 {131}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.09699	.47373	.19152	.25384	1.1302	48.439	.95837	47.215	.46232
Stddev	.00021	.00160	.00088	.00221	.0119	.107	.00012	.178	.00062
%RSD	.21858	.33833	.46033	.87241	1.0563	.22189	.01277	.37605	.13315

#1	.09684	.47486	.19214	.25227	1.1217	48.515	.95828	47.089	.46189
#2	.09714	.47259	.19090	.25540	1.1386	48.363	.95846	47.341	.46276

Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Elem	Mo2020	Na8183	Ni2316	P_1782	Pb2203	S_1820	Sb2068	Se1960	Si2881
Line	202.030 {467}	818.326 { 41}	231.604 {446}	178.284 {489}	220.353 {453}	182.034 {485}	206.833 {463}	196.090 {472}	288.158 {117}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	1.0039	52.016	.46978	9.8801	.48859	1.9976	.51180	2.0393	2.2505
Stddev	.0060	.474	.00358	.0371	.00363	.0153	.00821	.0235	.0332
%RSD	.59864	.91127	.76177	.37550	.74197	.76746	1.6049	1.1510	1.4734

#1	1.0082	52.351	.47231	9.9063	.49116	2.0085	.51761	2.0559	2.2739
#2	.99969	51.681	.46725	9.8539	.48603	1.9868	.50600	2.0227	2.2270

Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	None	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Elem	SiO2	Sn1899	Sr4077	Th2837	Ti3349	Ti1908	U_3701	V_2924	Zn2062
Line	288.158 {117}2	189.989 {477}	407.771 { 83}	283.730 {119}	334.904 {101}	190.856 {477}	370.152 { 91}	292.402 {115}	206.200 {163}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	4.8160	1.9318	.96087	.94761	.93983	1.8942	1.9607	.46738	.45975
Stddev	.0710	.0227	.00177	.00329	.00217	.0661	.0311	.00104	.00194
%RSD	1.4734	1.1758	.18387	.34696	.23127	3.4885	1.5855	.22253	.42185

#1	4.8662	1.9478	.96212	.94528	.93830	1.9409	1.9387	.46665	.46112
#2	4.7659	1.9157	.95963	.94993	.94137	1.8474	1.9826	.46812	.45838

Check ?	None	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Elem	Zr3391								
Line	339.198 { 99}								
Units	ppm								
Avg	.49686								
Stddev	.00275								
%RSD	.55422								

#1	.49881								
#2	.49492								

Check ?	Chk Pass								
High Limit									
Low Limit									

Sample Name: LCS 280-324888/2-A Acquired: 5/18/2016 13:22:47 Type: Unk
Method: 6500_025(v6) Mode: CONC Corr. Factor: 1.000000
User: CRHOADES Prep Date: Custom ID2: Custom ID3:
Comment: 324888 SOIL 6010C (Be) Q5

Int. Std.	Y_2243	Y_3600	Y_3774
Line	224.306 {450}	360.073 { 94}	377.433 { 89}
Units	Cts/S	Cts/S	Cts/S
Avg	2750.2	42291.	2263.5
Stddev	13.5	35.	9.2
%RSD	.49137	.08252	.40844
#1	2759.7	42266.	2270.0
#2	2740.6	42315.	2257.0

Sample Name: 280-82987-A-4-A Acquired: 5/18/2016 13:25:17 Type: Unk

Method: 6500_025(v6) Mode: CONC Corr. Factor: 1.000000

User: CRHOADES Prep Date: Custom ID2: Custom ID3:

Comment: 324888 SOIL 6010C (Be) Q5

Elem	Ag3280	Al3092	As1890	B_2089	Ba4554	Be3130	Bi2230	Ca3179	Cd2288
Line	328.068 {103}	309.271 {109}	189.042 {478}	208.959 {461}	455.403 {74}	313.042 {108}	223.061 {451}	317.933 {106}	228.802 {447}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	-.00054	113.85	.08327	.02658	.91478	.00504	.00600	55.189	.00280
Stddev	.00042	.26	.00146	.00090	.00205	.00042	.00681	.079	.00009
%RSD	77.343	.23074	1.7539	3.3817	.22395	8.3584	113.53	.14245	3.3321

#1	-.00083	113.66	.08430	.02722	.91333	.00474	.01082	55.245	.00274
#2	-.00024	114.03	.08223	.02594	.91623	.00533	.00118	55.134	.00287

Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Elem	Co2286	Cr2055	Cu3247	Fe2714	K_7664	Li6707	Mg2790	Mn2576	Mo2020
Line	228.616 {447}	205.560 {464}	324.754 {104}	271.441 {124}	766.490 {44}	670.784 {50}	279.079 {121}2	257.610 {131}	202.030 {467}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.07097	.11706	.18237	252.28	20.177	.13961	57.095	3.4731	.00485
Stddev	.00089	.00155	.00059	1.41	.080	.00032	.145	.0097	.00003
%RSD	1.2563	1.3250	.32329	.55782	.39565	.23264	.25318	.28002	.63924

#1	.07034	.11597	.18196	251.29	20.120	.13984	57.197	3.4800	.00487
#2	.07160	.11816	.18279	253.28	20.233	.13938	56.993	3.4662	.00483

Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Elem	Na5895	Ni2316	P_1782	Pb2203	S_1820	Sb2068	Se1960	Si2881	SiO2
Line	589.592 {57}	231.604 {446}	178.284 {489}	220.353 {453}	182.034 {485}	206.833 {463}	196.090 {472}	288.158 {117}	288.158 {117}2
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	1.2983	.12192	W 7.5862	.11524	.90287	.00045	.00896	10.920	23.368
Stddev	.0100	.00122	.0741	.00112	.01483	.00290	.00634	.080	.172
%RSD	.76760	1.0030	.97648	.97262	1.6424	642.04	70.712	.73459	.73459

#1	1.3053	.12106	7.5338	.11604	.89238	-.00160	.01344	10.863	23.247
#2	1.2913	.12279	7.6385	.11445	.91335	.00250	.00448	10.976	23.490

Check ?	Chk Pass	Chk Pass	Chk Warn	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit			2.0000						
Low Limit			-1.0000						

Elem	Sn1899	Sr4077	Th2837	Ti3349	Ti1908	U_3701	V_2924	Zn2062	Zr3391
Line	189.989 {477}	407.771 {83}	283.730 {119}	334.904 {101}	190.856 {477}	370.152 {91}	292.402 {115}	206.200 {163}	339.198 {99}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	-.00110	.18147	.06746	9.4056	.01858	W -.08736	.35032	.55055	.16525
Stddev	.00113	.00061	.00016	.0178	.00487	.02333	.00260	.00163	.00192
%RSD	102.23	.33410	.23962	.18966	26.186	26.702	.74181	.29530	1.1592

#1	-.00031	.18104	.06734	9.4182	.01514	-.07087	.35216	.55170	.16389
#2	-.00190	.18190	.06757	9.3930	.02202	-.10385	.34848	.54940	.16660

Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Warn	Chk Pass	Chk Pass	Chk Pass
High Limit						45.000			
Low Limit						-.05000			

Int. Std.	Y_2243	Y_3600	Y_3774
Line	224.306 {450}	360.073 {94}	377.433 {89}
Units	Cts/S	Cts/S	Cts/S
Avg	3047.6	46216.	2568.2
Stddev	9.4	234.	3.1
%RSD	.30854	.50536	.12029

#1	3041.0	46051.	2570.4
#2	3054.3	46381.	2566.1

Sample Name: 280-82987-A-5-A Acquired: 5/18/2016 13:27:50 Type: Unk

Method: 6500_025(v6) Mode: CONC Corr. Factor: 1.000000

User: CRHOADES Prep Date: Custom ID2: Custom ID3:

Comment: 324888 SOIL 6010C (Be) Q5

Elem	Ag3280	Al3092	As1890	B_2089	Ba4554	Be3130	Bi2230	Ca3179	Cd2288
Line	328.068 {103}	309.271 {109}	189.042 {478}	208.959 {461}	455.403 {74}	313.042 {108}	223.061 {451}	317.933 {106}	228.802 {447}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	-0.00093	122.79	.09704	.04198	1.2453	.00503	.00530	57.081	.00274
Stddev	.00051	.72	.00124	.00170	.0071	.00018	.00037	.429	.00028
%RSD	54.504	.58914	1.2800	4.0525	.56837	3.4827	6.9166	.75235	10.274

#1	-0.00057	123.30	.09792	.04318	1.2503	.00515	.00504	57.385	.00254
#2	-0.0129	122.28	.09617	.04078	1.2403	.00490	.00556	56.778	.00294

Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Elem	Co2286	Cr2055	Cu3247	Fe2714	K_7664	Li6707	Mg2790	Mn2576	Mo2020
Line	228.616 {447}	205.560 {464}	324.754 {104}	271.441 {124}	766.490 {44}	670.784 {50}	279.079 {121}2	257.610 {131}	202.030 {467}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.08476	.11197	.17359	272.92	22.303	.12935	53.590	4.7266	.00308
Stddev	.00140	.00011	.00024	1.31	.161	.00214	.056	.0672	.00059
%RSD	1.6540	.09754	.13856	.47963	.72211	1.6573	.10456	1.4217	19.251

#1	.08575	.11204	.17342	273.84	22.417	.13087	53.550	4.6791	.00266
#2	.08376	.11189	.17376	271.99	22.189	.12784	53.629	4.7741	.00350

Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Elem	Na5895	Ni2316	P_1782	Pb2203	S_1820	Sb2068	Se1960	Si2881	SiO2
Line	589.592 {57}	231.604 {446}	178.284 {489}	220.353 {453}	182.034 {485}	206.833 {463}	196.090 {472}	288.158 {117}	288.158 {117}2
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	1.4792	.11779	W 9.4031	.17668	2.4273	-0.00083	.01182	11.788	25.226
Stddev	.0159	.00036	.0294	.00144	.0190	.00032	.00738	.112	.240
%RSD	1.0763	.30901	.31275	.81448	.78349	38.339	62.416	.94961	.94961

#1	1.4905	.11753	9.4239	.17770	2.4407	-0.00061	.00660	11.867	25.396
#2	1.4679	.11805	9.3823	.17567	2.4138	-0.0106	.01703	11.709	25.057

Check ?	Chk Pass	Chk Pass	Chk Warn	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit			2.0000						
Low Limit			-1.0000						

Elem	Sn1899	Sr4077	Th2837	Ti3349	Ti1908	U_3701	V_2924	Zn2062	Zr3391
Line	189.989 {477}	407.771 {83}	283.730 {119}	334.904 {101}	190.856 {477}	370.152 {91}	292.402 {115}	206.200 {163}	339.198 {99}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	-0.00018	.24943	.05562	9.5004	.00613	W -.08199	.47739	.61732	.16762
Stddev	.00012	.00209	.00201	.0254	.00262	.04022	.00079	.00362	.00160
%RSD	69.616	.83695	3.6120	.26780	42.816	49.054	.16448	.58596	.95523

#1	-0.00026	.25091	.05420	9.4824	.00427	-.11042	.47683	.61988	.16649
#2	-0.00009	.24796	.05704	9.5184	.00799	-.05355	.47794	.61476	.16876

Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Warn	Chk Pass	Chk Pass	Chk Pass
High Limit						45.000			
Low Limit						-.05000			

Int. Std.	Y_2243	Y_3600	Y_3774
Line	224.306 {450}	360.073 {94}	377.433 {89}
Units	Cts/S	Cts/S	Cts/S
Avg	3067.2	46310.	2639.6
Stddev	3.7	46.	9.3
%RSD	.12174	.10038	.35249

#1	3069.8	46278.	2633.0
#2	3064.5	46343.	2646.2

Sample Name: 280-82987-A-6-A Acquired: 5/18/2016 13:30:27 Type: Unk

Method: 6500_025(v6) Mode: CONC Corr. Factor: 1.000000

User: CRHOADES Prep Date: Custom ID2: Custom ID3:

Comment: 324888 SOIL 6010C (Be) Q5

Elem	Ag3280	Al3092	As1890	B_2089	Ba4554	Be3130	Bi2230	Ca3179	Cd2288
Line	328.068 {103}	309.271 {109}	189.042 {478}	208.959 {461}	455.403 {74}	313.042 {108}	223.061 {451}	317.933 {106}	228.802 {447}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	-.00120	114.74	.09259	.03176	1.0227	.00464	.01100	65.981	.00171
Stddev	.00019	1.57	.00311	.00003	.0165	.00008	.00366	.983	.00028
%RSD	16.299	1.3649	3.3536	.08666	1.6125	1.6704	33.249	1.4896	16.297

#1	-.00106	115.85	.09478	.03178	1.0344	.00459	.00841	66.676	.00191
#2	-.00133	113.64	.09039	.03174	1.0111	.00470	.01359	65.286	.00151

Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Elem	Co2286	Cr2055	Cu3247	Fe2714	K_7664	Li6707	Mg2790	Mn2576	Mo2020
Line	228.616 {447}	205.560 {464}	324.754 {104}	271.441 {124}	766.490 {44}	670.784 {50}	279.079 {121}2	257.610 {131}	202.030 {467}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.06791	.18427	.15249	220.47	19.622	.14274	59.537	4.1038	.00147
Stddev	.00050	.00129	.00010	1.88	.193	.00099	.135	.0001	.00075
%RSD	.73878	.69931	.06273	.85404	.98532	.69227	.22730	.00228	50.874

#1	.06826	.18518	.15242	221.80	19.759	.14344	59.442	4.1039	.00094
#2	.06755	.18336	.15256	219.14	19.485	.14205	59.633	4.1037	.00200

Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Elem	Na5895	Ni2316	P_1782	Pb2203	S_1820	Sb2068	Se1960	Si2881	SiO2
Line	589.592 {57}	231.604 {446}	178.284 {489}	220.353 {453}	182.034 {485}	206.833 {463}	196.090 {472}	288.158 {117}	288.158 {117}2
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	1.3115	.14537	W 6.0248	.13957	1.6639	-.00140	.00833	10.392	22.240
Stddev	.0241	.00031	.0049	.00055	.0039	.00274	.00416	.009	.018
%RSD	1.8392	.21141	.08204	.39334	.23603	195.32	49.909	.08314	.08314

#1	1.3286	.14559	6.0283	.13918	1.6667	-.00334	.01127	10.386	22.227
#2	1.2945	.14515	6.0213	.13996	1.6611	.00053	.00539	10.398	22.253

Check ?	Chk Pass	Chk Pass	Chk Warn	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit			2.0000						
Low Limit			-1.0000						

Elem	Sn1899	Sr4077	Th2837	Ti3349	Ti1908	U_3701	V_2924	Zn2062	Zr3391
Line	189.989 {477}	407.771 {83}	283.730 {119}	334.904 {101}	190.856 {477}	370.152 {91}	292.402 {115}	206.200 {163}	339.198 {99}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	-.00029	.21490	.06751	6.8753	-.00229	F -.10036	.29050	.47310	.14294
Stddev	.00011	.00316	.00010	.0069	.00259	.00634	.00025	.00006	.00329
%RSD	38.628	1.4702	.15031	.10093	113.03	6.3162	.08752	.01296	2.3029

#1	-.00021	.21713	.06758	6.8802	-.00412	-.09588	.29032	.47305	.14061
#2	-.00037	.21266	.06744	6.8704	-.00046	-.10484	.29068	.47314	.14526

Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Fail	Chk Pass	Chk Pass	Chk Pass
High Limit						50.000			
Low Limit						-1.0000			

Int. Std.	Y_2243	Y_3600	Y_3774						
Line	224.306 {450}	360.073 {94}	377.433 {89}						
Units	Cts/S	Cts/S	Cts/S						
Avg	2988.7	45268.	2585.5						
Stddev	2.9	26.	36.2						
%RSD	.09713	.05691	1.3998						

#1	2990.7	45249.	2559.9						
#2	2986.6	45286.	2611.1						

Sample Name: 280-82987-A-7-A Acquired: 5/18/2016 13:33:00 Type: Unk

Method: 6500_025(v6) Mode: CONC Corr. Factor: 1.000000

User: CRHOADES Prep Date: Custom ID2: Custom ID3:

Comment: 324888 SOIL 6010C (Be) Q5

Elem	Ag3280	Al3092	As1890	B_2089	Ba4554	Be3130	Bi2230	Ca3179	Cd2288
Line	328.068 {103}	309.271 {109}	189.042 {478}	208.959 {461}	455.403 {74}	313.042 {108}	223.061 {451}	317.933 {106}	228.802 {447}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.00320	135.95	.42928	.03068	1.2072	.00529	.01234	208.31	.00100
Stddev	.00011	2.14	.00329	.00079	.0201	.00018	.00094	3.49	.00005
%RSD	3.4485	1.5720	.76690	2.5701	1.6654	3.4260	7.6280	1.6773	4.8993

#1	.00328	137.46	.42695	.03013	1.2214	.00542	.01301	210.78	.00096
#2	.00312	134.44	.43161	.03124	1.1930	.00516	.01168	205.84	.00103

Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Elem	Co2286	Cr2055	Cu3247	Fe2714	K_7664	Li6707	Mg2790	Mn2576	Mo2020
Line	228.616 {447}	205.560 {464}	324.754 {104}	271.441 {124}	766.490 {44}	670.784 {50}	279.079 {121}2	257.610 {131}	202.030 {467}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.07880	.13124	.18959	253.17	22.618	.16648	69.712	W 10.301	.00162
Stddev	.00091	.00018	.00129	2.53	.220	.00344	.148	.151	.00129
%RSD	1.1524	.13794	.67910	1.0010	.97290	2.0679	.21279	1.4653	79.523

#1	.07945	.13137	.18868	254.96	22.774	.16892	69.607	10.194	.00071
#2	.07816	.13111	.19050	251.38	22.463	.16405	69.817	10.408	.00252

Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Warn	Chk Pass
High Limit								10.000	
Low Limit								-.01000	

Elem	Na5895	Ni2316	P_1782	Pb2203	S_1820	Sb2068	Se1960	Si2881	SiO2
Line	589.592 {57}	231.604 {446}	178.284 {489}	220.353 {453}	182.034 {485}	206.833 {463}	196.090 {472}	288.158 {117}	288.158 {117}2
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	1.4914	.14412	W 7.9139	.16875	2.0833	-.00263	.00836	11.271	24.119
Stddev	.0165	.00207	.0261	.00168	.0004	.00304	.00849	.061	.132
%RSD	1.1072	1.4370	.32930	.99804	.01690	115.74	101.61	.54522	.54522

#1	1.5031	.14559	7.9323	.16994	2.0831	-.00478	.01436	11.314	24.212
#2	1.4797	.14266	7.8954	.16756	2.0836	-.00048	.00235	11.227	24.026

Check ?	Chk Pass	Chk Pass	Chk Warn	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit			2.0000						
Low Limit			-1.0000						

Elem	Sn1899	Sr4077	Th2837	Ti3349	Ti1908	U_3701	V_2924	Zn2062	Zr3391
Line	189.989 {477}	407.771 {83}	283.730 {119}	334.904 {101}	190.856 {477}	370.152 {91}	292.402 {115}	206.200 {163}	339.198 {99}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.00042	.30855	.07033	7.7986	.00192	F -.14466	.33643	.59197	.15902
Stddev	.00236	.00633	.00170	.0121	.00271	.02123	.00110	.00052	.00687
%RSD	556.12	2.0527	2.4178	.15573	141.08	14.672	.32726	.08760	4.3198

#1	.00209	.31303	.06913	7.7900	.00384	-.12966	.33565	.59234	.16388
#2	-.00124	.30407	.07153	7.8071	.00000	-.15967	.33721	.59160	.15416

Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Fail	Chk Pass	Chk Pass	Chk Pass
High Limit						50.000			
Low Limit						-.10000			

Int. Std.	Y_2243	Y_3600	Y_3774
Line	224.306 {450}	360.073 {94}	377.433 {89}
Units	Cts/S	Cts/S	Cts/S
Avg	3055.4	46343.	2685.4
Stddev	.7	25.	25.5
%RSD	.02134	.05339	.94910

#1	3054.9	46361.	2667.4
#2	3055.9	46326.	2703.4

Sample Name: 280-82987-A-7-A @2 Acquired: 5/18/2016 13:35:38 Type: Unk
Method: 6500_025(v6) Mode: CONC Corr. Factor: 1.000000
User: CRHOADES Prep Date: Custom ID2: Custom ID3:
Comment: 324888 SOIL 6010C (Mn) Q5 2x

Elem	Ag3280	Al3092	As1890	B_2089	Ba4554	Be3130	Bi2230	Ca3179	Cd2288
Line	328.068 {103}	309.271 {109}	189.042 {478}	208.959 {461}	455.403 { 74}	313.042 {108}	223.061 {451}	317.933 {106}	228.802 {447}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.00067	62.288	.19144	.01873	.54486	.00252	.00455	95.661	.00041
Stddev	.00061	.322	.00734	.00141	.00282	.00016	.00458	.289	.00033
%RSD	91.192	.51654	3.8346	7.5509	.51688	6.1871	100.60	.30229	80.306

#1	.00109	62.061	.19663	.01973	.54287	.00263	.00779	95.457	.00018
#2	.00024	62.516	.18625	.01773	.54685	.00241	.00131	95.866	.00064

Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Elem	Co2286	Cr2055	Cu3247	Fe2714	K_7664	Li6707	Mg2790	Mn2576	Mo2020
Line	228.616 {447}	205.560 {464}	324.754 {104}	271.441 {124}	766.490 { 44}	670.784 { 50}	279.079 {121}2	257.610 {131}	202.030 {467}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.03695	.06107	.08283	117.19	10.421	.07812	31.828	4.8888	.00006
Stddev	.00061	.00031	.00011	.83	.038	.00116	.056	.0248	.00053
%RSD	1.6454	.50712	.13764	.71077	.36347	1.4798	.17455	.50773	855.14

#1	.03652	.06085	.08275	116.60	10.394	.07731	31.788	4.8713	.00044
#2	.03738	.06129	.08291	117.77	10.447	.07894	31.867	4.9064	-.00031

Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Elem	Na5895	Ni2316	P_1782	Pb2203	S_1820	Sb2068	Se1960	Si2881	SiO2
Line	589.592 { 57}	231.604 {446}	178.284 {489}	220.353 {453}	182.034 {485}	206.833 {463}	196.090 {472}	288.158 {117}	288.158 {117}2
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.65023	.06753	W 3.5931	.07751	.92287	-.00181	-.00287	5.2776	11.294
Stddev	.00789	.00061	.0621	.00072	.00068	.00089	.00045	.0105	.022
%RSD	1.2142	.90069	1.7289	.93401	.07345	49.345	15.601	.19915	.19915

#1	.64465	.06710	3.5492	.07700	.92335	-.00118	-.00319	5.2701	11.278
#2	.65581	.06796	3.6370	.07802	.92239	-.00244	-.00256	5.2850	11.310

Check ?	Chk Pass	Chk Pass	Chk Warn	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit			2.0000						
Low Limit			-1.0000						

Elem	Sn1899	Sr4077	Th2837	Ti3349	Ti1908	U_3701	V_2924	Zn2062	Zr3391
Line	189.989 {477}	407.771 { 83}	283.730 {119}	334.904 {101}	190.856 {477}	370.152 { 91}	292.402 {115}	206.200 {163}	339.198 { 99}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.00063	.14395	.03534	3.5469	-.00148	W -.05499	.15447	.27864	.07236
Stddev	.00038	.00038	.00056	.0063	.00519	.01484	.00079	.00228	.00356
%RSD	60.612	.26190	1.5925	.17725	350.83	26.996	.51015	.81716	4.9177

#1	.00036	.14368	.03574	3.5425	.00219	-.04449	.15391	.28025	.07488
#2	.00089	.14422	.03494	3.5513	-.00515	-.06548	.15503	.27703	.06985

Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Warn	Chk Pass	Chk Pass	Chk Pass
High Limit						45.000			
Low Limit						-.05000			

Int. Std.	Y_2243	Y_3600	Y_3774
Line	224.306 {450}	360.073 { 94}	377.433 { 89}
Units	Cts/S	Cts/S	Cts/S
Avg	2749.2	40768.	2240.3
Stddev	65.6	28.	28.8
%RSD	2.3870	.06917	1.2856

#1	2702.8	40748.	2260.6
#2	2795.6	40788.	2219.9

Sample Name: 280-82987-A-8-A Acquired: 5/18/2016 13:38:20 Type: Unk

Method: 6500_025(v6) Mode: CONC Corr. Factor: 1.000000

User: CRHOADES Prep Date: Custom ID2: Custom ID3:

Comment: 324888 SOIL 6010C (Be) Q5

Elem	Ag3280	Al3092	As1890	B_2089	Ba4554	Be3130	Bi2230	Ca3179	Cd2288
Line	328.068 {103}	309.271 {109}	189.042 {478}	208.959 {461}	455.403 {74}	313.042 {108}	223.061 {451}	317.933 {106}	228.802 {447}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	-.00079	145.72	.13432	.02621	1.2720	.00536	.00928	79.973	.00582
Stddev	.00048	1.44	.00529	.00085	.0084	.00002	.00083	.639	.00031
%RSD	60.575	.99117	3.9390	3.2585	.66315	.45425	8.9574	.79939	5.4107

#1	-.00045	146.74	.13058	.02682	1.2780	.00537	.00869	80.425	.00604
#2	-.00113	144.70	.13806	.02561	1.2660	.00534	.00986	79.521	.00560

Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Elem	Co2286	Cr2055	Cu3247	Fe2714	K_7664	Li6707	Mg2790	Mn2576	Mo2020
Line	228.616 {447}	205.560 {464}	324.754 {104}	271.441 {124}	766.490 {44}	670.784 {50}	279.079 {121}2	257.610 {131}	202.030 {467}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.10169	.14686	.21189	322.99	26.558	.18937	81.925	4.8456	.00289
Stddev	.00076	.00074	.00033	1.61	.115	.00076	.224	.0429	.00047
%RSD	.74567	.50713	.15552	.49971	.43394	.40174	.27341	.88442	16.437

#1	.10223	.14739	.21212	324.13	26.640	.18883	82.083	4.8153	.00255
#2	.10116	.14634	.21165	321.85	26.477	.18991	81.767	4.8759	.00322

Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Elem	Na5895	Ni2316	P_1782	Pb2203	S_1820	Sb2068	Se1960	Si2881	SiO2
Line	589.592 {57}	231.604 {446}	178.284 {489}	220.353 {453}	182.034 {485}	206.833 {463}	196.090 {472}	288.158 {117}	288.158 {117}2
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	1.8348	.13496	W 12.470	.16492	1.6605	-.00605	.00178	10.484	22.436
Stddev	.0022	.00065	.047	.00037	.0105	.00089	.00611	.121	.259
%RSD	.12258	.48487	.37448	.22532	.62982	14.781	344.22	1.1547	1.1547

#1	1.8332	.13543	12.504	.16518	1.6679	-.00542	-.00255	10.570	22.619
#2	1.8364	.13450	12.437	.16466	1.6531	-.00668	.00610	10.398	22.253

Check ?	Chk Pass	Chk Pass	Chk Warn	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit			2.0000						
Low Limit			-1.0000						

Elem	Sn1899	Sr4077	Th2837	Ti3349	Ti1908	U_3701	V_2924	Zn2062	Zr3391
Line	189.989 {477}	407.771 {83}	283.730 {119}	334.904 {101}	190.856 {477}	370.152 {91}	292.402 {115}	206.200 {163}	339.198 {99}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.00071	.32678	.06973	W 10.142	.00191	F -.19984	.45203	.66957	.19838
Stddev	.00006	.00244	.00226	.054	.00055	.07062	.00043	.00197	.00681
%RSD	8.6982	.74618	3.2433	.53421	28.833	35.340	.09541	.29484	3.4341

#1	.00075	.32851	.06813	10.180	.00152	-.14990	.45233	.67097	.20320
#2	.00066	.32506	.07133	10.103	.00230	-.24977	.45172	.66818	.19356

Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Warn	Chk Pass	Chk Fail	Chk Pass	Chk Pass	Chk Pass
High Limit				10.000		50.000			
Low Limit				-.01000		-.10000			

Int. Std.	Y_2243	Y_3600	Y_3774						
Line	224.306 {450}	360.073 {94}	377.433 {89}						
Units	Cts/S	Cts/S	Cts/S						
Avg	3056.8	46249.	2570.2						
Stddev	5.3	121.	16.2						
%RSD	.17268	.26258	.63203						

#1	3060.5	46335.	2558.7						
#2	3053.1	46163.	2581.7						

Sample Name: CCVH-3894253 Acquired: 5/18/2016 13:40:59 Type: QC
Method: 6500_025(v6) Mode: CONC Corr. Factor: 1.000000
User: CRHOADES Prep Date: Custom ID2: Custom ID3:
Comment:

Elem	Ag3280	Al3092	As1890	B_2089	Ba4554	Be3130	Bi2230	Ca3179	Cd2288	Co2286	Cr2055	Cu3247	Fe2714
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	-.00016	51.022	.00078	.00775	-.00041	.00062	1.0424	-.01354	-.00072	-.00120	-.00027	.00228	50.265
Stddev	.00114	.998	.00254	.00055	.00030	.00014	.0040	.00535	.00012	.00013	.00020	.00059	.304
%RSD	728.49	1.9555	327.19	7.1176	72.296	22.431	.38601	39.559	16.381	11.057	72.082	26.087	.60505

#1	-.00097	51.728	.00257	.00814	-.00062	.00072	1.0396	-.00975	-.00064	-.00111	-.00041	.00270	50.480
#2	.00065	50.317	-.00102	.00736	-.00020	.00052	1.0453	-.01732	-.00081	-.00130	-.00013	.00186	50.050

Check ?	None	Chk Pass	None	None	None	None	Chk Pass	None	None	None	None	None	Chk Pass
Value													
Range													

Elem	K_7664	Li6707	Mg2790	Mn2576	Mo2020	Na8183	Ni2316	P_1782	Pb2203	S_1820	Sb2068	Se1960	Si2881
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.06218	.00099	.02695	.00033	-.00137	257.22	.00138	.00498	-.00365	5.1363	-.01230	-.00211	-.03175
Stddev	.03957	.00388	.00062	.00015	.00059	1.63	.00020	.00198	.00143	.0001	.00303	.00616	.02016
%RSD	63.634	389.99	2.2962	45.217	42.966	.63495	14.799	39.831	39.120	.00199	24.586	291.92	63.483

#1	.03420	-.00175	.02739	.00043	-.00179	258.38	.00124	.00638	-.00466	5.1363	-.01017	-.00646	-.01750
#2	.09016	.00374	.02651	.00022	-.00096	256.07	.00152	.00358	-.00264	5.1364	-.01444	.00225	-.04600

Check ?	None	None	None	None	None	Chk Pass	None	None	None	Chk Pass	None	None	None
Value													
Range													

Elem	SiO2	Sn1899	Sr4077	Th2837	Ti3349	Ti1908	U_3701	V_2924	Zn2062	Zr3391
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	-.06795	.00012	.00057	4.8463	.00439	-.00253	10.458	.00897	-.00067	.05754
Stddev	.04313	.00054	.00004	.0182	.00047	.00084	.262	.00012	.00017	.00213
%RSD	63.483	435.70	6.5988	.37587	10.633	33.069	2.5075	1.3184	24.917	3.6983

#1	-.03745	-.00026	.00055	4.8335	.00472	-.00312	10.644	.00888	-.00079	.05603
#2	-.09845	.00051	.00060	4.8592	.00406	-.00194	10.273	.00905	-.00056	.05904

Check ?	None	None	None	Chk Pass	None	None	Chk Pass	None	None	None
Value										
Range										

Int. Std.	Y_2243	Y_3600	Y_3774
Units	Cts/S	Cts/S	Cts/S
Avg	2696.4	40443.	2209.9
Stddev	65.5	43.	65.7
%RSD	2.4305	.10740	2.9709

#1	2742.8	40412.	2163.5
#2	2650.1	40473.	2256.3

Sample Name: CCV-3894251 Acquired: 5/18/2016 13:43:37 Type: QC
Method: 6500_025(v6) Mode: CONC Corr. Factor: 1.000000
User: CRHOADES Prep Date: Custom ID2: Custom ID3:
Comment:

Elem	Ag3280	Al1670	As1890	B_2089	Ba4554	Be3130	Bi2230	Ca3179	Cd2288	Co2286	Cr2055	Cu3247	Fe2599
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.50552	.54745	1.0508	.51525	.50820	.48654	.00430	5.0516	.50725	.51848	.51788	.52615	2.4655
Stddev	.00071	.00056	.0062	.00128	.00009	.00060	.00317	.0109	.00145	.00025	.00098	.00166	.0140
%RSD	.14110	.10228	.58676	.24809	.01833	.12349	73.764	.21598	.28682	.04916	.18949	.31543	.56851

#1	.50501	.54785	1.0552	.51435	.50827	.48612	.00654	5.0439	.50622	.51830	.51718	.52732	2.4754
#2	.50602	.54706	1.0465	.51615	.50814	.48697	.00205	5.0593	.50828	.51866	.51857	.52497	2.4556

Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	None	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Value													
Range													

Elem	K_7664	Li6707	Mg2790	Mn2576	Mo2020	Na5895	Ni2316	P_1782	Pb2203	S_1820	Sb2068	Se1960	Si2881
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	50.485	1.0097	19.856	.49063	.51888	5.0555	.51136	1.0208	1.0442	-.01610	1.0252	1.0607	4.8884
Stddev	.005	.0019	.009	.00028	.00241	.0146	.00038	.0008	.0015	.00755	.0090	.0093	.0124
%RSD	.00995	.19348	.04389	.05800	.46411	.28903	.07349	.07801	.14309	46.902	.87897	.87699	.25427

#1	50.488	1.0110	19.850	.49043	.51717	5.0658	.51162	1.0214	1.0431	-.01076	1.0316	1.0541	4.8972
#2	50.481	1.0083	19.862	.49083	.52058	5.0451	.51109	1.0202	1.0452	-.02145	1.0188	1.0672	4.8796

Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	None	Chk Pass	Chk Pass	Chk Pass
Value													
Range													

Elem	SiO2	Sn1899	Sr4077	Th2837	Ti3349	Ti1908	U_3701	V_2924	Zn2062	Zr3391
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	10.461	1.0392	.50412	-.00013	.48465	1.0599	.01262	.49887	.49002	.50837
Stddev	.027	.0030	.00124	.00138	.00121	.0037	.03143	.00037	.00061	.00384
%RSD	.25427	.28579	.24641	1066.1	.24941	.34562	248.96	.07334	.12498	.75485

#1	10.480	1.0413	.50324	.00085	.48380	1.0625	-.00960	.49861	.49045	.51108
#2	10.442	1.0371	.50500	-.00111	.48551	1.0573	.03485	.49913	.48958	.50566

Check ?	Chk Pass	Chk Pass	Chk Pass	None	Chk Pass	Chk Pass	None	Chk Pass	Chk Pass	Chk Pass
Value										
Range										

Int. Std.	Y_2243	Y_3600	Y_3774
Units	Cts/S	Cts/S	Cts/S
Avg	2679.2	41002.	2141.9
Stddev	4.4	149.	64.8
%RSD	.16348	.36326	3.0269

#1	2676.1	41107.	2096.1
#2	2682.3	40896.	2187.8

Sample Name: CCB Acquired: 5/18/2016 13:46:08 Type: QC
 Method: 6500_025(v6) Mode: CONC Corr. Factor: 1.000000
 User: CRHOADES Prep Date: Custom ID2: Custom ID3:
 Comment:

Elem	Ag3280	Al1670	As1890	B_2089	Ba4554	Be3130	Bi2230	Ca3179	Cd2288	Co2286	Cr2055
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	-.00085	-.00084	-.00294	.00701	-.00089	.00033	-.00212	-.01760	-.00009	.00005	-.00022
Stddev	.00024	.00015	.00079	.00173	.00010	.00007	.00330	.01109	.00014	.00028	.00020
%RSD	28.031	17.449	26.837	24.713	11.661	21.025	155.89	63.022	168.85	559.62	89.899

#1	-.00068	-.00074	-.00350	.00823	-.00096	.00037	.00022	-.00976	-.00019	.00025	-.00037
#2	-.00102	-.00095	-.00238	.00578	-.00082	.00028	-.00445	-.02544	.00002	-.00015	-.00008

Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit											
Low Limit											

Elem	Cu3247	Fe2599	K_7664	Li6707	Mg2790	Mn2576	Mo2020	Na5895	Ni2316	P_1782	Pb2203
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	-.00057	.02771	.03439	-.00003	.00253	.00031	.00164	-.00094	-.00088	.00041	.00031
Stddev	.00056	.00796	.07088	.00158	.00264	.00008	.00067	.00496	.00001	.00046	.00063
%RSD	98.541	28.715	206.10	5944.5	104.36	25.566	40.618	527.50	.98801	114.63	204.03

#1	-.00096	.02208	.08451	.00109	.00439	.00037	.00117	.00257	-.00087	.00073	-.00014
#2	-.00017	.03333	-.01573	-.00115	.00066	.00026	.00211	-.00445	-.00088	.00008	.00075

Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit											
Low Limit											

Elem	S_1820	Sb2068	Se1960	Si2881	SiO2	Sn1899	Sr4077	Th2837	Ti3349	Ti1908	U_3701
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	-.01154	W .00486	W .00911	.00702	.01502	-.00078	.00000	-.00238	.00018	.00188	.01779
Stddev	.00596	.00071	.00312	.05909	.12644	.00173	.0002	.00301	.00020	.00379	.02121
%RSD	51.637	14.606	34.249	841.76	841.76	221.12	108910.	126.01	114.06	200.96	119.28

#1	-.01576	.00537	.00690	.04880	.10443	-.00200	.00016	-.00451	.00032	-.00079	.00278
#2	-.00733	.00436	.01131	-.03476	-.07439	.00044	-.00016	-.00026	.00003	.00456	.03279

Check ?	Chk Pass	Chk Warn	Chk Warn	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit		.00100	.00750								
Low Limit		-.00100	-.01500								

Elem	V_2924	Zn2062	Zr3391
Units	ppm	ppm	ppm
Avg	.00093	-.00039	-.00288
Stddev	.00076	.00025	.00192
%RSD	81.399	64.948	66.781

#1	.00039	-.00056	-.00424
#2	.00146	-.00021	-.00152

Check ?	Chk Pass	Chk Pass	Chk Pass
High Limit			
Low Limit			

Int. Std.	Y_2243	Y_3600	Y_3774
Units	Cts/S	Cts/S	Cts/S
Avg	2715.8	41708.	2199.7
Stddev	8.6	281.	47.9
%RSD	.31493	.67372	2.1754

#1	2709.8	41907.	2233.5
#2	2721.8	41509.	2165.8

Sample Name: CCVL-3897520 Acquired: 5/18/2016 13:48:31 Type: QC
Method: 6500_025(v6) Mode: CONC Corr. Factor: 1.000000
User: CRHOADES Prep Date: Custom ID2: Custom ID3:
Comment:

Elem	Ag3280	Al1670	As1890	B_2089	Ba4554	Be3130	Bi2230	Ca3179	Cd2288	Co2286	Cr2055	Cu3247
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.00981	.11148	.01453	.10211	.00949	.00114	.11173	.20020	.00491	.00966	.01021	.01587
Stddev	.00048	.00089	.00366	.00156	.00042	.00033	.00315	.00150	.00017	.00019	.00004	.00068
%RSD	4.8971	.79551	25.230	1.5236	4.3828	29.296	2.8230	.74727	3.4443	1.9423	.35088	4.3136

#1	.00947	.11085	.01193	.10101	.00979	.00090	.10950	.19914	.00503	.00980	.01019	.01539
#2	.01015	.11211	.01712	.10321	.00920	.00137	.11396	.20125	.00479	.00953	.01024	.01636

Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Value												
Range												

Elem	Fe2599	K_7664	Li6707	Mg2790	Mn2576	Mo2020	Na5895	Ni2316	P_1782	Pb2203	S_1820	Sb2068
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.10379	3.0725	.00733	.20596	.01001	.02054	1.0171	.03985	2.8704	.00921	-.00811	.02376
Stddev	.00086	.0404	.00498	.00171	.00008	.00010	.0226	.00069	.0341	.00257	.00311	.00362
%RSD	.82529	1.3160	67.999	.83160	.76825	.50404	2.2211	1.7196	1.1869	27.913	38.391	15.248

#1	.10318	3.1011	.01085	.20475	.00995	.02047	1.0012	.03936	2.8463	.00739	-.01031	.02120
#2	.10440	3.0439	.00380	.20717	.01006	.02062	1.0331	.04033	2.8945	.01103	-.00591	.02632

Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	None	Chk Pass
Value												
Range												

Elem	Se1960	Si2881	SiO2	Sn1899	Sr4077	Th2837	Ti3349	Ti1908	U_3701	V_2924	Zn2062	Zr3391
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	F .02190	.50545	1.0817	.10303	.01020	.01506	.00985	.01152	.05798	.00959	.01899	.01616
Stddev	.00970	.01747	.0374	.00107	.00013	.00359	.00047	.00146	.02348	.00046	.00162	.00425
%RSD	44.284	3.4568	3.4568	1.0368	1.2276	23.862	4.7278	12.639	40.490	4.7831	8.5131	26.308

#1	.02875	.49310	1.0552	.10227	.01029	.01761	.00952	.01255	.07459	.00992	.02013	.01316
#2	.01504	.51781	1.1081	.10378	.01011	.01252	.01018	.01049	.04138	.00927	.01784	.01917

Check ?	Chk Fail	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Value	.01500											
Range	30.000%											

Int. Std.	Y_2243	Y_3600	Y_3774
Units	Cts/S	Cts/S	Cts/S
Avg	2721.4	41835.	2238.2
Stddev	3.4	289.	6.7
%RSD	.12330	.69041	.29950

#1	2719.0	42040.	2233.5
#2	2723.8	41631.	2243.0

Elem	Ag3280	Al3092	As1890	B_2089	Ba4554	Be3130	Bi2230	Ca3179	Cd2288
Line	328.068 {103}	309.271 {109}	189.042 {478}	208.959 {461}	455.403 {74}	313.042 {108}	223.061 {451}	317.933 {106}	228.802 {447}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	-0.00092	146.58	.09145	.04017	1.3125	.00490	.00661	69.614	.00279
Stddev	.00015	1.71	.00483	.00004	.0120	.00012	.00315	.871	.00005
%RSD	16.786	1.1657	5.2850	.10452	.91015	2.5038	47.611	1.2514	1.7295

#1	-0.00081	147.78	.09487	.04014	1.3209	.00482	.00883	70.230	.00276
#2	-.00103	145.37	.08803	.04020	1.3040	.00499	.00438	68.998	.00283

Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Elem	Co2286	Cr2055	Cu3247	Fe2714	K_7664	Li6707	Mg2790	Mn2576	Mo2020
Line	228.616 {447}	205.560 {464}	324.754 {104}	271.441 {124}	766.490 {44}	670.784 {50}	279.079 {121}2	257.610 {131}	202.030 {467}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.08584	.18341	.17694	273.18	33.792	.18746	70.169	4.3982	.00355
Stddev	.00276	.00406	.00045	3.06	.628	.00342	.122	.0141	.00018
%RSD	3.2148	2.2160	.25675	1.1207	1.8598	1.8243	.17317	.32084	4.9531

#1	.08779	.18629	.17661	275.34	34.236	.18988	70.083	4.4082	.00367
#2	.08389	.18054	.17726	271.01	33.347	.18504	70.254	4.3882	.00342

Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Elem	Na5895	Ni2316	P_1782	Pb2203	S_1820	Sb2068	Se1960	Si2881	SiO2
Line	589.592 {57}	231.604 {446}	178.284 {489}	220.353 {453}	182.034 {485}	206.833 {463}	196.090 {472}	288.158 {117}	288.158 {117}2
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	1.7685	.14112	W 9.6412	.22609	2.2983	W -.01038	.00665	11.111	23.777
Stddev	.0338	.00461	.2290	.00551	.0324	.00435	.01890	.185	.396
%RSD	1.9101	3.2653	2.3754	2.4365	1.4078	41.936	284.43	1.6667	1.6667

#1	1.7924	.14438	9.8032	.22998	2.3212	-.01345	.02001	11.241	24.057
#2	1.7446	.13786	9.4793	.22219	2.2754	-.00730	-.00672	10.980	23.496

Check ?	Chk Pass	Chk Pass	Chk Warn	Chk Pass	Chk Pass	Chk Warn	Chk Pass	Chk Pass	Chk Pass
High Limit			2.0000			2.0000			
Low Limit			-1.0000			-.01000			

Elem	Sn1899	Sr4077	Th2837	Ti3349	Ti1908	U_3701	V_2924	Zn2062	Zr3391
Line	189.989 {477}	407.771 {83}	283.730 {119}	334.904 {101}	190.856 {477}	370.152 {91}	292.402 {115}	206.200 {163}	339.198 {99}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	-.00131	.27383	.07795	W 11.743	-.00433	F -.13924	.47583	.66189	.18066
Stddev	.00290	.00314	.00011	.040	.00248	.07753	.00029	.00345	.00024
%RSD	221.85	1.1456	.14455	.33650	57.219	55.680	.06153	.52175	.13533

#1	-.00336	.27605	.07787	11.715	-.00609	-.08442	.47604	.65945	.18049
#2	.00074	.27161	.07803	11.771	-.00258	-.19405	.47563	.66433	.18084

Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Warn	Chk Pass	Chk Fail	Chk Pass	Chk Pass	Chk Pass
High Limit				10.000		50.000			
Low Limit				-.01000		-.10000			

Int. Std.	Y_2243	Y_3600	Y_3774						
Line	224.306 {450}	360.073 {94}	377.433 {89}						
Units	Cts/S	Cts/S	Cts/S						
Avg	2979.2	45099.	2584.7						
Stddev	7.3	177.	34.8						
%RSD	.24470	.39292	1.3455						

#1	2974.1	45225.	2560.1						
#2	2984.4	44974.	2609.2						

Sample Name: 280-82987-A-10-A Acquired: 5/18/2016 13:53:49 Type: Unk

Method: 6500_025(v6) Mode: CONC Corr. Factor: 1.000000

User: CRHOADES Prep Date: Custom ID2: Custom ID3:

Comment: 324888 SOIL 6010C (Be) Q5

Elem	Ag3280	Al3092	As1890	B_2089	Ba4554	Be3130	Bi2230	Ca3179	Cd2288
Line	328.068 {103}	309.271 {109}	189.042 {478}	208.959 {461}	455.403 { 74}	313.042 {108}	223.061 {451}	317.933 {106}	228.802 {447}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	-.00064	119.62	.10642	.04081	.90886	.00484	.00385	102.54	.00183
Stddev	.00019	.34	.00256	.00134	.00434	.00027	.00392	.39	.00029
%RSD	29.957	.28098	2.4069	3.2821	.47706	5.4883	101.81	.37880	15.684

#1	-.00050	119.86	.10823	.04176	.91193	.00502	.00663	102.81	.00163
#2	-.00077	119.38	.10461	.03987	.90580	.00465	.00108	102.26	.00204

Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Elem	Co2286	Cr2055	Cu3247	Fe2714	K_7664	Li6707	Mg2790	Mn2576	Mo2020
Line	228.616 {447}	205.560 {464}	324.754 {104}	271.441 {124}	766.490 { 44}	670.784 { 50}	279.079 {121}2	257.610 {131}	202.030 {467}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.07284	.12192	.16756	228.73	21.101	.14452	57.556	3.8542	.00170
Stddev	.00056	.00038	.00105	1.09	.081	.00391	.270	.0153	.00053
%RSD	.76708	.31090	.62878	.47786	.38292	2.7056	.46970	.39722	31.083

#1	.07245	.12165	.16682	229.51	21.044	.14176	57.364	3.8434	.00207
#2	.07324	.12218	.16831	227.96	21.158	.14729	57.747	3.8650	.00132

Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Elem	Na5895	Ni2316	P_1782	Pb2203	S_1820	Sb2068	Se1960	Si2881	SiO2
Line	589.592 { 57}	231.604 {446}	178.284 {489}	220.353 {453}	182.034 {485}	206.833 {463}	196.090 {472}	288.158 {117}	288.158 {117}2
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	1.5032	.11736	W 6.3205	.14771	1.8319	-.00058	.00474	11.382	24.358
Stddev	.0173	.00192	.0514	.00232	.0022	.00381	.00817	.072	.154
%RSD	1.1535	1.6358	.81346	1.5674	.12157	662.75	172.11	.63370	.63370

#1	1.5155	.11601	6.2841	.14935	1.8304	.00212	-.00103	11.433	24.467
#2	1.4909	.11872	6.3568	.14607	1.8335	-.00327	.01052	11.331	24.249

Check ?	Chk Pass	Chk Pass	Chk Warn	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit			2.0000						
Low Limit			-1.0000						

Elem	Sn1899	Sr4077	Th2837	Ti3349	Ti1908	U_3701	V_2924	Zn2062	Zr3391
Line	189.989 {477}	407.771 { 83}	283.730 {119}	334.904 {101}	190.856 {477}	370.152 { 91}	292.402 {115}	206.200 {163}	339.198 { 99}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.00195	.32176	.06357	7.6122	-.00091	W -.07029	.30884	.51867	.15314
Stddev	.00240	.00047	.00365	.0235	.00499	.01420	.00127	.00222	.00012
%RSD	123.13	.14540	5.7451	.30913	548.42	20.206	.41079	.42730	.07721

#1	.00025	.32209	.06098	7.5956	.00262	-.08033	.30795	.51710	.15323
#2	.00365	.32143	.06615	7.6289	-.00444	-.06024	.30974	.52023	.15306

Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Warn	Chk Pass	Chk Pass	Chk Pass
High Limit						45.000			
Low Limit						-.05000			

Int. Std.	Y_2243	Y_3600	Y_3774
Line	224.306 {450}	360.073 { 94}	377.433 { 89}
Units	Cts/S	Cts/S	Cts/S
Avg	2943.7	44489.	2566.1
Stddev	1.6	141.	.2
%RSD	.05300	.31802	.00901

#1	2944.8	44589.	2566.3
#2	2942.6	44389.	2566.0

Sample Name: 280-82987-B-11-G Acquired: 5/18/2016 13:56:22 Type: Unk

Method: 6500_025(v6) Mode: CONC Corr. Factor: 1.000000

User: CRHOADES Prep Date: Custom ID2: Custom ID3:

Comment: 324888 SOIL 6010C (Be) Q5

Elem	Ag3280	Al3092	As1890	B_2089	Ba4554	Be3130	Bi2230	Ca3179	Cd2288
Line	328.068 {103}	309.271 {109}	189.042 {478}	208.959 {461}	455.403 { 74}	313.042 {108}	223.061 {451}	317.933 {106}	228.802 {447}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	-.00120	153.54	.10507	.02994	1.1622	.00584	.00654	66.672	.00357
Stddev	.00050	.43	.00730	.00081	.0025	.00039	.00260	.247	.00017
%RSD	41.307	.28183	6.9470	2.7121	.21590	6.7561	39.695	.36992	4.8015

#1	-.00085	153.85	.09991	.02937	1.1640	.00612	.00471	66.847	.00369
#2	-.00156	153.24	.11023	.03052	1.1604	.00556	.00838	66.498	.00345

Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Elem	Co2286	Cr2055	Cu3247	Fe2714	K_7664	Li6707	Mg2790	Mn2576	Mo2020
Line	228.616 {447}	205.560 {464}	324.754 {104}	271.441 {124}	766.490 { 44}	670.784 { 50}	279.079 {121}2	257.610 {131}	202.030 {467}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.08066	.15164	.18546	285.94	24.082	.17883	73.713	4.4010	.00209
Stddev	.00094	.00218	.00052	.50	.138	.00022	.191	.0718	.00036
%RSD	1.1613	1.4378	.28263	.17628	.57128	.12502	.25864	1.6312	17.087

#1	.08000	.15010	.18583	286.29	23.984	.17867	73.578	4.3502	.00235
#2	.08132	.15318	.18509	285.58	24.179	.17898	73.848	4.4518	.00184

Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Elem	Na5895	Ni2316	P_1782	Pb2203	S_1820	Sb2068	Se1960	Si2881	SiO2
Line	589.592 { 57}	231.604 {446}	178.284 {489}	220.353 {453}	182.034 {485}	206.833 {463}	196.090 {472}	288.158 {117}	288.158 {117}2
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	1.6936	.13573	W 8.9624	.17947	1.6759	-.00182	.00611	14.115	30.206
Stddev	.0278	.00245	.1113	.00473	.0207	.00086	.00622	.140	.299
%RSD	1.6419	1.8069	1.2423	2.6349	1.2320	47.075	101.74	.98989	.98989

#1	1.7133	.13400	8.8837	.17613	1.6613	-.00122	.01051	14.214	30.418
#2	1.6740	.13746	9.0412	.18281	1.6905	-.00243	.00172	14.016	29.995

Check ?	Chk Pass	Chk Pass	Chk Warn	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit			2.0000						
Low Limit			-1.0000						

Elem	Sn1899	Sr4077	Th2837	Ti3349	Ti1908	U_3701	V_2924	Zn2062	Zr3391
Line	189.989 {477}	407.771 { 83}	283.730 {119}	334.904 {101}	190.856 {477}	370.152 { 91}	292.402 {115}	206.200 {163}	339.198 { 99}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	-.00197	.29024	.08232	9.9320	-.00135	F -.14381	.39115	.63833	.19893
Stddev	.00032	.00079	.00214	.0086	.00106	.01060	.00070	.00231	.00016
%RSD	16.462	.27156	2.5944	.08642	78.240	7.3700	.17846	.36125	.08087

#1	-.00220	.29080	.08081	9.9259	-.00210	-.13632	.39066	.63670	.19905
#2	-.00174	.28969	.08383	9.9381	-.00061	-.15131	.39165	.63996	.19882

Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Fail	Chk Pass	Chk Pass	Chk Pass
High Limit						50.000			
Low Limit						-1.0000			

Int. Std.	Y_2243	Y_3600	Y_3774						
Line	224.306 {450}	360.073 { 94}	377.433 { 89}						
Units	Cts/S	Cts/S	Cts/S						
Avg	2954.7	44958.	2506.1						
Stddev	4.4	325.	4.4						
%RSD	.14832	.72199	.17375						

#1	2957.8	45187.	2503.1						
#2	2951.6	44728.	2509.2						

Sample Name: 82987-B-11-G SD@5 Acquired: 5/18/2016 13:58:59 Type: Unk
Method: 6500_025(v6) Mode: CONC Corr. Factor: 1.000000
User: CRHOADES Prep Date: Custom ID2: Custom ID3:
Comment: 324888 SOIL 6010C (Be) Q5

Elem	Ag3280	Al3092	As1890	B_2089	Ba4554	Be3130	Bi2230	Ca3179	Cd2288
Line	328.068 {103}	309.271 {109}	189.042 {478}	208.959 {461}	455.403 { 74}	313.042 {108}	223.061 {451}	317.933 {106}	228.802 {447}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	-0.00072	33.591	.01883	.00964	.25186	.00157	-0.00033	14.850	.00074
Stddev	.00100	.753	.00378	.00023	.00537	.00029	.00403	.232	.00010
%RSD	139.29	2.2403	20.055	2.3407	2.1330	18.323	1235.4	1.5606	14.056

#1	-0.00142	33.059	.02149	.00948	.24806	.00137	-0.00318	14.686	.00081
#2	-0.00001	34.123	.01616	.00980	.25566	.00177	.00253	15.014	.00066

Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Elem	Co2286	Cr2055	Cu3247	Fe2714	K_7664	Li6707	Mg2790	Mn2576	Mo2020
Line	228.616 {447}	205.560 {464}	324.754 {104}	271.441 {124}	766.490 { 44}	670.784 { 50}	279.079 {121}2	257.610 {131}	202.030 {467}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.01813	.03284	.03932	62.927	5.2557	.03997	15.894	.95448	-0.00014
Stddev	.00008	.00007	.00076	.500	.1465	.00173	.006	.00135	.00013
%RSD	.45862	.22260	1.9440	.79533	2.7882	4.3172	.03572	.14193	96.023

#1	.01819	.03289	.03878	62.573	5.1521	.04119	15.890	.95353	-0.00004
#2	.01807	.03278	.03986	63.281	5.3593	.03875	15.898	.95544	-0.00023

Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Elem	Na5895	Ni2316	P_1782	Pb2203	S_1820	Sb2068	Se1960	Si2881	SiO2
Line	589.592 { 57}	231.604 {446}	178.284 {489}	220.353 {453}	182.034 {485}	206.833 {463}	196.090 {472}	288.158 {117}	288.158 {117}2
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.33469	.03008	1.9356	.04032	.34808	.00012	.00483	3.0557	6.5393
Stddev	.00892	.00076	.0125	.00137	.00226	.00068	.00766	.0070	.0149
%RSD	2.6653	2.5181	.64555	3.4078	.64937	588.10	158.40	.22788	.22788

#1	.34100	.03061	1.9445	.03935	.34968	.00060	-0.00058	3.0508	6.5287
#2	.32838	.02954	1.9268	.04129	.34648	-0.00037	.01025	3.0607	6.5498

Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Elem	Sn1899	Sr4077	Th2837	Ti3349	Ti1908	U_3701	V_2924	Zn2062	Zr3391
Line	189.989 {477}	407.771 { 83}	283.730 {119}	334.904 {101}	190.856 {477}	370.152 { 91}	292.402 {115}	206.200 {163}	339.198 { 99}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	-0.00042	.06429	.01867	2.1016	-0.00420	-0.02609	.08535	.14351	.04122
Stddev	.00101	.00035	.00071	.0025	.00070	.00217	.00127	.00058	.00109
%RSD	238.76	.54243	3.7876	.11984	16.755	8.3290	1.4936	.40641	2.6450

#1	-0.00113	.06404	.01817	2.1034	-0.00370	-.02763	.08625	.14310	.04044
#2	.00029	.06454	.01917	2.0998	-0.00470	-.02456	.08445	.14392	.04199

Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Int. Std.	Y_2243	Y_3600	Y_3774
Line	224.306 {450}	360.073 { 94}	377.433 { 89}
Units	Cts/S	Cts/S	Cts/S
Avg	2761.1	42201.	2279.4
Stddev	6.4	112.	47.7
%RSD	.23294	.26565	2.0911

#1	2765.6	42280.	2313.1
#2	2756.5	42122.	2245.7

Sample Name: 280-82987-B-11-H MS Acquired: 5/18/2016 14:01:37 Type: Unk
Method: 6500_025(v6) Mode: CONC Corr. Factor: 1.000000
User: CRHOADES Prep Date: Custom ID2: Custom ID3:
Comment: 324888 SOIL 6010C (Be) Q5

Elem	Ag3280	Al3092	As1890	B_2089	Ba4554	Be3130	Bi2230	Ca3179	Cd2288
Line	328.068 {103}	309.271 {109}	189.042 {478}	208.959 {461}	455.403 {74}	313.042 {108}	223.061 {451}	317.933 {106}	228.802 {447}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.04503	139.67	1.0267	.89015	2.7852	.04745	F 1.9015	97.346	.09055
Stddev	.00001	.14	.0014	.00042	.0037	.00010	.0122	.115	.00080
%RSD	.02935	.10358	.13731	.04734	.13152	.21777	.64128	.11850	.88133

#1	.04502	139.57	1.0257	.89045	2.7826	.04738	1.9101	97.265	.09112
#2	.04504	139.77	1.0277	.88985	2.7878	.04753	1.8929	97.428	.08999

Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Fail	Chk Pass	Chk Pass
High Limit							.10000		
Low Limit							-.10000		

Elem	Co2286	Cr2055	Cu3247	Fe2714	K_7664	Li6707	Mg2790	Mn2576	Mo2020
Line	228.616 {447}	205.560 {464}	324.754 {104}	271.441 {124}	766.490 {44}	670.784 {50}	279.079 {121}2	257.610 {131}	202.030 {467}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.49308	.29689	.39181	220.37	68.575	1.0112	101.43	4.1045	.89995
Stddev	.00131	.00177	.00007	.15	.268	.0007	.46	.0377	.00635
%RSD	.26491	.59768	.01700	.06973	.39105	.06596	.44890	.91719	.70600

#1	.49401	.29815	.39176	220.26	68.386	1.0108	101.75	4.1312	.90445
#2	.49216	.29564	.39186	220.48	68.765	1.0117	101.11	4.0779	.89546

Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Elem	Na8183	Ni2316	P_1782	Pb2203	S_1820	Sb2068	Se1960	Si2881	SiO2
Line	818.326 {41}	231.604 {446}	178.284 {489}	220.353 {453}	182.034 {485}	206.833 {463}	196.090 {472}	288.158 {117}	288.158 {117}2
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	49.811	.53516	W 14.863	.58634	3.5569	.25915	1.8952	15.422	33.003
Stddev	.204	.00129	.063	.00003	.0289	.00655	.0257	.024	.052
%RSD	.40928	.24158	.42176	.00573	.81372	2.5267	1.3563	.15666	.15666

#1	49.956	.53607	14.907	.58636	3.5774	.26378	1.9134	15.439	33.039
#2	49.667	.53424	14.819	.58632	3.5365	.25452	1.8770	15.405	32.966

Check ?	Chk Pass	Chk Pass	Chk Warn	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit			2.0000						
Low Limit			-1.0000						

Elem	Sn1899	Sr4077	Th2837	Ti3349	Ti1908	U_3701	V_2924	Zn2062	Zr3391
Line	189.989 {477}	407.771 {83}	283.730 {119}	334.904 {101}	190.856 {477}	370.152 {91}	292.402 {115}	206.200 {163}	339.198 {99}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	1.7029	1.1391	.92436	8.4665	1.5894	1.7563	.74394	.90568	.62789
Stddev	.0315	.0043	.00402	.0220	.0732	.0367	.00030	.00523	.00621
%RSD	1.8508	.37740	.43469	.26011	4.6034	2.0898	.04002	.57798	.98908

#1	1.7252	1.1361	.92152	8.4821	1.6411	1.7822	.74415	.90938	.62350
#2	1.6806	1.1421	.92720	8.4510	1.5377	1.7303	.74373	.90197	.63228

Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Int. Std.	Y_2243	Y_3600	Y_3774
Line	224.306 {450}	360.073 {94}	377.433 {89}
Units	Cts/S	Cts/S	Cts/S
Avg	2924.8	44148.	2406.1
Stddev	21.9	990.	11.8
%RSD	.74717	2.2423	.48952

#1	2940.2	43448.	2414.4
#2	2909.3	44848.	2397.7

Sample Name: 280-82987-B-11-I MSD Acquired: 5/18/2016 14:04:06 Type: Unk
Method: 6500_025(v6) Mode: CONC Corr. Factor: 1.000000
User: CRHOADES Prep Date: Custom ID2: Custom ID3:
Comment: 324888 SOIL 6010C (Be) Q5

Elem	Ag3280	Al3092	As1890	B_2089	Ba4554	Be3130	Bi2230	Ca3179	Cd2288
Line	328.068 {103}	309.271 {109}	189.042 {478}	208.959 {461}	455.403 {74}	313.042 {108}	223.061 {451}	317.933 {106}	228.802 {447}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.04485	162.21	1.0157	.88164	2.8687	.04650	F 1.8676	108.93	.08983
Stddev	.00130	.58	.0131	.00550	.0016	.00002	.0012	.07	.00018
%RSD	2.8963	.35882	1.2894	.62337	.05476	.04471	.06662	.06457	.20412

#1	.04393	162.62	1.0064	.87776	2.8698	.04652	1.8667	108.98	.08970
#2	.04577	161.80	1.0250	.88553	2.8676	.04649	1.8685	108.88	.08996

Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Fail	Chk Pass	Chk Pass
High Limit							.10000		
Low Limit							-.10000		

Elem	Co2286	Cr2055	Cu3247	Fe2714	K_7664	Li6707	Mg2790	Mn2576	Mo2020
Line	228.616 {447}	205.560 {464}	324.754 {104}	271.441 {124}	766.490 {44}	670.784 {50}	279.079 {121}2	257.610 {131}	202.030 {467}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.49469	.30976	.42097	268.86	68.859	1.0133	111.19	4.5860	.87323
Stddev	.00227	.00137	.00022	.41	.004	.0003	.51	.0321	.00044
%RSD	.45926	.44279	.05294	.15105	.00579	.03031	.46194	.70074	.04989

#1	.49308	.30879	.42112	268.57	68.861	1.0136	111.55	4.6087	.87354
#2	.49630	.31073	.42081	269.15	68.856	1.0131	110.82	4.5632	.87292

Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Elem	Na8183	Ni2316	P_1782	Pb2203	S_1820	Sb2068	Se1960	Si2881	SiO2
Line	818.326 {41}	231.604 {446}	178.284 {489}	220.353 {453}	182.034 {485}	206.833 {463}	196.090 {472}	288.158 {117}	288.158 {117}2
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	50.104	.54411	W 17.222	.60310	3.9207	.21663	1.8688	15.373	32.898
Stddev	.209	.00034	.152	.00083	.0016	.00420	.0199	.058	.125
%RSD	.41632	.06250	.88260	.13739	.04119	1.9409	1.0630	.37995	.37995

#1	50.251	.54387	17.329	.60252	3.9219	.21960	1.8828	15.331	32.809
#2	49.956	.54435	17.114	.60369	3.9196	.21365	1.8547	15.414	32.986

Check ?	Chk Pass	Chk Pass	Chk Warn	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit			2.0000						
Low Limit			-1.0000						

Elem	Sn1899	Sr4077	Th2837	Ti3349	Ti1908	U_3701	V_2924	Zn2062	Zr3391
Line	189.989 {477}	407.771 {83}	283.730 {119}	334.904 {101}	190.856 {477}	370.152 {91}	292.402 {115}	206.200 {163}	339.198 {99}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	1.6612	1.1649	.90978	W 11.109	1.5578	1.7354	.82284	1.0107	.64618
Stddev	.0280	.0003	.00699	.065	.0664	.0033	.00127	.0093	.00626
%RSD	1.6882	.02698	.76811	.58092	4.2603	.18811	.15462	.92116	.96835

#1	1.6811	1.1646	.91472	11.155	1.6047	1.7377	.82373	1.0173	.64176
#2	1.6414	1.1651	.90484	11.063	1.5109	1.7331	.82194	1.0041	.65061

Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Warn	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit				10.000					
Low Limit				-.01000					

Int. Std.	Y_2243	Y_3600	Y_3774
Line	224.306 {450}	360.073 {94}	377.433 {89}
Units	Cts/S	Cts/S	Cts/S
Avg	3042.2	45900.	2591.5
Stddev	4.6	665.	7.7
%RSD	.15085	1.4478	.29523

#1	3045.4	45431.	2586.1
#2	3038.9	46370.	2596.9

Sample Name: 280-82987-B-11-G PDS Acquired: 5/18/2016 14:06:37 Type: Unk
Method: 6500_025(v6) Mode: CONC Corr. Factor: 1.000000
User: CRHOADES Prep Date: Custom ID2: Custom ID3:
Comment: 324888 SOIL 6010C (Be) Q5

Elem	Ag3280	Al3092	As1890	B_2089	Ba4554	Be3130	Bi2230	Ca3179	Cd2288
Line	328.068 {103}	309.271 {109}	189.042 {478}	208.959 {461}	455.403 { 74}	313.042 {108}	223.061 {451}	317.933 {106}	228.802 {447}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.04706	151.13	.29465	.12281	1.2334	.04828	.00828	82.553	.05121
Stddev	.00055	.14	.00472	.00002	.0046	.00021	.00189	.320	.00010
%RSD	1.1710	.09256	1.6027	.01566	.37198	.44505	22.795	.38787	.20389

#1	.04667	151.23	.29131	.12280	1.2366	.04844	.00961	82.780	.05114
#2	.04745	151.03	.29799	.12282	1.2302	.04813	.00694	82.327	.05129

Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Elem	Co2286	Cr2055	Cu3247	Fe2714	K_7664	Li6707	Mg2790	Mn2576	Mo2020
Line	228.616 {447}	205.560 {464}	324.754 {104}	271.441 {124}	766.490 { 44}	670.784 { 50}	279.079 {121}2	257.610 {131}	202.030 {467}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.12299	.19356	.23189	280.02	41.088	.26730	90.333	4.3035	.05465
Stddev	.00040	.00037	.00095	1.10	.016	.00264	.124	.0081	.00053
%RSD	.32506	.19313	.40976	.39322	.03828	.98907	.13701	.18733	.96508

#1	.12271	.19329	.23256	279.24	41.076	.26917	90.420	4.3092	.05427
#2	.12327	.19382	.23122	280.80	41.099	.26543	90.245	4.2978	.05502

Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Elem	Na8183	Ni2316	P_1782	Pb2203	S_1820	Sb2068	Se1960	Si2881	SiO2
Line	818.326 { 41}	231.604 {446}	178.284 {489}	220.353 {453}	182.034 {485}	206.833 {463}	196.090 {472}	288.158 {117}	288.158 {117}2
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	23.077	.17878	W 10.843	.26957	1.7016	.09042	.20249	18.143	38.825
Stddev	.137	.00064	.083	.00279	.0060	.00224	.00830	.163	.349
%RSD	.59421	.35565	.76121	1.0337	.35004	2.4741	4.1004	.89890	.89890

#1	22.980	.17923	10.784	.26760	1.6974	.08884	.19662	18.027	38.578
#2	23.174	.17833	10.901	.27154	1.7058	.09200	.20836	18.258	39.072

Check ?	Chk Pass	Chk Pass	Chk Warn	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit			2.0000						
Low Limit			-1.0000						

Elem	Sn1899	Sr4077	Th2837	Ti3349	Ti1908	U_3701	V_2924	Zn2062	Zr3391
Line	189.989 {477}	407.771 { 83}	283.730 {119}	334.904 {101}	190.856 {477}	370.152 { 91}	292.402 {115}	206.200 {163}	339.198 { 99}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.09041	.32892	.26131	9.7709	.19468	.32625	.42710	.79300	.24061
Stddev	.00284	.00136	.00147	.0001	.00551	.05871	.00159	.00162	.00034
%RSD	3.1413	.41266	.56241	.00096	2.8284	17.995	.37214	.20465	.13982

#1	.08840	.32988	.26235	9.7709	.19079	.28474	.42822	.79415	.24038
#2	.09242	.32796	.26027	9.7708	.19857	.36777	.42597	.79185	.24085

Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Int. Std.	Y_2243	Y_3600	Y_3774
Line	224.306 {450}	360.073 { 94}	377.433 { 89}
Units	Cts/S	Cts/S	Cts/S
Avg	2968.1	45323.	2615.4
Stddev	8.0	423.	19.6
%RSD	.27008	.93220	.75094

#1	2962.4	45621.	2629.3
#2	2973.7	45024.	2601.5

Sample Name: 280-82987-A-12-A Acquired: 5/18/2016 14:09:12 Type: Unk

Method: 6500_025(v6) Mode: CONC Corr. Factor: 1.000000

User: CRHOADES Prep Date: Custom ID2: Custom ID3:

Comment: 324888 SOIL 6010C (Be) Q5

Elem	Ag3280	Al3092	As1890	B_2089	Ba4554	Be3130	Bi2230	Ca3179	Cd2288
Line	328.068 {103}	309.271 {109}	189.042 {478}	208.959 {461}	455.403 { 74}	313.042 {108}	223.061 {451}	317.933 {106}	228.802 {447}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	-.00082	112.62	.08492	.01582	.83731	.00442	.00538	46.599	.00238
Stddev	.00085	.06	.00496	.00105	.00002	.00013	.00309	.061	.00028
%RSD	103.96	.05686	5.8422	6.6549	.00295	2.9641	57.365	.13008	11.589

#1	-.00022	112.58	.08843	.01656	.83733	.00433	.00320	46.556	.00257
#2	-.00142	112.67	.08141	.01507	.83730	.00451	.00757	46.642	.00218

Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Elem	Co2286	Cr2055	Cu3247	Fe2714	K_7664	Li6707	Mg2790	Mn2576	Mo2020
Line	228.616 {447}	205.560 {464}	324.754 {104}	271.441 {124}	766.490 { 44}	670.784 { 50}	279.079 {121}2	257.610 {131}	202.030 {467}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.07034	.12848	.14928	231.39	23.120	.14364	60.749	3.8661	.00286
Stddev	.00057	.00055	.00162	.30	.064	.00103	.143	.0077	.00014
%RSD	.80839	.42999	1.0870	.13113	.27777	.71440	.23579	.19966	4.7591

#1	.07074	.12887	.14813	231.17	23.074	.14292	60.648	3.8606	.00276
#2	.06993	.12808	.15043	231.60	23.165	.14437	60.851	3.8715	.00296

Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Elem	Na5895	Ni2316	P_1782	Pb2203	S_1820	Sb2068	Se1960	Si2881	SiO2
Line	589.592 { 57}	231.604 {446}	178.284 {489}	220.353 {453}	182.034 {485}	206.833 {463}	196.090 {472}	288.158 {117}	288.158 {117}2
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	1.2758	.11182	W 7.4326	.11730	.88002	-.00274	.00172	11.031	23.606
Stddev	.0016	.00102	.0102	.00441	.01074	.00425	.00355	.066	.142
%RSD	.12846	.91072	.13774	3.7617	1.2209	155.09	206.18	.60083	.60083

#1	1.2770	.11254	7.4399	.12042	.88762	-.00575	.00424	10.984	23.505
#2	1.2746	.11110	7.4254	.11418	.87242	.00027	-.00079	11.078	23.706

Check ?	Chk Pass	Chk Pass	Chk Warn	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit			2.0000						
Low Limit			-1.0000						

Elem	Sn1899	Sr4077	Th2837	Ti3349	Ti1908	U_3701	V_2924	Zn2062	Zr3391
Line	189.989 {477}	407.771 { 83}	283.730 {119}	334.904 {101}	190.856 {477}	370.152 { 91}	292.402 {115}	206.200 {163}	339.198 { 99}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	-.00143	.17689	.06642	7.7690	.00429	F -.12299	.32168	.49400	.13120
Stddev	.00205	.00078	.00221	.0122	.00308	.00898	.00003	.00080	.00195
%RSD	143.24	.43861	3.3282	.15747	71.788	7.3001	.00780	.16099	1.4827

#1	.00002	.17744	.06798	7.7603	.00211	-.12934	.32170	.49343	.12982
#2	-.00289	.17635	.06486	7.7776	.00646	-.11664	.32166	.49456	.13257

Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Fail	Chk Pass	Chk Pass	Chk Pass
High Limit						50.000			
Low Limit						-1.0000			

Int. Std.	Y_2243	Y_3600	Y_3774
Line	224.306 {450}	360.073 { 94}	377.433 { 89}
Units	Cts/S	Cts/S	Cts/S
Avg	2979.8	45468.	2567.6
Stddev	6.5	354.	45.8
%RSD	.21766	.77915	1.7840

#1	2984.4	45718.	2600.0
#2	2975.2	45217.	2535.2

Sample Name: CCVH-3894253 Acquired: 5/18/2016 14:11:45 Type: QC
Method: 6500_025(v6) Mode: CONC Corr. Factor: 1.000000
User: CRHOADES Prep Date: Custom ID2: Custom ID3:
Comment:

Elem	Ag3280	Al3092	As1890	B_2089	Ba4554	Be3130	Bi2230	Ca3179	Cd2288	Co2286	Cr2055
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	-.00106	51.862	-.00575	.00628	-.00050	.00020	W 1.0633	-.00941	-.00044	-.00081	.00027
Stddev	.00023	1.075	.00782	.00035	.00023	.00002	.0066	.01279	.00008	.00030	.00017
%RSD	21.862	2.0736	135.91	5.6399	45.929	9.9589	.61633	135.87	17.935	36.533	62.694

#1	-.00122	52.622	-.01128	.00603	-.00066	.00021	1.0586	-.00037	-.00049	-.00102	.00015
#2	-.00089	51.101	-.00022	.00653	-.00034	.00019	1.0679	-.01846	-.00038	-.00060	.00038

Check ?	None	Chk Pass	None	None	None	None	Chk Warn	None	None	None	None
Value							1.0000				
Range							5.0000%				

Elem	Cu3247	Fe2714	K_7664	Li6707	Mg2790	Mn2576	Mo2020	Na8183	Ni2316	P_1782	Pb2203
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.00173	50.014	.15428	.00383	.02151	.00024	-.00072	258.53	.00119	.00639	-.00155
Stddev	.00110	.092	.07367	.00202	.00152	.00002	.00014	.27	.00013	.00014	.00147
%RSD	63.812	.18328	47.749	52.768	7.0480	8.4856	19.588	.10551	11.036	2.2663	94.450

#1	.00095	49.949	.10219	.00526	.02258	.00025	-.00082	258.73	.00128	.00649	-.00259
#2	.00251	50.079	.20637	.00240	.02043	.00022	-.00062	258.34	.00110	.00628	-.00052

Check ?	None	Chk Pass	None	None	None	None	None	Chk Pass	None	None	None
Value											
Range											

Elem	S_1820	Sb2068	Se1960	Si2881	SiO2	Sn1899	Sr4077	Th2837	Ti3349	Ti1908	U_3701
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	5.2171	-.00836	.00968	.00473	.01012	.00032	.00061	4.8374	.00482	.00200	W 10.576
Stddev	.1334	.00222	.00502	.00580	.01241	.00077	.00008	.0157	.00011	.00191	.063
%RSD	2.5562	26.604	51.852	122.67	122.67	238.80	12.740	.32433	2.2493	95.644	.59484

#1	5.1228	-.00993	.01323	.00883	.01889	.00087	.00066	4.8485	.00490	.00065	10.620
#2	5.3114	-.00679	.00613	.00063	.00134	-.00022	.00055	4.8263	.00475	.00335	10.531

Check ?	Chk Pass	None	None	None	None	None	None	Chk Pass	None	None	Chk Warn
Value											10.000
Range											5.0000%

Elem	V_2924	Zn2062	Zr3391
Units	ppm	ppm	ppm
Avg	.00898	-.00015	.05982
Stddev	.00097	.00071	.00187
%RSD	10.759	475.78	3.1283

#1	.00966	.00035	.05849
#2	.00829	-.00065	.06114

Check ?	None	None	None
Value			
Range			

Int. Std.	Y_2243	Y_3600	Y_3774
Units	Cts/S	Cts/S	Cts/S
Avg	2715.8	40735.	2205.0
Stddev	36.6	11.	31.2
%RSD	1.3491	.02733	1.4157

#1	2741.7	40727.	2182.9
#2	2689.9	40743.	2227.1

Sample Name: CCV-3894251 Acquired: 5/18/2016 14:14:22 Type: QC
Method: 6500_025(v6) Mode: CONC Corr. Factor: 1.000000
User: CRHOADES Prep Date: Custom ID2: Custom ID3:
Comment:

Elem	Ag3280	Al1670	As1890	B_2089	Ba4554	Be3130	Bi2230	Ca3179	Cd2288	Co2286	Cr2055	Cu3247	Fe2599
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.50294	.54294	1.0222	.50114	.50179	.47999	.00109	4.9881	.50580	.50204	.50034	.52265	2.4643
Stddev	.00188	.00163	.0030	.00013	.00206	.00135	.00005	.0189	.00045	.00031	.00004	.00142	.0397
%RSD	.37299	.30023	.29654	.02657	.41004	.28204	4.9132	.37818	.08825	.06129	.00897	.27118	1.6103

#1	.50161	.54409	1.0201	.50104	.50324	.47904	.00112	4.9747	.50549	.50182	.50031	.52164	2.4363
#2	.50427	.54178	1.0243	.50123	.50033	.48095	.00105	5.0014	.50612	.50226	.50037	.52365	2.4924

Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	None	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Value													
Range													

Elem	K_7664	Li6707	Mg2790	Mn2576	Mo2020	Na5895	Ni2316	P_1782	Pb2203	S_1820	Sb2068	Se1960	Si2881
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	49.376	.99812	19.621	.48527	.50163	5.0060	.49603	.99220	1.0108	-.01074	.99749	1.0353	4.8759
Stddev	.155	.00832	.036	.00166	.00029	.0387	.00045	.00788	.0008	.00178	.00388	.0139	.0517
%RSD	.31355	.83403	.18346	.34267	.05685	.77395	.09151	.79402	.07670	16.544	.38937	1.3445	1.0598

#1	49.486	.99224	19.595	.48410	.50142	4.9786	.49635	.99777	1.0103	-.01200	1.0002	1.0451	4.8393
#2	49.267	1.0040	19.646	.48645	.50183	5.0334	.49571	.98663	1.0114	-.00949	.99475	1.0254	4.9124

Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	None	Chk Pass	Chk Pass	Chk Pass
Value													
Range													

Elem	SiO2	Sn1899	Sr4077	Th2837	Ti3349	Ti1908	U_3701	V_2924	Zn2062	Zr3391
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	10.434	1.0072	.49443	-.00099	.47854	1.0320	-.01050	.49166	.48098	.50947
Stddev	.111	.0001	.00312	.00111	.00243	.0057	.00014	.00668	.00486	.00383
%RSD	1.0598	.00684	.63194	111.43	.50699	.55562	1.3207	1.3586	1.0095	.75086

#1	10.356	1.0072	.49664	-.00177	.47682	1.0360	-.01040	.48694	.47755	.50676
#2	10.513	1.0073	.49222	-.00021	.48025	1.0279	-.01059	.49639	.48442	.51217

Check ?	Chk Pass	Chk Pass	Chk Pass	None	Chk Pass	Chk Pass	None	Chk Pass	Chk Pass	Chk Pass
Value										
Range										

Int. Std.	Y_2243	Y_3600	Y_3774
Units	Cts/S	Cts/S	Cts/S
Avg	2744.4	41739.	2194.1
Stddev	12.1	240.	34.5
%RSD	.44064	.57394	1.5716

#1	2735.8	41570.	2218.5
#2	2752.9	41909.	2169.7

Sample Name: CCB Acquired: 5/18/2016 14:16:54 Type: QC
 Method: 6500_025(v6) Mode: CONC Corr. Factor: 1.000000
 User: CRHOADES Prep Date: Custom ID2: Custom ID3:
 Comment:

Elem	Ag3280	Al1670	As1890	B_2089	Ba4554	Be3130	Bi2230	Ca3179	Cd2288	Co2286	Cr2055
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	-.00082	-.00017	.00590	.00337	-.00086	.00006	-.00313	-.01652	-.00011	.00024	-.00005
Stddev	.00041	.00046	.00018	.00016	.00019	.00003	.00001	.00698	.00001	.00003	.00002
%RSD	50.458	263.77	3.0931	4.7491	21.620	52.330	.44259	42.243	8.1665	12.872	52.028

#1	-.00053	.00015	.00577	.00349	-.00099	.00008	-.00314	-.01159	-.00012	.00022	-.00007
#2	-.00111	-.00050	.00603	.00326	-.00073	.00004	-.00312	-.02146	-.00011	.00027	-.00003

Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit											
Low Limit											

Elem	Cu3247	Fe2599	K_7664	Li6707	Mg2790	Mn2576	Mo2020	Na5895	Ni2316	P_1782	Pb2203
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.00060	-.00294	.11041	.00302	-.00083	.00000	.00177	.01580	-.00050	-.00003	-.00074
Stddev	.00044	.00019	.02547	.00173	.00488	.0000	.00009	.03408	.00042	.00047	.00139
%RSD	72.487	6.5045	23.068	57.343	588.26	1786.2	4.9141	215.67	84.590	1436.7	188.42

#1	.00091	-.00280	.09240	.00424	.00262	-.00002	.00183	.03990	-.00020	-.00037	.00025
#2	.00029	-.00307	.12842	.00179	-.00428	.00002	.00171	-.00830	-.00079	.00030	-.00173

Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit											
Low Limit											

Elem	S_1820	Sb2068	Se1960	Si2881	SiO2	Sn1899	Sr4077	Th2837	Ti3349	Ti1908	U_3701
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	-.01548	W .00786	.00008	.01658	.03548	-.00091	.00014	-.00005	-.00017	.00224	-.01299
Stddev	.00464	.00439	.00236	.05962	.12759	.00220	.00010	.00281	.00021	.00253	.02760
%RSD	29.950	55.884	2866.3	359.65	359.65	240.93	68.326	6204.1	125.04	112.67	212.44

#1	-.01220	.00475	-.00158	-.02558	-.05474	.00064	.00021	.00194	-.00032	.00046	-.03250
#2	-.01876	.01096	.00175	.05874	.12570	-.00247	.00007	-.00203	-.00002	.00403	.00652

Check ?	Chk Pass	Chk Warn	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit		.00100									
Low Limit		-.00100									

Elem	V_2924	Zn2062	Zr3391
Units	ppm	ppm	ppm
Avg	-.00036	-.00083	.00048
Stddev	.00047	.00100	.00445
%RSD	131.05	120.65	927.01

#1	-.00069	-.00154	.00362
#2	-.00003	-.00012	-.00266

Check ?	Chk Pass	Chk Pass	Chk Pass
High Limit			
Low Limit			

Int. Std.	Y_2243	Y_3600	Y_3774
Units	Cts/S	Cts/S	Cts/S
Avg	2770.3	42572.	2270.8
Stddev	1.2	84.	3.7
%RSD	.04246	.19643	.16268

#1	2771.2	42512.	2268.2
#2	2769.5	42631.	2273.4

Sample Name: CCVL-3897520 Acquired: 5/18/2016 14:19:18 Type: QC
Method: 6500_025(v6) Mode: CONC Corr. Factor: 1.000000
User: CRHOADES Prep Date: Custom ID2: Custom ID3:
Comment:

Elem	Ag3280	Al1670	As1890	B_2089	Ba4554	Be3130	Bi2230	Ca3179	Cd2288	Co2286	Cr2055	Cu3247
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.00893	.11073	F .02076	.10145	.00880	.00108	.11097	.18609	.00497	.01014	.01033	.01568
Stddev	.00006	.00049	.00559	.00010	.00069	.00018	.00194	.00504	.00012	.00022	.00030	.00070
%RSD	.70378	.44072	26.927	.09404	7.8761	16.950	1.7488	2.7085	2.3231	2.1761	2.9325	4.4868

#1	.00889	.11039	.02471	.10138	.00831	.00121	.10959	.18253	.00505	.01029	.01054	.01618
#2	.00898	.11108	.01681	.10151	.00929	.00095	.11234	.18966	.00489	.00998	.01011	.01518

Check ?	Chk Pass	Chk Pass	Chk Fail	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Value			.01500									
Range			30.000%									

Elem	Fe2599	K_7664	Li6707	Mg2790	Mn2576	Mo2020	Na5895	Ni2316	P_1782	Pb2203	S_1820	Sb2068
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.10437	3.0193	.01274	.20412	.00996	.02054	1.0061	.03982	2.9100	.00858	-.01568	.01950
Stddev	.00034	.0471	.00092	.00012	.00015	.00011	.0200	.00058	.0339	.00313	.00540	.00178
%RSD	.32658	1.5614	7.2132	.06045	1.4987	.52559	1.9856	1.4456	1.1641	36.443	34.439	9.1349

#1	.10462	3.0526	.01339	.20404	.00986	.02047	.99195	.04023	2.9340	.01080	-.01186	.01824
#2	.10413	2.9859	.01209	.20421	.01007	.02062	1.0202	.03942	2.8861	.00637	-.01950	.02076

Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	None	Chk Pass
Value												
Range												

Elem	Se1960	Si2881	SiO2	Sn1899	Sr4077	Th2837	Ti3349	Ti1908	U_3701	V_2924	Zn2062	Zr3391
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	F .02102	.48345	1.0346	.10244	.01011	.01488	.00943	.01236	.04587	.00982	.01886	.01664
Stddev	.00069	.00916	.0196	.00043	.00008	.00293	.00054	.00040	.01995	.00015	.00008	.00221
%RSD	3.2854	1.8953	1.8953	.42418	.75173	19.667	5.7615	3.2475	43.499	1.5721	.43769	13.272

#1	.02053	.47697	1.0207	.10275	.01016	.01695	.00981	.01208	.03176	.00993	.01892	.01508
#2	.02150	.48993	1.0484	.10213	.01006	.01281	.00904	.01265	.05998	.00971	.01880	.01820

Check ?	Chk Fail	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Value	.01500											
Range	30.000%											

Int. Std.	Y_2243	Y_3600	Y_3774
Units	Cts/S	Cts/S	Cts/S
Avg	2780.9	42735.	2338.1
Stddev	1.2	8.	14.0
%RSD	.04147	.01812	.59835

#1	2780.1	42729.	2328.2
#2	2781.8	42740.	2348.0

Sample Name: MB 280-325210/1-A Acquired: 5/18/2016 14:21:58 Type: Unk

Method: 6500_025(v6) Mode: CONC Corr. Factor: 1.000000

User: CRHOADES Prep Date: 5/16 Custom ID2: Custom ID3:

Comment: 325210 6010C (Sb) Q4

Elem	Ag3280	Al1670	As1890	B_2089	Ba4554	Be3130	Bi2230	Ca3179	Cd2288
Line	328.068 {103}	167.079 {502}	189.042 {478}	208.959 {461}	455.403 { 74}	313.042 {108}	223.061 {451}	317.933 {106}	228.802 {447}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	-0.00026	.00353	-0.00191	.00320	-0.00102	-0.00010	.00250	-0.00547	-0.00032
Stddev	.00083	.00104	.00164	.00058	.00083	.00001	.00047	.00591	.00011
%RSD	321.34	29.432	85.940	18.100	81.216	7.9976	18.791	108.04	33.346

#1	.00033	.00280	-.00306	.00361	-.00043	-.00010	.00283	-.00129	-.00039
#2	-.00085	.00427	-.00075	.00279	-.00161	-.00011	.00217	-.00964	-.00024

Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Elem	Co2286	Cr2055	Cu3247	Fe2599	K_7664	Li6707	Mg2790	Mn2576	Mo2020
Line	228.616 {447}	205.560 {464}	324.754 {104}	259.940 {130}	766.490 { 44}	670.784 { 50}	279.079 {121}2	257.610 {131}	202.030 {467}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	-0.00010	-0.00003	-0.00033	.03541	.02728	.00145	.00141	.00017	.00010
Stddev	.00031	.00011	.00036	.00345	.02156	.00210	.00380	.00002	.00023
%RSD	312.56	370.59	110.16	9.7453	79.011	144.70	269.84	14.384	231.03

#1	.00012	.00005	-.00058	.03297	.04253	-.00003	-.00128	.00019	.00027
#2	-.00032	-.00011	-.00007	.03785	.01204	.00293	.00410	.00015	-.00006

Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Elem	Na5895	Ni2316	P_1782	Pb2203	S_1820	Sb2068	Se1960	Si2881	SiO2
Line	589.592 { 57}	231.604 {446}	178.284 {489}	220.353 {453}	182.034 {485}	206.833 {463}	196.090 {472}	288.158 {117}	288.158 {117}2
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.00278	-0.00071	.00163	.00150	-.01428	.00391	.00733	.00583	.01247
Stddev	.01580	.00028	.00036	.00136	.00627	.00170	.00346	.02615	.05596
%RSD	568.63	39.998	22.144	90.118	43.910	43.514	47.287	448.89	448.89

#1	.01395	-.00091	.00189	.00246	-.00985	.00271	.00978	-.01267	-.02710
#2	-.00839	-.00051	.00138	.00055	-.01872	.00511	.00488	.02432	.05204

Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	None
High Limit									
Low Limit									

Elem	Sn1899	Sr4077	Th2837	Ti3349	Ti1908	U_3701	V_2924	Zn2062	Zr3391
Line	189.989 {477}	407.771 { 83}	283.730 {119}	334.904 {101}	190.856 {477}	370.152 { 91}	292.402 {115}	206.200 {163}	339.198 { 99}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	-0.00007	.00033	.00095	-0.00014	-0.00467	-0.01815	.00041	.00034	.00023
Stddev	.00020	.00013	.00313	.00021	.00092	.02138	.00050	.00040	.00141
%RSD	295.58	38.616	331.43	156.66	19.776	117.81	122.30	117.45	620.30

#1	.00007	.00041	-.00127	-.00029	-.00532	-.00303	.00006	.00006	-.00077
#2	-.00021	.00024	.00316	.00001	-.00401	-.03327	.00076	.00063	.00122

Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Int. Std.	Y_2243	Y_3600	Y_3774
Line	224.306 {450}	360.073 { 94}	377.433 { 89}
Units	Cts/S	Cts/S	Cts/S
Avg	2791.7	43007.	2252.3
Stddev	17.7	10.	71.5
%RSD	.63462	.02304	3.1761

#1	2779.2	43000.	2201.8
#2	2804.2	43014.	2302.9

Sample Name: LCS 280-325210/2-A Acquired: 5/18/2016 14:24:21 Type: Unk
Method: 6500_025(v6) Mode: CONC Corr. Factor: 1.000000
User: CRHOADES Prep Date: Custom ID2: Custom ID3:
Comment: 325210 6010C (Sb) Q4

Elem	Ag3280	Al1670	As1890	B_2089	Ba4554	Be3130	Bi2230	Ca3179	Cd2288
Line	328.068 {103}	167.079 {502}	189.042 {478}	208.959 {461}	455.403 { 74}	313.042 {108}	223.061 {451}	317.933 {106}	228.802 {447}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.04980	2.0636	1.0588	1.0176	1.9965	.04924	2.1576	48.969	.10126
Stddev	.00028	.0048	.0003	.0003	.0044	.00033	.0095	.221	.00014
%RSD	.55376	.23269	.02688	.02527	.21912	.66777	.44021	.45125	.13422

#1	.04999	2.0670	1.0586	1.0174	1.9996	.04947	2.1644	49.126	.10136
#2	.04960	2.0602	1.0590	1.0178	1.9935	.04901	2.1509	48.813	.10116

Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	None	Chk Pass	Chk Pass
High Limit									
Low Limit									

Elem	Co2286	Cr2055	Cu3247	Fe2599	K_7664	Li6707	Mg2790	Mn2576	Mo2020
Line	228.616 {447}	205.560 {464}	324.754 {104}	259.940 {130}	766.490 { 44}	670.784 { 50}	279.079 {121}2	257.610 {131}	202.030 {467}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.49410	.20065	.26227	.98595	49.146	.99554	49.203	.47908	1.0557
Stddev	.00004	.00076	.00094	.01539	.314	.00231	.028	.00003	.0025
%RSD	.00856	.37707	.35678	1.5609	.63829	.23187	.05776	.00700	.23797

#1	.49407	.20118	.26293	.99683	49.368	.99717	49.183	.47906	1.0575
#2	.49413	.20011	.26161	.97507	48.924	.99391	49.223	.47911	1.0539

Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Elem	Na8183	Ni2316	P_1782	Pb2203	S_1820	Sb2068	Se1960	Si2881	SiO2
Line	818.326 { 41}	231.604 {446}	178.284 {489}	220.353 {453}	182.034 {485}	206.833 {463}	196.090 {472}	288.158 {117}	288.158 {117}2
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	54.143	.48928	10.277	.51145	2.0924	.53607	2.1593	9.8435	21.065
Stddev	.339	.00010	.001	.00113	.0090	.01084	.0202	.1087	.233
%RSD	.62674	.02029	.01415	.22167	.43162	2.0229	.93467	1.1038	1.1038

#1	53.903	.48935	10.276	.51225	2.0988	.54374	2.1736	9.9204	21.230
#2	54.383	.48921	10.278	.51065	2.0860	.52841	2.1450	9.7667	20.901

Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	None	Chk Pass	Chk Pass	Chk Pass	None
High Limit									
Low Limit									

Elem	Sn1899	Sr4077	Th2837	Ti3349	Ti1908	U_3701	V_2924	Zn2062	Zr3391
Line	189.989 {477}	407.771 { 83}	283.730 {119}	334.904 {101}	190.856 {477}	370.152 { 91}	292.402 {115}	206.200 {163}	339.198 { 99}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	2.0432	.97251	.98545	.97031	2.0076	2.1107	.48697	.47440	.51606
Stddev	.0320	.00534	.00581	.00209	.0761	.1490	.00140	.00418	.00137
%RSD	1.5667	.54873	.58922	.21488	3.7929	7.0598	.28757	.88204	.26484

#1	2.0659	.97628	.98135	.96884	2.0614	2.2161	.48796	.47144	.51703
#2	2.0206	.96874	.98956	.97179	1.9538	2.0053	.48598	.47736	.51509

Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Int. Std.	Y_2243	Y_3600	Y_3774
Line	224.306 {450}	360.073 { 94}	377.433 { 89}
Units	Cts/S	Cts/S	Cts/S
Avg	2701.4	41536.	2268.8
Stddev	2.0	43.	17.8
%RSD	.07483	.10394	.78619

#1	2699.9	41506.	2256.2
#2	2702.8	41567.	2281.4

Sample Name: 280-82931-B-4-A Acquired: 5/18/2016 14:26:48 Type: Unk

Method: 6500_025(v6) Mode: CONC Corr. Factor: 1.000000

User: CRHOADES Prep Date: Custom ID2: Custom ID3:

Comment: 325210 6010C (Sb) Q4

Elem	Ag3280	Al1670	As1890	B_2089	Ba4554	Be3130	Bi2230	Ca3179	Cd2288
Line	328.068 {103}	167.079 {502}	189.042 {478}	208.959 {461}	455.403 { 74}	313.042 {108}	223.061 {451}	317.933 {106}	228.802 {447}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	-.00067	.00259	.00699	.00589	-.00033	.00026	.00038	.01097	.00008
Stddev	.00022	.00047	.00184	.00022	.00005	.00013	.00362	.00542	.00026
%RSD	32.637	18.265	26.310	3.7738	14.696	50.839	952.01	49.371	324.98

#1	-.00052	.00292	.00829	.00573	-.00036	.00016	.00294	.00714	-.00010
#2	-.00083	.00226	.00569	.00604	-.00030	.00035	-.00218	.01480	.00026

Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Elem	Co2286	Cr2055	Cu3247	Fe2599	K_7664	Li6707	Mg2790	Mn2576	Mo2020
Line	228.616 {447}	205.560 {464}	324.754 {104}	259.940 {130}	766.490 { 44}	670.784 { 50}	279.079 {121}2	257.610 {131}	202.030 {467}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.00000	-.00040	.00023	.01429	.01624	.00246	.00398	.00021	.00377
Stddev	.00005	.00046	.00053	.00378	.01054	.00135	.00044	.00004	.00136
%RSD	1260.6	113.37	230.87	26.467	64.869	54.982	11.192	19.105	35.989

#1	-.00003	-.00073	-.00015	.01161	.02369	.00342	.00429	.00024	.00281
#2	.00004	-.00008	.00060	.01696	.00879	.00150	.00366	.00018	.00473

Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Elem	Na5895	Ni2316	P_1782	Pb2203	S_1820	Sb2068	Se1960	Si2881	SiO2
Line	589.592 { 57}	231.604 {446}	178.284 {489}	220.353 {453}	182.034 {485}	206.833 {463}	196.090 {472}	288.158 {117}	288.158 {117}2
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.02749	.00137	-.00116	-.00153	-.01487	.00657	.00623	.00881	.01884
Stddev	.02325	.00019	.00140	.00078	.00691	.00400	.00218	.00616	.01319
%RSD	84.599	14.232	120.54	50.657	46.438	60.855	34.952	69.970	69.970

#1	.01104	.00150	-.00017	-.00098	-.00999	.00939	.00777	.01316	.02817
#2	.04393	.00123	-.00216	-.00208	-.01975	.00374	.00469	.00445	.00952

Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Elem	Sn1899	Sr4077	Th2837	Ti3349	Ti1908	U_3701	V_2924	Zn2062	Zr3391
Line	189.989 {477}	407.771 { 83}	283.730 {119}	334.904 {101}	190.856 {477}	370.152 { 91}	292.402 {115}	206.200 {163}	339.198 { 99}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	-.00010	.00028	-.00100	-.00002	.02454	-.00193	.00050	.00073	-.00144
Stddev	.00085	.00011	.00243	.00043	.00870	.03520	.00066	.00040	.00572
%RSD	829.24	40.562	243.87	2328.6	35.457	1822.4	131.97	54.686	396.95

#1	.00050	.00020	.00072	-.00033	.01839	-.02682	.00003	.00045	-.00549
#2	-.00071	.00036	-.00272	.00029	.03069	.02296	.00097	.00101	.00260

Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Int. Std.	Y_2243	Y_3600	Y_3774
Line	224.306 {450}	360.073 { 94}	377.433 { 89}
Units	Cts/S	Cts/S	Cts/S
Avg	2722.7	42037.	2242.9
Stddev	1.9	67.	26.7
%RSD	.06848	.15969	1.1884

#1	2724.0	41990.	2224.0
#2	2721.4	42085.	2261.7

Sample Name: 280-82954-C-16-A Acquired: 5/18/2016 14:29:11 Type: Unk

Method: 6500_025(v6) Mode: CONC Corr. Factor: 1.000000

User: CRHOADES Prep Date: Custom ID2: Custom ID3:

Comment: 325210 6010C (Sb) Q4

Elem	Ag3280	Al1670	As1890	B_2089	Ba4554	Be3130	Bi2230	Ca3179	Cd2288
Line	328.068 {103}	167.079 {502}	189.042 {478}	208.959 {461}	455.403 {74}	313.042 {108}	223.061 {451}	317.933 {106}	228.802 {447}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	-0.00021	.00551	-0.00417	.00283	-0.00064	.00026	-0.00037	.00165	-0.00023
Stddev	.00057	.00010	.00761	.00035	.00065	.00001	.00111	.00545	.00022
%RSD	266.96	1.8805	182.52	12.435	101.40	3.5443	300.00	330.03	95.076

#1	-0.00061	.00544	-0.00956	.00258	-0.00018	.00025	-0.00115	.00550	-0.00039
#2	.00019	.00559	.00121	.00308	-0.00111	.00027	.00041	-.00220	-0.00008

Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Elem	Co2286	Cr2055	Cu3247	Fe2599	K_7664	Li6707	Mg2790	Mn2576	Mo2020
Line	228.616 {447}	205.560 {464}	324.754 {104}	259.940 {130}	766.490 {44}	670.784 {50}	279.079 {121}2	257.610 {131}	202.030 {467}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	-0.00026	.00013	.00060	.01427	-0.00487	-0.00048	.00135	.00018	.00009
Stddev	.00008	.00021	.00076	.00087	.02876	.00159	.00671	.00003	.00015
%RSD	29.128	162.09	125.78	6.1203	590.76	330.10	495.59	17.408	173.88

#1	-0.00031	-0.00002	.00114	.01488	-.02521	-.00160	-.00339	.00020	-0.00002
#2	-0.00021	.00028	.00007	.01365	.01547	.00064	.00609	.00016	.00020

Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Elem	Na5895	Ni2316	P_1782	Pb2203	S_1820	Sb2068	Se1960	Si2881	SiO2
Line	589.592 {57}	231.604 {446}	178.284 {489}	220.353 {453}	182.034 {485}	206.833 {463}	196.090 {472}	288.158 {117}	288.158 {117}2
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.01389	.00015	-0.00015	.00042	-0.01356	-0.00062	.00297	.04639	.09927
Stddev	.02934	.00034	.00175	.00016	.00081	.00099	.00500	.01099	.02352
%RSD	211.19	228.49	1145.7	39.542	5.9703	157.90	168.23	23.695	23.695

#1	.03464	.00039	-.00139	.00030	-.01299	-.00132	-.00056	.03862	.08264
#2	-.00685	-.00009	.00109	.00053	-.01413	.00007	.00650	.05416	.11591

Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Elem	Sn1899	Sr4077	Th2837	Ti3349	Ti1908	U_3701	V_2924	Zn2062	Zr3391
Line	189.989 {477}	407.771 {83}	283.730 {119}	334.904 {101}	190.856 {477}	370.152 {91}	292.402 {115}	206.200 {163}	339.198 {99}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	-0.00061	.00035	-0.00250	-0.00037	.00756	.01364	-0.00016	-0.00025	.00117
Stddev	.00015	.00000	.00126	.00038	.00463	.04649	.00029	.00029	.00458
%RSD	24.615	1.2941	50.273	105.01	61.230	340.72	178.13	113.93	390.93

#1	-0.00050	.00036	-.00161	-.00064	.00429	.04651	-.00037	-.00005	.00441
#2	-0.00072	.00035	-.00338	-.00009	.01084	-.01923	.00004	-.00046	-.00207

Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Int. Std.	Y_2243	Y_3600	Y_3774
Line	224.306 {450}	360.073 {94}	377.433 {89}
Units	Cts/S	Cts/S	Cts/S
Avg	2715.3	41903.	2317.7
Stddev	3.9	156.	96.3
%RSD	.14466	.37217	4.1551

#1	2712.5	42014.	2249.6
#2	2718.0	41793.	2385.8

Sample Name: 82954-C-16-A SD@5 Acquired: 5/18/2016 14:31:34 Type: Unk
Method: 6500_025(v6) Mode: CONC Corr. Factor: 1.000000
User: CRHOADES Prep Date: Custom ID2: Custom ID3:
Comment: 325210 6010C (Sb) Q4

Elem	Ag3280	Al1670	As1890	B_2089	Ba4554	Be3130	Bi2230	Ca3179	Cd2288
Line	328.068 {103}	167.079 {502}	189.042 {478}	208.959 {461}	455.403 { 74}	313.042 {108}	223.061 {451}	317.933 {106}	228.802 {447}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.00013	.00182	-.00205	.00319	-.00038	.00006	.00122	-.01637	-.00058
Stddev	.00039	.00001	.00116	.00089	.00028	.00003	.00572	.00282	.00033
%RSD	286.36	.27553	56.834	28.020	74.594	45.532	467.84	17.247	57.704

#1	-.00014	.00182	-.00287	.00382	-.00058	.00004	-.00282	-.01837	-.00082
#2	.00041	.00181	-.00122	.00255	-.00018	.00009	.00527	-.01438	-.00034

Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Elem	Co2286	Cr2055	Cu3247	Fe2599	K_7664	Li6707	Mg2790	Mn2576	Mo2020
Line	228.616 {447}	205.560 {464}	324.754 {104}	259.940 {130}	766.490 { 44}	670.784 { 50}	279.079 {121}2	257.610 {131}	202.030 {467}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	-.00020	.00024	.00072	.41064	.03295	.00081	-.00008	.00330	-.00024
Stddev	.00021	.00026	.00014	.00230	.04208	.00181	.00248	.00004	.00053
%RSD	105.29	112.06	18.775	.56122	127.74	223.64	3020.2	1.0897	219.53

#1	-.00034	.00005	.00063	.40901	.06271	-.00047	-.00183	.00328	.00013
#2	-.00005	.00042	.00082	.41227	.00319	.00209	.00167	.00333	-.00062

Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Elem	Na5895	Ni2316	P_1782	Pb2203	S_1820	Sb2068	Se1960	Si2881	SiO2
Line	589.592 { 57}	231.604 {446}	178.284 {489}	220.353 {453}	182.034 {485}	206.833 {463}	196.090 {472}	288.158 {117}	288.158 {117}2
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	-.00617	-.00080	-.00289	.00032	-.01374	.00048	.00806	.04192	.08971
Stddev	.00171	.00013	.00024	.00052	.00278	.00132	.00799	.09060	.19388
%RSD	27.681	16.792	8.1542	165.63	20.256	275.40	99.053	216.11	216.11

#1	-.00496	-.00089	-.00272	.00068	-.01177	.00142	.01371	-.02214	-.04738
#2	-.00737	-.00070	-.00306	-.00005	-.01570	-.00046	.00242	.10598	.22680

Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Elem	Sn1899	Sr4077	Th2837	Ti3349	Ti1908	U_3701	V_2924	Zn2062	Zr3391
Line	189.989 {477}	407.771 { 83}	283.730 {119}	334.904 {101}	190.856 {477}	370.152 { 91}	292.402 {115}	206.200 {163}	339.198 { 99}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	-.00078	.00025	.00243	-.00022	.00094	-.00384	.00109	.01029	-.00133
Stddev	.00174	.00011	.00132	.00032	.00070	.01965	.00061	.00008	.00261
%RSD	224.23	44.580	54.024	146.82	74.662	511.59	55.947	.77875	196.96

#1	-.00200	.00017	.00150	-.00044	.00143	-.01774	.00152	.01035	.00052
#2	.00045	.00032	.00336	.00001	.00044	.01005	.00066	.01024	-.00317

Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Int. Std.	Y_2243	Y_3600	Y_3774
Line	224.306 {450}	360.073 { 94}	377.433 { 89}
Units	Cts/S	Cts/S	Cts/S
Avg	2720.7	41853.	2197.3
Stddev	16.5	40.	51.8
%RSD	.60612	.09630	2.3559

#1	2709.0	41881.	2160.7
#2	2732.3	41824.	2233.9

Sample Name: 280-82954-C-16-B MS Acquired: 5/18/2016 14:33:57 Type: Unk
Method: 6500_025(v6) Mode: CONC Corr. Factor: 1.000000
User: CRHOADES Prep Date: Custom ID2: Custom ID3:
Comment: 325210 6010C (Sb) Q4

Elem	Ag3280	Al1670	As1890	B_2089	Ba4554	Be3130	Bi2230	Ca3179	Cd2288
Line	328.068 {103}	167.079 {502}	189.042 {478}	208.959 {461}	455.403 { 74}	313.042 {108}	223.061 {451}	317.933 {106}	228.802 {447}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.04955	2.0657	1.0539	1.0184	2.0164	.04873	F 2.1444	49.402	.10014
Stddev	.00007	.0033	.0143	.0007	.0130	.00006	.0055	.438	.00015
%RSD	.14046	.15821	1.3541	.06888	.64266	.12626	.25474	.88581	.14585

#1	.04960	2.0680	1.0640	1.0179	2.0256	.04869	2.1483	49.712	.10004
#2	.04950	2.0634	1.0438	1.0189	2.0072	.04878	2.1406	49.093	.10025

Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Fail	Chk Pass	Chk Pass
High Limit							.10000		
Low Limit							-.10000		

Elem	Co2286	Cr2055	Cu3247	Fe2599	K_7664	Li6707	Mg2790	Mn2576	Mo2020
Line	228.616 {447}	205.560 {464}	324.754 {104}	259.940 {130}	766.490 { 44}	670.784 { 50}	279.079 {121}2	257.610 {131}	202.030 {467}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.49415	.20182	.25868	.98290	49.714	.99838	48.735	.47531	1.0642
Stddev	.00005	.00075	.00127	.00331	.394	.00344	.075	.00060	.0013
%RSD	.01022	.37240	.49143	.33663	.79257	.34458	.15396	.12596	.12448

#1	.49419	.20235	.25958	.98056	49.993	.99594	48.788	.47489	1.0651
#2	.49412	.20129	.25778	.98524	49.435	1.0008	48.682	.47573	1.0633

Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Elem	Na8183	Ni2316	P_1782	Pb2203	S_1820	Sb2068	Se1960	Si2881	SiO2
Line	818.326 { 41}	231.604 {446}	178.284 {489}	220.353 {453}	182.034 {485}	206.833 {463}	196.090 {472}	288.158 {117}	288.158 {117}2
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	54.191	.48858	W 10.207	.51017	2.0876	.54254	2.1625	9.8989	21.184
Stddev	.011	.00006	.000	.00240	.0057	.00720	.0087	.0043	.009
%RSD	.02024	.01166	.00477	.47072	.27254	1.3275	.40422	.04337	.04337

#1	54.183	.48862	10.208	.50847	2.0916	.54763	2.1563	9.9019	21.190
#2	54.199	.48854	10.207	.51187	2.0836	.53745	2.1687	9.8958	21.177

Check ?	Chk Pass	Chk Pass	Chk Warn	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit			2.0000						
Low Limit			-1.0000						

Elem	Sn1899	Sr4077	Th2837	Ti3349	Ti1908	U_3701	V_2924	Zn2062	Zr3391
Line	189.989 {477}	407.771 { 83}	283.730 {119}	334.904 {101}	190.856 {477}	370.152 { 91}	292.402 {115}	206.200 {163}	339.198 { 99}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	W 2.0670	.97906	.98690	.97119	2.0233	2.0867	.48381	.47363	.52718
Stddev	.0086	.00943	.00001	.00063	.0391	.0306	.00070	.00187	.00323
%RSD	.41767	.96344	.00079	.06444	1.9311	1.4642	.14464	.39559	.61211

#1	2.0609	.98573	.98690	.97164	2.0509	2.1083	.48431	.47231	.52489
#2	2.0731	.97239	.98691	.97075	1.9956	2.0651	.48332	.47495	.52946

Check ?	Chk Warn	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit	2.0000								
Low Limit	-.05000								

Int. Std.	Y_2243	Y_3600	Y_3774
Line	224.306 {450}	360.073 { 94}	377.433 { 89}
Units	Cts/S	Cts/S	Cts/S
Avg	2635.9	40377.	2188.3
Stddev	10.2	80.	23.1
%RSD	.38817	.19760	1.0547

#1	2628.7	40434.	2172.0
#2	2643.1	40321.	2204.6

Sample Name: 280-82954-C-16-C MSD Acquired: 5/18/2016 14:36:24 Type: Unk
Method: 6500_025(v6) Mode: CONC Corr. Factor: 1.000000
User: CRHOADES Prep Date: Custom ID2: Custom ID3:
Comment: 325210 6010C (Sb) Q4

Elem	Ag3280	Al1670	As1890	B_2089	Ba4554	Be3130	Bi2230	Ca3179	Cd2288
Line	328.068 {103}	167.079 {502}	189.042 {478}	208.959 {461}	455.403 { 74}	313.042 {108}	223.061 {451}	317.933 {106}	228.802 {447}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.05053	2.0798	1.0736	1.0132	2.0168	.04883	F 2.1422	49.349	.09975
Stddev	.00037	.0565	.0269	.0199	.0530	.00115	.0422	1.330	.00217
%RSD	.72293	2.7187	2.5052	1.9667	2.6291	2.3449	1.9719	2.6948	2.1790

#1	.05079	2.0398	1.0546	.99911	2.0543	.04964	2.1123	50.290	.09822
#2	.05027	2.1197	1.0926	1.0273	1.9793	.04802	2.1720	48.409	.10129

Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Fail	Chk Pass	Chk Pass
High Limit							.10000		
Low Limit							-.10000		

Elem	Co2286	Cr2055	Cu3247	Fe2599	K_7664	Li6707	Mg2790	Mn2576	Mo2020
Line	228.616 {447}	205.560 {464}	324.754 {104}	259.940 {130}	766.490 { 44}	670.784 { 50}	279.079 {121}2	257.610 {131}	202.030 {467}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.49267	.20193	.26627	.99158	49.667	1.0100	49.930	.48771	1.0666
Stddev	.01008	.00449	.00084	.00467	1.319	.0050	.008	.00045	.0205
%RSD	2.0467	2.2237	.31423	.47060	2.6564	.49335	.01671	.09147	1.9188

#1	.48554	.19876	.26568	.99488	50.600	1.0135	49.936	.48802	1.0521
#2	.49980	.20511	.26686	.98828	48.734	1.0065	49.924	.48739	1.0810

Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Elem	Na8183	Ni2316	P_1782	Pb2203	S_1820	Sb2068	Se1960	Si2881	SiO2
Line	818.326 { 41}	231.604 {446}	178.284 {489}	220.353 {453}	182.034 {485}	206.833 {463}	196.090 {472}	288.158 {117}	288.158 {117}2
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	54.038	.48790	W 10.176	.51147	2.0675	.53152	2.1548	10.022	21.447
Stddev	.251	.01059	.217	.00854	.0321	.00508	.0009	.029	.061
%RSD	.46418	2.1699	2.1359	1.6694	1.5505	.95612	.04282	.28623	.28623

#1	54.215	.48041	10.023	.50543	2.0448	.52792	2.1555	10.001	21.403
#2	53.860	.49539	10.330	.51751	2.0901	.53511	2.1541	10.042	21.490

Check ?	Chk Pass	Chk Pass	Chk Warn	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit			2.0000						
Low Limit			-1.0000						

Elem	Sn1899	Sr4077	Th2837	Ti3349	Ti1908	U_3701	V_2924	Zn2062	Zr3391
Line	189.989 {477}	407.771 { 83}	283.730 {119}	334.904 {101}	190.856 {477}	370.152 { 91}	292.402 {115}	206.200 {163}	339.198 { 99}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	W 2.0504	.97907	1.0052	.98934	1.9913	2.1554	.49666	.48620	.53857
Stddev	.0069	.03141	.0039	.00088	.0523	.0488	.00033	.00004	.00424
%RSD	.33469	3.2079	.39016	.08884	2.6244	2.2656	.06723	.00732	.78667

#1	2.0455	1.0013	1.0024	.98996	2.0283	2.1900	.49689	.48623	.53557
#2	2.0552	.95686	1.0080	.98872	1.9544	2.1209	.49642	.48618	.54156

Check ?	Chk Warn	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit	2.0000								
Low Limit	-.05000								

Int. Std.	Y_2243	Y_3600	Y_3774
Line	224.306 {450}	360.073 { 94}	377.433 { 89}
Units	Cts/S	Cts/S	Cts/S
Avg	2680.6	40329.	2233.9
Stddev	73.1	127.	34.7
%RSD	2.7277	.31483	1.5524

#1	2732.3	40419.	2209.4
#2	2628.9	40240.	2258.5

Sample Name: 280-82954-C-16-A PDS Acquired: 5/18/2016 14:38:53 Type: Unk
 Method: 6500_025(v6) Mode: CONC Corr. Factor: 1.000000
 User: CRHOADES Prep Date: Custom ID2: Custom ID3:
 Comment: 325210 6010C (Sb) Q4

Elem	Ag3280	Al1670	As1890	B_2089	Ba4554	Be3130	Bi2230	Ca3179	Cd2288
Line	328.068 {103}	167.079 {502}	189.042 {478}	208.959 {461}	455.403 { 74}	313.042 {108}	223.061 {451}	317.933 {106}	228.802 {447}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.04943	1.0613	.20821	.10680	.10271	.04894	.00250	19.737	.05125
Stddev	.00017	.0252	.00427	.00232	.00128	.00054	.00140	.102	.00125
%RSD	.33948	2.3762	2.0525	2.1766	1.2473	1.1125	56.099	.51513	2.4368

#1	.04931	1.0435	.20519	.10516	.10362	.04932	.00350	19.809	.05036
#2	.04955	1.0792	.21123	.10845	.10180	.04855	.00151	19.665	.05213

Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Elem	Co2286	Cr2055	Cu3247	Fe2599	K_7664	Li6707	Mg2790	Mn2576	Mo2020
Line	228.616 {447}	205.560 {464}	324.754 {104}	259.940 {130}	766.490 { 44}	670.784 { 50}	279.079 {121}2	257.610 {131}	202.030 {467}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.04993	.05147	.05279	1.3930	20.502	.10398	19.702	.05267	.05777
Stddev	.00083	.00128	.00075	.0066	.032	.00321	.025	.00032	.00316
%RSD	1.6630	2.4845	1.4155	.47230	.15797	3.0911	.12758	.61655	5.4648

#1	.04935	.05056	.05226	1.3884	20.525	.10171	19.720	.05289	.05553
#2	.05052	.05237	.05332	1.3977	20.480	.10625	19.685	.05244	.06000

Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Elem	Na8183	Ni2316	P_1782	Pb2203	S_1820	Sb2068	Se1960	Si2881	SiO2
Line	818.326 { 41}	231.604 {446}	178.284 {489}	220.353 {453}	182.034 {485}	206.833 {463}	196.090 {472}	288.158 {117}	288.158 {117}2
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	22.582	.04920	W 2.0323	.10484	-.01006	.10246	.22070	4.9881	10.675
Stddev	.213	.00129	.0422	.00259	.00110	.00571	.00510	.0066	.014
%RSD	.94482	2.6169	2.0779	2.4674	10.905	5.5756	2.3117	.13238	.13238

#1	22.733	.04829	2.0024	.10301	-.00929	.09842	.21710	4.9928	10.685
#2	22.431	.05011	2.0622	.10667	-.01084	.10650	.22431	4.9834	10.665

Check ?	Chk Pass	Chk Pass	Chk Warn	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit			2.0000						
Low Limit			-1.0000						

Elem	Sn1899	Sr4077	Th2837	Ti3349	Ti1908	U_3701	V_2924	Zn2062	Zr3391
Line	189.989 {477}	407.771 { 83}	283.730 {119}	334.904 {101}	190.856 {477}	370.152 { 91}	292.402 {115}	206.200 {163}	339.198 { 99}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.10434	.05094	.19624	.04888	.24053	.53988	.05005	.20304	.05486
Stddev	.00500	.00045	.00021	.00018	.00862	.02725	.00090	.00019	.00024
%RSD	4.7905	.89078	.10716	.37178	3.5819	5.0468	1.8023	.09283	.43150

#1	.10081	.05126	.19639	.04875	.23444	.55915	.04941	.20290	.05469
#2	.10788	.05062	.19609	.04901	.24662	.52061	.05069	.20317	.05503

Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Int. Std.	Y_2243	Y_3600	Y_3774
Line	224.306 {450}	360.073 { 94}	377.433 { 89}
Units	Cts/S	Cts/S	Cts/S
Avg	2719.4	40796.	2146.3
Stddev	66.6	241.	9.3
%RSD	2.4496	.59032	.43213

#1	2766.5	40626.	2139.8
#2	2672.3	40967.	2152.9

Sample Name: CCVH-3894253 Acquired: 5/18/2016 14:41:30 Type: QC
Method: 6500_025(v6) Mode: CONC Corr. Factor: 1.000000
User: CRHOADES Prep Date: Custom ID2: Custom ID3:
Comment:

Elem	Ag3280	Al3092	As1890	B_2089	Ba4554	Be3130	Bi2230	Ca3179	Cd2288	Co2286	Cr2055
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	-.00044	51.850	.00057	.00717	-.00054	.00033	W 1.0792	-.01698	-.00060	-.00093	.00023
Stddev	.00074	.557	.00472	.00048	.00041	.00013	.0084	.00687	.00018	.00035	.00050
%RSD	169.09	1.0749	827.25	6.6774	75.742	38.930	.77805	40.474	30.735	37.107	213.82
#1	-.00096	51.456	.00390	.00683	-.00084	.00024	1.0851	-.02184	-.00073	-.00118	.00058
#2	.00009	52.244	-.00276	.00751	-.00025	.00042	1.0732	-.01212	-.00047	-.00069	-.00012
Check ?	None	Chk Pass	None	None	None	None	Chk Warn	None	None	None	None
Value							1.0000				
Range							5.0000%				
Elem	Cu3247	Fe2714	K_7664	Li6707	Mg2790	Mn2576	Mo2020	Na8183	Ni2316	P_1782	Pb2203
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.00205	50.650	.29033	.00173	.02489	-.00009	-.00041	258.84	.00126	.00597	.00187
Stddev	.00002	.109	.13376	.00361	.00225	.00001	.00107	.68	.00078	.00185	.00159
%RSD	.97436	.21564	46.071	209.45	9.0543	11.295	262.67	.26351	62.228	30.984	85.158
#1	.00204	50.727	.19575	-.00083	.02330	-.00010	-.00116	258.35	.00181	.00728	.00074
#2	.00207	50.573	.38491	.00428	.02649	-.00008	.00035	259.32	.00070	.00467	.00299
Check ?	None	Chk Pass	None	None	None	None	None	Chk Pass	None	None	None
Value											
Range											
Elem	S_1820	Sb2068	Se1960	Si2881	SiO2	Sn1899	Sr4077	Th2837	Ti3349	Ti1908	U_3701
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	F 5.5565	-.01042	.01137	.01628	.03485	.00294	.00039	4.8731	.00362	.00356	10.325
Stddev	.0221	.00365	.00004	.02416	.05171	.00213	.00002	.0113	.00063	.00062	.084
%RSD	.39782	35.062	.31605	148.38	148.38	72.360	4.1762	.23186	17.417	17.345	.81175
#1	5.5409	-.00783	.01134	.03337	.07141	.00144	.00040	4.8652	.00406	.00312	10.265
#2	5.5722	-.01300	.01139	-.00080	-.00172	.00444	.00037	4.8811	.00317	.00400	10.384
Check ?	Chk Fail	None	None	None	None	None	None	Chk Pass	None	None	Chk Pass
Value	5.0000										
Range	10.490%										
Elem	V_2924	Zn2062	Zr3391								
Units	ppm	ppm	ppm								
Avg	.00873	-.00047	.06085								
Stddev	.00051	.00026	.00078								
%RSD	5.8983	56.438	1.2744								
#1	.00909	-.00028	.06030								
#2	.00836	-.00066	.06140								
Check ?	None	None	None								
Value											
Range											
Int. Std.	Y_2243	Y_3600	Y_3774								
Units	Cts/S	Cts/S	Cts/S								
Avg	2589.3	39535.	2135.3								
Stddev	6.2	65.	18.2								
%RSD	.24092	.16388	.85071								
#1	2584.9	39581.	2148.1								
#2	2593.8	39489.	2122.4								

Sample Name: CCV-3894251 Acquired: 5/18/2016 14:44:07 Type: QC

Method: 6500_025(v6) Mode: CONC Corr. Factor: 1.000000

User: CRHOADES Prep Date: Custom ID2: Custom ID3:

Comment:

Elem	Ag3280	Al1670	As1890	B_2089	Ba4554	Be3130	Bi2230	Ca3179	Cd2288	Co2286	Cr2055	Cu3247	Fe2599
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.49988	.53646	1.0324	.49732	.49075	.46991	-.00320	4.8801	.50096	.51209	.51111	.52109	2.4263
Stddev	.00003	.02353	.0449	.01879	.00232	.00241	.00154	.0707	.00784	.02049	.02055	.00076	.0156
%RSD	.00665	4.3870	4.3448	3.7777	.47234	.51339	48.055	1.4478	1.5652	4.0018	4.0199	.14619	.64343

#1	.49986	.55310	1.0642	.51060	.48912	.46821	-.00212	4.8302	.50650	.52658	.52564	.52055	2.4373
#2	.49990	.51982	1.0007	.48403	.49239	.47162	-.00429	4.9301	.49542	.49760	.49658	.52163	2.4153

Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	None	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Value													
Range													

Elem	K_7664	Li6707	Mg2790	Mn2576	Mo2020	Na5895	Ni2316	P_1782	Pb2203	S_1820	Sb2068	Se1960	Si2881
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	48.187	1.0002	19.697	.48697	.51330	5.0436	.50601	1.0065	1.0431	-.01325	1.0225	1.0634	4.9538
Stddev	.314	.0139	.062	.00112	.02174	.0329	.01866	.0401	.0411	.00313	.0458	.0379	.0319
%RSD	.65175	1.3890	.31251	.23024	4.2356	.65187	3.6873	3.9833	3.9400	23.625	4.4770	3.5646	.64485

#1	47.965	.99040	19.741	.48777	.52867	5.0203	.51921	1.0348	1.0722	-.01104	1.0549	1.0902	4.9312
#2	48.409	1.0100	19.654	.48618	.49793	5.0668	.49282	.97811	1.0141	-.01547	.99013	1.0366	4.9764

Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	None	Chk Pass	Chk Pass	Chk Pass
Value													
Range													

Elem	SiO2	Sn1899	Sr4077	Th2837	Ti3349	Ti1908	U_3701	V_2924	Zn2062	Zr3391
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	10.601	1.0387	.48152	-.00089	.47995	1.0582	.00997	.49701	.48788	.51715
Stddev	.068	.0395	.00306	.00401	.00079	.0487	.12610	.00213	.00294	.00097
%RSD	.64485	3.8054	.63466	448.88	.16494	4.6006	1264.4	.42954	.60159	.18764
#1	10.553	1.0666	.47936	-.00373	.48051	1.0927	.09914	.49852	.48995	.51646
#2	10.649	1.0107	.48368	.00194	.47939	1.0238	-.07919	.49550	.48580	.51784

Check ?	Chk Pass	Chk Pass	Chk Pass	None	Chk Pass	Chk Pass	None	Chk Pass	Chk Pass	Chk Pass
Value										
Range										

Int. Std.	Y_2243	Y_3600	Y_3774
Units	Cts/S	Cts/S	Cts/S
Avg	2681.3	40529.	2193.0
Stddev	105.5	94.	16.2
%RSD	3.9329	.23314	.73964
#1	2606.7	40462.	2204.4
#2	2755.8	40596.	2181.5

Sample Name: CCB Acquired: 5/18/2016 14:46:38 Type: QC
 Method: 6500_025(v6) Mode: CONC Corr. Factor: 1.000000
 User: CRHOADES Prep Date: Custom ID2: Custom ID3:
 Comment:

Elem	Ag3280	Al1670	As1890	B_2089	Ba4554	Be3130	Bi2230	Ca3179	Cd2288	Co2286	Cr2055
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	-.00191	-.00043	.00235	.00376	-.00084	.00031	.00238	-.01213	-.00013	-.00064	-.00002
Stddev	.00044	.00047	.00208	.00126	.00008	.00015	.00126	.00548	.00010	.00006	.00002
%RSD	23.323	111.11	88.685	33.570	9.5255	48.563	52.815	45.224	73.241	9.9312	129.34

#1	-.00159	-.00076	.00383	.00466	-.00078	.00041	.00326	-.01601	-.00006	-.00059	.00000
#2	-.00222	-.00009	.00088	.00287	-.00090	.00020	.00149	-.00825	-.00020	-.00068	-.00003

Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit											
Low Limit											

Elem	Cu3247	Fe2599	K_7664	Li6707	Mg2790	Mn2576	Mo2020	Na5895	Ni2316	P_1782	Pb2203
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	-.00001	-.00514	.13048	.00064	.00428	.00004	.00213	.00500	.00016	-.00092	.00064
Stddev	.00078	.00150	.07045	.00182	.00026	.00006	.00034	.01271	.00018	.00240	.00142
%RSD	12667.	29.225	53.991	284.26	6.0403	164.75	15.885	254.16	113.87	260.12	222.41

#1	.00054	-.00620	.08067	.00193	.00446	.00008	.00189	-.00399	.00029	-.00262	-.00037
#2	-.00055	-.00408	.18029	-.00065	.00410	-.00001	.00237	.01399	.00003	.00077	.00164

Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit											
Low Limit											

Elem	S_1820	Sb2068	Se1960	Si2881	SiO2	Sn1899	Sr4077	Th2837	Ti3349	Ti1908	U_3701
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	-.01886	W .00485	W .00996	-.00075	-.00159	.00194	.00009	.00166	-.00015	-.00012	-.02859
Stddev	.00762	.00480	.00359	.03486	.07461	.00024	.00006	.00062	.00053	.00153	.04285
%RSD	40.384	98.870	36.035	4678.8	4678.8	12.204	69.135	36.965	352.44	1323.1	149.89

#1	-.02424	.00146	.01249	.02391	.05116	.00177	.00004	.00123	.00022	.00097	.00171
#2	-.01347	.00824	.00742	-.02540	-.05435	.00211	.00013	.00210	-.00052	-.00120	-.05889

Check ?	Chk Pass	Chk Warn	Chk Warn	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit		.00100	.00750								
Low Limit		-.00100	-.01500								

Elem	V_2924	Zn2062	Zr3391
Units	ppm	ppm	ppm
Avg	.00010	-.00082	-.00210
Stddev	.00029	.00064	.00914
%RSD	281.96	78.424	435.87

#1	-.00010	-.00037	.00436
#2	.00031	-.00128	-.00856

Check ?	Chk Pass	Chk Pass	Chk Pass
High Limit			
Low Limit			

Int. Std.	Y_2243	Y_3600	Y_3774
Units	Cts/S	Cts/S	Cts/S
Avg	2645.3	40824.	2131.3
Stddev	3.1	88.	40.6
%RSD	.11801	.21640	1.9050

#1	2647.5	40762.	2160.0
#2	2643.1	40887.	2102.6

Sample Name: CCVL-3897520 Acquired: 5/18/2016 14:49:01 Type: QC

Method: 6500_025(v6) Mode: CONC Corr. Factor: 1.000000

User: CRHOADES Prep Date: Custom ID2: Custom ID3:

Comment:

Elem	Ag3280	Al1670	As1890	B_2089	Ba4554	Be3130	Bi2230	Ca3179	Cd2288	Co2286	Cr2055	Cu3247
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.00907	.11072	.01244	.10164	.00955	.00118	.11187	.19154	.00469	.01044	.01037	.01599
Stddev	.00036	.00028	.00035	.00261	.00009	.00014	.00397	.01037	.00005	.00033	.00062	.00034
%RSD	3.9752	.25367	2.8153	2.5656	.91285	12.092	3.5484	5.4119	1.1447	3.1891	5.9815	2.1115

#1	.00881	.11052	.01220	.10349	.00961	.00108	.10906	.18421	.00472	.01068	.01080	.01575
#2	.00932	.11091	.01269	.09980	.00949	.00128	.11467	.19887	.00465	.01021	.00993	.01623

Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Value												
Range												

Elem	Fe2599	K_7664	Li6707	Mg2790	Mn2576	Mo2020	Na5895	Ni2316	P_1782	Pb2203	S_1820	Sb2068
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.09584	3.1811	.00995	.20475	.01001	.02035	1.0269	.04085	2.9154	.00958	-.01795	.02561
Stddev	.00149	.1806	.00132	.00351	.00004	.00067	.0073	.00097	.0611	.00036	.00267	.00336
%RSD	1.5566	5.6766	13.298	1.7124	.43293	3.3149	.71233	2.3815	2.0961	3.7553	14.869	13.130

#1	.09689	3.0535	.00901	.20723	.01004	.02082	1.0217	.04153	2.9586	.00983	-.01606	.02799
#2	.09478	3.3088	.01088	.20227	.00998	.01987	1.0320	.04016	2.8722	.00932	-.01984	.02323

Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	None	Chk Pass
Value												
Range												

Elem	Se1960	Si2881	SiO2	Sn1899	Sr4077	Th2837	Ti3349	Ti1908	U_3701	V_2924	Zn2062	Zr3391
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	F .02169	.51476	1.1016	.10646	.01011	.01619	.00956	.01331	.07342	.01060	.01936	.01397
Stddev	.00345	.02261	.0484	.00199	.00010	.00206	.00042	.00218	.03660	.00023	.00012	.00077
%RSD	15.902	4.3921	4.3921	1.8716	.94012	12.745	4.3638	16.343	49.855	2.1397	.64224	5.4799

#1	.01925	.49877	1.0674	.10787	.01017	.01765	.00927	.01485	.04754	.01076	.01945	.01451
#2	.02413	.53075	1.1358	.10505	.01004	.01473	.00986	.01178	.09930	.01044	.01928	.01343

Check ?	Chk Fail	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Value	.01500											
Range	30.000%											

Int. Std.	Y_2243	Y_3600	Y_3774
Units	Cts/S	Cts/S	Cts/S
Avg	2644.4	40680.	2151.7
Stddev	6.8	137.	53.0
%RSD	.25719	.33572	2.4631

#1	2639.6	40777.	2189.2
#2	2649.2	40584.	2114.3

Sample Name: LB 280-325280/1-B Acquired: 5/18/2016 14:51:41 Type: Unk
Method: 6500_025(v6) Mode: CONC Corr. Factor: 1.000000
User: CRHOADES Prep Date: 5/16 Custom ID2: Custom ID3:
Comment: 325378 6010C (Se) Q5

Elem	Ag3280	Al1670	As1890	B_2089	Ba4554	Be3130	Bi2230	Ca3179	Cd2288
Line	328.068 {103}	167.079 {502}	189.042 {478}	208.959 {461}	455.403 { 74}	313.042 {108}	223.061 {451}	317.933 {106}	228.802 {447}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	-0.00044	.00311	-0.00642	.02234	-0.00064	.00008	-0.00220	W .13838	-0.00007
Stddev	.00051	.00044	.00666	.00051	.00002	.00004	.00373	.01824	.00013
%RSD	116.59	14.121	103.69	2.2620	3.5935	54.374	169.83	13.183	183.01

#1	-0.00080	.00280	-0.00171	.02198	-0.00062	.00005	-0.00484	.12548	.00002
#2	-0.00008	.00343	-0.01113	.02269	-0.00066	.00011	.00044	.15128	-0.00017

Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Warn	Chk Pass
High Limit								.10000	
Low Limit								-.10000	

Elem	Co2286	Cr2055	Cu3247	Fe2599	K_7664	Li6707	Mg2790	Mn2576	Mo2020
Line	228.616 {447}	205.560 {464}	324.754 {104}	259.940 {130}	766.490 { 44}	670.784 { 50}	279.079 {121}2	257.610 {131}	202.030 {467}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	-0.00034	.00022	.00441	F .10898	.26806	.00394	.01884	.00052	.00015
Stddev	.00006	.00001	.00012	.00316	.15170	.00029	.00703	.00010	.00053
%RSD	17.523	4.4215	2.6096	2.9039	56.593	7.4271	37.327	18.557	356.96

#1	-0.00030	.00022	.00433	.10674	.16079	.00373	.01387	.00045	-0.00023
#2	-0.00038	.00021	.00449	.11122	.37533	.00415	.02381	.00059	.00052

Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Fail	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit				.10000					
Low Limit				-.10000					

Elem	Na8183	Ni2316	P_1782	Pb2203	S_1820	Sb2068	Se1960	Si2881	SiO2
Line	818.326 { 41}	231.604 {446}	178.284 {489}	220.353 {453}	182.034 {485}	206.833 {463}	196.090 {472}	288.158 {117}	288.158 {117}2
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	322.60	-0.00008	.00352	-0.00107	.00161	.00061	-0.00336	.02791	.05973
Stddev	6.15	.00056	.00115	.00107	.00332	.00009	.00353	.00529	.01132
%RSD	1.9073	715.75	32.584	99.137	205.43	14.165	105.07	18.958	18.958

#1	326.95	.00031	.00433	-0.00183	-0.00073	.00068	-0.00086	.02417	.05172
#2	318.25	-0.00047	.00271	-0.00032	.00396	.00055	-0.00586	.03165	.06773

Check ?	None	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	None
High Limit									
Low Limit									

Elem	Sn1899	Sr4077	Th2837	Ti3349	Ti1908	U_3701	V_2924	Zn2062	Zr3391
Line	189.989 {477}	407.771 { 83}	283.730 {119}	334.904 {101}	190.856 {477}	370.152 { 91}	292.402 {115}	206.200 {163}	339.198 { 99}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.00102	.00070	-0.00162	.00030	-0.00120	-0.02191	.00052	.00043	-0.00316
Stddev	.00066	.00004	.00191	.00062	.00032	.03862	.00004	.00022	.00223
%RSD	64.968	6.4136	118.36	204.73	26.273	176.30	6.8364	50.469	70.390

#1	.00055	.00073	-0.00026	-0.00014	-0.00098	-.04922	.00055	.00028	-0.00474
#2	.00149	.00067	-0.00297	.00074	-0.00142	.00540	.00050	.00059	-0.00159

Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Int. Std.	Y_2243	Y_3600	Y_3774
Line	224.306 {450}	360.073 { 94}	377.433 { 89}
Units	Cts/S	Cts/S	Cts/S
Avg	2664.9	40910.	2271.8
Stddev	12.2	194.	33.0
%RSD	.45763	.47312	1.4519

#1	2673.5	41047.	2295.1
#2	2656.3	40773.	2248.4

Sample Name: LCS 280-325280/2-B Acquired: 5/18/2016 14:54:23 Type: Unk
Method: 6500_025(v6) Mode: CONC Corr. Factor: 1.000000
User: CRHOADES Prep Date: Custom ID2: Custom ID3:
Comment: 325378 6010C (Se) Q5

Elem	Ag3280	Al1670	As1890	B_2089	Ba4554	Be3130	Bi2230	Ca3179	Cd2288
Line	328.068 {103}	167.079 {502}	189.042 {478}	208.959 {461}	455.403 {74}	313.042 {108}	223.061 {451}	317.933 {106}	228.802 {447}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.22897	F .45853	.94539	F .23646	2.5597	.01033	.46446	10.720	.25410
Stddev	.00058	.00177	.00445	.00106	.0576	.00022	.00764	.232	.00427
%RSD	.25448	.38660	.47020	.44885	2.2503	2.1667	1.6459	2.1625	1.6819

#1	.22938	.45728	.94853	.23722	2.6004	.01049	.46987	10.884	.25712
#2	.22856	.45979	.94225	.23571	2.5189	.01017	.45906	10.556	.25108

Check ?	Chk Pass	Chk Fail	Chk Pass	Chk Fail	Chk Pass	Chk Pass	None	Chk Pass	Chk Pass
High Limit		.43200		.22000					
Low Limit		.34400		.17800					

Elem	Co2286	Cr2055	Cu3247	Fe2599	K_7664	Li6707	Mg2790	Mn2576	Mo2020
Line	228.616 {447}	205.560 {464}	324.754 {104}	259.940 {130}	766.490 {44}	670.784 {50}	279.079 {121}2	257.610 {131}	202.030 {467}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.10837	F 1.1422	.51643	.21836	F 11.380	.21320	10.130	.10248	F .23163
Stddev	.00096	.0026	.00244	.00278	.150	.00413	.016	.00008	.00453
%RSD	.88553	.22690	.47274	1.2713	1.3210	1.9353	.16260	.07916	1.9545

#1	.10905	1.1403	.51816	.22032	11.486	.21612	10.142	.10254	.23483
#2	.10769	1.1440	.51471	.21640	11.273	.21029	10.118	.10242	.22843

Check ?	Chk Pass	Chk Fail	Chk Pass	Chk Pass	Chk Fail	Chk Pass	Chk Pass	Chk Pass	Chk Fail
High Limit		.25200			11.000				.22000
Low Limit		.16800			8.9000				.18000

Elem	Na8183	Ni2316	P_1782	Pb2203	S_1820	Sb2068	Se1960	Si2881	SiO2
Line	818.326 {41}	231.604 {446}	178.284 {489}	220.353 {453}	182.034 {485}	206.833 {463}	196.090 {472}	288.158 {117}	288.158 {117}2
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	F 322.15	.10772	F 2.2834	F 1.2607	.47185	F .11795	F .73182	2.1228	F 4.5429
Stddev	6.49	.00167	.0443	.0282	.02389	.00593	.04373	.0369	.0790
%RSD	2.0144	1.5518	1.9397	2.2335	5.0629	5.0315	5.9758	1.7392	1.7392

#1	326.74	.10890	2.3147	1.2806	.48875	.12215	.76275	2.0967	4.4870
#2	317.56	.10654	2.2520	1.2408	.45496	.11375	.70090	2.1489	4.5987

Check ?	Chk Fail	Chk Pass	Chk Fail	Chk Fail	None	Chk Fail	Chk Fail	Chk Pass	Chk Fail
High Limit	11.200		2.2200	1.1550		.10800	.72000		4.9220
Low Limit	9.1000		1.8200	.99000		.08800	.52200		4.0200

Elem	Sn1899	Sr4077	Th2837	Ti3349	Ti1908	U_3701	V_2924	Zn2062	Zr3391
Line	189.989 {477}	407.771 {83}	283.730 {119}	334.904 {101}	190.856 {477}	370.152 {91}	292.402 {115}	206.200 {163}	339.198 {99}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	F .45459	.21475	.20881	.20852	.39072	F .48356	.10400	.53845	.10619
Stddev	.02431	.00008	.00144	.00013	.04602	.01399	.00067	.00291	.00266
%RSD	5.3477	.03739	.68862	.06262	11.779	2.8931	.63981	.54117	2.5021

#1	.47178	.21469	.20779	.20861	.42326	.47367	.10353	.53639	.10807
#2	.43740	.21481	.20983	.20843	.35818	.49345	.10447	.54051	.10431

Check ?	Chk Fail	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Fail	Chk Pass	Chk Pass	Chk Pass
High Limit	.45200					.46400			
Low Limit	.34000					.34000			

Int. Std.	Y_2243	Y_3600	Y_3774
Line	224.306 {450}	360.073 {94}	377.433 {89}
Units	Cts/S	Cts/S	Cts/S
Avg	2628.7	39670.	2219.7
Stddev	7.6	52.	80.2
%RSD	.28888	.13102	3.6109

#1	2634.0	39707.	2163.0
#2	2623.3	39633.	2276.3

Sample Name: 280-82964-A-2-B Acquired: 5/18/2016 14:56:56 Type: Unk

Method: 6500_025(v6) Mode: CONC Corr. Factor: 1.000000

User: CRHOADES Prep Date: Custom ID2: Custom ID3:

Comment: 325378 6010C (Se) Q5

Elem	Ag3280	Al1670	As1890	B_2089	Ba4554	Be3130	Bi2230	Ca3179	Cd2288
Line	328.068 {103}	167.079 {502}	189.042 {478}	208.959 {461}	455.403 { 74}	313.042 {108}	223.061 {451}	317.933 {106}	228.802 {447}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	-.00032	.00349	.00189	.10792	.04980	.00004	-.00518	182.60	.00095
Stddev	.00056	.00028	.00759	.00296	.00154	.00036	.00374	6.58	.00041
%RSD	173.01	7.9890	402.21	2.7388	3.0923	1007.4	72.106	3.6015	42.810

#1	.00007	.00329	.00725	.10583	.05089	.00029	-.00254	187.25	.00124
#2	-.00071	.00369	-.00348	.11001	.04871	-.00022	-.00783	177.95	.00066

Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Elem	Co2286	Cr2055	Cu3247	Fe2599	K_7664	Li6707	Mg2790	Mn2576	Mo2020
Line	228.616 {447}	205.560 {464}	324.754 {104}	259.940 {130}	766.490 { 44}	670.784 { 50}	279.079 {121}2	257.610 {131}	202.030 {467}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.00321	.00436	.04418	.00644	31.206	.01802	1.7113	.08936	.02117
Stddev	.00009	.00049	.00011	.00158	.091	.00023	.0095	.00006	.00137
%RSD	2.7217	11.222	.25010	24.551	.29128	1.2708	.55458	.06278	6.4480

#1	.00315	.00402	.04410	.00755	31.142	.01818	1.7180	.08940	.02021
#2	.00327	.00471	.04425	.00532	31.271	.01786	1.7046	.08932	.02214

Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Elem	Na8183	Ni2316	P_1782	Pb2203	S_1820	Sb2068	Se1960	Si2881	SiO2
Line	818.326 { 41}	231.604 {446}	178.284 {489}	220.353 {453}	182.034 {485}	206.833 {463}	196.090 {472}	288.158 {117}	288.158 {117}2
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	306.37	.00679	.06540	.00021	26.676	.00414	.05754	2.3774	5.0877
Stddev	.47	.00068	.00329	.00107	.462	.00493	.00467	.0053	.0113
%RSD	.15235	10.046	5.0325	500.63	1.7330	119.27	8.1112	.22263	.22263

#1	306.04	.00631	.06307	.00097	26.349	.00065	.06084	2.3812	5.0957
#2	306.70	.00727	.06772	-.00054	27.003	.00763	.05424	2.3737	5.0797

Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Elem	Sn1899	Sr4077	Th2837	Ti3349	Ti1908	U_3701	V_2924	Zn2062	Zr3391
Line	189.989 {477}	407.771 { 83}	283.730 {119}	334.904 {101}	190.856 {477}	370.152 { 91}	292.402 {115}	206.200 {163}	339.198 { 99}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	-.00264	.77972	.00041	-.00057	.00967	.00646	.02003	.00025	-.00037
Stddev	.00160	.02715	.00158	.00039	.00022	.01223	.00040	.00068	.00330
%RSD	60.674	3.4823	387.06	69.639	2.3029	189.27	1.9782	271.24	902.51

#1	-.00377	.79892	-.00071	-.00085	.00983	.01512	.01975	-.00023	.00197
#2	-.00151	.76052	.00153	-.00029	.00951	-.00219	.02031	.00073	-.00270

Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Int. Std.	Y_2243	Y_3600	Y_3774
Line	224.306 {450}	360.073 { 94}	377.433 { 89}
Units	Cts/S	Cts/S	Cts/S
Avg	2631.2	40271.	2256.0
Stddev	5.8	150.	77.8
%RSD	.22040	.37167	3.4475

#1	2635.3	40377.	2201.0
#2	2627.1	40166.	2311.0

Sample Name: 280-82983-A-2-B Acquired: 5/18/2016 14:59:34 Type: Unk

Method: 6500_025(v6) Mode: CONC Corr. Factor: 1.000000

User: CRHOADES Prep Date: Custom ID2: Custom ID3:

Comment: 325378 6010C (Se) Q5

Elem	Ag3280	Al1670	As1890	B_2089	Ba4554	Be3130	Bi2230	Ca3179	Cd2288
Line	328.068 {103}	167.079 {502}	189.042 {478}	208.959 {461}	455.403 { 74}	313.042 {108}	223.061 {451}	317.933 {106}	228.802 {447}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	-.00075	.04459	-.00498	.01584	.25289	.00026	.00285	24.817	-.00003
Stddev	.00048	.00060	.00394	.00101	.00398	.00003	.00397	.642	.00014
%RSD	64.175	1.3424	79.041	6.3665	1.5720	11.026	139.37	2.5879	499.42

#1	-.00041	.04501	-.00220	.01655	.25570	.00024	.00004	25.271	.00007
#2	-.00109	.04416	-.00777	.01513	.25008	.00028	.00565	24.363	-.00013

Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Elem	Co2286	Cr2055	Cu3247	Fe2599	K_7664	Li6707	Mg2790	Mn2576	Mo2020
Line	228.616 {447}	205.560 {464}	324.754 {104}	259.940 {130}	766.490 { 44}	670.784 { 50}	279.079 {121}2	257.610 {131}	202.030 {467}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.01395	-.00018	.00864	.67171	1.9517	.00425	2.8104	.57849	.00017
Stddev	.00018	.00014	.00033	.00411	.0348	.00379	.0009	.00174	.00037
%RSD	1.2827	79.102	3.8364	.61249	1.7836	89.026	.03056	.30059	214.04

#1	.01408	-.00028	.00887	.67462	1.9271	.00693	2.8110	.57972	-.00009
#2	.01383	-.00008	.00840	.66881	1.9763	.00158	2.8098	.57726	.00044

Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Elem	Na8183	Ni2316	P_1782	Pb2203	S_1820	Sb2068	Se1960	Si2881	SiO2
Line	818.326 { 41}	231.604 {446}	178.284 {489}	220.353 {453}	182.034 {485}	206.833 {463}	196.090 {472}	288.158 {117}	288.158 {117}2
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	303.77	.00624	.00963	.00149	.22746	.00070	.00398	1.8935	4.0522
Stddev	9.68	.00002	.00226	.00345	.00227	.00070	.00545	.0291	.0624
%RSD	3.1864	.34792	23.465	231.23	.99895	100.85	136.96	1.5389	1.5389

#1	310.62	.00622	.01122	.00394	.22585	.00020	.00783	1.9141	4.0963
#2	296.93	.00625	.00803	-.00095	.22907	.00119	.00013	1.8729	4.0081

Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Elem	Sn1899	Sr4077	Th2837	Ti3349	Ti1908	U_3701	V_2924	Zn2062	Zr3391
Line	189.989 {477}	407.771 { 83}	283.730 {119}	334.904 {101}	190.856 {477}	370.152 { 91}	292.402 {115}	206.200 {163}	339.198 { 99}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	-.00159	.10226	-.00066	-.00015	.00012	-.02637	.00066	.00967	-.00099
Stddev	.00077	.00023	.00164	.00004	.00084	.00531	.00019	.00092	.00099
%RSD	48.608	.22959	249.11	28.559	721.07	20.131	29.119	9.4901	99.908

#1	-.00104	.10209	.00050	-.00018	-.00048	-.03012	.00053	.01032	-.00169
#2	-.00214	.10243	-.00182	-.00012	.00071	-.02262	.00080	.00902	-.00029

Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Int. Std.	Y_2243	Y_3600	Y_3774
Line	224.306 {450}	360.073 { 94}	377.433 { 89}
Units	Cts/S	Cts/S	Cts/S
Avg	2642.3	40296.	2205.3
Stddev	16.0	99.	51.2
%RSD	.60598	.24606	2.3212

#1	2631.0	40226.	2169.1
#2	2653.6	40366.	2241.5

Sample Name: 280-82983-A-3-B Acquired: 5/18/2016 15:02:15 Type: Unk

Method: 6500_025(v6) Mode: CONC Corr. Factor: 1.000000

User: CRHOADES Prep Date: Custom ID2: Custom ID3:

Comment: 325378 6010C (Se) Q5

Elem	Ag3280	Al1670	As1890	B_2089	Ba4554	Be3130	Bi2230	Ca3179	Cd2288
Line	328.068 {103}	167.079 {502}	189.042 {478}	208.959 {461}	455.403 { 74}	313.042 {108}	223.061 {451}	317.933 {106}	228.802 {447}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	-0.00072	.03307	-0.00327	.01865	.07111	.00026	.00261	10.465	-0.00024
Stddev	.00014	.00165	.00280	.00331	.00111	.00001	.00236	.059	.00026
%RSD	19.528	4.9916	85.625	17.759	1.5591	4.9507	90.419	.56787	108.88

#1	-0.00082	.03424	-0.00129	.02099	.07033	.00025	.00094	10.423	-0.00006
#2	-0.00062	.03191	-0.00525	.01631	.07190	.00027	.00428	10.507	-0.00043

Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Elem	Co2286	Cr2055	Cu3247	Fe2599	K_7664	Li6707	Mg2790	Mn2576	Mo2020
Line	228.616 {447}	205.560 {464}	324.754 {104}	259.940 {130}	766.490 { 44}	670.784 { 50}	279.079 {121}2	257.610 {131}	202.030 {467}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.00059	.00017	.00699	.02300	1.1632	.00770	3.4607	.05127	-0.00038
Stddev	.00037	.00017	.00018	.00623	.0315	.00292	.0193	.00008	.00000
%RSD	61.823	105.76	2.5353	27.080	2.7055	37.879	.55824	.15448	1.0727

#1	.00085	.00004	.00686	.02741	1.1410	.00564	3.4744	.05133	-0.00038
#2	.00033	.00029	.00712	.01860	1.1855	.00977	3.4471	.05122	-0.00039

Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Elem	Na8183	Ni2316	P_1782	Pb2203	S_1820	Sb2068	Se1960	Si2881	SiO2
Line	818.326 { 41}	231.604 {446}	178.284 {489}	220.353 {453}	182.034 {485}	206.833 {463}	196.090 {472}	288.158 {117}	288.158 {117}2
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	310.59	-0.00008	.01481	.01531	.04771	-0.00260	.00784	.91245	1.9526
Stddev	5.49	.00014	.00217	.00106	.00477	.00203	.00383	.04972	.1064
%RSD	1.7679	181.27	14.646	6.8992	9.9987	78.128	48.832	5.4492	5.4492

#1	314.48	.00002	.01635	.01456	.04433	-0.00404	.01054	.94761	2.0279
#2	306.71	-0.00018	.01328	.01606	.05108	-0.00117	.00513	.87729	1.8774

Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Elem	Sn1899	Sr4077	Th2837	Ti3349	Ti1908	U_3701	V_2924	Zn2062	Zr3391
Line	189.989 {477}	407.771 { 83}	283.730 {119}	334.904 {101}	190.856 {477}	370.152 { 91}	292.402 {115}	206.200 {163}	339.198 { 99}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	-0.00001	.05314	-0.00074	-0.00016	-0.00378	-0.02871	.00083	.00400	-0.00127
Stddev	.00243	.00015	.00383	.00016	.00150	.00759	.00048	.00001	.00214
%RSD	16991.	.28482	517.24	101.93	39.688	26.422	57.518	.17445	168.22

#1	-0.00173	.05303	.00197	-0.00004	-0.00485	-0.02335	.00117	.00399	-0.00279
#2	.00170	.05325	-0.00345	-0.00027	-0.00272	-0.03407	.00049	.00400	.00024

Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Int. Std.	Y_2243	Y_3600	Y_3774
Line	224.306 {450}	360.073 { 94}	377.433 { 89}
Units	Cts/S	Cts/S	Cts/S
Avg	2782.8	40962.	2265.2
Stddev	171.6	244.	28.6
%RSD	6.1650	.59564	1.2617

#1	2661.5	40790.	2285.4
#2	2904.1	41135.	2245.0

Sample Name: 280-82983-A-3-B SD@5 Acquired: 5/18/2016 15:04:54 Type: Unk
Method: 6500_025(v6) Mode: CONC Corr. Factor: 1.000000
User: CRHOADES Prep Date: Custom ID2: Custom ID3:
Comment: 325378 6010C (Se) Q5

Elem	Ag3280	Al1670	As1890	B_2089	Ba4554	Be3130	Bi2230	Ca3179	Cd2288
Line	328.068 {103}	167.079 {502}	189.042 {478}	208.959 {461}	455.403 { 74}	313.042 {108}	223.061 {451}	317.933 {106}	228.802 {447}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	-0.00060	.00618	-0.00083	.00438	.01156	-0.00006	.00071	1.6672	-0.00014
Stddev	.00052	.00102	.00822	.00020	.00041	.00012	.00092	.0147	.00028
%RSD	87.324	16.520	993.21	4.5834	3.5594	200.26	129.09	.88447	193.13

#1	-0.00023	.00690	.00499	.00452	.01185	.00002	.00137	1.6567	.00005
#2	-0.00097	.00546	-.00664	.00424	.01127	-.00014	.00006	1.6776	-.00034

Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Elem	Co2286	Cr2055	Cu3247	Fe2599	K_7664	Li6707	Mg2790	Mn2576	Mo2020
Line	228.616 {447}	205.560 {464}	324.754 {104}	259.940 {130}	766.490 { 44}	670.784 { 50}	279.079 {121}2	257.610 {131}	202.030 {467}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	-0.00019	-0.00011	.00104	.00643	.39695	.00258	.57489	.00849	-0.00071
Stddev	.00021	.00029	.00049	.00004	.03217	.00028	.00591	.00016	.00081
%RSD	111.75	254.86	46.754	.64676	8.1040	10.856	1.0273	1.9000	114.31

#1	-0.00004	-.00032	.00070	.00640	.41969	.00238	.57072	.00838	-.00128
#2	-.00034	.00009	.00139	.00646	.37420	.00278	.57907	.00861	-.00014

Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Elem	Na8183	Ni2316	P_1782	Pb2203	S_1820	Sb2068	Se1960	Si2881	SiO2
Line	818.326 { 41}	231.604 {446}	178.284 {489}	220.353 {453}	182.034 {485}	206.833 {463}	196.090 {472}	288.158 {117}	288.158 {117}2
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	52.166	-0.00021	-0.00045	.00340	-0.00053	.00079	.00658	.15817	.33849
Stddev	.489	.00070	.00377	.00052	.00585	.00074	.00181	.00633	.01354
%RSD	.93836	326.67	838.00	15.389	1112.7	93.567	27.504	4.0010	4.0010

#1	51.820	.00028	-.00312	.00303	-.00466	.00132	.00787	.16265	.34807
#2	52.512	-.00071	.00222	.00377	.00361	.00027	.00530	.15370	.32891

Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Elem	Sn1899	Sr4077	Th2837	Ti3349	Ti1908	U_3701	V_2924	Zn2062	Zr3391
Line	189.989 {477}	407.771 { 83}	283.730 {119}	334.904 {101}	190.856 {477}	370.152 { 91}	292.402 {115}	206.200 {163}	339.198 { 99}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	-0.00017	.00856	.00218	-0.00004	.00071	-0.00173	.00036	-0.00038	-0.00190
Stddev	.00002	.00001	.00180	.00084	.00109	.08127	.00005	.00039	.00040
%RSD	12.902	.16872	82.191	2106.1	153.38	4687.9	12.784	103.24	21.266

#1	-0.00015	.00857	.00092	-.00063	.00148	-.05920	.00039	-.00066	-.00162
#2	-0.00018	.00855	.00345	.00055	-.00006	.05574	.00032	-.00010	-.00219

Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Int. Std.	Y_2243	Y_3600	Y_3774
Line	224.306 {450}	360.073 { 94}	377.433 { 89}
Units	Cts/S	Cts/S	Cts/S
Avg	2695.2	41678.	2156.0
Stddev	3.8	210.	10.9
%RSD	.13978	.50335	.50361

#1	2697.8	41826.	2148.3
#2	2692.5	41529.	2163.7

Sample Name: 280-82983-A-3-D MS Acquired: 5/18/2016 15:07:35 Type: Unk
Method: 6500_025(v6) Mode: CONC Corr. Factor: 1.000000
User: CRHOADES Prep Date: Custom ID2: Custom ID3:
Comment: 325378 6010C (Se) Q5

Elem	Ag3280	Al1670	As1890	B_2089	Ba4554	Be3130	Bi2230	Ca3179	Cd2288
Line	328.068 {103}	167.079 {502}	189.042 {478}	208.959 {461}	455.403 {74}	313.042 {108}	223.061 {451}	317.933 {106}	228.802 {447}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	W .21078	.44864	.85669	.21574	2.4990	.00961	F .42696	19.213	.23271
Stddev	.00037	.00032	.00319	.00114	.0075	.00017	.00160	.199	.00097
%RSD	.17366	.07082	.37256	.53033	.29879	1.7206	.37476	1.0333	.41664

#1	.21052	.44886	.85443	.21493	2.5043	.00949	.42583	19.353	.23202
#2	.21104	.44841	.85894	.21654	2.4937	.00973	.42809	19.073	.23340

Check ?	Chk Warn	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Fail	Chk Pass	Chk Pass
High Limit	.10000						.10000		
Low Limit	-.01000						-.10000		

Elem	Co2286	Cr2055	Cu3247	Fe2599	K_7664	Li6707	Mg2790	Mn2576	Mo2020
Line	228.616 {447}	205.560 {464}	324.754 {104}	259.940 {130}	766.490 {44}	670.784 {50}	279.079 {121}2	257.610 {131}	202.030 {467}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.09964	1.0456	.47638	.21782	10.815	.19807	12.414	.13959	.21274
Stddev	.00119	.0005	.00076	.00820	.116	.00007	.006	.00011	.00090
%RSD	1.1981	.04663	.16037	3.7669	1.0682	.03666	.04805	.08047	.42118

#1	.09880	1.0453	.47584	.21202	10.733	.19812	12.410	.13951	.21210
#2	.10048	1.0460	.47692	.22362	10.896	.19802	12.419	.13967	.21337

Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Elem	Na8183	Ni2316	P_1782	Pb2203	S_1820	Sb2068	Se1960	Si2881	SiO2
Line	818.326 {41}	231.604 {446}	178.284 {489}	220.353 {453}	182.034 {485}	206.833 {463}	196.090 {472}	288.158 {117}	288.158 {117}2
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	292.57	.10044	W 2.1322	1.1787	.46922	.10448	.67560	2.7555	5.8967
Stddev	.44	.00165	.0328	.0257	.00562	.00393	.02111	.0182	.0390
%RSD	.15202	1.6430	1.5409	2.1815	1.1988	3.7637	3.1253	.66186	.66186

#1	292.88	.09927	2.1089	1.1605	.46524	.10170	.66067	2.7684	5.9243
#2	292.26	.10161	2.1554	1.1969	.47319	.10726	.69053	2.7426	5.8691

Check ?	Chk Pass	Chk Pass	Chk Warn	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit			2.0000						
Low Limit			-1.0000						

Elem	Sn1899	Sr4077	Th2837	Ti3349	Ti1908	U_3701	V_2924	Zn2062	Zr3391
Line	189.989 {477}	407.771 {83}	283.730 {119}	334.904 {101}	190.856 {477}	370.152 {91}	292.402 {115}	206.200 {163}	339.198 {99}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.41478	.24259	.19144	.19069	.34379	.40966	.09638	.49606	.10211
Stddev	.01024	.00087	.00087	.00120	.00410	.03177	.00060	.00758	.00354
%RSD	2.4697	.36022	.45313	.63187	1.1940	7.7546	.61823	1.5290	3.4656

#1	.40754	.24320	.19206	.18983	.34669	.38720	.09596	.50143	.10461
#2	.42202	.24197	.19083	.19154	.34089	.43213	.09680	.49070	.09961

Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Int. Std.	Y_2243	Y_3600	Y_3774						
Line	224.306 {450}	360.073 {94}	377.433 {89}						
Units	Cts/S	Cts/S	Cts/S						
Avg	2655.6	40301.	2193.7						
Stddev	6.5	28.	4.2						
%RSD	.24562	.06932	.19013						

#1	2651.0	40281.	2190.7						
#2	2660.2	40321.	2196.6						

Sample Name: 280-82983-A-3-E MSD Acquired: 5/18/2016 15:10:08 Type: Unk
Method: 6500_025(v6) Mode: CONC Corr. Factor: 1.000000
User: CRHOADES Prep Date: Custom ID2: Custom ID3:
Comment: 325378 6010C (Se) Q5

Elem	Ag3280	Al1670	As1890	B_2089	Ba4554	Be3130	Bi2230	Ca3179	Cd2288
Line	328.068 {103}	167.079 {502}	189.042 {478}	208.959 {461}	455.403 {74}	313.042 {108}	223.061 {451}	317.933 {106}	228.802 {447}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	W .21164	.45335	.86849	.21649	2.5057	.00996	F .43072	19.199	.23152
Stddev	.00114	.00188	.00524	.00136	.0466	.00054	.00430	.400	.00319
%RSD	.53892	.41525	.60367	.62858	1.8585	5.4145	.99768	2.0839	1.3760

#1	.21245	.45201	.86478	.21552	2.5386	.01034	.42768	19.481	.22927
#2	.21084	.45468	.87220	.21745	2.4728	.00958	.43376	18.916	.23377

Check ?	Chk Warn	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Fail	Chk Pass	Chk Pass
High Limit	.10000						.10000		
Low Limit	-.01000						-.10000		

Elem	Co2286	Cr2055	Cu3247	Fe2599	K_7664	Li6707	Mg2790	Mn2576	Mo2020
Line	228.616 {447}	205.560 {464}	324.754 {104}	259.940 {130}	766.490 {44}	670.784 {50}	279.079 {121}2	257.610 {131}	202.030 {467}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.09946	1.0589	.47868	.21788	11.004	.19990	12.436	.14026	.21244
Stddev	.00196	.0046	.00244	.00620	.044	.00125	.006	.00020	.00304
%RSD	1.9690	.43722	.50926	2.8452	.40441	.62706	.05058	.14125	1.4315

#1	.09807	1.0557	.48040	.21349	11.035	.20078	12.440	.14040	.21029
#2	.10084	1.0622	.47695	.22226	10.973	.19901	12.431	.14012	.21460

Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Elem	Na8183	Ni2316	P_1782	Pb2203	S_1820	Sb2068	Se1960	Si2881	SiO2
Line	818.326 {41}	231.604 {446}	178.284 {489}	220.353 {453}	182.034 {485}	206.833 {463}	196.090 {472}	288.158 {117}	288.158 {117}2
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	293.94	.09881	W 2.0955	1.1558	.45547	.10473	.65199	2.7940	5.9791
Stddev	.94	.00065	.0272	.0186	.00531	.00561	.00452	.0055	.0117
%RSD	.32093	.65875	1.2970	1.6065	1.1654	5.3523	.69319	.19507	.19507

#1	294.60	.09835	2.0762	1.1427	.45172	.10870	.64879	2.7978	5.9873
#2	293.27	.09927	2.1147	1.1689	.45923	.10077	.65519	2.7901	5.9708

Check ?	Chk Pass	Chk Pass	Chk Warn	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit			2.0000						
Low Limit			-1.0000						

Elem	Sn1899	Sr4077	Th2837	Ti3349	Ti1908	U_3701	V_2924	Zn2062	Zr3391
Line	189.989 {477}	407.771 {83}	283.730 {119}	334.904 {101}	190.856 {477}	370.152 {91}	292.402 {115}	206.200 {163}	339.198 {99}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.40590	.24253	.19661	.19319	.35508	.40811	.09666	.49373	.10494
Stddev	.00667	.00383	.00512	.00015	.00788	.01285	.00102	.00094	.00484
%RSD	1.6431	1.5781	2.6040	.07807	2.2200	3.1485	1.0600	.18971	4.6147

#1	.40118	.24524	.20023	.19329	.36066	.41720	.09738	.49439	.10152
#2	.41061	.23982	.19299	.19308	.34951	.39903	.09593	.49307	.10836

Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Int. Std.	Y_2243	Y_3600	Y_3774
Line	224.306 {450}	360.073 {94}	377.433 {89}
Units	Cts/S	Cts/S	Cts/S
Avg	2637.7	40976.	2209.1
Stddev	16.3	59.	66.8
%RSD	.61873	.14425	3.0239

#1	2649.3	40935.	2161.9
#2	2626.2	41018.	2256.4

Sample Name: 280-82983-A-3-B PDS Acquired: 5/18/2016 15:12:42 Type: Unk
Method: 6500_025(v6) Mode: CONC Corr. Factor: 1.000000
User: CRHOADES Prep Date: Custom ID2: Custom ID3:
Comment: 325378 6010C (Se) Q5

Elem	Ag3280	Al1670	As1890	B_2089	Ba4554	Be3130	Bi2230	Ca3179	Cd2288
Line	328.068 {103}	167.079 {502}	189.042 {478}	208.959 {461}	455.403 { 74}	313.042 {108}	223.061 {451}	317.933 {106}	228.802 {447}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.04969	1.0475	.20688	.11542	.17049	.04792	.00257	29.196	.05023
Stddev	.00012	.0043	.00009	.00003	.00666	.00099	.00416	1.321	.00001
%RSD	.23590	.41570	.04566	.02357	3.9087	2.0662	162.06	4.5251	.01534

#1	.04961	1.0506	.20695	.11540	.17521	.04862	.00551	30.130	.05022
#2	.04977	1.0444	.20681	.11544	.16578	.04722	-.00038	28.262	.05023

Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Elem	Co2286	Cr2055	Cu3247	Fe2599	K_7664	Li6707	Mg2790	Mn2576	Mo2020
Line	228.616 {447}	205.560 {464}	324.754 {104}	259.940 {130}	766.490 { 44}	670.784 { 50}	279.079 {121}2	257.610 {131}	202.030 {467}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.04911	.05081	.05983	2.5868	21.315	.10174	22.275	.10832	.05216
Stddev	.00037	.00057	.00020	.0485	.139	.00106	.035	.00011	.00037
%RSD	.75042	1.1283	.33475	1.8731	.64999	1.0372	.15622	.10296	.71281

#1	.04885	.05122	.05997	2.6211	21.413	.10248	22.251	.10839	.05189
#2	.04937	.05041	.05969	2.5526	21.217	.10099	22.300	.10824	.05242

Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Elem	Na8183	Ni2316	P_1782	Pb2203	S_1820	Sb2068	Se1960	Si2881	SiO2
Line	818.326 { 41}	231.604 {446}	178.284 {489}	220.353 {453}	182.034 {485}	206.833 {463}	196.090 {472}	288.158 {117}	288.158 {117}2
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	318.12	.04823	W 2.0525	.11169	.04822	.10385	.21223	5.7618	12.330
Stddev	15.62	.00096	.0025	.00475	.00201	.00079	.00116	.0105	.022
%RSD	4.9088	1.9940	.12351	4.2526	4.1721	.75962	.54485	.18206	.18206

#1	329.16	.04891	2.0507	.10833	.04964	.10329	.21142	5.7543	12.314
#2	307.08	.04755	2.0543	.11505	.04679	.10441	.21305	5.7692	12.346

Check ?	Chk Pass	Chk Pass	Chk Warn	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit			2.0000						
Low Limit			-1.0000						

Elem	Sn1899	Sr4077	Th2837	Ti3349	Ti1908	U_3701	V_2924	Zn2062	Zr3391
Line	189.989 {477}	407.771 { 83}	283.730 {119}	334.904 {101}	190.856 {477}	370.152 { 91}	292.402 {115}	206.200 {163}	339.198 { 99}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.09727	.10249	.19982	.04921	.19920	.48840	.05116	.23201	.05290
Stddev	.00034	.00009	.00272	.00038	.00369	.00583	.00090	.00107	.00282
%RSD	.35169	.08922	1.3596	.77037	1.8521	1.1935	1.7580	.45968	5.3352

#1	.09751	.10256	.19790	.04894	.19659	.49252	.05179	.23277	.05490
#2	.09703	.10243	.20174	.04948	.20181	.48428	.05052	.23126	.05091

Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Int. Std.	Y_2243	Y_3600	Y_3774
Line	224.306 {450}	360.073 { 94}	377.433 { 89}
Units	Cts/S	Cts/S	Cts/S
Avg	2675.2	40380.	2260.3
Stddev	26.2	99.	93.4
%RSD	.97958	.24559	4.1342

#1	2656.7	40310.	2194.3
#2	2693.7	40450.	2326.4

Sample Name: 280-83060-D-1-H Acquired: 5/18/2016 15:15:20 Type: Unk

Method: 6500_025(v6) Mode: CONC Corr. Factor: 1.000000

User: CRHOADES Prep Date: Custom ID2: Custom ID3:

Comment: 325378 6010C (Se) Q5

Elem	Ag3280	Al1670	As1890	B_2089	Ba4554	Be3130	Bi2230	Ca3179	Cd2288
Line	328.068 {103}	167.079 {502}	189.042 {478}	208.959 {461}	455.403 { 74}	313.042 {108}	223.061 {451}	317.933 {106}	228.802 {447}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	-0.00087	.01502	.00075	.01412	.13641	.00013	-0.00161	149.59	-0.00009
Stddev	.00028	.00009	.00476	.00053	.00053	.00021	.00020	.15	.00019
%RSD	32.429	.57727	637.21	3.7615	.38646	162.24	12.168	.10268	207.43

#1	-0.00108	.01508	-0.00262	.01374	.13679	-0.00002	-0.00175	149.48	.00004
#2	-0.00067	.01496	.00411	.01449	.13604	.00027	-0.00147	149.70	-0.00022

Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Elem	Co2286	Cr2055	Cu3247	Fe2599	K_7664	Li6707	Mg2790	Mn2576	Mo2020
Line	228.616 {447}	205.560 {464}	324.754 {104}	259.940 {130}	766.490 { 44}	670.784 { 50}	279.079 {121}2	257.610 {131}	202.030 {467}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.00510	.00024	.00329	13.451	1.5301	.00961	3.6312	1.0899	-0.00013
Stddev	.00029	.00027	.00090	.044	.0141	.00011	.0215	.0034	.00056
%RSD	5.6116	111.71	27.191	.32844	.92178	1.1216	.59092	.31528	419.23

#1	.00490	.00043	.00266	13.420	1.5401	.00969	3.6464	1.0923	-0.00053
#2	.00530	.00005	.00393	13.483	1.5202	.00954	3.6161	1.0874	.00026

Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Elem	Na8183	Ni2316	P_1782	Pb2203	S_1820	Sb2068	Se1960	Si2881	SiO2
Line	818.326 { 41}	231.604 {446}	178.284 {489}	220.353 {453}	182.034 {485}	206.833 {463}	196.090 {472}	288.158 {117}	288.158 {117}2
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	356.69	.01012	.00871	.00003	23.453	.00347	.00188	2.8267	6.0491
Stddev	1.34	.00005	.00253	.00247	.008	.00141	.00471	.0127	.0272
%RSD	.37475	.44857	29.068	9563.1	.03599	40.774	250.15	.44975	.44975

#1	355.74	.01015	.00692	-0.00172	23.447	.00447	-0.00145	2.8177	6.0298
#2	357.63	.01009	.01050	.00178	23.459	.00247	.00522	2.8357	6.0683

Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Elem	Sn1899	Sr4077	Th2837	Ti3349	Ti1908	U_3701	V_2924	Zn2062	Zr3391
Line	189.989 {477}	407.771 { 83}	283.730 {119}	334.904 {101}	190.856 {477}	370.152 { 91}	292.402 {115}	206.200 {163}	339.198 { 99}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	-0.00139	.48668	-0.00166	-0.00040	.00063	.01000	.00047	.00159	.00312
Stddev	.00012	.00127	.00178	.00033	.00224	.04035	.00001	.00050	.00241
%RSD	8.5330	.26086	107.45	82.391	356.43	403.36	2.4528	31.664	77.198

#1	-0.00131	.48579	-0.00040	-0.00017	-0.00095	-0.01853	.00047	.00195	.00142
#2	-0.00148	.48758	-0.00292	-0.00064	.00221	.03854	.00046	.00123	.00482

Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Int. Std.	Y_2243	Y_3600	Y_3774
Line	224.306 {450}	360.073 { 94}	377.433 { 89}
Units	Cts/S	Cts/S	Cts/S
Avg	2590.9	39704.	2117.5
Stddev	3.9	145.	3.6
%RSD	.15061	.36512	.16866

#1	2593.7	39601.	2120.0
#2	2588.1	39806.	2115.0

Sample Name: CCVH-3894253 Acquired: 5/18/2016 15:17:59 Type: QC
Method: 6500_025(v6) Mode: CONC Corr. Factor: 1.000000
User: CRHOADES Prep Date: Custom ID2: Custom ID3:
Comment:

Elem	Ag3280	Al3092	As1890	B_2089	Ba4554	Be3130	Bi2230	Ca3179	Cd2288	Co2286	Cr2055
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	-.00059	53.500	-.00794	.00315	-.00020	.00029	W 1.0816	.00324	-.00089	-.00114	.00032
Stddev	.00004	.229	.00541	.00040	.00014	.00002	.0026	.00386	.00005	.00040	.00022
%RSD	5.9302	.42865	68.217	12.718	69.238	5.9002	.24009	118.87	5.7874	35.549	69.459

#1	-.00057	53.338	-.01177	.00344	-.00030	.00028	1.0835	.00052	-.00086	-.00085	.00048
#2	-.00062	53.662	-.00411	.00287	-.00010	.00031	1.0798	.00597	-.00093	-.00142	.00016

Check ?	None	Chk Pass	None	None	None	None	Chk Warn	None	None	None	None
Value							1.0000				
Range							5.0000%				

Elem	Cu3247	Fe2714	K_7664	Li6707	Mg2790	Mn2576	Mo2020	Na8183	Ni2316	P_1782	Pb2203
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.00233	50.408	.41573	.00472	.01586	.00001	-.00154	259.03	.00112	.00326	-.00116
Stddev	.00028	.007	.00389	.00282	.00012	.00002	.00029	.73	.00005	.00229	.00143
%RSD	12.119	.01392	.93609	59.710	.74418	165.94	18.777	.28052	4.2614	70.311	122.56

#1	.00213	50.413	.41848	.00273	.01595	.00003	-.00134	258.51	.00115	.00164	-.00016
#2	.00253	50.403	.41298	.00672	.01578	.00000	-.00175	259.54	.00109	.00489	-.00217

Check ?	None	Chk Pass	None	None	None	None	None	Chk Pass	None	None	None
Value											
Range											

Elem	S_1820	Sb2068	Se1960	Si2881	SiO2	Sn1899	Sr4077	Th2837	Ti3349	Ti1908	U_3701
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	W 5.2698	-.00998	.00682	-.02113	-.04522	.00034	.00032	4.8686	.00358	-.00138	W 10.633
Stddev	.0135	.00216	.00465	.00225	.00482	.00037	.00036	.0095	.00025	.00431	.028
%RSD	.25572	21.643	68.147	10.667	10.667	109.57	113.58	.19578	6.9928	312.34	.26736

#1	5.2794	-.00846	.00353	-.01954	-.04181	.00008	.00006	4.8753	.00340	-.00443	10.653
#2	5.2603	-.01151	.01011	-.02272	-.04863	.00060	.00058	4.8619	.00376	.00167	10.613

Check ?	Chk Warn	None	None	None	None	None	None	Chk Pass	None	None	Chk Warn
Value	5.0000										10.000
Range	5.0000%										5.0000%

Elem	V_2924	Zn2062	Zr3391
Units	ppm	ppm	ppm
Avg	.00817	-.00080	.05926
Stddev	.00004	.00125	.00056
%RSD	.52434	156.05	.93946

#1	.00814	-.00169	.05965
#2	.00820	.00008	.05887

Check ?	None	None	None
Value			
Range			

Int. Std.	Y_2243	Y_3600	Y_3774
Units	Cts/S	Cts/S	Cts/S
Avg	2604.4	40203.	2108.8
Stddev	13.2	112.	10.6
%RSD	.50643	.27924	.50059

#1	2613.7	40283.	2101.3
#2	2595.0	40124.	2116.3

Sample Name: CCV-3894251 Acquired: 5/18/2016 15:20:37 Type: QC
Method: 6500_025(v6) Mode: CONC Corr. Factor: 1.000000
User: CRHOADES Prep Date: Custom ID2: Custom ID3:
Comment:

Elem	Ag3280	Al1670	As1890	B_2089	Ba4554	Be3130	Bi2230	Ca3179	Cd2288	Co2286	Cr2055	Cu3247	Fe2599
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.50091	.54085	1.0317	.50232	.51395	.48766	-.00044	5.0713	.50245	.51234	.51347	.52032	2.4891
Stddev	.00069	.00391	.0184	.00640	.00632	.00059	.00054	.0153	.00140	.01077	.01171	.00015	.0103
%RSD	.13751	.72226	1.7846	1.2747	1.2303	.12126	123.61	.30191	.27772	2.1016	2.2799	.02966	.41373

#1	.50140	.53809	1.0187	.49779	.51842	.48808	-.00082	5.0821	.50344	.50473	.50519	.52021	2.4964
#2	.50042	.54361	1.0447	.50685	.50947	.48724	-.00006	5.0605	.50146	.51996	.52175	.52043	2.4818

Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	None	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Value													
Range													

Elem	K_7664	Li6707	Mg2790	Mn2576	Mo2020	Na5895	Ni2316	P_1782	Pb2203	S_1820	Sb2068	Se1960	Si2881
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	50.178	1.0114	19.723	.48995	.51279	5.2364	.50666	.99739	1.0285	-.01255	1.0092	1.0329	4.9361
Stddev	.577	.0117	.032	.00080	.01129	.0166	.01071	.01531	.0226	.00581	.0251	.0238	.0042
%RSD	1.1497	1.1518	.16381	.16267	2.2012	.31655	2.1134	1.5352	2.1981	46.316	2.4837	2.3062	.08403

#1	50.586	1.0197	19.700	.48939	.50480	5.2481	.49908	.98657	1.0125	-.00844	.99146	1.0160	4.9332
#2	49.770	1.0032	19.745	.49052	.52077	5.2246	.51423	1.0082	1.0445	-.01666	1.0269	1.0497	4.9390

Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	None	Chk Pass	Chk Pass	Chk Pass
Value													
Range													

Elem	SiO2	Sn1899	Sr4077	Th2837	Ti3349	Ti1908	U_3701	V_2924	Zn2062	Zr3391
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	10.563	1.0231	.50292	.00175	.48282	1.0419	-.00249	.49587	.48457	.50510
Stddev	.009	.0201	.00423	.00326	.00182	.0144	.04834	.00542	.00154	.00378
%RSD	.08403	1.9627	.84197	185.95	.37594	1.3813	1939.5	1.0931	.31724	.74902
#1	10.557	1.0089	.50592	-.00055	.48153	1.0317	.03169	.49970	.48566	.50777
#2	10.569	1.0373	.49993	.00405	.48410	1.0521	-.03667	.49203	.48348	.50242

Check ?	Chk Pass	Chk Pass	Chk Pass	None	Chk Pass	Chk Pass	None	Chk Pass	Chk Pass	Chk Pass
Value										
Range										

Int. Std.	Y_2243	Y_3600	Y_3774
Units	Cts/S	Cts/S	Cts/S
Avg	2684.6	40725.	2132.2
Stddev	26.1	95.	7.9
%RSD	.97117	.23230	.36946
#1	2703.0	40792.	2137.8
#2	2666.2	40658.	2126.6

Sample Name: CCB Acquired: 5/18/2016 15:23:10 Type: QC
 Method: 6500_025(v6) Mode: CONC Corr. Factor: 1.000000
 User: CRHOADES Prep Date: Custom ID2: Custom ID3:
 Comment:

Elem	Ag3280	Al1670	As1890	B_2089	Ba4554	Be3130	Bi2230	Ca3179	Cd2288	Co2286	Cr2055
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	-.00008	-.00040	.00310	.00241	-.00021	.00017	.00187	-.00869	-.00031	.00013	.00004
Stddev	.00083	.00048	.00201	.00088	.00062	.00008	.00172	.00300	.00021	.00006	.00030
%RSD	1045.0	119.71	64.738	36.345	288.66	48.976	92.274	34.548	67.170	47.810	673.78

#1	-.00066	-.00006	.00168	.00303	-.00065	.00011	.00065	-.01082	-.00046	.00017	.00026
#2	.00050	-.00074	.00452	.00179	.00022	.00023	.00309	-.00657	-.00016	.00008	-.00017

Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit											
Low Limit											

Elem	Cu3247	Fe2599	K_7664	Li6707	Mg2790	Mn2576	Mo2020	Na5895	Ni2316	P_1782	Pb2203
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	-.00038	-.00744	.05893	.00203	.00363	-.00003	.00192	.14988	-.00094	.00243	-.00080
Stddev	.00017	.00642	.05955	.00254	.00157	.00010	.00111	.01978	.00062	.00214	.00091
%RSD	45.590	86.335	101.04	125.23	43.296	309.09	57.773	13.196	65.270	87.735	113.99

#1	-.00026	-.00290	.01683	.00382	.00252	.00004	.00114	.13589	-.00051	.00395	-.00144
#2	-.00050	-.01198	.10104	.00023	.00474	-.00011	.00271	.16386	-.00138	.00092	-.00015

Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit											
Low Limit											

Elem	S_1820	Sb2068	Se1960	Si2881	SiO2	Sn1899	Sr4077	Th2837	Ti3349	Ti1908	U_3701
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	-.01731	W .00417	W .00946	.05124	.10964	.00020	.00006	-.00022	-.00016	.00347	-.03231
Stddev	.00264	.00095	.00202	.01627	.03482	.00029	.00008	.00106	.00014	.00132	.07884
%RSD	15.237	22.678	21.376	31.756	31.756	141.84	147.28	471.63	82.897	38.054	244.05

#1	-.01545	.00350	.01089	.03973	.08502	.00041	.00000	-.00097	-.00026	.00254	.02345
#2	-.01918	.00484	.00803	.06274	.13426	.00000	.00012	.00052	-.00007	.00440	-.08806

Check ?	Chk Pass	Chk Warn	Chk Warn	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit		.00100	.00750								
Low Limit		-.00100	-.01500								

Elem	V_2924	Zn2062	Zr3391
Units	ppm	ppm	ppm
Avg	.00068	-.00058	.00265
Stddev	.00029	.00071	.00178
%RSD	42.286	121.70	67.161

#1	.00088	-.00109	.00139
#2	.00048	-.00008	.00391

Check ?	Chk Pass	Chk Pass	Chk Pass
High Limit			
Low Limit			

Int. Std.	Y_2243	Y_3600	Y_3774
Units	Cts/S	Cts/S	Cts/S
Avg	2697.1	41862.	2152.9
Stddev	1.1	192.	36.6
%RSD	.04065	.45937	1.7003

#1	2697.9	41726.	2127.0
#2	2696.3	41998.	2178.8

Sample Name: CCVL-3897520 Acquired: 5/18/2016 15:25:34 Type: QC
Method: 6500_025(v6) Mode: CONC Corr. Factor: 1.000000
User: CRHOADES Prep Date: Custom ID2: Custom ID3:
Comment:

Elem	Ag3280	Al1670	As1890	B_2089	Ba4554	Be3130	Bi2230	Ca3179	Cd2288	Co2286	Cr2055	Cu3247
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.00960	.10916	F .01957	.09634	.01044	.00115	.11296	.18410	.00456	.01027	.00998	.01578
Stddev	.00086	.00107	.00307	.00070	.00012	.00022	.00261	.01188	.00023	.00000	.00014	.00039
%RSD	8.9135	.98216	15.709	.72281	1.1257	18.733	2.3141	6.4530	4.9499	.00614	1.4533	2.4509

#1	.00899	.10840	.02175	.09683	.01036	.00100	.11111	.19250	.00472	.01027	.00987	.01605
#2	.01020	.10992	.01740	.09585	.01052	.00131	.11481	.17570	.00440	.01027	.01008	.01551

Check ?	Chk Pass	Chk Pass	Chk Fail	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Value			.01500									
Range			30.000%									

Elem	Fe2599	K_7664	Li6707	Mg2790	Mn2576	Mo2020	Na5895	Ni2316	P_1782	Pb2203	S_1820	Sb2068
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.10447	3.1530	.01201	.20511	.01012	.01962	1.1192	.03981	2.8249	.01021	-.01465	.02039
Stddev	.00204	.0382	.00477	.00641	.00000	.00001	.0442	.00009	.0018	.00022	.00159	.00185
%RSD	1.9538	1.2111	39.695	3.1260	.04239	.06551	3.9475	.21627	.06301	2.1528	10.871	9.0768

#1	.10591	3.1800	.01538	.20964	.01012	.01962	1.1505	.03975	2.8236	.01036	-.01578	.02170
#2	.10302	3.1260	.00864	.20058	.01012	.01961	1.0880	.03987	2.8261	.01005	-.01353	.01908

Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	None	Chk Pass
Value												
Range												

Elem	Se1960	Si2881	SiO2	Sn1899	Sr4077	Th2837	Ti3349	Ti1908	U_3701	V_2924	Zn2062	Zr3391
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	F .01994	.49889	1.0676	.10138	.01010	.01426	.00950	.01181	.06006	.01008	.01988	.01094
Stddev	.00514	.05401	.1156	.00148	.00022	.00285	.00014	.00259	.01801	.00132	.00055	.00323
%RSD	25.779	10.827	10.827	1.4629	2.1576	20.012	1.5197	21.895	29.981	13.084	2.7699	29.491

#1	.01631	.46069	.98588	.10033	.00995	.01224	.00940	.01364	.07279	.01101	.02027	.01323
#2	.02358	.53708	1.1494	.10243	.01026	.01628	.00961	.00999	.04732	.00915	.01949	.00866

Check ?	Chk Fail	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Value	.01500											
Range	30.000%											

Int. Std.	Y_2243	Y_3600	Y_3774
Units	Cts/S	Cts/S	Cts/S
Avg	2723.7	41752.	2219.0
Stddev	14.6	48.	2.2
%RSD	.53467	.11518	.09917

#1	2734.0	41718.	2220.6
#2	2713.4	41786.	2217.5

Sample Name: MB 280-325684/1-A Acquired: 5/18/2016 15:28:15 Type: Unk

Method: 6500_025(v6) Mode: CONC Corr. Factor: 1.000000

User: CRHOADES Prep Date: 5/17 Custom ID2: Custom ID3:

Comment: 325684 SOIL 6010C (B) Q5

Elem	Ag3280	Al1670	As1890	B_2089	Ba4554	Be3130	Bi2230	Ca3179	Cd2288
Line	328.068 {103}	167.079 {502}	189.042 {478}	208.959 {461}	455.403 { 74}	313.042 {108}	223.061 {451}	317.933 {106}	228.802 {447}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	-.00084	.01514	.00183	.01622	-.00062	.00019	-.00369	.09949	-.00018
Stddev	.00032	.00058	.00087	.00044	.00033	.00022	.00306	.01131	.00001
%RSD	37.699	3.7973	47.481	2.6914	53.703	113.37	82.995	11.366	7.3538

#1	-.00107	.01474	.00245	.01653	-.00038	.00004	-.00152	.10749	-.00017
#2	-.00062	.01555	.00122	.01591	-.00085	.00035	-.00585	.09150	-.00019

Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Elem	Co2286	Cr2055	Cu3247	Fe2599	K_7664	Li6707	Mg2790	Mn2576	Mo2020
Line	228.616 {447}	205.560 {464}	324.754 {104}	259.940 {130}	766.490 { 44}	670.784 { 50}	279.079 {121}2	257.610 {131}	202.030 {467}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.00006	.00023	.00005	.01073	-.02505	-.00173	.00649	.00023	.00018
Stddev	.00004	.00021	.00067	.00230	.09551	.00131	.00279	.00004	.00004
%RSD	68.012	91.988	1261.0	21.388	381.22	75.472	43.034	15.010	25.475

#1	.00009	.00008	.00053	.01236	-.09259	-.00081	.00846	.00026	.00021
#2	.00003	.00038	-.00042	.00911	.04248	-.00266	.00451	.00021	.00014

Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Elem	Na5895	Ni2316	P_1782	Pb2203	S_1820	Sb2068	Se1960	Si2881	SiO2
Line	589.592 { 57}	231.604 {446}	178.284 {489}	220.353 {453}	182.034 {485}	206.833 {463}	196.090 {472}	288.158 {117}	288.158 {117}2
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.11159	-.00083	.00167	-.00069	-.01078	.00038	.00261	.07274	.15566
Stddev	.00160	.00024	.00034	.00070	.00036	.00121	.00033	.01208	.02585
%RSD	1.4338	28.626	20.273	101.47	3.3196	320.17	12.485	16.605	16.605

#1	.11272	-.00066	.00191	-.00020	-.01103	.00123	.00238	.06420	.13739
#2	.11046	-.00100	.00143	-.00119	-.01053	-.00048	.00284	.08128	.17394

Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	None
High Limit									
Low Limit									

Elem	Sn1899	Sr4077	Th2837	Ti3349	Ti1908	U_3701	V_2924	Zn2062	Zr3391
Line	189.989 {477}	407.771 { 83}	283.730 {119}	334.904 {101}	190.856 {477}	370.152 { 91}	292.402 {115}	206.200 {163}	339.198 { 99}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.00124	.00053	-.00004	.00061	-.00038	-.00795	.00079	.00020	.00129
Stddev	.00005	.00015	.00116	.00012	.00222	.03246	.00064	.00098	.00444
%RSD	4.1244	27.591	2897.6	19.190	582.11	408.42	81.237	490.94	343.11

#1	.00120	.00043	-.00086	.00069	-.00195	-.03090	.00124	.00090	.00444
#2	.00128	.00064	.00078	.00052	.00119	.01501	.00034	-.00050	-.00185

Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Int. Std.	Y_2243	Y_3600	Y_3774
Line	224.306 {450}	360.073 { 94}	377.433 { 89}
Units	Cts/S	Cts/S	Cts/S
Avg	2761.4	42929.	2296.7
Stddev	16.3	180.	14.7
%RSD	.58880	.41934	.64088

#1	2772.9	42801.	2307.1
#2	2749.9	43056.	2286.3

Sample Name: LCS 280-325684/2-A Acquired: 5/18/2016 15:30:37 Type: Unk
Method: 6500_025(v6) Mode: CONC Corr. Factor: 1.000000
User: CRHOADES Prep Date: Custom ID2: Custom ID3:
Comment: 325684 SOIL 6010C (B) Q5

Elem	Ag3280	Al1670	As1890	B_2089	Ba4554	Be3130	Bi2230	Ca3179	Cd2288
Line	328.068 {103}	167.079 {502}	189.042 {478}	208.959 {461}	455.403 { 74}	313.042 {108}	223.061 {451}	317.933 {106}	228.802 {447}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.04948	2.1334	1.0555	F 1.1467	1.9571	.04761	2.1381	48.081	.09906
Stddev	.00103	.0047	.0005	.0035	.0760	.00221	.0220	1.870	.00067
%RSD	2.0909	.22274	.05087	.30720	3.8814	4.6508	1.0291	3.8892	.67955

#1	.05022	2.1300	1.0559	1.1491	1.9034	.04605	2.1537	46.759	.09953
#2	.04875	2.1367	1.0551	1.1442	2.0108	.04918	2.1226	49.403	.09858

Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Fail	Chk Pass	Chk Pass	None	Chk Pass	Chk Pass
High Limit				1.1000					
Low Limit				.81000					

Elem	Co2286	Cr2055	Cu3247	Fe2599	K_7664	Li6707	Mg2790	Mn2576	Mo2020
Line	228.616 {447}	205.560 {464}	324.754 {104}	259.940 {130}	766.490 { 44}	670.784 { 50}	279.079 {121}2	257.610 {131}	202.030 {467}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.48979	.20021	.25817	.97085	48.047	.97463	48.452	.47362	1.0640
Stddev	.00313	.00118	.00112	.03007	1.858	.01449	.126	.00074	.0140
%RSD	.63847	.59038	.43536	3.0972	3.8669	1.4864	.26043	.15718	1.3174

#1	.49200	.20104	.25896	.94959	46.734	.96438	48.541	.47415	1.0739
#2	.48758	.19937	.25737	.99211	49.361	.98487	48.363	.47309	1.0541

Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Elem	Na8183	Ni2316	P_1782	Pb2203	S_1820	Sb2068	Se1960	Si2881	SiO2
Line	818.326 { 41}	231.604 {446}	178.284 {489}	220.353 {453}	182.034 {485}	206.833 {463}	196.090 {472}	288.158 {117}	288.158 {117}2
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	53.016	.48479	10.134	.50540	2.0883	.52833	2.1251	2.1402	4.5800
Stddev	1.293	.00342	.067	.00327	.0318	.00968	.0528	.0475	.1016
%RSD	2.4397	.70482	.65996	.64669	1.5215	1.8322	2.4861	2.2189	2.2189

#1	52.102	.48721	10.182	.50771	2.1108	.53517	2.1625	2.1066	4.5081
#2	53.931	.48237	10.087	.50309	2.0659	.52148	2.0878	2.1738	4.6518

Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	None	Chk Pass	Chk Pass	Chk Pass	None
High Limit									
Low Limit									

Elem	Sn1899	Sr4077	Th2837	Ti3349	Ti1908	U_3701	V_2924	Zn2062	Zr3391
Line	189.989 {477}	407.771 { 83}	283.730 {119}	334.904 {101}	190.856 {477}	370.152 { 91}	292.402 {115}	206.200 {163}	339.198 { 99}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	2.0327	.94523	.97987	.97177	1.9738	2.0596	.48235	.47248	.53149
Stddev	.0457	.03658	.00900	.00008	.0745	.0629	.00149	.00601	.00421
%RSD	2.2478	3.8703	.91889	.00867	3.7745	3.0560	.30858	1.2710	.79271

#1	2.0651	.91936	.98624	.97171	2.0265	2.1041	.48340	.46824	.52851
#2	2.0004	.97110	.97351	.97183	1.9211	2.0151	.48130	.47673	.53447

Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Int. Std.	Y_2243	Y_3600	Y_3774
Line	224.306 {450}	360.073 { 94}	377.433 { 89}
Units	Cts/S	Cts/S	Cts/S
Avg	2664.7	41217.	2275.7
Stddev	2.6	36.	78.3
%RSD	.09835	.08841	3.4411

#1	2666.5	41242.	2331.0
#2	2662.8	41191.	2220.3

Sample Name: 280-82566-A-1-C Acquired: 5/18/2016 15:33:06 Type: Unk

Method: 6500_025(v6) Mode: CONC Corr. Factor: 1.000000

User: CRHOADES Prep Date: Custom ID2: Custom ID3:

Comment: 325684 SOIL 6010C (B) Q5

Elem	Ag3280	Al3092	As1890	B_2089	Ba4554	Be3130	Bi2230	Ca3179	Cd2288
Line	328.068 {103}	309.271 {109}	189.042 {478}	208.959 {461}	455.403 {74}	313.042 {108}	223.061 {451}	317.933 {106}	228.802 {447}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	-.00231	74.612	.01600	.05739	.78370	.00432	-.00155	F 1139.0	.00314
Stddev	.00056	.924	.00280	.00015	.00924	.00009	.00636	2.0	.00002
%RSD	24.249	1.2386	17.522	.25623	1.1785	2.1339	411.23	.17255	.56029

#1	-.00271	73.959	.01402	.05728	.77717	.00426	.00295	1137.6	.00315
#2	-.00192	75.266	.01799	.05749	.79023	.00439	-.00605	1140.4	.00313

Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Fail	Chk Pass
High Limit								1000.0	
Low Limit								-.10000	

Elem	Co2286	Cr2055	Cu3247	Fe2714	K_7664	Li6707	Mg2790	Mn2576	Mo2020
Line	228.616 {447}	205.560 {464}	324.754 {104}	271.441 {124}	766.490 {44}	670.784 {50}	279.079 {121}2	257.610 {131}	202.030 {467}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.03395	.10244	.05440	92.833	12.928	.09573	43.738	2.0005	.00876
Stddev	.00016	.00020	.00006	.762	.100	.00007	.098	.0044	.00037
%RSD	.47736	.19931	.10298	.82040	.77620	.07046	.22457	.22168	4.2716

#1	.03407	.10230	.05436	92.295	12.858	.09568	43.668	1.9973	.00849
#2	.03384	.10259	.05444	93.372	12.999	.09578	43.807	2.0036	.00902

Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Elem	Na5895	Ni2316	P_1782	Pb2203	S_1820	Sb2068	Se1960	Si2881	SiO2
Line	589.592 {57}	231.604 {446}	178.284 {489}	220.353 {453}	182.034 {485}	206.833 {463}	196.090 {472}	288.158 {117}	288.158 {117}2
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	2.1910	.08477	W 2.2393	.05065	5.6183	.00164	.01840	7.1878	15.382
Stddev	.0030	.00141	.0015	.00074	.0328	.00059	.01254	.0464	.099
%RSD	.13852	1.6643	.06720	1.4656	.58328	36.204	68.182	.64521	.64521

#1	2.1932	.08577	2.2404	.05013	5.6415	.00122	.00953	7.1550	15.312
#2	2.1889	.08378	2.2383	.05118	5.5951	.00206	.02726	7.2205	15.452

Check ?	Chk Pass	Chk Pass	Chk Warn	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit			2.0000						
Low Limit			-1.0000						

Elem	Sn1899	Sr4077	Th2837	Ti3349	Ti1908	U_3701	V_2924	Zn2062	Zr3391
Line	189.989 {477}	407.771 {83}	283.730 {119}	334.904 {101}	190.856 {477}	370.152 {91}	292.402 {115}	206.200 {163}	339.198 {99}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.00184	1.3519	.02576	1.4323	.01257	F -.10983	.20055	.23511	.05622
Stddev	.00246	.0216	.00084	.0055	.00366	.06787	.00220	.00106	.00193
%RSD	133.46	1.5972	3.2544	.38594	29.116	61.793	1.0945	.44953	3.4243

#1	.00010	1.3366	.02635	1.4284	.00998	-.15782	.19900	.23437	.05758
#2	.00358	1.3672	.02516	1.4362	.01516	-.06184	.20211	.23586	.05486

Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Fail	Chk Pass	Chk Pass	Chk Pass
High Limit						50.000			
Low Limit						-.10000			

Int. Std.	Y_2243	Y_3600	Y_3774
Line	224.306 {450}	360.073 {94}	377.433 {89}
Units	Cts/S	Cts/S	Cts/S
Avg	2659.2	40124.	2305.5
Stddev	2.7	78.	34.0
%RSD	.10086	.19389	1.4730

#1	2657.3	40179.	2329.5
#2	2661.1	40069.	2281.5

Sample Name: 280-82566-A-2-C Acquired: 5/18/2016 15:36:07 Type: Unk

Method: 6500_025(v6) Mode: CONC Corr. Factor: 1.000000

User: CRHOADES Prep Date: Custom ID2: Custom ID3:

Comment: 325684 SOIL 6010C (B) Q5

Elem	Ag3280	Al3092	As1890	B_2089	Ba4554	Be3130	Bi2230	Ca3179	Cd2288
Line	328.068 {103}	309.271 {109}	189.042 {478}	208.959 {461}	455.403 {74}	313.042 {108}	223.061 {451}	317.933 {106}	228.802 {447}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	-0.0152	77.698	.01183	.06297	.73141	.00452	-0.00238	F 1426.2	.00328
Stddev	.00030	.581	.00601	.00023	.00426	.00027	.00446	6.3	.00019
%RSD	19.691	.74727	50.822	.36778	.58179	5.9705	187.30	.44254	5.8046

#1	-0.00131	77.287	.00758	.06280	.72840	.00433	-0.00554	1430.7	.00341
#2	-0.00173	78.109	.01609	.06313	.73441	.00472	.00077	1421.7	.00314

Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Fail	Chk Pass
High Limit								1000.0	
Low Limit								-.10000	

Elem	Co2286	Cr2055	Cu3247	Fe2714	K_7664	Li6707	Mg2790	Mn2576	Mo2020
Line	228.616 {447}	205.560 {464}	324.754 {104}	271.441 {124}	766.490 {44}	670.784 {50}	279.079 {121}2	257.610 {131}	202.030 {467}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.03594	.10632	.05861	98.706	13.964	.10716	56.983	2.4543	.00567
Stddev	.00028	.00022	.00062	.865	.167	.00188	.009	.0044	.00018
%RSD	.78378	.20578	1.0520	.87608	1.1956	1.7540	.01504	.17854	3.2162

#1	.03574	.10617	.05817	98.095	13.846	.10583	56.977	2.4512	.00554
#2	.03614	.10647	.05905	99.317	14.082	.10849	56.989	2.4574	.00580

Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Elem	Na5895	Ni2316	P_1782	Pb2203	S_1820	Sb2068	Se1960	Si2881	SiO2
Line	589.592 {57}	231.604 {446}	178.284 {489}	220.353 {453}	182.034 {485}	206.833 {463}	196.090 {472}	288.158 {117}	288.158 {117}2
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	2.2135	.08969	W 2.4967	.05619	13.541	-0.00162	.01265	7.6958	16.469
Stddev	.0343	.00006	.0191	.00042	.050	.00405	.00685	.0169	.036
%RSD	1.5490	.07026	.76460	.74986	.36962	249.52	54.113	.21972	.21972

#1	2.1892	.08965	2.4832	.05590	13.506	-.00449	.00781	7.6838	16.443
#2	2.2377	.08974	2.5102	.05649	13.576	.00124	.01750	7.7077	16.495

Check ?	Chk Pass	Chk Pass	Chk Warn	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit			2.0000						
Low Limit			-1.0000						

Elem	Sn1899	Sr4077	Th2837	Ti3349	Ti1908	U_3701	V_2924	Zn2062	Zr3391
Line	189.989 {477}	407.771 {83}	283.730 {119}	334.904 {101}	190.856 {477}	370.152 {91}	292.402 {115}	206.200 {163}	339.198 {99}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.00140	1.6622	.02855	1.5485	-0.00346	F -.11221	.22450	.25456	.06064
Stddev	.00010	.0143	.00503	.0018	.00074	.03424	.00037	.00261	.00034
%RSD	7.0513	.85774	17.621	.11779	21.372	30.517	.16529	1.0258	.55459

#1	.00133	1.6521	.03211	1.5472	-.00399	-.13642	.22424	.25272	.06087
#2	.00147	1.6723	.02499	1.5497	-.00294	-.08800	.22476	.25641	.06040

Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Fail	Chk Pass	Chk Pass	Chk Pass
High Limit						50.000			
Low Limit						-.10000			

Int. Std.	Y_2243	Y_3600	Y_3774						
Line	224.306 {450}	360.073 {94}	377.433 {89}						
Units	Cts/S	Cts/S	Cts/S						
Avg	2644.8	39390.	2300.5						
Stddev	6.4	181.	2.8						
%RSD	.24360	.45843	.12048						

#1	2640.3	39518.	2298.5						
#2	2649.4	39262.	2302.5						

Sample Name: 280-82566-A-3-C Acquired: 5/18/2016 15:39:08 Type: Unk

Method: 6500_025(v6) Mode: CONC Corr. Factor: 1.000000

User: CRHOADES Prep Date: Custom ID2: Custom ID3:

Comment: 325684 SOIL 6010C (B) Q5

Elem	Ag3280	Al3092	As1890	B_2089	Ba4554	Be3130	Bi2230	Ca3179	Cd2288
Line	328.068 {103}	309.271 {109}	189.042 {478}	208.959 {461}	455.403 { 74}	313.042 {108}	223.061 {451}	317.933 {106}	228.802 {447}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	-0.00241	74.313	.01060	.06108	.74252	.00433	-0.00760	F 1747.4	.00351
Stddev	.00021	.974	.00478	.00037	.00591	.00007	.00128	2.8	.00009
%RSD	8.5903	1.3106	45.039	.61044	.79592	1.5708	16.819	.15743	2.6938

#1	-0.00227	73.625	.00723	.06135	.73834	.00429	-0.00669	1745.4	.00344
#2	-0.00256	75.002	.01398	.06082	.74670	.00438	-0.00850	1749.3	.00357

Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Fail	Chk Pass
High Limit								1000.0	
Low Limit								-1.00000	

Elem	Co2286	Cr2055	Cu3247	Fe2714	K_7664	Li6707	Mg2790	Mn2576	Mo2020
Line	228.616 {447}	205.560 {464}	324.754 {104}	271.441 {124}	766.490 { 44}	670.784 { 50}	279.079 {121}2	257.610 {131}	202.030 {467}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.03495	.11176	.05785	92.725	13.502	.10806	57.150	2.3386	.00569
Stddev	.00059	.00078	.00124	.367	.001	.00274	.150	.0036	.00098
%RSD	1.6822	.70209	2.1350	.39615	.00596	2.5399	.26187	.15518	17.303

#1	.03453	.11121	.05872	92.466	13.502	.11000	57.256	2.3412	.00500
#2	.03536	.11232	.05697	92.985	13.503	.10612	57.044	2.3361	.00639

Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Elem	Na5895	Ni2316	P_1782	Pb2203	S_1820	Sb2068	Se1960	Si2881	SiO2
Line	589.592 { 57}	231.604 {446}	178.284 {489}	220.353 {453}	182.034 {485}	206.833 {463}	196.090 {472}	288.158 {117}	288.158 {117}2
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	2.2950	.09114	W 2.3954	.05636	15.478	.00006	.00723	8.4442	18.071
Stddev	.0008	.00109	.0232	.00161	.117	.00643	.00979	.0964	.206
%RSD	.03609	1.1920	.96943	2.8513	.75617	10216.	135.28	1.1420	1.1420

#1	2.2956	.09038	2.3789	.05522	15.396	-.00448	.01416	8.5124	18.217
#2	2.2945	.09191	2.4118	.05750	15.561	.00461	.00031	8.3760	17.925

Check ?	Chk Pass	Chk Pass	Chk Warn	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit			2.0000						
Low Limit			-1.0000						

Elem	Sn1899	Sr4077	Th2837	Ti3349	Ti1908	U_3701	V_2924	Zn2062	Zr3391
Line	189.989 {477}	407.771 { 83}	283.730 {119}	334.904 {101}	190.856 {477}	370.152 { 91}	292.402 {115}	206.200 {163}	339.198 { 99}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.00151	1.9735	.02401	1.4124	-.00544	F -.13911	.20358	.27968	.05774
Stddev	.00155	.0160	.00369	.0013	.00058	.00157	.00101	.00179	.00214
%RSD	102.73	.80893	15.366	.08909	10.665	1.1256	.49528	.64165	3.6988

#1	.00260	1.9623	.02662	1.4133	-.00503	-.14022	.20287	.27841	.05623
#2	.00041	1.9848	.02140	1.4115	-.00585	-.13800	.20430	.28095	.05925

Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Fail	Chk Pass	Chk Pass	Chk Pass
High Limit						50.000			
Low Limit						-1.0000			

Int. Std.	Y_2243	Y_3600	Y_3774
Line	224.306 {450}	360.073 { 94}	377.433 { 89}
Units	Cts/S	Cts/S	Cts/S
Avg	2593.2	38621.	2308.5
Stddev	10.0	141.	26.4
%RSD	.38681	.36436	1.1433

#1	2586.1	38720.	2327.2
#2	2600.3	38521.	2289.9

Sample Name: 280-82566-A-4-C Acquired: 5/18/2016 15:42:08 Type: Unk

Method: 6500_025(v6) Mode: CONC Corr. Factor: 1.000000

User: CRHOADES Prep Date: Custom ID2: Custom ID3:

Comment: 325684 SOIL 6010C (B) Q5

Elem	Ag3280	Al3092	As1890	B_2089	Ba4554	Be3130	Bi2230	Ca3179	Cd2288
Line	328.068 {103}	309.271 {109}	189.042 {478}	208.959 {461}	455.403 {74}	313.042 {108}	223.061 {451}	317.933 {106}	228.802 {447}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	-0.00231	74.450	.02109	.06288	.95053	.00414	.00022	F 1619.1	.00375
Stddev	.00072	.279	.01023	.00125	.00305	.00010	.00829	37.0	.00004
%RSD	31.041	.37504	48.507	1.9859	.32043	2.3072	3838.6	2.2866	1.1338

#1	-0.00181	74.647	.01386	.06200	.95268	.00407	-0.00564	1645.3	.00378
#2	-0.00282	74.252	.02832	.06376	.94837	.00421	.00608	1592.9	.00372

Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Fail	Chk Pass
High Limit								1000.0	
Low Limit								-1.0000	

Elem	Co2286	Cr2055	Cu3247	Fe2714	K_7664	Li6707	Mg2790	Mn2576	Mo2020
Line	228.616 {447}	205.560 {464}	324.754 {104}	271.441 {124}	766.490 {44}	670.784 {50}	279.079 {121}2	257.610 {131}	202.030 {467}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.03431	.11095	.05688	88.012	13.767	.10753	55.007	2.2329	.00631
Stddev	.00053	.00016	.00033	.675	.308	.00199	.172	.0060	.00016
%RSD	1.5371	.14517	.58610	.76691	2.2337	1.8477	.31333	.27098	2.4700

#1	.03468	.11084	.05712	88.490	13.984	.10893	55.129	2.2372	.00620
#2	.03393	.11106	.05664	87.535	13.549	.10612	54.886	2.2286	.00642

Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Elem	Na5895	Ni2316	P_1782	Pb2203	S_1820	Sb2068	Se1960	Si2881	SiO2
Line	589.592 {57}	231.604 {446}	178.284 {489}	220.353 {453}	182.034 {485}	206.833 {463}	196.090 {472}	288.158 {117}	288.158 {117}2
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	2.2971	.09705	W 2.5087	.05717	18.046	-.00173	.01385	7.7451	16.575
Stddev	.0370	.00002	.0030	.00014	.069	.00209	.00874	.0458	.098
%RSD	1.6108	.01701	.12120	.24132	.38304	121.17	63.096	.59132	.59132

#1	2.3233	.09704	2.5066	.05708	17.997	-.00025	.02003	7.7127	16.505
#2	2.2709	.09706	2.5109	.05727	18.095	-.00321	.00767	7.7775	16.644

Check ?	Chk Pass	Chk Pass	Chk Warn	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit			2.0000						
Low Limit			-1.0000						

Elem	Sn1899	Sr4077	Th2837	Ti3349	Ti1908	U_3701	V_2924	Zn2062	Zr3391
Line	189.989 {477}	407.771 {83}	283.730 {119}	334.904 {101}	190.856 {477}	370.152 {91}	292.402 {115}	206.200 {163}	339.198 {99}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.00061	1.8595	.02512	1.3837	-.00867	F -.12666	.20242	.29905	.05803
Stddev	.00237	.0138	.00376	.0033	.00283	.01429	.00136	.00360	.00361
%RSD	388.02	.74352	14.971	.23935	32.617	11.285	.67071	1.2036	6.2150

#1	-0.00107	1.8692	.02778	1.3860	-.00667	-.13676	.20338	.30160	.05548
#2	.00229	1.8497	.02246	1.3813	-.01067	-.11655	.20146	.29651	.06059

Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Fail	Chk Pass	Chk Pass	Chk Pass
High Limit						50.000			
Low Limit						-1.0000			

Int. Std.	Y_2243	Y_3600	Y_3774
Line	224.306 {450}	360.073 {94}	377.433 {89}
Units	Cts/S	Cts/S	Cts/S
Avg	2615.9	39362.	2281.2
Stddev	2.9	181.	46.5
%RSD	.11162	.45997	2.0391

#1	2618.0	39234.	2248.3
#2	2613.9	39490.	2314.1

Sample Name: 280-82566-A-5-C Acquired: 5/18/2016 15:45:09 Type: Unk

Method: 6500_025(v6) Mode: CONC Corr. Factor: 1.000000

User: CRHOADES Prep Date: Custom ID2: Custom ID3:

Comment: 325684 SOIL 6010C (B) Q5

Elem	Ag3280	Al3092	As1890	B_2089	Ba4554	Be3130	Bi2230	Ca3179	Cd2288
Line	328.068 {103}	309.271 {109}	189.042 {478}	208.959 {461}	455.403 { 74}	313.042 {108}	223.061 {451}	317.933 {106}	228.802 {447}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	-0.00165	76.536	.01216	.06468	.78955	.00421	-0.00270	F 1463.7	.00305
Stddev	.00016	.128	.00927	.00220	.00108	.00007	.00081	20.0	.00005
%RSD	9.8868	.16714	76.195	3.3991	.13637	1.7563	30.201	1.3661	1.6432

#1	-0.00154	76.626	.01871	.06312	.79031	.00415	-0.00327	1449.6	.00308
#2	-0.00177	76.445	.00561	.06623	.78879	.00426	-0.00212	1477.8	.00301

Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Fail	Chk Pass
High Limit								1000.0	
Low Limit								-1.0000	

Elem	Co2286	Cr2055	Cu3247	Fe2714	K_7664	Li6707	Mg2790	Mn2576	Mo2020
Line	228.616 {447}	205.560 {464}	324.754 {104}	271.441 {124}	766.490 { 44}	670.784 { 50}	279.079 {121}2	257.610 {131}	202.030 {467}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.03597	.10223	.05642	91.320	13.536	.10034	52.617	2.1428	.00469
Stddev	.00067	.00209	.00077	.356	.156	.00036	.138	.0147	.00040
%RSD	1.8686	2.0459	1.3589	.38949	1.1494	.35846	.26282	.68637	8.4892

#1	.03550	.10075	.05588	91.571	13.646	.10008	52.519	2.1532	.00441
#2	.03645	.10371	.05696	91.068	13.426	.10059	52.714	2.1324	.00497

Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Elem	Na5895	Ni2316	P_1782	Pb2203	S_1820	Sb2068	Se1960	Si2881	SiO2
Line	589.592 { 57}	231.604 {446}	178.284 {489}	220.353 {453}	182.034 {485}	206.833 {463}	196.090 {472}	288.158 {117}	288.158 {117}2
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	2.1799	.08815	W 3.5065	.05198	11.243	.00449	.01004	7.7596	16.606
Stddev	.0228	.00193	.0721	.00184	.203	.00772	.00277	.0909	.194
%RSD	1.0450	2.1848	2.0556	3.5417	1.8043	171.91	27.597	1.1711	1.1711

#1	2.1638	.08679	3.4556	.05068	11.100	.00995	.00808	7.8239	16.743
#2	2.1960	.08951	3.5575	.05328	11.387	-.00097	.01200	7.6954	16.468

Check ?	Chk Pass	Chk Pass	Chk Warn	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit			2.0000						
Low Limit			-1.0000						

Elem	Sn1899	Sr4077	Th2837	Ti3349	Ti1908	U_3701	V_2924	Zn2062	Zr3391
Line	189.989 {477}	407.771 { 83}	283.730 {119}	334.904 {101}	190.856 {477}	370.152 { 91}	292.402 {115}	206.200 {163}	339.198 { 99}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	-0.00051	1.7773	.02934	1.5694	-0.00611	F -.13711	.20479	.25352	.05931
Stddev	.00167	.0027	.00066	.0019	.00145	.02409	.00186	.00295	.00209
%RSD	330.41	.15314	2.2604	.12297	23.732	17.568	.90717	1.1623	3.5315

#1	.00068	1.7793	.02981	1.5680	-.00713	-.15415	.20610	.25560	.06079
#2	-.00169	1.7754	.02888	1.5707	-.00508	-.12008	.20348	.25143	.05783

Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Fail	Chk Pass	Chk Pass	Chk Pass
High Limit						50.000			
Low Limit						-1.0000			

Int. Std.	Y_2243	Y_3600	Y_3774						
Line	224.306 {450}	360.073 { 94}	377.433 { 89}						
Units	Cts/S	Cts/S	Cts/S						
Avg	2622.2	40084.	2337.0						
Stddev	23.3	212.	.6						
%RSD	.88935	.52970	.02732						

#1	2638.7	40234.	2337.5						
#2	2605.7	39934.	2336.6						

Sample Name: 280-82566-A-6-C Acquired: 5/18/2016 15:48:11 Type: Unk

Method: 6500_025(v6) Mode: CONC Corr. Factor: 1.000000

User: CRHOADES Prep Date: Custom ID2: Custom ID3:

Comment: 325684 SOIL 6010C (B) Q5

Elem	Ag3280	Al3092	As1890	B_2089	Ba4554	Be3130	Bi2230	Ca3179	Cd2288
Line	328.068 {103}	309.271 {109}	189.042 {478}	208.959 {461}	455.403 {74}	313.042 {108}	223.061 {451}	317.933 {106}	228.802 {447}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	-0.00267	93.537	.01848	.07791	.92924	.00513	-0.00714	F 1801.3	.00512
Stddev	.00071	.488	.00163	.00138	.00617	.00023	.00071	66.1	.00006
%RSD	26.449	.52206	8.8444	1.7687	.66412	4.4512	9.9180	3.6694	1.0815

#1	-0.00217	93.882	.01732	.07694	.93360	.00497	-0.00764	1848.0	.00508
#2	-0.00317	93.192	.01964	.07888	.92488	.00529	-0.00664	1754.5	.00516

Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Fail	Chk Pass
High Limit								1000.0	
Low Limit								-1.0000	

Elem	Co2286	Cr2055	Cu3247	Fe2714	K_7664	Li6707	Mg2790	Mn2576	Mo2020
Line	228.616 {447}	205.560 {464}	324.754 {104}	271.441 {124}	766.490 {44}	670.784 {50}	279.079 {121}2	257.610 {131}	202.030 {467}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.04236	.12988	.06791	112.08	16.868	.13074	66.641	2.7302	.00681
Stddev	.00001	.00106	.00001	.73	.152	.00240	.028	.0043	.00041
%RSD	.01632	.81390	.00779	.65405	.89907	1.8381	.04230	.15645	6.0108

#1	.04237	.12913	.06791	112.60	16.975	.13244	66.621	2.7272	.00652
#2	.04236	.13062	.06790	111.56	16.760	.12904	66.661	2.7332	.00710

Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Elem	Na5895	Ni2316	P_1782	Pb2203	S_1820	Sb2068	Se1960	Si2881	SiO2
Line	589.592 {57}	231.604 {446}	178.284 {489}	220.353 {453}	182.034 {485}	206.833 {463}	196.090 {472}	288.158 {117}	288.158 {117}2
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	2.7636	.10959	W 2.9806	.06798	15.494	.00039	.01886	9.4655	20.256
Stddev	.0124	.00058	.0166	.00005	.137	.00145	.01227	.1024	.219
%RSD	.44817	.52649	.55764	.06745	.88176	367.37	65.071	1.0821	1.0821

#1	2.7723	.10918	2.9689	.06795	15.397	-.00063	.02754	9.3930	20.101
#2	2.7548	.11000	2.9924	.06801	15.590	.00142	.01018	9.5379	20.411

Check ?	Chk Pass	Chk Pass	Chk Warn	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit			2.0000						
Low Limit			-1.0000						

Elem	Sn1899	Sr4077	Th2837	Ti3349	Ti1908	U_3701	V_2924	Zn2062	Zr3391
Line	189.989 {477}	407.771 {83}	283.730 {119}	334.904 {101}	190.856 {477}	370.152 {91}	292.402 {115}	206.200 {163}	339.198 {99}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.00318	2.4382	.03126	1.7371	-.00891	F -.15546	.25387	.30295	.06916
Stddev	.00141	.0240	.00113	.0001	.00234	.01487	.00104	.00093	.00135
%RSD	44.312	.98465	3.6206	.00668	26.274	9.5658	.40911	.30861	1.9525

#1	.00418	2.4552	.03206	1.7371	-.00725	-.14494	.25314	.30229	.06821
#2	.00219	2.4213	.03046	1.7372	-.01056	-.16597	.25461	.30361	.07012

Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Fail	Chk Pass	Chk Pass	Chk Pass
High Limit						50.000			
Low Limit						-1.0000			

Int. Std.	Y_2243	Y_3600	Y_3774						
Line	224.306 {450}	360.073 {94}	377.433 {89}						
Units	Cts/S	Cts/S	Cts/S						
Avg	2563.6	38971.	2285.6						
Stddev	14.9	680.	45.9						
%RSD	.57996	1.7447	2.0089						

#1	2553.1	39452.	2253.2						
#2	2574.1	38490.	2318.1						

Sample Name: CCVH-3894253 Acquired: 5/18/2016 15:51:11 Type: QC
Method: 6500_025(v6) Mode: CONC Corr. Factor: 1.000000
User: CRHOADES Prep Date: Custom ID2: Custom ID3:
Comment:

Elem	Ag3280	Al3092	As1890	B_2089	Ba4554	Be3130	Bi2230	Ca3179	Cd2288	Co2286	Cr2055
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	-.00118	52.575	-.01024	.00281	-.00050	.00041	W 1.0734	.12893	-.00085	-.00111	.00037
Stddev	.00009	.986	.00193	.00000	.00029	.00011	.0216	.01187	.00020	.00022	.00031
%RSD	7.5870	1.8756	18.822	.00420	57.525	27.131	2.0130	9.2098	23.959	19.888	82.534

#1	-.00111	53.272	-.01161	.00281	-.00071	.00049	1.0887	.13733	-.00100	-.00095	.00059
#2	-.00124	51.878	-.00888	.00281	-.00030	.00033	1.0581	.12053	-.00071	-.00126	.00016

Check ?	None	Chk Pass	None	None	None	None	Chk Warn	None	None	None	None
Value							1.0000				
Range							5.0000%				

Elem	Cu3247	Fe2714	K_7664	Li6707	Mg2790	Mn2576	Mo2020	Na8183	Ni2316	P_1782	Pb2203
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.00208	50.537	.29651	.00216	.02662	-.00003	-.00158	257.35	.00166	.00500	-.00223
Stddev	.00080	.250	.04456	.00082	.00835	.00000	.00070	.04	.00071	.00177	.00044
%RSD	38.551	.49520	15.028	37.882	31.383	.51627	44.534	.01729	42.811	35.354	19.803

#1	.00151	50.360	.26500	.00158	.02071	-.00003	-.00208	257.32	.00216	.00625	-.00255
#2	.00264	50.714	.32802	.00273	.03252	-.00003	-.00108	257.39	.00116	.00375	-.00192

Check ?	None	Chk Pass	None	None	None	None	None	Chk Pass	None	None	None
Value											
Range											

Elem	S_1820	Sb2068	Se1960	Si2881	SiO2	Sn1899	Sr4077	Th2837	Ti3349	Ti1908	U_3701
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	5.1848	-.00954	.00838	-.02069	-.04427	-.00041	.00063	4.8259	.00397	-.00366	10.483
Stddev	.2160	.00183	.00291	.01402	.03001	.00154	.00009	.0193	.00018	.00213	.147
%RSD	4.1661	19.134	34.722	67.780	67.780	372.29	14.697	.39910	4.5208	58.085	1.3991

#1	5.3375	-.00825	.00632	-.03060	-.06549	.00067	.00056	4.8122	.00385	-.00516	10.586
#2	5.0321	-.01083	.01044	-.01077	-.02305	-.00150	.00069	4.8395	.00410	-.00216	10.379

Check ?	Chk Pass	None	None	None	None	None	None	Chk Pass	None	None	Chk Pass
Value											
Range											

Elem	V_2924	Zn2062	Zr3391
Units	ppm	ppm	ppm
Avg	.00880	.00010	.06322
Stddev	.00073	.00032	.00033
%RSD	8.2940	329.78	.52442

#1	.00932	-.00013	.06346
#2	.00829	.00032	.06299

Check ?	None	None	None
Value			
Range			

Int. Std.	Y_2243	Y_3600	Y_3774
Units	Cts/S	Cts/S	Cts/S
Avg	2624.0	39821.	2126.1
Stddev	14.9	249.	77.8
%RSD	.56724	.62484	3.6570

#1	2613.5	39997.	2071.1
#2	2634.5	39645.	2181.1

Sample Name: CCV-3894251 Acquired: 5/18/2016 15:53:48 Type: QC

Method: 6500_025(v6) Mode: CONC Corr. Factor: 1.000000

User: CRHOADES Prep Date: Custom ID2: Custom ID3:

Comment:

Elem	Ag3280	Al1670	As1890	B_2089	Ba4554	Be3130	Bi2230	Ca3179	Cd2288	Co2286	Cr2055	Cu3247
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.49896	F .56936	1.0373	.50171	.50533	.48140	-.00157	5.1193	.49852	.51950	.52076	.52167
Stddev	.00054	.02712	.0016	.00333	.00760	.00602	.00356	.0658	.00134	.00307	.00261	.00094
%RSD	.10827	4.7631	.15793	.66466	1.5048	1.2508	227.35	1.2849	.26965	.59022	.50105	.18033

#1	.49935	.58853	1.0362	.49935	.51071	.48565	-.00408	5.1658	.49947	.51733	.51892	.52234
#2	.49858	.55018	1.0385	.50407	.49996	.47714	.00095	5.0728	.49757	.52166	.52261	.52101

Check ?	Chk Pass	Chk Fail	Chk Pass	Chk Pass	Chk Pass	Chk Pass	None	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Value		.50000										
Range		10.490%										

Elem	Fe2599	K_7664	Li6707	Mg2790	Mn2576	Mo2020	Na5895	Ni2316	P_1782	Pb2203	S_1820	Sb2068
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	2.4631	49.398	1.0035	19.538	.48565	.52183	5.1204	.51158	1.0161	1.0539	-.01245	1.0306
Stddev	.0061	.579	.0103	.066	.00240	.00023	.0427	.00327	.0020	.0074	.00492	.0090
%RSD	.24597	1.1722	1.0214	.33976	.49380	.04329	.83443	.63886	.19628	.70101	39.553	.87688

#1	2.4674	49.807	1.0107	19.585	.48734	.52167	5.1506	.50927	1.0147	1.0487	-.00897	1.0242
#2	2.4588	48.989	.99621	19.491	.48395	.52199	5.0902	.51389	1.0175	1.0591	-.01593	1.0370

Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	None	Chk Pass
Value												
Range												

Elem	Se1960	Si2881	SiO2	Sn1899	Sr4077	Th2837	Ti3349	Ti1908	U_3701	V_2924	Zn2062	Zr3391
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	1.0683	4.9090	10.505	1.0613	.49647	-.00003	.47862	1.0739	-.03426	.49649	.48359	.51312
Stddev	.0008	.1169	.250	.0095	.00709	.00374	.00049	.0099	.00559	.00169	.00229	.00835
%RSD	.07336	2.3812	2.3812	.89325	1.4281	13706.	.10213	.91793	16.318	.34031	.47352	1.6277

#1	1.0689	4.9917	10.682	1.0546	.50148	.00262	.47897	1.0669	-.03822	.49768	.48521	.50722
#2	1.0678	4.8264	10.328	1.0680	.49145	-.00268	.47828	1.0808	-.03031	.49529	.48197	.51903

Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	None	Chk Pass	Chk Pass	None	Chk Pass	Chk Pass	Chk Pass
Value												
Range												

Int. Std.	Y_2243	Y_3600	Y_3774
Units	Cts/S	Cts/S	Cts/S
Avg	2669.2	41476.	2185.5
Stddev	1.8	183.	32.1
%RSD	.06612	.44215	1.4682

#1	2670.4	41346.	2162.8
#2	2667.9	41605.	2208.2

Sample Name: CCB Acquired: 5/18/2016 15:56:19 Type: QC
 Method: 6500_025(v6) Mode: CONC Corr. Factor: 1.000000
 User: CRHOADES Prep Date: Custom ID2: Custom ID3:
 Comment:

Elem	Ag3280	Al1670	As1890	B_2089	Ba4554	Be3130	Bi2230	Ca3179	Cd2288	Co2286	Cr2055
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	-.00104	-.00063	.00248	.00154	-.00050	.00021	-.00057	-.00525	-.00036	.00011	.00022
Stddev	.00014	.00102	.00568	.00029	.00004	.00017	.00283	.01560	.00012	.00003	.00040
%RSD	13.680	162.14	229.30	19.019	8.1573	79.023	495.04	297.48	33.231	27.969	182.94

#1	-.00094	-.00135	-.00154	.00133	-.00053	.00033	.00143	.00579	-.00028	.00013	-.00006
#2	-.00114	.00009	.00649	.00175	-.00047	.00009	-.00258	-.01628	-.00045	.00009	.00050

Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit											
Low Limit											

Elem	Cu3247	Fe2599	K_7664	Li6707	Mg2790	Mn2576	Mo2020	Na5895	Ni2316	P_1782	Pb2203
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	-.00063	-.00628	.12920	.00030	.00486	-.00003	.00165	.09567	-.00047	-.00032	.00270
Stddev	.00013	.00379	.01995	.00145	.00707	.00007	.00066	.00342	.00003	.00320	.00195
%RSD	20.324	60.297	15.442	488.71	145.55	268.07	40.154	3.5707	7.3418	1011.9	72.228

#1	-.00054	-.00360	.14331	-.00073	.00986	-.00008	.00118	.09808	-.00049	.00195	.00408
#2	-.00072	-.00896	.11509	.00132	-.00014	.00002	.00212	.09325	-.00044	-.00258	.00132

Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit											
Low Limit											

Elem	S_1820	Sb2068	Se1960	Si2881	SiO2	Sn1899	Sr4077	Th2837	Ti3349	Ti1908	U_3701
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	-.01289	W .00604	.00540	.03917	.08383	.00035	.00009	.00092	-.00004	.00157	-.00141
Stddev	.00566	.00376	.00970	.01562	.03344	.00042	.00003	.00393	.00018	.00237	.06275
%RSD	43.899	62.272	179.75	39.884	39.884	118.70	32.900	427.69	487.60	150.39	4443.7

#1	-.01689	.00871	-.00146	.02813	.06019	.00065	.00011	-.00186	-.00016	-.00010	.04296
#2	-.00889	.00338	.01226	.05022	.10748	.00006	.00007	.00370	.00009	.00325	-.04579

Check ?	Chk Pass	Chk Warn	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit		.00100									
Low Limit		-.00100									

Elem	V_2924	Zn2062	Zr3391
Units	ppm	ppm	ppm
Avg	.00064	-.00087	-.00133
Stddev	.00016	.00047	.00345
%RSD	24.444	53.595	259.22

#1	.00053	-.00120	-.00377
#2	.00076	-.00054	.00111

Check ?	Chk Pass	Chk Pass	Chk Pass
High Limit			
Low Limit			

Int. Std.	Y_2243	Y_3600	Y_3774
Units	Cts/S	Cts/S	Cts/S
Avg	2708.1	40993.	2127.8
Stddev	33.9	12.	.0
%RSD	1.2512	.02904	.00021

#1	2732.0	41002.	2127.8
#2	2684.1	40985.	2127.8

Sample Name: CCVL-3897520 Acquired: 5/18/2016 15:58:43 Type: QC
Method: 6500_025(v6) Mode: CONC Corr. Factor: 1.000000
User: CRHOADES Prep Date: Custom ID2: Custom ID3:
Comment:

Elem	Ag3280	Al1670	As1890	B_2089	Ba4554	Be3130	Bi2230	Ca3179	Cd2288	Co2286	Cr2055	Cu3247
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.00917	.11256	.01382	.09695	.00961	.00109	.11288	.22950	.00493	.01020	.01043	.01519
Stddev	.00082	.00073	.00026	.00047	.00012	.00014	.00159	.00258	.00006	.00002	.00046	.00122
%RSD	8.9058	.64574	1.9106	.48633	1.2177	12.976	1.4120	1.1254	1.1188	.24091	4.4485	8.0327

#1	.00975	.11307	.01363	.09662	.00969	.00119	.11175	.22767	.00497	.01018	.01010	.01433
#2	.00859	.11204	.01400	.09729	.00953	.00099	.11400	.23132	.00489	.01022	.01076	.01605

Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Value												
Range												

Elem	Fe2599	K_7664	Li6707	Mg2790	Mn2576	Mo2020	Na5895	Ni2316	P_1782	Pb2203	S_1820	Sb2068
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.12373	3.0773	.01072	.20831	.01008	.01996	1.0987	.04051	2.8602	.01027	-.01104	.02217
Stddev	.00999	.0915	.00092	.00006	.00011	.00024	.0012	.00053	.0034	.00124	.00395	.00113
%RSD	8.0718	2.9744	8.6114	.02922	1.1128	1.1910	.10810	1.3165	.11707	12.108	35.825	5.0795

#1	.11667	3.1420	.01137	.20826	.01000	.02013	1.0978	.04088	2.8626	.00939	-.00824	.02297
#2	.13079	3.0126	.01006	.20835	.01016	.01979	1.0995	.04013	2.8579	.01115	-.01383	.02138

Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	None	Chk Pass
Value												
Range												

Elem	Se1960	Si2881	SiO2	Sn1899	Sr4077	Th2837	Ti3349	Ti1908	U_3701	V_2924	Zn2062	Zr3391
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.01775	.47340	1.0131	.10269	.01024	F .01999	.00866	.01397	F .00862	.00979	.01910	.01383
Stddev	.00767	.00887	.0190	.00116	.00008	.00051	.00057	.00200	.00481	.00078	.00019	.00481
%RSD	43.205	1.8734	1.8734	1.1344	.73794	2.5523	6.5993	14.292	55.836	7.9625	1.0080	34.754

#1	.01233	.47968	1.0265	.10352	.01030	.01963	.00907	.01538	.00522	.01034	.01923	.01723
#2	.02317	.46713	.99966	.10187	.01019	.02035	.00826	.01256	.01202	.00924	.01896	.01043

Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Fail	Chk Pass	Chk Pass	Chk Fail	Chk Pass	Chk Pass	Chk Pass
Value						.01500			.06000			
Range						30.000%			-30.000%			

Int. Std.	Y_2243	Y_3600	Y_3774
Units	Cts/S	Cts/S	Cts/S
Avg	2643.4	41058.	2157.8
Stddev	.0	165.	22.7
%RSD	.00012	.40243	1.0540

#1	2643.4	41175.	2141.7
#2	2643.4	40942.	2173.8

Sample Name: 280-82566-A-7-C Acquired: 5/18/2016 16:01:24 Type: Unk

Method: 6500_025(v6) Mode: CONC Corr. Factor: 1.000000

User: CRHOADES Prep Date: Custom ID2: Custom ID3:

Comment: 325684 SOIL 6010C (B) Q5

Elem	Ag3280	Al3092	As1890	B_2089	Ba4554	Be3130	Bi2230	Ca3179	Cd2288
Line	328.068 {103}	309.271 {109}	189.042 {478}	208.959 {461}	455.403 {74}	313.042 {108}	223.061 {451}	317.933 {106}	228.802 {447}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	-0.00205	79.488	.02919	.06232	1.8870	.00454	-0.00236	F 1829.7	.00420
Stddev	.00033	.235	.00542	.00121	.0018	.00003	.00065	1.5	.00029
%RSD	16.081	.29543	18.583	1.9384	.09691	.71666	27.538	.08287	6.9326

#1	-0.00181	79.321	.03303	.06146	1.8857	.00456	-0.00282	1830.8	.00399
#2	-0.00228	79.654	.02536	.06317	1.8883	.00452	-0.00190	1828.6	.00441

Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Fail	Chk Pass
High Limit								1000.0	
Low Limit								-.10000	

Elem	Co2286	Cr2055	Cu3247	Fe2714	K_7664	Li6707	Mg2790	Mn2576	Mo2020
Line	228.616 {447}	205.560 {464}	324.754 {104}	271.441 {124}	766.490 {44}	670.784 {50}	279.079 {121}2	257.610 {131}	202.030 {467}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.03431	.11459	.06054	100.55	14.551	.11017	55.114	2.5028	.00948
Stddev	.00015	.00006	.00080	.44	.127	.00058	.130	.6421	.00000
%RSD	.42947	.04997	1.3266	.43476	.87503	.52825	.23525	25.657	.02217

#1	.03441	.11455	.06111	100.24	14.461	.10976	55.206	2.9568	.00948
#2	.03420	.11463	.05998	100.86	14.641	.11058	55.023	2.0487	.00948

Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Elem	Na5895	Ni2316	P_1782	Pb2203	S_1820	Sb2068	Se1960	Si2881	SiO2
Line	589.592 {57}	231.604 {446}	178.284 {489}	220.353 {453}	182.034 {485}	206.833 {463}	196.090 {472}	288.158 {117}	288.158 {117}2
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	2.3183	.09795	W 2.4597	.05881	10.627	.00526	.02194	9.1341	19.547
Stddev	.0073	.00024	.0062	.00301	.083	.00205	.00642	.0070	.015
%RSD	.31493	.24864	.25350	5.1257	.77995	38.874	29.258	.07712	.07712

#1	2.3132	.09812	2.4553	.06095	10.568	.00671	.01740	9.1291	19.536
#2	2.3235	.09777	2.4641	.05668	10.686	.00382	.02648	9.1390	19.558

Check ?	Chk Pass	Chk Pass	Chk Warn	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit			2.0000						
Low Limit			-1.0000						

Elem	Sn1899	Sr4077	Th2837	Ti3349	Ti1908	U_3701	V_2924	Zn2062	Zr3391
Line	189.989 {477}	407.771 {83}	283.730 {119}	334.904 {101}	190.856 {477}	370.152 {91}	292.402 {115}	206.200 {163}	339.198 {99}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	-0.00075	2.0636	.02345	1.4913	-0.00918	F -.10712	.23386	.27756	.05513
Stddev	.00020	.0059	.00318	.0026	.00465	.00187	.00088	.00050	.00188
%RSD	26.444	.28535	13.564	.17723	50.671	1.7498	.37489	.18049	3.4103

#1	-0.00061	2.0594	.02570	1.4894	-0.00589	-.10579	.23324	.27792	.05381
#2	-0.00089	2.0677	.02120	1.4931	-.01247	-.10844	.23448	.27721	.05646

Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Fail	Chk Pass	Chk Pass	Chk Pass
High Limit						50.000			
Low Limit						-.10000			

Int. Std.	Y_2243	Y_3600	Y_3774						
Line	224.306 {450}	360.073 {94}	377.433 {89}						
Units	Cts/S	Cts/S	Cts/S						
Avg	2574.3	38489.	2242.8						
Stddev	40.9	987.	3.5						
%RSD	1.5875	2.5632	.15407						

#1	2545.4	39187.	2245.3						
#2	2603.2	37792.	2240.4						

Sample Name: 280-82566-A-7-C SD@5 Acquired: 5/18/2016 16:04:24 Type: Unk
Method: 6500_025(v6) Mode: CONC Corr. Factor: 1.000000
User: CRHOADES Prep Date: Custom ID2: Custom ID3:
Comment: 325684 SOIL 6010C (B) Q5

Elem	Ag3280	Al3092	As1890	B_2089	Ba4554	Be3130	Bi2230	Ca3179	Cd2288
Line	328.068 {103}	309.271 {109}	189.042 {478}	208.959 {461}	455.403 { 74}	313.042 {108}	223.061 {451}	317.933 {106}	228.802 {447}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	-.00067	16.508	.00633	.01459	.39190	.00123	-.00051	397.84	.00080
Stddev	.00031	.090	.00177	.00105	.00130	.00019	.00324	.89	.00033
%RSD	46.524	.54707	27.922	7.1983	.33069	15.487	630.47	.22257	41.448

#1	-.00045	16.445	.00758	.01385	.39098	.00110	-.00280	397.21	.00103
#2	-.00089	16.572	.00508	.01534	.39282	.00137	.00178	398.46	.00056

Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Elem	Co2286	Cr2055	Cu3247	Fe2599	K_7664	Li6707	Mg2790	Mn2576	Mo2020
Line	228.616 {447}	205.560 {464}	324.754 {104}	259.940 {130}	766.490 { 44}	670.784 { 50}	279.079 {121}2	257.610 {131}	202.030 {467}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.00784	.02584	.01236	20.504	2.8843	.02343	12.090	.62625	.00093
Stddev	.00023	.00047	.00116	.055	.0777	.00688	.001	.00059	.00032
%RSD	2.9566	1.8100	9.3508	.26951	2.6948	29.371	.00927	.09488	34.583

#1	.00801	.02617	.01155	20.465	2.8294	.01857	12.091	.62667	.00070
#2	.00768	.02551	.01318	20.543	2.9393	.02830	12.089	.62583	.00115

Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Elem	Na5895	Ni2316	P_1782	Pb2203	S_1820	Sb2068	Se1960	Si2881	SiO2
Line	589.592 { 57}	231.604 {446}	178.284 {489}	220.353 {453}	182.034 {485}	206.833 {463}	196.090 {472}	288.158 {117}	288.158 {117}2
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.54882	.02267	.54241	.01397	2.2654	.00219	.01089	2.0179	4.3183
Stddev	.01394	.00077	.01745	.00252	.0972	.00057	.00414	.0238	.0509
%RSD	2.5399	3.3750	3.2172	18.050	4.2882	26.007	38.035	1.1796	1.1796

#1	.55868	.02321	.55475	.01575	2.3341	.00259	.01381	2.0011	4.2823
#2	.53897	.02213	.53007	.01219	2.1967	.00178	.00796	2.0347	4.3543

Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Elem	Sn1899	Sr4077	Th2837	Ti3349	Ti1908	U_3701	V_2924	Zn2062	Zr3391
Line	189.989 {477}	407.771 { 83}	283.730 {119}	334.904 {101}	190.856 {477}	370.152 { 91}	292.402 {115}	206.200 {163}	339.198 { 99}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.00034	.42692	.00624	.31461	-.00178	W -.08007	.04927	.06157	.01039
Stddev	.00015	.00178	.00069	.00577	.00365	.09610	.00073	.00016	.00319
%RSD	43.318	.41686	10.987	1.8353	205.58	120.02	1.4826	.26650	30.744

#1	.00045	.42566	.00673	.31870	.00081	-.14803	.04876	.06168	.01264
#2	.00024	.42818	.00576	.31053	-.00436	-.01212	.04979	.06145	.00813

Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Warn	Chk Pass	Chk Pass	Chk Pass
High Limit						45.000			
Low Limit						-.05000			

Int. Std.	Y_2243	Y_3600	Y_3774
Line	224.306 {450}	360.073 { 94}	377.433 { 89}
Units	Cts/S	Cts/S	Cts/S
Avg	2581.5	39539.	2177.7
Stddev	6.2	219.	2.7
%RSD	.23869	.55387	.12222

#1	2577.1	39694.	2179.6
#2	2585.8	39384.	2175.9

Sample Name: 280-82566-A-7-D MS Acquired: 5/18/2016 16:07:02 Type: Unk
Method: 6500_025(v6) Mode: CONC Corr. Factor: 1.000000
User: CRHOADES Prep Date: Custom ID2: Custom ID3:
Comment: 325684 SOIL 6010C (B) Q5

Elem	Ag3280	Al3092	As1890	B_2089	Ba4554	Be3130	Bi2230	Ca3179	Cd2288
Line	328.068 {103}	309.271 {109}	189.042 {478}	208.959 {461}	455.403 {74}	313.042 {108}	223.061 {451}	317.933 {106}	228.802 {447}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.04736	113.79	1.0178	.97493	2.5424	.04729	F 1.9591	F 1553.9	.09616
Stddev	.00003	.40	.0151	.00455	.0099	.00031	.0063	17.4	.00029
%RSD	.06164	.35043	1.4849	.46697	.38785	.65266	.32324	1.1196	.30676

#1	.04734	113.51	1.0071	.97171	2.5355	.04707	1.9546	1541.6	.09595
#2	.04738	114.07	1.0285	.97815	2.5494	.04751	1.9635	1566.2	.09636

Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Fail	Chk Fail	Chk Pass
High Limit							.10000	1000.0	
Low Limit							-.10000	-.10000	

Elem	Co2286	Cr2055	Cu3247	Fe2714	K_7664	Li6707	Mg2790	Mn2576	Mo2020
Line	228.616 {447}	205.560 {464}	324.754 {104}	271.441 {124}	766.490 {44}	670.784 {50}	279.079 {121}2	257.610 {131}	202.030 {467}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.45729	.30733	.29446	93.487	69.785	1.0336	98.907	2.6302	.95592
Stddev	.00153	.00151	.00008	.019	.347	.0002	.206	.0025	.00076
%RSD	.33555	.49031	.02734	.02010	.49714	.01631	.20877	.09400	.07958

#1	.45838	.30626	.29440	93.500	69.539	1.0335	98.761	2.6285	.95646
#2	.45621	.30839	.29451	93.473	70.030	1.0337	99.053	2.6319	.95538

Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Elem	Na8183	Ni2316	P_1782	Pb2203	S_1820	Sb2068	Se1960	Si2881	SiO2
Line	818.326 {41}	231.604 {446}	178.284 {489}	220.353 {453}	182.034 {485}	206.833 {463}	196.090 {472}	288.158 {117}	288.158 {117}2
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	51.339	.50750	W 11.843	.48524	13.440	.29896	1.9708	11.583	24.788
Stddev	1.565	.00178	.078	.00102	.025	.00261	.0222	.057	.122
%RSD	3.0481	.35059	.65600	.21027	.18336	.87390	1.1274	.49225	.49225

#1	50.232	.50624	11.897	.48596	13.423	.30081	1.9865	11.543	24.702
#2	52.445	.50876	11.788	.48452	13.457	.29711	1.9551	11.624	24.874

Check ?	Chk Pass	Chk Pass	Chk Warn	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit			2.0000						
Low Limit			-1.0000						

Elem	Sn1899	Sr4077	Th2837	Ti3349	Ti1908	U_3701	V_2924	Zn2062	Zr3391
Line	189.989 {477}	407.771 {83}	283.730 {119}	334.904 {101}	190.856 {477}	370.152 {91}	292.402 {115}	206.200 {163}	339.198 {99}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	1.7586	2.6834	.92970	3.0568	1.5201	1.8977	.67949	.65935	.55710
Stddev	.0268	.0038	.00046	.0052	.0797	.0159	.00223	.00334	.00229
%RSD	1.5237	.14263	.04949	.17100	5.2460	.83672	.32770	.50628	.41133

#1	1.7776	2.6807	.93003	3.0531	1.5765	1.8865	.67791	.65699	.55548
#2	1.7397	2.6861	.92938	3.0605	1.4637	1.9089	.68106	.66171	.55872

Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Int. Std.	Y_2243	Y_3600	Y_3774
Line	224.306 {450}	360.073 {94}	377.433 {89}
Units	Cts/S	Cts/S	Cts/S
Avg	2518.0	38631.	2268.0
Stddev	17.8	229.	7.8
%RSD	.70781	.59210	.34465

#1	2530.6	38470.	2273.6
#2	2505.4	38793.	2262.5

Sample Name: 280-82566-A-7-E MSD Acquired: 5/18/2016 16:09:53 Type: Unk
Method: 6500_025(v6) Mode: CONC Corr. Factor: 1.000000
User: CRHOADES Prep Date: Custom ID2: Custom ID3:
Comment: 325684 SOIL 6010C (B) Q5

Elem	Ag3280	Al3092	As1890	B_2089	Ba4554	Be3130	Bi2230	Ca3179	Cd2288
Line	328.068 {103}	309.271 {109}	189.042 {478}	208.959 {461}	455.403 {74}	313.042 {108}	223.061 {451}	317.933 {106}	228.802 {447}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.04664	95.049	.99343	.92759	2.5420	.04556	F 1.9068	F 2132.8	.09495
Stddev	.00042	.270	.00564	.00223	.0030	.00022	.0008	4.9	.00038
%RSD	.89254	.28378	.56805	.24080	.11922	.47321	.04456	.23085	.40539

#1	.04693	94.859	.98944	.92601	2.5441	.04541	1.9074	2129.3	.09468
#2	.04634	95.240	.99742	.92917	2.5398	.04571	1.9062	2136.3	.09522

Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Fail	Chk Fail	Chk Pass
High Limit							.10000	1000.0	
Low Limit							-.10000	-.10000	

Elem	Co2286	Cr2055	Cu3247	Fe2714	K_7664	Li6707	Mg2790	Mn2576	Mo2020
Line	228.616 {447}	205.560 {464}	324.754 {104}	271.441 {124}	766.490 {44}	670.784 {50}	279.079 {121}2	257.610 {131}	202.030 {467}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.43961	.29279	.27881	95.706	65.761	1.0168	88.870	2.9877	.94290
Stddev	.00051	.00016	.00005	.296	.119	.0013	.224	.0049	.00393
%RSD	.11558	.05469	.01683	.30973	.18057	.13071	.25170	.16485	.41641

#1	.43996	.29290	.27884	95.496	65.677	1.0178	88.712	2.9842	.94568
#2	.43925	.29268	.27878	95.915	65.845	1.0159	89.028	2.9912	.94012

Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Elem	Na8183	Ni2316	P_1782	Pb2203	S_1820	Sb2068	Se1960	Si2881	SiO2
Line	818.326 {41}	231.604 {446}	178.284 {489}	220.353 {453}	182.034 {485}	206.833 {463}	196.090 {472}	288.158 {117}	288.158 {117}2
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	50.721	.49157	W 12.006	.46565	8.9192	.33327	1.9498	10.487	22.442
Stddev	.593	.00017	.016	.00351	.0008	.00441	.0235	.015	.033
%RSD	1.1682	.03473	.13064	.75417	.00888	1.3224	1.2033	.14641	.14641

#1	51.140	.49145	11.995	.46814	8.9187	.33016	1.9332	10.498	22.465
#2	50.302	.49169	12.017	.46317	8.9198	.33639	1.9664	10.476	22.419

Check ?	Chk Pass	Chk Pass	Chk Warn	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit			2.0000						
Low Limit			-1.0000						

Elem	Sn1899	Sr4077	Th2837	Ti3349	Ti1908	U_3701	V_2924	Zn2062	Zr3391
Line	189.989 {477}	407.771 {83}	283.730 {119}	334.904 {101}	190.856 {477}	370.152 {91}	292.402 {115}	206.200 {163}	339.198 {99}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	1.7433	2.6343	.90920	2.6365	1.5317	1.8930	.63134	.65411	.53312
Stddev	.0058	.0059	.00374	.0046	.0475	.0613	.00254	.00129	.00248
%RSD	.33294	.22337	.41097	.17323	3.1026	3.2380	.40185	.19787	.46442

#1	1.7392	2.6384	.90655	2.6333	1.5653	1.9363	.62955	.65502	.53137
#2	1.7474	2.6301	.91184	2.6397	1.4981	1.8496	.63314	.65319	.53487

Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Int. Std.	Y_2243	Y_3600	Y_3774
Line	224.306 {450}	360.073 {94}	377.433 {89}
Units	Cts/S	Cts/S	Cts/S
Avg	2467.2	38051.	2202.7
Stddev	4.2	464.	18.3
%RSD	.17045	1.2183	.83167

#1	2464.2	37723.	2215.7
#2	2470.2	38379.	2189.8

Sample Name: 280-82566-A-7-C PDS Acquired: 5/18/2016 16:12:44 Type: Unk
Method: 6500_025(v6) Mode: CONC Corr. Factor: 1.000000
User: CRHOADES Prep Date: Custom ID2: Custom ID3:
Comment: 325684 SOIL 6010C (B) Q5

Elem	Ag3280	Al3092	As1890	B_2089	Ba4554	Be3130	Bi2230	Ca3179	Cd2288
Line	328.068 {103}	309.271 {109}	189.042 {478}	208.959 {461}	455.403 {74}	313.042 {108}	223.061 {451}	317.933 {106}	228.802 {447}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.04819	79.044	.22509	.15145	1.9458	.04776	-.00092	F 1822.1	.05195
Stddev	.00052	.037	.00440	.00236	.0040	.00033	.00095	6.3	.00051
%RSD	1.0830	.04704	1.9546	1.5615	.20295	.68523	104.09	.34467	.97957

#1	.04856	79.070	.22198	.15313	1.9486	.04799	-.00159	1817.6	.05231
#2	.04782	79.018	.22820	.14978	1.9430	.04753	-.00024	1826.5	.05159

Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Fail	Chk Pass
High Limit								1000.0	
Low Limit								-.10000	

Elem	Co2286	Cr2055	Cu3247	Fe2714	K_7664	Li6707	Mg2790	Mn2576	Mo2020
Line	228.616 {447}	205.560 {464}	324.754 {104}	271.441 {124}	766.490 {44}	670.784 {50}	279.079 {121}2	257.610 {131}	202.030 {467}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.07561	.15629	.10773	98.972	34.211	.20628	70.961	2.9123	.05901
Stddev	.00028	.00021	.00075	.900	.085	.00535	.105	.0004	.00127
%RSD	.36799	.13570	.69679	.90974	.24846	2.5951	.14779	.01529	2.1440

#1	.07542	.15644	.10826	99.608	34.271	.21007	70.887	2.9120	.05812
#2	.07581	.15614	.10719	98.335	34.151	.20250	71.035	2.9126	.05991

Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Elem	Na8183	Ni2316	P_1782	Pb2203	S_1820	Sb2068	Se1960	Si2881	SiO2
Line	818.326 {41}	231.604 {446}	178.284 {489}	220.353 {453}	182.034 {485}	206.833 {463}	196.090 {472}	288.158 {117}	288.158 {117}2
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	23.340	.13713	W 4.3332	.14583	10.470	.09178	.22026	13.660	29.232
Stddev	.158	.00027	.0187	.00281	.017	.00173	.00929	.093	.199
%RSD	.67637	.19625	.43067	1.9258	.16346	1.8900	4.2178	.67941	.67941

#1	23.452	.13694	4.3464	.14384	10.458	.09055	.22682	13.725	29.372
#2	23.228	.13732	4.3200	.14782	10.482	.09300	.21369	13.594	29.091

Check ?	Chk Pass	Chk Pass	Chk Warn	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit			2.0000						
Low Limit			-1.0000						

Elem	Sn1899	Sr4077	Th2837	Ti3349	Ti1908	U_3701	V_2924	Zn2062	Zr3391
Line	189.989 {477}	407.771 {83}	283.730 {119}	334.904 {101}	190.856 {477}	370.152 {91}	292.402 {115}	206.200 {163}	339.198 {99}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.08908	2.0707	.20522	1.4950	.14414	.40533	.27268	.43789	.10972
Stddev	.00107	.0069	.00108	.0008	.00558	.05709	.00119	.00455	.00173
%RSD	1.2037	.33389	.52521	.05466	3.8687	14.086	.43722	1.0394	1.5766

#1	.08984	2.0756	.20598	1.4944	.14809	.44570	.27184	.44111	.10850
#2	.08833	2.0658	.20445	1.4956	.14020	.36496	.27352	.43467	.11094

Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Int. Std.	Y_2243	Y_3600	Y_3774						
Line	224.306 {450}	360.073 {94}	377.433 {89}						
Units	Cts/S	Cts/S	Cts/S						
Avg	2662.4	38957.	2244.8						
Stddev	44.6	15.	16.3						
%RSD	1.6737	.03815	.72815						

#1	2630.9	38968.	2233.2						
#2	2693.9	38947.	2256.3						

Sample Name: CCVH-3894253 Acquired: 5/18/2016 16:15:40 Type: QC
Method: 6500_025(v6) Mode: CONC Corr. Factor: 1.000000
User: CRHOADES Prep Date: Custom ID2: Custom ID3:
Comment:

Elem	Ag3280	Al3092	As1890	B_2089	Ba4554	Be3130	Bi2230	Ca3179	Cd2288	Co2286	Cr2055
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	-.00036	52.510	-.00347	.00406	-.00081	.00054	W 1.0704	.13201	-.00046	-.00123	.00037
Stddev	.00029	.454	.00241	.00027	.00008	.00024	.0082	.01556	.00003	.00055	.00001
%RSD	79.230	.86482	69.486	6.6102	9.5787	44.963	.76709	11.791	5.7167	44.821	2.8509

#1	-.00016	52.831	-.00177	.00387	-.00086	.00037	1.0646	.14302	-.00048	-.00084	.00037
#2	-.00057	52.189	-.00518	.00425	-.00075	.00071	1.0762	.12100	-.00044	-.00163	.00038

Check ?	None	Chk Pass	None	None	None	None	Chk Warn	None	None	None	None
Value							1.0000				
Range							5.0000%				

Elem	Cu3247	Fe2714	K_7664	Li6707	Mg2790	Mn2576	Mo2020	Na8183	Ni2316	P_1782	Pb2203
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.00017	50.190	.33122	-.00232	.02821	.00006	-.00037	257.16	.00111	.00599	-.00084
Stddev	.00028	.092	.09822	.00146	.00339	.00007	.00000	.01	.00065	.00122	.00073
%RSD	159.75	.18287	29.653	62.881	12.029	115.52	.58937	.00455	58.158	20.386	86.720

#1	-.00002	50.255	.26177	-.00129	.03061	.00001	-.00037	257.16	.00065	.00685	-.00135
#2	.00037	50.125	.40067	-.00335	.02581	.00012	-.00036	257.15	.00157	.00512	-.00032

Check ?	None	Chk Pass	None	None	None	None	None	Chk Pass	None	None	None
Value											
Range											

Elem	S_1820	Sb2068	Se1960	Si2881	SiO2	Sn1899	Sr4077	Th2837	Ti3349	Ti1908	U_3701
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	5.1548	-.01201	.00710	.01558	.03334	.00039	.00072	4.7867	.00463	-.00134	10.294
Stddev	.0991	.00185	.00119	.01916	.04100	.00177	.00024	.0135	.00037	.00117	.037
%RSD	1.9220	15.368	16.710	122.96	122.96	455.38	33.871	.28115	7.9397	87.068	.35690

#1	5.0848	-.01071	.00626	.02913	.06234	-.00086	.00089	4.7772	.00489	-.00217	10.268
#2	5.2249	-.01332	.00794	.00203	.00435	.00164	.00054	4.7962	.00437	-.00052	10.320

Check ?	Chk Pass	None	None	None	None	None	None	Chk Pass	None	None	Chk Pass
Value											
Range											

Elem	V_2924	Zn2062	Zr3391
Units	ppm	ppm	ppm
Avg	.00853	-.00104	.05985
Stddev	.00060	.00034	.00249
%RSD	7.0265	32.219	4.1592

#1	.00810	-.00128	.06161
#2	.00895	-.00080	.05809

Check ?	None	None	None
Value			
Range			

Int. Std.	Y_2243	Y_3600	Y_3774
Units	Cts/S	Cts/S	Cts/S
Avg	2638.9	40066.	2141.8
Stddev	41.8	85.	2.2
%RSD	1.5842	.21296	.10294

#1	2668.4	40006.	2140.2
#2	2609.3	40126.	2143.3

Sample Name: CCV-3894251 Acquired: 5/18/2016 16:18:17 Type: QC
Method: 6500_025(v6) Mode: CONC Corr. Factor: 1.000000
User: CRHOADES Prep Date: Custom ID2: Custom ID3:
Comment:

Elem	Ag3280	Al1670	As1890	B_2089	Ba4554	Be3130	Bi2230	Ca3179	Cd2288	Co2286	Cr2055
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.49733	.55076	1.0343	.50044	.50457	.47782	.00406	5.0962	.50388	.50975	.51101
Stddev	.00098	.00457	.0071	.00523	.00761	.00622	.00244	.0561	.00483	.00195	.00119
%RSD	.19625	.83014	.68911	1.0447	1.5089	1.3008	60.033	1.1010	.95920	.38255	.23243

#1	.49664	.54753	1.0292	.49675	.50995	.48222	.00578	5.1358	.50046	.50837	.51017
#2	.49802	.55399	1.0393	.50414	.49919	.47343	.00233	5.0565	.50730	.51113	.51185

Check ?	Chk Pass	Chk Warn	Chk Pass	Chk Pass	Chk Pass	Chk Pass	None	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Value		.50000									
Range		10.000%									

Elem	Cu3247	Fe2599	K_7664	Li6707	Mg2790	Mn2576	Mo2020	Na5895	Ni2316	P_1782	Pb2203
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.51817	2.4350	49.307	1.0111	19.496	.48437	.51433	5.1361	.50218	.98539	1.0203
Stddev	.00017	.0224	.564	.0044	.027	.00125	.00003	.0056	.00000	.00242	.0035
%RSD	.03265	.91859	1.1434	.43368	.13698	.25725	.00535	.10921	.00056	.24567	.34684

#1	.51805	2.4509	49.706	1.0080	19.477	.48349	.51435	5.1401	.50218	.98368	1.0178
#2	.51829	2.4192	48.908	1.0142	19.515	.48525	.51432	5.1322	.50218	.98710	1.0228

Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Value											
Range											

Elem	S_1820	Sb2068	Se1960	Si2881	SiO2	Sn1899	Sr4077	Th2837	Ti3349	Ti1908	U_3701
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	-.01625	.99967	1.0312	4.9632	10.621	1.0246	.49451	-.00004	.47743	1.0371	.00504
Stddev	.01230	.00714	.0013	.0441	.094	.0039	.00813	.00115	.00145	.0030	.03183
%RSD	75.723	.71448	.12504	.88815	.88815	.37711	1.6441	3230.2	.30466	.28796	631.92

#1	-.02494	.99462	1.0303	4.9944	10.688	1.0218	.50025	.00078	.47640	1.0392	-.01747
#2	-.00755	1.0047	1.0321	4.9320	10.555	1.0273	.48876	-.00085	.47845	1.0350	.02754

Check ?	None	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	None	Chk Pass	Chk Pass	None
Value											
Range											

Elem	V_2924	Zn2062	Zr3391
Units	ppm	ppm	ppm
Avg	.49541	.48060	.51392
Stddev	.00010	.00029	.00330
%RSD	.01940	.05970	.64300

#1	.49534	.48080	.51158
#2	.49547	.48040	.51626

Check ?	Chk Pass	Chk Pass	Chk Pass
Value			
Range			

Int. Std.	Y_2243	Y_3600	Y_3774
Units	Cts/S	Cts/S	Cts/S
Avg	2660.6	40733.	2160.1
Stddev	3.3	76.	1.3
%RSD	.12318	.18675	.06072

#1	2662.9	40787.	2161.0
#2	2658.3	40679.	2159.2

Sample Name: CCB Acquired: 5/18/2016 16:20:49 Type: QC
 Method: 6500_025(v6) Mode: CONC Corr. Factor: 1.000000
 User: CRHOADES Prep Date: Custom ID2: Custom ID3:
 Comment:

Elem	Ag3280	Al1670	As1890	B_2089	Ba4554	Be3130	Bi2230	Ca3179	Cd2288	Co2286	Cr2055
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	-.00020	.00000	-.00279	.00200	-.00060	.00021	.00423	-.01120	-.00012	-.00036	.00000
Stddev	.00017	.00062	.00609	.00013	.00008	.00006	.00152	.01230	.00028	.00009	.00032
%RSD	85.361	38626.	218.69	6.2827	13.290	26.686	36.035	109.81	232.12	24.141	12612.

#1	-.00008	-.00044	-.00709	.00191	-.00054	.00017	.00531	-.00250	-.00032	-.00043	-.00022
#2	-.00031	.00044	.00152	.00209	-.00066	.00025	.00315	-.01990	.00008	-.00030	.00023

Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit											
Low Limit											

Elem	Cu3247	Fe2599	K_7664	Li6707	Mg2790	Mn2576	Mo2020	Na5895	Ni2316	P_1782	Pb2203
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	-.00052	-.00569	.12557	.00095	.00456	.00000	.00193	.10120	-.00058	-.00213	-.00075
Stddev	.00036	.00649	.00971	.00157	.00412	.00006	.00033	.00600	.00043	.00220	.00132
%RSD	69.000	113.93	7.7337	166.31	90.516	1259.2	17.078	5.9237	73.651	103.24	175.76

#1	-.00078	-.01028	.11870	.00206	.00747	.00005	.00170	.09697	-.00088	-.00369	-.00169
#2	-.00027	-.00111	.13243	-.00017	.00164	-.00004	.00217	.10544	-.00028	-.00058	.00018

Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit											
Low Limit											

Elem	S_1820	Sb2068	Se1960	Si2881	SiO2	Sn1899	Sr4077	Th2837	Ti3349	Ti1908	U_3701
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	-.01202	W .00938	.00207	.02886	.06175	.00084	.00002	-.00049	.00050	.00340	.00130
Stddev	.00305	.00187	.00081	.01093	.02340	.00018	.00019	.00147	.00037	.00265	.04108
%RSD	25.341	19.895	38.887	37.886	37.886	21.778	854.53	297.88	75.517	78.135	3167.0

#1	-.00986	.01070	.00265	.03659	.07829	.00097	.00016	.00055	.00076	.00152	-.02775
#2	-.01417	.00806	.00150	.02113	.04521	.00071	-.00011	-.00153	.00023	.00527	.03034

Check ?	Chk Pass	Chk Warn	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit		.00100									
Low Limit		-.00100									

Elem	V_2924	Zn2062	Zr3391
Units	ppm	ppm	ppm
Avg	.00023	-.00130	.00097
Stddev	.00009	.00001	.00097
%RSD	36.804	.52053	100.36

#1	.00029	-.00131	.00165
#2	.00017	-.00130	.00028

Check ?	Chk Pass	Chk Pass	Chk Pass
High Limit			
Low Limit			

Int. Std.	Y_2243	Y_3600	Y_3774
Units	Cts/S	Cts/S	Cts/S
Avg	2672.5	41318.	2223.9
Stddev	7.8	78.	78.0
%RSD	.29105	.18957	3.5079

#1	2667.0	41373.	2168.7
#2	2678.0	41263.	2279.0

Sample Name: CCVL-3897520 Acquired: 5/18/2016 16:23:12 Type: QC

Method: 6500_025(v6) Mode: CONC Corr. Factor: 1.000000

User: CRHOADES Prep Date: Custom ID2: Custom ID3:

Comment:

Elem	Ag3280	Al1670	As1890	B_2089	Ba4554	Be3130	Bi2230	Ca3179	Cd2288	Co2286	Cr2055	Cu3247
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.00936	.11108	F .00525	.09866	.00921	.00112	.11331	.22436	.00498	.01000	.01032	.01466
Stddev	.00032	.00245	.00055	.00195	.00081	.00000	.00427	.00902	.00076	.00085	.00039	.00050
%RSD	3.4205	2.2016	10.449	1.9796	8.7913	.17449	3.7713	4.0199	15.290	8.5310	3.8215	3.4152

#1	.00913	.11281	.00486	.10004	.00863	.00112	.11633	.21798	.00551	.01060	.01060	.01430
#2	.00959	.10935	.00564	.09727	.00978	.00112	.11029	.23074	.00444	.00940	.01004	.01501

Check ?	Chk Pass	Chk Pass	Chk Fail	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Value			.01500									
Range			-30.000%									

Elem	Fe2599	K_7664	Li6707	Mg2790	Mn2576	Mo2020	Na5895	Ni2316	P_1782	Pb2203	S_1820	Sb2068
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.09655	3.1136	.01147	.23003	.01081	.02065	1.0669	.04061	2.8676	.00955	-.00792	.02340
Stddev	.00048	.0873	.00273	.03723	.00116	.00044	.0135	.00125	.0759	.00072	.00997	.00122
%RSD	.49664	2.8045	23.804	16.186	10.693	2.1233	1.2639	3.0729	2.6479	7.5192	125.93	5.1956

#1	.09621	3.0519	.00954	.25636	.01162	.02096	1.0574	.04149	2.9213	.01005	-.01497	.02426
#2	.09688	3.1754	.01340	.20370	.00999	.02034	1.0765	.03972	2.8139	.00904	-.00087	.02254

Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	None	Chk Pass
Value												
Range												

Elem	Se1960	Si2881	SiO2	Sn1899	Sr4077	Th2837	Ti3349	Ti1908	U_3701	V_2924	Zn2062	Zr3391
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	F .02190	.47235	1.0108	.10454	.01025	.01675	.01056	.01677	.05408	.01065	.01851	F .02033
Stddev	.00452	.00645	.0138	.00127	.00015	.00025	.00123	.00391	.02385	.00024	.00127	.00024
%RSD	20.624	1.3662	1.3662	1.2113	1.4176	1.4802	11.648	23.335	44.109	2.2353	6.8430	1.1891

#1	.02509	.47691	1.0206	.10544	.01015	.01658	.01143	.01954	.07095	.01082	.01941	.02016
#2	.01870	.46779	1.0011	.10365	.01035	.01693	.00969	.01401	.03721	.01048	.01762	.02050

Check ?	Chk Fail	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Fail
Value	.01500											.01500
Range	30.000%											30.000%

Int. Std.	Y_2243	Y_3600	Y_3774
Units	Cts/S	Cts/S	Cts/S
Avg	2703.6	41312.	2249.7
Stddev	61.6	2.	110.2
%RSD	2.2795	.00363	4.8968

#1	2660.0	41313.	2327.6
#2	2747.1	41311.	2171.8

Sample Name: MB 280-325380/1-A Acquired: 5/18/2016 16:25:53 Type: Unk

Method: 6500_025(v6) Mode: CONC Corr. Factor: 1.000000

User: CRHOADES Prep Date: 5/17 Custom ID2: Custom ID3:

Comment: 325380 6010C (Ca Fe) Q5

Elem	Ag3280	Al1670	As1890	B_2089	Ba4554	Be3130	Bi2230	Ca3179	Cd2288
Line	328.068 {103}	167.079 {502}	189.042 {478}	208.959 {461}	455.403 { 74}	313.042 {108}	223.061 {451}	317.933 {106}	228.802 {447}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	-0.00062	.00172	-0.00110	.00084	-0.00012	.00030	.00407	-0.00585	-0.00019
Stddev	.00007	.00016	.00348	.00013	.00100	.00006	.00121	.00172	.00037
%RSD	11.327	9.1831	317.38	15.184	810.48	18.963	29.787	29.360	193.66

#1	-0.00057	.00161	-0.00356	.00093	-0.00083	.00026	.00493	-0.00707	-0.00045
#2	-0.00067	.00183	.00137	.00075	.00058	.00034	.00321	-.00464	.00007

Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Elem	Co2286	Cr2055	Cu3247	Fe2599	K_7664	Li6707	Mg2790	Mn2576	Mo2020
Line	228.616 {447}	205.560 {464}	324.754 {104}	259.940 {130}	766.490 { 44}	670.784 { 50}	279.079 {121}2	257.610 {131}	202.030 {467}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	-0.00026	.00022	-0.00013	.01893	.09075	.00079	.00187	.00020	-0.00013
Stddev	.00012	.00027	.00032	.00373	.08536	.00275	.00161	.00007	.00047
%RSD	47.955	123.08	241.55	19.722	94.061	349.51	86.255	35.392	350.04

#1	-0.00034	.00003	.00009	.02157	.15110	.00273	.00073	.00015	.00020
#2	-0.00017	.00042	-0.00035	.01629	.03039	-.00116	.00301	.00025	-.00047

Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Elem	Na5895	Ni2316	P_1782	Pb2203	S_1820	Sb2068	Se1960	Si2881	SiO2
Line	589.592 { 57}	231.604 {446}	178.284 {489}	220.353 {453}	182.034 {485}	206.833 {463}	196.090 {472}	288.158 {117}	288.158 {117}2
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.09177	-0.00054	-0.00103	-0.00053	-0.01692	-0.00059	W .00802	-0.01101	-0.02357
Stddev	.00067	.00020	.00067	.00068	.00185	.00377	.00225	.07359	.15748
%RSD	.72710	37.133	64.885	127.86	10.941	634.17	28.011	668.24	668.24

#1	.09130	-0.00068	-0.00150	-0.00102	-0.01561	-0.00326	.00643	.04102	.08779
#2	.09224	-0.00040	-0.00056	-0.00005	-0.01822	.00207	.00961	-.06305	-.13492

Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Warn	Chk Pass	None
High Limit							.00750		
Low Limit							-.00750		

Elem	Sn1899	Sr4077	Th2837	Ti3349	Ti1908	U_3701	V_2924	Zn2062	Zr3391
Line	189.989 {477}	407.771 { 83}	283.730 {119}	334.904 {101}	190.856 {477}	370.152 { 91}	292.402 {115}	206.200 {163}	339.198 { 99}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.00047	.00030	.00023	.00012	-0.00269	.01603	.00003	.00009	.00406
Stddev	.00125	.00001	.00256	.00012	.00004	.04169	.00061	.00017	.00181
%RSD	263.27	4.4776	1126.8	101.38	1.6720	260.04	2069.3	186.92	44.592

#1	-0.00041	.00029	.00204	.00020	-0.00272	.04551	-0.00040	.00022	.00534
#2	.00136	.00031	-0.00158	.00003	-0.00266	-0.01345	.00046	-0.00003	.00278

Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Int. Std.	Y_2243	Y_3600	Y_3774
Line	224.306 {450}	360.073 { 94}	377.433 { 89}
Units	Cts/S	Cts/S	Cts/S
Avg	2721.2	42037.	2142.8
Stddev	54.4	192.	23.9
%RSD	1.9982	.45652	1.1175

#1	2759.6	42172.	2159.7
#2	2682.7	41901.	2125.8

Sample Name: LCS 280-325380/2-A Acquired: 5/18/2016 16:28:16 Type: Unk
Method: 6500_025(v6) Mode: CONC Corr. Factor: 1.000000
User: CRHOADES Prep Date: Custom ID2: Custom ID3:
Comment: 325380 6010C (Ca Fe) Q5

Elem	Ag3280	Al1670	As1890	B_2089	Ba4554	Be3130	Bi2230	Ca3179	Cd2288
Line	328.068 {103}	167.079 {502}	189.042 {478}	208.959 {461}	455.403 {74}	313.042 {108}	223.061 {451}	317.933 {106}	228.802 {447}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.04993	2.1356	1.0701	.99498	2.0467	.04874	2.1679	49.720	.09938
Stddev	.00038	.0056	.0042	.00024	.0121	.00036	.0099	.104	.00059
%RSD	.76785	.26208	.38989	.02404	.59046	.74106	.45736	.20875	.59501

#1	.05020	2.1395	1.0730	.99515	2.0382	.04848	2.1749	49.646	.09980
#2	.04966	2.1316	1.0671	.99481	2.0552	.04899	2.1609	49.793	.09897

Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	None	Chk Pass	Chk Pass
High Limit									
Low Limit									

Elem	Co2286	Cr2055	Cu3247	Fe2599	K_7664	Li6707	Mg2790	Mn2576	Mo2020
Line	228.616 {447}	205.560 {464}	324.754 {104}	259.940 {130}	766.490 {44}	670.784 {50}	279.079 {121}2	257.610 {131}	202.030 {467}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.49318	.20244	.25983	.99176	50.074	1.0064	49.050	.47947	1.0579
Stddev	.00109	.00048	.00092	.00393	.104	.0057	.115	.00161	.0059
%RSD	.22133	.23659	.35435	.39606	.20739	.56196	.23528	.33611	.55846

#1	.49395	.20278	.25918	.98898	50.000	1.0024	49.131	.48061	1.0621
#2	.49241	.20210	.26048	.99453	50.147	1.0104	48.968	.47833	1.0537

Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Elem	Na8183	Ni2316	P_1782	Pb2203	S_1820	Sb2068	Se1960	Si2881	SiO2
Line	818.326 {41}	231.604 {446}	178.284 {489}	220.353 {453}	182.034 {485}	206.833 {463}	196.090 {472}	288.158 {117}	288.158 {117}2
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	54.219	.48710	10.100	.51075	2.0616	.51776	2.1502	9.7206	20.802
Stddev	.287	.00154	.021	.00048	.0098	.00304	.0113	.0116	.025
%RSD	.52945	.31601	.20671	.09381	.47404	.58768	.52356	.11941	.11941

#1	54.422	.48819	10.115	.51042	2.0686	.51991	2.1582	9.7288	20.820
#2	54.016	.48601	10.086	.51109	2.0547	.51561	2.1422	9.7124	20.784

Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	None	Chk Pass	Chk Pass	Chk Pass	None
High Limit									
Low Limit									

Elem	Sn1899	Sr4077	Th2837	Ti3349	Ti1908	U_3701	V_2924	Zn2062	Zr3391
Line	189.989 {477}	407.771 {83}	283.730 {119}	334.904 {101}	190.856 {477}	370.152 {91}	292.402 {115}	206.200 {163}	339.198 {99}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	2.0104	.98383	.98107	.96214	1.9769	2.1148	.49051	.47535	.52985
Stddev	.0055	.00420	.00329	.00387	.0535	.0350	.00049	.00187	.00696
%RSD	.27173	.42696	.33582	.40224	2.7071	1.6565	.09935	.39352	1.3139

#1	2.0143	.98086	.98340	.96488	2.0148	2.0900	.49016	.47402	.52493
#2	2.0066	.98680	.97874	.95940	1.9391	2.1395	.49085	.47667	.53477

Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Int. Std.	Y_2243	Y_3600	Y_3774
Line	224.306 {450}	360.073 {94}	377.433 {89}
Units	Cts/S	Cts/S	Cts/S
Avg	2619.0	40215.	2172.1
Stddev	17.2	251.	8.5
%RSD	.65510	.62344	.39002

#1	2606.8	40038.	2178.1
#2	2631.1	40392.	2166.1

Sample Name: 320-18794-E-1-A Acquired: 5/18/2016 16:30:43 Type: Unk

Method: 6500_025(v6) Mode: CONC Corr. Factor: 1.000000

User: CRHOADES Prep Date: Custom ID2: Custom ID3:

Comment: 325380 6010C (Ca Fe) Q5

Elem	Ag3280	Al1670	As1890	B_2089	Ba4554	Be3130	Bi2230	Ca3179	Cd2288
Line	328.068 {103}	167.079 {502}	189.042 {478}	208.959 {461}	455.403 { 74}	313.042 {108}	223.061 {451}	317.933 {106}	228.802 {447}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	-.00135	.00459	.00421	.07292	.03919	.00017	.00260	45.000	-.00022
Stddev	.00048	.00070	.00302	.00370	.00117	.00004	.00389	.105	.00024
%RSD	35.932	15.158	71.671	5.0730	2.9782	20.228	149.60	.23372	109.47

#1	-.00169	.00410	.00635	.07553	.03837	.00015	.00536	44.926	-.00039
#2	-.00101	.00509	.00208	.07030	.04002	.00020	-.00015	45.075	-.00005

Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Elem	Co2286	Cr2055	Cu3247	Fe2599	K_7664	Li6707	Mg2790	Mn2576	Mo2020
Line	228.616 {447}	205.560 {464}	324.754 {104}	259.940 {130}	766.490 { 44}	670.784 { 50}	279.079 {121}2	257.610 {131}	202.030 {467}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	-.00029	.00069	.00158	5.5310	5.3631	.01022	7.6754	.19002	.00344
Stddev	.00026	.00050	.00065	.0067	.0522	.00199	.0175	.00019	.00085
%RSD	89.600	72.108	40.994	.12201	.97303	19.459	.22808	.10009	24.861

#1	-.00047	.00105	.00112	5.5262	5.3262	.01163	7.6630	.18989	.00283
#2	-.00011	.00034	.00204	5.5357	5.4000	.00882	7.6878	.19015	.00404

Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Elem	Na8183	Ni2316	P_1782	Pb2203	S_1820	Sb2068	Se1960	Si2881	SiO2
Line	818.326 { 41}	231.604 {446}	178.284 {489}	220.353 {453}	182.034 {485}	206.833 {463}	196.090 {472}	288.158 {117}	288.158 {117}2
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	34.993	.00285	.46909	.00032	.70659	.00486	.01425	17.155	36.711
Stddev	.247	.00005	.00548	.00114	.00879	.00414	.00472	.031	.066
%RSD	.70714	1.6950	1.1690	358.51	1.2442	85.093	33.093	.17926	.17926

#1	34.818	.00288	.47297	.00112	.71281	.00194	.01758	17.133	36.665
#2	35.168	.00282	.46521	-.00049	.70038	.00779	.01092	17.177	36.758

Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Elem	Sn1899	Sr4077	Th2837	Ti3349	Ti1908	U_3701	V_2924	Zn2062	Zr3391
Line	189.989 {477}	407.771 { 83}	283.730 {119}	334.904 {101}	190.856 {477}	370.152 { 91}	292.402 {115}	206.200 {163}	339.198 { 99}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.00094	.31024	.00079	.00008	.02254	-.03112	.00094	.00024	-.00145
Stddev	.00058	.00012	.00325	.00041	.00599	.00777	.00040	.00030	.00069
%RSD	61.470	.03960	409.48	524.59	26.589	24.971	42.714	124.12	47.464

#1	.00135	.31032	.00309	-.00021	.01830	-.03662	.00123	.00003	-.00096
#2	.00053	.31015	-.00151	.00037	.02678	-.02563	.00066	.00046	-.00194

Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Int. Std.	Y_2243	Y_3600	Y_3774
Line	224.306 {450}	360.073 { 94}	377.433 { 89}
Units	Cts/S	Cts/S	Cts/S
Avg	2653.1	41521.	2085.6
Stddev	6.9	368.	11.2
%RSD	.26092	.88557	.53497

#1	2658.0	41261.	2077.7
#2	2648.2	41781.	2093.5

Elem	Ag3280	Al1670	As1890	B_2089	Ba4554	Be3130	Bi2230	Ca3179	Cd2288
Line	328.068 {103}	167.079 {502}	189.042 {478}	208.959 {461}	455.403 { 74}	313.042 {108}	223.061 {451}	317.933 {106}	228.802 {447}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	-0.00077	.10642	-0.00078	.03248	.01740	.00007	-0.00122	11.285	-0.00025
Stddev	.00048	.00139	.00011	.00257	.00012	.00011	.00360	.001	.00010
%RSD	62.305	1.3060	13.708	7.9007	.66925	164.06	294.82	.00857	42.256

#1	-.00111	.10740	-.00070	.03429	.01731	.00014	.00133	11.285	-.00017
#2	-.00043	.10544	-.00085	.03066	.01748	-.00001	-.00377	11.284	-.00032

Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Elem	Co2286	Cr2055	Cu3247	Fe2599	K_7664	Li6707	Mg2790	Mn2576	Mo2020
Line	228.616 {447}	205.560 {464}	324.754 {104}	259.940 {130}	766.490 { 44}	670.784 { 50}	279.079 {121}2	257.610 {131}	202.030 {467}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	-0.00002	.00044	1.1924	1.1239	4.9088	.00356	2.0569	.51924	.00084
Stddev	.00005	.00007	.0004	.0075	.0191	.00065	.0047	.00107	.00023
%RSD	309.20	16.875	.03056	.66650	.38855	18.292	.22703	.20562	27.632

#1	-.00006	.00039	1.1921	1.1186	4.9223	.00310	2.0536	.51848	.00067
#2	.00002	.00049	1.1927	1.1292	4.8954	.00402	2.0602	.51999	.00100

Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Elem	Na8183	Ni2316	P_1782	Pb2203	S_1820	Sb2068	Se1960	Si2881	SiO2
Line	818.326 { 41}	231.604 {446}	178.284 {489}	220.353 {453}	182.034 {485}	206.833 {463}	196.090 {472}	288.158 {117}	288.158 {117}2
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	54.290	-0.00042	1.7109	.00128	2.7680	.00374	-0.00129	3.9121	8.3719
Stddev	.789	.00007	.0403	.00134	.0622	.00010	.00377	.0387	.0829
%RSD	1.4528	17.176	2.3575	104.64	2.2467	2.7682	292.34	.99036	.99036

#1	53.732	-.00037	1.7395	.00033	2.8119	.00367	.00138	3.9395	8.4305
#2	54.848	-.00047	1.6824	.00223	2.7240	.00381	-.00395	3.8847	8.3133

Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Elem	Sn1899	Sr4077	Th2837	Ti3349	Ti1908	U_3701	V_2924	Zn2062	Zr3391
Line	189.989 {477}	407.771 { 83}	283.730 {119}	334.904 {101}	190.856 {477}	370.152 { 91}	292.402 {115}	206.200 {163}	339.198 { 99}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.00044	.07048	.00309	.00035	.00140	-0.04528	.00115	.00458	.00123
Stddev	.00080	.00022	.00209	.00005	.00312	.03732	.00005	.00016	.00691
%RSD	181.24	.31013	67.683	12.934	222.80	82.402	4.6207	3.3894	560.54

#1	.00100	.07063	.00161	.00032	-.00081	-.01890	.00119	.00447	.00611
#2	-.00012	.07032	.00456	.00038	.00361	-.07167	.00112	.00469	-.00365

Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Int. Std.	Y_2243	Y_3600	Y_3774
Line	224.306 {450}	360.073 { 94}	377.433 { 89}
Units	Cts/S	Cts/S	Cts/S
Avg	2671.8	41967.	2218.4
Stddev	6.6	223.	35.1
%RSD	.24604	.53189	1.5826

#1	2667.2	42125.	2193.5
#2	2676.5	41810.	2243.2

Sample Name: 320-18796-D-2-A Acquired: 5/18/2016 16:36:01 Type: Unk

Method: 6500_025(v6) Mode: CONC Corr. Factor: 1.000000

User: CRHOADES Prep Date: Custom ID2: Custom ID3:

Comment: 325380 6010C (Ca Fe) Q5

Elem	Ag3280	Al1670	As1890	B_2089	Ba4554	Be3130	Bi2230	Ca3179	Cd2288
Line	328.068 {103}	167.079 {502}	189.042 {478}	208.959 {461}	455.403 {74}	313.042 {108}	223.061 {451}	317.933 {106}	228.802 {447}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	-0.00037	.01000	.00336	.05850	.00304	.00006	.00166	20.384	-0.00024
Stddev	.00040	.00052	.00030	.00013	.00030	.00004	.00099	.001	.00003
%RSD	110.01	5.1632	8.9932	.22013	10.037	59.409	59.848	.00408	13.268

#1	-0.00065	.01036	.00357	.05859	.00282	.00009	.00236	20.385	-0.00026
#2	-0.00008	.00963	.00314	.05841	.00325	.00004	.00096	20.384	-0.00022

Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Elem	Co2286	Cr2055	Cu3247	Fe2599	K_7664	Li6707	Mg2790	Mn2576	Mo2020
Line	228.616 {447}	205.560 {464}	324.754 {104}	259.940 {130}	766.490 {44}	670.784 {50}	279.079 {121}2	257.610 {131}	202.030 {467}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	-0.00039	.00001	.05093	.35121	8.9158	.00465	3.7858	.15437	-0.00046
Stddev	.00006	.00029	.00061	.00283	.0025	.00394	.0009	.00001	.00040
%RSD	15.024	2466.4	1.1992	.80561	.02765	84.699	.02425	.00431	87.271

#1	-0.00043	-0.00019	.05050	.34921	8.9140	.00744	3.7852	.15437	-0.00074
#2	-0.00035	.00022	.05136	.35322	8.9175	.00187	3.7865	.15438	-0.00017

Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Elem	Na8183	Ni2316	P_1782	Pb2203	S_1820	Sb2068	Se1960	Si2881	SiO2
Line	818.326 {41}	231.604 {446}	178.284 {489}	220.353 {453}	182.034 {485}	206.833 {463}	196.090 {472}	288.158 {117}	288.158 {117}2
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	62.019	.00018	1.9012	-0.00081	2.1624	.00188	.00253	9.2472	19.789
Stddev	.154	.00037	.0193	.00183	.0270	.00056	.00313	.0655	.140
%RSD	.24906	200.64	1.0156	226.56	1.2505	29.990	123.77	.70873	.70873

#1	62.128	-0.00008	1.9149	.00049	2.1815	.00148	.00475	9.2935	19.888
#2	61.910	.00044	1.8876	-.00210	2.1433	.00228	.00032	9.2008	19.690

Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Elem	Sn1899	Sr4077	Th2837	Ti3349	Ti1908	U_3701	V_2924	Zn2062	Zr3391
Line	189.989 {477}	407.771 {83}	283.730 {119}	334.904 {101}	190.856 {477}	370.152 {91}	292.402 {115}	206.200 {163}	339.198 {99}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	-0.00136	.11894	.00196	-0.00057	-0.00269	-0.03865	.00075	.00886	-0.00233
Stddev	.00170	.00003	.00182	.00014	.00155	.01932	.00005	.00014	.00006
%RSD	124.54	.02271	92.938	25.350	57.570	49.978	7.0964	1.5682	2.5233

#1	-0.00016	.11896	.00325	-.00067	-.00159	-.05231	.00078	.00896	-.00229
#2	-0.00256	.11892	.00067	-.00047	-.00378	-.02499	.00071	.00876	-.00237

Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Int. Std.	Y_2243	Y_3600	Y_3774
Line	224.306 {450}	360.073 {94}	377.433 {89}
Units	Cts/S	Cts/S	Cts/S
Avg	2657.5	41771.	2211.4
Stddev	1.6	82.	9.5
%RSD	.06131	.19688	.42848

#1	2658.7	41830.	2204.7
#2	2656.4	41713.	2218.1

Elem	Ag3280	Al1670	As1890	B_2089	Ba4554	Be3130	Bi2230	Ca3179	Cd2288
Line	328.068 {103}	167.079 {502}	189.042 {478}	208.959 {461}	455.403 {74}	313.042 {108}	223.061 {451}	317.933 {106}	228.802 {447}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.00010	.09430	-.00030	.03419	.01664	.00019	.00111	13.490	-.00006
Stddev	.00107	.00088	.00339	.00020	.00004	.00044	.00333	.087	.00031
%RSD	1026.1	.93387	1136.6	.59634	.25128	232.38	299.80	.64255	486.85

#1	-.00065	.09367	-.00270	.03404	.01666	.00050	-.00124	13.429	.00015
#2	.00086	.09492	.00210	.03433	.01661	-.00012	.00346	13.551	-.00028

Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Elem	Co2286	Cr2055	Cu3247	Fe2599	K_7664	Li6707	Mg2790	Mn2576	Mo2020
Line	228.616 {447}	205.560 {464}	324.754 {104}	259.940 {130}	766.490 {44}	670.784 {50}	279.079 {121}2	257.610 {131}	202.030 {467}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	-.00021	.00051	1.7350	1.5232	5.8754	.00524	2.4537	.72617	-.00044
Stddev	.00026	.00007	.0040	.0036	.0027	.00037	.0046	.00012	.00044
%RSD	124.42	14.706	.23204	.23355	.04648	6.9641	.18534	.01600	101.47

#1	-.00003	.00046	1.7321	1.5207	5.8773	.00550	2.4505	.72625	-.00012
#2	-.00039	.00056	1.7378	1.5257	5.8734	.00499	2.4569	.72609	-.00075

Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Elem	Na8183	Ni2316	P_1782	Pb2203	S_1820	Sb2068	Se1960	Si2881	SiO2
Line	818.326 {41}	231.604 {446}	178.284 {489}	220.353 {453}	182.034 {485}	206.833 {463}	196.090 {472}	288.158 {117}	288.158 {117}2
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	55.667	.00058	W 2.2255	-.00194	2.7173	-.00018	-.00163	4.7615	10.190
Stddev	.070	.00066	.0361	.00005	.0403	.00126	.00133	.0189	.041
%RSD	.12630	114.76	1.6234	2.6924	1.4815	718.06	81.796	.39771	.39771

#1	55.717	.00105	2.1999	-.00190	2.6889	.00072	-.00069	4.7482	10.161
#2	55.618	.00011	2.2510	-.00198	2.7458	-.00107	-.00257	4.7749	10.218

Check ?	Chk Pass	Chk Pass	Chk Warn	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit			2.0000						
Low Limit			-1.0000						

Elem	Sn1899	Sr4077	Th2837	Ti3349	Ti1908	U_3701	V_2924	Zn2062	Zr3391
Line	189.989 {477}	407.771 {83}	283.730 {119}	334.904 {101}	190.856 {477}	370.152 {91}	292.402 {115}	206.200 {163}	339.198 {99}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	-.00011	.08351	.00187	.00105	-.00280	.00634	.00130	.00579	-.00218
Stddev	.00013	.00056	.00148	.00012	.00610	.02022	.00019	.00064	.00074
%RSD	117.47	.66733	79.043	11.135	217.97	318.79	14.878	11.133	33.960

#1	-.00020	.08312	.00291	.00097	-.00712	-.00795	.00117	.00534	-.00270
#2	-.00002	.08391	.00082	.00114	.00152	.02064	.00144	.00625	-.00165

Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Int. Std.	Y_2243	Y_3600	Y_3774						
Line	224.306 {450}	360.073 {94}	377.433 {89}						
Units	Cts/S	Cts/S	Cts/S						
Avg	2729.5	42331.	2233.1						
Stddev	40.4	66.	27.8						
%RSD	1.4799	.15513	1.2442						

#1	2758.0	42377.	2252.8						
#2	2700.9	42284.	2213.5						

Sample Name: 320-18796-D-4-A Acquired: 5/18/2016 16:41:20 Type: Unk

Method: 6500_025(v6) Mode: CONC Corr. Factor: 1.000000

User: CRHOADES Prep Date: Custom ID2: Custom ID3:

Comment: 325380 6010C (Ca Fe) Q5

Elem	Ag3280	Al1670	As1890	B_2089	Ba4554	Be3130	Bi2230	Ca3179	Cd2288
Line	328.068 {103}	167.079 {502}	189.042 {478}	208.959 {461}	455.403 { 74}	313.042 {108}	223.061 {451}	317.933 {106}	228.802 {447}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	-0.00053	.10207	-0.00650	.03156	.01747	.00017	-0.00233	12.482	-0.00026
Stddev	.00008	.00032	.00506	.00002	.00084	.00000	.00118	.066	.00031
%RSD	15.405	.31440	77.873	.07055	4.8124	2.5878	50.561	.52827	118.76

#1	-0.00047	.10184	-0.01007	.03158	.01688	.00016	-0.00317	12.435	-0.00048
#2	-0.00059	.10230	-0.00292	.03155	.01807	.00017	-0.00150	12.528	-0.00004

Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Elem	Co2286	Cr2055	Cu3247	Fe2599	K_7664	Li6707	Mg2790	Mn2576	Mo2020
Line	228.616 {447}	205.560 {464}	324.754 {104}	259.940 {130}	766.490 { 44}	670.784 { 50}	279.079 {121}2	257.610 {131}	202.030 {467}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.00020	-0.00013	1.7274	1.3737	5.5405	.00361	2.2489	.60560	-0.00027
Stddev	.00016	.00037	.0060	.0082	.0454	.00130	.0029	.00250	.00082
%RSD	82.328	287.20	.34889	.60010	.81885	36.028	.12851	.41355	297.15

#1	.00031	.00013	1.7316	1.3678	5.5085	.00269	2.2469	.60737	-0.00085
#2	.00008	-0.00039	1.7231	1.3795	5.5726	.00453	2.2509	.60383	.00030

Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Elem	Na8183	Ni2316	P_1782	Pb2203	S_1820	Sb2068	Se1960	Si2881	SiO2
Line	818.326 { 41}	231.604 {446}	178.284 {489}	220.353 {453}	182.034 {485}	206.833 {463}	196.090 {472}	288.158 {117}	288.158 {117}2
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	55.419	.00038	W 2.0231	-0.00031	2.9399	.00027	.00267	4.3584	9.3269
Stddev	1.066	.00012	.0390	.00264	.0590	.00392	.00881	.0114	.0244
%RSD	1.9231	32.637	1.9299	863.60	2.0053	1436.2	329.40	.26127	.26127

#1	54.665	.00029	1.9955	-0.00217	2.8982	-0.00250	.00890	4.3503	9.3097
#2	56.172	.00046	2.0507	.00156	2.9815	.00305	-0.00355	4.3664	9.3442

Check ?	Chk Pass	Chk Pass	Chk Warn	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit			2.0000						
Low Limit			-1.0000						

Elem	Sn1899	Sr4077	Th2837	Ti3349	Ti1908	U_3701	V_2924	Zn2062	Zr3391
Line	189.989 {477}	407.771 { 83}	283.730 {119}	334.904 {101}	190.856 {477}	370.152 { 91}	292.402 {115}	206.200 {163}	339.198 { 99}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.00056	.07719	.00129	.00000	-0.00340	-0.00506	.00161	.00616	.00006
Stddev	.00111	.00067	.00086	.00037	.00101	.01086	.00005	.00072	.00110
%RSD	200.26	.86920	67.007	34706.	29.791	214.66	2.9777	11.624	1867.3

#1	-0.00023	.07671	.00068	-0.00026	-0.00268	-0.01274	.00158	.00666	.00084
#2	.00134	.07766	.00190	.00026	-0.00411	.00262	.00165	.00565	-0.00072

Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Int. Std.	Y_2243	Y_3600	Y_3774
Line	224.306 {450}	360.073 { 94}	377.433 { 89}
Units	Cts/S	Cts/S	Cts/S
Avg	2684.8	42023.	2253.2
Stddev	7.8	271.	21.6
%RSD	.28881	.64375	.95856

#1	2690.3	41831.	2268.4
#2	2679.4	42214.	2237.9

Sample Name: 320-18796-D-5-A Acquired: 5/18/2016 16:43:59 Type: Unk

Method: 6500_025(v6) Mode: CONC Corr. Factor: 1.000000

User: CRHOADES Prep Date: Custom ID2: Custom ID3:

Comment: 325380 6010C (Ca Fe) Q5

Elem	Ag3280	Al1670	As1890	B_2089	Ba4554	Be3130	Bi2230	Ca3179	Cd2288
Line	328.068 {103}	167.079 {502}	189.042 {478}	208.959 {461}	455.403 {74}	313.042 {108}	223.061 {451}	317.933 {106}	228.802 {447}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	k .00379	k .61881	kW -.01322	.06187	2.4942	k .00338	kW .09832	99.516	k .00052
Stddev	.00374	.17103	.00042	.00381	.0405	.00022	.07889	1.715	.00011
%RSD	98.898	27.639	3.1555	6.1533	1.6239	6.4848	80.239	1.7237	20.441

#1	.00114	.49787	-.01293	.05918	2.5228	.00354	.04254	100.73	.00059
#2	k .00643	k .73974	k -.01352	.06456	2.4655	k .00323	k .15410	98.303	k .00044

Check ?	Chk Pass	Chk Pass	Chk Warn	Chk Pass	Chk Pass	Chk Pass	Chk Warn	Chk Pass	Chk Pass
High Limit			10.000				.05000		
Low Limit			-.01000				-.05000		

Elem	Co2286	Cr2055	Cu3247	Fe2714	K_7664	Li6707	Mg2790	Mn2576	Mo2020
Line	228.616 {447}	205.560 {464}	324.754 {104}	271.441 {124}	766.490 {44}	670.784 {50}	279.079 {121}2	257.610 {131}	202.030 {467}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	k -.00404	k .00748	k 1.5437	kW 635.12	6.2515	.01055	k 9.4167	^ *****	k -.00317
Stddev	.00025	.00025	.0028	.45	.0183	.00110	.0891	----	.00048
%RSD	6.1368	3.2937	.18286	.07160	.29275	10.397	.94659	----	15.117

#1	-.00422	.00766	1.5417	634.79	6.2386	.00978	9.4797	50.262	-.00350
#2	k -.00386	k .00731	k 1.5457	k 635.44	6.2645	.01133	k 9.3536	^ ----	k -.00283

Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Warn	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit				500.00					
Low Limit				40.000					

Elem	Na8183	Ni2316	P_1782	Pb2203	S_1820	Sb2068	Se1960	Si2881	SiO2
Line	818.326 {41}	231.604 {446}	178.284 {489}	220.353 {453}	182.034 {485}	206.833 {463}	196.090 {472}	288.158 {117}	288.158 {117}2
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	32.816	k .01488	W 23.056	k .00773	k .87649	k -.00012	k .02272	W 115.18	W 246.48
Stddev	.095	.00087	1.002	.00183	.07996	.01549	.01342	2.02	4.33
%RSD	.29073	5.8292	4.3445	23.629	9.1226	13296.	59.075	1.7579	1.7579

#1	32.749	.01427	22.347	.00643	.93303	-.01107	.01323	116.61	249.55
#2	32.884	k .01550	23.764	k .00902	k .81995	k .01084	k .03221	113.75	243.42

Check ?	Chk Pass	Chk Pass	Chk Warn	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Warn	Chk Warn
High Limit			2.0000					50.000	107.00
Low Limit			-1.0000					-.10000	-.21400

Elem	Sn1899	Sr4077	Th2837	Ti3349	Ti1908	U_3701	V_2924	Zn2062	Zr3391
Line	189.989 {477}	407.771 {83}	283.730 {119}	334.904 {101}	190.856 {477}	370.152 {91}	292.402 {115}	206.200 {163}	339.198 {99}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	k .00224	1.4794	k .22883	k .00690	k .02294	k -.03692	k .02125	.19872	k -.00557
Stddev	.00033	.0282	.34804	.00005	.00821	.08949	.01058	.00134	.01494
%RSD	14.883	1.9078	152.10	.71811	35.801	242.35	49.804	.67337	268.18

#1	.00247	1.4994	-.01727	.00687	.02875	.02635	.02873	.19778	.00499
#2	k .00200	1.4595	k .47493	k .00694	k .01713	k -.10020	k .01377	.19967	k -.01614

Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Int. Std.	Y_2243	Y_3600	Y_3774						
Line	224.306 {450}	360.073 {94}	377.433 {89}						
Units	Cts/S	Cts/S	Cts/S						
Avg	2693.6	40310.	2216.7						
Stddev	118.1	136.	48.3						
%RSD	4.3835	.33792	2.1777						

#1	2777.1	40214.	2182.5						
#2	2610.1	40406.	2250.8						

Sample Name: 320-18796-D-6-A Acquired: 5/18/2016 16:46:56 Type: Unk

Method: 6500_025(v6) Mode: CONC Corr. Factor: 1.000000

User: CRHOADES Prep Date: Custom ID2: Custom ID3:

Comment: 325380 6010C (Ca Fe) Q5

Elem	Ag3280	Al1670	As1890	B_2089	Ba4554	Be3130	Bi2230	Ca3179	Cd2288
Line	328.068 {103}	167.079 {502}	189.042 {478}	208.959 {461}	455.403 {74}	313.042 {108}	223.061 {451}	317.933 {106}	228.802 {447}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	-0.00076	.00232	.00266	.05945	.00656	.00014	-0.00152	35.824	-0.00035
Stddev	.00014	.00015	.00789	.00093	.00021	.00030	.00040	.042	.00012
%RSD	17.732	6.3041	296.37	1.5709	3.2614	211.28	26.068	.11792	32.905

#1	-0.00086	.00243	-0.00292	.06011	.00671	-0.00007	-0.00124	35.794	-0.00043
#2	-0.00067	.00222	.00825	.05879	.00640	.00036	-0.00180	35.854	-0.00027

Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Elem	Co2286	Cr2055	Cu3247	Fe2599	K_7664	Li6707	Mg2790	Mn2576	Mo2020
Line	228.616 {447}	205.560 {464}	324.754 {104}	259.940 {130}	766.490 {44}	670.784 {50}	279.079 {121}2	257.610 {131}	202.030 {467}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	-0.00011	.00046	.01213	.18508	5.7051	.00627	6.5637	.11128	-0.00081
Stddev	.00042	.00054	.00027	.00757	.0027	.00282	.0262	.00036	.00037
%RSD	372.57	117.98	2.2127	4.0925	.04806	44.920	.39964	.32578	45.558

#1	-0.00041	.00008	.01232	.19043	5.7031	.00827	6.5822	.11154	-0.00055
#2	.00018	.00085	.01194	.17972	5.7070	.00428	6.5451	.11103	-0.00107

Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Elem	Na8183	Ni2316	P_1782	Pb2203	S_1820	Sb2068	Se1960	Si2881	SiO2
Line	818.326 {41}	231.604 {446}	178.284 {489}	220.353 {453}	182.034 {485}	206.833 {463}	196.090 {472}	288.158 {117}	288.158 {117}2
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	31.590	-0.00084	.03327	.00286	.58344	.00020	.00994	17.650	37.772
Stddev	.202	.00021	.00316	.00103	.00825	.00329	.00444	.109	.234
%RSD	.63830	25.365	9.4926	36.079	1.4148	1621.0	44.638	.62024	.62024

#1	31.732	-0.00069	.03104	.00213	.58928	-0.00213	.00680	17.728	37.937
#2	31.447	-0.00099	.03550	.00359	.57760	.00253	.01308	17.573	37.606

Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Elem	Sn1899	Sr4077	Th2837	Ti3349	Ti1908	U_3701	V_2924	Zn2062	Zr3391
Line	189.989 {477}	407.771 {83}	283.730 {119}	334.904 {101}	190.856 {477}	370.152 {91}	292.402 {115}	206.200 {163}	339.198 {99}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.00037	.24124	.00252	-0.00063	-0.00253	W -.05328	.00065	.01032	-0.00064
Stddev	.00004	.00638	.00026	.00035	.00238	.04797	.00014	.00014	.00292
%RSD	11.371	2.6437	10.361	56.298	94.201	90.037	21.859	1.3938	452.97

#1	.00034	.23673	.00233	-0.00038	-0.00421	-0.01936	.00075	.01022	.00142
#2	.00040	.24575	.00270	-0.00088	-0.00084	-0.08720	.00055	.01043	-0.00271

Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Warn	Chk Pass	Chk Pass	Chk Pass
High Limit						45.000			
Low Limit						-0.05000			

Int. Std.	Y_2243	Y_3600	Y_3774						
Line	224.306 {450}	360.073 {94}	377.433 {89}						
Units	Cts/S	Cts/S	Cts/S						
Avg	2642.7	40908.	2187.0						
Stddev	6.3	176.	11.1						
%RSD	.23882	.42976	.50943						

#1	2647.2	41032.	2179.1						
#2	2638.3	40783.	2194.8						

Sample Name: CCVH-3894253 Acquired: 5/18/2016 16:49:35 Type: QC
Method: 6500_025(v6) Mode: CONC Corr. Factor: 1.000000
User: CRHOADES Prep Date: Custom ID2: Custom ID3:
Comment:

Elem	Ag3280	Al3092	As1890	B_2089	Ba4554	Be3130	Bi2230	Ca3179	Cd2288	Co2286	Cr2055
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	-.00099	53.629	-.00099	.00209	.00005	.00024	W 1.0919	-.00370	-.00047	-.00117	.00031
Stddev	.00150	.553	.00294	.00054	.00046	.00015	.0041	.01606	.00004	.00010	.00036
%RSD	150.78	1.0308	296.39	25.902	903.83	61.224	.37304	433.77	8.6844	8.8945	115.04

#1	-.00205	54.020	.00109	.00248	-.00027	.00034	1.0948	.00766	-.00050	-.00124	.00057
#2	.00007	53.238	-.00307	.00171	.00037	.00014	1.0890	-.01506	-.00044	-.00110	.00006

Check ?	None	Chk Pass	None	None	None	None	Chk Warn	None	None	None	None
Value							1.0000				
Range							5.0000%				

Elem	Cu3247	Fe2714	K_7664	Li6707	Mg2790	Mn2576	Mo2020	Na8183	Ni2316	P_1782	Pb2203
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.00049	50.670	.09018	-.00006	.02289	.00097	-.00177	258.69	.00145	.00515	-.00008
Stddev	.00098	.138	.10211	.00501	.00700	.00001	.00017	1.28	.00027	.00262	.00020
%RSD	197.73	.27178	113.23	8624.6	30.599	.61933	9.7081	.49496	18.273	50.913	254.56

#1	.00118	50.767	.01798	-.00360	.02784	.00096	-.00189	259.60	.00164	.00701	-.00022
#2	-.00020	50.573	.16238	.00348	.01793	.00097	-.00165	257.79	.00127	.00330	.00006

Check ?	None	Chk Pass	None	None	None	None	None	Chk Pass	None	None	None
Value											
Range											

Elem	S_1820	Sb2068	Se1960	Si2881	SiO2	Sn1899	Sr4077	Th2837	Ti3349	Ti1908	U_3701
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	W 5.4192	-.01295	.00546	.01574	.03369	.00116	.00053	W 4.7316	.00521	-.00362	W 10.756
Stddev	.1784	.00260	.00190	.01877	.04016	.00009	.00026	.0067	.00049	.00319	.001
%RSD	3.2915	20.078	34.905	119.21	119.21	8.0957	49.434	.14079	9.4858	88.099	.01168

#1	5.2931	-.01111	.00680	.02901	.06209	.00109	.00071	4.7364	.00555	-.00137	10.757
#2	5.5453	-.01478	.00411	.00247	.00529	.00122	.00034	4.7269	.00486	-.00588	10.755

Check ?	Chk Warn	None	None	None	None	None	None	Chk Warn	None	None	Chk Warn
Value	5.0000							5.0000			10.000
Range	5.0000%							-5.0000%			5.0000%

Elem	V_2924	Zn2062	Zr3391
Units	ppm	ppm	ppm
Avg	.00967	-.00005	.05874
Stddev	.00182	.00002	.00559
%RSD	18.840	40.351	9.5218

#1	.00838	-.00003	.06270
#2	.01096	-.00006	.05479

Check ?	None	None	None
Value			
Range			

Int. Std.	Y_2243	Y_3600	Y_3774
Units	Cts/S	Cts/S	Cts/S
Avg	2469.8	38110.	2018.4
Stddev	9.8	32.	17.3
%RSD	.39767	.08382	.85659

#1	2476.8	38087.	2006.1
#2	2462.9	38132.	2030.6

Sample Name: CCV-3894251 Acquired: 5/18/2016 16:52:11 Type: QC

Method: 6500_025(v6) Mode: CONC Corr. Factor: 1.000000

User: CRHOADES Prep Date: Custom ID2: Custom ID3:

Comment:

Elem	Ag3280	Al1670	As1890	B_2089	Ba4554	Be3130	Bi2230	Ca3179	Cd2288	Co2286	Cr2055	Cu3247	Fe2599
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.50483	.53300	1.0272	.48473	.50810	.47572	.00226	5.0204	.48995	.50217	.50427	.52853	2.4608
Stddev	.00274	.03689	.0720	.03317	.00732	.00509	.00172	.0513	.02232	.03436	.03422	.00173	.0012
%RSD	.54373	6.9221	7.0059	6.8429	1.4409	1.0690	75.966	1.0220	4.5559	6.8433	6.7862	.32734	.04813

#1	.50677	.55909	1.0781	.50818	.51328	.47931	.00105	5.0567	.50573	.52647	.52846	.52975	2.4617
#2	.50289	.50691	.97631	.46127	.50293	.47212	.00347	4.9842	.47416	.47787	.48007	.52731	2.4600

Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	None	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Value													
Range													

Elem	K_7664	Li6707	Mg2790	Mn2576	Mo2020	Na5895	Ni2316	P_1782	Pb2203	S_1820	Sb2068	Se1960	Si2881
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	49.420	1.0073	19.620	.48664	.50719	5.1610	.49436	.98015	1.0129	-.01165	.99436	1.0540	4.9546
Stddev	.439	.0040	.031	.00105	.03734	.0004	.03347	.07034	.0623	.00247	.04486	.0484	.0224
%RSD	.88861	.39320	.15567	.21502	7.3621	.00821	6.7702	7.1767	6.1537	21.219	4.5117	4.5926	.45212

#1	49.731	1.0045	19.641	.48738	.53359	5.1613	.51802	1.0299	1.0570	-.00990	1.0261	1.0882	4.9388
#2	49.110	1.0101	19.598	.48590	.48079	5.1607	.47069	.93041	.96887	-.01339	.96264	1.0198	4.9705

Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	None	Chk Pass	Chk Pass	Chk Pass
Value													
Range													

Elem	SiO2	Sn1899	Sr4077	Th2837	Ti3349	Ti1908	U_3701	V_2924	Zn2062	Zr3391
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	10.603	1.0332	.49115	-.00003	.47759	1.0514	.01597	.49937	.48395	.51722
Stddev	.048	.0384	.00486	.00221	.00258	.0420	.05154	.00228	.00044	.00058
%RSD	.45212	3.7163	.98979	7016.0	.53946	3.9902	322.79	.45724	.09052	.11183
#1	10.569	1.0603	.49458	-.00159	.47941	1.0811	.05242	.50098	.48426	.51763
#2	10.637	1.0060	.48771	.00153	.47577	1.0218	-.02048	.49776	.48364	.51681

Check ?	Chk Pass	Chk Pass	Chk Pass	None	Chk Pass	Chk Pass	None	Chk Pass	Chk Pass	Chk Pass
Value										
Range										

Int. Std.	Y_2243	Y_3600	Y_3774
Units	Cts/S	Cts/S	Cts/S
Avg	2734.7	40728.	2178.5
Stddev	177.4	147.	.1
%RSD	6.4876	.36153	.00249
#1	2609.3	40832.	2178.5
#2	2860.2	40624.	2178.5

Sample Name: CCB Acquired: 5/18/2016 16:54:41 Type: QC
 Method: 6500_025(v6) Mode: CONC Corr. Factor: 1.000000
 User: CRHOADES Prep Date: Custom ID2: Custom ID3:
 Comment:

Elem	Ag3280	Al1670	As1890	B_2089	Ba4554	Be3130	Bi2230	Ca3179	Cd2288	Co2286	Cr2055
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	-.00091	.00012	.00097	.00117	-.00055	.00023	.00462	-.01954	-.00035	-.00023	.00015
Stddev	.00090	.00050	.00220	.00077	.00029	.00012	.00030	.00638	.00026	.00074	.00031
%RSD	98.815	400.93	227.40	65.376	53.217	52.800	6.3929	32.623	74.708	318.39	201.73

#1	-.00028	-.00023	.00252	.00172	-.00034	.00032	.00482	-.02405	-.00016	-.00076	-.00006
#2	-.00155	.00048	-.00059	.00063	-.00076	.00015	.00441	-.01503	-.00053	.00029	.00037

Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit											
Low Limit											

Elem	Cu3247	Fe2599	K_7664	Li6707	Mg2790	Mn2576	Mo2020	Na5895	Ni2316	P_1782	Pb2203
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	-.00087	-.00249	.09069	.00063	.00179	.00005	.00120	.05552	-.00013	.00025	.00036
Stddev	.00025	.00679	.04690	.00300	.00063	.00010	.00144	.01335	.00029	.00150	.00094
%RSD	28.648	272.36	51.711	472.97	35.128	206.37	119.75	24.037	227.63	600.76	260.35

#1	-.00104	.00231	.12385	-.00149	.00223	-.00002	.00018	.06496	.00008	-.00081	-.00031
#2	-.00069	-.00730	.05753	.00276	.00135	.00012	.00222	.04609	-.00033	.00131	.00103

Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit											
Low Limit											

Elem	S_1820	Sb2068	Se1960	Si2881	SiO2	Sn1899	Sr4077	Th2837	Ti3349	Ti1908	U_3701
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	-.01007	W .00743	.00310	.01035	.02214	-.00027	-.00002	.00322	-.00016	-.00017	-.06256
Stddev	.00501	.00184	.00522	.00559	.01197	.00032	.00020	.00257	.00035	.00015	.02470
%RSD	49.739	24.745	168.66	54.045	54.045	117.97	871.01	79.800	221.23	85.404	39.482

#1	-.01361	.00613	.00679	.01430	.03060	-.00050	-.00016	.00140	.00009	-.00028	-.08002
#2	-.00653	.00873	-.00060	.00639	.01368	-.00005	.00012	.00503	-.00041	-.00007	-.04509

Check ?	Chk Pass	Chk Warn	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit		.00100									
Low Limit		-.00100									

Elem	V_2924	Zn2062	Zr3391
Units	ppm	ppm	ppm
Avg	.00104	-.00066	.00051
Stddev	.00024	.00041	.00113
%RSD	22.745	61.971	218.91

#1	.00087	-.00037	-.00028
#2	.00121	-.00095	.00131

Check ?	Chk Pass	Chk Pass	Chk Pass
High Limit			
Low Limit			

Int. Std.	Y_2243	Y_3600	Y_3774
Units	Cts/S	Cts/S	Cts/S
Avg	2664.2	40941.	2174.3
Stddev	56.0	78.	9.6
%RSD	2.1025	.19030	.44121

#1	2703.8	40996.	2167.6
#2	2624.5	40886.	2181.1

Sample Name: CCVL-3897520 Acquired: 5/18/2016 16:57:03 Type: QC
Method: 6500_025(v6) Mode: CONC Corr. Factor: 1.000000
User: CRHOADES Prep Date: Custom ID2: Custom ID3:
Comment:

Elem	Ag3280	Al1670	As1890	B_2089	Ba4554	Be3130	Bi2230	Ca3179	Cd2288	Co2286	Cr2055	Cu3247
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.01036	.11097	.01183	.09147	.00925	F .00134	.10667	.19150	.00489	.00971	.01046	.01558
Stddev	.00039	.00028	.00162	.00507	.00035	.00010	.00722	.00217	.00038	.00033	.00053	.00028
%RSD	3.7173	.25007	13.702	5.5463	3.7914	7.5741	6.7687	1.1320	7.8191	3.3963	5.0377	1.7764

#1	.01009	.11077	.01069	.08788	.00900	.00127	.10156	.18997	.00462	.00948	.01008	.01538
#2	.01063	.11116	.01298	.09506	.00950	.00141	.11177	.19303	.00516	.00995	.01083	.01578

Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Fail	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Value						.00100						
Range						30.000%						

Elem	Fe2599	K_7664	Li6707	Mg2790	Mn2576	Mo2020	Na5895	Ni2316	P_1782	Pb2203	S_1820	Sb2068
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.12177	3.0545	.01226	.20454	.01048	.01961	1.0723	.03962	2.7991	.01138	-.01056	.02514
Stddev	.00339	.0563	.00145	.00679	.00014	.00078	.0265	.00058	.0536	.00131	.00484	.00240
%RSD	2.7846	1.8441	11.864	3.3205	1.3060	3.9990	2.4742	1.4706	1.9132	11.485	45.774	9.5522

#1	.11937	3.0147	.01123	.19974	.01038	.01906	1.0535	.03921	2.7613	.01230	-.01398	.02683
#2	.12416	3.0943	.01329	.20934	.01058	.02017	1.0911	.04004	2.8370	.01046	-.00714	.02344

Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	None	Chk Pass
Value												
Range												

Elem	Se1960	Si2881	SiO2	Sn1899	Sr4077	Th2837	Ti3349	Ti1908	U_3701	V_2924	Zn2062	Zr3391
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	F .02306	.48161	1.0306	.10345	.01016	.01646	.00909	.01141	.05032	.00962	.01813	.01202
Stddev	.00126	.01596	.0342	.00010	.00008	.00379	.00038	.00715	.00887	.00055	.00033	.00256
%RSD	5.4637	3.3148	3.3148	.09824	.78844	23.052	4.1868	62.691	17.628	5.6979	1.8154	21.275

#1	.02217	.49290	1.0548	.10352	.01010	.01914	.00936	.00635	.04405	.00923	.01790	.01021
#2	.02395	.47032	1.0065	.10337	.01022	.01377	.00882	.01646	.05659	.01000	.01837	.01383

Check ?	Chk Fail	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Value	.01500											
Range	30.000%											

Int. Std.	Y_2243	Y_3600	Y_3774
Units	Cts/S	Cts/S	Cts/S
Avg	2819.7	41044.	2182.3
Stddev	192.3	60.	21.5
%RSD	6.8202	.14522	.98329

#1	2955.6	41002.	2197.4
#2	2683.7	41086.	2167.1

Sample Name: 200-33501-E-4-A Acquired: 5/18/2016 16:59:42 Type: Unk

Method: 6500_025(v6) Mode: CONC Corr. Factor: 1.000000

User: CRHOADES Prep Date: Custom ID2: Custom ID3:

Comment: 325380 6010C (Ca Fe) Q5

Elem	Ag3280	Al1670	As1890	B_2089	Ba4554	Be3130	Bi2230	Ca3179	Cd2288
Line	328.068 {103}	167.079 {502}	189.042 {478}	208.959 {461}	455.403 { 74}	313.042 {108}	223.061 {451}	317.933 {106}	228.802 {447}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	-.00096	.00302	-.00335	.00795	.00626	.00026	-.00044	10.719	-.00020
Stddev	.00014	.00018	.00298	.00101	.00015	.00012	.00498	.095	.00040
%RSD	14.768	5.8588	88.946	12.734	2.4726	44.557	1125.1	.88193	200.82

#1	-.00107	.00315	-.00124	.00723	.00637	.00018	.00308	10.785	.00008
#2	-.00086	.00289	-.00545	.00866	.00615	.00034	-.00396	10.652	-.00048

Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Elem	Co2286	Cr2055	Cu3247	Fe2599	K_7664	Li6707	Mg2790	Mn2576	Mo2020
Line	228.616 {447}	205.560 {464}	324.754 {104}	259.940 {130}	766.490 { 44}	670.784 { 50}	279.079 {121}2	257.610 {131}	202.030 {467}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.00017	.00007	.00002	.01239	.94181	.00074	1.2656	.00073	-.00057
Stddev	.00027	.00008	.00065	.00085	.10758	.00336	.0065	.00003	.00017
%RSD	159.03	128.34	3200.4	6.8824	11.423	451.20	.51201	4.5334	29.291

#1	-.00002	.00013	.00048	.01299	.86573	-.00163	1.2610	.00071	-.00045
#2	.00035	.00001	-.00044	.01179	1.0179	.00312	1.2702	.00075	-.00069

Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Elem	Na8183	Ni2316	P_1782	Pb2203	S_1820	Sb2068	Se1960	Si2881	SiO2
Line	818.326 { 41}	231.604 {446}	178.284 {489}	220.353 {453}	182.034 {485}	206.833 {463}	196.090 {472}	288.158 {117}	288.158 {117}2
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	22.155	.00072	.00142	.00024	2.9752	-.00034	.00159	1.1981	2.5640
Stddev	.094	.00011	.00059	.00071	.0645	.00600	.00292	.0002	.0004
%RSD	.42227	15.746	41.542	293.33	2.1675	1781.9	183.18	.01526	.01526

#1	22.221	.00080	.00100	-.00026	3.0208	.00390	.00366	1.1982	2.5642
#2	22.089	.00064	.00183	.00074	2.9296	-.00458	-.00047	1.1980	2.5637

Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Elem	Sn1899	Sr4077	Th2837	Ti3349	Ti1908	U_3701	V_2924	Zn2062	Zr3391
Line	189.989 {477}	407.771 { 83}	283.730 {119}	334.904 {101}	190.856 {477}	370.152 { 91}	292.402 {115}	206.200 {163}	339.198 { 99}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	-.00114	.05839	.00252	-.00049	-.00580	W -.05368	.00055	.00326	.00034
Stddev	.00111	.00033	.00186	.00041	.00026	.00539	.00069	.00092	.00395
%RSD	97.666	.56975	73.965	83.481	4.5222	10.038	125.13	28.122	1151.4

#1	-.00193	.05816	.00383	-.00077	-.00598	-.05749	.00006	.00391	-.00245
#2	-.00035	.05863	.00120	-.00020	-.00561	-.04987	.00104	.00261	.00313

Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Warn	Chk Pass	Chk Pass	Chk Pass
High Limit						45.000			
Low Limit						-.05000			

Int. Std.	Y_2243	Y_3600	Y_3774
Line	224.306 {450}	360.073 { 94}	377.433 { 89}
Units	Cts/S	Cts/S	Cts/S
Avg	2659.9	41446.	2221.7
Stddev	.3	90.	42.0
%RSD	.01094	.21783	1.8917

#1	2660.1	41382.	2192.0
#2	2659.7	41509.	2251.4

Sample Name: 200-33501-E-4-A SD@5 Acquired: 5/18/2016 17:02:21 Type: Unk
Method: 6500_025(v6) Mode: CONC Corr. Factor: 1.000000
User: CRHOADES Prep Date: Custom ID2: Custom ID3:
Comment: 325380 6010C (Ca Fe) Q5

Elem	Ag3280	Al1670	As1890	B_2089	Ba4554	Be3130	Bi2230	Ca3179	Cd2288
Line	328.068 {103}	167.079 {502}	189.042 {478}	208.959 {461}	455.403 { 74}	313.042 {108}	223.061 {451}	317.933 {106}	228.802 {447}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	-0.00059	.00074	.00000	.00142	.00087	.00013	.00245	2.1743	-0.00041
Stddev	.00066	.00053	.0052	.00040	.00000	.00002	.00143	.0205	.00013
%RSD	111.89	71.948	159850.	28.185	.10163	17.998	58.493	.94355	32.384

#1	-0.00106	.00111	-0.00367	.00171	.00087	.00012	.00144	2.1888	-0.00031
#2	-0.00012	.00036	.00366	.00114	.00087	.00015	.00346	2.1598	-0.00050

Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Elem	Co2286	Cr2055	Cu3247	Fe2599	K_7664	Li6707	Mg2790	Mn2576	Mo2020
Line	228.616 {447}	205.560 {464}	324.754 {104}	259.940 {130}	766.490 { 44}	670.784 { 50}	279.079 {121}2	257.610 {131}	202.030 {467}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	-0.00023	-0.00024	-0.00128	.01213	.20681	.00256	.25691	.00021	.00054
Stddev	.00007	.00007	.00001	.00171	.03261	.00592	.00094	.00004	.00046
%RSD	30.915	27.256	.95148	14.108	15.769	230.98	.36442	19.091	85.442

#1	-0.00028	-0.00019	-0.00129	.01092	.18375	-0.00162	.25625	.00018	.00021
#2	-0.00018	-0.00029	-0.00128	.01334	.22987	.00675	.25758	.00024	.00087

Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Elem	Na5895	Ni2316	P_1782	Pb2203	S_1820	Sb2068	Se1960	Si2881	SiO2
Line	589.592 { 57}	231.604 {446}	178.284 {489}	220.353 {453}	182.034 {485}	206.833 {463}	196.090 {472}	288.158 {117}	288.158 {117}2
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	3.9695	-0.00001	-0.00014	.00091	.57142	-0.00059	.00881	.29099	.62273
Stddev	.0449	.00005	.00317	.00216	.00659	.00449	.00737	.02368	.05068
%RSD	1.1298	349.03	2279.3	237.69	1.1538	757.22	83.653	8.1386	8.1386

#1	4.0012	-0.00005	.00210	.00244	.56675	-0.00377	.00360	.27425	.58689
#2	3.9378	.00002	-0.00238	-0.00062	.57608	.00258	.01403	.30774	.65856

Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Elem	Sn1899	Sr4077	Th2837	Ti3349	Ti1908	U_3701	V_2924	Zn2062	Zr3391
Line	189.989 {477}	407.771 { 83}	283.730 {119}	334.904 {101}	190.856 {477}	370.152 { 91}	292.402 {115}	206.200 {163}	339.198 { 99}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	-0.00029	.01177	.00061	-0.00060	-0.00354	-0.00530	.00066	.00086	-0.00136
Stddev	.00398	.00009	.00227	.00056	.00045	.01502	.00105	.00040	.00349
%RSD	1385.8	.76862	374.86	93.821	12.596	283.58	157.90	46.112	256.98

#1	.00252	.01183	-0.00100	-0.00020	-0.00322	.00533	-0.00008	.00058	.00111
#2	-0.00310	.01171	.00221	-0.00100	-0.00385	-0.01592	.00140	.00114	-0.00383

Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Int. Std.	Y_2243	Y_3600	Y_3774
Line	224.306 {450}	360.073 { 94}	377.433 { 89}
Units	Cts/S	Cts/S	Cts/S
Avg	2607.6	40197.	2088.2
Stddev	47.4	223.	16.2
%RSD	1.8194	.55355	.77407

#1	2574.0	40355.	2099.6
#2	2641.1	40040.	2076.8

Sample Name: 200-33501-E-4-B MS Acquired: 5/18/2016 17:05:03 Type: Unk
Method: 6500_025(v6) Mode: CONC Corr. Factor: 1.000000
User: CRHOADES Prep Date: Custom ID2: Custom ID3:
Comment: 325380 6010C (Ca Fe) Q5

Elem	Ag3280	Al1670	Al3092	As1890	B_2089	Ba4554	Be3130	Bi2230	Ca3179
Line	328.068 {103}	167.079 {502}	309.271 {109}	189.042 {478}	208.959 {461}	455.403 { 74}	313.042 {108}	223.061 {451}	317.933 {106}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.04979	2.1340	W 2.4637	1.0905	1.0140	2.1313	.04909	F 2.1990	62.530
Stddev	.00009	.0711	.0571	.0300	.0306	.0016	.00109	.0538	.051
%RSD	.19001	3.3328	2.3199	2.7543	3.0135	.07532	2.2164	2.4450	.08180

#1	.04986	2.0838	2.5041	1.0692	.99235	2.1324	.04832	2.1610	62.493
#2	.04973	2.1843	2.4232	1.1117	1.0356	2.1301	.04986	2.2370	62.566

Check ?	Chk Pass	Chk Pass	Chk Warn	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Fail	Chk Pass
High Limit			500.00					.10000	
Low Limit			3.2000					-.10000	

Elem	Cd2288	Co2286	Cr2055	Cu3247	Fe2599	K_7664	Li6707	Mg2790	Mn2576
Line	228.802 {447}	228.616 {447}	205.560 {464}	324.754 {104}	259.940 {130}	766.490 { 44}	670.784 { 50}	279.079 {121}2	257.610 {131}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.10000	.49664	.20434	.26277	1.0181	52.860	1.0097	50.168	.48003
Stddev	.00288	.01436	.00548	.00031	.0040	.039	.0113	.064	.00023
%RSD	2.8826	2.8915	2.6810	.11827	.39648	.07450	1.1161	.12735	.04767

#1	.09796	.48649	.20047	.26255	1.0210	52.832	1.0018	50.123	.47986
#2	.10204	.50680	.20821	.26299	1.0153	52.888	1.0177	50.214	.48019

Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Elem	Mo2020	Na8183	Ni2316	P_1782	Pb2203	S_1820	Sb2068	Se1960	Si2881
Line	202.030 {467}	818.326 { 41}	231.604 {446}	178.284 {489}	220.353 {453}	182.034 {485}	206.833 {463}	196.090 {472}	288.158 {117}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	1.0712	75.393	.49272	W 10.288	.51342	5.1616	.52618	2.2205	11.153
Stddev	.0242	.009	.01419	.290	.01235	.1522	.01482	.0576	.041
%RSD	2.2627	.01159	2.8803	2.8168	2.4061	2.9493	2.8174	2.5921	.36527

#1	1.0541	75.387	.48269	10.083	.50469	5.0539	.51570	2.1798	11.125
#2	1.0884	75.399	.50276	10.493	.52216	5.2692	.53667	2.2612	11.182

Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Warn	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit				2.0000					
Low Limit				-1.0000					

Elem	SiO2	Sn1899	Sr4077	Th2837	Ti3349	Ti1908	U_3701	V_2924	Zn2062
Line	288.158 {117}2	189.989 {477}	407.771 { 83}	283.730 {119}	334.904 {101}	190.856 {477}	370.152 { 91}	292.402 {115}	206.200 {163}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	23.868	W 2.0866	1.0628	.98827	.96256	1.9778	2.1385	.49245	.48283
Stddev	.087	.0453	.0006	.00710	.00085	.0141	.0465	.00048	.00318
%RSD	.36527	2.1706	.06060	.71840	.08844	.71568	2.1763	.09672	.65864

#1	23.807	2.0545	1.0632	.99329	.96317	1.9878	2.1055	.49211	.48508
#2	23.930	2.1186	1.0623	.98325	.96196	1.9678	2.1714	.49279	.48058

Check ?	Chk Pass	Chk Warn	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit		2.0000							
Low Limit		-.05000							

Elem	Zr3391								
Line	339.198 { 99}								
Units	ppm								
Avg	.53719								
Stddev	.00503								
%RSD	.93568								

#1	.53364								
#2	.54075								

Check ?	Chk Pass								
High Limit									
Low Limit									

Sample Name: 200-33501-E-4-B MS Acquired: 5/18/2016 17:05:03 Type: Unk
Method: 6500_025(v6) Mode: CONC Corr. Factor: 1.000000
User: CRHOADES Prep Date: Custom ID2: Custom ID3:
Comment: 325380 6010C (Ca Fe) Q5

Int. Std.	Y_2243	Y_3600	Y_3774
Line	224.306 {450}	360.073 { 94}	377.433 { 89}
Units	Cts/S	Cts/S	Cts/S
Avg	2607.5	39067.	2030.2
Stddev	55.7	378.	14.6
%RSD	2.1365	.96725	.72054
#1	2646.8	38800.	2019.8
#2	2568.1	39335.	2040.5

Sample Name: 200-33501-E-4-C MSD Acquired: 5/18/2016 17:07:29 Type: Unk
Method: 6500_025(v6) Mode: CONC Corr. Factor: 1.000000
User: CRHOADES Prep Date: Custom ID2: Custom ID3:
Comment: 325380 6010C (Ca Fe) Q5

Elem	Ag3280	Al1670	Al3092	As1890	B_2089	Ba4554	Be3130	Bi2230	Ca3179
Line	328.068 {103}	167.079 {502}	309.271 {109}	189.042 {478}	208.959 {461}	455.403 { 74}	313.042 {108}	223.061 {451}	317.933 {106}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.05036	2.1181	W 2.3892	1.0809	1.0096	2.0465	.04816	F 2.1558	60.220
Stddev	.00019	.0449	.0188	.0104	.0169	.0091	.00017	.0174	.377
%RSD	.38010	2.1177	.78536	.95974	1.6695	.44626	.35610	.80484	.62542

#1	.05022	2.0864	2.4024	1.0735	.99765	2.0400	.04828	2.1435	59.953
#2	.05049	2.1498	2.3759	1.0882	1.0215	2.0530	.04804	2.1680	60.486

Check ?	Chk Pass	Chk Pass	Chk Warn	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Fail	Chk Pass
High Limit			500.00					.10000	
Low Limit			3.2000					-.10000	

Elem	Cd2288	Co2286	Cr2055	Cu3247	Fe2599	K_7664	Li6707	Mg2790	Mn2576
Line	228.802 {447}	228.616 {447}	205.560 {464}	324.754 {104}	259.940 {130}	766.490 { 44}	670.784 { 50}	279.079 {121}2	257.610 {131}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.09903	.48903	.20081	.25931	.98385	50.829	.99151	49.494	.47049
Stddev	.00173	.00508	.00236	.00107	.01778	.052	.00787	.145	.00037
%RSD	1.7469	1.0395	1.1770	.41362	1.8072	.10206	.79410	.29240	.07789

#1	.09781	.48544	.19914	.25855	.99643	50.793	.99708	49.392	.47023
#2	.10025	.49262	.20248	.26006	.97128	50.866	.98594	49.597	.47075

Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Elem	Mo2020	Na8183	Ni2316	P_1782	Pb2203	S_1820	Sb2068	Se1960	Si2881
Line	202.030 {467}	818.326 { 41}	231.604 {446}	178.284 {489}	220.353 {453}	182.034 {485}	206.833 {463}	196.090 {472}	288.158 {117}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	1.0581	75.041	.48362	W 10.169	.50586	5.1281	.51467	2.1850	10.924
Stddev	.0103	.649	.00602	.131	.00490	.0773	.00241	.0149	.003
%RSD	.97718	.86463	1.2444	1.2896	.96830	1.5066	.46870	.68035	.02511

#1	1.0508	75.500	.47937	10.076	.50240	5.0735	.51296	2.1745	10.926
#2	1.0654	74.582	.48788	10.262	.50933	5.1828	.51638	2.1955	10.923

Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Warn	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit				2.0000					
Low Limit				-1.0000					

Elem	SiO2	Sn1899	Sr4077	Th2837	Ti3349	Ti1908	U_3701	V_2924	Zn2062
Line	288.158 {117}2	189.989 {477}	407.771 { 83}	283.730 {119}	334.904 {101}	190.856 {477}	370.152 { 91}	292.402 {115}	206.200 {163}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	23.378	W 2.0208	1.0236	.96398	.94051	1.9067	2.0462	.48367	.46924
Stddev	.006	.0092	.0045	.00443	.00226	.0575	.0150	.00110	.00252
%RSD	.02511	.45735	.43862	.45964	.23994	3.0178	.73415	.22827	.53689

#1	23.383	2.0143	1.0204	.96085	.93891	1.9473	2.0356	.48289	.47103
#2	23.374	2.0273	1.0267	.96711	.94210	1.8660	2.0569	.48445	.46746

Check ?	Chk Pass	Chk Warn	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit		2.0000							
Low Limit		-.05000							

Elem	Zr3391
Line	339.198 { 99}
Units	ppm
Avg	.52485
Stddev	.00393
%RSD	.74931

#1	.52207
#2	.52763

Check ?	Chk Pass
High Limit	
Low Limit	

Sample Name: 200-33501-E-4-C MSD Acquired: 5/18/2016 17:07:29 Type: Unk
 Method: 6500_025(v6) Mode: CONC Corr. Factor: 1.000000
 User: CRHOADES Prep Date: Custom ID2: Custom ID3:
 Comment: 325380 6010C (Ca Fe) Q5

Int. Std.	Y_2243	Y_3600	Y_3774
Line	224.306 {450}	360.073 { 94}	377.433 { 89}
Units	Cts/S	Cts/S	Cts/S
Avg	2591.0	39744.	2148.1
Stddev	35.0	50.	22.3
%RSD	1.3515	.12518	1.0366
#1	2615.8	39779.	2163.9
#2	2566.3	39709.	2132.4

Sample Name: 200-33501-E-4-A PDS Acquired: 5/18/2016 17:09:55 Type: Unk
Method: 6500_025(v6) Mode: CONC Corr. Factor: 1.000000
User: CRHOADES Prep Date: Custom ID2: Custom ID3:
Comment: 325380 6010C (Ca Fe) Q5

Elem	Ag3280	Al1670	As1890	B_2089	Ba4554	Be3130	Bi2230	Ca3179	Cd2288
Line	328.068 {103}	167.079 {502}	189.042 {478}	208.959 {461}	455.403 { 74}	313.042 {108}	223.061 {451}	317.933 {106}	228.802 {447}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.06926	2.0780	.42219	.01136	.21019	.09433	.00538	49.022	.09967
Stddev	.00014	.0341	.01085	.00089	.00145	.00054	.00220	.557	.00030
%RSD	.19871	1.6389	2.5710	7.7977	.69201	.57323	40.894	1.1367	.29761

#1	.06916	2.0539	.41451	.01199	.21122	.09395	.00382	49.416	.09946
#2	.06935	2.1021	.42986	.01074	.20917	.09471	.00693	48.628	.09988

Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Elem	Co2286	Cr2055	Cu3247	Fe2599	K_7664	Li6707	Mg2790	Mn2576	Mo2020
Line	228.616 {447}	205.560 {464}	324.754 {104}	259.940 {130}	766.490 { 44}	670.784 { 50}	279.079 {121}2	257.610 {131}	202.030 {467}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.09701	.09950	.10215	1.9263	40.365	.19774	39.183	.09516	.00424
Stddev	.00026	.00065	.00020	.0127	.868	.00353	.049	.00076	.00093
%RSD	.26455	.64925	.19475	.65683	2.1509	1.7835	.12505	.80003	22.021

#1	.09683	.09995	.10229	1.9174	40.979	.19524	39.148	.09462	.00358
#2	.09719	.09904	.10201	1.9353	39.752	.20023	39.217	.09570	.00490

Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Elem	Na8183	Ni2316	P_1782	Pb2203	S_1820	Sb2068	Se1960	Si2881	SiO2
Line	818.326 { 41}	231.604 {446}	178.284 {489}	220.353 {453}	182.034 {485}	206.833 {463}	196.090 {472}	288.158 {117}	288.158 {117}2
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	62.266	.09619	W 4.0133	.20062	2.9325	-.00001	.42990	1.2664	2.7100
Stddev	.196	.00061	.0184	.00096	.0004	.00179	.00250	.0403	.0863
%RSD	.31499	.63897	.45743	.48088	.01521	12559.	.58223	3.1838	3.1838

#1	62.127	.09576	4.0003	.19994	2.9322	.00125	.43167	1.2949	2.7710
#2	62.405	.09663	4.0263	.20130	2.9328	-.00128	.42813	1.2378	2.6490

Check ?	Chk Pass	Chk Pass	Chk Warn	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit			2.0000						
Low Limit			-1.0000						

Elem	Sn1899	Sr4077	Th2837	Ti3349	Ti1908	U_3701	V_2924	Zn2062	Zr3391
Line	189.989 {477}	407.771 { 83}	283.730 {119}	334.904 {101}	190.856 {477}	370.152 { 91}	292.402 {115}	206.200 {163}	339.198 { 99}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	-.00026	.15475	.38368	.00023	.43604	1.0443	.10014	.37740	.00622
Stddev	.00015	.00077	.00164	.00020	.00694	.0524	.00051	.00031	.00177
%RSD	58.517	.50063	.42774	88.766	1.5920	5.0146	.51081	.08244	28.400

#1	-.00037	.15421	.38252	.00037	.43113	1.0073	.10050	.37718	.00746
#2	-.00015	.15530	.38484	.00008	.44095	1.0813	.09978	.37762	.00497

Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Int. Std.	Y_2243	Y_3600	Y_3774
Line	224.306 {450}	360.073 { 94}	377.433 { 89}
Units	Cts/S	Cts/S	Cts/S
Avg	2618.3	40112.	2129.7
Stddev	53.5	83.	28.8
%RSD	2.0421	.20609	1.3532

#1	2656.1	40171.	2109.3
#2	2580.5	40054.	2150.1

Sample Name: CCVH-3894253 Acquired: 5/18/2016 17:12:29 Type: QC
Method: 6500_025(v6) Mode: CONC Corr. Factor: 1.000000
User: CRHOADES Prep Date: Custom ID2: Custom ID3:
Comment:

Elem	Ag3280	Al3092	As1890	B_2089	Ba4554	Be3130	Bi2230	Ca3179	Cd2288	Co2286	Cr2055
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	-.00100	54.326	-.00643	.00406	-.00005	.00059	W 1.0604	-.01882	-.00053	-.00132	.00037
Stddev	.00001	.566	.00017	.00049	.00004	.00003	.0139	.00594	.00011	.00013	.00025
%RSD	1.0200	1.0420	2.6954	12.129	76.511	5.4897	1.3093	31.583	21.308	9.8602	69.010

#1	-.00099	53.925	-.00656	.00441	-.00007	.00062	1.0506	-.01462	-.00045	-.00141	.00019
#2	-.00100	54.726	-.00631	.00371	-.00002	.00057	1.0702	-.02302	-.00061	-.00123	.00055

Check ?	None	Chk Pass	None	None	None	None	Chk Warn	None	None	None	None
Value							1.0000				
Range							5.0000%				

Elem	Cu3247	Fe2714	K_7664	Li6707	Mg2790	Mn2576	Mo2020	Na8183	Ni2316	P_1782	Pb2203
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.00118	50.754	.28264	.00546	.02682	-.00015	-.00099	258.44	.00142	.00587	-.00169
Stddev	.00061	.285	.01657	.00154	.00498	.00003	.00043	.95	.00026	.00303	.00044
%RSD	51.825	.56123	5.8637	28.253	18.581	17.980	43.837	.36951	18.116	51.599	25.899

#1	.00075	50.553	.27092	.00655	.02330	-.00013	-.00130	257.77	.00160	.00802	-.00138
#2	.00161	50.956	.29436	.00437	.03034	-.00017	-.00068	259.12	.00124	.00373	-.00199

Check ?	None	Chk Pass	None	None	None	None	None	Chk Pass	None	None	None
Value											
Range											

Elem	S_1820	Sb2068	Se1960	Si2881	SiO2	Sn1899	Sr4077	Th2837	Ti3349	Ti1908	U_3701
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	5.1178	-.01094	.00704	-.03067	-.06564	.00016	.00030	W 4.7141	.00587	-.00132	W 10.702
Stddev	.0099	.00006	.00237	.01999	.04278	.00006	.00013	.0028	.00018	.00531	.060
%RSD	.19300	.55578	33.603	65.176	65.176	40.955	42.379	.05936	3.1336	401.85	.56119

#1	5.1248	-.01098	.00537	-.01654	-.03539	.00020	.00038	4.7122	.00574	-.00508	10.744
#2	5.1108	-.01089	.00872	-.04481	-.09589	.00011	.00021	4.7161	.00600	.00243	10.659

Check ?	Chk Pass	None	None	None	None	None	None	Chk Warn	None	None	Chk Warn
Value								5.0000			10.000
Range								-5.0000%			5.0000%

Elem	V_2924	Zn2062	Zr3391
Units	ppm	ppm	ppm
Avg	.00924	-.00091	.05645
Stddev	.00057	.00086	.00438
%RSD	6.2224	94.683	7.7612

#1	.00883	-.00152	.05335
#2	.00964	-.00030	.05954

Check ?	None	None	None
Value			
Range			

Int. Std.	Y_2243	Y_3600	Y_3774
Units	Cts/S	Cts/S	Cts/S
Avg	2615.0	39466.	2052.7
Stddev	111.2	65.	28.8
%RSD	4.2525	.16414	1.4044

#1	2693.7	39512.	2073.0
#2	2536.4	39420.	2032.3

Sample Name: CCV-3894251 Acquired: 5/18/2016 17:15:06 Type: QC

Method: 6500_025(v6) Mode: CONC Corr. Factor: 1.000000

User: CRHOADES Prep Date: Custom ID2: Custom ID3:

Comment:

Elem	Ag3280	Al1670	As1890	B_2089	Ba4554	Be3130	Bi2230	Ca3179	Cd2288	Co2286	Cr2055	Cu3247
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.49939	F .55867	1.0478	.49603	.51509	.47884	.00399	5.0736	.50361	.50675	.51024	.52244
Stddev	.00059	.00446	.0033	.00027	.00154	.00194	.00198	.0085	.00129	.00101	.00072	.00074
%RSD	.11899	.79837	.31403	.05441	.29857	.40600	49.709	.16700	.25569	.19926	.14029	.14151

#1	.49897	.55552	1.0502	.49622	.51618	.48022	.00539	5.0796	.50270	.50604	.51075	.52296
#2	.49981	.56183	1.0455	.49584	.51400	.47747	.00259	5.0676	.50452	.50746	.50973	.52192

Check ?	Chk Pass	Chk Fail	Chk Pass	Chk Pass	Chk Pass	Chk Pass	None	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Value		.50000										
Range		10.490%										

Elem	Fe2599	K_7664	Li6707	Mg2790	Mn2576	Mo2020	Na5895	Ni2316	P_1782	Pb2203	S_1820	Sb2068
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	2.4484	49.849	1.0086	19.475	.48193	.51216	5.1379	.49863	.98104	1.0141	-.00727	.97745
Stddev	.0125	.037	.0045	.102	.00090	.00192	.0140	.00081	.00051	.0034	.00735	.00735
%RSD	.51182	.07344	.44456	.52589	.18738	.37577	.27300	.16317	.05167	.33406	101.13	.75237

#1	2.4395	49.875	1.0054	19.402	.48129	.51352	5.1279	.49921	.98140	1.0165	-.01246	.98265
#2	2.4573	49.823	1.0118	19.547	.48257	.51079	5.1478	.49806	.98068	1.0117	-.00207	.97225

Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	None	Chk Pass
Value												
Range												

Elem	Se1960	Si2881	SiO2	Sn1899	Sr4077	Th2837	Ti3349	Ti1908	U_3701	V_2924	Zn2062	Zr3391
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	1.0593	4.9777	10.652	1.0199	.49416	-.00137	.47211	1.0393	-.00329	.49404	.47678	.52311
Stddev	.0127	.0527	.113	.0013	.00073	.00025	.00065	.0020	.03578	.00117	.00225	.00155
%RSD	1.1984	1.0577	1.0577	.13000	.14859	18.172	.13791	.19312	1086.3	.23645	.47203	.29653

#1	1.0682	4.9405	10.573	1.0190	.49468	-.00154	.47165	1.0407	-.02860	.49487	.47837	.52201
#2	1.0503	5.0150	10.732	1.0209	.49364	-.00119	.47258	1.0379	.02201	.49322	.47518	.52421

Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	None	Chk Pass	Chk Pass	None	Chk Pass	Chk Pass	Chk Pass
Value												
Range												

Int. Std.	Y_2243	Y_3600	Y_3774
Units	Cts/S	Cts/S	Cts/S
Avg	2577.1	40002.	2091.8
Stddev	7.9	68.	7.0
%RSD	.30649	.17037	.33377

#1	2582.7	40050.	2086.9
#2	2571.6	39954.	2096.8

Sample Name: CCB Acquired: 5/18/2016 17:17:38 Type: QC
 Method: 6500_025(v6) Mode: CONC Corr. Factor: 1.000000
 User: CRHOADES Prep Date: Custom ID2: Custom ID3:
 Comment:

Elem	Ag3280	Al1670	As1890	B_2089	Ba4554	Be3130	Bi2230	Ca3179	Cd2288	Co2286	Cr2055
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	-.00054	-.00011	.00073	.00267	-.00066	.00017	.00031	-.01935	.00006	-.00029	-.00014
Stddev	.00043	.00039	.00699	.00048	.00118	.00024	.00068	.00264	.00007	.00002	.00024
%RSD	80.773	349.37	953.09	18.007	179.97	138.53	221.35	13.618	113.35	7.6466	169.08

#1	-.00023	.00017	-.00421	.00301	-.00149	.00034	-.00017	-.01749	.00011	-.00027	-.00032
#2	-.00084	-.00039	.00568	.00233	.00018	.00000	.00079	-.02122	.00001	-.00030	.00003

Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit											
Low Limit											

Elem	Cu3247	Fe2599	K_7664	Li6707	Mg2790	Mn2576	Mo2020	Na5895	Ni2316	P_1782	Pb2203
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	-.00118	-.00051	.01914	-.00123	-.00257	.00009	.00196	.03574	-.00052	.00382	.00031
Stddev	.00028	.00308	.13216	.00081	.00624	.00002	.00052	.01195	.00113	.00062	.00107
%RSD	23.740	601.29	690.52	66.201	242.81	20.673	26.364	33.443	217.51	16.292	345.52

#1	-.00138	-.00269	-.07431	-.00065	-.00699	.00010	.00159	.02728	-.00132	.00426	-.00045
#2	-.00098	.00166	.11259	-.00181	.00184	.00008	.00232	.04419	.00028	.00338	.00106

Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit											
Low Limit											

Elem	S_1820	Sb2068	Se1960	Si2881	SiO2	Sn1899	Sr4077	Th2837	Ti3349	Ti1908	U_3701
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	-.01340	W .00756	.00651	.00015	.00033	-.00042	.00020	.00173	-.00005	.00271	.00747
Stddev	.00522	.00132	.00178	.02716	.05812	.00053	.00006	.00120	.00019	.00204	.00026
%RSD	38.997	17.399	27.317	17644.	17644.	124.66	28.529	69.609	380.30	75.345	3.5227

#1	-.01709	.00849	.00525	-.01905	-.04077	-.00080	.00016	.00258	-.00018	.00126	.00766
#2	-.00970	.00663	.00776	.01936	.04143	-.00005	.00024	.00088	.00008	.00415	.00728

Check ?	Chk Pass	Chk Warn	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit		.00100									
Low Limit		-.00100									

Elem	V_2924	Zn2062	Zr3391
Units	ppm	ppm	ppm
Avg	.00110	-.00071	.00257
Stddev	.00047	.00068	.00139
%RSD	43.101	96.030	53.980

#1	.00076	-.00023	.00159
#2	.00143	-.00119	.00355

Check ?	Chk Pass	Chk Pass	Chk Pass
High Limit			
Low Limit			

Int. Std.	Y_2243	Y_3600	Y_3774
Units	Cts/S	Cts/S	Cts/S
Avg	2596.0	40645.	2120.2
Stddev	3.7	122.	10.5
%RSD	.14387	.30082	.49332

#1	2598.6	40732.	2127.6
#2	2593.3	40559.	2112.8

Sample Name: CCVL-3897520 Acquired: 5/18/2016 17:20:00 Type: QC
Method: 6500_025(v6) Mode: CONC Corr. Factor: 1.000000
User: CRHOADES Prep Date: Custom ID2: Custom ID3:
Comment:

Elem	Ag3280	Al1670	As1890	B_2089	Ba4554	Be3130	Bi2230	Ca3179	Cd2288	Co2286	Cr2055	Cu3247
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.00881	.11276	.01604	.09800	.01003	.00100	.11416	.18519	.00472	.01009	.01019	.01483
Stddev	.00142	.00053	.00145	.00010	.00021	.00001	.00268	.00153	.00032	.00052	.00021	.00062
%RSD	16.142	.46956	9.0102	.09935	2.0610	.87390	2.3460	.82703	6.8761	5.1740	2.1080	4.1674

#1	.00981	.11238	.01502	.09806	.00989	.00099	.11227	.18628	.00495	.00972	.01034	.01439
#2	.00780	.11313	.01706	.09793	.01018	.00101	.11605	.18411	.00450	.01046	.01004	.01527

Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Value												
Range												

Elem	Fe2599	K_7664	Li6707	Mg2790	Mn2576	Mo2020	Na5895	Ni2316	P_1782	Pb2203	S_1820	Sb2068
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.09082	3.1607	.01133	.20355	.00989	.02118	1.0549	.04007	2.8731	.00865	-.01477	.02158
Stddev	.00645	.0431	.00189	.00042	.00012	.00023	.0058	.00089	.0351	.00001	.00837	.00204
%RSD	7.1042	1.3648	16.696	.20817	1.1696	1.0677	.55378	2.2244	1.2209	.11302	56.698	9.4711

#1	.09538	3.1302	.01267	.20325	.00997	.02102	1.0508	.03944	2.8483	.00864	-.00885	.02302
#2	.08626	3.1912	.00999	.20385	.00981	.02134	1.0591	.04070	2.8979	.00866	-.02069	.02013

Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	None	Chk Pass
Value												
Range												

Elem	Se1960	Si2881	SiO2	Sn1899	Sr4077	Th2837	Ti3349	Ti1908	U_3701	V_2924	Zn2062	Zr3391
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	F .02400	.50811	1.0874	.10504	.01008	.01236	.00950	.01474	.05878	.00984	.01769	.01565
Stddev	.00221	.02063	.0442	.00188	.00033	.00235	.00022	.00061	.01022	.00043	.00053	.00200
%RSD	9.1871	4.0606	4.0606	1.7895	3.2822	19.013	2.3367	4.1455	17.394	4.3956	2.9981	12.746

#1	.02244	.52270	1.1186	.10371	.00985	.01070	.00966	.01517	.05155	.00954	.01807	.01424
#2	.02556	.49352	1.0561	.10637	.01032	.01403	.00934	.01431	.06600	.01015	.01732	.01706

Check ?	Chk Fail	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Value	.01500											
Range	30.000%											

Int. Std.	Y_2243	Y_3600	Y_3774
Units	Cts/S	Cts/S	Cts/S
Avg	2654.9	40826.	2097.3
Stddev	31.3	49.	10.6
%RSD	1.1787	.12024	.50418

#1	2677.0	40791.	2089.9
#2	2632.8	40861.	2104.8

Sample Name: MB 280-325212/1-A Acquired: 5/18/2016 17:22:41 Type: Unk

Method: 6500_025(v6) Mode: CONC Corr. Factor: 1.000000

User: CRHOADES Prep Date: 5/17 Custom ID2: Custom ID3:

Comment: 325212 6010C Q4

Elem	Ag3280	Al1670	As1890	B_2089	Ba4554	Be3130	Bi2230	Ca3179	Cd2288
Line	328.068 {103}	167.079 {502}	189.042 {478}	208.959 {461}	455.403 { 74}	313.042 {108}	223.061 {451}	317.933 {106}	228.802 {447}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	-0.00119	.00340	-0.00149	.00153	-0.00043	W .00051	-0.00197	-0.01289	-0.00021
Stddev	.00042	.00019	.00287	.00053	.00043	.00007	.00062	.00308	.00008
%RSD	35.075	5.6808	192.94	34.841	98.347	14.074	31.452	23.904	39.566

#1	-0.00148	.00354	.00054	.00191	-0.00013	.00046	-0.00241	-0.01071	-0.00027
#2	-0.00089	.00327	-0.00352	.00115	-0.00074	.00056	-0.00153	-0.01507	-0.00015

Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Warn	Chk Pass	Chk Pass	Chk Pass
High Limit						.00050			
Low Limit						-0.00050			

Elem	Co2286	Cr2055	Cu3247	Fe2599	K_7664	Li6707	Mg2790	Mn2576	Mo2020
Line	228.616 {447}	205.560 {464}	324.754 {104}	259.940 {130}	766.490 { 44}	670.784 { 50}	279.079 {121}2	257.610 {131}	202.030 {467}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	-0.00045	-0.00026	-0.00086	.00426	.05241	.00270	.00000	.00012	-0.00015
Stddev	.00039	.00034	.00023	.00002	.07668	.00224	.00264	.00006	.00016
%RSD	87.277	129.71	26.486	.35556	146.31	82.956	101120.	47.243	109.44

#1	-0.00017	-0.00002	-0.00070	.00424	.10663	.00111	-0.00187	.00016	-0.00003
#2	-0.00073	-0.00050	-0.00103	.00427	-0.00181	.00428	.00187	.00008	-0.00027

Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Elem	Na5895	Ni2316	P_1782	Pb2203	S_1820	Sb2068	Se1960	Si2881	SiO2
Line	589.592 { 57}	231.604 {446}	178.284 {489}	220.353 {453}	182.034 {485}	206.833 {463}	196.090 {472}	288.158 {117}	288.158 {117}2
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.05974	-0.00032	.00166	.00036	-0.00644	-0.00167	.00740	.02176	.04656
Stddev	.01055	.00014	.00138	.00146	.00213	.00021	.00231	.02025	.04333
%RSD	17.657	43.670	83.396	401.95	33.008	12.766	31.215	93.055	93.055

#1	.06720	-0.00022	.00068	.00139	-0.00494	-0.00152	.00576	.00744	.01592
#2	.05228	-0.00041	.00264	-0.00067	-0.00795	-0.00182	.00903	.03607	.07720

Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	None
High Limit									
Low Limit									

Elem	Sn1899	Sr4077	Th2837	Ti3349	Ti1908	U_3701	V_2924	Zn2062	Zr3391
Line	189.989 {477}	407.771 { 83}	283.730 {119}	334.904 {101}	190.856 {477}	370.152 { 91}	292.402 {115}	206.200 {163}	339.198 { 99}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.00086	.00021	.00013	.00033	-0.00209	.00455	.00067	-0.00034	-0.00137
Stddev	.00202	.00004	.00073	.00019	.00353	.00464	.00026	.00012	.00062
%RSD	234.45	18.297	579.81	57.556	168.60	101.88	38.225	36.358	45.617

#1	-0.00057	.00018	-0.00039	.00046	-0.00459	.00783	.00086	-0.00043	-0.00181
#2	.00229	.00023	.00064	.00020	.00040	.00127	.00049	-0.00025	-0.00093

Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Int. Std.	Y_2243	Y_3600	Y_3774
Line	224.306 {450}	360.073 { 94}	377.433 { 89}
Units	Cts/S	Cts/S	Cts/S
Avg	2704.7	41697.	2127.7
Stddev	47.7	8.	14.0
%RSD	1.7632	.01912	.65607

#1	2738.4	41692.	2137.6
#2	2671.0	41703.	2117.8

Sample Name: LCS 280-325212/2-A Acquired: 5/18/2016 17:25:04 Type: Unk
Method: 6500_025(v6) Mode: CONC Corr. Factor: 1.000000
User: CRHOADES Prep Date: Custom ID2: Custom ID3:
Comment: 325212 6010C Q4

Elem	Ag3280	Al1670	Al3092	As1890	B_2089	Ba4554	Be3130	Bi2230	Ca3179
Line	328.068 {103}	167.079 {502}	309.271 {109}	189.042 {478}	208.959 {461}	455.403 { 74}	313.042 {108}	223.061 {451}	317.933 {106}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.05052	2.1119	F 2.4250	1.0628	.99255	2.0641	.04882	2.1643	50.155
Stddev	.00028	.0469	.0561	.0316	.02160	.0094	.00057	.0388	.206
%RSD	.55156	2.2183	2.3152	2.9775	2.1759	.45709	1.1768	1.7924	.40987

#1	.05033	2.0788	2.3853	1.0404	.97728	2.0575	.04842	2.1368	50.009
#2	.05072	2.1451	2.4647	1.0852	1.0078	2.0708	.04923	2.1917	50.300

Check ?	Chk Pass	Chk Pass	Chk Fail	Chk Pass	Chk Pass	Chk Pass	Chk Pass	None	Chk Pass
High Limit			2.2250						
Low Limit			1.7300						

Elem	Cd2288	Co2286	Cr2055	Cu3247	Fe2599	K_7664	Li6707	Mg2790	Mn2576
Line	228.802 {447}	228.616 {447}	205.560 {464}	324.754 {104}	259.940 {130}	766.490 { 44}	670.784 { 50}	279.079 {121}2	257.610 {131}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.09829	.48944	.20096	.26299	.99998	50.073	.99712	49.157	.47672
Stddev	.00251	.01084	.00398	.00028	.00437	.101	.00179	.094	.00114
%RSD	2.5577	2.2147	1.9820	.10806	.43656	.20241	.17996	.19144	.23951

#1	.09652	.48178	.19814	.26319	.99689	50.002	.99839	49.090	.47591
#2	.10007	.49711	.20377	.26279	1.0031	50.145	.99585	49.223	.47752

Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Elem	Mo2020	Na8183	Ni2316	P_1782	Pb2203	S_1820	Sb2068	Se1960	Si2881
Line	202.030 {467}	818.326 { 41}	231.604 {446}	178.284 {489}	220.353 {453}	182.034 {485}	206.833 {463}	196.090 {472}	288.158 {117}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	1.0521	53.999	.48274	10.053	.50657	2.0733	.51670	2.1765	9.8226
Stddev	.0175	.402	.00887	.213	.00965	.0351	.00222	.0043	.0114
%RSD	1.6588	.74519	1.8366	2.1162	1.9053	1.6942	.42918	.19744	.11610

#1	1.0397	54.284	.47647	9.9022	.49974	2.0485	.51513	2.1734	9.8145
#2	1.0644	53.714	.48901	10.203	.51339	2.0982	.51827	2.1795	9.8306

Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	None	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Elem	SiO2	Sn1899	Sr4077	Th2837	Ti3349	Ti1908	U_3701	V_2924	Zn2062
Line	288.158 {117}2	189.989 {477}	407.771 { 83}	283.730 {119}	334.904 {101}	190.856 {477}	370.152 { 91}	292.402 {115}	206.200 {163}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	21.020	2.0220	.97530	.97630	.95597	1.9770	2.1684	.49055	.47315
Stddev	.024	.0128	.00680	.00279	.00137	.0406	.0838	.00020	.00275
%RSD	.11610	.63323	.69712	.28579	.14372	2.0538	3.8633	.04004	.58184

#1	21.003	2.0130	.97050	.97433	.95500	2.0057	2.2277	.49041	.47509
#2	21.038	2.0311	.98011	.97827	.95694	1.9483	2.1092	.49069	.47120

Check ?	None	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Elem	Zr3391								
Line	339.198 { 99}								
Units	ppm								
Avg	.52629								
Stddev	.00292								
%RSD	.55560								

#1	.52836								
#2	.52422								

Check ?	Chk Pass								
High Limit									
Low Limit									

Sample Name: LCS 280-325212/2-A Acquired: 5/18/2016 17:25:04 Type: Unk
Method: 6500_025(v6) Mode: CONC Corr. Factor: 1.000000
User: CRHOADES Prep Date: Custom ID2: Custom ID3:
Comment: 325212 6010C Q4

Int. Std.	Y_2243	Y_3600	Y_3774
Line	224.306 {450}	360.073 { 94}	377.433 { 89}
Units	Cts/S	Cts/S	Cts/S
Avg	2611.3	40313.	2176.4
Stddev	53.0	31.	7.3
%RSD	2.0288	.07772	.33400
#1	2648.7	40335.	2181.5
#2	2573.8	40291.	2171.3

Elem	Ag3280	Al1670	As1890	B_2089	Ba4554	Be3130	Bi2230	Ca3179	Cd2288
Line	328.068 {103}	167.079 {502}	189.042 {478}	208.959 {461}	455.403 {74}	313.042 {108}	223.061 {451}	317.933 {106}	228.802 {447}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	-0.00083	1.1558	-0.00420	.14037	.02074	.00034	-0.00239	W 502.07	.00124
Stddev	.00001	.0201	.00164	.00032	.00070	.00039	.00054	9.63	.00006
%RSD	.65149	1.7427	39.093	.23094	3.3875	116.69	22.659	1.9172	4.6264

#1	-0.00083	1.1701	-0.00304	.14060	.02124	.00062	-0.00277	508.88	.00120
#2	-0.00082	1.1416	-0.00537	.14014	.02025	.00006	-0.00200	495.26	.00129

Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Warn	Chk Pass
High Limit								500.00	
Low Limit								-.05000	

Elem	Co2286	Cr2055	Cu3247	Fe2599	K_7664	Li6707	Mg2790	Mn2576	Mo2020
Line	228.616 {447}	205.560 {464}	324.754 {104}	259.940 {130}	766.490 {44}	670.784 {50}	279.079 {121}2	257.610 {131}	202.030 {467}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.02008	.00250	.00738	10.361	9.9992	.10136	122.52	.92916	.00530
Stddev	.00027	.00025	.00127	.163	.1615	.00070	.05	.00070	.00155
%RSD	1.3328	9.9237	17.194	1.5746	1.6155	.68931	.04382	.07515	29.239

#1	.02027	.00232	.00828	10.476	9.8849	.10186	122.48	.92867	.00420
#2	.01989	.00267	.00649	10.246	10.113	.10087	122.56	.92966	.00639

Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Elem	Na8183	Ni2316	P_1782	Pb2203	S_1820	Sb2068	Se1960	Si2881	SiO2
Line	818.326 {41}	231.604 {446}	178.284 {489}	220.353 {453}	182.034 {485}	206.833 {463}	196.090 {472}	288.158 {117}	288.158 {117}2
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	W 1013.9	.00967	.12042	.00598	F 1136.5	.00600	.05942	10.052	21.512
Stddev	20.3	.00056	.00079	.00139	15.6	.00304	.00034	.073	.155
%RSD	2.0046	5.7852	.65755	23.273	1.3700	50.669	.56505	.72209	.72209

#1	1028.2	.01007	.11986	.00696	1147.5	.00815	.05918	10.104	21.622
#2	999.50	.00927	.12098	.00499	1125.5	.00385	.05966	10.001	21.402

Check ?	Chk Warn	Chk Pass	Chk Pass	Chk Pass	Chk Fail	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit	500.00				200.00				
Low Limit	11.000				-.20000				

Elem	Sn1899	Sr4077	Th2837	Ti3349	Ti1908	U_3701	V_2924	Zn2062	Zr3391
Line	189.989 {477}	407.771 {83}	283.730 {119}	334.904 {101}	190.856 {477}	370.152 {91}	292.402 {115}	206.200 {163}	339.198 {99}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	-0.00231	W 10.587	-0.00186	.04908	.01706	.12578	.00850	.02489	.00361
Stddev	.00078	.194	.00135	.00002	.01015	.04898	.00022	.00070	.00086
%RSD	33.861	1.8303	72.549	.03522	59.485	38.939	2.5390	2.8039	23.709

#1	-0.00286	10.724	-0.00091	.04909	.00988	.09115	.00866	.02440	.00300
#2	-0.00176	10.450	-0.00282	.04906	.02423	.16042	.00835	.02539	.00421

Check ?	Chk Pass	Chk Warn	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit		5.0000							
Low Limit		-.01000							

Int. Std.	Y_2243	Y_3600	Y_3774
Line	224.306 {450}	360.073 {94}	377.433 {89}
Units	Cts/S	Cts/S	Cts/S
Avg	2482.5	37642.	2146.0
Stddev	36.5	76.	70.1
%RSD	1.4699	.20077	3.2657

#1	2456.7	37695.	2096.4
#2	2508.3	37588.	2195.5

Sample Name: 280-83040-C-1-A SD@5 Acquired: 5/18/2016 17:30:35 Type: Unk
Method: 6500_025(v6) Mode: CONC Corr. Factor: 1.000000
User: CRHOADES Prep Date: Custom ID2: Custom ID3:
Comment: 325212 6010C Q4

Elem	Ag3280	Al1670	As1890	B_2089	Ba4554	Be3130	Bi2230	Ca3179	Cd2288
Line	328.068 {103}	167.079 {502}	189.042 {478}	208.959 {461}	455.403 { 74}	313.042 {108}	223.061 {451}	317.933 {106}	228.802 {447}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	-.00101	.40356	-.00768	.02809	.00448	.00010	-.00018	98.495	.00022
Stddev	.00097	.03211	.00306	.00272	.00015	.00008	.00006	.245	.00029
%RSD	96.534	7.9568	39.764	9.6960	3.3960	79.592	31.822	.24908	132.66

#1	-.00170	.38085	-.00552	.02617	.00459	.00015	-.00022	98.321	.00042
#2	-.00032	.42627	-.00985	.03002	.00437	.00004	-.00014	98.668	.00001

Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Elem	Co2286	Cr2055	Cu3247	Fe2599	K_7664	Li6707	Mg2790	Mn2576	Mo2020
Line	228.616 {447}	205.560 {464}	324.754 {104}	259.940 {130}	766.490 { 44}	670.784 { 50}	279.079 {121}2	257.610 {131}	202.030 {467}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.00389	.00074	.00075	2.0693	2.1036	.02131	24.148	.18414	.00020
Stddev	.00042	.00017	.00014	.0098	.0099	.00015	.004	.00007	.00127
%RSD	10.779	23.345	18.282	.47579	.47009	.71994	.01558	.03831	634.35

#1	.00419	.00086	.00084	2.0623	2.1106	.02142	24.146	.18419	-.00070
#2	.00359	.00061	.00065	2.0762	2.0966	.02120	24.151	.18409	.00110

Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Elem	Na8183	Ni2316	P_1782	Pb2203	S_1820	Sb2068	Se1960	Si2881	SiO2
Line	818.326 { 41}	231.604 {446}	178.284 {489}	220.353 {453}	182.034 {485}	206.833 {463}	196.090 {472}	288.158 {117}	288.158 {117}2
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	204.10	.00144	.02348	-.00111	F 214.31	.00186	.01105	2.3142	4.9524
Stddev	1.30	.00032	.00082	.00058	14.19	.00469	.00010	.0740	.1584
%RSD	.63723	22.467	3.4978	52.237	6.6233	251.70	.91383	3.1985	3.1985

#1	203.18	.00167	.02290	-.00070	204.27	-.00145	.01098	2.2619	4.8404
#2	205.02	.00121	.02406	-.00152	224.35	.00518	.01112	2.3665	5.0644

Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Fail	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit					200.00				
Low Limit					-.20000				

Elem	Sn1899	Sr4077	Th2837	Ti3349	Ti1908	U_3701	V_2924	Zn2062	Zr3391
Line	189.989 {477}	407.771 { 83}	283.730 {119}	334.904 {101}	190.856 {477}	370.152 { 91}	292.402 {115}	206.200 {163}	339.198 { 99}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	-.00186	2.0484	-.00125	.01880	.00315	-.01831	.00206	.00495	.00022
Stddev	.00018	.0060	.00159	.00159	.00296	.02348	.00087	.00005	.00237
%RSD	9.4547	.29191	126.94	8.4811	93.856	128.24	42.201	1.0172	1084.6

#1	-.00174	2.0441	-.00238	.01993	.00106	-.03491	.00145	.00499	-.00146
#2	-.00199	2.0526	-.00013	.01767	.00525	-.00171	.00268	.00492	.00190

Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Int. Std.	Y_2243	Y_3600	Y_3774
Line	224.306 {450}	360.073 { 94}	377.433 { 89}
Units	Cts/S	Cts/S	Cts/S
Avg	2647.4	39306.	2150.0
Stddev	187.1	90.	5.5
%RSD	7.0670	.22796	.25672

#1	2779.7	39369.	2153.9
#2	2515.1	39242.	2146.1

Sample Name: 280-83040-C-1-B MS Acquired: 5/18/2016 17:33:13 Type: Unk
Method: 6500_025(v6) Mode: CONC Corr. Factor: 1.000000
User: CRHOADES Prep Date: Custom ID2: Custom ID3:
Comment: 325212 6010C Q4

Elem	Ag3280	Al3092	As1890	B_2089	Ba4554	Be3130	Bi2230	Ca3179	Cd2288
Line	328.068 {103}	309.271 {109}	189.042 {478}	208.959 {461}	455.403 {74}	313.042 {108}	223.061 {451}	317.933 {106}	228.802 {447}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.05221	6.5211	1.1206	1.0980	2.0657	.04753	F 2.1774	W 545.27	.10218
Stddev	.00058	.0947	.0001	.0014	.0386	.00042	.0115	10.48	.00029
%RSD	1.1183	1.4529	.01008	.12333	1.8685	.88021	.52826	1.9216	.27975

#1	.05179	6.5880	1.1207	1.0970	2.0930	.04783	2.1856	552.68	.10239
#2	.05262	6.4541	1.1205	1.0989	2.0384	.04724	2.1693	537.86	.10198

Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Fail	Chk Warn	Chk Pass
High Limit							.10000	500.00	
Low Limit							-.10000	-.05000	

Elem	Co2286	Cr2055	Cu3247	Fe2599	K_7664	Li6707	Mg2790	Mn2576	Mo2020
Line	228.616 {447}	205.560 {464}	324.754 {104}	259.940 {130}	766.490 {44}	670.784 {50}	279.079 {121}2	257.610 {131}	202.030 {467}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.49814	.20000	.27047	11.676	61.053	1.1228	146.39	1.3979	1.0503
Stddev	.00006	.00006	.00110	.144	1.202	.0001	33.62	.0033	.0010
%RSD	.01226	.03225	.40606	1.2298	1.9696	.00947	22.963	.23823	.09334

#1	.49818	.19996	.27124	11.777	61.904	1.1229	170.16	1.3955	1.0496
#2	.49810	.20005	.26969	11.574	60.203	1.1227	122.62	1.4002	1.0510

Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Elem	Na8183	Ni2316	P_1782	Pb2203	S_1820	Sb2068	Se1960	Si2881	SiO2
Line	818.326 {41}	231.604 {446}	178.284 {489}	220.353 {453}	182.034 {485}	206.833 {463}	196.090 {472}	288.158 {117}	288.158 {117}2
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	W 1059.1	.48075	W 11.126	.47801	F 1160.0	.52838	2.3810	23.535	50.366
Stddev	21.6	.00028	.007	.00151	.9	.00587	.0076	.150	.321
%RSD	2.0374	.05775	.06095	.31588	.08047	1.1109	.31983	.63733	.63733

#1	1074.3	.48056	11.122	.47907	1159.4	.52423	2.3864	23.641	50.593
#2	1043.8	.48095	11.131	.47694	1160.7	.53253	2.3756	23.429	50.139

Check ?	Chk Warn	Chk Pass	Chk Warn	Chk Pass	Chk Fail	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit	500.00		2.0000		200.00				
Low Limit	11.000		-1.0000		-2.0000				

Elem	Sn1899	Sr4077	Th2837	Ti3349	Ti1908	U_3701	V_2924	Zn2062	Zr3391
Line	189.989 {477}	407.771 {83}	283.730 {119}	334.904 {101}	190.856 {477}	370.152 {91}	292.402 {115}	206.200 {163}	339.198 {99}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	1.9749	W 11.555	.96657	1.0080	1.6671	2.1971	.49874	.48170	.53324
Stddev	.0126	.460	.00500	.0048	.0522	.0271	.00222	.00135	.00554
%RSD	.63583	3.9813	.51698	.47481	3.1282	1.2330	.44493	.28082	1.0391

#1	1.9838	11.880	.97010	1.0046	1.7040	2.2162	.50031	.48075	.52932
#2	1.9660	11.229	.96303	1.0114	1.6302	2.1779	.49717	.48266	.53716

Check ?	Chk Pass	Chk Warn	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit		5.0000							
Low Limit		-.01000							

Int. Std.	Y_2243	Y_3600	Y_3774
Line	224.306 {450}	360.073 {94}	377.433 {89}
Units	Cts/S	Cts/S	Cts/S
Avg	2439.0	37003.	2175.4
Stddev	12.0	753.	56.4
%RSD	.49218	2.0353	2.5924

#1	2430.5	37535.	2135.5
#2	2447.5	36470.	2215.3

Sample Name: 280-83040-C-1-C MSD Acquired: 5/18/2016 17:36:11 Type: Unk
Method: 6500_025(v6) Mode: CONC Corr. Factor: 1.000000
User: CRHOADES Prep Date: Custom ID2: Custom ID3:
Comment: 325212 6010C Q4

Elem	Ag3280	Al3092	As1890	B_2089	Ba4554	Be3130	Bi2230	Ca3179	Cd2288
Line	328.068 {103}	309.271 {109}	189.042 {478}	208.959 {461}	455.403 {74}	313.042 {108}	223.061 {451}	317.933 {106}	228.802 {447}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.05242	5.9988	1.1027	1.0691	2.0347	.04686	F 2.1234	W 536.93	.09935
Stddev	.00022	.0246	.0297	.0243	.0007	.00041	.0444	1.65	.00167
%RSD	.42422	.40975	2.6984	2.2727	.03329	.87243	2.0894	.30707	1.6787

#1	.05258	5.9814	1.0816	1.0519	2.0342	.04657	2.0921	538.10	.09817
#2	.05226	6.0162	1.1237	1.0862	2.0351	.04715	2.1548	535.77	.10053

Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Fail	Chk Warn	Chk Pass
High Limit							.10000	500.00	
Low Limit							-.10000	-.05000	

Elem	Co2286	Cr2055	Cu3247	Fe2599	K_7664	Li6707	Mg2790	Mn2576	Mo2020
Line	228.616 {447}	205.560 {464}	324.754 {104}	259.940 {130}	766.490 {44}	670.784 {50}	279.079 {121}2	257.610 {131}	202.030 {467}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.48271	.19364	.26848	11.214	60.126	1.1101	168.93	1.3832	1.0271
Stddev	.00951	.00327	.00136	.010	.076	.0015	.15	.0003	.0196
%RSD	1.9699	1.6867	.50659	.09032	.12655	.13323	.09038	.02271	1.9109

#1	.47599	.19133	.26752	11.221	60.073	1.1090	169.04	1.3834	1.0132
#2	.48944	.19595	.26945	11.207	60.180	1.1111	168.82	1.3830	1.0410

Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Elem	Na8183	Ni2316	P_1782	Pb2203	S_1820	Sb2068	Se1960	Si2881	SiO2
Line	818.326 {41}	231.604 {446}	178.284 {489}	220.353 {453}	182.034 {485}	206.833 {463}	196.090 {472}	288.158 {117}	288.158 {117}2
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	W 1045.6	.46507	W 10.764	.46321	F 1126.7	.51404	2.2732	22.676	48.526
Stddev	2.5	.00875	.214	.01201	23.1	.00440	.0060	.013	.028
%RSD	.23471	1.8820	1.9927	2.5918	2.0526	.85556	.26155	.05704	.05704

#1	1047.3	.45888	10.612	.45472	1110.3	.51093	2.2690	22.685	48.545
#2	1043.8	.47126	10.916	.47170	1143.0	.51715	2.2774	22.666	48.506

Check ?	Chk Warn	Chk Pass	Chk Warn	Chk Pass	Chk Fail	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit	500.00		2.0000		200.00				
Low Limit	11.000		-1.0000		-2.0000				

Elem	Sn1899	Sr4077	Th2837	Ti3349	Ti1908	U_3701	V_2924	Zn2062	Zr3391
Line	189.989 {477}	407.771 {83}	283.730 {119}	334.904 {101}	190.856 {477}	370.152 {91}	292.402 {115}	206.200 {163}	339.198 {99}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	1.9031	W 10.952	.97100	1.0001	1.6431	2.1439	.49550	.47329	.52998
Stddev	.0104	.401	.00465	.0012	.0370	.0405	.00070	.00553	.00493
%RSD	.54901	3.6595	.47877	.12018	2.2506	1.8882	.14043	1.1685	.93067

#1	1.8957	10.668	.96771	.99923	1.6693	2.1725	.49599	.47720	.52650
#2	1.9105	11.235	.97429	1.0009	1.6170	2.1153	.49501	.46938	.53347

Check ?	Chk Pass	Chk Warn	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit		5.0000							
Low Limit		-.01000							

Int. Std.	Y_2243	Y_3600	Y_3774
Line	224.306 {450}	360.073 {94}	377.433 {89}
Units	Cts/S	Cts/S	Cts/S
Avg	2508.8	37775.	2206.5
Stddev	44.4	36.	29.5
%RSD	1.7685	.09505	1.3353

#1	2540.1	37749.	2185.7
#2	2477.4	37800.	2227.4

Sample Name: 280-83040-C-1-A PDS Acquired: 5/18/2016 17:39:11 Type: Unk
Method: 6500_025(v6) Mode: CONC Corr. Factor: 1.000000
User: CRHOADES Prep Date: Custom ID2: Custom ID3:
Comment: 325212 6010C Q4

Elem	Ag3280	Al3092	As1890	B_2089	Ba4554	Be3130	Bi2230	Ca3179	Cd2288
Line	328.068 {103}	309.271 {109}	189.042 {478}	208.959 {461}	455.403 { 74}	313.042 {108}	223.061 {451}	317.933 {106}	228.802 {447}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.01687	3.5070	.22376	.23596	.12444	.04653	-.00200	498.51	.05284
Stddev	.00063	.1265	.00057	.00348	.00042	.00020	.00072	.04	.00133
%RSD	3.7306	3.6071	.25568	1.4742	.34084	.43325	35.940	.00758	2.5197

#1	.01642	3.5965	.22336	.23350	.12414	.04639	-.00251	498.49	.05190
#2	.01731	3.4176	.22417	.23842	.12474	.04667	-.00149	498.54	.05378

Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Elem	Co2286	Cr2055	Cu3247	Fe2599	K_7664	Li6707	Mg2790	Mn2576	Mo2020
Line	228.616 {447}	205.560 {464}	324.754 {104}	259.940 {130}	766.490 { 44}	670.784 { 50}	279.079 {121}2	257.610 {131}	202.030 {467}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.06798	.05185	.05868	10.932	30.841	.19702	137.98	.95459	.05632
Stddev	.00114	.00073	.00081	.019	.046	.00088	.10	.00126	.00230
%RSD	1.6748	1.3998	1.3833	.17388	.14795	.44789	.07237	.13161	4.0842

#1	.06717	.05133	.05925	10.945	30.809	.19764	138.05	.95548	.05469
#2	.06878	.05236	.05810	10.918	30.873	.19639	137.91	.95371	.05794

Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Elem	Na8183	Ni2316	P_1782	Pb2203	S_1820	Sb2068	Se1960	Si2881	SiO2
Line	818.326 { 41}	231.604 {446}	178.284 {489}	220.353 {453}	182.034 {485}	206.833 {463}	196.090 {472}	288.158 {117}	288.158 {117}2
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	W 992.56	.05785	W 2.3359	.09878	F 1129.6	.10836	.27630	16.323	34.932
Stddev	1.24	.00251	.0883	.00519	1.1	.00327	.01070	.159	.340
%RSD	.12450	4.3311	3.7798	5.2490	.09699	3.0153	3.8744	.97206	.97206

#1	993.44	.05608	2.2735	.09512	1130.3	.10605	.26873	16.436	35.172
#2	991.69	.05962	2.3983	.10245	1128.8	.11067	.28387	16.211	34.692

Check ?	Chk Warn	Chk Pass	Chk Warn	Chk Pass	Chk Fail	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit	500.00		2.0000		200.00				
Low Limit	11.000		-1.0000		-20000				

Elem	Sn1899	Sr4077	Th2837	Ti3349	Ti1908	U_3701	V_2924	Zn2062	Zr3391
Line	189.989 {477}	407.771 { 83}	283.730 {119}	334.904 {101}	190.856 {477}	370.152 { 91}	292.402 {115}	206.200 {163}	339.198 { 99}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.09520	W 10.176	.19574	.14205	.16342	.59374	.05752	.21093	.06014
Stddev	.00066	.006	.00039	.00217	.00432	.02207	.00042	.00029	.00049
%RSD	.69199	.06220	.20006	1.5259	2.6437	3.7173	.72886	.13770	.81749

#1	.09473	10.171	.19602	.14051	.16036	.57813	.05782	.21114	.06049
#2	.09567	10.180	.19546	.14358	.16647	.60935	.05722	.21073	.05979

Check ?	Chk Pass	Chk Warn	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit		5.0000							
Low Limit		-.01000							

Int. Std.	Y_2243	Y_3600	Y_3774
Line	224.306 {450}	360.073 { 94}	377.433 { 89}
Units	Cts/S	Cts/S	Cts/S
Avg	2439.9	37769.	2214.2
Stddev	4.0	169.	22.3
%RSD	.16348	.44708	1.0078

#1	2442.7	37650.	2198.4
#2	2437.1	37889.	2230.0

Elem	Ag3280	Al1670	As1890	B_2089	Ba4554	Be3130	Bi2230	Ca3179	Cd2288
Line	328.068 {103}	167.079 {502}	189.042 {478}	208.959 {461}	455.403 {74}	313.042 {108}	223.061 {451}	317.933 {106}	228.802 {447}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	-0.00078	.10300	W -0.01581	.11985	.00616	.00009	-0.00362	412.76	.00141
Stddev	.00066	.00013	.00116	.00130	.00031	.00008	.00158	10.22	.00004
%RSD	84.190	.12199	7.3609	1.0836	5.0873	87.501	43.738	2.4764	2.5592

#1	-.00125	.10309	-.01499	.12077	.00638	.00003	-.00250	405.53	.00144
#2	-.00032	.10291	-.01663	.11893	.00594	.00014	-.00474	419.99	.00139

Check ?	Chk Pass	Chk Pass	Chk Warn	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit			10.000						
Low Limit			-.01000						

Elem	Co2286	Cr2055	Cu3247	Fe2599	K_7664	Li6707	Mg2790	Mn2576	Mo2020
Line	228.616 {447}	205.560 {464}	324.754 {104}	259.940 {130}	766.490 {44}	670.784 {50}	279.079 {121}2	257.610 {131}	202.030 {467}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	-0.00049	.00094	.00442	.18664	8.5871	.12582	177.39	.00287	.00043
Stddev	.00014	.00062	.00048	.00259	.1935	.00219	.31	.00005	.00068
%RSD	28.239	66.281	10.871	1.3865	2.2539	1.7409	.17564	1.7300	157.96

#1	-.00039	.00138	.00477	.18481	8.4502	.12427	177.61	.00283	.00091
#2	-.00059	.00050	.00408	.18847	8.7239	.12737	177.17	.00290	-.00005

Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Elem	Na8183	Ni2316	P_1782	Pb2203	S_1820	Sb2068	Se1960	Si2881	SiO2
Line	818.326 {41}	231.604 {446}	178.284 {489}	220.353 {453}	182.034 {485}	206.833 {463}	196.090 {472}	288.158 {117}	288.158 {117}2
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	W 1574.9	.00351	.03706	.00175	F 1424.3	-0.00229	.04178	10.828	23.172
Stddev	42.7	.00062	.00119	.00003	1.1	.00050	.00370	.019	.041
%RSD	2.7135	17.814	3.2205	1.4520	.07603	21.748	8.8677	.17763	.17763

#1	1544.6	.00306	.03790	.00177	1423.6	-.00264	.04440	10.842	23.202
#2	1605.1	.00395	.03622	.00173	1425.1	-.00193	.03916	10.815	23.143

Check ?	Chk Warn	Chk Pass	Chk Pass	Chk Pass	Chk Fail	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit	500.00				200.00				
Low Limit	11.000				-.20000				

Elem	Sn1899	Sr4077	Th2837	Ti3349	Ti1908	U_3701	V_2924	Zn2062	Zr3391
Line	189.989 {477}	407.771 {83}	283.730 {119}	334.904 {101}	190.856 {477}	370.152 {91}	292.402 {115}	206.200 {163}	339.198 {99}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	-0.00173	W 9.9037	-0.00076	.00415	.00444	.58552	.00020	.00112	.00050
Stddev	.00005	.0670	.00055	.00028	.00257	.02612	.00110	.00119	.00390
%RSD	3.0187	.67626	72.460	6.6913	57.849	4.4611	562.95	105.92	782.29

#1	-.00170	9.8563	-.00037	.00395	.00262	.60399	.00097	.00028	.00326
#2	-.00177	9.9510	-.00115	.00434	.00626	.56705	-.00058	.00196	-.00226

Check ?	Chk Pass	Chk Warn	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit		5.0000							
Low Limit		-.01000							

Int. Std.	Y_2243	Y_3600	Y_3774						
Line	224.306 {450}	360.073 {94}	377.433 {89}						
Units	Cts/S	Cts/S	Cts/S						
Avg	2596.4	37258.	2234.2						
Stddev	12.2	8.	41.0						
%RSD	.46867	.02048	1.8350						

#1	2605.0	37252.	2263.2						
#2	2587.8	37263.	2205.2						

Sample Name: 280-83044-A-1-A Acquired: 5/18/2016 17:45:04 Type: Unk

Method: 6500_025(v6) Mode: CONC Corr. Factor: 1.000000

User: CRHOADES Prep Date: Custom ID2: Custom ID3:

Comment: 325212 6010C Q4

Elem	Ag3280	Al3092	As1890	B_2089	Ba4554	Be3130	Bi2230	Ca3179	Cd2288
Line	328.068 {103}	309.271 {109}	189.042 {478}	208.959 {461}	455.403 {74}	313.042 {108}	223.061 {451}	317.933 {106}	228.802 {447}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	-0.00219	117.68	.00796	.29409	2.3219	.00356	-0.01017	F 2249.7	.00208
Stddev	.00033	.18	.00023	.00326	.0011	.00025	.00107	17.2	.00028
%RSD	14.997	.15613	2.8793	1.1076	.04690	6.9203	10.564	.76395	13.433

#1	-0.00196	117.81	.00812	.29640	2.3227	.00339	-0.01093	2261.8	.00228
#2	-0.00242	117.55	.00779	.29179	2.3211	.00374	-0.00941	2237.5	.00188

Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Fail	Chk Pass
High Limit								1000.0	
Low Limit								-1.0000	

Elem	Co2286	Cr2055	Cu3247	Fe2714	K_7664	Li6707	Mg2790	Mn2576	Mo2020
Line	228.616 {447}	205.560 {464}	324.754 {104}	271.441 {124}	766.490 {44}	670.784 {50}	279.079 {121}2	257.610 {131}	202.030 {467}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.05361	.32864	.26317	150.84	W 189.17	.25588	101.71	7.4186	.04060
Stddev	.00065	.00037	.00002	.62	.58	.00155	.03	.0424	.00046
%RSD	1.2155	.11116	.00583	.41325	.30425	.60746	.03402	.57110	1.1443

#1	.05407	.32890	.26316	151.29	189.57	.25478	101.73	7.3886	.04093
#2	.05315	.32838	.26318	150.40	188.76	.25698	101.68	7.4485	.04027

Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Warn	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit					100.00				
Low Limit					-50000				

Elem	Na8183	Ni2316	P_1782	Pb2203	S_1820	Sb2068	Se1960	Si2881	SiO2
Line	818.326 {41}	231.604 {446}	178.284 {489}	220.353 {453}	182.034 {485}	206.833 {463}	196.090 {472}	288.158 {117}	288.158 {117}2
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	W 3962.9	.16596	W 4.0380	.06946	F 274.01	.00789	.03537	W 55.343	118.43
Stddev	7.5	.00083	.0175	.00331	6.16	.00004	.00125	.450	.96
%RSD	.18950	.49937	.43406	4.7592	2.2469	.44643	3.5248	.81292	.81292

#1	3968.2	.16655	4.0504	.06712	278.37	.00787	.03625	55.661	119.11
#2	3957.6	.16537	4.0256	.07180	269.66	.00792	.03448	55.025	117.75

Check ?	Chk Warn	Chk Pass	Chk Warn	Chk Pass	Chk Fail	Chk Pass	Chk Pass	Chk Warn	Chk Pass
High Limit	500.00		2.0000		200.00			50.000	
Low Limit	11.000		-1.0000		-20000			-1.0000	

Elem	Sn1899	Sr4077	Th2837	Ti3349	Ti1908	U_3701	V_2924	Zn2062	Zr3391
Line	189.989 {477}	407.771 {83}	283.730 {119}	334.904 {101}	190.856 {477}	370.152 {91}	292.402 {115}	206.200 {163}	339.198 {99}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	-0.00048	W 12.354	.01024	4.1416	W -.01007	W -.07181	.46502	4.0511	.22699
Stddev	.00128	.093	.00085	.0035	.00634	.05956	.00023	.0008	.00371
%RSD	268.02	.75322	8.3177	.08420	62.968	82.942	.04908	.01973	1.6330

#1	.00043	12.420	.00964	4.1441	-.00559	-.02970	.46518	4.0506	.22961
#2	-.00139	12.289	.01084	4.1392	-.01455	-.11393	.46486	4.0517	.22437

Check ?	Chk Pass	Chk Warn	Chk Pass	Chk Pass	Chk Warn	Chk Warn	Chk Pass	Chk Pass	Chk Pass
High Limit		5.0000			5.0000	45.000			
Low Limit		-.01000			-.01000	-.05000			

Int. Std.	Y_2243	Y_3600	Y_3774
Line	224.306 {450}	360.073 {94}	377.433 {89}
Units	Cts/S	Cts/S	Cts/S
Avg	2519.9	37897.	2347.6
Stddev	58.8	18.	10.8
%RSD	2.3315	.04769	.46172

#1	2478.3	37910.	2340.0
#2	2561.4	37884.	2355.3

Sample Name: CCVH-3894253 Acquired: 5/18/2016 17:48:18 Type: QC
Method: 6500_025(v6) Mode: CONC Corr. Factor: 1.000000
User: CRHOADES Prep Date: Custom ID2: Custom ID3:
Comment:

Elem	Ag3280	Al3092	As1890	B_2089	Ba4554	Be3130	Bi2230	Ca3179	Cd2288	Co2286	Cr2055
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	-.00098	52.390	-.00206	.00355	-.00032	.00047	W 1.0925	.10999	-.00071	-.00118	.00034
Stddev	.00095	.726	.00904	.00039	.00006	.00005	.0086	.00482	.00021	.00024	.00032
%RSD	96.504	1.3851	439.99	10.974	19.334	11.562	.78913	4.3807	29.783	20.220	93.050

#1	-.00031	52.903	.00434	.00382	-.00028	.00043	1.0986	.10658	-.00056	-.00101	.00056
#2	-.00165	51.877	-.00845	.00327	-.00037	.00051	1.0864	.11339	-.00086	-.00135	.00012

Check ?	None	Chk Pass	None	None	None	None	Chk Warn	None	None	None	None
Value							1.0000				
Range							5.0000%				

Elem	Cu3247	Fe2714	K_7664	Li6707	Mg2790	Mn2576	Mo2020	Na8183	Ni2316	P_1782	Pb2203
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	-.00028	49.994	.58535	.00189	.02668	.00038	-.00120	258.03	.00146	.00232	-.00039
Stddev	.00035	.703	.05015	.00126	.00355	.00003	.00030	1.91	.00067	.00131	.00209
%RSD	122.32	1.4071	8.5670	66.646	13.301	7.9107	24.905	.73856	45.920	56.267	529.71

#1	-.00053	50.492	.54989	.00100	.02417	.00036	-.00141	259.37	.00193	.00325	.00108
#2	-.00004	49.497	.62081	.00279	.02919	.00040	-.00099	256.68	.00099	.00140	-.00187

Check ?	None	Chk Pass	None	None	None	None	None	Chk Pass	None	None	None
Value											
Range											

Elem	S_1820	Sb2068	Se1960	Si2881	SiO2	Sn1899	Sr4077	Th2837	Ti3349	Ti1908	U_3701
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	W 5.4961	-.00686	.01069	.04214	.09017	.00057	.00112	W 4.7345	.00544	-.00115	W 10.611
Stddev	.1213	.00499	.00681	.01388	.02970	.00032	.00013	.0058	.00056	.00142	.198
%RSD	2.2063	72.747	63.732	32.936	32.936	56.684	11.148	.12190	10.279	123.21	1.8653

#1	5.5819	-.00333	.01551	.03232	.06917	.00079	.00103	4.7385	.00504	-.00015	10.471
#2	5.4104	-.01038	.00587	.05195	.11117	.00034	.00121	4.7304	.00584	-.00216	10.751

Check ?	Chk Warn	None	None	None	None	None	None	Chk Warn	None	None	Chk Warn
Value	5.0000							5.0000			10.000
Range	5.0000%							-5.0000%			5.0000%

Elem	V_2924	Zn2062	Zr3391
Units	ppm	ppm	ppm
Avg	.00947	.00025	.05446
Stddev	.00085	.00029	.00290
%RSD	8.9947	115.65	5.3239

#1	.00887	.00005	.05651
#2	.01007	.00045	.05241

Check ?	None	None	None
Value			
Range			

Int. Std.	Y_2243	Y_3600	Y_3774
Units	Cts/S	Cts/S	Cts/S
Avg	2541.3	39754.	2159.1
Stddev	.2	182.	30.4
%RSD	.00892	.45682	1.4061

#1	2541.1	39626.	2137.7
#2	2541.5	39883.	2180.6

Sample Name: CCV-3894251 Acquired: 5/18/2016 17:50:56 Type: QC
Method: 6500_025(v6) Mode: CONC Corr. Factor: 1.000000
User: CRHOADES Prep Date: Custom ID2: Custom ID3:
Comment:

Elem	Ag3280	Al1670	As1890	B_2089	Ba4554	Be3130	Bi2230	Ca3179	Cd2288	Co2286	Cr2055	Cu3247
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.49125	.54390	1.0311	.48989	.51069	.47246	.00235	5.1043	.49733	.50230	.50555	.51515
Stddev	.00140	.00726	.0152	.00063	.01100	.00726	.00022	.0771	.00047	.00033	.00067	.00087
%RSD	.28432	1.3345	1.4728	.12763	2.1538	1.5359	9.5365	1.5113	.09491	.06520	.13297	.16829

#1	.49026	.53876	1.0203	.48945	.51846	.47759	.00251	5.1589	.49767	.50253	.50603	.51576
#2	.49224	.54903	1.0418	.49033	.50291	.46733	.00219	5.0498	.49700	.50207	.50508	.51454

Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	None	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Value												
Range												

Elem	Fe2599	K_7664	Li6707	Mg2790	Mn2576	Mo2020	Na5895	Ni2316	P_1782	Pb2203	S_1820	Sb2068
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	2.4262	49.334	.99441	19.041	.47455	.50764	F 5.5827	.49326	.96751	.99925	.22508	.97112
Stddev	.0192	.829	.00264	.021	.00008	.00323	.0233	.00170	.00283	.00283	.00494	.00009
%RSD	.78948	1.6813	.26507	.10984	.01607	.63679	.41743	.34461	.29235	.28307	2.1956	.00887

#1	2.4397	49.921	.99255	19.026	.47450	.50993	5.5663	.49446	.96951	.99725	.22857	.97118
#2	2.4126	48.748	.99628	19.056	.47461	.50536	5.5992	.49206	.96551	1.0013	.22159	.97106

Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Fail	Chk Pass	Chk Pass	Chk Pass	None	Chk Pass
Value							5.0000					
Range							10.490%					

Elem	Se1960	Si2881	SiO2	Sn1899	Sr4077	Th2837	Ti3349	Ti1908	U_3701	V_2924	Zn2062	Zr3391
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	1.0263	4.8890	10.463	1.0101	.48607	-.00199	.46560	1.0231	-.03246	.48890	.46979	.51090
Stddev	.0010	.0288	.062	.0031	.00972	.00166	.00048	.0113	.03433	.00242	.00506	.00174
%RSD	.09579	.58905	.58905	.30233	2.0004	83.348	.10241	1.1029	105.77	.49529	1.0772	.34132

#1	1.0256	4.9094	10.506	1.0080	.49295	-.00082	.46526	1.0311	-.00818	.48719	.46621	.51213
#2	1.0270	4.8687	10.419	1.0123	.47919	-.00316	.46594	1.0151	-.05674	.49062	.47336	.50967

Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	None	Chk Pass	Chk Pass	None	Chk Pass	Chk Pass	Chk Pass
Value												
Range												

Int. Std.	Y_2243	Y_3600	Y_3774
Units	Cts/S	Cts/S	Cts/S
Avg	2556.8	39914.	2105.6
Stddev	42.6	504.	40.8
%RSD	1.6646	1.2620	1.9370

#1	2586.9	40270.	2076.8
#2	2526.7	39558.	2134.5

Sample Name: CCB Acquired: 5/18/2016 17:53:28 Type: QC
 Method: 6500_025(v6) Mode: CONC Corr. Factor: 1.000000
 User: CRHOADES Prep Date: Custom ID2: Custom ID3:
 Comment:

Elem	Ag3280	Al1670	As1890	B_2089	Ba4554	Be3130	Bi2230	Ca3179	Cd2288	Co2286	Cr2055
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.00009	.00000	.00544	.00200	-.00034	.00023	.00257	-.00902	.00007	-.00050	-.00018
Stddev	.00002	.0001	.00175	.00067	.00063	.00019	.00420	.01038	.00003	.00019	.00093
%RSD	23.765	3549.5	32.236	33.372	185.07	83.238	163.61	115.08	39.585	37.999	506.13

#1	.00008	-.00011	.00668	.00247	-.00079	.00009	-.00040	-.01637	.00005	-.00063	-.00084
#2	.00011	.00010	.00420	.00153	.00011	.00036	.00553	-.00168	.00009	-.00037	.00047

Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit											
Low Limit											

Elem	Cu3247	Fe2599	K_7664	Li6707	Mg2790	Mn2576	Mo2020	Na5895	Ni2316	P_1782	Pb2203
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	-.00046	.00625	.14739	.00119	.00216	.00002	.00218	W .49684	-.00034	-.00008	-.00090
Stddev	.00003	.00511	.03498	.00091	.00703	.00007	.00125	.01736	.00001	.00183	.00232
%RSD	5.5966	81.664	23.734	76.140	326.10	323.80	57.243	3.4940	3.6619	2198.5	256.63

#1	-.00048	.00264	.17212	.00183	-.00282	-.00003	.00130	.50912	-.00033	-.00138	.00074
#2	-.00044	.00986	.12265	.00055	.00713	.00008	.00306	.48457	-.00035	.00121	-.00255

Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Warn	Chk Pass	Chk Pass	Chk Pass
High Limit								.35000			
Low Limit								-.35000			

Elem	S_1820	Sb2068	Se1960	Si2881	SiO2	Sn1899	Sr4077	Th2837	Ti3349	Ti1908	U_3701
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	F .16791	W .00571	.00699	.05513	.11799	.00137	.00034	.00178	.00001	.00100	-.02313
Stddev	.00783	.00358	.00447	.02722	.05825	.00181	.00006	.00024	.00029	.00294	.01250
%RSD	4.6631	62.756	63.945	49.370	49.370	131.60	17.038	13.335	3202.2	293.46	54.038

#1	.17344	.00318	.00383	.03589	.07680	.00010	.00030	.00162	-.00019	-.00108	-.03197
#2	.16237	.00824	.01015	.07438	.15918	.00265	.00038	.00195	.00021	.00308	-.01429

Check ?	Chk Fail	Chk Warn	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit	.10000	.00100									
Low Limit	-.20000	-.00100									

Elem	V_2924	Zn2062	Zr3391
Units	ppm	ppm	ppm
Avg	.00061	-.00131	.00153
Stddev	.00018	.00085	.00361
%RSD	28.873	64.398	235.25

#1	.00049	-.00072	-.00102
#2	.00074	-.00191	.00409

Check ?	Chk Pass	Chk Pass	Chk Pass
High Limit			
Low Limit			

Int. Std.	Y_2243	Y_3600	Y_3774
Units	Cts/S	Cts/S	Cts/S
Avg	2659.5	41178.	2150.2
Stddev	14.8	123.	21.9
%RSD	.55582	.29961	1.0165

#1	2669.9	41090.	2134.7
#2	2649.0	41265.	2165.6

Sample Name: CCVL-3897520 Acquired: 5/18/2016 17:55:51 Type: QC
Method: 6500_025(v6) Mode: CONC Corr. Factor: 1.000000
User: CRHOADES Prep Date: Custom ID2: Custom ID3:
Comment:

Elem	Ag3280	Al1670	As1890	B_2089	Ba4554	Be3130	Bi2230	Ca3179	Cd2288	Co2286	Cr2055	Cu3247
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.00970	.11302	.01866	.09678	.00965	.00103	.11111	.22635	.00456	.00983	.01056	.01458
Stddev	.00009	.00181	.00391	.00196	.00005	.00005	.00366	.01004	.00026	.00040	.00036	.00065
%RSD	.88525	1.6010	20.984	2.0234	.50400	5.1798	3.2916	4.4334	5.6460	4.0216	3.4404	4.4722

#1	.00964	.11430	.01589	.09816	.00962	.00100	.11369	.23345	.00475	.01011	.01082	.01412
#2	.00976	.11174	.02142	.09539	.00969	.00107	.10852	.21926	.00438	.00955	.01030	.01504

Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Value												
Range												

Elem	Fe2599	K_7664	Li6707	Mg2790	Mn2576	Mo2020	Na5895	Ni2316	P_1782	Pb2203	S_1820	Sb2068
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.11221	3.2481	.01221	.19551	.00970	.02010	F 1.4896	.04004	2.8321	.00830	.16305	.02007
Stddev	.00082	.0643	.00216	.00353	.00008	.00047	.0095	.00092	.0551	.00037	.00116	.00427
%RSD	.72969	1.9787	17.711	1.8059	.77605	2.3202	.63624	2.2922	1.9443	4.4279	.71043	21.272

#1	.11279	3.2027	.01068	.19301	.00965	.01978	1.4829	.04069	2.8710	.00856	.16223	.02309
#2	.11163	3.2935	.01374	.19801	.00976	.02043	1.4963	.03939	2.7932	.00804	.16386	.01706

Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Fail	Chk Pass	Chk Pass	Chk Pass	None	Chk Pass
Value							1.0000					
Range							30.000%					

Elem	Se1960	Si2881	SiO2	Sn1899	Sr4077	Th2837	Ti3349	Ti1908	U_3701	V_2924	Zn2062	Zr3391
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	F .02280	.51127	1.0941	.10450	.00986	.01412	.00884	.01238	.06772	.01053	.01750	.01401
Stddev	.00502	.04242	.0908	.00370	.00007	.00053	.00032	.00184	.00113	.00044	.00109	.00416
%RSD	22.035	8.2970	8.2970	3.5372	.73391	3.7647	3.6698	14.886	1.6753	4.1667	6.2358	29.678

#1	.02636	.48127	1.0299	.10712	.00981	.01449	.00861	.01369	.06692	.01084	.01827	.01107
#2	.01925	.54127	1.1583	.10189	.00991	.01374	.00907	.01108	.06852	.01022	.01673	.01695

Check ?	Chk Fail	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Value	.01500											
Range	30.000%											

Int. Std.	Y_2243	Y_3600	Y_3774
Units	Cts/S	Cts/S	Cts/S
Avg	2608.3	40935.	2138.8
Stddev	7.5	191.	.5
%RSD	.28846	.46635	.02169

#1	2602.9	40800.	2138.5
#2	2613.6	41070.	2139.1

Sample Name: MB 280-325403/1-A Acquired: 5/18/2016 17:58:31 Type: Unk

Method: 6500_025(v6) Mode: CONC Corr. Factor: 1.000000

User: CRHOADES Prep Date: 5/17 Custom ID2: Custom ID3:

Comment: 325403 SOIL 6010C (Cu) Q4

Elem	Ag3280	Al1670	As1890	B_2089	Ba4554	Be3130	Bi2230	Ca3179	Cd2288
Line	328.068 {103}	167.079 {502}	189.042 {478}	208.959 {461}	455.403 { 74}	313.042 {108}	223.061 {451}	317.933 {106}	228.802 {447}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	-0.00043	.00997	-0.00588	.01261	-0.00061	.00022	.00008	.00621	-0.00024
Stddev	.00086	.00039	.00449	.00016	.00071	.00024	.00157	.00379	.00015
%RSD	201.83	3.9575	76.235	1.2578	116.89	109.49	2032.5	60.941	63.141

#1	-.00103	.00970	-.00906	.01249	-.00112	.00005	-.00103	.00354	-.00034
#2	.00018	.01025	-.00271	.01272	-.00011	.00038	.00119	.00889	-.00013

Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Elem	Co2286	Cr2055	Cu3247	Fe2599	K_7664	Li6707	Mg2790	Mn2576	Mo2020
Line	228.616 {447}	205.560 {464}	324.754 {104}	259.940 {130}	766.490 { 44}	670.784 { 50}	279.079 {121}2	257.610 {131}	202.030 {467}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	-0.00002	.00049	-0.00080	.01313	.11384	-0.00171	.00591	.00013	-0.00017
Stddev	.00003	.00000	.00071	.00034	.02727	.00061	.00179	.00008	.00038
%RSD	182.59	.10997	87.828	2.5875	23.954	35.953	30.276	60.211	228.69

#1	.00001	.00049	-.00030	.01337	.09456	-.00214	.00465	.00007	-.00044
#2	-.00004	.00049	-.00130	.01288	.13312	-.00127	.00718	.00018	.00010

Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Elem	Na5895	Ni2316	P_1782	Pb2203	S_1820	Sb2068	Se1960	Si2881	SiO2
Line	589.592 { 57}	231.604 {446}	178.284 {489}	220.353 {453}	182.034 {485}	206.833 {463}	196.090 {472}	288.158 {117}	288.158 {117}2
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.37239	-0.00080	.00281	-0.00068	F .12660	.00328	-0.00023	.11805	.25263
Stddev	.01428	.00054	.00240	.00143	.00025	.00024	.00818	.00680	.01456
%RSD	3.8343	67.772	85.470	211.34	.19570	7.2604	3542.6	5.7625	5.7625

#1	.38248	-.00042	.00111	.00033	.12678	.00311	-.00602	.11324	.24234
#2	.36229	-.00119	.00451	-.00169	.12643	.00345	.00556	.12286	.26292

Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Fail	Chk Pass	Chk Pass	Chk Pass	None
High Limit					.10000				
Low Limit					-.10000				

Elem	Sn1899	Sr4077	Th2837	Ti3349	Ti1908	U_3701	V_2924	Zn2062	Zr3391
Line	189.989 {477}	407.771 { 83}	283.730 {119}	334.904 {101}	190.856 {477}	370.152 { 91}	292.402 {115}	206.200 {163}	339.198 { 99}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.00110	.00027	.00188	-0.00012	-0.00351	.03393	.00075	.00040	-0.00243
Stddev	.00088	.00024	.00060	.00009	.00127	.00445	.00025	.00016	.00082
%RSD	79.979	92.260	31.781	75.782	36.096	13.107	33.433	41.184	33.663

#1	.00048	.00044	.00146	-.00005	-.00262	.03079	.00057	.00028	-.00186
#2	.00172	.00009	.00231	-.00018	-.00441	.03708	.00093	.00051	-.00301

Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Int. Std.	Y_2243	Y_3600	Y_3774
Line	224.306 {450}	360.073 { 94}	377.433 { 89}
Units	Cts/S	Cts/S	Cts/S
Avg	2700.3	42332.	2132.6
Stddev	30.0	123.	29.2
%RSD	1.1095	.29088	1.3692

#1	2721.5	42245.	2153.2
#2	2679.1	42419.	2111.9

Sample Name: LCS 280-325403/2-A Acquired: 5/18/2016 18:00:54 Type: Unk
Method: 6500_025(v6) Mode: CONC Corr. Factor: 1.000000
User: CRHOADES Prep Date: Custom ID2: Custom ID3:
Comment: 325403 SOIL 6010C (Cu) Q4

Elem	Ag3280	Al1670	As1890	B_2089	Ba4554	Be3130	Bi2230	Ca3179	Cd2288
Line	328.068 {103}	167.079 {502}	189.042 {478}	208.959 {461}	455.403 { 74}	313.042 {108}	223.061 {451}	317.933 {106}	228.802 {447}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.04786	2.1190	1.0473	F 1.1108	2.0243	.04689	2.1266	49.128	.09532
Stddev	.00007	.0050	.0094	.0004	.0136	.00041	.0134	.163	.00028
%RSD	.13778	.23712	.89717	.03313	.67108	.87314	.63045	.33168	.28951

#1	.04790	2.1226	1.0540	1.1111	2.0147	.04718	2.1360	49.013	.09552
#2	.04781	2.1154	1.0407	1.1106	2.0339	.04660	2.1171	49.243	.09512

Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Fail	Chk Pass	Chk Pass	None	Chk Pass	Chk Pass
High Limit				1.1050					
Low Limit				.86000					

Elem	Co2286	Cr2055	Cu3247	Fe2599	K_7664	Li6707	Mg2790	Mn2576	Mo2020
Line	228.616 {447}	205.560 {464}	324.754 {104}	259.940 {130}	766.490 { 44}	670.784 { 50}	279.079 {121}2	257.610 {131}	202.030 {467}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.47638	.19619	.25393	1.0009	49.113	.96418	46.550	.45502	1.0465
Stddev	.00003	.00054	.00045	.0038	.221	.00689	.037	.00037	.0060
%RSD	.00610	.27603	.17882	.38270	.44981	.71480	.07988	.08226	.57826

#1	.47641	.19581	.25425	1.0036	48.957	.96905	46.576	.45529	1.0508
#2	.47636	.19658	.25361	.99819	49.269	.95931	46.524	.45476	1.0422

Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Elem	Na8183	Ni2316	P_1782	Pb2203	S_1820	Sb2068	Se1960	Si2881	SiO2
Line	818.326 { 41}	231.604 {446}	178.284 {489}	220.353 {453}	182.034 {485}	206.833 {463}	196.090 {472}	288.158 {117}	288.158 {117}2
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	52.906	.47011	9.7693	.49374	2.1672	.50679	2.0637	F 2.3186	4.9619
Stddev	.246	.00089	.0141	.00084	.0118	.00078	.0163	.0126	.0269
%RSD	.46519	.18840	.14448	.16919	.54641	.15452	.79117	.54244	.54244

#1	53.080	.47074	9.7594	.49433	2.1756	.50734	2.0753	2.3275	4.9809
#2	52.732	.46949	9.7793	.49315	2.1588	.50623	2.0522	2.3097	4.9429

Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	None	Chk Pass	Chk Pass	Chk Fail	None
High Limit								11.000	
Low Limit								9.0000	

Elem	Sn1899	Sr4077	Th2837	Ti3349	Ti1908	U_3701	V_2924	Zn2062	Zr3391
Line	189.989 {477}	407.771 { 83}	283.730 {119}	334.904 {101}	190.856 {477}	370.152 { 91}	292.402 {115}	206.200 {163}	339.198 { 99}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	1.9721	.95325	.93393	.93442	1.9372	2.1086	.46742	.44944	.52097
Stddev	.0009	.00379	.00042	.00173	.0468	.0221	.00126	.00442	.00073
%RSD	.04516	.39755	.04528	.18504	2.4162	1.0480	.26915	.98387	.14042

#1	1.9727	.95057	.93423	.93564	1.9703	2.1242	.46831	.44632	.52148
#2	1.9715	.95593	.93363	.93320	1.9041	2.0930	.46653	.45257	.52045

Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Int. Std.	Y_2243	Y_3600	Y_3774						
Line	224.306 {450}	360.073 { 94}	377.433 { 89}						
Units	Cts/S	Cts/S	Cts/S						
Avg	2593.6	40627.	2146.0						
Stddev	1.5	164.	3.2						
%RSD	.05662	.40305	.14695						

#1	2594.6	40511.	2143.7						
#2	2592.6	40743.	2148.2						

Sample Name: 280-82954-A-1-A Acquired: 5/18/2016 18:03:21 Type: Unk

Method: 6500_025(v6) Mode: CONC Corr. Factor: 1.000000

User: CRHOADES Prep Date: Custom ID2: Custom ID3:

Comment: 325403 SOIL 6010C (Cu) Q4

Elem	Ag3280	Al3092	As1890	B_2089	Ba4554	Be3130	Bi2230	Ca3179	Cd2288
Line	328.068 {103}	309.271 {109}	189.042 {478}	208.959 {461}	455.403 {74}	313.042 {108}	223.061 {451}	317.933 {106}	228.802 {447}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	-.00048	21.554	.00743	.00592	.08536	.00028	.00486	.56315	.01364
Stddev	.00013	.641	.00736	.00085	.00358	.00001	.00086	.02481	.00016
%RSD	27.314	2.9739	99.066	14.355	4.1997	4.1108	17.726	4.4049	1.1856

#1	-.00058	21.101	.00223	.00652	.08282	.00027	.00547	.54561	.01353
#2	-.00039	22.007	.01264	.00532	.08789	.00029	.00425	.58069	.01376

Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Elem	Co2286	Cr2055	Cu3247	Fe2599	K_7664	Li6707	Mg2790	Mn2576	Mo2020
Line	228.616 {447}	205.560 {464}	324.754 {104}	259.940 {130}	766.490 {44}	670.784 {50}	279.079 {121}2	257.610 {131}	202.030 {467}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.00064	.02612	.26781	8.3959	.16664	.00740	.45554	.02946	.00503
Stddev	.00047	.00038	.00025	.1930	.02827	.00238	.00261	.00003	.00136
%RSD	72.563	1.4384	.09248	2.2985	16.967	32.139	.57244	.09496	26.989

#1	.00097	.02638	.26763	8.2595	.18663	.00908	.45738	.02944	.00407
#2	.00031	.02585	.26798	8.5324	.14664	.00572	.45369	.02948	.00599

Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Elem	Na5895	Ni2316	P_1782	Pb2203	S_1820	Sb2068	Se1960	Si2881	SiO2
Line	589.592 {57}	231.604 {446}	178.284 {489}	220.353 {453}	182.034 {485}	206.833 {463}	196.090 {472}	288.158 {117}	288.158 {117}2
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.35041	.00847	.22040	.25891	.69977	.00293	.00450	2.2265	4.7648
Stddev	.00260	.00001	.00073	.00369	.00374	.00261	.01442	.0628	.1344
%RSD	.74177	.17354	.33177	1.4236	.53404	89.313	320.20	2.8211	2.8211

#1	.35225	.00848	.21988	.25631	.70241	.00108	-.00569	2.1821	4.6697
#2	.34857	.00846	.22091	.26152	.69712	.00478	.01470	2.2709	4.8598

Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Elem	Sn1899	Sr4077	Th2837	Ti3349	Ti1908	U_3701	V_2924	Zn2062	Zr3391
Line	189.989 {477}	407.771 {83}	283.730 {119}	334.904 {101}	190.856 {477}	370.152 {91}	292.402 {115}	206.200 {163}	339.198 {99}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.00545	.00721	.00653	.17364	.02317	-.02961	.01534	.63163	.01087
Stddev	.00086	.00004	.00323	.00308	.00535	.01748	.00029	.00335	.00262
%RSD	15.806	.54072	49.499	1.7754	23.083	59.037	1.8576	.53008	24.083

#1	.00606	.00719	.00425	.17582	.01939	-.01725	.01554	.62926	.01272
#2	.00484	.00724	.00882	.17146	.02695	-.04197	.01514	.63399	.00901

Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Int. Std.	Y_2243	Y_3600	Y_3774
Line	224.306 {450}	360.073 {94}	377.433 {89}
Units	Cts/S	Cts/S	Cts/S
Avg	2662.5	41513.	2239.9
Stddev	13.0	35.	73.8
%RSD	.48963	.08331	3.2925

#1	2653.3	41489.	2292.1
#2	2671.7	41538.	2187.8

Sample Name: 280-82954-A-1-A SD@5 Acquired: 5/18/2016 18:05:59 Type: Unk
Method: 6500_025(v6) Mode: CONC Corr. Factor: 1.000000
User: CRHOADES Prep Date: Custom ID2: Custom ID3:
Comment: 325403 SOIL 6010C (Cu) Q4

Elem	Ag3280	Al3092	As1890	B_2089	Ba4554	Be3130	Bi2230	Ca3179	Cd2288
Line	328.068 {103}	309.271 {109}	189.042 {478}	208.959 {461}	455.403 {74}	313.042 {108}	223.061 {451}	317.933 {106}	228.802 {447}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	-.00045	4.7291	.00035	.00228	.01775	.00016	.00231	.11734	.00228
Stddev	.00050	.0095	.00274	.00032	.00014	.00025	.00124	.02337	.00026
%RSD	112.58	.20045	778.86	13.964	.78094	155.79	53.768	19.917	11.213

#1	-.00080	4.7224	-.00159	.00205	.01765	-.00002	.00143	.13387	.00210
#2	-.00009	4.7358	.00229	.00250	.01784	.00033	.00319	.10082	.00246

Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Elem	Co2286	Cr2055	Cu3247	Fe2599	K_7664	Li6707	Mg2790	Mn2576	Mo2020
Line	228.616 {447}	205.560 {464}	324.754 {104}	259.940 {130}	766.490 {44}	670.784 {50}	279.079 {121}2	257.610 {131}	202.030 {467}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	-.00005	.00505	.05260	1.7643	.16356	.00251	.09308	.00640	.00057
Stddev	.00038	.00017	.00078	.0010	.03061	.00237	.00066	.00006	.00088
%RSD	788.79	3.3643	1.4872	.05708	18.716	94.635	.70479	.93769	154.03

#1	.00022	.00493	.05315	1.7650	.18521	.00083	.09261	.00644	-.00005
#2	-.00032	.00517	.05205	1.7636	.14192	.00418	.09354	.00635	.00119

Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Elem	Na5895	Ni2316	P_1782	Pb2203	S_1820	Sb2068	Se1960	Si2881	SiO2
Line	589.592 {57}	231.604 {446}	178.284 {489}	220.353 {453}	182.034 {485}	206.833 {463}	196.090 {472}	288.158 {117}	288.158 {117}2
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.31659	.00145	.04334	.05187	.22036	.00809	.00643	.82792	1.7717
Stddev	.02468	.00018	.00137	.00044	.00708	.00044	.00225	.00936	.0200
%RSD	7.7949	12.103	3.1720	.84166	3.2124	5.4767	35.049	1.1305	1.1305

#1	.33404	.00133	.04431	.05156	.21535	.00840	.00483	.83453	1.7859
#2	.29914	.00158	.04237	.05217	.22537	.00778	.00802	.82130	1.7576

Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Elem	Sn1899	Sr4077	Th2837	Ti3349	Ti1908	U_3701	V_2924	Zn2062	Zr3391
Line	189.989 {477}	407.771 {83}	283.730 {119}	334.904 {101}	190.856 {477}	370.152 {91}	292.402 {115}	206.200 {163}	339.198 {99}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.00047	.00167	.00302	.04335	.00400	-.00823	.00379	.12914	.00104
Stddev	.00178	.00010	.00049	.00288	.00069	.00177	.00045	.00135	.00143
%RSD	377.84	5.9051	16.281	6.6438	17.273	21.542	11.996	1.0434	138.49

#1	.00173	.00174	.00267	.04539	.00449	-.00698	.00411	.13009	.00002
#2	-.00079	.00160	.00337	.04131	.00351	-.00949	.00346	.12819	.00205

Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Int. Std.	Y_2243	Y_3600	Y_3774
Line	224.306 {450}	360.073 {94}	377.433 {89}
Units	Cts/S	Cts/S	Cts/S
Avg	2563.0	40011.	2070.1
Stddev	.2	185.	6.9
%RSD	.00856	.46214	.33470

#1	2563.2	40142.	2065.2
#2	2562.9	39880.	2075.0

Sample Name: 280-82954-A-1-B MS Acquired: 5/18/2016 18:08:39 Type: Unk
Method: 6500_025(v6) Mode: CONC Corr. Factor: 1.000000
User: CRHOADES Prep Date: Custom ID2: Custom ID3:
Comment: 325403 SOIL 6010C (Cu) Q4

Elem	Ag3280	Al3092	As1890	B_2089	Ba4554	Be3130	Bi2230	Ca3179	Cd2288
Line	328.068 {103}	309.271 {109}	189.042 {478}	208.959 {461}	455.403 { 74}	313.042 {108}	223.061 {451}	317.933 {106}	228.802 {447}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.04612	21.457	.99246	.90061	2.0240	.04396	F 2.0006	47.206	.10146
Stddev	.00015	.067	.00323	.00060	.0064	.00018	.0150	.162	.00071
%RSD	.33576	.31361	.32560	.06673	.31633	.40004	.74715	.34300	.69502

#1	.04623	21.409	.99017	.90018	2.0285	.04383	2.0112	47.320	.10196
#2	.04601	21.504	.99474	.90103	2.0194	.04408	1.9900	47.091	.10096

Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Fail	Chk Pass	Chk Pass
High Limit							.10000		
Low Limit							-.10000		

Elem	Co2286	Cr2055	Cu3247	Fe2714	K_7664	Li6707	Mg2790	Mn2576	Mo2020
Line	228.616 {447}	205.560 {464}	324.754 {104}	271.441 {124}	766.490 { 44}	670.784 { 50}	279.079 {121}2	257.610 {131}	202.030 {467}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.45960	.29717	.76858	91.809	47.260	.91908	44.710	.79725	.99696
Stddev	.00046	.00181	.00167	.150	.423	.00525	.192	.00301	.00508
%RSD	.10085	.60753	.21693	.16346	.89487	.57129	.42999	.37812	.50934

#1	.45992	.29845	.76740	91.915	47.559	.91537	44.574	.79511	1.0005
#2	.45927	.29589	.76976	91.703	46.961	.92280	44.846	.79938	.99336

Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Elem	Na8183	Ni2316	P_1782	Pb2203	S_1820	Sb2068	Se1960	Si2881	SiO2
Line	818.326 { 41}	231.604 {446}	178.284 {489}	220.353 {453}	182.034 {485}	206.833 {463}	196.090 {472}	288.158 {117}	288.158 {117}2
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	49.265	.53706	W 9.3380	.74097	2.6923	.47013	1.9189	5.9492	12.731
Stddev	.650	.00169	.0050	.00522	.0095	.00270	.0158	.0238	.051
%RSD	1.3197	.31546	.05403	.70483	.35207	.57373	.82437	.40074	.40074

#1	48.805	.53826	9.3416	.74467	2.6990	.47204	1.9301	5.9323	12.695
#2	49.724	.53586	9.3345	.73728	2.6856	.46823	1.9077	5.9661	12.767

Check ?	Chk Pass	Chk Pass	Chk Warn	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit			2.0000						
Low Limit			-1.0000						

Elem	Sn1899	Sr4077	Th2837	Ti3349	Ti1908	U_3701	V_2924	Zn2062	Zr3391
Line	189.989 {477}	407.771 { 83}	283.730 {119}	334.904 {101}	190.856 {477}	370.152 { 91}	292.402 {115}	206.200 {163}	339.198 { 99}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	1.8927	.91251	.88301	1.1611	1.7205	1.9306	.46334	.92143	.49917
Stddev	.0106	.00614	.00299	.0074	.0697	.0369	.00310	.00405	.00108
%RSD	.56198	.67288	.33868	.63576	4.0523	1.9138	.66849	.43928	.21551

#1	1.9002	.91685	.88090	1.1559	1.7698	1.9567	.46115	.91857	.49993
#2	1.8852	.90817	.88513	1.1663	1.6712	1.9044	.46553	.92429	.49841

Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Int. Std.	Y_2243	Y_3600	Y_3774						
Line	224.306 {450}	360.073 { 94}	377.433 { 89}						
Units	Cts/S	Cts/S	Cts/S						
Avg	2496.1	38558.	2021.0						
Stddev	6.2	180.	9.7						
%RSD	.24893	.46644	.47912						

#1	2491.7	38685.	2014.2						
#2	2500.5	38431.	2027.9						

Sample Name: 280-82954-A-1-C MSD Acquired: 5/18/2016 18:11:05 Type: Unk
Method: 6500_025(v6) Mode: CONC Corr. Factor: 1.000000
User: CRHOADES Prep Date: Custom ID2: Custom ID3:
Comment: 325403 SOIL 6010C (Cu) Q4

Elem	Ag3280	Al3092	As1890	B_2089	Ba4554	Be3130	Bi2230	Ca3179	Cd2288
Line	328.068 {103}	309.271 {109}	189.042 {478}	208.959 {461}	455.403 {74}	313.042 {108}	223.061 {451}	317.933 {106}	228.802 {447}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.04673	22.836	.98793	.93329	2.0858	.04619	F 2.0409	48.848	.10578
Stddev	.00035	.099	.00276	.01001	.0101	.00008	.0192	.303	.00121
%RSD	.75560	.43417	.27914	1.0726	.48376	.16849	.94277	.61953	1.1464

#1	.04698	22.766	.98988	.94036	2.0786	.04614	2.0545	48.634	.10663
#2	.04648	22.906	.98598	.92621	2.0929	.04625	2.0273	49.062	.10492

Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Fail	Chk Pass	Chk Pass
High Limit							.10000		
Low Limit							-.10000		

Elem	Co2286	Cr2055	Cu3247	Fe2599	K_7664	Li6707	Mg2790	Mn2576	Mo2020
Line	228.616 {447}	205.560 {464}	324.754 {104}	259.940 {130}	766.490 {44}	670.784 {50}	279.079 {121}2	257.610 {131}	202.030 {467}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.46490	.21178	.47496	10.763	48.911	.95381	46.719	.48667	1.0168
Stddev	.00383	.00193	.00053	.013	.310	.00781	.072	.00108	.0069
%RSD	.82291	.91351	.11167	.11779	.63298	.81874	.15480	.22104	.67536

#1	.46761	.21315	.47459	10.754	48.692	.94829	46.770	.48743	1.0217
#2	.46220	.21041	.47534	10.772	49.130	.95933	46.668	.48591	1.0120

Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Elem	Na8183	Ni2316	P_1782	Pb2203	S_1820	Sb2068	Se1960	Si2881	SiO2
Line	818.326 {41}	231.604 {446}	178.284 {489}	220.353 {453}	182.034 {485}	206.833 {463}	196.090 {472}	288.158 {117}	288.158 {117}2
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	51.218	.46599	W 9.5050	.68597	2.7096	.48496	1.9950	7.4539	15.951
Stddev	.828	.00343	.0761	.00657	.0382	.00243	.0063	.0695	.149
%RSD	1.6175	.73668	.80042	.95788	1.4109	.50072	.31727	.93288	.93288

#1	51.804	.46842	9.5588	.69061	2.7366	.48668	1.9995	7.5031	16.057
#2	50.632	.46357	9.4512	.68132	2.6826	.48325	1.9906	7.4047	15.846

Check ?	Chk Pass	Chk Pass	Chk Warn	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit			2.0000						
Low Limit			-1.0000						

Elem	Sn1899	Sr4077	Th2837	Ti3349	Ti1908	U_3701	V_2924	Zn2062	Zr3391
Line	189.989 {477}	407.771 {83}	283.730 {119}	334.904 {101}	190.856 {477}	370.152 {91}	292.402 {115}	206.200 {163}	339.198 {99}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	1.9219	.94262	.92467	1.2231	1.8607	2.0798	.47832	.86199	.52958
Stddev	.0053	.00873	.00802	.0005	.0506	.0798	.00031	.00303	.00189
%RSD	.27716	.92623	.86699	.04432	2.7217	3.8364	.06564	.35117	.35777

#1	1.9257	.93644	.91900	1.2227	1.8965	2.1363	.47810	.86413	.53092
#2	1.9182	.94879	.93034	1.2235	1.8249	2.0234	.47854	.85985	.52824

Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Int. Std.	Y_2243	Y_3600	Y_3774
Line	224.306 {450}	360.073 {94}	377.433 {89}
Units	Cts/S	Cts/S	Cts/S
Avg	2555.7	38734.	2038.4
Stddev	5.8	643.	13.2
%RSD	.22741	1.6591	.64821

#1	2551.6	38280.	2047.8
#2	2559.8	39189.	2029.1

Sample Name: 280-82954-A-1-A PDS Acquired: 5/18/2016 18:13:31 Type: Unk
Method: 6500_025(v6) Mode: CONC Corr. Factor: 1.000000
User: CRHOADES Prep Date: Custom ID2: Custom ID3:
Comment: 325403 SOIL 6010C (Cu) Q4

Elem	Ag3280	Al3092	As1890	B_2089	Ba4554	Be3130	Bi2230	Ca3179	Cd2288
Line	328.068 {103}	309.271 {109}	189.042 {478}	208.959 {461}	455.403 {74}	313.042 {108}	223.061 {451}	317.933 {106}	228.802 {447}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.01422	23.546	.21508	.10326	.19110	.04691	.00498	20.403	.06203
Stddev	.00072	.490	.00272	.00177	.00413	.00034	.00089	.172	.00050
%RSD	5.0687	2.0827	1.2644	1.7186	2.1600	.73515	17.860	.84124	.80280

#1	.01473	23.199	.21701	.10452	.18818	.04666	.00561	20.282	.06167
#2	.01371	23.892	.21316	.10201	.19402	.04715	.00435	20.525	.06238

Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Elem	Co2286	Cr2055	Cu3247	Fe2599	K_7664	Li6707	Mg2790	Mn2576	Mo2020
Line	228.616 {447}	205.560 {464}	324.754 {104}	259.940 {130}	766.490 {44}	670.784 {50}	279.079 {121}2	257.610 {131}	202.030 {467}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.04998	.07677	.30855	9.3624	20.323	.10474	19.709	.07835	.05696
Stddev	.00001	.00063	.00007	.0853	.068	.00316	.018	.00019	.00059
%RSD	.02964	.82025	.02199	.91112	.33643	3.0198	.09293	.24062	1.0426

#1	.04997	.07632	.30860	9.3021	20.275	.10698	19.722	.07849	.05654
#2	.04999	.07721	.30850	9.4227	20.371	.10251	19.696	.07822	.05738

Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Elem	Na8183	Ni2316	P_1782	Pb2203	S_1820	Sb2068	Se1960	Si2881	SiO2
Line	818.326 {41}	231.604 {446}	178.284 {489}	220.353 {453}	182.034 {485}	206.833 {463}	196.090 {472}	288.158 {117}	288.158 {117}2
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	22.431	.05706	W 2.1328	.34004	.64512	.10498	.21418	11.699	25.035
Stddev	.282	.00001	.0038	.00192	.00141	.00011	.00444	.037	.079
%RSD	1.2585	.01186	.18002	.56427	.21892	.10437	2.0751	.31430	.31430

#1	22.630	.05706	2.1301	.33868	.64612	.10490	.21104	11.673	24.979
#2	22.231	.05707	2.1355	.34139	.64412	.10505	.21732	11.725	25.090

Check ?	Chk Pass	Chk Pass	Chk Warn	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit			2.0000						
Low Limit			-1.0000						

Elem	Sn1899	Sr4077	Th2837	Ti3349	Ti1908	U_3701	V_2924	Zn2062	Zr3391
Line	189.989 {477}	407.771 {83}	283.730 {119}	334.904 {101}	190.856 {477}	370.152 {91}	292.402 {115}	206.200 {163}	339.198 {99}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.10408	.05689	.19753	.34232	.22499	.60034	.06502	.80824	.06510
Stddev	.00214	.00113	.00303	.00768	.01161	.01020	.00007	.00520	.00000
%RSD	2.0584	1.9909	1.5345	2.2441	5.1580	1.6985	.10317	.64362	.00117

#1	.10257	.05609	.19967	.34775	.21679	.60755	.06497	.81192	.06510
#2	.10560	.05769	.19539	.33689	.23320	.59313	.06507	.80456	.06511

Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Int. Std.	Y_2243	Y_3600	Y_3774
Line	224.306 {450}	360.073 {94}	377.433 {89}
Units	Cts/S	Cts/S	Cts/S
Avg	2596.8	39449.	2102.8
Stddev	27.9	310.	7.8
%RSD	1.0744	.78461	.37108

#1	2577.1	39230.	2108.3
#2	2616.5	39667.	2097.3

Sample Name: 280-82954-A-2-A Acquired: 5/18/2016 18:16:07 Type: Unk

Method: 6500_025(v6) Mode: CONC Corr. Factor: 1.000000

User: CRHOADES Prep Date: Custom ID2: Custom ID3:

Comment: 325403 SOIL 6010C (Cu) Q4

Elem	Ag3280	Al3092	As1890	B_2089	Ba4554	Be3130	Bi2230	Ca3179	Cd2288
Line	328.068 {103}	309.271 {109}	189.042 {478}	208.959 {461}	455.403 {74}	313.042 {108}	223.061 {451}	317.933 {106}	228.802 {447}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	-.00084	19.644	-.00203	.00563	.14238	.00035	.00453	.71056	.00723
Stddev	.00049	.299	.00016	.00045	.00140	.00002	.00666	.00461	.00017
%RSD	58.837	1.5205	7.7737	7.9299	.98330	6.2123	146.90	.64867	2.3115

#1	-.00119	19.433	-.00215	.00595	.14139	.00037	.00924	.70731	.00735
#2	-.00049	19.855	-.00192	.00532	.14337	.00034	-.00018	.71382	.00711

Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Elem	Co2286	Cr2055	Cu3247	Fe2599	K_7664	Li6707	Mg2790	Mn2576	Mo2020
Line	228.616 {447}	205.560 {464}	324.754 {104}	259.940 {130}	766.490 {44}	670.784 {50}	279.079 {121}2	257.610 {131}	202.030 {467}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.00122	.01781	.16144	16.732	.39462	.00643	.58937	.07693	.00197
Stddev	.00045	.00008	.00018	.063	.05472	.00426	.00965	.00050	.00025
%RSD	36.642	.46333	.11435	.37600	13.866	66.261	1.6370	.65267	12.585

#1	.00090	.01787	.16157	16.688	.35593	.00342	.59619	.07728	.00215
#2	.00153	.01775	.16130	16.777	.43331	.00944	.58255	.07657	.00180

Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Elem	Na5895	Ni2316	P_1782	Pb2203	S_1820	Sb2068	Se1960	Si2881	SiO2
Line	589.592 {57}	231.604 {446}	178.284 {489}	220.353 {453}	182.034 {485}	206.833 {463}	196.090 {472}	288.158 {117}	288.158 {117}2
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.25375	.01102	.28757	.20731	.29417	.00150	.00422	2.6721	5.7182
Stddev	.00188	.00007	.00469	.00086	.01084	.00121	.01078	.0132	.0281
%RSD	.74221	.63037	1.6313	.41432	3.6854	81.026	255.16	.49210	.49210

#1	.25242	.01097	.29089	.20792	.30184	.00235	-.00340	2.6814	5.7381
#2	.25509	.01107	.28425	.20670	.28651	.00064	.01184	2.6628	5.6983

Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Elem	Sn1899	Sr4077	Th2837	Ti3349	Ti1908	U_3701	V_2924	Zn2062	Zr3391
Line	189.989 {477}	407.771 {83}	283.730 {119}	334.904 {101}	190.856 {477}	370.152 {91}	292.402 {115}	206.200 {163}	339.198 {99}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.00711	.00773	.00370	.21742	.00099	.04513	.02103	.28296	.01320
Stddev	.00174	.00019	.00006	.00530	.00133	.00281	.00030	.00474	.00285
%RSD	24.427	2.4017	1.7074	2.4399	135.47	6.2361	1.4401	1.6745	21.585

#1	.00834	.00786	.00375	.22117	.00004	.04713	.02124	.28631	.01119
#2	.00588	.00760	.00366	.21367	.00193	.04314	.02081	.27961	.01522

Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Int. Std.	Y_2243	Y_3600	Y_3774
Line	224.306 {450}	360.073 {94}	377.433 {89}
Units	Cts/S	Cts/S	Cts/S
Avg	2653.5	40625.	2129.4
Stddev	28.0	96.	16.4
%RSD	1.0552	.23666	.77155

#1	2633.7	40693.	2117.8
#2	2673.3	40557.	2141.0

Sample Name: 280-82954-A-3-A Acquired: 5/18/2016 18:18:45 Type: Unk

Method: 6500_025(v6) Mode: CONC Corr. Factor: 1.000000

User: CRHOADES Prep Date: Custom ID2: Custom ID3:

Comment: 325403 SOIL 6010C (Cu) Q4

Elem	Ag3280	Al3092	As1890	B_2089	Ba4554	Be3130	Bi2230	Ca3179	Cd2288
Line	328.068 {103}	309.271 {109}	189.042 {478}	208.959 {461}	455.403 {74}	313.042 {108}	223.061 {451}	317.933 {106}	228.802 {447}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	-.00010	30.479	-.00120	.00524	.15094	.00032	.00262	1.1935	.03456
Stddev	.00080	.162	.00431	.00012	.00235	.00009	.00048	.0031	.00005
%RSD	769.51	.53090	358.67	2.3676	1.5585	27.490	18.481	.25846	.13179

#1	.00046	30.594	-.00425	.00533	.15261	.00038	.00296	1.1913	.03453
#2	-.00067	30.365	.00184	.00515	.14928	.00026	.00228	1.1957	.03459

Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Elem	Co2286	Cr2055	Cu3247	Fe2599	K_7664	Li6707	Mg2790	Mn2576	Mo2020
Line	228.616 {447}	205.560 {464}	324.754 {104}	259.940 {130}	766.490 {44}	670.784 {50}	279.079 {121}2	257.610 {131}	202.030 {467}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.00130	.03082	.89427	12.445	.29561	.01066	.64257	.10540	.00197
Stddev	.00025	.00037	.00099	.015	.11771	.00316	.00559	.00013	.00012
%RSD	19.502	1.2053	.11082	.11768	39.818	29.665	.87069	.12758	6.0877

#1	.00112	.03056	.89357	12.455	.21238	.01290	.64653	.10531	.00188
#2	.00148	.03108	.89497	12.434	.37885	.00843	.63862	.10550	.00205

Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Elem	Na5895	Ni2316	P_1782	Pb2203	S_1820	Sb2068	Se1960	Si2881	SiO2
Line	589.592 {57}	231.604 {446}	178.284 {489}	220.353 {453}	182.034 {485}	206.833 {463}	196.090 {472}	288.158 {117}	288.158 {117}2
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.24461	.01128	.33833	.49586	.51788	.00876	.00863	2.5541	5.4658
Stddev	.00008	.00044	.00433	.00131	.00794	.00335	.00961	.0004	.0009
%RSD	.03463	3.8814	1.2786	.26496	1.5329	38.217	111.31	.01593	.01593

#1	.24455	.01097	.33527	.49493	.52350	.00639	.01542	2.5544	5.4665
#2	.24467	.01159	.34139	.49679	.51227	.01112	.00184	2.5538	5.4652

Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Elem	Sn1899	Sr4077	Th2837	Ti3349	Ti1908	U_3701	V_2924	Zn2062	Zr3391
Line	189.989 {477}	407.771 {83}	283.730 {119}	334.904 {101}	190.856 {477}	370.152 {91}	292.402 {115}	206.200 {163}	339.198 {99}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.01946	.02383	.00760	.20957	-.00081	-.01572	.02337	.82477	.00865
Stddev	.00203	.00026	.00100	.00231	.00148	.01554	.00024	.01116	.00326
%RSD	10.435	1.0915	13.179	1.1016	182.43	98.807	1.0250	1.3534	37.688

#1	.01803	.02401	.00830	.20793	.00023	-.02671	.02320	.81687	.01095
#2	.02090	.02364	.00689	.21120	-.00185	-.00474	.02354	.83266	.00634

Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Int. Std.	Y_2243	Y_3600	Y_3774
Line	224.306 {450}	360.073 {94}	377.433 {89}
Units	Cts/S	Cts/S	Cts/S
Avg	2633.5	40214.	2166.4
Stddev	37.8	86.	14.9
%RSD	1.4350	.21508	.68883

#1	2606.8	40275.	2155.8
#2	2660.3	40153.	2176.9

Sample Name: 280-82954-A-4-A Acquired: 5/18/2016 18:21:21 Type: Unk

Method: 6500_025(v6) Mode: CONC Corr. Factor: 1.000000

User: CRHOADES Prep Date: Custom ID2: Custom ID3:

Comment: 325403 SOIL 6010C (Cu) Q4

Elem	Ag3280	Al3092	As1890	B_2089	Ba4554	Be3130	Bi2230	Ca3179	Cd2288
Line	328.068 {103}	309.271 {109}	189.042 {478}	208.959 {461}	455.403 {74}	313.042 {108}	223.061 {451}	317.933 {106}	228.802 {447}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	-.00080	43.137	.00765	.00624	.13705	.00033	.00119	1.2514	.00786
Stddev	.00105	.473	.00103	.00120	.00057	.00012	.00129	.0030	.00021
%RSD	131.61	1.0969	13.414	19.270	.41770	38.122	108.69	.24085	2.6462

#1	-.00006	43.471	.00692	.00709	.13746	.00024	.00027	1.2536	.00772
#2	-.00154	42.802	.00837	.00539	.13665	.00042	.00210	1.2493	.00801

Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Elem	Co2286	Cr2055	Cu3247	Fe2599	K_7664	Li6707	Mg2790	Mn2576	Mo2020
Line	228.616 {447}	205.560 {464}	324.754 {104}	259.940 {130}	766.490 {44}	670.784 {50}	279.079 {121}2	257.610 {131}	202.030 {467}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.00229	.03947	.60858	18.106	.65287	.01662	1.3142	.11274	.00176
Stddev	.00016	.00005	.00178	.050	.02309	.00019	.0051	.00024	.00017
%RSD	6.9379	.12220	.29272	.27590	3.5362	1.1377	.38689	.21590	9.4434

#1	.00240	.03944	.60732	18.141	.66920	.01676	1.3178	.11292	.00164
#2	.00217	.03951	.60984	18.070	.63655	.01649	1.3106	.11257	.00188

Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Elem	Na5895	Ni2316	P_1782	Pb2203	S_1820	Sb2068	Se1960	Si2881	SiO2
Line	589.592 {57}	231.604 {446}	178.284 {489}	220.353 {453}	182.034 {485}	206.833 {463}	196.090 {472}	288.158 {117}	288.158 {117}2
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.29095	.01741	.40012	.85453	.57474	.00614	.01021	3.5067	7.5044
Stddev	.00378	.00000	.00280	.00037	.01266	.00599	.00043	.0148	.0318
%RSD	1.3007	.01656	.70061	.04352	2.2036	97.584	4.2550	.42308	.42308

#1	.28827	.01741	.39814	.85427	.56578	.00190	.01051	3.4962	7.4819
#2	.29362	.01740	.40210	.85480	.58369	.01038	.00990	3.5172	7.5268

Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Elem	Sn1899	Sr4077	Th2837	Ti3349	Ti1908	U_3701	V_2924	Zn2062	Zr3391
Line	189.989 {477}	407.771 {83}	283.730 {119}	334.904 {101}	190.856 {477}	370.152 {91}	292.402 {115}	206.200 {163}	339.198 {99}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.01537	.01192	.00701	.35312	.00105	.00078	.04347	.49347	.01634
Stddev	.00048	.00030	.00092	.00035	.00107	.02598	.00048	.00465	.00088
%RSD	3.1171	2.5411	13.171	.09958	101.43	3310.4	1.0942	.94181	5.3926

#1	.01571	.01213	.00767	.35287	.00181	.01915	.04313	.49675	.01696
#2	.01504	.01170	.00636	.35337	.00030	-.01758	.04380	.49018	.01572

Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Int. Std.	Y_2243	Y_3600	Y_3774
Line	224.306 {450}	360.073 {94}	377.433 {89}
Units	Cts/S	Cts/S	Cts/S
Avg	2670.0	40373.	2176.0
Stddev	42.9	28.	17.2
%RSD	1.6068	.06967	.79158

#1	2700.3	40393.	2163.8
#2	2639.7	40353.	2188.2

Sample Name: CCVH-3894253 Acquired: 5/18/2016 18:23:58 Type: QC
Method: 6500_025(v6) Mode: CONC Corr. Factor: 1.000000
User: CRHOADES Prep Date: Custom ID2: Custom ID3:
Comment:

Elem	Ag3280	Al3092	As1890	B_2089	Ba4554	Be3130	Bi2230	Ca3179	Cd2288	Co2286	Cr2055
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	-.00076	53.552	-.00437	.00169	-.00043	.00042	W 1.0709	-.01366	-.00043	-.00087	.00037
Stddev	.00058	1.021	.00178	.00011	.00003	.00046	.0011	.00862	.00016	.00004	.00003
%RSD	76.672	1.9065	40.657	6.5556	7.6634	109.56	.10216	63.088	36.949	4.5817	8.7790

#1	-.00035	52.830	-.00311	.00161	-.00045	.00074	1.0702	-.00756	-.00032	-.00090	.00039
#2	-.00117	54.274	-.00563	.00176	-.00041	.00009	1.0717	-.01975	-.00054	-.00084	.00035

Check ?	None	Chk Pass	None	None	None	None	Chk Warn	None	None	None	None
Value							1.0000				
Range							5.0000%				

Elem	Cu3247	Fe2714	K_7664	Li6707	Mg2790	Mn2576	Mo2020	Na8183	Ni2316	P_1782	Pb2203
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	-.00026	49.953	.11929	-.00007	.02158	-.00012	-.00122	257.63	.00138	.00312	-.00048
Stddev	.00004	.520	.05854	.00262	.00191	.00009	.00000	.77	.00051	.00167	.00145
%RSD	13.464	1.0409	49.079	3657.3	8.8450	73.456	.20920	.30004	36.692	53.401	301.05

#1	-.00024	50.321	.07789	-.00192	.02293	-.00018	-.00121	257.09	.00102	.00194	.00054
#2	-.00028	49.586	.16069	.00178	.02023	-.00006	-.00122	258.18	.00174	.00430	-.00150

Check ?	None	Chk Pass	None	None	None	None	None	Chk Pass	None	None	None
Value											
Range											

Elem	S_1820	Sb2068	Se1960	Si2881	SiO2	Sn1899	Sr4077	Th2837	Ti3349	Ti1908	U_3701
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	5.1951	-.01193	.00649	.01505	.03220	.00042	.00034	W 4.7034	.00526	-.00369	W 10.604
Stddev	.0285	.00119	.00555	.03368	.07208	.00159	.00026	.0065	.00107	.00158	.152
%RSD	.54887	9.9536	85.480	223.86	223.86	378.62	74.790	.13854	20.365	42.789	1.4311

#1	5.2152	-.01109	.01041	-.00877	-.01877	.00154	.00016	4.6988	.00450	-.00481	10.497
#2	5.1749	-.01277	.00257	.03886	.08317	-.00070	.00052	4.7080	.00602	-.00257	10.711

Check ?	Chk Pass	None	None	None	None	None	None	Chk Warn	None	None	Chk Warn
Value								5.0000			10.000
Range								-5.0000%			5.0000%

Elem	V_2924	Zn2062	Zr3391
Units	ppm	ppm	ppm
Avg	.00887	-.00019	.05578
Stddev	.00076	.00037	.00023
%RSD	8.5290	197.20	.41358

#1	.00833	.00007	.05595
#2	.00940	-.00045	.05562

Check ?	None	None	None
Value			
Range			

Int. Std.	Y_2243	Y_3600	Y_3774
Units	Cts/S	Cts/S	Cts/S
Avg	2574.0	39828.	2102.2
Stddev	32.1	297.	43.9
%RSD	1.2478	.74524	2.0863

#1	2551.3	40037.	2133.2
#2	2596.7	39618.	2071.2

Sample Name: CCV-3894251 Acquired: 5/18/2016 18:26:36 Type: QC

Method: 6500_025(v6) Mode: CONC Corr. Factor: 1.000000

User: CRHOADES Prep Date: Custom ID2: Custom ID3:

Comment:

Elem	Ag3280	Al1670	As1890	B_2089	Ba4554	Be3130	Bi2230	Ca3179	Cd2288	Co2286	Cr2055	Cu3247	Fe2599	K_7664
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.49440	.54845	1.0377	.49085	.50185	.46839	.00186	4.9364	.49767	.50279	.50718	.51686	2.4279	48.703
Stddev	.00001	.00654	.0097	.00171	.00435	.00430	.00123	.0588	.00114	.00219	.00299	.00100	.0207	.304
%RSD	.00201	1.1932	.93877	.34918	.86610	.91804	66.147	1.1912	.22993	.43553	.59029	.19388	.85067	.62389

#1	.49439	.55308	1.0446	.49206	.50492	.47144	.00273	4.9779	.49686	.50433	.50929	.51757	2.4425	48.918
#2	.49440	.54382	1.0308	.48964	.49877	.46535	.00099	4.8948	.49848	.50124	.50506	.51615	2.4133	48.488

Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	None	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Value														
Range														

Elem	Li6707	Mg2790	Mn2576	Mo2020	Na5895	Ni2316	P_1782	Pb2203	S_1820	Sb2068	Se1960	Si2881	SiO2	Sn1899
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.99765	19.278	.47876	.50862	5.1783	.49484	.97254	1.0012	.05899	.98129	1.0368	4.9019	10.490	1.0115
Stddev	.00113	.013	.00135	.00488	.0204	.00353	.00884	.0072	.00468	.01545	.0096	.0159	.034	.0071
%RSD	.11376	.06721	.28214	.95935	.39325	.71257	.90859	.72035	7.9334	1.5744	.92924	.32421	.32421	.70383

#1	.99846	19.287	.47780	.51207	5.1927	.49733	.97879	1.0063	.06230	.99222	1.0436	4.9131	10.514	1.0165
#2	.99685	19.269	.47971	.50517	5.1639	.49234	.96629	.99613	.05568	.97037	1.0300	4.8906	10.466	1.0065

Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	None	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Value														
Range														

Elem	Sr4077	Th2837	Ti3349	Tl1908	U_3701	V_2924	Zn2062	Zr3391
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.47860	.00173	.46907	1.0181	.03043	.49523	.47838	.51023
Stddev	.00552	.00035	.00302	.0118	.04615	.00120	.00677	.00795
%RSD	1.1534	20.064	.64410	1.1599	151.65	.24294	1.4157	1.5586
#1	.48250	.00197	.46693	1.0264	-.00220	.49438	.47359	.51585
#2	.47470	.00148	.47121	1.0097	.06306	.49608	.48317	.50461

Check ?	Chk Pass	None	Chk Pass	Chk Pass	None	Chk Pass	Chk Pass	Chk Pass
Value								
Range								

Int. Std.	Y_2243	Y_3600	Y_3774
Units	Cts/S	Cts/S	Cts/S
Avg	2547.3	39506.	2100.2
Stddev	34.2	358.	19.5
%RSD	1.3419	.90638	.92627

#1	2523.2	39759.	2086.5
#2	2571.5	39253.	2114.0

Sample Name: CCB Acquired: 5/18/2016 18:29:08 Type: QC
 Method: 6500_025(v6) Mode: CONC Corr. Factor: 1.000000
 User: CRHOADES Prep Date: Custom ID2: Custom ID3:
 Comment:

Elem	Ag3280	Al1670	As1890	B_2089	Ba4554	Be3130	Bi2230	Ca3179	Cd2288	Co2286	Cr2055
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	-.00051	-.00007	-.00043	.00225	.00011	.00029	.00132	-.00897	-.00013	-.00008	.00016
Stddev	.00055	.00021	.00046	.00038	.00041	.00008	.00013	.00038	.00001	.00047	.00054
%RSD	106.96	301.92	106.05	16.973	381.60	27.029	9.7906	4.2165	6.0068	596.67	335.08

#1	-.00013	-.00022	-.00011	.00252	-.00018	.00023	.00141	-.00923	-.00013	.00025	.00054
#2	-.00090	.00008	-.00076	.00198	.00039	.00034	.00123	-.00870	-.00012	-.00041	-.00022

Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit											
Low Limit											

Elem	Cu3247	Fe2599	K_7664	Li6707	Mg2790	Mn2576	Mo2020	Na5895	Ni2316	P_1782	Pb2203
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	-.00116	-.01365	-.00984	.00215	.00020	-.00005	.00159	.17742	-.00063	.00309	.00009
Stddev	.00005	.00937	.04707	.00535	.00208	.00004	.00068	.00273	.00005	.00063	.00185
%RSD	4.6609	68.668	478.10	248.69	1015.3	90.678	42.794	1.5381	8.6789	20.325	1971.9

#1	-.00112	-.00702	.02344	.00593	-.00127	-.00002	.00111	.17549	-.00059	.00353	-.00121
#2	-.00120	-.02028	-.04313	-.00163	.00168	-.00008	.00207	.17935	-.00067	.00264	.00140

Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit											
Low Limit											

Elem	S_1820	Sb2068	Se1960	Si2881	SiO2	Sn1899	Sr4077	Th2837	Ti3349	Ti1908	U_3701
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	W .05441	W .00388	W .01092	.03729	.07979	.00015	.00008	.00282	-.00073	.00368	-.01376
Stddev	.00370	.00387	.00011	.01986	.04249	.00158	.00001	.00103	.00003	.00376	.04293
%RSD	6.7975	99.735	1.0469	53.253	53.253	1088.1	16.711	36.533	3.4921	102.05	311.92

#1	.05180	.00662	.01100	.05133	.10984	.00126	.00007	.00355	-.00071	.00102	-.04412
#2	.05703	.00115	.01084	.02325	.04975	-.00097	.00009	.00209	-.00075	.00634	.01659

Check ?	Chk Warn	Chk Warn	Chk Warn	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit	.05000	.00100	.00750								
Low Limit	-.20000	-.00100	-.01500								

Elem	V_2924	Zn2062	Zr3391
Units	ppm	ppm	ppm
Avg	.00023	-.00125	-.00288
Stddev	.00040	.00010	.00095
%RSD	175.10	7.6729	32.913

#1	-.00005	-.00131	-.00355
#2	.00051	-.00118	-.00221

Check ?	Chk Pass	Chk Pass	Chk Pass
High Limit			
Low Limit			

Int. Std.	Y_2243	Y_3600	Y_3774
Units	Cts/S	Cts/S	Cts/S
Avg	2615.8	39957.	2055.2
Stddev	3.4	121.	22.3
%RSD	.12906	.30357	1.0867

#1	2613.4	39871.	2071.0
#2	2618.2	40043.	2039.4

Sample Name: CCVL-3897520 Acquired: 5/18/2016 18:31:31 Type: QC
Method: 6500_025(v6) Mode: CONC Corr. Factor: 1.000000
User: CRHOADES Prep Date: Custom ID2: Custom ID3:
Comment:

Elem	Ag3280	Al1670	As1890	B_2089	Ba4554	Be3130	Bi2230	Ca3179	Cd2288	Co2286	Cr2055	Cu3247
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.00910	.11078	F .02250	.09513	.01035	.00114	.10978	.19216	.00494	.00967	.00996	.01402
Stddev	.00023	.00344	.00442	.00045	.00031	.00022	.00194	.00784	.00014	.00003	.00029	.00053
%RSD	2.5340	3.1066	19.647	.47274	3.0110	19.321	1.7666	4.0784	2.9030	.35778	2.8937	3.7554

#1	.00893	.10835	.02562	.09545	.01057	.00098	.11115	.19770	.00504	.00964	.01016	.01439
#2	.00926	.11322	.01937	.09482	.01013	.00129	.10841	.18662	.00484	.00969	.00975	.01365

Check ?	Chk Pass	Chk Pass	Chk Fail	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Value			.01500									
Range			30.000%									

Elem	Fe2599	K_7664	Li6707	Mg2790	Mn2576	Mo2020	Na5895	Ni2316	P_1782	Pb2203	S_1820	Sb2068
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.09395	3.0783	.01010	.19436	.00979	.02023	1.1738	.03901	2.7893	.01158	.05362	.02364
Stddev	.00149	.0934	.00021	.00459	.00018	.00011	.0118	.00032	.0001	.00027	.00798	.00130
%RSD	1.5877	3.0336	2.0761	2.3609	1.8079	.56536	1.0038	.80763	.00295	2.3118	14.881	5.5090

#1	.09500	3.1444	.01025	.19111	.00992	.02031	1.1655	.03879	2.7893	.01176	.05926	.02272
#2	.09289	3.0123	.00995	.19760	.00967	.02015	1.1821	.03924	2.7894	.01139	.04797	.02456

Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	None	Chk Pass
Value												
Range												

Elem	Se1960	Si2881	SiO2	Sn1899	Sr4077	Th2837	Ti3349	Ti1908	U_3701	V_2924	Zn2062	Zr3391
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.01546	.49028	1.0492	.10193	.01004	.01344	.00940	.01248	F .08027	.01009	.01875	.01425
Stddev	.00280	.01117	.0239	.00266	.00004	.00156	.00048	.00095	.04644	.00058	.00024	.00286
%RSD	18.106	2.2790	2.2790	2.6124	.36516	11.608	5.0868	7.6169	57.855	5.7663	1.2562	20.040

#1	.01744	.48238	1.0323	.10005	.01007	.01233	.00974	.01181	.11311	.01050	.01892	.01627
#2	.01348	.49818	1.0661	.10381	.01001	.01454	.00906	.01316	.04743	.00968	.01859	.01223

Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Fail	Chk Pass	Chk Pass	Chk Pass
Value									.06000			
Range									30.000%			

Int. Std.	Y_2243	Y_3600	Y_3774
Units	Cts/S	Cts/S	Cts/S
Avg	2597.5	39971.	2083.0
Stddev	36.7	7.	2.5
%RSD	1.4135	.01825	.11773

#1	2623.5	39976.	2081.3
#2	2571.5	39966.	2084.8

Sample Name: 280-82954-A-6-A Acquired: 5/18/2016 18:34:11 Type: Unk

Method: 6500_025(v6) Mode: CONC Corr. Factor: 1.000000

User: CRHOADES Prep Date: Custom ID2: Custom ID3:

Comment: 325403 SOIL 6010C (Cu) Q4

Elem	Ag3280	Al3092	As1890	B_2089	Ba4554	Be3130	Bi2230	Ca3179	Cd2288
Line	328.068 {103}	309.271 {109}	189.042 {478}	208.959 {461}	455.403 {74}	313.042 {108}	223.061 {451}	317.933 {106}	228.802 {447}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	-.00101	31.910	.01372	.00365	.06835	.00033	-.00063	.19345	.00078
Stddev	.00015	.706	.00208	.00010	.00183	.00017	.00039	.00079	.00004
%RSD	15.103	2.2132	15.174	2.6110	2.6819	53.110	62.630	.41017	4.6497

#1	-.00090	32.410	.01519	.00358	.06965	.00020	-.00035	.19289	.00076
#2	-.00112	31.411	.01224	.00371	.06705	.00045	-.00090	.19401	.00081

Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Elem	Co2286	Cr2055	Cu3247	Fe2599	K_7664	Li6707	Mg2790	Mn2576	Mo2020
Line	228.616 {447}	205.560 {464}	324.754 {104}	259.940 {130}	766.490 {44}	670.784 {50}	279.079 {121}2	257.610 {131}	202.030 {467}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.00112	.02627	.13332	21.104	.56602	.01533	1.1214	.04532	.00174
Stddev	.00012	.00017	.00082	.103	.02400	.00513	.0023	.00030	.00018
%RSD	10.689	.63186	.61840	.48782	4.2405	33.478	.20295	.67232	10.335

#1	.00104	.02639	.13390	21.177	.58299	.01896	1.1198	.04554	.00187
#2	.00121	.02616	.13274	21.032	.54905	.01170	1.1231	.04511	.00161

Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Elem	Na5895	Ni2316	P_1782	Pb2203	S_1820	Sb2068	Se1960	Si2881	SiO2
Line	589.592 {57}	231.604 {446}	178.284 {489}	220.353 {453}	182.034 {485}	206.833 {463}	196.090 {472}	288.158 {117}	288.158 {117}2
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.22466	.01095	.28198	.13309	.51632	.00387	.00430	3.1498	6.7407
Stddev	.00844	.00007	.00078	.00163	.00287	.00014	.00487	.0733	.1568
%RSD	3.7583	.66293	.27710	1.2279	.55523	3.5793	113.10	2.3259	2.3259

#1	.23063	.01100	.28253	.13194	.51429	.00397	.00086	3.2017	6.8515
#2	.21869	.01090	.28143	.13425	.51835	.00377	.00774	3.0980	6.6298

Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Elem	Sn1899	Sr4077	Th2837	Ti3349	Ti1908	U_3701	V_2924	Zn2062	Zr3391
Line	189.989 {477}	407.771 {83}	283.730 {119}	334.904 {101}	190.856 {477}	370.152 {91}	292.402 {115}	206.200 {163}	339.198 {99}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.00214	.00529	.01000	.33303	-.00068	-.01296	.04340	.19739	.01874
Stddev	.00024	.00033	.00068	.00557	.00132	.00916	.00025	.00139	.00217
%RSD	11.089	6.3100	6.8237	1.6731	193.91	70.665	.56829	.70237	11.589

#1	.00231	.00552	.01048	.33697	-.00162	-.00648	.04357	.19837	.01721
#2	.00197	.00505	.00952	.32909	.00025	-.01944	.04322	.19641	.02028

Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Int. Std.	Y_2243	Y_3600	Y_3774
Line	224.306 {450}	360.073 {94}	377.433 {89}
Units	Cts/S	Cts/S	Cts/S
Avg	2675.7	40599.	2180.5
Stddev	4.5	8.	47.8
%RSD	.16801	.01971	2.1941

#1	2672.5	40605.	2146.7
#2	2678.9	40593.	2214.3

Sample Name: 280-82954-A-7-A Acquired: 5/18/2016 18:36:49 Type: Unk

Method: 6500_025(v6) Mode: CONC Corr. Factor: 1.000000

User: CRHOADES Prep Date: Custom ID2: Custom ID3:

Comment: 325403 SOIL 6010C (Cu) Q4

Elem	Ag3280	Al3092	As1890	B_2089	Ba4554	Be3130	Bi2230	Ca3179	Cd2288
Line	328.068 {103}	309.271 {109}	189.042 {478}	208.959 {461}	455.403 {74}	313.042 {108}	223.061 {451}	317.933 {106}	228.802 {447}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	-0.00044	17.318	.00057	.00145	.06263	.00036	-0.00047	.57144	.00563
Stddev	.00033	.053	.00107	.00140	.00053	.00035	.00284	.00382	.00026
%RSD	76.515	.30333	186.76	96.667	.85367	96.905	599.42	.66774	4.6793

#1	-0.00020	17.281	-0.00018	.00046	.06300	.00061	.00154	.57413	.00544
#2	-0.00067	17.355	.00132	.00244	.06225	.00011	-.00249	.56874	.00582

Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Elem	Co2286	Cr2055	Cu3247	Fe2599	K_7664	Li6707	Mg2790	Mn2576	Mo2020
Line	228.616 {447}	205.560 {464}	324.754 {104}	259.940 {130}	766.490 {44}	670.784 {50}	279.079 {121}2	257.610 {131}	202.030 {467}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.00049	.01559	.29108	9.2933	.25830	.01282	.48602	.09866	.00120
Stddev	.00019	.00022	.00020	.0257	.04302	.00119	.00369	.00021	.00052
%RSD	39.416	1.3959	.06856	.27705	16.657	9.2468	.75988	.21081	43.043

#1	.00062	.01574	.29094	9.2751	.22788	.01198	.48863	.09851	.00084
#2	.00035	.01544	.29122	9.3115	.28872	.01366	.48341	.09881	.00157

Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Elem	Na5895	Ni2316	P_1782	Pb2203	S_1820	Sb2068	Se1960	Si2881	SiO2
Line	589.592 {57}	231.604 {446}	178.284 {489}	220.353 {453}	182.034 {485}	206.833 {463}	196.090 {472}	288.158 {117}	288.158 {117}2
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.19532	.01709	.24204	.23947	.27433	.00828	.00249	1.8874	4.0390
Stddev	.01186	.00068	.00413	.00199	.00440	.00682	.00671	.0020	.0042
%RSD	6.0734	3.9787	1.7083	.83186	1.6028	82.332	269.16	.10426	.10426

#1	.20371	.01757	.24496	.24088	.27744	.01311	.00724	1.8860	4.0360
#2	.18694	.01661	.23911	.23806	.27123	.00346	-.00225	1.8888	4.0420

Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Elem	Sn1899	Sr4077	Th2837	Ti3349	Ti1908	U_3701	V_2924	Zn2062	Zr3391
Line	189.989 {477}	407.771 {83}	283.730 {119}	334.904 {101}	190.856 {477}	370.152 {91}	292.402 {115}	206.200 {163}	339.198 {99}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.00626	.00525	.00607	.18687	-.00202	-.03243	.01891	.56125	.00950
Stddev	.00003	.00000	.00055	.00112	.00280	.00546	.00087	.00470	.00300
%RSD	.52518	.07662	9.1124	.59910	138.29	16.842	4.5885	.83718	31.577

#1	.00629	.00525	.00646	.18607	-.00400	-.03629	.01952	.56458	.01162
#2	.00624	.00524	.00568	.18766	-.00004	-.02857	.01830	.55793	.00738

Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Int. Std.	Y_2243	Y_3600	Y_3774
Line	224.306 {450}	360.073 {94}	377.433 {89}
Units	Cts/S	Cts/S	Cts/S
Avg	2614.6	41253.	2146.1
Stddev	17.8	166.	.8
%RSD	.68035	.40353	.03871

#1	2627.2	41135.	2145.5
#2	2602.1	41370.	2146.7

Sample Name: 280-82954-A-8-A Acquired: 5/18/2016 18:39:27 Type: Unk

Method: 6500_025(v6) Mode: CONC Corr. Factor: 1.000000

User: CRHOADES Prep Date: Custom ID2: Custom ID3:

Comment: 325403 SOIL 6010C (Cu) Q4

Elem	Ag3280	Al3092	As1890	B_2089	Ba4554	Be3130	Bi2230	Ca3179	Cd2288
Line	328.068 {103}	309.271 {109}	189.042 {478}	208.959 {461}	455.403 { 74}	313.042 {108}	223.061 {451}	317.933 {106}	228.802 {447}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	-.00002	21.937	.01280	.00327	.07860	.00036	.00225	1.0148	.00633
Stddev	.00003	.075	.00189	.00061	.00001	.00014	.00351	.0040	.00003
%RSD	183.67	.34378	14.739	18.759	.01261	37.288	155.67	.39727	.43728

#1	.00000	21.884	.01146	.00283	.07861	.00027	-.00023	1.0120	.00635
#2	-.00004	21.991	.01413	.00370	.07860	.00046	.00473	1.0177	.00631

Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Elem	Co2286	Cr2055	Cu3247	Fe2599	K_7664	Li6707	Mg2790	Mn2576	Mo2020
Line	228.616 {447}	205.560 {464}	324.754 {104}	259.940 {130}	766.490 { 44}	670.784 { 50}	279.079 {121}2	257.610 {131}	202.030 {467}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.00122	.02865	.28263	9.8184	.26394	.00985	.58923	.08235	.00085
Stddev	.00033	.00005	.00195	.0208	.09889	.00178	.00258	.00028	.00053
%RSD	26.680	.18077	.69034	.21219	37.469	18.078	.43801	.33423	61.859

#1	.00145	.02861	.28401	9.8331	.19401	.00859	.59106	.08254	.00122
#2	.00099	.02868	.28125	9.8037	.33387	.01111	.58741	.08215	.00048

Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Elem	Na5895	Ni2316	P_1782	Pb2203	S_1820	Sb2068	Se1960	Si2881	SiO2
Line	589.592 { 57}	231.604 {446}	178.284 {489}	220.353 {453}	182.034 {485}	206.833 {463}	196.090 {472}	288.158 {117}	288.158 {117}2
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.18474	.01100	.27553	.32540	.53275	.00475	.00872	2.2799	4.8791
Stddev	.00937	.00072	.00064	.00133	.00014	.00454	.00252	.0010	.0022
%RSD	5.0705	6.5378	.23068	.40906	.02682	95.641	28.867	.04576	.04576

#1	.17812	.01151	.27508	.32446	.53265	.00154	.01050	2.2807	4.8807
#2	.19136	.01049	.27598	.32634	.53285	.00796	.00694	2.2792	4.8775

Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Elem	Sn1899	Sr4077	Th2837	Ti3349	Ti1908	U_3701	V_2924	Zn2062	Zr3391
Line	189.989 {477}	407.771 { 83}	283.730 {119}	334.904 {101}	190.856 {477}	370.152 { 91}	292.402 {115}	206.200 {163}	339.198 { 99}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.00484	.00685	.00358	.20558	-.00213	.00718	.02262	.40733	.01171
Stddev	.00042	.00024	.00061	.00256	.00088	.01155	.00012	.00704	.00247
%RSD	8.6666	3.4983	17.070	1.2438	41.516	161.00	.55183	1.7271	21.104

#1	.00514	.00702	.00401	.20377	-.00276	-.00099	.02271	.41231	.01345
#2	.00455	.00668	.00315	.20739	-.00151	.01534	.02253	.40236	.00996

Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Int. Std.	Y_2243	Y_3600	Y_3774
Line	224.306 {450}	360.073 { 94}	377.433 { 89}
Units	Cts/S	Cts/S	Cts/S
Avg	2642.0	40787.	2180.6
Stddev	42.5	132.	46.6
%RSD	1.6104	.32284	2.1354

#1	2672.1	40880.	2147.7
#2	2611.9	40694.	2213.6

Sample Name: 280-82954-A-9-A Acquired: 5/18/2016 18:42:05 Type: Unk

Method: 6500_025(v6) Mode: CONC Corr. Factor: 1.000000

User: CRHOADES Prep Date: Custom ID2: Custom ID3:

Comment: 325403 SOIL 6010C (Cu) Q4

Elem	Ag3280	Al3092	As1890	B_2089	Ba4554	Be3130	Bi2230	Ca3179	Cd2288
Line	328.068 {103}	309.271 {109}	189.042 {478}	208.959 {461}	455.403 {74}	313.042 {108}	223.061 {451}	317.933 {106}	228.802 {447}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	-0.00049	36.008	.00639	.00269	.06850	-0.00001	-0.00126	.71914	.02239
Stddev	.00019	.377	.00070	.00100	.00086	.00002	.00264	.00699	.00013
%RSD	38.852	1.0470	10.917	37.033	1.2497	168.63	209.05	.97192	.58475

#1	-0.00035	35.742	.00590	.00198	.06789	.00000	-.00313	.72409	.02229
#2	-.00062	36.275	.00688	.00339	.06911	-.00003	.00060	.71420	.02248

Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Elem	Co2286	Cr2055	Cu3247	Fe2599	K_7664	Li6707	Mg2790	Mn2576	Mo2020
Line	228.616 {447}	205.560 {464}	324.754 {104}	259.940 {130}	766.490 {44}	670.784 {50}	279.079 {121}2	257.610 {131}	202.030 {467}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.00110	.02280	.67833	10.345	.48760	.01393	.73661	.04605	.00085
Stddev	.00028	.00029	.00533	.029	.06206	.00092	.00628	.00007	.00061
%RSD	25.229	1.2723	.78609	.27888	12.728	6.5783	.85250	.16245	71.778

#1	.00091	.02259	.67456	10.365	.44371	.01328	.73217	.04600	.00042
#2	.00130	.02300	.68210	10.324	.53148	.01458	.74105	.04610	.00128

Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Elem	Na5895	Ni2316	P_1782	Pb2203	S_1820	Sb2068	Se1960	Si2881	SiO2
Line	589.592 {57}	231.604 {446}	178.284 {489}	220.353 {453}	182.034 {485}	206.833 {463}	196.090 {472}	288.158 {117}	288.158 {117}2
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.22127	.01595	.29420	.27452	.59069	.00615	.00791	3.0398	6.5051
Stddev	.01149	.00067	.00235	.00136	.00320	.00013	.00081	.0493	.1056
%RSD	5.1933	4.1759	.79759	.49585	.54213	2.0817	10.210	1.6227	1.6227

#1	.21314	.01642	.29254	.27548	.59295	.00606	.00848	3.0049	6.4305
#2	.22939	.01548	.29586	.27356	.58843	.00624	.00734	3.0747	6.5798

Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Elem	Sn1899	Sr4077	Th2837	Ti3349	Ti1908	U_3701	V_2924	Zn2062	Zr3391
Line	189.989 {477}	407.771 {83}	283.730 {119}	334.904 {101}	190.856 {477}	370.152 {91}	292.402 {115}	206.200 {163}	339.198 {99}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.00539	.00706	.11305	.22157	-.00361	.00540	.03120	.35521	.01126
Stddev	.00048	.00025	.00113	.00182	.00383	.01948	.00036	.00518	.00798
%RSD	8.8938	3.5809	1.0004	.82206	106.11	360.63	1.1386	1.4584	70.876

#1	.00573	.00688	.11385	.22286	-.00090	.01917	.03095	.35887	.00562
#2	.00506	.00724	.11225	.22029	-.00632	-.00837	.03145	.35155	.01691

Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Int. Std.	Y_2243	Y_3600	Y_3774						
Line	224.306 {450}	360.073 {94}	377.433 {89}						
Units	Cts/S	Cts/S	Cts/S						
Avg	2627.8	40277.	2120.4						
Stddev	49.6	156.	40.9						
%RSD	1.8868	.38702	1.9292						

#1	2662.8	40167.	2149.3						
#2	2592.7	40388.	2091.5						

Sample Name: 280-82954-A-10-A Acquired: 5/18/2016 18:44:42 Type: Unk

Method: 6500_025(v6) Mode: CONC Corr. Factor: 1.000000

User: CRHOADES Prep Date: Custom ID2: Custom ID3:

Comment: 325403 SOIL 6010C (Cu) Q4

Elem	Ag3280	Al3092	As1890	B_2089	Ba4554	Be3130	Bi2230	Ca3179	Cd2288
Line	328.068 {103}	309.271 {109}	189.042 {478}	208.959 {461}	455.403 {74}	313.042 {108}	223.061 {451}	317.933 {106}	228.802 {447}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	-0.00018	24.464	-0.00086	.00244	.16170	.00034	.00230	5.3834	.01297
Stddev	.00072	.259	.00334	.00209	.00076	.00005	.00696	.0483	.00012
%RSD	400.68	1.0580	386.79	86.004	.47153	13.515	303.31	.89754	.90065

#1	-0.00069	24.281	-0.00323	.00392	.16116	.00037	-0.00263	5.3492	.01288
#2	.00033	24.647	.00150	.00095	.16224	.00031	.00722	5.4176	.01305

Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Elem	Co2286	Cr2055	Cu3247	Fe2599	K_7664	Li6707	Mg2790	Mn2576	Mo2020
Line	228.616 {447}	205.560 {464}	324.754 {104}	259.940 {130}	766.490 {44}	670.784 {50}	279.079 {121}2	257.610 {131}	202.030 {467}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.00113	.02335	.54136	11.564	.30264	.02035	.59309	.08533	.00098
Stddev	.00005	.00029	.00042	.035	.04394	.00181	.00240	.00003	.00023
%RSD	4.7601	1.2464	.07785	.29950	14.518	8.8845	.40426	.03219	23.755

#1	.00117	.02314	.54106	11.540	.33371	.01907	.59139	.08531	.00082
#2	.00109	.02356	.54166	11.589	.27157	.02162	.59478	.08535	.00115

Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Elem	Na5895	Ni2316	P_1782	Pb2203	S_1820	Sb2068	Se1960	Si2881	SiO2
Line	589.592 {57}	231.604 {446}	178.284 {489}	220.353 {453}	182.034 {485}	206.833 {463}	196.090 {472}	288.158 {117}	288.158 {117}2
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.20370	.03122	.27475	.46331	.48460	.00552	.00792	2.2253	4.7622
Stddev	.02289	.00033	.00073	.00554	.00184	.00055	.00126	.0716	.1532
%RSD	11.236	1.0702	.26420	1.1956	.38046	9.8676	15.946	3.2162	3.2162

#1	.18752	.03099	.27424	.45939	.48591	.00591	.00703	2.1747	4.6539
#2	.21988	.03146	.27527	.46722	.48330	.00514	.00881	2.2759	4.8705

Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Elem	Sn1899	Sr4077	Th2837	Ti3349	Ti1908	U_3701	V_2924	Zn2062	Zr3391
Line	189.989 {477}	407.771 {83}	283.730 {119}	334.904 {101}	190.856 {477}	370.152 {91}	292.402 {115}	206.200 {163}	339.198 {99}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.00858	.03670	.00686	.20258	-.00539	W -.05624	.02126	.86103	.00912
Stddev	.00169	.00083	.00449	.00199	.00092	.09016	.00014	.00899	.00464
%RSD	19.693	2.2750	65.496	.98082	17.117	160.30	.65510	1.0445	50.882

#1	.00977	.03611	.00368	.20117	-.00474	.00751	.02116	.85467	.00584
#2	.00738	.03729	.01004	.20398	-.00604	-.12000	.02136	.86739	.01240

Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Warn	Chk Pass	Chk Pass	Chk Pass
High Limit						45.000			
Low Limit						-.05000			

Int. Std.	Y_2243	Y_3600	Y_3774
Line	224.306 {450}	360.073 {94}	377.433 {89}
Units	Cts/S	Cts/S	Cts/S
Avg	2681.2	41577.	2178.0
Stddev	24.5	172.	13.3
%RSD	.91555	.41458	.60947

#1	2698.6	41699.	2187.4
#2	2663.9	41455.	2168.6

Sample Name: 280-82954-A-11-A Acquired: 5/18/2016 18:47:18 Type: Unk

Method: 6500_025(v6) Mode: CONC Corr. Factor: 1.000000

User: CRHOADES Prep Date: Custom ID2: Custom ID3:

Comment: 325403 SOIL 6010C (Cu) Q4

Elem	Ag3280	Al3092	As1890	B_2089	Ba4554	Be3130	Bi2230	Ca3179	Cd2288
Line	328.068 {103}	309.271 {109}	189.042 {478}	208.959 {461}	455.403 { 74}	313.042 {108}	223.061 {451}	317.933 {106}	228.802 {447}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	-.00091	17.386	.00648	.00115	.05066	.00024	.00361	.74333	.00381
Stddev	.00056	.125	.00190	.00020	.00054	.00014	.00313	.00685	.00015
%RSD	61.867	.71669	29.253	17.707	1.0593	56.623	86.718	.92154	3.8465

#1	-.00130	17.474	.00782	.00100	.05104	.00014	.00582	.74817	.00392
#2	-.00051	17.298	.00514	.00129	.05028	.00033	.00139	.73848	.00371

Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Elem	Co2286	Cr2055	Cu3247	Fe2599	K_7664	Li6707	Mg2790	Mn2576	Mo2020
Line	228.616 {447}	205.560 {464}	324.754 {104}	259.940 {130}	766.490 { 44}	670.784 { 50}	279.079 {121}2	257.610 {131}	202.030 {467}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.00103	.01724	.56393	9.2486	.23762	.00998	.47141	.03971	.00111
Stddev	.00021	.00000	.00062	.0468	.00206	.00017	.00085	.00005	.00010
%RSD	20.594	.01577	.10929	.50606	.86685	1.7035	.17978	.11400	8.8100

#1	.00088	.01724	.56350	9.2817	.23616	.01010	.47201	.03968	.00104
#2	.00118	.01724	.56437	9.2156	.23907	.00986	.47081	.03975	.00117

Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Elem	Na5895	Ni2316	P_1782	Pb2203	S_1820	Sb2068	Se1960	Si2881	SiO2
Line	589.592 { 57}	231.604 {446}	178.284 {489}	220.353 {453}	182.034 {485}	206.833 {463}	196.090 {472}	288.158 {117}	288.158 {117}2
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.17816	.03311	.25276	.50253	.33064	.00178	.00830	2.0917	4.4763
Stddev	.01491	.00016	.00512	.00726	.00764	.00130	.00335	.0089	.0190
%RSD	8.3696	.49346	2.0262	1.4447	2.3106	72.867	40.375	.42486	.42486

#1	.16761	.03300	.24914	.49740	.32523	.00270	.01068	2.0855	4.4629
#2	.18870	.03323	.25638	.50767	.33604	.00086	.00593	2.0980	4.4898

Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Elem	Sn1899	Sr4077	Th2837	Ti3349	Ti1908	U_3701	V_2924	Zn2062	Zr3391
Line	189.989 {477}	407.771 { 83}	283.730 {119}	334.904 {101}	190.856 {477}	370.152 { 91}	292.402 {115}	206.200 {163}	339.198 { 99}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.00673	.00919	.00319	.22672	-.00004	W -.06911	.02059	.39650	.00729
Stddev	.00060	.00025	.00087	.00066	.00350	.02652	.00049	.00835	.00373
%RSD	8.9452	2.7543	27.277	.28962	8432.6	38.381	2.3735	2.1063	51.190

#1	.00630	.00937	.00257	.22719	-.00252	-.05035	.02024	.40241	.00992
#2	.00715	.00901	.00380	.22626	.00244	-.08786	.02094	.39059	.00465

Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Warn	Chk Pass	Chk Pass	Chk Pass
High Limit						45.000			
Low Limit						-.05000			

Int. Std.	Y_2243	Y_3600	Y_3774						
Line	224.306 {450}	360.073 { 94}	377.433 { 89}						
Units	Cts/S	Cts/S	Cts/S						
Avg	2655.6	41213.	2321.9						
Stddev	17.7	42.	4.0						
%RSD	.66574	.10291	.17128						

#1	2668.1	41243.	2324.7						
#2	2643.1	41183.	2319.0						

Sample Name: 280-82954-A-12-A Acquired: 5/18/2016 18:49:55 Type: Unk

Method: 6500_025(v6) Mode: CONC Corr. Factor: 1.000000

User: CRHOADES Prep Date: Custom ID2: Custom ID3:

Comment: 325403 SOIL 6010C (Cu) Q4

Elem	Ag3280	Al3092	As1890	B_2089	Ba4554	Be3130	Bi2230	Ca3179	Cd2288
Line	328.068 {103}	309.271 {109}	189.042 {478}	208.959 {461}	455.403 {74}	313.042 {108}	223.061 {451}	317.933 {106}	228.802 {447}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	-.00041	22.273	.00333	.01420	.10015	.00021	.00067	.62097	.00507
Stddev	.00073	.323	.00572	.00038	.00102	.00011	.00010	.01296	.00060
%RSD	175.69	1.4493	171.93	2.7002	1.0167	54.582	14.523	2.0872	11.895

#1	-.00093	22.045	-.00072	.01447	.09943	.00013	.00060	.61181	.00549
#2	.00010	22.502	.00738	.01393	.10087	.00029	.00074	.63013	.00464

Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Elem	Co2286	Cr2055	Cu3247	Fe2599	K_7664	Li6707	Mg2790	Mn2576	Mo2020
Line	228.616 {447}	205.560 {464}	324.754 {104}	259.940 {130}	766.490 {44}	670.784 {50}	279.079 {121}2	257.610 {131}	202.030 {467}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.00087	.01655	.15593	10.271	.42963	.01252	.78825	.08414	.00045
Stddev	.00002	.00007	.00046	.043	.06066	.00058	.00826	.00020	.00050
%RSD	2.0108	.43316	.29568	.42033	14.119	4.6160	1.0481	.23693	111.06

#1	.00088	.01660	.15561	10.240	.47252	.01293	.78241	.08400	.00080
#2	.00086	.01650	.15626	10.301	.38674	.01211	.79409	.08428	.00010

Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Elem	Na5895	Ni2316	P_1782	Pb2203	S_1820	Sb2068	Se1960	Si2881	SiO2
Line	589.592 {57}	231.604 {446}	178.284 {489}	220.353 {453}	182.034 {485}	206.833 {463}	196.090 {472}	288.158 {117}	288.158 {117}2
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.18688	.01042	.24014	.18276	.24080	.00295	.00364	2.8093	6.0119
Stddev	.00423	.00024	.00107	.00253	.00041	.00220	.00572	.0215	.0460
%RSD	2.2661	2.2847	.44648	1.3860	.17128	74.531	157.11	.76572	.76572

#1	.18388	.01059	.24090	.18097	.24109	.00140	.00769	2.8245	6.0445
#2	.18987	.01025	.23939	.18455	.24051	.00451	-.00040	2.7941	5.9794

Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Elem	Sn1899	Sr4077	Th2837	Ti3349	Ti1908	U_3701	V_2924	Zn2062	Zr3391
Line	189.989 {477}	407.771 {83}	283.730 {119}	334.904 {101}	190.856 {477}	370.152 {91}	292.402 {115}	206.200 {163}	339.198 {99}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.00455	.00691	.00245	.24323	-.00401	-.01012	.02480	.26452	.01033
Stddev	.00194	.00017	.00473	.00675	.00072	.02877	.00025	.00478	.00395
%RSD	42.555	2.4258	192.74	2.7748	18.057	284.36	1.0150	1.8058	38.301

#1	.00318	.00679	.00580	.23845	-.00452	-.03046	.02462	.26115	.01312
#2	.00592	.00703	-.00089	.24800	-.00350	.01023	.02498	.26790	.00753

Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Int. Std.	Y_2243	Y_3600	Y_3774
Line	224.306 {450}	360.073 {94}	377.433 {89}
Units	Cts/S	Cts/S	Cts/S
Avg	2617.4	40695.	2101.9
Stddev	21.9	466.	53.2
%RSD	.83793	1.1439	2.5329

#1	2632.9	40366.	2139.6
#2	2601.9	41024.	2064.3

Sample Name: CCVH-3894253 Acquired: 5/18/2016 18:52:33 Type: QC
Method: 6500_025(v6) Mode: CONC Corr. Factor: 1.000000
User: CRHOADES Prep Date: Custom ID2: Custom ID3:
Comment:

Elem	Ag3280	Al3092	As1890	B_2089	Ba4554	Be3130	Bi2230	Ca3179	Cd2288	Co2286	Cr2055
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	-.00087	51.277	-.00372	.00039	-.00033	.00043	W 1.0728	-.01635	-.00046	-.00126	.00035
Stddev	.00047	1.810	.00110	.00000	.00091	.00020	.0159	.00256	.00011	.00022	.00007
%RSD	53.779	3.5295	29.688	.66347	275.14	45.619	1.4801	15.626	24.922	17.711	18.940

#1	-.00054	52.557	-.00450	.00040	.00031	.00029	1.0615	-.01454	-.00038	-.00142	.00040
#2	-.00119	49.998	-.00294	.00039	-.00097	.00057	1.0840	-.01816	-.00054	-.00110	.00030

Check ?	None	Chk Pass	None	None	None	None	Chk Warn	None	None	None	None
Value							1.0000				
Range							5.0000%				

Elem	Cu3247	Fe2714	K_7664	Li6707	Mg2790	Mn2576	Mo2020	Na8183	Ni2316	P_1782	Pb2203
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	-.00010	49.167	.04566	.00276	.02621	-.00016	-.00217	251.11	.00190	.00230	-.00046
Stddev	.00066	1.213	.10243	.00046	.00138	.00006	.00058	4.72	.00032	.00341	.00006
%RSD	685.72	2.4671	224.34	16.736	5.2605	39.254	26.984	1.8798	16.606	148.64	11.949

#1	-.00056	50.025	-.02677	.00244	.02524	-.00021	-.00258	254.45	.00168	-.00012	-.00043
#2	.00037	48.309	.11809	.00309	.02719	-.00012	-.00175	247.78	.00213	.00471	-.00050

Check ?	None	Chk Pass	None	None	None	None	None	Chk Pass	None	None	None
Value											
Range											

Elem	S_1820	Sb2068	Se1960	Si2881	SiO2	Sn1899	Sr4077	Th2837	Ti3349	Ti1908	U_3701
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	5.1649	-.01366	.00391	-.01872	-.04006	.00032	.00033	W 4.6871	.00567	-.00481	W 10.615
Stddev	.1510	.00388	.00358	.01190	.02546	.00081	.00012	.0013	.00067	.00363	.013
%RSD	2.9230	28.411	91.705	63.549	63.549	253.05	36.286	.02856	11.853	75.477	.12710

#1	5.0582	-.01092	.00137	-.01031	-.02206	.00089	.00041	4.6862	.00615	-.00737	10.624
#2	5.2717	-.01641	.00644	-.02713	-.05806	-.00025	.00024	4.6881	.00520	-.00224	10.605

Check ?	Chk Pass	None	None	None	None	None	None	Chk Warn	None	None	Chk Warn
Value								5.0000			10.000
Range								-5.0000%			5.0000%

Elem	V_2924	Zn2062	Zr3391
Units	ppm	ppm	ppm
Avg	.00953	.00027	.05461
Stddev	.00023	.00075	.00735
%RSD	2.3982	278.32	13.464

#1	.00969	-.00026	.04941
#2	.00937	.00079	.05981

Check ?	None	None	None
Value			
Range			

Int. Std.	Y_2243	Y_3600	Y_3774
Units	Cts/S	Cts/S	Cts/S
Avg	2522.7	38702.	2101.0
Stddev	47.3	126.	96.6
%RSD	1.8747	.32622	4.5995

#1	2556.2	38791.	2032.7
#2	2489.3	38612.	2169.4

Sample Name: CCV-3894251 Acquired: 5/18/2016 18:55:09 Type: QC

Method: 6500_025(v6) Mode: CONC Corr. Factor: 1.000000

User: CRHOADES Prep Date: Custom ID2: Custom ID3:

Comment:

Elem	Ag3280	Al1670	As1890	B_2089	Ba4554	Be3130	Bi2230	Ca3179	Cd2288	Co2286	Cr2055	Cu3247	Fe2599
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.48613	.53535	1.0325	.48173	.50353	.46717	.00155	4.9478	.49339	.49680	.49882	.50986	2.4331
Stddev	.00032	.00049	.0075	.00135	.01047	.00367	.00298	.0456	.00144	.00008	.00081	.00277	.0282
%RSD	.06625	.09161	.72167	.28038	2.0792	.78658	192.18	.92105	.29281	.01565	.16256	.54260	1.1577

#1	.48590	.53570	1.0377	.48269	.49613	.46457	.00365	4.9156	.49441	.49685	.49824	.51182	2.4131
#2	.48636	.53501	1.0272	.48078	.51093	.46977	-.00056	4.9800	.49237	.49674	.49939	.50791	2.4530

Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	None	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Value													
Range													

Elem	K_7664	Li6707	Mg2790	Mn2576	Mo2020	Na5895	Ni2316	P_1782	Pb2203	S_1820	Sb2068	Se1960	Si2881
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	48.867	.98102	19.023	.47130	.50367	5.0802	.48697	.96172	1.0008	.03068	.97823	1.0393	4.8521
Stddev	.975	.00057	.008	.00025	.00320	.0425	.00173	.00094	.0009	.00102	.00192	.0039	.0024
%RSD	1.9953	.05792	.04255	.05351	.63572	.83691	.35462	.09808	.08642	3.3159	.19585	.37783	.04851

#1	48.177	.98062	19.017	.47112	.50593	5.1102	.48819	.96239	1.0014	.02997	.97959	1.0421	4.8504
#2	49.556	.98142	19.029	.47148	.50140	5.0501	.48575	.96105	1.0002	.03140	.97688	1.0365	4.8537

Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	None	Chk Pass	Chk Pass	Chk Pass
Value													
Range													

Elem	SiO2	Sn1899	Sr4077	Th2837	Ti3349	Ti1908	U_3701	V_2924	Zn2062	Zr3391
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	10.383	1.0054	.47894	-.00059	.46699	1.0535	.03775	.48284	.46830	.51217
Stddev	.005	.0022	.00907	.00149	.00084	.0059	.01634	.00613	.00996	.00496
%RSD	.04851	.21735	1.8935	251.79	.17888	.56184	43.277	1.2705	2.1262	.96909
#1	10.380	1.0039	.47253	.00046	.46758	1.0577	.02620	.48718	.47534	.50866
#2	10.387	1.0070	.48535	-.00164	.46640	1.0493	.04930	.47850	.46126	.51568

Check ?	Chk Pass	Chk Pass	Chk Pass	None	Chk Pass	Chk Pass	None	Chk Pass	Chk Pass	Chk Pass
Value										
Range										

Int. Std.	Y_2243	Y_3600	Y_3774
Units	Cts/S	Cts/S	Cts/S
Avg	2579.3	39041.	2056.5
Stddev	7.7	57.	66.4
%RSD	.30037	.14679	3.2304
#1	2573.8	39081.	2103.5
#2	2584.8	39000.	2009.5

Sample Name: CCB Acquired: 5/18/2016 18:57:41 Type: QC
Method: 6500_025(v6) Mode: CONC Corr. Factor: 1.000000
User: CRHOADES Prep Date: Custom ID2: Custom ID3:
Comment:

Elem	Ag3280	Al1670	As1890	B_2089	Ba4554	Be3130	Bi2230	Ca3179	Cd2288	Co2286	Cr2055
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	-.00053	.00020	.00335	.00099	-.00076	.00011	.00449	-.02461	-.00040	-.00032	-.00010
Stddev	.00016	.00034	.00008	.00074	.00096	.00024	.00635	.00424	.00010	.00027	.00035
%RSD	31.014	165.65	2.3090	74.403	125.07	227.03	141.37	17.239	24.327	86.595	345.35

#1	-.00065	-.00003	.00329	.00152	-.00144	.00028	.00000	-.02161	-.00047	-.00012	.00015
#2	-.00042	.00044	.00340	.00047	-.00009	-.00006	.00899	-.02761	-.00033	-.00051	-.00035

Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit											
Low Limit											

Elem	Cu3247	Fe2599	K_7664	Li6707	Mg2790	Mn2576	Mo2020	Na5895	Ni2316	P_1782	Pb2203
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	-.00111	-.00310	.04286	.00406	-.00007	-.00001	.00201	.11562	.00006	.00028	.00115
Stddev	.00038	.00247	.01272	.00020	.00534	.00008	.00056	.00224	.00015	.00331	.00134
%RSD	34.123	79.665	29.671	4.8915	7408.3	963.37	28.031	1.9392	233.21	1194.1	116.64

#1	-.00084	-.00135	.05185	.00392	.00371	.00005	.00161	.11720	-.00004	.00262	.00210
#2	-.00138	-.00485	.03387	.00420	-.00385	-.00007	.00241	.11403	.00017	-.00206	.00020

Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit											
Low Limit											

Elem	S_1820	Sb2068	Se1960	Si2881	SiO2	Sn1899	Sr4077	Th2837	Ti3349	Ti1908	U_3701
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.02839	W .00507	W .00947	.03304	.07071	.00110	.00007	.00054	-.00061	.00136	-.02344
Stddev	.00151	.00316	.00047	.02442	.05227	.00032	.00025	.00042	.00087	.00178	.04443
%RSD	5.3154	62.232	5.0145	73.918	73.918	29.366	380.63	76.948	143.14	131.39	189.57

#1	.02946	.00730	.00981	.05031	.10767	.00087	.00025	.00025	.00001	.00010	-.05485
#2	.02733	.00284	.00913	.01577	.03375	.00133	-.00011	.00084	-.00123	.00262	.00798

Check ?	Chk Pass	Chk Warn	Chk Warn	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit		.00100	.00750								
Low Limit		-.00100	-.01500								

Elem	V_2924	Zn2062	Zr3391
Units	ppm	ppm	ppm
Avg	.00089	-.00090	-.00247
Stddev	.00063	.00034	.00204
%RSD	70.510	37.578	82.449

#1	.00045	-.00066	-.00392
#2	.00133	-.00113	-.00103

Check ?	Chk Pass	Chk Pass	Chk Pass
High Limit			
Low Limit			

Int. Std.	Y_2243	Y_3600	Y_3774
Units	Cts/S	Cts/S	Cts/S
Avg	2561.5	39806.	2060.8
Stddev	.9	362.	.1
%RSD	.03545	.90919	.00407

#1	2560.9	39550.	2060.8
#2	2562.2	40062.	2060.7

Sample Name: CCVL-3897520 Acquired: 5/18/2016 19:00:03 Type: QC

Method: 6500_025(v6) Mode: CONC Corr. Factor: 1.000000

User: CRHOADES Prep Date: Custom ID2: Custom ID3:

Comment:

Elem	Ag3280	Al1670	As1890	B_2089	Ba4554	Be3130	Bi2230	Ca3179	Cd2288	Co2286	Cr2055	Cu3247	Fe2599	K_7664
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.00966	.11085	.01242	.09324	.00932	.00108	.11451	.18577	.00444	.00954	.01024	.01438	.10388	2.9509
Stddev	.00024	.00044	.00610	.00074	.00000	.00023	.00321	.01205	.00039	.00004	.00008	.00057	.00063	.0994
%RSD	2.4472	.39475	49.090	.79509	.04131	20.793	2.7993	6.4852	8.8375	.43080	.77562	3.9769	.60887	3.3701

#1	.00949	.11116	.01673	.09271	.00932	.00124	.11678	.17725	.00472	.00951	.01019	.01479	.10433	2.8806
#2	.00982	.11054	.00811	.09376	.00932	.00092	.11224	.19429	.00416	.00957	.01030	.01398	.10343	3.0213

Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Value														
Range														

Elem	Li6707	Mg2790	Mn2576	Mo2020	Na5895	Ni2316	P_1782	Pb2203	S_1820	Sb2068	Se1960	Si2881	SiO2	Sn1899
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.00745	.20094	.00975	.01943	1.1173	.03855	2.7664	.00893	.03016	.02299	.01745	.51129	1.0942	.10005
Stddev	.00325	.00168	.00015	.00063	.0023	.00062	.0059	.00143	.00206	.00550	.00572	.03275	.0701	.00080
%RSD	43.638	.83549	1.5351	3.2447	.20689	1.6085	.21291	16.041	6.8244	23.915	32.754	6.4062	6.4062	.79769

#1	.00515	.19975	.00964	.01899	1.1189	.03898	2.7623	.00791	.03162	.01910	.01341	.53445	1.1437	.09949
#2	.00974	.20213	.00985	.01988	1.1156	.03811	2.7706	.00994	.02870	.02688	.02149	.48813	1.0446	.10062

Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	None	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Value														
Range														

Elem	Sr4077	Th2837	Ti3349	Tl1908	U_3701	V_2924	Zn2062	Zr3391
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.00977	.01268	.00864	.01311	.05343	.01041	.01782	.01673
Stddev	.00007	.00220	.00011	.00422	.00849	.00062	.00019	.00083
%RSD	.75522	17.325	1.2340	32.195	15.883	5.9477	1.0861	4.9837
#1	.00982	.01113	.00872	.01013	.05943	.00997	.01769	.01614
#2	.00972	.01423	.00857	.01610	.04743	.01085	.01796	.01732

Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Value								
Range								

Int. Std.	Y_2243	Y_3600	Y_3774
Units	Cts/S	Cts/S	Cts/S
Avg	2546.9	39746.	2074.8
Stddev	20.2	122.	18.0
%RSD	.79407	.30726	.86896

#1	2561.3	39832.	2087.5
#2	2532.6	39659.	2062.0

Elem	Ag3280	Al3092	As1890	B_2089	Ba4554	Be3130	Bi2230	Ca3179	Cd2288
Line	328.068 {103}	309.271 {109}	189.042 {478}	208.959 {461}	455.403 {74}	313.042 {108}	223.061 {451}	317.933 {106}	228.802 {447}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.00005	20.120	-.00155	.00229	.07117	.00040	.00124	.68528	.00430
Stddev	.00047	.113	.00084	.00117	.00022	.00000	.00030	.00890	.00015
%RSD	921.82	.56149	54.070	51.070	.31010	.81405	24.596	1.2988	3.5807

#1	.00038	20.200	-.00096	.00146	.07133	.00040	.00145	.69157	.00441
#2	-.00028	20.040	-.00214	.00312	.07102	.00040	.00102	.67898	.00419

Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Elem	Co2286	Cr2055	Cu3247	Fe2599	K_7664	Li6707	Mg2790	Mn2576	Mo2020
Line	228.616 {447}	205.560 {464}	324.754 {104}	259.940 {130}	766.490 {44}	670.784 {50}	279.079 {121}2	257.610 {131}	202.030 {467}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.00061	.01864	.38081	11.111	.30981	.00996	.58643	.12917	.00180
Stddev	.00019	.00004	.00141	.119	.13763	.00346	.00437	.00011	.00006
%RSD	31.118	.19163	.37089	1.0751	44.422	34.751	.74539	.08341	3.0873

#1	.00075	.01867	.37981	11.196	.21250	.00752	.58952	.12925	.00176
#2	.00048	.01862	.38181	11.027	.40713	.01241	.58334	.12909	.00184

Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Elem	Na5895	Ni2316	P_1782	Pb2203	S_1820	Sb2068	Se1960	Si2881	SiO2
Line	589.592 {57}	231.604 {446}	178.284 {489}	220.353 {453}	182.034 {485}	206.833 {463}	196.090 {472}	288.158 {117}	288.158 {117}2
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.17105	.02091	.27353	.30095	.31746	.00257	.00526	2.3915	5.1178
Stddev	.02168	.00082	.00506	.00568	.00185	.00410	.00316	.0342	.0732
%RSD	12.674	3.9400	1.8516	1.8862	.58319	159.33	60.119	1.4309	1.4309

#1	.15572	.02149	.27711	.30497	.31615	.00547	.00302	2.4157	5.1696
#2	.18638	.02033	.26995	.29694	.31877	-.00033	.00749	2.3673	5.0661

Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Elem	Sn1899	Sr4077	Th2837	Ti3349	Ti1908	U_3701	V_2924	Zn2062	Zr3391
Line	189.989 {477}	407.771 {83}	283.730 {119}	334.904 {101}	190.856 {477}	370.152 {91}	292.402 {115}	206.200 {163}	339.198 {99}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.01822	.00621	.00458	.25430	-.00207	.04667	.02470	.63955	.00846
Stddev	.00044	.00013	.00277	.00176	.00278	.00111	.00032	.00323	.00268
%RSD	2.4163	2.1407	60.572	.69116	134.27	2.3678	1.3135	.50487	31.648

#1	.01791	.00630	.00262	.25305	-.00404	.04745	.02493	.63727	.00657
#2	.01854	.00611	.00654	.25554	-.00010	.04589	.02447	.64183	.01036

Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Int. Std.	Y_2243	Y_3600	Y_3774						
Line	224.306 {450}	360.073 {94}	377.433 {89}						
Units	Cts/S	Cts/S	Cts/S						
Avg	2641.8	40737.	2226.8						
Stddev	87.8	136.	25.9						
%RSD	3.3246	.33374	1.1636						

#1	2579.6	40641.	2208.5						
#2	2703.9	40833.	2245.2						

Sample Name: 280-82954-A-21-A Acquired: 5/18/2016 19:05:22 Type: Unk

Method: 6500_025(v6) Mode: CONC Corr. Factor: 1.000000

User: CRHOADES Prep Date: Custom ID2: Custom ID3:

Comment: 325403 SOIL 6010C (Cu) Q4

Elem	Ag3280	Al3092	As1890	B_2089	Ba4554	Be3130	Bi2230	Ca3179	Cd2288
Line	328.068 {103}	309.271 {109}	189.042 {478}	208.959 {461}	455.403 {74}	313.042 {108}	223.061 {451}	317.933 {106}	228.802 {447}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	-.00027	18.769	.00148	.00113	.07015	.00017	.00363	.43308	.00441
Stddev	.00047	.384	.00012	.00008	.00195	.00010	.00028	.01035	.00015
%RSD	177.72	2.0444	8.0635	7.2308	2.7852	56.110	7.8173	2.3901	3.3400

#1	.00007	19.040	.00139	.00119	.07153	.00024	.00343	.42576	.00451
#2	-.00060	18.498	.00156	.00107	.06877	.00010	.00383	.44040	.00431

Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Elem	Co2286	Cr2055	Cu3247	Fe2599	K_7664	Li6707	Mg2790	Mn2576	Mo2020
Line	228.616 {447}	205.560 {464}	324.754 {104}	259.940 {130}	766.490 {44}	670.784 {50}	279.079 {121}2	257.610 {131}	202.030 {467}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.00064	.02179	.54106	10.569	.29799	.00810	.48002	.06405	.00160
Stddev	.00001	.00008	.00085	.014	.07918	.00228	.00668	.00029	.00027
%RSD	1.5181	.37488	.15627	.13078	26.573	28.124	1.3925	.44638	16.798

#1	.00063	.02185	.54046	10.579	.24200	.00972	.47529	.06426	.00141
#2	.00065	.02173	.54166	10.560	.35398	.00649	.48474	.06385	.00179

Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Elem	Na5895	Ni2316	P_1782	Pb2203	S_1820	Sb2068	Se1960	Si2881	SiO2
Line	589.592 {57}	231.604 {446}	178.284 {489}	220.353 {453}	182.034 {485}	206.833 {463}	196.090 {472}	288.158 {117}	288.158 {117}2
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.16212	.02792	.24381	.56894	.33246	.00866	.00617	2.6002	5.5644
Stddev	.02197	.00038	.00179	.00344	.00208	.00470	.00582	.0027	.0059
%RSD	13.550	1.3743	.73236	.60386	.62443	54.277	94.376	.10589	.10589

#1	.17765	.02820	.24507	.57137	.33392	.00533	.00205	2.6021	5.5685
#2	.14658	.02765	.24254	.56651	.33099	.01198	.01029	2.5982	5.5602

Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Elem	Sn1899	Sr4077	Th2837	Ti3349	Ti1908	U_3701	V_2924	Zn2062	Zr3391
Line	189.989 {477}	407.771 {83}	283.730 {119}	334.904 {101}	190.856 {477}	370.152 {91}	292.402 {115}	206.200 {163}	339.198 {99}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.00735	.00889	.00432	.24064	-.00325	.02982	.02060	.41700	.01095
Stddev	.00080	.00007	.00019	.00404	.00085	.00067	.00019	.00485	.00360
%RSD	10.879	.78748	4.2923	1.6780	26.101	2.2389	.94498	1.1638	32.897

#1	.00791	.00884	.00419	.24350	-.00265	.02934	.02074	.42044	.00840
#2	.00678	.00894	.00445	.23778	-.00384	.03029	.02046	.41357	.01349

Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Int. Std.	Y_2243	Y_3600	Y_3774
Line	224.306 {450}	360.073 {94}	377.433 {89}
Units	Cts/S	Cts/S	Cts/S
Avg	2610.6	39958.	2135.2
Stddev	60.3	256.	5.3
%RSD	2.3082	.63971	.24731

#1	2568.0	40139.	2138.9
#2	2653.2	39778.	2131.4

Elem	Ag3280	Al3092	As1890	B_2089	Ba4554	Be3130	Bi2230	Ca3179	Cd2288
Line	328.068 {103}	309.271 {109}	189.042 {478}	208.959 {461}	455.403 { 74}	313.042 {108}	223.061 {451}	317.933 {106}	228.802 {447}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	-0.00095	18.223	.00882	.00121	.06310	.00015	-0.00044	.88995	.00490
Stddev	.00030	.487	.00742	.00029	.00331	.00001	.00073	.03042	.00001
%RSD	31.181	2.6699	84.165	23.942	5.2398	4.4403	168.74	3.4179	.14853

#1	-0.00074	18.567	.01406	.00142	.06544	.00016	-0.00095	.91146	.00491
#2	-0.00116	17.879	.00357	.00101	.06076	.00015	.00008	.86844	.00490

Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Elem	Co2286	Cr2055	Cu3247	Fe2599	K_7664	Li6707	Mg2790	Mn2576	Mo2020
Line	228.616 {447}	205.560 {464}	324.754 {104}	259.940 {130}	766.490 { 44}	670.784 { 50}	279.079 {121}2	257.610 {131}	202.030 {467}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.00112	.02033	.27301	10.074	.26608	.00932	.50886	.05344	.00059
Stddev	.00050	.00016	.00080	.261	.06138	.00138	.00266	.00029	.00022
%RSD	44.941	.80506	.29307	2.5871	23.067	14.762	.52337	.53817	37.190

#1	.00148	.02044	.27357	10.258	.22268	.00835	.50697	.05324	.00074
#2	.00077	.02021	.27244	9.8898	.30948	.01029	.51074	.05365	.00043

Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Elem	Na5895	Ni2316	P_1782	Pb2203	S_1820	Sb2068	Se1960	Si2881	SiO2
Line	589.592 { 57}	231.604 {446}	178.284 {489}	220.353 {453}	182.034 {485}	206.833 {463}	196.090 {472}	288.158 {117}	288.158 {117}2
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.19627	.00875	.25851	.29535	.53056	.00567	.00498	2.2157	4.7416
Stddev	.02977	.00077	.00039	.00043	.00458	.00127	.00087	.0419	.0897
%RSD	15.166	8.8310	.15064	.14403	.86399	22.407	17.424	1.8923	1.8923

#1	.17522	.00930	.25823	.29505	.53380	.00656	.00560	2.2454	4.8051
#2	.21732	.00821	.25878	.29565	.52732	.00477	.00437	2.1861	4.6782

Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Elem	Sn1899	Sr4077	Th2837	Ti3349	Ti1908	U_3701	V_2924	Zn2062	Zr3391
Line	189.989 {477}	407.771 { 83}	283.730 {119}	334.904 {101}	190.856 {477}	370.152 { 91}	292.402 {115}	206.200 {163}	339.198 { 99}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.00472	.00705	.00596	.17524	-.00406	-.04808	.01822	.34024	.01016
Stddev	.00016	.00003	.00057	.00195	.00541	.00541	.00005	.00708	.00123
%RSD	3.3888	.37647	9.6088	1.1129	133.32	11.259	.26387	2.0807	12.071

#1	.00461	.00707	.00555	.17662	-.00788	-.05191	.01819	.34525	.00929
#2	.00484	.00704	.00636	.17386	-.00023	-.04425	.01825	.33524	.01103

Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Int. Std.	Y_2243	Y_3600	Y_3774
Line	224.306 {450}	360.073 { 94}	377.433 { 89}
Units	Cts/S	Cts/S	Cts/S
Avg	2659.1	40944.	2193.3
Stddev	23.4	488.	90.9
%RSD	.87927	1.1914	4.1434

#1	2642.6	41288.	2129.1
#2	2675.6	40599.	2257.6

Sample Name: 280-82954-A-5-B MS Acquired: 5/18/2016 19:10:39 Type: Unk
Method: 6500_025(v6) Mode: CONC Corr. Factor: 1.000000
User: CRHOADES Prep Date: Custom ID2: Custom ID3:
Comment: 325403 SOIL 6010C (Cu) Q4

Elem	Ag3280	Al3092	As1890	B_2089	Ba4554	Be3130	Bi2230	Ca3179	Cd2288
Line	328.068 {103}	309.271 {109}	189.042 {478}	208.959 {461}	455.403 { 74}	313.042 {108}	223.061 {451}	317.933 {106}	228.802 {447}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.04644	26.686	.99941	.93023	1.9956	.04498	F 2.0556	47.504	.09939
Stddev	.00056	.483	.00810	.00479	.0339	.00097	.0082	.812	.00043
%RSD	1.2132	1.8083	.81090	.51495	1.6990	2.1510	.39683	1.7084	.42877

#1	.04684	26.344	1.0051	.93361	1.9716	.04430	2.0614	46.930	.09969
#2	.04604	27.027	.99368	.92684	2.0195	.04567	2.0499	48.078	.09909

Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Fail	Chk Pass	Chk Pass
High Limit							.10000		
Low Limit							-.10000		

Elem	Co2286	Cr2055	Cu3247	Fe2599	K_7664	Li6707	Mg2790	Mn2576	Mo2020
Line	228.616 {447}	205.560 {464}	324.754 {104}	259.940 {130}	766.490 { 44}	670.784 { 50}	279.079 {121}2	257.610 {131}	202.030 {467}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.46583	.21324	.54081	11.158	47.384	.93486	46.511	.49681	1.0064
Stddev	.00480	.00191	.00090	.155	.608	.00350	.086	.00001	.0102
%RSD	1.0301	.89780	.16635	1.3897	1.2831	.37408	.18462	.00178	1.0177

#1	.46922	.21460	.54145	11.048	46.954	.93733	46.571	.49680	1.0136
#2	.46243	.21189	.54018	11.267	47.814	.93239	46.450	.49682	.99915

Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Elem	Na8183	Ni2316	P_1782	Pb2203	S_1820	Sb2068	Se1960	Si2881	SiO2
Line	818.326 { 41}	231.604 {446}	178.284 {489}	220.353 {453}	182.034 {485}	206.833 {463}	196.090 {472}	288.158 {117}	288.158 {117}2
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	50.654	.47097	W 9.5968	.82119	2.5154	.48802	2.0042	5.0942	10.901
Stddev	.652	.00278	.0904	.00785	.0276	.00889	.0422	.0632	.135
%RSD	1.2876	.58942	.94240	.95542	1.0985	1.8209	2.1053	1.2400	1.2400

#1	51.116	.47294	9.6607	.82674	2.5349	.49431	2.0340	5.0495	10.806
#2	50.193	.46901	9.5328	.81564	2.4958	.48174	1.9744	5.1388	10.997

Check ?	Chk Pass	Chk Pass	Chk Warn	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit			2.0000						
Low Limit			-1.0000						

Elem	Sn1899	Sr4077	Th2837	Ti3349	Ti1908	U_3701	V_2924	Zn2062	Zr3391
Line	189.989 {477}	407.771 { 83}	283.730 {119}	334.904 {101}	190.856 {477}	370.152 { 91}	292.402 {115}	206.200 {163}	339.198 { 99}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	1.9184	.90938	.90036	1.2251	1.8123	2.0188	.47979	.81755	.51087
Stddev	.0349	.01360	.00180	.0002	.0906	.0211	.00165	.00416	.00159
%RSD	1.8170	1.4960	.19996	.01867	4.9968	1.0452	.34431	.50929	.31189

#1	1.9431	.89976	.90163	1.2253	1.8763	2.0039	.48095	.82049	.50974
#2	1.8938	.91900	.89908	1.2250	1.7483	2.0338	.47862	.81460	.51199

Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Int. Std.	Y_2243	Y_3600	Y_3774						
Line	224.306 {450}	360.073 { 94}	377.433 { 89}						
Units	Cts/S	Cts/S	Cts/S						
Avg	2514.2	38866.	2100.1						
Stddev	8.8	171.	18.1						
%RSD	.34892	.43895	.86275						

#1	2520.4	38987.	2112.9						
#2	2508.0	38745.	2087.3						

Sample Name: 280-82954-A-5-C MSD Acquired: 5/18/2016 19:13:05 Type: Unk
Method: 6500_025(v6) Mode: CONC Corr. Factor: 1.000000
User: CRHOADES Prep Date: Custom ID2: Custom ID3:
Comment: 325403 SOIL 6010C (Cu) Q4

Elem	Ag3280	Al3092	As1890	B_2089	Ba4554	Be3130	Bi2230	Ca3179	Cd2288
Line	328.068 {103}	309.271 {109}	189.042 {478}	208.959 {461}	455.403 {74}	313.042 {108}	223.061 {451}	317.933 {106}	228.802 {447}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.04754	37.653	1.0037	.93684	2.0985	.04624	F 2.0611	49.133	.10056
Stddev	.00072	.002	.0099	.00371	.0048	.00015	.0062	.073	.00038
%RSD	1.5079	.00471	.98568	.39583	.22833	.31496	.30132	.14824	.37543

#1	.04805	37.655	.99672	.93422	2.1019	.04634	2.0654	49.184	.10029
#2	.04703	37.652	1.0107	.93947	2.0951	.04613	2.0567	49.081	.10083

Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Fail	Chk Pass	Chk Pass
High Limit							.10000		
Low Limit							-.10000		

Elem	Co2286	Cr2055	Cu3247	Fe2599	K_7664	Li6707	Mg2790	Mn2576	Mo2020
Line	228.616 {447}	205.560 {464}	324.754 {104}	259.940 {130}	766.490 {44}	670.784 {50}	279.079 {121}2	257.610 {131}	202.030 {467}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.46839	.22315	.69592	13.728	49.396	.96476	47.845	.51105	1.0202
Stddev	.00234	.00097	.00279	.036	.030	.00060	.065	.00104	.0030
%RSD	.49912	.43487	.40150	.26411	.06096	.06211	.13633	.20426	.29350

#1	.46674	.22246	.69789	13.703	49.375	.96433	47.891	.51032	1.0180
#2	.47004	.22383	.69394	13.754	49.418	.96518	47.799	.51179	1.0223

Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Elem	Na8183	Ni2316	P_1782	Pb2203	S_1820	Sb2068	Se1960	Si2881	SiO2
Line	818.326 {41}	231.604 {446}	178.284 {489}	220.353 {453}	182.034 {485}	206.833 {463}	196.090 {472}	288.158 {117}	288.158 {117}2
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	51.604	.47620	W 9.6888	1.0764	2.5936	.48191	2.0005	6.3135	13.511
Stddev	.564	.00139	.0247	.0019	.0012	.00590	.0082	.0466	.100
%RSD	1.0924	.29275	.25504	.17904	.04604	1.2236	.40810	.73840	.73840

#1	52.003	.47522	9.6713	1.0750	2.5928	.48608	1.9947	6.2805	13.440
#2	51.205	.47719	9.7063	1.0778	2.5945	.47774	2.0063	6.3464	13.581

Check ?	Chk Pass	Chk Pass	Chk Warn	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit			2.0000						
Low Limit			-1.0000						

Elem	Sn1899	Sr4077	Th2837	Ti3349	Ti1908	U_3701	V_2924	Zn2062	Zr3391
Line	189.989 {477}	407.771 {83}	283.730 {119}	334.904 {101}	190.856 {477}	370.152 {91}	292.402 {115}	206.200 {163}	339.198 {99}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	1.9398	.94445	.92579	1.3644	1.8506	2.0364	.49961	.98814	.52377
Stddev	.0036	.00303	.00034	.0027	.0478	.0710	.00108	.00704	.00377
%RSD	.18525	.32133	.03620	.19893	2.5856	3.4877	.21554	.71232	.72051

#1	1.9424	.94660	.92602	1.3664	1.8844	2.0866	.50037	.98317	.52644
#2	1.9373	.94231	.92555	1.3625	1.8168	1.9861	.49885	.99312	.52110

Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Int. Std.	Y_2243	Y_3600	Y_3774
Line	224.306 {450}	360.073 {94}	377.433 {89}
Units	Cts/S	Cts/S	Cts/S
Avg	2548.0	38948.	2083.7
Stddev	11.7	314.	25.4
%RSD	.45899	.80719	1.2171

#1	2556.2	39170.	2101.7
#2	2539.7	38726.	2065.8

Sample Name: CCVH-3894253 Acquired: 5/18/2016 19:15:31 Type: QC
Method: 6500_025(v6) Mode: CONC Corr. Factor: 1.000000
User: CRHOADES Prep Date: Custom ID2: Custom ID3:
Comment:

Elem	Ag3280	Al3092	As1890	B_2089	Ba4554	Be3130	Bi2230	Ca3179	Cd2288	Co2286	Cr2055
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	-.00065	52.829	.00064	.00476	-.00085	.00042	W 1.0630	-.01647	-.00073	-.00114	.00002
Stddev	.00002	.510	.00092	.00056	.00011	.00001	.0027	.00192	.00016	.00046	.00031
%RSD	2.7875	.96603	144.48	11.691	12.404	3.1173	.25473	11.628	21.324	40.256	1728.9

#1	-.00066	53.190	-.00001	.00515	-.00078	.00041	1.0611	-.01512	-.00084	-.00081	-.00020
#2	-.00063	52.468	.00129	.00436	-.00093	.00043	1.0649	-.01783	-.00062	-.00146	.00024

Check ?	None	Chk Pass	None	None	None	None	Chk Warn	None	None	None	None
Value							1.0000				
Range							5.0000%				

Elem	Cu3247	Fe2714	K_7664	Li6707	Mg2790	Mn2576	Mo2020	Na8183	Ni2316	P_1782	Pb2203
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	-.00016	49.213	.16098	.00519	.02310	-.00018	.00336	255.37	.00098	.00540	-.00042
Stddev	.00003	.058	.00174	.00315	.00348	.00008	.00190	.15	.00075	.00089	.00042
%RSD	18.855	.11691	1.0821	60.749	15.075	45.183	56.508	.05897	76.608	16.549	99.310

#1	-.00019	49.173	.15974	.00742	.02064	-.00013	.00202	255.47	.00151	.00603	-.00072
#2	-.00014	49.254	.16221	.00296	.02557	-.00024	.00471	255.26	.00045	.00477	-.00013

Check ?	None	Chk Pass	None	None	None	None	None	Chk Pass	None	None	None
Value											
Range											

Elem	S_1820	Sb2068	Se1960	Si2881	SiO2	Sn1899	Sr4077	Th2837	Ti3349	Ti1908	U_3701
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	5.0445	-.00882	.00998	.00942	.02015	.00205	.00030	W 4.6692	.00607	.02089	W 10.586
Stddev	.0158	.00446	.00004	.02857	.06114	.00118	.00016	.0183	.00053	.00390	.034
%RSD	.31279	50.603	.40010	303.35	303.35	57.881	53.069	.39123	8.7699	18.658	.32165

#1	5.0557	-.00566	.01001	.02962	.06338	.00121	.00019	4.6563	.00644	.01813	10.610
#2	5.0334	-.01197	.00996	-.01078	-.02308	.00288	.00042	4.6822	.00569	.02364	10.561

Check ?	Chk Pass	None	None	None	None	None	None	Chk Warn	None	None	Chk Warn
Value								5.0000			10.000
Range								-5.0000%			5.0000%

Elem	V_2924	Zn2062	Zr3391
Units	ppm	ppm	ppm
Avg	.00891	-.00014	.05249
Stddev	.00065	.00013	.00073
%RSD	7.3100	92.795	1.3931

#1	.00937	-.00005	.05300
#2	.00845	-.00023	.05197

Check ?	None	None	None
Value			
Range			

Int. Std.	Y_2243	Y_3600	Y_3774
Units	Cts/S	Cts/S	Cts/S
Avg	2468.8	38322.	2037.6
Stddev	10.7	295.	25.1
%RSD	.43187	.76930	1.2328

#1	2476.4	38530.	2019.8
#2	2461.3	38113.	2055.3

Sample Name: CCV-3894251 Acquired: 5/18/2016 19:18:09 Type: QC
Method: 6500_025(v6) Mode: CONC Corr. Factor: 1.000000
User: CRHOADES Prep Date: Custom ID2: Custom ID3:
Comment:

Elem	Ag3280	Al1670	As1890	B_2089	Ba4554	Be3130	Bi2230	Ca3179	Cd2288	Co2286	Cr2055	Cu3247	Fe2599
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.48954	.54333	1.0387	.49175	.50229	.46656	.00103	4.9547	.49308	.50269	.50688	.51434	2.4017
Stddev	.00064	.01388	.0261	.00948	.01076	.00785	.00309	.0926	.00044	.01085	.01184	.00020	.0315
%RSD	.13150	2.5539	2.5156	1.9276	2.1426	1.6819	299.52	1.8696	.09002	2.1585	2.3351	.03958	1.3110

#1	.49000	.55314	1.0572	.49846	.50990	.47211	.00322	5.0202	.49277	.51036	.51525	.51449	2.4239
#2	.48908	.53351	1.0202	.48505	.49468	.46101	-.00115	4.8892	.49340	.49501	.49851	.51420	2.3794

Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	None	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Value													
Range													

Elem	K_7664	Li6707	Mg2790	Mn2576	Mo2020	Na5895	Ni2316	P_1782	Pb2203	S_1820	Sb2068	Se1960	Si2881
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	48.622	.98672	18.994	.46989	.51406	5.0651	.49547	.97297	1.0133	.02659	.99534	1.0561	4.8730
Stddev	.935	.00336	.013	.00017	.01151	.0827	.01281	.02488	.0265	.00443	.02016	.0326	.0501
%RSD	1.9231	.34036	.06653	.03532	2.2386	1.6327	2.5861	2.5575	2.6138	16.666	2.0259	3.0822	1.0280

#1	49.283	.98910	19.003	.47001	.52220	5.1236	.50453	.99056	1.0320	.02972	1.0096	1.0791	4.9085
#2	47.961	.98435	18.985	.46977	.50592	5.0066	.48641	.95537	.99452	.02345	.98108	1.0331	4.8376

Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	None	Chk Pass	Chk Pass	Chk Pass
Value													
Range													

Elem	SiO2	Sn1899	Sr4077	Th2837	Ti3349	Ti1908	U_3701	V_2924	Zn2062	Zr3391
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	10.428	1.0221	.47729	-.00101	.46474	1.0778	.01453	.48445	.47020	.50748
Stddev	.107	.0240	.01014	.00086	.00106	.0328	.01119	.00257	.00276	.00003
%RSD	1.0280	2.3481	2.1255	84.809	.22730	3.0390	77.026	.53013	.58781	.00574

#1	10.504	1.0391	.48446	-.00040	.46549	1.1010	.00662	.48627	.46825	.50750
#2	10.352	1.0051	.47012	-.00162	.46399	1.0547	.02245	.48263	.47215	.50746

Check ?	Chk Pass	Chk Pass	Chk Pass	None	Chk Pass	Chk Pass	None	Chk Pass	Chk Pass	Chk Pass
Value										
Range										

Int. Std.	Y_2243	Y_3600	Y_3774
Units	Cts/S	Cts/S	Cts/S
Avg	2532.5	38840.	2030.8
Stddev	52.1	226.	28.7
%RSD	2.0577	.58302	1.4125

#1	2495.6	38680.	2010.5
#2	2569.3	39000.	2051.0

Sample Name: CCB Acquired: 5/18/2016 19:20:40 Type: QC
 Method: 6500_025(v6) Mode: CONC Corr. Factor: 1.000000
 User: CRHOADES Prep Date: Custom ID2: Custom ID3:
 Comment:

Elem	Ag3280	Al1670	As1890	B_2089	Ba4554	Be3130	Bi2230	Ca3179	Cd2288	Co2286	Cr2055
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	-.00026	.00000	.00402	.00190	-.00084	.00027	.00534	-.02629	-.00027	.00008	-.00022
Stddev	.00014	.00033	.00045	.00080	.00050	.00014	.00066	.00168	.00018	.00009	.00003
%RSD	53.364	12335.	11.076	42.013	59.855	53.937	12.336	6.3901	64.537	113.45	14.877

#1	-.00016	.00023	.00434	.00247	-.00049	.00037	.00487	-.02748	-.00015	.00002	-.00020
#2	-.00036	-.00023	.00371	.00134	-.00120	.00016	.00581	-.02510	-.00040	.00014	-.00025

Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit											
Low Limit											

Elem	Cu3247	Fe2599	K_7664	Li6707	Mg2790	Mn2576	Mo2020	Na5895	Ni2316	P_1782	Pb2203
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	-.00109	.00442	.07014	.00047	.00652	.00011	.00210	.11914	-.00032	.00165	-.00014
Stddev	.00016	.00179	.02729	.00430	.00049	.00004	.00159	.01849	.00024	.00277	.00006
%RSD	14.621	40.403	38.903	925.00	7.5650	39.471	75.628	15.516	75.618	167.69	44.216

#1	-.00098	.00568	.08944	-.00258	.00687	.00014	.00098	.10607	-.00015	.00361	-.00019
#2	-.00120	.00316	.05085	.00351	.00617	.00008	.00322	.13221	-.00049	-.00031	-.00010

Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit											
Low Limit											

Elem	S_1820	Sb2068	Se1960	Si2881	SiO2	Sn1899	Sr4077	Th2837	Ti3349	Ti1908	U_3701
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.03019	W .00597	.00396	.00186	.00398	.00105	.00017	-.00232	.00005	.00261	.05830
Stddev	.00423	.00106	.00278	.02553	.05463	.00104	.00008	.00166	.00088	.00000	.03117
%RSD	14.027	17.688	70.139	1372.2	1372.2	98.294	44.672	71.751	1779.5	.05673	53.467

#1	.03318	.00672	.00592	.01991	.04261	.00032	.00022	-.00349	-.00057	.00261	.08034
#2	.02719	.00523	.00199	-.01619	-.03465	.00179	.00012	-.00114	.00067	.00260	.03626

Check ?	Chk Pass	Chk Warn	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit		.00100									
Low Limit		-.00100									

Elem	V_2924	Zn2062	Zr3391
Units	ppm	ppm	ppm
Avg	.00051	-.00037	.00012
Stddev	.00005	.00071	.00293
%RSD	10.177	192.58	2484.8

#1	.00047	.00013	-.00195
#2	.00054	-.00087	.00219

Check ?	Chk Pass	Chk Pass	Chk Pass
High Limit			
Low Limit			

Int. Std.	Y_2243	Y_3600	Y_3774
Units	Cts/S	Cts/S	Cts/S
Avg	2568.7	39687.	2144.5
Stddev	68.0	29.	74.9
%RSD	2.6473	.07243	3.4910

#1	2616.7	39708.	2091.5
#2	2520.6	39667.	2197.4

Sample Name: CCVL-3897520 Acquired: 5/18/2016 19:23:03 Type: QC

Method: 6500_025(v6) Mode: CONC Corr. Factor: 1.000000

User: CRHOADES Prep Date: Custom ID2: Custom ID3:

Comment:

Elem	Ag3280	Al1670	As1890	B_2089	Ba4554	Be3130	Bi2230	Ca3179	Cd2288	Co2286	Cr2055	Cu3247	Fe2599	K_7664
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.00949	.12100	.01613	.09597	.01036	.00121	.10822	.19312	.00476	.01011	.01045	.01427	.10742	2.9921
Stddev	.00066	.01340	.00467	.00198	.00019	.00022	.00536	.01232	.00036	.00033	.00017	.00137	.00228	.0470
%RSD	6.9257	11.077	28.951	2.0622	1.8008	18.187	4.9532	6.3801	7.5377	3.2159	1.6665	9.5708	2.1213	1.5699

#1	.00903	.11152	.01283	.09457	.01050	.00106	.10443	.18441	.00451	.00988	.01033	.01523	.10580	3.0253
#2	.00996	.13048	.01944	.09737	.01023	.00137	.11201	.20184	.00501	.01034	.01058	.01330	.10903	2.9589

Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Value														
Range														

Elem	Li6707	Mg2790	Mn2576	Mo2020	Na5895	Ni2316	P_1782	Pb2203	S_1820	Sb2068	Se1960	Si2881	SiO2	Sn1899
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.00792	.20085	.00984	.02026	1.1125	.03952	2.8024	.00830	.03165	.02553	.01519	.51015	1.0917	.10251
Stddev	.00489	.00405	.00015	.00098	.0012	.00132	.0711	.00028	.00215	.00082	.00062	.00952	.0204	.00323
%RSD	61.769	2.0180	1.5555	4.8282	.10402	3.3457	2.5357	3.3859	6.7867	3.2129	4.0764	1.8660	1.8660	3.1539

#1	.00446	.20371	.00974	.01957	1.1134	.03858	2.7521	.00850	.03317	.02611	.01476	.51688	1.1061	.10023
#2	.01138	.19798	.00995	.02095	1.1117	.04045	2.8526	.00811	.03013	.02495	.01563	.50342	1.0773	.10480

Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	None	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Value														
Range														

Elem	Sr4077	Th2837	Ti3349	Tl1908	U_3701	V_2924	Zn2062	Zr3391
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.00983	.01525	.00913	.01494	.06732	.00999	.01787	.01289
Stddev	.00006	.00315	.00004	.00251	.00258	.00122	.00098	.00243
%RSD	.56803	20.684	.44309	16.815	3.8354	12.167	5.4629	18.855
#1	.00987	.01748	.00916	.01316	.06914	.00913	.01856	.01461
#2	.00979	.01302	.00910	.01671	.06549	.01085	.01718	.01117

Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Value								
Range								

Int. Std.	Y_2243	Y_3600	Y_3774
Units	Cts/S	Cts/S	Cts/S
Avg	2544.5	39530.	2094.5
Stddev	31.9	68.	33.8
%RSD	1.2531	.17156	1.6114
#1	2567.0	39482.	2070.6
#2	2521.9	39577.	2118.4

Sample Name: MB 280-325612/1-A Acquired: 5/18/2016 19:25:44 Type: Unk

Method: 6500_025(v6) Mode: CONC Corr. Factor: 1.000000

User: CRHOADES Prep Date: 5/17 Custom ID2: Custom ID3:

Comment: 325612 6010C (Fe)

Elem	Ag3280	Al1670	As1890	B_2089	Ba4554	Be3130	Bi2230	Ca3179	Cd2288
Line	328.068 {103}	167.079 {502}	189.042 {478}	208.959 {461}	455.403 { 74}	313.042 {108}	223.061 {451}	317.933 {106}	228.802 {447}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	-0.00082	.00195	.00136	.00056	-0.00063	W .00053	-0.00069	-0.01849	.00003
Stddev	.00061	.00080	.00751	.00052	.00010	.00024	.00296	.00974	.00010
%RSD	73.780	41.187	551.82	93.598	15.876	44.995	430.41	52.665	352.12

#1	-.00125	.00252	-.00395	.00019	-.00056	.00036	-.00278	-.02537	-.00004
#2	-.00039	.00138	.00668	.00093	-.00070	.00071	.00141	-.01160	.00010

Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Warn	Chk Pass	Chk Pass	Chk Pass
High Limit						.00050			
Low Limit						-.00050			

Elem	Co2286	Cr2055	Cu3247	Fe2599	K_7664	Li6707	Mg2790	Mn2576	Mo2020
Line	228.616 {447}	205.560 {464}	324.754 {104}	259.940 {130}	766.490 { 44}	670.784 { 50}	279.079 {121}2	257.610 {131}	202.030 {467}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.00004	-0.00001	-0.00141	-0.00271	.03307	.00225	-0.00060	-0.00005	-0.00052
Stddev	.00039	.00045	.00069	.00715	.04704	.00419	.00289	.00003	.00077
%RSD	983.77	7091.7	49.130	264.09	142.26	185.94	485.55	59.417	148.12

#1	.00032	.00031	-.00190	.00235	-.00020	-.00071	.00145	-.00007	.00002
#2	-.00024	-.00032	-.00092	-.00776	.06633	.00521	-.00264	-.00003	-.00107

Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Elem	Na5895	Ni2316	P_1782	Pb2203	S_1820	Sb2068	Se1960	Si2881	SiO2
Line	589.592 { 57}	231.604 {446}	178.284 {489}	220.353 {453}	182.034 {485}	206.833 {463}	196.090 {472}	288.158 {117}	288.158 {117}2
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.07994	-0.00070	-0.00126	-0.00029	.02585	.00000	-0.00208	-0.00582	-0.01245
Stddev	.00172	.00009	.00113	.00250	.00272	.0001	.00794	.00615	.01317
%RSD	2.1457	13.158	89.571	860.25	10.539	93044.	382.35	105.75	105.75

#1	.07872	-.00063	-.00206	.00148	.02778	-.00009	.00354	-.01017	-.02176
#2	.08115	-.00076	-.00046	-.00206	.02393	.00009	-.00769	-.00147	-.00314

Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	None
High Limit									
Low Limit									

Elem	Sn1899	Sr4077	Th2837	Ti3349	Ti1908	U_3701	V_2924	Zn2062	Zr3391
Line	189.989 {477}	407.771 { 83}	283.730 {119}	334.904 {101}	190.856 {477}	370.152 { 91}	292.402 {115}	206.200 {163}	339.198 { 99}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	-0.00018	-0.00005	.00138	-0.00037	-0.00491	-0.00882	.00116	-0.00065	.00133
Stddev	.00191	.00042	.00251	.00033	.00238	.02384	.00001	.00064	.00235
%RSD	1047.6	919.87	181.74	91.485	48.476	270.23	.62893	99.573	177.53

#1	.00117	.00025	.00316	-.00060	-.00323	.00804	.00116	-.00019	.00299
#2	-.00153	-.00034	-.00039	-.00013	-.00660	-.02568	.00117	-.00110	-.00034

Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Int. Std.	Y_2243	Y_3600	Y_3774
Line	224.306 {450}	360.073 { 94}	377.433 { 89}
Units	Cts/S	Cts/S	Cts/S
Avg	2605.2	39893.	2104.5
Stddev	54.2	245.	31.8
%RSD	2.0793	.61484	1.5108

#1	2566.9	39719.	2082.0
#2	2643.5	40066.	2127.0

Sample Name: LCS 280-325612/2-A Acquired: 5/18/2016 19:28:06 Type: Unk
Method: 6500_025(v6) Mode: CONC Corr. Factor: 1.000000
User: CRHOADES Prep Date: Custom ID2: Custom ID3:
Comment: 325612 6010C (Fe)

Elem	Ag3280	Al1670	As1890	B_2089	Ba4554	Be3130	Bi2230	Ca3179	Cd2288
Line	328.068 {103}	167.079 {502}	189.042 {478}	208.959 {461}	455.403 { 74}	313.042 {108}	223.061 {451}	317.933 {106}	228.802 {447}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.04981	2.1178	1.0708	1.0140	2.0041	.04675	2.1998	48.447	.09904
Stddev	.00027	.0102	.0189	.0015	.0615	.00158	.0003	1.650	.00008
%RSD	.54322	.48039	1.7678	.14808	3.0685	3.3798	.01447	3.4049	.07711

#1	.05000	2.1250	1.0841	1.0150	1.9606	.04563	2.2000	47.280	.09909
#2	.04962	2.1106	1.0574	1.0129	2.0476	.04787	2.1996	49.613	.09899

Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	None	Chk Pass	Chk Pass
High Limit									
Low Limit									

Elem	Co2286	Cr2055	Cu3247	Fe2599	K_7664	Li6707	Mg2790	Mn2576	Mo2020
Line	228.616 {447}	205.560 {464}	324.754 {104}	259.940 {130}	766.490 { 44}	670.784 { 50}	279.079 {121}2	257.610 {131}	202.030 {467}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.48414	.19912	.26185	.95372	48.466	.96915	47.983	.46209	1.0539
Stddev	.00257	.00096	.00081	.02369	1.492	.00248	.006	.00013	.0052
%RSD	.53160	.48004	.30748	2.4837	3.0784	.25631	.01231	.02753	.49724

#1	.48596	.19979	.26128	.93697	47.411	.97091	47.987	.46218	1.0576
#2	.48232	.19844	.26242	.97047	49.521	.96739	47.979	.46200	1.0502

Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Elem	Na8183	Ni2316	P_1782	Pb2203	S_1820	Sb2068	Se1960	Si2881	SiO2
Line	818.326 { 41}	231.604 {446}	178.284 {489}	220.353 {453}	182.034 {485}	206.833 {463}	196.090 {472}	288.158 {117}	288.158 {117}2
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	53.506	.47673	10.056	.49979	2.1313	.52026	2.1752	9.6525	20.656
Stddev	.222	.00121	.015	.00152	.0150	.00109	.0169	.0018	.004
%RSD	.41573	.25305	.14597	.30472	.70505	.20868	.77517	.01837	.01837

#1	53.663	.47759	10.066	.50086	2.1419	.51949	2.1871	9.6512	20.654
#2	53.348	.47588	10.045	.49871	2.1206	.52102	2.1633	9.6537	20.659

Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	None	Chk Pass	Chk Pass	Chk Pass	None
High Limit									
Low Limit									

Elem	Sn1899	Sr4077	Th2837	Ti3349	Ti1908	U_3701	V_2924	Zn2062	Zr3391
Line	189.989 {477}	407.771 { 83}	283.730 {119}	334.904 {101}	190.856 {477}	370.152 { 91}	292.402 {115}	206.200 {163}	339.198 { 99}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	2.0169	.93885	.94465	.93829	1.9307	2.0625	.47680	.45660	.52596
Stddev	.0007	.03319	.00360	.00251	.0677	.0115	.00143	.00254	.01194
%RSD	.03430	3.5354	.38142	.26752	3.5038	.55557	.29978	.55557	2.2699

#1	2.0164	.91538	.94210	.93651	1.9785	2.0706	.47781	.45480	.53441
#2	2.0174	.96232	.94720	.94006	1.8828	2.0544	.47579	.45839	.51752

Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Int. Std.	Y_2243	Y_3600	Y_3774
Line	224.306 {450}	360.073 { 94}	377.433 { 89}
Units	Cts/S	Cts/S	Cts/S
Avg	2604.8	40679.	2248.5
Stddev	11.7	41.	63.0
%RSD	.44740	.10121	2.8040

#1	2596.6	40708.	2293.1
#2	2613.1	40650.	2203.9

Sample Name: 280-83031-B-1-A Acquired: 5/18/2016 19:30:33 Type: Unk

Method: 6500_025(v6) Mode: CONC Corr. Factor: 1.000000

User: CRHOADES Prep Date: Custom ID2: Custom ID3:

Comment: 325612 6010C (Fe)

Elem	Ag3280	Al1670	As1890	B_2089	Ba4554	Be3130	Bi2230	Ca3179	Cd2288
Line	328.068 {103}	167.079 {502}	189.042 {478}	208.959 {461}	455.403 {74}	313.042 {108}	223.061 {451}	317.933 {106}	228.802 {447}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	-.00089	.00191	.00986	.30873	.22180	.00013	.00054	189.81	.00032
Stddev	.00069	.00066	.00251	.00008	.00371	.00007	.00168	4.51	.00043
%RSD	76.897	34.775	25.513	.02462	1.6737	55.156	308.43	2.3782	133.66

#1	-.00041	.00238	.01163	.30879	.21917	.00008	-.00064	186.62	.00002
#2	-.00138	.00144	.00808	.30868	.22442	.00018	.00173	193.00	.00062

Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Elem	Co2286	Cr2055	Cu3247	Fe2599	K_7664	Li6707	Mg2790	Mn2576	Mo2020
Line	228.616 {447}	205.560 {464}	324.754 {104}	259.940 {130}	766.490 {44}	670.784 {50}	279.079 {121}2	257.610 {131}	202.030 {467}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.00432	.00036	.00188	3.3282	11.206	.02675	14.871	.70008	.00967
Stddev	.00023	.00016	.00030	.0207	.021	.00370	.043	.00219	.00111
%RSD	5.2912	45.121	16.187	.62032	.18577	13.826	.28970	.31226	11.510

#1	.00416	.00047	.00166	3.3136	11.192	.02937	14.840	.69854	.00888
#2	.00448	.00024	.00209	3.3428	11.221	.02414	14.901	.70163	.01046

Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Elem	Na8183	Ni2316	P_1782	Pb2203	S_1820	Sb2068	Se1960	Si2881	SiO2
Line	818.326 {41}	231.604 {446}	178.284 {489}	220.353 {453}	182.034 {485}	206.833 {463}	196.090 {472}	288.158 {117}	288.158 {117}2
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	59.291	.01082	.11689	.00187	47.104	.00637	.00486	13.737	29.397
Stddev	.426	.00043	.00088	.00476	.017	.00477	.01163	.066	.142
%RSD	.71922	3.9315	.75549	254.57	.03557	74.865	239.56	.48302	.48302

#1	59.593	.01112	.11626	.00524	47.092	.00974	.01308	13.690	29.296
#2	58.990	.01052	.11751	-.00150	47.116	.00300	-.00337	13.784	29.497

Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Elem	Sn1899	Sr4077	Th2837	Ti3349	Ti1908	U_3701	V_2924	Zn2062	Zr3391
Line	189.989 {477}	407.771 {83}	283.730 {119}	334.904 {101}	190.856 {477}	370.152 {91}	292.402 {115}	206.200 {163}	339.198 {99}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.00020	.63642	-.00172	-.00019	.02315	.02462	.00122	.00754	.00143
Stddev	.00025	.01618	.00209	.00017	.01033	.02141	.00070	.00053	.00275
%RSD	127.08	2.5428	121.48	89.821	44.598	86.950	57.324	7.0943	192.27

#1	.00037	.62498	-.00320	-.00007	.01585	.00948	.00171	.00716	.00338
#2	.00002	.64787	-.00024	-.00031	.03045	.03976	.00072	.00792	-.00051

Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Int. Std.	Y_2243	Y_3600	Y_3774
Line	224.306 {450}	360.073 {94}	377.433 {89}
Units	Cts/S	Cts/S	Cts/S
Avg	2474.4	38601.	2087.5
Stddev	5.7	388.	39.8
%RSD	.23034	1.0057	1.9057

#1	2478.4	38875.	2115.6
#2	2470.4	38326.	2059.4

Sample Name: 280-83031-B-1-A SD@5 Acquired: 5/18/2016 19:33:11 Type: Unk
Method: 6500_025(v6) Mode: CONC Corr. Factor: 1.000000
User: CRHOADES Prep Date: Custom ID2: Custom ID3:
Comment: 325612 6010C (Fe)

Elem	Ag3280	Al1670	As1890	B_2089	Ba4554	Be3130	Bi2230	Ca3179	Cd2288
Line	328.068 {103}	167.079 {502}	189.042 {478}	208.959 {461}	455.403 { 74}	313.042 {108}	223.061 {451}	317.933 {106}	228.802 {447}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	-.00043	.00036	-.00196	.05982	.04240	.00008	.00033	36.885	-.00018
Stddev	.00013	.00045	.00347	.00025	.00081	.00007	.00388	1.644	.00032
%RSD	29.449	126.59	177.33	.42444	1.9036	81.740	1189.9	4.4583	175.87

#1	-.00034	.00004	.00050	.06000	.04183	.00004	.00307	35.722	-.00040
#2	-.00052	.00068	-.00441	.05965	.04297	.00013	-.00242	38.048	.00004

Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Elem	Co2286	Cr2055	Cu3247	Fe2599	K_7664	Li6707	Mg2790	Mn2576	Mo2020
Line	228.616 {447}	205.560 {464}	324.754 {104}	259.940 {130}	766.490 { 44}	670.784 { 50}	279.079 {121}2	257.610 {131}	202.030 {467}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.00055	-.00009	-.00036	.66704	2.2398	.00326	3.0111	.14038	.00128
Stddev	.00016	.00011	.00052	.00850	.0473	.00050	.0117	.00058	.00013
%RSD	29.371	124.25	143.31	1.2741	2.1095	15.306	.38716	.41013	10.283

#1	.00043	-.00001	.00000	.66103	2.2064	.00361	3.0029	.13997	.00119
#2	.00066	-.00017	-.00073	.67305	2.2732	.00291	3.0194	.14078	.00138

Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Elem	Na8183	Ni2316	P_1782	Pb2203	S_1820	Sb2068	Se1960	Si2881	SiO2
Line	818.326 { 41}	231.604 {446}	178.284 {489}	220.353 {453}	182.034 {485}	206.833 {463}	196.090 {472}	288.158 {117}	288.158 {117}2
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	12.558	.00146	.01970	-.00104	9.0400	-.00106	.00285	2.6804	5.7360
Stddev	.728	.00002	.00102	.00078	.0571	.00081	.00507	.0126	.0270
%RSD	5.7934	1.3683	5.1641	75.092	.63114	76.002	178.08	.47144	.47144

#1	12.044	.00148	.02042	-.00049	9.0803	-.00163	.00644	2.6715	5.7169
#2	13.073	.00145	.01898	-.00160	8.9996	-.00049	-.00074	2.6893	5.7552

Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Elem	Sn1899	Sr4077	Th2837	Ti3349	Ti1908	U_3701	V_2924	Zn2062	Zr3391
Line	189.989 {477}	407.771 { 83}	283.730 {119}	334.904 {101}	190.856 {477}	370.152 { 91}	292.402 {115}	206.200 {163}	339.198 { 99}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.00031	.12782	.00117	-.00010	.00012	.02030	.00077	.00157	.00036
Stddev	.00071	.00058	.00013	.00047	.00052	.00949	.00029	.00039	.00319
%RSD	229.18	.45208	11.191	464.95	447.45	46.721	37.801	24.657	892.09

#1	.00081	.12823	.00126	-.00043	-.00025	.02701	.00057	.00185	-.00190
#2	-.00019	.12741	.00107	.00023	.00049	.01360	.00098	.00130	.00261

Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Int. Std.	Y_2243	Y_3600	Y_3774
Line	224.306 {450}	360.073 { 94}	377.433 { 89}
Units	Cts/S	Cts/S	Cts/S
Avg	2573.6	40327.	2122.0
Stddev	56.3	145.	90.5
%RSD	2.1871	.35908	4.2667

#1	2613.4	40430.	2186.1
#2	2533.8	40225.	2058.0

Sample Name: 280-83031-B-1-B MS Acquired: 5/18/2016 19:35:49 Type: Unk
Method: 6500_025(v6) Mode: CONC Corr. Factor: 1.000000
User: CRHOADES Prep Date: Custom ID2: Custom ID3:
Comment: 325612 6010C (Fe)

Elem	Ag3280	Al1670	Al3092	As1890	B_2089	Ba4554	Be3130	Bi2230	Ca3179
Line	328.068 {103}	167.079 {502}	309.271 {109}	189.042 {478}	208.959 {461}	455.403 { 74}	313.042 {108}	223.061 {451}	317.933 {106}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.05031	2.0847	W 2.4171	1.1065	1.3234	2.3020	.04824	F 2.1808	242.90
Stddev	.00100	.0161	.0488	.0058	.0013	.0287	.00017	.0205	3.53
%RSD	1.9898	.77146	2.0179	.52111	.09914	1.2455	.34390	.94156	1.4530

#1	.04960	2.0734	2.4516	1.1025	1.3244	2.3222	.04812	2.1954	245.40
#2	.05102	2.0961	2.3826	1.1106	1.3225	2.2817	.04836	2.1663	240.41

Check ?	Chk Pass	Chk Pass	Chk Warn	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Fail	Chk Pass
High Limit			500.00					.10000	
Low Limit			3.2000					-.10000	

Elem	Cd2288	Co2286	Cr2055	Cu3247	Fe2599	K_7664	Li6707	Mg2790	Mn2576
Line	228.802 {447}	228.616 {447}	205.560 {464}	324.754 {104}	259.940 {130}	766.490 { 44}	670.784 { 50}	279.079 {121}2	257.610 {131}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.10018	.48456	.20039	.26598	4.3365	62.399	1.0154	63.074	1.1709
Stddev	.00029	.00080	.00005	.00192	.0056	1.069	.0024	.243	.0030
%RSD	.28504	.16588	.02526	.72032	.12848	1.7133	.23553	.38494	.25586

#1	.10038	.48399	.20043	.26462	4.3326	63.155	1.0170	62.902	1.1688
#2	.09998	.48512	.20035	.26733	4.3405	61.643	1.0137	63.246	1.1730

Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Elem	Mo2020	Na8183	Ni2316	P_1782	Pb2203	S_1820	Sb2068	Se1960	Si2881
Line	202.030 {467}	818.326 { 41}	231.604 {446}	178.284 {489}	220.353 {453}	182.034 {485}	206.833 {463}	196.090 {472}	288.158 {117}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	1.0619	111.47	.48332	W 10.500	.49582	50.728	.52647	2.1898	23.778
Stddev	.0020	.06	.00017	.007	.00293	.205	.00130	.0191	.110
%RSD	.18615	.05012	.03548	.06369	.59071	.40340	.24767	.87381	.46396

#1	1.0633	111.51	.48319	10.505	.49789	50.583	.52739	2.2033	23.856
#2	1.0605	111.43	.48344	10.496	.49375	50.872	.52555	2.1762	23.700

Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Warn	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit				2.0000					
Low Limit				-1.0000					

Elem	SiO2	Sn1899	Sr4077	Th2837	Ti3349	Ti1908	U_3701	V_2924	Zn2062
Line	288.158 {117}2	189.989 {477}	407.771 { 83}	283.730 {119}	334.904 {101}	190.856 {477}	370.152 { 91}	292.402 {115}	206.200 {163}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	50.885	W 2.0115	1.6182	.95852	.94218	1.7737	2.1544	.48488	.46937
Stddev	.236	.0047	.0186	.00286	.00244	.0825	.0128	.00169	.00114
%RSD	.46396	.23456	1.1478	.29828	.25854	4.6506	.59247	.34788	.24386

#1	51.052	2.0149	1.6313	.95650	.94046	1.8321	2.1634	.48369	.46856
#2	50.718	2.0082	1.6050	.96055	.94390	1.7154	2.1453	.48607	.47018

Check ?	Chk Pass	Chk Warn	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit		2.0000							
Low Limit		-.05000							

Elem	Zr3391								
Line	339.198 { 99}								
Units	ppm								
Avg	.52657								
Stddev	.00135								
%RSD	.25623								

#1	.52561								
#2	.52752								

Check ?	Chk Pass								
High Limit									
Low Limit									

Sample Name: 280-83031-B-1-B MS Acquired: 5/18/2016 19:35:49 Type: Unk
Method: 6500_025(v6) Mode: CONC Corr. Factor: 1.000000
User: CRHOADES Prep Date: Custom ID2: Custom ID3:
Comment: 325612 6010C (Fe)

Int. Std.	Y_2243	Y_3600	Y_3774
Line	224.306 {450}	360.073 { 94}	377.433 { 89}
Units	Cts/S	Cts/S	Cts/S
Avg	2498.6	39135.	2071.0
Stddev	46.2	82.	34.5
%RSD	1.8509	.21013	1.6665
#1	2531.3	39077.	2046.6
#2	2465.9	39193.	2095.4

Sample Name: 280-83031-B-1-C MSD Acquired: 5/18/2016 19:38:15 Type: Unk
Method: 6500_025(v6) Mode: CONC Corr. Factor: 1.000000
User: CRHOADES Prep Date: Custom ID2: Custom ID3:
Comment: 325612 6010C (Fe)

Elem	Ag3280	Al1670	Al3092	As1890	B_2089	Ba4554	Be3130	Bi2230	Ca3179
Line	328.068 {103}	167.079 {502}	309.271 {109}	189.042 {478}	208.959 {461}	455.403 { 74}	313.042 {108}	223.061 {451}	317.933 {106}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.05124	2.1167	W 2.4989	1.1297	1.3603	2.3349	.04909	F 2.2507	247.83
Stddev	.00042	.0066	.0288	.0016	.0045	.0203	.00041	.0221	2.14
%RSD	.82625	.31133	1.1514	.14157	.32697	.86879	.83648	.98217	.86394

#1	.05154	2.1214	2.5193	1.1286	1.3571	2.3206	.04880	2.2664	246.32
#2	.05094	2.1121	2.4786	1.1308	1.3634	2.3492	.04938	2.2351	249.35

Check ?	Chk Pass	Chk Pass	Chk Warn	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Fail	Chk Pass
High Limit			500.00					.10000	
Low Limit			3.2000					-.10000	

Elem	Cd2288	Co2286	Cr2055	Cu3247	Fe2599	K_7664	Li6707	Mg2790	Mn2576
Line	228.802 {447}	228.616 {447}	205.560 {464}	324.754 {104}	259.940 {130}	766.490 { 44}	670.784 { 50}	279.079 {121}2	257.610 {131}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.10281	.49668	.20472	.26944	4.4424	62.868	1.0296	63.702	1.1940
Stddev	.00019	.00024	.00016	.00041	.0221	.582	.0010	.120	.0019
%RSD	.18703	.04852	.07724	.15282	.49691	.92648	.09572	.18901	.15636

#1	.10267	.49685	.20483	.26915	4.4268	62.456	1.0289	63.617	1.1927
#2	.10294	.49651	.20460	.26973	4.4580	63.280	1.0303	63.788	1.1954

Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Elem	Mo2020	Na8183	Ni2316	P_1782	Pb2203	S_1820	Sb2068	Se1960	Si2881
Line	202.030 {467}	818.326 { 41}	231.604 {446}	178.284 {489}	220.353 {453}	182.034 {485}	206.833 {463}	196.090 {472}	288.158 {117}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	1.1009	114.34	.49345	W 10.737	.50934	52.570	.54447	2.2684	24.114
Stddev	.0029	.12	.00132	.003	.00059	.083	.00694	.0114	.063
%RSD	.26583	.10184	.26793	.02641	.11540	.15856	1.2749	.50067	.26259

#1	1.1029	114.26	.49438	10.739	.50976	52.629	.53956	2.2765	24.159
#2	1.0988	114.42	.49251	10.735	.50893	52.511	.54938	2.2604	24.069

Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Warn	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit				2.0000					
Low Limit				-1.0000					

Elem	SiO2	Sn1899	Sr4077	Th2837	Ti3349	Ti1908	U_3701	V_2924	Zn2062
Line	288.158 {117}2	189.989 {477}	407.771 { 83}	283.730 {119}	334.904 {101}	190.856 {477}	370.152 { 91}	292.402 {115}	206.200 {163}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	51.605	W 2.0636	1.6497	.96346	.95547	1.8880	2.1822	.48862	.46319
Stddev	.136	.0010	.0162	.00152	.00353	.0527	.0094	.00047	.00077
%RSD	.26259	.05045	.98285	.15731	.36903	2.7932	.43178	.09622	.16647

#1	51.700	2.0643	1.6382	.96239	.95297	1.9253	2.1755	.48895	.46264
#2	51.509	2.0629	1.6611	.96453	.95796	1.8507	2.1888	.48829	.46373

Check ?	Chk Pass	Chk Warn	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit		2.0000							
Low Limit		-.05000							

Elem	Zr3391								
Line	339.198 { 99}								
Units	ppm								
Avg	.53566								
Stddev	.00420								
%RSD	.78408								

#1	.53269								
#2	.53863								

Check ?	Chk Pass								
High Limit									
Low Limit									

Sample Name: 280-83031-B-1-C MSD Acquired: 5/18/2016 19:38:15 Type: Unk
 Method: 6500_025(v6) Mode: CONC Corr. Factor: 1.000000
 User: CRHOADES Prep Date: Custom ID2: Custom ID3:
 Comment: 325612 6010C (Fe)

Int. Std.	Y_2243	Y_3600	Y_3774
Line	224.306 {450}	360.073 { 94}	377.433 { 89}
Units	Cts/S	Cts/S	Cts/S
Avg	2534.9	39821.	2155.2
Stddev	4.2	11.	28.9
%RSD	.16632	.02730	1.3396
#1	2531.9	39829.	2134.8
#2	2537.9	39814.	2175.6

Sample Name: 280-83031-B-1-A PDS Acquired: 5/18/2016 19:40:40 Type: Unk
Method: 6500_025(v6) Mode: CONC Corr. Factor: 1.000000
User: CRHOADES Prep Date: Custom ID2: Custom ID3:
Comment: 325612 6010C (Fe)

Elem	Ag3280	Al1670	As1890	B_2089	Ba4554	Be3130	Bi2230	Ca3179	Cd2288
Line	328.068 {103}	167.079 {502}	189.042 {478}	208.959 {461}	455.403 { 74}	313.042 {108}	223.061 {451}	317.933 {106}	228.802 {447}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.01384	.99283	.21011	.36752	.31464	.04762	.00138	201.28	.04897
Stddev	.00000	.05779	.01743	.02173	.00195	.00032	.00275	2.19	.00309
%RSD	.00740	5.8211	8.2959	5.9131	.62116	.67389	198.87	1.0859	6.3016

#1	.01384	1.0337	.22244	.38289	.31602	.04785	-.00056	202.82	.05115
#2	.01384	.95196	.19779	.35215	.31326	.04739	.00333	199.73	.04679

Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Elem	Co2286	Cr2055	Cu3247	Fe2599	K_7664	Li6707	Mg2790	Mn2576	Mo2020
Line	228.616 {447}	205.560 {464}	324.754 {104}	259.940 {130}	766.490 { 44}	670.784 { 50}	279.079 {121}2	257.610 {131}	202.030 {467}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.05098	.04907	.05527	4.1985	31.543	.12585	33.432	.72840	.05931
Stddev	.00279	.00330	.00079	.0132	.011	.00258	.028	.00084	.00160
%RSD	5.4658	6.7331	1.4251	.31328	.03573	2.0516	.08225	.11516	2.7007

#1	.05295	.05141	.05471	4.2078	31.551	.12402	33.451	.72780	.06045
#2	.04901	.04673	.05583	4.1892	31.535	.12768	33.412	.72899	.05818

Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Elem	Na8183	Ni2316	P_1782	Pb2203	S_1820	Sb2068	Se1960	Si2881	SiO2
Line	818.326 { 41}	231.604 {446}	178.284 {489}	220.353 {453}	182.034 {485}	206.833 {463}	196.090 {472}	288.158 {117}	288.158 {117}2
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	78.718	.05606	W 2.1074	.09981	42.481	.09712	.21825	18.216	38.982
Stddev	.661	.00251	.0784	.00491	2.449	.00190	.00452	.026	.055
%RSD	.83985	4.4767	3.7210	4.9165	5.7650	1.9542	2.0692	.14016	.14016

#1	79.186	.05783	2.1629	.10328	44.213	.09847	.22145	18.234	39.021
#2	78.251	.05428	2.0520	.09634	40.749	.09578	.21506	18.198	38.944

Check ?	Chk Pass	Chk Pass	Chk Warn	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit			2.0000						
Low Limit			-1.0000						

Elem	Sn1899	Sr4077	Th2837	Ti3349	Ti1908	U_3701	V_2924	Zn2062	Zr3391
Line	189.989 {477}	407.771 { 83}	283.730 {119}	334.904 {101}	190.856 {477}	370.152 { 91}	292.402 {115}	206.200 {163}	339.198 { 99}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.09928	.65673	.19381	.04641	.18740	.48716	.05093	.19731	.05440
Stddev	.00128	.00448	.00077	.00095	.00029	.00008	.00011	.00031	.00875
%RSD	1.2870	.68228	.39515	2.0572	.15732	.01693	.20795	.15797	16.087

#1	.09837	.65989	.19327	.04573	.18719	.48710	.05086	.19709	.04821
#2	.10018	.65356	.19435	.04708	.18761	.48721	.05101	.19753	.06058

Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Int. Std.	Y_2243	Y_3600	Y_3774
Line	224.306 {450}	360.073 { 94}	377.433 { 89}
Units	Cts/S	Cts/S	Cts/S
Avg	2645.6	38204.	2152.9
Stddev	165.1	276.	25.6
%RSD	6.2412	.72177	1.1903

#1	2528.8	38399.	2134.8
#2	2762.4	38010.	2171.0

Sample Name: CCVH-3894253 Acquired: 5/18/2016 19:43:15 Type: QC
Method: 6500_025(v6) Mode: CONC Corr. Factor: 1.000000
User: CRHOADES Prep Date: Custom ID2: Custom ID3:
Comment:

Elem	Ag3280	Al3092	As1890	B_2089	Ba4554	Be3130	Bi2230	Ca3179	Cd2288	Co2286	Cr2055
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	-.00135	51.627	.00306	.00772	-.00128	.00059	W 1.0994	.05641	-.00048	-.00071	.00011
Stddev	.00020	1.914	.00111	.00060	.00029	.00030	.0113	.00337	.00015	.00028	.00014
%RSD	15.149	3.7064	36.247	7.7988	22.750	51.683	1.0251	5.9719	32.145	39.596	120.72

#1	-.00149	52.980	.00228	.00815	-.00149	.00080	1.1073	.05879	-.00059	-.00091	.00021
#2	-.00120	50.274	.00384	.00730	-.00108	.00037	1.0914	.05403	-.00037	-.00051	.00002

Check ?	None	Chk Pass	None	None	None	None	Chk Warn	None	None	None	None
Value							1.0000				
Range							5.0000%				

Elem	Cu3247	Fe2714	K_7664	Li6707	Mg2790	Mn2576	Mo2020	Na8183	Ni2316	P_1782	Pb2203
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.00049	48.875	.24446	.00249	.05174	.00027	.00014	251.88	.00110	.00524	.00217
Stddev	.00108	.865	.04786	.00169	.02294	.00037	.00007	4.97	.00009	.00128	.00271
%RSD	221.43	1.7700	19.579	67.707	44.334	136.89	53.071	1.9732	8.3517	24.335	124.67

#1	-.00028	49.487	.27831	.00369	.03552	.00001	.00009	255.39	.00117	.00434	.00408
#2	.00125	48.264	.21062	.00130	.06796	.00053	.00019	248.36	.00104	.00614	.00026

Check ?	None	Chk Pass	None	None	None	None	None	Chk Pass	None	None	None
Value											
Range											

Elem	S_1820	Sb2068	Se1960	Si2881	SiO2	Sn1899	Sr4077	Th2837	Ti3349	Ti1908	U_3701
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	W 5.4365	-.01667	-.00258	.01907	.04080	.00200	.00088	W 4.6021	.00670	.01140	W 10.613
Stddev	.1669	.00388	.00290	.02295	.04911	.00082	.00002	.0210	.00113	.00075	.038
%RSD	3.0708	23.252	112.45	120.35	120.35	40.790	1.8275	.45717	16.936	6.6150	.35512

#1	5.5546	-.01941	-.00053	.00284	.00608	.00258	.00087	4.6169	.00589	.01087	10.640
#2	5.3185	-.01393	-.00463	.03529	.07553	.00143	.00089	4.5872	.00750	.01194	10.587

Check ?	Chk Warn	None	None	None	None	None	None	Chk Warn	None	None	Chk Warn
Value	5.0000							5.0000			10.000
Range	5.0000%							-5.0000%			5.0000%

Elem	V_2924	Zn2062	Zr3391
Units	ppm	ppm	ppm
Avg	.00939	.00882	.05970
Stddev	.00024	.00128	.00273
%RSD	2.5428	14.517	4.5706

#1	.00922	.00791	.05777
#2	.00956	.00972	.06163

Check ?	None	None	None
Value			
Range			

Int. Std.	Y_2243	Y_3600	Y_3774
Units	Cts/S	Cts/S	Cts/S
Avg	2483.5	39100.	2137.3
Stddev	2.6	281.	56.7
%RSD	.10624	.71959	2.6518

#1	2481.6	38901.	2097.2
#2	2485.4	39299.	2177.4

Sample Name: CCV-3894251 Acquired: 5/18/2016 19:45:53 Type: QC
Method: 6500_025(v6) Mode: CONC Corr. Factor: 1.000000
User: CRHOADES Prep Date: Custom ID2: Custom ID3:
Comment:

Elem	Ag3280	Al1670	As1890	B_2089	Ba4554	Be3130	Bi2230	Ca3179	Cd2288	Co2286	Cr2055
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.49452	F .55367	1.0559	.50351	.50199	.46459	.00028	4.9312	.49687	.50857	.51278
Stddev	.00159	.00096	.0061	.00207	.00241	.00251	.00132	.0280	.00038	.00427	.00637
%RSD	.32196	.17359	.57513	.41014	.48060	.54134	477.69	.56836	.07637	.83903	1.2421

#1	.49564	.55435	1.0516	.50205	.50370	.46637	-.00066	4.9510	.49714	.50555	.50828
#2	.49339	.55299	1.0602	.50497	.50029	.46281	.00121	4.9113	.49660	.51159	.51728

Check ?	Chk Pass	Chk Fail	Chk Pass	Chk Pass	Chk Pass	Chk Pass	None	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Value		.50000									
Range		10.490%									

Elem	Cu3247	Fe2599	K_7664	Li6707	Mg2790	Mn2576	Mo2020	Na5895	Ni2316	P_1782	Pb2203
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.51828	2.3779	48.623	.98282	19.038	.46738	.52289	5.0458	.49996	.98982	1.0355
Stddev	.00274	.0130	.339	.01248	.035	.00024	.00601	.0036	.00518	.01544	.0239
%RSD	.52812	.54661	.69673	1.2695	.18531	.05175	1.1488	.07050	1.0353	1.5596	2.3082

#1	.52022	2.3871	48.863	.97399	19.063	.46756	.51864	5.0433	.49630	.97891	1.0186
#2	.51635	2.3687	48.384	.99164	19.013	.46721	.52714	5.0483	.50362	1.0007	1.0524

Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Value											
Range											

Elem	S_1820	Sb2068	Se1960	Si2881	SiO2	Sn1899	Sr4077	Th2837	Ti3349	Ti1908	U_3701
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.02359	1.0278	W 1.1042	4.8244	10.324	1.0635	.47724	-.00108	.46188	F 1.1233	.01527
Stddev	.00016	.0238	.0518	.0058	.012	.0439	.00272	.00243	.00168	.0546	.06829
%RSD	.66356	2.3192	4.6920	.12005	.12005	4.1236	.57088	224.59	.36329	4.8598	447.13

#1	.02348	1.0110	1.0676	4.8203	10.315	1.0325	.47917	.00064	.46306	1.0847	-.03301
#2	.02370	1.0447	1.1409	4.8285	10.333	1.0945	.47532	-.00280	.46069	1.1619	.06356

Check ?	None	Chk Pass	Chk Warn	Chk Pass	Chk Pass	Chk Pass	Chk Pass	None	Chk Pass	Chk Fail	None
Value			1.0000							1.0000	
Range			10.000%							10.490%	

Elem	V_2924	Zn2062	Zr3391
Units	ppm	ppm	ppm
Avg	.48020	.46090	.51828
Stddev	.00638	.00189	.00322
%RSD	1.3290	.40901	.62049

#1	.48471	.46223	.51601
#2	.47569	.45957	.52056

Check ?	Chk Pass	Chk Pass	Chk Pass
Value			
Range			

Int. Std.	Y_2243	Y_3600	Y_3774
Units	Cts/S	Cts/S	Cts/S
Avg	2579.3	40418.	2138.0
Stddev	2.5	59.	5.9
%RSD	.09726	.14493	.27406

#1	2581.1	40460.	2133.9
#2	2577.5	40377.	2142.1

Sample Name: CCB Acquired: 5/18/2016 19:48:25 Type: QC
 Method: 6500_025(v6) Mode: CONC Corr. Factor: 1.000000
 User: CRHOADES Prep Date: Custom ID2: Custom ID3:
 Comment:

Elem	Ag3280	Al1670	As1890	B_2089	Ba4554	Be3130	Bi2230	Ca3179	Cd2288	Co2286	Cr2055
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	-.00052	-.00025	.00033	.00306	.00018	.00045	-.00338	.07703	-.00014	.00002	-.00019
Stddev	.00024	.00032	.00639	.00101	.00132	.00030	.00144	.11452	.00001	.00010	.00026
%RSD	45.566	127.43	1932.0	33.087	728.76	67.040	42.518	148.66	10.015	524.52	138.67

#1	-.00069	-.00002	-.00419	.00378	.00112	.00067	-.00440	.15801	-.00015	.00009	.00000
#2	-.00035	-.00047	.00485	.00234	-.00075	.00024	-.00237	-.00394	-.00013	-.00005	-.00037

Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit											
Low Limit											

Elem	Cu3247	Fe2599	K_7664	Li6707	Mg2790	Mn2576	Mo2020	Na5895	Ni2316	P_1782	Pb2203
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	-.00150	.01368	.09421	-.00153	.00590	.00004	.00223	.19541	.00033	.00094	.00034
Stddev	.00005	.01901	.06436	.00056	.00209	.00014	.00061	.13334	.00085	.00029	.00069
%RSD	3.0436	138.99	68.312	36.431	35.445	376.94	27.162	68.237	254.43	31.421	203.77

#1	-.00147	.02712	.13971	-.00192	.00442	-.00006	.00180	.28970	.00094	.00073	.00083
#2	-.00154	.00023	.04870	-.00113	.00737	.00013	.00266	.10112	-.00027	.00115	-.00015

Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit											
Low Limit											

Elem	S_1820	Sb2068	Se1960	Si2881	SiO2	Sn1899	Sr4077	Th2837	Ti3349	Ti1908	U_3701
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.02648	W .00470	.00685	.04284	.09167	-.00011	.00085	-.00129	-.00001	.00239	.01093
Stddev	.00600	.00480	.00492	.02659	.05691	.00195	.00123	.00305	.00005	.00180	.02289
%RSD	22.666	102.06	71.763	62.077	62.077	1837.3	143.97	236.08	396.96	75.406	209.48

#1	.03072	.00131	.00338	.06164	.13191	-.00148	.00172	.00086	-.00005	.00366	-.00526
#2	.02224	.00810	.01033	.02403	.05143	.00127	-.00002	-.00344	.00002	.00111	.02711

Check ?	Chk Pass	Chk Warn	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit		.00100									
Low Limit		-.00100									

Elem	V_2924	Zn2062	Zr3391
Units	ppm	ppm	ppm
Avg	-.00017	-.00040	.00270
Stddev	.00008	.00034	.00178
%RSD	45.769	83.678	65.759

#1	-.00011	-.00064	.00396
#2	-.00022	-.00017	.00145

Check ?	Chk Pass	Chk Pass	Chk Pass
High Limit			
Low Limit			

Int. Std.	Y_2243	Y_3600	Y_3774
Units	Cts/S	Cts/S	Cts/S
Avg	2603.8	40826.	2340.6
Stddev	8.7	21.	28.9
%RSD	.33476	.05080	1.2355

#1	2610.0	40840.	2361.0
#2	2597.7	40811.	2320.1

Sample Name: CCVL-3897520 Acquired: 5/18/2016 19:50:48 Type: QC
Method: 6500_025(v6) Mode: CONC Corr. Factor: 1.000000
User: CRHOADES Prep Date: Custom ID2: Custom ID3:
Comment:

Elem	Ag3280	Al1670	As1890	B_2089	Ba4554	Be3130	Bi2230	Ca3179	Cd2288	Co2286	Cr2055
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.00972	.11431	.01392	.09807	.00897	.00105	.11393	.16913	.00500	.01032	.01092
Stddev	.00098	.00042	.00343	.00058	.00057	.00022	.00468	.01227	.00024	.00011	.00009
%RSD	10.081	.36804	24.632	.58713	6.3814	21.135	4.1046	7.2573	4.8004	1.0339	.81136

#1	.01041	.11401	.01149	.09847	.00937	.00089	.11062	.16045	.00517	.01040	.01086
#2	.00902	.11460	.01634	.09766	.00857	.00121	.11724	.17781	.00483	.01025	.01098

Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Value											
Range											

Elem	Cu3247	Fe2599	K_7664	Li6707	Mg2790	Mn2576	Mo2020	Na5895	Ni2316	P_1782	Pb2203
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.01516	F .15363	2.8699	.01158	.19482	.01025	.02175	1.0855	.04235	3.0465	.01035
Stddev	.00041	.00253	.0670	.00158	.00231	.00019	.00007	.0284	.00028	.0080	.00229
%RSD	2.6917	1.6476	2.3353	13.666	1.1840	1.9001	.34054	2.6201	.66241	.26256	22.155

#1	.01487	.15184	2.8225	.01270	.19319	.01012	.02170	1.0654	.04216	3.0409	.01197
#2	.01545	.15542	2.9173	.01046	.19645	.01039	.02181	1.1057	.04255	3.0522	.00873

Check ?	Chk Pass	Chk Fail	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Value		.10000									
Range		30.000%									

Elem	S_1820	Sb2068	Se1960	Si2881	SiO2	Sn1899	Sr4077	Th2837	Ti3349	Ti1908	U_3701
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.02556	F .03085	.01873	.43561	.93221	.11604	.00953	.01637	.00864	.01764	F -.00605
Stddev	.00610	.00097	.00463	.02922	.06253	.00274	.00012	.00081	.00016	.00033	.00429
%RSD	23.868	3.1331	24.706	6.7072	6.7072	2.3634	1.2422	4.9527	1.8804	1.8793	70.927

#1	.02987	.03153	.01546	.41495	.88800	.11410	.00962	.01580	.00876	.01787	-.00301
#2	.02124	.03017	.02200	.45627	.97642	.11798	.00945	.01694	.00853	.01740	-.00908

Check ?	None	Chk Fail	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Fail
Value		.02000									.06000
Range		30.000%									-30.000%

Elem	V_2924	Zn2062	Zr3391
Units	ppm	ppm	ppm
Avg	.01000	.01866	.01370
Stddev	.00104	.00004	.00118
%RSD	10.418	.22543	8.6454

#1	.01074	.01863	.01286
#2	.00927	.01869	.01454

Check ?	Chk Pass	Chk Pass	Chk Pass
Value			
Range			

Int. Std.	Y_2243	Y_3600	Y_3774
Units	Cts/S	Cts/S	Cts/S
Avg	2575.3	40687.	2313.5
Stddev	9.3	78.	2.5
%RSD	.36020	.19086	.10849

#1	2581.9	40741.	2311.7
#2	2568.8	40632.	2315.3

Sample Name: MB 280-325053/1-A Acquired: 5/18/2016 19:53:29 Type: Unk
Method: 6500_025(v6) Mode: CONC Corr. Factor: 1.000000
User: CRHOADES Prep Date: 5/13 Custom ID2: Custom ID3:
Comment: 325053 6010B

Elem	Ag3280	Al1670	As1890	B_2089	Ba4554	Be3130	Bi2230	Ca3179	Cd2288
Line	328.068 {103}	167.079 {502}	189.042 {478}	208.959 {461}	455.403 { 74}	313.042 {108}	223.061 {451}	317.933 {106}	228.802 {447}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	-.00129	.00599	-.00712	.00177	-.00016	.00013	.00085	-.00662	-.00028
Stddev	.00040	.00218	.00359	.00036	.00053	.00009	.00278	.00167	.00004
%RSD	30.804	36.433	50.368	20.533	341.04	70.400	328.44	25.235	16.103

#1	-.00158	.00445	-.00459	.00203	-.00053	.00007	.00282	-.00544	-.00031
#2	-.00101	.00753	-.00966	.00151	.00022	.00020	-.00112	-.00780	-.00025

Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Elem	Co2286	Cr2055	Cu3247	Fe2599	K_7664	Li6707	Mg2790	Mn2576	Mo2020
Line	228.616 {447}	205.560 {464}	324.754 {104}	259.940 {130}	766.490 { 44}	670.784 { 50}	279.079 {121}2	257.610 {131}	202.030 {467}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.00015	.00019	-.00062	.01956	.02663	-.00051	.00244	.00020	-.00031
Stddev	.00025	.00023	.00004	.00183	.02105	.00135	.00170	.00010	.00101
%RSD	170.34	123.86	7.1026	9.3458	79.029	264.90	69.804	47.547	325.26

#1	-.00003	.00035	-.00066	.02086	.01175	.00044	.00365	.00027	-.00103
#2	.00033	.00002	-.00059	.01827	.04151	-.00146	.00124	.00013	.00040

Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Elem	Na5895	Ni2316	P_1782	Pb2203	S_1820	Sb2068	Se1960	Si2881	SiO2
Line	589.592 { 57}	231.604 {446}	178.284 {489}	220.353 {453}	182.034 {485}	206.833 {463}	196.090 {472}	288.158 {117}	288.158 {117}2
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.12613	-.00063	.00374	-.00051	.02306	.00265	.00061	.03519	.07531
Stddev	.00174	.00013	.00152	.00033	.00482	.00073	.00149	.03106	.06646
%RSD	1.3785	20.946	40.715	64.062	20.906	27.633	246.01	88.252	88.252

#1	.12490	-.00054	.00482	-.00075	.02647	.00213	.00166	.05715	.12230
#2	.12736	-.00073	.00267	-.00028	.01965	.00317	-.00045	.01323	.02831

Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	None
High Limit									
Low Limit									

Elem	Sn1899	Sr4077	Th2837	Ti3349	Ti1908	U_3701	V_2924	Zn2062	Zr3391
Line	189.989 {477}	407.771 { 83}	283.730 {119}	334.904 {101}	190.856 {477}	370.152 { 91}	292.402 {115}	206.200 {163}	339.198 { 99}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	-.00029	.00016	.00112	-.00089	.00027	-.03319	.00047	.00056	.00174
Stddev	.00222	.00002	.00118	.00031	.00653	.04525	.00078	.00031	.00124
%RSD	763.33	9.8152	105.87	35.420	2392.1	136.33	166.45	54.889	71.354

#1	-.00186	.00017	.00028	-.00111	-.00434	-.06519	-.00008	.00034	.00086
#2	.00128	.00015	.00195	-.00067	.00489	-.00120	.00102	.00077	.00262

Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Int. Std.	Y_2243	Y_3600	Y_3774
Line	224.306 {450}	360.073 { 94}	377.433 { 89}
Units	Cts/S	Cts/S	Cts/S
Avg	2551.8	40273.	2177.3
Stddev	4.5	45.	153.3
%RSD	.17770	.11187	7.0416

#1	2555.0	40241.	2285.7
#2	2548.6	40305.	2068.9

Sample Name: LCS 280-325053/2-A Acquired: 5/18/2016 19:55:52 Type: Unk
Method: 6500_025(v6) Mode: CONC Corr. Factor: 1.000000
User: CRHOADES Prep Date: Custom ID2: Custom ID3:
Comment: 325053 6010B

Elem	Ag3280	Al1670	Al3092	As1890	B_2089	Ba4554	Be3130	Bi2230	Ca3179
Line	328.068 {103}	167.079 {502}	309.271 {109}	189.042 {478}	208.959 {461}	455.403 { 74}	313.042 {108}	223.061 {451}	317.933 {106}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.05101	F 2.2324	F 2.4707	F 1.1203	1.0551	2.0736	.04831	2.2925	50.205
Stddev	.00023	.0046	.0996	.0137	.0002	.0420	.00082	.0007	1.140
%RSD	.45484	.20446	4.0290	1.2211	.02027	2.0253	1.6886	.02998	2.2710

#1	.05118	2.2357	2.5411	1.1300	1.0553	2.1033	.04888	2.2920	51.011
#2	.05085	2.2292	2.4003	1.1106	1.0550	2.0439	.04773	2.2930	49.398

Check ?	Chk Pass	Chk Fail	Chk Fail	Chk Fail	Chk Pass	Chk Pass	Chk Pass	None	Chk Pass
High Limit		2.2299	2.2250	1.1050					
Low Limit		1.7300	1.7300	.87500					

Elem	Cd2288	Co2286	Cr2055	Cu3247	Fe2599	K_7664	Li6707	Mg2790	Mn2576
Line	228.802 {447}	228.616 {447}	205.560 {464}	324.754 {104}	259.940 {130}	766.490 { 44}	670.784 { 50}	279.079 {121}2	257.610 {131}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.10287	.51128	W .21094	.27042	1.1263	50.279	1.0133	49.773	.48259
Stddev	.00026	.00147	.00139	.00006	.0206	.684	.0119	.116	.00103
%RSD	.25665	.28774	.65706	.02200	1.8262	1.3604	1.1785	.23346	.21444

#1	.10269	.51232	.21192	.27038	1.1409	50.763	1.0218	49.691	.48186
#2	.10306	.51024	.20996	.27046	1.1118	49.795	1.0049	49.855	.48332

Check ?	Chk Pass	Chk Pass	Chk Warn	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit			.21000						
Low Limit			.19000						

Elem	Mo2020	Na8183	Ni2316	P_1782	Pb2203	S_1820	Sb2068	Se1960	Si2881
Line	202.030 {467}	818.326 { 41}	231.604 {446}	178.284 {489}	220.353 {453}	182.034 {485}	206.833 {463}	196.090 {472}	288.158 {117}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	F 1.1153	55.284	.50512	10.531	.52974	2.2117	W .55014	F 2.3198	10.148
Stddev	.0041	.223	.00171	.007	.00235	.0148	.00285	.0014	.044
%RSD	.36514	.40252	.33932	.06882	.44337	.66837	.51875	.06181	.43309

#1	1.1181	55.126	.50633	10.536	.52808	2.2013	.55216	2.3208	10.117
#2	1.1124	55.441	.50391	10.526	.53140	2.2222	.54812	2.3188	10.179

Check ?	Chk Fail	Chk Pass	Chk Pass	Chk Pass	Chk Pass	None	Chk Warn	Chk Fail	Chk Pass
High Limit	1.1000						.54000	2.2400	
Low Limit	.90000						.44000	1.7000	

Elem	SiO2	Sn1899	Sr4077	Th2837	Ti3349	Ti1908	U_3701	V_2924	Zn2062
Line	288.158 {117}2	189.989 {477}	407.771 { 83}	283.730 {119}	334.904 {101}	190.856 {477}	370.152 { 91}	292.402 {115}	206.200 {163}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	21.717	2.1902	.96244	.98337	.97167	2.1183	2.2477	.49971	.47754
Stddev	.094	.0053	.02242	.00057	.00049	.0590	.0548	.00078	.00278
%RSD	.43309	.24391	2.3300	.05747	.05000	2.7848	2.4374	.15515	.58111

#1	21.651	2.1940	.97830	.98297	.97201	2.1600	2.2090	.49916	.47558
#2	21.784	2.1865	.94659	.98377	.97133	2.0766	2.2865	.50026	.47950

Check ?	None	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Elem	Zr3391								
Line	339.198 { 99}								
Units	ppm								
Avg	.54735								
Stddev	.00067								
%RSD	.12288								

#1	.54783								
#2	.54688								

Check ?	Chk Pass								
High Limit									
Low Limit									

Sample Name: LCS 280-325053/2-A Acquired: 5/18/2016 19:55:52 Type: Unk
 Method: 6500_025(v6) Mode: CONC Corr. Factor: 1.000000
 User: CRHOADES Prep Date: Custom ID2: Custom ID3:
 Comment: 325053 6010B

Int. Std.	Y_2243	Y_3600	Y_3774
Line	224.306 {450}	360.073 { 94}	377.433 { 89}
Units	Cts/S	Cts/S	Cts/S
Avg	2471.5	38741.	2128.1
Stddev	11.5	37.	47.7
%RSD	.46508	.09579	2.2431
#1	2463.4	38715.	2094.3
#2	2479.6	38767.	2161.8

Sample Name: 280-82998-I-2-A Acquired: 5/18/2016 19:58:19 Type: Unk
Method: 6500_025(v6) Mode: CONC Corr. Factor: 1.000000
User: CRHOADES Prep Date: Custom ID2: Custom ID3:
Comment: 325053 6010B

Elem	Ag3280	Al1670	As1890	B_2089	Ba4554	Be3130	Bi2230	Ca3179	Cd2288
Line	328.068 {103}	167.079 {502}	189.042 {478}	208.959 {461}	455.403 { 74}	313.042 {108}	223.061 {451}	317.933 {106}	228.802 {447}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	k -.00038	.21753	.01152	4.7403	1.3424	k .00028	k -.00616	W 511.24	k .00159
Stddev	.00015	.00909	.00265	.1081	.0013	.00003	.00134	1.26	.00010
%RSD	37.798	4.1809	23.042	2.2796	.09834	12.067	21.764	.24613	6.4266

#1	-.00028	.22396	.01340	4.8167	1.3433	.00030	-.00710	510.35	.00166
#2	k -.00049	.21110	.00964	4.6638	1.3414	k .00025	k -.00521	512.13	k .00152

Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Warn	Chk Pass
High Limit								500.00	
Low Limit								-.05000	

Elem	Co2286	Cr2055	Cu3247	Fe2599	K_7664	Li6707	Mg2790	Mn2576	Mo2020
Line	228.616 {447}	205.560 {464}	324.754 {104}	259.940 {130}	766.490 { 44}	670.784 { 50}	279.079 {121}2	257.610 {131}	202.030 {467}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	k .00526	.01971	k .00692	23.760	W 223.68	.32005	k 176.34	^ *****	k .00667
Stddev	.00047	.00001	.00048	.046	.84	.00097	244.02	----	.00060
%RSD	8.8682	.04521	6.9419	.19516	.37620	.30190	138.38	----	9.0648

#1	.00493	.01971	.00726	23.727	224.28	.31936	348.89	1.8251	.00624
#2	k .00559	.01972	k .00658	23.793	223.09	.32073	k 3.7977	^ ----	k .00710

Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Warn	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit					100.00				
Low Limit					-.50000				

Elem	Na8183	Ni2316	P_1782	Pb2203	S_1820	Sb2068	Se1960	Si2881	SiO2
Line	818.326 { 41}	231.604 {446}	178.284 {489}	220.353 {453}	182.034 {485}	206.833 {463}	196.090 {472}	288.158 {117}	288.158 {117}2
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	W 1205.7	k .11067	W 5.0880	k .00542	k 14.558	k .00073	k .01319	21.964	47.003
Stddev	3.1	.00077	.0182	.00092	.055	.00136	.00996	.091	.194
%RSD	.25628	.69472	.35822	16.936	.38026	187.15	75.495	.41228	.41228

#1	1203.5	.11122	5.1009	.00606	14.598	.00169	.00615	21.900	46.866
#2	1207.9	k .11013	5.0751	k .00477	k 14.519	k -.00024	k .02023	22.028	47.140

Check ?	Chk Warn	Chk Pass	Chk Warn	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit	500.00		2.0000						
Low Limit	11.000		-1.0000						

Elem	Sn1899	Sr4077	Th2837	Ti3349	Ti1908	U_3701	V_2924	Zn2062	Zr3391
Line	189.989 {477}	407.771 { 83}	283.730 {119}	334.904 {101}	190.856 {477}	370.152 { 91}	292.402 {115}	206.200 {163}	339.198 { 99}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	k .00848	W 8.8885	k -.00210	k .01761	k .01959	kW -.09655	k .01437	.16094	k .01541
Stddev	.00207	.0610	.00148	.00007	.00935	.00771	.00067	.00361	.00421
%RSD	24.399	.68678	70.247	.39181	47.704	7.9862	4.6725	2.2417	27.330

#1	.00702	8.8454	-.00106	.01766	.01299	-.09110	.01485	.16349	.01839
#2	k .00994	8.9317	k -.00315	k .01756	k .02620	k -.10201	k .01390	.15839	k .01243

Check ?	Chk Pass	Chk Warn	Chk Pass	Chk Pass	Chk Pass	Chk Warn	Chk Pass	Chk Pass	Chk Pass
High Limit		5.0000				45.000			
Low Limit		-.01000				-.05000			

Int. Std.	Y_2243	Y_3600	Y_3774
Line	224.306 {450}	360.073 { 94}	377.433 { 89}
Units	Cts/S	Cts/S	Cts/S
Avg	2480.6	37393.	2257.6
Stddev	63.0	41.	26.9
%RSD	2.5400	.10889	1.1896

#1	2436.0	37421.	2276.6
#2	2525.1	37364.	2238.6

Sample Name: 280-82998-I-2-A SD@5 Acquired: 5/18/2016 20:01:29 Type: Unk
 Method: 6500_025(v6) Mode: CONC Corr. Factor: 1.000000
 User: CRHOADES Prep Date: Custom ID2: Custom ID3:
 Comment: 325053 6010B

Elem	Ag3280	Al1670	As1890	B_2089	Ba4554	Be3130	Bi2230	Ca3179	Cd2288
Line	328.068 {103}	167.079 {502}	189.042 {478}	208.959 {461}	455.403 {74}	313.042 {108}	223.061 {451}	317.933 {106}	228.802 {447}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.00004	.05307	-.00134	1.0069	.25783	.00052	-.00049	99.608	.00103
Stddev	.00011	.00188	.00077	.0032	.00054	.00030	.00023	1.222	.00008
%RSD	268.63	3.5341	57.339	.31755	.21135	56.757	47.825	1.2273	7.6913

#1	-.00004	.05439	-.00079	1.0092	.25744	.00031	-.00065	98.743	.00097
#2	.00012	.05174	-.00188	1.0046	.25822	.00073	-.00032	100.47	.00108

Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Elem	Co2286	Cr2055	Cu3247	Fe2599	K_7664	Li6707	Mg2790	Mn2576	Mo2020
Line	228.616 {447}	205.560 {464}	324.754 {104}	259.940 {130}	766.490 {44}	670.784 {50}	279.079 {121}2	257.610 {131}	202.030 {467}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.00106	.00356	.00243	4.6180	42.305	.06218	67.769	.35797	.00054
Stddev	.00012	.00032	.00084	.0633	.518	.00050	.502	.00254	.00046
%RSD	11.228	8.9657	34.643	1.3707	1.2244	.80893	.74037	.71013	85.118

#1	.00115	.00378	.00302	4.5732	41.939	.06254	68.124	.35977	.00087
#2	.00098	.00333	.00183	4.6627	42.671	.06183	67.414	.35617	.00022

Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Elem	Na8183	Ni2316	P_1782	Pb2203	S_1820	Sb2068	Se1960	Si2881	SiO2
Line	818.326 {41}	231.604 {446}	178.284 {489}	220.353 {453}	182.034 {485}	206.833 {463}	196.090 {472}	288.158 {117}	288.158 {117}2
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	239.25	.02222	.97288	.00174	2.7037	.00324	.01351	4.1991	8.9860
Stddev	1.83	.00066	.00540	.00213	.0083	.00632	.00554	.0028	.0061
%RSD	.76694	2.9890	.55467	121.96	.30509	195.49	41.012	.06763	.06763

#1	237.95	.02175	.96906	.00024	2.6978	-.00124	.01742	4.1971	8.9817
#2	240.55	.02269	.97669	.00325	2.7095	.00771	.00959	4.2011	8.9903

Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Elem	Sn1899	Sr4077	Th2837	Ti3349	Ti1908	U_3701	V_2924	Zn2062	Zr3391
Line	189.989 {477}	407.771 {83}	283.730 {119}	334.904 {101}	190.856 {477}	370.152 {91}	292.402 {115}	206.200 {163}	339.198 {99}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	-.00030	1.6841	-.00071	.00373	.00059	-.01817	.00302	.03431	.00436
Stddev	.00266	.0160	.00074	.00017	.00218	.05428	.00077	.00065	.00075
%RSD	891.03	.95279	104.64	4.5074	369.82	298.65	25.455	1.8975	17.252

#1	.00158	1.6728	-.00019	.00362	.00214	.02021	.00247	.03477	.00490
#2	-.00218	1.6955	-.00124	.00385	-.00095	-.05656	.00356	.03385	.00383

Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Int. Std.	Y_2243	Y_3600	Y_3774
Line	224.306 {450}	360.073 {94}	377.433 {89}
Units	Cts/S	Cts/S	Cts/S
Avg	2592.1	40420.	2344.9
Stddev	52.5	332.	2.9
%RSD	2.0263	.82021	.12335

#1	2554.9	40186.	2342.8
#2	2629.2	40655.	2346.9

Sample Name: 280-82998-I-2-B MS Acquired: 5/18/2016 20:04:07 Type: Unk
Method: 6500_025(v6) Mode: CONC Corr. Factor: 1.000000
User: CRHOADES Prep Date: Custom ID2: Custom ID3:
Comment: 325053 6010B

Elem	Ag3280	Al1670	Al3092	As1890	B_2089	Ba4554	Be3130	Bi2230	Ca3179
Line	328.068 {103}	167.079 {502}	309.271 {109}	189.042 {478}	208.959 {461}	455.403 { 74}	313.042 {108}	223.061 {451}	317.933 {106}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.05668	2.2732	3.4316	1.1761	5.9480	3.5376	.04838	F 2.2729	W 575.14
Stddev	.00053	.0810	.0917	.0514	.1972	.0008	.00015	.0721	.07
%RSD	.93178	3.5634	2.6717	4.3664	3.3156	.02355	.31616	3.1706	.01288
#1	.05706	2.2159	3.4964	1.1398	5.8085	3.5382	.04849	2.2220	575.08
#2	.05631	2.3305	3.3668	1.2124	6.0874	3.5370	.04827	2.3239	575.19

Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Fail	Chk Warn
High Limit								.10000	500.00
Low Limit								-.10000	-.05000

Elem	Cd2288	Co2286	Cr2055	Cu3247	Fe2599	K_7664	Li6707	Mg2790	Mn2576
Line	228.802 {447}	228.616 {447}	205.560 {464}	324.754 {104}	259.940 {130}	766.490 { 44}	670.784 { 50}	279.079 {121}2	257.610 {131}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.10771	.48368	.22503	.28845	25.527	W 280.86	1.3898	405.86	2.3533
Stddev	.00273	.01309	.00819	.00008	.023	.89	.0032	3.97	.0027
%RSD	2.5358	2.7068	3.6374	.02839	.08901	.31812	.22642	.97716	.11581
#1	.10578	.47442	.21924	.28851	25.511	281.49	1.3920	403.06	2.3514
#2	.10964	.49294	.23082	.28839	25.543	280.23	1.3876	408.67	2.3552

Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Warn	Chk Pass	Chk Pass	Chk Pass
High Limit						100.00			
Low Limit						-.50000			

Elem	Mo2020	Na8183	Ni2316	P_1782	Pb2203	S_1820	Sb2068	Se1960	Si2881
Line	202.030 {467}	818.326 { 41}	231.604 {446}	178.284 {489}	220.353 {453}	182.034 {485}	206.833 {463}	196.090 {472}	288.158 {117}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	1.0943	W 1299.7	.57966	W 16.063	.48865	17.232	.55647	2.3488	32.287
Stddev	.0367	2.2	.01514	.350	.01580	.551	.01473	.0408	.101
%RSD	3.3568	.16614	2.6110	2.1805	3.2332	3.1954	2.6462	1.7393	.31308
#1	1.0683	1298.1	.56895	15.815	.47748	16.843	.54606	2.3199	32.359
#2	1.1202	1301.2	.59036	16.311	.49982	17.621	.56688	2.3777	32.216

Check ?	Chk Pass	Chk Warn	Chk Pass	Chk Warn	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit		500.00		2.0000					
Low Limit		11.000		-1.0000					

Elem	SiO2	Sn1899	Sr4077	Th2837	Ti3349	Ti1908	U_3701	V_2924	Zn2062
Line	288.158 {117}2	189.989 {477}	407.771 { 83}	283.730 {119}	334.904 {101}	190.856 {477}	370.152 { 91}	292.402 {115}	206.200 {163}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	69.095	1.9993	W 10.048	.97707	.99663	1.6498	2.1658	.52028	.61552
Stddev	.216	.0391	.097	.00247	.00054	.0407	.0478	.00087	.00076
%RSD	.31308	1.9555	.96037	.25271	.05392	2.4653	2.2090	.16789	.12404
#1	69.248	1.9716	10.117	.97881	.99625	1.6786	2.1320	.51966	.61498
#2	68.942	2.0269	9.9802	.97532	.99701	1.6210	2.1997	.52090	.61606

Check ?	Chk Pass	Chk Pass	Chk Warn	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit			5.0000						
Low Limit			-.01000						

Elem	Zr3391								
Line	339.198 { 99}								
Units	ppm								
Avg	.53281								
Stddev	.01590								
%RSD	2.9836								
#1	.54406								
#2	.52157								

Check ?	Chk Pass								
High Limit									
Low Limit									

Sample Name: 280-82998-I-2-B MS Acquired: 5/18/2016 20:04:07 Type: Unk
 Method: 6500_025(v6) Mode: CONC Corr. Factor: 1.000000
 User: CRHOADES Prep Date: Custom ID2: Custom ID3:
 Comment: 325053 6010B

Int. Std.	Y_2243	Y_3600	Y_3774
Line	224.306 {450}	360.073 { 94}	377.433 { 89}
Units	Cts/S	Cts/S	Cts/S
Avg	2391.0	36803.	2225.3
Stddev	88.6	28.	1.6
%RSD	3.7042	.07724	.07039
#1	2453.6	36783.	2224.2
#2	2328.4	36823.	2226.4

Sample Name: 280-82998-I-2-C MSD Acquired: 5/18/2016 20:07:08 Type: Unk
Method: 6500_025(v6) Mode: CONC Corr. Factor: 1.000000
User: CRHOADES Prep Date: Custom ID2: Custom ID3:
Comment: 325053 6010B

Elem	Ag3280	Al1670	Al3092	As1890	B_2089	Ba4554	Be3130	Bi2230	Ca3179
Line	328.068 {103}	167.079 {502}	309.271 {109}	189.042 {478}	208.959 {461}	455.403 { 74}	313.042 {108}	223.061 {451}	317.933 {106}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.05569	2.2821	3.4079	1.1882	5.8532	3.5121	.04875	F 2.3004	W 561.60
Stddev	.00118	.0529	.0192	.0317	.1341	.0053	.00016	.0535	1.32
%RSD	2.1199	2.3181	.56420	2.6691	2.2914	.15222	.33408	2.3261	.23437

#1	.05485	2.3195	3.3943	1.2107	5.9481	3.5159	.04886	2.3382	562.53
#2	.05652	2.2446	3.4215	1.1658	5.7584	3.5083	.04863	2.2625	560.67

Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Fail	Chk Warn
High Limit								.10000	500.00
Low Limit								-.10000	-.05000

Elem	Cd2288	Co2286	Cr2055	Cu3247	Fe2599	K_7664	Li6707	Mg2790	Mn2576
Line	228.802 {447}	228.616 {447}	205.560 {464}	324.754 {104}	259.940 {130}	766.490 { 44}	670.784 { 50}	279.079 {121}2	257.610 {131}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.10902	.49055	.22686	.28579	24.840	W 274.02	1.3842	389.90	2.2771
Stddev	.00273	.01117	.00531	.00138	.050	1.96	.0018	.68	.0024
%RSD	2.5035	2.2779	2.3423	.48198	.20002	.71688	.12735	.17494	.10524

#1	.11095	.49846	.23061	.28481	24.876	275.41	1.3829	389.42	2.2788
#2	.10709	.48265	.22310	.28676	24.805	272.63	1.3854	390.38	2.2754

Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Warn	Chk Pass	Chk Pass	Chk Pass
High Limit						100.00			
Low Limit						-.50000			

Elem	Mo2020	Na8183	Ni2316	P_1782	Pb2203	S_1820	Sb2068	Se1960	Si2881
Line	202.030 {467}	818.326 { 41}	231.604 {446}	178.284 {489}	220.353 {453}	182.034 {485}	206.833 {463}	196.090 {472}	288.158 {117}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	1.1109	W 1267.9	.58544	W 16.040	.49357	16.844	.56083	2.3628	31.666
Stddev	.0280	5.0	.01146	.202	.01312	.395	.01314	.0566	.002
%RSD	2.5248	.39236	1.9569	1.2617	2.6579	2.3437	2.3438	2.3951	.00788

#1	1.1308	1271.4	.59354	16.183	.50285	17.123	.57012	2.4028	31.664
#2	1.0911	1264.4	.57734	15.897	.48430	16.565	.55153	2.3227	31.668

Check ?	Chk Pass	Chk Warn	Chk Pass	Chk Warn	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit		500.00		2.0000					
Low Limit		11.000		-1.0000					

Elem	SiO2	Sn1899	Sr4077	Th2837	Ti3349	Ti1908	U_3701	V_2924	Zn2062
Line	288.158 {117}2	189.989 {477}	407.771 { 83}	283.730 {119}	334.904 {101}	190.856 {477}	370.152 { 91}	292.402 {115}	206.200 {163}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	67.765	W 2.0131	W 9.8628	.97199	.98658	1.7453	2.1710	.51556	.60621
Stddev	.005	.0407	.0126	.00053	.00131	.0844	.0049	.00004	.00051
%RSD	.00788	2.0197	.12737	.05464	.13264	4.8368	.22412	.00848	.08420

#1	67.762	2.0419	9.8717	.97161	.98565	1.8050	2.1745	.51559	.60657
#2	67.769	1.9844	9.8539	.97237	.98750	1.6856	2.1676	.51553	.60585

Check ?	Chk Pass	Chk Warn	Chk Warn	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit		2.0000	5.0000						
Low Limit		-.05000	-.01000						

Elem	Zr3391
Line	339.198 { 99}
Units	ppm
Avg	.53362
Stddev	.00924
%RSD	1.7316

#1	.52709
#2	.54016

Check ?	Chk Pass
High Limit	
Low Limit	

Sample Name: 280-82998-I-2-C MSD Acquired: 5/18/2016 20:07:08 Type: Unk
 Method: 6500_025(v6) Mode: CONC Corr. Factor: 1.000000
 User: CRHOADES Prep Date: Custom ID2: Custom ID3:
 Comment: 325053 6010B

Int. Std.	Y_2243	Y_3600	Y_3774
Line	224.306 {450}	360.073 { 94}	377.433 { 89}
Units	Cts/S	Cts/S	Cts/S
Avg	2363.9	37077.	2228.0
Stddev	49.8	182.	10.7
%RSD	2.1046	.49101	.47799
#1	2328.7	36948.	2220.5
#2	2399.1	37206.	2235.6

Sample Name: CCVH-3894253 Acquired: 5/18/2016 20:10:06 Type: QC
Method: 6500_025(v6) Mode: CONC Corr. Factor: 1.000000
User: CRHOADES Prep Date: Custom ID2: Custom ID3:
Comment:

Elem	Ag3280	Al3092	As1890	B_2089	Ba4554	Be3130	Bi2230	Ca3179	Cd2288	Co2286	Cr2055
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.00010	52.643	-.00863	.03678	-.00023	.00041	W 1.1020	.02947	-.00030	-.00081	.00009
Stddev	.00006	1.733	.00619	.00353	.00063	.00006	.0025	.00891	.00011	.00055	.00026
%RSD	58.315	3.2913	71.637	9.6071	278.69	14.493	.22659	30.219	36.780	67.490	290.20

#1	.00006	53.868	-.00426	.03928	-.00067	.00045	1.1003	.03577	-.00022	-.00120	-.00009
#2	.00014	51.418	-.01301	.03428	.00022	.00037	1.1038	.02317	-.00037	-.00042	.00027

Check ?	None	Chk Pass	None	None	None	None	Chk Warn	None	None	None	None
Value							1.0000				
Range							5.0000%				

Elem	Cu3247	Fe2714	K_7664	Li6707	Mg2790	Mn2576	Mo2020	Na8183	Ni2316	P_1782	Pb2203
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.00003	49.721	.68933	.00018	.03253	-.00018	.00180	256.17	.00114	.01418	.00023
Stddev	.00060	1.212	.13087	.00160	.01356	.00003	.00081	3.62	.00086	.00328	.00054
%RSD	2366.2	2.4380	18.985	893.51	41.705	18.859	45.203	1.4112	75.507	23.111	231.07

#1	-.00040	50.578	.78187	-.00095	.04212	-.00016	.00122	258.73	.00053	.01650	-.00015
#2	.00045	48.864	.59679	.00131	.02293	-.00020	.00238	253.62	.00174	.01187	.00061

Check ?	None	Chk Pass	None	None	None	None	None	Chk Pass	None	None	None
Value											
Range											

Elem	S_1820	Sb2068	Se1960	Si2881	SiO2	Sn1899	Sr4077	Th2837	Ti3349	Ti1908	U_3701
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	5.2186	-.00825	.01460	.02985	.06388	.00180	.00104	W 4.6835	.00663	.01656	W 10.659
Stddev	.0376	.00015	.00105	.02244	.04803	.00088	.00002	.0145	.00060	.00336	.328
%RSD	.72040	1.8175	7.2071	75.188	75.188	48.937	2.2336	.31024	8.9860	20.266	3.0734

#1	5.1920	-.00814	.01386	.01398	.02992	.00118	.00102	4.6938	.00705	.01419	10.891
#2	5.2451	-.00836	.01534	.04572	.09784	.00242	.00105	4.6732	.00621	.01893	10.427

Check ?	Chk Pass	None	None	None	None	None	None	Chk Warn	None	None	Chk Warn
Value								5.0000			10.000
Range								-5.0000%			5.0000%

Elem	V_2924	Zn2062	Zr3391
Units	ppm	ppm	ppm
Avg	.00877	.00047	.05322
Stddev	.00124	.00044	.00392
%RSD	14.193	93.788	7.3709

#1	.00965	.00079	.05045
#2	.00789	.00016	.05599

Check ?	None	None	None
Value			
Range			

Int. Std.	Y_2243	Y_3600	Y_3774
Units	Cts/S	Cts/S	Cts/S
Avg	2560.1	40664.	2244.5
Stddev	6.2	326.	76.3
%RSD	.24222	.80195	3.4015

#1	2555.7	40434.	2190.5
#2	2564.5	40895.	2298.5

Sample Name: CCV-3894251 Acquired: 5/18/2016 20:12:43 Type: QC
Method: 6500_025(v6) Mode: CONC Corr. Factor: 1.000000
User: CRHOADES Prep Date: Custom ID2: Custom ID3:
Comment:

Elem	Ag3280	Al1670	As1890	B_2089	Ba4554	Be3130	Bi2230	Ca3179	Cd2288	Co2286	Cr2055
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.49060	.55028	1.0507	.51466	.49595	.45243	.00074	4.8516	.49465	.50212	.50764
Stddev	.00129	.00377	.0063	.00855	.01177	.00910	.00182	.1442	.00032	.01034	.01147
%RSD	.26312	.68516	.60411	1.6616	2.3726	2.0124	247.48	2.9713	.06430	2.0589	2.2586

#1	.49151	.55295	1.0552	.52071	.48763	.44599	.00202	4.7497	.49442	.50943	.51575
#2	.48969	.54762	1.0462	.50861	.50427	.45887	-.00055	4.9536	.49487	.49481	.49954

Check ?	Chk Pass	Chk Warn	Chk Pass	Chk Pass	Chk Pass	Chk Pass	None	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Value		.50000									
Range		10.000%									

Elem	Cu3247	Fe2599	K_7664	Li6707	Mg2790	Mn2576	Mo2020	Na5895	Ni2316	P_1782	Pb2203
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.51712	2.3540	47.642	.96563	18.893	.46408	.51782	5.1745	.49324	.98087	1.0218
Stddev	.00113	.0444	1.148	.00768	.051	.00092	.01340	.0057	.01189	.02906	.0345
%RSD	.21831	1.8841	2.4098	.79506	.26831	.19836	2.5869	.10996	2.4098	2.9628	3.3813

#1	.51792	2.3227	46.830	.96020	18.928	.46473	.52730	5.1705	.50164	1.0014	1.0463
#2	.51632	2.3854	48.454	.97106	18.857	.46343	.50835	5.1785	.48484	.96032	.99741

Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Value											
Range											

Elem	S_1820	Sb2068	Se1960	Si2881	SiO2	Sn1899	Sr4077	Th2837	Ti3349	Ti1908	U_3701
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.02563	1.0167	1.0976	4.7821	10.234	1.0576	.46295	.00260	.45950	W 1.1001	.00988
Stddev	.00042	.0446	.0480	.0091	.019	.0584	.00960	.00314	.00040	.0744	.01687
%RSD	1.6382	4.3890	4.3691	.19046	.19046	5.5220	2.0729	120.85	.08763	6.7611	170.71

#1	.02592	1.0482	1.1315	4.7756	10.220	1.0989	.45616	.00482	.45922	1.1526	-.00205
#2	.02533	.98513	1.0637	4.7885	10.247	1.0163	.46973	.00038	.45979	1.0475	.02182

Check ?	None	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	None	Chk Pass	Chk Warn	None
Value										1.0000	
Range										10.000%	

Elem	V_2924	Zn2062	Zr3391
Units	ppm	ppm	ppm
Avg	.47892	.45887	.51511
Stddev	.00774	.00438	.00288
%RSD	1.6165	.95485	.55897

#1	.48440	.46197	.51714
#2	.47345	.45577	.51307

Check ?	Chk Pass	Chk Pass	Chk Pass
Value			
Range			

Int. Std.	Y_2243	Y_3600	Y_3774
Units	Cts/S	Cts/S	Cts/S
Avg	2602.4	40989.	2237.2
Stddev	3.7	83.	41.3
%RSD	.14324	.20367	1.8443

#1	2605.0	40930.	2266.4
#2	2599.8	41048.	2208.0

Sample Name: CCB Acquired: 5/18/2016 20:15:15 Type: QC
 Method: 6500_025(v6) Mode: CONC Corr. Factor: 1.000000
 User: CRHOADES Prep Date: Custom ID2: Custom ID3:
 Comment:

Elem	Ag3280	Al1670	As1890	B_2089	Ba4554	Be3130	Bi2230	Ca3179	Cd2288	Co2286	Cr2055
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	-.00008	-.00042	.00198	W .01586	-.00095	.00031	.00252	-.02016	-.00017	.00005	.00011
Stddev	.00032	.00020	.00332	.00049	.00015	.00002	.00245	.00604	.00013	.00003	.00047
%RSD	399.06	47.665	167.42	3.0962	15.579	5.0771	97.354	29.967	78.014	63.857	447.21

#1	.00015	-.00056	-.00036	.01621	-.00084	.00032	.00079	-.01589	-.00026	.00003	-.00023
#2	-.00030	-.00028	.00432	.01551	-.00105	.00030	.00426	-.02443	-.00008	.00007	.00044

Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Warn	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit				.01500							
Low Limit				-.01500							

Elem	Cu3247	Fe2599	K_7664	Li6707	Mg2790	Mn2576	Mo2020	Na5895	Ni2316	P_1782	Pb2203
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	-.00127	.03344	.22884	.00100	.00862	.00044	.00232	.26686	-.00046	.00333	.00055
Stddev	.00037	.00051	.08194	.00164	.00520	.00012	.00101	.01659	.00059	.00083	.00096
%RSD	29.123	1.5233	35.809	163.58	60.314	26.197	43.276	6.2161	127.57	24.881	172.86

#1	-.00153	.03308	.17090	-.00016	.01229	.00053	.00161	.27859	-.00005	.00392	-.00012
#2	-.00101	.03380	.28678	.00216	.00494	.00036	.00304	.25513	-.00088	.00274	.00123

Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit											
Low Limit											

Elem	S_1820	Sb2068	Se1960	Si2881	SiO2	Sn1899	Sr4077	Th2837	Ti3349	Ti1908	U_3701
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.02156	W .00380	W .00779	.01695	.03627	-.00050	.00024	.00265	-.00005	.00184	-.02714
Stddev	.00818	.00145	.00897	.00557	.01191	.00269	.00017	.00217	.00015	.00046	.01185
%RSD	37.966	38.144	115.21	32.851	32.851	535.44	70.646	81.832	321.79	25.283	43.646

#1	.01577	.00483	.00144	.02088	.04469	-.00241	.00012	.00112	-.00016	.00151	-.03552
#2	.02734	.00278	.01413	.01301	.02784	.00140	.00036	.00418	.00006	.00216	-.01877

Check ?	Chk Pass	Chk Warn	Chk Warn	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit		.00100	.00750								
Low Limit		-.00100	-.01500								

Elem	V_2924	Zn2062	Zr3391
Units	ppm	ppm	ppm
Avg	.00054	-.00038	.00078
Stddev	.00003	.00039	.00307
%RSD	5.6802	101.67	395.70

#1	.00052	-.00065	.00294
#2	.00056	-.00011	-.00139

Check ?	Chk Pass	Chk Pass	Chk Pass
High Limit			
Low Limit			

Int. Std.	Y_2243	Y_3600	Y_3774
Units	Cts/S	Cts/S	Cts/S
Avg	2630.4	41540.	2317.4
Stddev	3.1	105.	41.1
%RSD	.11737	.25332	1.7715

#1	2632.5	41466.	2346.4
#2	2628.2	41615.	2288.3

Sample Name: CCVL-3897520 Acquired: 5/18/2016 20:17:38 Type: QC
Method: 6500_025(v6) Mode: CONC Corr. Factor: 1.000000
User: CRHOADES Prep Date: Custom ID2: Custom ID3:
Comment:

Elem	Ag3280	Al1670	As1890	B_2089	Ba4554	Be3130	Bi2230	Ca3179	Cd2288	Co2286	Cr2055	Cu3247
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.00881	.11298	.01232	.10896	.00889	.00105	.11567	.18872	.00515	.00997	.01078	.01502
Stddev	.00011	.00108	.00181	.00034	.00009	.00016	.00257	.01074	.00023	.00026	.00006	.00004
%RSD	1.2527	.95667	14.674	.31172	1.0504	15.104	2.2222	5.6885	4.3829	2.6184	.57352	.24202

#1	.00873	.11222	.01359	.10872	.00895	.00094	.11749	.18113	.00531	.00979	.01074	.01505
#2	.00889	.11375	.01104	.10920	.00882	.00116	.11386	.19631	.00499	.01016	.01082	.01499

Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Value												
Range												

Elem	Fe2599	K_7664	Li6707	Mg2790	Mn2576	Mo2020	Na5895	Ni2316	P_1782	Pb2203	S_1820	Sb2068
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.10849	3.0586	.00881	.20529	.00962	.02202	1.2197	.04245	3.0423	.01101	.02521	F .02791
Stddev	.00402	.1017	.00049	.00137	.00010	.00011	.0004	.00076	.0009	.00037	.00302	.00317
%RSD	3.7011	3.3248	5.5147	.66757	1.0243	.48600	.03189	1.7888	.03017	3.3197	11.970	11.347

#1	.10565	2.9867	.00915	.20432	.00955	.02210	1.2200	.04192	3.0429	.01075	.02308	.03014
#2	.11133	3.1305	.00846	.20626	.00969	.02195	1.2195	.04299	3.0416	.01127	.02735	.02567

Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	None	Chk Fail
Value												.02000
Range												30.000%

Elem	Se1960	Si2881	SiO2	Sn1899	Sr4077	Th2837	Ti3349	Ti1908	U_3701	V_2924	Zn2062	Zr3391
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	F .02107	.48285	1.0333	.11648	.01016	.01456	.00937	.01795	.06485	.00975	.01785	.01407
Stddev	.00177	.00018	.0004	.00167	.00023	.00069	.00061	.00284	.00530	.00091	.00058	.00545
%RSD	8.3883	.03816	.03816	1.4295	2.2278	4.7310	6.4756	15.806	8.1803	9.3463	3.2322	38.759

#1	.01982	.48298	1.0336	.11530	.01032	.01407	.00894	.01594	.06110	.01039	.01826	.01021
#2	.02232	.48272	1.0330	.11766	.01000	.01504	.00980	.01995	.06860	.00910	.01745	.01792

Check ?	Chk Fail	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Value	.01500											
Range	30.000%											

Int. Std.	Y_2243	Y_3600	Y_3774
Units	Cts/S	Cts/S	Cts/S
Avg	2595.3	41170.	2343.4
Stddev	11.8	109.	12.8
%RSD	.45498	.26408	.54476

#1	2603.7	41093.	2352.5
#2	2587.0	41247.	2334.4

Elem	Ag3280	Al1670	As1890	B_2089	Ba4554	Be3130	Bi2230	Ca3179	Cd2288
Line	328.068 {103}	167.079 {502}	189.042 {478}	208.959 {461}	455.403 { 74}	313.042 {108}	223.061 {451}	317.933 {106}	228.802 {447}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	-.00079	.79034	-.00601	.03011	.01904	.00039	-.00138	2.6670	.00060
Stddev	.00030	.00030	.00276	.00018	.00017	.00008	.00352	.0279	.00009
%RSD	37.747	.03758	45.982	.60099	.87453	20.521	255.04	1.0467	15.367

#1	-.00100	.79013	-.00406	.03024	.01916	.00044	.00111	2.6867	.00067
#2	-.00058	.79055	-.00797	.02998	.01892	.00033	-.00387	2.6472	.00054

Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Elem	Co2286	Cr2055	Cu3247	Fe2599	K_7664	Li6707	Mg2790	Mn2576	Mo2020
Line	228.616 {447}	205.560 {464}	324.754 {104}	259.940 {130}	766.490 { 44}	670.784 { 50}	279.079 {121}2	257.610 {131}	202.030 {467}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.00421	.01481	.00366	1.5844	5.8305	.00479	43.235	.03911	.00062
Stddev	.00040	.00066	.00002	.0146	.1070	.00134	.004	.00012	.00006
%RSD	9.4883	4.4888	.49838	.92007	1.8344	27.966	.00886	.29527	9.5229

#1	.00449	.01528	.00367	1.5947	5.7548	.00574	43.232	.03919	.00058
#2	.00393	.01434	.00365	1.5741	5.9061	.00384	43.237	.03903	.00066

Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Elem	Na5895	Ni2316	P_1782	Pb2203	S_1820	Sb2068	Se1960	Si2881	SiO2
Line	589.592 { 57}	231.604 {446}	178.284 {489}	220.353 {453}	182.034 {485}	206.833 {463}	196.090 {472}	288.158 {117}	288.158 {117}2
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	5.9221	.08273	.13221	-.00050	1.3078	.00055	.00979	19.333	41.373
Stddev	.0077	.00335	.00642	.00070	.0802	.00041	.00154	.022	.047
%RSD	.13043	4.0476	4.8558	138.83	6.1334	75.490	15.716	.11464	.11464

#1	5.9167	.08510	.13675	-.00099	1.3645	.00025	.00870	19.317	41.339
#2	5.9276	.08036	.12768	-.00001	1.2510	.00084	.01088	19.349	41.406

Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Elem	Sn1899	Sr4077	Th2837	Ti3349	Ti1908	U_3701	V_2924	Zn2062	Zr3391
Line	189.989 {477}	407.771 { 83}	283.730 {119}	334.904 {101}	190.856 {477}	370.152 { 91}	292.402 {115}	206.200 {163}	339.198 { 99}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.00057	.01818	-.00113	.02448	-.00239	-.01725	.00356	.00535	-.00127
Stddev	.00059	.00016	.00139	.00038	.00260	.00946	.00041	.00014	.00200
%RSD	103.63	.88022	122.72	1.5480	108.66	54.830	11.483	2.5716	157.55

#1	.00015	.01830	-.00015	.02421	-.00423	-.01056	.00327	.00525	.00014
#2	.00099	.01807	-.00212	.02475	-.00055	-.02394	.00385	.00545	-.00269

Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Int. Std.	Y_2243	Y_3600	Y_3774						
Line	224.306 {450}	360.073 { 94}	377.433 { 89}						
Units	Cts/S	Cts/S	Cts/S						
Avg	2625.4	40817.	2309.6						
Stddev	8.6	103.	7.4						
%RSD	.32656	.25178	.31895						

#1	2619.3	40744.	2314.8						
#2	2631.4	40889.	2304.3						

Elem	Ag3280	Al1670	As1890	B_2089	Ba4554	Be3130	Bi2230	Ca3179	Cd2288
Line	328.068 {103}	167.079 {502}	189.042 {478}	208.959 {461}	455.403 {74}	313.042 {108}	223.061 {451}	317.933 {106}	228.802 {447}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.00000	1.4102	-.00188	.01928	.01079	.00029	.00193	1.7552	.00028
Stddev	.00058	.0502	.00173	.00085	.00005	.00002	.00398	.0365	.00038
%RSD	28161.	3.5618	91.691	4.4280	.46068	7.4921	206.17	2.0788	137.22

#1	.00041	1.4457	-.00310	.01988	.01075	.00031	.00474	1.7294	.00001
#2	-.00041	1.3747	-.00066	.01868	.01082	.00028	-.00088	1.7810	.00055

Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Elem	Co2286	Cr2055	Cu3247	Fe2599	K_7664	Li6707	Mg2790	Mn2576	Mo2020
Line	228.616 {447}	205.560 {464}	324.754 {104}	259.940 {130}	766.490 {44}	670.784 {50}	279.079 {121}2	257.610 {131}	202.030 {467}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.01231	.04654	.00633	6.4415	1.6903	.00142	24.146	.10011	.00008
Stddev	.00043	.00102	.00073	.1245	.0525	.00427	.054	.00050	.00037
%RSD	3.4908	2.2014	11.592	1.9323	3.1059	300.71	.22445	.50201	480.94

#1	.01261	.04727	.00685	6.3534	1.7275	.00444	24.185	.10046	.00034
#2	.01200	.04582	.00581	6.5295	1.6532	-.00160	24.108	.09975	-.00018

Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Elem	Na5895	Ni2316	P_1782	Pb2203	S_1820	Sb2068	Se1960	Si2881	SiO2
Line	589.592 {57}	231.604 {446}	178.284 {489}	220.353 {453}	182.034 {485}	206.833 {463}	196.090 {472}	288.158 {117}	288.158 {117}2
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	2.9762	.26025	.12177	.00064	.73303	-.00026	.00445	21.886	46.837
Stddev	.0346	.00725	.00713	.00243	.02068	.00128	.00553	.273	.585
%RSD	1.1640	2.7850	5.8527	382.03	2.8216	496.53	124.40	1.2494	1.2494

#1	2.9517	.26538	.12680	.00235	.74766	.00065	.00836	21.693	46.423
#2	3.0007	.25513	.11673	-.00108	.71841	-.00116	.00054	22.080	47.251

Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Elem	Sn1899	Sr4077	Th2837	Ti3349	Ti1908	U_3701	V_2924	Zn2062	Zr3391
Line	189.989 {477}	407.771 {83}	283.730 {119}	334.904 {101}	190.856 {477}	370.152 {91}	292.402 {115}	206.200 {163}	339.198 {99}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.00062	.01043	.00458	.02740	-.00486	-.03240	.00417	.00969	.00037
Stddev	.00052	.00025	.00112	.00047	.00215	.01053	.00090	.00035	.00403
%RSD	82.873	2.3509	24.423	1.7005	44.141	32.505	21.504	3.6504	1087.4

#1	.00026	.01026	.00538	.02707	-.00335	-.03985	.00353	.00944	.00322
#2	.00099	.01060	.00379	.02773	-.00638	-.02495	.00480	.00994	-.00248

Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Int. Std.	Y_2243	Y_3600	Y_3774						
Line	224.306 {450}	360.073 {94}	377.433 {89}						
Units	Cts/S	Cts/S	Cts/S						
Avg	2701.0	41673.	2337.8						
Stddev	101.1	16.	78.7						
%RSD	3.7416	.03856	3.3679						

#1	2629.6	41661.	2393.5						
#2	2772.5	41684.	2282.2						

Elem	Ag3280	Al3092	As1890	B_2089	Ba4554	Be3130	Bi2230	Ca3179	Cd2288
Line	328.068 {103}	309.271 {109}	189.042 {478}	208.959 {461}	455.403 {74}	313.042 {108}	223.061 {451}	317.933 {106}	228.802 {447}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	-0.0034	7.8902	.00112	.03039	.09245	.00031	-0.00262	15.318	.00109
Stddev	.00076	.0139	.00374	.00035	.00090	.00008	.00409	.005	.00000
%RSD	222.97	.17572	333.49	1.1502	.97774	27.199	156.39	.02947	.09246

#1	.00020	7.8804	.00377	.03064	.09181	.00037	.00028	15.315	.00109
#2	-.00087	7.9000	-.00152	.03014	.09308	.00025	-.00551	15.321	.00109

Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Elem	Co2286	Cr2055	Cu3247	Fe2599	K_7664	Li6707	Mg2790	Mn2576	Mo2020
Line	228.616 {447}	205.560 {464}	324.754 {104}	259.940 {130}	766.490 {44}	670.784 {50}	279.079 {121}2	257.610 {131}	202.030 {467}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.02493	.06845	.01690	15.364	4.3933	.00968	50.139	.50065	.00114
Stddev	.00021	.00071	.00011	.022	.0298	.00095	.033	.00133	.00091
%RSD	.85877	1.0300	.67785	.14112	.67921	9.8253	.06650	.26542	79.693

#1	.02508	.06895	.01698	15.348	4.4144	.01036	50.163	.50159	.00050
#2	.02478	.06795	.01682	15.379	4.3722	.00901	50.116	.49971	.00179

Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Elem	Na5895	Ni2316	P_1782	Pb2203	S_1820	Sb2068	Se1960	Si2881	SiO2
Line	589.592 {57}	231.604 {446}	178.284 {489}	220.353 {453}	182.034 {485}	206.833 {463}	196.090 {472}	288.158 {117}	288.158 {117}2
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	4.9657	.41144	.29079	.01324	1.9975	.00182	.00610	41.287	88.354
Stddev	.0018	.00283	.00097	.00099	.0177	.00035	.00318	.047	.101
%RSD	.03680	.68854	.33471	7.4521	.88406	19.045	52.084	.11431	.11431

#1	4.9644	.41345	.29011	.01255	2.0100	.00207	.00385	41.320	88.426
#2	4.9670	.40944	.29148	.01394	1.9850	.00158	.00834	41.254	88.283

Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Elem	Sn1899	Sr4077	Th2837	Ti3349	Ti1908	U_3701	V_2924	Zn2062	Zr3391
Line	189.989 {477}	407.771 {83}	283.730 {119}	334.904 {101}	190.856 {477}	370.152 {91}	292.402 {115}	206.200 {163}	339.198 {99}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.00023	.05310	.00162	.19307	-.00578	-.03569	.02057	.07085	.00185
Stddev	.00015	.00002	.00092	.00128	.00201	.00684	.00060	.00029	.00206
%RSD	63.577	.03178	56.829	.66413	34.714	19.151	2.9095	.40869	111.52

#1	.00013	.05308	.00226	.19397	-.00436	-.04053	.02015	.07105	.00331
#2	.00034	.05311	.00097	.19216	-.00720	-.03086	.02100	.07064	.00039

Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Int. Std.	Y_2243	Y_3600	Y_3774						
Line	224.306 {450}	360.073 {94}	377.433 {89}						
Units	Cts/S	Cts/S	Cts/S						
Avg	2624.1	41175.	2327.0						
Stddev	11.1	301.	3.4						
%RSD	.42118	.73202	.14413						

#1	2616.3	40962.	2324.6						
#2	2631.9	41388.	2329.4						

Elem	Ag3280	Al1670	As1890	B_2089	Ba4554	Be3130	Bi2230	Ca3179	Cd2288
Line	328.068 {103}	167.079 {502}	189.042 {478}	208.959 {461}	455.403 { 74}	313.042 {108}	223.061 {451}	317.933 {106}	228.802 {447}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	-.00063	.59835	-.00281	.03710	.01704	.00010	-.00269	9.3266	.00008
Stddev	.00086	.00649	.00255	.00013	.00018	.00025	.00047	.0426	.00021
%RSD	137.19	1.0839	90.836	.35705	1.0481	264.09	17.502	.45664	277.87

#1	-.00002	.59376	-.00100	.03720	.01691	.00028	-.00302	9.2965	-.00007
#2	-.00124	.60293	-.00461	.03701	.01717	-.00008	-.00235	9.3568	.00022

Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Elem	Co2286	Cr2055	Cu3247	Fe2599	K_7664	Li6707	Mg2790	Mn2576	Mo2020
Line	228.616 {447}	205.560 {464}	324.754 {104}	259.940 {130}	766.490 { 44}	670.784 { 50}	279.079 {121}2	257.610 {131}	202.030 {467}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.00451	.01005	.00475	1.7730	3.5303	.00224	16.836	.04414	-.00004
Stddev	.00044	.00003	.00025	.0044	.0757	.00316	.015	.00025	.00026
%RSD	9.7839	.31648	5.1883	.24684	2.1458	140.73	.08863	.56690	595.30

#1	.00420	.01003	.00492	1.7761	3.4768	.00001	16.826	.04396	-.00023
#2	.00482	.01007	.00458	1.7699	3.5839	.00448	16.847	.04431	.00014

Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Elem	Na5895	Ni2316	P_1782	Pb2203	S_1820	Sb2068	Se1960	Si2881	SiO2
Line	589.592 { 57}	231.604 {446}	178.284 {489}	220.353 {453}	182.034 {485}	206.833 {463}	196.090 {472}	288.158 {117}	288.158 {117}2
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	7.2532	.08174	.15943	.00030	2.0439	.00328	.00141	12.308	26.340
Stddev	.0251	.00014	.00061	.00055	.0087	.00418	.01068	.057	.122
%RSD	.34551	.17237	.38527	181.38	.42763	127.58	754.89	.46192	.46192

#1	7.2355	.08184	.15986	-.00009	2.0377	.00032	.00896	12.349	26.426
#2	7.2709	.08165	.15899	.00070	2.0501	.00624	-.00614	12.268	26.254

Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Elem	Sn1899	Sr4077	Th2837	Ti3349	Ti1908	U_3701	V_2924	Zn2062	Zr3391
Line	189.989 {477}	407.771 { 83}	283.730 {119}	334.904 {101}	190.856 {477}	370.152 { 91}	292.402 {115}	206.200 {163}	339.198 { 99}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	-.00037	.04019	.00043	.01601	-.00147	-.02466	.00452	.01536	.00140
Stddev	.00183	.00040	.00025	.00019	.00203	.04245	.00064	.00042	.00438
%RSD	494.03	1.0055	58.151	1.1758	138.33	172.14	14.075	2.7235	311.89

#1	-.00167	.04047	.00061	.01614	-.00291	-.05467	.00407	.01506	.00450
#2	.00093	.03990	.00025	.01588	-.00003	.00536	.00497	.01566	-.00169

Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Int. Std.	Y_2243	Y_3600	Y_3774
Line	224.306 {450}	360.073 { 94}	377.433 { 89}
Units	Cts/S	Cts/S	Cts/S
Avg	2774.0	41887.	2357.6
Stddev	10.9	126.	4.5
%RSD	.39344	.30151	.19043

#1	2781.8	41976.	2354.4
#2	2766.3	41798.	2360.8

Elem	Ag3280	Al1670	As1890	B_2089	Ba4554	Be3130	Bi2230	Ca3179	Cd2288
Line	328.068 {103}	167.079 {502}	189.042 {478}	208.959 {461}	455.403 { 74}	313.042 {108}	223.061 {451}	317.933 {106}	228.802 {447}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	-0.00042	-0.00146	-0.00750	.23905	.01491	.00018	-0.00470	483.04	.00170
Stddev	.00038	.00001	.00087	.00997	.00007	.00017	.00261	8.32	.00025
%RSD	90.669	.86557	11.609	4.1706	.47167	92.079	55.593	1.7222	14.952

#1	-0.00069	-0.00145	-0.00689	.23200	.01496	.00006	-0.00285	477.16	.00152
#2	-0.00015	-0.00147	-0.00812	.24610	.01486	.00030	-0.00655	488.92	.00188

Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Elem	Co2286	Cr2055	Cu3247	Fe2599	K_7664	Li6707	Mg2790	Mn2576	Mo2020
Line	228.616 {447}	205.560 {464}	324.754 {104}	259.940 {130}	766.490 { 44}	670.784 { 50}	279.079 {121}2	257.610 {131}	202.030 {467}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	-0.00045	.00031	.00127	.01923	19.620	.52353	135.64	.02260	.00067
Stddev	.00056	.00019	.00012	.00503	.398	.00698	.03	.00003	.00021
%RSD	124.45	59.471	9.5473	26.154	2.0295	1.3337	.02506	.15285	30.877

#1	-0.00005	.00045	.00135	.02278	19.339	.51859	135.62	.02258	.00053
#2	-0.00085	.00018	.00118	.01567	19.902	.52847	135.66	.02263	.00082

Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Elem	Na8183	Ni2316	P_1782	Pb2203	S_1820	Sb2068	Se1960	Si2881	SiO2
Line	818.326 { 41}	231.604 {446}	178.284 {489}	220.353 {453}	182.034 {485}	206.833 {463}	196.090 {472}	288.158 {117}	288.158 {117}2
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	W 512.99	.00489	.02060	.00014	F 898.01	.00425	-0.00214	8.6971	18.612
Stddev	11.11	.00023	.00124	.00012	35.10	.00381	.00836	.0077	.017
%RSD	2.1666	4.6434	6.0414	86.328	3.9082	89.520	391.47	.08910	.08910

#1	505.13	.00473	.02148	.00005	873.20	.00156	.00378	8.6916	18.600
#2	520.85	.00505	.01972	.00023	922.83	.00694	-0.00805	8.7026	18.624

Check ?	Chk Warn	Chk Pass	Chk Pass	Chk Pass	Chk Fail	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit	500.00				200.00				
Low Limit	11.000				-20000				

Elem	Sn1899	Sr4077	Th2837	Ti3349	Ti1908	U_3701	V_2924	Zn2062	Zr3391
Line	189.989 {477}	407.771 { 83}	283.730 {119}	334.904 {101}	190.856 {477}	370.152 { 91}	292.402 {115}	206.200 {163}	339.198 { 99}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	-0.00380	W 7.9189	-0.00192	-0.00055	-0.00590	.07604	-0.00029	.00162	.00222
Stddev	.00006	.1082	.00218	.00031	.00350	.01812	.00038	.00011	.00002
%RSD	1.5969	1.3664	113.36	55.518	59.424	23.830	129.77	6.9903	.92505

#1	-0.00384	7.8424	-0.00038	-0.00033	-0.00342	.06323	-0.00056	.00170	.00221
#2	-0.00376	7.9954	-0.00346	-0.00077	-0.00837	.08886	-0.00002	.00154	.00224

Check ?	Chk Pass	Chk Warn	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit		5.0000							
Low Limit		-0.01000							

Int. Std.	Y_2243	Y_3600	Y_3774						
Line	224.306 {450}	360.073 { 94}	377.433 { 89}						
Units	Cts/S	Cts/S	Cts/S						
Avg	2523.1	38465.	2297.8						
Stddev	99.5	51.	47.5						
%RSD	3.9450	.13245	2.0686						

#1	2593.5	38501.	2331.4						
#2	2452.7	38429.	2264.2						

Elem	Ag3280	Al1670	As1890	B_2089	Ba4554	Be3130	Bi2230	Ca3179	Cd2288
Line	328.068 {103}	167.079 {502}	189.042 {478}	208.959 {461}	455.403 {74}	313.042 {108}	223.061 {451}	317.933 {106}	228.802 {447}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	-0.0021	.37082	-0.00622	.19568	.01379	.00024	-0.00216	411.01	.00228
Stddev	.00050	.01821	.00757	.00705	.00023	.00035	.00561	1.86	.00003
%RSD	235.01	4.9106	121.71	3.6050	1.6749	147.65	259.86	.45372	1.4892

#1	-0.00057	.38370	-0.00087	.20067	.01362	-0.00001	-0.00612	409.69	.00226
#2	.00014	.35794	-.01158	.19069	.01395	.00049	.00181	412.32	.00231

Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Elem	Co2286	Cr2055	Cu3247	Fe2599	K_7664	Li6707	Mg2790	Mn2576	Mo2020
Line	228.616 {447}	205.560 {464}	324.754 {104}	259.940 {130}	766.490 {44}	670.784 {50}	279.079 {121}2	257.610 {131}	202.030 {467}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.00259	.00198	.01063	.50525	30.052	1.0242	274.29	.44597	.00126
Stddev	.00057	.00002	.00015	.00572	.008	.0034	.29	.00042	.00007
%RSD	22.176	1.1846	1.3660	1.1327	.02545	.32697	.10629	.09444	5.8298

#1	.00218	.00197	.01053	.50121	30.047	1.0218	274.08	.44567	.00120
#2	.00300	.00200	.01074	.50930	30.058	1.0266	274.50	.44626	.00131

Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Elem	Na8183	Ni2316	P_1782	Pb2203	S_1820	Sb2068	Se1960	Si2881	SiO2
Line	818.326 {41}	231.604 {446}	178.284 {489}	220.353 {453}	182.034 {485}	206.833 {463}	196.090 {472}	288.158 {117}	288.158 {117}2
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	W 2511.5	.01021	.03191	.00165	F 2017.7	-0.00337	.00409	8.7800	18.789
Stddev	9.5	.00116	.00194	.00104	107.3	.00340	.00444	.0089	.019
%RSD	.38023	11.315	6.0650	63.177	5.3162	100.73	108.53	.10103	.10103

#1	2504.8	.00939	.03328	.00091	2093.5	-0.00577	.00095	8.7738	18.776
#2	2518.3	.01103	.03054	.00239	1941.8	-0.00097	.00723	8.7863	18.803

Check ?	Chk Warn	Chk Pass	Chk Pass	Chk Pass	Chk Fail	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit	500.00				200.00				
Low Limit	11.000				-20000				

Elem	Sn1899	Sr4077	Th2837	Ti3349	Ti1908	U_3701	V_2924	Zn2062	Zr3391
Line	189.989 {477}	407.771 {83}	283.730 {119}	334.904 {101}	190.856 {477}	370.152 {91}	292.402 {115}	206.200 {163}	339.198 {99}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	-0.00240	W 9.0602	-0.00359	.01061	-0.00377	.12874	-0.00064	.01074	.00255
Stddev	.00124	.0207	.00330	.00136	.00591	.00681	.00015	.00057	.00005
%RSD	51.752	.22868	91.920	12.777	156.67	5.2897	22.766	5.3277	2.0315

#1	-0.00152	9.0455	-0.00126	.00965	-0.00795	.12393	-0.00053	.01033	.00258
#2	-0.00328	9.0748	-0.00593	.01157	.00041	.13356	-0.00074	.01114	.00251

Check ?	Chk Pass	Chk Warn	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit		5.0000							
Low Limit		-.01000							

Int. Std.	Y_2243	Y_3600	Y_3774						
Line	224.306 {450}	360.073 {94}	377.433 {89}						
Units	Cts/S	Cts/S	Cts/S						
Avg	2427.3	36218.	2126.8						
Stddev	112.8	55.	6.6						
%RSD	4.6462	.15212	.31128						

#1	2347.5	36257.	2122.1						
#2	2507.0	36179.	2131.5						

Elem	Ag3280	Al1670	As1890	B_2089	Ba4554	Be3130	Bi2230	Ca3179	Cd2288
Line	328.068 {103}	167.079 {502}	189.042 {478}	208.959 {461}	455.403 {74}	313.042 {108}	223.061 {451}	317.933 {106}	228.802 {447}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	-.00086	.36595	-.00627	.30929	.01931	.00037	.00227	59.257	.00048
Stddev	.00036	.00577	.00621	.00321	.00051	.00042	.00472	.482	.00000
%RSD	41.871	1.5768	98.972	1.0388	2.6251	112.86	207.94	.81293	.64350

#1	-.00060	.36187	-.00188	.30701	.01895	.00067	-.00107	59.598	.00048
#2	-.00111	.37003	-.01066	.31156	.01967	.00007	.00561	58.916	.00048

Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Elem	Co2286	Cr2055	Cu3247	Fe2599	K_7664	Li6707	Mg2790	Mn2576	Mo2020
Line	228.616 {447}	205.560 {464}	324.754 {104}	259.940 {130}	766.490 {44}	670.784 {50}	279.079 {121}2	257.610 {131}	202.030 {467}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.00008	.00931	.02785	.48695	9.2458	.20432	30.110	.02462	.02163
Stddev	.00011	.00034	.00016	.00271	.1221	.00388	.104	.00028	.00033
%RSD	134.02	3.7039	.57626	.55679	1.3210	1.8976	.34689	1.1461	1.5321

#1	.00016	.00955	.02796	.48504	9.3322	.20706	30.036	.02442	.02186
#2	.00000	.00906	.02773	.48887	9.1595	.20158	30.183	.02482	.02139

Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Elem	Na8183	Ni2316	P_1782	Pb2203	S_1820	Sb2068	Se1960	Si2881	SiO2
Line	818.326 {41}	231.604 {446}	178.284 {489}	220.353 {453}	182.034 {485}	206.833 {463}	196.090 {472}	288.158 {117}	288.158 {117}2
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	323.77	.00180	.01987	.00383	W 192.33	-.00116	.02787	7.0293	15.043
Stddev	3.18	.00026	.00195	.00095	5.46	.00127	.00397	.0225	.048
%RSD	.98257	14.279	9.8019	24.818	2.8366	108.68	14.260	.32037	.32037

#1	326.02	.00198	.02125	.00450	188.47	-.00206	.02506	7.0453	15.077
#2	321.53	.00162	.01850	.00316	196.19	-.00027	.03068	7.0134	15.009

Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Warn	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit					180.00				
Low Limit					-.15000				

Elem	Sn1899	Sr4077	Th2837	Ti3349	Ti1908	U_3701	V_2924	Zn2062	Zr3391
Line	189.989 {477}	407.771 {83}	283.730 {119}	334.904 {101}	190.856 {477}	370.152 {91}	292.402 {115}	206.200 {163}	339.198 {99}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.00016	1.2386	.00041	.00954	-.00606	-.02501	.00037	.02770	-.00086
Stddev	.00056	.0087	.00174	.00068	.00026	.07259	.00020	.00016	.00279
%RSD	361.47	.70145	420.56	7.1102	4.3122	290.26	53.460	.58550	324.73

#1	.00055	1.2448	.00165	.01001	-.00625	-.07634	.00051	.02781	-.00284
#2	-.00024	1.2325	-.00082	.00906	-.00588	.02632	.00023	.02758	.00112

Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Int. Std.	Y_2243	Y_3600	Y_3774						
Line	224.306 {450}	360.073 {94}	377.433 {89}						
Units	Cts/S	Cts/S	Cts/S						
Avg	2587.3	39899.	2268.8						
Stddev	55.2	6.	49.0						
%RSD	2.1349	.01629	2.1582						

#1	2626.3	39895.	2234.2						
#2	2548.2	39904.	2303.5						

Sample Name: 280-82959-C-5-A Acquired: 5/18/2016 20:39:20 Type: Unk

Method: 6500_025(v6) Mode: CONC Corr. Factor: 1.000000

User: CRHOADES Prep Date: Custom ID2: Custom ID3:

Comment: 325053 6010B

Elem	Ag3280	Al1670	As1890	B_2089	Ba4554	Be3130	Bi2230	Ca3179	Cd2288
Line	328.068 {103}	167.079 {502}	189.042 {478}	208.959 {461}	455.403 { 74}	313.042 {108}	223.061 {451}	317.933 {106}	228.802 {447}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	-.00084	.24452	W -.01573	.30072	.01352	.00011	.00389	374.50	.00172
Stddev	.00003	.00100	.00124	.00466	.00069	.00009	.00795	4.31	.00006
%RSD	3.1673	.40923	7.8539	1.5494	5.0749	81.394	204.35	1.1511	3.7413

#1	-.00086	.24523	-.01660	.30402	.01304	.00005	-.00173	371.45	.00176
#2	-.00082	.24382	-.01485	.29743	.01401	.00017	.00951	377.55	.00167

Check ?	Chk Pass	Chk Pass	Chk Warn	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit			10.000						
Low Limit			-.01000						

Elem	Co2286	Cr2055	Cu3247	Fe2599	K_7664	Li6707	Mg2790	Mn2576	Mo2020
Line	228.616 {447}	205.560 {464}	324.754 {104}	259.940 {130}	766.490 { 44}	670.784 { 50}	279.079 {121}2	257.610 {131}	202.030 {467}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.00248	.00156	.00358	.27010	21.182	.64833	225.07	.16284	.00108
Stddev	.00073	.00017	.00071	.00154	.045	.00160	.09	.00007	.00026
%RSD	29.299	10.922	19.916	.57128	.21278	.24672	.03811	.04047	24.246

#1	.00300	.00169	.00307	.27119	21.150	.64946	225.01	.16289	.00090
#2	.00197	.00144	.00408	.26901	21.214	.64720	225.13	.16279	.00127

Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Elem	Na8183	Ni2316	P_1782	Pb2203	S_1820	Sb2068	Se1960	Si2881	SiO2
Line	818.326 { 41}	231.604 {446}	178.284 {489}	220.353 {453}	182.034 {485}	206.833 {463}	196.090 {472}	288.158 {117}	288.158 {117}2
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	W 1267.2	.00737	.02189	.00155	F 1294.6	-.00714	W -.00526	8.4091	17.996
Stddev	15.0	.00032	.00095	.00298	1.1	.00112	.00111	.0062	.013
%RSD	1.1854	4.3720	4.3196	191.88	.08787	15.742	21.083	.07394	.07394

#1	1256.6	.00760	.02256	.00366	1295.4	-.00634	-.00448	8.4048	17.986
#2	1277.8	.00714	.02122	-.00055	1293.8	-.00793	-.00605	8.4135	18.005

Check ?	Chk Warn	Chk Pass	Chk Pass	Chk Pass	Chk Fail	Chk Pass	Chk Warn	Chk Pass	Chk Pass
High Limit	500.00				200.00		5.0000		
Low Limit	11.000				-.20000		-.00500		

Elem	Sn1899	Sr4077	Th2837	Ti3349	Ti1908	U_3701	V_2924	Zn2062	Zr3391
Line	189.989 {477}	407.771 { 83}	283.730 {119}	334.904 {101}	190.856 {477}	370.152 { 91}	292.402 {115}	206.200 {163}	339.198 { 99}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	-.00071	W 7.8085	-.00303	.00557	-.00530	.03099	-.00013	.00382	.00440
Stddev	.00147	.1107	.00238	.00005	.00182	.03445	.00098	.00105	.00194
%RSD	206.36	1.4176	78.635	.91942	34.348	111.14	770.65	27.524	43.944

#1	.00033	7.7302	-.00134	.00560	-.00401	.00664	.00057	.00457	.00304
#2	-.00175	7.8868	-.00471	.00553	-.00658	.05535	-.00082	.00308	.00577

Check ?	Chk Pass	Chk Warn	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit		5.0000							
Low Limit		-.01000							

Int. Std.	Y_2243	Y_3600	Y_3774
Line	224.306 {450}	360.073 { 94}	377.433 { 89}
Units	Cts/S	Cts/S	Cts/S
Avg	2369.7	36079.	2055.1
Stddev	14.5	128.	31.2
%RSD	.61115	.35464	1.5168

#1	2380.0	36169.	2077.1
#2	2359.5	35988.	2033.1

Sample Name: CCVH-3894253 Acquired: 5/18/2016 20:42:26 Type: QC
Method: 6500_025(v6) Mode: CONC Corr. Factor: 1.000000
User: CRHOADES Prep Date: Custom ID2: Custom ID3:
Comment:

Elem	Ag3280	Al3092	As1890	B_2089	Ba4554	Be3130	Bi2230	Ca3179	Cd2288	Co2286	Cr2055
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	-.00013	51.195	-.00989	.00465	-.00085	.00031	F 1.1115	.04131	-.00013	-.00140	.00006
Stddev	.00031	1.457	.00192	.00045	.00044	.00004	.0091	.04523	.00017	.00020	.00008
%RSD	239.07	2.8468	19.404	9.7539	51.333	11.479	.82198	109.48	129.84	14.649	130.31

#1	-.00035	50.165	-.01125	.00433	-.00054	.00029	1.1180	.07329	-.00025	-.00154	.00000
#2	.00009	52.226	-.00853	.00497	-.00116	.00034	1.1051	.00933	-.00001	-.00125	.00012

Check ?	None	Chk Pass	None	None	None	None	Chk Fail	None	None	None	None
Value							1.0000				
Range							10.490%				

Elem	Cu3247	Fe2714	K_7664	Li6707	Mg2790	Mn2576	Mo2020	Na8183	Ni2316	P_1782	Pb2203
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.00017	48.615	.36925	-.00178	.03297	-.00035	-.00241	251.02	.00093	.00644	-.00240
Stddev	.00066	1.300	.07353	.00467	.00246	.00007	.00063	5.33	.00013	.00157	.00014
%RSD	390.25	2.6738	19.913	263.04	7.4685	20.451	26.320	2.1216	14.364	24.418	5.8805

#1	.00063	47.696	.31725	-.00508	.03123	-.00040	-.00286	247.25	.00084	.00755	-.00250
#2	-.00030	49.534	.42124	.00153	.03472	-.00030	-.00196	254.78	.00103	.00532	-.00230

Check ?	None	Chk Pass	None	None	None	None	None	Chk Pass	None	None	None
Value											
Range											

Elem	S_1820	Sb2068	Se1960	Si2881	SiO2	Sn1899	Sr4077	Th2837	Ti3349	Ti1908	U_3701
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	F 5.5596	-.01002	.00680	.03400	.07276	-.00068	.00176	W 4.5832	.00618	-.00401	W 10.571
Stddev	.0235	.00303	.00094	.04811	.10295	.00103	.00105	.0318	.00117	.00573	.193
%RSD	.42240	30.238	13.794	141.49	141.49	151.56	59.815	.69398	18.974	142.91	1.8228

#1	5.5762	-.01216	.00746	-.00002	-.00004	-.00141	.00251	4.5607	.00701	-.00806	10.707
#2	5.5430	-.00788	.00613	.06802	.14555	.00005	.00102	4.6057	.00535	.00004	10.434

Check ?	Chk Fail	None	None	None	None	None	None	Chk Warn	None	None	Chk Warn
Value	5.0000							5.0000			10.000
Range	10.490%							-5.0000%			5.0000%

Elem	V_2924	Zn2062	Zr3391
Units	ppm	ppm	ppm
Avg	.00997	.00013	.05474
Stddev	.00002	.00041	.00212
%RSD	.19775	308.83	3.8712

#1	.00996	-.00016	.05324
#2	.00998	.00042	.05624

Check ?	None	None	None
Value			
Range			

Int. Std.	Y_2243	Y_3600	Y_3774
Units	Cts/S	Cts/S	Cts/S
Avg	2615.0	40707.	2276.5
Stddev	14.0	613.	72.0
%RSD	.53704	1.5065	3.1610

#1	2605.0	41141.	2327.4
#2	2624.9	40273.	2225.6

Sample Name: CCV-3894251 Acquired: 5/18/2016 20:45:03 Type: QC

Method: 6500_025(v6) Mode: CONC Corr. Factor: 1.000000

User: CRHOADES Prep Date: Custom ID2: Custom ID3:

Comment:

Elem	Ag3280	Al1670	As1890	B_2089	Ba4554	Be3130	Bi2230	Ca3179	Cd2288	Co2286	Cr2055	Cu3247
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.49670	F .55671	1.0741	.50449	.49873	.45465	.00255	4.8729	.49965	.51453	.52105	.52732
Stddev	.00014	.00419	.0013	.00260	.00838	.00787	.00802	.0619	.00161	.00084	.00046	.00003
%RSD	.02774	.75212	.11876	.51616	1.6811	1.7300	314.88	1.2702	.32155	.16336	.08835	.00510

#1	.49679	.55967	1.0732	.50265	.49280	.44909	.00821	4.8291	.49851	.51393	.52138	.52734
#2	.49660	.55375	1.0750	.50633	.50466	.46022	-.00312	4.9167	.50079	.51512	.52073	.52730

Check ?	Chk Pass	Chk Fail	Chk Pass	Chk Pass	Chk Pass	Chk Pass	None	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Value		.50000										
Range		10.490%										

Elem	Fe2599	K_7664	Li6707	Mg2790	Mn2576	Mo2020	Na5895	Ni2316	P_1782	Pb2203	S_1820	Sb2068
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	2.3334	47.897	.97191	18.986	.46478	.52940	5.1955	.50428	1.0135	1.0489	.25384	1.0514
Stddev	.0370	.883	.00341	.059	.00083	.00192	.0815	.00094	.0009	.0009	.01103	.0054
%RSD	1.5842	1.8434	.35058	.31167	.17896	.36344	1.5689	.18555	.09033	.08321	4.3460	.51590

#1	2.3073	47.273	.96950	19.028	.46537	.53076	5.1378	.50362	1.0141	1.0496	.26164	1.0476
#2	2.3596	48.522	.97432	18.944	.46419	.52804	5.2531	.50494	1.0128	1.0483	.24604	1.0552

Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	None	Chk Pass
Value												
Range												

Elem	Se1960	Si2881	SiO2	Sn1899	Sr4077	Th2837	Ti3349	Ti1908	U_3701	V_2924	Zn2062	Zr3391
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	F 1.1412	4.8047	10.282	1.0849	.46545	.00050	.45970	F 1.1224	-.01727	.47956	.45084	.51507
Stddev	.0123	.0264	.056	.0090	.00818	.00085	.00109	.0000	.04121	.00450	.00437	.00321
%RSD	1.0762	.54907	.54907	.83138	1.7564	170.58	.23615	.00144	238.67	.93884	.96844	.62310

#1	1.1325	4.7860	10.242	1.0786	.45967	-.00010	.46047	1.1224	-.04641	.48274	.45392	.51734
#2	1.1499	4.8233	10.322	1.0913	.47123	.00110	.45893	1.1224	.01187	.47637	.44775	.51280

Check ?	Chk Fail	Chk Pass	Chk Pass	Chk Pass	Chk Pass	None	Chk Pass	Chk Fail	None	Chk Pass	Chk Pass	Chk Pass
Value	1.0000							1.0000				
Range	10.490%							10.490%				

Int. Std.	Y_2243	Y_3600	Y_3774
Units	Cts/S	Cts/S	Cts/S
Avg	2575.0	41644.	2279.2
Stddev	19.4	37.	46.8
%RSD	.75214	.08922	2.0552

#1	2561.3	41617.	2312.3
#2	2588.7	41670.	2246.1

Sample Name: CCB Acquired: 5/18/2016 20:47:34 Type: QC
Method: 6500_025(v6) Mode: CONC Corr. Factor: 1.000000
User: CRHOADES Prep Date: Custom ID2: Custom ID3:
Comment:

Elem	Ag3280	Al1670	As1890	B_2089	Ba4554	Be3130	Bi2230	Ca3179	Cd2288	Co2286	Cr2055
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	-.00019	.00586	.00370	.00296	-.00079	.00021	.00186	-.01606	-.00029	.00000	.00003
Stddev	.00052	.00908	.00047	.00034	.00012	.00004	.00301	.00849	.00028	.0003	.00032
%RSD	279.28	154.97	12.644	11.521	15.033	18.565	162.40	52.860	98.996	83444.	1089.9

#1	-.00056	-.00056	.00337	.00271	-.00087	.00018	.00399	-.02206	-.00049	-.00024	-.00019
#2	.00018	.01227	.00403	.00320	-.00070	.00024	-.00028	-.01006	-.00009	.00024	.00025

Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit											
Low Limit											

Elem	Cu3247	Fe2599	K_7664	Li6707	Mg2790	Mn2576	Mo2020	Na5895	Ni2316	P_1782	Pb2203
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	-.00123	-.00221	.14844	.00130	-.00252	-.00006	.00153	.27508	-.00067	.00230	.00036
Stddev	.00055	.00380	.00163	.00224	.00744	.00004	.00067	.00594	.00044	.00239	.00018
%RSD	44.332	172.49	1.0948	171.84	294.73	67.059	44.075	2.1594	65.830	104.01	50.740

#1	-.00085	.00048	.14959	-.00028	.00274	-.00008	.00105	.27928	-.00099	.00061	.00023
#2	-.00162	-.00489	.14729	.00288	-.00779	-.00003	.00201	.27088	-.00036	.00400	.00049

Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit											
Low Limit											

Elem	S_1820	Sb2068	Se1960	Si2881	SiO2	Sn1899	Sr4077	Th2837	Ti3349	Ti1908	U_3701
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	F .39465	W .00919	.00589	.00047	.00101	.00105	.00026	.00138	-.00014	.00362	-.02062
Stddev	.31125	.00036	.00575	.00257	.00550	.00161	.00003	.00044	.00042	.00102	.03397
%RSD	78.869	3.8843	97.635	542.82	542.82	153.58	11.937	31.567	298.55	28.270	164.74

#1	.17456	.00894	.00182	-.00134	-.00288	-.00009	.00028	.00169	-.00044	.00435	-.04464
#2	.61474	.00944	.00995	.00229	.00490	.00218	.00023	.00107	.00016	.00290	.00340

Check ?	Chk Fail	Chk Warn	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit	.10000	.00100									
Low Limit	-.20000	-.00100									

Elem	V_2924	Zn2062	Zr3391
Units	ppm	ppm	ppm
Avg	-.00002	-.00085	.00147
Stddev	.00062	.00021	.00335
%RSD	2509.2	24.166	228.27

#1	-.00046	-.00100	-.00090
#2	.00041	-.00071	.00384

Check ?	Chk Pass	Chk Pass	Chk Pass
High Limit			
Low Limit			

Int. Std.	Y_2243	Y_3600	Y_3774
Units	Cts/S	Cts/S	Cts/S
Avg	2670.8	42652.	2321.3
Stddev	24.4	28.	100.7
%RSD	.91188	.06635	4.3383

#1	2688.1	42672.	2250.1
#2	2653.6	42632.	2392.5

Sample Name: CCVL-3897520 Acquired: 5/18/2016 20:49:56 Type: QC
Method: 6500_025(v6) Mode: CONC Corr. Factor: 1.000000
User: CRHOADES Prep Date: Custom ID2: Custom ID3:
Comment:

Elem	Ag3280	Al1670	As1890	B_2089	Ba4554	Be3130	Bi2230	Ca3179	Cd2288	Co2286	Cr2055	Cu3247
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.01044	.10928	.01434	.09486	.00910	F .00136	.11299	.17873	.00503	.00960	.01014	.01464
Stddev	.00095	.00483	.00309	.00418	.00019	.00032	.00220	.00354	.00030	.00056	.00007	.00009
%RSD	9.0997	4.4190	21.553	4.4036	2.0661	23.287	1.9509	1.9798	5.8772	5.8797	.72639	.64757
#1	.00976	.11270	.01653	.09781	.00923	.00114	.11143	.18123	.00524	.01000	.01019	.01457
#2	.01111	.10587	.01216	.09190	.00897	.00159	.11455	.17623	.00482	.00920	.01009	.01470
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Fail	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Value						.00100						
Range						30.000%						
Elem	Fe2599	K_7664	Li6707	Mg2790	Mn2576	Mo2020	Na5895	Ni2316	P_1782	Pb2203	S_1820	Sb2068
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.09503	2.9950	.01050	.20539	.00958	.01992	1.2710	.03833	2.8098	.01040	.15831	F .02695
Stddev	.00381	.0623	.00276	.00727	.00001	.00036	.0139	.00035	.0504	.00072	.01067	.00119
%RSD	4.0053	2.0807	26.272	3.5380	.08823	1.7880	1.0938	.92355	1.7925	6.9429	6.7386	4.4288
#1	.09234	2.9509	.01245	.20025	.00958	.02017	1.2808	.03859	2.8454	.00989	.16586	.02779
#2	.09772	3.0391	.00855	.21053	.00959	.01966	1.2611	.03808	2.7742	.01091	.15077	.02610
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	None	Chk Fail
Value												.02000
Range												30.000%
Elem	Se1960	Si2881	SiO2	Sn1899	Sr4077	Th2837	Ti3349	Ti1908	U_3701	V_2924	Zn2062	Zr3391
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.01509	.45779	.97967	.10335	.00986	.01463	.00882	.01474	F .03329	.00990	.01810	.01118
Stddev	.00524	.01077	.02305	.00092	.00034	.00355	.00004	.00148	.04891	.00032	.00125	.00197
%RSD	34.713	2.3532	2.3532	.89396	3.4732	24.273	.45511	10.062	146.91	3.2549	6.8906	17.581
#1	.01880	.45017	.96337	.10270	.00962	.01212	.00879	.01579	.06788	.01012	.01722	.00979
#2	.01139	.46541	.99597	.10400	.01010	.01715	.00885	.01370	-.00129	.00967	.01899	.01257
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Fail	Chk Pass	Chk Pass	Chk Pass
Value									.06000			
Range									-30.000%			
Int. Std.	Y_2243	Y_3600	Y_3774									
Units	Cts/S	Cts/S	Cts/S									
Avg	2735.8	41928.	2382.2									
Stddev	145.6	13.	5.8									
%RSD	5.3211	.03073	.24244									
#1	2632.9	41919.	2378.1									
#2	2838.8	41937.	2386.3									

Elem	Ag3280	Al1670	As1890	B_2089	Ba4554	Be3130	Bi2230	Ca3179	Cd2288
Line	328.068 {103}	167.079 {502}	189.042 {478}	208.959 {461}	455.403 {74}	313.042 {108}	223.061 {451}	317.933 {106}	228.802 {447}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	-0.00034	.05670	-0.00155	.43194	.01276	.00026	-0.00084	115.91	.00097
Stddev	.00025	.00007	.00490	.00632	.00017	.00005	.00340	.14	.00012
%RSD	75.541	.12282	315.82	1.4637	1.3564	17.409	403.03	.12080	12.349

#1	-0.00016	.05675	-0.00501	.42747	.01264	.00030	-0.00324	116.01	.00089
#2	-0.00052	.05665	.00191	.43641	.01288	.00023	.00156	115.81	.00106

Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Elem	Co2286	Cr2055	Cu3247	Fe2599	K_7664	Li6707	Mg2790	Mn2576	Mo2020
Line	228.616 {447}	205.560 {464}	324.754 {104}	259.940 {130}	766.490 {44}	670.784 {50}	279.079 {121}2	257.610 {131}	202.030 {467}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	-0.00005	.00077	.00150	.08117	8.8479	.25176	74.835	.03235	.00116
Stddev	.00039	.00009	.00083	.00237	.0098	.00146	.028	.00024	.00054
%RSD	809.99	11.848	55.098	2.9143	.11060	.57834	.03746	.75552	46.038

#1	.00023	.00070	.00209	.08285	8.8548	.25073	74.816	.03252	.00078
#2	-.00033	.00083	.00092	.07950	8.8410	.25279	74.855	.03218	.00154

Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Elem	Na8183	Ni2316	P_1782	Pb2203	S_1820	Sb2068	Se1960	Si2881	SiO2
Line	818.326 {41}	231.604 {446}	178.284 {489}	220.353 {453}	182.034 {485}	206.833 {463}	196.090 {472}	288.158 {117}	288.158 {117}2
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	365.78	.00112	.02081	.00061	F 331.06	.00234	-0.00208	7.2248	15.461
Stddev	.01	.00016	.00219	.00042	4.99	.00211	.00303	.0279	.060
%RSD	.00145	14.542	10.533	69.947	1.5067	90.323	145.24	.38651	.38651

#1	365.79	.00123	.02236	.00091	327.53	.00085	.00006	7.2050	15.419
#2	365.78	.00100	.01926	.00031	334.59	.00384	-.00422	7.2445	15.503

Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Fail	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit					200.00				
Low Limit					-.20000				

Elem	Sn1899	Sr4077	Th2837	Ti3349	Ti1908	U_3701	V_2924	Zn2062	Zr3391
Line	189.989 {477}	407.771 {83}	283.730 {119}	334.904 {101}	190.856 {477}	370.152 {91}	292.402 {115}	206.200 {163}	339.198 {99}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	-0.00188	2.9139	.00049	.00113	-0.00686	-0.03711	.00018	.00154	.00119
Stddev	.00067	.0023	.00014	.00038	.00006	.02641	.00067	.00005	.00383
%RSD	35.534	.07997	28.358	34.062	.91937	71.169	383.77	3.1558	321.54

#1	-0.00235	2.9123	.00058	.00086	-0.00691	-.05578	.00065	.00157	-.00152
#2	-.00140	2.9156	.00039	.00140	-0.00682	-.01843	-.00030	.00150	.00390

Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Int. Std.	Y_2243	Y_3600	Y_3774						
Line	224.306 {450}	360.073 {94}	377.433 {89}						
Units	Cts/S	Cts/S	Cts/S						
Avg	2548.0	39143.	2284.4						
Stddev	22.8	138.	15.5						
%RSD	.89558	.35357	.67935						

#1	2564.1	39241.	2273.5						
#2	2531.8	39045.	2295.4						

Elem	Ag3280	Al1670	As1890	B_2089	Ba4554	Be3130	Bi2230	Ca3179	Cd2288
Line	328.068 {103}	167.079 {502}	189.042 {478}	208.959 {461}	455.403 {74}	313.042 {108}	223.061 {451}	317.933 {106}	228.802 {447}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	-0.00045	1.4996	-0.00300	.22371	.05057	.00035	.00424	69.066	.00026
Stddev	.00026	.0021	.00234	.00369	.00140	.00003	.00125	1.434	.00003
%RSD	58.620	.13665	77.932	1.6477	2.7627	7.9573	29.558	2.0766	10.471

#1	-0.00026	1.5010	-0.00465	.22632	.05156	.00033	.00512	70.080	.00027
#2	-0.00063	1.4981	-0.00135	.22110	.04958	.00037	.00335	68.052	.00024

Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Elem	Co2286	Cr2055	Cu3247	Fe2599	K_7664	Li6707	Mg2790	Mn2576	Mo2020
Line	228.616 {447}	205.560 {464}	324.754 {104}	259.940 {130}	766.490 {44}	670.784 {50}	279.079 {121}2	257.610 {131}	202.030 {467}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.00056	.00319	.00328	1.2867	6.6421	.10354	22.880	.02604	.00330
Stddev	.00035	.00024	.00008	.1437	.0112	.00476	.011	.00028	.00067
%RSD	62.093	7.6126	2.3339	11.164	.16807	4.5949	.04937	1.0898	20.307

#1	.00081	.00336	.00334	1.3883	6.6500	.10691	22.872	.02625	.00377
#2	.00031	.00301	.00323	1.1851	6.6342	.10018	22.888	.02584	.00283

Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Elem	Na8183	Ni2316	P_1782	Pb2203	S_1820	Sb2068	Se1960	Si2881	SiO2
Line	818.326 {41}	231.604 {446}	178.284 {489}	220.353 {453}	182.034 {485}	206.833 {463}	196.090 {472}	288.158 {117}	288.158 {117}2
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	81.673	.00195	.04920	.00021	47.016	-.00210	.01046	12.338	26.404
Stddev	1.288	.00004	.00125	.00033	.042	.00480	.00110	.534	1.144
%RSD	1.5768	2.1620	2.5487	154.52	.09013	228.58	10.556	4.3307	4.3307

#1	82.583	.00192	.05009	.00044	47.046	.00129	.01124	12.716	27.213
#2	80.762	.00198	.04831	-.00002	46.986	-.00549	.00968	11.961	25.596

Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Elem	Sn1899	Sr4077	Th2837	Ti3349	Ti1908	U_3701	V_2924	Zn2062	Zr3391
Line	189.989 {477}	407.771 {83}	283.730 {119}	334.904 {101}	190.856 {477}	370.152 {91}	292.402 {115}	206.200 {163}	339.198 {99}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.00014	1.7673	.00128	.03171	-.00090	.01812	.00431	.00459	.00248
Stddev	.00004	.0296	.00178	.00485	.00169	.01176	.00085	.00166	.00012
%RSD	30.169	1.6746	139.62	15.282	187.01	64.909	19.652	36.210	4.9094

#1	.00017	1.7882	.00002	.03513	-.00210	.00980	.00491	.00577	.00256
#2	.00011	1.7464	.00254	.02828	.00029	.02643	.00371	.00342	.00239

Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Int. Std.	Y_2243	Y_3600	Y_3774
Line	224.306 {450}	360.073 {94}	377.433 {89}
Units	Cts/S	Cts/S	Cts/S
Avg	2499.4	40972.	2315.3
Stddev	40.3	10.	7.9
%RSD	1.6132	.02327	.33984

#1	2527.9	40966.	2309.7
#2	2470.8	40979.	2320.9

Elem	Ag3280	Al1670	As1890	B_2089	Ba4554	Be3130	Bi2230	Ca3179	Cd2288
Line	328.068 {103}	167.079 {502}	189.042 {478}	208.959 {461}	455.403 {74}	313.042 {108}	223.061 {451}	317.933 {106}	228.802 {447}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	-.00054	.01126	-.00835	.23312	.05136	.00023	.00121	420.84	.00203
Stddev	.00008	.00002	.00021	.00112	.00068	.00010	.00015	5.72	.00002
%RSD	14.190	.19683	2.5369	.47948	1.3148	42.571	12.309	1.3583	.94207

#1	-.00049	.01127	-.00850	.23233	.05088	.00030	.00132	416.80	.00204
#2	-.00059	.01124	-.00820	.23391	.05184	.00016	.00111	424.88	.00201

Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Elem	Co2286	Cr2055	Cu3247	Fe2599	K_7664	Li6707	Mg2790	Mn2576	Mo2020
Line	228.616 {447}	205.560 {464}	324.754 {104}	259.940 {130}	766.490 {44}	670.784 {50}	279.079 {121}2	257.610 {131}	202.030 {467}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.00060	.00107	.00334	.02469	25.526	.86670	276.12	.05459	.00626
Stddev	.00012	.00034	.00080	.00090	.407	.00754	.66	.00013	.00045
%RSD	19.746	31.908	24.094	3.6502	1.5949	.87052	.23998	.23507	7.1248

#1	.00068	.00083	.00277	.02533	25.238	.86136	276.59	.05468	.00595
#2	.00051	.00131	.00391	.02405	25.814	.87203	275.65	.05450	.00658

Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Elem	Na8183	Ni2316	P_1782	Pb2203	S_1820	Sb2068	Se1960	Si2881	SiO2
Line	818.326 {41}	231.604 {446}	178.284 {489}	220.353 {453}	182.034 {485}	206.833 {463}	196.090 {472}	288.158 {117}	288.158 {117}2
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	W 2039.3	.01208	.14347	.00243	F 1611.6	.00098	.37449	6.9023	14.771
Stddev	39.3	.00112	.00512	.00069	3.7	.00515	.01057	.0162	.035
%RSD	1.9272	9.3065	3.5722	28.440	.22692	523.90	2.8218	.23445	.23445

#1	2011.5	.01128	.13984	.00292	1614.2	.00463	.36702	6.9137	14.795
#2	2067.1	.01287	.14709	.00194	1609.1	-.00266	.38196	6.8909	14.746

Check ?	Chk Warn	Chk Pass	Chk Pass	Chk Pass	Chk Fail	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit	500.00				200.00				
Low Limit	11.000				-.20000				

Elem	Sn1899	Sr4077	Th2837	Ti3349	Ti1908	U_3701	V_2924	Zn2062	Zr3391
Line	189.989 {477}	407.771 {83}	283.730 {119}	334.904 {101}	190.856 {477}	370.152 {91}	292.402 {115}	206.200 {163}	339.198 {99}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	-.00412	^ *****	-.00367	.00025	-.00097	.13425	-.00109	.00680	-.00069
Stddev	.00180	----	.00455	.00002	.00580	.01473	.00027	.00030	.00350
%RSD	43.645	----	124.15	9.4712	596.49	10.975	25.075	4.4685	503.85

#1	-.00285	14.078	-.00689	.00023	-.00507	.14466	-.00090	.00701	.00178
#2	-.00540	^ ----	-.00045	.00027	.00313	.12383	-.00129	.00658	-.00317

Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Int. Std.	Y_2243	Y_3600	Y_3774
Line	224.306 {450}	360.073 {94}	377.433 {89}
Units	Cts/S	Cts/S	Cts/S
Avg	2305.3	35612.	2148.7
Stddev	4.3	146.	19.8
%RSD	.18649	.41063	.92224

#1	2302.3	35509.	2162.7
#2	2308.4	35716.	2134.7

Sample Name: 280-82992-C-1-A Acquired: 5/18/2016 21:01:00 Type: Unk

Method: 6500_025(v6) Mode: CONC Corr. Factor: 1.000000

User: CRHOADES Prep Date: Custom ID2: Custom ID3:

Comment: 325053 6010B

Elem	Ag3280	Al1670	As1890	B_2089	Ba4554	Be3130	Bi2230	Ca3179	Cd2288
Line	328.068 {103}	167.079 {502}	189.042 {478}	208.959 {461}	455.403 { 74}	313.042 {108}	223.061 {451}	317.933 {106}	228.802 {447}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	-.00041	.22510	.00037	1.7968	.27153	.00028	.00318	121.78	.00133
Stddev	.00050	.00644	.00555	.0628	.00655	.00000	.00592	4.28	.00028
%RSD	122.56	2.8610	1495.0	3.4953	2.4107	.47358	186.32	3.5134	21.259

#1	-.00077	.22965	.00429	1.8412	.26690	.00028	.00736	118.75	.00153
#2	-.00005	.22055	-.00355	1.7524	.27616	.00028	-.00101	124.80	.00113

Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Elem	Co2286	Cr2055	Cu3247	Fe2599	K_7664	Li6707	Mg2790	Mn2576	Mo2020
Line	228.616 {447}	205.560 {464}	324.754 {104}	259.940 {130}	766.490 { 44}	670.784 { 50}	279.079 {121}2	257.610 {131}	202.030 {467}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.00680	.00337	.00202	.35979	12.804	.01320	175.98	.82683	.01708
Stddev	.00031	.00032	.00000	.00103	.063	.00144	.52	.00135	.00134
%RSD	4.5307	9.5007	.21253	.28567	.49037	10.943	.29368	.16290	7.8318

#1	.00702	.00360	.00202	.35906	12.760	.01422	176.34	.82778	.01803
#2	.00658	.00315	.00202	.36052	12.849	.01218	175.61	.82588	.01614

Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Elem	Na8183	Ni2316	P_1782	Pb2203	S_1820	Sb2068	Se1960	Si2881	SiO2
Line	818.326 { 41}	231.604 {446}	178.284 {489}	220.353 {453}	182.034 {485}	206.833 {463}	196.090 {472}	288.158 {117}	288.158 {117}2
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	157.81	.13166	.19511	-.00041	100.29	-.00263	.00602	17.021	36.425
Stddev	.27	.00393	.00509	.00032	3.20	.00449	.01029	.042	.089
%RSD	.17039	2.9864	2.6064	78.351	3.1881	171.13	171.02	.24437	.24437

#1	158.00	.13444	.19871	-.00018	102.55	-.00580	.01329	16.992	36.362
#2	157.62	.12888	.19152	-.00064	98.031	.00055	-.00126	17.050	36.488

Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Elem	Sn1899	Sr4077	Th2837	Ti3349	Ti1908	U_3701	V_2924	Zn2062	Zr3391
Line	189.989 {477}	407.771 { 83}	283.730 {119}	334.904 {101}	190.856 {477}	370.152 { 91}	292.402 {115}	206.200 {163}	339.198 { 99}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	-.00046	.86397	.01332	.00123	-.00382	.00601	.00090	.02382	-.00015
Stddev	.00161	.03050	.00155	.00026	.00022	.06866	.00048	.00067	.00532
%RSD	349.69	3.5301	11.602	21.162	5.6642	1142.8	53.192	2.8321	3440.0

#1	-.00160	.84241	.01441	.00142	-.00397	-.04254	.00124	.02335	.00361
#2	.00068	.88554	.01223	.00105	-.00367	.05456	.00056	.02430	-.00392

Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Int. Std.	Y_2243	Y_3600	Y_3774
Line	224.306 {450}	360.073 { 94}	377.433 { 89}
Units	Cts/S	Cts/S	Cts/S
Avg	2637.4	41091.	2335.5
Stddev	84.6	231.	97.6
%RSD	3.2082	.56313	4.1778

#1	2577.6	41255.	2404.5
#2	2697.2	40928.	2266.5

Elem	Ag3280	Al1670	As1890	B_2089	Ba4554	Be3130	Bi2230	Ca3179	Cd2288
Line	328.068 {103}	167.079 {502}	189.042 {478}	208.959 {461}	455.403 {74}	313.042 {108}	223.061 {451}	317.933 {106}	228.802 {447}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	-.00118	.02666	W -.01206	.20256	.01020	.00008	.00089	388.02	.00301
Stddev	.00000	.00066	.00516	.00274	.00063	.00019	.00481	13.69	.00053
%RSD	.00697	2.4609	42.778	1.3533	6.1516	238.53	540.30	3.5277	17.606

#1	-.00118	.02619	-.00841	.20450	.01065	-.00006	.00429	397.70	.00339
#2	-.00118	.02712	-.01570	.20063	.00976	.00022	-.00251	378.34	.00264

Check ?	Chk Pass	Chk Pass	Chk Warn	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit			10.000						
Low Limit			-.01000						

Elem	Co2286	Cr2055	Cu3247	Fe2599	K_7664	Li6707	Mg2790	Mn2576	Mo2020
Line	228.616 {447}	205.560 {464}	324.754 {104}	259.940 {130}	766.490 {44}	670.784 {50}	279.079 {121}2	257.610 {131}	202.030 {467}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.00036	.00107	.00407	.07669	25.273	1.0195	111.45	.61476	-.00044
Stddev	.00034	.00031	.00025	.00923	.004	.0091	157.98	.01594	.00069
%RSD	92.561	28.417	6.2625	12.036	.01697	.89411	141.75	2.5925	155.52

#1	.00060	.00129	.00389	.08321	25.270	1.0260	223.16	.60349	.00004
#2	.00013	.00086	.00425	.07016	25.276	1.0131	-.2557	.62603	-.00093

Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Elem	Na8183	Ni2316	P_1782	Pb2203	S_1820	Sb2068	Se1960	Si2881	SiO2
Line	818.326 {41}	231.604 {446}	178.284 {489}	220.353 {453}	182.034 {485}	206.833 {463}	196.090 {472}	288.158 {117}	288.158 {117}2
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	W 2147.9	.02059	.05328	.00365	F 1930.5	-.00221	-.00423	9.1138	19.504
Stddev	77.5	.00061	.00240	.00103	2.6	.00200	.00610	.1345	.288
%RSD	3.6066	2.9495	4.5098	28.164	.13368	90.355	144.22	1.4762	1.4762

#1	2202.7	.02102	.05498	.00292	1928.6	-.00362	.00008	9.2089	19.707
#2	2093.1	.02016	.05158	.00437	1932.3	-.00080	-.00854	9.0187	19.300

Check ?	Chk Warn	Chk Pass	Chk Pass	Chk Pass	Chk Fail	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit	500.00				200.00				
Low Limit	11.000				-.20000				

Elem	Sn1899	Sr4077	Th2837	Ti3349	Ti1908	U_3701	V_2924	Zn2062	Zr3391
Line	189.989 {477}	407.771 {83}	283.730 {119}	334.904 {101}	190.856 {477}	370.152 {91}	292.402 {115}	206.200 {163}	339.198 {99}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	-.00318	W 8.6078	-.00187	.00072	-.00417	.04020	-.00175	.01309	.00426
Stddev	.00168	.2717	.00129	.00069	.00224	.02242	.00027	.00104	.00123
%RSD	52.735	3.1560	68.859	95.433	53.643	55.777	15.297	7.9316	28.855

#1	-.00437	8.7998	-.00278	.00120	-.00259	.02434	-.00194	.01236	.00339
#2	-.00200	8.4157	-.00096	.00023	-.00576	.05605	-.00156	.01383	.00513

Check ?	Chk Pass	Chk Warn	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit		5.0000							
Low Limit		-.01000							

Int. Std.	Y_2243	Y_3600	Y_3774						
Line	224.306 {450}	360.073 {94}	377.433 {89}						
Units	Cts/S	Cts/S	Cts/S						
Avg	2316.7	36204.	2170.2						
Stddev	4.7	510.	122.7						
%RSD	.20156	1.4094	5.6552						

#1	2320.0	35843.	2083.4						
#2	2313.4	36564.	2257.0						

Elem	Ag3280	Al1670	As1890	B_2089	Ba4554	Be3130	Bi2230	Ca3179	Cd2288
Line	328.068 {103}	167.079 {502}	189.042 {478}	208.959 {461}	455.403 {74}	313.042 {108}	223.061 {451}	317.933 {106}	228.802 {447}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	-.00123	.04177	W -.01166	.42885	.01057	.00010	.00006	428.13	.00171
Stddev	.00051	.00083	.00184	.00042	.00025	.00025	.00024	1.14	.00051
%RSD	41.693	1.9888	15.820	.09788	2.3769	242.73	364.04	.26518	29.723

#1	-.00159	.04119	-.01297	.42855	.01040	.00028	.00023	427.33	.00135
#2	-.00087	.04236	-.01036	.42915	.01075	-.00007	-.00010	428.94	.00207

Check ?	Chk Pass	Chk Pass	Chk Warn	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit			10.000						
Low Limit			-.01000						

Elem	Co2286	Cr2055	Cu3247	Fe2599	K_7664	Li6707	Mg2790	Mn2576	Mo2020
Line	228.616 {447}	205.560 {464}	324.754 {104}	259.940 {130}	766.490 {44}	670.784 {50}	279.079 {121}2	257.610 {131}	202.030 {467}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	-.00046	.00079	.00264	.03403	19.381	.65908	199.16	.04777	.00067
Stddev	.00041	.00005	.00001	.00747	.125	.00361	.11	.00012	.00042
%RSD	89.575	6.0710	.23595	21.945	.64727	.54728	.05771	.24658	62.449

#1	-.00075	.00075	.00265	.03931	19.293	.66163	199.08	.04769	.00097
#2	-.00017	.00082	.00264	.02875	19.470	.65653	199.24	.04785	.00037

Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Elem	Na8183	Ni2316	P_1782	Pb2203	S_1820	Sb2068	Se1960	Si2881	SiO2
Line	818.326 {41}	231.604 {446}	178.284 {489}	220.353 {453}	182.034 {485}	206.833 {463}	196.090 {472}	288.158 {117}	288.158 {117}2
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	W 1244.0	.00581	.02398	-.00032	F 1394.0	-.00131	.01170	7.8505	16.800
Stddev	4.9	.00054	.00880	.00019	1.0	.00809	.00547	.0103	.022
%RSD	.39350	9.2517	36.706	61.430	.06932	619.67	46.712	.13060	.13060

#1	1240.6	.00619	.03020	-.00018	1394.7	-.00703	.01557	7.8432	16.784
#2	1247.5	.00543	.01776	-.00045	1393.4	.00442	.00784	7.8577	16.816

Check ?	Chk Warn	Chk Pass	Chk Pass	Chk Pass	Chk Fail	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit	500.00				200.00				
Low Limit	11.000				-.20000				

Elem	Sn1899	Sr4077	Th2837	Ti3349	Ti1908	U_3701	V_2924	Zn2062	Zr3391
Line	189.989 {477}	407.771 {83}	283.730 {119}	334.904 {101}	190.856 {477}	370.152 {91}	292.402 {115}	206.200 {163}	339.198 {99}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	-.00218	W 8.5969	-.00366	.00126	-.00367	.13923	-.00046	.00478	-.00159
Stddev	.00214	.0154	.00543	.00019	.00406	.14368	.00135	.00026	.00590
%RSD	98.268	.17924	148.38	15.220	110.74	103.20	294.63	5.4489	371.39

#1	-.00066	8.5860	-.00750	.00140	-.00654	.24082	.00050	.00497	.00258
#2	-.00369	8.6078	.00018	.00113	-.00080	.03763	-.00141	.00460	-.00576

Check ?	Chk Pass	Chk Warn	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit		5.0000							
Low Limit		-.01000							

Int. Std.	Y_2243	Y_3600	Y_3774						
Line	224.306 {450}	360.073 {94}	377.433 {89}						
Units	Cts/S	Cts/S	Cts/S						
Avg	2368.0	36342.	2184.7						
Stddev	3.6	202.	56.1						
%RSD	.15103	.55539	2.5658						

#1	2370.6	36199.	2224.3						
#2	2365.5	36485.	2145.1						

Elem	Ag3280	Al1670	As1890	B_2089	Ba4554	Be3130	Bi2230	Ca3179	Cd2288
Line	328.068 {103}	167.079 {502}	189.042 {478}	208.959 {461}	455.403 { 74}	313.042 {108}	223.061 {451}	317.933 {106}	228.802 {447}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	-.00082	.01937	-.00939	.22069	.00757	.00020	.00212	369.63	.00263
Stddev	.00024	.00086	.01564	.00427	.00035	.00025	.00051	4.08	.00011
%RSD	29.193	4.4332	166.63	1.9330	4.6717	125.94	23.940	1.1033	4.2253

#1	-.00099	.01876	.00167	.22371	.00782	.00038	.00176	372.51	.00271
#2	-.00065	.01998	-.02045	.21767	.00732	.00002	.00247	366.75	.00256

Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Elem	Co2286	Cr2055	Cu3247	Fe2599	K_7664	Li6707	Mg2790	Mn2576	Mo2020
Line	228.616 {447}	205.560 {464}	324.754 {104}	259.940 {130}	766.490 { 44}	670.784 { 50}	279.079 {121}2	257.610 {131}	202.030 {467}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.00042	.00032	.00297	.05160	24.307	.83879	120.36	.04233	.00021
Stddev	.00001	.00047	.00114	.00519	.206	.00077	171.53	.00031	.00033
%RSD	2.9135	146.68	38.248	10.061	.84553	.09139	142.51	.73045	156.98

#1	.00043	-.00001	.00217	.05527	24.162	.83933	241.65	.04211	.00044
#2	.00041	.00065	.00378	.04793	24.453	.83824	-.9269	.04255	-.00002

Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Elem	Na8183	Ni2316	P_1782	Pb2203	S_1820	Sb2068	Se1960	Si2881	SiO2
Line	818.326 { 41}	231.604 {446}	178.284 {489}	220.353 {453}	182.034 {485}	206.833 {463}	196.090 {472}	288.158 {117}	288.158 {117}2
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	W 1877.3	.01637	.03065	.00182	F 1849.8	.00161	-.00407	7.2595	15.535
Stddev	14.5	.00112	.00350	.00095	11.7	.00811	.01283	.0607	.130
%RSD	.77057	6.8233	11.416	52.333	.63175	504.68	315.26	.83584	.83584

#1	1887.5	.01716	.03312	.00115	1858.0	.00734	.00500	7.3024	15.627
#2	1867.1	.01558	.02817	.00250	1841.5	-.00413	-.01314	7.2166	15.443

Check ?	Chk Warn	Chk Pass	Chk Pass	Chk Pass	Chk Fail	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit	500.00				200.00				
Low Limit	11.000				-.20000				

Elem	Sn1899	Sr4077	Th2837	Ti3349	Ti1908	U_3701	V_2924	Zn2062	Zr3391
Line	189.989 {477}	407.771 { 83}	283.730 {119}	334.904 {101}	190.856 {477}	370.152 { 91}	292.402 {115}	206.200 {163}	339.198 { 99}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	-.00228	W 7.9464	-.00624	.00166	-.00644	.07034	-.00106	.02574	.00277
Stddev	.00026	.0688	.00144	.00026	.00203	.03179	.00033	.00096	.00087
%RSD	11.307	.86623	23.090	15.938	31.524	45.196	30.794	3.7114	31.539

#1	-.00210	7.9951	-.00522	.00147	-.00501	.09282	-.00083	.02506	.00215
#2	-.00246	7.8977	-.00725	.00185	-.00788	.04786	-.00129	.02641	.00338

Check ?	Chk Pass	Chk Warn	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit		5.0000							
Low Limit		-.01000							

Int. Std.	Y_2243	Y_3600	Y_3774						
Line	224.306 {450}	360.073 { 94}	377.433 { 89}						
Units	Cts/S	Cts/S	Cts/S						
Avg	2321.4	35451.	2158.5						
Stddev	16.4	397.	3.8						
%RSD	.70798	1.1189	.17485						

#1	2309.8	35732.	2155.9						
#2	2333.1	35171.	2161.2						

Elem	Ag3280	Al1670	As1890	B_2089	Ba4554	Be3130	Bi2230	Ca3179	Cd2288
Line	328.068 {103}	167.079 {502}	189.042 {478}	208.959 {461}	455.403 { 74}	313.042 {108}	223.061 {451}	317.933 {106}	228.802 {447}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	-0.00038	.46488	-0.00665	.31767	.01240	.00022	-0.00038	324.74	.00144
Stddev	.00043	.00506	.00361	.00601	.00025	.00007	.00113	.80	.00003
%RSD	111.20	1.0875	54.216	1.8932	2.0072	32.697	300.62	.24684	1.8389

#1	-0.00008	.46845	-0.00410	.32192	.01222	.00027	.00042	324.18	.00145
#2	-0.00068	.46130	-0.00920	.31342	.01257	.00017	-.00118	325.31	.00142

Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Elem	Co2286	Cr2055	Cu3247	Fe2599	K_7664	Li6707	Mg2790	Mn2576	Mo2020
Line	228.616 {447}	205.560 {464}	324.754 {104}	259.940 {130}	766.490 { 44}	670.784 { 50}	279.079 {121}2	257.610 {131}	202.030 {467}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	-0.00019	.00353	.00493	.34220	14.044	.31254	148.95	.01257	.00122
Stddev	.00031	.00005	.00065	.00091	.075	.00139	.50	.00002	.00102
%RSD	164.72	1.4856	13.177	.26640	.53744	.44402	.33694	.13138	83.635

#1	.00003	.00357	.00538	.34285	13.990	.31155	148.59	.01258	.00050
#2	-.00040	.00349	.00447	.34156	14.097	.31352	149.30	.01255	.00195

Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Elem	Na8183	Ni2316	P_1782	Pb2203	S_1820	Sb2068	Se1960	Si2881	SiO2
Line	818.326 { 41}	231.604 {446}	178.284 {489}	220.353 {453}	182.034 {485}	206.833 {463}	196.090 {472}	288.158 {117}	288.158 {117}2
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	205.98	.00265	.01122	.00064	F 598.57	-0.00135	.00568	8.6008	18.406
Stddev	1.51	.00039	.00272	.00052	.18	.00049	.00059	.0256	.055
%RSD	.73223	14.819	24.237	81.363	.02970	36.026	10.293	.29707	.29707

#1	204.92	.00292	.01314	.00101	598.44	-.00170	.00527	8.5827	18.367
#2	207.05	.00237	.00929	.00027	598.69	-.00101	.00610	8.6188	18.444

Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Fail	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit					200.00				
Low Limit					-.20000				

Elem	Sn1899	Sr4077	Th2837	Ti3349	Ti1908	U_3701	V_2924	Zn2062	Zr3391
Line	189.989 {477}	407.771 { 83}	283.730 {119}	334.904 {101}	190.856 {477}	370.152 { 91}	292.402 {115}	206.200 {163}	339.198 { 99}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	-0.00184	W 6.0953	-0.00443	.01282	-0.00527	.02605	-0.00031	.00314	.00260
Stddev	.00209	.0378	.00016	.00013	.00407	.01974	.00021	.00028	.00028
%RSD	113.48	.61952	3.5023	1.0234	77.261	75.779	65.307	8.8507	10.602

#1	-0.00332	6.0686	-0.00432	.01291	-0.00815	.01209	-0.00017	.00334	.00279
#2	-0.00036	6.1220	-0.00454	.01273	-0.00239	.04001	-0.00046	.00295	.00240

Check ?	Chk Pass	Chk Warn	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit		5.0000							
Low Limit		-.01000							

Int. Std.	Y_2243	Y_3600	Y_3774						
Line	224.306 {450}	360.073 { 94}	377.433 { 89}						
Units	Cts/S	Cts/S	Cts/S						
Avg	2515.4	39478.	2274.4						
Stddev	6.2	232.	10.5						
%RSD	.24552	.58877	.45977						

#1	2519.7	39643.	2267.0						
#2	2511.0	39314.	2281.8						

Sample Name: CCVH-3894253 Acquired: 5/18/2016 21:15:37 Type: QC
Method: 6500_025(v6) Mode: CONC Corr. Factor: 1.000000
User: CRHOADES Prep Date: Custom ID2: Custom ID3:
Comment:

Elem	Ag3280	Al3092	As1890	B_2089	Ba4554	Be3130	Bi2230	Ca3179	Cd2288	Co2286	Cr2055
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	-.00080	53.093	-.00614	.00419	-.00041	.00030	W 1.0878	.04401	-.00046	-.00099	.00025
Stddev	.00007	.001	.00260	.00058	.00062	.00007	.0188	.00260	.00033	.00024	.00005
%RSD	8.4673	.00247	42.327	13.902	150.38	22.941	1.7262	5.8964	71.278	23.997	20.919

#1	-.00076	53.092	-.00430	.00378	-.00085	.00025	1.1011	.04585	-.00069	-.00082	.00021
#2	-.00085	53.094	-.00798	.00461	.00003	.00035	1.0745	.04218	-.00023	-.00116	.00028

Check ?	None	Chk Pass	None	None	None	None	Chk Warn	None	None	None	None
Value							1.0000				
Range							5.0000%				

Elem	Cu3247	Fe2714	K_7664	Li6707	Mg2790	Mn2576	Mo2020	Na8183	Ni2316	P_1782	Pb2203
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	-.00131	49.332	.36971	.00380	.04251	-.00028	-.00182	253.84	.00112	.00565	-.00068
Stddev	.00029	.414	.03847	.00589	.00068	.00013	.00024	.90	.00084	.00029	.00002
%RSD	21.988	.83992	10.406	155.11	1.6004	47.440	13.293	.35462	75.485	5.1005	2.7630

#1	-.00111	49.039	.34250	.00797	.04203	-.00037	-.00165	253.20	.00171	.00545	-.00069
#2	-.00152	49.625	.39691	-.00037	.04299	-.00018	-.00199	254.47	.00052	.00585	-.00066

Check ?	None	Chk Pass	None	None	None	None	None	Chk Pass	None	None	None
Value											
Range											

Elem	S_1820	Sb2068	Se1960	Si2881	SiO2	Sn1899	Sr4077	Th2837	Ti3349	Ti1908	U_3701
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	F 5.6192	-.01100	.00865	-.02064	-.04417	.00073	.00173	W 4.5437	.00724	-.00397	W 10.661
Stddev	.0447	.00455	.00262	.03988	.08535	.00036	.00010	.0219	.00026	.00048	.057
%RSD	.79520	41.390	30.312	193.24	193.24	49.505	6.0148	.48256	3.5535	12.199	.53568

#1	5.6508	-.01421	.00680	.00756	.01618	.00048	.00181	4.5282	.00742	-.00431	10.701
#2	5.5876	-.00778	.01051	-.04884	-.10452	.00099	.00166	4.5592	.00706	-.00363	10.621

Check ?	Chk Fail	None	None	None	None	None	None	Chk Warn	None	None	Chk Warn
Value	5.0000							5.0000			10.000
Range	10.490%							-5.0000%			5.0000%

Elem	V_2924	Zn2062	Zr3391
Units	ppm	ppm	ppm
Avg	.00961	-.00042	.04971
Stddev	.00061	.00007	.00039
%RSD	6.3535	15.514	.77575

#1	.00918	-.00047	.04944
#2	.01004	-.00038	.04998

Check ?	None	None	None
Value			
Range			

Int. Std.	Y_2243	Y_3600	Y_3774
Units	Cts/S	Cts/S	Cts/S
Avg	2510.5	39254.	2167.3
Stddev	47.9	145.	23.9
%RSD	1.9086	.37060	1.1010

#1	2476.6	39357.	2184.2
#2	2544.4	39151.	2150.4

Sample Name: CCV-3894251 Acquired: 5/18/2016 21:18:14 Type: QC
Method: 6500_025(v6) Mode: CONC Corr. Factor: 1.000000
User: CRHOADES Prep Date: Custom ID2: Custom ID3:
Comment:

Elem	Ag3280	Al1670	As1890	B_2089	Ba4554	Be3130	Bi2230	Ca3179	Cd2288	Co2286	Cr2055	Cu3247	Fe2599
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.49035	.54751	1.0373	.49187	.50197	.45438	.00150	4.9200	.49296	.49903	.50526	.52155	2.3377
Stddev	.00236	.00997	.0237	.01021	.00320	.00235	.00067	.0139	.00048	.01142	.00932	.00287	.0117
%RSD	.48083	1.8203	2.2817	2.0748	.63828	.51634	44.784	.28255	.09768	2.2893	1.8445	.55102	.49877
#1	.48868	.54046	1.0206	.48466	.50423	.45604	.00103	4.9298	.49262	.49095	.49867	.51951	2.3460
#2	.49202	.55456	1.0540	.49909	.49970	.45273	.00198	4.9101	.49330	.50711	.51185	.52358	2.3295

Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	None	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Value													
Range													

Elem	K_7664	Li6707	Mg2790	Mn2576	Mo2020	Na5895	Ni2316	P_1782	Pb2203	S_1820	Sb2068	Se1960	Si2881
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	48.356	.96613	18.818	.45882	.51092	5.2350	.48808	.96769	1.0066	.35646	.98603	1.0646	4.7708
Stddev	.311	.00466	.115	.00207	.00889	.0075	.00907	.01363	.0187	.00626	.01584	.0169	.0992
%RSD	.64278	.48220	.61103	.45058	1.7394	.14284	1.8590	1.4083	1.8559	1.7548	1.6069	1.5872	2.0799
#1	48.575	.96942	18.737	.45736	.50464	5.2403	.48167	.95806	.99336	.35204	.97483	1.0527	4.7007
#2	48.136	.96284	18.900	.46028	.51721	5.2297	.49450	.97733	1.0198	.36088	.99724	1.0765	4.8410

Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	None	Chk Pass	Chk Pass	Chk Pass
Value													
Range													

Elem	SiO2	Sn1899	Sr4077	Th2837	Ti3349	Ti1908	U_3701	V_2924	Zn2062	Zr3391
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	10.210	1.0225	.46529	.00286	.45203	1.0567	-.03997	.47973	.45281	.51269
Stddev	.212	.0211	.00395	.00304	.00112	.0111	.00810	.00321	.00510	.00308
%RSD	2.0799	2.0635	.84873	106.37	.24843	1.0493	20.256	.66847	1.1263	.60036
#1	10.059	1.0076	.46808	.00071	.45124	1.0489	-.04569	.47747	.44921	.51051
#2	10.360	1.0374	.46250	.00500	.45283	1.0646	-.03424	.48200	.45642	.51487

Check ?	Chk Pass	Chk Pass	Chk Pass	None	Chk Pass	Chk Pass	None	Chk Pass	Chk Pass	Chk Pass
Value										
Range										

Int. Std.	Y_2243	Y_3600	Y_3774
Units	Cts/S	Cts/S	Cts/S
Avg	2535.1	40000.	2134.3
Stddev	50.4	184.	37.0
%RSD	1.9898	.45877	1.7320
#1	2570.8	39870.	2160.4
#2	2499.4	40130.	2108.2

Sample Name: CCB Acquired: 5/18/2016 21:20:47 Type: QC
 Method: 6500_025(v6) Mode: CONC Corr. Factor: 1.000000
 User: CRHOADES Prep Date: Custom ID2: Custom ID3:
 Comment:

Elem	Ag3280	Al1670	As1890	B_2089	Ba4554	Be3130	Bi2230	Ca3179	Cd2288	Co2286	Cr2055
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	-.00048	-.00050	-.00538	.00252	-.00094	.00013	-.00033	-.02620	-.00023	-.00016	-.00017
Stddev	.00012	.00022	.01076	.00067	.00032	.00006	.00348	.00726	.00016	.00013	.00005
%RSD	25.833	44.016	199.96	26.440	34.426	45.221	1059.5	27.714	69.094	82.882	31.369

#1	-.00039	-.00066	.00223	.00205	-.00071	.00009	-.00279	-.02107	-.00034	-.00006	-.00021
#2	-.00057	-.00034	-.01299	.00299	-.00117	.00017	.00213	-.03134	-.00012	-.00025	-.00013

Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit											
Low Limit											

Elem	Cu3247	Fe2599	K_7664	Li6707	Mg2790	Mn2576	Mo2020	Na5895	Ni2316	P_1782	Pb2203
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	-.00079	-.00197	.19198	.00126	-.00130	-.00001	.00164	W .37042	.00005	.00068	-.00212
Stddev	.00069	.00771	.03692	.00282	.00433	.00003	.00081	.00973	.00069	.00013	.00106
%RSD	86.592	391.84	19.233	223.68	333.81	198.23	49.580	2.6270	1473.3	18.481	49.767

#1	-.00128	.00348	.21809	-.00073	.00176	.00001	.00106	.36354	-.00044	.00077	-.00137
#2	-.00031	-.00742	.16587	.00325	-.00436	-.00003	.00221	.37730	.00054	.00059	-.00287

Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Warn	Chk Pass	Chk Pass	Chk Pass
High Limit								.35000			
Low Limit								-.35000			

Elem	S_1820	Sb2068	Se1960	Si2881	SiO2	Sn1899	Sr4077	Th2837	Ti3349	Ti1908	U_3701
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	F .26062	W .00377	.00642	.01304	.02790	-.00030	.00018	.00141	-.00003	.00106	-.03878
Stddev	.00547	.00133	.00589	.01770	.03787	.00155	.00005	.00014	.00040	.00171	.02811
%RSD	2.0986	35.210	91.719	135.71	135.71	508.39	26.165	9.7551	1585.5	161.28	72.470

#1	.26449	.00471	.01058	.00053	.00113	.00079	.00014	.00132	-.00031	.00227	-.01891
#2	.25676	.00283	.00226	.02555	.05468	-.00140	.00021	.00151	.00026	-.00015	-.05866

Check ?	Chk Fail	Chk Warn	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit	.10000	.00100									
Low Limit	-.20000	-.00100									

Elem	V_2924	Zn2062	Zr3391
Units	ppm	ppm	ppm
Avg	-.00020	-.00044	.00024
Stddev	.00025	.00012	.00135
%RSD	124.63	26.934	567.71

#1	-.00038	-.00036	.00119
#2	-.00002	-.00052	-.00072

Check ?	Chk Pass	Chk Pass	Chk Pass
High Limit			
Low Limit			

Int. Std.	Y_2243	Y_3600	Y_3774
Units	Cts/S	Cts/S	Cts/S
Avg	2546.7	41639.	2244.0
Stddev	88.2	15.	177.3
%RSD	3.4643	.03715	7.9034

#1	2609.1	41628.	2118.6
#2	2484.3	41650.	2369.4

Sample Name: CCVL-3897520 Acquired: 5/18/2016 21:23:10 Type: QC
Method: 6500_025(v6) Mode: CONC Corr. Factor: 1.000000
User: CRHOADES Prep Date: Custom ID2: Custom ID3:
Comment:

Elem	Ag3280	Al1670	As1890	B_2089	Ba4554	Be3130	Bi2230	Ca3179	Cd2288	Co2286	Cr2055
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.01015	.09999	F .00862	.08544	.00891	.00100	.10109	.16682	.00459	.00902	.00919
Stddev	.00028	.00381	.00084	.00249	.00079	.00002	.00107	.00662	.00029	.00035	.00069
%RSD	2.7604	3.8114	9.7245	2.9185	8.9033	1.5232	1.0579	3.9703	6.2886	3.8788	7.4636
#1	.01035	.10269	.00803	.08720	.00947	.00099	.10034	.17151	.00479	.00927	.00967
#2	.00995	.09730	.00922	.08368	.00835	.00101	.10185	.16214	.00438	.00877	.00870
Check ?	Chk Pass	Chk Pass	Chk Fail	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Value			.01500								
Range			-30.000%								
Elem	Cu3247	Fe2599	K_7664	Li6707	Mg2790	Mn2576	Mo2020	Na5895	Ni2316	P_1782	Pb2203
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.01513	.10150	3.0979	.01033	.19396	.00936	.01893	F 1.3217	.03662	2.6535	.00880
Stddev	.00052	.00177	.1870	.00035	.00712	.00013	.00057	.0181	.00172	.0701	.00032
%RSD	3.4286	1.7406	6.0364	3.3957	3.6704	1.3946	3.0222	1.3696	4.6855	2.6418	3.6478
#1	.01550	.10275	3.2302	.01008	.19899	.00945	.01933	1.3345	.03783	2.7031	.00857
#2	.01476	.10025	2.9657	.01058	.18892	.00926	.01852	1.3089	.03540	2.6040	.00902
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Fail	Chk Pass	Chk Pass	Chk Pass
Value								1.0000			
Range								30.000%			
Elem	S_1820	Sb2068	Se1960	Si2881	SiO2	Sn1899	Sr4077	Th2837	Ti3349	Ti1908	U_3701
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.23036	.02103	.01619	.47893	1.0249	.10001	.00989	.01771	.00896	.01345	F -.03351
Stddev	.01864	.00453	.00276	.02301	.0492	.00374	.00007	.00033	.00004	.00212	.00364
%RSD	8.0936	21.564	17.037	4.8044	4.8044	3.7361	.71195	1.8883	.48230	15.783	10.849
#1	.24355	.01782	.01424	.46266	.99009	.10265	.00994	.01795	.00899	.01495	-.03094
#2	.21718	.02424	.01814	.49520	1.0597	.09737	.00984	.01747	.00893	.01195	-.03608
Check ?	None	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Fail
Value											.06000
Range											-30.000%
Elem	V_2924	Zn2062	Zr3391								
Units	ppm	ppm	ppm								
Avg	.01035	.01710	.01061								
Stddev	.00127	.00064	.00097								
%RSD	12.322	3.7129	9.1351								
#1	.01125	.01755	.01130								
#2	.00945	.01666	.00993								
Check ?	Chk Pass	Chk Pass	Chk Pass								
Value											
Range											
Int. Std.	Y_2243	Y_3600	Y_3774								
Units	Cts/S	Cts/S	Cts/S								
Avg	2959.3	41090.	2326.5								
Stddev	89.8	226.	72.0								
%RSD	3.0339	.55056	3.0951								
#1	2895.8	41250.	2275.6								
#2	3022.8	40930.	2377.4								

Sample Name: MB 280-325228/1-A Acquired: 5/18/2016 21:25:51 Type: Unk

Method: 6500_025(v6) Mode: CONC Corr. Factor: 1.000000

User: CRHOADES Prep Date: 5/16 Custom ID2: Custom ID3:

Comment: 325228 6010B (As)

Elem	Ag3280	Al1670	As1890	B_2089	Ba4554	Be3130	Bi2230	Ca3179	Cd2288
Line	328.068 {103}	167.079 {502}	189.042 {478}	208.959 {461}	455.403 { 74}	313.042 {108}	223.061 {451}	317.933 {106}	228.802 {447}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	-0.00052	.00575	-0.00388	.00085	-0.00009	.00011	-0.00036	-0.00063	-0.00004
Stddev	.00025	.00043	.00303	.00083	.00009	.00010	.00460	.00432	.00039
%RSD	47.033	7.3887	78.205	97.609	97.237	87.439	1278.5	691.31	940.52

#1	-0.00070	.00545	-0.00603	.00144	-0.00015	.00019	.00290	-0.00368	-0.00032
#2	-0.00035	.00605	-0.00173	.00026	-0.00003	.00004	-0.00362	.00243	.00023

Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Elem	Co2286	Cr2055	Cu3247	Fe2599	K_7664	Li6707	Mg2790	Mn2576	Mo2020
Line	228.616 {447}	205.560 {464}	324.754 {104}	259.940 {130}	766.490 { 44}	670.784 { 50}	279.079 {121}2	257.610 {131}	202.030 {467}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	-0.00033	-0.00058	-0.00090	.02650	.10406	-0.00115	-0.00149	.00018	-0.00099
Stddev	.00006	.00022	.00029	.00201	.00360	.00124	.00239	.00005	.00034
%RSD	17.451	38.093	32.181	7.5946	3.4642	108.06	160.04	27.826	34.240

#1	-0.00037	-0.00073	-0.00069	.02508	.10661	-0.00203	.00020	.00014	-0.00123
#2	-0.00029	-0.00042	-0.00110	.02792	.10151	-0.00027	-0.00319	.00022	-0.00075

Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Elem	Na5895	Ni2316	P_1782	Pb2203	S_1820	Sb2068	Se1960	Si2881	SiO2
Line	589.592 { 57}	231.604 {446}	178.284 {489}	220.353 {453}	182.034 {485}	206.833 {463}	196.090 {472}	288.158 {117}	288.158 {117}2
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.31449	-0.00035	.00126	.00075	F .20550	.00451	W .00818	.01703	.03644
Stddev	.00375	.00056	.00032	.00076	.00562	.00142	.00530	.05546	.11869
%RSD	1.1939	159.98	25.273	101.06	2.7352	31.452	64.782	325.69	325.69

#1	.31184	-0.00074	.00104	.00128	.20947	.00351	.01192	-.02219	-.04748
#2	.31715	.00005	.00149	.00021	.20153	.00552	.00443	.05625	.12037

Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Fail	Chk Pass	Chk Warn	Chk Pass	None
High Limit					.10000		.00750		
Low Limit					-.10000		-.00750		

Elem	Sn1899	Sr4077	Th2837	Ti3349	Ti1908	U_3701	V_2924	Zn2062	Zr3391
Line	189.989 {477}	407.771 { 83}	283.730 {119}	334.904 {101}	190.856 {477}	370.152 { 91}	292.402 {115}	206.200 {163}	339.198 { 99}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.00143	.00039	.00092	-0.00010	-0.00607	-0.03560	.00057	.00073	.00058
Stddev	.00020	.00009	.00104	.00014	.00104	.08268	.00015	.00013	.00256
%RSD	13.817	22.391	112.89	138.30	17.176	232.23	26.862	17.673	444.50

#1	.00157	.00046	.00018	.00000	-0.00533	.02286	.00046	.00064	.00239
#2	.00129	.00033	.00165	-0.00019	-0.00681	-.09407	.00067	.00083	-.00123

Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Int. Std.	Y_2243	Y_3600	Y_3774
Line	224.306 {450}	360.073 { 94}	377.433 { 89}
Units	Cts/S	Cts/S	Cts/S
Avg	2733.8	42758.	2302.6
Stddev	68.9	29.	53.7
%RSD	2.5203	.06754	2.3340

#1	2685.1	42737.	2264.6
#2	2782.5	42778.	2340.6

Sample Name: LCS 280-325228/2-A Acquired: 5/18/2016 21:28:14 Type: Unk
Method: 6500_025(v6) Mode: CONC Corr. Factor: 1.000000
User: CRHOADES Prep Date: Custom ID2: Custom ID3:
Comment: 325228 6010B (As)

Elem	Ag3280	Al1670	As1890	B_2089	Ba4554	Be3130	Bi2230	Ca3179	Cd2288
Line	328.068 {103}	167.079 {502}	189.042 {478}	208.959 {461}	455.403 {74}	313.042 {108}	223.061 {451}	317.933 {106}	228.802 {447}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.05049	2.0865	1.0566	.97997	2.0459	.04632	2.1786	48.832	.09652
Stddev	.00056	.0402	.0203	.01858	.1058	.00200	.0309	2.510	.00216
%RSD	1.1028	1.9275	1.9209	1.8959	5.1689	4.3279	1.4174	5.1406	2.2407

#1	.05088	2.0580	1.0422	.96683	1.9712	.04490	2.1568	47.057	.09499
#2	.05009	2.1149	1.0709	.99310	2.1207	.04774	2.2005	50.607	.09805

Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	None	Chk Pass	Chk Pass
High Limit									
Low Limit									

Elem	Co2286	Cr2055	Cu3247	Fe2599	K_7664	Li6707	Mg2790	Mn2576	Mo2020
Line	228.616 {447}	205.560 {464}	324.754 {104}	259.940 {130}	766.490 {44}	670.784 {50}	279.079 {121}2	257.610 {131}	202.030 {467}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.47331	.19604	.26438	.93721	48.847	.96111	47.730	.45543	1.0295
Stddev	.00900	.00269	.00036	.02161	2.575	.01193	.184	.00249	.0167
%RSD	1.9012	1.3727	.13802	2.3062	5.2706	1.2410	.38599	.54765	1.6175

#1	.46694	.19414	.26464	.92192	47.026	.95268	47.599	.45367	1.0177
#2	.47967	.19794	.26412	.95249	50.667	.96955	47.860	.45720	1.0413

Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Elem	Na8183	Ni2316	P_1782	Pb2203	S_1820	Sb2068	Se1960	Si2881	SiO2
Line	818.326 {41}	231.604 {446}	178.284 {489}	220.353 {453}	182.034 {485}	206.833 {463}	196.090 {472}	288.158 {117}	288.158 {117}2
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	53.665	.46473	9.8452	.48917	2.2377	.50486	2.1955	9.5367	20.408
Stddev	.012	.00696	.1659	.00979	.0511	.00734	.0120	.0805	.172
%RSD	.02294	1.4983	1.6849	2.0021	2.2828	1.4534	.54513	.84462	.84462

#1	53.674	.45981	9.7279	.48224	2.2016	.49967	2.1870	9.4797	20.287
#2	53.656	.46966	9.9625	.49609	2.2739	.51005	2.2039	9.5936	20.530

Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	None	Chk Pass	Chk Pass	Chk Pass	None
High Limit									
Low Limit									

Elem	Sn1899	Sr4077	Th2837	Ti3349	Ti1908	U_3701	V_2924	Zn2062	Zr3391
Line	189.989 {477}	407.771 {83}	283.730 {119}	334.904 {101}	190.856 {477}	370.152 {91}	292.402 {115}	206.200 {163}	339.198 {99}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	2.0136	.92984	.93169	.91331	1.9460	2.1097	.47328	.44910	.52909
Stddev	.0012	.04900	.00330	.00451	.0465	.0109	.00326	.00815	.00086
%RSD	.05832	5.2698	.35444	.49426	2.3875	.51844	.68932	1.8149	.16319

#1	2.0127	.89519	.93402	.91012	1.9788	2.1175	.47098	.44334	.52848
#2	2.0144	.96449	.92935	.91650	1.9131	2.1020	.47559	.45487	.52970

Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Int. Std.	Y_2243	Y_3600	Y_3774
Line	224.306 {450}	360.073 {94}	377.433 {89}
Units	Cts/S	Cts/S	Cts/S
Avg	2631.6	41427.	2305.7
Stddev	73.4	310.	124.6
%RSD	2.7903	.74917	5.4034

#1	2683.6	41646.	2393.8
#2	2579.7	41207.	2217.6

Sample Name: 280-82937-A-1-A Acquired: 5/18/2016 21:30:41 Type: Unk

Method: 6500_025(v6) Mode: CONC Corr. Factor: 1.000000

User: CRHOADES Prep Date: Custom ID2: Custom ID3:

Comment: 325228 6010B (As)

Elem	Ag3280	Al1670	As1890	B_2089	Ba4554	Be3130	Bi2230	Ca3179	Cd2288
Line	328.068 {103}	167.079 {502}	189.042 {478}	208.959 {461}	455.403 { 74}	313.042 {108}	223.061 {451}	317.933 {106}	228.802 {447}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.00000	.00395	.00177	.12831	.01407	.00012	.00523	342.00	.00089
Stddev	.0008	.00074	.00502	.00014	.00092	.00007	.00220	17.59	.00010
%RSD	19612.	18.743	284.00	.10629	6.5291	61.240	42.070	5.1432	11.410

#1	.00057	.00343	.00532	.12840	.01472	.00017	.00367	354.44	.00082
#2	-.00058	.00448	-.00178	.12821	.01342	.00007	.00679	329.56	.00096

Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Elem	Co2286	Cr2055	Cu3247	Fe2599	K_7664	Li6707	Mg2790	Mn2576	Mo2020
Line	228.616 {447}	205.560 {464}	324.754 {104}	259.940 {130}	766.490 { 44}	670.784 { 50}	279.079 {121}2	257.610 {131}	202.030 {467}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	-.00050	.00076	.00163	.00377	2.2292	.02693	65.862	.00037	.00453
Stddev	.00000	.00004	.00003	.00260	.0286	.00004	.025	.00000	.00102
%RSD	.20679	4.7926	1.9774	68.836	1.2814	.16034	.03761	.02087	22.613

#1	-.00050	.00079	.00165	.00561	2.2494	.02690	65.844	.00037	.00380
#2	-.00050	.00074	.00161	.00194	2.2090	.02696	65.879	.00037	.00525

Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Elem	Na8183	Ni2316	P_1782	Pb2203	S_1820	Sb2068	Se1960	Si2881	SiO2
Line	818.326 { 41}	231.604 {446}	178.284 {489}	220.353 {453}	182.034 {485}	206.833 {463}	196.090 {472}	288.158 {117}	288.158 {117}2
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	288.74	.00176	.01361	-.00029	F 441.84	.00181	.04592	10.132	21.682
Stddev	3.99	.00054	.00145	.00001	2.39	.00566	.00123	.046	.099
%RSD	1.3805	30.669	10.630	2.2428	.54141	312.78	2.6718	.45612	.45612

#1	291.56	.00138	.01463	-.00029	443.54	-.00219	.04679	10.165	21.752
#2	285.92	.00214	.01258	-.00030	440.15	.00581	.04505	10.099	21.612

Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Fail	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit					200.00				
Low Limit					-.20000				

Elem	Sn1899	Sr4077	Th2837	Ti3349	Ti1908	U_3701	V_2924	Zn2062	Zr3391
Line	189.989 {477}	407.771 { 83}	283.730 {119}	334.904 {101}	190.856 {477}	370.152 { 91}	292.402 {115}	206.200 {163}	339.198 { 99}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	-.00199	W 6.2039	.00147	-.00010	.01749	-.00518	.00057	.00198	-.00052
Stddev	.00377	.3211	.00350	.00010	.01234	.07025	.00052	.00021	.00041
%RSD	189.27	5.1758	238.06	104.68	70.549	1355.4	90.632	10.450	79.111

#1	.00067	6.4310	.00394	-.00003	.00876	-.05486	.00021	.00183	-.00023
#2	-.00466	5.9769	-.00100	-.00017	.02621	.04449	.00094	.00212	-.00081

Check ?	Chk Pass	Chk Warn	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit		5.0000							
Low Limit		-.01000							

Int. Std.	Y_2243	Y_3600	Y_3774						
Line	224.306 {450}	360.073 { 94}	377.433 { 89}						
Units	Cts/S	Cts/S	Cts/S						
Avg	2538.5	39126.	2255.9						
Stddev	58.8	94.	107.1						
%RSD	2.3144	.23978	4.7470						

#1	2496.9	39060.	2180.2						
#2	2580.0	39193.	2331.7						

Sample Name: 280-82937-A-2-A Acquired: 5/18/2016 21:33:21 Type: Unk

Method: 6500_025(v6) Mode: CONC Corr. Factor: 1.000000

User: CRHOADES Prep Date: Custom ID2: Custom ID3:

Comment: 325228 6010B (As)

Elem	Ag3280	Al1670	As1890	B_2089	Ba4554	Be3130	Bi2230	Ca3179	Cd2288
Line	328.068 {103}	167.079 {502}	189.042 {478}	208.959 {461}	455.403 {74}	313.042 {108}	223.061 {451}	317.933 {106}	228.802 {447}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.00048	.00219	-.00655	.05119	.01226	.00007	.00394	80.769	-.00009
Stddev	.00010	.00103	.00361	.00040	.00063	.00001	.00096	.263	.00015
%RSD	21.489	47.040	55.067	.78639	5.1079	11.200	24.435	.32623	166.96

#1	.00055	.00291	-.00910	.05148	.01270	.00007	.00462	80.582	-.00019
#2	.00041	.00146	-.00400	.05091	.01182	.00008	.00326	80.955	.00002

Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Elem	Co2286	Cr2055	Cu3247	Fe2599	K_7664	Li6707	Mg2790	Mn2576	Mo2020
Line	228.616 {447}	205.560 {464}	324.754 {104}	259.940 {130}	766.490 {44}	670.784 {50}	279.079 {121}2	257.610 {131}	202.030 {467}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	-.00030	.00004	.00006	.04939	3.7650	.00486	4.9352	.10405	.00069
Stddev	.00020	.00024	.00006	.00169	.0054	.00668	.0203	.00059	.00051
%RSD	65.126	593.73	92.469	3.4264	.14453	137.22	.41086	.56834	74.993

#1	-.00016	.00021	.00010	.04820	3.7612	.00014	4.9495	.10447	.00032
#2	-.00044	-.00013	.00002	.05059	3.7688	.00958	4.9209	.10363	.00105

Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Elem	Na8183	Ni2316	P_1782	Pb2203	S_1820	Sb2068	Se1960	Si2881	SiO2
Line	818.326 {41}	231.604 {446}	178.284 {489}	220.353 {453}	182.034 {485}	206.833 {463}	196.090 {472}	288.158 {117}	288.158 {117}2
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	102.11	-.00012	.00338	.00012	96.688	.00181	.00255	4.6852	10.026
Stddev	.20	.00045	.00071	.00021	.854	.00056	.00048	.0561	.120
%RSD	.19511	371.68	20.975	176.70	.88315	30.996	18.866	1.1962	1.1962

#1	101.97	-.00044	.00288	.00027	97.291	.00141	.00289	4.7248	10.111
#2	102.25	.00020	.00388	-.00003	96.084	.00220	.00221	4.6455	9.9415

Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Elem	Sn1899	Sr4077	Th2837	Ti3349	Ti1908	U_3701	V_2924	Zn2062	Zr3391
Line	189.989 {477}	407.771 {83}	283.730 {119}	334.904 {101}	190.856 {477}	370.152 {91}	292.402 {115}	206.200 {163}	339.198 {99}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	-.00127	1.8381	.00216	.00009	.00153	-.02156	.00003	.00114	.00096
Stddev	.00089	.0087	.00555	.00043	.00195	.09644	.00029	.00020	.00183
%RSD	70.472	.47292	257.32	490.24	127.68	447.35	910.89	17.510	190.12

#1	-.00064	1.8319	.00608	-.00022	.00015	-.08975	-.00017	.00128	-.00033
#2	-.00190	1.8442	-.00177	.00039	.00291	.04664	.00024	.00100	.00226

Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Int. Std.	Y_2243	Y_3600	Y_3774
Line	224.306 {450}	360.073 {94}	377.433 {89}
Units	Cts/S	Cts/S	Cts/S
Avg	2593.3	40993.	2121.5
Stddev	94.6	283.	24.6
%RSD	3.6488	.69052	1.1614

#1	2526.3	41194.	2138.9
#2	2660.2	40793.	2104.1

Sample Name: 280-82988-B-1-A Acquired: 5/18/2016 21:36:00 Type: Unk

Method: 6500_025(v6) Mode: CONC Corr. Factor: 1.000000

User: CRHOADES Prep Date: Custom ID2: Custom ID3:

Comment: 325228 6010B (As)

Elem	Ag3280	Al1670	As1890	B_2089	Ba4554	Be3130	Bi2230	Ca3179	Cd2288
Line	328.068 {103}	167.079 {502}	189.042 {478}	208.959 {461}	455.403 {74}	313.042 {108}	223.061 {451}	317.933 {106}	228.802 {447}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	-0.00036	.00301	-0.00004	.06066	.06946	.00012	-0.00104	233.15	.00032
Stddev	.00086	.00070	.00290	.00304	.00022	.00022	.00228	.57	.00023
%RSD	241.67	23.325	7645.7	5.0137	.31774	186.62	219.98	.24404	71.712

#1	.00025	.00251	-.00209	.05851	.06930	.00028	-.00265	233.55	.00049
#2	-.00096	.00350	.00201	.06281	.06961	-.00004	.00058	232.74	.00016

Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Elem	Co2286	Cr2055	Cu3247	Fe2599	K_7664	Li6707	Mg2790	Mn2576	Mo2020
Line	228.616 {447}	205.560 {464}	324.754 {104}	259.940 {130}	766.490 {44}	670.784 {50}	279.079 {121}2	257.610 {131}	202.030 {467}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.00005	.00048	.00146	.03770	6.1382	.05647	30.802	.09813	.00118
Stddev	.00020	.00016	.00044	.00295	.0161	.00182	.011	.00017	.00039
%RSD	388.94	33.690	30.381	7.8191	.26194	3.2207	.03634	.17230	33.309

#1	.00019	.00036	.00115	.03562	6.1495	.05518	30.794	.09825	.00091
#2	-.00009	.00059	.00178	.03979	6.1268	.05775	30.809	.09801	.00146

Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Elem	Na8183	Ni2316	P_1782	Pb2203	S_1820	Sb2068	Se1960	Si2881	SiO2
Line	818.326 {41}	231.604 {446}	178.284 {489}	220.353 {453}	182.034 {485}	206.833 {463}	196.090 {472}	288.158 {117}	288.158 {117}2
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	174.01	.00197	.02440	-0.00015	158.37	-0.00022	.00564	5.2199	11.171
Stddev	.03	.00042	.00155	.00075	5.44	.00167	.00400	.0435	.093
%RSD	.01538	21.280	6.3559	519.71	3.4366	747.78	70.859	.83345	.83345

#1	173.99	.00227	.02331	-.00068	154.52	.00096	.00847	5.1891	11.105
#2	174.03	.00167	.02550	.00039	162.22	-.00141	.00282	5.2506	11.236

Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Elem	Sn1899	Sr4077	Th2837	Ti3349	Ti1908	U_3701	V_2924	Zn2062	Zr3391
Line	189.989 {477}	407.771 {83}	283.730 {119}	334.904 {101}	190.856 {477}	370.152 {91}	292.402 {115}	206.200 {163}	339.198 {99}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	-0.00088	3.2447	-0.00195	-0.00009	-0.00535	.00435	.00117	.00626	-0.00122
Stddev	.00176	.0025	.00208	.00050	.00042	.02086	.00002	.00134	.00123
%RSD	199.27	.07598	106.58	566.16	7.9210	479.64	1.5195	21.462	101.36

#1	-.00212	3.2465	-.00342	-.00044	-.00505	.01910	.00116	.00531	-.00034
#2	.00036	3.2430	-.00048	.00027	-.00565	-.01040	.00119	.00721	-.00209

Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Int. Std.	Y_2243	Y_3600	Y_3774
Line	224.306 {450}	360.073 {94}	377.433 {89}
Units	Cts/S	Cts/S	Cts/S
Avg	2717.0	40006.	2187.8
Stddev	91.8	89.	13.1
%RSD	3.3772	.22296	.60027

#1	2781.9	39943.	2178.5
#2	2652.1	40069.	2197.1

Sample Name: 280-82988-B-1-A SD@5 Acquired: 5/18/2016 21:38:39 Type: Unk
Method: 6500_025(v6) Mode: CONC Corr. Factor: 1.000000
User: CRHOADES Prep Date: Custom ID2: Custom ID3:
Comment: 325228 6010B (As)

Elem	Ag3280	Al1670	As1890	B_2089	Ba4554	Be3130	Bi2230	Ca3179	Cd2288
Line	328.068 {103}	167.079 {502}	189.042 {478}	208.959 {461}	455.403 { 74}	313.042 {108}	223.061 {451}	317.933 {106}	228.802 {447}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.00023	.00052	-.00447	.01278	.01261	.00033	.00215	44.725	.00009
Stddev	.00014	.00047	.00647	.00069	.00048	.00016	.00253	.634	.00017
%RSD	59.812	90.170	144.71	5.3652	3.8154	49.421	117.69	1.4183	202.37

#1	.00013	.00086	.00010	.01230	.01227	.00044	.00036	44.277	.00021
#2	.00032	.00019	-.00905	.01326	.01295	.00021	.00394	45.174	-.00004

Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Elem	Co2286	Cr2055	Cu3247	Fe2599	K_7664	Li6707	Mg2790	Mn2576	Mo2020
Line	228.616 {447}	205.560 {464}	324.754 {104}	259.940 {130}	766.490 { 44}	670.784 { 50}	279.079 {121}2	257.610 {131}	202.030 {467}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.00011	-.00010	.05574	.01613	1.2472	.01053	6.3233	.01972	-.00012
Stddev	.00015	.00031	.00067	.00077	.0238	.00226	.0041	.00004	.00003
%RSD	133.02	308.54	1.2039	4.7514	1.9108	21.421	.06492	.21750	25.384

#1	.00001	.00012	.05622	.01559	1.2641	.01213	6.3262	.01975	-.00010
#2	.00021	-.00032	.05527	.01667	1.2304	.00894	6.3204	.01969	-.00014

Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Elem	Na8183	Ni2316	P_1782	Pb2203	S_1820	Sb2068	Se1960	Si2881	SiO2
Line	818.326 { 41}	231.604 {446}	178.284 {489}	220.353 {453}	182.034 {485}	206.833 {463}	196.090 {472}	288.158 {117}	288.158 {117}2
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	36.061	-.00018	.00625	.00004	33.149	.00423	.00374	1.0352	2.2153
Stddev	1.082	.00013	.00639	.00067	.597	.00213	.00304	.0125	.0268
%RSD	3.0009	70.767	102.17	1849.5	1.8009	50.339	81.238	1.2102	1.2102

#1	35.296	-.00009	.01077	-.00044	32.727	.00272	.00589	1.0263	2.1963
#2	36.826	-.00027	.00174	.00051	33.572	.00573	.00159	1.0440	2.2342

Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Elem	Sn1899	Sr4077	Th2837	Ti3349	Ti1908	U_3701	V_2924	Zn2062	Zr3391
Line	189.989 {477}	407.771 { 83}	283.730 {119}	334.904 {101}	190.856 {477}	370.152 { 91}	292.402 {115}	206.200 {163}	339.198 { 99}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.00147	.61601	.00091	.00007	-.00224	W -.07011	.00028	.00203	-.00059
Stddev	.00067	.00994	.00192	.00042	.00733	.02013	.00054	.00030	.00018
%RSD	45.851	1.6135	211.67	604.98	327.05	28.711	190.11	14.938	31.206

#1	.00099	.60898	.00226	.00036	.00294	-.05587	.00066	.00182	-.00072
#2	.00194	.62304	-.00045	-.00023	-.00742	-.08434	-.00010	.00225	-.00046

Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Warn	Chk Pass	Chk Pass	Chk Pass
High Limit						45.000			
Low Limit						-.05000			

Int. Std.	Y_2243	Y_3600	Y_3774
Line	224.306 {450}	360.073 { 94}	377.433 { 89}
Units	Cts/S	Cts/S	Cts/S
Avg	2633.4	41758.	2397.9
Stddev	35.0	548.	43.6
%RSD	1.3304	1.3127	1.8175

#1	2658.2	41370.	2428.7
#2	2608.7	42145.	2367.1

Sample Name: 280-82988-B-1-B MS Acquired: 5/18/2016 21:41:19 Type: Unk
Method: 6500_025(v6) Mode: CONC Corr. Factor: 1.000000
User: CRHOADES Prep Date: Custom ID2: Custom ID3:
Comment: 325228 6010B (As)

Elem	Ag3280	Al1670	Al3092	As1890	B_2089	Ba4554	Be3130	Bi2230	Ca3179
Line	328.068 {103}	167.079 {502}	309.271 {109}	189.042 {478}	208.959 {461}	455.403 { 74}	313.042 {108}	223.061 {451}	317.933 {106}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.05024	2.0939	W 2.4670	1.1244	1.0702	2.1422	.04666	F 2.2238	283.22
Stddev	.00058	.0099	.0262	.0077	.0010	.0120	.00003	.0037	2.09
%RSD	1.1514	.47142	1.0615	.68475	.08916	.55807	.07456	.16659	.73618

#1	.04983	2.1009	2.4855	1.1298	1.0695	2.1506	.04669	2.2264	284.69
#2	.05065	2.0869	2.4485	1.1189	1.0708	2.1337	.04664	2.2212	281.74

Check ?	Chk Pass	Chk Pass	Chk Warn	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Fail	Chk Pass
High Limit			500.00					.10000	
Low Limit			3.2000					-.10000	

Elem	Cd2288	Co2286	Cr2055	Cu3247	Fe2599	K_7664	Li6707	Mg2790	Mn2576
Line	228.802 {447}	228.616 {447}	205.560 {464}	324.754 {104}	259.940 {130}	766.490 { 44}	670.784 { 50}	279.079 {121}2	257.610 {131}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.10099	.47707	.20065	.26808	.97198	56.321	1.0433	77.735	.54725
Stddev	.00026	.00041	.00090	.00067	.01247	.260	.0072	.114	.00108
%RSD	.25723	.08616	.45098	.25036	1.2827	.46189	.68955	.14702	.19794

#1	.10118	.47736	.20001	.26855	.96316	56.504	1.0382	77.816	.54649
#2	.10081	.47678	.20129	.26760	.98079	56.137	1.0484	77.654	.54802

Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Elem	Mo2020	Na8183	Ni2316	P_1782	Pb2203	S_1820	Sb2068	Se1960	Si2881
Line	202.030 {467}	818.326 { 41}	231.604 {446}	178.284 {489}	220.353 {453}	182.034 {485}	206.833 {463}	196.090 {472}	288.158 {117}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	1.0623	228.79	.46658	W 10.512	.49076	171.80	.52186	2.2296	15.011
Stddev	.0031	1.48	.00018	.021	.00363	.79	.00018	.0119	.073
%RSD	.29086	.64772	.03882	.20172	.73890	.46223	.03450	.53381	.48658

#1	1.0645	227.74	.46646	10.527	.49332	172.36	.52173	2.2380	14.959
#2	1.0602	229.83	.46671	10.497	.48820	171.24	.52199	2.2212	15.062

Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Warn	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit				2.0000					
Low Limit				-1.0000					

Elem	SiO2	Sn1899	Sr4077	Th2837	Ti3349	Ti1908	U_3701	V_2924	Zn2062
Line	288.158 {117}2	189.989 {477}	407.771 { 83}	283.730 {119}	334.904 {101}	190.856 {477}	370.152 { 91}	292.402 {115}	206.200 {163}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	32.123	W 2.0068	4.2148	.93408	.91313	1.7857	2.1438	.47595	.44418
Stddev	.156	.0069	.0008	.00125	.00021	.0648	.0393	.00258	.00212
%RSD	.48658	.34289	.01774	.13391	.02332	3.6300	1.8342	.54299	.47792

#1	32.012	2.0117	4.2153	.93496	.91298	1.8315	2.1160	.47412	.44568
#2	32.233	2.0020	4.2142	.93319	.91328	1.7398	2.1716	.47777	.44268

Check ?	Chk Pass	Chk Warn	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit		2.0000							
Low Limit		-.05000							

Elem	Zr3391
Line	339.198 { 99}
Units	ppm
Avg	.53147
Stddev	.00778
%RSD	1.4645

#1	.52596
#2	.53697

Check ?	Chk Pass
High Limit	
Low Limit	

Sample Name: 280-82988-B-1-B MS Acquired: 5/18/2016 21:41:19 Type: Unk
 Method: 6500_025(v6) Mode: CONC Corr. Factor: 1.000000
 User: CRHOADES Prep Date: Custom ID2: Custom ID3:
 Comment: 325228 6010B (As)

Int. Std.	Y_2243	Y_3600	Y_3774
Line	224.306 {450}	360.073 { 94}	377.433 { 89}
Units	Cts/S	Cts/S	Cts/S
Avg	2519.6	39951.	2204.5
Stddev	12.6	294.	41.1
%RSD	.50158	.73633	1.8633
#1	2510.6	40159.	2175.4
#2	2528.5	39743.	2233.5

Sample Name: 280-82988-B-1-C MSD Acquired: 5/18/2016 21:43:46 Type: Unk
Method: 6500_025(v6) Mode: CONC Corr. Factor: 1.000000
User: CRHOADES Prep Date: Custom ID2: Custom ID3:
Comment: 325228 6010B (As)

Elem	Ag3280	Al1670	Al3092	As1890	B_2089	Ba4554	Be3130	Bi2230	Ca3179
Line	328.068 {103}	167.079 {502}	309.271 {109}	189.042 {478}	208.959 {461}	455.403 { 74}	313.042 {108}	223.061 {451}	317.933 {106}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.05044	2.1942	W 2.6948	1.1160	1.0726	2.1985	.04722	F 2.2327	285.43
Stddev	.00094	.0222	.0418	.0004	.0050	.0074	.00053	.0050	.35
%RSD	1.8586	1.0131	1.5507	.03700	.46271	.33816	1.1208	.22548	.12101

#1	.04978	2.1785	2.7243	1.1157	1.0691	2.1933	.04685	2.2291	285.18
#2	.05111	2.2099	2.6652	1.1162	1.0761	2.2038	.04760	2.2362	285.67

Check ?	Chk Pass	Chk Pass	Chk Warn	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Fail	Chk Pass
High Limit			500.00					.10000	
Low Limit			3.2000					-.10000	

Elem	Cd2288	Co2286	Cr2055	Cu3247	Fe2599	K_7664	Li6707	Mg2790	Mn2576
Line	228.802 {447}	228.616 {447}	205.560 {464}	324.754 {104}	259.940 {130}	766.490 { 44}	670.784 { 50}	279.079 {121}2	257.610 {131}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.10049	.47515	.19889	.26748	1.0842	57.519	1.0363	77.046	.54607
Stddev	.00077	.00127	.00015	.00039	.0011	.097	.0040	.084	.00124
%RSD	.76456	.26670	.07779	.14743	.10033	.16839	.38842	.10938	.22754

#1	.09995	.47425	.19878	.26720	1.0850	57.451	1.0334	77.106	.54695
#2	.10104	.47605	.19900	.26776	1.0835	57.588	1.0391	76.987	.54520

Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Elem	Mo2020	Na8183	Ni2316	P_1782	Pb2203	S_1820	Sb2068	Se1960	Si2881
Line	202.030 {467}	818.326 { 41}	231.604 {446}	178.284 {489}	220.353 {453}	182.034 {485}	206.833 {463}	196.090 {472}	288.158 {117}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	1.0638	226.40	.46708	W 10.504	.48902	167.62	.52259	2.2517	14.904
Stddev	.0021	.11	.00191	.058	.00367	2.55	.00647	.0001	.004
%RSD	.19835	.04740	.40937	.55001	.75150	1.5194	1.2373	.00615	.02651

#1	1.0623	226.48	.46572	10.463	.48642	165.82	.51802	2.2516	14.907
#2	1.0653	226.33	.46843	10.545	.49162	169.42	.52717	2.2518	14.901

Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Warn	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit				2.0000					
Low Limit				-1.0000					

Elem	SiO2	Sn1899	Sr4077	Th2837	Ti3349	Ti1908	U_3701	V_2924	Zn2062
Line	288.158 {117}2	189.989 {477}	407.771 { 83}	283.730 {119}	334.904 {101}	190.856 {477}	370.152 { 91}	292.402 {115}	206.200 {163}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	31.895	W 2.0017	4.2505	.94858	.91468	1.7933	2.1871	.47754	.44930
Stddev	.008	.0013	.0122	.01077	.00168	.0626	.0513	.00069	.00025
%RSD	.02651	.06568	.28690	1.1349	.18400	3.4918	2.3454	.14503	.05621

#1	31.901	2.0026	4.2418	.95619	.91587	1.8376	2.1508	.47705	.44912
#2	31.889	2.0008	4.2591	.94097	.91349	1.7491	2.2234	.47803	.44948

Check ?	Chk Pass	Chk Warn	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit		2.0000							
Low Limit		-.05000							

Elem	Zr3391
Line	339.198 { 99}
Units	ppm
Avg	.52964
Stddev	.00317
%RSD	.59923

#1	.52739
#2	.53188

Check ?	Chk Pass
High Limit	
Low Limit	

Sample Name: 280-82988-B-1-C MSD Acquired: 5/18/2016 21:43:46 Type: Unk
Method: 6500_025(v6) Mode: CONC Corr. Factor: 1.000000
User: CRHOADES Prep Date: Custom ID2: Custom ID3:
Comment: 325228 6010B (As)

Int. Std.	Y_2243	Y_3600	Y_3774
Line	224.306 {450}	360.073 { 94}	377.433 { 89}
Units	Cts/S	Cts/S	Cts/S
Avg	2533.9	39064.	2149.7
Stddev	15.3	60.	16.6
%RSD	.60419	.15437	.77310
#1	2544.7	39021.	2161.4
#2	2523.1	39107.	2137.9

Sample Name: CCVH-3894253 Acquired: 5/18/2016 21:46:14 Type: QC
Method: 6500_025(v6) Mode: CONC Corr. Factor: 1.000000
User: CRHOADES Prep Date: Custom ID2: Custom ID3:
Comment:

Elem	Ag3280	Al3092	As1890	B_2089	Ba4554	Be3130	Bi2230	Ca3179	Cd2288	Co2286	Cr2055
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	-.00023	54.187	-.00346	.00658	.00025	.00038	W 1.0757	.01826	-.00049	-.00109	.00032
Stddev	.00080	.278	.00196	.00032	.00015	.00004	.0318	.00448	.00035	.00021	.00024
%RSD	347.49	.51341	56.663	4.8988	60.610	10.538	2.9568	24.553	70.385	19.325	75.639

#1	.00034	54.384	-.00484	.00680	.00036	.00036	1.0532	.01509	-.00025	-.00094	.00049
#2	-.00080	53.990	-.00207	.00635	.00014	.00041	1.0981	.02143	-.00073	-.00124	.00015

Check ?	None	Chk Pass	None	None	None	None	Chk Warn	None	None	None	None
Value							1.0000				
Range							5.0000%				

Elem	Cu3247	Fe2714	K_7664	Li6707	Mg2790	Mn2576	Mo2020	Na8183	Ni2316	P_1782	Pb2203
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	-.00131	49.120	.18045	.00034	.02199	-.00034	.00358	254.26	.00101	.00231	-.00051
Stddev	.00041	.384	.11574	.00092	.00736	.00001	.00054	.61	.00084	.00045	.00070
%RSD	31.403	.78213	64.140	272.82	33.468	4.2538	15.079	.24071	83.467	19.365	138.59

#1	-.00102	49.391	.26229	.00099	.02719	-.00033	.00320	253.83	.00160	.00262	-.00100
#2	-.00160	48.848	.09861	-.00031	.01678	-.00035	.00396	254.69	.00041	.00199	-.00001

Check ?	None	Chk Pass	None	None	None	None	None	Chk Pass	None	None	None
Value											
Range											

Elem	S_1820	Sb2068	Se1960	Si2881	SiO2	Sn1899	Sr4077	Th2837	Ti3349	Ti1908	U_3701
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	W 5.3141	-.00731	.00942	-.00899	-.01924	.00025	.00111	W 4.5665	.00690	.01919	10.436
Stddev	.0377	.00260	.00708	.00754	.01613	.00047	.00009	.0267	.00026	.00271	.042
%RSD	.71036	35.544	75.137	83.850	83.850	189.47	8.1387	.58522	3.7252	14.136	.40305

#1	5.3408	-.00547	.00441	-.01432	-.03064	.00059	.00117	4.5476	.00708	.01727	10.406
#2	5.2874	-.00915	.01442	-.00366	-.00783	-.00008	.00104	4.5854	.00671	.02111	10.465

Check ?	Chk Warn	None	None	None	None	None	None	Chk Warn	None	None	Chk Pass
Value	5.0000							5.0000			
Range	5.0000%							-5.0000%			

Elem	V_2924	Zn2062	Zr3391
Units	ppm	ppm	ppm
Avg	.00862	.00003	.04561
Stddev	.00097	.00025	.00080
%RSD	11.272	778.81	1.7513

#1	.00931	.00021	.04618
#2	.00794	-.00014	.04505

Check ?	None	None	None
Value			
Range			

Int. Std.	Y_2243	Y_3600	Y_3774
Units	Cts/S	Cts/S	Cts/S
Avg	2634.0	39977.	2133.7
Stddev	131.5	658.	8.4
%RSD	4.9904	1.6467	.39480

#1	2727.0	40442.	2127.7
#2	2541.1	39512.	2139.6

Sample Name: CCV-3894251 Acquired: 5/18/2016 21:48:52 Type: QC
Method: 6500_025(v6) Mode: CONC Corr. Factor: 1.000000
User: CRHOADES Prep Date: Custom ID2: Custom ID3:
Comment:

Elem	Ag3280	Al1670	As1890	B_2089	Ba4554	Be3130	Bi2230	Ca3179	Cd2288	Co2286	Cr2055
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.49003	W .55202	1.0464	.48401	.50762	.45347	-.00119	4.9141	.49135	.48838	.49618
Stddev	.00131	.00095	.0018	.00006	.01122	.00577	.00154	.0499	.00010	.00042	.00016
%RSD	.26757	.17214	.17372	.01323	2.2102	1.2730	129.44	1.0153	.02125	.08663	.03134

#1	.48910	.55135	1.0451	.48396	.51555	.45755	-.00229	4.9494	.49128	.48808	.49629
#2	.49095	.55269	1.0477	.48405	.49968	.44938	-.00010	4.8788	.49143	.48868	.49607

Check ?	Chk Pass	Chk Warn	Chk Pass	Chk Pass	Chk Pass	Chk Pass	None	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Value		.50000									
Range		10.000%									

Elem	Cu3247	Fe2599	K_7664	Li6707	Mg2790	Mn2576	Mo2020	Na5895	Ni2316	P_1782	Pb2203
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.52078	2.3332	48.567	.96128	18.715	.45578	.50412	5.0866	.47715	.94949	.98843
Stddev	.00329	.0079	1.093	.00195	.058	.00138	.00008	.0269	.00025	.00234	.00088
%RSD	.63149	.33990	2.2495	.20280	.31023	.30183	.01589	.52807	.05315	.24605	.08866

#1	.51846	2.3388	49.340	.96266	18.674	.45481	.50406	5.1056	.47733	.95114	.98781
#2	.52311	2.3276	47.795	.95990	18.756	.45675	.50418	5.0676	.47697	.94783	.98905

Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Value											
Range											

Elem	S_1820	Sb2068	Se1960	Si2881	SiO2	Sn1899	Sr4077	Th2837	Ti3349	Ti1908	U_3701
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.14691	.96694	1.0490	4.7756	10.220	1.0020	.46732	.00338	.45005	1.0451	-.03645
Stddev	.00851	.00027	.0037	.0039	.008	.0012	.01068	.00054	.00247	.0096	.01204
%RSD	5.7942	.02835	.35288	.08063	.08063	.12422	2.2862	15.870	.54837	.91627	33.032

#1	.15293	.96713	1.0463	4.7729	10.214	1.0029	.47488	.00376	.44831	1.0519	-.04496
#2	.14089	.96675	1.0516	4.7783	10.226	1.0011	.45977	.00300	.45180	1.0383	-.02793

Check ?	None	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	None	Chk Pass	Chk Pass	None
Value											
Range											

Elem	V_2924	Zn2062	Zr3391
Units	ppm	ppm	ppm
Avg	.47150	F .44255	.50830
Stddev	.00236	.00024	.00239
%RSD	.49995	.05520	.47047

#1	.47316	.44272	.50999
#2	.46983	.44238	.50661

Check ?	Chk Pass	Chk Fail	Chk Pass
Value		.50000	
Range		-10.490%	

Int. Std.	Y_2243	Y_3600	Y_3774
Units	Cts/S	Cts/S	Cts/S
Avg	2557.1	40373.	2148.1
Stddev	9.2	179.	32.5
%RSD	.36156	.44211	1.5133

#1	2563.7	40500.	2125.1
#2	2550.6	40247.	2171.1

Sample Name: CCB Acquired: 5/18/2016 21:51:25 Type: QC
Method: 6500_025(v6) Mode: CONC Corr. Factor: 1.000000
User: CRHOADES Prep Date: Custom ID2: Custom ID3:
Comment:

Elem	Ag3280	Al1670	As1890	B_2089	Ba4554	Be3130	Bi2230	Ca3179	Cd2288	Co2286	Cr2055
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	-.00025	.00012	-.00241	.00227	-.00033	.00032	.00689	-.01724	-.00032	.00000	.00007
Stddev	.00073	.00009	.00265	.00077	.00060	.00001	.00101	.00420	.00000	.00001	.00040
%RSD	290.48	75.206	109.98	33.806	181.77	2.8210	14.686	24.328	.83974	1156.9	588.67

#1	.00027	.00005	-.00054	.00173	.00009	.00032	.00760	-.01428	-.00032	.00000	.00035
#2	-.00077	.00018	-.00429	.00282	-.00076	.00031	.00617	-.02021	-.00033	.00001	-.00021

Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit											
Low Limit											

Elem	Cu3247	Fe2599	K_7664	Li6707	Mg2790	Mn2576	Mo2020	Na5895	Ni2316	P_1782	Pb2203
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	-.00132	.01219	.10518	-.00066	.00097	-.00002	.00296	.21905	-.00057	.00093	-.00050
Stddev	.00049	.00585	.00187	.00109	.00003	.00006	.00117	.00321	.00044	.00359	.00107
%RSD	37.268	48.006	1.7802	165.73	2.8095	326.27	39.570	1.4653	77.285	384.79	216.17

#1	-.00167	.00805	.10386	.00011	.00095	-.00006	.00213	.21678	-.00089	-.00161	-.00125
#2	-.00097	.01632	.10651	-.00143	.00099	.00003	.00379	.22132	-.00026	.00347	.00026

Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit											
Low Limit											

Elem	S_1820	Sb2068	Se1960	Si2881	SiO2	Sn1899	Sr4077	Th2837	Ti3349	Ti1908	U_3701
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	F .11175	W .00595	.00098	.02038	.04360	.00055	.00041	.00265	-.00050	.00137	-.00811
Stddev	.00651	.00275	.00513	.02646	.05663	.00075	.00024	.00163	.00037	.00129	.03915
%RSD	5.8258	46.135	524.18	129.87	129.87	137.78	58.005	61.361	74.254	93.869	482.87

#1	.11636	.00790	-.00265	.03909	.08364	.00001	.00058	.00150	-.00024	.00046	.01957
#2	.10715	.00401	.00461	.00166	.00356	.00108	.00024	.00381	-.00076	.00228	-.03579

Check ?	Chk Fail	Chk Warn	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit	.10000	.00100									
Low Limit	-.20000	-.00100									

Elem	V_2924	Zn2062	Zr3391
Units	ppm	ppm	ppm
Avg	.00109	-.00091	-.00162
Stddev	.00007	.00019	.00039
%RSD	6.6905	21.071	23.789

#1	.00114	-.00077	-.00135
#2	.00104	-.00104	-.00189

Check ?	Chk Pass	Chk Pass	Chk Pass
High Limit			
Low Limit			

Int. Std.	Y_2243	Y_3600	Y_3774
Units	Cts/S	Cts/S	Cts/S
Avg	2593.8	41800.	2188.2
Stddev	39.4	19.	13.5
%RSD	1.5186	.04639	.61532

#1	2621.7	41814.	2178.6
#2	2565.9	41786.	2197.7

Sample Name: CCVL-3897520 Acquired: 5/18/2016 21:53:48 Type: QC

Method: 6500_025(v6) Mode: CONC Corr. Factor: 1.000000

User: CRHOADES Prep Date: Custom ID2: Custom ID3:

Comment:

Elem	Ag3280	Al1670	As1890	B_2089	Ba4554	Be3130	Bi2230	Ca3179	Cd2288	Co2286	Cr2055	Cu3247
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.00964	.11313	.01144	.09620	.00983	.00123	.11875	.19483	.00503	.00961	.01047	.01532
Stddev	.00042	.00049	.00322	.00093	.00060	.00006	.00172	.00309	.00006	.00004	.00028	.00051
%RSD	4.3586	.43547	28.141	.96392	6.0825	4.5173	1.4456	1.5838	1.2737	.46601	2.6549	3.3580

#1	.00994	.11278	.01372	.09554	.00940	.00119	.11996	.19701	.00499	.00958	.01066	.01495
#2	.00935	.11348	.00916	.09685	.01025	.00127	.11753	.19265	.00508	.00964	.01027	.01568

Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Value												
Range												

Elem	Fe2599	K_7664	Li6707	Mg2790	Mn2576	Mo2020	Na5895	Ni2316	P_1782	Pb2203	S_1820	Sb2068
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.10032	3.0580	F .00631	.19800	.00944	.02035	1.2006	.03859	2.7606	.00960	.11148	.01820
Stddev	.00573	.0099	.00089	.00213	.00018	.00060	.0033	.00004	.0031	.00045	.00145	.00513
%RSD	5.7076	.32247	14.090	1.0749	1.9455	2.9620	.27817	.11123	.11223	4.6718	1.2962	28.178

#1	.10436	3.0510	.00694	.19650	.00931	.01992	1.1983	.03862	2.7584	.00992	.11046	.02183
#2	.09627	3.0650	.00568	.19951	.00957	.02077	1.2030	.03856	2.7627	.00929	.11250	.01458

Check ?	Chk Pass	Chk Pass	Chk Fail	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	None	Chk Pass
Value			.01000									
Range			-30.000%									

Elem	Se1960	Si2881	SiO2	Sn1899	Sr4077	Th2837	Ti3349	Ti1908	U_3701	V_2924	Zn2062	Zr3391
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.01668	.47040	1.0066	.10092	.00960	.01851	.00897	.01487	.04294	.00963	.01878	.01748
Stddev	.00087	.02261	.0484	.00217	.00015	.00171	.00014	.00125	.03399	.00006	.00086	.00361
%RSD	5.2433	4.8058	4.8058	2.1497	1.5112	9.2320	1.5478	8.4163	79.161	.66559	4.5919	20.635

#1	.01606	.45441	.97244	.09938	.00949	.01972	.00887	.01575	.06697	.00967	.01939	.01493
#2	.01729	.48638	1.0409	.10245	.00970	.01731	.00907	.01398	.01890	.00958	.01817	.02003

Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Value												
Range												

Int. Std.	Y_2243	Y_3600	Y_3774
Units	Cts/S	Cts/S	Cts/S
Avg	2590.6	40966.	2187.9
Stddev	3.0	237.	20.9
%RSD	.11650	.57806	.95368

#1	2588.5	41133.	2202.7
#2	2592.8	40798.	2173.2

Sample Name: 280-82988-B-2-A Acquired: 5/18/2016 21:56:29 Type: Unk

Method: 6500_025(v6) Mode: CONC Corr. Factor: 1.000000

User: CRHOADES Prep Date: Custom ID2: Custom ID3:

Comment: 325228 6010B (As)

Elem	Ag3280	Al1670	As1890	B_2089	Ba4554	Be3130	Bi2230	Ca3179	Cd2288
Line	328.068 {103}	167.079 {502}	189.042 {478}	208.959 {461}	455.403 { 74}	313.042 {108}	223.061 {451}	317.933 {106}	228.802 {447}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	-.00015	.00915	.00068	.05952	.06904	.00011	.00015	219.93	.00025
Stddev	.00056	.00024	.00309	.00107	.00049	.00016	.00310	1.29	.00006
%RSD	376.73	2.6619	451.58	1.7947	.70796	148.40	2118.1	.58716	25.072

#1	-.00055	.00897	.00287	.06027	.06869	.00022	.00233	219.02	.00020
#2	.00025	.00932	-.00150	.05876	.06939	-.00001	-.00204	220.85	.00029

Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Elem	Co2286	Cr2055	Cu3247	Fe2599	K_7664	Li6707	Mg2790	Mn2576	Mo2020
Line	228.616 {447}	205.560 {464}	324.754 {104}	259.940 {130}	766.490 { 44}	670.784 { 50}	279.079 {121}2	257.610 {131}	202.030 {467}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	-.00017	.00042	.00106	.02940	5.8888	.05224	30.084	.11968	.00165
Stddev	.00019	.00001	.00011	.00299	.0290	.00172	.010	.00009	.00066
%RSD	112.59	2.5606	10.629	10.177	.49155	3.2974	.03368	.07469	39.745

#1	-.00030	.00042	.00098	.03151	5.9093	.05102	30.077	.11962	.00119
#2	-.00003	.00043	.00114	.02728	5.8683	.05346	30.091	.11975	.00212

Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Elem	Na8183	Ni2316	P_1782	Pb2203	S_1820	Sb2068	Se1960	Si2881	SiO2
Line	818.326 { 41}	231.604 {446}	178.284 {489}	220.353 {453}	182.034 {485}	206.833 {463}	196.090 {472}	288.158 {117}	288.158 {117}2
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	171.61	.00225	.01524	.00036	160.58	.00071	.00975	4.3228	9.2508
Stddev	.53	.00053	.00160	.00286	.01	.00080	.01267	.0050	.0107
%RSD	.31157	23.618	10.524	786.83	.00786	112.66	129.98	.11512	.11512

#1	171.23	.00262	.01637	-.00166	160.59	.00128	.00079	4.3193	9.2432
#2	171.99	.00187	.01411	.00239	160.57	.00014	.01871	4.3263	9.2583

Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Elem	Sn1899	Sr4077	Th2837	Ti3349	Ti1908	U_3701	V_2924	Zn2062	Zr3391
Line	189.989 {477}	407.771 { 83}	283.730 {119}	334.904 {101}	190.856 {477}	370.152 { 91}	292.402 {115}	206.200 {163}	339.198 { 99}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	-.00081	3.0960	-.00020	-.00013	-.00322	.00512	.00176	.00181	-.00040
Stddev	.00009	.0218	.00106	.00004	.00061	.00580	.00033	.00086	.00104
%RSD	11.225	.70464	533.71	29.606	19.040	113.24	18.656	47.467	257.25

#1	-.00088	3.0806	-.00095	-.00010	-.00366	.00922	.00152	.00242	.00033
#2	-.00075	3.1115	.00055	-.00016	-.00279	.00102	.00199	.00120	-.00114

Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Int. Std.	Y_2243	Y_3600	Y_3774
Line	224.306 {450}	360.073 { 94}	377.433 { 89}
Units	Cts/S	Cts/S	Cts/S
Avg	2604.2	39947.	2204.9
Stddev	13.1	216.	37.5
%RSD	.50469	.54145	1.6988

#1	2594.9	40100.	2178.4
#2	2613.5	39794.	2231.4

Sample Name: 280-82988-B-3-A Acquired: 5/18/2016 21:59:09 Type: Unk

Method: 6500_025(v6) Mode: CONC Corr. Factor: 1.000000

User: CRHOADES Prep Date: Custom ID2: Custom ID3:

Comment: 325228 6010B (As)

Elem	Ag3280	Al1670	As1890	B_2089	Ba4554	Be3130	Bi2230	Ca3179	Cd2288
Line	328.068 {103}	167.079 {502}	189.042 {478}	208.959 {461}	455.403 {74}	313.042 {108}	223.061 {451}	317.933 {106}	228.802 {447}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	-0.00010	.00395	.00443	.06464	.06503	-0.00015	-0.00084	255.29	.00078
Stddev	.00064	.00145	.00238	.00013	.00020	.00033	.00495	1.28	.00005
%RSD	617.50	36.609	53.778	.20186	.31152	215.60	586.98	.50185	6.5967

#1	.00035	.00293	.00612	.06455	.06488	.00008	-.00434	256.19	.00074
#2	-.00056	.00498	.00275	.06473	.06517	-.00039	.00266	254.38	.00081

Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Elem	Co2286	Cr2055	Cu3247	Fe2599	K_7664	Li6707	Mg2790	Mn2576	Mo2020
Line	228.616 {447}	205.560 {464}	324.754 {104}	259.940 {130}	766.490 {44}	670.784 {50}	279.079 {121}2	257.610 {131}	202.030 {467}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	-0.00004	.00010	.00191	.05779	5.7445	.05350	35.044	.10381	.00145
Stddev	.00008	.00043	.00032	.00248	.0077	.00089	.012	.00013	.00023
%RSD	221.99	420.96	16.859	4.2912	.13332	1.6561	.03363	.12731	15.943

#1	.00002	-.00020	.00214	.05604	5.7390	.05287	35.052	.10372	.00128
#2	-.00010	.00041	.00168	.05954	5.7499	.05412	35.036	.10391	.00161

Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Elem	Na8183	Ni2316	P_1782	Pb2203	S_1820	Sb2068	Se1960	Si2881	SiO2
Line	818.326 {41}	231.604 {446}	178.284 {489}	220.353 {453}	182.034 {485}	206.833 {463}	196.090 {472}	288.158 {117}	288.158 {117}2
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	180.42	.00271	.02178	.00084	W 185.69	.00123	.00994	4.0857	8.7434
Stddev	1.14	.00010	.00055	.00111	.58	.00049	.01125	.0415	.0888
%RSD	.63010	3.7126	2.5344	132.47	.31065	39.487	113.22	1.0154	1.0154

#1	181.23	.00278	.02139	.00163	186.10	.00158	.00198	4.0564	8.6806
#2	179.62	.00264	.02217	.00005	185.28	.00089	.01789	4.1150	8.8062

Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Warn	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit					180.00				
Low Limit					-.15000				

Elem	Sn1899	Sr4077	Th2837	Ti3349	Ti1908	U_3701	V_2924	Zn2062	Zr3391
Line	189.989 {477}	407.771 {83}	283.730 {119}	334.904 {101}	190.856 {477}	370.152 {91}	292.402 {115}	206.200 {163}	339.198 {99}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	-0.00283	3.5543	-0.00036	-0.00007	-0.00452	-0.03784	.00138	.00266	.00116
Stddev	.00143	.0253	.00363	.00083	.00219	.05822	.00006	.00032	.00180
%RSD	50.575	.71287	1005.1	1154.6	48.512	153.88	4.1934	11.844	155.14

#1	-.00182	3.5722	-.00293	.00052	-.00607	.00333	.00134	.00289	-.00011
#2	-.00384	3.5364	.00220	-.00066	-.00297	-.07901	.00142	.00244	.00243

Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Int. Std.	Y_2243	Y_3600	Y_3774
Line	224.306 {450}	360.073 {94}	377.433 {89}
Units	Cts/S	Cts/S	Cts/S
Avg	2555.7	40541.	2242.7
Stddev	3.0	79.	46.4
%RSD	.11833	.19488	2.0672

#1	2557.8	40597.	2209.9
#2	2553.5	40485.	2275.5

Sample Name: 280-82988-B-4-A Acquired: 5/18/2016 22:01:48 Type: Unk

Method: 6500_025(v6) Mode: CONC Corr. Factor: 1.000000

User: CRHOADES Prep Date: Custom ID2: Custom ID3:

Comment: 325228 6010B (As)

Elem	Ag3280	Al1670	As1890	B_2089	Ba4554	Be3130	Bi2230	Ca3179	Cd2288
Line	328.068 {103}	167.079 {502}	189.042 {478}	208.959 {461}	455.403 {74}	313.042 {108}	223.061 {451}	317.933 {106}	228.802 {447}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	-0.00037	.00073	-0.00466	.06810	.05695	.00034	-0.00039	481.84	.00057
Stddev	.00020	.00030	.00247	.00592	.00015	.00024	.00322	8.52	.00013
%RSD	53.379	40.682	52.892	8.6940	.27020	69.476	820.00	1.7679	23.637

#1	-0.00052	.00052	-0.00641	.06391	.05705	.00017	-0.00267	487.86	.00047
#2	-0.00023	.00094	-0.00292	.07228	.05684	.00051	.00189	475.82	.00066

Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Elem	Co2286	Cr2055	Cu3247	Fe2599	K_7664	Li6707	Mg2790	Mn2576	Mo2020
Line	228.616 {447}	205.560 {464}	324.754 {104}	259.940 {130}	766.490 {44}	670.784 {50}	279.079 {121}2	257.610 {131}	202.030 {467}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.00033	.00021	.00096	.02929	4.6675	.04159	61.362	.61220	.00020
Stddev	.00022	.00005	.00079	.00241	.0247	.00032	.066	.00004	.00017
%RSD	65.657	22.997	81.811	8.2359	.52923	.75922	.10781	.00699	86.477

#1	.00049	.00017	.00152	.03100	4.6849	.04136	61.409	.61217	.00032
#2	.00018	.00024	.00041	.02759	4.6500	.04181	61.316	.61223	.00008

Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Elem	Na8183	Ni2316	P_1782	Pb2203	S_1820	Sb2068	Se1960	Si2881	SiO2
Line	818.326 {41}	231.604 {446}	178.284 {489}	220.353 {453}	182.034 {485}	206.833 {463}	196.090 {472}	288.158 {117}	288.158 {117}2
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	220.67	.00440	.08215	.00106	F 377.75	-0.00315	.00971	11.425	24.450
Stddev	1.27	.00037	.00414	.00174	27.00	.00013	.00739	.017	.037
%RSD	.57584	8.3166	5.0377	163.84	7.1465	4.0894	76.139	.15278	.15278

#1	221.56	.00414	.07922	-.00017	358.66	-.00306	.00448	11.438	24.477
#2	219.77	.00465	.08507	.00229	396.84	-.00324	.01493	11.413	24.424

Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Fail	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit					200.00				
Low Limit					-.20000				

Elem	Sn1899	Sr4077	Th2837	Ti3349	Ti1908	U_3701	V_2924	Zn2062	Zr3391
Line	189.989 {477}	407.771 {83}	283.730 {119}	334.904 {101}	190.856 {477}	370.152 {91}	292.402 {115}	206.200 {163}	339.198 {99}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	-0.00097	W 6.9876	-0.00070	-0.00003	-0.00716	.00066	.00055	-0.00026	-0.00064
Stddev	.00064	.1261	.00184	.00037	.00384	.01475	.00058	.00017	.00289
%RSD	66.512	1.8040	261.49	1173.7	53.683	2222.5	106.45	64.854	452.58

#1	-0.0142	7.0768	-0.00200	.00023	-.00988	.01109	.00013	-.00038	.00140
#2	-0.00051	6.8985	.00060	-.00029	-.00444	-.00977	.00096	-.00014	-.00268

Check ?	Chk Pass	Chk Warn	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit		5.0000							
Low Limit		-.01000							

Int. Std.	Y_2243	Y_3600	Y_3774
Line	224.306 {450}	360.073 {94}	377.433 {89}
Units	Cts/S	Cts/S	Cts/S
Avg	2695.6	39572.	2148.2
Stddev	182.8	168.	81.0
%RSD	6.7811	.42427	3.7712

#1	2824.8	39453.	2091.0
#2	2566.3	39690.	2205.5

Sample Name: 280-82988-B-5-A Acquired: 5/18/2016 22:04:26 Type: Unk

Method: 6500_025(v6) Mode: CONC Corr. Factor: 1.000000

User: CRHOADES Prep Date: Custom ID2: Custom ID3:

Comment: 325228 6010B (As)

Elem	Ag3280	Al1670	As1890	B_2089	Ba4554	Be3130	Bi2230	Ca3179	Cd2288
Line	328.068 {103}	167.079 {502}	189.042 {478}	208.959 {461}	455.403 { 74}	313.042 {108}	223.061 {451}	317.933 {106}	228.802 {447}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	-0.00014	.00146	-0.00874	.05765	.06866	.00008	-0.00060	258.60	.00034
Stddev	.00019	.00052	.00578	.00565	.00107	.00027	.00412	4.99	.00050
%RSD	132.34	35.488	66.139	9.7973	1.5657	350.87	691.62	1.9301	146.89

#1	-0.00001	.00109	-.01283	.06164	.06942	-.00011	-.00351	262.13	.00069
#2	-.00028	.00182	-.00465	.05365	.06790	.00027	.00232	255.07	-.00001

Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Elem	Co2286	Cr2055	Cu3247	Fe2599	K_7664	Li6707	Mg2790	Mn2576	Mo2020
Line	228.616 {447}	205.560 {464}	324.754 {104}	259.940 {130}	766.490 { 44}	670.784 { 50}	279.079 {121}2	257.610 {131}	202.030 {467}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	-0.00012	.00005	.00226	.03965	5.6120	.05492	35.055	.26855	.00124
Stddev	.00007	.00006	.00044	.00036	.0548	.00003	.084	.00030	.00044
%RSD	63.401	104.72	19.412	.90890	.97594	.06017	.24044	.11129	35.418

#1	-0.00007	.00001	.00195	.03940	5.6507	.05490	34.995	.26834	.00154
#2	-.00017	.00009	.00257	.03991	5.5733	.05495	35.115	.26876	.00093

Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Elem	Na8183	Ni2316	P_1782	Pb2203	S_1820	Sb2068	Se1960	Si2881	SiO2
Line	818.326 { 41}	231.604 {446}	178.284 {489}	220.353 {453}	182.034 {485}	206.833 {463}	196.090 {472}	288.158 {117}	288.158 {117}2
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	179.32	.00221	.02421	.00038	165.68	.00054	.00495	3.4857	7.4594
Stddev	.17	.00023	.00128	.00024	17.15	.00770	.00553	.0163	.0348
%RSD	.09652	10.439	5.2902	62.380	10.353	1421.8	111.76	.46701	.46701

#1	179.44	.00204	.02511	.00054	177.81	-.00490	.00104	3.4742	7.4347
#2	179.19	.00237	.02330	.00021	153.55	.00599	.00886	3.4972	7.4840

Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Elem	Sn1899	Sr4077	Th2837	Ti3349	Ti1908	U_3701	V_2924	Zn2062	Zr3391
Line	189.989 {477}	407.771 { 83}	283.730 {119}	334.904 {101}	190.856 {477}	370.152 { 91}	292.402 {115}	206.200 {163}	339.198 { 99}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	-0.00006	3.5361	-0.00032	-0.00040	-0.00413	-0.03965	.00066	.00073	.00193
Stddev	.00220	.0668	.00397	.00053	.00079	.01092	.00016	.00034	.00043
%RSD	3586.7	1.8881	1236.9	131.48	19.088	27.547	23.666	46.268	22.365

#1	.00149	3.5833	-.00313	-.00003	-.00469	-.03193	.00077	.00097	.00162
#2	-.00161	3.4889	.00249	-.00078	-.00358	-.04737	.00055	.00049	.00223

Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Int. Std.	Y_2243	Y_3600	Y_3774
Line	224.306 {450}	360.073 { 94}	377.433 { 89}
Units	Cts/S	Cts/S	Cts/S
Avg	2750.0	40573.	2201.7
Stddev	292.6	122.	13.0
%RSD	10.639	.30022	.59245

#1	2543.1	40659.	2192.5
#2	2956.9	40486.	2211.0

Sample Name: 280-82988-B-6-A Acquired: 5/18/2016 22:07:05 Type: Unk

Method: 6500_025(v6) Mode: CONC Corr. Factor: 1.000000

User: CRHOADES Prep Date: Custom ID2: Custom ID3:

Comment: 325228 6010B (As)

Elem	Ag3280	Al1670	As1890	B_2089	Ba4554	Be3130	Bi2230	Ca3179	Cd2288
Line	328.068 {103}	167.079 {502}	189.042 {478}	208.959 {461}	455.403 { 74}	313.042 {108}	223.061 {451}	317.933 {106}	228.802 {447}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.00070	.00204	-.00267	.06283	.06566	.00018	-.00535	271.37	.00042
Stddev	.00021	.00037	.00040	.00036	.00013	.00018	.00385	.03	.00007
%RSD	30.668	18.155	15.054	.57995	.19868	100.67	71.989	.01121	17.598

#1	.00055	.00230	-.00239	.06309	.06575	.00031	-.00263	271.35	.00037
#2	.00085	.00178	-.00296	.06258	.06557	.00005	-.00807	271.39	.00047

Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Elem	Co2286	Cr2055	Cu3247	Fe2599	K_7664	Li6707	Mg2790	Mn2576	Mo2020
Line	228.616 {447}	205.560 {464}	324.754 {104}	259.940 {130}	766.490 { 44}	670.784 { 50}	279.079 {121}2	257.610 {131}	202.030 {467}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	-.00026	.00014	.00158	.02721	5.6888	.05253	37.707	.21076	.00111
Stddev	.00018	.00024	.00015	.00245	.0809	.00090	.054	.00012	.00022
%RSD	68.108	176.89	9.1805	8.9984	1.4217	1.7139	.14427	.05838	19.884

#1	-.00039	-.00003	.00148	.02548	5.6316	.05317	37.669	.21068	.00095
#2	-.00014	.00031	.00169	.02894	5.7460	.05189	37.746	.21085	.00126

Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Elem	Na8183	Ni2316	P_1782	Pb2203	S_1820	Sb2068	Se1960	Si2881	SiO2
Line	818.326 { 41}	231.604 {446}	178.284 {489}	220.353 {453}	182.034 {485}	206.833 {463}	196.090 {472}	288.158 {117}	288.158 {117}2
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	190.62	.00252	.01584	.00113	F 201.01	.00099	.00667	3.3811	7.2356
Stddev	1.78	.00037	.00324	.00036	.19	.00165	.00554	.0345	.0739
%RSD	.93387	14.824	20.435	32.363	.09261	166.62	83.026	1.0216	1.0216

#1	189.36	.00226	.01812	.00138	201.14	.00216	.00275	3.4055	7.2878
#2	191.88	.00278	.01355	.00087	200.88	-.00018	.01058	3.3567	7.1833

Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Fail	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit					200.00				
Low Limit					-.20000				

Elem	Sn1899	Sr4077	Th2837	Ti3349	Ti1908	U_3701	V_2924	Zn2062	Zr3391
Line	189.989 {477}	407.771 { 83}	283.730 {119}	334.904 {101}	190.856 {477}	370.152 { 91}	292.402 {115}	206.200 {163}	339.198 { 99}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	-.00141	3.7886	-.00101	-.00040	-.00355	.00705	.00055	.00039	.00015
Stddev	.00205	.0056	.00162	.00082	.00035	.01372	.00090	.00012	.00331
%RSD	144.97	.14823	160.11	205.13	9.9368	194.66	163.72	32.024	2280.6

#1	-.00286	3.7846	-.00216	-.00098	-.00330	-.00265	.00119	.00030	.00249
#2	.00004	3.7926	.00013	.00018	-.00380	.01675	-.00009	.00048	-.00220

Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Int. Std.	Y_2243	Y_3600	Y_3774
Line	224.306 {450}	360.073 { 94}	377.433 { 89}
Units	Cts/S	Cts/S	Cts/S
Avg	2541.3	40229.	2245.2
Stddev	5.6	200.	16.7
%RSD	.21976	.49661	.74292

#1	2545.2	40087.	2233.5
#2	2537.3	40370.	2257.0

Sample Name: 280-82988-B-7-A Acquired: 5/18/2016 22:09:44 Type: Unk

Method: 6500_025(v6) Mode: CONC Corr. Factor: 1.000000

User: CRHOADES Prep Date: Custom ID2: Custom ID3:

Comment: 325228 6010B (As)

Elem	Ag3280	Al1670	As1890	B_2089	Ba4554	Be3130	Bi2230	Ca3179	Cd2288
Line	328.068 {103}	167.079 {502}	189.042 {478}	208.959 {461}	455.403 { 74}	313.042 {108}	223.061 {451}	317.933 {106}	228.802 {447}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.00023	-.00058	-.00360	.06029	.06057	.00032	-.00229	250.18	.00035
Stddev	.00004	.00012	.00007	.00074	.00125	.00006	.00292	9.15	.00014
%RSD	15.220	21.029	2.0197	1.2220	2.0563	18.704	127.80	3.6573	38.568

#1	.00026	-.00050	-.00365	.05977	.06145	.00028	-.00022	256.65	.00045
#2	.00021	-.00067	-.00355	.06081	.05969	.00036	-.00436	243.71	.00025

Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Elem	Co2286	Cr2055	Cu3247	Fe2599	K_7664	Li6707	Mg2790	Mn2576	Mo2020
Line	228.616 {447}	205.560 {464}	324.754 {104}	259.940 {130}	766.490 { 44}	670.784 { 50}	279.079 {121}2	257.610 {131}	202.030 {467}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	-.00029	-.00010	.00200	.02959	5.2688	.04988	35.858	.16636	.00049
Stddev	.00003	.00002	.00015	.00091	.1602	.00180	.010	.00017	.00025
%RSD	9.7806	14.913	7.7452	3.0605	3.0403	3.6118	.02826	.10067	51.770

#1	-.00031	-.00009	.00211	.02895	5.3820	.05116	35.865	.16648	.00066
#2	-.00027	-.00011	.00189	.03023	5.1555	.04861	35.850	.16624	.00031

Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Elem	Na8183	Ni2316	P_1782	Pb2203	S_1820	Sb2068	Se1960	Si2881	SiO2
Line	818.326 { 41}	231.604 {446}	178.284 {489}	220.353 {453}	182.034 {485}	206.833 {463}	196.090 {472}	288.158 {117}	288.158 {117}2
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	179.09	.00260	.01721	.00268	W 193.45	.00071	.00415	3.0515	6.5302
Stddev	1.85	.00022	.00225	.00331	.30	.00618	.00134	.0402	.0859
%RSD	1.0354	8.2958	13.071	123.21	.15755	865.23	32.268	1.3161	1.3161

#1	180.41	.00275	.01880	.00035	193.23	-.00366	.00321	3.0799	6.5910
#2	177.78	.00244	.01562	.00502	193.66	.00509	.00510	3.0231	6.4694

Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Warn	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit					180.00				
Low Limit					-.15000				

Elem	Sn1899	Sr4077	Th2837	Ti3349	Ti1908	U_3701	V_2924	Zn2062	Zr3391
Line	189.989 {477}	407.771 { 83}	283.730 {119}	334.904 {101}	190.856 {477}	370.152 { 91}	292.402 {115}	206.200 {163}	339.198 { 99}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.00053	3.5292	.00062	-.00047	-.00262	-.04636	.00037	-.00008	-.00519
Stddev	.00149	.1188	.00066	.00049	.00199	.03737	.00059	.00016	.00069
%RSD	279.44	3.3674	106.47	102.97	75.964	80.610	159.22	190.46	13.376

#1	-.00052	3.6132	.00015	-.00013	-.00121	-.07279	-.00005	-.00020	-.00470
#2	.00158	3.4452	.00109	-.00082	-.00403	-.01994	.00079	.00003	-.00569

Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Int. Std.	Y_2243	Y_3600	Y_3774
Line	224.306 {450}	360.073 { 94}	377.433 { 89}
Units	Cts/S	Cts/S	Cts/S
Avg	2531.4	40714.	2249.2
Stddev	19.6	175.	97.6
%RSD	.77480	.43091	4.3414

#1	2517.5	40838.	2180.1
#2	2545.2	40590.	2318.2

Sample Name: 280-82988-B-8-A Acquired: 5/18/2016 22:12:23 Type: Unk

Method: 6500_025(v6) Mode: CONC Corr. Factor: 1.000000

User: CRHOADES Prep Date: Custom ID2: Custom ID3:

Comment: 325228 6010B (As)

Elem	Ag3280	Al1670	As1890	B_2089	Ba4554	Be3130	Bi2230	Ca3179	Cd2288
Line	328.068 {103}	167.079 {502}	189.042 {478}	208.959 {461}	455.403 {74}	313.042 {108}	223.061 {451}	317.933 {106}	228.802 {447}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	-0.00032	.00557	-0.00956	.05814	.06229	.00012	-0.00339	262.02	.00078
Stddev	.00107	.00023	.00896	.00152	.00040	.00004	.00117	1.03	.00047
%RSD	335.29	4.1487	93.663	2.6062	.63560	30.887	34.397	.39226	59.720

#1	-0.00108	.00541	-0.00323	.05707	.06201	.00010	-0.00422	261.29	.00045
#2	.00044	.00574	-0.01590	.05921	.06257	.00015	-0.00257	262.75	.00111

Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Elem	Co2286	Cr2055	Cu3247	Fe2599	K_7664	Li6707	Mg2790	Mn2576	Mo2020
Line	228.616 {447}	205.560 {464}	324.754 {104}	259.940 {130}	766.490 {44}	670.784 {50}	279.079 {121}2	257.610 {131}	202.030 {467}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	-0.00024	.00000	.00117	.03351	5.2020	.05009	36.053	.17503	.00043
Stddev	.00004	.00001	.00009	.00628	.0097	.00080	.110	.00036	.00014
%RSD	17.960	3915.8	7.6457	18.751	.18559	1.5930	.30623	.20581	32.222

#1	-0.00021	.00004	.00111	.03795	5.1951	.04953	36.131	.17528	.00033
#2	-0.00027	-0.00004	.00124	.02906	5.2088	.05066	35.975	.17477	.00053

Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Elem	Na8183	Ni2316	P_1782	Pb2203	S_1820	Sb2068	Se1960	Si2881	SiO2
Line	818.326 {41}	231.604 {446}	178.284 {489}	220.353 {453}	182.034 {485}	206.833 {463}	196.090 {472}	288.158 {117}	288.158 {117}2
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	181.79	.00265	.01604	.00031	W 189.20	-0.00279	.00233	3.1302	6.6987
Stddev	.20	.00022	.00026	.00001	8.71	.00073	.01494	.0020	.0043
%RSD	.10846	8.4619	1.6065	1.9793	4.6010	26.035	641.51	.06406	.06406

#1	181.92	.00281	.01622	.00031	183.05	-0.00330	.01289	3.1316	6.7017
#2	181.65	.00249	.01586	.00032	195.36	-0.00228	-0.00824	3.1288	6.6956

Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Warn	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit					180.00				
Low Limit					-15000				

Elem	Sn1899	Sr4077	Th2837	Ti3349	Ti1908	U_3701	V_2924	Zn2062	Zr3391
Line	189.989 {477}	407.771 {83}	283.730 {119}	334.904 {101}	190.856 {477}	370.152 {91}	292.402 {115}	206.200 {163}	339.198 {99}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	-0.00131	3.7087	.00170	-0.00028	-0.00478	-0.02962	.00069	.00110	-0.00036
Stddev	.00125	.0178	.00132	.00009	.00414	.00925	.00043	.00037	.00394
%RSD	94.817	.48092	78.068	34.465	86.551	31.214	61.949	33.616	1084.9

#1	-0.00220	3.6961	.00076	-0.00034	-0.00771	-0.02308	.00099	.00136	.00242
#2	-0.00043	3.7214	.00263	-0.00021	-0.00186	-0.03616	.00039	.00084	-0.00315

Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Int. Std.	Y_2243	Y_3600	Y_3774
Line	224.306 {450}	360.073 {94}	377.433 {89}
Units	Cts/S	Cts/S	Cts/S
Avg	2654.0	40382.	2194.0
Stddev	120.5	123.	9.2
%RSD	4.5397	.30395	.41862

#1	2739.2	40295.	2200.5
#2	2568.8	40469.	2187.5

Sample Name: 280-83043-A-1-A Acquired: 5/18/2016 22:15:02 Type: Unk

Method: 6500_025(v6) Mode: CONC Corr. Factor: 1.000000

User: CRHOADES Prep Date: Custom ID2: Custom ID3:

Comment: 325228 6010B (As)

Elem	Ag3280	Al1670	As1890	B_2089	Ba4554	Be3130	Bi2230	Ca3179	Cd2288
Line	328.068 {103}	167.079 {502}	189.042 {478}	208.959 {461}	455.403 { 74}	313.042 {108}	223.061 {451}	317.933 {106}	228.802 {447}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	-0.0024	.00381	-0.00354	.03150	.03830	.00015	-0.00387	W 573.88	.00043
Stddev	.00017	.00017	.00344	.00137	.00016	.00034	.00453	8.70	.00026
%RSD	69.336	4.5592	96.944	4.3631	.42894	220.12	116.92	1.5154	61.739

#1	-0.00036	.00369	-0.00111	.03053	.03818	-0.00009	-0.00707	567.73	.00024
#2	-0.00012	.00394	-0.00597	.03248	.03841	.00040	-0.00067	580.03	.00061

Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Warn	Chk Pass
High Limit								500.00	
Low Limit								-.05000	

Elem	Co2286	Cr2055	Cu3247	Fe2599	K_7664	Li6707	Mg2790	Mn2576	Mo2020
Line	228.616 {447}	205.560 {464}	324.754 {104}	259.940 {130}	766.490 { 44}	670.784 { 50}	279.079 {121}2	257.610 {131}	202.030 {467}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	-0.0074	.00050	.00200	.02323	18.271	.16603	50.245	.00357	.00005
Stddev	.00014	.00037	.00022	.00042	.278	.00154	.021	.00002	.00027
%RSD	19.356	73.749	11.234	1.8203	1.5238	.92709	.04187	.58675	588.13

#1	-0.00085	.00024	.00216	.02293	18.074	.16494	50.260	.00358	-0.00014
#2	-0.00064	.00076	.00184	.02353	18.468	.16712	50.230	.00355	.00023

Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Elem	Na8183	Ni2316	P_1782	Pb2203	S_1820	Sb2068	Se1960	Si2881	SiO2
Line	818.326 { 41}	231.604 {446}	178.284 {489}	220.353 {453}	182.034 {485}	206.833 {463}	196.090 {472}	288.158 {117}	288.158 {117}2
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	442.64	.00286	.04034	.00113	F 608.77	-0.00215	.24573	11.604	24.833
Stddev	6.73	.00007	.00320	.00167	3.90	.00165	.00248	.196	.419
%RSD	1.5203	2.4421	7.9337	148.37	.64103	76.610	1.0105	1.6866	1.6866

#1	437.88	.00281	.04261	-0.00006	611.53	-0.00332	.24398	11.466	24.537
#2	447.40	.00291	.03808	.00231	606.01	-0.00099	.24749	11.742	25.129

Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Fail	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit					200.00				
Low Limit					-20000				

Elem	Sn1899	Sr4077	Th2837	Ti3349	Ti1908	U_3701	V_2924	Zn2062	Zr3391
Line	189.989 {477}	407.771 { 83}	283.730 {119}	334.904 {101}	190.856 {477}	370.152 { 91}	292.402 {115}	206.200 {163}	339.198 { 99}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	-0.00131	W 13.231	-0.00400	.00067	-0.00520	.09129	.00131	.00309	.00067
Stddev	.00167	.250	.00378	.00039	.00042	.02503	.00006	.00036	.00135
%RSD	127.81	1.8891	94.707	57.885	8.1062	27.421	4.3608	11.632	201.69

#1	-0.00013	13.054	-0.00667	.00095	-0.00550	.07359	.00135	.00334	-0.00029
#2	-0.00249	13.408	-0.00132	.00040	-0.00490	.10899	.00127	.00284	.00163

Check ?	Chk Pass	Chk Warn	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit		5.0000							
Low Limit		-.01000							

Int. Std.	Y_2243	Y_3600	Y_3774						
Line	224.306 {450}	360.073 { 94}	377.433 { 89}						
Units	Cts/S	Cts/S	Cts/S						
Avg	2501.7	39243.	2319.4						
Stddev	8.1	166.	31.9						
%RSD	.32215	.42190	1.3761						

#1	2496.0	39126.	2341.9						
#2	2507.4	39360.	2296.8						

Sample Name: 280-83043-A-2-A Acquired: 5/18/2016 22:17:46 Type: Unk

Method: 6500_025(v6) Mode: CONC Corr. Factor: 1.000000

User: CRHOADES Prep Date: Custom ID2: Custom ID3:

Comment: 325228 6010B (As)

Elem	Ag3280	Al1670	As1890	B_2089	Ba4554	Be3130	Bi2230	Ca3179	Cd2288
Line	328.068 {103}	167.079 {502}	189.042 {478}	208.959 {461}	455.403 { 74}	313.042 {108}	223.061 {451}	317.933 {106}	228.802 {447}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	-0.00029	-0.00019	-0.00357	.02190	.01571	.00015	.00478	83.512	-0.00006
Stddev	.00021	.00012	.01020	.00302	.00038	.00021	.00431	.793	.00029
%RSD	71.913	64.820	285.89	13.797	2.3885	137.66	90.220	.94996	459.22

#1	-0.00044	-0.00028	.00364	.01977	.01545	.00000	.00783	84.073	.00014
#2	-0.00014	-0.00010	-.01078	.02404	.01598	.00030	.00173	82.951	-.00027

Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Elem	Co2286	Cr2055	Cu3247	Fe2599	K_7664	Li6707	Mg2790	Mn2576	Mo2020
Line	228.616 {447}	205.560 {464}	324.754 {104}	259.940 {130}	766.490 { 44}	670.784 { 50}	279.079 {121}2	257.610 {131}	202.030 {467}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	-0.00013	.00025	-0.00033	.18686	3.3971	.00620	9.0114	.39713	-0.00018
Stddev	.00008	.00039	.00074	.00354	.0157	.00304	.0013	.00014	.00030
%RSD	64.447	153.33	228.92	1.8931	.46056	48.965	.01387	.03528	168.14

#1	-0.00007	-0.00002	-0.00085	.18936	3.4081	.00835	9.0106	.39703	-0.00039
#2	-0.00019	.00053	.00020	.18436	3.3860	.00405	9.0123	.39723	.00003

Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Elem	Na8183	Ni2316	P_1782	Pb2203	S_1820	Sb2068	Se1960	Si2881	SiO2
Line	818.326 { 41}	231.604 {446}	178.284 {489}	220.353 {453}	182.034 {485}	206.833 {463}	196.090 {472}	288.158 {117}	288.158 {117}2
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	90.405	.00047	.00169	.00032	79.035	.00373	.01179	6.7416	14.427
Stddev	.815	.00005	.00015	.00120	8.346	.00355	.00245	.0490	.105
%RSD	.90191	11.395	8.8891	376.03	10.560	95.118	20.818	.72606	.72606

#1	90.982	.00050	.00158	-.00053	73.134	.00122	.01352	6.7070	14.353
#2	89.829	.00043	.00179	.00116	84.936	.00624	.01005	6.7762	14.501

Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Elem	Sn1899	Sr4077	Th2837	Ti3349	Ti1908	U_3701	V_2924	Zn2062	Zr3391
Line	189.989 {477}	407.771 { 83}	283.730 {119}	334.904 {101}	190.856 {477}	370.152 { 91}	292.402 {115}	206.200 {163}	339.198 { 99}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	-0.00102	1.5759	-0.00032	-0.00046	-0.00053	-0.04493	.00039	.00076	.00133
Stddev	.00178	.0172	.00061	.00010	.00007	.02710	.00069	.00030	.00341
%RSD	174.92	1.0893	194.85	21.357	12.444	60.308	179.44	38.740	255.39

#1	-0.00227	1.5881	.00012	-.00053	-.00048	-.06409	-.00010	.00097	.00374
#2	.00024	1.5638	-.00075	-.00039	-.00057	-.02577	.00088	.00055	-.00107

Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Int. Std.	Y_2243	Y_3600	Y_3774
Line	224.306 {450}	360.073 { 94}	377.433 { 89}
Units	Cts/S	Cts/S	Cts/S
Avg	2827.3	41426.	2336.5
Stddev	303.9	548.	26.0
%RSD	10.747	1.3234	1.1132

#1	3042.1	41039.	2318.1
#2	2612.4	41814.	2354.9

Sample Name: CCVH-3894253 Acquired: 5/18/2016 22:20:26 Type: QC
Method: 6500_025(v6) Mode: CONC Corr. Factor: 1.000000
User: CRHOADES Prep Date: Custom ID2: Custom ID3:
Comment:

Elem	Ag3280	Al3092	As1890	B_2089	Ba4554	Be3130	Bi2230	Ca3179	Cd2288	Co2286	Cr2055
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.00452	51.109	.01358	.00480	.00442	.00503	W 1.0694	.07144	.00486	.00414	.00543
Stddev	.00017	1.156	.00689	.00079	.00010	.00068	.0245	.00372	.00010	.00044	.00006
%RSD	3.8001	2.2623	50.743	16.392	2.2809	13.442	2.2925	5.2022	2.0563	10.702	1.1581

#1	.00464	50.292	.01845	.00536	.00435	.00455	1.0868	.06882	.00493	.00445	.00538
#2	.00440	51.927	.00871	.00425	.00450	.00551	1.0521	.07407	.00479	.00382	.00547

Check ?	None	Chk Pass	None	None	None	None	Chk Warn	None	None	None	None
Value							1.0000				
Range							5.0000%				

Elem	Cu3247	Fe2714	K_7664	Li6707	Mg2790	Mn2576	Mo2020	Na8183	Ni2316	P_1782	Pb2203
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.00458	48.250	.71179	.00672	.21001	.00447	.00341	249.89	.00568	.01120	.00922
Stddev	.00004	1.247	.08008	.00317	.00038	.00009	.00038	4.40	.00040	.00091	.00094
%RSD	.88163	2.5848	11.250	47.158	.18256	1.9073	11.225	1.7626	7.0236	8.1269	10.142

#1	.00455	47.368	.65517	.00448	.20974	.00453	.00314	246.77	.00540	.01056	.00989
#2	.00460	49.132	.76841	.00896	.21029	.00441	.00368	253.00	.00596	.01185	.00856

Check ?	None	Chk Pass	None	None	None	None	None	Chk Pass	None	None	None
Value											
Range											

Elem	S_1820	Sb2068	Se1960	Si2881	SiO2	Sn1899	Sr4077	Th2837	Ti3349	Ti1908	U_3701
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	5.2325	-.00082	.01679	.04208	.09005	.01072	.00629	W 4.5270	.01082	.00092	10.391
Stddev	.0117	.00106	.00548	.04251	.09096	.00018	.00022	.0085	.00061	.00187	.088
%RSD	.22409	129.95	32.652	101.02	101.02	1.7206	3.5072	.18847	5.6177	202.12	.85029

#1	5.2408	-.00157	.01291	.07213	.15437	.01059	.00613	4.5331	.01039	-.00040	10.328
#2	5.2242	-.00007	.02066	.01202	.02573	.01085	.00644	4.5210	.01125	.00224	10.453

Check ?	Chk Pass	None	None	None	None	None	None	Chk Warn	None	None	Chk Pass
Value								5.0000			
Range								-5.0000%			

Elem	V_2924	Zn2062	Zr3391
Units	ppm	ppm	ppm
Avg	.01357	.00577	.05433
Stddev	.00071	.00082	.00075
%RSD	5.2094	14.166	1.3726

#1	.01307	.00519	.05381
#2	.01408	.00635	.05486

Check ?	None	None	None
Value			
Range			

Int. Std.	Y_2243	Y_3600	Y_3774
Units	Cts/S	Cts/S	Cts/S
Avg	2624.4	40143.	2212.9
Stddev	10.4	893.	61.5
%RSD	.39471	2.2238	2.7802

#1	2631.7	39512.	2256.4
#2	2617.1	40774.	2169.4

Sample Name: CCV-3894251 Acquired: 5/18/2016 22:23:03 Type: QC
Method: 6500_025(v6) Mode: CONC Corr. Factor: 1.000000
User: CRHOADES Prep Date: Custom ID2: Custom ID3:
Comment:

Elem	Ag3280	Al1670	As1890	B_2089	Ba4554	Be3130	Bi2230	Ca3179	Cd2288	Co2286	Cr2055	Cu3247	Fe2599	K_7664
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.48968	.54930	1.0427	.49045	.51336	.46121	.00162	4.9759	.49419	.50057	.50823	.52122	2.3627	49.093
Stddev	.00177	.01142	.0242	.01211	.00232	.00178	.00227	.0180	.00015	.01214	.01296	.00045	.0077	.179
%RSD	.36149	2.0793	2.3160	2.4694	.45178	.38505	140.14	.36130	.03047	2.4250	2.5499	.08680	.32454	.36504

#1	.48843	.55737	1.0597	.49901	.51500	.45995	.00001	4.9632	.49430	.50915	.51739	.52090	2.3572	49.220
#2	.49094	.54122	1.0256	.48188	.51172	.46246	.00322	4.9886	.49408	.49198	.49906	.52154	2.3681	48.967

Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	None	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Value														
Range														

Elem	Li6707	Mg2790	Mn2576	Mo2020	Na5895	Ni2316	P_1782	Pb2203	S_1820	Sb2068	Se1960	Si2881	SiO2	Sn1899
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.96895	18.940	.46198	.51344	5.1428	.49036	.97791	1.0161	.12930	1.0003	1.0799	4.7841	10.238	1.0319
Stddev	.01102	.070	.00142	.01333	.0136	.01285	.02700	.0288	.00195	.0298	.0333	.1178	.252	.0307
%RSD	1.1371	.37156	.30783	2.5971	.26486	2.6211	2.7610	2.8318	1.5098	2.9785	3.0824	2.4629	2.4629	2.9767

#1	.96116	18.891	.46097	.52287	5.1332	.49945	.99700	1.0365	.12792	1.0214	1.1035	4.7007	10.060	1.0537
#2	.97674	18.990	.46298	.50401	5.1524	.48127	.95882	.99578	.13068	.97926	1.0564	4.8674	10.416	1.0102

Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	None	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Value														
Range														

Elem	Sr4077	Th2837	Ti3349	Tl1908	U_3701	V_2924	Zn2062	Zr3391
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.47171	.00025	.45692	1.0712	.04982	.48204	.45803	.50641
Stddev	.00064	.00015	.00237	.0419	.01485	.00108	.00043	.01378
%RSD	.13496	59.452	.51805	3.9123	29.798	.22335	.09363	2.7215
#1	.47126	.00035	.45525	1.1008	.06032	.48128	.45834	.49666
#2	.47216	.00014	.45860	1.0415	.03933	.48280	.45773	.51616

Check ?	Chk Pass	None	Chk Pass	Chk Pass	None	Chk Pass	Chk Pass	Chk Pass
Value								
Range								

Int. Std.	Y_2243	Y_3600	Y_3774
Units	Cts/S	Cts/S	Cts/S
Avg	2625.5	40233.	2123.5
Stddev	57.5	164.	13.5
%RSD	2.1889	.40732	.63655
#1	2584.8	40349.	2113.9
#2	2666.1	40118.	2133.1

Sample Name: CCB Acquired: 5/18/2016 22:25:36 Type: QC
 Method: 6500_025(v6) Mode: CONC Corr. Factor: 1.000000
 User: CRHOADES Prep Date: Custom ID2: Custom ID3:
 Comment:

Elem	Ag3280	Al1670	As1890	B_2089	Ba4554	Be3130	Bi2230	Ca3179	Cd2288	Co2286	Cr2055
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	-.00075	-.00030	-.00059	.00044	-.00031	.00026	.00206	-.02919	-.00022	.00004	-.00012
Stddev	.00057	.00026	.00453	.00068	.00008	.00036	.00130	.00213	.00043	.00006	.00018
%RSD	75.429	87.947	765.22	156.28	27.310	142.03	63.199	7.2882	195.58	150.37	154.21

#1	-.00035	-.00048	-.00380	-.00005	-.00025	.00051	.00298	-.03069	.00008	.00009	.00001
#2	-.00115	-.00011	.00261	.00092	-.00037	.00000	.00114	-.02768	-.00053	.00000	-.00024

Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit											
Low Limit											

Elem	Cu3247	Fe2599	K_7664	Li6707	Mg2790	Mn2576	Mo2020	Na5895	Ni2316	P_1782	Pb2203
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	-.00166	.01494	.09930	.00051	.00399	.00013	.00188	.20942	-.00005	.01445	.00148
Stddev	.00041	.00281	.03841	.00075	.00103	.00011	.00054	.01892	.00025	.00131	.00064
%RSD	24.519	18.806	38.682	147.37	25.896	89.892	28.914	9.0327	540.15	9.0408	43.057

#1	-.00194	.01295	.12646	.00104	.00472	.00021	.00150	.19604	-.00022	.01352	.00103
#2	-.00137	.01693	.07214	-.00002	.00326	.00005	.00227	.22279	.00013	.01537	.00193

Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit											
Low Limit											

Elem	S_1820	Sb2068	Se1960	Si2881	SiO2	Sn1899	Sr4077	Th2837	Ti3349	Ti1908	U_3701
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	F .10021	W .00282	.00484	.01897	.04060	.00102	.00013	-.00020	-.00020	.00348	-.02293
Stddev	.00716	.00620	.00219	.01618	.03463	.00134	.00014	.00231	.00002	.00268	.01201
%RSD	7.1413	219.54	45.263	85.295	85.295	131.49	108.99	1155.2	8.5212	77.139	52.349

#1	.10528	.00721	.00329	.03041	.06508	.00197	.00003	-.00183	-.00021	.00538	-.01444
#2	.09515	-.00156	.00639	.00753	.01611	.00007	.00023	.00143	-.00019	.00158	-.03142

Check ?	Chk Fail	Chk Warn	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit	.10000	.00100									
Low Limit	-.20000	-.00100									

Elem	V_2924	Zn2062	Zr3391
Units	ppm	ppm	ppm
Avg	.00123	-.00023	.00033
Stddev	.00021	.00066	.00016
%RSD	17.028	287.16	48.049

#1	.00138	-.00070	.00045
#2	.00108	.00024	.00022

Check ?	Chk Pass	Chk Pass	Chk Pass
High Limit			
Low Limit			

Int. Std.	Y_2243	Y_3600	Y_3774
Units	Cts/S	Cts/S	Cts/S
Avg	2615.4	40443.	2192.6
Stddev	34.8	661.	.5
%RSD	1.3287	1.6356	.02217

#1	2640.0	39976.	2192.9
#2	2590.8	40911.	2192.2

Sample Name: CCVL-3897520 Acquired: 5/18/2016 22:27:59 Type: QC

Method: 6500_025(v6) Mode: CONC Corr. Factor: 1.000000

User: CRHOADES Prep Date: Custom ID2: Custom ID3:

Comment:

Elem	Ag3280	Al1670	As1890	B_2089	Ba4554	Be3130	Bi2230	Ca3179	Cd2288	Co2286	Cr2055	Cu3247
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.00898	.10985	F .00703	.09240	.00961	.00097	.11663	.18583	.00484	.00968	.01025	.01445
Stddev	.00002	.00124	.00403	.00011	.00016	.00008	.00028	.00384	.00003	.00050	.00003	.00030
%RSD	.17060	1.1255	57.267	.12290	1.6958	8.6306	.23786	2.0639	.56806	5.1723	.31807	2.0570

#1	.00899	.11073	.00418	.09232	.00973	.00091	.11643	.18854	.00486	.00933	.01023	.01466
#2	.00896	.10898	.00988	.09248	.00950	.00103	.11682	.18311	.00482	.01004	.01028	.01424

Check ?	Chk Pass	Chk Pass	Chk Fail	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Value			.01500									
Range			-30.000%									

Elem	Fe2599	K_7664	Li6707	Mg2790	Mn2576	Mo2020	Na5895	Ni2316	P_1782	Pb2203	S_1820	Sb2068
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.09789	3.1248	.00976	.19322	.00960	.01968	1.2359	.03912	2.7650	.00942	.09664	.02334
Stddev	.00482	.0876	.00136	.00616	.00019	.00024	.0092	.00086	.0061	.00076	.00409	.00005
%RSD	4.9273	2.8034	13.921	3.1886	2.0285	1.2199	.74474	2.1894	.22132	8.0310	4.2288	.20883

#1	.10130	3.0629	.00880	.18886	.00973	.01951	1.2294	.03972	2.7693	.00996	.09375	.02337
#2	.09447	3.1867	.01072	.19758	.00946	.01985	1.2424	.03851	2.7607	.00889	.09953	.02330

Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	None	Chk Pass
Value												
Range												

Elem	Se1960	Si2881	SiO2	Sn1899	Sr4077	Th2837	Ti3349	Ti1908	U_3701	V_2924	Zn2062	Zr3391
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	F .02615	.47653	1.0198	.10145	.00987	.01541	.00879	.01365	F .03745	.00998	.01851	.01503
Stddev	.00201	.05566	.1191	.00329	.00002	.00066	.00026	.00152	.00028	.00042	.00043	.00206
%RSD	7.6955	11.681	11.681	3.2445	.24751	4.3141	2.9470	11.165	.73671	4.1780	2.3480	13.724

#1	.02473	.43717	.93554	.09912	.00985	.01588	.00897	.01473	.03764	.01027	.01882	.01649
#2	.02758	.51589	1.1040	.10378	.00988	.01494	.00861	.01258	.03725	.00968	.01820	.01357

Check ?	Chk Fail	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Fail	Chk Pass	Chk Pass	Chk Pass
Value	.01500								.06000			
Range	30.000%								-30.000%			

Int. Std.	Y_2243	Y_3600	Y_3774
Units	Cts/S	Cts/S	Cts/S
Avg	2654.3	40233.	2177.9
Stddev	8.2	202.	51.1
%RSD	.30901	.50267	2.3482

#1	2648.5	40376.	2214.0
#2	2660.1	40090.	2141.7

Sample Name: MB 280-325217/1-A Acquired: 5/18/2016 22:30:40 Type: Unk

Method: 6500_025(v6) Mode: CONC Corr. Factor: 1.000000

User: CRHOADES Prep Date: 5/16 Custom ID2: Custom ID3:

Comment: 325217 6010B

Elem	Ag3280	Al1670	As1890	B_2089	Ba4554	Be3130	Bi2230	Ca3179	Cd2288
Line	328.068 {103}	167.079 {502}	189.042 {478}	208.959 {461}	455.403 { 74}	313.042 {108}	223.061 {451}	317.933 {106}	228.802 {447}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	-0.00033	.01132	-0.00373	-0.00069	-0.00072	.00016	-0.00159	.00040	-0.00027
Stddev	.00047	.00064	.00090	.00044	.00033	.00005	.00253	.00764	.00015
%RSD	140.63	5.6389	24.147	64.177	45.772	28.488	159.57	1899.7	54.110

#1	.00000	.01177	-.00309	-.00101	-.00048	.00020	-.00337	.00581	-.00038
#2	-.00066	.01086	-.00436	-.00038	-.00095	.00013	.00020	-.00500	-.00017

Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Elem	Co2286	Cr2055	Cu3247	Fe2599	K_7664	Li6707	Mg2790	Mn2576	Mo2020
Line	228.616 {447}	205.560 {464}	324.754 {104}	259.940 {130}	766.490 { 44}	670.784 { 50}	279.079 {121}2	257.610 {131}	202.030 {467}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	-0.00007	.00001	-0.00007	F 1.6044	-0.00048	.00100	.00421	W .00543	-0.00017
Stddev	.00029	.00021	.00049	.0060	.05246	.00423	.00127	.00001	.00018
%RSD	407.70	2046.9	673.92	.37472	10820.	423.77	30.125	.20386	103.98

#1	-.00028	-.00014	-.00042	1.6086	.03661	-.00199	.00332	.00543	-.00030
#2	.00013	.00016	.00027	1.6001	-.03758	.00399	.00511	.00544	-.00005

Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Fail	Chk Pass	Chk Pass	Chk Pass	Chk Warn	Chk Pass
High Limit				.10000				.00500	
Low Limit				-.10000				-.00500	

Elem	Na5895	Ni2316	P_1782	Pb2203	S_1820	Sb2068	Se1960	Si2881	SiO2
Line	589.592 { 57}	231.604 {446}	178.284 {489}	220.353 {453}	182.034 {485}	206.833 {463}	196.090 {472}	288.158 {117}	288.158 {117}2
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.23069	-0.00030	.00094	-0.00029	F .10543	.00197	W .00919	.04544	.09725
Stddev	.00916	.00004	.00150	.00141	.00352	.00273	.00526	.01003	.02146
%RSD	3.9712	13.002	159.97	492.21	3.3398	138.54	57.294	22.066	22.066

#1	.22422	-.00033	.00200	-.00129	.10294	.00004	.00547	.05253	.11242
#2	.23717	-.00027	-.00012	.00071	.10792	.00390	.01291	.03835	.08207

Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Fail	Chk Pass	Chk Warn	Chk Pass	None
High Limit					.10000		.00750		
Low Limit					-.10000		-.00750		

Elem	Sn1899	Sr4077	Th2837	Ti3349	Ti1908	U_3701	V_2924	Zn2062	Zr3391
Line	189.989 {477}	407.771 { 83}	283.730 {119}	334.904 {101}	190.856 {477}	370.152 { 91}	292.402 {115}	206.200 {163}	339.198 { 99}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.00131	.00018	.00332	-0.00022	-0.00095	-0.02467	.00042	.00160	.00244
Stddev	.00001	.00010	.00147	.00007	.00136	.02748	.00033	.00027	.00468
%RSD	.81360	58.478	44.139	32.404	143.17	111.37	78.437	16.658	191.69

#1	.00132	.00025	.00228	-.00027	.00001	-.04410	.00065	.00179	.00575
#2	.00130	.00010	.00436	-.00017	-.00191	-.00524	.00019	.00141	-.00087

Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Int. Std.	Y_2243	Y_3600	Y_3774
Line	224.306 {450}	360.073 { 94}	377.433 { 89}
Units	Cts/S	Cts/S	Cts/S
Avg	2644.8	41769.	2159.0
Stddev	4.5	68.	15.6
%RSD	.17036	.16250	.72167

#1	2641.7	41817.	2170.0
#2	2648.0	41721.	2148.0

Sample Name: LCS 280-325217/2-A Acquired: 5/18/2016 22:33:22 Type: Unk
Method: 6500_025(v6) Mode: CONC Corr. Factor: 1.000000
User: CRHOADES Prep Date: Custom ID2: Custom ID3:
Comment: 325217 6010B

Elem	Ag3280	Al1670	Al3092	As1890	B_2089	Ba4554	Be3130	Bi2230	Ca3179
Line	328.068 {103}	167.079 {502}	309.271 {109}	189.042 {478}	208.959 {461}	455.403 { 74}	313.042 {108}	223.061 {451}	317.933 {106}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.05073	2.1714	F 2.3886	1.0922	1.0141	2.1252	.04882	2.2469	50.860
Stddev	.00040	.0530	.0105	.0251	.0295	.0289	.00018	.0562	.678
%RSD	.78270	2.4420	.44081	2.2946	2.9062	1.3605	.37739	2.4999	1.3321

#1	.05101	2.1339	2.3960	1.0745	.99330	2.1457	.04868	2.2071	51.339
#2	.05045	2.2089	2.3811	1.1099	1.0350	2.1048	.04895	2.2866	50.380

Check ?	Chk Pass	Chk Pass	Chk Fail	Chk Pass	Chk Pass	Chk Pass	Chk Pass	None	Chk Pass
High Limit			2.2250						
Low Limit			1.7300						

Elem	Cd2288	Co2286	Cr2055	Cu3247	Fe2599	K_7664	Li6707	Mg2790	Mn2576
Line	228.802 {447}	228.616 {447}	205.560 {464}	324.754 {104}	259.940 {130}	766.490 { 44}	670.784 { 50}	279.079 {121}2	257.610 {131}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.10092	.49417	.20523	.26755	1.0105	51.024	.99944	48.999	.47165
Stddev	.00281	.01413	.00583	.00023	.0030	.770	.00236	.074	.00067
%RSD	2.7861	2.8595	2.8406	.08436	.29531	1.5100	.23628	.15065	.14250

#1	.09893	.48418	.20111	.26739	1.0084	51.568	.99777	48.947	.47118
#2	.10291	.50417	.20935	.26771	1.0127	50.479	1.0011	49.051	.47213

Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Elem	Mo2020	Na8183	Ni2316	P_1782	Pb2203	S_1820	Sb2068	Se1960	Si2881
Line	202.030 {467}	818.326 { 41}	231.604 {446}	178.284 {489}	220.353 {453}	182.034 {485}	206.833 {463}	196.090 {472}	288.158 {117}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	1.0836	55.331	.48723	10.199	.51277	2.2182	.52907	F 2.2462	9.9100
Stddev	.0279	.141	.01377	.274	.01003	.0619	.01601	.0421	.0183
%RSD	2.5736	.25556	2.8266	2.6862	1.9559	2.7911	3.0264	1.8734	.18442

#1	1.0639	55.231	.47749	10.005	.50568	2.1744	.51775	2.2165	9.9230
#2	1.1033	55.431	.49697	10.393	.51986	2.2620	.54039	2.2760	9.8971

Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	None	Chk Pass	Chk Fail	Chk Pass
High Limit								2.2400	
Low Limit								1.7000	

Elem	SiO2	Sn1899	Sr4077	Th2837	Ti3349	Ti1908	U_3701	V_2924	Zn2062
Line	288.158 {117}2	189.989 {477}	407.771 { 83}	283.730 {119}	334.904 {101}	190.856 {477}	370.152 { 91}	292.402 {115}	206.200 {163}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	21.207	2.1055	.97064	.96873	.95091	1.9982	2.1509	.49123	.46494
Stddev	.039	.0418	.01567	.00197	.00133	.0135	.0595	.00033	.00266
%RSD	.18442	1.9864	1.6142	.20335	.13945	.67437	2.7683	.06646	.57202

#1	21.235	2.0759	.98172	.97012	.94997	2.0077	2.1930	.49146	.46306
#2	21.180	2.1351	.95956	.96734	.95185	1.9887	2.1088	.49100	.46683

Check ?	None	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Elem	Zr3391								
Line	339.198 { 99}								
Units	ppm								
Avg	.54458								
Stddev	.00702								
%RSD	1.2889								

#1	.54955								
#2	.53962								

Check ?	Chk Pass								
High Limit									
Low Limit									

Sample Name: LCS 280-325217/2-A Acquired: 5/18/2016 22:33:22 Type: Unk
 Method: 6500_025(v6) Mode: CONC Corr. Factor: 1.000000
 User: CRHOADES Prep Date: Custom ID2: Custom ID3:
 Comment: 325217 6010B

Int. Std.	Y_2243	Y_3600	Y_3774
Line	224.306 {450}	360.073 { 94}	377.433 { 89}
Units	Cts/S	Cts/S	Cts/S
Avg	2598.7	40515.	2206.7
Stddev	67.0	404.	25.5
%RSD	2.5769	.99762	1.1548
#1	2646.1	40800.	2188.7
#2	2551.3	40229.	2224.7

Sample Name: 280-83024-A-2-G Acquired: 5/18/2016 22:35:50 Type: Unk
Method: 6500_025(v6) Mode: CONC Corr. Factor: 1.000000
User: CRHOADES Prep Date: Custom ID2: Custom ID3:
Comment: 325217 6010B

Elem	Ag3280	Al1670	As1890	B_2089	Ba4554	Be3130	Bi2230	Ca3179	Cd2288
Line	328.068 {103}	167.079 {502}	189.042 {478}	208.959 {461}	455.403 { 74}	313.042 {108}	223.061 {451}	317.933 {106}	228.802 {447}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	-.00095	.00945	.00572	.57918	.43025	.00010	.00009	163.76	.00035
Stddev	.00158	.00087	.00051	.00354	.00067	.00008	.00734	.44	.00007
%RSD	166.06	9.1985	8.8472	.61176	.15486	77.016	7814.7	.26905	21.027

#1	-.00207	.00884	.00608	.58169	.43072	.00016	.00529	164.07	.00030
#2	.00017	.01007	.00536	.57668	.42978	.00005	-.00510	163.45	.00040

Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Elem	Co2286	Cr2055	Cu3247	Fe2599	K_7664	Li6707	Mg2790	Mn2576	Mo2020
Line	228.616 {447}	205.560 {464}	324.754 {104}	259.940 {130}	766.490 { 44}	670.784 { 50}	279.079 {121}2	257.610 {131}	202.030 {467}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.00377	.00015	.00006	26.910	4.8768	.01256	30.450	2.3106	.00368
Stddev	.00025	.00002	.00012	.620	.0217	.00068	.032	.0039	.00079
%RSD	6.6727	16.285	205.16	2.3022	.44566	5.3952	.10667	.16916	21.474

#1	.00359	.00013	-.00003	27.348	4.8615	.01304	30.473	2.3134	.00312
#2	.00394	.00016	.00014	26.472	4.8922	.01208	30.427	2.3079	.00424

Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Elem	Na8183	Ni2316	P_1782	Pb2203	S_1820	Sb2068	Se1960	Si2881	SiO2
Line	818.326 { 41}	231.604 {446}	178.284 {489}	220.353 {453}	182.034 {485}	206.833 {463}	196.090 {472}	288.158 {117}	288.158 {117}2
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	67.780	.00496	.04638	.00099	1.7459	-.00069	.01100	9.9958	21.391
Stddev	.850	.00035	.00592	.00301	.0221	.00342	.00629	.0526	.113
%RSD	1.2545	7.0456	12.756	302.98	1.2657	497.93	57.177	.52624	.52624

#1	68.381	.00521	.05057	-.00114	1.7615	.00173	.00655	10.033	21.471
#2	67.179	.00472	.04220	.00313	1.7303	-.00310	.01545	9.9586	21.311

Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Elem	Sn1899	Sr4077	Th2837	Ti3349	Ti1908	U_3701	V_2924	Zn2062	Zr3391
Line	189.989 {477}	407.771 { 83}	283.730 {119}	334.904 {101}	190.856 {477}	370.152 { 91}	292.402 {115}	206.200 {163}	339.198 { 99}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.00143	.88756	.00020	.00024	.02126	-.02433	.00189	.04061	-.00096
Stddev	.00086	.00418	.00084	.00062	.00189	.01684	.00001	.00017	.00312
%RSD	60.316	.47099	415.09	257.76	8.8810	69.228	.31661	.40769	324.87

#1	.00204	.89052	.00080	.00068	.01993	-.01242	.00189	.04049	-.00317
#2	.00082	.88461	-.00039	-.00020	.02260	-.03624	.00188	.04072	.00125

Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Int. Std.	Y_2243	Y_3600	Y_3774
Line	224.306 {450}	360.073 { 94}	377.433 { 89}
Units	Cts/S	Cts/S	Cts/S
Avg	2563.2	40106.	2272.4
Stddev	.5	171.	6.6
%RSD	.01898	.42721	.29037

#1	2562.9	39985.	2267.7
#2	2563.6	40227.	2277.0

Sample Name: 280-83024-A-2-G SD@5 Acquired: 5/18/2016 22:38:28 Type: Unk
Method: 6500_025(v6) Mode: CONC Corr. Factor: 1.000000
User: CRHOADES Prep Date: Custom ID2: Custom ID3:
Comment: 325217 6010B

Elem	Ag3280	Al1670	As1890	B_2089	Ba4554	Be3130	Bi2230	Ca3179	Cd2288
Line	328.068 {103}	167.079 {502}	189.042 {478}	208.959 {461}	455.403 { 74}	313.042 {108}	223.061 {451}	317.933 {106}	228.802 {447}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	-0.00004	.00204	.00420	.11858	.08987	.00025	-0.00095	34.488	-0.00034
Stddev	.00008	.00058	.00138	.00048	.00149	.00036	.00125	.449	.00001
%RSD	223.83	28.664	32.786	.40151	1.6578	141.08	132.07	1.3011	3.8094

#1	.00002	.00245	.00517	.11824	.09092	.00051	-0.00006	34.805	-0.00035
#2	-0.00009	.00163	.00323	.11892	.08881	.00000	-0.00183	34.171	-0.00033

Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Elem	Co2286	Cr2055	Cu3247	Fe2599	K_7664	Li6707	Mg2790	Mn2576	Mo2020
Line	228.616 {447}	205.560 {464}	324.754 {104}	259.940 {130}	766.490 { 44}	670.784 { 50}	279.079 {121}2	257.610 {131}	202.030 {467}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.00069	-0.00006	-0.00041	5.8481	1.0111	.00889	6.2501	.46935	.00018
Stddev	.00042	.00004	.00047	.0214	.0490	.00205	.0067	.00005	.00036
%RSD	61.282	66.787	113.82	.36591	4.8453	23.083	.10734	.01083	198.33

#1	.00099	-0.00003	-0.00075	5.8330	1.0458	.01034	6.2454	.46932	-0.00007
#2	.00039	-0.00009	-0.00008	5.8632	.97650	.00744	6.2549	.46939	.00044

Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Elem	Na8183	Ni2316	P_1782	Pb2203	S_1820	Sb2068	Se1960	Si2881	SiO2
Line	818.326 { 41}	231.604 {446}	178.284 {489}	220.353 {453}	182.034 {485}	206.833 {463}	196.090 {472}	288.158 {117}	288.158 {117}2
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	15.225	.00081	.00891	.00158	.41110	.00436	-0.00341	1.9867	4.2515
Stddev	.245	.00024	.00415	.00012	.00966	.00297	.00646	.0274	.0586
%RSD	1.6114	29.437	46.571	7.4659	2.3489	67.957	189.46	1.3793	1.3793

#1	15.399	.00098	.01184	.00150	.41793	.00646	.00116	2.0061	4.2930
#2	15.052	.00064	.00597	.00167	.40427	.00227	-0.00798	1.9673	4.2101

Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Elem	Sn1899	Sr4077	Th2837	Ti3349	Ti1908	U_3701	V_2924	Zn2062	Zr3391
Line	189.989 {477}	407.771 { 83}	283.730 {119}	334.904 {101}	190.856 {477}	370.152 { 91}	292.402 {115}	206.200 {163}	339.198 { 99}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	-0.00010	.18839	.00095	.00002	.00253	.01972	.00107	.00854	-0.00388
Stddev	.00148	.00072	.00283	.00042	.00034	.04421	.00068	.00001	.00405
%RSD	1500.1	.38209	298.81	2616.0	13.357	224.19	63.227	.17523	104.31

#1	.00095	.18788	.00295	-0.00028	.00277	-0.11154	.00155	.00853	-0.00675
#2	-0.00115	.18889	-0.00105	.00031	.00229	.05098	.00059	.00855	-0.00102

Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Int. Std.	Y_2243	Y_3600	Y_3774
Line	224.306 {450}	360.073 { 94}	377.433 { 89}
Units	Cts/S	Cts/S	Cts/S
Avg	2529.7	40034.	2122.0
Stddev	9.0	177.	35.1
%RSD	.35773	.44201	1.6526

#1	2536.1	39909.	2097.2
#2	2523.3	40159.	2146.7

Sample Name: 280-83024-A-2-H MS Acquired: 5/18/2016 22:41:08 Type: Unk
Method: 6500_025(v6) Mode: CONC Corr. Factor: 1.000000
User: CRHOADES Prep Date: Custom ID2: Custom ID3:
Comment: 325217 6010B

Elem	Ag3280	Al1670	Al3092	As1890	B_2089	Ba4554	Be3130	Bi2230	Ca3179
Line	328.068 {103}	167.079 {502}	309.271 {109}	189.042 {478}	208.959 {461}	455.403 { 74}	313.042 {108}	223.061 {451}	317.933 {106}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.05053	2.1002	W 2.4845	1.0899	1.5488	2.4862	.04767	F 2.2147	209.90
Stddev	.00004	.0060	.0081	.0029	.0050	.0054	.00055	.0020	.10
%RSD	.08701	.28545	.32524	.26932	.32446	.21819	1.1566	.09137	.04532

#1	.05050	2.1045	2.4903	1.0920	1.5523	2.4823	.04728	2.2162	209.96
#2	.05056	2.0960	2.4788	1.0879	1.5452	2.4900	.04806	2.2133	209.83

Check ?	Chk Pass	Chk Pass	Chk Warn	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Fail	Chk Pass
High Limit			500.00					.10000	
Low Limit			3.2000					-.10000	

Elem	Cd2288	Co2286	Cr2055	Cu3247	Fe2599	K_7664	Li6707	Mg2790	Mn2576
Line	228.802 {447}	228.616 {447}	205.560 {464}	324.754 {104}	259.940 {130}	766.490 { 44}	670.784 { 50}	279.079 {121}2	257.610 {131}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.10013	.48807	.20320	.26621	27.598	54.272	1.0049	76.609	2.6958
Stddev	.00001	.00038	.00003	.00086	.467	.061	.0077	.200	.0067
%RSD	.01057	.07751	.01697	.32372	1.6915	.11212	.76814	.26053	.24730

#1	.10014	.48833	.20317	.26561	27.928	54.315	.99944	76.468	2.6911
#2	.10012	.48780	.20322	.26682	27.268	54.229	1.0104	76.750	2.7005

Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Elem	Mo2020	Na8183	Ni2316	P_1782	Pb2203	S_1820	Sb2068	Se1960	Si2881
Line	202.030 {467}	818.326 { 41}	231.604 {446}	178.284 {489}	220.353 {453}	182.034 {485}	206.833 {463}	196.090 {472}	288.158 {117}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	1.0857	119.04	.48031	W 10.290	.49559	3.7963	.52737	2.1400	19.478
Stddev	.0001	.83	.00069	.004	.00107	.0153	.00301	.0147	.328
%RSD	.01154	.69998	.14264	.04140	.21677	.40219	.57059	.68835	1.6814

#1	1.0856	118.45	.47983	10.293	.49634	3.8071	.52524	2.1505	19.246
#2	1.0858	119.63	.48079	10.287	.49483	3.7855	.52950	2.1296	19.709

Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Warn	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit				2.0000					
Low Limit				-1.0000					

Elem	SiO2	Sn1899	Sr4077	Th2837	Ti3349	Ti1908	U_3701	V_2924	Zn2062
Line	288.158 {117}2	189.989 {477}	407.771 { 83}	283.730 {119}	334.904 {101}	190.856 {477}	370.152 { 91}	292.402 {115}	206.200 {163}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	41.682	W 2.0280	1.8235	.97307	.95785	1.9351	2.1690	.48981	.48263
Stddev	.701	.0060	.0024	.00186	.00635	.0423	.0341	.00220	.00267
%RSD	1.6814	.29587	.13301	.19121	.66266	2.1886	1.5723	.44986	.55405

#1	41.187	2.0322	1.8217	.97176	.95337	1.9651	2.1931	.48825	.48074
#2	42.178	2.0237	1.8252	.97439	.96234	1.9052	2.1449	.49137	.48452

Check ?	Chk Pass	Chk Warn	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit		2.0000							
Low Limit		-.05000							

Elem	Zr3391								
Line	339.198 { 99}								
Units	ppm								
Avg	.53818								
Stddev	.00856								
%RSD	1.5900								

#1	.53213								
#2	.54423								

Check ?	Chk Pass								
High Limit									
Low Limit									

Sample Name: 280-83024-A-2-H MS Acquired: 5/18/2016 22:41:08 Type: Unk
 Method: 6500_025(v6) Mode: CONC Corr. Factor: 1.000000
 User: CRHOADES Prep Date: Custom ID2: Custom ID3:
 Comment: 325217 6010B

Int. Std.	Y_2243	Y_3600	Y_3774
Line	224.306 {450}	360.073 { 94}	377.433 { 89}
Units	Cts/S	Cts/S	Cts/S
Avg	2498.3	38643.	2192.8
Stddev	10.9	331.	17.2
%RSD	.43792	.85769	.78213
#1	2506.0	38877.	2180.7
#2	2490.6	38408.	2205.0

Sample Name: 280-83024-A-2-I MSD Acquired: 5/18/2016 22:43:35 Type: Unk
Method: 6500_025(v6) Mode: CONC Corr. Factor: 1.000000
User: CRHOADES Prep Date: Custom ID2: Custom ID3:
Comment: 325217 6010B

Elem	Ag3280	Al1670	Al3092	As1890	B_2089	Ba4554	Be3130	Bi2230	Ca3179
Line	328.068 {103}	167.079 {502}	309.271 {109}	189.042 {478}	208.959 {461}	455.403 { 74}	313.042 {108}	223.061 {451}	317.933 {106}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.05059	2.1234	W 2.5331	1.1127	1.5733	2.5548	.04874	F 2.2356	215.94
Stddev	.00006	.0276	.0451	.0052	.0096	.0718	.00079	.0061	6.31
%RSD	.11264	1.2993	1.7821	.47110	.60815	2.8123	1.6237	.27147	2.9205

#1	.05055	2.1039	2.5650	1.1164	1.5665	2.6056	.04930	2.2313	220.40
#2	.05063	2.1429	2.5012	1.1090	1.5800	2.5040	.04818	2.2399	211.48

Check ?	Chk Pass	Chk Pass	Chk Warn	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Fail	Chk Pass
High Limit			500.00					.10000	
Low Limit			3.2000					-.10000	

Elem	Cd2288	Co2286	Cr2055	Cu3247	Fe2599	K_7664	Li6707	Mg2790	Mn2576
Line	228.802 {447}	228.616 {447}	205.560 {464}	324.754 {104}	259.940 {130}	766.490 { 44}	670.784 { 50}	279.079 {121}2	257.610 {131}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.10159	.49102	.20438	.27276	27.906	56.028	1.0184	78.488	2.7332
Stddev	.00070	.00485	.00173	.00146	.874	1.504	.0046	.187	.0039
%RSD	.69047	.98876	.84689	.53435	3.1321	2.6852	.44939	.23797	.14305

#1	.10109	.48758	.20316	.27173	28.524	57.092	1.0151	78.356	2.7304
#2	.10208	.49445	.20561	.27379	27.288	54.964	1.0216	78.620	2.7359

Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Elem	Mo2020	Na8183	Ni2316	P_1782	Pb2203	S_1820	Sb2068	Se1960	Si2881
Line	202.030 {467}	818.326 { 41}	231.604 {446}	178.284 {489}	220.353 {453}	182.034 {485}	206.833 {463}	196.090 {472}	288.158 {117}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	1.0897	120.79	.48403	W 10.478	.50499	3.8667	.53165	2.2093	19.655
Stddev	.0067	.06	.00292	.058	.00096	.0142	.00170	.0242	.087
%RSD	.61575	.05253	.60313	.55337	.19104	.36725	.31911	1.0947	.44198

#1	1.0849	120.84	.48197	10.437	.50431	3.8768	.53045	2.2264	19.717
#2	1.0944	120.75	.48609	10.519	.50567	3.8567	.53285	2.1922	19.594

Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Warn	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit				2.0000					
Low Limit				-1.0000					

Elem	SiO2	Sn1899	Sr4077	Th2837	Ti3349	Ti1908	U_3701	V_2924	Zn2062
Line	288.158 {117}2	189.989 {477}	407.771 { 83}	283.730 {119}	334.904 {101}	190.856 {477}	370.152 { 91}	292.402 {115}	206.200 {163}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	42.062	W 2.0472	1.8720	.98707	.96764	1.9312	2.2201	.49831	.49362
Stddev	.186	.0056	.0472	.00487	.00025	.0462	.0005	.00257	.00153
%RSD	.44198	.27099	2.5232	.49388	.02539	2.3926	.02209	.51620	.30959

#1	42.194	2.0512	1.9054	.98363	.96782	1.9639	2.2204	.49649	.49470
#2	41.931	2.0433	1.8386	.99052	.96747	1.8986	2.2197	.50013	.49254

Check ?	Chk Pass	Chk Warn	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit		2.0000							
Low Limit		-.05000							

Elem	Zr3391								
Line	339.198 { 99}								
Units	ppm								
Avg	.54150								
Stddev	.00180								
%RSD	.33265								

#1	.54023								
#2	.54278								

Check ?	Chk Pass								
High Limit									
Low Limit									

Sample Name: 280-83024-A-2-I MSD Acquired: 5/18/2016 22:43:35 Type: Unk
 Method: 6500_025(v6) Mode: CONC Corr. Factor: 1.000000
 User: CRHOADES Prep Date: Custom ID2: Custom ID3:
 Comment: 325217 6010B

Int. Std.	Y_2243	Y_3600	Y_3774
Line	224.306 {450}	360.073 { 94}	377.433 { 89}
Units	Cts/S	Cts/S	Cts/S
Avg	2560.7	39328.	2152.2
Stddev	46.8	200.	55.5
%RSD	1.8257	.50923	2.5801
#1	2593.7	39186.	2113.0
#2	2527.6	39469.	2191.5

Sample Name: CCVH-3894253 Acquired: 5/18/2016 22:46:02 Type: QC
 Method: 6500_025(v6) Mode: CONC Corr. Factor: 1.000000
 User: CRHOADES Prep Date: Custom ID2: Custom ID3:
 Comment:

Elem	Ag3280	Al3092	As1890	B_2089	Ba4554	Be3130	Bi2230	Ca3179	Cd2288	Co2286	Cr2055
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	-0.00099	52.621	-0.00293	.01083	-0.00015	.00051	W 1.0790	-0.00795	-0.00041	-0.00106	.00047
Stddev	.00019	1.774	.00428	.00167	.00010	.00008	.0172	.01203	.00012	.00031	.00026
%RSD	18.649	3.3714	145.91	15.463	67.063	15.404	1.5914	151.33	29.257	29.388	54.176

#1	-0.00113	53.875	-0.00596	.01201	-0.00021	.00057	1.0912	.00056	-0.00033	-0.00084	.00029
#2	-0.00086	51.366	.00009	.00965	-0.00008	.00046	1.0669	-0.01646	-0.00050	-0.00128	.00066

Check ?	None	Chk Pass	None	None	None	None	Chk Warn	None	None	None	None
Value							1.0000				
Range							5.0000%				

Elem	Cu3247	Fe2714	K_7664	Li6707	Mg2790	Mn2576	Mo2020	Na8183	Ni2316	P_1782	Pb2203
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.00008	49.067	.19868	.00114	.03157	-0.00009	.00281	254.20	.00156	.00630	-0.00184
Stddev	.00031	.690	.03318	.00008	.00642	.00005	.00126	.64	.00024	.00024	.00130
%RSD	371.13	1.4066	16.700	6.7515	20.332	58.806	44.736	.25189	15.151	3.8468	70.373

#1	.00030	49.555	.22214	.00119	.03611	-0.00012	.00192	254.65	.00172	.00613	-0.00276
#2	-0.00014	48.579	.17522	.00108	.02703	-0.00005	.00370	253.75	.00139	.00647	-0.00093

Check ?	None	Chk Pass	None	None	None	None	None	Chk Pass	None	None	None
Value											
Range											

Elem	S_1820	Sb2068	Se1960	Si2881	SiO2	Sn1899	Sr4077	Th2837	Ti3349	Ti1908	U_3701
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	5.1145	-0.00877	.01195	-0.03240	-0.06934	.00120	.00053	W 4.6282	.00701	.01678	W 10.728
Stddev	.0193	.00373	.00386	.00153	.00327	.00100	.00018	.0059	.00024	.00277	.060
%RSD	.37725	42.551	32.308	4.7197	4.7197	82.732	34.057	.12683	3.4581	16.509	.55896

#1	5.1281	-.01141	.00922	-0.03348	-0.07165	.00050	.00040	4.6241	.00718	.01482	10.686
#2	5.1008	-.00613	.01468	-0.03132	-0.06703	.00191	.00065	4.6324	.00683	.01874	10.771

Check ?	Chk Pass	None	None	None	None	None	None	Chk Warn	None	None	Chk Warn
Value								5.0000			10.000
Range								-5.0000%			5.0000%

Elem	V_2924	Zn2062	Zr3391
Units	ppm	ppm	ppm
Avg	.00924	-0.00011	.05242
Stddev	.00082	.00026	.00294
%RSD	8.9264	245.96	5.6015

#1	.00982	-0.00029	.05450
#2	.00865	.00008	.05035

Check ?	None	None	None
Value			
Range			

Int. Std.	Y_2243	Y_3600	Y_3774
Units	Cts/S	Cts/S	Cts/S
Avg	2526.3	39044.	2083.0
Stddev	45.6	54.	83.6
%RSD	1.8036	.13922	4.0122

#1	2494.1	39083.	2023.9
#2	2558.5	39006.	2142.1

Sample Name: CCV-3894251 Acquired: 5/18/2016 22:48:39 Type: QC

Method: 6500_025(v6) Mode: CONC Corr. Factor: 1.000000

User: CRHOADES Prep Date: Custom ID2: Custom ID3:

Comment:

Elem	Ag3280	Al1670	As1890	B_2089	Ba4554	Be3130	Bi2230	Ca3179	Cd2288	Co2286	Cr2055	Cu3247	Fe2599
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.49126	.54230	1.0245	.48910	.50644	.45805	-.00158	4.9602	.49383	.49317	.49922	.51482	2.4828
Stddev	.00105	.00603	.0065	.00253	.01684	.01100	.00269	.1216	.00011	.00094	.00029	.00041	.0410
%RSD	.21388	1.1114	.63370	.51722	3.3243	2.4013	170.33	2.4521	.02136	.18988	.05779	.07971	1.6508

#1	.49201	.53803	1.0291	.48731	.51835	.46583	-.00348	5.0462	.49376	.49250	.49943	.51511	2.5118
#2	.49052	.54656	1.0199	.49089	.49454	.45028	.00032	4.8742	.49390	.49383	.49902	.51453	2.4538

Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	None	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Value													
Range													

Elem	K_7664	Li6707	Mg2790	Mn2576	Mo2020	Na5895	Ni2316	P_1782	Pb2203	S_1820	Sb2068	Se1960	Si2881
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	48.451	.96822	19.048	.46764	.50551	5.1312	.48365	.96431	.99735	.07550	.97643	1.0517	4.8400
Stddev	1.578	.01156	.022	.00075	.00111	.0439	.00108	.00045	.00308	.00652	.00261	.0102	.0032
%RSD	3.2567	1.1937	.11544	.16007	.21998	.85575	.22430	.04649	.30866	8.6350	.26707	.97161	.06667

#1	49.566	.97639	19.064	.46711	.50629	5.1623	.48288	.96463	.99517	.08011	.97459	1.0590	4.8377
#2	47.335	.96004	19.033	.46817	.50472	5.1002	.48441	.96399	.99953	.07089	.97828	1.0445	4.8422

Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	None	Chk Pass	Chk Pass	Chk Pass
Value													
Range													

Elem	SiO2	Sn1899	Sr4077	Th2837	Ti3349	Ti1908	U_3701	V_2924	Zn2062	Zr3391
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	10.358	1.0120	.46789	.00026	.46171	1.0504	-.03296	.48404	.46355	.51398
Stddev	.007	.0032	.01513	.00324	.00147	.0129	.03440	.00008	.00033	.00437
%RSD	.06667	.31313	3.2332	1251.8	.31875	1.2267	104.38	.01657	.07161	.84990

#1	10.353	1.0143	.47858	.00255	.46066	1.0596	-.00863	.48398	.46332	.51090
#2	10.362	1.0098	.45719	-.00203	.46275	1.0413	-.05728	.48409	.46379	.51707

Check ?	Chk Pass	Chk Pass	Chk Pass	None	Chk Pass	Chk Pass	None	Chk Pass	Chk Pass	Chk Pass
Value										
Range										

Int. Std.	Y_2243	Y_3600	Y_3774
Units	Cts/S	Cts/S	Cts/S
Avg	2595.5	39412.	2107.4
Stddev	38.9	257.	51.7
%RSD	1.4993	.65233	2.4532

#1	2623.0	39594.	2070.9
#2	2567.9	39230.	2144.0

Sample Name: CCB Acquired: 5/18/2016 22:51:11 Type: QC
 Method: 6500_025(v6) Mode: CONC Corr. Factor: 1.000000
 User: CRHOADES Prep Date: Custom ID2: Custom ID3:
 Comment:

Elem	Ag3280	Al1670	As1890	B_2089	Ba4554	Be3130	Bi2230	Ca3179	Cd2288	Co2286	Cr2055
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	-.00106	.00031	-.00321	.00324	-.00027	.00023	.00070	-.01827	-.00013	-.00019	.00013
Stddev	.00015	.00047	.00401	.00012	.00049	.00011	.00126	.00432	.00001	.00021	.00006
%RSD	13.780	150.00	124.86	3.6173	183.30	47.879	180.06	23.620	9.9069	113.08	46.455

#1	-.00117	.00064	-.00038	.00316	-.00062	.00031	-.00019	-.02132	-.00012	-.00004	.00018
#2	-.00096	-.00002	-.00605	.00332	.00008	.00015	.00159	-.01522	-.00014	-.00034	.00009

Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit											
Low Limit											

Elem	Cu3247	Fe2599	K_7664	Li6707	Mg2790	Mn2576	Mo2020	Na5895	Ni2316	P_1782	Pb2203
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	-.00108	-.00219	.15447	.00137	.00440	.00000	.00191	.17974	-.00105	.00074	.00118
Stddev	.00009	.00488	.04513	.00236	.00167	.00005	.00030	.00927	.00024	.00395	.00016
%RSD	8.3305	222.54	29.217	172.35	38.063	14026.	15.746	5.1591	22.630	537.21	13.895

#1	-.00114	-.00565	.18639	.00304	.00558	-.00004	.00169	.17318	-.00122	-.00206	.00129
#2	-.00101	.00126	.12256	-.00030	.00321	.00004	.00212	.18629	-.00089	.00353	.00106

Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit											
Low Limit											

Elem	S_1820	Sb2068	Se1960	Si2881	SiO2	Sn1899	Sr4077	Th2837	Ti3349	Ti1908	U_3701
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	W .05871	W .00756	W .00799	-.01444	-.03089	.00208	.00003	.00037	-.00052	.00484	-.01030
Stddev	.00112	.00046	.00724	.01026	.02195	.00154	.00010	.00047	.00059	.00223	.06264
%RSD	1.9034	6.0265	90.595	71.050	71.050	73.992	352.73	125.07	112.01	46.131	608.29

#1	.05950	.00788	.00287	-.02169	-.04641	.00099	.00010	.00070	-.00011	.00326	-.05459
#2	.05792	.00724	.01311	-.00718	-.01537	.00317	-.00004	.00004	-.00094	.00642	.03399

Check ?	Chk Warn	Chk Warn	Chk Warn	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit	.05000	.00100	.00750								
Low Limit	-.20000	-.00100	-.01500								

Elem	V_2924	Zn2062	Zr3391
Units	ppm	ppm	ppm
Avg	.00007	-.00099	-.00112
Stddev	.00003	.00013	.00295
%RSD	43.595	12.966	263.51

#1	.00009	-.00108	-.00320
#2	.00005	-.00090	.00097

Check ?	Chk Pass	Chk Pass	Chk Pass
High Limit			
Low Limit			

Int. Std.	Y_2243	Y_3600	Y_3774
Units	Cts/S	Cts/S	Cts/S
Avg	2855.1	41186.	2104.5
Stddev	65.2	30.	89.5
%RSD	2.2825	.07396	4.2510

#1	2901.2	41207.	2167.8
#2	2809.0	41164.	2041.3

Sample Name: CCVL-3897520 Acquired: 5/18/2016 22:53:33 Type: QC
Method: 6500_025(v6) Mode: CONC Corr. Factor: 1.000000
User: CRHOADES Prep Date: Custom ID2: Custom ID3:
Comment:

Elem	Ag3280	Al1670	As1890	B_2089	Ba4554	Be3130	Bi2230	Ca3179	Cd2288	Co2286	Cr2055	Cu3247
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.01021	.11193	.01834	.09816	.00951	.00118	.11690	.18031	.00494	.01019	.01063	.01512
Stddev	.00039	.00085	.00070	.00045	.00013	.00009	.00059	.00131	.00000	.00016	.00007	.00007
%RSD	3.8502	.75822	3.8192	.46053	1.3591	7.8604	.50354	.72535	.00964	1.5461	.65028	.46263

#1	.00993	.11133	.01785	.09784	.00960	.00124	.11649	.17939	.00494	.01030	.01068	.01517
#2	.01049	.11253	.01884	.09848	.00942	.00111	.11732	.18124	.00494	.01007	.01058	.01507

Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Value												
Range												

Elem	Fe2599	K_7664	Li6707	Mg2790	Mn2576	Mo2020	Na5895	Ni2316	P_1782	Pb2203	S_1820	Sb2068
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.10026	3.0987	.01019	.20080	.00970	.02015	1.2250	.03940	2.8253	.00919	.06496	.02584
Stddev	.00094	.0317	.00309	.00130	.00005	.00003	.0351	.00062	.0039	.00104	.00736	.00113
%RSD	.94144	1.0238	30.339	.64585	.49977	.14903	2.8677	1.5813	.13779	11.358	11.330	4.3790

#1	.10093	3.1212	.01237	.20172	.00974	.02017	1.2001	.03896	2.8281	.00845	.07017	.02504
#2	.09959	3.0763	.00800	.19988	.00967	.02013	1.2498	.03984	2.8225	.00993	.05976	.02664

Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	None	Chk Pass
Value												
Range												

Elem	Se1960	Si2881	SiO2	Sn1899	Sr4077	Th2837	Ti3349	Ti1908	U_3701	V_2924	Zn2062	Zr3391
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.01936	.49989	1.0698	.10267	.00974	.01655	.00875	.01342	F .04007	.00998	.01888	.01611
Stddev	.00464	.02023	.0433	.00056	.00017	.00167	.00063	.00088	.02100	.00080	.00037	.00134
%RSD	23.986	4.0469	4.0469	.54862	1.7080	10.105	7.2020	6.5246	52.405	8.0062	1.9595	8.2955

#1	.01608	.48558	1.0392	.10227	.00986	.01774	.00920	.01280	.02522	.01055	.01862	.01516
#2	.02264	.51419	1.1004	.10307	.00963	.01537	.00830	.01403	.05492	.00942	.01914	.01705

Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Fail	Chk Pass	Chk Pass	Chk Pass
Value									.06000			
Range									-30.000%			

Int. Std.	Y_2243	Y_3600	Y_3774
Units	Cts/S	Cts/S	Cts/S
Avg	2650.3	41147.	2186.0
Stddev	21.0	449.	34.6
%RSD	.79363	1.0905	1.5820

#1	2665.1	41464.	2210.5
#2	2635.4	40829.	2161.6

Sample Name: 280-82975-A-1-A Acquired: 5/18/2016 22:56:13 Type: Unk

Method: 6500_025(v6) Mode: CONC Corr. Factor: 1.000000

User: CRHOADES Prep Date: Custom ID2: Custom ID3:

Comment: 325217 6010B

Elem	Ag3280	Al1670	As1890	B_2089	Ba4554	Be3130	Bi2230	Ca3179	Cd2288
Line	328.068 {103}	167.079 {502}	189.042 {478}	208.959 {461}	455.403 { 74}	313.042 {108}	223.061 {451}	317.933 {106}	228.802 {447}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	-.00049	.07674	.00816	.21267	.05074	.00004	-.00232	62.277	.00037
Stddev	.00080	.00975	.00016	.01321	.00006	.00004	.00382	.507	.00020
%RSD	162.61	12.708	1.9410	6.2107	.12766	111.97	164.75	.81402	55.434

#1	-.00106	.06984	.00804	.20333	.05070	.00001	-.00502	62.635	.00051
#2	.00007	.08364	.00827	.22201	.05079	.00006	.00038	61.918	.00022

Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Elem	Co2286	Cr2055	Cu3247	Fe2599	K_7664	Li6707	Mg2790	Mn2576	Mo2020
Line	228.616 {447}	205.560 {464}	324.754 {104}	259.940 {130}	766.490 { 44}	670.784 { 50}	279.079 {121}2	257.610 {131}	202.030 {467}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.00997	.00109	.00526	.56273	1.1535	.00291	22.956	.42116	.30807
Stddev	.00066	.00000	.00016	.00098	.0124	.00120	.030	.00122	.00945
%RSD	6.6627	.22306	3.1206	.17488	1.0743	41.125	.13050	.29006	3.0678

#1	.00950	.00109	.00537	.56342	1.1623	.00375	22.934	.42030	.30138
#2	.01044	.00109	.00514	.56203	1.1448	.00206	22.977	.42203	.31475

Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Elem	Na8183	Ni2316	P_1782	Pb2203	S_1820	Sb2068	Se1960	Si2881	SiO2
Line	818.326 { 41}	231.604 {446}	178.284 {489}	220.353 {453}	182.034 {485}	206.833 {463}	196.090 {472}	288.158 {117}	288.158 {117}2
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	110.51	.02797	.06656	.00252	53.929	.00141	.00072	5.9246	12.679
Stddev	.62	.00121	.00634	.00110	4.426	.00363	.00037	.0079	.017
%RSD	.56071	4.3211	9.5306	43.699	8.2075	257.39	51.940	.13400	.13400

#1	110.07	.02712	.06207	.00174	50.799	.00397	.00098	5.9302	12.691
#2	110.95	.02882	.07105	.00330	57.059	-.00116	.00045	5.9189	12.667

Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Elem	Sn1899	Sr4077	Th2837	Ti3349	Ti1908	U_3701	V_2924	Zn2062	Zr3391
Line	189.989 {477}	407.771 { 83}	283.730 {119}	334.904 {101}	190.856 {477}	370.152 { 91}	292.402 {115}	206.200 {163}	339.198 { 99}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	-.00027	.43946	-.00003	.00175	.00068	.01395	-.00195	.01877	.00200
Stddev	.00190	.00213	.00193	.00002	.00060	.09078	.00011	.00030	.00014
%RSD	709.44	.48551	6474.6	1.1640	88.019	650.98	5.4966	1.5738	7.1749

#1	-.00161	.44096	-.00140	.00176	.00026	.07814	-.00202	.01856	.00210
#2	.00108	.43795	.00134	.00174	.00111	-.05025	-.00187	.01898	.00190

Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Int. Std.	Y_2243	Y_3600	Y_3774
Line	224.306 {450}	360.073 { 94}	377.433 { 89}
Units	Cts/S	Cts/S	Cts/S
Avg	2671.9	39744.	2146.4
Stddev	233.2	215.	3.0
%RSD	8.7271	.54113	.14004

#1	2836.8	39896.	2144.3
#2	2507.0	39591.	2148.6

Sample Name: 280-82975-A-2-B Acquired: 5/18/2016 22:58:52 Type: Unk

Method: 6500_025(v6) Mode: CONC Corr. Factor: 1.000000

User: CRHOADES Prep Date: Custom ID2: Custom ID3:

Comment: 325217 6010B

Elem	Ag3280	Al1670	As1890	B_2089	Ba4554	Be3130	Bi2230	Ca3179	Cd2288
Line	328.068 {103}	167.079 {502}	189.042 {478}	208.959 {461}	455.403 { 74}	313.042 {108}	223.061 {451}	317.933 {106}	228.802 {447}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	-0.00037	.12975	.35497	.22270	.42646	.00039	.00038	235.68	-0.00100
Stddev	.00045	.00751	.01770	.01370	.00040	.00012	.00554	.91	.00013
%RSD	123.57	5.7918	4.9856	6.1526	.09417	30.469	1471.3	.38547	13.005

#1	-0.00069	.13506	.36749	.23239	.42618	.00048	-.00354	236.32	-.00091
#2	-0.00005	.12443	.34246	.21301	.42675	.00031	.00430	235.04	-.00109

Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Elem	Co2286	Cr2055	Cu3247	Fe2599	K_7664	Li6707	Mg2790	Mn2576	Mo2020
Line	228.616 {447}	205.560 {464}	324.754 {104}	259.940 {130}	766.490 { 44}	670.784 { 50}	279.079 {121}2	257.610 {131}	202.030 {467}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.00474	.00174	.00673	10.337	W 140.03	.01546	29.552	1.0076	.22814
Stddev	.00004	.00032	.00015	.018	.49	.00241	.011	.0008	.00985
%RSD	.81606	18.234	2.2037	.17182	.35288	15.603	.03833	.08392	4.3155

#1	.00477	.00197	.00663	10.325	140.38	.01717	29.544	1.0082	.23510
#2	.00471	.00152	.00684	10.350	139.68	.01376	29.560	1.0070	.22118

Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Warn	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit					100.00				
Low Limit					-.50000				

Elem	Na8183	Ni2316	P_1782	Pb2203	S_1820	Sb2068	Se1960	Si2881	SiO2
Line	818.326 { 41}	231.604 {446}	178.284 {489}	220.353 {453}	182.034 {485}	206.833 {463}	196.090 {472}	288.158 {117}	288.158 {117}2
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	410.02	.03060	1.9350	.00076	70.953	.00119	.00638	8.7973	18.826
Stddev	.67	.00096	.0431	.00050	3.865	.00102	.00225	.0553	.118
%RSD	.16294	3.1339	2.2288	65.377	5.4467	86.012	35.303	.62851	.62851

#1	410.49	.03127	1.9655	.00112	73.685	.00191	.00479	8.8364	18.910
#2	409.55	.02992	1.9045	.00041	68.220	.00047	.00797	8.7582	18.742

Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Elem	Sn1899	Sr4077	Th2837	Ti3349	Ti1908	U_3701	V_2924	Zn2062	Zr3391
Line	189.989 {477}	407.771 { 83}	283.730 {119}	334.904 {101}	190.856 {477}	370.152 { 91}	292.402 {115}	206.200 {163}	339.198 { 99}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	-0.00150	2.6802	-0.00251	.00232	-0.00306	-0.00842	.00645	.01393	-0.00075
Stddev	.00165	.0054	.00311	.00034	.00086	.06203	.00023	.00067	.00097
%RSD	110.30	.20068	123.74	14.680	28.075	736.36	3.6187	4.8159	130.34

#1	-0.00267	2.6764	-.00471	.00208	-.00367	.03544	.00662	.01345	-.00006
#2	-0.00033	2.6840	-.00031	.00256	-.00245	-.05229	.00629	.01440	-.00143

Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Int. Std.	Y_2243	Y_3600	Y_3774
Line	224.306 {450}	360.073 { 94}	377.433 { 89}
Units	Cts/S	Cts/S	Cts/S
Avg	2805.9	39802.	2151.1
Stddev	153.6	32.	51.8
%RSD	5.4747	.07938	2.4081

#1	2697.3	39780.	2114.4
#2	2914.5	39824.	2187.7

Sample Name: 280-82975-A-4-A Acquired: 5/18/2016 23:01:31 Type: Unk

Method: 6500_025(v6) Mode: CONC Corr. Factor: 1.000000

User: CRHOADES Prep Date: Custom ID2: Custom ID3:

Comment: 325217 6010B

Elem	Ag3280	Al1670	As1890	B_2089	Ba4554	Be3130	Bi2230	Ca3179	Cd2288
Line	328.068 {103}	167.079 {502}	189.042 {478}	208.959 {461}	455.403 { 74}	313.042 {108}	223.061 {451}	317.933 {106}	228.802 {447}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	-.00030	.25747	.06356	.22658	.72770	.00027	-.00378	W 869.40	.00140
Stddev	.00094	.00850	.00191	.00761	.01030	.00003	.00263	13.47	.00001
%RSD	311.01	3.3002	3.0015	3.3581	1.4155	11.513	69.661	1.5487	.61829

#1	-.00096	.25146	.06221	.22120	.73499	.00030	-.00564	878.93	.00141
#2	.00036	.26347	.06491	.23196	.72042	.00025	-.00192	859.88	.00140

Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Warn	Chk Pass
High Limit								500.00	
Low Limit								-.05000	

Elem	Co2286	Cr2055	Cu3247	Fe2599	K_7664	Li6707	Mg2790	Mn2576	Mo2020
Line	228.616 {447}	205.560 {464}	324.754 {104}	259.940 {130}	766.490 { 44}	670.784 { 50}	279.079 {121}2	257.610 {131}	202.030 {467}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.01730	.00127	.00465	13.183	79.593	.03378	171.85	5.9599	.38776
Stddev	.00033	.00008	.00025	.183	1.074	.00144	.18	.0293	.00724
%RSD	1.9337	6.1802	5.2856	1.3903	1.3489	4.2493	.10469	.49071	1.8676

#1	.01706	.00121	.00447	13.313	80.352	.03480	171.73	5.9806	.38263
#2	.01754	.00132	.00482	13.054	78.833	.03277	171.98	5.9392	.39288

Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Elem	Na8183	Ni2316	P_1782	Pb2203	S_1820	Sb2068	Se1960	Si2881	SiO2
Line	818.326 { 41}	231.604 {446}	178.284 {489}	220.353 {453}	182.034 {485}	206.833 {463}	196.090 {472}	288.158 {117}	288.158 {117}2
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	W 1014.6	.05954	.43087	.00139	70.705	.00099	.00978	9.1951	19.677
Stddev	12.5	.00009	.00245	.00101	1.975	.00399	.00245	.0432	.093
%RSD	1.2362	.15740	.56778	72.748	2.7935	402.05	25.089	.47034	.47034

#1	1023.5	.05947	.42914	.00211	69.309	.00381	.00805	9.2256	19.743
#2	1005.8	.05961	.43260	.00068	72.102	-.00183	.01152	9.1645	19.612

Check ?	Chk Warn	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit	500.00								
Low Limit	11.000								

Elem	Sn1899	Sr4077	Th2837	Ti3349	Ti1908	U_3701	V_2924	Zn2062	Zr3391
Line	189.989 {477}	407.771 { 83}	283.730 {119}	334.904 {101}	190.856 {477}	370.152 { 91}	292.402 {115}	206.200 {163}	339.198 { 99}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	-.00346	W 7.4439	.00322	.00384	-.00269	W -.06546	-.00064	.01346	-.00316
Stddev	.00109	.0828	.00051	.00038	.00617	.01024	.00038	.00000	.00163
%RSD	31.615	1.1119	15.729	9.9695	229.76	15.642	58.234	.02176	51.506

#1	-.00269	7.5024	.00357	.00411	.00168	-.05822	-.00038	.01346	-.00431
#2	-.00424	7.3853	.00286	.00357	-.00705	-.07270	-.00091	.01346	-.00201

Check ?	Chk Pass	Chk Warn	Chk Pass	Chk Pass	Chk Pass	Chk Warn	Chk Pass	Chk Pass	Chk Pass
High Limit		5.0000				45.000			
Low Limit		-.01000				-.05000			

Int. Std.	Y_2243	Y_3600	Y_3774
Line	224.306 {450}	360.073 { 94}	377.433 { 89}
Units	Cts/S	Cts/S	Cts/S
Avg	2621.5	37783.	2234.0
Stddev	80.3	4.	63.0
%RSD	3.0635	.01135	2.8185

#1	2678.3	37780.	2189.5
#2	2564.7	37786.	2278.5

Elem	Ag3280	Al1670	As1890	B_2089	Ba4554	Be3130	Bi2230	Ca3179	Cd2288
Line	328.068 {103}	167.079 {502}	189.042 {478}	208.959 {461}	455.403 { 74}	313.042 {108}	223.061 {451}	317.933 {106}	228.802 {447}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	-.00113	.15116	.09630	.11918	.86175	.00035	-.00114	268.22	.00006
Stddev	.00001	.01003	.00417	.00847	.03359	.00017	.00187	9.81	.00025
%RSD	1.2199	6.6324	4.3342	7.1056	3.8982	48.307	163.83	3.6573	417.02

#1	-.00112	.14407	.09335	.11320	.88551	.00047	-.00246	275.16	.00023
#2	-.00114	.15825	.09925	.12517	.83800	.00023	.00018	261.29	-.00012

Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Elem	Co2286	Cr2055	Cu3247	Fe2599	K_7664	Li6707	Mg2790	Mn2576	Mo2020
Line	228.616 {447}	205.560 {464}	324.754 {104}	259.940 {130}	766.490 { 44}	670.784 { 50}	279.079 {121}2	257.610 {131}	202.030 {467}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.00176	.03242	.03475	16.030	W 289.36	.02157	28.008	.84542	.44240
Stddev	.00023	.00083	.00038	.376	11.74	.00510	.089	.00302	.00732
%RSD	13.226	2.5607	1.1007	2.3483	4.0568	23.634	.31699	.35714	1.6537

#1	.00193	.03184	.03448	16.296	297.66	.01797	27.945	.84328	.43722
#2	.00160	.03301	.03502	15.764	281.06	.02517	28.071	.84755	.44757

Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Warn	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit					100.00				
Low Limit					-.50000				

Elem	Na8183	Ni2316	P_1782	Pb2203	S_1820	Sb2068	Se1960	Si2881	SiO2
Line	818.326 { 41}	231.604 {446}	178.284 {489}	220.353 {453}	182.034 {485}	206.833 {463}	196.090 {472}	288.158 {117}	288.158 {117}2
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	369.77	.04433	1.5222	.00402	39.933	.00101	.00865	9.0307	19.326
Stddev	14.15	.00091	.0172	.00087	2.807	.00389	.00469	.0982	.210
%RSD	3.8273	2.0617	1.1325	21.622	7.0288	385.56	54.211	1.0876	1.0876

#1	379.78	.04368	1.5100	.00464	37.948	-.00174	.01197	9.1001	19.474
#2	359.77	.04497	1.5344	.00341	41.918	.00376	.00533	8.9613	19.177

Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Elem	Sn1899	Sr4077	Th2837	Ti3349	Ti1908	U_3701	V_2924	Zn2062	Zr3391
Line	189.989 {477}	407.771 { 83}	283.730 {119}	334.904 {101}	190.856 {477}	370.152 { 91}	292.402 {115}	206.200 {163}	339.198 { 99}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.00027	3.8239	-.00152	.00278	-.00447	-.04243	.02002	.03526	.00204
Stddev	.00170	.1515	.00097	.00023	.00229	.03398	.00040	.00032	.00606
%RSD	629.88	3.9613	63.766	8.4179	51.345	80.071	2.0066	.91211	297.38

#1	-.00093	3.9310	-.00220	.00295	-.00285	-.06646	.01974	.03549	-.00225
#2	.00148	3.7168	-.00083	.00262	-.00609	-.01841	.02031	.03503	.00632

Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Int. Std.	Y_2243	Y_3600	Y_3774
Line	224.306 {450}	360.073 { 94}	377.433 { 89}
Units	Cts/S	Cts/S	Cts/S
Avg	2689.2	39603.	2232.0
Stddev	192.2	180.	78.3
%RSD	7.1472	.45524	3.5068

#1	2825.1	39731.	2176.7
#2	2553.3	39476.	2287.4

Elem	Ag3280	Al1670	As1890	B_2089	Ba4554	Be3130	Bi2230	Ca3179	Cd2288
Line	328.068 {103}	167.079 {502}	189.042 {478}	208.959 {461}	455.403 { 74}	313.042 {108}	223.061 {451}	317.933 {106}	228.802 {447}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	-0.0022	1.9699	-0.00323	.03546	.04619	.00504	-0.00631	48.753	.00066
Stddev	.00051	.1218	.00418	.00317	.00046	.00015	.00462	.398	.00032
%RSD	232.34	6.1832	129.17	8.9499	1.0004	3.0522	73.256	.81602	48.929

#1	-0.00058	2.0561	-0.00619	.03770	.04651	.00493	-0.00957	49.034	.00043
#2	.00014	1.8838	-0.00028	.03322	.04586	.00515	-0.00304	48.471	.00088

Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Elem	Co2286	Cr2055	Cu3247	Fe2599	K_7664	Li6707	Mg2790	Mn2576	Mo2020
Line	228.616 {447}	205.560 {464}	324.754 {104}	259.940 {130}	766.490 { 44}	670.784 { 50}	279.079 {121}2	257.610 {131}	202.030 {467}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.02654	.00142	.00134	3.9176	10.311	.07426	20.828	.38446	.00208
Stddev	.00181	.00049	.00005	.0185	.052	.00139	.118	.00189	.00045
%RSD	6.8091	34.774	3.9357	.47245	.50137	1.8726	.56727	.49111	21.424

#1	.02782	.00177	.00130	3.9046	10.348	.07328	20.744	.38313	.00177
#2	.02526	.00107	.00138	3.9307	10.275	.07524	20.911	.38580	.00240

Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Elem	Na8183	Ni2316	P_1782	Pb2203	S_1820	Sb2068	Se1960	Si2881	SiO2
Line	818.326 { 41}	231.604 {446}	178.284 {489}	220.353 {453}	182.034 {485}	206.833 {463}	196.090 {472}	288.158 {117}	288.158 {117}2
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	52.953	.02190	.02821	.00284	101.77	.00185	-0.00046	34.480	73.786
Stddev	.258	.00083	.00144	.00098	6.48	.00214	.00488	.183	.392
%RSD	.48803	3.7897	5.1178	34.598	6.3640	115.57	1061.6	.53127	.53127

#1	53.135	.02249	.02923	.00353	106.35	.00336	-0.00391	34.350	73.509
#2	52.770	.02132	.02719	.00214	97.194	.00034	.00299	34.609	74.063

Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Elem	Sn1899	Sr4077	Th2837	Ti3349	Ti1908	U_3701	V_2924	Zn2062	Zr3391
Line	189.989 {477}	407.771 { 83}	283.730 {119}	334.904 {101}	190.856 {477}	370.152 { 91}	292.402 {115}	206.200 {163}	339.198 { 99}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	-0.00046	.85272	.00108	.00465	-0.00447	-0.02548	.00051	.16022	.00530
Stddev	.00283	.00744	.00184	.00023	.00032	.04950	.00065	.00456	.00210
%RSD	608.13	.87219	170.67	4.9843	7.1742	194.29	128.03	2.8444	39.570

#1	.00153	.85798	.00238	.00449	-0.00470	-0.06048	.00005	.15700	.00382
#2	-0.00246	.84746	-0.00022	.00482	-0.00424	.00952	.00096	.16344	.00678

Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Int. Std.	Y_2243	Y_3600	Y_3774						
Line	224.306 {450}	360.073 { 94}	377.433 { 89}						
Units	Cts/S	Cts/S	Cts/S						
Avg	2839.8	42408.	2320.1						
Stddev	180.4	241.	3.1						
%RSD	6.3525	.56894	.13240						

#1	2712.3	42578.	2322.3						
#2	2967.4	42237.	2317.9						

Sample Name: CCVH-3894253 Acquired: 5/18/2016 23:10:01 Type: QC
Method: 6500_025(v6) Mode: CONC Corr. Factor: 1.000000
User: CRHOADES Prep Date: Custom ID2: Custom ID3:
Comment:

Elem	Ag3280	Al3092	As1890	B_2089	Ba4554	Be3130	Bi2230	Ca3179	Cd2288	Co2286	Cr2055
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	-.00079	52.231	-.00972	.00298	-.00062	.00038	W 1.0780	-.00890	-.00018	-.00084	.00032
Stddev	.00035	1.907	.00083	.00067	.00011	.00014	.0053	.00464	.00033	.00036	.00037
%RSD	44.182	3.6512	8.5624	22.301	17.640	35.723	.49520	52.165	185.73	42.609	115.24

#1	-.00055	53.580	-.00913	.00251	-.00054	.00029	1.0742	-.00562	-.00041	-.00059	.00057
#2	-.00104	50.883	-.01030	.00345	-.00069	.00048	1.0818	-.01219	.00006	-.00109	.00006

Check ?	None	Chk Pass	None	None	None	None	Chk Warn	None	None	None	None
Value							1.0000				
Range							5.0000%				

Elem	Cu3247	Fe2714	K_7664	Li6707	Mg2790	Mn2576	Mo2020	Na8183	Ni2316	P_1782	Pb2203
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	-.00094	48.870	.25192	.00171	.02298	-.00026	-.00108	253.81	.00086	.00789	-.00045
Stddev	.00042	.586	.06574	.00239	.00256	.00005	.00015	1.82	.00040	.00042	.00065
%RSD	45.269	1.1984	26.096	139.46	11.131	19.581	13.540	.71838	46.244	5.2906	145.89

#1	-.00124	49.284	.29840	.00341	.02117	-.00022	-.00097	255.10	.00114	.00760	.00001
#2	-.00064	48.456	.20543	.00002	.02478	-.00029	-.00118	252.52	.00058	.00819	-.00091

Check ?	None	Chk Pass	None	None	None	None	None	Chk Pass	None	None	None
Value											
Range											

Elem	S_1820	Sb2068	Se1960	Si2881	SiO2	Sn1899	Sr4077	Th2837	Ti3349	Ti1908	U_3701
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	5.2116	-.00556	.00934	.04634	.09917	.00024	.00058	W 4.6642	.00577	-.00428	W 10.539
Stddev	.0041	.00117	.00158	.01132	.02423	.00034	.00025	.0014	.00053	.00179	.246
%RSD	.07861	21.077	16.962	24.431	24.431	144.74	42.792	.03116	9.1855	41.816	2.3328

#1	5.2087	-.00473	.00822	.05435	.11630	.00048	.00075	4.6652	.00539	-.00554	10.365
#2	5.2145	-.00639	.01046	.03834	.08204	-.00001	.00040	4.6632	.00614	-.00301	10.712

Check ?	Chk Pass	None	None	None	None	None	None	Chk Warn	None	None	Chk Warn
Value								5.0000			10.000
Range								-5.0000%			5.0000%

Elem	V_2924	Zn2062	Zr3391
Units	ppm	ppm	ppm
Avg	.00918	-.00071	.05519
Stddev	.00005	.00039	.00505
%RSD	.51819	54.727	9.1585

#1	.00915	-.00043	.05162
#2	.00921	-.00098	.05877

Check ?	None	None	None
Value			
Range			

Int. Std.	Y_2243	Y_3600	Y_3774
Units	Cts/S	Cts/S	Cts/S
Avg	2650.2	40613.	2214.5
Stddev	38.6	341.	84.1
%RSD	1.4549	.84071	3.7997

#1	2622.9	40854.	2155.0
#2	2677.4	40372.	2274.0

Sample Name: CCV-3894251 Acquired: 5/18/2016 23:12:39 Type: QC
Method: 6500_025(v6) Mode: CONC Corr. Factor: 1.000000
User: CRHOADES Prep Date: Custom ID2: Custom ID3:
Comment:

Elem	Ag3280	Al1670	As1890	B_2089	Ba4554	Be3130	Bi2230	Ca3179	Cd2288	Co2286	Cr2055
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.48864	.54906	1.0521	.49362	.49770	.45765	-.00258	4.8730	.49367	.50483	.51122
Stddev	.00192	.00247	.0219	.00565	.01044	.01140	.00002	.1243	.00070	.00369	.00353
%RSD	.39325	.44985	2.0800	1.1454	2.0971	2.4900	.93270	2.5507	.14131	.73073	.69038

#1	.49000	.54731	1.0366	.48963	.49032	.44959	-.00256	4.7851	.49417	.50222	.50872
#2	.48728	.55080	1.0676	.49762	.50508	.46571	-.00260	4.9608	.49318	.50744	.51371

Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	None	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Value											
Range											

Elem	Cu3247	Fe2599	K_7664	Li6707	Mg2790	Mn2576	Mo2020	Na5895	Ni2316	P_1782	Pb2203
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.51298	2.3757	47.904	.96674	18.901	.46520	.51828	5.1228	.49689	.99640	1.0327
Stddev	.00153	.0409	1.131	.00532	.021	.00132	.00310	.0180	.00227	.00628	.0032
%RSD	.29903	1.7208	2.3601	.54980	.11049	.28444	.59757	.35172	.45735	.63041	.31215

#1	.51406	2.3468	47.104	.96298	18.916	.46614	.51609	5.1100	.49529	.99196	1.0304
#2	.51189	2.4046	48.703	.97050	18.887	.46427	.52047	5.1355	.49850	1.0008	1.0349

Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Value											
Range											

Elem	S_1820	Sb2068	Se1960	Si2881	SiO2	Sn1899	Sr4077	Th2837	Ti3349	Ti1908	U_3701
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.07379	1.0281	1.0976	4.8091	10.291	1.0625	.46733	.00088	.46147	W 1.1033	-.03842
Stddev	.00360	.0097	.0126	.0189	.041	.0238	.01047	.00119	.00115	.0476	.01082
%RSD	4.8798	.94693	1.1515	.39349	.39349	2.2424	2.2412	135.46	.25027	4.3178	28.163

#1	.07634	1.0350	1.1065	4.7957	10.263	1.0793	.45992	.00004	.46229	1.1370	-.04607
#2	.07125	1.0212	1.0886	4.8225	10.320	1.0456	.47474	.00172	.46065	1.0696	-.03077

Check ?	None	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	None	Chk Pass	Chk Warn	None
Value										1.0000	
Range										10.0000%	

Elem	V_2924	Zn2062	Zr3391
Units	ppm	ppm	ppm
Avg	.48279	.46189	.50558
Stddev	.00120	.00241	.00360
%RSD	.24819	.52129	.71292

#1	.48363	.46359	.50303
#2	.48194	.46019	.50812

Check ?	Chk Pass	Chk Pass	Chk Pass
Value			
Range			

Int. Std.	Y_2243	Y_3600	Y_3774
Units	Cts/S	Cts/S	Cts/S
Avg	2599.2	40887.	2213.1
Stddev	8.0	74.	62.3
%RSD	.30650	.18123	2.8134

#1	2593.6	40940.	2257.1
#2	2604.9	40835.	2169.1

Sample Name: CCB Acquired: 5/18/2016 23:15:10 Type: QC
 Method: 6500_025(v6) Mode: CONC Corr. Factor: 1.000000
 User: CRHOADES Prep Date: Custom ID2: Custom ID3:
 Comment:

Elem	Ag3280	Al1670	As1890	B_2089	Ba4554	Be3130	Bi2230	Ca3179	Cd2288	Co2286	Cr2055
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	-0.00025	-0.00048	-0.00374	.00151	-0.00099	.00030	-0.00098	-0.02348	-0.00003	-0.00048	-0.00024
Stddev	.00027	.00017	.00326	.00000	.00064	.00006	.00015	.00338	.00004	.00007	.00024
%RSD	107.93	34.680	87.063	.06626	65.035	18.546	15.688	14.414	121.95	13.844	100.03

#1	-0.00044	-0.00037	-0.00605	.00151	-0.00145	.00026	-0.00087	-.02587	-0.00005	-0.00052	-0.00040
#2	-0.00006	-0.00060	-0.00144	.00150	-0.00054	.00034	-0.00109	-.02108	.00000	-0.00043	-0.00007

Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit											
Low Limit											

Elem	Cu3247	Fe2599	K_7664	Li6707	Mg2790	Mn2576	Mo2020	Na5895	Ni2316	P_1782	Pb2203
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	-0.00091	-0.00332	.19423	-0.00110	.00320	.00001	.00178	.23770	-0.00055	.00236	-0.00066
Stddev	.00125	.00394	.01429	.00203	.00853	.00004	.00124	.01906	.00045	.00020	.00165
%RSD	138.03	118.53	7.3577	184.68	266.51	639.21	69.768	8.0207	82.845	8.6348	249.85

#1	-0.00179	-0.00611	.18413	-0.00253	-0.00283	.00004	.00090	.22422	-0.00023	.00222	.00051
#2	-0.00002	-0.00054	.20434	.00034	.00923	-0.00002	.00266	.25118	-0.00086	.00251	-0.00183

Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit											
Low Limit											

Elem	S_1820	Sb2068	Se1960	Si2881	SiO2	Sn1899	Sr4077	Th2837	Ti3349	Ti1908	U_3701
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	W .06025	W .00524	W .01083	-0.01039	-0.02223	-0.00034	.00003	.00074	-0.00002	-0.00026	-0.01412
Stddev	.00109	.00553	.00412	.03670	.07853	.00030	.00022	.00079	.00025	.00186	.02881
%RSD	1.8025	105.52	38.035	353.25	353.25	88.415	776.99	106.43	1464.7	724.84	204.03

#1	.06102	.00915	.01375	-0.03634	-0.07776	-0.00013	-0.00012	.00018	.00016	-0.00157	.00625
#2	.05949	.00133	.00792	.01556	.03330	-0.00056	.00018	.00130	-0.00019	.00106	-.03449

Check ?	Chk Warn	Chk Warn	Chk Warn	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit	.05000	.00100	.00750								
Low Limit	-.20000	-.00100	-.01500								

Elem	V_2924	Zn2062	Zr3391
Units	ppm	ppm	ppm
Avg	.00055	-0.00098	-0.00168
Stddev	.00001	.00011	.00207
%RSD	2.0477	10.808	123.10

#1	.00056	-0.00090	-0.00022
#2	.00054	-0.00105	-0.00314

Check ?	Chk Pass	Chk Pass	Chk Pass
High Limit			
Low Limit			

Int. Std.	Y_2243	Y_3600	Y_3774
Units	Cts/S	Cts/S	Cts/S
Avg	2680.5	41954.	2259.6
Stddev	3.1	81.	.8
%RSD	.11591	.19348	.03676

#1	2678.3	41897.	2259.0
#2	2682.7	42011.	2260.2

Sample Name: CCVL-3897520 Acquired: 5/18/2016 23:17:33 Type: QC
Method: 6500_025(v6) Mode: CONC Corr. Factor: 1.000000
User: CRHOADES Prep Date: Custom ID2: Custom ID3:
Comment:

Elem	Ag3280	Al1670	As1890	B_2089	Ba4554	Be3130	Bi2230	Ca3179	Cd2288	Co2286	Cr2055	Cu3247
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.00897	.11387	.01890	.09872	.00959	.00082	.11362	.20395	.00509	.01022	.01061	.01551
Stddev	.00055	.00099	.00461	.00316	.00060	.00009	.00288	.00334	.00028	.00050	.00076	.00102
%RSD	6.1414	.86901	24.397	3.1991	6.2887	10.400	2.5346	1.6391	5.5132	4.8878	7.1505	6.5549

#1	.00935	.11457	.01564	.10096	.01001	.00088	.11565	.20631	.00529	.01057	.01115	.01479
#2	.00858	.11317	.02216	.09649	.00916	.00076	.11158	.20158	.00489	.00987	.01008	.01623

Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Value												
Range												

Elem	Fe2599	K_7664	Li6707	Mg2790	Mn2576	Mo2020	Na5895	Ni2316	P_1782	Pb2203	S_1820	Sb2068
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.11035	3.1206	.00973	.19831	.00979	.02082	1.2538	.04096	2.9341	.00748	.05187	F .02772
Stddev	.00338	.0575	.00045	.00006	.00020	.00086	.0150	.00228	.1414	.00133	.00374	.00447
%RSD	3.0603	1.8434	4.6025	.02949	2.0307	4.1271	1.1971	5.5595	4.8183	17.744	7.2111	16.137

#1	.10796	3.0799	.01005	.19835	.00965	.02143	1.2644	.04257	3.0340	.00842	.05452	.03088
#2	.11273	3.1613	.00942	.19827	.00993	.02021	1.2432	.03935	2.8341	.00654	.04923	.02456

Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	None	Chk Fail
Value												.02000
Range												30.000%

Elem	Se1960	Si2881	SiO2	Sn1899	Sr4077	Th2837	Ti3349	Ti1908	U_3701	V_2924	Zn2062	Zr3391
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	F .02045	.50117	1.0725	.10827	.01013	.01506	.00909	.01251	F .08691	.01081	.01901	.01476
Stddev	.00804	.02305	.0493	.00638	.00010	.00297	.00018	.00150	.01790	.00039	.00187	.00199
%RSD	39.303	4.5997	4.5997	5.8897	1.0057	19.740	1.9436	12.021	20.596	3.6375	9.8555	13.508

#1	.02613	.51747	1.1074	.11278	.01020	.01716	.00921	.01357	.09957	.01053	.01768	.01617
#2	.01476	.48487	1.0376	.10376	.01006	.01296	.00896	.01145	.07425	.01109	.02033	.01335

Check ?	Chk Fail	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Fail	Chk Pass	Chk Pass	Chk Pass
Value	.01500								.06000			
Range	30.000%								30.000%			

Int. Std.	Y_2243	Y_3600	Y_3774
Units	Cts/S	Cts/S	Cts/S
Avg	2674.3	42222.	2234.0
Stddev	5.4	60.	96.1
%RSD	.20277	.14241	4.3026

#1	2678.1	42180.	2302.0
#2	2670.4	42265.	2166.0

Sample Name: MB 280-324504/1-A Acquired: 5/18/2016 23:20:14 Type: Unk

Method: 6500_025(v6) Mode: CONC Corr. Factor: 1.000000

User: CRHOADES Prep Date: 5/13 Custom ID2: Custom ID3:

Comment: 324504 6010B (Se)

Elem	Ag3280	Al1670	As1890	B_2089	Ba4554	Be3130	Bi2230	Ca3179	Cd2288
Line	328.068 {103}	167.079 {502}	189.042 {478}	208.959 {461}	455.403 { 74}	313.042 {108}	223.061 {451}	317.933 {106}	228.802 {447}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.00063	.00362	.00165	-.00045	-.00078	.00026	.00361	-.00822	-.00008
Stddev	.00022	.00045	.00756	.00158	.00075	.00025	.00175	.00702	.00019
%RSD	35.245	12.363	458.17	351.15	95.453	95.451	48.405	85.444	227.45

#1	.00047	.00331	.00700	.00067	-.00026	.00009	.00238	-.00325	.00005
#2	.00079	.00394	-.00370	-.00157	-.00131	.00044	.00485	-.01318	-.00022

Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Elem	Co2286	Cr2055	Cu3247	Fe2599	K_7664	Li6707	Mg2790	Mn2576	Mo2020
Line	228.616 {447}	205.560 {464}	324.754 {104}	259.940 {130}	766.490 { 44}	670.784 { 50}	279.079 {121}2	257.610 {131}	202.030 {467}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	-.00023	-.00022	-.00079	.02278	.12407	.00217	-.00041	.00012	-.00010
Stddev	.00021	.00024	.00035	.00485	.11140	.00030	.00078	.00008	.00038
%RSD	91.650	105.90	43.834	21.280	89.783	13.804	191.55	63.605	394.04

#1	-.00008	-.00039	-.00104	.02620	.20285	.00239	-.00096	.00018	-.00037
#2	-.00037	-.00006	-.00055	.01935	.04530	.00196	.00014	.00007	.00017

Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Elem	Na5895	Ni2316	P_1782	Pb2203	S_1820	Sb2068	Se1960	Si2881	SiO2
Line	589.592 { 57}	231.604 {446}	178.284 {489}	220.353 {453}	182.034 {485}	206.833 {463}	196.090 {472}	288.158 {117}	288.158 {117}2
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.20664	-.00034	.00011	.00066	W .05725	.00480	W .00904	.04768	.10203
Stddev	.00650	.00039	.00039	.00115	.00553	.00263	.00211	.03845	.08228
%RSD	3.1458	116.35	363.19	174.61	9.6631	54.764	23.324	80.643	80.643

#1	.21123	-.00061	-.00017	-.00015	.06116	.00666	.01053	.07486	.16021
#2	.20204	-.00006	.00039	.00147	.05334	.00294	.00755	.02049	.04385

Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Warn	Chk Pass	Chk Warn	Chk Pass	None
High Limit					.05000		.00750		
Low Limit					-.05000		-.00750		

Elem	Sn1899	Sr4077	Th2837	Ti3349	Ti1908	U_3701	V_2924	Zn2062	Zr3391
Line	189.989 {477}	407.771 { 83}	283.730 {119}	334.904 {101}	190.856 {477}	370.152 { 91}	292.402 {115}	206.200 {163}	339.198 { 99}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.00037	.00025	-.00050	-.00007	.00005	.00793	.00076	.00183	.00004
Stddev	.00085	.00020	.00172	.00005	.00482	.09021	.00027	.00020	.00047
%RSD	227.85	79.614	346.16	77.693	10029.	1137.9	34.906	10.840	1144.2

#1	.00098	.00011	.00072	-.00003	-.00336	-.05586	.00095	.00169	-.00029
#2	-.00023	.00039	-.00171	-.00010	.00345	.07172	.00057	.00197	.00038

Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Int. Std.	Y_2243	Y_3600	Y_3774
Line	224.306 {450}	360.073 { 94}	377.433 { 89}
Units	Cts/S	Cts/S	Cts/S
Avg	2692.8	42916.	2223.7
Stddev	3.9	72.	31.2
%RSD	.14451	.16667	1.4013

#1	2695.6	42865.	2245.8
#2	2690.1	42966.	2201.7

Sample Name: LCS 280-324504/2-A Acquired: 5/18/2016 23:22:37 Type: Unk
Method: 6500_025(v6) Mode: CONC Corr. Factor: 1.000000
User: CRHOADES Prep Date: Custom ID2: Custom ID3:
Comment: 324504 6010B (Se)

Elem	Ag3280	Al1670	As1890	B_2089	Ba4554	Be3130	Bi2230	Ca3179	Cd2288
Line	328.068 {103}	167.079 {502}	189.042 {478}	208.959 {461}	455.403 { 74}	313.042 {108}	223.061 {451}	317.933 {106}	228.802 {447}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.05068	2.0904	1.0687	1.0064	2.0152	.04755	2.1706	48.573	.09853
Stddev	.00078	.0892	.0517	.0398	.0439	.00083	.0984	1.144	.00360
%RSD	1.5416	4.2690	4.8363	3.9531	2.1795	1.7474	4.5347	2.3561	3.6503

#1	.05013	2.1535	1.1053	1.0345	1.9841	.04697	2.2402	47.763	.10108
#2	.05124	2.0273	1.0322	.97827	2.0462	.04814	2.1010	49.382	.09599

Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	None	Chk Pass	Chk Pass
High Limit									
Low Limit									

Elem	Co2286	Cr2055	Cu3247	Fe2599	K_7664	Li6707	Mg2790	Mn2576	Mo2020
Line	228.616 {447}	205.560 {464}	324.754 {104}	259.940 {130}	766.490 { 44}	670.784 { 50}	279.079 {121}2	257.610 {131}	202.030 {467}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.48116	.19813	.26383	.97468	48.615	.97770	48.770	.47045	1.0405
Stddev	.02048	.00864	.00214	.02506	1.114	.00449	.158	.00145	.0460
%RSD	4.2569	4.3603	.80971	2.5715	2.2916	.45908	.32447	.30779	4.4212

#1	.49565	.20424	.26232	.95696	47.827	.97453	48.658	.46943	1.0730
#2	.46668	.19202	.26534	.99240	49.402	.98088	48.882	.47147	1.0080

Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Elem	Na8183	Ni2316	P_1782	Pb2203	S_1820	Sb2068	Se1960	Si2881	SiO2
Line	818.326 { 41}	231.604 {446}	178.284 {489}	220.353 {453}	182.034 {485}	206.833 {463}	196.090 {472}	288.158 {117}	288.158 {117}2
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	54.043	.47507	10.070	.49888	2.1328	.52654	2.2236	9.7495	20.864
Stddev	.377	.02035	.402	.01718	.0691	.01874	.0946	.0363	.078
%RSD	.69697	4.2837	3.9908	3.4429	3.2376	3.5599	4.2558	.37255	.37255

#1	54.309	.48946	10.354	.51103	2.1817	.53979	2.2905	9.7238	20.809
#2	53.777	.46068	9.7857	.48673	2.0840	.51328	2.1567	9.7752	20.919

Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	None	Chk Pass	Chk Pass	Chk Pass	None
High Limit									
Low Limit									

Elem	Sn1899	Sr4077	Th2837	Ti3349	Ti1908	U_3701	V_2924	Zn2062	Zr3391
Line	189.989 {477}	407.771 { 83}	283.730 {119}	334.904 {101}	190.856 {477}	370.152 { 91}	292.402 {115}	206.200 {163}	339.198 { 99}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	2.0572	.93310	.96476	.95074	1.9637	2.1927	.48757	.46565	.52765
Stddev	.0776	.01598	.00065	.00241	.1198	.0362	.00184	.00372	.00475
%RSD	3.7733	1.7128	.06688	.25328	6.1011	1.6492	.37719	.79980	.89929

#1	2.1121	.92180	.96431	.94904	2.0484	2.1671	.48626	.46828	.53101
#2	2.0023	.94441	.96522	.95245	1.8790	2.2183	.48887	.46302	.52429

Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Int. Std.	Y_2243	Y_3600	Y_3774
Line	224.306 {450}	360.073 { 94}	377.433 { 89}
Units	Cts/S	Cts/S	Cts/S
Avg	2696.1	41076.	2283.5
Stddev	117.9	54.	56.6
%RSD	4.3725	.13185	2.4801

#1	2612.7	41114.	2323.5
#2	2779.4	41038.	2243.4

Elem	Ag3280	Al1670	As1890	B_2089	Ba4554	Be3130	Bi2230	Ca3179	Cd2288
Line	328.068 {103}	167.079 {502}	189.042 {478}	208.959 {461}	455.403 { 74}	313.042 {108}	223.061 {451}	317.933 {106}	228.802 {447}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.00016	2.3527	.00642	.01693	.00428	.00042	.00236	5.8145	-.00029
Stddev	.00034	.0842	.00763	.00144	.00028	.00023	.00137	.0144	.00020
%RSD	211.95	3.5767	118.73	8.5014	6.5682	54.760	58.323	.24830	68.853

#1	-.00008	2.4122	.01181	.01794	.00408	.00025	.00138	5.8247	-.00044
#2	.00040	2.2931	.00103	.01591	.00448	.00058	.00333	5.8043	-.00015

Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Elem	Co2286	Cr2055	Cu3247	Fe2599	K_7664	Li6707	Mg2790	Mn2576	Mo2020
Line	228.616 {447}	205.560 {464}	324.754 {104}	259.940 {130}	766.490 { 44}	670.784 { 50}	279.079 {121}2	257.610 {131}	202.030 {467}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.00007	.00234	-.00038	1.5497	.54699	-.00092	2.1928	.00860	.00479
Stddev	.00041	.00020	.00017	.0059	.00618	.00027	.0104	.00003	.00024
%RSD	623.48	8.7082	45.186	.38115	1.1304	29.511	.47488	.29175	5.0414

#1	-.00022	.00219	-.00051	1.5539	.54262	-.00072	2.1854	.00858	.00462
#2	.00036	.00248	-.00026	1.5455	.55136	-.00111	2.2002	.00862	.00496

Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Elem	Na5895	Ni2316	P_1782	Pb2203	S_1820	Sb2068	Se1960	Si2881	SiO2
Line	589.592 { 57}	231.604 {446}	178.284 {489}	220.353 {453}	182.034 {485}	206.833 {463}	196.090 {472}	288.158 {117}	288.158 {117}2
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	3.8992	.00091	.17840	.00180	4.9659	.00421	.00718	4.0694	8.7084
Stddev	.0527	.00012	.01181	.00009	.2949	.00051	.00192	.0201	.0430
%RSD	1.3519	13.085	6.6183	5.1498	5.9375	12.093	26.741	.49333	.49333

#1	3.8620	.00100	.18675	.00187	5.1744	.00385	.00854	4.0552	8.6780
#2	3.9365	.00083	.17005	.00173	4.7574	.00457	.00582	4.0836	8.7388

Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Elem	Sn1899	Sr4077	Th2837	Ti3349	Ti1908	U_3701	V_2924	Zn2062	Zr3391
Line	189.989 {477}	407.771 { 83}	283.730 {119}	334.904 {101}	190.856 {477}	370.152 { 91}	292.402 {115}	206.200 {163}	339.198 { 99}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.00147	.07904	-.00070	.02394	.01676	-.00441	.00493	.00321	-.00049
Stddev	.00030	.00053	.00153	.00010	.00439	.00598	.00102	.00009	.00404
%RSD	20.719	.67213	218.63	.43567	26.175	135.42	20.723	2.8899	821.14

#1	.00168	.07867	.00038	.02387	.01366	-.00019	.00421	.00327	-.00335
#2	.00125	.07942	-.00179	.02402	.01986	-.00864	.00565	.00314	.00237

Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Int. Std.	Y_2243	Y_3600	Y_3774
Line	224.306 {450}	360.073 { 94}	377.433 { 89}
Units	Cts/S	Cts/S	Cts/S
Avg	2771.2	42442.	2368.5
Stddev	120.6	246.	8.8
%RSD	4.3538	.57900	.37146

#1	2685.8	42615.	2374.7
#2	2856.5	42268.	2362.3

Sample Name: 280-82833-D-1-A SD@5 Acquired: 5/18/2016 23:27:44 Type: Unk
Method: 6500_025(v6) Mode: CONC Corr. Factor: 1.000000
User: CRHOADES Prep Date: Custom ID2: Custom ID3:
Comment: 324504 6010B (Se)

Elem	Ag3280	Al1670	As1890	B_2089	Ba4554	Be3130	Bi2230	Ca3179	Cd2288
Line	328.068 {103}	167.079 {502}	189.042 {478}	208.959 {461}	455.403 { 74}	313.042 {108}	223.061 {451}	317.933 {106}	228.802 {447}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	-.00032	.51569	.00605	.00336	.00045	.00029	-.00234	1.1535	.00006
Stddev	.00071	.00018	.00047	.00159	.00062	.00008	.00230	.0411	.00006
%RSD	224.40	.03423	7.7731	47.253	139.41	28.984	98.576	3.5666	113.14
#1	-.00082	.51557	.00572	.00449	.00089	.00035	-.00397	1.1826	.00010
#2	.00019	.51582	.00638	.00224	.00001	.00023	-.00071	1.1244	.00001

Check ? Chk Pass Chk Pass Chk Pass Chk Pass Chk Pass Chk Pass Chk Pass Chk Pass Chk Pass
High Limit
Low Limit

Elem	Co2286	Cr2055	Cu3247	Fe2599	K_7664	Li6707	Mg2790	Mn2576	Mo2020
Line	228.616 {447}	205.560 {464}	324.754 {104}	259.940 {130}	766.490 { 44}	670.784 { 50}	279.079 {121}2	257.610 {131}	202.030 {467}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.00018	.00081	-.00101	.32426	.15057	.00008	.43524	.00178	.00114
Stddev	.00006	.00002	.00018	.00711	.02045	.00020	.00058	.00012	.00008
%RSD	32.911	1.9090	17.402	2.1929	13.585	260.45	.13262	6.4931	6.8026
#1	.00022	.00082	-.00114	.32929	.13610	-.00006	.43564	.00186	.00109
#2	.00013	.00080	-.00089	.31924	.16503	.00022	.43483	.00170	.00120

Check ? Chk Pass Chk Pass Chk Pass Chk Pass Chk Pass Chk Pass Chk Pass Chk Pass Chk Pass
High Limit
Low Limit

Elem	Na5895	Ni2316	P_1782	Pb2203	S_1820	Sb2068	Se1960	Si2881	SiO2
Line	589.592 { 57}	231.604 {446}	178.284 {489}	220.353 {453}	182.034 {485}	206.833 {463}	196.090 {472}	288.158 {117}	288.158 {117}2
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.93026	-.00020	.03662	-.00124	1.0511	-.00065	-.00114	.82934	1.7748
Stddev	.02630	.00010	.00016	.00062	.0679	.00355	.00205	.00911	.0195
%RSD	2.8268	50.564	.45016	50.074	6.4603	549.89	180.16	1.0987	1.0987
#1	.94885	-.00013	.03674	-.00168	1.0991	-.00316	-.00259	.82290	1.7610
#2	.91166	-.00028	.03650	-.00080	1.0031	.00187	.00031	.83578	1.7886

Check ? Chk Pass Chk Pass Chk Pass Chk Pass Chk Pass Chk Pass Chk Pass Chk Pass Chk Pass
High Limit
Low Limit

Elem	Sn1899	Sr4077	Th2837	Ti3349	Ti1908	U_3701	V_2924	Zn2062	Zr3391
Line	189.989 {477}	407.771 { 83}	283.730 {119}	334.904 {101}	190.856 {477}	370.152 { 91}	292.402 {115}	206.200 {163}	339.198 { 99}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.00159	.01610	.00135	.00759	.00252	-.01856	.00148	.00013	.00249
Stddev	.00118	.00011	.00051	.00057	.00029	.02227	.00035	.00018	.00454
%RSD	73.957	.66151	37.941	7.5682	11.550	120.01	23.736	133.60	182.01
#1	.00243	.01603	.00172	.00800	.00273	-.03431	.00173	.00001	.00570
#2	.00076	.01618	.00099	.00718	.00232	-.00281	.00123	.00026	-.00072

Check ? Chk Pass Chk Pass Chk Pass Chk Pass Chk Pass Chk Pass Chk Pass Chk Pass Chk Pass
High Limit
Low Limit

Int. Std.	Y_2243	Y_3600	Y_3774
Line	224.306 {450}	360.073 { 94}	377.433 { 89}
Units	Cts/S	Cts/S	Cts/S
Avg	2694.4	42378.	2307.1
Stddev	13.7	158.	120.4
%RSD	.50819	.37178	5.2201
#1	2704.1	42266.	2221.9
#2	2684.7	42489.	2392.2

Sample Name: 280-82833-D-1-B MS Acquired: 5/18/2016 23:30:25 Type: Unk
Method: 6500_025(v6) Mode: CONC Corr. Factor: 1.000000
User: CRHOADES Prep Date: Custom ID2: Custom ID3:
Comment: 324504 6010B (Se)

Elem	Ag3280	Al3092	As1890	B_2089	Ba4554	Be3130	Bi2230	Ca3179	Cd2288
Line	328.068 {103}	309.271 {109}	189.042 {478}	208.959 {461}	455.403 {74}	313.042 {108}	223.061 {451}	317.933 {106}	228.802 {447}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.05013	4.4973	1.0871	1.0482	1.9802	.04669	F 2.2071	53.218	.10062
Stddev	.00018	.0973	.0100	.0021	.0099	.00005	.0069	.285	.00008
%RSD	.36306	2.1635	.92327	.20429	.50220	.11012	.31464	.53576	.08216

#1	.05026	4.4285	1.0942	1.0467	1.9731	.04672	2.2120	53.017	.10068
#2	.05000	4.5661	1.0800	1.0497	1.9872	.04665	2.2022	53.420	.10056

Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Fail	Chk Pass	Chk Pass
High Limit							.10000		
Low Limit							-.10000		

Elem	Co2286	Cr2055	Cu3247	Fe2599	K_7664	Li6707	Mg2790	Mn2576	Mo2020
Line	228.616 {447}	205.560 {464}	324.754 {104}	259.940 {130}	766.490 {44}	670.784 {50}	279.079 {121}2	257.610 {131}	202.030 {467}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.49796	.20536	.26518	2.3925	48.300	.97623	50.993	.47681	1.0669
Stddev	.00037	.00012	.00109	.0178	.347	.00608	.064	.00081	.0028
%RSD	.07415	.05658	.41082	.74413	.71796	.62244	.12454	.16886	.25995

#1	.49822	.20527	.26441	2.3800	48.055	.97194	50.949	.47624	1.0688
#2	.49770	.20544	.26595	2.4051	48.546	.98053	51.038	.47738	1.0649

Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Elem	Na8183	Ni2316	P_1782	Pb2203	S_1820	Sb2068	Se1960	Si2881	SiO2
Line	818.326 {41}	231.604 {446}	178.284 {489}	220.353 {453}	182.034 {485}	206.833 {463}	196.090 {472}	288.158 {117}	288.158 {117}2
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	57.718	.49137	W 10.531	.50935	6.8198	.53120	2.2364	13.739	29.401
Stddev	.005	.00124	.007	.00118	.0140	.01145	.0050	.019	.040
%RSD	.00911	.25234	.06974	.23108	.20570	2.1561	.22447	.13537	.13537

#1	57.714	.49225	10.536	.51019	6.8099	.53930	2.2400	13.752	29.429
#2	57.721	.49049	10.526	.50852	6.8297	.52310	2.2329	13.725	29.372

Check ?	Chk Pass	Chk Pass	Chk Warn	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit			2.0000						
Low Limit			-1.0000						

Elem	Sn1899	Sr4077	Th2837	Ti3349	Ti1908	U_3701	V_2924	Zn2062	Zr3391
Line	189.989 {477}	407.771 {83}	283.730 {119}	334.904 {101}	190.856 {477}	370.152 {91}	292.402 {115}	206.200 {163}	339.198 {99}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	W 2.1003	.98892	.97056	.97116	1.8899	2.1235	.48887	.46263	.53308
Stddev	.0010	.00587	.00736	.00215	.0724	.0343	.00140	.00014	.00674
%RSD	.04972	.59385	.75808	.22089	3.8329	1.6160	.28735	.03047	1.2646

#1	2.1010	.98477	.96536	.96964	1.9411	2.1478	.48788	.46253	.52832
#2	2.0995	.99307	.97576	.97268	1.8387	2.0992	.48986	.46273	.53785

Check ?	Chk Warn	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit	2.0000								
Low Limit	-.05000								

Int. Std.	Y_2243	Y_3600	Y_3774
Line	224.306 {450}	360.073 {94}	377.433 {89}
Units	Cts/S	Cts/S	Cts/S
Avg	2571.8	40146.	2253.8
Stddev	11.5	158.	10.2
%RSD	.44721	.39325	.45117

#1	2563.7	40258.	2261.0
#2	2580.0	40034.	2246.6

Sample Name: 280-82833-D-1-C MSD Acquired: 5/18/2016 23:32:52 Type: Unk
Method: 6500_025(v6) Mode: CONC Corr. Factor: 1.000000
User: CRHOADES Prep Date: Custom ID2: Custom ID3:
Comment: 324504 6010B (Se)

Elem	Ag3280	Al3092	As1890	B_2089	Ba4554	Be3130	Bi2230	Ca3179	Cd2288
Line	328.068 {103}	309.271 {109}	189.042 {478}	208.959 {461}	455.403 {74}	313.042 {108}	223.061 {451}	317.933 {106}	228.802 {447}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	k .05175	W 3.1935	k 1.0622	1.0167	k 1.3873	k .03303	kF 2.1473	37.614	k .10056
Stddev	.00253	2.0508	.0358	.0327	.8908	.02052	.0610	23.815	.00207
%RSD	4.8921	64.219	3.3691	3.2160	64.213	62.142	2.8410	63.314	2.0609

#1	k .05354	1.7433	k 1.0369	.99362	k .75741	k .01852	k 2.1041	20.774	k .10202
#2	.04996	4.6436	1.0875	1.0399	2.0172	.04754	2.1904	54.454	.09909

Check ?	Chk Pass	Chk Warn	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Fail	Chk Pass	Chk Pass
High Limit		500.00					.10000		
Low Limit		3.2000					-.10000		

Elem	Co2286	Cr2055	Cu3247	Fe2599	K_7664	Li6707	Mg2790	Mn2576	Mo2020
Line	228.616 {447}	205.560 {464}	324.754 {104}	259.940 {130}	766.490 {44}	670.784 {50}	279.079 {121}2	257.610 {131}	202.030 {467}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	k .48264	k .20097	k .26232	1.7452	34.851	.68974	k 50.438	k .47332	k 1.0494
Stddev	.00824	.00585	.00018	1.0941	20.610	.42679	.133	.00186	.0295
%RSD	1.7072	2.9096	.06880	62.691	59.136	61.877	.26324	.39365	2.8092

#1	k .47681	k .19683	k .26220	.97157	20.278	.38795	k 50.532	k .47464	k 1.0285
#2	.48846	.20510	.26245	2.5188	49.424	.99153	50.344	.47201	1.0702

Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Elem	Na8183	Ni2316	P_1782	Pb2203	S_1820	Sb2068	Se1960	Si2881	SiO2
Line	818.326 {41}	231.604 {446}	178.284 {489}	220.353 {453}	182.034 {485}	206.833 {463}	196.090 {472}	288.158 {117}	288.158 {117}2
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	41.370	k .47709	kW 10.125	k .49633	k 6.7442	k .51636	k 2.1422	k 9.8731	k 21.128
Stddev	24.155	.01207	.167	.01525	.1921	.01220	.0530	5.9762	12.789
%RSD	58.388	2.5298	1.6469	3.0723	2.8476	2.3631	2.4749	60.530	60.530

#1	24.289	k .46856	k 10.007	k .48555	k 6.6084	k .50773	k 2.1047	k 5.6473	k 12.085
#2	58.450	.48563	10.242	.50711	6.8800	.52499	2.1797	14.099	30.172

Check ?	Chk Pass	Chk Pass	Chk Warn	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit			2.0000						
Low Limit			-1.0000						

Elem	Sn1899	Sr4077	Th2837	Ti3349	Ti1908	U_3701	V_2924	Zn2062	Zr3391
Line	189.989 {477}	407.771 {83}	283.730 {119}	334.904 {101}	190.856 {477}	370.152 {91}	292.402 {115}	206.200 {163}	339.198 {99}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	W 2.0215	.69681	k .98097	k .96922	k 1.9112	k 2.1199	k .48411	k .45991	k .38837
Stddev	.0264	.44523	.04501	.00739	.0314	.0126	.00169	.00151	.22098
%RSD	1.3064	63.895	4.5882	.76220	1.6448	.59186	.34829	.32878	56.900

#1	2.0028	.38199	k 1.0128	k .97445	k 1.9335	k 2.1288	k .48530	k .46098	k .23211
#2	2.0402	1.0116	.94914	.96400	1.8890	2.1111	.48292	.45884	.54462

Check ?	Chk Warn	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit	2.0000								
Low Limit	-.05000								

Int. Std.	Y_2243	Y_3600	Y_3774
Line	224.306 {450}	360.073 {94}	377.433 {89}
Units	Cts/S	Cts/S	Cts/S
Avg	2646.4	40581.	2484.6
Stddev	71.8	224.	380.9
%RSD	2.7117	.55295	15.331

#1	2697.1	40422.	2753.9
#2	2595.7	40739.	2215.2

Elem	Ag3280	Al1670	As1890	B_2089	Ba4554	Be3130	Bi2230	Ca3179	Cd2288
Line	328.068 {103}	167.079 {502}	189.042 {478}	208.959 {461}	455.403 { 74}	313.042 {108}	223.061 {451}	317.933 {106}	228.802 {447}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	-.00015	.23654	.00941	.01838	.01107	.00043	.00669	17.351	.00005
Stddev	.00053	.00125	.00130	.00038	.00035	.00006	.00191	.079	.00001
%RSD	342.89	.52996	13.816	2.0809	3.1764	14.536	28.607	.45331	20.862

#1	-.00052	.23565	.01033	.01865	.01082	.00047	.00533	17.295	.00006
#2	.00022	.23743	.00849	.01811	.01132	.00038	.00804	17.407	.00004

Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Elem	Co2286	Cr2055	Cu3247	Fe2599	K_7664	Li6707	Mg2790	Mn2576	Mo2020
Line	228.616 {447}	205.560 {464}	324.754 {104}	259.940 {130}	766.490 { 44}	670.784 { 50}	279.079 {121}2	257.610 {131}	202.030 {467}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.00007	.00216	.00021	10.345	1.5021	.00324	3.5454	.02018	.00435
Stddev	.00015	.00032	.00045	.018	.0085	.00101	.0453	.00052	.00152
%RSD	219.55	14.944	210.80	.17842	.56790	31.152	1.2773	2.5725	35.005

#1	.00017	.00193	.00053	10.332	1.5081	.00395	3.5774	.02055	.00327
#2	-.00004	.00239	-.00010	10.358	1.4961	.00253	3.5134	.01981	.00542

Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Elem	Na5895	Ni2316	P_1782	Pb2203	S_1820	Sb2068	Se1960	Si2881	SiO2
Line	589.592 { 57}	231.604 {446}	178.284 {489}	220.353 {453}	182.034 {485}	206.833 {463}	196.090 {472}	288.158 {117}	288.158 {117}2
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	5.7696	.00052	.04061	.00021	1.3369	.00198	.00986	3.5247	7.5429
Stddev	.0090	.00043	.00215	.00030	.0156	.00218	.00227	.0364	.0778
%RSD	.15567	83.417	5.3061	146.01	1.1652	110.33	23.021	1.0316	1.0316

#1	5.7633	.00021	.04214	.00042	1.3258	.00352	.00825	3.4990	7.4878
#2	5.7760	.00082	.03909	-.00001	1.3479	.00043	.01146	3.5504	7.5979

Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Elem	Sn1899	Sr4077	Th2837	Ti3349	Ti1908	U_3701	V_2924	Zn2062	Zr3391
Line	189.989 {477}	407.771 { 83}	283.730 {119}	334.904 {101}	190.856 {477}	370.152 { 91}	292.402 {115}	206.200 {163}	339.198 { 99}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.00083	.21967	.00207	.00214	.01879	-.02996	.00830	.00523	.00083
Stddev	.00161	.00064	.00292	.00068	.00663	.00806	.00097	.00099	.00068
%RSD	194.51	.29327	140.89	31.883	35.297	26.908	11.655	18.884	81.723

#1	.00196	.21922	.00413	.00262	.01410	-.02426	.00898	.00593	.00035
#2	-.00031	.22013	.00001	.00166	.02348	-.03566	.00761	.00453	.00131

Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Int. Std.	Y_2243	Y_3600	Y_3774						
Line	224.306 {450}	360.073 { 94}	377.433 { 89}						
Units	Cts/S	Cts/S	Cts/S						
Avg	2690.5	42306.	2275.6						
Stddev	14.1	351.	8.8						
%RSD	.52454	.83007	.38822						

#1	2700.5	42555.	2281.8						
#2	2680.5	42058.	2269.3						

Elem	Ag3280	Al1670	As1890	B_2089	Ba4554	Be3130	Bi2230	Ca3179	Cd2288
Line	328.068 {103}	167.079 {502}	189.042 {478}	208.959 {461}	455.403 {74}	313.042 {108}	223.061 {451}	317.933 {106}	228.802 {447}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	-0.00098	.22308	-0.00115	.01959	.00650	.00009	.00136	28.773	-0.00009
Stddev	.00012	.00048	.00528	.00030	.00070	.00016	.00364	1.018	.00031
%RSD	12.382	.21354	457.30	1.5168	10.701	175.76	268.13	3.5395	362.22

#1	-0.00089	.22342	-0.00489	.01938	.00699	.00020	-0.00122	29.493	-0.00031
#2	-0.00106	.22274	.00258	.01980	.00601	-0.00002	.00393	28.053	.00013

Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Elem	Co2286	Cr2055	Cu3247	Fe2599	K_7664	Li6707	Mg2790	Mn2576	Mo2020
Line	228.616 {447}	205.560 {464}	324.754 {104}	259.940 {130}	766.490 {44}	670.784 {50}	279.079 {121}2	257.610 {131}	202.030 {467}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.00015	.00138	.00013	.43062	2.2941	-0.00023	5.3279	.01220	.00081
Stddev	.00006	.00058	.00017	.01270	.0935	.00027	.0354	.00019	.00075
%RSD	42.836	42.413	130.02	2.9490	4.0735	118.37	.66452	1.5565	93.213

#1	.00010	.00179	.00001	.43960	2.3602	-0.00004	5.3529	.01233	.00028
#2	.00019	.00096	.00025	.42164	2.2280	-0.00042	5.3029	.01207	.00134

Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Elem	Na8183	Ni2316	P_1782	Pb2203	S_1820	Sb2068	Se1960	Si2881	SiO2
Line	818.326 {41}	231.604 {446}	178.284 {489}	220.353 {453}	182.034 {485}	206.833 {463}	196.090 {472}	288.158 {117}	288.158 {117}2
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	14.066	-0.00020	.02221	.00115	10.852	.00547	.00748	2.9850	6.3878
Stddev	.029	.00024	.00109	.00208	.034	.00373	.00952	.0321	.0688
%RSD	.20928	119.46	4.8990	181.54	.31645	68.108	127.37	1.0763	1.0763

#1	14.087	-0.00003	.02298	.00262	10.828	.00811	.00074	2.9622	6.3392
#2	14.045	-0.00037	.02144	-0.00032	10.876	.00284	.01421	3.0077	6.4364

Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Elem	Sn1899	Sr4077	Th2837	Ti3349	Ti1908	U_3701	V_2924	Zn2062	Zr3391
Line	189.989 {477}	407.771 {83}	283.730 {119}	334.904 {101}	190.856 {477}	370.152 {91}	292.402 {115}	206.200 {163}	339.198 {99}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	-0.00056	.03671	-0.00029	.00116	.00187	.01102	.00419	.00165	.00088
Stddev	.00256	.00001	.00456	.00000	.00823	.02921	.00018	.00007	.00072
%RSD	453.60	.01568	1580.0	.24164	440.46	265.13	4.2235	4.3601	81.260

#1	.00125	.03671	.00294	.00117	-0.00395	-0.00964	.00407	.00170	.00139
#2	-0.00237	.03671	-0.00352	.00116	.00769	.03167	.00432	.00160	.00038

Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Int. Std.	Y_2243	Y_3600	Y_3774
Line	224.306 {450}	360.073 {94}	377.433 {89}
Units	Cts/S	Cts/S	Cts/S
Avg	2655.8	41447.	2252.5
Stddev	9.3	7.	67.3
%RSD	.34992	.01736	2.9864

#1	2662.4	41442.	2205.0
#2	2649.3	41452.	2300.1

Elem	Ag3280	Al3092	As1890	B_2089	Ba4554	Be3130	Bi2230	Ca3179	Cd2288
Line	328.068 {103}	309.271 {109}	189.042 {478}	208.959 {461}	455.403 {74}	313.042 {108}	223.061 {451}	317.933 {106}	228.802 {447}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	-0.00026	3.5535	-0.00296	.01956	.02431	.00019	.00097	4.4579	.00000
Stddev	.00023	.1777	.00057	.00172	.00117	.00008	.00201	.1426	.00030
%RSD	87.285	5.0020	19.306	8.7737	4.7998	43.000	207.93	3.1992	80986.

#1	-0.00042	3.6792	-0.00255	.01835	.02513	.00025	-0.00045	4.5588	-0.00021
#2	-0.00010	3.4279	-0.00336	.02078	.02348	.00013	.00238	4.3571	.00021

Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Elem	Co2286	Cr2055	Cu3247	Fe2599	K_7664	Li6707	Mg2790	Mn2576	Mo2020
Line	228.616 {447}	205.560 {464}	324.754 {104}	259.940 {130}	766.490 {44}	670.784 {50}	279.079 {121}2	257.610 {131}	202.030 {467}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.00037	.00067	.00024	1.2667	6.6885	.00112	4.8127	.00247	.00025
Stddev	.00022	.00029	.00008	.0249	.0875	.00073	.0088	.00014	.00035
%RSD	60.205	42.951	32.749	1.9657	1.3076	64.769	.18189	5.6579	141.44

#1	.00053	.00047	.00019	1.2844	6.7504	.00061	4.8189	.00237	.00000
#2	.00021	.00088	.00030	1.2491	6.6267	.00163	4.8065	.00257	.00050

Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Elem	Na8183	Ni2316	P_1782	Pb2203	S_1820	Sb2068	Se1960	Si2881	SiO2
Line	818.326 {41}	231.604 {446}	178.284 {489}	220.353 {453}	182.034 {485}	206.833 {463}	196.090 {472}	288.158 {117}	288.158 {117}2
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	56.835	-0.00016	.04873	.00082	48.500	.00143	.00962	1.4687	3.1431
Stddev	1.060	.00013	.00240	.00231	1.754	.00007	.00079	.0209	.0446
%RSD	1.8643	78.758	4.9265	280.44	3.6158	5.1171	8.2351	1.4202	1.4202

#1	57.584	-0.00007	.04703	-0.00081	47.260	.00137	.01018	1.4835	3.1746
#2	56.086	-0.00026	.05043	.00246	49.740	.00148	.00906	1.4540	3.1115

Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Elem	Sn1899	Sr4077	Th2837	Ti3349	Ti1908	U_3701	V_2924	Zn2062	Zr3391
Line	189.989 {477}	407.771 {83}	283.730 {119}	334.904 {101}	190.856 {477}	370.152 {91}	292.402 {115}	206.200 {163}	339.198 {99}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.00040	.17183	-0.00346	.00277	-0.00491	-0.00680	.00121	.00139	.00026
Stddev	.00085	.00005	.00306	.00029	.00142	.00253	.00078	.00028	.00006
%RSD	213.40	.02967	88.662	10.306	28.842	37.222	64.429	20.049	23.481

#1	.00100	.17187	-0.00129	.00257	-0.00591	-0.00858	.00176	.00120	.00022
#2	-0.00020	.17180	-0.00562	.00297	-0.00391	-0.00501	.00066	.00159	.00030

Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Int. Std.	Y_2243	Y_3600	Y_3774						
Line	224.306 {450}	360.073 {94}	377.433 {89}						
Units	Cts/S	Cts/S	Cts/S						
Avg	2699.7	40929.	2228.3						
Stddev	93.0	86.	66.9						
%RSD	3.4447	.20890	3.0030						

#1	2765.4	40990.	2181.0						
#2	2633.9	40869.	2275.6						

Sample Name: CCVH-3894253 Acquired: 5/18/2016 23:43:19 Type: QC
Method: 6500_025(v6) Mode: CONC Corr. Factor: 1.000000
User: CRHOADES Prep Date: Custom ID2: Custom ID3:
Comment:

Elem	Ag3280	Al3092	As1890	B_2089	Ba4554	Be3130	Bi2230	Ca3179	Cd2288	Co2286	Cr2055
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	-0.00089	50.757	-0.00371	.00286	-0.00010	.00032	W 1.0908	-.02333	-0.00076	-0.00083	.00007
Stddev	.00051	.711	.00105	.00040	.00031	.00004	.0133	.00590	.00004	.00040	.00020
%RSD	57.386	1.4016	28.310	14.009	300.11	13.290	1.2227	25.297	4.9142	48.806	291.85

#1	-0.00053	50.254	-0.00297	.00258	-0.00033	.00029	1.1002	-.01915	-0.00074	-.00111	-0.00007
#2	-0.00124	51.260	-0.00445	.00314	.00012	.00035	1.0814	-.02750	-0.00079	-0.00054	.00021

Check ?	None	Chk Pass	None	None	None	None	Chk Warn	None	None	None	None
Value							1.0000				
Range							5.0000%				

Elem	Cu3247	Fe2714	K_7664	Li6707	Mg2790	Mn2576	Mo2020	Na8183	Ni2316	P_1782	Pb2203
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	-0.00002	48.491	.17999	.00156	.02111	.00027	-.00144	252.55	.00049	.00561	-0.00006
Stddev	.00025	.474	.00654	.00347	.00028	.00009	.00022	4.19	.00049	.00137	.00118
%RSD	1085.7	.97706	3.6362	222.92	1.3165	34.861	15.388	1.6597	99.300	24.485	1983.4

#1	-0.00020	48.156	.17536	-0.00090	.02091	.00033	-0.00129	249.59	.00015	.00658	-0.00089
#2	.00016	48.826	.18462	.00401	.02131	.00020	-0.00160	255.52	.00083	.00464	.00077

Check ?	None	Chk Pass	None	None	None	None	None	Chk Pass	None	None	None
Value											
Range											

Elem	S_1820	Sb2068	Se1960	Si2881	SiO2	Sn1899	Sr4077	Th2837	Ti3349	Ti1908	U_3701
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	W 5.5126	-.01537	.00774	-.02074	-.04438	.00030	.00076	W 4.6700	.00542	-.00601	W 10.527
Stddev	.0395	.00172	.00315	.01633	.03495	.00163	.00023	.0224	.00055	.00330	.233
%RSD	.71708	11.166	40.756	78.756	78.756	543.14	30.706	.47926	10.176	54.955	2.2175

#1	5.5406	-.01658	.00997	-0.00919	-0.01966	.00145	.00092	4.6858	.00581	-.00834	10.692
#2	5.4847	-.01415	.00551	-.03229	-.06909	-.00085	.00059	4.6542	.00503	-.00367	10.362

Check ?	Chk Warn	None	None	None	None	None	None	Chk Warn	None	None	Chk Warn
Value	5.0000							5.0000			10.000
Range	5.0000%							-5.0000%			5.0000%

Elem	V_2924	Zn2062	Zr3391
Units	ppm	ppm	ppm
Avg	.00981	.00173	.05758
Stddev	.00000	.00019	.00417
%RSD	.01764	10.839	7.2361

#1	.00981	.00159	.05464
#2	.00981	.00186	.06053

Check ?	None	None	None
Value			
Range			

Int. Std.	Y_2243	Y_3600	Y_3774
Units	Cts/S	Cts/S	Cts/S
Avg	2592.0	39722.	2199.6
Stddev	11.5	9.	27.2
%RSD	.44507	.02343	1.2353

#1	2583.8	39716.	2218.8
#2	2600.1	39729.	2180.4

Sample Name: CCV-3894251 Acquired: 5/18/2016 23:45:57 Type: QC
Method: 6500_025(v6) Mode: CONC Corr. Factor: 1.000000
User: CRHOADES Prep Date: Custom ID2: Custom ID3:
Comment:

Elem	Ag3280	Al1670	As1890	B_2089	Ba4554	Be3130	Bi2230	Ca3179	Cd2288	Co2286	Cr2055	Cu3247	Fe2599
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.48910	.54409	1.0205	.48478	.49344	.45632	-.00062	4.8649	.49233	.48969	.49503	.51091	2.4362
Stddev	.00004	.00171	.0017	.00271	.01841	.01437	.00041	.1477	.00159	.00084	.00254	.00143	.0560
%RSD	.00780	.31365	.16398	.56004	3.7316	3.1492	66.604	3.0370	.32380	.17192	.51246	.27933	2.2996

#1	.48912	.54530	1.0217	.48286	.50646	.46649	-.00033	4.9693	.49121	.48909	.49682	.50990	2.4758
#2	.48907	.54289	1.0193	.48670	.48042	.44616	-.00091	4.7604	.49346	.49028	.49324	.51192	2.3965

Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	None	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Value													
Range													

Elem	K_7664	Li6707	Mg2790	Mn2576	Mo2020	Na5895	Ni2316	P_1782	Pb2203	S_1820	Sb2068	Se1960	Si2881
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	47.936	.96804	18.957	.46713	.49985	5.0461	.48206	.95765	.98950	.03891	.98843	1.0318	4.7873
Stddev	1.673	.00910	.042	.00099	.00192	.0645	.00287	.00585	.00345	.00556	.00948	.0023	.0418
%RSD	3.4904	.93990	.22079	.21197	.38502	1.2778	.59457	.61126	.34909	14.300	.95931	.22185	.87254

#1	49.119	.97447	18.987	.46783	.50121	5.0917	.48409	.95351	.98706	.03498	.98172	1.0334	4.8168
#2	46.753	.96160	18.928	.46643	.49849	5.0005	.48003	.96179	.99194	.04285	.99513	1.0301	4.7577

Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	None	Chk Pass	Chk Pass	Chk Pass
Value													
Range													

Elem	SiO2	Sn1899	Sr4077	Th2837	Ti3349	Ti1908	U_3701	V_2924	Zn2062	Zr3391
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	10.245	1.0051	.46881	.00237	.46306	1.0361	-.04191	.48177	.46389	.51220
Stddev	.089	.0003	.01703	.00424	.00021	.0080	.02538	.00097	.00032	.00060
%RSD	.87254	.03046	3.6336	178.50	.04639	.77510	60.545	.20071	.06887	.11624

#1	10.308	1.0053	.48085	-.00062	.46321	1.0418	-.05986	.48245	.46412	.51262
#2	10.182	1.0049	.45676	.00537	.46291	1.0304	-.02397	.48108	.46367	.51178

Check ?	Chk Pass	Chk Pass	Chk Pass	None	Chk Pass	Chk Pass	None	Chk Pass	Chk Pass	Chk Pass
Value										
Range										

Int. Std.	Y_2243	Y_3600	Y_3774
Units	Cts/S	Cts/S	Cts/S
Avg	2643.3	40962.	2179.9
Stddev	41.5	364.	77.7
%RSD	1.5688	.88827	3.5622

#1	2614.0	40705.	2125.0
#2	2672.7	41219.	2234.8

Sample Name: CCB Acquired: 5/18/2016 23:48:28 Type: QC
 Method: 6500_025(v6) Mode: CONC Corr. Factor: 1.000000
 User: CRHOADES Prep Date: Custom ID2: Custom ID3:
 Comment:

Elem	Ag3280	Al1670	As1890	B_2089	Ba4554	Be3130	Bi2230	Ca3179	Cd2288	Co2286	Cr2055
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	-.00005	.00027	-.00091	.00055	-.00073	.00032	-.00057	-.01698	-.00013	-.00048	.00011
Stddev	.00007	.00042	.00285	.00021	.00068	.00005	.00075	.00481	.00015	.00013	.00006
%RSD	127.41	156.96	313.71	38.390	94.192	16.242	130.21	28.309	113.05	27.649	55.053

#1	-.00001	.00056	.00111	.00040	-.00024	.00035	-.00005	-.01358	-.00003	-.00038	.00015
#2	-.00010	-.00003	-.00293	.00070	-.00121	.00028	-.00110	-.02038	-.00024	-.00057	.00007

Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit											
Low Limit											

Elem	Cu3247	Fe2599	K_7664	Li6707	Mg2790	Mn2576	Mo2020	Na5895	Ni2316	P_1782	Pb2203
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	-.00069	-.00610	.16571	-.00314	.00222	.00007	.00205	.15094	-.00001	-.00030	-.00052
Stddev	.00050	.00674	.03986	.00309	.00023	.00013	.00035	.01724	.00021	.00019	.00024
%RSD	72.944	110.58	24.055	98.545	10.296	188.73	17.247	11.425	2361.1	64.673	45.329

#1	-.00033	-.00133	.19390	-.00533	.00239	-.00002	.00180	.16313	.00014	-.00043	-.00036
#2	-.00104	-.01086	.13752	-.00095	.00206	.00016	.00230	.13874	-.00016	-.00016	-.00069

Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit											
Low Limit											

Elem	S_1820	Sb2068	Se1960	Si2881	SiO2	Sn1899	Sr4077	Th2837	Ti3349	Ti1908	U_3701
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.03561	W .00363	.00416	.01347	.02882	-.00106	.00035	-.00158	-.00043	-.00104	-.00990
Stddev	.00035	.00025	.00053	.00454	.00973	.00114	.00004	.00321	.00016	.00175	.00639
%RSD	.98932	6.8043	12.829	33.751	33.751	107.48	12.682	203.46	37.898	168.82	64.599

#1	.03586	.00380	.00454	.01025	.02194	-.00187	.00032	-.00384	-.00032	-.00227	-.01442
#2	.03536	.00346	.00378	.01668	.03569	-.00025	.00039	.00069	-.00055	.00020	-.00538

Check ?	Chk Pass	Chk Warn	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit		.00100									
Low Limit		-.00100									

Elem	V_2924	Zn2062	Zr3391
Units	ppm	ppm	ppm
Avg	.00113	.00004	.00125
Stddev	.00022	.00066	.00048
%RSD	19.661	1504.4	38.672

#1	.00129	-.00042	.00090
#2	.00097	.00051	.00159

Check ?	Chk Pass	Chk Pass	Chk Pass
High Limit			
Low Limit			

Int. Std.	Y_2243	Y_3600	Y_3774
Units	Cts/S	Cts/S	Cts/S
Avg	2703.4	42674.	2269.6
Stddev	36.7	11.	164.1
%RSD	1.3584	.02586	7.2299

#1	2729.4	42681.	2153.6
#2	2677.4	42666.	2385.6

Sample Name: CCVL-3897520 Acquired: 5/18/2016 23:50:52 Type: QC

Method: 6500_025(v6) Mode: CONC Corr. Factor: 1.000000

User: CRHOADES Prep Date: Custom ID2: Custom ID3:

Comment:

Elem	Ag3280	Al1670	As1890	B_2089	Ba4554	Be3130	Bi2230	Ca3179	Cd2288	Co2286	Cr2055	Cu3247
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.00973	.11745	F .00932	.09775	.00978	F .00131	.11475	.18915	.00498	.01029	.01007	.01525
Stddev	.00026	.00379	.00637	.00121	.00015	.00007	.00279	.00148	.00016	.00028	.00020	.00035
%RSD	2.7158	3.2239	68.370	1.2413	1.5572	4.9836	2.4331	.78264	3.1295	2.6783	1.9528	2.3247

#1	.00992	.11478	.01382	.09860	.00989	.00136	.11277	.18810	.00487	.01009	.00994	.01550
#2	.00954	.12013	.00481	.09689	.00967	.00126	.11672	.19020	.00509	.01048	.01021	.01500

Check ?	Chk Pass	Chk Pass	Chk Fail	Chk Pass	Chk Pass	Chk Fail	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Value			.01500			.00100						
Range			-30.000%			30.000%						

Elem	Fe2599	K_7664	Li6707	Mg2790	Mn2576	Mo2020	Na5895	Ni2316	P_1782	Pb2203	S_1820	Sb2068
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.10128	3.0899	.00998	.20203	.00994	.02026	1.1963	.03995	2.8398	.01003	.03453	F .02623
Stddev	.00292	.1006	.00161	.00973	.00000	.00051	.0204	.00014	.0097	.00073	.01364	.00300
%RSD	2.8855	3.2557	16.077	4.8175	.03843	2.5320	1.7086	.34486	.34127	7.2743	39.500	11.443

#1	.09922	3.0188	.00885	.20891	.00993	.01990	1.2108	.04005	2.8467	.00951	.02489	.02411
#2	.10335	3.1611	.01112	.19515	.00994	.02062	1.1819	.03985	2.8330	.01055	.04418	.02835

Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	None	Chk Fail
Value												.02000
Range												30.000%

Elem	Se1960	Si2881	SiO2	Sn1899	Sr4077	Th2837	Ti3349	Ti1908	U_3701	V_2924	Zn2062	Zr3391
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	F .02338	.47801	1.0229	.10169	.00995	.01487	.00950	.01356	F .08308	.01073	.01844	.01614
Stddev	.00483	.00905	.0194	.00173	.00021	.00221	.00059	.00617	.09662	.00053	.00001	.00149
%RSD	20.675	1.8936	1.8936	1.7059	2.1053	14.861	6.2466	45.487	116.30	4.9545	.03877	9.2089

#1	.01996	.48441	1.0366	.10292	.00980	.01644	.00992	.01792	.01476	.01111	.01844	.01509
#2	.02680	.47161	1.0092	.10046	.01010	.01331	.00908	.00920	.15140	.01036	.01845	.01719

Check ?	Chk Fail	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Fail	Chk Pass	Chk Pass	Chk Pass
Value	.01500								.06000			
Range	30.000%								30.000%			

Int. Std.	Y_2243	Y_3600	Y_3774
Units	Cts/S	Cts/S	Cts/S
Avg	2664.0	41812.	2180.2
Stddev	9.4	14.	27.7
%RSD	.35273	.03263	1.2692

#1	2670.6	41822.	2160.7
#2	2657.3	41802.	2199.8

Elem	Ag3280	Al1670	As1890	B_2089	Ba4554	Be3130	Bi2230	Ca3179	Cd2288
Line	328.068 {103}	167.079 {502}	189.042 {478}	208.959 {461}	455.403 {74}	313.042 {108}	223.061 {451}	317.933 {106}	228.802 {447}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	-0.00028	1.0602	.00040	.01652	.00434	.00042	.00381	20.580	-0.00018
Stddev	.00024	.0049	.00355	.00031	.00039	.00004	.00670	.152	.00010
%RSD	86.445	.46477	878.93	1.8926	9.0603	10.453	175.91	.73983	54.632

#1	-0.00045	1.0637	.00292	.01674	.00462	.00039	-0.00093	20.688	-0.00025
#2	-0.00011	1.0567	-.00211	.01630	.00406	.00045	.00855	20.473	-0.00011

Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Elem	Co2286	Cr2055	Cu3247	Fe2599	K_7664	Li6707	Mg2790	Mn2576	Mo2020
Line	228.616 {447}	205.560 {464}	324.754 {104}	259.940 {130}	766.490 {44}	670.784 {50}	279.079 {121}2	257.610 {131}	202.030 {467}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.00002	.00247	.00113	.31094	1.7312	.00142	3.0402	.00279	.00010
Stddev	.00008	.00028	.00009	.00210	.0698	.00200	.0198	.00002	.00042
%RSD	311.00	11.334	7.9511	.67611	4.0294	141.11	.65264	.86300	404.99

#1	.00008	.00267	.00107	.31243	1.7806	.00283	3.0262	.00281	-0.00019
#2	-.00003	.00227	.00120	.30945	1.6819	.00000	3.0543	.00278	.00040

Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Elem	Na5895	Ni2316	P_1782	Pb2203	S_1820	Sb2068	Se1960	Si2881	SiO2
Line	589.592 {57}	231.604 {446}	178.284 {489}	220.353 {453}	182.034 {485}	206.833 {463}	196.090 {472}	288.158 {117}	288.158 {117}2
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	3.6129	.00052	.03330	.00054	3.4617	.00072	.00281	2.4705	5.2868
Stddev	.0113	.00071	.00106	.00080	.0239	.00528	.01084	.0008	.0017
%RSD	.31132	135.45	3.1953	148.13	.69159	737.63	386.18	.03263	.03263

#1	3.6209	.00103	.03254	.00111	3.4448	.00445	.01047	2.4699	5.2856
#2	3.6049	.00002	.03405	-.00003	3.4786	-.00302	-.00486	2.4711	5.2881

Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Elem	Sn1899	Sr4077	Th2837	Ti3349	Ti1908	U_3701	V_2924	Zn2062	Zr3391
Line	189.989 {477}	407.771 {83}	283.730 {119}	334.904 {101}	190.856 {477}	370.152 {91}	292.402 {115}	206.200 {163}	339.198 {99}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.00003	.25414	.00098	.01520	-.00275	-.00370	.00676	.00093	.00116
Stddev	.00140	.01309	.00091	.00054	.00166	.04608	.00016	.00010	.00138
%RSD	4150.9	5.1502	93.672	3.5292	60.131	1243.8	2.3292	10.504	119.43

#1	.00102	.26340	.00033	.01558	-.00392	-.03629	.00665	.00100	.00213
#2	-.00096	.24489	.00162	.01482	-.00158	.02888	.00688	.00086	.00018

Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Int. Std.	Y_2243	Y_3600	Y_3774
Line	224.306 {450}	360.073 {94}	377.433 {89}
Units	Cts/S	Cts/S	Cts/S
Avg	2707.7	42327.	2340.4
Stddev	4.6	249.	7.5
%RSD	.16973	.58775	.32209

#1	2704.5	42503.	2335.0
#2	2711.0	42151.	2345.7

Sample Name: 280-82833-D-6-A Acquired: 5/18/2016 23:56:12 Type: Unk

Method: 6500_025(v6) Mode: CONC Corr. Factor: 1.000000

User: CRHOADES Prep Date: Custom ID2: Custom ID3:

Comment: 324504 6010B (Se)

Elem	Ag3280	Al1670	Al3092	As1890	B_2089	Ba4554	Be3130	Bi2230	Ca3179
Line	328.068 {103}	167.079 {502}	309.271 {109}	189.042 {478}	208.959 {461}	455.403 { 74}	313.042 {108}	223.061 {451}	317.933 {106}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	-0.00060	2.4988	W 2.5325	.00582	.09716	.01609	.00035	.00078	30.915
Stddev	.00061	.0122	.0627	.00577	.00141	.00089	.00015	.00122	.149
%RSD	101.64	.48866	2.4741	99.188	1.4563	5.5272	42.560	156.17	.48042

#1	-0.00017	2.5075	2.5768	.00174	.09616	.01546	.00045	-.00008	30.810
#2	-.00104	2.4902	2.4882	.00990	.09816	.01672	.00024	.00164	31.020

Check ?	Chk Pass	Chk Pass	Chk Warn	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit			500.00						
Low Limit			3.2000						

Elem	Cd2288	Co2286	Cr2055	Cu3247	Fe2599	K_7664	Li6707	Mg2790	Mn2576
Line	228.802 {447}	228.616 {447}	205.560 {464}	324.754 {104}	259.940 {130}	766.490 { 44}	670.784 { 50}	279.079 {121}2	257.610 {131}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.00025	.00240	.00394	.00362	.99448	38.002	.00112	5.5043	.16821
Stddev	.00000	.00012	.00059	.00054	.01561	.191	.00416	.0104	.00034
%RSD	1.2950	4.9669	14.933	14.833	1.5692	.50208	370.57	.18909	.20194

#1	.00026	.00231	.00352	.00399	.98345	37.867	-.00182	5.4969	.16797
#2	.00025	.00248	.00435	.00324	1.0055	38.136	.00406	5.5116	.16845

Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Elem	Mo2020	Na5895	Na8183	Ni2316	P_1782	Pb2203	S_1820	Sb2068	Se1960
Line	202.030 {467}	589.592 { 57}	818.326 { 41}	231.604 {446}	178.284 {489}	220.353 {453}	182.034 {485}	206.833 {463}	196.090 {472}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.00020	8.6133	W 10.543	.00212	1.9097	.00215	49.269	.00334	.00341
Stddev	.00043	.0372	.517	.00075	.0128	.00176	.023	.00552	.00230
%RSD	218.85	.43182	4.8994	35.258	.66880	81.675	.04569	165.13	67.645

#1	-.00011	8.5870	10.908	.00265	1.9187	.00340	49.253	-.00056	.00178
#2	.00051	8.6396	10.178	.00159	1.9006	.00091	49.285	.00724	.00503

Check ?	Chk Pass	Chk Pass	Chk Warn	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit			500.00						
Low Limit			11.000						

Elem	Si2881	SiO2	Sn1899	Sr4077	Th2837	Ti3349	Ti1908	U_3701	V_2924
Line	288.158 {117}	288.158 {117}2	189.989 {477}	407.771 { 83}	283.730 {119}	334.904 {101}	190.856 {477}	370.152 { 91}	292.402 {115}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	4.3777	9.3683	-.00109	.09665	.00228	.12482	-.00146	-.00831	.00468
Stddev	.0638	.1365	.00050	.00037	.00028	.00033	.00530	.00043	.00048
%RSD	1.4570	1.4570	46.226	.38275	12.239	.26809	363.91	5.1586	10.239

#1	4.3326	9.2718	-.00073	.09639	.00208	.12458	.00229	-.00800	.00502
#2	4.4228	9.4648	-.00144	.09691	.00248	.12506	-.00520	-.00861	.00434

Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Elem	Zn2062	Zr3391
Line	206.200 {163}	339.198 { 99}
Units	ppm	ppm
Avg	.35129	.00458
Stddev	.00061	.00200
%RSD	.17393	43.651

#1	.35172	.00316
#2	.35086	.00599

Check ?	Chk Pass	Chk Pass
High Limit		
Low Limit		

Sample Name: 280-82833-D-6-A Acquired: 5/18/2016 23:56:12 Type: Unk
Method: 6500_025(v6) Mode: CONC Corr. Factor: 1.000000
User: CRHOADES Prep Date: Custom ID2: Custom ID3:
Comment: 324504 6010B (Se)

Int. Std.	Y_2243	Y_3600	Y_3774
Line	224.306 {450}	360.073 { 94}	377.433 { 89}
Units	Cts/S	Cts/S	Cts/S
Avg	2659.3	41612.	2354.3
Stddev	3.6	94.	3.5
%RSD	.13387	.22496	.14772
#1	2661.8	41678.	2351.8
#2	2656.7	41546.	2356.7

Elem	Ag3280	Al1670	As1890	B_2089	Ba4554	Be3130	Bi2230	Ca3179	Cd2288
Line	328.068 {103}	167.079 {502}	189.042 {478}	208.959 {461}	455.403 { 74}	313.042 {108}	223.061 {451}	317.933 {106}	228.802 {447}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	-0.00077	1.4782	.00374	.20483	.01806	.00029	.00304	35.762	-0.00013
Stddev	.00076	.0049	.00629	.00087	.00052	.00002	.00019	.319	.00015
%RSD	99.419	.33016	168.17	.42384	2.8623	8.0455	6.2747	.89134	113.09

#1	-0.00023	1.4817	-0.00071	.20544	.01770	.00027	.00318	35.988	-0.00003
#2	-0.00131	1.4748	.00819	.20421	.01843	.00031	.00291	35.537	-0.00024

Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Elem	Co2286	Cr2055	Cu3247	Fe2599	K_7664	Li6707	Mg2790	Mn2576	Mo2020
Line	228.616 {447}	205.560 {464}	324.754 {104}	259.940 {130}	766.490 { 44}	670.784 { 50}	279.079 {121}2	257.610 {131}	202.030 {467}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.00039	.00226	.00300	.79928	40.456	.00041	4.7234	.05533	-0.00038
Stddev	.00001	.00010	.00032	.00531	.428	.00093	.0019	.00008	.00035
%RSD	2.7567	4.4493	10.645	.66416	1.0581	224.48	.03982	.14671	93.387

#1	.00040	.00219	.00278	.79552	40.759	-0.00024	4.7221	.05538	-0.00063
#2	.00038	.00233	.00323	.80303	40.153	.00107	4.7247	.05527	-0.00013

Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Elem	Na8183	Ni2316	P_1782	Pb2203	S_1820	Sb2068	Se1960	Si2881	SiO2
Line	818.326 { 41}	231.604 {446}	178.284 {489}	220.353 {453}	182.034 {485}	206.833 {463}	196.090 {472}	288.158 {117}	288.158 {117}2
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	18.862	.00118	.31641	.00031	56.140	-0.00309	.00118	5.4908	11.750
Stddev	.144	.00061	.00158	.00009	.136	.00145	.00331	.0026	.006
%RSD	.76612	51.507	.50076	27.599	.24293	46.874	279.51	.04798	.04798

#1	18.760	.00160	.31753	.00037	56.237	-0.00411	.00352	5.4890	11.746
#2	18.964	.00075	.31529	.00025	56.044	-0.00206	-0.00115	5.4927	11.754

Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Elem	Sn1899	Sr4077	Th2837	Ti3349	Ti1908	U_3701	V_2924	Zn2062	Zr3391
Line	189.989 {477}	407.771 { 83}	283.730 {119}	334.904 {101}	190.856 {477}	370.152 { 91}	292.402 {115}	206.200 {163}	339.198 { 99}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.00031	.18410	-0.00077	.01207	-0.00296	.01830	.00292	.01027	.00216
Stddev	.00117	.00053	.00059	.00004	.00312	.04638	.00055	.00150	.00643
%RSD	377.96	.28694	76.214	.30833	105.32	253.47	18.740	14.577	298.17

#1	-0.00052	.18373	-0.00036	.01204	-0.00517	-0.01450	.00253	.00921	.00670
#2	.00114	.18448	-0.00119	.01209	-0.00076	.05109	.00330	.01133	-0.00239

Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Int. Std.	Y_2243	Y_3600	Y_3774						
Line	224.306 {450}	360.073 { 94}	377.433 { 89}						
Units	Cts/S	Cts/S	Cts/S						
Avg	2645.7	41425.	2179.6						
Stddev	.3	88.	31.9						
%RSD	.01135	.21308	1.4629						

#1	2645.5	41488.	2157.1						
#2	2646.0	41363.	2202.1						

Sample Name: 280-82833-D-8-A Acquired: 5/19/2016 0:01:29 Type: Unk
Method: 6500_025(v6) Mode: CONC Corr. Factor: 1.000000
User: CRHOADES Prep Date: Custom ID2: Custom ID3:
Comment: 324504 6010B (Se)

Elem	Ag3280	Al1670	As1890	B_2089	Ba4554	Be3130	Bi2230	Ca3179	Cd2288
Line	328.068 {103}	167.079 {502}	189.042 {478}	208.959 {461}	455.403 { 74}	313.042 {108}	223.061 {451}	317.933 {106}	228.802 {447}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	-0.00069	1.3357	.00147	.14065	.02037	.00024	.00132	48.222	.00001
Stddev	.00078	.0517	.00032	.00273	.00066	.00015	.00212	.908	.00020
%RSD	113.34	3.8699	22.044	1.9384	3.2528	62.007	160.80	1.8838	1886.7

#1	-0.00014	1.2991	.00124	.13873	.01990	.00013	.00282	47.580	-0.00013
#2	-0.00124	1.3722	.00170	.14258	.02084	.00034	-.00018	48.865	.00015

Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Elem	Co2286	Cr2055	Cu3247	Fe2599	K_7664	Li6707	Mg2790	Mn2576	Mo2020
Line	228.616 {447}	205.560 {464}	324.754 {104}	259.940 {130}	766.490 { 44}	670.784 { 50}	279.079 {121}2	257.610 {131}	202.030 {467}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	-0.00005	.00163	.00249	1.0098	4.8946	-0.00102	3.8136	.02585	-0.00075
Stddev	.00032	.00028	.00023	.0102	.0297	.00244	.0100	.00004	.00003
%RSD	592.51	17.021	9.1429	1.0086	.60668	239.29	.26207	.15132	3.4192

#1	.00017	.00143	.00233	1.0170	4.8736	-.00275	3.8065	.02587	-0.00077
#2	-.00028	.00183	.00265	1.0026	4.9156	.00071	3.8207	.02582	-.00074

Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Elem	Na5895	Ni2316	P_1782	Pb2203	S_1820	Sb2068	Se1960	Si2881	SiO2
Line	589.592 { 57}	231.604 {446}	178.284 {489}	220.353 {453}	182.034 {485}	206.833 {463}	196.090 {472}	288.158 {117}	288.158 {117}2
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	6.0884	.00145	.07200	.00017	46.413	.00039	.00496	5.3709	11.494
Stddev	.0332	.00026	.00034	.00016	1.521	.00308	.00470	.0210	.045
%RSD	.54526	18.107	.46813	95.502	3.2770	789.79	94.738	.39005	.39005

#1	6.1119	.00164	.07224	.00005	45.338	-.00179	.00164	5.3857	11.525
#2	6.0650	.00127	.07176	.00028	47.489	.00257	.00829	5.3560	11.462

Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Elem	Sn1899	Sr4077	Th2837	Ti3349	Ti1908	U_3701	V_2924	Zn2062	Zr3391
Line	189.989 {477}	407.771 { 83}	283.730 {119}	334.904 {101}	190.856 {477}	370.152 { 91}	292.402 {115}	206.200 {163}	339.198 { 99}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	-0.00042	.14936	-.00208	.01480	-.00427	.03357	.00286	.01244	.00341
Stddev	.00263	.00018	.00145	.00053	.00053	.00130	.00042	.00033	.00496
%RSD	625.65	.11977	69.587	3.6086	12.367	3.8864	14.568	2.6740	145.45

#1	.00144	.14924	-.00311	.01518	-.00464	.03449	.00257	.01268	.00692
#2	-.00228	.14949	-.00106	.01442	-.00390	.03265	.00316	.01221	-.00010

Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Int. Std.	Y_2243	Y_3600	Y_3774
Line	224.306 {450}	360.073 { 94}	377.433 { 89}
Units	Cts/S	Cts/S	Cts/S
Avg	2769.3	42063.	2235.2
Stddev	109.6	75.	47.2
%RSD	3.9594	.17879	2.1105

#1	2846.8	42010.	2268.5
#2	2691.8	42116.	2201.8

Sample Name: 280-82833-D-9-A Acquired: 5/19/2016 0:04:07 Type: Unk
 Method: 6500_025(v6) Mode: CONC Corr. Factor: 1.000000
 User: CRHOADES Prep Date: Custom ID2: Custom ID3:
 Comment: 324504 6010B (Se)

Elem	Ag3280	Al1670	As1890	B_2089	Ba4554	Be3130	Bi2230	Ca3179	Cd2288
Line	328.068 {103}	167.079 {502}	189.042 {478}	208.959 {461}	455.403 { 74}	313.042 {108}	223.061 {451}	317.933 {106}	228.802 {447}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.00034	1.8403	-0.00343	.08088	.00989	.00016	.00141	16.181	-0.00012
Stddev	.00040	.0020	.00259	.00023	.00144	.00005	.00242	.472	.00004
%RSD	118.17	.10663	75.342	.27955	14.580	31.807	171.72	2.9182	30.507

#1	.00006	1.8417	-.00526	.08072	.01091	.00012	-.00030	16.515	-.00015
#2	.00062	1.8389	-.00160	.08104	.00887	.00019	.00312	15.847	-.00010

Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Elem	Co2286	Cr2055	Cu3247	Fe2599	K_7664	Li6707	Mg2790	Mn2576	Mo2020
Line	228.616 {447}	205.560 {464}	324.754 {104}	259.940 {130}	766.490 { 44}	670.784 { 50}	279.079 {121}2	257.610 {131}	202.030 {467}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	-0.00035	.00299	.00128	.19699	3.3447	-0.00110	2.3536	.03795	-0.00011
Stddev	.00006	.00032	.00021	.00122	.0339	.00069	.0035	.00013	.00011
%RSD	17.998	10.789	16.542	.61903	1.0135	62.930	.14747	.34279	97.014

#1	-.00039	.00277	.00143	.19785	3.3687	-.00159	2.3511	.03804	-.00019
#2	-.00030	.00322	.00113	.19613	3.3207	-.00061	2.3560	.03786	-.00003

Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Elem	Na5895	Ni2316	P_1782	Pb2203	S_1820	Sb2068	Se1960	Si2881	SiO2
Line	589.592 { 57}	231.604 {446}	178.284 {489}	220.353 {453}	182.034 {485}	206.833 {463}	196.090 {472}	288.158 {117}	288.158 {117}2
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	2.9964	.00016	.27223	.00172	12.289	.00702	.00444	7.5041	16.059
Stddev	.0330	.00042	.00313	.00075	.323	.00192	.00231	.0055	.012
%RSD	1.1027	258.06	1.1501	43.783	2.6270	27.360	52.007	.07356	.07356

#1	3.0198	.00046	.27002	.00119	12.060	.00837	.00281	7.5080	16.067
#2	2.9730	-.00014	.27444	.00226	12.517	.00566	.00607	7.5002	16.051

Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Elem	Sn1899	Sr4077	Th2837	Ti3349	Ti1908	U_3701	V_2924	Zn2062	Zr3391
Line	189.989 {477}	407.771 { 83}	283.730 {119}	334.904 {101}	190.856 {477}	370.152 { 91}	292.402 {115}	206.200 {163}	339.198 { 99}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.00032	.05321	.00159	.04260	-.00409	-.03844	.00481	.00360	.00280
Stddev	.00241	.00046	.00546	.00037	.00119	.01746	.00064	.00017	.00107
%RSD	757.99	.85691	344.45	.86066	28.987	45.420	13.341	4.6733	38.269

#1	-.00138	.05288	.00545	.04286	-.00325	-.05078	.00435	.00348	.00355
#2	.00202	.05353	-.00228	.04234	-.00493	-.02609	.00526	.00372	.00204

Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Int. Std.	Y_2243	Y_3600	Y_3774
Line	224.306 {450}	360.073 { 94}	377.433 { 89}
Units	Cts/S	Cts/S	Cts/S
Avg	2715.8	42696.	2289.2
Stddev	.6	263.	127.8
%RSD	.02044	.61556	5.5848

#1	2716.2	42882.	2198.8
#2	2715.4	42510.	2379.6

Sample Name: CCVH-3894253 Acquired: 5/19/2016 0:06:45 Type: QC
Method: 6500_025(v6) Mode: CONC Corr. Factor: 1.000000
User: CRHOADES Prep Date: Custom ID2: Custom ID3:
Comment:

Elem	Ag3280	Al3092	As1890	B_2089	Ba4554	Be3130	Bi2230	Ca3179	Cd2288	Co2286	Cr2055
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.00000	51.993	-.00050	.00139	-.00059	.00038	W 1.0707	-.00974	-.00050	-.00105	.00016
Stddev	.0002	.245	.00628	.00117	.00033	.00003	.0298	.00028	.00020	.00032	.00010
%RSD	6656.9	.47085	1262.9	84.374	55.158	6.9441	2.7851	2.8658	39.577	30.914	60.215
#1	-.00015	52.166	.00394	.00222	-.00083	.00036	1.0918	-.00993	-.00036	-.00082	.00023
#2	.00014	51.820	-.00494	.00056	-.00036	.00039	1.0496	-.00954	-.00063	-.00128	.00009
Check ?	None	Chk Pass	None	None	None	None	Chk Warn	None	None	None	None
Value							1.0000				
Range							5.0000%				
Elem	Cu3247	Fe2714	K_7664	Li6707	Mg2790	Mn2576	Mo2020	Na8183	Ni2316	P_1782	Pb2203
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.00095	48.883	.17867	.00171	.01547	-.00028	-.00191	252.88	.00181	.00668	-.00293
Stddev	.00082	.167	.04671	.00233	.00059	.00002	.00028	.30	.00093	.00004	.00048
%RSD	86.710	.34086	26.143	136.11	3.8200	5.4139	14.460	.12039	51.214	.58249	16.428
#1	.00037	49.001	.14564	.00337	.01589	-.00029	-.00210	253.09	.00247	.00665	-.00327
#2	.00153	48.766	.21170	.00006	.01506	-.00027	-.00171	252.66	.00116	.00670	-.00259
Check ?	None	Chk Pass	None	None	None	None	None	Chk Pass	None	None	None
Value											
Range											
Elem	S_1820	Sb2068	Se1960	Si2881	SiO2	Sn1899	Sr4077	Th2837	Ti3349	Ti1908	U_3701
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	5.1864	-.00669	.00757	.00451	.00966	.00011	.00042	W 4.7038	.00652	-.00290	W 10.650
Stddev	.1140	.00311	.00222	.00543	.01163	.00083	.00028	.0006	.00094	.00307	.015
%RSD	2.1981	46.457	29.273	120.33	120.33	752.02	67.150	.01201	14.473	105.73	.14095
#1	5.2670	-.00449	.00914	.00067	.00144	.00070	.00061	4.7042	.00718	-.00073	10.661
#2	5.1058	-.00889	.00600	.00836	.01788	-.00048	.00022	4.7034	.00585	-.00508	10.640
Check ?	Chk Pass	None	None	None	None	None	None	Chk Warn	None	None	Chk Warn
Value								5.0000			10.000
Range								-5.0000%			5.0000%
Elem	V_2924	Zn2062	Zr3391								
Units	ppm	ppm	ppm								
Avg	.00956	-.00020	.05626								
Stddev	.00024	.00036	.00505								
%RSD	2.5380	184.31	8.9802								
#1	.00973	.00006	.05984								
#2	.00939	-.00045	.05269								
Check ?	None	None	None								
Value											
Range											
Int. Std.	Y_2243	Y_3600	Y_3774								
Units	Cts/S	Cts/S	Cts/S								
Avg	2671.7	40870.	2213.8								
Stddev	69.0	58.	3.9								
%RSD	2.5834	.14240	.17505								
#1	2622.9	40829.	2216.6								
#2	2720.5	40911.	2211.1								

Sample Name: CCV-3894251 Acquired: 5/19/2016 0:09:23 Type: QC
Method: 6500_025(v6) Mode: CONC Corr. Factor: 1.000000
User: CRHOADES Prep Date: Custom ID2: Custom ID3:
Comment:

Elem	Ag3280	Al1670	As1890	B_2089	Ba4554	Be3130	Bi2230	Ca3179	Cd2288	Co2286	Cr2055	Cu3247	Fe2599
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.49504	.54912	1.0302	.49293	.50612	.46788	.00152	4.9734	.49473	.50132	.50609	.51597	2.4006
Stddev	.00273	.00065	.0188	.00651	.00164	.00115	.00414	.0041	.00105	.01037	.01141	.00014	.0006
%RSD	.55074	.11888	1.8240	1.3211	.32382	.24525	273.37	.08258	.21133	2.0688	2.2537	.02709	.02702

#1	.49311	.54958	1.0434	.49753	.50728	.46869	.00444	4.9763	.49399	.50865	.51416	.51607	2.4001
#2	.49697	.54865	1.0169	.48832	.50496	.46707	-.00141	4.9705	.49547	.49398	.49803	.51587	2.4010

Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	None	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Value													
Range													

Elem	K_7664	Li6707	Mg2790	Mn2576	Mo2020	Na5895	Ni2316	P_1782	Pb2203	S_1820	Sb2068	Se1960	Si2881
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	48.923	.98017	19.199	.47128	.51066	5.1125	.49342	.97366	1.0130	.03444	1.0062	1.0457	4.7955
Stddev	.108	.00476	.081	.00151	.01493	.0171	.01077	.01685	.0206	.00276	.0152	.0148	.0018
%RSD	.22071	.48546	.42131	.31948	2.9236	.33392	2.1829	1.7301	2.0341	8.0148	1.5068	1.4114	.03710

#1	48.847	.97681	19.141	.47021	.52122	5.1246	.50104	.98557	1.0275	.03249	1.0169	1.0561	4.7968
#2	48.999	.98354	19.256	.47234	.50011	5.1004	.48580	.96174	.99841	.03639	.99548	1.0353	4.7943

Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	None	Chk Pass	Chk Pass	Chk Pass
Value													
Range													

Elem	SiO2	Sn1899	Sr4077	Th2837	Ti3349	Ti1908	U_3701	V_2924	Zn2062	Zr3391
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	10.262	1.0240	.47860	-.00394	.46825	1.0522	.03035	.48806	.46664	.51032
Stddev	.004	.0234	.00030	.00208	.00153	.0286	.06765	.00183	.00911	.00253
%RSD	.03710	2.2826	.06206	52.832	.32699	2.7204	222.92	.37543	1.9526	.49604

#1	10.265	1.0406	.47881	-.00542	.46717	1.0725	.07819	.48677	.46020	.50853
#2	10.260	1.0075	.47839	-.00247	.46933	1.0320	-.01749	.48936	.47308	.51211

Check ?	Chk Pass	Chk Pass	Chk Pass	None	Chk Pass	Chk Pass	None	Chk Pass	Chk Pass	Chk Pass
Value										
Range										

Int. Std.	Y_2243	Y_3600	Y_3774
Units	Cts/S	Cts/S	Cts/S
Avg	2670.6	41530.	2205.4
Stddev	5.8	11.	7.6
%RSD	.21659	.02641	.34533

#1	2666.5	41538.	2210.8
#2	2674.7	41522.	2200.0

Sample Name: CCB Acquired: 5/19/2016 0:11:54 Type: QC
 Method: 6500_025(v6) Mode: CONC Corr. Factor: 1.000000
 User: CRHOADES Prep Date: Custom ID2: Custom ID3:
 Comment:

Elem	Ag3280	Al1670	As1890	B_2089	Ba4554	Be3130	Bi2230	Ca3179	Cd2288	Co2286	Cr2055
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	-.00031	-.00089	.00051	.00045	-.00127	.00033	.00082	-.01681	-.00031	-.00029	-.00016
Stddev	.00024	.00024	.00615	.00100	.00051	.00015	.00061	.00744	.00010	.00048	.00006
%RSD	77.716	27.129	1215.4	220.45	39.868	45.433	73.911	44.262	30.648	164.56	36.305

#1	-.00014	-.00072	-.00384	.00116	-.00091	.00023	.00125	-.02207	-.00038	.00005	-.00012
#2	-.00048	-.00106	.00485	-.00025	-.00163	.00044	.00039	-.01155	-.00024	-.00063	-.00020

Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit											
Low Limit											

Elem	Cu3247	Fe2599	K_7664	Li6707	Mg2790	Mn2576	Mo2020	Na5895	Ni2316	P_1782	Pb2203
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	-.00138	-.00530	.01887	.00141	.00084	.00000	.00182	.13371	-.00015	-.00106	.00093
Stddev	.00043	.00253	.03633	.00093	.00236	.00007	.00120	.00182	.00013	.00060	.00144
%RSD	30.788	47.751	192.59	65.681	281.45	6214.8	66.082	1.3590	90.932	56.608	154.89

#1	-.00169	-.00709	.04456	.00076	.00251	-.00005	.00097	.13500	-.00005	-.00064	.00195
#2	-.00108	-.00351	-.00683	.00207	-.00083	.00005	.00267	.13243	-.00024	-.00149	-.00009

Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit											
Low Limit											

Elem	S_1820	Sb2068	Se1960	Si2881	SiO2	Sn1899	Sr4077	Th2837	Ti3349	Ti1908	U_3701
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.03354	W .00490	.00328	.00850	.01819	.00060	.00013	.00071	.00036	.00106	-.03495
Stddev	.00883	.00007	.00223	.00845	.01808	.00098	.00009	.00153	.00011	.00289	.00308
%RSD	26.332	1.5097	67.897	99.394	99.394	163.39	72.108	214.81	29.942	273.18	8.8043

#1	.02730	.00485	.00486	.01447	.03097	.00129	.00019	.00179	.00028	-.00099	-.03713
#2	.03979	.00496	.00171	.00253	.00540	-.00009	.00006	-.00037	.00043	.00310	-.03278

Check ?	Chk Pass	Chk Warn	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit		.00100									
Low Limit		-.00100									

Elem	V_2924	Zn2062	Zr3391
Units	ppm	ppm	ppm
Avg	.00083	-.00051	.00236
Stddev	.00058	.00012	.00021
%RSD	70.620	24.542	8.8292

#1	.00124	-.00060	.00221
#2	.00041	-.00042	.00250

Check ?	Chk Pass	Chk Pass	Chk Pass
High Limit			
Low Limit			

Int. Std.	Y_2243	Y_3600	Y_3774
Units	Cts/S	Cts/S	Cts/S
Avg	2690.1	41875.	2389.7
Stddev	9.8	5.	6.1
%RSD	.36406	.01213	.25555

#1	2697.1	41872.	2394.0
#2	2683.2	41879.	2385.4

Sample Name: CCVL-3897520 Acquired: 5/19/2016 0:14:17 Type: QC

Method: 6500_025(v6) Mode: CONC Corr. Factor: 1.000000

User: CRHOADES Prep Date: Custom ID2: Custom ID3:

Comment:

Elem	Ag3280	Al1670	As1890	B_2089	Ba4554	Be3130	Bi2230	Ca3179	Cd2288	Co2286	Cr2055	Cu3247
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.00974	.10627	.01558	.09029	.00896	.00108	.10922	.18249	.00465	.00991	.01038	.01525
Stddev	.00058	.01290	.00042	.01025	.00146	.00015	.01489	.01463	.00051	.00073	.00109	.00017
%RSD	5.9547	12.143	2.7280	11.357	16.246	13.609	13.635	8.0174	10.866	7.4072	10.499	1.1099

#1	.00933	.11540	.01528	.09754	.00999	.00098	.11975	.19283	.00501	.01043	.01115	.01537
#2	.01015	.09715	.01588	.08304	.00793	.00119	.09869	.17214	.00429	.00939	.00961	.01513

Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Value												
Range												

Elem	Fe2599	K_7664	Li6707	Mg2790	Mn2576	Mo2020	Na5895	Ni2316	P_1782	Pb2203	S_1820	Sb2068
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.10384	3.0898	.01175	.20657	.01000	.02007	1.1473	.03957	2.8694	.01029	.03379	.02247
Stddev	.00065	.0874	.00095	.00796	.00015	.00224	.0014	.00492	.3192	.00101	.00137	.00700
%RSD	.62765	2.8282	8.0891	3.8531	1.4600	11.139	.11736	12.444	11.123	9.8001	4.0555	31.141

#1	.10338	3.1516	.01108	.20094	.00990	.02166	1.1464	.04305	3.0951	.01101	.03282	.02741
#2	.10431	3.0280	.01242	.21220	.01010	.01849	1.1483	.03609	2.6437	.00958	.03476	.01752

Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	None	Chk Pass
Value												
Range												

Elem	Se1960	Si2881	SiO2	Sn1899	Sr4077	Th2837	Ti3349	Ti1908	U_3701	V_2924	Zn2062	Zr3391
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.01889	.49015	1.0489	.11180	.01004	.01510	.00959	.01631	F .03776	.01031	.01879	.01598
Stddev	.01138	.04782	.1023	.01248	.00010	.00036	.00008	.00069	.00022	.00060	.00067	.00023
%RSD	60.239	9.7571	9.7571	11.159	.96448	2.3559	.80758	4.2254	.59049	5.8129	3.5629	1.4488

#1	.02693	.52397	1.1213	.12063	.00997	.01535	.00964	.01679	.03792	.01074	.01832	.01615
#2	.01084	.45633	.97655	.10298	.01011	.01485	.00954	.01582	.03760	.00989	.01926	.01582

Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Fail	Chk Pass	Chk Pass	Chk Pass
Value									.06000			
Range									-30.000%			

Int. Std.	Y_2243	Y_3600	Y_3774
Units	Cts/S	Cts/S	Cts/S
Avg	2915.7	41943.	2308.2
Stddev	321.7	110.	58.9
%RSD	11.034	.26240	2.5514

#1	2688.3	42021.	2266.5
#2	3143.2	41866.	2349.8

Sample Name: MB 280-325556/1-A Acquired: 5/19/2016 0:16:58 Type: Unk
Method: 6500_025(v6) Mode: CONC Corr. Factor: 1.000000
User: CRHOADES Prep Date: 5/17 Custom ID2: Custom ID3:
Comment: 325556 6010B (Cu Fe Na)

Elem	Ag3280	Al1670	As1890	B_2089	Ba4554	Be3130	Bi2230	Ca3179	Cd2288
Line	328.068 {103}	167.079 {502}	189.042 {478}	208.959 {461}	455.403 { 74}	313.042 {108}	223.061 {451}	317.933 {106}	228.802 {447}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	-0.00027	.00345	-0.00613	.00019	-0.00063	.00028	.00080	-0.01066	-0.00004
Stddev	.00018	.00034	.01275	.00075	.00044	.00001	.00027	.00499	.00070
%RSD	65.305	9.7310	208.19	389.86	70.230	3.6897	34.166	46.850	1829.3

#1	-0.00015	.00321	.00289	.00072	-0.00032	.00029	.00099	-.00713	-0.00053
#2	-0.00040	.00369	-.01515	-.00034	-0.00095	.00027	.00060	-.01419	.00045

Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Elem	Co2286	Cr2055	Cu3247	Fe2599	K_7664	Li6707	Mg2790	Mn2576	Mo2020
Line	228.616 {447}	205.560 {464}	324.754 {104}	259.940 {130}	766.490 { 44}	670.784 { 50}	279.079 {121}2	257.610 {131}	202.030 {467}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	-0.00018	.00026	-0.00027	F .14053	.05653	.00049	.00298	.00030	-0.00072
Stddev	.00014	.00040	.00022	.00282	.03606	.00051	.00251	.00001	.00004
%RSD	76.908	156.65	82.225	2.0039	63.799	104.69	84.215	2.7626	5.2833

#1	-0.00027	-0.00003	-0.00043	.14252	.08203	.00085	.00120	.00031	-0.00070
#2	-0.00008	.00054	-0.00011	.13853	.03103	.00013	.00475	.00030	-0.00075

Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Fail	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit				.10000					
Low Limit				-.10000					

Elem	Na5895	Ni2316	P_1782	Pb2203	S_1820	Sb2068	Se1960	Si2881	SiO2
Line	589.592 { 57}	231.604 {446}	178.284 {489}	220.353 {453}	182.034 {485}	206.833 {463}	196.090 {472}	288.158 {117}	288.158 {117}2
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.14242	-0.00082	-0.00008	-0.00012	.04482	-0.00036	.00159	.01070	.02290
Stddev	.01136	.00015	.00052	.00085	.00395	.00135	.00193	.00760	.01626
%RSD	7.9768	18.338	689.06	711.78	8.8189	380.79	121.99	71.009	71.009

#1	.15045	-0.00071	.00029	-0.00072	.04203	.00060	.00022	.01607	.03440
#2	.13438	-0.00092	-0.00045	.00048	.04762	-0.00131	.00295	.00533	.01140

Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	None
High Limit									
Low Limit									

Elem	Sn1899	Sr4077	Th2837	Ti3349	Ti1908	U_3701	V_2924	Zn2062	Zr3391
Line	189.989 {477}	407.771 { 83}	283.730 {119}	334.904 {101}	190.856 {477}	370.152 { 91}	292.402 {115}	206.200 {163}	339.198 { 99}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	-0.00102	.00016	.00030	-0.00006	-0.00270	-0.03316	.00069	.00199	-0.00002
Stddev	.00011	.00001	.00694	.00035	.00059	.01777	.00008	.00004	.00287
%RSD	10.744	9.0104	2300.3	571.29	21.702	53.595	11.504	1.9454	17710.

#1	-0.00095	.00015	.00521	.00019	-0.00311	-.04573	.00063	.00202	.00201
#2	-0.00110	.00017	-.00461	-0.00031	-0.00228	-.02060	.00074	.00196	-.00204

Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Int. Std.	Y_2243	Y_3600	Y_3774						
Line	224.306 {450}	360.073 { 94}	377.433 { 89}						
Units	Cts/S	Cts/S	Cts/S						
Avg	2693.3	42610.	2300.2						
Stddev	6.6	34.	132.8						
%RSD	.24632	.08011	5.7738						

#1	2698.0	42634.	2206.3						
#2	2688.6	42586.	2394.1						

Sample Name: LCS 280-325556/2-A Acquired: 5/19/2016 0:19:21 Type: Unk
Method: 6500_025(v6) Mode: CONC Corr. Factor: 1.000000
User: CRHOADES Prep Date: Custom ID2: Custom ID3:
Comment: 325556 6010B (Cu Fe Na)

Elem	Ag3280	Al1670	As1890	B_2089	Ba4554	Be3130	Bi2230	Ca3179	Cd2288
Line	328.068 {103}	167.079 {502}	189.042 {478}	208.959 {461}	455.403 {74}	313.042 {108}	223.061 {451}	317.933 {106}	228.802 {447}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.04932	2.1557	1.0691	1.0072	2.0015	.04687	2.1676	52.821	.09864
Stddev	.00189	.0333	.0052	.0058	.1032	.00190	.0074	2.755	.00001
%RSD	3.8277	1.5460	.49051	.57353	5.1571	4.0637	.33952	5.2151	.00746

#1	.04798	2.1322	1.0653	1.0031	1.9286	.04552	2.1624	50.874	.09865
#2	.05065	2.1793	1.0728	1.0112	2.0745	.04821	2.1728	54.769	.09864

Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	None	Chk Pass	Chk Pass
High Limit									
Low Limit									

Elem	Co2286	Cr2055	Cu3247	Fe2599	K_7664	Li6707	Mg2790	Mn2576	Mo2020
Line	228.616 {447}	205.560 {464}	324.754 {104}	259.940 {130}	766.490 {44}	670.784 {50}	279.079 {121}2	257.610 {131}	202.030 {467}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.48218	.20032	.25532	.97963	48.483	.96028	54.173	.46337	1.0609
Stddev	.00356	.00118	.00161	.00935	2.499	.00780	.242	.00189	.0110
%RSD	.73850	.58865	.62982	.95480	5.1544	.81278	.44734	.40759	1.0366

#1	.48470	.19949	.25418	.97302	46.716	.95476	54.002	.46204	1.0687
#2	.47966	.20115	.25646	.98625	50.250	.96580	54.345	.46471	1.0531

Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Elem	Na8183	Ni2316	P_1782	Pb2203	S_1820	Sb2068	Se1960	Si2881	SiO2
Line	818.326 {41}	231.604 {446}	178.284 {489}	220.353 {453}	182.034 {485}	206.833 {463}	196.090 {472}	288.158 {117}	288.158 {117}2
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	F 56.722	.47812	9.9783	.50301	14.919	.52396	2.1467	9.7838	20.937
Stddev	1.264	.00196	.0445	.00062	.059	.00144	.0280	.0505	.108
%RSD	2.2280	.41014	.44599	.12254	.39385	.27462	1.3068	.51598	.51598

#1	55.828	.47674	10.010	.50257	14.878	.52294	2.1665	9.7481	20.861
#2	57.615	.47951	9.9469	.50344	14.961	.52497	2.1269	9.8195	21.014

Check ?	Chk Fail	Chk Pass	Chk Pass	Chk Pass	None	Chk Pass	Chk Pass	Chk Pass	None
High Limit	56.000								
Low Limit	45.500								

Elem	Sn1899	Sr4077	Th2837	Ti3349	Ti1908	U_3701	V_2924	Zn2062	Zr3391
Line	189.989 {477}	407.771 {83}	283.730 {119}	334.904 {101}	190.856 {477}	370.152 {91}	292.402 {115}	206.200 {163}	339.198 {99}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	2.0673	1.0280	.94893	.94835	1.9795	2.0875	.47764	.45676	.52526
Stddev	.0193	.0530	.00593	.00386	.0711	.0566	.00104	.00027	.00319
%RSD	.93384	5.1543	.62511	.40710	3.5900	2.7089	.21745	.05985	.60733

#1	2.0809	.99050	.94473	.94562	2.0297	2.0475	.47837	.45656	.52751
#2	2.0536	1.0654	.95312	.95108	1.9292	2.1274	.47690	.45695	.52300

Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Int. Std.	Y_2243	Y_3600	Y_3774
Line	224.306 {450}	360.073 {94}	377.433 {89}
Units	Cts/S	Cts/S	Cts/S
Avg	2608.7	40551.	2212.7
Stddev	3.5	199.	93.2
%RSD	.13395	.49116	4.2108

#1	2611.2	40692.	2278.6
#2	2606.3	40410.	2146.8

Sample Name: 280-83149-A-2-A Acquired: 5/19/2016 0:21:46 Type: Unk
Method: 6500_025(v6) Mode: CONC Corr. Factor: 1.000000
User: CRHOADES Prep Date: Custom ID2: Custom ID3:
Comment: 325556 6010B (Cu Fe Na)

Elem	Ag3280	Al1670	As1890	B_2089	Ba4554	Be3130	Bi2230	Ca3179	Cd2288
Line	328.068 {103}	167.079 {502}	189.042 {478}	208.959 {461}	455.403 {74}	313.042 {108}	223.061 {451}	317.933 {106}	228.802 {447}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	-.00056	.00630	.01418	.48034	.01109	.00025	.00059	12.701	.00021
Stddev	.00034	.00092	.00084	.01217	.00000	.00002	.00034	.270	.00001
%RSD	60.100	14.625	5.9172	2.5332	.03192	9.5218	56.626	2.1220	4.9777

#1	-.00032	.00565	.01477	.47174	.01109	.00023	.00083	12.891	.00022
#2	-.00080	.00695	.01359	.48894	.01109	.00026	.00035	12.510	.00021

Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Elem	Co2286	Cr2055	Cu3247	Fe2599	K_7664	Li6707	Mg2790	Mn2576	Mo2020
Line	228.616 {447}	205.560 {464}	324.754 {104}	259.940 {130}	766.490 {44}	670.784 {50}	279.079 {121}2	257.610 {131}	202.030 {467}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	-.00029	.00028	.01661	.00343	12.619	.00635	34.784	.00057	.02148
Stddev	.00013	.00016	.00021	.00169	.051	.00075	.151	.00003	.00057
%RSD	43.826	56.707	1.2531	49.182	.40142	11.763	.43513	5.3939	2.6511

#1	-.00038	.00039	.01646	.00224	12.583	.00688	34.891	.00059	.02108
#2	-.00020	.00017	.01676	.00462	12.655	.00583	34.677	.00055	.02188

Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Elem	Na8183	Ni2316	P_1782	Pb2203	S_1820	Sb2068	Se1960	Si2881	SiO2
Line	818.326 {41}	231.604 {446}	178.284 {489}	220.353 {453}	182.034 {485}	206.833 {463}	196.090 {472}	288.158 {117}	288.158 {117}2
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	115.16	.00248	.05141	.00241	63.076	.00136	.01206	3.6406	7.7908
Stddev	.06	.00053	.00464	.00079	2.576	.00109	.00342	.0518	.1109
%RSD	.05496	21.467	9.0295	32.833	4.0841	79.801	28.356	1.4230	1.4230

#1	115.12	.00286	.04812	.00185	61.254	.00213	.00964	3.6039	7.7124
#2	115.21	.00211	.05469	.00296	64.897	.00059	.01448	3.6772	7.8692

Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Elem	Sn1899	Sr4077	Th2837	Ti3349	Ti1908	U_3701	V_2924	Zn2062	Zr3391
Line	189.989 {477}	407.771 {83}	283.730 {119}	334.904 {101}	190.856 {477}	370.152 {91}	292.402 {115}	206.200 {163}	339.198 {99}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.00377	.09930	.00021	.00003	.01954	.00814	.01483	.00424	-.00124
Stddev	.00073	.00068	.00107	.00025	.00585	.02454	.00067	.00037	.00129
%RSD	19.471	.68042	519.65	748.53	29.922	301.64	4.5452	8.6689	104.05

#1	.00429	.09882	.00097	-.00014	.01541	-.00922	.01531	.00450	-.00033
#2	.00325	.09978	-.00055	.00021	.02368	.02549	.01435	.00398	-.00215

Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Int. Std.	Y_2243	Y_3600	Y_3774
Line	224.306 {450}	360.073 {94}	377.433 {89}
Units	Cts/S	Cts/S	Cts/S
Avg	2736.4	41486.	2267.4
Stddev	120.5	64.	93.9
%RSD	4.4047	.15539	4.1405

#1	2821.7	41441.	2201.1
#2	2651.2	41532.	2333.8

Sample Name: 280-82821-G-1-A Acquired: 5/19/2016 0:24:25 Type: Unk
Method: 6500_025(v6) Mode: CONC Corr. Factor: 1.000000
User: CRHOADES Prep Date: Custom ID2: Custom ID3:
Comment: 325556 6010B (Cu Fe Na)

Elem	Ag3280	Al1670	Al3092	As1890	B_2089	Ba4554	Be3130	Bi2230	Ca3179
Line	328.068 {103}	167.079 {502}	309.271 {109}	189.042 {478}	208.959 {461}	455.403 { 74}	313.042 {108}	223.061 {451}	317.933 {106}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	-.00120	1.5606	W 2.6207	.00119	.15571	.06686	.00027	-.00769	475.91
Stddev	.00047	.1434	.1854	.01063	.01290	.00319	.00010	.00097	22.41
%RSD	39.400	9.1866	7.0743	894.87	8.2817	4.7676	38.109	12.664	4.7086

#1	-.00153	1.6620	2.7518	-.00633	.16482	.06911	.00020	-.00838	491.76
#2	-.00087	1.4592	2.4896	.00871	.14659	.06461	.00034	-.00700	460.07

Check ?	Chk Pass	Chk Pass	Chk Warn	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit			500.00						
Low Limit			3.2000						

Elem	Cd2288	Co2286	Cr2055	Cu3247	Fe2599	K_7664	Li6707	Mg2790	Mn2576
Line	228.802 {447}	228.616 {447}	205.560 {464}	324.754 {104}	259.940 {130}	766.490 { 44}	670.784 { 50}	279.079 {121}2	257.610 {131}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.00148	.00060	.00491	.00393	2.0580	10.675	.07460	438.18	.06540
Stddev	.00017	.00025	.00017	.00043	.0584	.089	.00057	4.25	.00005
%RSD	11.463	41.963	3.4680	10.927	2.8396	.82998	.77079	.96943	.07899

#1	.00136	.00042	.00503	.00424	2.0993	10.738	.07500	441.18	.06537
#2	.00160	.00077	.00479	.00363	2.0166	10.612	.07419	435.18	.06544

Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Elem	Mo2020	Na8183	Ni2316	P_1782	Pb2203	S_1820	Sb2068	Se1960	Si2881
Line	202.030 {467}	818.326 { 41}	231.604 {446}	178.284 {489}	220.353 {453}	182.034 {485}	206.833 {463}	196.090 {472}	288.158 {117}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.00268	367.78	.00668	.08828	.00373	F 899.55	-.00316	.04616	8.1032
Stddev	.00038	16.87	.00038	.00587	.00193	81.19	.00269	.00110	.0592
%RSD	14.184	4.5870	5.6612	6.6535	51.891	9.0252	85.129	2.3773	.73042

#1	.00295	379.70	.00695	.09243	.00509	956.95	-.00506	.04694	8.1451
#2	.00241	355.85	.00641	.08412	.00236	842.14	-.00126	.04538	8.0614

Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Fail	Chk Pass	Chk Pass	Chk Pass
High Limit						200.00			
Low Limit						-.20000			

Elem	SiO2	Sn1899	Sr4077	Th2837	Ti3349	Ti1908	U_3701	V_2924	Zn2062
Line	288.158 {117}2	189.989 {477}	407.771 { 83}	283.730 {119}	334.904 {101}	190.856 {477}	370.152 { 91}	292.402 {115}	206.200 {163}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	17.341	-.00238	W 5.8665	-.00221	.07221	-.00672	-.03310	.00145	.01478
Stddev	.127	.00156	.2589	.00207	.00314	.00474	.01173	.00012	.00079
%RSD	.73042	65.356	4.4135	93.505	4.3489	70.533	35.434	8.5240	5.3662

#1	17.430	-.00128	6.0496	-.00075	.06999	-.01008	-.02481	.00153	.01535
#2	17.251	-.00348	5.6835	-.00367	.07444	-.00337	-.04140	.00136	.01422

Check ?	Chk Pass	Chk Pass	Chk Warn	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit			5.0000						
Low Limit			-.01000						

Elem	Zr3391								
Line	339.198 { 99}								
Units	ppm								
Avg	.00457								
Stddev	.00052								
%RSD	11.421								

#1	.00494								
#2	.00420								

Check ?	Chk Pass								
High Limit									
Low Limit									

Sample Name: 280-82821-G-1-A Acquired: 5/19/2016 0:24:25 Type: Unk
Method: 6500_025(v6) Mode: CONC Corr. Factor: 1.000000
User: CRHOADES Prep Date: Custom ID2: Custom ID3:
Comment: 325556 6010B (Cu Fe Na)

Int. Std.	Y_2243	Y_3600	Y_3774
Line	224.306 {450}	360.073 { 94}	377.433 { 89}
Units	Cts/S	Cts/S	Cts/S
Avg	2588.9	38009.	2178.5
Stddev	238.8	153.	126.2
%RSD	9.2235	.40124	5.7917
#1	2420.1	38117.	2089.3
#2	2757.8	37901.	2267.7

Sample Name: 280-82821-G-2-A Acquired: 5/19/2016 0:27:08 Type: Unk
Method: 6500_025(v6) Mode: CONC Corr. Factor: 1.000000
User: CRHOADES Prep Date: Custom ID2: Custom ID3:
Comment: 325556 6010B (Cu Fe Na)

Elem	Ag3280	Al3092	As1890	B_2089	Ba4554	Be3130	Bi2230	Ca3179	Cd2288
Line	328.068 {103}	309.271 {109}	189.042 {478}	208.959 {461}	455.403 { 74}	313.042 {108}	223.061 {451}	317.933 {106}	228.802 {447}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	-.00068	59.033	.00290	.05874	.00104	.01525	.00075	348.66	.00921
Stddev	.00007	.207	.00586	.00233	.00024	.00021	.00398	2.24	.00039
%RSD	10.836	.35088	202.11	3.9641	23.340	1.3587	532.73	.64385	4.1801

#1	-.00073	59.180	.00705	.06039	.00087	.01540	.00356	350.24	.00894
#2	-.00062	58.887	-.00125	.05709	.00121	.01510	-.00206	347.07	.00948

Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Elem	Co2286	Cr2055	Cu3247	Fe2599	K_7664	Li6707	Mg2790	Mn2576	Mo2020
Line	228.616 {447}	205.560 {464}	324.754 {104}	259.940 {130}	766.490 { 44}	670.784 { 50}	279.079 {121}2	257.610 {131}	202.030 {467}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.08782	.00172	.00651	25.134	4.7695	.21059	149.29	4.4874	.00080
Stddev	.00237	.00006	.00013	.060	.1314	.00093	.22	.0286	.00025
%RSD	2.7005	3.6740	2.0155	.23948	2.7557	.44217	.14417	.63651	31.235

#1	.08950	.00167	.00660	25.177	4.8625	.21125	149.44	4.4672	.00063
#2	.08614	.00176	.00642	25.092	4.6766	.20993	149.14	4.5076	.00098

Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Elem	Na8183	Ni2316	P_1782	Pb2203	S_1820	Sb2068	Se1960	Si2881	SiO2
Line	818.326 { 41}	231.604 {446}	178.284 {489}	220.353 {453}	182.034 {485}	206.833 {463}	196.090 {472}	288.158 {117}	288.158 {117}2
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	191.78	.17651	.05607	.00407	F 924.15	.00054	.00861	35.693	76.384
Stddev	.64	.00460	.00306	.00084	.76	.00062	.00458	.109	.233
%RSD	.33198	2.6059	5.4607	20.731	.08234	113.56	53.146	.30568	.30568

#1	191.33	.17976	.05390	.00467	923.61	.00011	.00537	35.770	76.549
#2	192.23	.17326	.05823	.00348	924.68	.00098	.01185	35.616	76.218

Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Fail	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit					200.00				
Low Limit					-.20000				

Elem	Sn1899	Sr4077	Th2837	Ti3349	Ti1908	U_3701	V_2924	Zn2062	Zr3391
Line	189.989 {477}	407.771 { 83}	283.730 {119}	334.904 {101}	190.856 {477}	370.152 { 91}	292.402 {115}	206.200 {163}	339.198 { 99}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	-.00177	.06054	-.00030	.00008	-.00068	W -.05055	.00534	1.3353	.00523
Stddev	.00001	.00002	.00048	.00018	.00022	.03201	.00029	.0001	.00058
%RSD	.68444	.02991	158.17	214.18	32.660	63.323	5.5222	.00837	11.096

#1	-.00177	.06053	-.00064	-.00004	-.00052	-.02791	.00513	1.3354	.00564
#2	-.00176	.06056	.00004	.00021	-.00084	-.07318	.00554	1.3352	.00482

Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Warn	Chk Pass	Chk Pass	Chk Pass
High Limit						45.000			
Low Limit						-.05000			

Int. Std.	Y_2243	Y_3600	Y_3774
Line	224.306 {450}	360.073 { 94}	377.433 { 89}
Units	Cts/S	Cts/S	Cts/S
Avg	3108.0	47716.	2783.5
Stddev	.0	24.	4.5
%RSD	.00056	.04992	.16014

#1	3108.0	47733.	2780.3
#2	3108.0	47699.	2786.6

Sample Name: 280-82821-G-3-A Acquired: 5/19/2016 0:29:53 Type: Unk
Method: 6500_025(v6) Mode: CONC Corr. Factor: 1.000000
User: CRHOADES Prep Date: Custom ID2: Custom ID3:
Comment: 325556 6010B (Cu Fe Na)

Elem	Ag3280	Al3092	As1890	B_2089	Ba4554	Be3130	Bi2230	Ca3179	Cd2288
Line	328.068 {103}	309.271 {109}	189.042 {478}	208.959 {461}	455.403 { 74}	313.042 {108}	223.061 {451}	317.933 {106}	228.802 {447}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	-0.00032	14.553	-0.00424	.15286	.01029	.00310	-0.00621	418.00	.00806
Stddev	.00016	.093	.00255	.00077	.00025	.00009	.00186	.34	.00003
%RSD	49.242	.63962	60.178	.50387	2.3918	2.9348	29.903	.08212	.43298

#1	-0.00043	14.487	-0.00604	.15340	.01011	.00316	-0.00490	418.24	.00809
#2	-0.00021	14.619	-0.00243	.15231	.01046	.00303	-0.00752	417.76	.00804

Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Elem	Co2286	Cr2055	Cu3247	Fe2599	K_7664	Li6707	Mg2790	Mn2576	Mo2020
Line	228.616 {447}	205.560 {464}	324.754 {104}	259.940 {130}	766.490 { 44}	670.784 { 50}	279.079 {121}2	257.610 {131}	202.030 {467}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.06029	.00597	.00926	.64811	18.672	.25615	366.79	4.4360	.00316
Stddev	.00066	.00004	.00054	.00277	.113	.00147	2.26	.0319	.00047
%RSD	1.0877	.66115	5.8054	.42680	.60319	.57302	.61669	.71863	14.887

#1	.05983	.00594	.00964	.64615	18.752	.25511	368.39	4.4134	.00349
#2	.06076	.00599	.00888	.65006	18.592	.25718	365.19	4.4585	.00282

Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Elem	Na8183	Ni2316	P_1782	Pb2203	S_1820	Sb2068	Se1960	Si2881	SiO2
Line	818.326 { 41}	231.604 {446}	178.284 {489}	220.353 {453}	182.034 {485}	206.833 {463}	196.090 {472}	288.158 {117}	288.158 {117}2
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	486.93	.13749	.04686	.00417	F 920.92	.00329	.01362	13.951	29.854
Stddev	.64	.00198	.00008	.00121	.86	.00266	.00199	.012	.027
%RSD	.13069	1.4414	.17939	29.107	.09391	80.951	14.573	.08927	.08927

#1	486.48	.13609	.04680	.00331	920.31	.00517	.01503	13.959	29.873
#2	487.38	.13889	.04692	.00502	921.53	.00140	.01222	13.942	29.835

Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Fail	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit					200.00				
Low Limit					-20000				

Elem	Sn1899	Sr4077	Th2837	Ti3349	Ti1908	U_3701	V_2924	Zn2062	Zr3391
Line	189.989 {477}	407.771 { 83}	283.730 {119}	334.904 {101}	190.856 {477}	370.152 { 91}	292.402 {115}	206.200 {163}	339.198 { 99}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	-0.00064	.62908	.00015	.01011	-0.00017	-0.03451	.00029	.25039	.00286
Stddev	.00004	.00030	.00041	.00013	.00192	.02495	.00151	.00019	.00228
%RSD	5.9445	.04800	283.66	1.3145	1121.5	72.309	523.73	.07473	79.479

#1	-0.00062	.62887	-0.00015	.01002	-0.00153	-0.01686	.00135	.25052	.00125
#2	-0.00067	.62930	.00044	.01021	.00119	-0.05215	-0.00078	.25025	.00447

Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Int. Std.	Y_2243	Y_3600	Y_3774
Line	224.306 {450}	360.073 { 94}	377.433 { 89}
Units	Cts/S	Cts/S	Cts/S
Avg	2958.9	46850.	2651.5
Stddev	20.7	112.	70.3
%RSD	.70001	.23880	2.6502

#1	2973.6	46929.	2601.9
#2	2944.3	46771.	2701.2

Sample Name: 280-82821-G-4-A Acquired: 5/19/2016 0:32:40 Type: Unk
Method: 6500_025(v6) Mode: CONC Corr. Factor: 1.000000
User: CRHOADES Prep Date: Custom ID2: Custom ID3:
Comment: 325556 6010B (Cu Fe Na)

Elem	Ag3280	Al1670	Al3092	As1890	B_2089	Ba4554	Be3130	Bi2230	Ca3179
Line	328.068 {103}	167.079 {502}	309.271 {109}	189.042 {478}	208.959 {461}	455.403 { 74}	313.042 {108}	223.061 {451}	317.933 {106}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	-.00051	2.0100	4.4231	W -.01244	.24190	.02728	.00020	.00301	499.13
Stddev	.00066	.0303	.2013	.00686	.00292	.00096	.00014	.00208	11.45
%RSD	130.92	1.5074	4.5502	55.162	1.2081	3.5331	70.445	69.111	2.2935

#1	-.00098	1.9885	4.5654	-.00759	.23983	.02797	.00010	.00448	507.23
#2	-.00004	2.0314	4.2808	-.01729	.24397	.02660	.00029	.00154	491.04

Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Warn	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit				10.000					
Low Limit				-.01000					

Elem	Cd2288	Co2286	Cr2055	Cu3247	Fe2599	K_7664	Li6707	Mg2790	Mn2576
Line	228.802 {447}	228.616 {447}	205.560 {464}	324.754 {104}	259.940 {130}	766.490 { 44}	670.784 { 50}	279.079 {121}2	257.610 {131}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.00197	.01961	.00382	.00684	2.8865	97.092	.52001	W 1132.6	3.2923
Stddev	.00016	.00096	.00013	.00100	.0046	2.165	.00092	14.5	.0147
%RSD	8.1708	4.8905	3.4896	14.654	.15795	2.2304	.17612	1.2837	.44649

#1	.00186	.01893	.00392	.00754	2.8832	98.623	.51936	1122.3	3.2819
#2	.00209	.02029	.00373	.00613	2.8897	95.560	.52065	1142.9	3.3027

Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Warn	Chk Pass
High Limit								500.00	
Low Limit								-.10000	

Elem	Mo2020	Na8183	Ni2316	P_1782	Pb2203	S_1820	Sb2068	Se1960	Si2881
Line	202.030 {467}	818.326 { 41}	231.604 {446}	178.284 {489}	220.353 {453}	182.034 {485}	206.833 {463}	196.090 {472}	288.158 {117}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.02057	W 1907.3	.04464	.10376	.00478	F 2123.6	-.00195	.00220	9.6635
Stddev	.00126	44.2	.00151	.00294	.00241	39.8	.00980	.00985	.0271
%RSD	6.1150	2.3163	3.3843	2.8304	50.493	1.8752	501.62	448.05	.27997

#1	.01968	1938.6	.04357	.10584	.00649	2095.4	-.00888	-.00477	9.6826
#2	.02146	1876.1	.04571	.10169	.00307	2151.7	.00498	.00916	9.6443

Check ?	Chk Pass	Chk Warn	Chk Pass	Chk Pass	Chk Pass	Chk Fail	Chk Pass	Chk Pass	Chk Pass
High Limit		500.00				200.00			
Low Limit		11.000				-.20000			

Elem	SiO2	Sn1899	Sr4077	Th2837	Ti3349	Ti1908	U_3701	V_2924	Zn2062
Line	288.158 {117}2	189.989 {477}	407.771 { 83}	283.730 {119}	334.904 {101}	190.856 {477}	370.152 { 91}	292.402 {115}	206.200 {163}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	20.680	-.00149	W 7.9916	-.00103	.09408	-.00414	.57994	.00187	.01162
Stddev	.058	.00197	.2006	.00022	.00157	.00300	.02151	.00039	.00157
%RSD	.27997	132.15	2.5097	21.633	1.6703	72.587	3.7088	20.725	13.478

#1	20.721	-.00288	8.1334	-.00088	.09519	-.00201	.59515	.00215	.01051
#2	20.639	-.00010	7.8498	-.00119	.09296	-.00626	.56473	.00160	.01273

Check ?	Chk Pass	Chk Pass	Chk Warn	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit			5.0000						
Low Limit			-.01000						

Elem	Zr3391								
Line	339.198 { 99}								
Units	ppm								
Avg	.00188								
Stddev	.00187								
%RSD	99.081								

#1	.00320								
#2	.00056								

Check ?	Chk Pass								
High Limit									
Low Limit									

Sample Name: 280-82821-G-4-A Acquired: 5/19/2016 0:32:40 Type: Unk
Method: 6500_025(v6) Mode: CONC Corr. Factor: 1.000000
User: CRHOADES Prep Date: Custom ID2: Custom ID3:
Comment: 325556 6010B (Cu Fe Na)

Int. Std.	Y_2243	Y_3600	Y_3774
Line	224.306 {450}	360.073 { 94}	377.433 { 89}
Units	Cts/S	Cts/S	Cts/S
Avg	2305.1	35511.	2079.6
Stddev	39.9	212.	49.6
%RSD	1.7322	.59820	2.3874
#1	2333.4	35661.	2044.5
#2	2276.9	35361.	2114.7

Sample Name: 280-82821-G-5-A Acquired: 5/19/2016 0:35:49 Type: Unk
Method: 6500_025(v6) Mode: CONC Corr. Factor: 1.000000
User: CRHOADES Prep Date: Custom ID2: Custom ID3:
Comment: 325556 6010B (Cu Fe Na)

Elem	Ag3280	Al1670	As1890	B_2089	Ba4554	Be3130	Bi2230	Ca3179	Cd2288
Line	328.068 {103}	167.079 {502}	189.042 {478}	208.959 {461}	455.403 { 74}	313.042 {108}	223.061 {451}	317.933 {106}	228.802 {447}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	-0.00027	.02152	-0.00394	.09192	.00935	.00034	-0.00599	485.94	.00168
Stddev	.00035	.00084	.00427	.00064	.00047	.00006	.00484	1.77	.00003
%RSD	128.87	3.8966	108.32	.69655	4.9859	16.892	80.680	.36502	1.8822

#1	-0.00052	.02212	-0.00696	.09237	.00902	.00030	-0.00257	487.19	.00170
#2	-0.00002	.02093	-0.00092	.09146	.00968	.00038	-0.00941	484.68	.00166

Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Elem	Co2286	Cr2055	Cu3247	Fe2599	K_7664	Li6707	Mg2790	Mn2576	Mo2020
Line	228.616 {447}	205.560 {464}	324.754 {104}	259.940 {130}	766.490 { 44}	670.784 { 50}	279.079 {121}2	257.610 {131}	202.030 {467}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	-0.00007	.00028	.00118	.37152	9.0819	.05098	325.12	.10133	.00050
Stddev	.00007	.00033	.00056	.00594	.0107	.00081	6.28	.00030	.00074
%RSD	102.42	116.53	47.827	1.5981	.11723	1.5871	1.9323	.29953	147.84

#1	-0.00013	.00051	.00078	.37572	9.0895	.05040	320.68	.10112	-0.00002
#2	-0.00002	.00005	.00158	.36733	9.0744	.05155	329.56	.10155	.00102

Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Elem	Na8183	Ni2316	P_1782	Pb2203	S_1820	Sb2068	Se1960	Si2881	SiO2
Line	818.326 { 41}	231.604 {446}	178.284 {489}	220.353 {453}	182.034 {485}	206.833 {463}	196.090 {472}	288.158 {117}	288.158 {117}2
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	262.74	.00402	.01286	.00110	F 834.39	.00354	.00323	4.6692	9.9921
Stddev	1.24	.00039	.00647	.00278	14.19	.00674	.00014	.0210	.0450
%RSD	.47173	9.7811	50.327	253.25	1.7012	190.23	4.4146	.45034	.45034

#1	261.86	.00430	.00828	-.00087	844.43	-.00122	.00333	4.6543	9.9603
#2	263.62	.00375	.01743	.00306	824.36	.00831	.00313	4.6841	10.024

Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Fail	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit					200.00				
Low Limit					-.20000				

Elem	Sn1899	Sr4077	Th2837	Ti3349	Ti1908	U_3701	V_2924	Zn2062	Zr3391
Line	189.989 {477}	407.771 { 83}	283.730 {119}	334.904 {101}	190.856 {477}	370.152 { 91}	292.402 {115}	206.200 {163}	339.198 { 99}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	-0.00082	2.6562	-0.00200	.00062	-0.00907	-0.02470	-0.00117	.00127	.00131
Stddev	.00132	.0162	.00063	.00067	.00436	.06537	.00026	.00017	.00214
%RSD	161.95	.60987	31.491	108.27	48.078	264.63	22.430	13.524	163.48

#1	-0.00175	2.6677	-0.00155	.00109	-.01215	.02152	-0.00136	.00139	.00282
#2	.00012	2.6447	-.00244	.00015	-.00599	-.07093	-0.00099	.00115	-.00020

Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Int. Std.	Y_2243	Y_3600	Y_3774
Line	224.306 {450}	360.073 { 94}	377.433 { 89}
Units	Cts/S	Cts/S	Cts/S
Avg	2470.6	38296.	2169.9
Stddev	57.9	17.	12.0
%RSD	2.3416	.04479	.55515

#1	2429.7	38309.	2161.3
#2	2511.5	38284.	2178.4

Sample Name: 280-82821-G-6-A Acquired: 5/19/2016 0:38:34 Type: Unk
Method: 6500_025(v6) Mode: CONC Corr. Factor: 1.000000
User: CRHOADES Prep Date: Custom ID2: Custom ID3:
Comment: 325556 6010B (Cu Fe Na)

Elem	Ag3280	Al1670	As1890	B_2089	Ba4554	Be3130	Bi2230	Ca3179	Cd2288
Line	328.068 {103}	167.079 {502}	189.042 {478}	208.959 {461}	455.403 { 74}	313.042 {108}	223.061 {451}	317.933 {106}	228.802 {447}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	-0.00097	.02113	-0.00525	.09346	.00925	.00017	-0.00403	493.65	.00160
Stddev	.00046	.00081	.00010	.00095	.00051	.00024	.00067	5.42	.00005
%RSD	47.383	3.8517	1.8191	1.0198	5.4693	140.77	16.748	1.0973	3.4474

#1	-0.00129	.02055	-0.00518	.09279	.00961	.00000	-0.00355	497.48	.00163
#2	-0.00064	.02171	-0.00532	.09413	.00890	.00034	-0.00451	489.82	.00156

Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Elem	Co2286	Cr2055	Cu3247	Fe2599	K_7664	Li6707	Mg2790	Mn2576	Mo2020
Line	228.616 {447}	205.560 {464}	324.754 {104}	259.940 {130}	766.490 { 44}	670.784 { 50}	279.079 {121}2	257.610 {131}	202.030 {467}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	-0.00018	.00010	.00131	.36797	9.0540	.04835	329.16	.09940	-0.00014
Stddev	.00023	.00036	.00122	.00043	.0307	.00139	2.39	.00017	.00017
%RSD	133.12	370.36	93.266	.11740	.33850	2.8835	.72750	.17078	120.66

#1	-0.00034	-0.00016	.00045	.36766	9.0323	.04736	327.46	.09952	-0.00026
#2	-0.00001	.00036	.00217	.36827	9.0757	.04933	330.85	.09928	-0.00002

Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Elem	Na8183	Ni2316	P_1782	Pb2203	S_1820	Sb2068	Se1960	Si2881	SiO2
Line	818.326 { 41}	231.604 {446}	178.284 {489}	220.353 {453}	182.034 {485}	206.833 {463}	196.090 {472}	288.158 {117}	288.158 {117}2
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	266.39	.00373	.01051	.00061	F 860.63	-0.00299	.00427	4.7592	10.185
Stddev	.08	.00041	.00055	.00084	.06	.00367	.00415	.0372	.079
%RSD	.02953	10.955	5.2657	137.87	.00702	122.61	97.064	.78050	.78050

#1	266.45	.00402	.01090	.00120	860.67	-0.00558	.00721	4.7855	10.241
#2	266.33	.00344	.01012	.00002	860.59	-0.00040	.00134	4.7329	10.128

Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Fail	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit					200.00				
Low Limit					-20000				

Elem	Sn1899	Sr4077	Th2837	Ti3349	Ti1908	U_3701	V_2924	Zn2062	Zr3391
Line	189.989 {477}	407.771 { 83}	283.730 {119}	334.904 {101}	190.856 {477}	370.152 { 91}	292.402 {115}	206.200 {163}	339.198 { 99}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	-0.00185	2.7084	-0.00246	.00059	-0.00485	-0.03043	-0.00062	.00088	-0.00244
Stddev	.00011	.0294	.00144	.00048	.00533	.03679	.00059	.00011	.00333
%RSD	5.9458	1.0840	58.475	81.020	110.02	120.88	94.310	12.215	136.47

#1	-0.00177	2.7291	-0.00144	.00025	-0.00862	-0.05644	-0.00104	.00096	-0.00009
#2	-0.00193	2.6876	-0.00348	.00092	-0.00108	-0.00442	-0.00021	.00080	-0.00480

Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Int. Std.	Y_2243	Y_3600	Y_3774
Line	224.306 {450}	360.073 { 94}	377.433 { 89}
Units	Cts/S	Cts/S	Cts/S
Avg	2437.3	38315.	2169.9
Stddev	2.1	122.	44.1
%RSD	.08590	.31857	2.0307

#1	2435.8	38229.	2138.7
#2	2438.8	38401.	2201.0

Sample Name: CCVH-3894253 Acquired: 5/19/2016 0:41:19 Type: QC
Method: 6500_025(v6) Mode: CONC Corr. Factor: 1.000000
User: CRHOADES Prep Date: Custom ID2: Custom ID3:
Comment:

Elem	Ag3280	Al3092	As1890	B_2089	Ba4554	Be3130	Bi2230	Ca3179	Cd2288	Co2286	Cr2055
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	-.00063	50.172	-.00792	.00078	-.00081	.00032	W 1.0884	.05090	-.00042	-.00102	.00060
Stddev	.00057	.607	.00550	.00010	.00058	.00017	.0125	.01578	.00021	.00015	.00050
%RSD	90.379	1.2096	69.450	12.358	72.371	52.804	1.1499	31.001	50.999	14.326	83.466

#1	-.00104	49.742	-.00403	.00071	-.00122	.00043	1.0972	.06205	-.00057	-.00112	.00025
#2	-.00023	50.601	-.01181	.00085	-.00039	.00020	1.0795	.03974	-.00027	-.00092	.00096

Check ?	None	Chk Pass	None	None	None	None	Chk Warn	None	None	None	None
Value							1.0000				
Range							5.0000%				

Elem	Cu3247	Fe2714	K_7664	Li6707	Mg2790	Mn2576	Mo2020	Na8183	Ni2316	P_1782	Pb2203
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.00028	47.785	.21294	.00223	.04019	.00005	-.00193	251.54	.00180	.00379	-.00200
Stddev	.00019	.350	.02290	.00112	.00266	.00003	.00034	3.51	.00066	.00184	.00035
%RSD	66.433	.73316	10.756	50.182	6.6091	59.164	17.482	1.3960	36.829	48.610	17.330

#1	.00042	47.538	.22914	.00144	.04207	.00007	-.00217	249.05	.00133	.00249	-.00176
#2	.00015	48.033	.19674	.00302	.03831	.00003	-.00169	254.02	.00226	.00510	-.00225

Check ?	None	Chk Pass	None	None	None	None	None	Chk Pass	None	None	None
Value											
Range											

Elem	S_1820	Sb2068	Se1960	Si2881	SiO2	Sn1899	Sr4077	Th2837	Ti3349	Ti1908	U_3701
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	F 5.8613	-.00751	.00808	-.01467	-.03140	-.00032	.00069	W 4.6432	.00580	-.00741	W 10.501
Stddev	.2255	.00377	.00195	.00700	.01497	.00020	.00013	.0085	.00098	.00360	.297
%RSD	3.8480	50.157	24.173	47.679	47.679	62.606	18.303	.18302	16.862	48.614	2.8245

#1	6.0208	-.01018	.00670	-.01962	-.04199	-.00018	.00060	4.6372	.00650	-.00995	10.711
#2	5.7018	-.00485	.00946	-.00973	-.02082	-.00046	.00078	4.6493	.00511	-.00486	10.291

Check ?	Chk Fail	None	None	None	None	None	None	Chk Warn	None	None	Chk Warn
Value	5.0000							5.0000			10.000
Range	10.490%							-5.0000%			5.0000%

Elem	V_2924	Zn2062	Zr3391
Units	ppm	ppm	ppm
Avg	.00978	.00479	.05933
Stddev	.00029	.00056	.00216
%RSD	2.9959	11.715	3.6486

#1	.00999	.00519	.06086
#2	.00957	.00439	.05780

Check ?	None	None	None
Value			
Range			

Int. Std.	Y_2243	Y_3600	Y_3774
Units	Cts/S	Cts/S	Cts/S
Avg	2602.7	40944.	2304.8
Stddev	29.6	119.	21.0
%RSD	1.1369	.29076	.90907

#1	2623.7	40860.	2319.6
#2	2581.8	41029.	2289.9

Sample Name: CCV-3894251 Acquired: 5/19/2016 0:43:55 Type: QC
Method: 6500_025(v6) Mode: CONC Corr. Factor: 1.000000
User: CRHOADES Prep Date: Custom ID2: Custom ID3:
Comment:

Elem	Ag3280	Al1670	As1890	B_2089	Ba4554	Be3130	Bi2230	Ca3179	Cd2288	Co2286	Cr2055	Cu3247	Fe2599
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.48894	.54696	1.0390	.49044	.49598	.45588	-.00184	4.8546	.49317	.49651	.50169	.51113	2.3353
Stddev	.00129	.00248	.0081	.00479	.02096	.01488	.00464	.1663	.00183	.00774	.00879	.00042	.0692
%RSD	.26396	.45295	.77922	.97576	4.2265	3.2639	252.49	3.4250	.37019	1.5596	1.7522	.08209	2.9629
#1	.48802	.54871	1.0447	.49383	.51080	.46640	.00144	4.9722	.49188	.50199	.50790	.51143	2.3842
#2	.48985	.54520	1.0333	.48706	.48116	.44536	-.00512	4.7371	.49446	.49104	.49547	.51084	2.2863

Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	None	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Value													
Range													

Elem	K_7664	Li6707	Mg2790	Mn2576	Mo2020	Na5895	Ni2316	P_1782	Pb2203	S_1820	Sb2068	Se1960	Si2881
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	47.936	.97354	18.797	.46274	.50802	5.0821	.48790	.97168	1.0059	.28320	1.0007	1.0426	4.7685
Stddev	1.793	.01160	.044	.00032	.00849	.0893	.00832	.01504	.0183	.01628	.0121	.0144	.0121
%RSD	3.7402	1.1917	.23253	.06937	1.6717	1.7581	1.7048	1.5480	1.8199	5.7489	1.2068	1.3824	.25468
#1	49.204	.98175	18.766	.46251	.51402	5.1452	.49378	.98231	1.0188	.29471	1.0092	1.0527	4.7771
#2	46.668	.96534	18.828	.46297	.50201	5.0189	.48202	.96104	.99291	.27169	.99214	1.0324	4.7599

Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	None	Chk Pass	Chk Pass	Chk Pass
Value													
Range													

Elem	SiO2	Sn1899	Sr4077	Th2837	Ti3349	Ti1908	U_3701	V_2924	Zn2062	Zr3391
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	10.205	1.0144	.46982	.00055	.46034	1.0520	-.04895	.47964	.45691	.50594
Stddev	.026	.0153	.01739	.00195	.00022	.0262	.00781	.00159	.00323	.00117
%RSD	.25468	1.5123	3.7004	358.43	.04841	2.4950	15.958	.33248	.70600	.23099
#1	10.223	1.0253	.48211	-.00084	.46018	1.0705	-.04343	.47851	.45919	.50512
#2	10.186	1.0036	.45753	.00193	.46050	1.0334	-.05448	.48076	.45463	.50677

Check ?	Chk Pass	Chk Pass	Chk Pass	None	Chk Pass	Chk Pass	None	Chk Pass	Chk Pass	Chk Pass
Value										
Range										

Int. Std.	Y_2243	Y_3600	Y_3774
Units	Cts/S	Cts/S	Cts/S
Avg	2597.1	40829.	2192.3
Stddev	17.8	288.	114.6
%RSD	.68362	.70641	5.2283
#1	2584.6	41033.	2111.3
#2	2609.7	40625.	2273.4

Sample Name: CCB Acquired: 5/19/2016 0:46:27 Type: QC
 Method: 6500_025(v6) Mode: CONC Corr. Factor: 1.000000
 User: CRHOADES Prep Date: Custom ID2: Custom ID3:
 Comment:

Elem	Ag3280	Al1670	As1890	B_2089	Ba4554	Be3130	Bi2230	Ca3179	Cd2288	Co2286	Cr2055
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	-.00019	.00041	.00179	.00048	-.00079	.00015	-.00217	-.01190	-.00002	.00013	.00006
Stddev	.00084	.00089	.00308	.00011	.00056	.00002	.00118	.00084	.00010	.00045	.00020
%RSD	438.01	219.65	171.93	22.609	71.269	13.480	54.223	7.0885	410.63	343.42	333.97

#1	.00040	-.00023	-.00039	.00040	-.00119	.00016	-.00300	-.01250	-.00010	-.00019	-.00008
#2	-.00079	.00104	.00397	.00055	-.00039	.00013	-.00134	-.01131	.00005	.00045	.00021

Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit											
Low Limit											

Elem	Cu3247	Fe2599	K_7664	Li6707	Mg2790	Mn2576	Mo2020	Na5895	Ni2316	P_1782	Pb2203
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.00011	-.00738	.19584	-.00194	W .06993	.00034	.00149	.22241	-.00063	.00079	-.00033
Stddev	.00086	.00012	.08517	.00257	.07814	.00044	.00056	.02619	.00007	.00249	.00025
%RSD	809.64	1.5756	43.488	132.34	111.73	130.02	37.748	11.773	11.778	316.24	76.477

#1	.00072	-.00746	.25606	-.00012	.12519	.00065	.00110	.24093	-.00058	-.00097	-.00015
#2	-.00050	-.00729	.13562	-.00376	.01468	.00003	.00189	.20389	-.00068	.00255	-.00050

Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Warn	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit					.04000						
Low Limit					-.04000						

Elem	S_1820	Sb2068	Se1960	Si2881	SiO2	Sn1899	Sr4077	Th2837	Ti3349	Ti1908	U_3701
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	F .23186	W .00655	.00555	.04209	.09008	-.00054	.00026	.00334	.00025	-.00121	-.03740
Stddev	.00932	.00440	.00127	.01294	.02769	.00032	.00013	.00217	.00013	.00185	.02491
%RSD	4.0188	67.199	22.926	30.734	30.734	58.158	50.673	65.019	52.302	152.46	66.593

#1	.22527	.00966	.00465	.03294	.07050	-.00077	.00036	.00487	.00035	.00009	-.01979
#2	.23845	.00344	.00645	.05124	.10965	-.00032	.00017	.00180	.00016	-.00252	-.05501

Check ?	Chk Fail	Chk Warn	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit	.10000	.00100									
Low Limit	-.20000	-.00100									

Elem	V_2924	Zn2062	Zr3391
Units	ppm	ppm	ppm
Avg	.00081	-.00067	.00019
Stddev	.00103	.00045	.00041
%RSD	128.02	67.023	209.92

#1	.00153	-.00035	.00048
#2	.00008	-.00099	-.00009

Check ?	Chk Pass	Chk Pass	Chk Pass
High Limit			
Low Limit			

Int. Std.	Y_2243	Y_3600	Y_3774
Units	Cts/S	Cts/S	Cts/S
Avg	2631.1	41311.	2214.2
Stddev	41.0	62.	87.5
%RSD	1.5582	.15015	3.9511

#1	2602.1	41355.	2152.3
#2	2660.1	41268.	2276.0

Sample Name: CCVL-3897520 Acquired: 5/19/2016 0:48:50 Type: QC
Method: 6500_025(v6) Mode: CONC Corr. Factor: 1.000000
User: CRHOADES Prep Date: Custom ID2: Custom ID3:
Comment:

Elem	Ag3280	Al1670	As1890	B_2089	Ba4554	Be3130	Bi2230	Ca3179	Cd2288	Co2286	Cr2055	Cu3247
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.00975	.11317	.01577	.09711	.00971	.00128	.11538	.21546	.00461	.01004	.01032	.01609
Stddev	.00058	.00044	.00471	.00165	.00032	.00030	.00119	.01056	.00008	.00007	.00026	.00023
%RSD	5.9587	.38583	29.855	1.7028	3.3385	23.235	1.0309	4.9033	1.8317	.70801	2.5011	1.4005

#1	.00934	.11347	.01244	.09595	.00949	.00149	.11622	.22293	.00455	.01009	.01050	.01625
#2	.01016	.11286	.01910	.09828	.00994	.00107	.11454	.20799	.00466	.00999	.01013	.01593

Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Value												
Range												

Elem	Fe2599	K_7664	Li6707	Mg2790	Mn2576	Mo2020	Na5895	Ni2316	P_1782	Pb2203	S_1820	Sb2068
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.10603	3.1612	.00960	.24444	.01000	.02036	1.2724	.03971	2.8241	.00877	.19161	.02395
Stddev	.00019	.0520	.00139	.03133	.00013	.00039	.0117	.00037	.0032	.00039	.00285	.00223
%RSD	.18244	1.6453	14.514	12.818	1.3295	1.9271	.91729	.92379	.11390	4.4308	1.4893	9.2938

#1	.10589	3.1979	.01059	.26660	.01010	.02009	1.2806	.03945	2.8218	.00905	.19363	.02552
#2	.10616	3.1244	.00862	.22229	.00991	.02064	1.2641	.03996	2.8264	.00850	.18959	.02237

Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	None	Chk Pass
Value												
Range												

Elem	Se1960	Si2881	SiO2	Sn1899	Sr4077	Th2837	Ti3349	Ti1908	U_3701	V_2924	Zn2062	Zr3391
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.01780	.49084	1.0504	.10095	.01037	.01409	.00883	.01392	F .03989	.01085	.01922	.01923
Stddev	.00436	.02129	.0456	.00069	.00001	.00178	.00003	.00097	.08987	.00023	.00008	.00525
%RSD	24.476	4.3365	4.3365	.68428	.05310	12.644	.31499	6.9391	225.32	2.1212	.40532	27.299

#1	.01472	.50589	1.0826	.10047	.01037	.01534	.00881	.01460	.10344	.01102	.01927	.01552
#2	.02088	.47579	1.0182	.10144	.01037	.01283	.00885	.01324	-.02366	.01069	.01916	.02294

Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Fail	Chk Pass	Chk Pass	Chk Pass
Value									.06000			
Range									-30.000%			

Int. Std.	Y_2243	Y_3600	Y_3774
Units	Cts/S	Cts/S	Cts/S
Avg	2630.0	40991.	2177.3
Stddev	32.3	407.	71.2
%RSD	1.2279	.99396	3.2693

#1	2607.1	41279.	2227.7
#2	2652.8	40703.	2127.0

Sample Name: 280-82821-M-7-A Acquired: 5/19/2016 0:51:30 Type: Unk
Method: 6500_025(v6) Mode: CONC Corr. Factor: 1.000000
User: CRHOADES Prep Date: Custom ID2: Custom ID3:
Comment: 325556 6010B (Cu Fe Na)

Elem	Ag3280	Al1670	As1890	B_2089	Ba4554	Be3130	Bi2230	Ca3179	Cd2288
Line	328.068 {103}	167.079 {502}	189.042 {478}	208.959 {461}	455.403 {74}	313.042 {108}	223.061 {451}	317.933 {106}	228.802 {447}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	-0.0137	.17920	W -0.1191	.10897	.00751	.00049	-0.00299	407.51	.00202
Stddev	.00108	.00187	.01213	.00021	.00024	.00010	.00178	1.06	.00040
%RSD	78.671	1.0451	101.87	.19291	3.2166	19.679	59.505	.26072	19.584

#1	-0.00214	.17788	-0.00333	.10882	.00768	.00056	-0.00425	408.26	.00230
#2	-0.00061	.18053	-0.02048	.10912	.00734	.00042	-0.00173	406.76	.00174

Check ?	Chk Pass	Chk Pass	Chk Warn	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit			10.000						
Low Limit			-0.01000						

Elem	Co2286	Cr2055	Cu3247	Fe2599	K_7664	Li6707	Mg2790	Mn2576	Mo2020
Line	228.616 {447}	205.560 {464}	324.754 {104}	259.940 {130}	766.490 {44}	670.784 {50}	279.079 {121}2	257.610 {131}	202.030 {467}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	-0.00142	.00103	.00256	.24803	16.887	.07086	W 519.23	.00443	.00048
Stddev	.00001	.00011	.00100	.00418	.243	.00302	.82	.00008	.00042
%RSD	.86937	10.420	38.969	1.6835	1.4406	4.2574	.15713	1.8492	86.178

#1	-0.00141	.00096	.00186	.25098	16.715	.06872	518.65	.00449	.00019
#2	-0.00143	.00111	.00327	.24507	17.059	.07299	519.80	.00438	.00078

Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Warn	Chk Pass	Chk Pass
High Limit							500.00		
Low Limit							-1.00000		

Elem	Na8183	Ni2316	P_1782	Pb2203	S_1820	Sb2068	Se1960	Si2881	SiO2
Line	818.326 {41}	231.604 {446}	178.284 {489}	220.353 {453}	182.034 {485}	206.833 {463}	196.090 {472}	288.158 {117}	288.158 {117}2
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	W 1755.4	.00391	.02216	.00316	F 1932.9	.00012	.17905	3.5113	7.5141
Stddev	2.2	.00020	.00343	.00025	24.8	.00283	.00111	.0054	.0115
%RSD	.12443	5.0002	15.475	7.9566	1.2809	2431.1	.62164	.15280	.15280

#1	1757.0	.00377	.02459	.00298	1915.4	-0.00188	.17826	3.5151	7.5223
#2	1753.9	.00405	.01974	.00334	1950.4	.00211	.17984	3.5075	7.5060

Check ?	Chk Warn	Chk Pass	Chk Pass	Chk Pass	Chk Fail	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit	500.00				200.00				
Low Limit	11.000				-2.0000				

Elem	Sn1899	Sr4077	Th2837	Ti3349	Ti1908	U_3701	V_2924	Zn2062	Zr3391
Line	189.989 {477}	407.771 {83}	283.730 {119}	334.904 {101}	190.856 {477}	370.152 {91}	292.402 {115}	206.200 {163}	339.198 {99}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	-0.00179	W 11.374	.00045	.00717	-0.00603	-0.00905	-0.00147	.00214	-0.00125
Stddev	.00037	.107	.00072	.00104	.00373	.03896	.00093	.00089	.00119
%RSD	20.707	.94491	160.32	14.577	61.777	430.69	63.098	41.415	94.833

#1	-0.00205	11.450	.00095	.00791	-0.00867	-0.03660	-0.00213	.00151	-0.00041
#2	-0.00153	11.298	-0.00006	.00643	-0.00340	.01850	-0.00082	.00277	-0.00209

Check ?	Chk Pass	Chk Warn	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit		5.0000							
Low Limit		-0.01000							

Int. Std.	Y_2243	Y_3600	Y_3774
Line	224.306 {450}	360.073 {94}	377.433 {89}
Units	Cts/S	Cts/S	Cts/S
Avg	2329.9	35266.	2006.5
Stddev	32.5	749.	.1
%RSD	1.3935	2.1228	.00719

#1	2352.9	34736.	2006.4
#2	2307.0	35795.	2006.6

Sample Name: 280-82821-M-7-A SD@5 Acquired: 5/19/2016 0:54:45 Type: Unk
Method: 6500_025(v6) Mode: CONC Corr. Factor: 1.000000
User: CRHOADES Prep Date: Custom ID2: Custom ID3:
Comment: 325556 6010B (Cu Fe Na)

Elem	Ag3280	Al1670	As1890	B_2089	Ba4554	Be3130	Bi2230	Ca3179	Cd2288
Line	328.068 {103}	167.079 {502}	189.042 {478}	208.959 {461}	455.403 { 74}	313.042 {108}	223.061 {451}	317.933 {106}	228.802 {447}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.00003	.03813	-.00231	.02178	.00071	.00045	.00401	80.958	.00096
Stddev	.00017	.00125	.00061	.00001	.00062	.00005	.00253	1.716	.00027
%RSD	500.22	3.2775	26.323	.03912	87.787	11.009	63.110	2.1199	28.089

#1	-.00009	.03901	-.00188	.02177	.00027	.00048	.00580	79.745	.00115
#2	.00016	.03724	-.00274	.02178	.00115	.00041	.00222	82.172	.00077

Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Elem	Co2286	Cr2055	Cu3247	Fe2599	K_7664	Li6707	Mg2790	Mn2576	Mo2020
Line	228.616 {447}	205.560 {464}	324.754 {104}	259.940 {130}	766.490 { 44}	670.784 { 50}	279.079 {121}2	257.610 {131}	202.030 {467}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	-.00004	-.00031	.00069	.06219	3.4749	.01413	102.85	.00089	-.00044
Stddev	.00061	.00016	.00035	.00503	.1172	.00000	.09	.00003	.00062
%RSD	1577.0	52.357	51.818	8.0810	3.3718	.00042	.08974	3.5038	138.87

#1	.00040	-.00019	.00094	.05863	3.3920	.01413	102.78	.00087	-.00088
#2	-.00047	-.00042	.00043	.06574	3.5577	.01413	102.91	.00091	-.00001

Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Elem	Na8183	Ni2316	P_1782	Pb2203	S_1820	Sb2068	Se1960	Si2881	SiO2
Line	818.326 { 41}	231.604 {446}	178.284 {489}	220.353 {453}	182.034 {485}	206.833 {463}	196.090 {472}	288.158 {117}	288.158 {117}2
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	342.94	-.00005	.00527	.00113	F 410.17	.00050	.03293	.71840	1.5374
Stddev	8.49	.00018	.00053	.00109	8.72	.00024	.00014	.00373	.0080
%RSD	2.4753	337.29	10.050	96.527	2.1250	48.176	.41972	.51973	.51973

#1	336.94	.00008	.00564	.00190	416.33	.00033	.03283	.71576	1.5317
#2	348.95	-.00018	.00489	.00036	404.00	.00066	.03303	.72104	1.5430

Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Fail	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit					200.00				
Low Limit					-.20000				

Elem	Sn1899	Sr4077	Th2837	Ti3349	Ti1908	U_3701	V_2924	Zn2062	Zr3391
Line	189.989 {477}	407.771 { 83}	283.730 {119}	334.904 {101}	190.856 {477}	370.152 { 91}	292.402 {115}	206.200 {163}	339.198 { 99}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	-.00123	2.2303	-.00213	.00111	-.00463	W -.05591	-.00058	.00147	.00126
Stddev	.00173	.0549	.00100	.00054	.00044	.00201	.00113	.00008	.00240
%RSD	140.84	2.4623	47.173	48.963	9.5004	3.5967	193.94	5.7075	190.71

#1	-.00001	2.1915	-.00284	.00072	-.00432	-.05733	-.00138	.00153	-.00044
#2	-.00245	2.2692	-.00142	.00149	-.00494	-.05449	.00022	.00141	.00296

Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Warn	Chk Pass	Chk Pass	Chk Pass
High Limit						45.000			
Low Limit						-.05000			

Int. Std.	Y_2243	Y_3600	Y_3774
Line	224.306 {450}	360.073 { 94}	377.433 { 89}
Units	Cts/S	Cts/S	Cts/S
Avg	2523.6	38687.	2201.1
Stddev	81.4	19.	42.1
%RSD	3.2260	.04855	1.9131

#1	2466.0	38700.	2230.9
#2	2581.2	38674.	2171.4

Sample Name: 280-82821-M-7-B MS Acquired: 5/19/2016 0:57:25 Type: Unk
Method: 6500_025(v6) Mode: CONC Corr. Factor: 1.000000
User: CRHOADES Prep Date: Custom ID2: Custom ID3:
Comment: 325556 6010B (Cu Fe Na)

Elem	Ag3280	Al1670	Al3092	As1890	B_2089	Ba4554	Be3130	Bi2230	Ca3179
Line	328.068 {103}	167.079 {502}	309.271 {109}	189.042 {478}	208.959 {461}	455.403 { 74}	313.042 {108}	223.061 {451}	317.933 {106}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.05388	2.2543	3.5750	1.0902	1.0224	2.0049	.04601	F 2.1273	444.23
Stddev	.00056	.0910	.0296	.0478	.0319	.0087	.00015	.0814	1.43
%RSD	1.0475	4.0345	.82654	4.3876	3.1149	.43489	.31946	3.8261	.32204

#1	.05348	2.3186	3.5958	1.1241	1.0450	1.9987	.04611	2.1849	443.22
#2	.05428	2.1900	3.5541	1.0564	.99991	2.0111	.04590	2.0698	445.24

Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Fail	Chk Pass
High Limit								.10000	
Low Limit								-.10000	

Elem	Cd2288	Co2286	Cr2055	Cu3247	Fe2599	K_7664	Li6707	Mg2790	Mn2576
Line	228.802 {447}	228.616 {447}	205.560 {464}	324.754 {104}	259.940 {130}	766.490 { 44}	670.784 { 50}	279.079 {121}2	257.610 {131}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.10067	.45448	.19097	.26704	1.2506	67.269	1.1072	W 563.28	.46333
Stddev	.00282	.01366	.00606	.00139	.0164	.286	.0053	4.69	.00070
%RSD	2.8051	3.0049	3.1707	.52166	1.3152	.42508	.47938	.83180	.15109

#1	.10267	.46414	.19526	.26802	1.2390	67.067	1.1035	559.97	.46383
#2	.09867	.44482	.18669	.26605	1.2623	67.472	1.1110	566.60	.46284

Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Warn	Chk Pass
High Limit								500.00	
Low Limit								-.10000	

Elem	Mo2020	Na8183	Ni2316	P_1782	Pb2203	S_1820	Sb2068	Se1960	Si2881
Line	202.030 {467}	818.326 { 41}	231.604 {446}	178.284 {489}	220.353 {453}	182.034 {485}	206.833 {463}	196.090 {472}	288.158 {117}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	1.0185	W 1767.7	.44798	W 10.723	.45240	F 1903.9	.52230	2.4440	14.049
Stddev	.0320	7.3	.01416	.333	.01122	74.5	.00748	.0376	.023
%RSD	3.1430	.41385	3.1616	3.1068	2.4803	3.9126	1.4312	1.5381	.16206

#1	1.0412	1762.5	.45799	10.958	.46034	1956.6	.52758	2.4706	14.033
#2	.99590	1772.9	.43796	10.487	.44447	1851.2	.51701	2.4174	14.065

Check ?	Chk Pass	Chk Warn	Chk Pass	Chk Warn	Chk Pass	Chk Fail	Chk Pass	Chk Pass	Chk Pass
High Limit		500.00		2.0000		200.00			
Low Limit		11.000		-1.0000		-.20000			

Elem	SiO2	Sn1899	Sr4077	Th2837	Ti3349	Ti1908	U_3701	V_2924	Zn2062
Line	288.158 {117}2	189.989 {477}	407.771 { 83}	283.730 {119}	334.904 {101}	190.856 {477}	370.152 { 91}	292.402 {115}	206.200 {163}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	30.065	1.8988	W 12.143	.97749	.96142	1.4978	2.0532	.48691	.45403
Stddev	.049	.0175	.005	.01082	.00106	.0677	.0178	.00134	.00133
%RSD	.16206	.92143	.04038	1.1073	.11027	4.5179	.86605	.27510	.29261

#1	30.031	1.9112	12.147	.98514	.96217	1.5457	2.0406	.48786	.45497
#2	30.100	1.8864	12.140	.96983	.96067	1.4500	2.0657	.48596	.45309

Check ?	Chk Pass	Chk Pass	Chk Warn	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit			5.0000						
Low Limit			-.01000						

Elem	Zr3391
Line	339.198 { 99}
Units	ppm
Avg	.54020
Stddev	.00222
%RSD	.41171

#1	.54178
#2	.53863

Check ?	Chk Pass
High Limit	
Low Limit	

Sample Name: 280-82821-M-7-B MS Acquired: 5/19/2016 0:57:25 Type: Unk
Method: 6500_025(v6) Mode: CONC Corr. Factor: 1.000000
User: CRHOADES Prep Date: Custom ID2: Custom ID3:
Comment: 325556 6010B (Cu Fe Na)

Int. Std.	Y_2243	Y_3600	Y_3774
Line	224.306 {450}	360.073 { 94}	377.433 { 89}
Units	Cts/S	Cts/S	Cts/S
Avg	2352.5	35683.	2178.0
Stddev	92.4	9.	8.6
%RSD	3.9293	.02557	.39360
#1	2287.2	35689.	2171.9
#2	2417.9	35676.	2184.1

Sample Name: 280-82821-M-7-C MSD Acquired: 5/19/2016 1:00:32 Type: Unk
Method: 6500_025(v6) Mode: CONC Corr. Factor: 1.000000
User: CRHOADES Prep Date: Custom ID2: Custom ID3:
Comment: 325556 6010B (Cu Fe Na)

Elem	Ag3280	Al1670	Al3092	As1890	B_2089	Ba4554	Be3130	Bi2230	Ca3179
Line	328.068 {103}	167.079 {502}	309.271 {109}	189.042 {478}	208.959 {461}	455.403 { 74}	313.042 {108}	223.061 {451}	317.933 {106}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.05259	2.2470	3.6999	1.0826	1.0227	2.0624	.04649	F 2.1231	453.22
Stddev	.00026	.0729	.0031	.0383	.0309	.0210	.00015	.0705	6.03
%RSD	.49851	3.2431	.08375	3.5394	3.0205	1.0190	.31971	3.3210	1.3302

#1	.05240	2.2985	3.7021	1.1097	1.0445	2.0772	.04638	2.1729	457.48
#2	.05277	2.1954	3.6977	1.0555	1.0008	2.0475	.04659	2.0732	448.96

Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Fail	Chk Pass
High Limit								.10000	
Low Limit								-.10000	

Elem	Cd2288	Co2286	Cr2055	Cu3247	Fe2599	K_7664	Li6707	Mg2790	Mn2576
Line	228.802 {447}	228.616 {447}	205.560 {464}	324.754 {104}	259.940 {130}	766.490 { 44}	670.784 { 50}	279.079 {121}2	257.610 {131}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.10074	.45256	.19054	.26507	1.2177	68.981	1.0871	W 552.90	.45516
Stddev	.00376	.01480	.00614	.00261	.0167	.895	.0012	3.95	.00270
%RSD	3.7280	3.2708	3.2244	.98329	1.3737	1.2974	.10564	.71508	.59220

#1	.10340	.46303	.19489	.26691	1.2296	69.614	1.0879	555.70	.45706
#2	.09809	.44209	.18620	.26322	1.2059	68.348	1.0862	550.11	.45325

Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Warn	Chk Pass
High Limit								500.00	
Low Limit								-.10000	

Elem	Mo2020	Na8183	Ni2316	P_1782	Pb2203	S_1820	Sb2068	Se1960	Si2881
Line	202.030 {467}	818.326 { 41}	231.604 {446}	178.284 {489}	220.353 {453}	182.034 {485}	206.833 {463}	196.090 {472}	288.158 {117}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	1.0236	W 1797.3	.44697	W 10.710	.44806	F 1878.3	.52468	2.4592	13.755
Stddev	.0386	21.1	.01511	.364	.01375	56.2	.01981	.1187	.014
%RSD	3.7741	1.1726	3.3814	3.4035	3.0678	2.9896	3.7760	4.8265	.09813

#1	1.0509	1812.2	.45765	10.967	.45778	1918.0	.53868	2.5431	13.746
#2	.99625	1782.4	.43628	10.452	.43834	1838.6	.51067	2.3752	13.765

Check ?	Chk Pass	Chk Warn	Chk Pass	Chk Warn	Chk Pass	Chk Fail	Chk Pass	Chk Pass	Chk Pass
High Limit		500.00		2.0000		200.00			
Low Limit		11.000		-1.0000		-.20000			

Elem	SiO2	Sn1899	Sr4077	Th2837	Ti3349	Ti1908	U_3701	V_2924	Zn2062
Line	288.158 {117}2	189.989 {477}	407.771 { 83}	283.730 {119}	334.904 {101}	190.856 {477}	370.152 { 91}	292.402 {115}	206.200 {163}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	29.436	1.9043	W 12.146	.95287	.94822	1.5872	2.0565	.47908	.44167
Stddev	.029	.0681	.441	.01158	.00350	.1081	.0576	.00171	.00068
%RSD	.09813	3.5756	3.6288	1.2151	.36905	6.8131	2.8016	.35757	.15419

#1	29.416	1.9525	12.458	.96106	.95070	1.6636	2.0973	.48029	.44119
#2	29.457	1.8562	11.834	.94468	.94575	1.5107	2.0158	.47786	.44215

Check ?	Chk Pass	Chk Pass	Chk Warn	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit			5.0000						
Low Limit			-.01000						

Elem	Zr3391								
Line	339.198 { 99}								
Units	ppm								
Avg	.52715								
Stddev	.00705								
%RSD	1.3380								

#1	.53213								
#2	.52216								

Check ?	Chk Pass								
High Limit									
Low Limit									

Sample Name: 280-82821-M-7-C MSD Acquired: 5/19/2016 1:00:32 Type: Unk
 Method: 6500_025(v6) Mode: CONC Corr. Factor: 1.000000
 User: CRHOADES Prep Date: Custom ID2: Custom ID3:
 Comment: 325556 6010B (Cu Fe Na)

Int. Std.	Y_2243	Y_3600	Y_3774
Line	224.306 {450}	360.073 { 94}	377.433 { 89}
Units	Cts/S	Cts/S	Cts/S
Avg	2358.2	35939.	2085.1
Stddev	79.5	239.	73.6
%RSD	3.3704	.66458	3.5302
#1	2302.0	35770.	2033.0
#2	2414.4	36108.	2137.1

Sample Name: 280-82821-M-7-A PDS Acquired: 5/19/2016 1:03:38 Type: Unk
Method: 6500_025(v6) Mode: CONC Corr. Factor: 1.000000
User: CRHOADES Prep Date: Custom ID2: Custom ID3:
Comment: 325556 6010B (Cu Fe Na)

Elem	Ag3280	Al1670	As1890	B_2089	Ba4554	Be3130	Bi2230	Ca3179	Cd2288
Line	328.068 {103}	167.079 {502}	189.042 {478}	208.959 {461}	455.403 { 74}	313.042 {108}	223.061 {451}	317.933 {106}	228.802 {447}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.01697	1.1363	.20261	.19821	.10968	.04543	.00090	412.58	.05387
Stddev	.00044	.0343	.00695	.00396	.00009	.00022	.00100	1.43	.00148
%RSD	2.6071	3.0150	3.4301	1.9958	.08273	.49018	111.09	.34577	2.7417

#1	.01728	1.1605	.20752	.20101	.10975	.04559	.00161	413.59	.05491
#2	.01666	1.1121	.19770	.19541	.10962	.04527	.00019	411.58	.05282

Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Elem	Co2286	Cr2055	Cu3247	Fe2599	K_7664	Li6707	Mg2790	Mn2576	Mo2020
Line	228.616 {447}	205.560 {464}	324.754 {104}	259.940 {130}	766.490 { 44}	670.784 { 50}	279.079 {121}2	257.610 {131}	202.030 {467}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.04599	.05009	.05554	1.1715	38.080	.17112	W 523.77	.04993	.05600
Stddev	.00083	.00172	.00032	.0043	.208	.00340	7.61	.00013	.00159
%RSD	1.7988	3.4288	.57600	.37171	.54658	1.9862	1.4536	.26095	2.8411

#1	.04657	.05131	.05576	1.1684	37.933	.16871	518.38	.05003	.05712
#2	.04540	.04888	.05531	1.1745	38.227	.17352	529.15	.04984	.05487

Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Warn	Chk Pass	Chk Pass
High Limit							500.00		
Low Limit							-1.0000		

Elem	Na8183	Ni2316	P_1782	Pb2203	S_1820	Sb2068	Se1960	Si2881	SiO2
Line	818.326 { 41}	231.604 {446}	178.284 {489}	220.353 {453}	182.034 {485}	206.833 {463}	196.090 {472}	288.158 {117}	288.158 {117}2
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	W 1719.7	.04948	W 2.2455	.09237	F 1874.7	.10102	.41892	8.2313	17.615
Stddev	6.9	.00238	.0943	.00740	52.6	.00900	.02743	.0056	.012
%RSD	.40307	4.8100	4.1997	8.0103	2.8060	8.9105	6.5480	.06825	.06825

#1	1724.6	.05116	2.3122	.09760	1911.9	.10738	.43832	8.2274	17.607
#2	1714.8	.04779	2.1788	.08714	1837.5	.09465	.39952	8.2353	17.624

Check ?	Chk Warn	Chk Pass	Chk Warn	Chk Pass	Chk Fail	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit	500.00		2.0000		200.00				
Low Limit	11.000		-1.0000		-2.0000				

Elem	Sn1899	Sr4077	Th2837	Ti3349	Ti1908	U_3701	V_2924	Zn2062	Zr3391
Line	189.989 {477}	407.771 { 83}	283.730 {119}	334.904 {101}	190.856 {477}	370.152 { 91}	292.402 {115}	206.200 {163}	339.198 { 99}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.09540	W 10.966	.18893	.05458	.16066	.54846	.04711	.18632	.05455
Stddev	.00749	.261	.00355	.00006	.01336	.07010	.00122	.00110	.00069
%RSD	7.8498	2.3842	1.8766	.10996	8.3139	12.780	2.5998	.59213	1.2660

#1	.10069	11.151	.18642	.05462	.17011	.59803	.04798	.18710	.05504
#2	.09010	10.782	.19143	.05453	.15122	.49890	.04625	.18554	.05407

Check ?	Chk Pass	Chk Warn	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit		5.0000							
Low Limit		-.01000							

Int. Std.	Y_2243	Y_3600	Y_3774						
Line	224.306 {450}	360.073 { 94}	377.433 { 89}						
Units	Cts/S	Cts/S	Cts/S						
Avg	2346.9	35976.	2171.9						
Stddev	66.6	25.	24.6						
%RSD	2.8367	.06852	1.1318						

#1	2299.8	35958.	2154.5						
#2	2394.0	35993.	2189.3						

Sample Name: 280-82821-G-8-A Acquired: 5/19/2016 1:06:49 Type: Unk
Method: 6500_025(v6) Mode: CONC Corr. Factor: 1.000000
User: CRHOADES Prep Date: Custom ID2: Custom ID3:
Comment: 325556 6010B (Cu Fe Na)

Elem	Ag3280	Al1670	Al3092	As1890	B_2089	Ba4554	Be3130	Bi2230	Ca3179
Line	328.068 {103}	167.079 {502}	309.271 {109}	189.042 {478}	208.959 {461}	455.403 { 74}	313.042 {108}	223.061 {451}	317.933 {106}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	-0.00001	1.2980	W 2.6496	-0.00368	.11377	.01626	.00040	-0.00136	427.90
Stddev	.00106	.0441	.0048	.00056	.00412	.00039	.00033	.00010	.10
%RSD	18772.	3.3959	.18033	15.242	3.6174	2.4123	82.469	7.0979	.02272

#1	-0.00075	1.3291	2.6530	-0.00328	.11668	.01654	.00017	-0.00129	427.96
#2	.00074	1.2668	2.6462	-0.00407	.11086	.01598	.00063	-0.00143	427.83

Check ?	Chk Pass	Chk Pass	Chk Warn	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit			500.00						
Low Limit			3.2000						

Elem	Cd2288	Co2286	Cr2055	Cu3247	Fe2599	K_7664	Li6707	Mg2790	Mn2576
Line	228.802 {447}	228.616 {447}	205.560 {464}	324.754 {104}	259.940 {130}	766.490 { 44}	670.784 { 50}	279.079 {121}2	257.610 {131}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.00150	.00025	.00305	.00279	1.8593	13.065	.08616	W 644.73	.04080
Stddev	.00042	.00001	.00016	.00011	.0120	.132	.00241	4.45	.00029
%RSD	27.609	3.6915	5.1479	3.8201	.64484	1.0114	2.7931	.69002	.72072

#1	.00121	.00024	.00294	.00271	1.8508	12.971	.08786	641.58	.04059
#2	.00180	.00025	.00317	.00286	1.8677	13.158	.08446	647.88	.04101

Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Warn	Chk Pass
High Limit								500.00	
Low Limit								-.10000	

Elem	Mo2020	Na8183	Ni2316	P_1782	Pb2203	S_1820	Sb2068	Se1960	Si2881
Line	202.030 {467}	818.326 { 41}	231.604 {446}	178.284 {489}	220.353 {453}	182.034 {485}	206.833 {463}	196.090 {472}	288.158 {117}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.00474	352.27	.00539	.09329	.00121	F 1152.0	-0.00001	.24184	5.6410
Stddev	.00013	6.35	.00105	.00198	.00068	38.2	.00149	.00443	.0196
%RSD	2.7921	1.8013	19.467	2.1202	56.361	3.3119	13564.	1.8327	.34806

#1	.00484	356.76	.00613	.09469	.00169	1179.0	.00104	.23870	5.6271
#2	.00465	347.78	.00465	.09189	.00073	1125.0	-.00106	.24497	5.6548

Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Fail	Chk Pass	Chk Pass	Chk Pass
High Limit						200.00			
Low Limit						-.20000			

Elem	SiO2	Sn1899	Sr4077	Th2837	Ti3349	Ti1908	U_3701	V_2924	Zn2062
Line	288.158 {117}2	189.989 {477}	407.771 { 83}	283.730 {119}	334.904 {101}	190.856 {477}	370.152 { 91}	292.402 {115}	206.200 {163}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	12.072	-0.00138	W 8.8711	.00324	.05906	.00101	.17777	.00099	.00685
Stddev	.042	.00046	.0124	.00341	.00168	.00197	.10029	.00018	.00081
%RSD	.34806	33.268	.13987	105.13	2.8372	194.81	56.416	18.628	11.845

#1	12.042	-.00170	8.8623	.00083	.05788	-.00038	.24869	.00086	.00627
#2	12.101	-.00105	8.8798	.00565	.06025	.00240	.10685	.00112	.00742

Check ?	Chk Pass	Chk Pass	Chk Warn	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit			5.0000						
Low Limit			-.01000						

Elem	Zr3391								
Line	339.198 { 99}								
Units	ppm								
Avg	-0.00201								
Stddev	.00045								
%RSD	22.601								

#1	-.00169								
#2	-.00233								

Check ?	Chk Pass								
High Limit									
Low Limit									

Sample Name: 280-82821-G-8-A Acquired: 5/19/2016 1:06:49 Type: Unk
Method: 6500_025(v6) Mode: CONC Corr. Factor: 1.000000
User: CRHOADES Prep Date: Custom ID2: Custom ID3:
Comment: 325556 6010B (Cu Fe Na)

Int. Std.	Y_2243	Y_3600	Y_3774
Line	224.306 {450}	360.073 { 94}	377.433 { 89}
Units	Cts/S	Cts/S	Cts/S
Avg	2436.5	35994.	2050.4
Stddev	125.7	148.	3.0
%RSD	5.1597	.41015	.14795
#1	2347.6	35889.	2052.6
#2	2525.4	36098.	2048.3

Sample Name: 280-82821-G-9-A Acquired: 5/19/2016 1:09:31 Type: Unk
Method: 6500_025(v6) Mode: CONC Corr. Factor: 1.000000
User: CRHOADES Prep Date: Custom ID2: Custom ID3:
Comment: 325556 6010B (Cu Fe Na)

Elem	Ag3280	Al1670	As1890	B_2089	Ba4554	Be3130	Bi2230	Ca3179	Cd2288
Line	328.068 {103}	167.079 {502}	189.042 {478}	208.959 {461}	455.403 { 74}	313.042 {108}	223.061 {451}	317.933 {106}	228.802 {447}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	-.00141	.45805	-.00259	.09797	.01291	.00046	.00213	110.73	.00127
Stddev	.00033	.00181	.00464	.00166	.00003	.00011	.00476	.13	.00014
%RSD	23.504	.39432	179.13	1.6966	.19644	24.176	223.20	.12129	11.112

#1	-.00118	.45933	.00069	.09679	.01292	.00054	-.00123	110.64	.00117
#2	-.00165	.45677	-.00587	.09914	.01289	.00039	.00549	110.83	.00137

Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Elem	Co2286	Cr2055	Cu3247	Fe2599	K_7664	Li6707	Mg2790	Mn2576	Mo2020
Line	228.616 {447}	205.560 {464}	324.754 {104}	259.940 {130}	766.490 { 44}	670.784 { 50}	279.079 {121}2	257.610 {131}	202.030 {467}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	-.00064	.00148	.00176	.56916	8.3945	.03432	142.84	.01068	.06029
Stddev	.00002	.00035	.00018	.00220	.0258	.00441	.56	.00001	.00063
%RSD	2.8095	23.976	10.488	.38691	.30764	12.845	.39136	.13198	1.0482

#1	-.00065	.00173	.00189	.57072	8.4127	.03743	143.24	.01069	.05984
#2	-.00062	.00123	.00163	.56760	8.3762	.03120	142.45	.01067	.06073

Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Elem	Na8183	Ni2316	P_1782	Pb2203	S_1820	Sb2068	Se1960	Si2881	SiO2
Line	818.326 { 41}	231.604 {446}	178.284 {489}	220.353 {453}	182.034 {485}	206.833 {463}	196.090 {472}	288.158 {117}	288.158 {117}2
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	W 866.51	.00126	.01708	.00105	F 772.43	.00056	.00265	4.4183	9.4552
Stddev	2.37	.00026	.00108	.00056	3.85	.00049	.00228	.0921	.1970
%RSD	.27388	20.250	6.3425	53.288	.49859	87.135	85.841	2.0833	2.0833

#1	864.84	.00108	.01784	.00144	775.15	.00091	.00104	4.4834	9.5945
#2	868.19	.00144	.01631	.00065	769.70	.00022	.00426	4.3532	9.3159

Check ?	Chk Warn	Chk Pass	Chk Pass	Chk Pass	Chk Fail	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit	500.00				200.00				
Low Limit	11.000				-.20000				

Elem	Sn1899	Sr4077	Th2837	Ti3349	Ti1908	U_3701	V_2924	Zn2062	Zr3391
Line	189.989 {477}	407.771 { 83}	283.730 {119}	334.904 {101}	190.856 {477}	370.152 { 91}	292.402 {115}	206.200 {163}	339.198 { 99}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	-.00148	3.8859	.00070	.01890	-.00363	-.02101	-.00014	.00178	-.00131
Stddev	.00262	.0106	.00075	.00028	.00137	.01914	.00061	.00014	.00005
%RSD	176.74	.27224	106.72	1.4927	37.875	91.083	450.12	8.1096	4.1170

#1	.00037	3.8784	.00017	.01910	-.00460	-.00748	-.00057	.00168	-.00135
#2	-.00333	3.8933	.00124	.01870	-.00265	-.03455	.00030	.00188	-.00128

Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Int. Std.	Y_2243	Y_3600	Y_3774
Line	224.306 {450}	360.073 { 94}	377.433 { 89}
Units	Cts/S	Cts/S	Cts/S
Avg	2464.5	36469.	2043.1
Stddev	82.1	108.	12.5
%RSD	3.3302	.29551	.61022

#1	2406.5	36392.	2034.3
#2	2522.5	36545.	2051.9

Sample Name: 280-82821-G-10-A Acquired: 5/19/2016 1:12:13 Type: Unk

Method: 6500_025(v6) Mode: CONC Corr. Factor: 1.000000

User: CRHOADES Prep Date: Custom ID2: Custom ID3:

Comment: 325556 6010B (Cu Fe Na)

Elem	Ag3280	Al1670	As1890	B_2089	Ba4554	Be3130	Bi2230	Ca3179	Cd2288
Line	328.068 {103}	167.079 {502}	189.042 {478}	208.959 {461}	455.403 { 74}	313.042 {108}	223.061 {451}	317.933 {106}	228.802 {447}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	-0.00010	.00312	-0.00378	-0.00018	-0.00055	.00016	.00895	.12315	-0.00029
Stddev	.00010	.00031	.00393	.00013	.00037	.00032	.00118	.01855	.00045
%RSD	102.47	9.9844	103.76	70.848	68.321	195.65	13.225	15.061	157.02

#1	-0.00017	.00335	-0.00101	-0.00009	-0.00028	.00039	.00811	.13626	-0.00061
#2	-0.00003	.00290	-0.00656	-0.00027	-0.00081	-0.00006	.00978	.11003	.00003

Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Elem	Co2286	Cr2055	Cu3247	Fe2599	K_7664	Li6707	Mg2790	Mn2576	Mo2020
Line	228.616 {447}	205.560 {464}	324.754 {104}	259.940 {130}	766.490 { 44}	670.784 { 50}	279.079 {121}2	257.610 {131}	202.030 {467}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	-0.00030	.00011	-0.00141	.00587	.22827	.00006	.10893	.00004	-0.00025
Stddev	.00049	.00040	.00005	.00501	.00986	.00279	.01106	.00000	.00039
%RSD	164.51	357.97	3.7509	85.211	4.3183	4471.7	10.155	8.3596	156.54

#1	.00005	.00040	-0.00145	.00233	.22130	-0.00191	.11675	.00004	.00003
#2	-0.00065	-0.00017	-0.00137	.00941	.23524	.00203	.10111	.00004	-0.00052

Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Elem	Na5895	Ni2316	P_1782	Pb2203	S_1820	Sb2068	Se1960	Si2881	SiO2
Line	589.592 { 57}	231.604 {446}	178.284 {489}	220.353 {453}	182.034 {485}	206.833 {463}	196.090 {472}	288.158 {117}	288.158 {117}2
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	1.1765	-0.00053	.00269	.00033	1.0764	-0.00213	-0.00026	.04252	.09098
Stddev	.0885	.00014	.00045	.00015	.6434	.00568	.00394	.00098	.00210
%RSD	7.5254	26.590	16.636	45.902	59.772	267.39	1535.3	2.3038	2.3038

#1	1.2391	-0.00063	.00238	.00043	1.5314	.00189	-0.00305	.04182	.08950
#2	1.1139	-0.00043	.00301	.00022	.62146	-0.00614	.00253	.04321	.09247

Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Elem	Sn1899	Sr4077	Th2837	Ti3349	Ti1908	U_3701	V_2924	Zn2062	Zr3391
Line	189.989 {477}	407.771 { 83}	283.730 {119}	334.904 {101}	190.856 {477}	370.152 { 91}	292.402 {115}	206.200 {163}	339.198 { 99}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	-0.00002	.00357	.00254	.00009	-0.00119	-0.02258	.00083	-0.00073	.00164
Stddev	.00100	.00075	.00219	.00031	.00129	.08878	.00004	.00070	.00294
%RSD	4314.9	20.873	86.192	354.58	108.97	393.19	4.2515	96.580	179.59

#1	-0.00073	.00410	.00408	.00031	-0.00027	.04020	.00081	-0.00122	.00372
#2	.00069	.00304	.00099	-0.00013	-0.00210	-0.08535	.00086	-0.00023	-0.00044

Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Int. Std.	Y_2243	Y_3600	Y_3774
Line	224.306 {450}	360.073 { 94}	377.433 { 89}
Units	Cts/S	Cts/S	Cts/S
Avg	2757.3	43165.	2256.3
Stddev	56.5	67.	50.7
%RSD	2.0478	.15451	2.2456

#1	2797.2	43213.	2292.1
#2	2717.4	43118.	2220.5

Sample Name: CCVH-3894253 Acquired: 5/19/2016 1:14:55 Type: QC
Method: 6500_025(v6) Mode: CONC Corr. Factor: 1.000000
User: CRHOADES Prep Date: Custom ID2: Custom ID3:
Comment:

Elem	Ag3280	Al3092	As1890	B_2089	Ba4554	Be3130	Bi2230	Ca3179	Cd2288	Co2286	Cr2055
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	-.00043	52.058	-.00835	.00075	-.00083	.00025	W 1.0740	-.00858	-.00035	-.00072	.00039
Stddev	.00021	.065	.00311	.00001	.00005	.00012	.0059	.00761	.00001	.00017	.00002
%RSD	48.630	.12502	37.271	1.4905	5.6335	47.402	.54524	88.703	3.0847	23.202	4.0985

#1	-.00057	52.104	-.01055	.00076	-.00080	.00016	1.0782	-.00320	-.00036	-.00084	.00040
#2	-.00028	52.012	-.00615	.00074	-.00087	.00033	1.0699	-.01397	-.00034	-.00060	.00038

Check ?	None	Chk Pass	None	None	None	None	Chk Warn	None	None	None	None
Value							1.0000				
Range							5.0000%				

Elem	Cu3247	Fe2714	K_7664	Li6707	Mg2790	Mn2576	Mo2020	Na8183	Ni2316	P_1782	Pb2203
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	-.00068	49.463	.29134	.00148	.02799	.00032	-.00173	257.43	.00093	.00524	-.00138
Stddev	.00113	.275	.09878	.00101	.00152	.00001	.00009	.41	.00017	.00018	.00005
%RSD	167.13	.55502	33.906	68.609	5.4269	4.5532	5.3909	.16031	18.083	3.4255	3.7873

#1	-.00148	49.268	.36118	.00219	.02692	.00033	-.00167	257.14	.00081	.00511	-.00142
#2	.00012	49.657	.22149	.00076	.02907	.00031	-.00180	257.72	.00105	.00537	-.00134

Check ?	None	Chk Pass	None	None	None	None	None	Chk Pass	None	None	None
Value											
Range											

Elem	S_1820	Sb2068	Se1960	Si2881	SiO2	Sn1899	Sr4077	Th2837	Ti3349	Ti1908	U_3701
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	F 5.5784	-.01191	.00908	-.02190	-.04686	.00015	.00059	W 4.6590	.00575	-.00439	W 10.717
Stddev	.0305	.00738	.00146	.01900	.04065	.00125	.00015	.0174	.00007	.00147	.058
%RSD	.54738	61.908	16.056	86.751	86.751	811.54	25.316	.37293	1.1833	33.443	.53705

#1	5.5999	-.01713	.01011	-.03533	-.07560	-.00073	.00048	4.6713	.00570	-.00335	10.758
#2	5.5568	-.00670	.00805	-.00846	-.01811	.00104	.00069	4.6467	.00580	-.00542	10.677

Check ?	Chk Fail	None	None	None	None	None	None	Chk Warn	None	None	Chk Warn
Value	5.0000							5.0000			10.000
Range	10.490%							-5.0000%			5.0000%

Elem	V_2924	Zn2062	Zr3391
Units	ppm	ppm	ppm
Avg	.00933	.00164	.04834
Stddev	.00018	.00016	.00604
%RSD	1.9687	9.5657	12.488

#1	.00946	.00153	.04407
#2	.00920	.00175	.05261

Check ?	None	None	None
Value			
Range			

Int. Std.	Y_2243	Y_3600	Y_3774
Units	Cts/S	Cts/S	Cts/S
Avg	2503.1	38205.	2089.8
Stddev	36.1	32.	10.5
%RSD	1.4419	.08253	.50446

#1	2477.6	38183.	2082.3
#2	2528.6	38228.	2097.2

Sample Name: CCV-3894251 Acquired: 5/19/2016 1:17:32 Type: QC
Method: 6500_025(v6) Mode: CONC Corr. Factor: 1.000000
User: CRHOADES Prep Date: Custom ID2: Custom ID3:
Comment:

Elem	Ag3280	Al1670	As1890	B_2089	Ba4554	Be3130	Bi2230	Ca3179	Cd2288	Co2286	Cr2055	Cu3247	Fe2599
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.48629	.54510	1.0280	.48210	.49853	.45629	-.00026	4.8256	.49146	.49259	.49838	.51184	2.3528
Stddev	.00040	.00367	.0113	.00318	.00189	.00222	.00324	.0034	.00069	.00027	.00051	.00009	.0044
%RSD	.08133	.67320	1.1000	.66005	.37872	.48689	1261.3	.06975	.13977	.05477	.10289	.01796	.18706

#1	.48657	.54251	1.0200	.47985	.49987	.45786	-.00255	4.8233	.49097	.49278	.49874	.51177	2.3497
#2	.48601	.54770	1.0360	.48435	.49720	.45472	.00203	4.8280	.49195	.49240	.49801	.51190	2.3559

Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	None	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Value													
Range													

Elem	K_7664	Li6707	Mg2790	Mn2576	Mo2020	Na5895	Ni2316	P_1782	Pb2203	S_1820	Sb2068	Se1960	Si2881
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	48.200	.98610	18.703	.46328	.50469	5.2573	.48270	.95494	.98898	.36069	.97012	1.0328	4.7886
Stddev	.091	.00552	.015	.00007	.00018	.0120	.00052	.00195	.00115	.01567	.00439	.0096	.0140
%RSD	.18978	.56007	.08150	.01592	.03584	.22790	.10833	.20393	.11584	4.3438	.45202	.92573	.29310

#1	48.265	.98220	18.714	.46323	.50457	5.2488	.48233	.95631	.98817	.37177	.97322	1.0260	4.7985
#2	48.135	.99001	18.692	.46334	.50482	5.2658	.48307	.95356	.98979	.34961	.96702	1.0395	4.7786

Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	None	Chk Pass	Chk Pass	Chk Pass
Value													
Range													

Elem	SiO2	Sn1899	Sr4077	Th2837	Ti3349	Ti1908	U_3701	V_2924	Zn2062	Zr3391
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	10.248	1.0033	.46869	.00070	.45978	1.0344	-.01288	.47859	.45554	.50632
Stddev	.030	.0038	.00058	.00060	.00005	.0059	.01204	.00191	.00835	.00225
%RSD	.29310	.38265	.12432	85.409	.01184	.57460	93.469	.39975	1.8320	.44516

#1	10.269	1.0006	.46910	.00028	.45982	1.0386	-.02140	.47723	.44964	.50791
#2	10.226	1.0060	.46827	.00112	.45974	1.0302	-.00437	.47994	.46145	.50472

Check ?	Chk Pass	Chk Pass	Chk Pass	None	Chk Pass	Chk Pass	None	Chk Pass	Chk Pass	Chk Pass
Value										
Range										

Int. Std.	Y_2243	Y_3600	Y_3774
Units	Cts/S	Cts/S	Cts/S
Avg	2533.5	39475.	2111.9
Stddev	48.5	39.	11.6
%RSD	1.9149	.09966	.55078

#1	2567.8	39447.	2103.6
#2	2499.2	39503.	2120.1

Sample Name: CCB Acquired: 5/19/2016 1:20:03 Type: QC
 Method: 6500_025(v6) Mode: CONC Corr. Factor: 1.000000
 User: CRHOADES Prep Date: Custom ID2: Custom ID3:
 Comment:

Elem	Ag3280	Al1670	As1890	B_2089	Ba4554	Be3130	Bi2230	Ca3179	Cd2288	Co2286	Cr2055
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	-.00015	-.00035	-.00582	.00092	-.00126	.00021	.00442	-.01426	-.00024	-.00026	-.00039
Stddev	.00032	.00064	.00824	.00050	.00004	.00028	.00059	.01205	.00008	.00020	.00012
%RSD	212.90	185.17	141.65	54.169	2.9684	135.20	13.437	84.499	33.136	77.370	31.998

#1	-.00037	.00011	-.01165	.00127	-.00123	.00001	.00400	-.00574	-.00030	-.00041	-.00030
#2	.00008	-.00080	.00001	.00057	-.00129	.00041	.00485	-.02278	-.00019	-.00012	-.00048

Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit											
Low Limit											

Elem	Cu3247	Fe2599	K_7664	Li6707	Mg2790	Mn2576	Mo2020	Na5895	Ni2316	P_1782	Pb2203
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	-.00121	-.00520	.09383	.00020	.00155	.00000	.00197	.27444	-.00075	-.00087	-.00150
Stddev	.00039	.00234	.03182	.00178	.00199	.00005	.00060	.00240	.00048	.00117	.00302
%RSD	32.363	44.909	33.918	871.91	128.51	2568.9	30.635	.87482	64.188	134.71	201.43

#1	-.00093	-.00355	.11633	-.00106	.00014	-.00003	.00155	.27274	-.00110	-.00004	.00064
#2	-.00149	-.00685	.07132	.00147	.00295	.00004	.00240	.27614	-.00041	-.00170	-.00363

Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit											
Low Limit											

Elem	S_1820	Sb2068	Se1960	Si2881	SiO2	Sn1899	Sr4077	Th2837	Ti3349	Ti1908	U_3701
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	F .29045	W .00561	.00216	.01527	.03267	-.00017	.00027	-.00014	-.00003	.00348	-.03108
Stddev	.00575	.00595	.00676	.00394	.00844	.00075	.00009	.00175	.00015	.00048	.03199
%RSD	1.9794	106.12	312.35	25.833	25.833	426.74	33.077	1288.6	497.96	13.902	102.93

#1	.28638	.00140	-.00261	.01248	.02670	.00035	.00034	.00110	-.00014	.00314	-.00846
#2	.29451	.00982	.00694	.01806	.03864	-.00070	.00021	-.00137	.00008	.00382	-.05371

Check ?	Chk Fail	Chk Warn	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit	.10000	.00100									
Low Limit	-.20000	-.00100									

Elem	V_2924	Zn2062	Zr3391
Units	ppm	ppm	ppm
Avg	.00026	-.00107	-.00059
Stddev	.00036	.00008	.00217
%RSD	139.33	7.9527	370.24

#1	.00052	-.00101	.00095
#2	.00000	-.00113	-.00212

Check ?	Chk Pass	Chk Pass	Chk Pass
High Limit			
Low Limit			

Int. Std.	Y_2243	Y_3600	Y_3774
Units	Cts/S	Cts/S	Cts/S
Avg	2622.2	41714.	2192.4
Stddev	8.1	193.	68.0
%RSD	.31009	.46340	3.1017

#1	2616.4	41851.	2144.3
#2	2627.9	41577.	2240.5

Sample Name: CCVL-3897520 Acquired: 5/19/2016 1:22:25 Type: QC
Method: 6500_025(v6) Mode: CONC Corr. Factor: 1.000000
User: CRHOADES Prep Date: Custom ID2: Custom ID3:
Comment:

Elem	Ag3280	Al1670	As1890	B_2089	Ba4554	Be3130	Bi2230	Ca3179	Cd2288	Co2286	Cr2055	Cu3247
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.00992	.11840	F .00959	.09891	.00926	.00124	.12121	.19020	.00521	.01038	.01081	.01520
Stddev	.00088	.00496	.00088	.00131	.00109	.00007	.00103	.02082	.00050	.00064	.00032	.00102
%RSD	8.8880	4.1854	9.1970	1.3202	11.786	5.4063	.84764	10.949	9.5697	6.1706	2.9493	6.6924

#1	.01054	.12191	.01022	.09799	.01003	.00129	.12194	.20492	.00556	.01084	.01103	.01448
#2	.00930	.11490	.00897	.09983	.00848	.00119	.12048	.17547	.00486	.00993	.01058	.01591

Check ?	Chk Pass	Chk Pass	Chk Fail	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Value			.01500									
Range			-30.000%									

Elem	Fe2599	K_7664	Li6707	Mg2790	Mn2576	Mo2020	Na5895	Ni2316	P_1782	Pb2203	S_1820	Sb2068
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.12020	3.1202	.01134	.20799	.00975	.02149	1.2994	.04128	2.9620	.00932	.29909	.02429
Stddev	.00167	.0742	.00333	.00396	.00008	.00052	.0284	.00027	.0425	.00029	.04860	.00743
%RSD	1.3878	2.3768	29.389	1.9023	.87161	2.4283	2.1863	.66024	1.4363	3.0782	16.249	30.589

#1	.12138	3.1727	.00899	.20519	.00969	.02186	1.3195	.04147	2.9920	.00952	.33345	.01903
#2	.11902	3.0678	.01370	.21078	.00981	.02112	1.2793	.04109	2.9319	.00912	.26472	.02954

Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	None	Chk Pass
Value												
Range												

Elem	Se1960	Si2881	SiO2	Sn1899	Sr4077	Th2837	Ti3349	Ti1908	U_3701	V_2924	Zn2062	Zr3391
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.01616	.50517	1.0811	.10582	.01014	.01549	.00901	.01344	.07502	.01032	.01919	.01582
Stddev	.00211	.05041	.1079	.00172	.00001	.00065	.00034	.00039	.05047	.00039	.00045	.00089
%RSD	13.023	9.9796	9.9796	1.6279	.08616	4.1773	3.7430	2.9272	67.284	3.8145	2.3240	5.6177

#1	.01765	.54082	1.1574	.10704	.01015	.01595	.00877	.01316	.03933	.01060	.01887	.01519
#2	.01467	.46952	1.0048	.10461	.01014	.01503	.00925	.01371	.11071	.01005	.01950	.01644

Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Value												
Range												

Int. Std.	Y_2243	Y_3600	Y_3774
Units	Cts/S	Cts/S	Cts/S
Avg	2611.4	41921.	2309.8
Stddev	13.1	284.	79.5
%RSD	.50145	.67744	3.4413

#1	2620.7	42122.	2253.6
#2	2602.2	41721.	2366.0

Sample Name: MB 280-325504/1-A Acquired: 5/19/2016 1:25:05 Type: Unk

Method: 6500_025(v6) Mode: CONC Corr. Factor: 1.000000

User: CRHOADES Prep Date: 5/17 Custom ID2: Custom ID3:

Comment: 325504 200.7 (Cu Fe Zn)

Elem	Ag3280	Al1670	As1890	B_2089	Ba4554	Be3130	Bi2230	Ca3179	Cd2288
Line	328.068 {103}	167.079 {502}	189.042 {478}	208.959 {461}	455.403 { 74}	313.042 {108}	223.061 {451}	317.933 {106}	228.802 {447}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	-0.00015	.00104	.00109	-0.00064	-0.00034	.00011	.00308	-0.00400	-0.00022
Stddev	.00007	.00073	.00121	.00082	.00030	.00013	.00266	.00382	.00004
%RSD	47.462	69.968	111.00	129.26	88.010	116.87	86.482	95.544	16.946

#1	-0.00020	.00156	.00195	-0.00122	-0.00013	.00020	.00120	-0.00670	-0.00020
#2	-0.00010	.00053	.00024	-0.00005	-0.00055	.00002	.00496	-0.00130	-0.00025

Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Elem	Co2286	Cr2055	Cu3247	Fe2599	K_7664	Li6707	Mg2790	Mn2576	Mo2020
Line	228.616 {447}	205.560 {464}	324.754 {104}	259.940 {130}	766.490 { 44}	670.784 { 50}	279.079 {121}2	257.610 {131}	202.030 {467}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	-0.00002	.00020	-0.00078	.00139	.10822	-0.00173	.00335	.00000	-0.00050
Stddev	.00003	.00010	.00062	.00575	.07197	.00409	.00391	.00016	.00015
%RSD	186.40	52.419	79.895	415.27	66.508	237.14	116.92	5497.4	29.108

#1	.00001	.00013	-0.00034	-0.00268	.15911	.00117	.00058	-0.00011	-0.00040
#2	-0.00004	.00027	-0.00122	.00545	.05732	-0.00462	.00611	.00012	-0.00060

Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Elem	Na5895	Ni2316	P_1782	Pb2203	S_1820	Sb2068	Se1960	Si2881	SiO2
Line	589.592 { 57}	231.604 {446}	178.284 {489}	220.353 {453}	182.034 {485}	206.833 {463}	196.090 {472}	288.158 {117}	288.158 {117}2
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.25839	-0.00064	-0.00035	-0.00011	F .22469	.00087	.00290	.02402	.05140
Stddev	.01739	.00008	.00143	.00006	.00691	.00020	.00249	.01012	.02166
%RSD	6.7311	11.997	411.43	58.223	3.0741	22.749	85.760	42.139	42.139

#1	.27069	-0.00058	.00066	-0.00006	.22957	.00101	.00466	.03118	.06672
#2	.24609	-0.00069	-0.00136	-0.00015	.21980	.00073	.00114	.01686	.03609

Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Fail	Chk Pass	Chk Pass	Chk Pass	None
High Limit					.10000				
Low Limit					-0.10000				

Elem	Sn1899	Sr4077	Th2837	Ti3349	Ti1908	U_3701	V_2924	Zn2062	Zr3391
Line	189.989 {477}	407.771 { 83}	283.730 {119}	334.904 {101}	190.856 {477}	370.152 { 91}	292.402 {115}	206.200 {163}	339.198 { 99}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	-0.00056	.00042	.00288	.00012	-0.00302	F -.08692	.00107	-0.00030	-0.00193
Stddev	.00128	.00010	.00206	.00002	.00107	.02149	.00029	.00005	.00188
%RSD	228.96	23.038	71.414	19.372	35.354	24.720	27.208	17.401	97.550

#1	.00035	.00035	.00433	.00010	-0.00378	-.10212	.00086	-0.00027	-0.00060
#2	-0.00146	.00049	.00143	.00013	-0.00227	-0.07173	.00127	-0.00034	-0.00326

Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Fail	Chk Pass	Chk Pass	Chk Pass
High Limit						.06000			
Low Limit						-0.06000			

Int. Std.	Y_2243	Y_3600	Y_3774
Line	224.306 {450}	360.073 { 94}	377.433 { 89}
Units	Cts/S	Cts/S	Cts/S
Avg	2703.8	42435.	2279.8
Stddev	58.1	486.	4.5
%RSD	2.1472	1.1451	.19731

#1	2662.7	42779.	2276.6
#2	2744.8	42091.	2283.0

Sample Name: LCS 280-325504/2-A Acquired: 5/19/2016 1:27:27 Type: Unk

Method: 6500_025(v6) Mode: CONC Corr. Factor: 1.000000

User: CRHOADES Prep Date: Custom ID2: Custom ID3:

Comment: 325504 200.7 (Cu Fe Zn)

Elem	Ag3280	Al1670	Al3092	As1890	B_2089	Ba4554	Be3130	Bi2230	Ca3179
Line	328.068 {103}	167.079 {502}	309.271 {109}	189.042 {478}	208.959 {461}	455.403 { 74}	313.042 {108}	223.061 {451}	317.933 {106}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.05066	2.1100	F 2.4302	1.0655	1.0198	2.0580	.04738	2.2017	49.146
Stddev	.00107	.0264	.0072	.0150	.0087	.0186	.00007	.0318	.502
%RSD	2.1141	1.2501	.29676	1.4103	.84878	.90399	.13996	1.4447	1.0209

#1	.04990	2.1286	2.4251	1.0762	1.0259	2.0711	.04743	2.2242	49.501
#2	.05142	2.0913	2.4353	1.0549	1.0137	2.0448	.04733	2.1792	48.792

Check ?	Chk Pass	Chk Pass	Chk Fail	Chk Pass	Chk Pass	Chk Pass	Chk Pass	None	Chk Pass
High Limit			2.2250						
Low Limit			1.7300						

Elem	Cd2288	Co2286	Cr2055	Cu3247	Fe2599	K_7664	Li6707	Mg2790	Mn2576
Line	228.802 {447}	228.616 {447}	205.560 {464}	324.754 {104}	259.940 {130}	766.490 { 44}	670.784 { 50}	279.079 {121}2	257.610 {131}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.09893	.48513	.20036	.26619	.96968	49.618	.99663	48.303	.46780
Stddev	.00075	.00447	.00133	.00281	.00419	.392	.00208	.111	.00000
%RSD	.75626	.92216	.66604	1.0547	.43249	.78937	.20876	.22880	.00036

#1	.09946	.48830	.20130	.26421	.97265	49.895	.99811	48.225	.46780
#2	.09840	.48197	.19942	.26818	.96672	49.341	.99516	48.381	.46779

Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Elem	Mo2020	Na8183	Ni2316	P_1782	Pb2203	S_1820	Sb2068	Se1960	Si2881
Line	202.030 {467}	818.326 { 41}	231.604 {446}	178.284 {489}	220.353 {453}	182.034 {485}	206.833 {463}	196.090 {472}	288.158 {117}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	1.0746	54.669	.47789	10.016	.50092	2.3523	.52408	2.2036	9.9230
Stddev	.0117	1.477	.00456	.081	.00386	.0109	.00169	.0230	.0823
%RSD	1.0844	2.7013	.95513	.80712	.77050	.46513	.32198	1.0435	.82936

#1	1.0828	53.624	.48111	10.073	.50364	2.3600	.52289	2.2198	9.8648
#2	1.0663	55.713	.47466	9.9584	.49819	2.3446	.52528	2.1873	9.9812

Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	None	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Elem	SiO2	Sn1899	Sr4077	Th2837	Ti3349	Ti1908	U_3701	V_2924	Zn2062
Line	288.158 {117}2	189.989 {477}	407.771 { 83}	283.730 {119}	334.904 {101}	190.856 {477}	370.152 { 91}	292.402 {115}	206.200 {163}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	21.235	2.0742	.95189	.95556	.96026	1.9667	2.1569	.48673	.45879
Stddev	.176	.0015	.01099	.00038	.00122	.0604	.0223	.00045	.00059
%RSD	.82936	.07180	1.1546	.03958	.12733	3.0702	1.0357	.09149	.12875

#1	21.111	2.0753	.95967	.95583	.95939	2.0094	2.1727	.48641	.45921
#2	21.360	2.0732	.94412	.95529	.96112	1.9240	2.1411	.48704	.45838

Check ?	None	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Elem	Zr3391								
Line	339.198 { 99}								
Units	ppm								
Avg	.54347								
Stddev	.00232								
%RSD	.42666								

#1	.54511								
#2	.54183								

Check ?	Chk Pass								
High Limit									
Low Limit									

Sample Name: LCS 280-325504/2-A Acquired: 5/19/2016 1:27:27 Type: Unk
 Method: 6500_025(v6) Mode: CONC Corr. Factor: 1.000000
 User: CRHOADES Prep Date: Custom ID2: Custom ID3:
 Comment: 325504 200.7 (Cu Fe Zn)

Int. Std.	Y_2243	Y_3600	Y_3774
Line	224.306 {450}	360.073 { 94}	377.433 { 89}
Units	Cts/S	Cts/S	Cts/S
Avg	2633.5	40476.	2232.7
Stddev	26.9	80.	35.7
%RSD	1.0223	.19709	1.6000
#1	2614.5	40420.	2207.4
#2	2652.5	40533.	2258.0

Sample Name: 280-83179-C-7-B Acquired: 5/19/2016 1:29:55 Type: Unk
Method: 6500_025(v6) Mode: CONC Corr. Factor: 1.000000
User: CRHOADES Prep Date: Custom ID2: Custom ID3:
Comment: 325504 200.7 (Cu Fe Zn)

Elem	Ag3280	Al1670	As1890	B_2089	Ba4554	Be3130	Bi2230	Ca3179	Cd2288
Line	328.068 {103}	167.079 {502}	189.042 {478}	208.959 {461}	455.403 { 74}	313.042 {108}	223.061 {451}	317.933 {106}	228.802 {447}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	-.00167	.69452	.00442	.02171	.08284	.00034	.00847	80.521	.00033
Stddev	.00055	.00767	.00284	.00123	.00066	.00007	.00021	.639	.00009
%RSD	33.194	1.1042	64.108	5.6594	.79370	19.300	2.4324	.79397	26.530

#1	-.00128	.68910	.00242	.02258	.08331	.00039	.00832	80.973	.00027
#2	-.00206	.69994	.00643	.02084	.08238	.00030	.00861	80.069	.00039

Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Elem	Co2286	Cr2055	Cu3247	Fe2599	K_7664	Li6707	Mg2790	Mn2576	Mo2020
Line	228.616 {447}	205.560 {464}	324.754 {104}	259.940 {130}	766.490 { 44}	670.784 { 50}	279.079 {121}2	257.610 {131}	202.030 {467}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.00024	.00086	.00024	.69077	1.9191	.00148	19.141	.09957	.00404
Stddev	.00005	.00013	.00019	.00540	.1132	.00142	.013	.00032	.00150
%RSD	21.481	14.881	79.403	.78127	5.8991	95.654	.06887	.32425	37.143

#1	.00028	.00077	.00010	.69459	1.9992	.00248	19.151	.09980	.00298
#2	.00021	.00095	.00037	.68696	1.8390	.00048	19.132	.09934	.00511

Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Elem	Na8183	Ni2316	P_1782	Pb2203	S_1820	Sb2068	Se1960	Si2881	SiO2
Line	818.326 { 41}	231.604 {446}	178.284 {489}	220.353 {453}	182.034 {485}	206.833 {463}	196.090 {472}	288.158 {117}	288.158 {117}2
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	53.061	.00006	.03787	.00004	27.170	.00337	.00634	3.5757	7.6520
Stddev	.622	.00027	.00399	.00259	.270	.00390	.00365	.0430	.0920
%RSD	1.1714	482.10	10.541	6818.0	.99397	115.82	57.579	1.2022	1.2022

#1	53.501	-.00013	.03505	.00187	26.979	.00061	.00892	3.6061	7.7171
#2	52.622	.00024	.04070	-.00179	27.361	.00613	.00376	3.5453	7.5870

Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Elem	Sn1899	Sr4077	Th2837	Ti3349	Ti1908	U_3701	V_2924	Zn2062	Zr3391
Line	189.989 {477}	407.771 { 83}	283.730 {119}	334.904 {101}	190.856 {477}	370.152 { 91}	292.402 {115}	206.200 {163}	339.198 { 99}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	-.00027	1.3170	-.00114	.01279	.01952	-.02347	.00207	.00160	.00086
Stddev	.00095	.0100	.00072	.00144	.00417	.06729	.00127	.00080	.00205
%RSD	345.32	.76239	63.231	11.271	21.385	286.65	61.279	49.874	237.23

#1	-.00095	1.3241	-.00063	.01381	.01657	-.07105	.00117	.00104	-.00058
#2	.00040	1.3099	-.00165	.01177	.02247	.02411	.00296	.00216	.00231

Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Int. Std.	Y_2243	Y_3600	Y_3774
Line	224.306 {450}	360.073 { 94}	377.433 { 89}
Units	Cts/S	Cts/S	Cts/S
Avg	2650.3	39299.	2089.7
Stddev	35.1	29.	28.0
%RSD	1.3263	.07457	1.3375

#1	2625.5	39278.	2069.9
#2	2675.2	39320.	2109.5

Sample Name: 280-83179-C-7-B SD@5 Acquired: 5/19/2016 1:32:33 Type: Unk
Method: 6500_025(v6) Mode: CONC Corr. Factor: 1.000000
User: CRHOADES Prep Date: Custom ID2: Custom ID3:
Comment: 325504 200.7 (Cu Fe Zn)

Elem	Ag3280	Al1670	As1890	B_2089	Ba4554	Be3130	Bi2230	Ca3179	Cd2288
Line	328.068 {103}	167.079 {502}	189.042 {478}	208.959 {461}	455.403 {74}	313.042 {108}	223.061 {451}	317.933 {106}	228.802 {447}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	-.00030	.17674	.00396	.00462	.01606	.00038	-.00069	16.643	-.00013
Stddev	.00047	.00199	.00087	.00122	.00018	.00001	.00011	.061	.00028
%RSD	154.94	1.1242	22.033	26.450	1.1074	2.8825	15.987	.36484	223.11

#1	.00003	.17815	.00334	.00375	.01593	.00037	-.00077	16.600	.00007
#2	-.00063	.17534	.00458	.00548	.01618	.00039	-.00061	16.686	-.00033

Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Elem	Co2286	Cr2055	Cu3247	Fe2599	K_7664	Li6707	Mg2790	Mn2576	Mo2020
Line	228.616 {447}	205.560 {464}	324.754 {104}	259.940 {130}	766.490 {44}	670.784 {50}	279.079 {121}2	257.610 {131}	202.030 {467}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.00002	.00009	-.00126	.16229	.47904	-.00121	3.9028	.02044	-.00030
Stddev	.00042	.00003	.00099	.00070	.04434	.00065	.0106	.00025	.00008
%RSD	2670.3	38.602	78.700	.43272	9.2564	53.486	.27041	1.2192	26.654

#1	.00032	.00006	-.00056	.16179	.44769	-.00167	3.8954	.02026	-.00024
#2	-.00028	.00011	-.00196	.16278	.51040	-.00075	3.9103	.02061	-.00035

Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Elem	Na5895	Na8183	Ni2316	P_1782	Pb2203	S_1820	Sb2068	Se1960	Si2881
Line	589.592 {57}	818.326 {41}	231.604 {446}	178.284 {489}	220.353 {453}	182.034 {485}	206.833 {463}	196.090 {472}	288.158 {117}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	10.000	12.373	-.00053	.01277	-.00034	5.4475	-.00197	.00182	.79584
Stddev	.007	.318	.00053	.00202	.00221	.0428	.00245	.00420	.01531
%RSD	.06940	2.5722	99.634	15.863	645.22	.78612	124.64	231.29	1.9241

#1	9.9956	12.598	-.00091	.01133	.00122	5.4778	-.00023	-.00115	.80667
#2	10.005	12.148	-.00016	.01420	-.00190	5.4172	-.00370	.00478	.78501

Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Elem	SiO2	Sn1899	Sr4077	Th2837	Ti3349	Ti1908	U_3701	V_2924	Zn2062
Line	288.158 {117}2	189.989 {477}	407.771 {83}	283.730 {119}	334.904 {101}	190.856 {477}	370.152 {91}	292.402 {115}	206.200 {163}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	1.7031	-.00171	.27010	.00003	.00500	.00120	-.01201	.00188	.00080
Stddev	.0328	.00021	.00155	.00243	.00094	.00308	.02409	.00036	.00053
%RSD	1.9241	12.188	.57264	7149.3	18.721	256.72	200.52	19.393	66.314

#1	1.7263	-.00156	.27119	.00176	.00434	.00338	.00502	.00162	.00118
#2	1.6799	-.00186	.26900	-.00169	.00566	-.00098	-.02905	.00213	.00042

Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Elem	Zr3391								
Line	339.198 {99}								
Units	ppm								
Avg	-.00104								
Stddev	.00022								
%RSD	20.634								

#1	-.00120								
#2	-.00089								

Check ?	Chk Pass								
High Limit									
Low Limit									

Sample Name: 280-83179-C-7-B SD@5 Acquired: 5/19/2016 1:32:33 Type: Unk
 Method: 6500_025(v6) Mode: CONC Corr. Factor: 1.000000
 User: CRHOADES Prep Date: Custom ID2: Custom ID3:
 Comment: 325504 200.7 (Cu Fe Zn)

Int. Std.	Y_2243	Y_3600	Y_3774
Line	224.306 {450}	360.073 { 94}	377.433 { 89}
Units	Cts/S	Cts/S	Cts/S
Avg	2626.5	40820.	2116.5
Stddev	6.9	368.	35.1
%RSD	.26346	.90255	1.6569
#1	2621.6	41080.	2141.3
#2	2631.4	40559.	2091.7

Sample Name: 280-83179-C-7-C MS Acquired: 5/19/2016 1:35:11 Type: Unk
Method: 6500_025(v6) Mode: CONC Corr. Factor: 1.000000
User: CRHOADES Prep Date: Custom ID2: Custom ID3:
Comment: 325504 200.7 (Cu Fe Zn)

Elem	Ag3280	Al3092	As1890	B_2089	Ba4554	Be3130	Bi2230	Ca3179	Cd2288
Line	328.068 {103}	309.271 {109}	189.042 {478}	208.959 {461}	455.403 {74}	313.042 {108}	223.061 {451}	317.933 {106}	228.802 {447}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.05038	3.6098	1.0873	1.0484	2.1939	.04802	F 2.1996	133.28	.10006
Stddev	.00039	.0056	.0066	.0020	.0048	.00059	.0076	.27	.00003
%RSD	.76703	.15581	.60821	.19219	.21957	1.2275	.34420	.20335	.02619

#1	.05011	3.6138	1.0920	1.0469	2.1905	.04760	2.2049	133.09	.10008
#2	.05065	3.6059	1.0826	1.0498	2.1974	.04844	2.1942	133.48	.10005

Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Fail	Chk Pass	Chk Pass
High Limit							.10000		
Low Limit							-.10000		

Elem	Co2286	Cr2055	Cu3247	Fe2599	K_7664	Li6707	Mg2790	Mn2576	Mo2020
Line	228.616 {447}	205.560 {464}	324.754 {104}	259.940 {130}	766.490 {44}	670.784 {50}	279.079 {121}2	257.610 {131}	202.030 {467}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.48278	.20267	.26825	1.7172	52.949	.99020	67.677	.56246	1.0797
Stddev	.00060	.00040	.00088	.0076	.257	.00251	.188	.00101	.0030
%RSD	.12462	.19967	.32871	.44162	.48519	.25351	.27769	.18022	.28155

#1	.48235	.20295	.26763	1.7225	52.767	.99198	67.544	.56175	1.0818
#2	.48320	.20238	.26887	1.7118	53.131	.98843	67.810	.56318	1.0775

Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Elem	Na8183	Ni2316	P_1782	Pb2203	S_1820	Sb2068	Se1960	Si2881	SiO2
Line	818.326 {41}	231.604 {446}	178.284 {489}	220.353 {453}	182.034 {485}	206.833 {463}	196.090 {472}	288.158 {117}	288.158 {117}2
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	106.63	.47468	W 10.323	.49825	30.411	.52726	2.1885	14.083	30.138
Stddev	.16	.00054	.018	.00076	.033	.00339	.0040	.052	.111
%RSD	.14802	.11369	.17440	.15212	.10755	.64271	.18159	.36910	.36910

#1	106.74	.47430	10.336	.49879	30.387	.52965	2.1913	14.120	30.217
#2	106.51	.47506	10.310	.49772	30.434	.52486	2.1857	14.046	30.059

Check ?	Chk Pass	Chk Pass	Chk Warn	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit			2.0000						
Low Limit			-1.0000						

Elem	Sn1899	Sr4077	Th2837	Ti3349	Ti1908	U_3701	V_2924	Zn2062	Zr3391
Line	189.989 {477}	407.771 {83}	283.730 {119}	334.904 {101}	190.856 {477}	370.152 {91}	292.402 {115}	206.200 {163}	339.198 {99}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	W 2.0451	2.3425	.95080	.96708	1.8417	2.1296	.48410	.45429	.53898
Stddev	.0028	.0104	.00405	.00064	.0632	.0446	.00082	.00199	.00008
%RSD	.13639	.44313	.42578	.06571	3.4300	2.0948	.16950	.43783	.01504

#1	2.0431	2.3351	.94794	.96663	1.8864	2.1612	.48352	.45289	.53903
#2	2.0470	2.3498	.95366	.96753	1.7971	2.0981	.48468	.45570	.53892

Check ?	Chk Warn	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit	2.0000								
Low Limit	-.05000								

Int. Std.	Y_2243	Y_3600	Y_3774
Line	224.306 {450}	360.073 {94}	377.433 {89}
Units	Cts/S	Cts/S	Cts/S
Avg	2575.9	40147.	2161.2
Stddev	11.3	49.	21.7
%RSD	.43752	.12246	1.0025

#1	2583.9	40113.	2145.8
#2	2568.0	40182.	2176.5

Sample Name: 280-83179-C-7-D MSD Acquired: 5/19/2016 1:37:37 Type: Unk
Method: 6500_025(v6) Mode: CONC Corr. Factor: 1.000000
User: CRHOADES Prep Date: Custom ID2: Custom ID3:
Comment: 325504 200.7 (Cu Fe Zn)

Elem	Ag3280	Al3092	As1890	B_2089	Ba4554	Be3130	Bi2230	Ca3179	Cd2288
Line	328.068 {103}	309.271 {109}	189.042 {478}	208.959 {461}	455.403 { 74}	313.042 {108}	223.061 {451}	317.933 {106}	228.802 {447}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.04931	3.5277	1.0858	1.0390	2.1111	.04693	F 2.1975	130.07	.09961
Stddev	.00053	.0411	.0070	.0007	.0064	.00018	.0023	.42	.00003
%RSD	1.0731	1.1655	.64549	.06983	.30410	.39146	.10331	.32042	.03167

#1	.04968	3.5568	1.0809	1.0385	2.1157	.04680	2.1959	130.36	.09963
#2	.04894	3.4987	1.0908	1.0395	2.1066	.04706	2.1991	129.77	.09959

Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Fail	Chk Pass	Chk Pass
High Limit							.10000		
Low Limit							-.10000		

Elem	Co2286	Cr2055	Cu3247	Fe2599	K_7664	Li6707	Mg2790	Mn2576	Mo2020
Line	228.616 {447}	205.560 {464}	324.754 {104}	259.940 {130}	766.490 { 44}	670.784 { 50}	279.079 {121}2	257.610 {131}	202.030 {467}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.48092	.20074	.26152	1.6856	51.063	.96859	66.687	.55334	1.0765
Stddev	.00019	.00040	.00131	.0097	.242	.00548	.032	.00073	.0022
%RSD	.03892	.19736	.49968	.57252	.47378	.56547	.04804	.13115	.20432

#1	.48078	.20102	.26244	1.6788	51.234	.96472	66.710	.55385	1.0749
#2	.48105	.20046	.26060	1.6925	50.892	.97247	66.665	.55283	1.0780

Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Elem	Na8183	Ni2316	P_1782	Pb2203	S_1820	Sb2068	Se1960	Si2881	SiO2
Line	818.326 { 41}	231.604 {446}	178.284 {489}	220.353 {453}	182.034 {485}	206.833 {463}	196.090 {472}	288.158 {117}	288.158 {117}2
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	105.80	.47303	W 10.283	.49678	30.986	.53282	2.2424	13.839	29.616
Stddev	.76	.00030	.020	.00280	.130	.00276	.0036	.025	.053
%RSD	.71745	.06428	.19736	.56372	.41988	.51781	.16243	.17919	.17919

#1	105.26	.47281	10.269	.49480	30.894	.53087	2.2399	13.857	29.654
#2	106.34	.47324	10.297	.49876	31.078	.53477	2.2450	13.822	29.579

Check ?	Chk Pass	Chk Pass	Chk Warn	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit			2.0000						
Low Limit			-1.0000						

Elem	Sn1899	Sr4077	Th2837	Ti3349	Ti1908	U_3701	V_2924	Zn2062	Zr3391
Line	189.989 {477}	407.771 { 83}	283.730 {119}	334.904 {101}	190.856 {477}	370.152 { 91}	292.402 {115}	206.200 {163}	339.198 { 99}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	W 2.0714	2.2880	.93435	.94492	1.8939	2.0465	.47529	.45042	.52186
Stddev	.0112	.0082	.00744	.00058	.0414	.0574	.00033	.00014	.00423
%RSD	.54075	.35935	.79638	.06172	2.1863	2.8062	.06918	.03078	.81013

#1	2.0635	2.2938	.93961	.94450	1.9232	2.0059	.47552	.45032	.51887
#2	2.0793	2.2822	.92909	.94533	1.8647	2.0871	.47505	.45052	.52484

Check ?	Chk Warn	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit	2.0000								
Low Limit	-.05000								

Int. Std.	Y_2243	Y_3600	Y_3774
Line	224.306 {450}	360.073 { 94}	377.433 { 89}
Units	Cts/S	Cts/S	Cts/S
Avg	2554.5	40241.	2221.7
Stddev	2.3	116.	25.4
%RSD	.09185	.28714	1.1442

#1	2552.9	40160.	2203.7
#2	2556.2	40323.	2239.6

Sample Name: CCVH-3894253 Acquired: 5/19/2016 1:40:03 Type: QC
Method: 6500_025(v6) Mode: CONC Corr. Factor: 1.000000
User: CRHOADES Prep Date: Custom ID2: Custom ID3:
Comment:

Elem	Ag3280	Al3092	As1890	B_2089	Ba4554	Be3130	Bi2230	Ca3179	Cd2288	Co2286	Cr2055
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.00042	52.554	.00207	.00536	-.00009	.00038	W 1.0907	.00334	-.00015	-.00124	.00043
Stddev	.00065	.588	.00527	.00060	.00049	.00044	.0004	.01061	.00017	.00018	.00012
%RSD	156.77	1.1193	254.32	11.217	529.47	115.79	.03840	317.25	112.14	14.891	29.064

#1	.00088	52.970	.00579	.00579	.00026	.00007	1.0904	.01084	-.00027	-.00111	.00034
#2	-.00005	52.138	-.00165	.00494	-.00044	.00069	1.0910	-.00416	-.00003	-.00137	.00051

Check ?	None	Chk Pass	None	None	None	None	Chk Warn	None	None	None	None
Value							1.0000				
Range							5.0000%				

Elem	Cu3247	Fe2714	K_7664	Li6707	Mg2790	Mn2576	Mo2020	Na8183	Ni2316	P_1782	Pb2203
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	-.00124	49.155	.24054	.00174	.02715	-.00032	.00351	257.19	.00122	.00485	-.00058
Stddev	.00004	.028	.09486	.00224	.00114	.00013	.00124	.26	.00020	.00101	.00070
%RSD	2.8864	.05720	39.438	128.89	4.2136	39.785	35.396	.10131	16.466	20.901	120.82

#1	-.00127	49.135	.30762	.00332	.02634	-.00041	.00263	257.38	.00108	.00414	-.00107
#2	-.00121	49.175	.17346	.00015	.02795	-.00023	.00439	257.01	.00136	.00557	-.00008

Check ?	None	Chk Pass	None	None	None	None	None	Chk Pass	None	None	None
Value											
Range											

Elem	S_1820	Sb2068	Se1960	Si2881	SiO2	Sn1899	Sr4077	Th2837	Ti3349	Ti1908	U_3701
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	W 5.3066	-.00986	.01484	.03139	.06718	.00070	.00103	W 4.6075	.00624	.01303	10.487
Stddev	.0107	.00158	.00117	.01154	.02470	.00130	.00007	.0091	.00104	.00397	.284
%RSD	.20104	16.025	7.8590	36.769	36.769	185.29	6.7446	.19775	16.679	30.466	2.7088

#1	5.2990	-.00874	.01402	.02323	.04972	-.00022	.00098	4.6140	.00550	.01022	10.286
#2	5.3141	-.01098	.01567	.03956	.08465	.00162	.00108	4.6011	.00697	.01584	10.687

Check ?	Chk Warn	None	None	None	None	None	None	Chk Warn	None	None	Chk Pass
Value	5.0000							5.0000			
Range	5.0000%							-5.0000%			

Elem	V_2924	Zn2062	Zr3391
Units	ppm	ppm	ppm
Avg	.00952	-.00063	.05338
Stddev	.00097	.00002	.00060
%RSD	10.166	3.3922	1.1211

#1	.00883	-.00065	.05381
#2	.01020	-.00062	.05296

Check ?	None	None	None
Value			
Range			

Int. Std.	Y_2243	Y_3600	Y_3774
Units	Cts/S	Cts/S	Cts/S
Avg	2631.6	40461.	2213.0
Stddev	33.6	69.	38.7
%RSD	1.2766	.17012	1.7485

#1	2655.3	40413.	2185.6
#2	2607.8	40510.	2240.3

Sample Name: CCV-3894251 Acquired: 5/19/2016 1:42:40 Type: QC
Method: 6500_025(v6) Mode: CONC Corr. Factor: 1.000000
User: CRHOADES Prep Date: Custom ID2: Custom ID3:
Comment:

Elem	Ag3280	Al1670	As1890	B_2089	Ba4554	Be3130	Bi2230	Ca3179	Cd2288	Co2286	Cr2055	Cu3247	Fe2599
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.49042	.54316	1.0427	.49102	.50804	.46125	-.00010	4.9044	.49425	.49875	.50616	.51747	2.3403
Stddev	.00166	.01285	.0203	.01042	.00592	.00384	.00044	.0336	.00013	.00714	.00876	.00313	.0166
%RSD	.33809	2.3664	1.9437	2.1217	1.1657	.83355	455.62	.68606	.02668	1.4312	1.7313	.60458	.70787

#1	.48925	.55225	1.0570	.49839	.51223	.46397	-.00041	4.9281	.49434	.50379	.51236	.51525	2.3520
#2	.49159	.53408	1.0284	.48365	.50385	.45853	.00022	4.8806	.49416	.49370	.49996	.51968	2.3286

Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	None	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Value													
Range													

Elem	K_7664	Li6707	Mg2790	Mn2576	Mo2020	Na5895	Ni2316	P_1782	Pb2203	S_1820	Sb2068	Se1960	Si2881
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	48.949	.97947	18.829	.46366	.51342	5.1379	.48845	.96374	1.0025	.15263	.98917	1.0562	4.7812
Stddev	.419	.00464	.034	.00078	.01002	.0271	.00825	.00987	.0210	.00910	.02475	.0263	.0580
%RSD	.85558	.47371	.17849	.16893	1.9514	.52668	1.6889	1.0241	2.0926	5.9628	2.5018	2.4877	1.2141

#1	49.245	.97618	18.806	.46310	.52050	5.1571	.49428	.97072	1.0173	.15907	1.0067	1.0748	4.7402
#2	48.653	.98275	18.853	.46421	.50633	5.1188	.48261	.95676	.98767	.14620	.97167	1.0376	4.8223

Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	None	Chk Pass	Chk Pass	Chk Pass
Value													
Range													

Elem	SiO2	Sn1899	Sr4077	Th2837	Ti3349	Ti1908	U_3701	V_2924	Zn2062	Zr3391
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	10.232	1.0189	.47288	.00161	.46073	1.0521	-.00433	.47940	.45226	.51187
Stddev	.124	.0154	.00574	.00269	.00003	.0255	.02567	.00377	.00544	.00267
%RSD	1.2141	1.5078	1.2148	166.74	.00654	2.4279	593.32	.78576	1.2019	.52126
#1	10.144	1.0298	.47694	-.00029	.46075	1.0701	.01383	.48207	.45610	.50998
#2	10.320	1.0080	.46882	.00351	.46071	1.0340	-.02248	.47674	.44841	.51375

Check ?	Chk Pass	Chk Pass	Chk Pass	None	Chk Pass	Chk Pass	None	Chk Pass	Chk Pass	Chk Pass
Value										
Range										

Int. Std.	Y_2243	Y_3600	Y_3774
Units	Cts/S	Cts/S	Cts/S
Avg	2616.8	40687.	2196.4
Stddev	51.8	100.	36.0
%RSD	1.9793	.24672	1.6397
#1	2580.2	40758.	2171.0
#2	2653.5	40616.	2221.9

Sample Name: CCB Acquired: 5/19/2016 1:45:12 Type: QC
 Method: 6500_025(v6) Mode: CONC Corr. Factor: 1.000000
 User: CRHOADES Prep Date: Custom ID2: Custom ID3:
 Comment:

Elem	Ag3280	Al1670	As1890	B_2089	Ba4554	Be3130	Bi2230	Ca3179	Cd2288	Co2286	Cr2055
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.00025	.00106	.00233	.00289	-.00043	.00024	-.00026	-.00252	-.00024	.00003	-.00001
Stddev	.00007	.00044	.00567	.00052	.00045	.00004	.00083	.00426	.00022	.00002	.00015
%RSD	30.317	41.775	243.48	18.009	106.68	17.764	315.43	168.98	94.368	74.083	1656.6

#1	.00030	.00074	-.00168	.00326	-.00010	.00021	.00032	.00049	-.00039	.00001	.00010
#2	.00019	.00137	.00634	.00252	-.00075	.00027	-.00085	-.00553	-.00008	.00004	-.00011

Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit											
Low Limit											

Elem	Cu3247	Fe2599	K_7664	Li6707	Mg2790	Mn2576	Mo2020	Na5895	Ni2316	P_1782	Pb2203
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.00245	F .63683	.10168	-.00196	.00674	F .00568	.00201	.18764	.00067	.00161	-.00189
Stddev	.00014	.00874	.00261	.00165	.00677	.00002	.00077	.00371	.00028	.00342	.00053
%RSD	5.6030	1.3725	2.5643	84.140	100.52	.31611	38.156	1.9775	42.407	212.04	28.114

#1	.00255	.64301	.09983	-.00312	.01153	.00569	.00147	.18502	.00087	.00403	-.00152
#2	.00235	.63065	.10352	-.00079	.00195	.00567	.00256	.19027	.00047	-.00081	-.00227

Check ?	Chk Pass	Chk Fail	Chk Pass	Chk Pass	Chk Pass	Chk Fail	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit		.10000				.00500					
Low Limit		-.10000				-.01000					

Elem	S_1820	Sb2068	Se1960	Si2881	SiO2	Sn1899	Sr4077	Th2837	Ti3349	Ti1908	U_3701
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	F .14918	W .00354	W .00799	.04766	.10200	.00135	.00001	.00077	.00018	.00271	.00626
Stddev	.00838	.00074	.00709	.01288	.02756	.00012	.00010	.00117	.00041	.00401	.03732
%RSD	5.6151	21.056	88.767	27.021	27.021	8.9690	954.63	152.20	230.52	147.82	595.78

#1	.15511	.00301	.00297	.05677	.12148	.00143	.00008	.00160	-.00011	-.00012	-.02013
#2	.14326	.00406	.01300	.03855	.08251	.00126	-.00006	-.00006	.00047	.00555	.03266

Check ?	Chk Fail	Chk Warn	Chk Warn	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit	.10000	.00100	.00750								
Low Limit	-.20000	-.00100	-.01500								

Elem	V_2924	Zn2062	Zr3391
Units	ppm	ppm	ppm
Avg	-.00015	-.00035	-.00318
Stddev	.00014	.00015	.00623
%RSD	93.439	42.055	196.18

#1	-.00025	-.00045	-.00758
#2	-.00005	-.00025	.00123

Check ?	Chk Pass	Chk Pass	Chk Pass
High Limit			
Low Limit			

Int. Std.	Y_2243	Y_3600	Y_3774
Units	Cts/S	Cts/S	Cts/S
Avg	2600.8	41098.	2125.3
Stddev	18.5	141.	53.1
%RSD	.70954	.34369	2.4990

#1	2613.9	40998.	2162.8
#2	2587.8	41198.	2087.7

Sample Name: CCVL-3897520 Acquired: 5/19/2016 1:47:34 Type: QC
Method: 6500_025(v6) Mode: CONC Corr. Factor: 1.000000
User: CRHOADES Prep Date: Custom ID2: Custom ID3:
Comment:

Elem	Ag3280	Al1670	As1890	B_2089	Ba4554	Be3130	Bi2230	Ca3179	Cd2288	Co2286	Cr2055	Cu3247
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.00939	.11359	.01729	.09836	.00996	.00119	.11700	.19236	.00488	.01019	.01037	.01436
Stddev	.00070	.00217	.00458	.00206	.00065	.00007	.00050	.00707	.00005	.00049	.00030	.00007
%RSD	7.4825	1.9106	26.470	2.0899	6.5557	5.8379	.42701	3.6745	1.0712	4.7978	2.9284	.45380

#1	.00889	.11205	.02053	.09690	.01042	.00124	.11665	.18737	.00492	.00985	.01016	.01432
#2	.00989	.11512	.01406	.09981	.00950	.00114	.11736	.19736	.00485	.01054	.01059	.01441

Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Value												
Range												

Elem	Fe2599	K_7664	Li6707	Mg2790	Mn2576	Mo2020	Na5895	Ni2316	P_1782	Pb2203	S_1820	Sb2068
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	F .13944	3.1684	.00932	.20266	.00973	.02109	1.2439	.04008	2.8575	.00977	.12588	.02251
Stddev	.00144	.0085	.00326	.00749	.00001	.00031	.0132	.00081	.0665	.00008	.01748	.00050
%RSD	1.0357	.26736	35.012	3.6971	.10727	1.4918	1.0641	2.0206	2.3267	.86112	13.888	2.2372

#1	.13842	3.1744	.01163	.19737	.00972	.02087	1.2532	.03951	2.8105	.00983	.11352	.02216
#2	.14046	3.1624	.00701	.20796	.00973	.02131	1.2345	.04066	2.9046	.00971	.13824	.02287

Check ?	Chk Fail	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	None	Chk Pass
Value	.10000											
Range	30.000%											

Elem	Se1960	Si2881	SiO2	Sn1899	Sr4077	Th2837	Ti3349	Ti1908	U_3701	V_2924	Zn2062	Zr3391
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	F .02843	.45815	.98045	.10592	.01010	.01752	.00928	.01383	F .03734	.01002	.01858	.01668
Stddev	.00192	.01760	.03767	.00087	.00028	.00219	.00057	.00070	.03888	.00076	.00008	.00039
%RSD	6.7476	3.8425	3.8425	.82185	2.7718	12.501	6.1650	5.0877	104.11	7.6244	.44087	2.3222

#1	.02978	.47060	1.0071	.10653	.00990	.01598	.00888	.01432	.06484	.01056	.01864	.01640
#2	.02707	.44570	.95381	.10530	.01029	.01907	.00969	.01333	.00985	.00948	.01852	.01695

Check ?	Chk Fail	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Fail	Chk Pass	Chk Pass	Chk Pass
Value	.01500								.06000			
Range	30.000%								-30.000%			

Int. Std.	Y_2243	Y_3600	Y_3774
Units	Cts/S	Cts/S	Cts/S
Avg	2594.3	40517.	2127.8
Stddev	42.8	87.	32.9
%RSD	1.6496	.21449	1.5461

#1	2624.5	40579.	2104.6
#2	2564.0	40456.	2151.1

Sample Name: 280-83179-C-8-B Acquired: 5/19/2016 1:50:14 Type: Unk
Method: 6500_025(v6) Mode: CONC Corr. Factor: 1.000000
User: CRHOADES Prep Date: Custom ID2: Custom ID3:
Comment: 325504 200.7 (Cu Fe Zn)

Elem	Ag3280	Al1670	As1890	B_2089	Ba4554	Be3130	Bi2230	Ca3179	Cd2288
Line	328.068 {103}	167.079 {502}	189.042 {478}	208.959 {461}	455.403 { 74}	313.042 {108}	223.061 {451}	317.933 {106}	228.802 {447}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	-.00119	.14099	-.00259	.06768	.06601	.00020	.00635	38.903	.00027
Stddev	.00011	.00084	.00970	.00200	.00038	.00028	.00494	.718	.00017
%RSD	9.5397	.59411	375.22	2.9620	.56920	137.18	77.853	1.8466	63.700

#1	-.00127	.14159	-.00944	.06910	.06628	.00040	.00985	39.411	.00015
#2	-.00111	.14040	.00427	.06626	.06575	.00001	.00285	38.395	.00039

Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Elem	Co2286	Cr2055	Cu3247	Fe2599	K_7664	Li6707	Mg2790	Mn2576	Mo2020
Line	228.616 {447}	205.560 {464}	324.754 {104}	259.940 {130}	766.490 { 44}	670.784 { 50}	279.079 {121}2	257.610 {131}	202.030 {467}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	-.00009	.00005	.00187	.15449	4.2449	.00844	20.224	.01038	.00190
Stddev	.00047	.00009	.00052	.00432	.0267	.00110	.138	.00003	.00008
%RSD	537.49	185.94	27.860	2.7966	.62782	13.032	.68045	.32059	4.0685

#1	-.00042	-.00001	.00150	.15755	4.2261	.00921	20.126	.01040	.00195
#2	.00025	.00011	.00223	.15144	4.2638	.00766	20.321	.01035	.00184

Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Elem	Na8183	Ni2316	P_1782	Pb2203	S_1820	Sb2068	Se1960	Si2881	SiO2
Line	818.326 { 41}	231.604 {446}	178.284 {489}	220.353 {453}	182.034 {485}	206.833 {463}	196.090 {472}	288.158 {117}	288.158 {117}2
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	260.90	-.00003	.01466	.00177	92.834	.00119	.00819	4.1765	8.9377
Stddev	1.53	.00035	.00375	.00187	.434	.00085	.00200	.0170	.0364
%RSD	.58745	1120.6	25.608	105.89	.46797	71.981	24.403	.40698	.40698

#1	259.81	.00022	.01731	.00309	92.526	.00058	.00961	4.1645	8.9120
#2	261.98	-.00028	.01200	.00044	93.141	.00179	.00678	4.1885	8.9635

Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Elem	Sn1899	Sr4077	Th2837	Ti3349	Ti1908	U_3701	V_2924	Zn2062	Zr3391
Line	189.989 {477}	407.771 { 83}	283.730 {119}	334.904 {101}	190.856 {477}	370.152 { 91}	292.402 {115}	206.200 {163}	339.198 { 99}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	-.00096	.93956	-.00074	.00233	-.00115	-.03497	.00079	.00087	.00162
Stddev	.00201	.01813	.00132	.00019	.00369	.00725	.00030	.00066	.00048
%RSD	209.03	1.9296	178.08	8.3085	320.61	20.727	37.563	75.501	29.738

#1	.00046	.95238	.00019	.00219	-.00376	-.02984	.00099	.00041	.00128
#2	-.00239	.92674	-.00168	.00247	.00146	-.04009	.00058	.00134	.00196

Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Int. Std.	Y_2243	Y_3600	Y_3774
Line	224.306 {450}	360.073 { 94}	377.433 { 89}
Units	Cts/S	Cts/S	Cts/S
Avg	2567.4	39901.	2173.1
Stddev	7.7	100.	17.0
%RSD	.30116	.25116	.78284

#1	2561.9	39972.	2161.1
#2	2572.8	39831.	2185.2

Sample Name: 280-83179-C-9-B Acquired: 5/19/2016 1:52:53 Type: Unk
Method: 6500_025(v6) Mode: CONC Corr. Factor: 1.000000
User: CRHOADES Prep Date: Custom ID2: Custom ID3:
Comment: 325504 200.7 (Cu Fe Zn)

Elem	Ag3280	Al1670	As1890	B_2089	Ba4554	Be3130	Bi2230	Ca3179	Cd2288
Line	328.068 {103}	167.079 {502}	189.042 {478}	208.959 {461}	455.403 {74}	313.042 {108}	223.061 {451}	317.933 {106}	228.802 {447}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	-0.00004	.01557	-0.00316	.15832	.29642	.00027	.00358	2.4941	-0.00034
Stddev	.00033	.00097	.00372	.00253	.00060	.00012	.00101	.0077	.00029
%RSD	891.75	6.2564	117.60	1.6005	.20385	43.710	28.134	.30860	84.052

#1	-0.00027	.01626	-0.00580	.15652	.29600	.00035	.00429	2.4887	-0.0014
#2	.00020	.01489	-0.00053	.16011	.29685	.00018	.00287	2.4996	-0.00055

Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Elem	Co2286	Cr2055	Cu3247	Fe2599	K_7664	Li6707	Mg2790	Mn2576	Mo2020
Line	228.616 {447}	205.560 {464}	324.754 {104}	259.940 {130}	766.490 {44}	670.784 {50}	279.079 {121}2	257.610 {131}	202.030 {467}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	-0.00035	.00066	.00174	.57688	2.0661	.06692	.31830	.01106	.00069
Stddev	.00060	.00026	.00049	.00144	.0427	.00091	.01242	.00005	.00027
%RSD	170.83	39.319	28.078	.24886	2.0649	1.3661	3.9020	.42859	39.896

#1	.00007	.00048	.00208	.57586	2.0360	.06628	.30952	.01103	.00049
#2	-0.00077	.00084	.00139	.57789	2.0963	.06757	.32709	.01109	.00088

Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Elem	Na8183	Ni2316	P_1782	Pb2203	S_1820	Sb2068	Se1960	Si2881	SiO2
Line	818.326 {41}	231.604 {446}	178.284 {489}	220.353 {453}	182.034 {485}	206.833 {463}	196.090 {472}	288.158 {117}	288.158 {117}2
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	392.83	.00003	.02851	.00187	.23650	.00116	.00161	9.1173	19.511
Stddev	4.70	.00021	.00465	.00174	.00175	.00078	.00038	.0161	.034
%RSD	1.1965	643.44	16.292	92.825	.74068	66.822	23.938	.17640	.17640

#1	389.51	.00018	.02523	.00064	.23774	.00171	.00188	9.1287	19.535
#2	396.15	-0.00011	.03180	.00310	.23526	.00061	.00134	9.1059	19.487

Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Elem	Sn1899	Sr4077	Th2837	Ti3349	Ti1908	U_3701	V_2924	Zn2062	Zr3391
Line	189.989 {477}	407.771 {83}	283.730 {119}	334.904 {101}	190.856 {477}	370.152 {91}	292.402 {115}	206.200 {163}	339.198 {99}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	-0.00018	.36209	.00136	-0.00029	-0.00280	-0.01393	.00083	-0.00013	-0.00323
Stddev	.00107	.00488	.00011	.00046	.00155	.04288	.00085	.00088	.00494
%RSD	590.29	1.3489	8.3699	160.00	55.427	307.76	101.73	656.92	153.08

#1	.00058	.35863	.00144	-0.00061	-0.00389	-0.04425	.00143	.00049	.00027
#2	-0.00094	.36554	.00128	.00004	-0.00170	.01639	.00023	-0.00075	-0.00672

Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Int. Std.	Y_2243	Y_3600	Y_3774
Line	224.306 {450}	360.073 {94}	377.433 {89}
Units	Cts/S	Cts/S	Cts/S
Avg	2604.5	40150.	2191.2
Stddev	50.2	186.	34.0
%RSD	1.9260	.46364	1.5534

#1	2640.0	40281.	2215.2
#2	2569.0	40018.	2167.1

Sample Name: 280-83179-C-10-D Acquired: 5/19/2016 1:55:33 Type: Unk

Method: 6500_025(v6) Mode: CONC Corr. Factor: 1.000000

User: CRHOADES Prep Date: Custom ID2: Custom ID3:

Comment: 325504 200.7 (Cu Fe Zn)

Elem	Ag3280	Al3092	As1890	B_2089	Ba4554	Be3130	Bi2230	Ca3179	Cd2288
Line	328.068 {103}	309.271 {109}	189.042 {478}	208.959 {461}	455.403 {74}	313.042 {108}	223.061 {451}	317.933 {106}	228.802 {447}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	-0.00088	3.4946	-0.00219	.00639	.05986	.00053	.00378	16.069	-0.00020
Stddev	.00121	.0009	.00218	.00036	.00000	.00008	.00231	.108	.00054
%RSD	138.25	.02616	99.405	5.6712	.00124	15.777	61.169	.67095	269.96

#1	-0.00173	3.4952	-0.00065	.00613	.05986	.00059	.00542	15.993	-0.00059
#2	-0.00002	3.4939	-0.00373	.00664	.05987	.00047	.00215	16.146	.00018

Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Elem	Co2286	Cr2055	Cu3247	Fe2599	K_7664	Li6707	Mg2790	Mn2576	Mo2020
Line	228.616 {447}	205.560 {464}	324.754 {104}	259.940 {130}	766.490 {44}	670.784 {50}	279.079 {121}2	257.610 {131}	202.030 {467}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.00076	.00243	.00246	2.1040	1.8405	.00282	2.9875	.06619	-0.00024
Stddev	.00058	.00041	.00016	.0159	.0875	.00502	.0085	.00011	.00006
%RSD	76.394	16.829	6.6354	.75764	4.7521	178.13	.28355	.17296	23.612

#1	.00035	.00272	.00235	2.0927	1.9024	-0.00073	2.9815	.06611	-0.00020
#2	.00118	.00214	.00258	2.1153	1.7787	.00636	2.9935	.06627	-0.00028

Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Elem	Na5895	Ni2316	P_1782	Pb2203	S_1820	Sb2068	Se1960	Si2881	SiO2
Line	589.592 {57}	231.604 {446}	178.284 {489}	220.353 {453}	182.034 {485}	206.833 {463}	196.090 {472}	288.158 {117}	288.158 {117}2
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	4.3201	.00131	.07512	.00118	3.2717	.00208	.00074	9.8712	21.124
Stddev	.0141	.00044	.00266	.00126	.0256	.00452	.00513	.0638	.137
%RSD	.32704	33.481	3.5443	107.42	.78251	217.51	690.46	.64644	.64644

#1	4.3301	.00100	.07701	.00207	3.2536	-0.00112	.00437	9.8260	21.028
#2	4.3101	.00162	.07324	.00028	3.2898	.00528	-0.00288	9.9163	21.221

Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Elem	Sn1899	Sr4077	Th2837	Ti3349	Ti1908	U_3701	V_2924	Zn2062	Zr3391
Line	189.989 {477}	407.771 {83}	283.730 {119}	334.904 {101}	190.856 {477}	370.152 {91}	292.402 {115}	206.200 {163}	339.198 {99}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	-0.00102	.12184	-0.00079	.08347	-0.00035	.01692	.00562	.00616	.00093
Stddev	.00052	.00012	.00080	.00020	.00079	.03689	.00037	.00002	.00293
%RSD	51.202	.10120	101.21	.23877	224.12	218.05	6.5333	.28532	314.36

#1	-0.00140	.12176	-0.00136	.08332	-0.00091	-0.00917	.00536	.00615	-0.00114
#2	-0.00065	.12193	-0.00023	.08361	.00021	.04300	.00588	.00617	.00300

Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Int. Std.	Y_2243	Y_3600	Y_3774
Line	224.306 {450}	360.073 {94}	377.433 {89}
Units	Cts/S	Cts/S	Cts/S
Avg	2667.3	40841.	2148.2
Stddev	27.8	153.	18.9
%RSD	1.0438	.37471	.87977

#1	2647.6	40949.	2134.9
#2	2686.9	40733.	2161.6

Sample Name: 280-83179-C-11-B Acquired: 5/19/2016 1:58:12 Type: Unk

Method: 6500_025(v6) Mode: CONC Corr. Factor: 1.000000

User: CRHOADES Prep Date: Custom ID2: Custom ID3:

Comment: 325504 200.7 (Cu Fe Zn)

Elem	Ag3280	Al3092	As1890	B_2089	Ba4554	Be3130	Bi2230	Ca3179	Cd2288
Line	328.068 {103}	309.271 {109}	189.042 {478}	208.959 {461}	455.403 { 74}	313.042 {108}	223.061 {451}	317.933 {106}	228.802 {447}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.00023	3.8634	.00230	.00483	.05760	.00045	.00182	14.003	-.00012
Stddev	.00003	.0801	.00112	.00090	.00145	.00044	.00191	.167	.00011
%RSD	12.911	2.0724	48.867	18.629	2.5148	97.001	105.10	1.1946	95.866

#1	.00025	3.9200	.00151	.00546	.05863	.00076	.00047	14.121	-.00004
#2	.00021	3.8068	.00309	.00419	.05658	.00014	.00317	13.884	-.00020

Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Elem	Co2286	Cr2055	Cu3247	Fe2599	K_7664	Li6707	Mg2790	Mn2576	Mo2020
Line	228.616 {447}	205.560 {464}	324.754 {104}	259.940 {130}	766.490 { 44}	670.784 { 50}	279.079 {121}2	257.610 {131}	202.030 {467}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.00041	.00273	.00481	1.7969	1.4065	.00396	2.0655	.03195	.00007
Stddev	.00045	.00008	.00009	.0229	.0043	.00456	.0102	.00001	.00031
%RSD	109.42	2.9401	1.9632	1.2727	.30337	115.24	.49474	.03542	460.68

#1	.00009	.00268	.00474	1.8130	1.4035	.00073	2.0583	.03196	-.00015
#2	.00073	.00279	.00488	1.7807	1.4095	.00718	2.0727	.03194	.00028

Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Elem	Na5895	Ni2316	P_1782	Pb2203	S_1820	Sb2068	Se1960	Si2881	SiO2
Line	589.592 { 57}	231.604 {446}	178.284 {489}	220.353 {453}	182.034 {485}	206.833 {463}	196.090 {472}	288.158 {117}	288.158 {117}2
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	2.9853	.00108	.07187	.00043	2.1490	.00052	.00844	10.511	22.493
Stddev	.0297	.00018	.00135	.00123	.0621	.00377	.00521	.100	.213
%RSD	.99488	16.709	1.8823	286.02	2.8895	726.66	61.753	.94746	.94746

#1	3.0063	.00095	.07091	.00130	2.1929	-.00215	.01213	10.581	22.644
#2	2.9643	.00120	.07282	-.00044	2.1051	.00318	.00476	10.440	22.342

Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Elem	Sn1899	Sr4077	Th2837	Ti3349	Ti1908	U_3701	V_2924	Zn2062	Zr3391
Line	189.989 {477}	407.771 { 83}	283.730 {119}	334.904 {101}	190.856 {477}	370.152 { 91}	292.402 {115}	206.200 {163}	339.198 { 99}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.00039	.09948	.00133	.09287	-.00553	-.01227	.00518	.00458	.00277
Stddev	.00041	.00007	.00331	.00047	.00070	.07482	.00036	.00018	.00317
%RSD	106.23	.07127	249.22	.50623	12.689	609.88	6.9673	4.0378	114.52

#1	.00068	.09953	-.00101	.09320	-.00603	.04064	.00544	.00471	.00501
#2	.00010	.09943	.00367	.09254	-.00504	-.06517	.00492	.00445	.00053

Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Int. Std.	Y_2243	Y_3600	Y_3774
Line	224.306 {450}	360.073 { 94}	377.433 { 89}
Units	Cts/S	Cts/S	Cts/S
Avg	2674.9	42666.	2334.7
Stddev	1.8	14.	27.2
%RSD	.06708	.03180	1.1629

#1	2673.6	42657.	2315.5
#2	2676.2	42676.	2353.9

Sample Name: 280-83179-C-12-B Acquired: 5/19/2016 2:00:51 Type: Unk

Method: 6500_025(v6) Mode: CONC Corr. Factor: 1.000000

User: CRHOADES Prep Date: Custom ID2: Custom ID3:

Comment: 325504 200.7 (Cu Fe Zn)

Elem	Ag3280	Al3092	As1890	B_2089	Ba4554	Be3130	Bi2230	Ca3179	Cd2288
Line	328.068 {103}	309.271 {109}	189.042 {478}	208.959 {461}	455.403 {74}	313.042 {108}	223.061 {451}	317.933 {106}	228.802 {447}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	-0.00066	3.9949	-0.00360	.00717	.07531	.00036	.00487	18.794	-0.00022
Stddev	.00010	.0820	.00322	.00002	.00141	.00012	.00233	.415	.00035
%RSD	15.110	2.0517	89.387	.21223	1.8738	34.308	47.877	2.2055	158.41

#1	-0.00073	4.0528	-0.00588	.00716	.07631	.00044	.00322	19.088	-0.00047
#2	-0.00059	3.9369	-0.00133	.00718	.07431	.00027	.00652	18.501	.00003

Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Elem	Co2286	Cr2055	Cu3247	Fe2599	K_7664	Li6707	Mg2790	Mn2576	Mo2020
Line	228.616 {447}	205.560 {464}	324.754 {104}	259.940 {130}	766.490 {44}	670.784 {50}	279.079 {121}2	257.610 {131}	202.030 {467}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.00103	.00318	.00232	3.4359	1.6058	.00200	3.9777	.12481	-0.00032
Stddev	.00013	.00007	.00044	.0106	.0227	.00584	.0112	.00004	.00004
%RSD	12.897	2.2164	18.822	.30745	1.4116	292.40	.28171	.03102	13.827

#1	.00094	.00313	.00262	3.4285	1.5897	-.00213	3.9856	.12484	-.00035
#2	.00112	.00323	.00201	3.4434	1.6218	.00613	3.9697	.12478	-.00029

Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Elem	Na5895	Ni2316	P_1782	Pb2203	S_1820	Sb2068	Se1960	Si2881	SiO2
Line	589.592 {57}	231.604 {446}	178.284 {489}	220.353 {453}	182.034 {485}	206.833 {463}	196.090 {472}	288.158 {117}	288.158 {117}2
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	6.5386	.00169	.11317	.00266	3.4808	.00137	.00295	11.897	25.460
Stddev	.0059	.00044	.00251	.00100	.0362	.00045	.00423	.060	.129
%RSD	.09017	26.111	2.2172	37.481	1.0400	32.821	143.15	.50798	.50798

#1	6.5428	.00200	.11495	.00196	3.4552	.00105	-.00004	11.940	25.551
#2	6.5345	.00138	.11140	.00337	3.5064	.00168	.00594	11.854	25.368

Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Elem	Sn1899	Sr4077	Th2837	Ti3349	Ti1908	U_3701	V_2924	Zn2062	Zr3391
Line	189.989 {477}	407.771 {83}	283.730 {119}	334.904 {101}	190.856 {477}	370.152 {91}	292.402 {115}	206.200 {163}	339.198 {99}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	-0.00059	.14981	.00231	.09574	-.00297	-.04013	.00715	.00988	.00031
Stddev	.00217	.00009	.00387	.00401	.00545	.02717	.00025	.00037	.00082
%RSD	366.59	.05947	167.25	4.1847	183.34	67.705	3.5394	3.7636	266.00

#1	.00094	.14987	.00505	.09291	-.00683	-.05935	.00697	.00962	-.00027
#2	-.00213	.14975	-.00042	.09858	.00088	-.02092	.00732	.01014	.00089

Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Int. Std.	Y_2243	Y_3600	Y_3774
Line	224.306 {450}	360.073 {94}	377.433 {89}
Units	Cts/S	Cts/S	Cts/S
Avg	2616.2	40406.	2220.5
Stddev	78.0	129.	9.8
%RSD	2.9818	.31986	.44086

#1	2561.0	40315.	2227.4
#2	2671.3	40498.	2213.5

Sample Name: 280-83179-C-13-A Acquired: 5/19/2016 2:03:30 Type: Unk

Method: 6500_025(v6) Mode: CONC Corr. Factor: 1.000000

User: CRHOADES Prep Date: Custom ID2: Custom ID3:

Comment: 325504 200.7 (Cu Fe Zn)

Elem	Ag3280	Al3092	As1890	B_2089	Ba4554	Be3130	Bi2230	Ca3179	Cd2288
Line	328.068 {103}	309.271 {109}	189.042 {478}	208.959 {461}	455.403 {74}	313.042 {108}	223.061 {451}	317.933 {106}	228.802 {447}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	-0.0010	6.3979	-0.00330	.00932	.10987	.00027	-0.00134	25.692	-0.00008
Stddev	.00048	.1407	.00322	.00015	.00226	.00001	.00126	.447	.00040
%RSD	482.67	2.1993	97.750	1.6417	2.0549	1.8831	94.441	1.7390	499.99

#1	-0.00044	6.4974	-0.00102	.00943	.11147	.00027	-0.00223	26.007	-0.00036
#2	.00024	6.2984	-0.00557	.00921	.10827	.00027	-0.00044	25.376	.00020

Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Elem	Co2286	Cr2055	Cu3247	Fe2599	K_7664	Li6707	Mg2790	Mn2576	Mo2020
Line	228.616 {447}	205.560 {464}	324.754 {104}	259.940 {130}	766.490 {44}	670.784 {50}	279.079 {121}2	257.610 {131}	202.030 {467}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.00207	.00549	.00569	5.6580	2.3513	.00594	5.9076	.15060	-0.00054
Stddev	.00026	.00052	.00037	.0293	.0613	.00302	.0294	.00057	.00044
%RSD	12.662	9.4777	6.4819	.51861	2.6065	50.920	.49694	.38008	81.553

#1	.00225	.00512	.00595	5.6787	2.3947	.00808	5.8869	.15019	-0.00023
#2	.00188	.00586	.00543	5.6372	2.3080	.00380	5.9284	.15100	-0.00086

Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Elem	Na5895	Na8183	Ni2316	P_1782	Pb2203	S_1820	Sb2068	Se1960	Si2881
Line	589.592 {57}	818.326 {41}	231.604 {446}	178.284 {489}	220.353 {453}	182.034 {485}	206.833 {463}	196.090 {472}	288.158 {117}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	8.2941	W 10.343	.00385	.17053	.00072	6.1869	.00202	.00513	15.686
Stddev	.0132	.499	.00037	.00098	.00057	.0821	.00586	.00466	.032
%RSD	.15968	4.8257	9.7273	.57756	79.050	1.3268	290.51	90.849	.20681

#1	8.2847	10.696	.00412	.17122	.00032	6.1289	.00616	.00843	15.709
#2	8.3035	9.9897	.00359	.16983	.00112	6.2450	-0.00212	.00183	15.663

Check ?	Chk Pass	Chk Warn	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit		500.00							
Low Limit		11.000							

Elem	SiO2	Sn1899	Sr4077	Th2837	Ti3349	Ti1908	U_3701	V_2924	Zn2062
Line	288.158 {117}2	189.989 {477}	407.771 {83}	283.730 {119}	334.904 {101}	190.856 {477}	370.152 {91}	292.402 {115}	206.200 {163}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	33.568	-0.00050	.22102	.00317	.14722	-0.00441	.00523	.01070	.01605
Stddev	.069	.00113	.00068	.00049	.00050	.00058	.05361	.00047	.00048
%RSD	.20681	226.15	.30655	15.386	.33752	13.139	1025.0	4.4170	3.0020

#1	33.617	-0.00130	.22054	.00282	.14686	-0.00482	-0.03268	.01103	.01571
#2	33.519	.00030	.22150	.00351	.14757	-0.00400	.04314	.01037	.01639

Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Elem	Zr3391								
Line	339.198 {99}								
Units	ppm								
Avg	.00456								
Stddev	.00038								
%RSD	8.4298								

#1	.00483								
#2	.00429								

Check ?	Chk Pass								
High Limit									
Low Limit									

Sample Name: 280-83179-C-13-A Acquired: 5/19/2016 2:03:30 Type: Unk
Method: 6500_025(v6) Mode: CONC Corr. Factor: 1.000000
User: CRHOADES Prep Date: Custom ID2: Custom ID3:
Comment: 325504 200.7 (Cu Fe Zn)

Int. Std.	Y_2243	Y_3600	Y_3774
Line	224.306 {450}	360.073 { 94}	377.433 { 89}
Units	Cts/S	Cts/S	Cts/S
Avg	2591.7	41354.	2171.4
Stddev	26.3	158.	84.1
%RSD	1.0144	.38154	3.8720
#1	2610.3	41466.	2112.0
#2	2573.1	41243.	2230.9

Sample Name: CCVH-3894253 Acquired: 5/19/2016 2:06:07 Type: QC
Method: 6500_025(v6) Mode: CONC Corr. Factor: 1.000000
User: CRHOADES Prep Date: Custom ID2: Custom ID3:
Comment:

Elem	Ag3280	Al3092	As1890	B_2089	Ba4554	Be3130	Bi2230	Ca3179	Cd2288	Co2286	Cr2055
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	-.00089	53.315	-.00825	.00196	.00026	.00038	W 1.0905	-.01106	-.00034	-.00108	.00032
Stddev	.00018	.664	.00199	.00037	.00012	.00004	.0315	.00455	.00005	.00027	.00029
%RSD	20.214	1.2448	24.138	18.824	46.906	10.435	2.8859	41.105	13.595	24.788	92.444

#1	-.00077	52.846	-.00684	.00170	.00017	.00041	1.1128	-.00784	-.00037	-.00127	.00011
#2	-.00102	53.785	-.00966	.00222	.00034	.00035	1.0683	-.01427	-.00031	-.00089	.00052

Check ?	None	Chk Pass	None	None	None	None	Chk Warn	None	None	None	None
Value							1.0000				
Range							5.0000%				

Elem	Cu3247	Fe2714	K_7664	Li6707	Mg2790	Mn2576	Mo2020	Na8183	Ni2316	P_1782	Pb2203
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	-.00098	48.957	.04709	.00217	.02504	-.00009	-.00150	255.61	.00157	.00465	-.00040
Stddev	.00035	.701	.06848	.00053	.00071	.00002	.00038	.46	.00001	.00092	.00213
%RSD	35.225	1.4311	145.44	24.489	2.8430	21.984	25.437	.17882	.74325	19.726	534.78

#1	-.00122	49.453	-.00134	.00254	.02554	-.00010	-.00177	255.94	.00158	.00400	-.00190
#2	-.00074	48.462	.09551	.00179	.02453	-.00007	-.00123	255.29	.00156	.00530	.00111

Check ?	None	Chk Pass	None	None	None	None	None	Chk Pass	None	None	None
Value											
Range											

Elem	S_1820	Sb2068	Se1960	Si2881	SiO2	Sn1899	Sr4077	Th2837	Ti3349	Ti1908	U_3701
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	5.2235	-.00866	.00308	-.00400	-.00857	.00087	.00039	W 4.5848	.00673	-.00801	W 10.594
Stddev	.1240	.00019	.00409	.00117	.00249	.00029	.00017	.0115	.00004	.00215	.065
%RSD	2.3736	2.1772	132.84	29.103	29.103	33.068	44.356	.25135	.66294	26.875	.61419

#1	5.3112	-.00879	.00597	-.00318	-.00680	.00108	.00051	4.5929	.00677	-.00953	10.640
#2	5.1358	-.00852	.00019	-.00483	-.01033	.00067	.00027	4.5766	.00670	-.00649	10.548

Check ?	Chk Pass	None	None	None	None	None	None	Chk Warn	None	None	Chk Warn
Value								5.0000			10.000
Range								-5.0000%			5.0000%

Elem	V_2924	Zn2062	Zr3391
Units	ppm	ppm	ppm
Avg	.01010	-.00058	.05054
Stddev	.00003	.00030	.00464
%RSD	.30169	51.915	9.1792

#1	.01012	-.00037	.05382
#2	.01008	-.00079	.04726

Check ?	None	None	None
Value			
Range			

Int. Std.	Y_2243	Y_3600	Y_3774
Units	Cts/S	Cts/S	Cts/S
Avg	2516.1	39007.	2093.9
Stddev	18.1	3.	47.1
%RSD	.71822	.00835	2.2488

#1	2503.3	39010.	2127.2
#2	2528.9	39005.	2060.6

Sample Name: CCV-3894251 Acquired: 5/19/2016 2:08:43 Type: QC
Method: 6500_025(v6) Mode: CONC Corr. Factor: 1.000000
User: CRHOADES Prep Date: Custom ID2: Custom ID3:
Comment:

Elem	Ag3280	Al1670	As1890	B_2089	Ba4554	Be3130	Bi2230	Ca3179	Cd2288	Co2286	Cr2055	Cu3247
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.48944	F .55753	1.0451	.48412	.50233	.45394	.00059	4.8862	.49188	.49430	.50033	.51558
Stddev	.00046	.00302	.0026	.00054	.00628	.00523	.00222	.0555	.00029	.00163	.00178	.00003
%RSD	.09422	.54084	.24352	.11135	1.2494	1.1520	375.49	1.1363	.05826	.33001	.35675	.00625

#1	.48977	.55540	1.0469	.48374	.50677	.45764	-.00098	4.9255	.49168	.49315	.50160	.51561
#2	.48912	.55966	1.0433	.48450	.49789	.45024	.00216	4.8469	.49208	.49546	.49907	.51556

Check ?	Chk Pass	Chk Fail	Chk Pass	Chk Pass	Chk Pass	Chk Pass	None	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Value		.50000										
Range		10.490%										

Elem	Fe2599	K_7664	Li6707	Mg2790	Mn2576	Mo2020	Na5895	Ni2316	P_1782	Pb2203	S_1820	Sb2068
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	2.3397	48.340	.96393	18.893	.46328	.50485	5.1245	.48305	.96021	.99710	.09877	.97687
Stddev	.0024	.553	.00192	.044	.00152	.00068	.0154	.00020	.00391	.00561	.00149	.00107
%RSD	.10178	1.1450	.19961	.23061	.32882	.13533	.30018	.04174	.40677	.56239	1.5050	.10917

#1	2.3413	48.731	.96257	18.924	.46436	.50533	5.1136	.48319	.96297	1.0011	.09982	.97612
#2	2.3380	47.948	.96529	18.862	.46220	.50436	5.1354	.48291	.95745	.99313	.09772	.97762

Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	None	Chk Pass
Value												
Range												

Elem	Se1960	Si2881	SiO2	Sn1899	Sr4077	Th2837	Ti3349	Ti1908	U_3701	V_2924	Zn2062	Zr3391
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	1.0438	4.7916	10.254	1.0140	.46553	.00102	.45687	1.0392	.02245	.48453	.45703	.50753
Stddev	.0084	.0565	.121	.0042	.00562	.00009	.00034	.0058	.04696	.00160	.00113	.00042
%RSD	.80141	1.1796	1.1796	.41372	1.2076	8.9800	.07379	.55683	209.19	.33078	.24714	.08355

#1	1.0497	4.7517	10.169	1.0169	.46951	.00108	.45711	1.0433	-.01076	.48566	.45783	.50783
#2	1.0379	4.8316	10.340	1.0110	.46156	.00095	.45663	1.0351	.05566	.48339	.45623	.50723

Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	None	Chk Pass	Chk Pass	None	Chk Pass	Chk Pass	Chk Pass
Value												
Range												

Int. Std.	Y_2243	Y_3600	Y_3774
Units	Cts/S	Cts/S	Cts/S
Avg	2540.6	40115.	2139.7
Stddev	5.5	332.	11.4
%RSD	.21520	.82787	.53320

#1	2536.7	39880.	2131.7
#2	2544.5	40349.	2147.8

Sample Name: CCB Acquired: 5/19/2016 2:11:14 Type: QC
 Method: 6500_025(v6) Mode: CONC Corr. Factor: 1.000000
 User: CRHOADES Prep Date: Custom ID2: Custom ID3:
 Comment:

Elem	Ag3280	Al1670	As1890	B_2089	Ba4554	Be3130	Bi2230	Ca3179	Cd2288	Co2286	Cr2055
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	-.00092	-.00019	.00138	-.00027	-.00105	.00027	.00529	-.02441	-.00017	-.00025	-.00003
Stddev	.00038	.00031	.00625	.00120	.00032	.00022	.00561	.01073	.00031	.00002	.00038
%RSD	41.202	169.62	451.68	444.95	30.079	79.777	106.21	43.960	180.73	8.7270	1534.3

#1	-.00065	.00004	-.00304	.00058	-.00127	.00043	.00132	-.03199	-.00039	-.00024	-.00030
#2	-.00118	-.00041	.00580	-.00112	-.00083	.00012	.00926	-.01682	.00005	-.00027	.00025

Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit											
Low Limit											

Elem	Cu3247	Fe2599	K_7664	Li6707	Mg2790	Mn2576	Mo2020	Na5895	Ni2316	P_1782	Pb2203
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	-.00096	W .06259	.04150	.00049	.00078	.00078	.00132	.17405	-.00035	-.00003	.00061
Stddev	.00015	.00767	.00792	.00201	.00308	.00008	.00036	.00534	.00038	.00429	.00124
%RSD	15.997	12.248	19.091	410.38	393.73	10.634	27.418	3.0698	106.00	15681.	203.89

#1	-.00085	.06802	.04710	-.00093	-.00140	.00084	.00106	.17027	-.00062	.00301	-.00027
#2	-.00107	.05717	.03589	.00192	.00296	.00072	.00158	.17783	-.00009	-.00306	.00149

Check ?	Chk Pass	Chk Warn	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit		.05000									
Low Limit		-.05000									

Elem	S_1820	Sb2068	Se1960	Si2881	SiO2	Sn1899	Sr4077	Th2837	Ti3349	Ti1908	U_3701
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	W .09374	W .00301	W .01114	-.03057	-.06542	.00084	.00012	.00114	.00008	.00078	.02573
Stddev	.00390	.00213	.00229	.00204	.00436	.00036	.00035	.00410	.00019	.00258	.02071
%RSD	4.1552	70.990	20.534	6.6623	6.6623	43.324	291.69	359.83	243.06	331.41	80.474

#1	.09099	.00150	.01275	-.03201	-.06850	.00058	-.00013	.00404	.00021	-.00105	.01109
#2	.09650	.00452	.00952	-.02913	-.06234	.00109	.00036	-.00176	-.00006	.00261	.04038

Check ?	Chk Warn	Chk Warn	Chk Warn	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit	.05000	.00100	.00750								
Low Limit	-.20000	-.00100	-.01500								

Elem	V_2924	Zn2062	Zr3391
Units	ppm	ppm	ppm
Avg	.00028	-.00062	.00051
Stddev	.00055	.00017	.00207
%RSD	196.97	27.108	405.23

#1	.00067	-.00050	.00197
#2	-.00011	-.00074	-.00095

Check ?	Chk Pass	Chk Pass	Chk Pass
High Limit			
Low Limit			

Int. Std.	Y_2243	Y_3600	Y_3774
Units	Cts/S	Cts/S	Cts/S
Avg	2650.5	41227.	2147.4
Stddev	49.3	51.	29.1
%RSD	1.8594	.12420	1.3557

#1	2615.6	41263.	2168.0
#2	2685.3	41190.	2126.8

Sample Name: CCVL-3897520 Acquired: 5/19/2016 2:13:36 Type: QC
Method: 6500_025(v6) Mode: CONC Corr. Factor: 1.000000
User: CRHOADES Prep Date: Custom ID2: Custom ID3:
Comment:

Elem	Ag3280	Al1670	As1890	B_2089	Ba4554	Be3130	Bi2230	Ca3179	Cd2288	Co2286	Cr2055	Cu3247
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.01008	.11664	.01502	.09933	.01013	.00111	.11278	.19858	.00494	.01025	.01079	.01437
Stddev	.00008	.00076	.00846	.00006	.00024	.00003	.00045	.01080	.00003	.00029	.00030	.00018
%RSD	.79378	.65149	56.284	.06496	2.3691	2.7007	.40274	5.4400	.59669	2.7980	2.8157	1.2781

#1	.01003	.11718	.02100	.09938	.01030	.00113	.11246	.20622	.00492	.01005	.01058	.01450
#2	.01014	.11610	.00904	.09929	.00997	.00109	.11310	.19094	.00496	.01045	.01101	.01424

Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Value												
Range												

Elem	Fe2599	K_7664	Li6707	Mg2790	Mn2576	Mo2020	Na5895	Ni2316	P_1782	Pb2203	S_1820	Sb2068
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.10528	3.1316	.00718	.20088	.00979	.02104	1.2427	.04065	2.8981	.00930	.08443	.02575
Stddev	.00375	.0526	.00262	.00099	.00011	.00029	.0208	.00056	.0096	.00069	.00338	.00430
%RSD	3.5586	1.6785	36.437	.49144	1.1675	1.3921	1.6696	1.3731	.33092	7.3757	4.0001	16.680

#1	.10793	3.0944	.00533	.20018	.00987	.02083	1.2280	.04025	2.8913	.00881	.08204	.02879
#2	.10263	3.1687	.00903	.20158	.00971	.02125	1.2574	.04104	2.9048	.00978	.08682	.02272

Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	None	Chk Pass
Value												
Range												

Elem	Se1960	Si2881	SiO2	Sn1899	Sr4077	Th2837	Ti3349	Ti1908	U_3701	V_2924	Zn2062	Zr3391
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	F .02306	.52111	1.1152	.10503	.00997	.01663	.00960	.01417	F .00300	.01030	.01880	.01790
Stddev	.00203	.00839	.0180	.00051	.00008	.00095	.00020	.00011	.03925	.00139	.00019	.00158
%RSD	8.7956	1.6092	1.6092	.48786	.82718	5.7040	2.0682	.75837	1308.7	13.483	1.0073	8.8058

#1	.02162	.52704	1.1279	.10539	.01003	.01596	.00946	.01409	.03076	.01128	.01894	.01901
#2	.02449	.51518	1.1025	.10467	.00991	.01730	.00974	.01424	-.02476	.00932	.01867	.01678

Check ?	Chk Fail	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Fail	Chk Pass	Chk Pass	Chk Pass
Value	.01500								.06000			
Range	30.000%								-30.000%			

Int. Std.	Y_2243	Y_3600	Y_3774
Units	Cts/S	Cts/S	Cts/S
Avg	2631.7	41613.	2144.9
Stddev	.2	40.	18.0
%RSD	.00876	.09604	.83727

#1	2631.8	41641.	2132.2
#2	2631.5	41584.	2157.6

Sample Name: MB 280-325785/1-A Acquired: 5/19/2016 2:16:17 Type: Unk

Method: 6500_025(v6) Mode: CONC Corr. Factor: 1.000000

User: CRHOADES Prep Date: 5/18 Custom ID2: Custom ID3:

Comment: 325785 200.7

Elem	Ag3280	Al1670	As1890	B_2089	Ba4554	Be3130	Bi2230	Ca3179	Cd2288
Line	328.068 {103}	167.079 {502}	189.042 {478}	208.959 {461}	455.403 { 74}	313.042 {108}	223.061 {451}	317.933 {106}	228.802 {447}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	F .04887	F 2.0585	F 1.0339	F .96742	F 1.9840	F .04533	F 2.1202	F 47.473	F .09503
Stddev	.00043	.0885	.0367	.03799	.0728	.00139	.1002	1.826	.00399
%RSD	.88453	4.2982	3.5536	3.9271	3.6684	3.0768	4.7257	3.8458	4.1961

#1	.04857	2.1211	1.0599	.99429	2.0355	.04632	2.1911	48.764	.09785
#2	.04918	1.9959	1.0079	.94056	1.9325	.04434	2.0494	46.182	.09221

Check ?	Chk Fail	Chk Fail	Chk Fail	Chk Fail	Chk Fail	Chk Fail	Chk Fail	Chk Fail	Chk Fail
High Limit	.01000	.10000	.01500	.10000	.01000	.00100	.10000	.20000	.00500
Low Limit	-.01000	-.10000	-.01500	-.10000	-.01000	-.00100	-.10000	-.20000	-.00500

Elem	Co2286	Cr2055	Cu3247	Fe2599	K_7664	Li6707	Mg2790	Mn2576	Mo2020
Line	228.616 {447}	205.560 {464}	324.754 {104}	259.940 {130}	766.490 { 44}	670.784 { 50}	279.079 {121}2	257.610 {131}	202.030 {467}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	F .46799	F .19437	F .25455	F .91737	F 47.693	F .94878	F 46.845	F .45254	F 1.0278
Stddev	.01996	.00807	.00036	.01418	1.999	.01426	.169	.00244	.0466
%RSD	4.2646	4.1518	.13987	1.5462	4.1923	1.5028	.36103	.53941	4.5345

#1	.48210	.20008	.25481	.92740	49.107	.95886	46.726	.45082	1.0607
#2	.45387	.18867	.25430	.90734	46.280	.93870	46.965	.45427	.99482

Check ?	Chk Fail	Chk Fail	Chk Fail	Chk Fail	Chk Fail	Chk Fail	Chk Fail	Chk Fail	Chk Fail
High Limit	.01000	.01000	.01500	.10000	3.0000	.01000	.20000	.01000	.02000
Low Limit	-.01000	-.01000	-.01500	-.10000	-3.0000	-.01000	-.20000	-.01000	-.02000

Elem	Na8183	Ni2316	P_1782	Pb2203	S_1820	Sb2068	Se1960	Si2881	SiO2
Line	818.326 { 41}	231.604 {446}	178.284 {489}	220.353 {453}	182.034 {485}	206.833 {463}	196.090 {472}	288.158 {117}	288.158 {117}2
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	52.675	F .46060	F 9.6453	F .48241	F 2.1083	F .50650	F 2.1140	F 9.5435	20.423
Stddev	.997	.02023	.3893	.02037	.0942	.01680	.0658	.1342	.287
%RSD	1.8919	4.3913	4.0365	4.2221	4.4676	3.3176	3.1124	1.4063	1.4063

#1	53.380	.47490	9.9206	.49681	2.1749	.51838	2.1605	9.6384	20.626
#2	51.971	.44630	9.3700	.46800	2.0417	.49461	2.0674	9.4486	20.220

Check ?	None	Chk Fail	Chk Fail	Chk Fail	Chk Fail	Chk Fail	Chk Fail	Chk Fail	None
High Limit		.04000	3.0000	.00900	.10000	.01000	.01500	.50000	
Low Limit		-.04000	-3.0000	-.00300	-.10000	-.01000	-.01500	-.50000	

Elem	Sn1899	Sr4077	Th2837	Ti3349	Ti1908	U_3701	V_2924	Zn2062	Zr3391
Line	189.989 {477}	407.771 { 83}	283.730 {119}	334.904 {101}	190.856 {477}	370.152 { 91}	292.402 {115}	206.200 {163}	339.198 { 99}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	F 1.9948	F .90795	F .92596	F .91582	F 1.9049	F 2.1014	F .47008	F .44602	F .52116
Stddev	.0446	.03713	.00127	.00338	.0862	.0428	.00139	.00092	.00002
%RSD	2.2343	4.0898	.13766	.36854	4.5275	2.0358	.29510	.20722	.00445

#1	2.0263	.93420	.92686	.91343	1.9659	2.1316	.46910	.44536	.52118
#2	1.9633	.88169	.92506	.91820	1.8439	2.0711	.47106	.44667	.52114

Check ?	Chk Fail	Chk Fail	Chk Fail	Chk Fail	Chk Fail	Chk Fail	Chk Fail	Chk Fail	Chk Fail
High Limit	.10000	.01000	.01500	.01000	.01500	.06000	.01000	.02000	.01500
Low Limit	-.10000	-.01000	-.01500	-.01000	-.01500	-.06000	-.01000	-.02000	-.01500

Int. Std.	Y_2243	Y_3600	Y_3774
Line	224.306 {450}	360.073 { 94}	377.433 { 89}
Units	Cts/S	Cts/S	Cts/S
Avg	2636.4	39907.	2206.4
Stddev	124.6	7.	89.0
%RSD	4.7274	.01656	4.0354

#1	2548.3	39902.	2143.4
#2	2724.6	39912.	2269.3

Sample Name: LCS 280-325785/2-A Acquired: 5/19/2016 2:18:44 Type: Unk

Method: 6500_025(v6) Mode: CONC Corr. Factor: 1.000000

User: CRHOADES Prep Date: Custom ID2: Custom ID3:

Comment: 325785 200.7

Elem	Ag3280	Al1670	As1890	B_2089	Ba4554	Be3130	Bi2230	Ca3179	Cd2288
Line	328.068 {103}	167.079 {502}	189.042 {478}	208.959 {461}	455.403 { 74}	313.042 {108}	223.061 {451}	317.933 {106}	228.802 {447}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	F -.00061	F .00336	F -.00659	F .00254	F -.00044	F .00015	-.00026	F -.00287	F .00000
Stddev	.00115	.00051	.00339	.00056	.00013	.00011	.00546	.00200	.0001
%RSD	187.88	15.308	51.448	21.881	29.832	69.709	2086.6	69.467	12163.
#1	.00020	.00299	-.00898	.00293	-.00035	.00023	-.00412	-.00146	.00010
#2	-.00143	.00372	-.00419	.00214	-.00053	.00008	.00360	-.00429	-.00010
Check ?	Chk Fail	Chk Fail	Chk Fail	Chk Fail	Chk Fail	Chk Fail	None	Chk Fail	Chk Fail
High Limit	.05750	2.2299	1.1050	1.1050	2.2499	.05650		55.500	.11100
Low Limit	.04275	1.7300	.87500	.86000	1.7900	.04450		44.750	.08800
Elem	Co2286	Cr2055	Cu3247	Fe2599	K_7664	Li6707	Mg2790	Mn2576	Mo2020
Line	228.616 {447}	205.560 {464}	324.754 {104}	259.940 {130}	766.490 { 44}	670.784 { 50}	279.079 {121}2	257.610 {131}	202.030 {467}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	F -.00023	F -.00010	F -.00115	F .00719	F .07307	F .00219	F .00651	F .00008	F .00315
Stddev	.00011	.00004	.00068	.00807	.04961	.00150	.00248	.00000	.00077
%RSD	49.653	34.141	58.934	112.20	67.888	68.425	38.066	3.6210	24.315
#1	-.00015	-.00008	-.00163	.00149	.10815	.00113	.00827	.00008	.00261
#2	-.00031	-.00013	-.00067	.01290	.03799	.00325	.00476	.00008	.00369
Check ?	Chk Fail	Chk Fail	Chk Fail	Chk Fail	Chk Fail	Chk Fail	Chk Fail	Chk Fail	Chk Fail
High Limit	.55500	.22000	.28000	1.1500	57.000	1.1400	56.500	.55000	1.1000
Low Limit	.44500	.18000	.21500	.89000	44.500	.89000	46.000	.45000	.90000
Elem	Na5895	Ni2316	P_1782	Pb2203	S_1820	Sb2068	Se1960	Si2881	SiO2
Line	589.592 { 57}	231.604 {446}	178.284 {489}	220.353 {453}	182.034 {485}	206.833 {463}	196.090 {472}	288.158 {117}	288.158 {117}2
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	F .20229	F -.00129	F -.00290	F .00002	.08666	F .00221	F .00689	F .02316	.04957
Stddev	.00658	.00006	.00112	.00050	.00184	.00038	.00757	.02050	.04388
%RSD	3.2542	4.5297	38.549	2394.2	2.1233	17.402	109.78	88.526	88.526
#1	.20694	-.00133	-.00211	.00037	.08797	.00193	.00154	.00866	.01854
#2	.19763	-.00125	-.00369	-.00033	.08536	.00248	.01225	.03766	.08060
Check ?	Chk Fail	Chk Fail	Chk Fail	Chk Fail	None	Chk Fail	Chk Fail	Chk Fail	None
High Limit	56.000	.55500	11.100	.55000		.55499	2.2400	11.000	
Low Limit	45.500	.44500	9.1000	.44500		.44000	1.7000	9.0000	
Elem	Sn1899	Sr4077	Th2837	Ti3349	Ti1908	U_3701	V_2924	Zn2062	Zr3391
Line	189.989 {477}	407.771 { 83}	283.730 {119}	334.904 {101}	190.856 {477}	370.152 { 91}	292.402 {115}	206.200 {163}	339.198 { 99}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	F -.00019	F .00031	F -.00030	F .00001	F .01850	F .03166	F .00103	F .00001	F .00134
Stddev	.00120	.00004	.00291	.00021	.00972	.04075	.00018	.00062	.00319
%RSD	644.64	11.928	967.68	3189.1	52.543	128.71	17.161	6653.6	238.82
#1	.00066	.00029	.00175	-.00014	.01163	.00285	.00116	.00045	-.00092
#2	-.00103	.00034	-.00235	.00015	.02537	.06048	.00091	-.00043	.00359
Check ?	Chk Fail	Chk Fail	Chk Fail	Chk Fail	Chk Fail	Chk Fail	Chk Fail	Chk Fail	Chk Fail
High Limit	2.2600	1.1100	1.2000	1.1100	2.2000	2.3000	.55500	.55500	.57500
Low Limit	1.7000	.90000	.80000	.90000	1.7600	1.7000	.45000	.42500	.42500
Int. Std.	Y_2243	Y_3600	Y_3774						
Line	224.306 {450}	360.073 { 94}	377.433 { 89}						
Units	Cts/S	Cts/S	Cts/S						
Avg	2658.0	41884.	2092.7						
Stddev	1.0	580.	43.3						
%RSD	.03629	1.3849	2.0678						
#1	2658.7	41474.	2123.3						
#2	2657.3	42295.	2062.1						

Sample Name: 280-83243-A-1-A Acquired: 5/19/2016 2:21:07 Type: Unk
Method: 6500_025(v6) Mode: CONC Corr. Factor: 1.000000
User: CRHOADES Prep Date: Custom ID2: Custom ID3:
Comment: 325785 200.7

Elem	Ag3280	Al3092	As1890	B_2089	Ba4554	Be3130	Bi2230	Ca3179	Cd2288
Line	328.068 {103}	309.271 {109}	189.042 {478}	208.959 {461}	455.403 {74}	313.042 {108}	223.061 {451}	317.933 {106}	228.802 {447}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	-0.00097	15.451	-0.00344	W 36.548	.00805	.00012	-0.00228	9.7120	-0.00039
Stddev	.00001	.382	.00012	2.879	.00040	.00009	.00241	.1834	.00017
%RSD	.58252	2.4742	3.5950	7.8775	5.0193	69.824	105.77	1.8879	43.938

#1	-0.00098	15.722	-0.00336	34.512	.00834	.00006	-0.00058	9.8417	-0.00027
#2	-0.00097	15.181	-0.00353	38.584	.00777	.00019	-0.00399	9.5824	-0.00052

Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Warn	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit				10.000					
Low Limit				-.01000					

Elem	Co2286	Cr2055	Cu3247	Fe2599	K_7664	Li6707	Mg2790	Mn2576	Mo2020
Line	228.616 {447}	205.560 {464}	324.754 {104}	259.940 {130}	766.490 {44}	670.784 {50}	279.079 {121}2	257.610 {131}	202.030 {467}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	-0.00129	.01692	.07290	.34365	19.130	.04379	.90775	.01230	.02168
Stddev	.00002	.00087	.00058	.00015	.051	.00250	.00418	.00002	.00168
%RSD	1.5686	5.1386	.79405	.04231	.26673	5.7199	.46055	.18654	7.7278

#1	-0.00128	.01630	.07331	.34375	19.094	.04202	.90480	.01228	.02049
#2	-0.00130	.01753	.07249	.34355	19.166	.04556	.91071	.01232	.02286

Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Elem	Na8183	Ni2316	P_1782	Pb2203	S_1820	Sb2068	Se1960	Si2881	SiO2
Line	818.326 {41}	231.604 {446}	178.284 {489}	220.353 {453}	182.034 {485}	206.833 {463}	196.090 {472}	288.158 {117}	288.158 {117}2
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	W 5571.1	.01596	.65497	-0.00033	F 1973.0	.01903	.00244	.18204	.38956
Stddev	126.8	.00072	.00823	.00115	152.2	.00054	.00470	.03379	.07231
%RSD	2.2764	4.5393	1.2563	343.75	7.7142	2.8195	192.88	18.562	18.562

#1	5660.8	.01545	.64915	.00048	1865.4	.01941	-0.00089	.20593	.44069
#2	5481.5	.01647	.66079	-0.00115	2080.6	.01865	.00576	.15815	.33843

Check ?	Chk Warn	Chk Pass	Chk Pass	Chk Pass	Chk Fail	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit	500.00				200.00				
Low Limit	11.000				-.20000				

Elem	Sn1899	Sr4077	Th2837	Ti3349	Ti1908	U_3701	V_2924	Zn2062	Zr3391
Line	189.989 {477}	407.771 {83}	283.730 {119}	334.904 {101}	190.856 {477}	370.152 {91}	292.402 {115}	206.200 {163}	339.198 {99}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	-0.00004	.08424	.00100	.00090	.00521	.01209	.00114	.00532	.00054
Stddev	.00000	.00042	.00188	.00000	.00607	.00913	.00148	.00041	.00208
%RSD	6.3496	.49666	187.24	.40392	116.48	75.558	129.77	7.6968	383.66

#1	-0.00004	.08394	.00233	.00090	.00092	.01854	.00219	.00561	-0.00093
#2	-0.00004	.08453	-0.00032	.00090	.00950	.00563	.00009	.00503	.00202

Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Int. Std.	Y_2243	Y_3600	Y_3774
Line	224.306 {450}	360.073 {94}	377.433 {89}
Units	Cts/S	Cts/S	Cts/S
Avg	2522.6	35270.	2198.9
Stddev	212.1	89.	47.0
%RSD	8.4081	.25102	2.1384

#1	2672.6	35332.	2165.7
#2	2372.6	35207.	2232.2

Sample Name: 280-83229-F-1-A Acquired: 5/19/2016 2:24:11 Type: Unk
Method: 6500_025(v6) Mode: CONC Corr. Factor: 1.000000
User: CRHOADES Prep Date: Custom ID2: Custom ID3:
Comment: 325785 200.7

Elem	Ag3280	Al1670	As1890	B_2089	Ba4554	Be3130	Bi2230	Ca3179	Cd2288
Line	328.068 {103}	167.079 {502}	189.042 {478}	208.959 {461}	455.403 { 74}	313.042 {108}	223.061 {451}	317.933 {106}	228.802 {447}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.00023	.83104	.00285	.22255	.15111	.00016	-.00137	42.736	.00008
Stddev	.00058	.03811	.00008	.02024	.00209	.00002	.00144	.637	.00017
%RSD	247.49	4.5863	2.8439	9.0948	1.3851	14.361	105.11	1.4906	224.39

#1	.00064	.85799	.00279	.23686	.15259	.00017	-.00035	43.187	-.00004
#2	-.00017	.80409	.00290	.20824	.14963	.00014	-.00238	42.286	.00020

Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Elem	Co2286	Cr2055	Cu3247	Fe2599	K_7664	Li6707	Mg2790	Mn2576	Mo2020
Line	228.616 {447}	205.560 {464}	324.754 {104}	259.940 {130}	766.490 { 44}	670.784 { 50}	279.079 {121}2	257.610 {131}	202.030 {467}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.00066	.00094	.00419	.86696	4.5578	.00959	5.5104	.52712	.01442
Stddev	.00030	.00007	.00072	.00554	.0622	.00056	.0115	.00057	.00004
%RSD	46.438	6.9059	17.156	.63955	1.3638	5.8136	.20911	.10787	.30198

#1	.00087	.00090	.00369	.87088	4.6017	.00998	5.5022	.52671	.01439
#2	.00044	.00099	.00470	.86304	4.5138	.00919	5.5185	.52752	.01445

Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Elem	Na8183	Ni2316	P_1782	Pb2203	S_1820	Sb2068	Se1960	Si2881	SiO2
Line	818.326 { 41}	231.604 {446}	178.284 {489}	220.353 {453}	182.034 {485}	206.833 {463}	196.090 {472}	288.158 {117}	288.158 {117}2
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	45.341	.00148	.14759	.00365	19.949	-.00091	-.00500	6.4020	13.700
Stddev	.179	.00007	.00202	.00025	.260	.00047	.00061	.0241	.052
%RSD	.39434	4.6274	1.3717	6.7895	1.3037	51.849	12.189	.37608	.37608

#1	45.468	.00153	.14902	.00347	20.133	-.00125	-.00543	6.4190	13.737
#2	45.215	.00143	.14616	.00382	19.765	-.00058	-.00457	6.3849	13.664

Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Elem	Sn1899	Sr4077	Th2837	Ti3349	Ti1908	U_3701	V_2924	Zn2062	Zr3391
Line	189.989 {477}	407.771 { 83}	283.730 {119}	334.904 {101}	190.856 {477}	370.152 { 91}	292.402 {115}	206.200 {163}	339.198 { 99}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.00071	.20379	.00127	.02186	-.00027	-.04433	.00620	.01451	-.00038
Stddev	.00024	.00089	.00031	.00114	.00201	.04495	.00030	.00004	.00096
%RSD	33.741	.43706	24.699	5.2169	753.37	101.41	4.8563	.24741	254.44

#1	.00054	.20316	.00149	.02267	-.00169	-.01254	.00642	.01448	.00030
#2	.00088	.20442	.00105	.02105	.00116	-.07611	.00599	.01453	-.00105

Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Int. Std.	Y_2243	Y_3600	Y_3774
Line	224.306 {450}	360.073 { 94}	377.433 { 89}
Units	Cts/S	Cts/S	Cts/S
Avg	2724.4	41569.	2283.8
Stddev	133.6	75.	86.0
%RSD	4.9020	.18147	3.7638

#1	2630.0	41623.	2223.0
#2	2818.9	41516.	2344.5

Sample Name: 280-83229-F-1-A SD@5 Acquired: 5/19/2016 2:26:48 Type: Unk
Method: 6500_025(v6) Mode: CONC Corr. Factor: 1.000000
User: CRHOADES Prep Date: Custom ID2: Custom ID3:
Comment: 325785 200.7

Elem	Ag3280	Al1670	As1890	B_2089	Ba4554	Be3130	Bi2230	Ca3179	Cd2288
Line	328.068 {103}	167.079 {502}	189.042 {478}	208.959 {461}	455.403 {74}	313.042 {108}	223.061 {451}	317.933 {106}	228.802 {447}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	-0.00049	.19495	-0.00660	.09615	.03072	.00010	.00251	9.0151	-0.00009
Stddev	.00029	.00191	.00558	.00435	.00059	.00001	.00257	.0437	.00005
%RSD	59.213	.97913	84.562	4.5214	1.9179	9.2073	102.19	.48423	57.393

#1	-0.00069	.19360	-0.00266	.09922	.03031	.00011	.00070	9.0460	-0.00005
#2	-0.00028	.19630	-0.01055	.09308	.03114	.00009	.00433	8.9842	-0.00012

Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Elem	Co2286	Cr2055	Cu3247	Fe2599	K_7664	Li6707	Mg2790	Mn2576	Mo2020
Line	228.616 {447}	205.560 {464}	324.754 {104}	259.940 {130}	766.490 {44}	670.784 {50}	279.079 {121}2	257.610 {131}	202.030 {467}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	-0.00006	.00013	-0.00085	.19219	1.1036	.00205	1.1222	.10680	.00204
Stddev	.00009	.00025	.00048	.00490	.0042	.00459	.0072	.00016	.00011
%RSD	143.96	193.71	56.485	2.5519	.38147	224.28	.64321	.14637	5.2621

#1	-0.00013	-0.00005	-0.00119	.18872	1.1006	.00529	1.1273	.10692	.00197
#2	.00000	.00030	-0.00051	.19566	1.1066	-0.00120	1.1171	.10669	.00212

Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Elem	Na5895	Na8183	Ni2316	P_1782	Pb2203	S_1820	Sb2068	Se1960	Si2881
Line	589.592 {57}	818.326 {41}	231.604 {446}	178.284 {489}	220.353 {453}	182.034 {485}	206.833 {463}	196.090 {472}	288.158 {117}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	8.7198	W 10.219	-0.00021	.03041	.00111	4.1621	.00178	.00477	1.3144
Stddev	.0095	.522	.00082	.00011	.00146	.0127	.00176	.00661	.0135
%RSD	.10866	5.1093	394.42	.35683	131.07	.30446	98.745	138.37	1.0270

#1	8.7131	10.588	-0.00079	.03033	.00008	4.1711	.00302	.00010	1.3049
#2	8.7265	9.8499	.00037	.03049	.00214	4.1531	.00054	.00945	1.3240

Check ?	Chk Pass	Chk Warn	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit		500.00							
Low Limit		11.000							

Elem	SiO2	Sn1899	Sr4077	Th2837	Ti3349	Ti1908	U_3701	V_2924	Zn2062
Line	288.158 {117}2	189.989 {477}	407.771 {83}	283.730 {119}	334.904 {101}	190.856 {477}	370.152 {91}	292.402 {115}	206.200 {163}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	2.8129	.00078	.04080	.00101	.00477	-0.00157	-0.03312	.00136	.00500
Stddev	.0289	.00212	.00045	.00002	.00057	.00212	.00619	.00031	.00002
%RSD	1.0270	273.88	1.1136	2.4293	12.016	134.81	18.679	22.429	.40159

#1	2.7925	.00228	.04112	.00103	.00437	-0.00307	-0.02875	.00115	.00499
#2	2.8333	-0.00073	.04048	.00099	.00518	-0.00007	-0.03749	.00158	.00501

Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Elem	Zr3391								
Line	339.198 {99}								
Units	ppm								
Avg	-0.00219								
Stddev	.00273								
%RSD	124.89								

#1	-0.00412								
#2	-0.00026								

Check ?	Chk Pass								
High Limit									
Low Limit									

Sample Name: 280-83229-F-1-A SD@5 Acquired: 5/19/2016 2:26:48 Type: Unk
 Method: 6500_025(v6) Mode: CONC Corr. Factor: 1.000000
 User: CRHOADES Prep Date: Custom ID2: Custom ID3:
 Comment: 325785 200.7

Int. Std.	Y_2243	Y_3600	Y_3774
Line	224.306 {450}	360.073 { 94}	377.433 { 89}
Units	Cts/S	Cts/S	Cts/S
Avg	2615.3	41896.	2160.5
Stddev	32.5	13.	24.6
%RSD	1.2433	.03045	1.1395
#1	2638.3	41887.	2177.9
#2	2592.3	41905.	2143.1

Sample Name: 280-83229-F-1-B MS Acquired: 5/19/2016 2:29:28 Type: Unk
Method: 6500_025(v6) Mode: CONC Corr. Factor: 1.000000
User: CRHOADES Prep Date: Custom ID2: Custom ID3:
Comment: 325785 200.7

Elem	Ag3280	Al3092	As1890	B_2089	Ba4554	Be3130	Bi2230	Ca3179	Cd2288
Line	328.068 {103}	309.271 {109}	189.042 {478}	208.959 {461}	455.403 {74}	313.042 {108}	223.061 {451}	317.933 {106}	228.802 {447}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.04999	3.3326	1.0668	1.1307	2.1468	.04622	F 2.1450	90.323	.09606
Stddev	.00026	.0075	.0110	.0110	.0101	.00030	.0146	.291	.00027
%RSD	.52825	.22581	1.0274	.97255	.46869	.64047	.67861	.32232	.28498

#1	.05017	3.3273	1.0745	1.1385	2.1539	.04643	2.1553	90.529	.09625
#2	.04980	3.3379	1.0590	1.1229	2.1397	.04601	2.1347	90.117	.09586

Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Fail	Chk Pass	Chk Pass
High Limit							.10000		
Low Limit							-.10000		

Elem	Co2286	Cr2055	Cu3247	Fe2599	K_7664	Li6707	Mg2790	Mn2576	Mo2020
Line	228.616 {447}	205.560 {464}	324.754 {104}	259.940 {130}	766.490 {44}	670.784 {50}	279.079 {121}2	257.610 {131}	202.030 {467}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.47187	.19666	.26940	1.8638	52.054	.98324	53.147	.99493	1.0513
Stddev	.00228	.00002	.00006	.0052	.163	.00042	.197	.00246	.0069
%RSD	.48288	.00767	.02214	.27694	.31269	.04235	.37038	.24693	.66066

#1	.47348	.19667	.26944	1.8601	52.169	.98353	53.286	.99667	1.0562
#2	.47026	.19665	.26936	1.8674	51.939	.98294	53.008	.99319	1.0463

Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Elem	Na8183	Ni2316	P_1782	Pb2203	S_1820	Sb2068	Se1960	Si2881	SiO2
Line	818.326 {41}	231.604 {446}	178.284 {489}	220.353 {453}	182.034 {485}	206.833 {463}	196.090 {472}	288.158 {117}	288.158 {117}2
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	97.349	.46480	W 9.9799	.48786	21.972	.50767	2.1337	16.627	35.583
Stddev	.701	.00284	.0491	.00400	.217	.00464	.0143	.179	.382
%RSD	.71991	.61065	.49229	.81922	.98955	.91451	.67078	1.0738	1.0738

#1	97.845	.46681	10.015	.49069	22.126	.51096	2.1438	16.754	35.853
#2	96.854	.46279	9.9451	.48504	21.818	.50439	2.1235	16.501	35.313

Check ?	Chk Pass	Chk Pass	Chk Warn	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit			2.0000						
Low Limit			-1.0000						

Elem	Sn1899	Sr4077	Th2837	Ti3349	Ti1908	U_3701	V_2924	Zn2062	Zr3391
Line	189.989 {477}	407.771 {83}	283.730 {119}	334.904 {101}	190.856 {477}	370.152 {91}	292.402 {115}	206.200 {163}	339.198 {99}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	W 2.0055	1.1091	.94463	.95466	1.9150	2.1438	.48755	.46581	.52738
Stddev	.0051	.0028	.00336	.00239	.0482	.0166	.00047	.00493	.00123
%RSD	.25421	.25483	.35590	.25015	2.5177	.77619	.09738	1.0579	.23290

#1	2.0091	1.1111	.94701	.95635	1.9490	2.1321	.48788	.46929	.52651
#2	2.0019	1.1071	.94226	.95297	1.8809	2.1556	.48721	.46232	.52825

Check ?	Chk Warn	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit	2.0000								
Low Limit	-.05000								

Int. Std.	Y_2243	Y_3600	Y_3774						
Line	224.306 {450}	360.073 {94}	377.433 {89}						
Units	Cts/S	Cts/S	Cts/S						
Avg	2657.6	40284.	2250.0						
Stddev	18.2	153.	3.4						
%RSD	.68510	.37931	.15045						

#1	2644.7	40175.	2247.6						
#2	2670.5	40392.	2252.4						

Sample Name: 280-83229-F-1-C MSD Acquired: 5/19/2016 2:31:55 Type: Unk
Method: 6500_025(v6) Mode: CONC Corr. Factor: 1.000000
User: CRHOADES Prep Date: Custom ID2: Custom ID3:
Comment: 325785 200.7

Elem	Ag3280	Al3092	As1890	B_2089	Ba4554	Be3130	Bi2230	Ca3179	Cd2288
Line	328.068 {103}	309.271 {109}	189.042 {478}	208.959 {461}	455.403 {74}	313.042 {108}	223.061 {451}	317.933 {106}	228.802 {447}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.05032	3.4404	1.0909	1.1600	2.1949	.04703	F 2.2052	92.558	.09817
Stddev	.00008	.0328	.0032	.0024	.0411	.00060	.0178	1.592	.00068
%RSD	.16781	.95462	.29153	.21066	1.8746	1.2777	.80851	1.7198	.69097

#1	.05026	3.4636	1.0887	1.1617	2.1658	.04661	2.2178	91.433	.09865
#2	.05038	3.4171	1.0932	1.1583	2.2240	.04746	2.1926	93.684	.09769

Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Fail	Chk Pass	Chk Pass
High Limit							.10000		
Low Limit							-.10000		

Elem	Co2286	Cr2055	Cu3247	Fe2599	K_7664	Li6707	Mg2790	Mn2576	Mo2020
Line	228.616 {447}	205.560 {464}	324.754 {104}	259.940 {130}	766.490 {44}	670.784 {50}	279.079 {121}2	257.610 {131}	202.030 {467}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.48761	.20246	.26607	1.8575	53.206	.96862	52.685	.98677	1.0878
Stddev	.00070	.00001	.00194	.0028	.947	.00350	.132	.00135	.0031
%RSD	.14282	.00285	.72817	.14992	1.7797	.36131	.25005	.13731	.28581

#1	.48811	.20247	.26470	1.8595	52.536	.96615	52.591	.98581	1.0900
#2	.48712	.20246	.26744	1.8556	53.875	.97110	52.778	.98772	1.0856

Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Elem	Na8183	Ni2316	P_1782	Pb2203	S_1820	Sb2068	Se1960	Si2881	SiO2
Line	818.326 {41}	231.604 {446}	178.284 {489}	220.353 {453}	182.034 {485}	206.833 {463}	196.090 {472}	288.158 {117}	288.158 {117}2
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	96.523	.47943	W 10.330	.50466	22.698	.52448	2.1951	16.563	35.445
Stddev	.383	.00088	.012	.00015	.093	.00031	.0187	.017	.035
%RSD	.39669	.18331	.11517	.02963	.40916	.05850	.85122	.09971	.09971

#1	96.794	.48005	10.339	.50476	22.764	.52426	2.2083	16.575	35.470
#2	96.252	.47881	10.322	.50455	22.632	.52470	2.1818	16.551	35.420

Check ?	Chk Pass	Chk Pass	Chk Warn	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit			2.0000						
Low Limit			-1.0000						

Elem	Sn1899	Sr4077	Th2837	Ti3349	Ti1908	U_3701	V_2924	Zn2062	Zr3391
Line	189.989 {477}	407.771 {83}	283.730 {119}	334.904 {101}	190.856 {477}	370.152 {91}	292.402 {115}	206.200 {163}	339.198 {99}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	W 2.0679	1.1317	.93755	.94265	1.9428	2.1007	.48182	.45929	.51710
Stddev	.0154	.0203	.00238	.00205	.0868	.0196	.00074	.00230	.00364
%RSD	.74564	1.7935	.25354	.21771	4.4695	.93114	.15303	.50075	.70348

#1	2.0788	1.1173	.93587	.94119	2.0042	2.1145	.48130	.45767	.51452
#2	2.0570	1.1460	.93923	.94410	1.8814	2.0868	.48234	.46092	.51967

Check ?	Chk Warn	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit	2.0000								
Low Limit	-.05000								

Int. Std.	Y_2243	Y_3600	Y_3774						
Line	224.306 {450}	360.073 {94}	377.433 {89}						
Units	Cts/S	Cts/S	Cts/S						
Avg	2557.6	40308.	2186.0						
Stddev	5.8	25.	32.2						
%RSD	.22719	.06205	1.4734						

#1	2561.7	40326.	2208.8						
#2	2553.5	40290.	2163.3						

Sample Name: CCVH-3894253 Acquired: 5/19/2016 2:34:20 Type: QC
Method: 6500_025(v6) Mode: CONC Corr. Factor: 1.000000
User: CRHOADES Prep Date: Custom ID2: Custom ID3:
Comment:

Elem	Ag3280	Al3092	As1890	B_2089	Ba4554	Be3130	Bi2230	Ca3179	Cd2288	Co2286	Cr2055
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	-0.00019	52.095	-0.00338	.03644	.00016	.00012	W 1.0911	.02139	-0.00055	-0.00091	.00079
Stddev	.00000	.507	.00041	.00098	.00088	.00020	.0087	.01132	.00011	.00014	.00002
%RSD	1.8793	.97319	12.098	2.7012	545.43	164.22	.80115	52.936	20.294	15.567	2.7419

#1	-0.00019	52.454	-0.00309	.03714	.00079	.00026	1.0973	.02940	-0.00063	-0.00101	.00080
#2	-0.00019	51.737	-0.00367	.03574	-0.00046	-0.00002	1.0850	.01338	-0.00048	-0.00081	.00077

Check ?	None	Chk Pass	None	None	None	None	Chk Warn	None	None	None	None
Value							1.0000				
Range							5.0000%				

Elem	Cu3247	Fe2714	K_7664	Li6707	Mg2790	Mn2576	Mo2020	Na8183	Ni2316	P_1782	Pb2203
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	-0.00101	49.222	.21454	.00477	.02795	-0.00009	.00353	256.02	.00122	.00633	-0.00035
Stddev	.00068	.179	.03216	.00095	.00452	.00006	.00094	.81	.00001	.00124	.00057
%RSD	66.748	.36463	14.988	19.792	16.176	68.248	26.608	.31532	.95650	19.518	162.15

#1	-0.00149	49.096	.23728	.00544	.02475	-0.00014	.00286	256.59	.00121	.00546	-0.00076
#2	-0.00054	49.349	.19181	.00411	.03115	-0.00005	.00419	255.45	.00122	.00721	.00005

Check ?	None	Chk Pass	None	None	None	None	None	Chk Pass	None	None	None
Value											
Range											

Elem	S_1820	Sb2068	Se1960	Si2881	SiO2	Sn1899	Sr4077	Th2837	Ti3349	Ti1908	U_3701
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	W 5.3091	-0.01037	.01257	.02346	.05021	.00192	.00055	W 4.5742	.00763	.01731	W 10.697
Stddev	.0508	.00141	.00083	.00700	.01498	.00090	.00011	.0006	.00003	.00420	.012
%RSD	.95662	13.606	6.6232	29.826	29.826	47.174	19.193	.01208	.35233	24.258	.11377

#1	5.3450	-.01136	.01198	.01852	.03962	.00256	.00048	4.5738	.00764	.01434	10.705
#2	5.2732	-.00937	.01315	.02841	.06080	.00128	.00062	4.5746	.00761	.02028	10.688

Check ?	Chk Warn	None	None	None	None	None	None	Chk Warn	None	None	Chk Warn
Value	5.0000							5.0000			10.000
Range	5.0000%							-5.0000%			5.0000%

Elem	V_2924	Zn2062	Zr3391
Units	ppm	ppm	ppm
Avg	.00938	.00070	.05669
Stddev	.00030	.00027	.00042
%RSD	3.2139	37.936	.73300

#1	.00917	.00051	.05640
#2	.00959	.00089	.05699

Check ?	None	None	None
Value			
Range			

Int. Std.	Y_2243	Y_3600	Y_3774
Units	Cts/S	Cts/S	Cts/S
Avg	2640.7	40103.	2188.2
Stddev	25.4	7.	14.6
%RSD	.96333	.01743	.66763

#1	2622.7	40108.	2177.9
#2	2658.6	40098.	2198.5

Sample Name: CCV-3894251 Acquired: 5/19/2016 2:36:56 Type: QC
Method: 6500_025(v6) Mode: CONC Corr. Factor: 1.000000
User: CRHOADES Prep Date: Custom ID2: Custom ID3:
Comment:

Elem	Ag3280	Al1670	As1890	B_2089	Ba4554	Be3130	Bi2230	Ca3179	Cd2288	Co2286	Cr2055
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.48630	.55017	1.0458	.51762	.50068	.45202	.00084	4.8440	.49165	.49871	.50478
Stddev	.00092	.00574	.0203	.01001	.01425	.00802	.00025	.0891	.00085	.01003	.01169
%RSD	.18917	1.0428	1.9425	1.9347	2.8454	1.7751	29.270	1.8389	.17254	2.0106	2.3160

#1	.48695	.55423	1.0601	.52470	.51075	.45769	.00101	4.9070	.49225	.50580	.51304
#2	.48565	.54612	1.0314	.51054	.49061	.44635	.00067	4.7810	.49105	.49162	.49651

Check ?	Chk Pass	Chk Warn	Chk Pass	Chk Pass	Chk Pass	Chk Pass	None	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Value		.50000									
Range		10.000%									

Elem	Cu3247	Fe2599	K_7664	Li6707	Mg2790	Mn2576	Mo2020	Na5895	Ni2316	P_1782	Pb2203
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.51188	2.2943	47.946	.95689	18.754	.46016	.51409	5.1452	.48966	.97161	1.0048
Stddev	.00094	.0264	1.208	.00244	.037	.00075	.01350	.0313	.01000	.02036	.0224
%RSD	.18416	1.1495	2.5201	.25461	.19536	.16386	2.6268	.60884	2.0422	2.0956	2.2305

#1	.51121	2.3130	48.801	.95516	18.780	.46069	.52364	5.1231	.49673	.98601	1.0207
#2	.51254	2.2757	47.092	.95861	18.728	.45963	.50454	5.1674	.48259	.95722	.98900

Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Value											
Range											

Elem	S_1820	Sb2068	Se1960	Si2881	SiO2	Sn1899	Sr4077	Th2837	Ti3349	Ti1908	U_3701
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.15199	.98684	1.0683	4.7034	10.065	1.0238	.46303	.00175	.45531	1.0670	.02458
Stddev	.00127	.01989	.0289	.0531	.114	.0226	.01241	.00201	.00046	.0266	.02850
%RSD	.83438	2.0159	2.7037	1.1296	1.1296	2.2078	2.6799	114.53	.10153	2.4947	115.98

#1	.15289	1.0009	1.0888	4.6658	9.9849	1.0397	.47181	.00033	.45499	1.0858	.00442
#2	.15109	.97277	1.0479	4.7410	10.146	1.0078	.45426	.00317	.45564	1.0482	.04473

Check ?	None	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	None	Chk Pass	Chk Pass	None
Value											
Range											

Elem	V_2924	Zn2062	Zr3391
Units	ppm	ppm	ppm
Avg	.47928	.45038	.50966
Stddev	.00017	.00079	.00980
%RSD	.03564	.17444	1.9238

#1	.47940	.45094	.50272
#2	.47916	.44983	.51659

Check ?	Chk Pass	Chk Pass	Chk Pass
Value			
Range			

Int. Std.	Y_2243	Y_3600	Y_3774
Units	Cts/S	Cts/S	Cts/S
Avg	2587.7	40729.	2199.4
Stddev	24.1	251.	48.4
%RSD	.93001	.61618	2.1987

#1	2570.7	40906.	2165.2
#2	2604.7	40551.	2233.5

Sample Name: CCB Acquired: 5/19/2016 2:39:27 Type: QC
 Method: 6500_025(v6) Mode: CONC Corr. Factor: 1.000000
 User: CRHOADES Prep Date: Custom ID2: Custom ID3:
 Comment:

Elem	Ag3280	Al1670	As1890	B_2089	Ba4554	Be3130	Bi2230	Ca3179	Cd2288	Co2286	Cr2055
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	-.00015	.01684	-.00200	W .02333	-.00046	.00020	-.00253	-.02047	.00012	-.00019	-.00007
Stddev	.00017	.00018	.00180	.00122	.00042	.00003	.00305	.00194	.00013	.00036	.00035
%RSD	111.46	1.0959	89.924	5.2398	92.597	16.327	120.74	9.5011	109.00	185.13	532.55

#1	-.00027	.01671	-.00073	.02420	-.00076	.00022	-.00469	-.02184	.00003	.00006	-.00031
#2	-.00003	.01697	-.00327	.02247	-.00016	.00017	-.00037	-.01909	.00021	-.00045	.00018

Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Warn	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit				.01500							
Low Limit				-.01500							

Elem	Cu3247	Fe2599	K_7664	Li6707	Mg2790	Mn2576	Mo2020	Na5895	Ni2316	P_1782	Pb2203
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	-.00130	-.00367	.08041	.00092	.00437	.00003	.00190	.31852	-.00108	.00291	-.00047
Stddev	.00070	.00440	.04713	.00047	.01095	.00007	.00062	.00339	.00038	.00318	.00102
%RSD	54.185	119.78	58.619	51.166	250.29	243.46	32.528	1.0627	35.104	109.03	214.48

#1	-.00180	-.00056	.11374	.00125	.01211	.00008	.00146	.32092	-.00081	.00067	.00024
#2	-.00080	-.00678	.04708	.00059	-.00337	-.00002	.00233	.31613	-.00135	.00516	-.00119

Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit											
Low Limit											

Elem	S_1820	Sb2068	Se1960	Si2881	SiO2	Sn1899	Sr4077	Th2837	Ti3349	Ti1908	U_3701
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	F .12814	W .00643	W .01496	.03591	.07684	.00085	.00029	.00049	.00025	.00230	-.01300
Stddev	.00120	.00249	.00744	.01752	.03749	.00150	.00013	.00330	.00039	.00231	.01391
%RSD	.93452	38.675	49.713	48.796	48.796	177.07	45.193	673.22	156.96	100.36	106.99

#1	.12898	.00819	.00970	.02352	.05033	.00191	.00020	.00282	.00052	.00067	-.02284
#2	.12729	.00467	.02022	.04830	.10335	-.00021	.00038	-.00184	-.00003	.00393	-.00317

Check ?	Chk Fail	Chk Warn	Chk Warn	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit	.10000	.00100	.00750								
Low Limit	-.20000	-.00100	-.01500								

Elem	V_2924	Zn2062	Zr3391
Units	ppm	ppm	ppm
Avg	.00084	.00069	-.00024
Stddev	.00020	.00021	.00166
%RSD	23.244	29.966	693.81

#1	.00070	.00084	-.00141
#2	.00098	.00055	.00093

Check ?	Chk Pass	Chk Pass	Chk Pass
High Limit			
Low Limit			

Int. Std.	Y_2243	Y_3600	Y_3774
Units	Cts/S	Cts/S	Cts/S
Avg	2685.9	42209.	2217.0
Stddev	52.8	273.	49.3
%RSD	1.9659	.64647	2.2238

#1	2648.5	42016.	2182.2
#2	2723.2	42402.	2251.9

Sample Name: CCVL-3897520 Acquired: 5/19/2016 2:41:50 Type: QC
Method: 6500_025(v6) Mode: CONC Corr. Factor: 1.000000
User: CRHOADES Prep Date: Custom ID2: Custom ID3:
Comment:

Elem	Ag3280	Al1670	As1890	B_2089	Ba4554	Be3130	Bi2230	Ca3179	Cd2288	Co2286	Cr2055	Cu3247
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.00949	.11431	.01471	.11421	.00971	.00120	.10987	F .33661	.00493	.00944	.01037	.01429
Stddev	.00035	.00273	.00083	.00022	.00024	.00009	.00027	.00387	.00021	.00047	.00012	.00016
%RSD	3.7275	2.3851	5.6612	.18883	2.4697	7.5328	.24957	1.1484	4.2388	4.9486	1.1092	1.1398

#1	.00974	.11238	.01412	.11406	.00988	.00126	.10968	.33388	.00508	.00911	.01029	.01440
#2	.00924	.11624	.01530	.11436	.00954	.00113	.11006	.33934	.00479	.00977	.01046	.01417

Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Fail	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Value								.20000				
Range								30.000%				

Elem	Fe2599	K_7664	Li6707	Mg2790	Mn2576	Mo2020	Na5895	Ni2316	P_1782	Pb2203	S_1820	Sb2068
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.10645	3.0867	.00760	.21095	.00970	.02023	1.2805	.03911	2.7954	.00953	.11584	.02261
Stddev	.00342	.0067	.00290	.00061	.00012	.00014	.0617	.00006	.0049	.00178	.00167	.00049
%RSD	3.2104	.21843	38.165	.28765	1.2503	.68913	4.8218	.14066	.17385	18.718	1.4449	2.1492

#1	.10887	3.0914	.00555	.21052	.00962	.02013	1.2369	.03907	2.7920	.00827	.11702	.02295
#2	.10404	3.0819	.00965	.21138	.00979	.02033	1.3242	.03915	2.7989	.01079	.11465	.02226

Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	None	Chk Pass
Value												
Range												

Elem	Se1960	Si2881	SiO2	Sn1899	Sr4077	Th2837	Ti3349	Ti1908	U_3701	V_2924	Zn2062	Zr3391
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.01770	.50598	1.0828	.10174	.01018	.01648	.00934	.01145	F .02528	.00963	F .02782	.01594
Stddev	.00020	.08188	.1752	.00194	.00013	.00156	.00076	.00101	.01441	.00034	.00102	.00392
%RSD	1.1096	16.182	16.182	1.9114	1.2804	9.4425	8.1346	8.8370	56.996	3.4811	3.6550	24.580

#1	.01756	.44809	.95890	.10311	.01027	.01758	.00880	.01073	.01509	.00986	.02710	.01317
#2	.01784	.56388	1.2067	.10036	.01009	.01538	.00987	.01216	.03547	.00939	.02854	.01871

Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Fail	Chk Pass	Chk Fail	Chk Pass
Value									.06000		.02000	
Range									-30.000%		30.000%	

Int. Std.	Y_2243	Y_3600	Y_3774
Units	Cts/S	Cts/S	Cts/S
Avg	2670.6	41963.	2178.1
Stddev	40.9	75.	21.6
%RSD	1.5305	.17967	.99005

#1	2699.5	42016.	2193.3
#2	2641.7	41910.	2162.8

Sample Name: MB 280-325817/1-A Acquired: 5/19/2016 2:44:31 Type: Unk

Method: 6500_025(v6) Mode: CONC Corr. Factor: 1.000000

User: CRHOADES Prep Date: 5/18 Custom ID2: Custom ID3:

Comment: 325817 6010C Q5 (Fe)

Elem	Ag3280	Al1670	As1890	B_2089	Ba4554	Be3130	Bi2230	Ca3179	Cd2288
Line	328.068 {103}	167.079 {502}	189.042 {478}	208.959 {461}	455.403 { 74}	313.042 {108}	223.061 {451}	317.933 {106}	228.802 {447}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	-0.00038	.00296	.00022	.01514	-0.00059	.00010	-0.00052	-0.00256	.00013
Stddev	.00002	.00009	.00214	.00006	.00049	.00004	.00223	.00088	.00007
%RSD	5.8792	3.1504	970.33	.40865	83.649	41.793	427.19	34.422	53.172

#1	-0.00039	.00289	-0.00129	.01510	-0.00024	.00013	.00105	-0.00193	.00017
#2	-0.00036	.00303	.00173	.01519	-0.00094	.00007	-.00210	-.00318	.00008

Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Elem	Co2286	Cr2055	Cu3247	Fe2599	K_7664	Li6707	Mg2790	Mn2576	Mo2020
Line	228.616 {447}	205.560 {464}	324.754 {104}	259.940 {130}	766.490 { 44}	670.784 { 50}	279.079 {121}2	257.610 {131}	202.030 {467}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.00013	.00005	-0.00114	F .11950	.02686	-0.00171	-0.00170	.00273	.00002
Stddev	.00003	.00033	.00002	.00289	.03982	.00406	.00266	.00000	.00017
%RSD	22.888	662.84	1.6509	2.4198	148.24	237.89	156.94	.04468	729.45

#1	.00016	-0.00019	-0.00113	.12155	-0.00129	.00117	-0.00358	.00273	-0.00010
#2	.00011	.00029	-0.00115	.11746	.05502	-.00458	.00019	.00273	.00014

Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Fail	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit				.10000					
Low Limit				-.10000					

Elem	Na5895	Ni2316	P_1782	Pb2203	S_1820	Sb2068	Se1960	Si2881	SiO2
Line	589.592 { 57}	231.604 {446}	178.284 {489}	220.353 {453}	182.034 {485}	206.833 {463}	196.090 {472}	288.158 {117}	288.158 {117}2
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.26470	-0.00060	.00326	-0.00118	F .10704	.00439	.00529	.04182	.08949
Stddev	.00548	.00033	.00093	.00066	.00074	.00354	.00230	.07382	.15798
%RSD	2.0687	54.866	28.690	55.788	.68822	80.604	43.486	176.55	176.55

#1	.26083	-0.00037	.00392	-0.00071	.10652	.00690	.00692	.09402	.20120
#2	.26857	-0.00083	.00260	-0.00164	.10756	.00189	.00366	-.01039	-.02223

Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Fail	Chk Pass	Chk Pass	Chk Pass	None
High Limit					.10000				
Low Limit					-.10000				

Elem	Sn1899	Sr4077	Th2837	Ti3349	Ti1908	U_3701	V_2924	Zn2062	Zr3391
Line	189.989 {477}	407.771 { 83}	283.730 {119}	334.904 {101}	190.856 {477}	370.152 { 91}	292.402 {115}	206.200 {163}	339.198 { 99}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	-0.00017	.00028	-0.00039	.00008	-0.00034	.03334	.00011	.00154	.00124
Stddev	.00018	.00014	.00101	.00011	.00344	.03238	.00009	.00018	.00008
%RSD	106.22	50.991	256.16	134.79	1001.3	97.132	78.797	11.677	6.4408

#1	-0.00029	.00018	.00032	.00000	.00209	.01044	.00018	.00142	.00119
#2	-0.00004	.00038	-0.00110	.00015	-0.00277	.05624	.00005	.00167	.00130

Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Int. Std.	Y_2243	Y_3600	Y_3774
Line	224.306 {450}	360.073 { 94}	377.433 { 89}
Units	Cts/S	Cts/S	Cts/S
Avg	2707.5	42395.	2224.1
Stddev	53.3	66.	29.1
%RSD	1.9695	.15606	1.3083

#1	2669.8	42442.	2244.7
#2	2745.3	42349.	2203.5

Sample Name: LCS 280-325817/2-A Acquired: 5/19/2016 2:46:52 Type: Unk
Method: 6500_025(v6) Mode: CONC Corr. Factor: 1.000000
User: CRHOADES Prep Date: Custom ID2: Custom ID3:
Comment: 325817 6010C Q5 (Fe)

Elem	Ag3280	Al1670	As1890	B_2089	Ba4554	Be3130	Bi2230	Ca3179	Cd2288
Line	328.068 {103}	167.079 {502}	189.042 {478}	208.959 {461}	455.403 {74}	313.042 {108}	223.061 {451}	317.933 {106}	228.802 {447}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.04892	2.0592	1.0395	.97656	2.0189	.04638	2.1250	48.383	.09492
Stddev	.00015	.0217	.0137	.00912	.0340	.00018	.0146	.813	.00034
%RSD	.31582	1.0534	1.3173	.93372	1.6830	.38156	.68703	1.6799	.35668

#1	.04881	2.0746	1.0492	.98301	2.0429	.04651	2.1354	48.958	.09516
#2	.04903	2.0439	1.0299	.97011	1.9949	.04626	2.1147	47.808	.09468

Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	None	Chk Pass	Chk Pass
High Limit									
Low Limit									

Elem	Co2286	Cr2055	Cu3247	Fe2599	K_7664	Li6707	Mg2790	Mn2576	Mo2020
Line	228.616 {447}	205.560 {464}	324.754 {104}	259.940 {130}	766.490 {44}	670.784 {50}	279.079 {121}2	257.610 {131}	202.030 {467}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.46705	.19329	.25647	.93046	48.686	.96103	46.995	.45317	1.0226
Stddev	.00349	.00137	.00139	.00878	.750	.00200	.148	.00072	.0114
%RSD	.74679	.71038	.54387	.94381	1.5401	.20825	.31523	.15855	1.1140

#1	.46952	.19426	.25745	.93667	49.216	.95962	47.100	.45367	1.0307
#2	.46458	.19231	.25548	.92425	48.156	.96245	46.890	.45266	1.0146

Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Elem	Na8183	Ni2316	P_1782	Pb2203	S_1820	Sb2068	Se1960	Si2881	SiO2
Line	818.326 {41}	231.604 {446}	178.284 {489}	220.353 {453}	182.034 {485}	206.833 {463}	196.090 {472}	288.158 {117}	288.158 {117}2
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	52.896	.45994	9.6496	.48151	2.1247	.50011	2.1329	9.4992	20.328
Stddev	.370	.00307	.0719	.00310	.0065	.00629	.0010	.0447	.096
%RSD	.69948	.66825	.74538	.64392	.30665	1.2581	.04602	.47006	.47006

#1	52.635	.46211	9.7005	.48370	2.1293	.50456	2.1336	9.4676	20.261
#2	53.158	.45777	9.5988	.47931	2.1201	.49567	2.1322	9.5308	20.396

Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	None	Chk Pass	Chk Pass	Chk Pass	None
High Limit									
Low Limit									

Elem	Sn1899	Sr4077	Th2837	Ti3349	Ti1908	U_3701	V_2924	Zn2062	Zr3391
Line	189.989 {477}	407.771 {83}	283.730 {119}	334.904 {101}	190.856 {477}	370.152 {91}	292.402 {115}	206.200 {163}	339.198 {99}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	1.9912	.92578	.93139	.91705	1.9338	2.0904	.47285	.44326	.51774
Stddev	.0015	.01502	.00265	.00129	.0567	.0031	.00072	.00325	.00011
%RSD	.07703	1.6226	.28461	.14108	2.9330	.14866	.15312	.73227	.02048

#1	1.9923	.93640	.93326	.91797	1.9739	2.0926	.47234	.44555	.51766
#2	1.9901	.91516	.92952	.91614	1.8937	2.0882	.47336	.44096	.51781

Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Int. Std.	Y_2243	Y_3600	Y_3774
Line	224.306 {450}	360.073 {94}	377.433 {89}
Units	Cts/S	Cts/S	Cts/S
Avg	2665.8	40680.	2211.8
Stddev	21.7	246.	43.3
%RSD	.81222	.60576	1.9578

#1	2650.5	40506.	2181.2
#2	2681.1	40855.	2242.4

Sample Name: 280-82764-G-1-D Acquired: 5/19/2016 2:49:19 Type: Unk
Method: 6500_025(v6) Mode: CONC Corr. Factor: 1.000000
User: CRHOADES Prep Date: Custom ID2: Custom ID3:
Comment: 325817 6010C Q5 (Fe)

Elem	Ag3280	Al1670	As1890	B_2089	Ba4554	Be3130	Bi2230	Ca3179	Cd2288
Line	328.068 {103}	167.079 {502}	189.042 {478}	208.959 {461}	455.403 { 74}	313.042 {108}	223.061 {451}	317.933 {106}	228.802 {447}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	-.00044	.02544	.01331	.46545	.12873	.00008	.00097	76.872	.00040
Stddev	.00054	.00007	.00010	.00250	.00103	.00021	.00133	1.214	.00009
%RSD	124.23	.25826	.75515	.53621	.79726	245.02	137.25	1.5793	22.171

#1	-.00005	.02539	.01324	.46722	.12945	-.00006	.00003	77.731	.00047
#2	-.00082	.02548	.01338	.46369	.12800	.00023	.00192	76.014	.00034

Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Elem	Co2286	Cr2055	Cu3247	Fe2599	K_7664	Li6707	Mg2790	Mn2576	Mo2020
Line	228.616 {447}	205.560 {464}	324.754 {104}	259.940 {130}	766.490 { 44}	670.784 { 50}	279.079 {121}2	257.610 {131}	202.030 {467}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.01576	.00181	-.00022	30.780	17.150	-.00049	13.346	.18008	.00346
Stddev	.00029	.00036	.00084	.458	.079	.00243	.006	.00045	.00142
%RSD	1.8525	20.104	387.43	1.4874	.46274	496.13	.04167	.25001	41.162

#1	.01555	.00155	.00038	31.104	17.206	.00123	13.350	.18040	.00245
#2	.01597	.00207	-.00081	30.457	17.094	-.00221	13.342	.17976	.00447

Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Elem	Na8183	Ni2316	P_1782	Pb2203	S_1820	Sb2068	Se1960	Si2881	SiO2
Line	818.326 { 41}	231.604 {446}	178.284 {489}	220.353 {453}	182.034 {485}	206.833 {463}	196.090 {472}	288.158 {117}	288.158 {117}2
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	25.334	.00753	.15360	-.00180	13.134	-.00054	.01310	2.1913	4.6895
Stddev	.155	.00049	.00225	.00028	.008	.00885	.00986	.0131	.0281
%RSD	.61015	6.5442	1.4671	15.559	.06001	1646.1	75.263	.59890	.59890

#1	25.443	.00787	.15519	-.00200	13.139	-.00680	.00613	2.1821	4.6696
#2	25.225	.00718	.15201	-.00160	13.128	.00572	.02008	2.2006	4.7093

Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Elem	Sn1899	Sr4077	Th2837	Ti3349	Ti1908	U_3701	V_2924	Zn2062	Zr3391
Line	189.989 {477}	407.771 { 83}	283.730 {119}	334.904 {101}	190.856 {477}	370.152 { 91}	292.402 {115}	206.200 {163}	339.198 { 99}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.00151	.34856	.00270	-.00062	.01457	.00156	.00494	.01825	-.00132
Stddev	.00101	.00544	.00018	.00044	.00740	.00490	.00056	.00052	.00579
%RSD	67.068	1.5610	6.5025	70.769	50.782	313.41	11.248	2.8390	437.66

#1	.00222	.35241	.00283	-.00093	.00934	-.00190	.00455	.01862	.00277
#2	.00079	.34472	.00258	-.00031	.01980	.00503	.00533	.01789	-.00542

Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Int. Std.	Y_2243	Y_3600	Y_3774
Line	224.306 {450}	360.073 { 94}	377.433 { 89}
Units	Cts/S	Cts/S	Cts/S
Avg	2642.0	41050.	2217.0
Stddev	53.9	26.	25.5
%RSD	2.0411	.06425	1.1517

#1	2603.8	41031.	2199.0
#2	2680.1	41069.	2235.1

Sample Name: 280-82764-G-1-D SD@5 Acquired: 5/19/2016 2:51:56 Type: Unk
 Method: 6500_025(v6) Mode: CONC Corr. Factor: 1.000000
 User: CRHOADES Prep Date: Custom ID2: Custom ID3:
 Comment: 325817 6010C Q5 (Fe)

Elem	Ag3280	Al1670	As1890	B_2089	Ba4554	Be3130	Bi2230	Ca3179	Cd2288
Line	328.068 {103}	167.079 {502}	189.042 {478}	208.959 {461}	455.403 {74}	313.042 {108}	223.061 {451}	317.933 {106}	228.802 {447}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	-0.00008	.00710	-0.00437	.10330	.02477	-0.00021	.00185	15.613	-0.00036
Stddev	.00002	.00005	.00064	.00234	.00142	.00015	.00378	.184	.00006
%RSD	30.039	.70614	14.697	2.2690	5.7396	73.738	204.23	1.1778	15.838

#1	-0.00006	.00707	-0.00482	.10495	.02578	-0.00031	.00452	15.743	-0.00032
#2	-0.00010	.00714	-0.00391	.10164	.02377	-0.00010	-0.00082	15.483	-0.00040

Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Elem	Co2286	Cr2055	Cu3247	Fe2599	K_7664	Li6707	Mg2790	Mn2576	Mo2020
Line	228.616 {447}	205.560 {464}	324.754 {104}	259.940 {130}	766.490 {44}	670.784 {50}	279.079 {121}2	257.610 {131}	202.030 {467}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.00289	.00053	-0.00107	6.1947	3.3993	-0.00105	2.7041	.03618	.00024
Stddev	.00000	.00036	.00069	.0243	.0623	.00540	.0049	.00004	.00038
%RSD	.09748	67.771	64.616	.39263	1.8335	515.65	.18077	.11805	155.87

#1	.00288	.00028	-0.00058	6.2119	3.4434	.00277	2.7007	.03621	-0.00002
#2	.00289	.00079	-0.00156	6.1775	3.3553	-0.00487	2.7076	.03615	.00051

Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Elem	Na5895	Ni2316	P_1782	Pb2203	S_1820	Sb2068	Se1960	Si2881	SiO2
Line	589.592 {57}	231.604 {446}	178.284 {489}	220.353 {453}	182.034 {485}	206.833 {463}	196.090 {472}	288.158 {117}	288.158 {117}2
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	4.4466	.00111	.02902	.00161	2.6541	.00286	.00280	.44957	.96208
Stddev	.0076	.00035	.00307	.00136	.0414	.00633	.00424	.03361	.07193
%RSD	.17091	32.047	10.575	84.330	1.5615	221.57	151.32	7.4770	7.4770

#1	4.4520	.00086	.03119	.00257	2.6834	-0.00162	.00580	.47334	1.0129
#2	4.4412	.00136	.02685	.00065	2.6248	.00733	-0.00020	.42580	.91121

Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Elem	Sn1899	Sr4077	Th2837	Ti3349	Ti1908	U_3701	V_2924	Zn2062	Zr3391
Line	189.989 {477}	407.771 {83}	283.730 {119}	334.904 {101}	190.856 {477}	370.152 {91}	292.402 {115}	206.200 {163}	339.198 {99}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.00213	.07045	.00128	-0.00021	.00151	-0.02487	.00166	.00444	-0.00178
Stddev	.00012	.00023	.00131	.00043	.00176	.01735	.00025	.00078	.00496
%RSD	5.5488	.33151	102.44	203.79	116.92	69.778	14.926	17.657	278.09

#1	.00222	.07061	.00035	-0.00052	.00026	-0.03714	.00148	.00500	.00172
#2	.00205	.07028	.00220	.00009	.00276	-0.01260	.00183	.00389	-0.00529

Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Int. Std.	Y_2243	Y_3600	Y_3774
Line	224.306 {450}	360.073 {94}	377.433 {89}
Units	Cts/S	Cts/S	Cts/S
Avg	2667.8	41794.	2223.3
Stddev	35.0	131.	37.3
%RSD	1.3117	.31325	1.6799

#1	2643.1	41701.	2196.9
#2	2692.5	41886.	2249.7

Sample Name: 280-82764-G-1-E MS Acquired: 5/19/2016 2:54:35 Type: Unk
 Method: 6500_025(v6) Mode: CONC Corr. Factor: 1.000000
 User: CRHOADES Prep Date: Custom ID2: Custom ID3:
 Comment: 325817 6010C Q5 (Fe)

Elem	Ag3280	Al1670	Al3092	As1890	B_2089	Ba4554	Be3130	Bi2230	Ca3179
Line	328.068 {103}	167.079 {502}	309.271 {109}	189.042 {478}	208.959 {461}	455.403 { 74}	313.042 {108}	223.061 {451}	317.933 {106}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.05028	2.0793	W 2.3855	1.0761	1.4613	2.1571	.04703	F 2.1562	126.13
Stddev	.00123	.0193	.0572	.0079	.0091	.0104	.00002	.0278	.24
%RSD	2.4418	.92938	2.3970	.73317	.62264	.48446	.05042	1.2886	.19392

#1	.04942	2.0930	2.4259	1.0817	1.4678	2.1645	.04701	2.1759	126.31
#2	.05115	2.0657	2.3450	1.0705	1.4549	2.1497	.04705	2.1366	125.96

Check ?	Chk Pass	Chk Pass	Chk Warn	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Fail	Chk Pass
High Limit			500.00					.10000	
Low Limit			3.2000					-.10000	

Elem	Cd2288	Co2286	Cr2055	Cu3247	Fe2599	K_7664	Li6707	Mg2790	Mn2576
Line	228.802 {447}	228.616 {447}	205.560 {464}	324.754 {104}	259.940 {130}	766.490 { 44}	670.784 { 50}	279.079 {121}2	257.610 {131}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.09713	.48984	.19797	.26687	32.002	66.037	.97989	61.671	.64711
Stddev	.00019	.00381	.00222	.00053	.098	.192	.00081	.095	.00168
%RSD	.19863	.77863	1.1204	.19687	.30757	.29067	.08238	.15474	.25989

#1	.09727	.49254	.19954	.26724	32.072	66.173	.97932	61.604	.64592
#2	.09699	.48714	.19640	.26650	31.933	65.902	.98046	61.739	.64830

Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Elem	Mo2020	Na8183	Ni2316	P_1782	Pb2203	S_1820	Sb2068	Se1960	Si2881
Line	202.030 {467}	818.326 { 41}	231.604 {446}	178.284 {489}	220.353 {453}	182.034 {485}	206.833 {463}	196.090 {472}	288.158 {117}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	1.0454	77.871	.47494	W 10.227	.48730	15.789	.51681	2.1741	11.965
Stddev	.0116	.778	.00396	.074	.00255	.132	.00257	.0230	.000
%RSD	1.1120	.99942	.83430	.72811	.52296	.83492	.49801	1.0572	.00413

#1	1.0536	77.320	.47774	10.280	.48910	15.882	.51863	2.1904	11.964
#2	1.0372	78.421	.47214	10.174	.48550	15.696	.51499	2.1579	11.965

Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Warn	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit				2.0000					
Low Limit				-1.0000					

Elem	SiO2	Sn1899	Sr4077	Th2837	Ti3349	Ti1908	U_3701	V_2924	Zn2062
Line	288.158 {117}2	189.989 {477}	407.771 { 83}	283.730 {119}	334.904 {101}	190.856 {477}	370.152 { 91}	292.402 {115}	206.200 {163}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	25.605	W 2.0119	1.2874	.95404	.94270	1.8775	2.1567	.48587	.46657
Stddev	.001	.0019	.0034	.00215	.00027	.0579	.0083	.00143	.00027
%RSD	.00413	.09317	.26592	.22541	.02886	3.0852	.38462	.29369	.05720

#1	25.604	2.0132	1.2898	.95556	.94251	1.9185	2.1626	.48688	.46676
#2	25.605	2.0106	1.2850	.95252	.94290	1.8365	2.1509	.48487	.46639

Check ?	Chk Pass	Chk Warn	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit		2.0000							
Low Limit		-.05000							

Elem	Zr3391
Line	339.198 { 99}
Units	ppm
Avg	.53452
Stddev	.00401
%RSD	.74962

#1	.53168
#2	.53735

Check ?	Chk Pass
High Limit	
Low Limit	

Sample Name: 280-82764-G-1-E MS Acquired: 5/19/2016 2:54:35 Type: Unk
 Method: 6500_025(v6) Mode: CONC Corr. Factor: 1.000000
 User: CRHOADES Prep Date: Custom ID2: Custom ID3:
 Comment: 325817 6010C Q5 (Fe)

Int. Std.	Y_2243	Y_3600	Y_3774
Line	224.306 {450}	360.073 { 94}	377.433 { 89}
Units	Cts/S	Cts/S	Cts/S
Avg	2655.3	40556.	2260.5
Stddev	23.2	111.	1.6
%RSD	.87456	.27395	.07281
#1	2638.9	40634.	2259.3
#2	2671.8	40477.	2261.7

Sample Name: 280-82764-G-1-F MSD Acquired: 5/19/2016 2:57:02 Type: Unk
Method: 6500_025(v6) Mode: CONC Corr. Factor: 1.000000
User: CRHOADES Prep Date: Custom ID2: Custom ID3:
Comment: 325817 6010C Q5 (Fe)

Elem	Ag3280	Al1670	As1890	B_2089	Ba4554	Be3130	Bi2230	Ca3179	Cd2288
Line	328.068 {103}	167.079 {502}	189.042 {478}	208.959 {461}	455.403 { 74}	313.042 {108}	223.061 {451}	317.933 {106}	228.802 {447}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.04890	2.0706	1.0746	1.4425	2.1225	.04551	F 2.1290	124.50	.09527
Stddev	.00008	.0147	.0030	.0096	.0441	.00038	.0194	2.85	.00105
%RSD	.16740	.70838	.27930	.66744	2.0790	.83943	.91251	2.2876	1.0996

#1	.04884	2.0602	1.0725	1.4357	2.0913	.04524	2.1153	122.49	.09453
#2	.04896	2.0809	1.0767	1.4493	2.1537	.04578	2.1428	126.52	.09601

Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Fail	Chk Pass	Chk Pass
High Limit							.10000		
Low Limit							-.10000		

Elem	Co2286	Cr2055	Cu3247	Fe2599	K_7664	Li6707	Mg2790	Mn2576	Mo2020
Line	228.616 {447}	205.560 {464}	324.754 {104}	259.940 {130}	766.490 { 44}	670.784 { 50}	279.079 {121}2	257.610 {131}	202.030 {467}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.48378	.19471	.25477	31.830	64.930	.93974	58.966	.61898	1.0336
Stddev	.00477	.00225	.00054	.702	1.345	.00116	.111	.00042	.0106
%RSD	.98533	1.1563	.21003	2.2042	2.0718	.12383	.18844	.06768	1.0240

#1	.48041	.19311	.25515	31.333	63.979	.94057	59.045	.61928	1.0261
#2	.48715	.19630	.25439	32.326	65.881	.93892	58.887	.61869	1.0411

Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Elem	Na8183	Ni2316	P_1782	Pb2203	S_1820	Sb2068	Se1960	Si2881	SiO2
Line	818.326 { 41}	231.604 {446}	178.284 {489}	220.353 {453}	182.034 {485}	206.833 {463}	196.090 {472}	288.158 {117}	288.158 {117}2
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	74.518	.46664	W 10.028	.48311	15.638	.50257	2.1256	11.485	24.578
Stddev	.053	.00504	.116	.00697	.157	.00945	.0557	.059	.127
%RSD	.07142	1.0795	1.1599	1.4426	1.0018	1.8802	2.6214	.51559	.51559

#1	74.481	.46308	9.9459	.47818	15.527	.49588	2.0862	11.527	24.668
#2	74.556	.47020	10.110	.48804	15.748	.50925	2.1650	11.443	24.489

Check ?	Chk Pass	Chk Pass	Chk Warn	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit			2.0000						
Low Limit			-1.0000						

Elem	Sn1899	Sr4077	Th2837	Ti3349	Ti1908	U_3701	V_2924	Zn2062	Zr3391
Line	189.989 {477}	407.771 { 83}	283.730 {119}	334.904 {101}	190.856 {477}	370.152 { 91}	292.402 {115}	206.200 {163}	339.198 { 99}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	1.9689	1.2612	.90618	.89628	1.8557	1.9891	.46490	.44584	.50073
Stddev	.0531	.0254	.00181	.00306	.0016	.0175	.00027	.00089	.00421
%RSD	2.6975	2.0122	.19998	.34087	.08419	.88001	.05784	.19881	.84034

#1	1.9314	1.2432	.90490	.89844	1.8568	1.9767	.46509	.44521	.49776
#2	2.0065	1.2791	.90746	.89412	1.8546	2.0015	.46471	.44646	.50371

Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Int. Std.	Y_2243	Y_3600	Y_3774
Line	224.306 {450}	360.073 { 94}	377.433 { 89}
Units	Cts/S	Cts/S	Cts/S
Avg	2572.8	40653.	2215.4
Stddev	15.8	10.	48.1
%RSD	.61324	.02434	2.1715

#1	2584.0	40660.	2249.4
#2	2561.6	40646.	2181.4

Sample Name: 280-82764-G-1-D PDS Acquired: 5/19/2016 2:59:29 Type: Unk
Method: 6500_025(v6) Mode: CONC Corr. Factor: 1.000000
User: CRHOADES Prep Date: Custom ID2: Custom ID3:
Comment: 325817 6010C Q5 (Fe)

Elem	Ag3280	Al1670	As1890	B_2089	Ba4554	Be3130	Bi2230	Ca3179	Cd2288
Line	328.068 {103}	167.079 {502}	189.042 {478}	208.959 {461}	455.403 { 74}	313.042 {108}	223.061 {451}	317.933 {106}	228.802 {447}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.00929	1.0797	.23389	.55749	.22849	.04589	.00132	94.623	.04989
Stddev	.00013	.0041	.00095	.00400	.00381	.00071	.00444	2.314	.00079
%RSD	1.3563	.38159	.40563	.71775	1.6667	1.5537	335.02	2.4452	1.5812

#1	.00920	1.0826	.23322	.56032	.23118	.04640	.00446	96.259	.05044
#2	.00938	1.0768	.23457	.55466	.22579	.04539	-.00181	92.987	.04933

Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Elem	Co2286	Cr2055	Cu3247	Fe2599	K_7664	Li6707	Mg2790	Mn2576	Mo2020
Line	228.616 {447}	205.560 {464}	324.754 {104}	259.940 {130}	766.490 { 44}	670.784 { 50}	279.079 {121}2	257.610 {131}	202.030 {467}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.06420	.05159	.05133	31.193	36.173	.09573	31.316	.22137	.05618
Stddev	.00170	.00213	.00103	.729	.795	.00541	.148	.00133	.00046
%RSD	2.6472	4.1304	2.0161	2.3371	2.1980	5.6465	.47224	.59973	.82740

#1	.06540	.05310	.05060	31.708	36.736	.09955	31.211	.22043	.05651
#2	.06300	.05008	.05206	30.678	35.611	.09191	31.420	.22230	.05585

Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Elem	Na8183	Ni2316	P_1782	Pb2203	S_1820	Sb2068	Se1960	Si2881	SiO2
Line	818.326 { 41}	231.604 {446}	178.284 {489}	220.353 {453}	182.034 {485}	206.833 {463}	196.090 {472}	288.158 {117}	288.158 {117}2
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	44.732	.05523	W 2.1624	.09913	13.154	.10247	.22684	7.0614	15.111
Stddev	.249	.00203	.0495	.00224	.360	.00401	.00398	.0345	.074
%RSD	.55768	3.6722	2.2884	2.2616	2.7332	3.9144	1.7566	.48810	.48810

#1	44.908	.05666	2.1974	.10072	13.409	.10531	.22966	7.0370	15.059
#2	44.555	.05380	2.1274	.09755	12.900	.09964	.22402	7.0857	15.163

Check ?	Chk Pass	Chk Pass	Chk Warn	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit			2.0000						
Low Limit			-1.0000						

Elem	Sn1899	Sr4077	Th2837	Ti3349	Ti1908	U_3701	V_2924	Zn2062	Zr3391
Line	189.989 {477}	407.771 { 83}	283.730 {119}	334.904 {101}	190.856 {477}	370.152 { 91}	292.402 {115}	206.200 {163}	339.198 { 99}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.10252	.38818	.18594	.04594	.18997	.51536	.05210	.19704	.05388
Stddev	.00481	.00975	.00128	.00060	.01174	.02035	.00113	.00040	.00124
%RSD	4.6899	2.5121	.68925	1.2985	6.1805	3.9496	2.1679	.20174	2.3046

#1	.10592	.39507	.18504	.04552	.19828	.52976	.05290	.19732	.05476
#2	.09912	.38128	.18685	.04636	.18167	.50097	.05130	.19676	.05301

Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Int. Std.	Y_2243	Y_3600	Y_3774
Line	224.306 {450}	360.073 { 94}	377.433 { 89}
Units	Cts/S	Cts/S	Cts/S
Avg	2516.5	39434.	2164.0
Stddev	24.5	196.	7.4
%RSD	.97509	.49786	.34405

#1	2499.1	39295.	2158.7
#2	2533.8	39573.	2169.2

Sample Name: 280-82764-G-2-G Acquired: 5/19/2016 3:02:02 Type: Unk
 Method: 6500_025(v6) Mode: CONC Corr. Factor: 1.000000
 User: CRHOADES Prep Date: Custom ID2: Custom ID3:
 Comment: 325817 6010C Q5 (Fe)

Elem	Ag3280	Al1670	As1890	B_2089	Ba4554	Be3130	Bi2230	Ca3179	Cd2288
Line	328.068 {103}	167.079 {502}	189.042 {478}	208.959 {461}	455.403 { 74}	313.042 {108}	223.061 {451}	317.933 {106}	228.802 {447}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	-.00025	.03230	.02546	.15155	.16756	.00036	.00142	12.597	-.00009
Stddev	.00018	.00040	.00328	.00224	.00228	.00015	.00132	.101	.00013
%RSD	74.248	1.2408	12.895	1.4760	1.3589	41.054	93.299	.80285	152.34

#1	-.00012	.03201	.02314	.14997	.16595	.00047	.00048	12.526	-.00018
#2	-.00038	.03258	.02779	.15313	.16917	.00026	.00236	12.669	.00001

Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Elem	Co2286	Cr2055	Cu3247	Fe2599	K_7664	Li6707	Mg2790	Mn2576	Mo2020
Line	228.616 {447}	205.560 {464}	324.754 {104}	259.940 {130}	766.490 { 44}	670.784 { 50}	279.079 {121}2	257.610 {131}	202.030 {467}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.00178	.00054	-.00046	20.906	6.3899	-.00077	5.8178	.07719	.00069
Stddev	.00010	.00005	.00009	.118	.0630	.00258	.0387	.00025	.00097
%RSD	5.5314	8.5837	19.524	.56631	.98658	335.88	.66469	.32401	139.83

#1	.00171	.00057	-.00040	20.822	6.3453	.00106	5.7904	.07701	.00001
#2	.00185	.00050	-.00053	20.990	6.4345	-.00259	5.8451	.07736	.00138

Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Elem	Na8183	Ni2316	P_1782	Pb2203	S_1820	Sb2068	Se1960	Si2881	SiO2
Line	818.326 { 41}	231.604 {446}	178.284 {489}	220.353 {453}	182.034 {485}	206.833 {463}	196.090 {472}	288.158 {117}	288.158 {117}2
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	22.879	.00825	.05195	-.00218	2.2467	.00594	.00364	2.7360	5.8550
Stddev	.253	.00025	.00066	.00033	.0130	.00251	.00327	.0321	.0687
%RSD	1.1049	3.0636	1.2698	15.215	.58010	42.235	89.861	1.1737	1.1737

#1	22.700	.00808	.05241	-.00195	2.2375	.00416	.00596	2.7133	5.8064
#2	23.057	.00843	.05148	-.00242	2.2559	.00771	.00133	2.7587	5.9036

Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Elem	Sn1899	Sr4077	Th2837	Ti3349	Ti1908	U_3701	V_2924	Zn2062	Zr3391
Line	189.989 {477}	407.771 { 83}	283.730 {119}	334.904 {101}	190.856 {477}	370.152 { 91}	292.402 {115}	206.200 {163}	339.198 { 99}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.00099	.07963	.00231	-.00022	.00755	-.01057	.00184	.00236	.00149
Stddev	.00281	.00080	.00031	.00021	.00252	.03427	.00054	.00029	.00033
%RSD	283.10	.99912	13.279	94.969	33.418	324.39	29.352	12.307	22.151

#1	.00298	.07907	.00253	-.00036	.00577	-.03480	.00222	.00215	.00125
#2	-.00099	.08019	.00209	-.00007	.00934	.01367	.00146	.00256	.00172

Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Int. Std.	Y_2243	Y_3600	Y_3774
Line	224.306 {450}	360.073 { 94}	377.433 { 89}
Units	Cts/S	Cts/S	Cts/S
Avg	2678.4	42358.	2273.4
Stddev	1.8	91.	38.5
%RSD	.06840	.21564	1.6951

#1	2677.1	42422.	2300.6
#2	2679.7	42293.	2246.1

Sample Name: 280-82764-X-9-L Acquired: 5/19/2016 3:04:42 Type: Unk
Method: 6500_025(v6) Mode: CONC Corr. Factor: 1.000000
User: CRHOADES Prep Date: Custom ID2: Custom ID3:
Comment: 325817 6010C Q5 (Fe)

Elem	Ag3280	Al1670	As1890	B_2089	Ba4554	Be3130	Bi2230	Ca3179	Cd2288
Line	328.068 {103}	167.079 {502}	189.042 {478}	208.959 {461}	455.403 { 74}	313.042 {108}	223.061 {451}	317.933 {106}	228.802 {447}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	-.00057	.00277	.00289	.26697	.09930	.00015	-.00102	36.817	.00008
Stddev	.00085	.00048	.00164	.00045	.00014	.00006	.00353	.148	.00011
%RSD	150.00	17.315	56.547	.16859	.14231	37.034	347.38	.40108	149.89

#1	.00003	.00244	.00405	.26665	.09940	.00011	-.00351	36.921	.00015
#2	-.00117	.00311	.00174	.26728	.09920	.00019	.00148	36.712	.00000

Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Elem	Co2286	Cr2055	Cu3247	Fe2599	K_7664	Li6707	Mg2790	Mn2576	Mo2020
Line	228.616 {447}	205.560 {464}	324.754 {104}	259.940 {130}	766.490 { 44}	670.784 { 50}	279.079 {121}2	257.610 {131}	202.030 {467}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.00266	.00068	.00007	.12188	10.684	-.00421	8.6895	.03817	-.00010
Stddev	.00012	.00020	.00055	.00425	.146	.00460	.0023	.00014	.00026
%RSD	4.5213	29.054	735.56	3.4837	1.3673	109.22	.02598	.36417	266.42

#1	.00257	.00054	-.00032	.11888	10.581	-.00746	8.6879	.03808	-.00028
#2	.00274	.00082	.00047	.12488	10.788	-.00096	8.6911	.03827	.00009

Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Elem	Na8183	Ni2316	P_1782	Pb2203	S_1820	Sb2068	Se1960	Si2881	SiO2
Line	818.326 { 41}	231.604 {446}	178.284 {489}	220.353 {453}	182.034 {485}	206.833 {463}	196.090 {472}	288.158 {117}	288.158 {117}2
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	81.769	.00686	.27920	.00031	6.7649	.00192	.00527	2.0862	4.4644
Stddev	.119	.00024	.00014	.00151	.0132	.00376	.00627	.0343	.0733
%RSD	.14563	3.5557	.05072	481.11	.19546	195.78	119.06	1.6429	1.6429

#1	81.685	.00669	.27930	.00138	6.7743	.00458	.00083	2.1104	4.5163
#2	81.853	.00703	.27910	-.00075	6.7556	-.00074	.00970	2.0619	4.4125

Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Elem	Sn1899	Sr4077	Th2837	Ti3349	Ti1908	U_3701	V_2924	Zn2062	Zr3391
Line	189.989 {477}	407.771 { 83}	283.730 {119}	334.904 {101}	190.856 {477}	370.152 { 91}	292.402 {115}	206.200 {163}	339.198 { 99}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	-.00057	.17843	.00013	.00008	-.00073	-.00219	.00161	.00123	-.00061
Stddev	.00112	.00006	.00120	.00026	.00596	.06965	.00130	.00028	.00036
%RSD	198.28	.03112	897.59	323.24	813.04	3184.9	80.433	22.489	58.204

#1	-.00136	.17847	.00098	.00027	-.00494	-.05144	.00070	.00103	-.00087
#2	.00023	.17839	-.00072	-.00010	.00348	.04706	.00253	.00142	-.00036

Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Int. Std.	Y_2243	Y_3600	Y_3774
Line	224.306 {450}	360.073 { 94}	377.433 { 89}
Units	Cts/S	Cts/S	Cts/S
Avg	2659.7	39912.	2113.4
Stddev	27.2	5.	8.4
%RSD	1.0210	.01259	.39581

#1	2640.5	39909.	2107.5
#2	2678.9	39916.	2119.3

Sample Name: CCVH-3894253 Acquired: 5/19/2016 3:07:20 Type: QC
Method: 6500_025(v6) Mode: CONC Corr. Factor: 1.000000
User: CRHOADES Prep Date: Custom ID2: Custom ID3:
Comment:

Elem	Ag3280	Al3092	As1890	B_2089	Ba4554	Be3130	Bi2230	Ca3179	Cd2288	Co2286	Cr2055
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	-.00029	52.239	.00082	.01117	-.00048	.00038	W 1.0773	-.01663	-.00060	-.00125	.00037
Stddev	.00035	.758	.00153	.00093	.00021	.00003	.0045	.00442	.00004	.00039	.00010
%RSD	120.37	1.4515	186.26	8.3124	42.491	8.5672	.41832	26.557	6.2282	30.992	27.859

#1	-.00055	52.775	.00190	.01182	-.00034	.00036	1.0805	-.01351	-.00057	-.00098	.00030
#2	-.00004	51.703	-.00026	.01051	-.00063	.00041	1.0741	-.01975	-.00063	-.00152	.00044

Check ?	None	Chk Pass	None	None	None	None	Chk Warn	None	None	None	None
Value							1.0000				
Range							5.0000%				

Elem	Cu3247	Fe2714	K_7664	Li6707	Mg2790	Mn2576	Mo2020	Na8183	Ni2316	P_1782	Pb2203
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	-.00051	48.810	.05585	.00032	.02020	-.00017	-.00134	253.74	.00057	.00365	-.00073
Stddev	.00025	.643	.06976	.00129	.00426	.00009	.00065	1.29	.00025	.00412	.00032
%RSD	48.103	1.3177	124.90	408.17	21.114	53.495	48.289	.50852	44.033	113.08	43.693

#1	-.00068	49.264	.00652	-.00059	.01718	-.00023	-.00180	254.65	.00074	.00073	-.00095
#2	-.00034	48.355	.10518	.00123	.02321	-.00010	-.00089	252.83	.00039	.00656	-.00050

Check ?	None	Chk Pass	None	None	None	None	None	Chk Pass	None	None	None
Value											
Range											

Elem	S_1820	Sb2068	Se1960	Si2881	SiO2	Sn1899	Sr4077	Th2837	Ti3349	Ti1908	U_3701
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	5.1608	-.01005	.00545	-.00628	-.01345	-.00007	.00051	W 4.5910	.00599	-.00359	10.465
Stddev	.0041	.00203	.00242	.00129	.00276	.00079	.00001	.0232	.00111	.00100	.139
%RSD	.08027	20.222	44.446	20.495	20.495	1196.0	1.9361	.50548	18.545	27.744	1.3262

#1	5.1638	-.01149	.00716	-.00537	-.01150	.00049	.00052	4.6075	.00520	-.00430	10.367
#2	5.1579	-.00861	.00374	-.00719	-.01540	-.00062	.00050	4.5746	.00677	-.00289	10.563

Check ?	Chk Pass	None	None	None	None	None	None	Chk Warn	None	None	Chk Pass
Value								5.0000			
Range								-5.0000%			

Elem	V_2924	Zn2062	Zr3391
Units	ppm	ppm	ppm
Avg	.00911	-.00108	.05440
Stddev	.00047	.00081	.00532
%RSD	5.1311	74.963	9.7732

#1	.00944	-.00166	.05816
#2	.00878	-.00051	.05064

Check ?	None	None	None
Value			
Range			

Int. Std.	Y_2243	Y_3600	Y_3774
Units	Cts/S	Cts/S	Cts/S
Avg	2619.5	40535.	2212.5
Stddev	43.1	90.	36.0
%RSD	1.6465	.22168	1.6273

#1	2650.0	40471.	2187.1
#2	2589.0	40598.	2238.0

Sample Name: CCV-3894251 Acquired: 5/19/2016 3:09:57 Type: QC
Method: 6500_025(v6) Mode: CONC Corr. Factor: 1.000000
User: CRHOADES Prep Date: Custom ID2: Custom ID3:
Comment:

Elem	Ag3280	Al1670	As1890	B_2089	Ba4554	Be3130	Bi2230	Ca3179	Cd2288	Co2286	Cr2055	Cu3247
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.49045	F .55337	1.0408	.49374	.50943	.46117	.00430	4.9004	.49199	.49035	.49572	.51757
Stddev	.00089	.00700	.0043	.00162	.00568	.00135	.00276	.0057	.00077	.00168	.00217	.00078
%RSD	.18176	1.2654	.41328	.32844	1.1145	.29174	64.153	.11681	.15685	.34351	.43801	.14992

#1	.49108	.55832	1.0438	.49488	.50542	.46022	.00625	4.8963	.49254	.49154	.49726	.51703
#2	.48982	.54842	1.0377	.49259	.51345	.46212	.00235	4.9044	.49145	.48916	.49419	.51812

Check ?	Chk Pass	Chk Fail	Chk Pass	Chk Pass	Chk Pass	Chk Pass	None	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Value		.50000										
Range		10.490%										

Elem	Fe2599	K_7664	Li6707	Mg2790	Mn2576	Mo2020	Na5895	Ni2316	P_1782	Pb2203	S_1820	Sb2068
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	2.3448	48.966	.96269	18.888	.46178	.50226	5.0623	.47989	.96122	.99219	.07172	.98142
Stddev	.0276	.752	.00038	.006	.00021	.00410	.0197	.00095	.00448	.00165	.00243	.00454
%RSD	1.1785	1.5366	.03902	.03063	.04510	.81560	.39003	.19766	.46628	.16641	3.3877	.46260

#1	2.3252	48.434	.96296	18.884	.46193	.50516	5.0483	.48056	.96439	.99336	.07344	.98463
#2	2.3643	49.498	.96242	18.892	.46163	.49936	5.0762	.47922	.95805	.99102	.07000	.97821

Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	None	Chk Pass
Value												
Range												

Elem	Se1960	Si2881	SiO2	Sn1899	Sr4077	Th2837	Ti3349	Ti1908	U_3701	V_2924	Zn2062	Zr3391
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	1.0546	4.7627	10.192	1.0096	.47466	.00002	.45598	1.0455	.00387	.47569	F .44588	.50538
Stddev	.0039	.0408	.087	.0014	.00547	.00294	.00069	.0134	.01558	.00264	.00208	.00280
%RSD	.36614	.85692	.85692	.13567	1.1529	16757.	.15078	1.2817	402.43	.55510	.46745	.55402

#1	1.0574	4.7338	10.130	1.0087	.47079	-.00206	.45549	1.0550	.01489	.47383	.44441	.50340
#2	1.0519	4.7915	10.254	1.0106	.47853	.00210	.45646	1.0360	-.00715	.47756	.44735	.50736

Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	None	Chk Pass	Chk Pass	None	Chk Pass	Chk Fail	Chk Pass
Value											.50000	
Range											-10.490%	

Int. Std.	Y_2243	Y_3600	Y_3774
Units	Cts/S	Cts/S	Cts/S
Avg	2648.1	41723.	2195.1
Stddev	12.5	94.	23.9
%RSD	.47057	.22497	1.0870

#1	2639.3	41656.	2212.0
#2	2656.9	41789.	2178.2

Sample Name: CCB Acquired: 5/19/2016 3:12:29 Type: QC
 Method: 6500_025(v6) Mode: CONC Corr. Factor: 1.000000
 User: CRHOADES Prep Date: Custom ID2: Custom ID3:
 Comment:

Elem	Ag3280	Al1670	As1890	B_2089	Ba4554	Be3130	Bi2230	Ca3179	Cd2288	Co2286	Cr2055
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.00011	.00122	.00154	.00765	-.00083	.00021	.00091	-.02165	.00000	-.00067	-.00011
Stddev	.00001	.00003	.00675	.00079	.00061	.00018	.00001	.00111	.0000	.00009	.00023
%RSD	9.4885	2.2254	437.63	10.296	74.010	89.515	1.0168	5.1460	1699.5	13.380	209.65

#1	.00010	.00120	.00631	.00709	-.00126	.00034	.00091	-.02243	-.00003	-.00073	.00005
#2	.00012	.00124	-.00323	.00820	-.00040	.00008	.00090	-.02086	.00002	-.00060	-.00028

Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit											
Low Limit											

Elem	Cu3247	Fe2599	K_7664	Li6707	Mg2790	Mn2576	Mo2020	Na5895	Ni2316	P_1782	Pb2203
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	-.00108	-.00239	.10057	-.00278	.00160	.00001	.00196	.19450	-.00100	.00120	-.00285
Stddev	.00031	.00001	.00781	.00257	.00343	.00005	.00085	.00174	.00034	.00388	.00007
%RSD	29.058	.49891	7.7684	92.569	214.11	819.24	43.042	.89473	33.579	322.30	2.6103

#1	-.00086	-.00240	.09505	-.00459	-.00082	.00004	.00137	.19573	-.00076	-.00154	-.00290
#2	-.00130	-.00238	.10609	-.00096	.00403	-.00003	.00256	.19327	-.00124	.00394	-.00279

Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit											
Low Limit											

Elem	S_1820	Sb2068	Se1960	Si2881	SiO2	Sn1899	Sr4077	Th2837	Ti3349	Ti1908	U_3701
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	W .06471	W .00550	W .01110	-.00408	-.00873	.00049	.00023	.00141	-.00023	.00033	-.01750
Stddev	.00128	.00108	.00356	.03688	.07893	.00043	.00011	.00493	.00008	.00347	.05558
%RSD	1.9818	19.727	32.057	903.86	903.86	86.284	45.924	349.38	32.496	1040.0	317.63

#1	.06562	.00473	.01362	-.03016	-.06455	.00019	.00030	-.00207	-.00018	.00279	.02180
#2	.06380	.00627	.00859	.02200	.04708	.00080	.00016	.00490	-.00029	-.00212	-.05680

Check ?	Chk Warn	Chk Warn	Chk Warn	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit	.05000	.00100	.00750								
Low Limit	-.20000	-.00100	-.01500								

Elem	V_2924	Zn2062	Zr3391
Units	ppm	ppm	ppm
Avg	.00101	-.00093	-.00140
Stddev	.00072	.00032	.00019
%RSD	71.148	34.454	13.423

#1	.00050	-.00116	-.00126
#2	.00152	-.00070	-.00153

Check ?	Chk Pass	Chk Pass	Chk Pass
High Limit			
Low Limit			

Int. Std.	Y_2243	Y_3600	Y_3774
Units	Cts/S	Cts/S	Cts/S
Avg	2691.3	42164.	2188.9
Stddev	48.4	254.	40.6
%RSD	1.7993	.60181	1.8554

#1	2725.6	41984.	2217.6
#2	2657.1	42343.	2160.2

Sample Name: CCVL-3897520 Acquired: 5/19/2016 3:14:51 Type: QC

Method: 6500_025(v6) Mode: CONC Corr. Factor: 1.000000

User: CRHOADES Prep Date: Custom ID2: Custom ID3:

Comment:

Elem	Ag3280	Al1670	As1890	B_2089	Ba4554	Be3130	Bi2230	Ca3179	Cd2288	Co2286	Cr2055	Cu3247
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.00974	.11372	F .00990	.10092	.00965	.00119	.11069	.25507	.00486	.00985	.00978	.01466
Stddev	.00042	.00056	.00337	.00055	.00047	.00003	.00082	.00473	.00015	.00011	.00040	.00043
%RSD	4.2879	.49550	34.021	.54725	4.8819	2.5296	.74465	1.8548	3.0968	1.1337	4.0768	2.9664

#1	.00945	.11412	.01228	.10131	.00998	.00117	.11127	.25173	.00475	.00992	.00950	.01497
#2	.01004	.11332	.00752	.10053	.00932	.00121	.11010	.25842	.00496	.00977	.01007	.01435

Check ?	Chk Pass	Chk Pass	Chk Fail	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Value			.01500									
Range			-30.000%									

Elem	Fe2599	K_7664	Li6707	Mg2790	Mn2576	Mo2020	Na5895	Ni2316	P_1782	Pb2203	S_1820	Sb2068
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.11842	3.0664	.01078	.19234	.00950	.02030	1.1282	.03855	2.8159	.00795	.05412	.02498
Stddev	.00607	.0578	.00480	.00094	.00011	.00020	.0208	.00086	.0050	.00009	.00004	.00053
%RSD	5.1292	1.8856	44.530	.48742	1.1273	.96463	1.8471	2.2402	.17854	1.0960	.07455	2.1334

#1	.12271	3.1073	.00739	.19168	.00957	.02044	1.1429	.03794	2.8123	.00789	.05415	.02461
#2	.11412	3.0255	.01418	.19300	.00942	.02016	1.1134	.03916	2.8194	.00801	.05410	.02536

Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	None	Chk Pass
Value												
Range												

Elem	Se1960	Si2881	SiO2	Sn1899	Sr4077	Th2837	Ti3349	Ti1908	U_3701	V_2924	Zn2062	Zr3391
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	F .02345	.51058	1.0926	.10054	.00965	.01441	.00879	.01454	F .00475	.00977	.01931	.01348
Stddev	.00577	.00038	.0008	.00014	.00023	.00121	.00025	.00017	.05691	.00028	.00103	.00416
%RSD	24.600	.07422	.07422	.13880	2.4257	8.4073	2.8116	1.1919	1199.3	2.8374	5.3321	30.880

#1	.02753	.51085	1.0932	.10064	.00948	.01526	.00896	.01467	-.03550	.00957	.02004	.01642
#2	.01937	.51031	1.0921	.10044	.00981	.01355	.00861	.01442	.04499	.00997	.01858	.01053

Check ?	Chk Fail	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Fail	Chk Pass	Chk Pass	Chk Pass
Value	.01500								.06000			
Range	30.000%								-30.000%			

Int. Std.	Y_2243	Y_3600	Y_3774
Units	Cts/S	Cts/S	Cts/S
Avg	2704.9	42597.	2272.5
Stddev	46.4	37.	12.1
%RSD	1.7163	.08700	.53337

#1	2672.1	42571.	2264.0
#2	2737.7	42623.	2281.1

Sample Name: MB 280-325819/1-A Acquired: 5/19/2016 3:17:31 Type: Unk

Method: 6500_025(v6) Mode: CONC Corr. Factor: 1.000000

User: CRHOADES Prep Date: 5/18 Custom ID2: Custom ID3:

Comment: 325819 6010B (Fe)

Elem	Ag3280	Al1670	As1890	B_2089	Ba4554	Be3130	Bi2230	Ca3179	Cd2288
Line	328.068 {103}	167.079 {502}	189.042 {478}	208.959 {461}	455.403 { 74}	313.042 {108}	223.061 {451}	317.933 {106}	228.802 {447}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.00052	.01611	.00748	.00648	-.00068	.00020	-.00102	-.00314	-.00004
Stddev	.00037	.00051	.00350	.00093	.00011	.00023	.00316	.00778	.00024
%RSD	71.829	3.1575	46.770	14.362	16.041	114.44	309.80	247.80	573.97

#1	.00026	.01646	.00500	.00714	-.00076	.00036	-.00326	-.00864	-.00021
#2	.00078	.01575	.00995	.00582	-.00060	.00004	.00122	.00236	.00013

Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Elem	Co2286	Cr2055	Cu3247	Fe2599	K_7664	Li6707	Mg2790	Mn2576	Mo2020
Line	228.616 {447}	205.560 {464}	324.754 {104}	259.940 {130}	766.490 { 44}	670.784 { 50}	279.079 {121}2	257.610 {131}	202.030 {467}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	-.00007	.00020	-.00095	.01596	.05505	.00348	.00856	.00032	.00007
Stddev	.00015	.00009	.00018	.00091	.06181	.00313	.00682	.00013	.00068
%RSD	224.25	46.154	18.458	5.6845	112.28	90.067	79.691	40.019	1033.8

#1	.00004	.00014	-.00083	.01660	.09875	.00126	.00374	.00041	-.00041
#2	-.00018	.00027	-.00107	.01531	.01134	.00569	.01338	.00023	.00054

Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Elem	Na5895	Ni2316	P_1782	Pb2203	S_1820	Sb2068	Se1960	Si2881	SiO2
Line	589.592 { 57}	231.604 {446}	178.284 {489}	220.353 {453}	182.034 {485}	206.833 {463}	196.090 {472}	288.158 {117}	288.158 {117}2
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.17583	-.00046	.00071	-.00136	W .07770	W .00555	W .00878	.02106	.04506
Stddev	.01061	.00012	.00314	.00083	.00430	.00339	.00396	.00508	.01087
%RSD	6.0359	26.133	443.03	60.571	5.5284	61.152	45.141	24.123	24.123

#1	.16832	-.00038	.00293	-.00195	.08073	.00315	.00598	.02465	.05275
#2	.18333	-.00055	-.00151	-.00078	.07466	.00795	.01158	.01747	.03738

Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Warn	Chk Warn	Chk Warn	Chk Pass	None
High Limit					.05000	.00500	.00750		
Low Limit					-.05000	-.00500	-.00750		

Elem	Sn1899	Sr4077	Th2837	Ti3349	Ti1908	U_3701	V_2924	Zn2062	Zr3391
Line	189.989 {477}	407.771 { 83}	283.730 {119}	334.904 {101}	190.856 {477}	370.152 { 91}	292.402 {115}	206.200 {163}	339.198 { 99}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	-.00066	.00017	.00249	.00037	-.00310	.02058	.00029	.00089	.00113
Stddev	.00008	.00019	.00275	.00056	.00086	.08857	.00067	.00048	.00119
%RSD	12.029	110.90	110.27	151.55	27.806	430.38	232.60	54.164	105.86

#1	-.00072	.00030	.00443	.00076	-.00371	-.04205	-.00019	.00122	.00028
#2	-.00061	.00004	.00055	-.00003	-.00249	.08321	.00076	.00055	.00197

Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Int. Std.	Y_2243	Y_3600	Y_3774
Line	224.306 {450}	360.073 { 94}	377.433 { 89}
Units	Cts/S	Cts/S	Cts/S
Avg	2718.7	40894.	2186.8
Stddev	38.3	101.	13.3
%RSD	1.4078	.24638	.60742

#1	2691.6	40966.	2177.4
#2	2745.7	40823.	2196.2

Sample Name: LCS 280-325819/2-A Acquired: 5/19/2016 3:19:53 Type: Unk

Method: 6500_025(v6) Mode: CONC Corr. Factor: 1.000000

User: CRHOADES Prep Date: Custom ID2: Custom ID3:

Comment: 325819 6010B (Fe)

Elem	Ag3280	Al1670	As1890	B_2089	Ba4554	Be3130	Bi2230	Ca3179	Cd2288
Line	328.068 {103}	167.079 {502}	189.042 {478}	208.959 {461}	455.403 {74}	313.042 {108}	223.061 {451}	317.933 {106}	228.802 {447}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.04870	2.0272	1.0431	.98734	1.9823	.04612	2.1249	47.263	.09443
Stddev	.00001	.0090	.0038	.00185	.0017	.00004	.0016	.139	.00039
%RSD	.01447	.44292	.36766	.18771	.08320	.07709	.07552	.29381	.41594

#1	.04870	2.0209	1.0403	.98603	1.9835	.04615	2.1238	47.362	.09415
#2	.04871	2.0336	1.0458	.98865	1.9812	.04610	2.1260	47.165	.09471

Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	None	Chk Pass	Chk Pass
High Limit									
Low Limit									

Elem	Co2286	Cr2055	Cu3247	Fe2599	K_7664	Li6707	Mg2790	Mn2576	Mo2020
Line	228.616 {447}	205.560 {464}	324.754 {104}	259.940 {130}	766.490 {44}	670.784 {50}	279.079 {121}2	257.610 {131}	202.030 {467}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.46369	.19153	.25615	.93658	47.213	.95016	46.099	F .44675	1.0208
Stddev	.00288	.00055	.00061	.00822	.084	.00410	.023	.00087	.0046
%RSD	.62071	.28694	.23994	.87751	.17841	.43116	.04966	.19484	.45099

#1	.46166	.19114	.25658	.93077	47.154	.94726	46.116	.44737	1.0176
#2	.46573	.19191	.25571	.94239	47.273	.95305	46.083	.44614	1.0241

Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Fail	Chk Pass
High Limit								.55000	
Low Limit								.45000	

Elem	Na8183	Ni2316	P_1782	Pb2203	S_1820	Sb2068	Se1960	Si2881	SiO2
Line	818.326 {41}	231.604 {446}	178.284 {489}	220.353 {453}	182.034 {485}	206.833 {463}	196.090 {472}	288.158 {117}	288.158 {117}2
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	52.550	.45683	9.6625	.47693	2.1231	.50472	2.1295	9.2928	19.887
Stddev	.249	.00221	.0237	.00119	.0104	.00160	.0031	.0522	.112
%RSD	.47454	.48450	.24513	.24955	.48960	.31704	.14327	.56204	.56204

#1	52.374	.45526	9.6457	.47608	2.1158	.50585	2.1317	9.2559	19.808
#2	52.726	.45839	9.6792	.47777	2.1305	.50358	2.1274	9.3298	19.966

Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	None	Chk Pass	Chk Pass	Chk Pass	None
High Limit									
Low Limit									

Elem	Sn1899	Sr4077	Th2837	Ti3349	Ti1908	U_3701	V_2924	Zn2062	Zr3391
Line	189.989 {477}	407.771 {83}	283.730 {119}	334.904 {101}	190.856 {477}	370.152 {91}	292.402 {115}	206.200 {163}	339.198 {99}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	1.9602	.90795	.92318	.90934	1.9332	2.0263	.46491	.43182	.51324
Stddev	.0000	.00162	.00263	.00230	.0549	.0159	.00045	.00142	.00154
%RSD	.00108	.17893	.28511	.25248	2.8392	.78509	.09628	.32818	.30087

#1	1.9601	.90910	.92504	.91097	1.9720	2.0150	.46523	.43283	.51214
#2	1.9602	.90680	.92132	.90772	1.8944	2.0375	.46460	.43082	.51433

Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Int. Std.	Y_2243	Y_3600	Y_3774
Line	224.306 {450}	360.073 {94}	377.433 {89}
Units	Cts/S	Cts/S	Cts/S
Avg	2697.5	41631.	2299.8
Stddev	11.1	119.	14.0
%RSD	.41098	.28510	.60776

#1	2705.4	41547.	2289.9
#2	2689.7	41715.	2309.6

Sample Name: 280-82786-M-1-B Acquired: 5/19/2016 3:22:20 Type: Unk
Method: 6500_025(v6) Mode: CONC Corr. Factor: 1.000000
User: CRHOADES Prep Date: Custom ID2: Custom ID3:
Comment: 325819 6010B (Fe)

Elem	Ag3280	Al1670	As1890	B_2089	Ba4554	Be3130	Bi2230	Ca3179	Cd2288
Line	328.068 {103}	167.079 {502}	189.042 {478}	208.959 {461}	455.403 { 74}	313.042 {108}	223.061 {451}	317.933 {106}	228.802 {447}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	-0.00056	.00780	-0.00519	.15247	.01392	.00022	.00164	37.889	.00026
Stddev	.00063	.00078	.00527	.00124	.00026	.00003	.00249	.931	.00001
%RSD	112.97	9.9849	101.45	.81493	1.8740	13.216	151.70	2.4579	2.4827

#1	-0.00100	.00725	-0.00147	.15335	.01373	.00020	-0.00012	37.230	.00026
#2	-0.00011	.00835	-0.00892	.15159	.01410	.00024	.00340	38.547	.00025

Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Elem	Co2286	Cr2055	Cu3247	Fe2599	K_7664	Li6707	Mg2790	Mn2576	Mo2020
Line	228.616 {447}	205.560 {464}	324.754 {104}	259.940 {130}	766.490 { 44}	670.784 { 50}	279.079 {121}2	257.610 {131}	202.030 {467}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	-0.00025	.00024	.00191	.25222	3.7799	.06408	15.511	.04810	.00332
Stddev	.00042	.00025	.00011	.00329	.0984	.00172	.112	.00029	.00130
%RSD	166.74	104.77	5.7551	1.3034	2.6020	2.6860	.72015	.59453	39.288

#1	-0.00054	.00006	.00183	.24990	3.7104	.06287	15.432	.04789	.00239
#2	.00004	.00042	.00198	.25455	3.8495	.06530	15.590	.04830	.00424

Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Elem	Na8183	Ni2316	P_1782	Pb2203	S_1820	Sb2068	Se1960	Si2881	SiO2
Line	818.326 { 41}	231.604 {446}	178.284 {489}	220.353 {453}	182.034 {485}	206.833 {463}	196.090 {472}	288.158 {117}	288.158 {117}2
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	272.04	.00003	.01546	-0.00079	96.664	.00431	.01034	5.3149	11.374
Stddev	.80	.00068	.00200	.00021	.208	.00244	.00004	.0195	.042
%RSD	.29554	2115.9	12.951	27.007	.21560	56.521	.36917	.36715	.36715

#1	271.47	-0.00045	.01688	-0.00095	96.517	.00259	.01031	5.3012	11.344
#2	272.60	.00051	.01404	-0.00064	96.811	.00603	.01037	5.3287	11.404

Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Elem	Sn1899	Sr4077	Th2837	Ti3349	Ti1908	U_3701	V_2924	Zn2062	Zr3391
Line	189.989 {477}	407.771 { 83}	283.730 {119}	334.904 {101}	190.856 {477}	370.152 { 91}	292.402 {115}	206.200 {163}	339.198 { 99}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.00150	1.0452	.00166	-0.00040	.01245	-0.02186	.00041	.04013	-0.00277
Stddev	.00053	.0300	.00486	.00021	.00734	.07103	.00038	.00044	.00198
%RSD	35.436	2.8733	292.04	52.315	58.952	324.97	93.102	1.0976	71.249

#1	.00112	1.0240	.00510	-0.00055	.00726	-.07209	.00014	.03982	-0.00138
#2	.00187	1.0664	-.00177	-0.00025	.01765	.02837	.00068	.04044	-0.00417

Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Int. Std.	Y_2243	Y_3600	Y_3774
Line	224.306 {450}	360.073 { 94}	377.433 { 89}
Units	Cts/S	Cts/S	Cts/S
Avg	2601.6	40790.	2242.5
Stddev	8.8	245.	71.3
%RSD	.33705	.60120	3.1805

#1	2607.8	40963.	2292.9
#2	2595.4	40616.	2192.1

Sample Name: 280-82864-A-1-D Acquired: 5/19/2016 3:24:58 Type: Unk
Method: 6500_025(v6) Mode: CONC Corr. Factor: 1.000000
User: CRHOADES Prep Date: Custom ID2: Custom ID3:
Comment: 325819 6010B (Fe)

Elem	Ag3280	Al1670	As1890	B_2089	Ba4554	Be3130	Bi2230	Ca3179	Cd2288
Line	328.068 {103}	167.079 {502}	189.042 {478}	208.959 {461}	455.403 { 74}	313.042 {108}	223.061 {451}	317.933 {106}	228.802 {447}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	-0.00020	.07863	-0.00286	.06672	.12414	.00030	-0.00195	75.379	.00013
Stddev	.00034	.00122	.00376	.00209	.00001	.00013	.00598	.062	.00011
%RSD	171.84	1.5469	131.51	3.1297	.00586	42.227	307.21	.08289	79.295

#1	.00004	.07777	-.00020	.06819	.12415	.00038	-.00618	75.423	.00006
#2	-.00044	.07949	-.00551	.06524	.12414	.00021	.00228	75.335	.00021

Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Elem	Co2286	Cr2055	Cu3247	Fe2599	K_7664	Li6707	Mg2790	Mn2576	Mo2020
Line	228.616 {447}	205.560 {464}	324.754 {104}	259.940 {130}	766.490 { 44}	670.784 { 50}	279.079 {121}2	257.610 {131}	202.030 {467}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.00020	.00004	.00239	.07418	7.7321	.03421	19.172	.00721	.00110
Stddev	.00023	.00051	.00052	.00407	.0293	.00071	.016	.00002	.00001
%RSD	116.49	1211.8	21.730	5.4825	.37898	2.0824	.08491	.25837	1.2253

#1	.00036	-.00032	.00202	.07706	7.7113	.03472	19.160	.00720	.00109
#2	.00003	.00040	.00275	.07131	7.7528	.03371	19.183	.00722	.00111

Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Elem	Na8183	Ni2316	P_1782	Pb2203	S_1820	Sb2068	Se1960	Si2881	SiO2
Line	818.326 { 41}	231.604 {446}	178.284 {489}	220.353 {453}	182.034 {485}	206.833 {463}	196.090 {472}	288.158 {117}	288.158 {117}2
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	94.408	.00137	.01525	-.00017	22.746	.00443	.00410	2.5198	5.3924
Stddev	.029	.00006	.00192	.00094	.251	.00208	.00362	.0113	.0243
%RSD	.03026	4.6516	12.586	563.11	1.1018	46.999	88.271	.44967	.44967

#1	94.428	.00133	.01661	.00050	22.923	.00591	.00154	2.5118	5.3752
#2	94.387	.00142	.01389	-.00083	22.569	.00296	.00665	2.5278	5.4095

Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Elem	Sn1899	Sr4077	Th2837	Ti3349	Ti1908	U_3701	V_2924	Zn2062	Zr3391
Line	189.989 {477}	407.771 { 83}	283.730 {119}	334.904 {101}	190.856 {477}	370.152 { 91}	292.402 {115}	206.200 {163}	339.198 { 99}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	-0.00080	.54220	.00031	.00159	-.00157	-.04543	.00116	.00148	-.00005
Stddev	.00191	.00134	.00072	.00064	.00153	.05916	.00032	.00033	.00005
%RSD	240.04	.24794	231.79	40.432	97.864	130.24	27.505	22.565	111.18

#1	-.00215	.54315	.00081	.00205	-.00265	-.00359	.00139	.00124	-.00008
#2	.00056	.54125	-.00020	.00114	-.00048	-.08726	.00094	.00172	-.00001

Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Int. Std.	Y_2243	Y_3600	Y_3774
Line	224.306 {450}	360.073 { 94}	377.433 { 89}
Units	Cts/S	Cts/S	Cts/S
Avg	2563.3	40759.	2240.8
Stddev	24.6	527.	6.3
%RSD	.95866	1.2934	.27929

#1	2546.0	41132.	2245.2
#2	2580.7	40387.	2236.4

Sample Name: 280-82864-A-1-D SD@5 Acquired: 5/19/2016 3:27:37 Type: Unk
Method: 6500_025(v6) Mode: CONC Corr. Factor: 1.000000
User: CRHOADES Prep Date: Custom ID2: Custom ID3:
Comment: 325819 6010B (Fe)

Elem	Ag3280	Al1670	As1890	B_2089	Ba4554	Be3130	Bi2230	Ca3179	Cd2288
Line	328.068 {103}	167.079 {502}	189.042 {478}	208.959 {461}	455.403 {74}	313.042 {108}	223.061 {451}	317.933 {106}	228.802 {447}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	-0.00050	.01867	.00399	.01668	.02432	.00000	.00391	15.586	-0.00021
Stddev	.00047	.00130	.00511	.00044	.00006	.00002	.00493	.057	.00076
%RSD	94.060	6.9480	127.90	2.6536	.24425	1135.8	126.12	.36850	361.97

#1	-0.00017	.01959	.00761	.01699	.02427	.00001	.00042	15.545	-0.00075
#2	-0.00084	.01776	.00038	.01637	.02436	-0.00001	.00739	15.627	.00033

Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Elem	Co2286	Cr2055	Cu3247	Fe2599	K_7664	Li6707	Mg2790	Mn2576	Mo2020
Line	228.616 {447}	205.560 {464}	324.754 {104}	259.940 {130}	766.490 {44}	670.784 {50}	279.079 {121}2	257.610 {131}	202.030 {467}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	-0.00008	-0.00010	-0.00002	.07513	1.6227	.00445	3.9152	.00166	.00105
Stddev	.00025	.00007	.00013	.00837	.1110	.00234	.0289	.00002	.00041
%RSD	332.03	65.521	529.49	11.136	6.8414	52.619	.73721	1.1345	39.240

#1	-0.00025	-0.00005	.00007	.06921	1.7012	.00611	3.9356	.00167	.00076
#2	.00010	-0.00015	-0.00012	.08105	1.5442	.00279	3.8948	.00164	.00134

Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Elem	Na8183	Ni2316	P_1782	Pb2203	S_1820	Sb2068	Se1960	Si2881	SiO2
Line	818.326 {41}	231.604 {446}	178.284 {489}	220.353 {453}	182.034 {485}	206.833 {463}	196.090 {472}	288.158 {117}	288.158 {117}2
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	20.223	-0.00026	.00190	-0.00046	4.2996	.00374	.00681	.53003	1.1343
Stddev	.900	.00051	.00129	.00077	.0059	.00186	.00061	.07963	.1704
%RSD	4.4521	191.85	67.785	167.11	.13624	49.745	8.9919	15.024	15.024

#1	20.860	.00009	.00099	.00008	4.3038	.00243	.00724	.47372	1.0138
#2	19.587	-0.00062	.00282	-0.00100	4.2955	.00506	.00638	.58634	1.2548

Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Elem	Sn1899	Sr4077	Th2837	Ti3349	Ti1908	U_3701	V_2924	Zn2062	Zr3391
Line	189.989 {477}	407.771 {83}	283.730 {119}	334.904 {101}	190.856 {477}	370.152 {91}	292.402 {115}	206.200 {163}	339.198 {99}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	-0.00146	.11124	.00081	.00087	-0.00410	-0.00988	.00072	.00221	-0.00260
Stddev	.00243	.00105	.00239	.00059	.00006	.02925	.00004	.00032	.00059
%RSD	166.62	.94514	296.68	67.682	1.4936	295.97	5.6879	14.351	22.704

#1	.00026	.11049	.00250	.00045	-0.00406	-0.03056	.00069	.00198	-0.00218
#2	-0.00317	.11198	-0.00089	.00129	-0.00415	.01080	.00075	.00243	-0.00302

Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Int. Std.	Y_2243	Y_3600	Y_3774
Line	224.306 {450}	360.073 {94}	377.433 {89}
Units	Cts/S	Cts/S	Cts/S
Avg	2625.9	40739.	2133.8
Stddev	28.6	212.	18.1
%RSD	1.0895	.52056	.84902

#1	2605.6	40589.	2146.6
#2	2646.1	40889.	2121.0

Sample Name: 280-82864-A-1-E MS Acquired: 5/19/2016 3:30:16 Type: Unk
Method: 6500_025(v6) Mode: CONC Corr. Factor: 1.000000
User: CRHOADES Prep Date: Custom ID2: Custom ID3:
Comment: 325819 6010B (Fe)

Elem	Ag3280	Al1670	Al3092	As1890	B_2089	Ba4554	Be3130	Bi2230	Ca3179
Line	328.068 {103}	167.079 {502}	309.271 {109}	189.042 {478}	208.959 {461}	455.403 { 74}	313.042 {108}	223.061 {451}	317.933 {106}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.04832	2.1561	W 2.4463	1.0675	1.0640	2.1452	.04708	F 2.1391	122.21
Stddev	.00043	.0193	.0251	.0112	.0014	.0279	.00012	.0080	1.50
%RSD	.89842	.89434	1.0258	1.0509	.12683	1.3007	.24794	.37158	1.2260

#1	.04802	2.1698	2.4286	1.0754	1.0631	2.1254	.04700	2.1447	121.15
#2	.04863	2.1425	2.4641	1.0596	1.0650	2.1649	.04717	2.1334	123.27

Check ?	Chk Pass	Chk Pass	Chk Warn	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Fail	Chk Pass
High Limit			500.00					.10000	
Low Limit			3.2000					-.10000	

Elem	Cd2288	Co2286	Cr2055	Cu3247	Fe2599	K_7664	Li6707	Mg2790	Mn2576
Line	228.802 {447}	228.616 {447}	205.560 {464}	324.754 {104}	259.940 {130}	766.490 { 44}	670.784 { 50}	279.079 {121}2	257.610 {131}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.09688	.46943	.19541	.26200	1.0377	55.914	.98607	65.248	.45797
Stddev	.00024	.00024	.00069	.00069	.0118	.982	.00292	.114	.00027
%RSD	.24591	.05116	.35162	.26505	1.1358	1.7568	.29635	.17481	.05984

#1	.09671	.46926	.19590	.26249	1.0461	55.219	.98401	65.329	.45816
#2	.09705	.46960	.19493	.26151	1.0294	56.608	.98814	65.167	.45778

Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Elem	Mo2020	Na8183	Ni2316	P_1782	Pb2203	S_1820	Sb2068	Se1960	Si2881
Line	202.030 {467}	818.326 { 41}	231.604 {446}	178.284 {489}	220.353 {453}	182.034 {485}	206.833 {463}	196.090 {472}	288.158 {117}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	1.0446	142.34	.46249	W 10.033	.48195	24.124	.50600	2.1440	11.921
Stddev	.0008	1.11	.00141	.032	.00097	.010	.00368	.0028	.009
%RSD	.07497	.77729	.30528	.31931	.20113	.04253	.72678	.13009	.07432

#1	1.0452	143.12	.46349	10.056	.48127	24.131	.50340	2.1459	11.915
#2	1.0441	141.56	.46150	10.010	.48264	24.116	.50860	2.1420	11.927

Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Warn	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit				2.0000					
Low Limit				-1.0000					

Elem	SiO2	Sn1899	Sr4077	Th2837	Ti3349	Ti1908	U_3701	V_2924	Zn2062
Line	288.158 {117}2	189.989 {477}	407.771 { 83}	283.730 {119}	334.904 {101}	190.856 {477}	370.152 { 91}	292.402 {115}	206.200 {163}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	25.510	1.9445	1.4658	.93995	.92549	1.8356	2.0997	.47141	.44170
Stddev	.019	.0094	.0213	.00171	.00023	.0522	.0095	.00068	.00259
%RSD	.07432	.48126	1.4557	.18139	.02439	2.8417	.45391	.14503	.58615

#1	25.497	1.9511	1.4507	.93874	.92565	1.8725	2.0930	.47093	.44353
#2	25.524	1.9379	1.4809	.94115	.92533	1.7987	2.1065	.47189	.43986

Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Elem	Zr3391								
Line	339.198 { 99}								
Units	ppm								
Avg	.50996								
Stddev	.00420								
%RSD	.82301								

#1	.51293								
#2	.50700								

Check ?	Chk Pass								
High Limit									
Low Limit									

Sample Name: 280-82864-A-1-E MS Acquired: 5/19/2016 3:30:16 Type: Unk
 Method: 6500_025(v6) Mode: CONC Corr. Factor: 1.000000
 User: CRHOADES Prep Date: Custom ID2: Custom ID3:
 Comment: 325819 6010B (Fe)

Int. Std.	Y_2243	Y_3600	Y_3774
Line	224.306 {450}	360.073 { 94}	377.433 { 89}
Units	Cts/S	Cts/S	Cts/S
Avg	2556.7	40192.	2216.2
Stddev	13.0	172.	32.7
%RSD	.51018	.42833	1.4757
#1	2547.5	40070.	2239.4
#2	2565.9	40313.	2193.1

Sample Name: 280-82864-A-1-F MSD Acquired: 5/19/2016 3:32:44 Type: Unk
Method: 6500_025(v6) Mode: CONC Corr. Factor: 1.000000
User: CRHOADES Prep Date: Custom ID2: Custom ID3:
Comment: 325819 6010B (Fe)

Elem	Ag3280	Al1670	Al3092	As1890	B_2089	Ba4554	Be3130	Bi2230	Ca3179
Line	328.068 {103}	167.079 {502}	309.271 {109}	189.042 {478}	208.959 {461}	455.403 { 74}	313.042 {108}	223.061 {451}	317.933 {106}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.04907	2.1608	W 2.4915	1.0697	1.0681	2.1511	.04713	F 2.1483	121.95
Stddev	.00054	.0162	.0170	.0052	.0039	.0195	.00013	.0092	.99
%RSD	1.0942	.74914	.68243	.48827	.36311	.90715	.27494	.42991	.81492

#1	.04944	2.1494	2.4795	1.0734	1.0709	2.1373	.04723	2.1548	121.25
#2	.04869	2.1723	2.5035	1.0660	1.0654	2.1649	.04704	2.1418	122.65

Check ?	Chk Pass	Chk Pass	Chk Warn	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Fail	Chk Pass
High Limit			500.00					.10000	
Low Limit			3.2000					-.10000	

Elem	Cd2288	Co2286	Cr2055	Cu3247	Fe2599	K_7664	Li6707	Mg2790	Mn2576
Line	228.802 {447}	228.616 {447}	205.560 {464}	324.754 {104}	259.940 {130}	766.490 { 44}	670.784 { 50}	279.079 {121}2	257.610 {131}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.09694	.47030	.19589	.26037	1.0133	56.186	.98953	64.740	.45526
Stddev	.00002	.00059	.00017	.00298	.0003	.641	.00444	.249	.00175
%RSD	.02170	.12636	.08847	1.1427	.02552	1.1411	.44887	.38409	.38464

#1	.09693	.47072	.19602	.26248	1.0135	55.732	.98639	64.916	.45650
#2	.09696	.46988	.19577	.25827	1.0131	56.639	.99267	64.565	.45402

Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Elem	Mo2020	Na8183	Ni2316	P_1782	Pb2203	S_1820	Sb2068	Se1960	Si2881
Line	202.030 {467}	818.326 { 41}	231.604 {446}	178.284 {489}	220.353 {453}	182.034 {485}	206.833 {463}	196.090 {472}	288.158 {117}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	1.0454	142.22	.46383	W 10.053	.48122	23.891	.50947	2.1480	11.988
Stddev	.0031	.64	.00249	.042	.00042	.058	.00229	.0189	.060
%RSD	.30018	.44835	.53640	.42080	.08762	.24462	.44925	.88048	.49925

#1	1.0476	142.67	.46559	10.083	.48093	23.933	.51109	2.1613	11.946
#2	1.0432	141.77	.46207	10.023	.48152	23.850	.50786	2.1346	12.031

Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Warn	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit				2.0000					
Low Limit				-1.0000					

Elem	SiO2	Sn1899	Sr4077	Th2837	Ti3349	Ti1908	U_3701	V_2924	Zn2062
Line	288.158 {117}2	189.989 {477}	407.771 { 83}	283.730 {119}	334.904 {101}	190.856 {477}	370.152 { 91}	292.402 {115}	206.200 {163}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	25.655	1.9443	1.4702	.93148	.91952	1.8555	2.0289	.47058	.43704
Stddev	.128	.0055	.0110	.00219	.00201	.0438	.0006	.00088	.00172
%RSD	.49925	.28211	.74638	.23473	.21842	2.3589	.03212	.18723	.39313

#1	25.564	1.9482	1.4625	.93303	.92094	1.8864	2.0284	.47120	.43582
#2	25.746	1.9404	1.4780	.92994	.91810	1.8245	2.0293	.46996	.43825

Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Elem	Zr3391
Line	339.198 { 99}
Units	ppm
Avg	.51417
Stddev	.00012
%RSD	.02241

#1	.51426
#2	.51409

Check ?	Chk Pass
High Limit	
Low Limit	

Sample Name: 280-82864-A-1-F MSD Acquired: 5/19/2016 3:32:44 Type: Unk
 Method: 6500_025(v6) Mode: CONC Corr. Factor: 1.000000
 User: CRHOADES Prep Date: Custom ID2: Custom ID3:
 Comment: 325819 6010B (Fe)

Int. Std.	Y_2243	Y_3600	Y_3774
Line	224.306 {450}	360.073 { 94}	377.433 { 89}
Units	Cts/S	Cts/S	Cts/S
Avg	2557.1	40469.	2206.5
Stddev	17.4	110.	10.9
%RSD	.68107	.27143	.49617
#1	2569.4	40392.	2214.3
#2	2544.8	40547.	2198.8

Sample Name: 280-82864-A-2-B Acquired: 5/19/2016 3:35:11 Type: Unk
Method: 6500_025(v6) Mode: CONC Corr. Factor: 1.000000
User: CRHOADES Prep Date: Custom ID2: Custom ID3:
Comment: 325819 6010B (Fe)

Elem	Ag3280	Al1670	As1890	B_2089	Ba4554	Be3130	Bi2230	Ca3179	Cd2288
Line	328.068 {103}	167.079 {502}	189.042 {478}	208.959 {461}	455.403 { 74}	313.042 {108}	223.061 {451}	317.933 {106}	228.802 {447}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.00033	.10812	.00019	.06850	.11314	.00037	-.00047	72.609	.00005
Stddev	.00082	.00258	.00456	.00080	.00119	.00002	.00309	.051	.00013
%RSD	246.72	2.3892	2362.5	1.1720	1.0554	4.1199	662.30	.07077	267.18

#1	.00092	.10995	-.00303	.06907	.11398	.00038	.00172	72.646	.00014
#2	-.00025	.10629	.00342	.06794	.11229	.00036	-.00265	72.573	-.00004

Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Elem	Co2286	Cr2055	Cu3247	Fe2599	K_7664	Li6707	Mg2790	Mn2576	Mo2020
Line	228.616 {447}	205.560 {464}	324.754 {104}	259.940 {130}	766.490 { 44}	670.784 { 50}	279.079 {121}2	257.610 {131}	202.030 {467}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.00016	.00051	.00316	.14757	8.5834	.03184	18.464	.01078	.00434
Stddev	.00012	.00013	.00096	.00320	.0213	.00355	.016	.00002	.00135
%RSD	73.416	26.062	30.232	2.1668	.24847	11.147	.08450	.22806	31.060

#1	.00008	.00041	.00249	.14531	8.5985	.03435	18.475	.01076	.00339
#2	.00024	.00060	.00384	.14983	8.5683	.02933	18.453	.01080	.00529

Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Elem	Na8183	Ni2316	P_1782	Pb2203	S_1820	Sb2068	Se1960	Si2881	SiO2
Line	818.326 { 41}	231.604 {446}	178.284 {489}	220.353 {453}	182.034 {485}	206.833 {463}	196.090 {472}	288.158 {117}	288.158 {117}2
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	96.428	.00168	.01259	-.00080	21.706	.00273	.01092	2.8334	6.0634
Stddev	.049	.00070	.00217	.00245	.085	.00274	.00214	.0776	.1660
%RSD	.05106	41.819	17.231	305.54	.39174	100.27	19.617	2.7383	2.7383

#1	96.394	.00119	.01413	.00093	21.766	.00079	.01244	2.7785	5.9460
#2	96.463	.00218	.01106	-.00253	21.646	.00467	.00941	2.8882	6.1808

Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Elem	Sn1899	Sr4077	Th2837	Ti3349	Ti1908	U_3701	V_2924	Zn2062	Zr3391
Line	189.989 {477}	407.771 { 83}	283.730 {119}	334.904 {101}	190.856 {477}	370.152 { 91}	292.402 {115}	206.200 {163}	339.198 { 99}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.00175	.52501	.00006	.00225	.01928	-.00269	.00154	.00224	.00193
Stddev	.00140	.00028	.00120	.00007	.00837	.05748	.00015	.00044	.00327
%RSD	79.854	.05426	2029.9	3.1851	43.435	2135.3	9.5936	19.585	169.62

#1	.00076	.52521	-.00079	.00220	.01336	-.04334	.00143	.00255	.00424
#2	.00274	.52481	.00091	.00230	.02520	.03795	.00164	.00193	-.00038

Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Int. Std.	Y_2243	Y_3600	Y_3774
Line	224.306 {450}	360.073 { 94}	377.433 { 89}
Units	Cts/S	Cts/S	Cts/S
Avg	2667.8	41334.	2271.4
Stddev	34.4	70.	2.8
%RSD	1.2884	.17048	.12296

#1	2643.5	41284.	2269.4
#2	2692.1	41383.	2273.3

Sample Name: 280-82864-A-3-B Acquired: 5/19/2016 3:37:50 Type: Unk
Method: 6500_025(v6) Mode: CONC Corr. Factor: 1.000000
User: CRHOADES Prep Date: Custom ID2: Custom ID3:
Comment: 325819 6010B (Fe)

Elem	Ag3280	Al1670	As1890	B_2089	Ba4554	Be3130	Bi2230	Ca3179	Cd2288
Line	328.068 {103}	167.079 {502}	189.042 {478}	208.959 {461}	455.403 { 74}	313.042 {108}	223.061 {451}	317.933 {106}	228.802 {447}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.00000	.08769	-.00046	.06316	.10360	.00014	-.00122	63.416	.00030
Stddev	.00021	.00387	.00027	.00186	.00172	.00025	.00508	1.143	.00016
%RSD	15027.	4.4093	59.356	2.9394	1.6640	176.84	414.95	1.8017	51.157

#1	.00015	.09042	-.00065	.06448	.10482	-.00004	.00237	64.224	.00041
#2	-.00015	.08496	-.00027	.06185	.10238	.00032	-.00482	62.608	.00019

Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Elem	Co2286	Cr2055	Cu3247	Fe2599	K_7664	Li6707	Mg2790	Mn2576	Mo2020
Line	228.616 {447}	205.560 {464}	324.754 {104}	259.940 {130}	766.490 { 44}	670.784 { 50}	279.079 {121}2	257.610 {131}	202.030 {467}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	-.00006	.00013	.00237	.08362	6.8868	.03027	18.442	.00266	.00111
Stddev	.00017	.00024	.00044	.00108	.0822	.00041	.058	.00004	.00049
%RSD	301.60	185.47	18.631	1.2961	1.1930	1.3556	.31617	1.3563	43.973

#1	-.00018	.00030	.00206	.08285	6.8287	.02998	18.401	.00263	.00076
#2	.00006	-.00004	.00268	.08439	6.9449	.03056	18.483	.00268	.00146

Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Elem	Na8183	Ni2316	P_1782	Pb2203	S_1820	Sb2068	Se1960	Si2881	SiO2
Line	818.326 { 41}	231.604 {446}	178.284 {489}	220.353 {453}	182.034 {485}	206.833 {463}	196.090 {472}	288.158 {117}	288.158 {117}2
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	90.112	.00155	.01125	-.00026	24.499	.00335	.00604	1.3997	2.9953
Stddev	.236	.00022	.00152	.00141	.405	.00505	.00593	.0170	.0364
%RSD	.26189	14.262	13.477	545.17	1.6535	150.98	98.241	1.2165	1.2165

#1	90.279	.00171	.01232	.00074	24.785	-.00023	.00184	1.4117	3.0211
#2	89.946	.00140	.01018	-.00125	24.212	.00692	.01024	1.3876	2.9696

Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Elem	Sn1899	Sr4077	Th2837	Ti3349	Ti1908	U_3701	V_2924	Zn2062	Zr3391
Line	189.989 {477}	407.771 { 83}	283.730 {119}	334.904 {101}	190.856 {477}	370.152 { 91}	292.402 {115}	206.200 {163}	339.198 { 99}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	-.00105	.48188	-.00043	.00158	.00152	-.00732	.00090	.00315	.00020
Stddev	.00054	.00875	.00134	.00038	.00061	.00114	.00114	.00059	.00016
%RSD	51.910	1.8161	309.79	23.868	40.487	15.561	126.00	18.700	83.216

#1	-.00066	.48806	-.00138	.00131	.00108	-.00813	.00170	.00357	.00008
#2	-.00143	.47569	.00052	.00185	.00195	-.00652	.00010	.00274	.00031

Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Int. Std.	Y_2243	Y_3600	Y_3774
Line	224.306 {450}	360.073 { 94}	377.433 { 89}
Units	Cts/S	Cts/S	Cts/S
Avg	2660.3	41629.	2280.9
Stddev	64.2	319.	57.5
%RSD	2.4131	.76623	2.5216

#1	2614.9	41855.	2240.2
#2	2705.7	41404.	2321.5

Sample Name: 280-82864-A-4-B Acquired: 5/19/2016 3:40:29 Type: Unk
Method: 6500_025(v6) Mode: CONC Corr. Factor: 1.000000
User: CRHOADES Prep Date: Custom ID2: Custom ID3:
Comment: 325819 6010B (Fe)

Elem	Ag3280	Al1670	As1890	B_2089	Ba4554	Be3130	Bi2230	Ca3179	Cd2288
Line	328.068 {103}	167.079 {502}	189.042 {478}	208.959 {461}	455.403 { 74}	313.042 {108}	223.061 {451}	317.933 {106}	228.802 {447}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.00014	.04660	-.00810	.06192	.11738	.00031	.00108	70.869	.00028
Stddev	.00051	.00169	.00577	.00032	.00065	.00005	.00204	.130	.00009
%RSD	352.82	3.6214	71.296	.51865	.55457	16.607	189.36	.18376	33.023

#1	.00051	.04780	-.01218	.06169	.11784	.00027	-.00036	70.961	.00021
#2	-.00022	.04541	-.00401	.06215	.11692	.00034	.00252	70.777	.00034

Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Elem	Co2286	Cr2055	Cu3247	Fe2599	K_7664	Li6707	Mg2790	Mn2576	Mo2020
Line	228.616 {447}	205.560 {464}	324.754 {104}	259.940 {130}	766.490 { 44}	670.784 { 50}	279.079 {121}2	257.610 {131}	202.030 {467}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	-.00004	.00016	.00299	.04401	7.2397	.02935	18.539	.00377	.00085
Stddev	.00007	.00036	.00019	.00523	.0192	.00042	.038	.00016	.00046
%RSD	165.88	222.22	6.4233	11.882	.26509	1.4285	.20409	4.2176	54.073

#1	.00001	.00041	.00286	.04032	7.2532	.02964	18.512	.00365	.00052
#2	-.00010	-.00009	.00313	.04771	7.2261	.02905	18.565	.00388	.00117

Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Elem	Na8183	Ni2316	P_1782	Pb2203	S_1820	Sb2068	Se1960	Si2881	SiO2
Line	818.326 { 41}	231.604 {446}	178.284 {489}	220.353 {453}	182.034 {485}	206.833 {463}	196.090 {472}	288.158 {117}	288.158 {117}2
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	91.228	.00154	.01409	-.00034	22.438	.00196	.00537	2.2859	4.8918
Stddev	1.080	.00034	.00074	.00194	.074	.00166	.00029	.0182	.0390
%RSD	1.1840	22.318	5.2493	564.51	.32844	84.480	5.3973	.79699	.79699

#1	90.465	.00179	.01462	.00103	22.386	.00313	.00516	2.2730	4.8642
#2	91.992	.00130	.01357	-.00172	22.491	.00079	.00557	2.2987	4.9193

Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Elem	Sn1899	Sr4077	Th2837	Ti3349	Ti1908	U_3701	V_2924	Zn2062	Zr3391
Line	189.989 {477}	407.771 { 83}	283.730 {119}	334.904 {101}	190.856 {477}	370.152 { 91}	292.402 {115}	206.200 {163}	339.198 { 99}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.00084	.51601	.00028	.00093	-.00129	W -.05676	.00054	.00014	.00055
Stddev	.00111	.00019	.00181	.00009	.00198	.04104	.00040	.00085	.00069
%RSD	132.86	.03661	647.50	10.058	153.23	72.295	74.307	616.88	126.80

#1	.00163	.51614	.00156	.00100	-.00269	-.02774	.00026	-.00046	.00103
#2	.00005	.51588	-.00100	.00086	.00011	-.08578	.00082	.00074	.00006

Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Warn	Chk Pass	Chk Pass	Chk Pass
High Limit						45.000			
Low Limit						-.05000			

Int. Std.	Y_2243	Y_3600	Y_3774
Line	224.306 {450}	360.073 { 94}	377.433 { 89}
Units	Cts/S	Cts/S	Cts/S
Avg	2663.9	41546.	2250.0
Stddev	66.9	94.	19.0
%RSD	2.5111	.22508	.84250

#1	2616.6	41480.	2236.6
#2	2711.2	41612.	2263.4

Sample Name: CCVH-3894253 Acquired: 5/19/2016 3:43:08 Type: QC
Method: 6500_025(v6) Mode: CONC Corr. Factor: 1.000000
User: CRHOADES Prep Date: Custom ID2: Custom ID3:
Comment:

Elem	Ag3280	Al3092	As1890	B_2089	Ba4554	Be3130	Bi2230	Ca3179	Cd2288	Co2286	Cr2055
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	-.00005	51.642	-.00221	.00515	-.00045	.00043	1.0231	-.01474	-.00043	-.00104	.00016
Stddev	.00100	.234	.00743	.00102	.00085	.00015	.1109	.00206	.00049	.00002	.00015
%RSD	2011.5	.45275	335.83	19.735	187.72	34.643	10.840	13.974	112.75	2.0886	92.811

#1	-.00076	51.477	-.00747	.00587	.00015	.00032	1.1016	-.01328	-.00078	-.00103	.00026
#2	.00066	51.807	.00304	.00443	-.00105	.00053	.94472	-.01619	-.00009	-.00106	.00005

Check ?	None	Chk Pass	None	None	None	None	Chk Pass	None	None	None	None
Value											
Range											

Elem	Cu3247	Fe2714	K_7664	Li6707	Mg2790	Mn2576	Mo2020	Na8183	Ni2316	P_1782	Pb2203
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	-.00080	48.892	.21503	-.00035	.02493	-.00030	-.00157	256.51	.00125	.00433	-.00011
Stddev	.00008	.402	.09747	.00277	.00393	.00003	.00014	.67	.00003	.00325	.00125
%RSD	9.7679	.82217	45.327	788.21	15.750	9.3020	9.2367	.26178	2.3765	75.038	1163.2

#1	-.00086	48.607	.28395	-.00231	.02771	-.00032	-.00147	256.03	.00128	.00663	.00078
#2	-.00075	49.176	.14611	.00161	.02215	-.00028	-.00167	256.98	.00123	.00203	-.00099

Check ?	None	Chk Pass	None	None	None	None	None	Chk Pass	None	None	None
Value											
Range											

Elem	S_1820	Sb2068	Se1960	Si2881	SiO2	Sn1899	Sr4077	Th2837	Ti3349	Ti1908	U_3701
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	5.2375	-.01318	.00489	.00953	.02039	.00116	.00054	W 4.6381	.00595	-.00615	W 10.668
Stddev	.4870	.00695	.00616	.01140	.02440	.00095	.00016	.0095	.00017	.00243	.037
%RSD	9.2986	52.704	126.03	119.71	119.71	81.706	29.030	.20514	2.8066	39.474	.34450

#1	5.5818	-.01809	.00053	.01759	.03764	.00183	.00043	4.6448	.00583	-.00787	10.642
#2	4.8931	-.00827	.00925	.00146	.00313	.00049	.00065	4.6313	.00607	-.00444	10.694

Check ?	Chk Pass	None	None	None	None	None	None	Chk Warn	None	None	Chk Warn
Value								5.0000			10.000
Range								-5.0000%			5.0000%

Elem	V_2924	Zn2062	Zr3391
Units	ppm	ppm	ppm
Avg	.00982	-.00073	.04780
Stddev	.00007	.00011	.00181
%RSD	.68578	15.468	3.7804

#1	.00977	-.00081	.04908
#2	.00987	-.00065	.04653

Check ?	None	None	None
Value			
Range			

Int. Std.	Y_2243	Y_3600	Y_3774
Units	Cts/S	Cts/S	Cts/S
Avg	2692.0	39297.	2145.1
Stddev	282.0	100.	12.9
%RSD	10.474	.25351	.60049

#1	2492.6	39227.	2154.2
#2	2891.4	39368.	2135.9

Sample Name: CCV-3894251 Acquired: 5/19/2016 3:45:45 Type: QC
Method: 6500_025(v6) Mode: CONC Corr. Factor: 1.000000
User: CRHOADES Prep Date: Custom ID2: Custom ID3:
Comment:

Elem	Ag3280	Al1670	As1890	B_2089	Ba4554	Be3130	Bi2230	Ca3179	Cd2288	Co2286	Cr2055
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.48743	.54641	1.0522	.49783	.48676	W .44757	-.00183	4.7394	.49461	.49678	.50277
Stddev	.00072	.00002	.0073	.00793	.00404	.00450	.00328	.0235	.00035	.00957	.00974
%RSD	.14768	.00302	.69278	1.5930	.82924	1.0062	179.31	.49614	.07153	1.9267	1.9366
#1	.48794	.54642	1.0573	.50344	.48391	.44438	.00049	4.7228	.49436	.50355	.50966
#2	.48692	.54640	1.0470	.49222	.48961	.45075	-.00415	4.7560	.49486	.49001	.49589
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Warn	None	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Value						.50000					
Range						-10.000%					
Elem	Cu3247	Fe2599	K_7664	Li6707	Mg2790	Mn2576	Mo2020	Na5895	Ni2316	P_1782	Pb2203
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.51023	2.2673	46.711	.95733	18.817	.46173	.50912	5.0117	.48887	.97994	1.0095
Stddev	.00164	.0172	.257	.00197	.053	.00182	.01153	.0670	.00925	.01701	.0198
%RSD	.32088	.76048	.54923	.20623	.28098	.39514	2.2647	1.3369	1.8920	1.7359	1.9623
#1	.51139	2.2551	46.530	.95593	18.854	.46302	.51727	4.9644	.49541	.99197	1.0235
#2	.50907	2.2795	46.893	.95873	18.780	.46044	.50097	5.0591	.48233	.96791	.99550
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Value											
Range											
Elem	S_1820	Sb2068	Se1960	Si2881	SiO2	Sn1899	Sr4077	Th2837	Ti3349	Ti1908	U_3701
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.05204	.99659	1.0737	4.7390	10.142	1.0175	.45263	-.00005	.45890	1.0567	-.02197
Stddev	.00269	.01095	.0043	.0899	.192	.0189	.00237	.00278	.00184	.0222	.01775
%RSD	5.1618	1.0990	.39785	1.8971	1.8971	1.8577	.52403	5476.4	.40038	2.1035	80.784
#1	.05014	1.0043	1.0767	4.6755	10.005	1.0309	.45095	.00192	.46020	1.0724	-.00942
#2	.05394	.98884	1.0707	4.8026	10.278	1.0042	.45430	-.00202	.45760	1.0410	-.03452
Check ?	None	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	None	Chk Pass	Chk Pass	None
Value											
Range											
Elem	V_2924	Zn2062	Zr3391								
Units	ppm	ppm	ppm								
Avg	.47808	.45124	.50814								
Stddev	.00554	.00258	.00713								
%RSD	1.1591	.57203	1.4032								
#1	.48199	.45307	.50310								
#2	.47416	.44942	.51319								
Check ?	Chk Pass	Chk Pass	Chk Pass								
Value											
Range											
Int. Std.	Y_2243	Y_3600	Y_3774								
Units	Cts/S	Cts/S	Cts/S								
Avg	2635.1	41573.	2257.3								
Stddev	16.7	196.	.1								
%RSD	.63259	.47165	.00547								
#1	2623.3	41435.	2257.3								
#2	2646.9	41712.	2257.2								

Sample Name: CCB Acquired: 5/19/2016 3:48:17 Type: QC
 Method: 6500_025(v6) Mode: CONC Corr. Factor: 1.000000
 User: CRHOADES Prep Date: Custom ID2: Custom ID3:
 Comment:

Elem	Ag3280	Al1670	As1890	B_2089	Ba4554	Be3130	Bi2230	Ca3179	Cd2288	Co2286	Cr2055
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	-.00049	-.00011	.00292	.00363	-.00114	.00012	-.00093	-.02147	-.00001	-.00025	.00012
Stddev	.00027	.00021	.00160	.00027	.00013	.00028	.00198	.00427	.00005	.00052	.00025
%RSD	55.625	195.65	54.883	7.3575	11.253	232.59	211.76	19.890	346.77	211.47	210.10

#1	-.00030	-.00026	.00405	.00382	-.00105	-.00008	-.00233	-.01845	.00002	-.00061	-.00006
#2	-.00069	.00004	.00178	.00344	-.00123	.00031	.00046	-.02448	-.00005	.00012	.00029

Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit											
Low Limit											

Elem	Cu3247	Fe2599	K_7664	Li6707	Mg2790	Mn2576	Mo2020	Na5895	Ni2316	P_1782	Pb2203
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	-.00094	.00599	.05776	-.00010	-.00313	.00001	.00168	.16875	-.00063	-.00078	.00006
Stddev	.00050	.00719	.06320	.00222	.00223	.00009	.00012	.02431	.00074	.00087	.00211
%RSD	53.755	120.17	109.41	2170.8	71.361	942.05	7.2169	14.404	117.94	111.70	3668.6

#1	-.00129	.00090	.10245	-.00167	-.00155	.00008	.00177	.18594	-.00115	-.00016	-.00143
#2	-.00058	.01107	.01308	.00147	-.00471	-.00006	.00160	.15156	-.00010	-.00139	.00155

Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit											
Low Limit											

Elem	S_1820	Sb2068	Se1960	Si2881	SiO2	Sn1899	Sr4077	Th2837	Ti3349	Ti1908	U_3701
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.04564	W .00239	.00444	.04010	.08582	.00080	.00030	.00292	-.00011	.00312	-.05666
Stddev	.00135	.00368	.00427	.00902	.01930	.00218	.00002	.00222	.00037	.00030	.01479
%RSD	2.9667	153.98	96.177	22.482	22.482	272.92	8.2590	75.909	329.67	9.5615	26.101

#1	.04660	-.00021	.00142	.03373	.07218	.00234	.00032	.00135	.00015	.00291	-.06712
#2	.04468	.00499	.00746	.04648	.09947	-.00074	.00028	.00448	-.00037	.00333	-.04620

Check ?	Chk Pass	Chk Warn	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit		.00100									
Low Limit		-.00100									

Elem	V_2924	Zn2062	Zr3391
Units	ppm	ppm	ppm
Avg	.00005	-.00079	.00080
Stddev	.00051	.00034	.00056
%RSD	1021.1	42.835	69.810

#1	.00041	-.00055	.00040
#2	-.00031	-.00102	.00119

Check ?	Chk Pass	Chk Pass	Chk Pass
High Limit			
Low Limit			

Int. Std.	Y_2243	Y_3600	Y_3774
Units	Cts/S	Cts/S	Cts/S
Avg	2679.7	42154.	2308.3
Stddev	60.3	63.	122.1
%RSD	2.2501	.14955	5.2881

#1	2637.0	42109.	2222.0
#2	2722.3	42198.	2394.6

Sample Name: CCVL-3897520 Acquired: 5/19/2016 3:50:39 Type: QC
Method: 6500_025(v6) Mode: CONC Corr. Factor: 1.000000
User: CRHOADES Prep Date: Custom ID2: Custom ID3:
Comment:

Elem	Ag3280	Al1670	As1890	B_2089	Ba4554	Be3130	Bi2230	Ca3179	Cd2288	Co2286	Cr2055	Cu3247
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.00948	.11170	.01230	.09824	.00919	.00106	.11509	.18705	.00475	.00947	.00977	.01388
Stddev	.00028	.00067	.00276	.00099	.00040	.00018	.00049	.00682	.00011	.00065	.00003	.00016
%RSD	2.9694	.59634	22.442	1.0101	4.3806	17.091	.42824	3.6442	2.2547	6.8142	.29730	1.1333

#1	.00928	.11218	.01425	.09895	.00947	.00119	.11544	.18223	.00468	.00901	.00979	.01377
#2	.00968	.11123	.01035	.09754	.00890	.00093	.11474	.19187	.00483	.00993	.00975	.01399

Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Value												
Range												

Elem	Fe2599	K_7664	Li6707	Mg2790	Mn2576	Mo2020	Na5895	Ni2316	P_1782	Pb2203	S_1820	Sb2068
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.10938	2.9779	.01056	.19388	.00968	.02033	1.1545	.03840	2.8338	.00862	.04459	.02553
Stddev	.00371	.1537	.00261	.00214	.00001	.00005	.0137	.00038	.0071	.00205	.00158	.00583
%RSD	3.3961	5.1609	24.722	1.1058	.13319	.22675	1.1900	.99534	.25028	23.845	3.5355	22.840

#1	.10675	2.8692	.00871	.19539	.00969	.02029	1.1448	.03867	2.8288	.00716	.04347	.02140
#2	.11200	3.0865	.01240	.19236	.00967	.02036	1.1642	.03813	2.8388	.01007	.04570	.02965

Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	None	Chk Pass
Value												
Range												

Elem	Se1960	Si2881	SiO2	Sn1899	Sr4077	Th2837	Ti3349	Ti1908	U_3701	V_2924	Zn2062	Zr3391
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	F .02518	.48491	1.0377	.10237	.00978	.01398	.00917	F .00877	.06097	.00978	.01819	.01618
Stddev	.00511	.00844	.0181	.00285	.00023	.00289	.00053	.00251	.02290	.00038	.00112	.00296
%RSD	20.287	1.7412	1.7412	2.7795	2.3842	20.681	5.7827	28.652	37.555	3.8880	6.1393	18.298

#1	.02879	.47894	1.0249	.10439	.00962	.01602	.00880	.00699	.04478	.00952	.01740	.01409
#2	.02157	.49088	1.0505	.10036	.00995	.01193	.00955	.01055	.07716	.01005	.01898	.01828

Check ?	Chk Fail	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Fail	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Value	.01500							.01500				
Range	30.000%							-30.000%				

Int. Std.	Y_2243	Y_3600	Y_3774
Units	Cts/S	Cts/S	Cts/S
Avg	2681.5	42634.	2247.9
Stddev	2.6	355.	28.3
%RSD	.09880	.83376	1.2610

#1	2683.4	42886.	2268.0
#2	2679.6	42383.	2227.9

Sample Name: 280-82864-A-5-B Acquired: 5/19/2016 3:53:19 Type: Unk
Method: 6500_025(v6) Mode: CONC Corr. Factor: 1.000000
User: CRHOADES Prep Date: Custom ID2: Custom ID3:
Comment: 325819 6010B (Fe)

Elem	Ag3280	Al1670	As1890	B_2089	Ba4554	Be3130	Bi2230	Ca3179	Cd2288
Line	328.068 {103}	167.079 {502}	189.042 {478}	208.959 {461}	455.403 { 74}	313.042 {108}	223.061 {451}	317.933 {106}	228.802 {447}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	-0.00029	.42990	-0.00115	.07574	.28882	.00031	-0.00525	101.22	.00047
Stddev	.00084	.00200	.00023	.00115	.00479	.00008	.00195	.53	.00015
%RSD	292.43	.46451	20.295	1.5218	1.6580	24.311	37.141	.52691	31.934

#1	-0.00088	.42849	-0.00131	.07492	.29220	.00036	-0.00662	101.60	.00036
#2	.00031	.43131	-0.00098	.07655	.28543	.00026	-0.00387	100.84	.00057

Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Elem	Co2286	Cr2055	Cu3247	Fe2599	K_7664	Li6707	Mg2790	Mn2576	Mo2020
Line	228.616 {447}	205.560 {464}	324.754 {104}	259.940 {130}	766.490 { 44}	670.784 { 50}	279.079 {121}2	257.610 {131}	202.030 {467}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	-0.00008	.00048	.00577	.53228	7.9078	.01684	23.769	.05504	.00136
Stddev	.00056	.00004	.00053	.00110	.0586	.00390	.044	.00019	.00004
%RSD	664.88	9.2720	9.2615	.20706	.74084	23.151	.18412	.34419	2.6070

#1	-0.00048	.00052	.00539	.53306	7.8664	.01960	23.800	.05491	.00134
#2	.00031	.00045	.00614	.53150	7.9492	.01409	23.738	.05518	.00139

Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Elem	Na8183	Ni2316	P_1782	Pb2203	S_1820	Sb2068	Se1960	Si2881	SiO2
Line	818.326 { 41}	231.604 {446}	178.284 {489}	220.353 {453}	182.034 {485}	206.833 {463}	196.090 {472}	288.158 {117}	288.158 {117}2
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	111.73	.00125	.36295	-0.00039	21.565	.00428	-0.00021	3.2751	7.0087
Stddev	.82	.00048	.00177	.00232	.325	.00012	.00496	.0069	.0149
%RSD	.73249	38.277	.48704	593.49	1.5088	2.7137	2355.7	.21184	.21184

#1	111.16	.00091	.36170	-.00203	21.335	.00419	.00330	3.2800	7.0192
#2	112.31	.00159	.36420	.00125	21.795	.00436	-.00372	3.2702	6.9982

Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Elem	Sn1899	Sr4077	Th2837	Ti3349	Ti1908	U_3701	V_2924	Zn2062	Zr3391
Line	189.989 {477}	407.771 { 83}	283.730 {119}	334.904 {101}	190.856 {477}	370.152 { 91}	292.402 {115}	206.200 {163}	339.198 { 99}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	-0.00185	.68689	-0.00019	.01218	-0.00393	.00579	.00274	.00673	.00033
Stddev	.00009	.00526	.00430	.00168	.00154	.06938	.00037	.00029	.00136
%RSD	5.0661	.76554	2312.8	13.786	39.144	1199.1	13.627	4.3580	408.71

#1	-0.00179	.69060	.00285	.01337	-.00502	-.04327	.00248	.00652	.00129
#2	-.00192	.68317	-.00323	.01099	-.00284	.05484	.00301	.00694	-.00063

Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Int. Std.	Y_2243	Y_3600	Y_3774
Line	224.306 {450}	360.073 { 94}	377.433 { 89}
Units	Cts/S	Cts/S	Cts/S
Avg	2632.2	40724.	2229.4
Stddev	41.3	448.	9.9
%RSD	1.5686	1.0989	.44326

#1	2661.4	40407.	2222.4
#2	2603.0	41040.	2236.4

Sample Name: 280-82864-A-6-B Acquired: 5/19/2016 3:55:57 Type: Unk
Method: 6500_025(v6) Mode: CONC Corr. Factor: 1.000000
User: CRHOADES Prep Date: Custom ID2: Custom ID3:
Comment: 325819 6010B (Fe)

Elem	Ag3280	Al1670	As1890	B_2089	Ba4554	Be3130	Bi2230	Ca3179	Cd2288
Line	328.068 {103}	167.079 {502}	189.042 {478}	208.959 {461}	455.403 { 74}	313.042 {108}	223.061 {451}	317.933 {106}	228.802 {447}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	-.00052	.12696	.00388	.06750	.16496	.00012	-.00508	81.506	.00027
Stddev	.00018	.00110	.00203	.00050	.00279	.00002	.00262	1.505	.00047
%RSD	35.240	.86642	52.336	.74363	1.6910	19.939	51.470	1.8471	175.39

#1	-.00065	.12618	.00532	.06786	.16298	.00010	-.00694	80.441	.00060
#2	-.00039	.12773	.00244	.06715	.16693	.00014	-.00323	82.571	-.00006

Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Elem	Co2286	Cr2055	Cu3247	Fe2599	K_7664	Li6707	Mg2790	Mn2576	Mo2020
Line	228.616 {447}	205.560 {464}	324.754 {104}	259.940 {130}	766.490 { 44}	670.784 { 50}	279.079 {121}2	257.610 {131}	202.030 {467}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.00004	.00064	.00243	.25085	6.4050	.01322	23.236	.03291	.00122
Stddev	.00001	.00025	.00079	.00137	.0705	.00074	.004	.00028	.00003
%RSD	14.931	39.429	32.470	.54471	1.1002	5.6010	.01604	.84335	2.5791

#1	.00004	.00081	.00187	.24989	6.3551	.01269	23.239	.03272	.00125
#2	.00005	.00046	.00299	.25182	6.4548	.01374	23.233	.03311	.00120

Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Elem	Na8183	Ni2316	P_1782	Pb2203	S_1820	Sb2068	Se1960	Si2881	SiO2
Line	818.326 { 41}	231.604 {446}	178.284 {489}	220.353 {453}	182.034 {485}	206.833 {463}	196.090 {472}	288.158 {117}	288.158 {117}2
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	104.49	.00116	.02653	-.00122	20.012	.00214	-.00387	.58739	1.2570
Stddev	.36	.00047	.00071	.00123	.024	.00103	.00272	.01546	.0331
%RSD	.34174	41.011	2.6612	100.96	.12193	47.922	70.249	2.6317	2.6317

#1	104.23	.00149	.02703	-.00035	20.029	.00142	-.00580	.57646	1.2336
#2	104.74	.00082	.02603	-.00209	19.995	.00287	-.00195	.59832	1.2804

Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Elem	Sn1899	Sr4077	Th2837	Ti3349	Ti1908	U_3701	V_2924	Zn2062	Zr3391
Line	189.989 {477}	407.771 { 83}	283.730 {119}	334.904 {101}	190.856 {477}	370.152 { 91}	292.402 {115}	206.200 {163}	339.198 { 99}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	-.00031	.62136	.00411	.00205	-.00526	W -.06835	.00092	.00126	-.00192
Stddev	.00137	.01195	.00093	.00009	.00060	.03059	.00076	.00052	.00125
%RSD	446.04	1.9236	22.615	4.4054	11.349	44.750	82.883	41.397	65.290

#1	-.00128	.61291	.00345	.00212	-.00568	-.08998	.00146	.00089	-.00280
#2	.00066	.62981	.00476	.00199	-.00484	-.04672	.00038	.00163	-.00103

Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Warn	Chk Pass	Chk Pass	Chk Pass
High Limit						45.000			
Low Limit						-.05000			

Int. Std.	Y_2243	Y_3600	Y_3774
Line	224.306 {450}	360.073 { 94}	377.433 { 89}
Units	Cts/S	Cts/S	Cts/S
Avg	2685.9	40924.	2337.8
Stddev	31.0	190.	37.8
%RSD	1.1532	.46549	1.6178

#1	2707.8	41058.	2364.5
#2	2664.0	40789.	2311.1

Sample Name: 280-82864-A-7-B Acquired: 5/19/2016 3:58:36 Type: Unk
Method: 6500_025(v6) Mode: CONC Corr. Factor: 1.000000
User: CRHOADES Prep Date: Custom ID2: Custom ID3:
Comment: 325819 6010B (Fe)

Elem	Ag3280	Al1670	As1890	B_2089	Ba4554	Be3130	Bi2230	Ca3179	Cd2288
Line	328.068 {103}	167.079 {502}	189.042 {478}	208.959 {461}	455.403 { 74}	313.042 {108}	223.061 {451}	317.933 {106}	228.802 {447}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.00069	.21946	-.00159	.06671	.17294	.00023	.00214	86.740	.00020
Stddev	.00023	.00596	.00084	.00158	.00561	.00041	.00293	2.221	.00011
%RSD	33.567	2.7138	53.251	2.3682	3.2437	177.17	136.72	2.5611	52.622

#1	.00052	.22367	-.00218	.06783	.17691	-.00006	.00007	88.311	.00027
#2	.00085	.21525	-.00099	.06559	.16897	.00052	.00421	85.170	.00013

Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Elem	Co2286	Cr2055	Cu3247	Fe2599	K_7664	Li6707	Mg2790	Mn2576	Mo2020
Line	228.616 {447}	205.560 {464}	324.754 {104}	259.940 {130}	766.490 { 44}	670.784 { 50}	279.079 {121}2	257.610 {131}	202.030 {467}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	-.00006	.00010	.00175	.24058	5.8760	.01557	24.373	.02837	.00068
Stddev	.00026	.00005	.00031	.00685	.0495	.00093	.151	.00034	.00020
%RSD	409.37	49.473	17.836	2.8465	.84261	5.9640	.62072	1.1917	30.033

#1	.00012	.00007	.00153	.24543	5.9110	.01623	24.266	.02813	.00083
#2	-.00025	.00014	.00198	.23574	5.8410	.01492	24.480	.02861	.00054

Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Elem	Na8183	Ni2316	P_1782	Pb2203	S_1820	Sb2068	Se1960	Si2881	SiO2
Line	818.326 { 41}	231.604 {446}	178.284 {489}	220.353 {453}	182.034 {485}	206.833 {463}	196.090 {472}	288.158 {117}	288.158 {117}2
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	100.61	.00117	.03813	-.00051	21.061	.00156	.00370	1.0674	2.2842
Stddev	.14	.00031	.00237	.00057	.436	.00535	.00016	.0435	.0931
%RSD	.13574	26.188	6.2181	111.73	2.0697	342.82	4.3043	4.0762	4.0762

#1	100.52	.00096	.03645	-.00011	21.369	-.00222	.00359	1.0366	2.2183
#2	100.71	.00139	.03981	-.00091	20.753	.00534	.00382	1.0981	2.3500

Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Elem	Sn1899	Sr4077	Th2837	Ti3349	Ti1908	U_3701	V_2924	Zn2062	Zr3391
Line	189.989 {477}	407.771 { 83}	283.730 {119}	334.904 {101}	190.856 {477}	370.152 { 91}	292.402 {115}	206.200 {163}	339.198 { 99}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	-.00078	.65255	-.00129	.00407	-.00447	.00409	.00099	.00052	.00157
Stddev	.00087	.01774	.00156	.00077	.00330	.02654	.00085	.00025	.00370
%RSD	112.15	2.7191	120.71	18.974	73.892	648.78	86.493	48.008	234.95

#1	-.00016	.66510	-.00240	.00352	-.00681	.02285	.00159	.00069	-.00104
#2	-.00140	.64000	-.00019	.00461	-.00213	-.01467	.00038	.00034	.00419

Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Int. Std.	Y_2243	Y_3600	Y_3774
Line	224.306 {450}	360.073 { 94}	377.433 { 89}
Units	Cts/S	Cts/S	Cts/S
Avg	2655.1	41206.	2321.7
Stddev	76.3	343.	84.2
%RSD	2.8727	.83254	3.6286

#1	2601.1	41449.	2262.2
#2	2709.0	40964.	2381.3

Sample Name: 280-82864-A-8-B Acquired: 5/19/2016 4:01:13 Type: Unk
Method: 6500_025(v6) Mode: CONC Corr. Factor: 1.000000
User: CRHOADES Prep Date: Custom ID2: Custom ID3:
Comment: 325819 6010B (Fe)

Elem	Ag3280	Al1670	As1890	B_2089	Ba4554	Be3130	Bi2230	Ca3179	Cd2288
Line	328.068 {103}	167.079 {502}	189.042 {478}	208.959 {461}	455.403 { 74}	313.042 {108}	223.061 {451}	317.933 {106}	228.802 {447}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	-.00021	.17018	-.00730	.06464	.11767	.00030	-.00011	64.568	.00031
Stddev	.00060	.00136	.00125	.00108	.00192	.00012	.00020	1.146	.00022
%RSD	284.42	.79973	17.090	1.6748	1.6355	40.135	173.28	1.7751	71.364

#1	.00021	.17114	-.00642	.06387	.11631	.00022	-.00025	63.757	.00046
#2	-.00064	.16922	-.00818	.06540	.11903	.00039	.00003	65.378	.00015

Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Elem	Co2286	Cr2055	Cu3247	Fe2599	K_7664	Li6707	Mg2790	Mn2576	Mo2020
Line	228.616 {447}	205.560 {464}	324.754 {104}	259.940 {130}	766.490 { 44}	670.784 { 50}	279.079 {121}2	257.610 {131}	202.030 {467}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.00020	.00027	.00308	.24406	8.7539	.02521	15.778	.04828	.00077
Stddev	.00006	.00017	.00032	.00614	.0054	.00047	.005	.00004	.00030
%RSD	30.051	62.085	10.330	2.5137	.06168	1.8541	.03338	.08888	39.422

#1	.00015	.00039	.00286	.23973	8.7501	.02554	15.781	.04831	.00098
#2	.00024	.00015	.00331	.24840	8.7577	.02488	15.774	.04825	.00055

Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Elem	Na8183	Ni2316	P_1782	Pb2203	S_1820	Sb2068	Se1960	Si2881	SiO2
Line	818.326 { 41}	231.604 {446}	178.284 {489}	220.353 {453}	182.034 {485}	206.833 {463}	196.090 {472}	288.158 {117}	288.158 {117}2
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	86.706	.00091	.01345	-.00107	19.705	.00020	.00340	3.3530	7.1754
Stddev	.254	.00004	.00109	.00173	.015	.00718	.00638	.0177	.0380
%RSD	.29329	4.4514	8.1053	161.05	.07427	3561.1	187.71	.52914	.52914

#1	86.526	.00089	.01422	.00015	19.715	-.00488	-.00111	3.3404	7.1485
#2	86.886	.00094	.01268	-.00229	19.695	.00528	.00791	3.3655	7.2022

Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Elem	Sn1899	Sr4077	Th2837	Ti3349	Ti1908	U_3701	V_2924	Zn2062	Zr3391
Line	189.989 {477}	407.771 { 83}	283.730 {119}	334.904 {101}	190.856 {477}	370.152 { 91}	292.402 {115}	206.200 {163}	339.198 { 99}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	-.00130	.44143	.00115	.00376	-.00346	-.01579	.00073	-.00015	-.00110
Stddev	.00168	.00831	.00171	.00029	.00062	.02546	.00077	.00046	.00011
%RSD	128.71	1.8821	148.54	7.8373	17.926	161.18	104.79	300.71	10.145

#1	-.00249	.43556	-.00006	.00397	-.00302	-.03379	.00127	-.00047	-.00103
#2	-.00012	.44730	.00236	.00355	-.00390	.00221	.00019	.00017	-.00118

Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Int. Std.	Y_2243	Y_3600	Y_3774
Line	224.306 {450}	360.073 { 94}	377.433 { 89}
Units	Cts/S	Cts/S	Cts/S
Avg	2630.8	41309.	2301.0
Stddev	4.6	108.	18.7
%RSD	.17347	.26169	.81370

#1	2627.6	41232.	2314.3
#2	2634.0	41385.	2287.8

Sample Name: 280-82864-A-9-B Acquired: 5/19/2016 4:03:50 Type: Unk
Method: 6500_025(v6) Mode: CONC Corr. Factor: 1.000000
User: CRHOADES Prep Date: Custom ID2: Custom ID3:
Comment: 325819 6010B (Fe)

Elem	Ag3280	Al1670	As1890	B_2089	Ba4554	Be3130	Bi2230	Ca3179	Cd2288
Line	328.068 {103}	167.079 {502}	189.042 {478}	208.959 {461}	455.403 { 74}	313.042 {108}	223.061 {451}	317.933 {106}	228.802 {447}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	-0.00035	.20195	-0.00181	.04907	.11894	.00010	-0.00162	64.634	.00011
Stddev	.00058	.00158	.00403	.00264	.00354	.00019	.00409	2.259	.00001
%RSD	163.57	.78434	222.59	5.3808	2.9733	191.59	252.45	3.4952	5.8529

#1	-0.00076	.20083	.00104	.05094	.11644	-0.00004	-0.00451	63.037	.00011
#2	.00006	.20307	-.00465	.04720	.12144	.00024	.00127	66.231	.00011

Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Elem	Co2286	Cr2055	Cu3247	Fe2599	K_7664	Li6707	Mg2790	Mn2576	Mo2020
Line	228.616 {447}	205.560 {464}	324.754 {104}	259.940 {130}	766.490 { 44}	670.784 { 50}	279.079 {121}2	257.610 {131}	202.030 {467}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	-0.00017	.00018	.00087	.17685	3.6987	.00845	14.385	.03670	-0.00005
Stddev	.00028	.00016	.00048	.00313	.0591	.00092	.029	.00012	.00025
%RSD	161.64	88.063	55.370	1.7699	1.5971	10.935	.20302	.32103	515.15

#1	.00002	.00029	.00121	.17906	3.6569	.00910	14.365	.03662	-.00023
#2	-.00037	.00007	.00053	.17464	3.7404	.00780	14.406	.03678	.00013

Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Elem	Na8183	Ni2316	P_1782	Pb2203	S_1820	Sb2068	Se1960	Si2881	SiO2
Line	818.326 { 41}	231.604 {446}	178.284 {489}	220.353 {453}	182.034 {485}	206.833 {463}	196.090 {472}	288.158 {117}	288.158 {117}2
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	65.609	.00108	.00983	.00038	18.033	-0.00022	.00182	2.4988	5.3473
Stddev	.554	.00053	.00206	.00007	.021	.00094	.00732	.0413	.0883
%RSD	.84367	48.782	20.980	17.494	.11750	434.49	401.20	1.6521	1.6521

#1	65.218	.00071	.00837	.00043	18.018	.00045	.00700	2.5279	5.4098
#2	66.001	.00145	.01128	.00034	18.048	-.00088	-.00335	2.4696	5.2849

Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Elem	Sn1899	Sr4077	Th2837	Ti3349	Ti1908	U_3701	V_2924	Zn2062	Zr3391
Line	189.989 {477}	407.771 { 83}	283.730 {119}	334.904 {101}	190.856 {477}	370.152 { 91}	292.402 {115}	206.200 {163}	339.198 { 99}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.00089	.42561	.00128	.00302	-.00338	W -.06725	.00055	.00071	.00385
Stddev	.00081	.01475	.00079	.00036	.00060	.02557	.00027	.00008	.00024
%RSD	91.324	3.4651	61.852	11.972	17.879	38.022	48.925	11.288	6.1109

#1	.00032	.41518	.00072	.00277	-.00295	-.08533	.00036	.00065	.00402
#2	.00146	.43603	.00183	.00328	-.00381	-.04917	.00074	.00076	.00368

Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Warn	Chk Pass	Chk Pass	Chk Pass
High Limit						45.000			
Low Limit						-.05000			

Int. Std.	Y_2243	Y_3600	Y_3774
Line	224.306 {450}	360.073 { 94}	377.433 { 89}
Units	Cts/S	Cts/S	Cts/S
Avg	2648.9	41836.	2327.2
Stddev	1.0	223.	78.2
%RSD	.03617	.53196	3.3586

#1	2649.6	41994.	2382.5
#2	2648.2	41679.	2271.9

Sample Name: CCVH-3894253 Acquired: 5/19/2016 4:06:28 Type: QC
Method: 6500_025(v6) Mode: CONC Corr. Factor: 1.000000
User: CRHOADES Prep Date: Custom ID2: Custom ID3:
Comment:

Elem	Ag3280	Al3092	As1890	B_2089	Ba4554	Be3130	Bi2230	Ca3179	Cd2288	Co2286	Cr2055
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.00000	50.663	-.00316	.00328	-.00118	.00061	W 1.1000	-.00406	-.00031	-.00096	.00054
Stddev	.00100	2.227	.00083	.00007	.00017	.00033	.0001	.01666	.00016	.00006	.00017
%RSD	96445.	4.3957	26.321	2.0561	14.724	54.785	.00545	409.86	52.318	5.7995	32.059

#1	-.00070	52.238	-.00375	.00333	-.00106	.00037	1.1000	.00771	-.00019	-.00100	.00066
#2	.00071	49.088	-.00257	.00323	-.00131	.00085	1.1001	-.01584	-.00042	-.00092	.00042

Check ?	None	Chk Pass	None	None	None	None	Chk Warn	None	None	None	None
Value							1.0000				
Range							5.0000%				

Elem	Cu3247	Fe2714	K_7664	Li6707	Mg2790	Mn2576	Mo2020	Na8183	Ni2316	P_1782	Pb2203
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	-.00018	48.439	.08751	.00139	.02168	-.00016	-.00186	253.19	.00177	.00303	-.00021
Stddev	.00020	1.324	.07157	.00213	.00118	.00002	.00038	6.22	.00037	.00049	.00201
%RSD	112.72	2.7330	81.787	152.92	5.4584	10.627	20.465	2.4584	20.805	16.190	961.46

#1	-.00032	49.375	.13812	.00290	.02085	-.00018	-.00159	257.59	.00151	.00338	.00121
#2	-.00004	47.503	.03690	-.00011	.02252	-.00015	-.00213	248.79	.00203	.00268	-.00163

Check ?	None	Chk Pass	None	None	None	None	None	Chk Pass	None	None	None
Value											
Range											

Elem	S_1820	Sb2068	Se1960	Si2881	SiO2	Sn1899	Sr4077	Th2837	Ti3349	Ti1908	U_3701
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	5.2459	-.00715	.00315	.01619	.03464	.00153	.00057	W 4.6342	.00538	.00017	W 10.531
Stddev	.0533	.00756	.00510	.03295	.07051	.00050	.00011	.0278	.00129	.00077	.208
%RSD	1.0168	105.69	161.85	203.55	203.55	32.854	19.906	.59912	24.020	441.32	1.9775

#1	5.2082	-.01250	.00676	-.00711	-.01522	.00118	.00049	4.6146	.00629	-.00037	10.678
#2	5.2837	-.00181	-.00046	.03949	.08450	.00189	.00066	4.6538	.00447	.00072	10.384

Check ?	Chk Pass	None	None	None	None	None	None	Chk Warn	None	None	Chk Warn
Value								5.0000			10.000
Range								-5.0000%			5.0000%

Elem	V_2924	Zn2062	Zr3391
Units	ppm	ppm	ppm
Avg	.00938	.00005	.05328
Stddev	.00059	.00002	.00842
%RSD	6.2706	43.840	15.797

#1	.00980	.00003	.04732
#2	.00897	.00006	.05923

Check ?	None	None	None
Value			
Range			

Int. Std.	Y_2243	Y_3600	Y_3774
Units	Cts/S	Cts/S	Cts/S
Avg	2609.7	41248.	2189.1
Stddev	23.8	121.	151.8
%RSD	.91147	.29319	6.9356

#1	2592.9	41333.	2081.7
#2	2626.5	41162.	2296.4

Sample Name: CCV-3894251 Acquired: 5/19/2016 4:09:04 Type: QC
Method: 6500_025(v6) Mode: CONC Corr. Factor: 1.000000
User: CRHOADES Prep Date: Custom ID2: Custom ID3:
Comment:

Elem	Ag3280	Al1670	As1890	B_2089	Ba4554	Be3130	Bi2230	Ca3179	Cd2288	Co2286	Cr2055	Cu3247	Fe2599
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.49311	.54265	1.0489	.49546	.49428	.45511	.00478	4.8155	.49345	.49878	.50419	.51711	2.3961
Stddev	.00051	.01242	.0180	.01527	.00519	.00511	.00033	.0592	.00132	.01219	.01273	.00046	.0288
%RSD	.10399	2.2890	1.7180	3.0812	1.0492	1.1234	6.8964	1.2303	.26739	2.4437	2.5253	.08876	1.2021

#1	.49348	.53387	1.0362	.48467	.49795	.45872	.00455	4.8574	.49251	.49016	.49518	.51743	2.4165
#2	.49275	.55143	1.0617	.50625	.49061	.45149	.00501	4.7736	.49438	.50740	.51319	.51678	2.3758

Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	None	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Value													
Range													

Elem	K_7664	Li6707	Mg2790	Mn2576	Mo2020	Na5895	Ni2316	P_1782	Pb2203	S_1820	Sb2068	Se1960	Si2881
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	47.328	.97317	19.015	.46681	.51065	5.0577	.49143	.99025	1.0170	.04317	1.0101	1.0848	4.7476
Stddev	.494	.00613	.013	.00009	.01141	.0337	.01271	.02878	.0311	.00232	.0214	.0324	.0751
%RSD	1.0431	.62989	.06583	.01821	2.2335	.66666	2.5861	2.9066	3.0590	5.3671	2.1203	2.9841	1.5812

#1	47.677	.97751	19.006	.46687	.50259	5.0816	.48245	.96990	.99499	.04154	.99494	1.0619	4.8007
#2	46.978	.96884	19.024	.46675	.51872	5.0339	.50042	1.0106	1.0390	.04481	1.0252	1.1077	4.6945

Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	None	Chk Pass	Chk Pass	Chk Pass
Value													
Range													

Elem	SiO2	Sn1899	Sr4077	Th2837	Ti3349	Ti1908	U_3701	V_2924	Zn2062	Zr3391
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	10.160	1.0266	.46145	.00005	.46256	1.0667	-.02036	.48582	.45600	.50327
Stddev	.161	.0290	.00482	.00034	.00019	.0257	.02837	.00054	.00068	.00545
%RSD	1.5812	2.8260	1.0446	718.31	.04121	2.4056	139.32	.11062	.14947	1.0820

#1	10.273	1.0060	.46486	.00029	.46242	1.0485	-.04043	.48544	.45552	.50712
#2	10.046	1.0471	.45804	-.00019	.46269	1.0848	-.00030	.48620	.45648	.49942

Check ?	Chk Pass	Chk Pass	Chk Pass	None	Chk Pass	Chk Pass	None	Chk Pass	Chk Pass	Chk Pass
Value										
Range										

Int. Std.	Y_2243	Y_3600	Y_3774
Units	Cts/S	Cts/S	Cts/S
Avg	2695.8	41752.	2282.8
Stddev	52.9	182.	20.2
%RSD	1.9621	.43544	.88478

#1	2733.2	41881.	2268.5
#2	2658.4	41624.	2297.1

Sample Name: CCB Acquired: 5/19/2016 4:11:36 Type: QC
Method: 6500_025(v6) Mode: CONC Corr. Factor: 1.000000
User: CRHOADES Prep Date: Custom ID2: Custom ID3:
Comment:

Elem	Ag3280	Al1670	As1890	B_2089	Ba4554	Be3130	Bi2230	Ca3179	Cd2288	Co2286	Cr2055	Cu3247	Fe2599
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.00003	.00038	-.00092	.00284	-.00083	.00029	-.00368	-.00653	.00010	-.00017	-.00015	-.00135	-.00011
Stddev	.00014	.00100	.00715	.00105	.00054	.00013	.00176	.00107	.00004	.00020	.00009	.00003	.00187
%RSD	469.77	260.32	781.37	36.809	64.889	46.450	47.763	16.346	37.695	117.70	57.089	1.9206	1664.2

#1	.00013	-.00032	-.00597	.00358	-.00121	.00038	-.00244	-.00578	.00007	-.00032	-.00021	-.00137	.00121
#2	-.00007	.00109	.00414	.00210	-.00045	.00019	-.00492	-.00729	.00012	-.00003	-.00009	-.00133	-.00143

Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit													
Low Limit													

Elem	K_7664	Li6707	Mg2790	Mn2576	Mo2020	Na5895	Ni2316	P_1782	Pb2203	S_1820	Sb2068	Se1960	Si2881
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	-.01232	.00086	.00473	.00004	.00209	.16895	-.00068	-.00017	.00038	.03503	-.00083	.00595	.04096
Stddev	.05335	.00398	.00109	.00001	.00075	.00667	.00015	.00342	.00142	.00556	.00225	.00932	.02725
%RSD	432.87	464.34	23.032	14.665	35.752	3.9475	22.153	1965.5	368.97	15.867	271.53	156.64	66.539

#1	-.05005	-.00196	.00396	.00004	.00156	.17366	-.00057	.00225	-.00062	.03110	-.00242	.01253	.06023
#2	.02540	.00367	.00550	.00004	.00262	.16423	-.00079	-.00260	.00139	.03896	.00076	-.00064	.02169

Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit													
Low Limit													

Elem	SiO2	Sn1899	Sr4077	Th2837	Ti3349	Ti1908	U_3701	V_2924	Zn2062	Zr3391
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.08765	.00032	.00037	.00237	-.00020	.00195	-.07598	.00040	-.00051	-.00207
Stddev	.05832	.00148	.00029	.00038	.00037	.00051	.03124	.00044	.00026	.00071
%RSD	66.539	457.09	79.927	15.968	190.76	26.083	41.114	110.63	50.447	34.433

#1	.12890	-.00072	.00016	.00210	.00007	.00231	-.09807	.00009	-.00070	-.00157
#2	.04641	.00137	.00057	.00263	-.00046	.00159	-.05389	.00071	-.00033	-.00258

Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit										
Low Limit										

Int. Std.	Y_2243	Y_3600	Y_3774
Units	Cts/S	Cts/S	Cts/S
Avg	2706.2	42063.	2324.3
Stddev	78.5	174.	115.0
%RSD	2.8996	.41442	4.9489

#1	2761.7	42187.	2405.6
#2	2650.8	41940.	2242.9

Sample Name: CCVL-3897520 Acquired: 5/19/2016 4:13:59 Type: QC
Method: 6500_025(v6) Mode: CONC Corr. Factor: 1.000000
User: CRHOADES Prep Date: Custom ID2: Custom ID3:
Comment:

Elem	Ag3280	Al1670	As1890	B_2089	Ba4554	Be3130	Bi2230	Ca3179	Cd2288	Co2286	Cr2055	Cu3247
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.00997	.11222	F .02042	.09995	.00924	.00115	.11506	.18168	.00499	.01001	.01011	.01425
Stddev	.00050	.00126	.00055	.00017	.00026	.00003	.00269	.00703	.00017	.00001	.00001	.00000
%RSD	5.0243	1.1251	2.7106	.17378	2.8334	2.3106	2.3338	3.8667	3.3665	.12060	.11641	.00270
#1	.00961	.11311	.02003	.10008	.00905	.00117	.11696	.18665	.00511	.01000	.01012	.01425
#2	.01032	.11132	.02082	.09983	.00942	.00113	.11316	.17672	.00488	.01002	.01011	.01425
Check ?	Chk Pass	Chk Pass	Chk Fail	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Value			.01500									
Range			30.000%									
Elem	Fe2599	K_7664	Li6707	Mg2790	Mn2576	Mo2020	Na5895	Ni2316	P_1782	Pb2203	S_1820	Sb2068
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.10284	2.9575	.00961	.19474	.00946	.02058	1.1450	.04047	2.9708	.00979	.04343	.01994
Stddev	.00614	.0351	.00313	.00224	.00007	.00042	.0194	.00040	.0398	.00178	.00522	.00353
%RSD	5.9737	1.1867	32.582	1.1524	.74612	2.0279	1.6986	.99637	1.3390	18.172	12.023	17.730
#1	.10718	2.9327	.00740	.19632	.00951	.02028	1.1312	.04019	2.9427	.00853	.04712	.01744
#2	.09849	2.9824	.01183	.19315	.00941	.02087	1.1587	.04076	2.9989	.01104	.03974	.02244
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	None	Chk Pass
Value												
Range												
Elem	Se1960	Si2881	SiO2	Sn1899	Sr4077	Th2837	Ti3349	Ti1908	U_3701	V_2924	Zn2062	Zr3391
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	F .02802	.48478	1.0374	.10687	.00973	.01552	.00914	F .00760	.05314	.01085	.01910	.01795
Stddev	.00333	.02439	.0522	.00104	.00011	.00074	.00023	.00124	.02417	.00049	.00009	.00178
%RSD	11.892	5.0317	5.0317	.97673	1.1663	4.7696	2.5085	16.341	45.474	4.4958	.46143	9.9235
#1	.03037	.50203	1.0743	.10613	.00965	.01605	.00930	.00848	.03606	.01120	.01916	.01921
#2	.02566	.46753	1.0005	.10761	.00981	.01500	.00898	.00672	.07023	.01051	.01904	.01669
Check ?	Chk Fail	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Fail	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Value	.01500							.01500				
Range	30.000%							-30.000%				
Int. Std.	Y_2243	Y_3600	Y_3774									
Units	Cts/S	Cts/S	Cts/S									
Avg	2674.7	42551.	2290.6									
Stddev	4.6	167.	10.5									
%RSD	.17037	.39355	.45719									
#1	2677.9	42669.	2283.2									
#2	2671.5	42433.	2298.1									

Sample Name: MB 280-325512/1-A Acquired: 5/19/2016 4:16:41 Type: Unk

Method: 6500_025(v6) Mode: CONC Corr. Factor: 1.000000

User: CRHOADES Prep Date: 5/18 Custom ID2: Custom ID3:

Comment: 325512 6010C soil Q4

Elem	Ag3280	Al1670	As1890	B_2089	Ba4554	Be3130	Bi2230	Ca3179	Cd2288
Line	328.068 {103}	167.079 {502}	189.042 {478}	208.959 {461}	455.403 {74}	313.042 {108}	223.061 {451}	317.933 {106}	228.802 {447}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.00005	.00757	-.00429	.01309	-.00030	.00034	-.00086	.03693	-.00016
Stddev	.00041	.00094	.00242	.00005	.00023	.00008	.00177	.00121	.00012
%RSD	877.06	12.395	56.547	.37550	79.392	24.449	204.28	3.2641	79.015

#1	.00033	.00823	-.00600	.01312	-.00013	.00040	.00038	.03608	-.00007
#2	-.00024	.00691	-.00257	.01305	-.00046	.00028	-.00211	.03778	-.00025

Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Elem	Co2286	Cr2055	Cu3247	Fe2599	K_7664	Li6707	Mg2790	Mn2576	Mo2020
Line	228.616 {447}	205.560 {464}	324.754 {104}	259.940 {130}	766.490 {44}	670.784 {50}	279.079 {121}2	257.610 {131}	202.030 {467}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	-.00015	.00046	-.00028	.03060	-.00383	-.00109	.01834	.00027	-.00046
Stddev	.00023	.00017	.00022	.00170	.02558	.00127	.00128	.00001	.00010
%RSD	158.61	36.767	76.828	5.5475	667.37	116.98	6.9645	3.6039	21.116

#1	-.00031	.00059	-.00013	.02940	.01426	-.00198	.01924	.00027	-.00039
#2	.00002	.00034	-.00044	.03181	-.02192	-.00019	.01743	.00028	-.00053

Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Elem	Na5895	Ni2316	P_1782	Pb2203	S_1820	Sb2068	Se1960	Si2881	SiO2
Line	589.592 {57}	231.604 {446}	178.284 {489}	220.353 {453}	182.034 {485}	206.833 {463}	196.090 {472}	288.158 {117}	288.158 {117}2
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.22917	-.00050	.00463	-.00047	.04139	.00064	.00355	.12236	.26185
Stddev	.02242	.00013	.00310	.00053	.00284	.00051	.00095	.03734	.07990
%RSD	9.7835	26.284	66.883	111.89	6.8714	80.041	26.893	30.516	30.516

#1	.24503	-.00041	.00244	-.00010	.03938	.00028	.00288	.14876	.31835
#2	.21332	-.00060	.00683	-.00085	.04340	.00100	.00423	.09596	.20535

Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	None
High Limit									
Low Limit									

Elem	Sn1899	Sr4077	Th2837	Ti3349	Ti1908	U_3701	V_2924	Zn2062	Zr3391
Line	189.989 {477}	407.771 {83}	283.730 {119}	334.904 {101}	190.856 {477}	370.152 {91}	292.402 {115}	206.200 {163}	339.198 {99}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.00065	.00039	.00366	-.00033	-.00091	W -.05190	.00057	-.00017	.00484
Stddev	.00192	.00014	.00020	.00011	.00228	.01894	.00100	.00072	.00040
%RSD	295.16	35.397	5.4194	31.677	250.11	36.500	174.58	422.10	8.1877

#1	.00200	.00029	.00380	-.00026	-.00252	-.03850	.00128	-.00068	.00456
#2	-.00071	.00048	.00352	-.00041	.00070	-.06529	-.00013	.00034	.00512

Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Warn	Chk Pass	Chk Pass	Chk Pass
High Limit						.05000			
Low Limit						-.05000			

Int. Std.	Y_2243	Y_3600	Y_3774						
Line	224.306 {450}	360.073 {94}	377.433 {89}						
Units	Cts/S	Cts/S	Cts/S						
Avg	2741.0	42508.	2317.5						
Stddev	37.8	8.	40.6						
%RSD	1.3803	.01891	1.7532						

#1	2714.2	42503.	2288.8						
#2	2767.7	42514.	2346.2						

Sample Name: LCS 280-325512/2-A Acquired: 5/19/2016 4:19:04 Type: Unk

Method: 6500_025(v6) Mode: CONC Corr. Factor: 1.000000

User: CRHOADES Prep Date: Custom ID2: Custom ID3:

Comment: 325512 6010C soil Q4

Elem	Ag3280	Al1670	Al3092	As1890	B_2089	Ba4554	Be3130	Bi2230	Ca3179
Line	328.068 {103}	167.079 {502}	309.271 {109}	189.042 {478}	208.959 {461}	455.403 { 74}	313.042 {108}	223.061 {451}	317.933 {106}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.05342	2.2688	F 2.5079	F 1.1396	F 1.1797	2.1587	.05075	2.3344	51.742
Stddev	.00068	.0652	.0229	.0289	.0260	.0181	.00057	.0493	.502
%RSD	1.2636	2.8715	.91319	2.5360	2.2053	.83926	1.1230	2.1136	.97114

#1	.05390	2.2228	2.5241	1.1192	1.1613	2.1715	.05116	2.2995	52.098
#2	.05294	2.3149	2.4917	1.1600	1.1981	2.1459	.05035	2.3692	51.387

Check ?	Chk Pass	Chk Pass	Chk Fail	Chk Fail	Chk Fail	Chk Pass	Chk Pass	None	Chk Pass
High Limit			2.3200	1.1000	1.1000				
Low Limit			1.6400	.85000	.81000				

Elem	Cd2288	Co2286	Cr2055	Cu3247	Fe2599	K_7664	Li6707	Mg2790	Mn2576
Line	228.802 {447}	228.616 {447}	205.560 {464}	324.754 {104}	259.940 {130}	766.490 { 44}	670.784 { 50}	279.079 {121}2	257.610 {131}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.10494	.51667	W .21332	F .28169	1.0339	51.725	1.0509	51.217	.49964
Stddev	.00134	.00881	.00428	.00202	.0096	.445	.0004	.136	.00020
%RSD	1.2732	1.7042	2.0056	.71755	.92704	.85996	.03946	.26466	.03987

#1	.10400	.51044	.21029	.28312	1.0406	52.040	1.0511	51.313	.49978
#2	.10589	.52290	.21634	.28026	1.0271	51.410	1.0506	51.121	.49950

Check ?	Chk Pass	Chk Pass	Chk Warn	Chk Fail	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit			.21000	.27500					
Low Limit			.19000	.22000					

Elem	Mo2020	Na8183	Ni2316	P_1782	Pb2203	S_1820	Sb2068	Se1960	Si2881
Line	202.030 {467}	818.326 { 41}	231.604 {446}	178.284 {489}	220.353 {453}	182.034 {485}	206.833 {463}	196.090 {472}	288.158 {117}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	F 1.1342	F 58.691	.51046	10.735	.53288	2.2939	.53794	F 2.3034	1.8904
Stddev	.0171	.582	.00795	.176	.00538	.0165	.00054	.0129	.0477
%RSD	1.5109	.99093	1.5572	1.6380	1.0102	.72003	.10106	.55909	2.5252

#1	1.1221	58.280	.50484	10.611	.52908	2.2822	.53756	2.3125	1.8566
#2	1.1463	59.103	.51608	10.860	.53669	2.3056	.53833	2.2943	1.9241

Check ?	Chk Fail	Chk Fail	Chk Pass	Chk Pass	Chk Pass	None	Chk Pass	Chk Fail	Chk Pass
High Limit	1.1000	56.000						2.2000	
Low Limit	.86000	45.000						1.6600	

Elem	SiO2	Sn1899	Sr4077	Th2837	Ti3349	Ti1908	U_3701	V_2924	Zn2062
Line	288.158 {117}2	189.989 {477}	407.771 { 83}	283.730 {119}	334.904 {101}	190.856 {477}	370.152 { 91}	292.402 {115}	206.200 {163}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	4.0454	2.1575	.99598	1.0329	1.0243	2.1644	F 2.3128	.51873	.48109
Stddev	.1022	.0060	.00735	.0006	.0012	.0243	.0027	.00176	.00352
%RSD	2.5252	.27762	.73829	.06211	.12028	1.1206	.11533	.33954	.73103

#1	3.9731	2.1533	1.0012	1.0324	1.0252	2.1815	2.3147	.51998	.48358
#2	4.1176	2.1618	.99078	1.0333	1.0234	2.1472	2.3109	.51749	.47860

Check ?	None	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Fail	Chk Pass	Chk Pass
High Limit							2.2000		
Low Limit							1.7000		

Elem	Zr3391								
Line	339.198 { 99}								
Units	ppm								
Avg	.56736								
Stddev	.00200								
%RSD	.35164								

#1	.56877								
#2	.56595								

Check ?	Chk Pass								
High Limit									
Low Limit									

Sample Name: LCS 280-325512/2-A Acquired: 5/19/2016 4:19:04 Type: Unk
 Method: 6500_025(v6) Mode: CONC Corr. Factor: 1.000000
 User: CRHOADES Prep Date: Custom ID2: Custom ID3:
 Comment: 325512 6010C soil Q4

Int. Std.	Y_2243	Y_3600	Y_3774
Line	224.306 {450}	360.073 { 94}	377.433 { 89}
Units	Cts/S	Cts/S	Cts/S
Avg	2634.0	40794.	2273.5
Stddev	65.6	9.	32.6
%RSD	2.4915	.02276	1.4320
#1	2680.4	40800.	2250.4
#2	2587.6	40787.	2296.5

Sample Name: 280-82851-A-1-C Acquired: 5/19/2016 4:21:31 Type: Unk
Method: 6500_025(v6) Mode: CONC Corr. Factor: 1.000000
User: CRHOADES Prep Date: Custom ID2: Custom ID3:
Comment: 325512 6010C soil Q4

Elem	Ag3280	Al3092	As1890	B_2089	Ba4554	Be3130	Bi2230	Ca3179	Cd2288
Line	328.068 {103}	309.271 {109}	189.042 {478}	208.959 {461}	455.403 { 74}	313.042 {108}	223.061 {451}	317.933 {106}	228.802 {447}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	-.00016	36.412	.00625	.00963	.13431	.00035	.00409	.77332	.00722
Stddev	.00094	.328	.00216	.00196	.00074	.00011	.00355	.00296	.00003
%RSD	574.15	.90059	34.539	20.346	.55449	32.520	86.984	.38331	.43821

#1	-.00083	36.644	.00472	.01102	.13484	.00043	.00660	.77542	.00719
#2	.00050	36.180	.00777	.00825	.13378	.00027	.00157	.77123	.00724

Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Elem	Co2286	Cr2055	Cu3247	Fe2599	K_7664	Li6707	Mg2790	Mn2576	Mo2020
Line	228.616 {447}	205.560 {464}	324.754 {104}	259.940 {130}	766.490 { 44}	670.784 { 50}	279.079 {121}2	257.610 {131}	202.030 {467}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.00163	.03562	.74365	19.179	.41878	.01794	.89377	.12046	.00905
Stddev	.00020	.00004	.00422	.001	.00264	.00378	.00240	.00032	.00059
%RSD	12.134	.11286	.56813	.00312	.63083	21.051	.26872	.26406	6.5398

#1	.00149	.03559	.74664	19.179	.42064	.02061	.89207	.12068	.00863
#2	.00177	.03565	.74067	19.180	.41691	.01527	.89547	.12023	.00947

Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Elem	Na5895	Ni2316	P_1782	Pb2203	S_1820	Sb2068	Se1960	Si2881	SiO2
Line	589.592 { 57}	231.604 {446}	178.284 {489}	220.353 {453}	182.034 {485}	206.833 {463}	196.090 {472}	288.158 {117}	288.158 {117}2
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.26712	.24789	.41097	.70851	.56256	.00678	.01684	1.2813	2.7419
Stddev	.02684	.00026	.00098	.00074	.01978	.00204	.00644	.0448	.0959
%RSD	10.046	.10321	.23838	.10382	3.5156	30.101	38.210	3.4967	3.4967

#1	.24815	.24771	.41167	.70903	.57654	.00534	.02140	1.3130	2.8097
#2	.28610	.24807	.41028	.70799	.54857	.00822	.01229	1.2496	2.6742

Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Elem	Sn1899	Sr4077	Th2837	Ti3349	Ti1908	U_3701	V_2924	Zn2062	Zr3391
Line	189.989 {477}	407.771 { 83}	283.730 {119}	334.904 {101}	190.856 {477}	370.152 { 91}	292.402 {115}	206.200 {163}	339.198 { 99}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.01058	.01649	.00754	.17516	.01417	.00645	.03902	.72736	.01639
Stddev	.00136	.00010	.00182	.00246	.00897	.06502	.00096	.01024	.00177
%RSD	12.896	.61677	24.158	1.4045	63.318	1007.6	2.4550	1.4082	10.808

#1	.00962	.01656	.00625	.17690	.00783	.05243	.03970	.73461	.01764
#2	.01155	.01641	.00882	.17342	.02052	-.03953	.03834	.72012	.01514

Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Int. Std.	Y_2243	Y_3600	Y_3774
Line	224.306 {450}	360.073 { 94}	377.433 { 89}
Units	Cts/S	Cts/S	Cts/S
Avg	2742.7	42701.	2323.4
Stddev	21.4	38.	4.9
%RSD	.78006	.08948	.21073

#1	2727.5	42674.	2319.9
#2	2757.8	42728.	2326.8

Sample Name: 280-82851-A-2-C Acquired: 5/19/2016 4:24:08 Type: Unk
Method: 6500_025(v6) Mode: CONC Corr. Factor: 1.000000
User: CRHOADES Prep Date: Custom ID2: Custom ID3:
Comment: 325512 6010C soil Q4

Elem	Ag3280	Al3092	As1890	B_2089	Ba4554	Be3130	Bi2230	Ca3179	Cd2288
Line	328.068 {103}	309.271 {109}	189.042 {478}	208.959 {461}	455.403 { 74}	313.042 {108}	223.061 {451}	317.933 {106}	228.802 {447}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	-.00011	36.918	.01099	.00674	.15759	.00043	-.00049	.91156	.01817
Stddev	.00016	.202	.00235	.00006	.00038	.00015	.00563	.01359	.00015
%RSD	147.10	.54610	21.424	.93558	.24351	34.325	1140.2	1.4908	.83078
#1	.00000	37.061	.00933	.00669	.15786	.00053	.00349	.90195	.01828
#2	-.00022	36.776	.01266	.00678	.15732	.00033	-.00448	.92117	.01806

Check ? Chk Pass Chk Pass Chk Pass Chk Pass Chk Pass Chk Pass Chk Pass Chk Pass Chk Pass
High Limit
Low Limit

Elem	Co2286	Cr2055	Cu3247	Fe2599	K_7664	Li6707	Mg2790	Mn2576	Mo2020
Line	228.616 {447}	205.560 {464}	324.754 {104}	259.940 {130}	766.490 { 44}	670.784 { 50}	279.079 {121}2	257.610 {131}	202.030 {467}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.00469	.04817	.68267	35.883	.44290	.02045	.93086	.19103	.00578
Stddev	.00014	.00023	.00141	.030	.04627	.00085	.00394	.00021	.00020
%RSD	2.9822	.47437	.20695	.08433	10.448	4.1622	.42318	.11030	3.4301
#1	.00479	.04833	.68167	35.905	.47562	.02105	.93365	.19118	.00592
#2	.00459	.04801	.68367	35.862	.41018	.01984	.92807	.19088	.00564

Check ? Chk Pass Chk Pass Chk Pass Chk Pass Chk Pass Chk Pass Chk Pass Chk Pass Chk Pass
High Limit
Low Limit

Elem	Na5895	Ni2316	P_1782	Pb2203	S_1820	Sb2068	Se1960	Si2881	SiO2
Line	589.592 { 57}	231.604 {446}	178.284 {489}	220.353 {453}	182.034 {485}	206.833 {463}	196.090 {472}	288.158 {117}	288.158 {117}2
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.21653	.23877	.42682	.90817	.57437	.00843	.00302	1.1813	2.5280
Stddev	.01311	.00123	.00168	.00079	.00173	.00089	.00536	.0077	.0165
%RSD	6.0530	.51675	.39429	.08672	.30179	10.602	177.48	.65370	.65370
#1	.22579	.23790	.42563	.90873	.57560	.00907	-.00077	1.1758	2.5163
#2	.20726	.23964	.42801	.90761	.57315	.00780	.00681	1.1868	2.5396

Check ? Chk Pass Chk Pass Chk Pass Chk Pass Chk Pass Chk Pass Chk Pass Chk Pass Chk Pass
High Limit
Low Limit

Elem	Sn1899	Sr4077	Th2837	Ti3349	Ti1908	U_3701	V_2924	Zn2062	Zr3391
Line	189.989 {477}	407.771 { 83}	283.730 {119}	334.904 {101}	190.856 {477}	370.152 { 91}	292.402 {115}	206.200 {163}	339.198 { 99}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.01348	.02189	.00896	.17515	-.00220	-.03549	.04018	.84881	.01333
Stddev	.00087	.00023	.00166	.00167	.00277	.02043	.00017	.00161	.00099
%RSD	6.4697	1.0494	18.561	.95221	126.20	57.565	.42017	.18918	7.4328
#1	.01410	.02173	.00779	.17397	-.00415	-.02104	.04006	.84768	.01263
#2	.01287	.02205	.01014	.17633	-.00024	-.04993	.04030	.84995	.01403

Check ? Chk Pass Chk Pass Chk Pass Chk Pass Chk Pass Chk Pass Chk Pass Chk Pass Chk Pass
High Limit
Low Limit

Int. Std.	Y_2243	Y_3600	Y_3774						
Line	224.306 {450}	360.073 { 94}	377.433 { 89}						
Units	Cts/S	Cts/S	Cts/S						
Avg	2755.3	42832.	2259.8						
Stddev	47.2	97.	7.8						
%RSD	1.7133	.22586	.34300						
#1	2721.9	42763.	2254.3						
#2	2788.6	42900.	2265.2						

Sample Name: 280-82851-A-3-C Acquired: 5/19/2016 4:26:44 Type: Unk
Method: 6500_025(v6) Mode: CONC Corr. Factor: 1.000000
User: CRHOADES Prep Date: Custom ID2: Custom ID3:
Comment: 325512 6010C soil Q4

Elem	Ag3280	Al3092	As1890	B_2089	Ba4554	Be3130	Bi2230	Ca3179	Cd2288
Line	328.068 {103}	309.271 {109}	189.042 {478}	208.959 {461}	455.403 {74}	313.042 {108}	223.061 {451}	317.933 {106}	228.802 {447}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	-.00151	43.244	.00637	.00859	.26804	.00071	.01112	1.0211	.01177
Stddev	.00013	.149	.00851	.00004	.00175	.00030	.00409	.0197	.00032
%RSD	8.8261	.34461	133.59	.51816	.65118	42.736	36.799	1.9281	2.7023

#1	-.00160	43.350	.00035	.00862	.26928	.00092	.01402	1.0350	.01199
#2	-.00141	43.139	.01239	.00855	.26681	.00049	.00823	1.0071	.01154

Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Elem	Co2286	Cr2055	Cu3247	Fe2599	K_7664	Li6707	Mg2790	Mn2576	Mo2020
Line	228.616 {447}	205.560 {464}	324.754 {104}	259.940 {130}	766.490 {44}	670.784 {50}	279.079 {121}2	257.610 {131}	202.030 {467}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.00354	.04719	.83090	22.957	.62662	.02763	1.2497	.14942	.00731
Stddev	.00028	.00200	.00083	.018	.10977	.00056	.0160	.00011	.00033
%RSD	7.7914	4.2336	.10033	.08008	17.518	2.0275	1.2809	.07564	4.5191

#1	.00334	.04860	.83031	22.944	.70424	.02724	1.2610	.14950	.00707
#2	.00373	.04578	.83149	22.970	.54900	.02803	1.2384	.14934	.00754

Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Elem	Na5895	Ni2316	P_1782	Pb2203	S_1820	Sb2068	Se1960	Si2881	SiO2
Line	589.592 {57}	231.604 {446}	178.284 {489}	220.353 {453}	182.034 {485}	206.833 {463}	196.090 {472}	288.158 {117}	288.158 {117}2
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.38628	.26846	.47669	1.0380	.59987	.00945	.01020	1.4286	3.0571
Stddev	.01521	.00691	.01104	.0231	.01120	.00173	.00131	.0248	.0530
%RSD	3.9365	2.5741	2.3156	2.2288	1.8663	18.329	12.847	1.7324	1.7324

#1	.37552	.27334	.48450	1.0544	.60779	.00822	.01112	1.4461	3.0946
#2	.39703	.26357	.46889	1.0216	.59196	.01067	.00927	1.4111	3.0197

Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Elem	Sn1899	Sr4077	Th2837	Ti3349	Ti1908	U_3701	V_2924	Zn2062	Zr3391
Line	189.989 {477}	407.771 {83}	283.730 {119}	334.904 {101}	190.856 {477}	370.152 {91}	292.402 {115}	206.200 {163}	339.198 {99}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.02003	.02707	.01233	.24016	.00512	-.00737	.04910	.93594	.40587
Stddev	.00011	.00000	.00052	.00101	.00230	.05321	.00048	.00903	.00181
%RSD	.55316	.00652	4.1903	.41926	44.813	721.51	.98225	.96531	.44556

#1	.01995	.02707	.01270	.24087	.00675	.03025	.04945	.94233	.40459
#2	.02010	.02707	.01197	.23945	.00350	-.04500	.04876	.92956	.40715

Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Int. Std.	Y_2243	Y_3600	Y_3774
Line	224.306 {450}	360.073 {94}	377.433 {89}
Units	Cts/S	Cts/S	Cts/S
Avg	2743.1	42179.	2296.1
Stddev	69.9	223.	7.8
%RSD	2.5495	.52841	.34044

#1	2693.7	42022.	2290.6
#2	2792.6	42337.	2301.6

Sample Name: CCVH-3894253 Acquired: 5/19/2016 4:29:20 Type: QC
Method: 6500_025(v6) Mode: CONC Corr. Factor: 1.000000
User: CRHOADES Prep Date: Custom ID2: Custom ID3:
Comment:

Elem	Ag3280	Al3092	As1890	B_2089	Ba4554	Be3130	Bi2230	Ca3179	Cd2288	Co2286	Cr2055
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	-.00021	52.872	-.00559	.00282	-.00076	.00012	W 1.0961	-.01460	-.00058	-.00087	.00031
Stddev	.00039	.644	.00167	.00083	.00060	.00057	.0269	.00221	.00029	.00060	.00013
%RSD	185.55	1.2188	29.841	29.509	79.627	480.36	2.4509	15.106	49.888	68.683	42.178

#1	.00007	53.327	-.00676	.00223	-.00119	.00052	1.1151	-.01616	-.00079	-.00130	.00040
#2	-.00049	52.416	-.00441	.00341	-.00033	-.00028	1.0771	-.01304	-.00038	-.00045	.00022

Check ?	None	Chk Pass	None	None	None	None	Chk Warn	None	None	None	None
Value							1.0000				
Range							5.0000%				

Elem	Cu3247	Fe2714	K_7664	Li6707	Mg2790	Mn2576	Mo2020	Na8183	Ni2316	P_1782	Pb2203
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.00002	49.298	.10049	-.00047	.01851	-.00020	-.00127	257.46	.00106	.00457	-.00218
Stddev	.00064	.082	.02607	.00198	.00328	.00003	.00028	2.42	.00011	.00080	.00322
%RSD	3369.8	.16725	25.944	426.00	17.747	16.194	22.020	.93946	10.449	17.584	147.83

#1	.00047	49.240	.11892	.00094	.02083	-.00018	-.00147	259.17	.00098	.00401	-.00445
#2	-.00043	49.357	.08205	-.00187	.01619	-.00023	-.00107	255.75	.00114	.00514	.00010

Check ?	None	Chk Pass	None	None	None	None	None	Chk Pass	None	None	None
Value											
Range											

Elem	S_1820	Sb2068	Se1960	Si2881	SiO2	Sn1899	Sr4077	Th2837	Ti3349	Ti1908	U_3701
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	W 5.2729	-.01360	.00194	.01527	.03268	.00067	.00062	W 4.6813	.00603	-.00279	W 10.647
Stddev	.1352	.00043	.00801	.00226	.00484	.00185	.00016	.0159	.00037	.00218	.179
%RSD	2.5637	3.1522	411.82	14.808	14.808	277.58	26.229	.34078	6.1834	77.963	1.6793

#1	5.3685	-.01330	.00761	.01687	.03610	-.00064	.00073	4.6925	.00577	-.00433	10.774
#2	5.1773	-.01391	-.00372	.01367	.02926	.00197	.00050	4.6700	.00629	-.00125	10.521

Check ?	Chk Warn	None	None	None	None	None	None	Chk Warn	None	None	Chk Warn
Value	5.0000							5.0000			10.000
Range	5.0000%							-5.0000%			5.0000%

Elem	V_2924	Zn2062	Zr3391
Units	ppm	ppm	ppm
Avg	.00818	-.00073	.05525
Stddev	.00025	.00034	.00654
%RSD	3.0881	45.991	11.829

#1	.00800	-.00049	.05988
#2	.00836	-.00097	.05063

Check ?	None	None	None
Value			
Range			

Int. Std.	Y_2243	Y_3600	Y_3774
Units	Cts/S	Cts/S	Cts/S
Avg	2649.9	40801.	2140.8
Stddev	68.2	40.	31.0
%RSD	2.5736	.09815	1.4477

#1	2601.6	40773.	2118.9
#2	2698.1	40830.	2162.7

Sample Name: CCV-3894251 Acquired: 5/19/2016 4:31:58 Type: QC
Method: 6500_025(v6) Mode: CONC Corr. Factor: 1.000000
User: CRHOADES Prep Date: Custom ID2: Custom ID3:
Comment:

Elem	Ag3280	Al1670	As1890	B_2089	Ba4554	Be3130	Bi2230	Ca3179	Cd2288	Co2286	Cr2055	Cu3247
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.49546	F .55674	1.0615	.50248	.49834	.46181	-.00013	4.8614	.49951	.50100	.50582	.52027
Stddev	.00093	.01232	.0176	.00797	.00077	.00007	.00249	.0090	.00123	.00911	.00820	.00034
%RSD	.18845	2.2120	1.6626	1.5858	.15490	.01477	1872.5	.18443	.24681	1.8185	1.6220	.06492

#1	.49612	.56545	1.0739	.50811	.49779	.46186	-.00189	4.8678	.49864	.50745	.51162	.52003
#2	.49480	.54803	1.0490	.49685	.49888	.46176	.00163	4.8551	.50038	.49456	.50002	.52051

Check ?	Chk Pass	Chk Fail	Chk Pass	Chk Pass	Chk Pass	Chk Pass	None	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Value		.50000										
Range		10.490%										

Elem	Fe2599	K_7664	Li6707	Mg2790	Mn2576	Mo2020	Na5895	Ni2316	P_1782	Pb2203	S_1820	Sb2068
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	2.3449	47.640	.97339	19.125	.46885	.51126	5.0708	.49437	.99227	1.0195	.03004	1.0176
Stddev	.0023	.030	.00558	.011	.00019	.01042	.0458	.00781	.02011	.0161	.00602	.0145
%RSD	.09876	.06314	.57364	.05700	.04060	2.0381	.90372	1.5804	2.0270	1.5803	20.042	1.4283

#1	2.3433	47.619	.96944	19.132	.46898	.51863	5.0384	.49990	1.0065	1.0309	.02578	1.0279
#2	2.3466	47.662	.97734	19.117	.46871	.50389	5.1032	.48885	.97805	1.0081	.03430	1.0074

Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	None	Chk Pass
Value												
Range												

Elem	Se1960	Si2881	SiO2	Sn1899	Sr4077	Th2837	Ti3349	Ti1908	U_3701	V_2924	Zn2062	Zr3391
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	1.0750	4.7726	10.213	1.0230	.46609	-.00034	.46621	1.0673	-.00494	.48563	.46179	.50591
Stddev	.0233	.0255	.054	.0164	.00023	.00032	.00241	.0256	.01119	.00095	.00322	.00678
%RSD	2.1716	.53322	.53322	1.6012	.04853	93.258	.51767	2.3959	226.32	.19481	.69732	1.3410

#1	1.0915	4.7906	10.252	1.0346	.46593	-.00056	.46792	1.0854	-.01285	.48496	.45952	.50111
#2	1.0585	4.7546	10.175	1.0114	.46625	-.00012	.46451	1.0493	.00297	.48629	.46407	.51071

Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	None	Chk Pass	Chk Pass	None	Chk Pass	Chk Pass	Chk Pass
Value												
Range												

Int. Std.	Y_2243	Y_3600	Y_3774
Units	Cts/S	Cts/S	Cts/S
Avg	2660.2	41545.	2252.5
Stddev	7.8	60.	33.2
%RSD	.29349	.14523	1.4751

#1	2654.7	41502.	2276.0
#2	2665.8	41588.	2229.0

Sample Name: CCB Acquired: 5/19/2016 4:34:29 Type: QC
 Method: 6500_025(v6) Mode: CONC Corr. Factor: 1.000000
 User: CRHOADES Prep Date: Custom ID2: Custom ID3:
 Comment:

Elem	Ag3280	Al1670	As1890	B_2089	Ba4554	Be3130	Bi2230	Ca3179	Cd2288	Co2286	Cr2055
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	-.00031	.00139	.00124	.00221	-.00067	.00010	.00045	-.01444	-.00017	-.00035	.00005
Stddev	.00014	.00004	.00296	.00022	.00009	.00011	.00310	.00078	.00012	.00014	.00006
%RSD	45.033	2.5746	238.10	9.8652	13.266	107.55	688.53	5.4256	68.671	41.724	116.06

#1	-.00021	.00142	.00333	.00206	-.00073	.00018	-.00174	-.01388	-.00025	-.00024	.00009
#2	-.00041	.00137	-.00085	.00237	-.00061	.00002	.00264	-.01499	-.00009	-.00045	.00001

Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit											
Low Limit											

Elem	Cu3247	Fe2599	K_7664	Li6707	Mg2790	Mn2576	Mo2020	Na5895	Ni2316	P_1782	Pb2203
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	-.00002	.03506	.12716	-.00067	.00072	.00020	.00147	.16123	-.00030	.00065	-.00168
Stddev	.00027	.00036	.00526	.00175	.00065	.00010	.00010	.01067	.00052	.00028	.00029
%RSD	1236.1	1.0129	4.1385	260.89	90.311	48.825	6.8091	6.6180	170.30	42.615	17.181

#1	.00017	.03481	.13088	.00057	.00117	.00013	.00154	.16877	.00006	.00045	-.00188
#2	-.00021	.03531	.12343	-.00191	.00026	.00027	.00140	.15368	-.00067	.00084	-.00147

Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit											
Low Limit											

Elem	S_1820	Sb2068	Se1960	Si2881	SiO2	Sn1899	Sr4077	Th2837	Ti3349	Ti1908	U_3701
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.03790	W .00754	W .00832	.02933	.06276	.00037	.00017	-.00016	.00016	.00107	.01446
Stddev	.00485	.00058	.00549	.00425	.00909	.00022	.00019	.00149	.00008	.00608	.05172
%RSD	12.803	7.7270	65.956	14.484	14.484	57.932	116.51	906.88	53.561	567.94	357.67

#1	.03447	.00713	.01220	.03233	.06919	.00022	.00003	-.00122	.00022	-.00323	.05103
#2	.04134	.00796	.00444	.02633	.05634	.00053	.00030	.00089	.00010	.00537	-.02211

Check ?	Chk Pass	Chk Warn	Chk Warn	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit		.00100	.00750								
Low Limit		-.00100	-.01500								

Elem	V_2924	Zn2062	Zr3391
Units	ppm	ppm	ppm
Avg	.00119	-.00045	-.00032
Stddev	.00018	.00002	.00468
%RSD	15.213	4.7959	1469.8

#1	.00106	-.00044	-.00363
#2	.00132	-.00047	.00299

Check ?	Chk Pass	Chk Pass	Chk Pass
High Limit			
Low Limit			

Int. Std.	Y_2243	Y_3600	Y_3774
Units	Cts/S	Cts/S	Cts/S
Avg	2720.2	42574.	2201.0
Stddev	42.9	392.	14.7
%RSD	1.5756	.92061	.66614

#1	2750.5	42297.	2190.6
#2	2689.8	42851.	2211.4

Sample Name: CCVL-3897520 Acquired: 5/19/2016 4:36:52 Type: QC
Method: 6500_025(v6) Mode: CONC Corr. Factor: 1.000000
User: CRHOADES Prep Date: Custom ID2: Custom ID3:
Comment:

Elem	Ag3280	Al1670	As1890	B_2089	Ba4554	Be3130	Bi2230	Ca3179	Cd2288	Co2286	Cr2055	Cu3247
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.01000	.11214	F .01031	.10046	.00944	.00075	.11133	.19602	.00532	.01002	.01047	.01498
Stddev	.00013	.00003	.00875	.00128	.00018	.00007	.00199	.01499	.00002	.00016	.00016	.00047
%RSD	1.2902	.02584	84.922	1.2735	1.8842	9.7395	1.7889	7.6467	.37081	1.5629	1.5700	3.1647

#1	.01010	.11212	.00412	.09956	.00931	.00080	.10993	.20662	.00531	.01013	.01035	.01531
#2	.00991	.11216	.01650	.10136	.00956	.00070	.11274	.18543	.00533	.00991	.01058	.01464

Check ?	Chk Pass	Chk Pass	Chk Fail	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Value			.01500									
Range			-30.000%									

Elem	Fe2599	K_7664	Li6707	Mg2790	Mn2576	Mo2020	Na5895	Ni2316	P_1782	Pb2203	S_1820	Sb2068
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.10212	2.9480	.01288	.19179	.00959	.02038	1.1361	.03955	2.9181	.00925	.03086	.02451
Stddev	.00484	.0114	.00273	.00023	.00019	.00040	.0044	.00095	.0515	.00100	.00589	.00461
%RSD	4.7418	.38758	21.171	.12215	1.9363	1.9744	.38673	2.4067	1.7648	10.811	19.073	18.794

#1	.09869	2.9561	.01481	.19163	.00972	.02010	1.1330	.03888	2.8817	.00996	.02669	.02777
#2	.10554	2.9399	.01095	.19196	.00946	.02067	1.1392	.04022	2.9545	.00854	.03502	.02126

Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	None	Chk Pass
Value												
Range												

Elem	Se1960	Si2881	SiO2	Sn1899	Sr4077	Th2837	Ti3349	Ti1908	U_3701	V_2924	Zn2062	Zr3391
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.01901	.50029	1.0706	.10392	.00979	.01578	.00912	.01178	.04339	.00968	.01857	.01729
Stddev	.00184	.04194	.0897	.00228	.00018	.00174	.00050	.00336	.01161	.00026	.00070	.00225
%RSD	9.6643	8.3826	8.3826	2.1932	1.7883	11.020	5.4498	28.482	26.749	2.6995	3.7549	13.008

#1	.01771	.52994	1.1341	.10231	.00967	.01701	.00947	.00941	.03518	.00987	.01906	.01570
#2	.02031	.47063	1.0072	.10553	.00992	.01455	.00877	.01416	.05160	.00950	.01807	.01888

Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Value												
Range												

Int. Std.	Y_2243	Y_3600	Y_3774
Units	Cts/S	Cts/S	Cts/S
Avg	2716.7	42953.	2264.5
Stddev	1.9	80.	36.0
%RSD	.06922	.18553	1.5896

#1	2718.0	42897.	2239.1
#2	2715.3	43009.	2290.0

Sample Name: 280-82931-A-1-C Acquired: 5/19/2016 4:39:33 Type: Unk
Method: 6500_025(v6) Mode: CONC Corr. Factor: 1.000000
User: CRHOADES Prep Date: Custom ID2: Custom ID3:
Comment: 325512 6010C soil Q4

Elem	Ag3280	Al3092	As1890	B_2089	Ba4554	Be3130	Bi2230	Ca3179	Cd2288
Line	328.068 {103}	309.271 {109}	189.042 {478}	208.959 {461}	455.403 { 74}	313.042 {108}	223.061 {451}	317.933 {106}	228.802 {447}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	-.00006	51.777	.00653	.00859	.13337	.00073	.00247	1.0118	.01087
Stddev	.00096	.783	.00072	.00059	.00169	.00009	.00308	.0229	.00042
%RSD	1568.0	1.5130	11.016	6.8511	1.2683	12.835	124.45	2.2652	3.8881

#1	-.00074	51.223	.00603	.00900	.13217	.00079	.00465	.99561	.01057
#2	.00062	52.331	.00704	.00817	.13456	.00066	.00030	1.0280	.01117

Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Elem	Co2286	Cr2055	Cu3247	Fe2599	K_7664	Li6707	Mg2790	Mn2576	Mo2020
Line	228.616 {447}	205.560 {464}	324.754 {104}	259.940 {130}	766.490 { 44}	670.784 { 50}	279.079 {121}2	257.610 {131}	202.030 {467}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.00205	.04574	.81179	18.926	.47208	.02256	1.1070	.09331	.00399
Stddev	.00021	.00030	.00432	.018	.11676	.00108	.0121	.00079	.00041
%RSD	10.285	.65273	.53269	.09317	24.733	4.7858	1.0978	.84368	10.321

#1	.00190	.04553	.81485	18.914	.55465	.02180	1.1156	.09386	.00370
#2	.00219	.04596	.80873	18.938	.38952	.02333	1.0985	.09275	.00428

Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Elem	Na5895	Ni2316	P_1782	Pb2203	S_1820	Sb2068	Se1960	Si2881	SiO2
Line	589.592 { 57}	231.604 {446}	178.284 {489}	220.353 {453}	182.034 {485}	206.833 {463}	196.090 {472}	288.158 {117}	288.158 {117}2
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.31663	.06304	.57187	.83393	1.1997	.00800	.00926	1.8755	4.0136
Stddev	.01648	.00037	.00605	.00484	.0075	.00039	.00196	.0368	.0788
%RSD	5.2044	.58814	1.0580	.58019	.62194	4.9276	21.196	1.9630	1.9630

#1	.30498	.06278	.56759	.83051	1.1944	.00772	.01065	1.8495	3.9579
#2	.32828	.06330	.57615	.83735	1.2050	.00828	.00788	1.9016	4.0693

Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Elem	Sn1899	Sr4077	Th2837	Ti3349	Ti1908	U_3701	V_2924	Zn2062	Zr3391
Line	189.989 {477}	407.771 { 83}	283.730 {119}	334.904 {101}	190.856 {477}	370.152 { 91}	292.402 {115}	206.200 {163}	339.198 { 99}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.01142	.01163	.00835	.21272	-.00116	-.03948	.04938	.79762	.01205
Stddev	.00017	.00060	.00314	.00746	.00344	.05593	.00144	.00613	.00649
%RSD	1.5073	5.1640	37.654	3.5072	296.03	141.67	2.9216	.76849	53.841

#1	.01130	.01121	.01057	.20744	.00127	.00007	.05040	.80195	.00746
#2	.01155	.01205	.00612	.21799	-.00359	-.07903	.04836	.79328	.01663

Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Int. Std.	Y_2243	Y_3600	Y_3774
Line	224.306 {450}	360.073 { 94}	377.433 { 89}
Units	Cts/S	Cts/S	Cts/S
Avg	2766.1	43293.	2312.7
Stddev	8.1	174.	7.0
%RSD	.29254	.40192	.30189

#1	2760.4	43170.	2317.6
#2	2771.8	43416.	2307.7

Sample Name: 280-82931-A-2-C Acquired: 5/19/2016 4:42:09 Type: Unk
Method: 6500_025(v6) Mode: CONC Corr. Factor: 1.000000
User: CRHOADES Prep Date: Custom ID2: Custom ID3:
Comment: 325512 6010C soil Q4

Elem	Ag3280	Al3092	As1890	B_2089	Ba4554	Be3130	Bi2230	Ca3179	Cd2288
Line	328.068 {103}	309.271 {109}	189.042 {478}	208.959 {461}	455.403 { 74}	313.042 {108}	223.061 {451}	317.933 {106}	228.802 {447}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.00017	48.255	.00379	.00469	.12244	.00068	.00002	.85839	.00603
Stddev	.00013	.594	.01143	.00105	.00183	.00014	.00082	.00330	.00011
%RSD	77.433	1.2306	301.22	22.294	1.4938	19.941	5187.1	.38402	1.9022

#1	.00008	47.835	.01187	.00543	.12115	.00058	-.00056	.86072	.00612
#2	.00026	48.675	-.00429	.00395	.12373	.00077	.00060	.85606	.00595

Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Elem	Co2286	Cr2055	Cu3247	Fe2599	K_7664	Li6707	Mg2790	Mn2576	Mo2020
Line	228.616 {447}	205.560 {464}	324.754 {104}	259.940 {130}	766.490 { 44}	670.784 { 50}	279.079 {121}2	257.610 {131}	202.030 {467}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.00146	.05492	.94678	17.646	.37420	.02033	.99841	.08707	.00255
Stddev	.00017	.00082	.00271	.093	.01433	.00230	.00207	.00024	.00040
%RSD	11.463	1.4992	.28592	.52455	3.8299	11.288	.20774	.27075	15.769

#1	.00157	.05550	.94487	17.711	.38434	.01871	.99694	.08691	.00226
#2	.00134	.05434	.94869	17.580	.36407	.02195	.99987	.08724	.00283

Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Elem	Na5895	Ni2316	P_1782	Pb2203	S_1820	Sb2068	Se1960	Si2881	SiO2
Line	589.592 { 57}	231.604 {446}	178.284 {489}	220.353 {453}	182.034 {485}	206.833 {463}	196.090 {472}	288.158 {117}	288.158 {117}2
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.27032	.05776	.53101	.70478	1.0490	.00434	.00369	1.6229	3.4731
Stddev	.00151	.00165	.01149	.01302	.0281	.00150	.00544	.0332	.0710
%RSD	.55853	2.8586	2.1635	1.8472	2.6800	34.546	147.15	2.0434	2.0434

#1	.27139	.05893	.53914	.71399	1.0689	.00328	.00754	1.6464	3.5232
#2	.26925	.05659	.52289	.69558	1.0292	.00540	-.00015	1.5995	3.4229

Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Elem	Sn1899	Sr4077	Th2837	Ti3349	Ti1908	U_3701	V_2924	Zn2062	Zr3391
Line	189.989 {477}	407.771 { 83}	283.730 {119}	334.904 {101}	190.856 {477}	370.152 { 91}	292.402 {115}	206.200 {163}	339.198 { 99}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.01337	.00998	.00673	.18315	-.00397	.00339	.04362	.72951	.01083
Stddev	.00006	.00006	.00166	.00714	.00009	.00471	.00064	.00514	.00285
%RSD	.46841	.58946	24.629	3.8975	2.1677	139.10	1.4691	.70476	26.349

#1	.01332	.01002	.00791	.18819	-.00391	.00006	.04316	.72587	.00882
#2	.01341	.00994	.00556	.17810	-.00403	.00672	.04407	.73314	.01285

Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Int. Std.	Y_2243	Y_3600	Y_3774
Line	224.306 {450}	360.073 { 94}	377.433 { 89}
Units	Cts/S	Cts/S	Cts/S
Avg	2743.1	43116.	2347.9
Stddev	14.0	41.	29.3
%RSD	.51026	.09577	1.2491

#1	2753.0	43145.	2368.6
#2	2733.2	43086.	2327.1

Sample Name: 280-82931-A-3-C Acquired: 5/19/2016 4:44:46 Type: Unk
Method: 6500_025(v6) Mode: CONC Corr. Factor: 1.000000
User: CRHOADES Prep Date: Custom ID2: Custom ID3:
Comment: 325512 6010C soil Q4

Elem	Ag3280	Al3092	As1890	B_2089	Ba4554	Be3130	Bi2230	Ca3179	Cd2288
Line	328.068 {103}	309.271 {109}	189.042 {478}	208.959 {461}	455.403 { 74}	313.042 {108}	223.061 {451}	317.933 {106}	228.802 {447}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	-.00074	44.387	.00652	.00727	.12653	.00029	.00017	.85994	.00631
Stddev	.00026	.611	.00908	.00002	.00232	.00000	.00117	.02088	.00006
%RSD	35.072	1.3773	139.31	.25529	1.8363	1.5053	677.59	2.4284	1.0042

#1	-.00056	44.819	.01294	.00728	.12817	.00029	.00100	.87471	.00635
#2	-.00093	43.955	.00010	.00726	.12489	.00029	-.00066	.84517	.00626

Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Elem	Co2286	Cr2055	Cu3247	Fe2599	K_7664	Li6707	Mg2790	Mn2576	Mo2020
Line	228.616 {447}	205.560 {464}	324.754 {104}	259.940 {130}	766.490 { 44}	670.784 { 50}	279.079 {121}2	257.610 {131}	202.030 {467}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.00163	.04274	.74274	17.896	.50133	.02212	1.0480	.08785	.00252
Stddev	.00008	.00141	.00502	.311	.01141	.00000	.0021	.00012	.00068
%RSD	4.7503	3.2927	.67565	1.7395	2.2763	.00349	.20442	.13927	26.870

#1	.00158	.04175	.74629	18.116	.50940	.02212	1.0495	.08776	.00204
#2	.00169	.04374	.73919	17.675	.49326	.02212	1.0465	.08794	.00300

Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Elem	Na5895	Ni2316	P_1782	Pb2203	S_1820	Sb2068	Se1960	Si2881	SiO2
Line	589.592 { 57}	231.604 {446}	178.284 {489}	220.353 {453}	182.034 {485}	206.833 {463}	196.090 {472}	288.158 {117}	288.158 {117}2
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.33494	.06119	.52565	.78614	1.0364	.00421	.01104	2.6432	5.6564
Stddev	.00544	.00152	.01517	.02147	.0459	.00114	.00045	.0550	.1178
%RSD	1.6252	2.4768	2.8868	2.7304	4.4274	27.172	4.0870	2.0822	2.0822

#1	.33109	.06011	.51492	.77096	1.0040	.00340	.01072	2.6821	5.7397
#2	.33879	.06226	.53638	.80132	1.0689	.00502	.01135	2.6043	5.5731

Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Elem	Sn1899	Sr4077	Th2837	Ti3349	Ti1908	U_3701	V_2924	Zn2062	Zr3391
Line	189.989 {477}	407.771 { 83}	283.730 {119}	334.904 {101}	190.856 {477}	370.152 { 91}	292.402 {115}	206.200 {163}	339.198 { 99}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.01076	.01069	.00637	.25549	-.00451	.02181	.04718	.83895	.01297
Stddev	.00026	.00020	.00183	.00633	.00038	.04871	.00081	.00206	.00108
%RSD	2.3829	1.8846	28.768	2.4792	8.4007	223.30	1.7157	.24511	8.3113

#1	.01094	.01083	.00766	.25997	-.00477	-.01263	.04661	.84041	.01221
#2	.01058	.01055	.00507	.25102	-.00424	.05626	.04775	.83750	.01373

Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Int. Std.	Y_2243	Y_3600	Y_3774
Line	224.306 {450}	360.073 { 94}	377.433 { 89}
Units	Cts/S	Cts/S	Cts/S
Avg	2761.3	41526.	2266.1
Stddev	.9	290.	35.7
%RSD	.03134	.69859	1.5740

#1	2760.7	41732.	2240.9
#2	2761.9	41321.	2291.3

Sample Name: 280-82931-A-5-C Acquired: 5/19/2016 4:47:22 Type: Unk
Method: 6500_025(v6) Mode: CONC Corr. Factor: 1.000000
User: CRHOADES Prep Date: Custom ID2: Custom ID3:
Comment: 325512 6010C soil Q4

Elem	Ag3280	Al3092	As1890	B_2089	Ba4554	Be3130	Bi2230	Ca3179	Cd2288
Line	328.068 {103}	309.271 {109}	189.042 {478}	208.959 {461}	455.403 {74}	313.042 {108}	223.061 {451}	317.933 {106}	228.802 {447}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	-.00042	31.892	.00907	.00515	.09859	.00045	.00522	.91550	.00374
Stddev	.00028	1.015	.00131	.00056	.00357	.00026	.00302	.01550	.00011
%RSD	67.495	3.1831	14.455	10.963	3.6183	57.904	57.785	1.6933	2.8164

#1	-.00022	31.174	.01000	.00555	.09607	.00027	.00309	.90454	.00382
#2	-.00062	32.610	.00814	.00475	.10111	.00063	.00736	.92646	.00367

Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Elem	Co2286	Cr2055	Cu3247	Fe2599	K_7664	Li6707	Mg2790	Mn2576	Mo2020
Line	228.616 {447}	205.560 {464}	324.754 {104}	259.940 {130}	766.490 {44}	670.784 {50}	279.079 {121}2	257.610 {131}	202.030 {467}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.00206	.02883	.24270	18.538	.47590	.01712	1.0221	.09634	.00183
Stddev	.00037	.00066	.00109	.164	.06882	.00156	.0016	.00047	.00024
%RSD	17.748	2.3041	.44712	.88309	14.460	9.1287	.15453	.48983	13.247

#1	.00181	.02930	.24347	18.422	.52456	.01822	1.0232	.09667	.00201
#2	.00232	.02836	.24194	18.654	.42724	.01601	1.0210	.09601	.00166

Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Elem	Na5895	Ni2316	P_1782	Pb2203	S_1820	Sb2068	Se1960	Si2881	SiO2
Line	589.592 {57}	231.604 {446}	178.284 {489}	220.353 {453}	182.034 {485}	206.833 {463}	196.090 {472}	288.158 {117}	288.158 {117}2
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.28674	.09403	.33160	.28317	.37297	.00449	.00096	2.2815	4.8824
Stddev	.01532	.00237	.00689	.00700	.00205	.00187	.00657	.0014	.0030
%RSD	5.3423	2.5177	2.0767	2.4718	.54929	41.699	684.55	.06234	.06234

#1	.27590	.09571	.33647	.28812	.37153	.00581	-.00369	2.2825	4.8846
#2	.29757	.09236	.32673	.27822	.37442	.00316	.00560	2.2805	4.8803

Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Elem	Sn1899	Sr4077	Th2837	Ti3349	Ti1908	U_3701	V_2924	Zn2062	Zr3391
Line	189.989 {477}	407.771 {83}	283.730 {119}	334.904 {101}	190.856 {477}	370.152 {91}	292.402 {115}	206.200 {163}	339.198 {99}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.00731	.01823	.01011	.27745	-.00380	W -.06337	.04072	.56462	.01358
Stddev	.00036	.00006	.00296	.00071	.00095	.02978	.00028	.00055	.00055
%RSD	4.9681	.30432	29.224	.25696	24.864	46.998	.69827	.09752	4.0213

#1	.00705	.01819	.00802	.27694	-.00447	-.04231	.04052	.56423	.01397
#2	.00757	.01827	.01220	.27795	-.00314	-.08443	.04092	.56501	.01319

Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Warn	Chk Pass	Chk Pass	Chk Pass
High Limit						45.000			
Low Limit						-.05000			

Int. Std.	Y_2243	Y_3600	Y_3774
Line	224.306 {450}	360.073 {94}	377.433 {89}
Units	Cts/S	Cts/S	Cts/S
Avg	2791.3	43328.	2329.6
Stddev	53.3	211.	90.2
%RSD	1.9108	.48701	3.8726

#1	2753.6	43179.	2393.4
#2	2829.0	43477.	2265.8

Sample Name: 280-82931-A-6-C Acquired: 5/19/2016 4:50:00 Type: Unk
 Method: 6500_025(v6) Mode: CONC Corr. Factor: 1.000000
 User: CRHOADES Prep Date: Custom ID2: Custom ID3:
 Comment: 325512 6010C soil Q4

Elem	Ag3280	Al3092	As1890	B_2089	Ba4554	Be3130	Bi2230	Ca3179	Cd2288
Line	328.068 {103}	309.271 {109}	189.042 {478}	208.959 {461}	455.403 {74}	313.042 {108}	223.061 {451}	317.933 {106}	228.802 {447}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	-.00059	39.460	.01092	.00469	.14492	.00058	.00076	.96016	.00719
Stddev	.00028	.473	.00103	.00037	.00169	.00000	.00498	.00951	.00052
%RSD	48.107	1.1978	9.4632	7.8074	1.1646	.32474	655.56	.99042	7.2234

#1	-.00079	39.794	.01019	.00444	.14611	.00058	.00428	.95344	.00682
#2	-.00039	39.126	.01165	.00495	.14373	.00058	-.00276	.96689	.00755

Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Elem	Co2286	Cr2055	Cu3247	Fe2599	K_7664	Li6707	Mg2790	Mn2576	Mo2020
Line	228.616 {447}	205.560 {464}	324.754 {104}	259.940 {130}	766.490 {44}	670.784 {50}	279.079 {121}2	257.610 {131}	202.030 {467}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.00243	.03876	5.0494	25.381	.56976	.01767	1.1668	.13740	.00184
Stddev	.00003	.00092	.0430	.047	.00548	.00167	.0047	.00016	.00005
%RSD	1.3776	2.3660	.85104	.18485	.96239	9.4752	.40550	.11423	2.8269

#1	.00245	.03811	5.0190	25.414	.56588	.01649	1.1634	.13729	.00180
#2	.00240	.03941	5.0798	25.348	.57363	.01886	1.1701	.13751	.00187

Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Elem	Na5895	Ni2316	P_1782	Pb2203	S_1820	Sb2068	Se1960	Si2881	SiO2
Line	589.592 {57}	231.604 {446}	178.284 {489}	220.353 {453}	182.034 {485}	206.833 {463}	196.090 {472}	288.158 {117}	288.158 {117}2
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.30508	.13818	.41790	.41078	.41361	.00629	.00130	1.5437	3.3034
Stddev	.01837	.00357	.01460	.01260	.01905	.00260	.00352	.0897	.1920
%RSD	6.0222	2.5865	3.4942	3.0667	4.6059	41.371	269.79	5.8130	5.8130

#1	.29209	.13565	.40758	.40187	.40014	.00445	-.00118	1.6071	3.4392
#2	.31808	.14070	.42823	.41969	.42708	.00813	.00379	1.4802	3.1677

Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Elem	Sn1899	Sr4077	Th2837	Ti3349	Ti1908	U_3701	V_2924	Zn2062	Zr3391
Line	189.989 {477}	407.771 {83}	283.730 {119}	334.904 {101}	190.856 {477}	370.152 {91}	292.402 {115}	206.200 {163}	339.198 {99}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.01636	.01771	.01389	.24965	-.00207	.00912	.04896	.63472	.02009
Stddev	.00074	.00014	.00164	.00062	.00061	.04626	.00003	.00045	.00028
%RSD	4.5039	.81603	11.787	.24650	29.702	507.04	.05560	.07114	1.3971

#1	.01584	.01761	.01505	.25008	-.00250	-.02359	.04894	.63504	.02029
#2	.01688	.01782	.01274	.24921	-.00163	.04184	.04897	.63441	.01990

Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Int. Std.	Y_2243	Y_3600	Y_3774
Line	224.306 {450}	360.073 {94}	377.433 {89}
Units	Cts/S	Cts/S	Cts/S
Avg	2760.9	41347.	2151.8
Stddev	18.1	775.	27.7
%RSD	.65571	1.8748	1.2861

#1	2773.7	40798.	2132.3
#2	2748.1	41895.	2171.4

Sample Name: 280-82931-A-7-C Acquired: 5/19/2016 4:52:36 Type: Unk
Method: 6500_025(v6) Mode: CONC Corr. Factor: 1.000000
User: CRHOADES Prep Date: Custom ID2: Custom ID3:
Comment: 325512 6010C soil Q4

Elem	Ag3280	Al3092	As1890	B_2089	Ba4554	Be3130	Bi2230	Ca3179	Cd2288
Line	328.068 {103}	309.271 {109}	189.042 {478}	208.959 {461}	455.403 {74}	313.042 {108}	223.061 {451}	317.933 {106}	228.802 {447}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	-.00054	29.370	.00800	.00253	.08744	.00059	-.00025	.86181	.00323
Stddev	.00046	.696	.00025	.00019	.00265	.00003	.00160	.02455	.00003
%RSD	85.019	2.3687	3.1255	7.6476	3.0291	4.7749	642.13	2.8481	1.0405

#1	-.00086	29.862	.00782	.00240	.08931	.00061	-.00138	.87916	.00321
#2	-.00021	28.878	.00818	.00267	.08557	.00057	.00088	.84445	.00325

Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Elem	Co2286	Cr2055	Cu3247	Fe2599	K_7664	Li6707	Mg2790	Mn2576	Mo2020
Line	228.616 {447}	205.560 {464}	324.754 {104}	259.940 {130}	766.490 {44}	670.784 {50}	279.079 {121}2	257.610 {131}	202.030 {467}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.00178	.02666	.22362	21.115	.43234	.01089	.91357	.11117	.00172
Stddev	.00005	.00055	.00107	.193	.19240	.00010	.00285	.00023	.00009
%RSD	2.7584	2.0449	.47932	.91551	44.502	.96146	.31199	.20667	5.4193

#1	.00181	.02705	.22286	21.252	.56839	.01081	.91558	.11133	.00179
#2	.00174	.02628	.22437	20.978	.29630	.01096	.91155	.11101	.00166

Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Elem	Na5895	Ni2316	P_1782	Pb2203	S_1820	Sb2068	Se1960	Si2881	SiO2
Line	589.592 {57}	231.604 {446}	178.284 {489}	220.353 {453}	182.034 {485}	206.833 {463}	196.090 {472}	288.158 {117}	288.158 {117}2
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.24262	.10643	.31219	.23857	.31181	.00480	.01092	1.5698	3.3594
Stddev	.00739	.00035	.00346	.00064	.00592	.00040	.00061	.0611	.1307
%RSD	3.0471	.33225	1.1067	.26670	1.8979	8.3295	5.6136	3.8909	3.8909

#1	.23739	.10668	.31464	.23813	.30763	.00452	.01135	1.5266	3.2669
#2	.24784	.10618	.30975	.23902	.31600	.00508	.01049	1.6130	3.4518

Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Elem	Sn1899	Sr4077	Th2837	Ti3349	Ti1908	U_3701	V_2924	Zn2062	Zr3391
Line	189.989 {477}	407.771 {83}	283.730 {119}	334.904 {101}	190.856 {477}	370.152 {91}	292.402 {115}	206.200 {163}	339.198 {99}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.00531	.01468	.01049	.23686	-.00086	W -.06017	.03757	.44274	.00883
Stddev	.00212	.00010	.00095	.00074	.00170	.04553	.00016	.00540	.00295
%RSD	39.980	.67490	9.0523	.31074	198.47	75.671	.42220	1.2191	33.402

#1	.00682	.01475	.00982	.23738	-.00206	-.09236	.03746	.44656	.00674
#2	.00381	.01461	.01116	.23634	.00035	-.02797	.03768	.43892	.01091

Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Warn	Chk Pass	Chk Pass	Chk Pass
High Limit						45.000			
Low Limit						-.05000			

Int. Std.	Y_2243	Y_3600	Y_3774
Line	224.306 {450}	360.073 {94}	377.433 {89}
Units	Cts/S	Cts/S	Cts/S
Avg	2728.2	41802.	2279.1
Stddev	65.7	114.	6.4
%RSD	2.4073	.27320	.28132

#1	2681.7	41883.	2274.6
#2	2774.6	41722.	2283.7

Sample Name: 280-82931-A-14-C Acquired: 5/19/2016 4:55:14 Type: Unk

Method: 6500_025(v6) Mode: CONC Corr. Factor: 1.000000

User: CRHOADES Prep Date: Custom ID2: Custom ID3:

Comment: 325512 6010C soil Q4

Elem	Ag3280	Al3092	As1890	B_2089	Ba4554	Be3130	Bi2230	Ca3179	Cd2288
Line	328.068 {103}	309.271 {109}	189.042 {478}	208.959 {461}	455.403 {74}	313.042 {108}	223.061 {451}	317.933 {106}	228.802 {447}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	-.00042	56.235	.00817	.00558	.20270	.00071	.00567	1.3563	.01456
Stddev	.00038	.975	.00032	.00056	.00345	.00032	.00357	.0006	.00025
%RSD	91.491	1.7345	3.8893	10.102	1.7013	44.870	62.985	.04806	1.7182

#1	-.00015	56.925	.00795	.00518	.20514	.00093	.00820	1.3558	.01474
#2	-.00069	55.546	.00839	.00598	.20026	.00048	.00315	1.3567	.01438

Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Elem	Co2286	Cr2055	Cu3247	Fe2599	K_7664	Li6707	Mg2790	Mn2576	Mo2020
Line	228.616 {447}	205.560 {464}	324.754 {104}	259.940 {130}	766.490 {44}	670.784 {50}	279.079 {121}2	257.610 {131}	202.030 {467}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.00252	.04872	.74688	28.193	.72871	.02516	1.5253	.10224	.00277
Stddev	.00008	.00060	.00020	.111	.03941	.00334	.0086	.00000	.00037
%RSD	3.2027	1.2377	.02719	.39292	5.4080	13.270	.56609	.00159	13.323

#1	.00257	.04914	.74703	28.114	.70085	.02752	1.5314	.10224	.00303
#2	.00246	.04829	.74674	28.271	.75658	.02280	1.5192	.10224	.00251

Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Elem	Na5895	Ni2316	P_1782	Pb2203	S_1820	Sb2068	Se1960	Si2881	SiO2
Line	589.592 {57}	231.604 {446}	178.284 {489}	220.353 {453}	182.034 {485}	206.833 {463}	196.090 {472}	288.158 {117}	288.158 {117}2
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.34093	.06806	.67870	.82620	1.0692	.00952	.00533	2.9925	6.4039
Stddev	.01029	.00098	.01333	.00606	.0067	.00015	.00427	.0428	.0916
%RSD	3.0181	1.4356	1.9646	.73401	.62927	1.6180	80.072	1.4308	1.4308

#1	.33365	.06875	.68813	.83048	1.0739	.00963	.00835	2.9622	6.3391
#2	.34820	.06737	.66927	.82191	1.0644	.00941	.00231	3.0228	6.4687

Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Elem	Sn1899	Sr4077	Th2837	Ti3349	Ti1908	U_3701	V_2924	Zn2062	Zr3391
Line	189.989 {477}	407.771 {83}	283.730 {119}	334.904 {101}	190.856 {477}	370.152 {91}	292.402 {115}	206.200 {163}	339.198 {99}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.01233	.01831	.01414	.28429	-.00428	.00358	.06573	.87136	.02030
Stddev	.00028	.00039	.00075	.00304	.00362	.06227	.00017	.00464	.00427
%RSD	2.2722	2.1306	5.3281	1.0694	84.552	1738.0	.26259	.53246	21.029

#1	.01253	.01804	.01360	.28214	-.00684	-.04045	.06561	.87464	.01728
#2	.01213	.01859	.01467	.28644	-.00172	.04762	.06585	.86807	.02332

Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Int. Std.	Y_2243	Y_3600	Y_3774
Line	224.306 {450}	360.073 {94}	377.433 {89}
Units	Cts/S	Cts/S	Cts/S
Avg	2685.4	42002.	2291.1
Stddev	3.8	162.	43.3
%RSD	.14167	.38583	1.8921

#1	2682.7	41888.	2260.5
#2	2688.1	42117.	2321.8

Sample Name: 280-82931-A-15-C Acquired: 5/19/2016 4:57:51 Type: Unk
Method: 6500_025(v6) Mode: CONC Corr. Factor: 1.000000
User: CRHOADES Prep Date: Custom ID2: Custom ID3:
Comment: 325512 6010C soil Q4

Elem	Ag3280	Al3092	As1890	B_2089	Ba4554	Be3130	Bi2230	Ca3179	Cd2288
Line	328.068 {103}	309.271 {109}	189.042 {478}	208.959 {461}	455.403 { 74}	313.042 {108}	223.061 {451}	317.933 {106}	228.802 {447}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	-.00022	54.595	.00433	.00292	.18645	.00059	.00641	1.2187	.01298
Stddev	.00018	.818	.00677	.00042	.00251	.00018	.00216	.0191	.00024
%RSD	82.005	1.4990	156.42	14.429	1.3468	30.309	33.619	1.5684	1.8825

#1	-.00035	55.174	-.00046	.00322	.18823	.00071	.00794	1.2052	.01280
#2	-.00009	54.016	.00911	.00262	.18468	.00046	.00489	1.2322	.01315

Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Elem	Co2286	Cr2055	Cu3247	Fe2599	K_7664	Li6707	Mg2790	Mn2576	Mo2020
Line	228.616 {447}	205.560 {464}	324.754 {104}	259.940 {130}	766.490 { 44}	670.784 { 50}	279.079 {121}2	257.610 {131}	202.030 {467}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.00222	.04784	.65291	27.470	.65818	.02743	1.5250	.12309	.00652
Stddev	.00024	.00079	.00298	.031	.03746	.00127	.0122	.00027	.00044
%RSD	10.692	1.6521	.45576	.11233	5.6920	4.6416	.79742	.21794	6.7728

#1	.00205	.04728	.65081	27.491	.63169	.02653	1.5164	.12290	.00621
#2	.00239	.04840	.65502	27.448	.68467	.02833	1.5336	.12328	.00683

Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Elem	Na5895	Ni2316	P_1782	Pb2203	S_1820	Sb2068	Se1960	Si2881	SiO2
Line	589.592 { 57}	231.604 {446}	178.284 {489}	220.353 {453}	182.034 {485}	206.833 {463}	196.090 {472}	288.158 {117}	288.158 {117}2
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.33259	.06415	.64310	.87236	.88636	.01027	.00007	2.7429	5.8698
Stddev	.00361	.00041	.00035	.00185	.00678	.00329	.00038	.0508	.1087
%RSD	1.0842	.64418	.05498	.21261	.76463	32.073	516.78	1.8521	1.8521

#1	.33514	.06385	.64335	.87367	.89116	.01259	-.00020	2.7070	5.7929
#2	.33004	.06444	.64285	.87104	.88157	.00794	.00034	2.7788	5.9466

Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Elem	Sn1899	Sr4077	Th2837	Ti3349	Ti1908	U_3701	V_2924	Zn2062	Zr3391
Line	189.989 {477}	407.771 { 83}	283.730 {119}	334.904 {101}	190.856 {477}	370.152 { 91}	292.402 {115}	206.200 {163}	339.198 { 99}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.04444	.02091	.01192	.26469	-.00074	-.03966	.06095	1.1051	.01799
Stddev	.00059	.00057	.00312	.00337	.00034	.05414	.00033	.0006	.00380
%RSD	1.3218	2.7341	26.128	1.2734	45.780	136.51	.54014	.05287	21.154

#1	.04403	.02132	.01413	.26231	-.00050	-.07795	.06071	1.1055	.02068
#2	.04486	.02051	.00972	.26708	-.00098	-.00138	.06118	1.1047	.01530

Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Int. Std.	Y_2243	Y_3600	Y_3774
Line	224.306 {450}	360.073 { 94}	377.433 { 89}
Units	Cts/S	Cts/S	Cts/S
Avg	2649.1	41072.	2195.3
Stddev	.3	204.	18.3
%RSD	.01254	.49744	.83393

#1	2648.9	40927.	2182.4
#2	2649.3	41216.	2208.3

Sample Name: CCVH-3894253 Acquired: 5/19/2016 5:00:29 Type: QC
Method: 6500_025(v6) Mode: CONC Corr. Factor: 1.000000
User: CRHOADES Prep Date: Custom ID2: Custom ID3:
Comment:

Elem	Ag3280	Al3092	As1890	B_2089	Ba4554	Be3130	Bi2230	Ca3179	Cd2288	Co2286	Cr2055
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.00031	50.699	-.00454	.00171	-.00084	.00042	F 1.1190	-.01495	-.00066	-.00133	.00016
Stddev	.00071	.505	.00688	.00103	.00007	.00004	.0036	.00540	.00002	.00019	.00030
%RSD	228.99	.99598	151.35	60.465	8.6111	10.229	.31707	36.141	2.8870	14.017	184.53

#1	-.00019	50.342	.00032	.00244	-.00089	.00045	1.1216	-.01877	-.00065	-.00146	.00037
#2	.00081	51.056	-.00941	.00098	-.00079	.00039	1.1165	-.01113	-.00067	-.00120	-.00005

Check ?	None	Chk Pass	None	None	None	None	Chk Fail	None	None	None	None
Value							1.0000				
Range							10.490%				

Elem	Cu3247	Fe2714	K_7664	Li6707	Mg2790	Mn2576	Mo2020	Na8183	Ni2316	P_1782	Pb2203
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.01039	49.123	.03424	-.00297	.02013	-.00022	-.00155	256.22	.00129	.00241	.00035
Stddev	.00039	.371	.03433	.00047	.00050	.00009	.00019	2.67	.00015	.00300	.00062
%RSD	3.7092	.75441	100.27	15.760	2.5042	39.190	12.518	1.0410	11.462	124.46	173.76

#1	.01066	48.861	.00996	-.00331	.01977	-.00016	-.00142	254.33	.00139	.00029	-.00008
#2	.01011	49.385	.05851	-.00264	.02048	-.00029	-.00169	258.11	.00119	.00453	.00079

Check ?	None	Chk Pass	None	None	None	None	None	Chk Pass	None	None	None
Value											
Range											

Elem	S_1820	Sb2068	Se1960	Si2881	SiO2	Sn1899	Sr4077	Th2837	Ti3349	Ti1908	U_3701
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	W 5.4085	-.00974	.01157	-.00218	-.00467	.00101	.00056	W 4.7082	.00580	-.00493	W 10.580
Stddev	.0512	.00330	.00075	.09631	.20610	.00148	.00017	.0054	.00055	.00121	.236
%RSD	.94632	33.870	6.4539	4414.4	4414.4	146.91	30.033	.11415	9.5326	24.592	2.2302

#1	5.4447	-.01207	.01210	-.07028	-.15041	.00205	.00068	4.7044	.00541	-.00408	10.747
#2	5.3723	-.00740	.01104	.06592	.14107	-.00004	.00044	4.7120	.00619	-.00579	10.413

Check ?	Chk Warn	None	None	None	None	None	None	Chk Warn	None	None	Chk Warn
Value	5.0000							5.0000			10.000
Range	5.0000%							-5.0000%			5.0000%

Elem	V_2924	Zn2062	Zr3391
Units	ppm	ppm	ppm
Avg	.00845	-.00077	.05302
Stddev	.00071	.00039	.00086
%RSD	8.4305	50.392	1.6172

#1	.00794	-.00050	.05241
#2	.00895	-.00105	.05363

Check ?	None	None	None
Value			
Range			

Int. Std.	Y_2243	Y_3600	Y_3774
Units	Cts/S	Cts/S	Cts/S
Avg	2650.2	41661.	2311.2
Stddev	.2	17.	26.2
%RSD	.00746	.04063	1.1330

#1	2650.1	41649.	2329.7
#2	2650.3	41673.	2292.6

Sample Name: CCV-3894251 Acquired: 5/19/2016 5:03:06 Type: QC
Method: 6500_025(v6) Mode: CONC Corr. Factor: 1.000000
User: CRHOADES Prep Date: Custom ID2: Custom ID3:
Comment:

Elem	Ag3280	Al1670	As1890	B_2089	Ba4554	Be3130	Bi2230	Ca3179	Cd2288	Co2286	Cr2055
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.49888	.53772	1.0417	.49240	.50237	.46835	.00011	4.9188	.49672	.49726	.49964
Stddev	.00266	.01838	.0303	.01714	.00400	.00072	.00070	.0159	.00711	.01543	.01585
%RSD	.53295	3.4176	2.9126	3.4806	.79572	.15293	648.32	.32360	1.4324	3.1025	3.1723

#1	.49700	.52473	1.0203	.48029	.50520	.46886	-.00039	4.9301	.49169	.48635	.48843
#2	.50076	.55072	1.0632	.50452	.49955	.46784	.00060	4.9076	.50175	.50817	.51084

Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	None	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Value											
Range											

Elem	Cu3247	Fe2599	K_7664	Li6707	Mg2790	Mn2576	Mo2020	Na5895	Ni2316	P_1782	Pb2203
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.52369	2.3632	48.189	.97183	19.225	.47177	.50424	5.0292	.48978	.98981	1.0212
Stddev	.00251	.0027	.193	.00253	.094	.00215	.01532	.0059	.01495	.02361	.0333
%RSD	.47939	.11194	.40037	.26014	.49115	.45570	3.0378	.11652	3.0518	2.3849	3.2568

#1	.52192	2.3613	48.325	.97362	19.158	.47025	.49341	5.0250	.47921	.97312	.99768
#2	.52547	2.3651	48.052	.97004	19.291	.47329	.51507	5.0333	.50035	1.0065	1.0447

Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Value											
Range											

Elem	S_1820	Sb2068	Se1960	Si2881	SiO2	Sn1899	Sr4077	Th2837	Ti3349	Ti1908	U_3701
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.03568	1.0342	W 1.1039	4.8065	10.286	1.0425	.47483	.00233	.46914	1.0844	.00978
Stddev	.00239	.0409	.0495	.0296	.063	.0425	.00130	.00120	.00147	.0377	.03309
%RSD	6.6964	3.9533	4.4799	.61571	.61571	4.0730	.27327	51.694	.31329	3.4799	338.41

#1	.03737	1.0053	1.0689	4.8274	10.331	1.0125	.47575	.00318	.46810	1.0577	-.01362
#2	.03399	1.0631	1.1388	4.7855	10.241	1.0726	.47392	.00148	.47018	1.1111	.03317

Check ?	None	Chk Pass	Chk Warn	Chk Pass	Chk Pass	Chk Pass	Chk Pass	None	Chk Pass	Chk Pass	None
Value			1.0000								
Range			10.000%								

Elem	V_2924	Zn2062	Zr3391
Units	ppm	ppm	ppm
Avg	.48763	.46187	.50229
Stddev	.00257	.00363	.00402
%RSD	.52765	.78561	.80052

#1	.48581	.45930	.50513
#2	.48945	.46443	.49945

Check ?	Chk Pass	Chk Pass	Chk Pass
Value			
Range			

Int. Std.	Y_2243	Y_3600	Y_3774
Units	Cts/S	Cts/S	Cts/S
Avg	2780.2	42757.	2286.4
Stddev	108.1	93.	5.4
%RSD	3.8887	.21743	.23619

#1	2856.6	42823.	2282.6
#2	2703.7	42692.	2290.3

Sample Name: CCB Acquired: 5/19/2016 5:05:37 Type: QC
 Method: 6500_025(v6) Mode: CONC Corr. Factor: 1.000000
 User: CRHOADES Prep Date: Custom ID2: Custom ID3:
 Comment:

Elem	Ag3280	Al1670	As1890	B_2089	Ba4554	Be3130	Bi2230	Ca3179	Cd2288	Co2286	Cr2055
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	-.00042	.00289	.00048	.00043	-.00050	.00015	-.00264	-.02041	.00021	-.00041	.00004
Stddev	.00048	.00067	.00007	.00058	.00023	.00002	.00051	.00105	.00016	.00024	.00014
%RSD	115.23	23.326	15.456	133.19	45.607	9.9044	19.388	5.1203	75.507	58.721	311.71

#1	-.00008	.00336	.00053	.00003	-.00066	.00017	-.00228	-.01967	.00010	-.00024	-.00005
#2	-.00076	.00241	.00042	.00084	-.00034	.00014	-.00300	-.02115	.00032	-.00058	.00014

Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit											
Low Limit											

Elem	Cu3247	Fe2599	K_7664	Li6707	Mg2790	Mn2576	Mo2020	Na5895	Ni2316	P_1782	Pb2203
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	-.00065	-.00195	-.05998	.00126	-.00387	-.00006	.00180	.14784	-.00044	.00030	.00125
Stddev	.00013	.00251	.07024	.00237	.00252	.00001	.00003	.00642	.00010	.00049	.00162
%RSD	19.732	128.48	117.11	188.98	65.040	17.321	1.6596	4.3452	22.169	165.19	129.85

#1	-.00074	-.00018	-.01031	-.00042	-.00209	-.00006	.00182	.15238	-.00037	-.00005	.00239
#2	-.00056	-.00372	-.10965	.00294	-.00565	-.00007	.00178	.14330	-.00051	.00064	.00010

Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit											
Low Limit											

Elem	S_1820	Sb2068	Se1960	Si2881	SiO2	Sn1899	Sr4077	Th2837	Ti3349	Ti1908	U_3701
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.03130	W .00445	W .01104	.01013	.02168	.00006	.00018	.00079	-.00022	.00225	-.06433
Stddev	.00076	.00175	.00042	.01829	.03914	.00097	.00033	.00011	.00003	.00026	.03263
%RSD	2.4349	39.413	3.7843	180.50	180.50	1716.8	178.91	13.826	15.517	11.494	50.726

#1	.03076	.00321	.01134	.02306	.04936	-.00063	.00042	.00071	-.00024	.00206	-.08740
#2	.03184	.00569	.01074	-.00280	-.00599	.00074	-.00005	.00087	-.00020	.00243	-.04125

Check ?	Chk Pass	Chk Warn	Chk Warn	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit		.00100	.00750								
Low Limit		-.00100	-.01500								

Elem	V_2924	Zn2062	Zr3391
Units	ppm	ppm	ppm
Avg	.00005	-.00023	.00414
Stddev	.00014	.00030	.00154
%RSD	276.74	130.21	37.248

#1	.00015	-.00002	.00305
#2	-.00005	-.00044	.00523

Check ?	Chk Pass	Chk Pass	Chk Pass
High Limit			
Low Limit			

Int. Std.	Y_2243	Y_3600	Y_3774
Units	Cts/S	Cts/S	Cts/S
Avg	2766.3	42715.	2240.0
Stddev	85.6	65.	26.5
%RSD	3.0930	.15150	1.1825

#1	2705.8	42669.	2221.2
#2	2826.8	42761.	2258.7

Sample Name: CCVL-3897520 Acquired: 5/19/2016 5:08:01 Type: QC
Method: 6500_025(v6) Mode: CONC Corr. Factor: 1.000000
User: CRHOADES Prep Date: Custom ID2: Custom ID3:
Comment:

Elem	Ag3280	Al1670	As1890	B_2089	Ba4554	Be3130	Bi2230	Ca3179	Cd2288	Co2286	Cr2055	Cu3247
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.01037	.11465	.01306	.09854	.00888	F .00138	.11003	.18927	.00487	.00988	.01043	.01593
Stddev	.00062	.00259	.00098	.00081	.00022	.00038	.00040	.00747	.00018	.00033	.00011	.00054
%RSD	5.9789	2.2574	7.4877	.82683	2.5183	27.820	.36069	3.9473	3.6214	3.3446	1.0418	3.4132
#1	.01081	.11282	.01375	.09797	.00873	.00165	.10975	.19456	.00475	.01011	.01035	.01632
#2	.00993	.11648	.01236	.09912	.00904	.00111	.11031	.18399	.00500	.00964	.01051	.01555
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Fail	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Value						.00100						
Range						30.000%						
Elem	Fe2599	K_7664	Li6707	Mg2790	Mn2576	Mo2020	Na5895	Ni2316	P_1782	Pb2203	S_1820	Sb2068
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.11142	3.0231	.01149	.20054	.00992	.02012	1.1909	.03973	2.8991	.00792	.02652	F .02612
Stddev	.01129	.0813	.00329	.00061	.00004	.00023	.0218	.00034	.0162	.00063	.00314	.00398
%RSD	10.133	2.6899	28.652	.30533	.40402	1.1557	1.8320	.85064	.55961	7.9412	11.830	15.227
#1	.11941	3.0806	.00916	.20097	.00989	.02028	1.2064	.03950	2.8876	.00748	.02430	.02893
#2	.10344	2.9656	.01382	.20011	.00995	.01995	1.1755	.03997	2.9106	.00837	.02874	.02331
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	None	Chk Fail
Value												.02000
Range												30.000%
Elem	Se1960	Si2881	SiO2	Sn1899	Sr4077	Th2837	Ti3349	Ti1908	U_3701	V_2924	Zn2062	Zr3391
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	F .01954	.48358	1.0349	.10314	.01006	.01528	.00938	.01254	.05665	.01013	.01842	.01706
Stddev	.00694	.00300	.0064	.00046	.00014	.00008	.00001	.00131	.01927	.00001	.00110	.00596
%RSD	35.491	.62026	.62026	.45033	1.4318	.50894	.13122	10.480	34.025	.10601	5.9693	34.929
#1	.01464	.48146	1.0303	.10281	.01016	.01534	.00939	.01347	.07028	.01013	.01920	.01284
#2	.02445	.48570	1.0394	.10347	.00996	.01523	.00937	.01161	.04302	.01012	.01765	.02127
Check ?	Chk Fail	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Value	.01500											
Range	30.000%											
Int. Std.	Y_2243	Y_3600	Y_3774									
Units	Cts/S	Cts/S	Cts/S									
Avg	2755.2	42664.	2310.9									
Stddev	71.7	182.	44.4									
%RSD	2.6007	.42661	1.9229									
#1	2805.8	42793.	2279.5									
#2	2704.5	42535.	2342.3									

Sample Name: 280-82931-A-16-C Acquired: 5/19/2016 5:10:41 Type: Unk

Method: 6500_025(v6) Mode: CONC Corr. Factor: 1.000000

User: CRHOADES Prep Date: Custom ID2: Custom ID3:

Comment: 325512 6010C soil Q4

Elem	Ag3280	Al3092	As1890	B_2089	Ba4554	Be3130	Bi2230	Ca3179	Cd2288
Line	328.068 {103}	309.271 {109}	189.042 {478}	208.959 {461}	455.403 { 74}	313.042 {108}	223.061 {451}	317.933 {106}	228.802 {447}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	-.00008	51.817	.00799	.00433	.21636	.00068	.00295	1.2425	.01484
Stddev	.00005	.118	.00096	.00116	.00006	.00006	.00651	.0083	.00010
%RSD	61.370	.22839	12.067	26.678	.02948	8.4237	220.90	.67108	.69095

#1	-.00005	51.901	.00867	.00515	.21632	.00064	-.00166	1.2366	.01491
#2	-.00012	51.733	.00731	.00352	.21641	.00072	.00755	1.2484	.01477

Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Elem	Co2286	Cr2055	Cu3247	Fe2599	K_7664	Li6707	Mg2790	Mn2576	Mo2020
Line	228.616 {447}	205.560 {464}	324.754 {104}	259.940 {130}	766.490 { 44}	670.784 { 50}	279.079 {121}2	257.610 {131}	202.030 {467}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.00220	.04622	.73691	26.679	.63988	.02408	1.4975	.10298	.00333
Stddev	.00016	.00022	.00447	.106	.06051	.00036	.0075	.00045	.00041
%RSD	7.2609	.46931	.60642	.39899	9.4570	1.4964	.50313	.43778	12.363

#1	.00232	.04607	.73375	26.754	.68267	.02434	1.4922	.10266	.00362
#2	.00209	.04637	.74007	26.604	.59709	.02383	1.5028	.10329	.00303

Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Elem	Na5895	Ni2316	P_1782	Pb2203	S_1820	Sb2068	Se1960	Si2881	SiO2
Line	589.592 { 57}	231.604 {446}	178.284 {489}	220.353 {453}	182.034 {485}	206.833 {463}	196.090 {472}	288.158 {117}	288.158 {117}2
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.30415	.07795	1.0787	.83599	.94850	.00715	.00467	2.0897	4.4719
Stddev	.02816	.00071	.0078	.00446	.00933	.00392	.00688	.0120	.0256
%RSD	9.2582	.90806	.72135	.53363	.98372	54.818	147.19	.57353	.57353

#1	.32406	.07845	1.0842	.83914	.95510	.00438	.00953	2.0812	4.4537
#2	.28424	.07745	1.0732	.83283	.94190	.00993	-.00019	2.0981	4.4900

Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Elem	Sn1899	Sr4077	Th2837	Ti3349	Ti1908	U_3701	V_2924	Zn2062	Zr3391
Line	189.989 {477}	407.771 { 83}	283.730 {119}	334.904 {101}	190.856 {477}	370.152 { 91}	292.402 {115}	206.200 {163}	339.198 { 99}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.01497	.01863	.01128	.25650	-.00262	-.04588	.06184	.85361	.01793
Stddev	.00079	.00019	.00196	.00216	.00271	.08023	.00033	.00233	.00349
%RSD	5.2921	.99326	17.367	.84074	103.69	174.88	.53482	.27288	19.454

#1	.01441	.01876	.00989	.25803	-.00454	.01085	.06207	.85197	.01547
#2	.01553	.01850	.01266	.25498	-.00070	-.10261	.06161	.85526	.02040

Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Int. Std.	Y_2243	Y_3600	Y_3774
Line	224.306 {450}	360.073 { 94}	377.433 { 89}
Units	Cts/S	Cts/S	Cts/S
Avg	2660.4	41843.	2285.1
Stddev	9.0	612.	17.5
%RSD	.33701	1.4621	.76444

#1	2666.7	41410.	2297.4
#2	2654.0	42275.	2272.7

Sample Name: 280-82931-A-17-C Acquired: 5/19/2016 5:13:17 Type: Unk
Method: 6500_025(v6) Mode: CONC Corr. Factor: 1.000000
User: CRHOADES Prep Date: Custom ID2: Custom ID3:
Comment: 325512 6010C soil Q4

Elem	Ag3280	Al3092	As1890	B_2089	Ba4554	Be3130	Bi2230	Ca3179	Cd2288
Line	328.068 {103}	309.271 {109}	189.042 {478}	208.959 {461}	455.403 { 74}	313.042 {108}	223.061 {451}	317.933 {106}	228.802 {447}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.00012	36.723	-.00181	.00273	.23923	.00057	.00452	1.5550	.02083
Stddev	.00007	.555	.00671	.00077	.00323	.00033	.00251	.0042	.00006
%RSD	56.315	1.5111	369.60	28.121	1.3482	58.470	55.484	.26796	.30592

#1	.00007	36.331	-.00656	.00219	.23695	.00080	.00630	1.5521	.02087
#2	.00017	37.116	.00293	.00328	.24151	.00033	.00275	1.5580	.02078

Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Elem	Co2286	Cr2055	Cu3247	Fe2599	K_7664	Li6707	Mg2790	Mn2576	Mo2020
Line	228.616 {447}	205.560 {464}	324.754 {104}	259.940 {130}	766.490 { 44}	670.784 { 50}	279.079 {121}2	257.610 {131}	202.030 {467}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.00175	.03761	.50141	20.976	.43434	.01732	1.0210	.11116	.00185
Stddev	.00003	.00015	.00020	.217	.04413	.00227	.0003	.00020	.00011
%RSD	1.6785	.40483	.03915	1.0328	10.159	13.130	.02930	.17743	6.1639

#1	.00177	.03750	.50127	20.822	.40314	.01893	1.0208	.11103	.00177
#2	.00173	.03772	.50155	21.129	.46554	.01571	1.0213	.11130	.00193

Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Elem	Na5895	Ni2316	P_1782	Pb2203	S_1820	Sb2068	Se1960	Si2881	SiO2
Line	589.592 { 57}	231.604 {446}	178.284 {489}	220.353 {453}	182.034 {485}	206.833 {463}	196.090 {472}	288.158 {117}	288.158 {117}2
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.28365	.05091	.50527	.60135	.64336	.00250	.00882	1.4993	3.2084
Stddev	.00511	.00142	.00708	.00855	.01988	.00131	.00450	.0290	.0619
%RSD	1.8013	2.7986	1.4006	1.4218	3.0903	52.650	50.981	1.9308	1.9308

#1	.28003	.04990	.50026	.59531	.62930	.00343	.01200	1.5197	3.2522
#2	.28726	.05191	.51027	.60740	.65742	.00157	.00564	1.4788	3.1646

Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Elem	Sn1899	Sr4077	Th2837	Ti3349	Ti1908	U_3701	V_2924	Zn2062	Zr3391
Line	189.989 {477}	407.771 { 83}	283.730 {119}	334.904 {101}	190.856 {477}	370.152 { 91}	292.402 {115}	206.200 {163}	339.198 { 99}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.05054	.02087	.00998	.19381	-.00158	-.04012	.03571	.75083	.00907
Stddev	.00082	.00021	.00140	.00176	.00068	.09237	.00003	.00143	.00064
%RSD	1.6308	1.0251	14.055	.90890	42.863	230.25	.09408	.18994	7.0957

#1	.04995	.02072	.00899	.19256	-.00205	.02520	.03573	.74982	.00953
#2	.05112	.02102	.01097	.19505	-.00110	-.10543	.03568	.75183	.00862

Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Int. Std.	Y_2243	Y_3600	Y_3774
Line	224.306 {450}	360.073 { 94}	377.433 { 89}
Units	Cts/S	Cts/S	Cts/S
Avg	2667.7	41378.	2244.6
Stddev	8.1	45.	45.8
%RSD	.30260	.10906	2.0387

#1	2661.9	41410.	2277.0
#2	2673.4	41346.	2212.3

Sample Name: 280-82931-A-18-C Acquired: 5/19/2016 5:15:53 Type: Unk

Method: 6500_025(v6) Mode: CONC Corr. Factor: 1.000000

User: CRHOADES Prep Date: Custom ID2: Custom ID3:

Comment: 325512 6010C soil Q4

Elem	Ag3280	Al3092	As1890	B_2089	Ba4554	Be3130	Bi2230	Ca3179	Cd2288
Line	328.068 {103}	309.271 {109}	189.042 {478}	208.959 {461}	455.403 {74}	313.042 {108}	223.061 {451}	317.933 {106}	228.802 {447}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.00018	38.436	.00657	.00298	.45940	.00031	.00612	1.6509	.02240
Stddev	.00043	.532	.00438	.00111	.00585	.00020	.00965	.0149	.00109
%RSD	240.63	1.3847	66.677	37.148	1.2732	66.034	157.79	.90518	4.8851

#1	.00048	38.060	.00347	.00376	.45526	.00045	.01294	1.6404	.02318
#2	-.00012	38.813	.00967	.00219	.46354	.00016	-.00071	1.6615	.02163

Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Elem	Co2286	Cr2055	Cu3247	Fe2599	K_7664	Li6707	Mg2790	Mn2576	Mo2020
Line	228.616 {447}	205.560 {464}	324.754 {104}	259.940 {130}	766.490 {44}	670.784 {50}	279.079 {121}2	257.610 {131}	202.030 {467}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.00143	.03705	.55687	18.488	.48203	.01459	1.0392	.10751	.00141
Stddev	.00025	.00103	.00148	.069	.01505	.00037	.0073	.00031	.00007
%RSD	17.804	2.7741	.26546	.37064	3.1217	2.5328	.70612	.29255	5.3069

#1	.00161	.03778	.55583	18.440	.47139	.01485	1.0444	.10729	.00135
#2	.00125	.03632	.55792	18.537	.49267	.01432	1.0340	.10773	.00146

Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Elem	Na5895	Ni2316	P_1782	Pb2203	S_1820	Sb2068	Se1960	Si2881	SiO2
Line	589.592 {57}	231.604 {446}	178.284 {489}	220.353 {453}	182.034 {485}	206.833 {463}	196.090 {472}	288.158 {117}	288.158 {117}2
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.26047	.05398	.61346	.65949	.69024	.00469	.00818	1.9744	4.2251
Stddev	.01017	.00163	.01453	.01655	.00048	.00244	.00228	.0029	.0061
%RSD	3.9042	3.0232	2.3684	2.5090	.06931	51.939	27.906	.14495	.14495

#1	.25328	.05513	.62373	.67119	.69058	.00641	.00656	1.9723	4.2208
#2	.26766	.05282	.60318	.64779	.68990	.00297	.00979	1.9764	4.2294

Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Elem	Sn1899	Sr4077	Th2837	Ti3349	Ti1908	U_3701	V_2924	Zn2062	Zr3391
Line	189.989 {477}	407.771 {83}	283.730 {119}	334.904 {101}	190.856 {477}	370.152 {91}	292.402 {115}	206.200 {163}	339.198 {99}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.01500	.02162	.01017	.20983	-.00229	W -.05287	.03602	.74172	.01096
Stddev	.00015	.00017	.00183	.00295	.00746	.04775	.00033	.00206	.00038
%RSD	1.0025	.80324	17.982	1.4057	325.44	90.326	.90815	.27778	3.4963

#1	.01510	.02174	.00888	.21191	-.00756	-.01910	.03626	.74318	.01123
#2	.01489	.02149	.01146	.20774	.00298	-.08664	.03579	.74027	.01069

Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Warn	Chk Pass	Chk Pass	Chk Pass
High Limit						45.000			
Low Limit						-.05000			

Int. Std.	Y_2243	Y_3600	Y_3774						
Line	224.306 {450}	360.073 {94}	377.433 {89}						
Units	Cts/S	Cts/S	Cts/S						
Avg	2754.1	41751.	2252.7						
Stddev	129.5	222.	24.1						
%RSD	4.7037	.53180	1.0685						

#1	2662.5	41594.	2269.7						
#2	2845.7	41908.	2235.7						

Sample Name: 280-82931-A-19-C Acquired: 5/19/2016 5:18:30 Type: Unk

Method: 6500_025(v6) Mode: CONC Corr. Factor: 1.000000

User: CRHOADES Prep Date: Custom ID2: Custom ID3:

Comment: 325512 6010C soil Q4

Elem	Ag3280	Al3092	As1890	B_2089	Ba4554	Be3130	Bi2230	Ca3179	Cd2288
Line	328.068 {103}	309.271 {109}	189.042 {478}	208.959 {461}	455.403 { 74}	313.042 {108}	223.061 {451}	317.933 {106}	228.802 {447}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	-.00069	41.402	-.00070	.00359	.23428	.00043	-.00078	1.6202	.01873
Stddev	.00027	.360	.00414	.00081	.00316	.00016	.00358	.0119	.00013
%RSD	38.871	.87021	590.95	22.679	1.3491	37.216	459.70	.73404	.68903

#1	-.00050	41.657	-.00363	.00302	.23651	.00054	-.00331	1.6286	.01864
#2	-.00087	41.147	.00223	.00417	.23204	.00032	.00175	1.6118	.01882

Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Elem	Co2286	Cr2055	Cu3247	Fe2599	K_7664	Li6707	Mg2790	Mn2576	Mo2020
Line	228.616 {447}	205.560 {464}	324.754 {104}	259.940 {130}	766.490 { 44}	670.784 { 50}	279.079 {121}2	257.610 {131}	202.030 {467}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.00183	.04578	.54186	19.213	.38972	.01719	1.0951	.12505	.00153
Stddev	.00079	.00081	.00263	.017	.08090	.00199	.0126	.00021	.00021
%RSD	43.085	1.7785	.48568	.08914	20.758	11.598	1.1543	.17091	13.765

#1	.00239	.04521	.54372	19.200	.44693	.01578	1.1040	.12520	.00138
#2	.00127	.04636	.54000	19.225	.33252	.01859	1.0861	.12490	.00168

Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Elem	Na5895	Ni2316	P_1782	Pb2203	S_1820	Sb2068	Se1960	Si2881	SiO2
Line	589.592 { 57}	231.604 {446}	178.284 {489}	220.353 {453}	182.034 {485}	206.833 {463}	196.090 {472}	288.158 {117}	288.158 {117}2
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.28029	.04820	.50778	.64761	.64710	.00851	.00075	1.6662	3.5658
Stddev	.00759	.00060	.00480	.01072	.00986	.00279	.01188	.0162	.0346
%RSD	2.7084	1.2389	.94590	1.6555	1.5241	32.837	1577.5	.96920	.96920

#1	.27492	.04777	.50438	.64003	.64012	.01048	.00915	1.6777	3.5902
#2	.28566	.04862	.51118	.65519	.65407	.00653	-.00764	1.6548	3.5413

Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Elem	Sn1899	Sr4077	Th2837	Ti3349	Ti1908	U_3701	V_2924	Zn2062	Zr3391
Line	189.989 {477}	407.771 { 83}	283.730 {119}	334.904 {101}	190.856 {477}	370.152 { 91}	292.402 {115}	206.200 {163}	339.198 { 99}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.01415	.02067	.00710	.19245	-.00326	.00215	.03713	.76610	.01277
Stddev	.00013	.00014	.00232	.00195	.00123	.02484	.00011	.00138	.00080
%RSD	.91397	.69442	32.626	1.0119	37.810	1155.3	.30240	.17987	6.2743

#1	.01406	.02057	.00874	.19107	-.00413	.01971	.03705	.76708	.01333
#2	.01425	.02078	.00546	.19382	-.00239	-.01541	.03721	.76513	.01220

Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Int. Std.	Y_2243	Y_3600	Y_3774						
Line	224.306 {450}	360.073 { 94}	377.433 { 89}						
Units	Cts/S	Cts/S	Cts/S						
Avg	2664.5	41622.	2217.2						
Stddev	4.1	205.	30.2						
%RSD	.15405	.49253	1.3606						

#1	2661.6	41477.	2195.9						
#2	2667.4	41767.	2238.5						

Sample Name: 280-82931-A-19-CSD@5 Acquired: 5/19/2016 5:21:07 Type: Unk
Method: 6500_025(v6) Mode: CONC Corr. Factor: 1.000000
User: CRHOADES Prep Date: Custom ID2: Custom ID3:
Comment: 325512 6010C soil Q4

Elem	Ag3280	Al3092	As1890	B_2089	Ba4554	Be3130	Bi2230	Ca3179	Cd2288
Line	328.068 {103}	309.271 {109}	189.042 {478}	208.959 {461}	455.403 {74}	313.042 {108}	223.061 {451}	317.933 {106}	228.802 {447}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	-.00086	8.3138	-.00040	-.00089	.04572	.00009	.00039	.30925	.00367
Stddev	.00019	.0923	.00227	.00052	.00044	.00018	.00066	.01286	.00015
%RSD	21.928	1.1101	560.68	58.665	.96010	196.30	171.80	4.1596	4.1653

#1	-.00099	8.3791	.00120	-.00127	.04603	-.00004	-.00008	.30015	.00356
#2	-.00072	8.2486	-.00201	-.00052	.04541	.00022	.00085	.31835	.00378

Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Elem	Co2286	Cr2055	Cu3247	Fe2599	K_7664	Li6707	Mg2790	Mn2576	Mo2020
Line	228.616 {447}	205.560 {464}	324.754 {104}	259.940 {130}	766.490 {44}	670.784 {50}	279.079 {121}2	257.610 {131}	202.030 {467}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.00017	.00909	.10708	3.8597	.07590	.00197	.21377	.02503	-.00086
Stddev	.00046	.00057	.00007	.0097	.00868	.00228	.00504	.00011	.00012
%RSD	272.27	6.2382	.06162	.25172	11.437	115.79	2.3574	.43861	13.664

#1	.00049	.00869	.10713	3.8666	.08204	.00036	.21733	.02511	-.00094
#2	-.00016	.00949	.10704	3.8529	.06976	.00358	.21021	.02496	-.00077

Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Elem	Na5895	Ni2316	P_1782	Pb2203	S_1820	Sb2068	Se1960	Si2881	SiO2
Line	589.592 {57}	231.604 {446}	178.284 {489}	220.353 {453}	182.034 {485}	206.833 {463}	196.090 {472}	288.158 {117}	288.158 {117}2
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.19041	.00932	.10151	.13187	.16503	.00569	.00080	.36654	.78440
Stddev	.01784	.00036	.00091	.00311	.00336	.00065	.00511	.00405	.00866
%RSD	9.3691	3.8233	.89960	2.3548	2.0337	11.406	635.55	1.1040	1.1040

#1	.17779	.00957	.10215	.12968	.16266	.00615	.00442	.36368	.77827
#2	.20302	.00906	.10086	.13407	.16741	.00524	-.00281	.36940	.79052

Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Elem	Sn1899	Sr4077	Th2837	Ti3349	Ti1908	U_3701	V_2924	Zn2062	Zr3391
Line	189.989 {477}	407.771 {83}	283.730 {119}	334.904 {101}	190.856 {477}	370.152 {91}	292.402 {115}	206.200 {163}	339.198 {99}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.00308	.00418	.00408	.03822	-.00230	.00555	.00784	.15180	.00218
Stddev	.00026	.00001	.00055	.00089	.00249	.02629	.00001	.00040	.00264
%RSD	8.3076	.32056	13.557	2.3379	108.45	473.30	.14360	.26178	120.75

#1	.00290	.00419	.00447	.03885	-.00054	-.01303	.00783	.15208	.00405
#2	.00326	.00417	.00369	.03759	-.00406	.02414	.00784	.15152	.00032

Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Int. Std.	Y_2243	Y_3600	Y_3774
Line	224.306 {450}	360.073 {94}	377.433 {89}
Units	Cts/S	Cts/S	Cts/S
Avg	2730.7	43090.	2316.1
Stddev	12.6	205.	27.1
%RSD	.46043	.47557	1.1711

#1	2721.8	43235.	2335.2
#2	2739.6	42945.	2296.9

Sample Name: 280-82931-A-19-D MS Acquired: 5/19/2016 5:23:46 Type: Unk
Method: 6500_025(v6) Mode: CONC Corr. Factor: 1.000000
User: CRHOADES Prep Date: Custom ID2: Custom ID3:
Comment: 325512 6010C soil Q4

Elem	Ag3280	Al3092	As1890	B_2089	Ba4554	Be3130	Bi2230	Ca3179	Cd2288
Line	328.068 {103}	309.271 {109}	189.042 {478}	208.959 {461}	455.403 {74}	313.042 {108}	223.061 {451}	317.933 {106}	228.802 {447}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.05171	50.018	1.0895	1.0145	2.2769	.04736	F 2.2515	50.290	.12039
Stddev	.00014	.025	.0079	.0015	.0008	.00064	.0002	.060	.00041
%RSD	.27522	.04998	.72619	.14376	.03438	1.3436	.00939	.11906	.33752

#1	.05181	50.035	1.0839	1.0155	2.2774	.04691	2.2514	50.248	.12067
#2	.05161	50.000	1.0951	1.0134	2.2763	.04781	2.2517	50.332	.12010

Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Fail	Chk Pass	Chk Pass
High Limit							.10000		
Low Limit							-.10000		

Elem	Co2286	Cr2055	Cu3247	Fe2599	K_7664	Li6707	Mg2790	Mn2576	Mo2020
Line	228.616 {447}	205.560 {464}	324.754 {104}	259.940 {130}	766.490 {44}	670.784 {50}	279.079 {121}2	257.610 {131}	202.030 {467}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.50324	.24910	.76361	19.566	49.873	1.0044	50.793	.59734	1.0643
Stddev	.00038	.00021	.00421	.050	.037	.0026	.014	.00031	.0040
%RSD	.07535	.08524	.55113	.25301	.07331	.25478	.02757	.05202	.37253

#1	.50351	.24895	.76658	19.531	49.847	1.0026	50.783	.59712	1.0671
#2	.50297	.24925	.76063	19.601	49.899	1.0062	50.803	.59756	1.0615

Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Elem	Na8183	Ni2316	P_1782	Pb2203	S_1820	Sb2068	Se1960	Si2881	SiO2
Line	818.326 {41}	231.604 {446}	178.284 {489}	220.353 {453}	182.034 {485}	206.833 {463}	196.090 {472}	288.158 {117}	288.158 {117}2
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	54.032	.54371	W 10.714	1.0740	2.8185	.48324	2.2489	3.8854	8.3149
Stddev	.068	.00017	.015	.0018	.0133	.00820	.0168	.0360	.0771
%RSD	.12551	.03106	.14192	.16922	.47036	1.6973	.74526	.92684	.92684

#1	53.984	.54359	10.704	1.0727	2.8091	.47744	2.2607	3.9109	8.3693
#2	54.080	.54383	10.725	1.0753	2.8279	.48904	2.2370	3.8600	8.2604

Check ?	Chk Pass	Chk Pass	Chk Warn	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit			2.0000						
Low Limit			-1.0000						

Elem	Sn1899	Sr4077	Th2837	Ti3349	Ti1908	U_3701	V_2924	Zn2062	Zr3391
Line	189.989 {477}	407.771 {83}	283.730 {119}	334.904 {101}	190.856 {477}	370.152 {91}	292.402 {115}	206.200 {163}	339.198 {99}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	W 2.0319	.97663	.97407	1.3629	2.0770	2.1266	.53733	1.1971	.55791
Stddev	.0032	.00347	.00050	.0041	.0525	.0814	.00101	.0065	.00881
%RSD	.15946	.35579	.05118	.30036	2.5269	3.8258	.18880	.54233	1.5795

#1	2.0342	.97417	.97442	1.3600	2.1142	2.1842	.53805	1.1925	.55168
#2	2.0296	.97908	.97372	1.3658	2.0399	2.0691	.53662	1.2017	.56414

Check ?	Chk Warn	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit	2.0000								
Low Limit	-.05000								

Int. Std.	Y_2243	Y_3600	Y_3774						
Line	224.306 {450}	360.073 {94}	377.433 {89}						
Units	Cts/S	Cts/S	Cts/S						
Avg	2640.0	41075.	2308.5						
Stddev	10.8	136.	.7						
%RSD	.40741	.33052	.02942						

#1	2632.4	41171.	2308.1						
#2	2647.6	40979.	2309.0						

Sample Name: 280-82931-A-19-E MSD Acquired: 5/19/2016 5:26:12 Type: Unk
Method: 6500_025(v6) Mode: CONC Corr. Factor: 1.000000
User: CRHOADES Prep Date: Custom ID2: Custom ID3:
Comment: 325512 6010C soil Q4

Elem	Ag3280	Al3092	As1890	B_2089	Ba4554	Be3130	Bi2230	Ca3179	Cd2288
Line	328.068 {103}	309.271 {109}	189.042 {478}	208.959 {461}	455.403 {74}	313.042 {108}	223.061 {451}	317.933 {106}	228.802 {447}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.05361	57.146	1.1107	1.0404	2.4112	.04951	F 2.2831	53.067	.12295
Stddev	.00081	1.406	.0145	.0174	.0533	.00076	.0391	1.116	.00183
%RSD	1.5104	2.4595	1.3016	1.6756	2.2093	1.5349	1.7144	2.1028	1.4889

#1	.05304	56.152	1.1004	1.0281	2.3735	.04898	2.2554	52.278	.12165
#2	.05418	58.139	1.1209	1.0528	2.4488	.05005	2.3107	53.856	.12424

Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Fail	Chk Pass	Chk Pass
High Limit							.10000		
Low Limit							-.10000		

Elem	Co2286	Cr2055	Cu3247	Fe2599	K_7664	Li6707	Mg2790	Mn2576	Mo2020
Line	228.616 {447}	205.560 {464}	324.754 {104}	259.940 {130}	766.490 {44}	670.784 {50}	279.079 {121}2	257.610 {131}	202.030 {467}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.51289	.25967	.80536	22.674	52.797	1.0463	52.728	.63045	1.0944
Stddev	.00937	.00345	.00232	.341	1.025	.0042	.122	.00100	.0159
%RSD	1.8274	1.3279	.28752	1.5031	1.9409	.39809	.23044	.15880	1.4546

#1	.50626	.25723	.80372	22.433	52.072	1.0434	52.642	.62974	1.0831
#2	.51952	.26211	.80700	22.915	53.521	1.0493	52.814	.63116	1.1056

Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Elem	Na8183	Ni2316	P_1782	Pb2203	S_1820	Sb2068	Se1960	Si2881	SiO2
Line	818.326 {41}	231.604 {446}	178.284 {489}	220.353 {453}	182.034 {485}	206.833 {463}	196.090 {472}	288.158 {117}	288.158 {117}2
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	56.261	.56063	W 10.966	1.1146	2.9001	.49383	2.2475	4.1589	8.9000
Stddev	.479	.00855	.195	.0179	.0449	.01061	.0409	.0578	.1238
%RSD	.85204	1.5243	1.7778	1.6039	1.5468	2.1480	1.8190	1.3910	1.3910

#1	56.600	.55459	10.828	1.1020	2.8684	.48633	2.2186	4.1180	8.8125
#2	55.922	.56667	11.104	1.1273	2.9318	.50133	2.2764	4.1998	8.9875

Check ?	Chk Pass	Chk Pass	Chk Warn	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit			2.0000						
Low Limit			-1.0000						

Elem	Sn1899	Sr4077	Th2837	Ti3349	Ti1908	U_3701	V_2924	Zn2062	Zr3391
Line	189.989 {477}	407.771 {83}	283.730 {119}	334.904 {101}	190.856 {477}	370.152 {91}	292.402 {115}	206.200 {163}	339.198 {99}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	W 2.0853	1.0287	1.0027	1.4075	2.0609	2.1862	.55924	1.3019	.56602
Stddev	.0382	.0210	.0036	.0036	.0117	.0593	.00142	.0010	.00486
%RSD	1.8330	2.0371	.36035	.25207	.56811	2.7129	.25431	.07589	.85823

#1	2.0583	1.0139	1.0001	1.4050	2.0691	2.2281	.56025	1.3012	.56259
#2	2.1123	1.0435	1.0053	1.4100	2.0526	2.1443	.55824	1.3026	.56946

Check ?	Chk Warn	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit	2.0000								
Low Limit	-.05000								

Int. Std.	Y_2243	Y_3600	Y_3774
Line	224.306 {450}	360.073 {94}	377.433 {89}
Units	Cts/S	Cts/S	Cts/S
Avg	2637.1	40564.	2228.6
Stddev	49.7	164.	55.2
%RSD	1.8864	.40314	2.4770

#1	2672.3	40679.	2267.6
#2	2601.9	40448.	2189.6

Sample Name: 280-82931-A-19-C PDS Acquired: 5/19/2016 5:28:39 Type: Unk
Method: 6500_025(v6) Mode: CONC Corr. Factor: 1.000000
User: CRHOADES Prep Date: Custom ID2: Custom ID3:
Comment: 325512 6010C soil Q4

Elem	Ag3280	Al3092	As1890	B_2089	Ba4554	Be3130	Bi2230	Ca3179	Cd2288
Line	328.068 {103}	309.271 {109}	189.042 {478}	208.959 {461}	455.403 {74}	313.042 {108}	223.061 {451}	317.933 {106}	228.802 {447}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.01056	41.273	.21835	.10622	.33298	.04578	.00376	20.579	.06744
Stddev	.00023	1.009	.00321	.00223	.00858	.00117	.00517	.455	.00040
%RSD	2.1985	2.4447	1.4722	2.0999	2.5762	2.5509	137.37	2.2134	.59058

#1	.01040	40.559	.22063	.10780	.32691	.04495	.00742	20.257	.06773
#2	.01073	41.986	.21608	.10464	.33905	.04661	.00011	20.901	.06716

Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Elem	Co2286	Cr2055	Cu3247	Fe2599	K_7664	Li6707	Mg2790	Mn2576	Mo2020
Line	228.616 {447}	205.560 {464}	324.754 {104}	259.940 {130}	766.490 {44}	670.784 {50}	279.079 {121}2	257.610 {131}	202.030 {467}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.05011	.09306	.57746	19.514	19.831	.11449	20.172	.16988	.05703
Stddev	.00040	.00048	.00054	.392	.193	.00142	.024	.00009	.00035
%RSD	.79756	.51547	.09301	2.0079	.97144	1.2390	.11840	.05284	.60868

#1	.05040	.09340	.57708	19.237	19.694	.11348	20.155	.16981	.05728
#2	.04983	.09272	.57784	19.791	19.967	.11549	20.189	.16994	.05679

Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Elem	Na8183	Ni2316	P_1782	Pb2203	S_1820	Sb2068	Se1960	Si2881	SiO2
Line	818.326 {41}	231.604 {446}	178.284 {489}	220.353 {453}	182.034 {485}	206.833 {463}	196.090 {472}	288.158 {117}	288.158 {117}2
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	22.589	.09423	W 2.4373	.70845	.62704	.10659	.22318	6.3715	13.635
Stddev	.237	.00120	.0217	.00323	.00595	.00110	.01116	.0763	.163
%RSD	1.0513	1.2752	.89143	.45611	.94855	1.0283	5.0012	1.1974	1.1974

#1	22.422	.09508	2.4526	.71073	.63124	.10736	.21529	6.3176	13.520
#2	22.757	.09338	2.4219	.70616	.62283	.10581	.23108	6.4255	13.750

Check ?	Chk Pass	Chk Pass	Chk Warn	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit			2.0000						
Low Limit			-1.0000						

Elem	Sn1899	Sr4077	Th2837	Ti3349	Ti1908	U_3701	V_2924	Zn2062	Zr3391
Line	189.989 {477}	407.771 {83}	283.730 {119}	334.904 {101}	190.856 {477}	370.152 {91}	292.402 {115}	206.200 {163}	339.198 {99}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.11252	.06848	.20037	.23559	.19720	.49158	.08527	.91526	.06406
Stddev	.00113	.00067	.00071	.00261	.00189	.00266	.00085	.00221	.00498
%RSD	1.0026	.97129	.35568	1.1095	.95718	.54183	.99991	.24110	7.7732

#1	.11172	.06801	.20088	.23374	.19854	.49346	.08587	.91370	.06758
#2	.11331	.06895	.19987	.23744	.19587	.48970	.08467	.91682	.06054

Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Int. Std.	Y_2243	Y_3600	Y_3774
Line	224.306 {450}	360.073 {94}	377.433 {89}
Units	Cts/S	Cts/S	Cts/S
Avg	2667.1	41051.	2233.4
Stddev	45.3	18.	62.9
%RSD	1.6984	.04387	2.8177

#1	2635.1	41064.	2277.9
#2	2699.1	41038.	2188.9

Sample Name: CCVH-3894253 Acquired: 5/19/2016 5:31:13 Type: QC
Method: 6500_025(v6) Mode: CONC Corr. Factor: 1.000000
User: CRHOADES Prep Date: Custom ID2: Custom ID3:
Comment:

Elem	Ag3280	Al3092	As1890	B_2089	Ba4554	Be3130	Bi2230	Ca3179	Cd2288	Co2286	Cr2055
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.00000	51.836	.00347	.00473	-.00030	.00055	F 1.1149	-.00791	-.00061	-.00154	.00058
Stddev	.00012	.015	.00432	.00068	.00037	.00004	.0013	.00723	.00004	.00002	.00015
%RSD	2596.6	.02951	124.22	14.299	124.23	7.3362	.11908	91.419	6.4868	1.3839	25.794

#1	.00009	51.847	.00042	.00425	-.00057	.00058	1.1140	-.00280	-.00058	-.00155	.00068
#2	-.00008	51.825	.00653	.00521	-.00004	.00052	1.1158	-.01302	-.00063	-.00152	.00047

Check ?	None	Chk Pass	None	None	None	None	Chk Fail	None	None	None	None
Value							1.0000				
Range							10.490%				

Elem	Cu3247	Fe2714	K_7664	Li6707	Mg2790	Mn2576	Mo2020	Na8183	Ni2316	P_1782	Pb2203
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.00127	48.978	.10421	.00426	.02011	-.00021	.00012	256.34	.00122	.00333	-.00035
Stddev	.00030	.416	.04394	.00253	.00196	.00005	.00007	.44	.00012	.00338	.00152
%RSD	23.602	.84971	42.165	59.346	9.7512	21.958	62.904	.16984	9.7726	101.57	431.64

#1	.00148	48.684	.13528	.00247	.02150	-.00024	.00006	256.03	.00131	.00094	.00072
#2	.00106	49.273	.07314	.00605	.01872	-.00018	.00017	256.65	.00114	.00572	-.00143

Check ?	None	Chk Pass	None	None	None	None	None	Chk Pass	None	None	None
Value											
Range											

Elem	S_1820	Sb2068	Se1960	Si2881	SiO2	Sn1899	Sr4077	Th2837	Ti3349	Ti1908	U_3701
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	W 5.3448	-.00618	.00592	-.01550	-.03316	.00126	.00041	W 4.7198	.00539	-.00112	W 10.525
Stddev	.0546	.00045	.01022	.01618	.03463	.00029	.00024	.0061	.00108	.00514	.104
%RSD	1.0217	7.2417	172.62	104.41	104.41	23.362	59.917	.12902	20.016	459.31	.99065

#1	5.3062	-.00650	-.00131	-.00406	-.00868	.00147	.00058	4.7241	.00462	-.00476	10.452
#2	5.3834	-.00587	.01315	-.02694	-.05765	.00105	.00023	4.7155	.00615	.00252	10.599

Check ?	Chk Warn	None	None	None	None	None	None	Chk Warn	None	None	Chk Warn
Value	5.0000							5.0000			10.000
Range	5.0000%							-5.0000%			5.0000%

Elem	V_2924	Zn2062	Zr3391
Units	ppm	ppm	ppm
Avg	.00965	.00002	.05412
Stddev	.00040	.00014	.00270
%RSD	4.1625	657.73	4.9799

#1	.00936	-.00008	.05222
#2	.00993	.00012	.05603

Check ?	None	None	None
Value			
Range			

Int. Std.	Y_2243	Y_3600	Y_3774
Units	Cts/S	Cts/S	Cts/S
Avg	2624.8	41020.	2210.3
Stddev	2.4	84.	13.4
%RSD	.09228	.20573	.60576

#1	2623.1	40960.	2219.7
#2	2626.5	41080.	2200.8

Sample Name: CCV-3894251 Acquired: 5/19/2016 5:33:51 Type: QC
Method: 6500_025(v6) Mode: CONC Corr. Factor: 1.000000
User: CRHOADES Prep Date: Custom ID2: Custom ID3:
Comment:

Elem	Ag3280	Al1670	As1890	B_2089	Ba4554	Be3130	Bi2230	Ca3179	Cd2288	Co2286	Cr2055	Cu3247
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.49457	F .55717	1.0646	.50383	.50597	.46934	-.00246	4.9452	.50750	.50688	.50981	.52007
Stddev	.00237	.00067	.0146	.00828	.01176	.00460	.00059	.0571	.01340	.01087	.00968	.00115
%RSD	.47888	.11989	1.3711	1.6425	2.3250	.98056	23.991	1.1553	2.6412	2.1438	1.8987	.22046

#1	.49624	.55670	1.0543	.49798	.51429	.47260	-.00288	4.9856	.49802	.49919	.50296	.51926
#2	.49289	.55764	1.0750	.50968	.49765	.46609	-.00205	4.9048	.51697	.51456	.51665	.52088

Check ?	Chk Pass	Chk Fail	Chk Pass	Chk Pass	Chk Pass	Chk Pass	None	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Value		.50000										
Range		10.490%										

Elem	Fe2599	K_7664	Li6707	Mg2790	Mn2576	Mo2020	Na5895	Ni2316	P_1782	Pb2203	S_1820	Sb2068
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	2.3861	49.131	.99129	19.169	.47124	.51547	5.1019	.49986	1.0031	1.0296	.04091	1.0316
Stddev	.0023	.984	.00545	.022	.00036	.00730	.0004	.00996	.0298	.0247	.00519	.0243
%RSD	.09487	2.0030	.55028	.11665	.07707	1.4168	.00718	1.9922	2.9722	2.3956	12.696	2.3531

#1	2.3845	49.827	.98743	19.185	.47150	.51030	5.1022	.49282	.98201	1.0121	.04458	1.0144
#2	2.3877	48.435	.99515	19.153	.47098	.52063	5.1016	.50690	1.0242	1.0470	.03724	1.0487

Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	None	Chk Pass
Value												
Range												

Elem	Se1960	Si2881	SiO2	Sn1899	Sr4077	Th2837	Ti3349	Ti1908	U_3701	V_2924	Zn2062	Zr3391
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	1.0858	4.8078	10.289	1.0379	.48482	-.00233	.46830	1.0843	.02618	.48825	.46294	.51321
Stddev	.0313	.0190	.041	.0261	.00966	.00289	.00059	.0126	.03634	.00060	.00108	.00199
%RSD	2.8789	.39606	.39606	2.5166	1.9925	124.03	.12544	1.1641	138.79	.12269	.23378	.38703

#1	1.0637	4.7944	10.260	1.0194	.49165	-.00438	.46872	1.0754	.05188	.48867	.46370	.51180
#2	1.1079	4.8213	10.318	1.0564	.47799	-.00029	.46789	1.0933	.00049	.48782	.46217	.51461

Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	None	Chk Pass	Chk Pass	None	Chk Pass	Chk Pass	Chk Pass
Value												
Range												

Int. Std.	Y_2243	Y_3600	Y_3774
Units	Cts/S	Cts/S	Cts/S
Avg	2629.3	40733.	2144.2
Stddev	17.2	8.	44.0
%RSD	.65552	.02052	2.0506

#1	2617.1	40727.	2113.1
#2	2641.5	40738.	2175.3

Sample Name: CCB Acquired: 5/19/2016 5:36:23 Type: QC
 Method: 6500_025(v6) Mode: CONC Corr. Factor: 1.000000
 User: CRHOADES Prep Date: Custom ID2: Custom ID3:
 Comment:

Elem	Ag3280	Al1670	As1890	B_2089	Ba4554	Be3130	Bi2230	Ca3179	Cd2288	Co2286	Cr2055
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	-.00062	.00247	.00299	.00308	-.00107	.00025	.00204	-.01769	-.00014	-.00008	.00014
Stddev	.00002	.00001	.00237	.00030	.00079	.00012	.00248	.00518	.00015	.00027	.00016
%RSD	3.6572	.36363	79.307	9.6825	73.580	46.729	121.26	29.271	110.67	323.16	118.24

#1	-.00061	.00246	.00131	.00329	-.00051	.00017	.00380	-.02135	-.00003	-.00028	.00002
#2	-.00064	.00248	.00466	.00287	-.00163	.00033	.00029	-.01403	-.00024	.00011	.00025

Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit											
Low Limit											

Elem	Cu3247	Fe2599	K_7664	Li6707	Mg2790	Mn2576	Mo2020	Na5895	Ni2316	P_1782	Pb2203
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	-.00052	.00478	.06698	.00382	.00135	.00015	.00221	.13643	-.00084	.00188	.00005
Stddev	.00004	.00084	.07817	.00437	.00024	.00001	.00100	.00579	.00027	.00148	.00050
%RSD	7.9207	17.596	116.71	114.20	17.423	6.9210	45.104	4.2439	32.158	78.649	1020.1

#1	-.00054	.00419	.12226	.00074	.00118	.00016	.00150	.14052	-.00065	.00083	-.00030
#2	-.00049	.00538	.01170	.00691	.00152	.00014	.00291	.13233	-.00103	.00292	.00040

Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit											
Low Limit											

Elem	S_1820	Sb2068	Se1960	Si2881	SiO2	Sn1899	Sr4077	Th2837	Ti3349	Ti1908	U_3701
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.02952	W .00849	.00716	.02198	.04703	.00138	.00045	.00058	-.00040	.00476	-.02190
Stddev	.00609	.00222	.00114	.01960	.04193	.00047	.00015	.00106	.00063	.00040	.02848
%RSD	20.632	26.152	15.895	89.165	89.165	34.240	33.836	182.49	157.52	8.4565	130.02

#1	.02522	.00692	.00797	.03583	.07668	.00105	.00035	.00133	.00005	.00447	-.04204
#2	.03383	.01005	.00636	.00812	.01738	.00172	.00056	-.00017	-.00084	.00504	-.00177

Check ?	Chk Pass	Chk Warn	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit		.00100									
Low Limit		-.00100									

Elem	V_2924	Zn2062	Zr3391
Units	ppm	ppm	ppm
Avg	.00077	-.00055	.00050
Stddev	.00041	.00001	.00023
%RSD	53.563	1.2446	46.179

#1	.00105	-.00056	.00033
#2	.00048	-.00055	.00066

Check ?	Chk Pass	Chk Pass	Chk Pass
High Limit			
Low Limit			

Int. Std.	Y_2243	Y_3600	Y_3774
Units	Cts/S	Cts/S	Cts/S
Avg	2675.4	42310.	2236.5
Stddev	16.2	352.	28.0
%RSD	.60457	.83156	1.2530

#1	2686.9	42062.	2256.4
#2	2664.0	42559.	2216.7

Sample Name: CCVL-3897520 Acquired: 5/19/2016 5:38:46 Type: QC
Method: 6500_025(v6) Mode: CONC Corr. Factor: 1.000000
User: CRHOADES Prep Date: Custom ID2: Custom ID3:
Comment:

Elem	Ag3280	Al1670	As1890	B_2089	Ba4554	Be3130	Bi2230	Ca3179	Cd2288	Co2286	Cr2055	Cu3247
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.00973	.11476	.01415	.10057	.00875	.00091	.11797	.18881	.00529	.01034	.01054	.01573
Stddev	.00071	.00223	.00048	.00204	.00011	.00018	.00401	.00457	.00028	.00047	.00059	.00021
%RSD	7.3477	1.9403	3.4089	2.0276	1.2836	19.593	3.3958	2.4195	5.2908	4.5328	5.6229	1.3446

#1	.01023	.11633	.01449	.10201	.00867	.00104	.12080	.19204	.00549	.01068	.01096	.01558
#2	.00922	.11318	.01381	.09913	.00883	.00079	.11514	.18558	.00509	.01001	.01013	.01588

Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Value												
Range												

Elem	Fe2599	K_7664	Li6707	Mg2790	Mn2576	Mo2020	Na5895	Ni2316	P_1782	Pb2203	S_1820	Sb2068
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.11324	3.0789	.00884	.20166	.00984	.02137	1.1871	.04108	3.0091	.00987	.03300	F .02660
Stddev	.00334	.0319	.00139	.00342	.00018	.00113	.0066	.00197	.1335	.00152	.00794	.00054
%RSD	2.9539	1.0360	15.753	1.6972	1.8718	5.2873	.55392	4.7932	4.4365	15.346	24.058	2.0465

#1	.11087	3.1014	.00982	.20408	.00997	.02217	1.1917	.04248	3.1035	.01095	.03861	.02699
#2	.11560	3.0563	.00785	.19924	.00971	.02057	1.1824	.03969	2.9147	.00880	.02739	.02622

Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	None	Chk Fail
Value												.02000
Range												30.000%

Elem	Se1960	Si2881	SiO2	Sn1899	Sr4077	Th2837	Ti3349	Ti1908	U_3701	V_2924	Zn2062	Zr3391
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.01901	.50235	1.0750	.10742	.01022	.01505	.00883	.01195	F .03606	.01028	.01951	.01525
Stddev	.00969	.06530	.1398	.00468	.00007	.00227	.00001	.00229	.01211	.00048	.00167	.00237
%RSD	50.955	13.000	13.000	4.3524	.65290	15.094	.12661	19.181	33.600	4.6555	8.5687	15.574

#1	.02586	.54853	1.1739	.11072	.01027	.01666	.00882	.01357	.04462	.01062	.02069	.01693
#2	.01216	.45618	.97622	.10411	.01017	.01344	.00884	.01033	.02749	.00994	.01832	.01357

Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Fail	Chk Pass	Chk Pass	Chk Pass
Value									.06000			
Range									-30.000%			

Int. Std.	Y_2243	Y_3600	Y_3774
Units	Cts/S	Cts/S	Cts/S
Avg	2745.1	42371.	2277.2
Stddev	66.4	3.	32.0
%RSD	2.4190	.00747	1.4036

#1	2698.2	42369.	2299.8
#2	2792.1	42374.	2254.6

Sample Name: MB 280-325569/1-A Acquired: 5/19/2016 5:41:27 Type: Unk

Method: 6500_025(v6) Mode: CONC Corr. Factor: 1.000000

User: CRHOADES Prep Date: 5/18 Custom ID2: Custom ID3:

Comment: 325569 6010C Q5

Elem	Ag3280	Al1670	As1890	B_2089	Ba4554	Be3130	Bi2230	Ca3179	Cd2288
Line	328.068 {103}	167.079 {502}	189.042 {478}	208.959 {461}	455.403 {74}	313.042 {108}	223.061 {451}	317.933 {106}	228.802 {447}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	-0.00004	.03899	.00000	.00102	-0.00025	.00021	-0.00060	.04651	-0.00018
Stddev	.00085	.00035	.00495	.00050	.00044	.00017	.00052	.00256	.00007
%RSD	2316.0	.88869	269090.	49.120	176.03	80.251	86.254	5.5140	35.898

#1	-0.00064	.03923	-0.00350	.00067	-0.00057	.00009	-0.00023	.04833	-0.00023
#2	.00057	.03874	.00351	.00138	.00006	.00034	-0.00097	.04470	-0.00014

Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Elem	Co2286	Cr2055	Cu3247	Fe2599	K_7664	Li6707	Mg2790	Mn2576	Mo2020
Line	228.616 {447}	205.560 {464}	324.754 {104}	259.940 {130}	766.490 {44}	670.784 {50}	279.079 {121}2	257.610 {131}	202.030 {467}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.00040	.00062	-0.00016	.01750	.06798	.00140	.00808	.00061	-0.00008
Stddev	.00016	.00041	.00007	.00310	.03492	.00020	.00097	.00007	.00053
%RSD	39.368	66.331	43.736	17.729	51.364	14.651	12.001	12.159	633.86

#1	.00052	.00033	-0.00011	.01969	.09267	.00125	.00877	.00066	-0.00046
#2	.00029	.00091	-0.00021	.01530	.04329	.00154	.00739	.00056	.00029

Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Elem	Na5895	Ni2316	P_1782	Pb2203	S_1820	Sb2068	Se1960	Si2881	SiO2
Line	589.592 {57}	231.604 {446}	178.284 {489}	220.353 {453}	182.034 {485}	206.833 {463}	196.090 {472}	288.158 {117}	288.158 {117}2
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.16992	-0.00026	-0.00070	.00067	.04527	W .00630	.00008	.04048	.08663
Stddev	.02595	.00015	.00077	.00087	.00012	.00135	.00073	.00239	.00512
%RSD	15.274	57.603	110.21	129.15	.26880	21.465	886.86	5.9046	5.9046

#1	.18827	-0.00036	-0.00125	.00006	.04536	.00726	-0.00043	.03879	.08301
#2	.15156	-0.00015	-0.00016	.00128	.04519	.00535	.00060	.04217	.09025

Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Warn	Chk Pass	Chk Pass	None
High Limit						.00500			
Low Limit						-.00500			

Elem	Sn1899	Sr4077	Th2837	Ti3349	Ti1908	U_3701	V_2924	Zn2062	Zr3391
Line	189.989 {477}	407.771 {83}	283.730 {119}	334.904 {101}	190.856 {477}	370.152 {91}	292.402 {115}	206.200 {163}	339.198 {99}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.00079	.00040	.00131	.00037	-0.00256	.00389	.00043	.00137	-0.00289
Stddev	.00034	.00008	.00102	.00045	.00111	.03783	.00082	.00002	.00217
%RSD	43.511	20.250	77.817	120.57	43.627	972.02	191.50	1.2650	75.073

#1	.00103	.00046	.00203	.00068	-0.00177	-.02286	-0.00015	.00136	-0.00443
#2	.00055	.00034	.00059	.00005	-0.00334	.03064	.00101	.00139	-0.00136

Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Int. Std.	Y_2243	Y_3600	Y_3774
Line	224.306 {450}	360.073 {94}	377.433 {89}
Units	Cts/S	Cts/S	Cts/S
Avg	2715.1	42262.	2211.1
Stddev	11.0	541.	19.7
%RSD	.40442	1.2795	.89171

#1	2707.4	41880.	2225.1
#2	2722.9	42644.	2197.2

Sample Name: LCS 280-325569/2-A Acquired: 5/19/2016 5:43:50 Type: Unk
Method: 6500_025(v6) Mode: CONC Corr. Factor: 1.000000
User: CRHOADES Prep Date: Custom ID2: Custom ID3:
Comment: 325569 6010C Q5

Elem	Ag3280	Al1670	As1890	B_2089	Ba4554	Be3130	Bi2230	Ca3179	Cd2288
Line	328.068 {103}	167.079 {502}	189.042 {478}	208.959 {461}	455.403 { 74}	313.042 {108}	223.061 {451}	317.933 {106}	228.802 {447}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.05008	2.1265	1.0847	1.0238	1.9429	.04574	2.2226	46.648	.09981
Stddev	.00003	.0041	.0031	.0027	.0178	.00057	.0005	.520	.00032
%RSD	.05346	.19400	.28416	.26429	.91715	1.2495	.02339	1.1156	.32180

#1	.05006	2.1236	1.0869	1.0219	1.9555	.04615	2.2222	47.016	.09958
#2	.05010	2.1294	1.0825	1.0257	1.9303	.04534	2.2229	46.280	.10004

Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	None	Chk Pass	Chk Pass
High Limit									
Low Limit									

Elem	Co2286	Cr2055	Cu3247	Fe2599	K_7664	Li6707	Mg2790	Mn2576	Mo2020
Line	228.616 {447}	205.560 {464}	324.754 {104}	259.940 {130}	766.490 { 44}	670.784 { 50}	279.079 {121}2	257.610 {131}	202.030 {467}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.48917	.20126	.26250	.92681	46.839	.96494	48.201	.46511	1.0630
Stddev	.00113	.00096	.00090	.00572	.403	.00580	.002	.00003	.0012
%RSD	.23009	.47509	.34241	.61763	.86026	.60091	.00350	.00622	.10995

#1	.48837	.20058	.26187	.93085	47.124	.96904	48.200	.46513	1.0638
#2	.48996	.20193	.26314	.92276	46.554	.96084	48.203	.46509	1.0622

Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Elem	Na8183	Ni2316	P_1782	Pb2203	S_1820	Sb2068	Se1960	Si2881	SiO2
Line	818.326 { 41}	231.604 {446}	178.284 {489}	220.353 {453}	182.034 {485}	206.833 {463}	196.090 {472}	288.158 {117}	288.158 {117}2
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	52.827	.48317	10.248	.50931	2.1864	.53586	2.2299	9.4500	20.223
Stddev	.591	.00187	.038	.00092	.0082	.00516	.0326	.0172	.037
%RSD	1.1191	.38651	.37421	.18154	.37340	.96215	1.4615	.18178	.18178

#1	53.245	.48185	10.221	.50997	2.1807	.53222	2.2068	9.4622	20.249
#2	52.409	.48449	10.275	.50866	2.1922	.53951	2.2529	9.4379	20.197

Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	None	Chk Pass	Chk Pass	Chk Pass	None
High Limit									
Low Limit									

Elem	Sn1899	Sr4077	Th2837	Ti3349	Ti1908	U_3701	V_2924	Zn2062	Zr3391
Line	189.989 {477}	407.771 { 83}	283.730 {119}	334.904 {101}	190.856 {477}	370.152 { 91}	292.402 {115}	206.200 {163}	339.198 { 99}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	2.0716	.91810	.96019	.94631	2.0452	2.0506	.48003	.45576	.52175
Stddev	.0451	.01213	.00058	.00061	.0044	.0303	.00010	.00341	.00137
%RSD	2.1775	1.3213	.06060	.06480	.21458	1.4763	.02098	.74824	.26316

#1	2.0397	.92668	.96060	.94674	2.0483	2.0291	.47996	.45817	.52272
#2	2.1035	.90952	.95978	.94587	2.0421	2.0720	.48010	.45335	.52078

Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Int. Std.	Y_2243	Y_3600	Y_3774
Line	224.306 {450}	360.073 { 94}	377.433 { 89}
Units	Cts/S	Cts/S	Cts/S
Avg	2648.5	41463.	2355.4
Stddev	5.9	285.	17.2
%RSD	.22131	.68828	.72813

#1	2652.6	41261.	2343.3
#2	2644.4	41664.	2367.5

Sample Name: 280-83062-B-1-B Acquired: 5/19/2016 5:46:17 Type: Unk
Method: 6500_025(v6) Mode: CONC Corr. Factor: 1.000000
User: CRHOADES Prep Date: Custom ID2: Custom ID3:
Comment: 325569 6010C Q5

Elem	Ag3280	Al3092	As1890	B_2089	Ba4554	Be3130	Bi2230	Ca3179	Cd2288
Line	328.068 {103}	309.271 {109}	189.042 {478}	208.959 {461}	455.403 { 74}	313.042 {108}	223.061 {451}	317.933 {106}	228.802 {447}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	-0.00067	5.1113	.00171	.01940	.03166	.00126	-0.00425	26.280	.00059
Stddev	.00037	.0925	.00153	.00000	.00110	.00027	.00109	.198	.00028
%RSD	55.480	1.8106	89.904	.02427	3.4780	21.353	25.664	.75381	47.262

#1	-0.00093	5.0459	.00062	.01940	.03088	.00107	-0.00348	26.140	.00079
#2	-0.00041	5.1767	.00279	.01941	.03244	.00145	-0.00502	26.420	.00039

Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Elem	Co2286	Cr2055	Cu3247	Fe2599	K_7664	Li6707	Mg2790	Mn2576	Mo2020
Line	228.616 {447}	205.560 {464}	324.754 {104}	259.940 {130}	766.490 { 44}	670.784 { 50}	279.079 {121}2	257.610 {131}	202.030 {467}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.10367	.00497	.01208	3.2450	.94524	.00712	15.119	1.3148	.00410
Stddev	.00374	.00028	.00043	.0350	.01973	.00214	.002	.0035	.00026
%RSD	3.6046	5.6652	3.5271	1.0782	2.0869	30.082	.01073	.26606	6.2957

#1	.10631	.00517	.01238	3.2203	.93130	.00863	15.120	1.3124	.00391
#2	.10103	.00477	.01177	3.2697	.95919	.00560	15.118	1.3173	.00428

Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Elem	Na5895	Ni2316	P_1782	Pb2203	S_1820	Sb2068	Se1960	Si2881	SiO2
Line	589.592 { 57}	231.604 {446}	178.284 {489}	220.353 {453}	182.034 {485}	206.833 {463}	196.090 {472}	288.158 {117}	288.158 {117}2
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	2.4602	.05616	.04230	.00542	44.795	.00527	.01209	11.681	24.998
Stddev	.0003	.00163	.00190	.00298	.965	.00232	.00081	.083	.177
%RSD	.01221	2.8985	4.4991	55.058	2.1543	44.032	6.6860	.70901	.70901

#1	2.4600	.05731	.04365	.00753	45.478	.00691	.01152	11.623	24.872
#2	2.4604	.05501	.04096	.00331	44.113	.00363	.01267	11.740	25.123

Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Elem	Sn1899	Sr4077	Th2837	Ti3349	Ti1908	U_3701	V_2924	Zn2062	Zr3391
Line	189.989 {477}	407.771 { 83}	283.730 {119}	334.904 {101}	190.856 {477}	370.152 { 91}	292.402 {115}	206.200 {163}	339.198 { 99}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	-0.00080	.15938	.00337	.05565	.01744	W -.06408	.00750	.04188	.00627
Stddev	.00016	.00082	.00011	.00237	.00421	.03598	.00107	.00020	.00271
%RSD	20.309	.51419	3.3327	4.2599	24.138	56.158	14.307	.46707	43.211

#1	-0.00069	.15880	.00345	.05397	.01447	-.08952	.00826	.04174	.00818
#2	-0.00092	.15996	.00330	.05732	.02042	-.03863	.00674	.04201	.00435

Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Warn	Chk Pass	Chk Pass	Chk Pass
High Limit						45.000			
Low Limit						-.05000			

Int. Std.	Y_2243	Y_3600	Y_3774
Line	224.306 {450}	360.073 { 94}	377.433 { 89}
Units	Cts/S	Cts/S	Cts/S
Avg	2741.3	42082.	2286.8
Stddev	66.2	323.	21.3
%RSD	2.4162	.76804	.93084

#1	2694.5	42311.	2301.8
#2	2788.2	41854.	2271.7

Sample Name: 280-83062-G-2-A Acquired: 5/19/2016 5:48:54 Type: Unk
Method: 6500_025(v6) Mode: CONC Corr. Factor: 1.000000
User: CRHOADES Prep Date: Custom ID2: Custom ID3:
Comment: 325569 6010C Q5

Elem	Ag3280	Al1670	As1890	B_2089	Ba4554	Be3130	Bi2230	Ca3179	Cd2288
Line	328.068 {103}	167.079 {502}	189.042 {478}	208.959 {461}	455.403 { 74}	313.042 {108}	223.061 {451}	317.933 {106}	228.802 {447}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.00014	1.3757	-.00550	.01186	.06849	.00024	-.00272	68.257	.00060
Stddev	.00061	.0043	.00305	.00013	.00037	.00011	.00240	1.198	.00029
%RSD	447.67	.30949	55.382	1.0630	.53810	46.243	88.376	1.7553	48.210

#1	.00057	1.3787	-.00765	.01195	.06823	.00032	-.00442	67.410	.00080
#2	-.00030	1.3727	-.00335	.01177	.06875	.00016	-.00102	69.104	.00039

Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Elem	Co2286	Cr2055	Cu3247	Fe2599	K_7664	Li6707	Mg2790	Mn2576	Mo2020
Line	228.616 {447}	205.560 {464}	324.754 {104}	259.940 {130}	766.490 { 44}	670.784 { 50}	279.079 {121}2	257.610 {131}	202.030 {467}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.00447	.00320	.00228	1.4494	1.2110	.00343	39.167	.04026	.00216
Stddev	.00018	.00014	.00057	.0259	.0223	.00300	.005	.00018	.00068
%RSD	4.1336	4.4907	24.832	1.7857	1.8449	87.497	.01217	.44848	31.330

#1	.00461	.00330	.00188	1.4677	1.2268	.00131	39.164	.04014	.00168
#2	.00434	.00310	.00269	1.4311	1.1952	.00556	39.171	.04039	.00264

Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Elem	Na5895	Ni2316	P_1782	Pb2203	S_1820	Sb2068	Se1960	Si2881	SiO2
Line	589.592 { 57}	231.604 {446}	178.284 {489}	220.353 {453}	182.034 {485}	206.833 {463}	196.090 {472}	288.158 {117}	288.158 {117}2
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	3.7775	.00133	.01893	.00218	32.586	.00001	.00023	8.5420	18.280
Stddev	.0164	.00000	.00029	.00122	.042	.00612	.00284	.0328	.070
%RSD	.43321	.17913	1.5291	55.981	.12966	65064.	1258.7	.38444	.38444

#1	3.7890	.00133	.01873	.00131	32.616	.00434	-.00178	8.5188	18.230
#2	3.7659	.00133	.01914	.00304	32.557	-.00432	.00224	8.5652	18.330

Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Elem	Sn1899	Sr4077	Th2837	Ti3349	Ti1908	U_3701	V_2924	Zn2062	Zr3391
Line	189.989 {477}	407.771 { 83}	283.730 {119}	334.904 {101}	190.856 {477}	370.152 { 91}	292.402 {115}	206.200 {163}	339.198 { 99}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.00575	.06945	.00019	.02759	-.00102	-.03766	.00326	.01017	.00217
Stddev	.00087	.00068	.00340	.00059	.00605	.03443	.00049	.00102	.00214
%RSD	15.047	.97972	1764.1	2.1472	595.68	91.424	15.137	10.016	98.525

#1	.00514	.06993	.00260	.02801	.00326	-.06201	.00361	.01089	.00066
#2	.00637	.06897	-.00221	.02717	-.00529	-.01331	.00291	.00945	.00368

Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Int. Std.	Y_2243	Y_3600	Y_3774
Line	224.306 {450}	360.073 { 94}	377.433 { 89}
Units	Cts/S	Cts/S	Cts/S
Avg	2669.8	42029.	2247.1
Stddev	11.6	103.	35.8
%RSD	.43523	.24585	1.5920

#1	2678.1	41956.	2272.4
#2	2661.6	42102.	2221.8

Sample Name: 280-83062-G-2-A SD@5 Acquired: 5/19/2016 5:51:32 Type: Unk
Method: 6500_025(v6) Mode: CONC Corr. Factor: 1.000000
User: CRHOADES Prep Date: Custom ID2: Custom ID3:
Comment: 325569 6010C Q5

Elem	Ag3280	Al1670	As1890	B_2089	Ba4554	Be3130	Bi2230	Ca3179	Cd2288
Line	328.068 {103}	167.079 {502}	189.042 {478}	208.959 {461}	455.403 { 74}	313.042 {108}	223.061 {451}	317.933 {106}	228.802 {447}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	-.00003	.30724	-.00081	.00266	.01321	.00033	-.00303	13.937	.00024
Stddev	.00052	.00172	.00125	.00077	.00005	.00036	.00374	.022	.00012
%RSD	1687.5	.55949	153.54	28.865	.36458	106.15	123.62	.15957	52.007

#1	.00034	.30845	-.00169	.00321	.01317	.00008	-.00567	13.953	.00033
#2	-.00040	.30602	.00007	.00212	.01324	.00059	-.00038	13.921	.00015

Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Elem	Co2286	Cr2055	Cu3247	Fe2599	K_7664	Li6707	Mg2790	Mn2576	Mo2020
Line	228.616 {447}	205.560 {464}	324.754 {104}	259.940 {130}	766.490 { 44}	670.784 { 50}	279.079 {121}2	257.610 {131}	202.030 {467}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.00082	.00023	.00028	.29988	.21760	-.00037	7.8105	.00825	.00029
Stddev	.00018	.00001	.00009	.00133	.02376	.00032	.0187	.00007	.00035
%RSD	21.829	4.7994	33.146	.44460	10.921	85.597	.24002	.79267	121.09

#1	.00095	.00024	.00034	.29894	.20080	-.00059	7.7973	.00820	.00004
#2	.00069	.00022	.00021	.30082	.23440	-.00015	7.8238	.00830	.00053

Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Elem	Na5895	Ni2316	P_1782	Pb2203	S_1820	Sb2068	Se1960	Si2881	SiO2
Line	589.592 { 57}	231.604 {446}	178.284 {489}	220.353 {453}	182.034 {485}	206.833 {463}	196.090 {472}	288.158 {117}	288.158 {117}2
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.85077	.00019	.00410	-.00043	6.5820	.00259	.00238	1.7796	3.8083
Stddev	.00939	.00045	.00364	.00098	.1446	.00116	.00218	.0128	.0273
%RSD	1.1040	233.52	88.695	229.31	2.1972	44.747	91.717	.71725	.71725

#1	.84413	.00052	.00668	-.00112	6.4797	.00177	.00084	1.7706	3.7890
#2	.85742	-.00013	.00153	.00027	6.6843	.00341	.00392	1.7886	3.8277

Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Elem	Sn1899	Sr4077	Th2837	Ti3349	Ti1908	U_3701	V_2924	Zn2062	Zr3391
Line	189.989 {477}	407.771 { 83}	283.730 {119}	334.904 {101}	190.856 {477}	370.152 { 91}	292.402 {115}	206.200 {163}	339.198 { 99}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.00035	.01434	-.00158	.00640	-.00042	.02334	.00117	.00341	.00472
Stddev	.00314	.00001	.00034	.00002	.00118	.02152	.00033	.00032	.00225
%RSD	904.26	.05773	21.740	.32845	278.90	92.209	28.040	9.3555	47.670

#1	-.00188	.01433	-.00133	.00642	-.00125	.03856	.00094	.00363	.00313
#2	.00257	.01435	-.00182	.00639	.00041	.00812	.00140	.00318	.00631

Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Int. Std.	Y_2243	Y_3600	Y_3774
Line	224.306 {450}	360.073 { 94}	377.433 { 89}
Units	Cts/S	Cts/S	Cts/S
Avg	2735.2	42826.	2280.8
Stddev	1.2	162.	25.2
%RSD	.04332	.37888	1.1059

#1	2734.4	42941.	2298.6
#2	2736.0	42711.	2262.9

Sample Name: 280-83062-G-2-B MS Acquired: 5/19/2016 5:54:12 Type: Unk
Method: 6500_025(v6) Mode: CONC Corr. Factor: 1.000000
User: CRHOADES Prep Date: Custom ID2: Custom ID3:
Comment: 325569 6010C Q5

Elem	Ag3280	Al3092	As1890	B_2089	Ba4554	Be3130	Bi2230	Ca3179	Cd2288
Line	328.068 {103}	309.271 {109}	189.042 {478}	208.959 {461}	455.403 {74}	313.042 {108}	223.061 {451}	317.933 {106}	228.802 {447}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.05060	4.8664	1.0867	1.0273	2.0527	.04679	F 2.1989	114.76	.09984
Stddev	.00041	.1464	.0021	.0067	.0506	.00077	.0209	3.05	.00053
%RSD	.80680	3.0077	.19053	.65457	2.4642	1.6438	.95053	2.6540	.52988

#1	.05088	4.9699	1.0882	1.0320	2.0884	.04733	2.2136	116.91	.10021
#2	.05031	4.7629	1.0853	1.0225	2.0169	.04624	2.1841	112.60	.09947

Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Fail	Chk Pass	Chk Pass
High Limit							.10000		
Low Limit							-.10000		

Elem	Co2286	Cr2055	Cu3247	Fe2599	K_7664	Li6707	Mg2790	Mn2576	Mo2020
Line	228.616 {447}	205.560 {464}	324.754 {104}	259.940 {130}	766.490 {44}	670.784 {50}	279.079 {121}2	257.610 {131}	202.030 {467}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.48443	.20216	.26413	2.5466	49.455	.97963	87.644	.49967	1.0573
Stddev	.00128	.00028	.00071	.0369	1.296	.00578	.490	.00091	.0051
%RSD	.26448	.14040	.26906	1.4509	2.6213	.58978	.55897	.18185	.48591

#1	.48534	.20236	.26463	2.5727	50.371	.97554	87.991	.50031	1.0609
#2	.48353	.20196	.26362	2.5205	48.538	.98371	87.298	.49902	1.0536

Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Elem	Na8183	Ni2316	P_1782	Pb2203	S_1820	Sb2068	Se1960	Si2881	SiO2
Line	818.326 {41}	231.604 {446}	178.284 {489}	220.353 {453}	182.034 {485}	206.833 {463}	196.090 {472}	288.158 {117}	288.158 {117}2
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	57.673	.47770	W 10.365	.50234	35.692	.53246	2.2304	19.449	41.621
Stddev	.324	.00165	.095	.00135	.301	.00203	.0048	.009	.020
%RSD	.56190	.34451	.91974	.26944	.84399	.38083	.21683	.04744	.04744

#1	57.902	.47886	10.432	.50330	35.905	.53390	2.2270	19.443	41.607
#2	57.444	.47653	10.297	.50139	35.479	.53103	2.2339	19.456	41.635

Check ?	Chk Pass	Chk Pass	Chk Warn	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit			2.0000						
Low Limit			-1.0000						

Elem	Sn1899	Sr4077	Th2837	Ti3349	Ti1908	U_3701	V_2924	Zn2062	Zr3391
Line	189.989 {477}	407.771 {83}	283.730 {119}	334.904 {101}	190.856 {477}	370.152 {91}	292.402 {115}	206.200 {163}	339.198 {99}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	W 2.0525	1.0079	.95259	.96865	1.9510	2.0119	.48030	.45844	.51969
Stddev	.0120	.0271	.00589	.00257	.0418	.0198	.00279	.00041	.00532
%RSD	.58208	2.6874	.61850	.26546	2.1411	.98275	.58010	.09009	1.0233

#1	2.0440	1.0270	.95676	.97046	1.9805	2.0259	.48227	.45815	.52345
#2	2.0609	.98871	.94842	.96683	1.9214	1.9979	.47833	.45873	.51593

Check ?	Chk Warn	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit	2.0000								
Low Limit	-.05000								

Int. Std.	Y_2243	Y_3600	Y_3774
Line	224.306 {450}	360.073 {94}	377.433 {89}
Units	Cts/S	Cts/S	Cts/S
Avg	2604.0	41091.	2303.1
Stddev	49.9	335.	49.9
%RSD	1.9160	.81504	2.1675

#1	2639.3	41328.	2267.8
#2	2568.8	40854.	2338.4

Sample Name: 280-83062-G-2-C MSD Acquired: 5/19/2016 5:56:38 Type: Unk
Method: 6500_025(v6) Mode: CONC Corr. Factor: 1.000000
User: CRHOADES Prep Date: Custom ID2: Custom ID3:
Comment: 325569 6010C Q5

Elem	Ag3280	Al3092	As1890	B_2089	Ba4554	Be3130	Bi2230	Ca3179	Cd2288
Line	328.068 {103}	309.271 {109}	189.042 {478}	208.959 {461}	455.403 {74}	313.042 {108}	223.061 {451}	317.933 {106}	228.802 {447}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.05183	4.8348	1.1270	1.0631	2.1722	.04936	F 2.2806	118.60	.10315
Stddev	.00101	.0049	.0079	.0050	.0061	.00039	.0024	.11	.00048
%RSD	1.9462	.10122	.69758	.47384	.28183	.78293	.10688	.09162	.46541

#1	.05255	4.8313	1.1326	1.0596	2.1679	.04908	2.2823	118.53	.10281
#2	.05112	4.8383	1.1214	1.0667	2.1765	.04963	2.2789	118.68	.10349

Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Fail	Chk Pass	Chk Pass
High Limit							.10000		
Low Limit							-.10000		

Elem	Co2286	Cr2055	Cu3247	Fe2599	K_7664	Li6707	Mg2790	Mn2576	Mo2020
Line	228.616 {447}	205.560 {464}	324.754 {104}	259.940 {130}	766.490 {44}	670.784 {50}	279.079 {121}2	257.610 {131}	202.030 {467}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.50276	.20957	.27102	2.4513	52.404	1.0117	88.109	.51187	1.1016
Stddev	.00014	.00059	.00038	.0286	.086	.0076	.144	.00065	.0017
%RSD	.02867	.27981	.14047	1.1650	.16406	.75593	.16324	.12607	.15638

#1	.50286	.20916	.27129	2.4311	52.344	1.0063	88.007	.51142	1.1004
#2	.50266	.20999	.27075	2.4715	52.465	1.0171	88.210	.51233	1.1028

Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Elem	Na8183	Ni2316	P_1782	Pb2203	S_1820	Sb2068	Se1960	Si2881	SiO2
Line	818.326 {41}	231.604 {446}	178.284 {489}	220.353 {453}	182.034 {485}	206.833 {463}	196.090 {472}	288.158 {117}	288.158 {117}2
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	58.707	.49288	W 10.707	.52059	35.319	.54785	2.2880	19.088	40.848
Stddev	1.097	.00066	.003	.00269	.011	.00585	.0173	.063	.134
%RSD	1.8681	.13469	.02824	.51616	.03111	1.0678	.75397	.32787	.32787

#1	57.932	.49335	10.705	.52249	35.326	.55199	2.3002	19.044	40.754
#2	59.483	.49241	10.709	.51869	35.311	.54372	2.2758	19.132	40.943

Check ?	Chk Pass	Chk Pass	Chk Warn	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit			2.0000						
Low Limit			-1.0000						

Elem	Sn1899	Sr4077	Th2837	Ti3349	Ti1908	U_3701	V_2924	Zn2062	Zr3391
Line	189.989 {477}	407.771 {83}	283.730 {119}	334.904 {101}	190.856 {477}	370.152 {91}	292.402 {115}	206.200 {163}	339.198 {99}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	W 2.1286	1.0640	.98240	.99548	2.0409	2.0657	.49316	.47109	.54036
Stddev	.0169	.0035	.00695	.00037	.0580	.0275	.00047	.00058	.00512
%RSD	.79434	.32799	.70762	.03700	2.8409	1.3321	.09432	.12263	.94701

#1	2.1406	1.0616	.97748	.99522	2.0819	2.0463	.49283	.47068	.53674
#2	2.1167	1.0665	.98732	.99574	1.9999	2.0852	.49349	.47150	.54398

Check ?	Chk Warn	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit	2.0000								
Low Limit	-.05000								

Int. Std.	Y_2243	Y_3600	Y_3774						
Line	224.306 {450}	360.073 {94}	377.433 {89}						
Units	Cts/S	Cts/S	Cts/S						
Avg	2632.0	40783.	2216.2						
Stddev	10.9	154.	11.4						
%RSD	.41408	.37637	.51602						

#1	2639.7	40891.	2208.2						
#2	2624.3	40674.	2224.3						

Sample Name: 280-83062-G-2-A PDS Acquired: 5/19/2016 5:59:03 Type: Unk
Method: 6500_025(v6) Mode: CONC Corr. Factor: 1.000000
User: CRHOADES Prep Date: Custom ID2: Custom ID3:
Comment: 325569 6010C Q5

Elem	Ag3280	Al1670	Al3092	As1890	B_2089	Ba4554	Be3130	Bi2230	Ca3179
Line	328.068 {103}	167.079 {502}	309.271 {109}	189.042 {478}	208.959 {461}	455.403 { 74}	313.042 {108}	223.061 {451}	317.933 {106}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.00990	2.3854	W 2.6587	.20882	.11349	.16947	.04729	-.00037	85.906
Stddev	.00055	.0670	.0551	.00178	.00306	.00086	.00023	.00184	1.046
%RSD	5.5308	2.8090	2.0716	.85309	2.6931	.50461	.47609	500.38	1.2173

#1	.01029	2.4328	2.6198	.21008	.11565	.16886	.04713	-.00167	85.167
#2	.00952	2.3380	2.6977	.20756	.11133	.17007	.04745	.00093	86.646

Check ?	Chk Pass	Chk Pass	Chk Warn	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit			500.00						
Low Limit			3.2000						

Elem	Cd2288	Co2286	Cr2055	Cu3247	Fe2599	K_7664	Li6707	Mg2790	Mn2576
Line	228.802 {447}	228.616 {447}	205.560 {464}	324.754 {104}	259.940 {130}	766.490 { 44}	670.784 { 50}	279.079 {121}2	257.610 {131}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.05070	.05193	.05237	.05488	2.3802	21.271	.09978	57.236	.08583
Stddev	.00039	.00019	.00038	.00023	.0140	.031	.00135	.036	.00026
%RSD	.76985	.37526	.73220	.41197	.58965	.14424	1.3523	.06247	.30279

#1	.05098	.05207	.05264	.05504	2.3902	21.249	.10074	57.262	.08601
#2	.05043	.05179	.05210	.05472	2.3703	21.293	.09883	57.211	.08564

Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Elem	Mo2020	Na8183	Ni2316	P_1782	Pb2203	S_1820	Sb2068	Se1960	Si2881
Line	202.030 {467}	818.326 { 41}	231.604 {446}	178.284 {489}	220.353 {453}	182.034 {485}	206.833 {463}	196.090 {472}	288.158 {117}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.05760	26.970	.04921	W 2.0343	.10025	32.042	.10454	.22827	13.451
Stddev	.00126	.034	.00102	.0092	.00034	.002	.00331	.01029	.073
%RSD	2.1823	.12422	2.0660	.44960	.33564	.00524	3.1635	4.5094	.54180

#1	.05671	26.994	.04993	2.0407	.10049	32.041	.10220	.23555	13.399
#2	.05849	26.946	.04849	2.0278	.10001	32.043	.10688	.22099	13.502

Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Warn	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit				2.0000					
Low Limit				-1.0000					

Elem	SiO2	Sn1899	Sr4077	Th2837	Ti3349	Ti1908	U_3701	V_2924	Zn2062
Line	288.158 {117}2	189.989 {477}	407.771 { 83}	283.730 {119}	334.904 {101}	190.856 {477}	370.152 { 91}	292.402 {115}	206.200 {163}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	28.784	.10637	.11683	.19172	.07820	.21442	.49533	.05081	.19293
Stddev	.156	.00070	.00029	.00038	.00003	.00007	.03839	.00091	.00072
%RSD	.54180	.65720	.25158	.19763	.03197	.03146	7.7496	1.8008	.37325

#1	28.674	.10686	.11662	.19199	.07822	.21447	.46818	.05146	.19242
#2	28.895	.10587	.11704	.19145	.07818	.21437	.52247	.05016	.19344

Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Elem	Zr3391
Line	339.198 { 99}
Units	ppm
Avg	.05306
Stddev	.00098
%RSD	1.8539

#1	.05375
#2	.05236

Check ?	Chk Pass
High Limit	
Low Limit	

Sample Name: 280-83062-G-2-A PDS Acquired: 5/19/2016 5:59:03 Type: Unk
 Method: 6500_025(v6) Mode: CONC Corr. Factor: 1.000000
 User: CRHOADES Prep Date: Custom ID2: Custom ID3:
 Comment: 325569 6010C Q5

Int. Std.	Y_2243	Y_3600	Y_3774
Line	224.306 {450}	360.073 { 94}	377.433 { 89}
Units	Cts/S	Cts/S	Cts/S
Avg	2682.6	41217.	2204.1
Stddev	80.1	19.	34.8
%RSD	2.9871	.04669	1.5810
#1	2625.9	41203.	2228.7
#2	2739.2	41230.	2179.5

Sample Name: 280-83062-C-3-B Acquired: 5/19/2016 6:01:37 Type: Unk
Method: 6500_025(v6) Mode: CONC Corr. Factor: 1.000000
User: CRHOADES Prep Date: Custom ID2: Custom ID3:
Comment: 325569 6010C Q5

Elem	Ag3280	Al1670	As1890	B_2089	Ba4554	Be3130	Bi2230	Ca3179	Cd2288
Line	328.068 {103}	167.079 {502}	189.042 {478}	208.959 {461}	455.403 { 74}	313.042 {108}	223.061 {451}	317.933 {106}	228.802 {447}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	-.00030	.80922	-.00159	.01408	.06801	.00026	.00168	69.057	.00054
Stddev	.00053	.02358	.01048	.00088	.00129	.00034	.00490	1.095	.00015
%RSD	174.91	2.9139	659.95	6.2665	1.8903	129.94	291.92	1.5853	26.812

#1	.00007	.82590	-.00900	.01470	.06710	.00050	-.00179	68.283	.00065
#2	-.00068	.79255	.00582	.01345	.06892	.00002	.00515	69.831	.00044

Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Elem	Co2286	Cr2055	Cu3247	Fe2599	K_7664	Li6707	Mg2790	Mn2576	Mo2020
Line	228.616 {447}	205.560 {464}	324.754 {104}	259.940 {130}	766.490 { 44}	670.784 { 50}	279.079 {121}2	257.610 {131}	202.030 {467}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.00390	.00206	.00177	.91518	1.2609	.00071	39.339	.03965	.00197
Stddev	.00007	.00044	.00007	.00058	.0792	.00288	.071	.00002	.00020
%RSD	1.7275	21.144	3.7880	.06341	6.2796	406.64	.17997	.05230	10.040

#1	.00385	.00175	.00172	.91559	1.3169	.00274	39.289	.03967	.00183
#2	.00395	.00237	.00182	.91476	1.2050	-.00133	39.390	.03964	.00211

Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Elem	Na5895	Ni2316	P_1782	Pb2203	S_1820	Sb2068	Se1960	Si2881	SiO2
Line	589.592 { 57}	231.604 {446}	178.284 {489}	220.353 {453}	182.034 {485}	206.833 {463}	196.090 {472}	288.158 {117}	288.158 {117}2
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	3.7975	.00084	.01228	.00179	31.859	.00198	.00663	7.7497	16.584
Stddev	.0336	.00090	.00006	.00194	1.076	.00076	.00475	.1174	.251
%RSD	.88600	107.41	.52637	108.44	3.3775	38.436	71.643	1.5147	1.5147

#1	3.7737	.00147	.01224	.00042	32.620	.00144	.00999	7.6667	16.407
#2	3.8213	.00020	.01233	.00316	31.098	.00251	.00327	7.8327	16.762

Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Elem	Sn1899	Sr4077	Th2837	Ti3349	Ti1908	U_3701	V_2924	Zn2062	Zr3391
Line	189.989 {477}	407.771 { 83}	283.730 {119}	334.904 {101}	190.856 {477}	370.152 { 91}	292.402 {115}	206.200 {163}	339.198 { 99}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.00384	.07020	.00055	.01825	.00103	W -.06486	.00174	.00703	.00371
Stddev	.00122	.00033	.00091	.00033	.00057	.05242	.00068	.00012	.00113
%RSD	31.890	.46465	163.21	1.8316	54.875	80.822	38.739	1.7002	30.424

#1	.00470	.06997	-.00009	.01802	.00063	-.02779	.00222	.00712	.00291
#2	.00297	.07043	.00119	.01849	.00143	-.10192	.00127	.00695	.00451

Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Warn	Chk Pass	Chk Pass	Chk Pass
High Limit						45.000			
Low Limit						-.05000			

Int. Std.	Y_2243	Y_3600	Y_3774
Line	224.306 {450}	360.073 { 94}	377.433 { 89}
Units	Cts/S	Cts/S	Cts/S
Avg	2654.8	40368.	2209.2
Stddev	89.9	200.	6.7
%RSD	3.3848	.49434	.30118

#1	2591.3	40509.	2204.5
#2	2718.3	40227.	2213.9

Sample Name: CCVH-3894253 Acquired: 5/19/2016 6:04:15 Type: QC
Method: 6500_025(v6) Mode: CONC Corr. Factor: 1.000000
User: CRHOADES Prep Date: Custom ID2: Custom ID3:
Comment:

Elem	Ag3280	Al3092	As1890	B_2089	Ba4554	Be3130	Bi2230	Ca3179	Cd2288	Co2286	Cr2055
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	-0.00115	51.017	-0.00381	.00397	-0.00095	.00045	F 1.1065	-0.00779	-0.00023	-0.00085	.00043
Stddev	.00042	.986	.00640	.00007	.00019	.00006	.0038	.00366	.00035	.00015	.00002
%RSD	36.673	1.9335	167.84	1.6979	19.748	12.610	.34067	46.942	153.51	17.920	3.6344

#1	-0.00144	51.715	-0.00834	.00402	-0.00081	.00041	1.1092	-.01037	.00002	-.00075	.00042
#2	-0.00085	50.320	.00071	.00392	-0.00108	.00049	1.1038	-.00520	-.00047	-.00096	.00044

Check ?	None	Chk Pass	None	None	None	None	Chk Fail	None	None	None	None
Value							1.0000				
Range							10.490%				

Elem	Cu3247	Fe2714	K_7664	Li6707	Mg2790	Mn2576	Mo2020	Na8183	Ni2316	P_1782	Pb2203
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.00093	49.160	.14691	-0.00021	.02742	-0.00012	-0.00097	255.92	.00127	.00501	-0.00150
Stddev	.00042	.558	.01754	.00200	.00495	.00000	.00011	2.12	.00018	.00383	.00265
%RSD	45.008	1.1358	11.941	963.94	18.058	3.8970	11.443	.82799	14.300	76.421	177.13

#1	.00122	49.555	.13451	-.00162	.03092	-.00012	-.00089	257.42	.00114	.00230	.00038
#2	.00063	48.766	.15932	.00121	.02392	-.00012	-.00104	254.42	.00139	.00772	-.00338

Check ?	None	Chk Pass	None	None	None	None	None	Chk Pass	None	None	None
Value											
Range											

Elem	S_1820	Sb2068	Se1960	Si2881	SiO2	Sn1899	Sr4077	Th2837	Ti3349	Ti1908	U_3701
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	W 5.4230	-0.01424	.00720	-0.00936	-0.02002	.00064	.00071	W 4.7183	.00510	-0.00311	W 10.535
Stddev	.0814	.00039	.00022	.01688	.03611	.00082	.00023	.0030	.00061	.00219	.127
%RSD	1.5006	2.7175	3.0541	180.35	180.35	128.33	32.365	.06362	11.959	70.305	1.2023

#1	5.3655	-.01452	.00704	.00258	.00551	.00006	.00087	4.7204	.00553	-.00156	10.624
#2	5.4805	-.01397	.00735	-.02129	-.04556	.00121	.00055	4.7161	.00466	-.00466	10.445

Check ?	Chk Warn	None	None	None	None	None	None	Chk Warn	None	None	Chk Warn
Value	5.0000							5.0000			10.000
Range	5.0000%							-5.0000%			5.0000%

Elem	V_2924	Zn2062	Zr3391
Units	ppm	ppm	ppm
Avg	.00918	-0.00066	.05647
Stddev	.00014	.00016	.00143
%RSD	1.4888	25.100	2.5314

#1	.00927	-.00054	.05748
#2	.00908	-.00077	.05546

Check ?	None	None	None
Value			
Range			

Int. Std.	Y_2243	Y_3600	Y_3774
Units	Cts/S	Cts/S	Cts/S
Avg	2584.9	40631.	2274.3
Stddev	5.1	495.	13.6
%RSD	.19827	1.2175	.59840

#1	2581.2	40281.	2264.7
#2	2588.5	40981.	2283.9

Sample Name: CCV-3894251 Acquired: 5/19/2016 6:06:53 Type: QC
Method: 6500_025(v6) Mode: CONC Corr. Factor: 1.000000
User: CRHOADES Prep Date: Custom ID2: Custom ID3:
Comment:

Elem	Ag3280	Al1670	As1890	B_2089	Ba4554	Be3130	Bi2230	Ca3179	Cd2288	Co2286	Cr2055
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.49981	F .56369	1.0740	.51090	.50779	.47281	-.00087	4.9753	.50403	.51529	.51894
Stddev	.00018	.00710	.0012	.00062	.00803	.00781	.00477	.0945	.00056	.00656	.00705
%RSD	.03684	1.2587	.10894	.12115	1.5808	1.6509	547.07	1.8991	.11013	1.2734	1.3582
#1	.49994	.55867	1.0748	.51046	.50211	.46729	-.00424	4.9085	.50364	.51993	.52392
#2	.49968	.56870	1.0731	.51133	.51346	.47833	.00250	5.0421	.50443	.51065	.51395
Check ?	Chk Pass	Chk Fail	Chk Pass	Chk Pass	Chk Pass	Chk Pass	None	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Value		.50000									
Range		10.490%									
Elem	Cu3247	Fe2599	K_7664	Li6707	Mg2790	Mn2576	Mo2020	Na5895	Ni2316	P_1782	Pb2203
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.52277	2.3878	49.011	.99493	19.395	.47805	.52370	5.0734	.50634	1.0172	1.0448
Stddev	.00143	.0176	.936	.00644	.045	.00054	.00995	.0623	.00545	.0158	.0104
%RSD	.27437	.73726	1.9097	.64752	.23222	.11347	1.8999	1.2275	1.0769	1.5571	.99404
#1	.52379	2.3754	48.349	.99037	19.427	.47843	.53074	5.0294	.51020	1.0284	1.0521
#2	.52176	2.4003	49.673	.99948	19.363	.47766	.51667	5.1175	.50249	1.0060	1.0375
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Value											
Range											
Elem	S_1820	Sb2068	Se1960	Si2881	SiO2	Sn1899	Sr4077	Th2837	Ti3349	Ti1908	U_3701
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.04314	1.0456	W 1.1029	4.8484	10.376	1.0471	.48453	-.00108	.47440	1.0913	.02697
Stddev	.01642	.0176	.0134	.0624	.133	.0130	.00582	.00091	.00010	.0213	.02254
%RSD	38.070	1.6783	1.2104	1.2864	1.2864	1.2444	1.2018	84.897	.02127	1.9486	83.579
#1	.03153	1.0580	1.1124	4.8043	10.281	1.0563	.48041	-.00043	.47447	1.1063	.01103
#2	.05475	1.0332	1.0935	4.8925	10.470	1.0379	.48864	-.00172	.47433	1.0763	.04290
Check ?	None	Chk Pass	Chk Warn	Chk Pass	Chk Pass	Chk Pass	Chk Pass	None	Chk Pass	Chk Pass	None
Value			1.0000								
Range			10.000%								
Elem	V_2924	Zn2062	Zr3391								
Units	ppm	ppm	ppm								
Avg	.49345	.47195	.51221								
Stddev	.00103	.00106	.00199								
%RSD	.20970	.22408	.38775								
#1	.49418	.47121	.51362								
#2	.49271	.47270	.51081								
Check ?	Chk Pass	Chk Pass	Chk Pass								
Value											
Range											
Int. Std.	Y_2243	Y_3600	Y_3774								
Units	Cts/S	Cts/S	Cts/S								
Avg	2634.8	39746.	2146.9								
Stddev	2.3	36.	103.1								
%RSD	.08892	.09162	4.8030								
#1	2636.5	39720.	2219.8								
#2	2633.2	39771.	2074.0								

Sample Name: CCB Acquired: 5/19/2016 6:09:24 Type: QC
 Method: 6500_025(v6) Mode: CONC Corr. Factor: 1.000000
 User: CRHOADES Prep Date: Custom ID2: Custom ID3:
 Comment:

Elem	Ag3280	Al1670	As1890	B_2089	Ba4554	Be3130	Bi2230	Ca3179	Cd2288	Co2286	Cr2055
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	-.00020	.00125	-.00464	.00327	.00008	.00044	.00040	-.01510	-.00010	-.00022	.00011
Stddev	.00060	.00055	.00594	.00061	.00058	.00025	.00315	.00202	.00033	.00034	.00033
%RSD	299.06	44.144	127.99	18.771	769.29	57.086	787.03	13.402	344.53	150.91	287.96

#1	.00023	.00086	-.00884	.00370	.00049	.00026	-.00183	-.01367	.00014	-.00046	.00035
#2	-.00063	.00164	-.00044	.00284	-.00033	.00062	.00263	-.01653	-.00033	.00001	-.00012

Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit											
Low Limit											

Elem	Cu3247	Fe2599	K_7664	Li6707	Mg2790	Mn2576	Mo2020	Na5895	Ni2316	P_1782	Pb2203
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	-.00061	-.00238	.08715	.00011	.00398	.00002	.00217	.11605	-.00079	.00043	.00002
Stddev	.00078	.00185	.08864	.00277	.00565	.00010	.00026	.02426	.00070	.00233	.00110
%RSD	128.19	77.867	101.70	2594.8	141.92	491.45	11.878	20.906	87.781	545.11	4695.8

#1	-.00006	-.00107	.14983	-.00185	.00798	-.00005	.00198	.13321	-.00030	.00208	-.00075
#2	-.00116	-.00369	.02448	.00207	-.00001	.00009	.00235	.09890	-.00128	-.00122	.00080

Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit											
Low Limit											

Elem	S_1820	Sb2068	Se1960	Si2881	SiO2	Sn1899	Sr4077	Th2837	Ti3349	Ti1908	U_3701
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.03647	W .00820	W .00819	.02316	.04956	.00048	.00036	-.00028	-.00016	.00485	-.01532
Stddev	.00078	.00070	.00059	.00491	.01051	.00026	.00010	.00095	.00057	.00216	.01468
%RSD	2.1467	8.5012	7.2120	21.210	21.210	54.146	28.833	335.93	363.24	44.558	95.812

#1	.03592	.00771	.00777	.02663	.05699	.00030	.00043	-.00096	.00024	.00332	-.00494
#2	.03703	.00870	.00861	.01969	.04213	.00066	.00029	.00039	-.00056	.00638	-.02570

Check ?	Chk Pass	Chk Warn	Chk Warn	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit		.00100	.00750								
Low Limit		-.00100	-.01500								

Elem	V_2924	Zn2062	Zr3391
Units	ppm	ppm	ppm
Avg	.00013	-.00079	.00070
Stddev	.00087	.00042	.00126
%RSD	669.63	53.104	179.39

#1	-.00049	-.00050	-.00019
#2	.00075	-.00109	.00159

Check ?	Chk Pass	Chk Pass	Chk Pass
High Limit			
Low Limit			

Int. Std.	Y_2243	Y_3600	Y_3774
Units	Cts/S	Cts/S	Cts/S
Avg	2609.1	40906.	2170.7
Stddev	7.3	154.	34.4
%RSD	.28070	.37728	1.5869

#1	2614.3	40797.	2195.0
#2	2603.9	41015.	2146.3

Sample Name: CCVL-3897520 Acquired: 5/19/2016 6:11:48 Type: QC
Method: 6500_025(v6) Mode: CONC Corr. Factor: 1.000000
User: CRHOADES Prep Date: Custom ID2: Custom ID3:
Comment:

Elem	Ag3280	Al1670	As1890	B_2089	Ba4554	Be3130	Bi2230	Ca3179	Cd2288	Co2286	Cr2055	Cu3247
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.00892	.11603	.01218	.09951	.00987	.00125	.11335	.19218	.00501	.01025	.01062	.01597
Stddev	.00071	.00177	.00664	.00167	.00055	.00006	.00078	.01089	.00015	.00031	.00030	.00030
%RSD	7.9808	1.5291	54.547	1.6765	5.5654	4.9175	.69016	5.6672	3.0891	3.0644	2.8130	1.8605
#1	.00943	.11728	.00748	.10069	.01025	.00129	.11280	.18448	.00512	.01048	.01083	.01576
#2	.00842	.11478	.01687	.09833	.00948	.00120	.11390	.19988	.00490	.01003	.01041	.01618
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Value												
Range												
Elem	Fe2599	K_7664	Li6707	Mg2790	Mn2576	Mo2020	Na5895	Ni2316	P_1782	Pb2203	S_1820	Sb2068
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.10426	3.0773	.00959	.20447	.00996	.02046	1.1384	.04027	2.9023	.00881	.03094	.01972
Stddev	.00091	.0230	.00330	.00674	.00018	.00061	.0242	.00083	.0276	.00145	.00488	.00182
%RSD	.87229	.74604	34.445	3.2979	1.7610	2.9869	2.1261	2.0726	.95158	16.441	15.762	9.2072
#1	.10361	3.0610	.01193	.19970	.00984	.02003	1.1213	.04086	2.9219	.00983	.03439	.01844
#2	.10490	3.0935	.00726	.20924	.01009	.02090	1.1556	.03968	2.8828	.00779	.02749	.02101
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	None	Chk Pass
Value												
Range												
Elem	Se1960	Si2881	SiO2	Sn1899	Sr4077	Th2837	Ti3349	Ti1908	U_3701	V_2924	Zn2062	Zr3391
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	F .02803	.48169	1.0308	.10493	.01032	.01665	.00902	.01216	F .00838	.00988	.01883	.01897
Stddev	.00002	.03415	.0731	.00034	.00020	.00205	.00010	.00163	.01341	.00041	.00072	.00343
%RSD	.05888	7.0901	7.0901	.32441	1.9428	12.334	1.1356	13.397	160.03	4.1251	3.7986	18.054
#1	.02802	.45754	.97914	.10517	.01018	.01520	.00894	.01332	-.00110	.00959	.01833	.01655
#2	.02804	.50584	1.0825	.10469	.01046	.01811	.00909	.01101	.01787	.01017	.01934	.02140
Check ?	Chk Fail	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Fail	Chk Pass	Chk Pass	Chk Pass
Value	.01500								.06000			
Range	30.000%								-30.000%			
Int. Std.	Y_2243	Y_3600	Y_3774									
Units	Cts/S	Cts/S	Cts/S									
Avg	2630.6	40947.	2165.0									
Stddev	26.9	30.	72.8									
%RSD	1.0220	.07250	3.3614									
#1	2611.6	40926.	2113.5									
#2	2649.6	40968.	2216.5									

Sample Name: CCVL-3897520 Acquired: 5/19/2016 6:11:48 Type: QC
Method: 6500_025(v6) Mode: CONC Corr. Factor: 1.000000
User: CRHOADES Prep Date: Custom ID2: Custom ID3:
Comment:

Elem	Ag3280	Al1670	As1890	B_2089	Ba4554	Be3130	Bi2230	Ca3179	Cd2288	Co2286	Cr2055	Cu3247
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.00892	.11603	.01218	.09951	.00987	.00125	.11335	.19218	.00501	.01025	.01062	.01597
Stddev	.00071	.00177	.00664	.00167	.00055	.00006	.00078	.01089	.00015	.00031	.00030	.00030
%RSD	7.9808	1.5291	54.547	1.6765	5.5654	4.9175	.69016	5.6672	3.0891	3.0644	2.8130	1.8605

#1	.00943	.11728	.00748	.10069	.01025	.00129	.11280	.18448	.00512	.01048	.01083	.01576
#2	.00842	.11478	.01687	.09833	.00948	.00120	.11390	.19988	.00490	.01003	.01041	.01618

Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Value												
Range												

Elem	Fe2599	K_7664	Li6707	Mg2790	Mn2576	Mo2020	Na5895	Ni2316	P_1782	Pb2203	S_1820	Sb2068
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.10426	3.0773	.00959	.20447	.00996	.02046	1.1384	.04027	2.9023	.00881	.03094	.01972
Stddev	.00091	.0230	.00330	.00674	.00018	.00061	.0242	.00083	.0276	.00145	.00488	.00182
%RSD	.87229	.74604	34.445	3.2979	1.7610	2.9869	2.1261	2.0726	.95158	16.441	15.762	9.2072

#1	.10361	3.0610	.01193	.19970	.00984	.02003	1.1213	.04086	2.9219	.00983	.03439	.01844
#2	.10490	3.0935	.00726	.20924	.01009	.02090	1.1556	.03968	2.8828	.00779	.02749	.02101

Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	None	Chk Pass
Value												
Range												

Elem	Se1960	Si2881	SiO2	Sn1899	Sr4077	Th2837	Ti3349	Ti1908	U_3701	V_2924	Zn2062	Zr3391
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	F .02803	.48169	1.0308	.10493	.01032	.01665	.00902	.01216	F .00838	.00988	.01883	.01897
Stddev	.00002	.03415	.0731	.00034	.00020	.00205	.00010	.00163	.01341	.00041	.00072	.00343
%RSD	.05888	7.0901	7.0901	.32441	1.9428	12.334	1.1356	13.397	160.03	4.1251	3.7986	18.054

#1	.02802	.45754	.97914	.10517	.01018	.01520	.00894	.01332	-.00110	.00959	.01833	.01655
#2	.02804	.50584	1.0825	.10469	.01046	.01811	.00909	.01101	.01787	.01017	.01934	.02140

Check ?	Chk Fail	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Fail	Chk Pass	Chk Pass	Chk Pass
Value	.01500								.06000			
Range	30.000%								-30.000%			

Int. Std.	Y_2243	Y_3600	Y_3774
Units	Cts/S	Cts/S	Cts/S
Avg	2630.6	40947.	2165.0
Stddev	26.9	30.	72.8
%RSD	1.0220	.07250	3.3614

#1	2611.6	40926.	2113.5
#2	2649.6	40968.	2216.5

UNIS Batch Number(s):				Filename(s):			
336609 - 0121				Q5A-051826.pdf			
Analyte ¹ : Residue/Bio: 5/14/16							
Matrix (Grid): Water Cold Leachate							
3. Study Items				Yes	No	NA	2 nd Rev
A. Calibration/Instrument: F.A. QC				<input checked="" type="checkbox"/>			
1. Instrument calibrated per lab SOP?				<input checked="" type="checkbox"/>			
2. Reanalysis of Calibration Standards before samples:							
95-105% recovery				<input checked="" type="checkbox"/>			
3. ICB/CCB: run before samples, 10% frequency, & closing							
Result < 1/3 RL (routine)				<input checked="" type="checkbox"/>			
4. ICB/CCV: frequency initial, 10%, & closing							
90-110% recovery, 5% RSD (200.7)				<input checked="" type="checkbox"/>			
95-105% recovery, 3% RSD (200.7)				<input checked="" type="checkbox"/>			
5. ICB/CCV: 70-130% recovery (6010C)				<input checked="" type="checkbox"/>			
6. ICSA/CSAB: run before samples							
ICSA detections for non-analyte > 1/3 RL (< LOD) > 2x MDL for DOD or special project				<input checked="" type="checkbox"/>			
ICSA/CSAB: 10% RSD elements 80-120%				<input checked="" type="checkbox"/>			
If no, list details:							
7. RL level & check standard (1, 2, 3): 50-150% (routine)				<input checked="" type="checkbox"/>			
80-120% recovery (DOD or special projects)				<input checked="" type="checkbox"/>			
8. Client Sample and QC Sample: Results							
1. Sample with target element concentrations > 90% linear range diluted and analyzed? (200.7)				<input checked="" type="checkbox"/>			
2. Were all hits reported from a run with interfering elements < linear range? (1. Flag lines: rated?)				<input checked="" type="checkbox"/>			
3. Internal standard (IS) response \pm 30% of ICB IS?				<input checked="" type="checkbox"/>			
If no, list details:							
C. Preparation/Matrix: LC							
1. Method used:							
one per preparation batch				<input checked="" type="checkbox"/>			
result < 1/3 RL (routine)				<input checked="" type="checkbox"/>			
2. LCS: one per preparation batch 80-120% recovery or historical (routine)				<input checked="" type="checkbox"/>			
85-115% recovery or historical (200.7); project limits (other)				<input checked="" type="checkbox"/>			
3. MS/MSD or MS/Dup for recovery: a pair per batch (routine)				<input checked="" type="checkbox"/>			
a pair per 10 samples (200.7)				<input checked="" type="checkbox"/>			
C. Preparation/Matrix: LC							
4. MS/MSD recovery & RPD: 75-125% recovery or historical (routine)				<input checked="" type="checkbox"/>			
70-130% recovery or historical (200.7)				<input checked="" type="checkbox"/>			
20% RPD				<input checked="" type="checkbox"/>			
project limits (other)				<input checked="" type="checkbox"/>			

Instrument ID (Circle one):				Method (Circle):			
QC Type (Circle): Standard				QC Type (Circle): Standard			
Other				Other			
Circle:	1000	TR	PD	1000	1000	1000	1000
If No, why is data reportable?							

Review Items	Yes	No	NA	2 nd Rev	If/Why is data reportable?
5. If TOLP NS <50% and sample result 80-100% of toxicity characteristic limit, was MSD run? Serial dilution: _____ present for each prep batch (routine) Required if MS/MSD fail (DoQVs) run at 5x dilution of parent sample ≤ 10% difference	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	Comments: □ Sample result < 50 x MDL
7. Post digestion spike: Required if MS/MSD fail (DoQ and 6010C) or by client request 75-125% recovery	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	
D. Raw Data & TALS Data Entry	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	
1. TALS Sample List Tab	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	
a. LIMS Sample ID# / Containers are correct	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	
b. Method and matrix are correct	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	
c. Date and time are correct	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	
d. Dilutions are correct	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	
e. Correct suffix designated; e.g. DU (where applicable)	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	
2. TALS Sample Results Tab	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	
a. All reported analytes are marked Primary or Secondary	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	
b. All unused data are marked Rejected or Accepted. Unused data are clearly identified with reason not used	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	
c. Out of control QC is clearly identified	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	
d. Any data that has a qualifier is reviewed with appropriate action taken (NCM if needed)	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	
e. The attached data file includes the filename, instrument, and analyst initials	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	
3. TALS Worksheet Tab is complete and correct	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	
4. TALS Reagent Tab is complete and correct	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	
5. TALS QC Links Tab is correct	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	
6. TALS Batch Information, Screen documentation is complete	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	
7. TALS Status set to appropriate review level	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	
E. Final Report and NCMs (2 nd level review only)	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	
1. Were all job/project requirements met?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	
2. Results for samples and QC correct on final report?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	
3. Are all necessary scanned documents in TALS?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	
4. NCMs reviewed for applicability, correct references to batches, grammar/typographical errors?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	
5. Raw Data PDF attached as document	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	

Comments: _____

Sample Name: ICIS Acquired: 5/20/2016 14:23:22 Type: Cal
Method: 6500_026(v10) Mode: IR Corr. Factor: 1.000000
User: kellyca Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	Ag3280	Al1670	Al3092	As1890	B_2089	Ba4554	Be3130	Bi2230	Ca3179	Cd2288	Co2286	Cr2055
Units	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S
Avg	-.00165	.00065	.00056	-.00044	.00110	.00060	.00094	-.00124	.00751	.00147	-.00021	.00038
Stddev	.00010	.00004	.00012	.00001	.00002	.00001	.00003	.00033	.00021	.00010	.00003	.00027
%RSD	6.3572	6.8385	21.491	1.9894	2.1043	.86420	3.3840	26.503	2.8318	6.7609	14.816	70.877
#1	-.00172	.00062	.00065	-.00043	.00108	.00060	.00092	-.00101	.00736	.00140	-.00019	.00019
#2	-.00157	.00068	.00048	-.00044	.00111	.00059	.00096	-.00148	.00766	.00154	-.00024	.00058
Elem	Cu3247	Fe2599	Fe2714	K_7664	Li6707	Mg2790	Mn2576	Mo2020	Na5895	Na8183	Ni2316	P_1782
Units	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S
Avg	.00494	.00021	-.00006	-.00134	-.00115	-.00003	.00002	.00017	.00039	-.01235	-.00113	.00016
Stddev	.00014	.00001	.00003	.00098	.00012	.00003	.00004	.00001	.00100	.00030	.00025	.00016
%RSD	2.7667	3.4054	55.662	72.915	10.287	105.42	178.32	4.0689	255.25	2.4133	21.889	100.97
#1	.00484	.00022	-.00008	-.00065	-.00107	-.00005	-.00001	.00017	.00109	-.01214	-.00095	.00027
#2	.00504	.00021	-.00004	-.00203	-.00124	-.00001	.00005	.00018	-.00031	-.01256	-.00130	.00004
Elem	Pb2203	S_1820	Sb2068	Se1960	Si2881	Sn1899	Sr4077	Th2837	Ti3349	Tl1908	U_3701	V_2924
Units	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S
Avg	-.00020	-.00009	.00025	.00020	.00102	.00020	-.00251	-.00066	-.00025	-.00018	-.00007	.00016
Stddev	.00042	.00004	.00034	.00002	.00000	.00024	.00014	.00003	.00007	.00009	.00007	.00004
%RSD	211.06	49.086	132.64	12.385	.33821	117.00	5.5453	4.9960	29.269	49.339	101.02	23.796
#1	.00010	-.00012	.00049	.00018	.00102	.00003	-.00261	-.00063	-.00030	-.00025	-.00012	.00018
#2	-.00050	-.00006	.00002	.00021	.00102	.00037	-.00241	-.00068	-.00020	-.00012	-.00002	.00013
Elem	Zn2062	Zr3391										
Units	Cts/S	Cts/S										
Avg	.00001	-.00073										
Stddev	.00001	.00007										
%RSD	80.326	8.9074										
#1	.00002	-.00078										
#2	.00001	-.00069										
Int. Std.	Y_2243	Y_3600	Y_3774									
Units	Cts/S	Cts/S	Cts/S									
Avg	1585.1	32316.	6123.7									
Stddev	1.0	28.	26.1									
%RSD	.06023	.08696	.42646									
#1	1584.4	32336.	6105.2									
#2	1585.7	32297.	6142.1									

Sample Name: IC1 Acquired: 5/20/2016 14:26:06 Type: Cal
Method: 6500_026(v10) Mode: IR Corr. Factor: 1.000000
User: kellyca Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	Ag3280	Al1670	As1890	B_2089	Ba4554	Be3130	Ca3179	Cd2288	Co2286	Cr2055	Cu3247	Fe2599	K_7664
Units	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S
Avg	.20936	.18764	.11575	.34349	5.9587	4.7804	1.0820	1.5463	.83911	1.0351	.33206	.50041	5.3326
Stddev	.00068	.00021	.00010	.00128	.0159	.0105	.0061	.0035	.00116	.0031	.00346	.00120	.0080
%RSD	.32676	.11373	.08368	.37211	.26637	.21966	.56748	.22584	.13773	.29626	1.0425	.23987	.14968
#1	.20888	.18749	.11568	.34439	5.9699	4.7878	1.0863	1.5487	.83993	1.0373	.32962	.50125	5.3382
#2	.20985	.18779	.11582	.34258	5.9475	4.7730	1.0777	1.5438	.83830	1.0329	.33451	.49956	5.3269
Elem	Li6707	Mg2790	Mn2576	Mo2020	Na5895	Ni2316	P_1782	Pb2203	Sb2068	Se1960	Si2881	Sn1899	Sr4077
Units	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S
Avg	2.8384	.43983	.84900	.57801	1.8291	.58600	.10425	.39227	.23658	.09451	.23421	.27941	10.836
Stddev	.0073	.00286	.00665	.00343	.0034	.00031	.00013	.00008	.00025	.00006	.00029	.00047	.029
%RSD	.25565	.64971	.78381	.59285	.18763	.05248	.12140	.02059	.10592	.06156	.12346	.16947	.26909
#1	2.8435	.43781	.84429	.58044	1.8316	.58622	.10434	.39221	.23640	.09447	.23400	.27974	10.856
#2	2.8332	.44185	.85370	.57559	1.8267	.58578	.10416	.39233	.23676	.09455	.23441	.27907	10.815
Elem	Ti3349	Tl1908	V_2924	Zn2062	Zr3391								
Units	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S								
Avg	.27882	.19676	.14934	.01388	.29042								
Stddev	.00197	.00029	.00145	.00008	.00090								
%RSD	.70638	.14983	.96854	.55690	.30870								
#1	.27743	.19655	.14832	.01383	.29105								
#2	.28021	.19697	.15036	.01394	.28978								
Int. Std.	Y_2243	Y_3600	Y_3774										
Units	Cts/S	Cts/S	Cts/S										
Avg	1542.3	30794.	6195.3										
Stddev	1.5	190.	23.2										
%RSD	.09851	.61648	.37515										
#1	1541.2	30928.	6178.8										
#2	1543.4	30659.	6211.7										

Sample Name: IC2 Acquired: 5/20/2016 14:28:38 Type: Cal
Method: 6500_026(v10) Mode: IR Corr. Factor: 1.000000
User: kellyca Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	Al3092	Bi2230	Fe2714	Na8183	S_1820	Th2837	U_3701
Units	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S
Avg	3.0715	.30247	.50744	2.6449	.44822	.44798	.14026
Stddev	.0000	.00031	.00226	.0010	.00197	.00060	.00036
%RSD	.00094	.10309	.44558	.03730	.43983	.13464	.25467
#1	3.0715	.30269	.50904	2.6442	.44961	.44755	.14001
#2	3.0715	.30225	.50584	2.6456	.44682	.44841	.14051
Int. Std.	Y_2243	Y_3600	Y_3774				
Units	Cts/S	Cts/S	Cts/S				
Avg	1485.6	29818.	6057.2				
Stddev	2.5	5.	16.7				
%RSD	.16679	.01672	.27557				
#1	1483.8	29822.	6045.4				
#2	1487.3	29815.	6069.0				

Sample Name: S1-3900193 Acquired: 5/20/2016 14:31:23 Type: QC
Method: 6500_026(v10) Mode: CONC Corr. Factor: 1.000000
User: kellyca Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	Ag3280	Al1670	As1890	B_2089	Ba4554	Be3130	Bi2230	Ca3179	Cd2288	Co2286	Cr2055	Cu3247	Fe2599
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.99974	1.0172	2.0270	1.0269	1.0064	1.0062	-.00461	9.9915	1.0195	1.0156	1.0136	1.0034	5.0059
Stddev	.00555	.0003	.0035	.0004	.0003	.0037	.00219	.0845	.0011	.0015	.0002	.0052	.0227
%RSD	.55519	.02469	.17289	.03774	.02578	.37019	47.589	.84544	.10352	.14925	.02398	.51868	.45438

#1	1.0037	1.0170	2.0245	1.0266	1.0062	1.0036	-.00616	9.9318	1.0187	1.0167	1.0137	1.0071	4.9898
#2	.99581	1.0174	2.0295	1.0272	1.0066	1.0089	-.00306	10.051	1.0202	1.0146	1.0134	.99974	5.0220

Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	None	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Value													
Range													

Elem	K_7664	Li6707	Mg2790	Mn2576	Mo2020	Na5895	Na8183	Ni2316	P_1782	Pb2203	S_1820	Sb2068	Se1960
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	100.62	2.0185	39.870	.99659	1.0209	10.128	10.304	1.0110	2.0367	2.0303	.01076	2.0553	2.0440
Stddev	.16	.0054	.131	.00071	.0028	.001	.099	.0042	.0076	.0016	.00150	.0071	.0064
%RSD	.15945	.26869	.32805	.07154	.27175	.01367	.96249	.41392	.37086	.07869	13.971	.34343	.31198

#1	100.51	2.0223	39.963	.99609	1.0229	10.127	10.374	1.0140	2.0313	2.0292	.00969	2.0603	2.0485
#2	100.73	2.0146	39.778	.99709	1.0189	10.129	10.234	1.0081	2.0420	2.0314	.01182	2.0503	2.0394

Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	None	Chk Pass	Chk Pass
Value													
Range													

Elem	Si2881	Sn1899	Sr4077	Th2837	Ti3349	Ti1908	U_3701	V_2924	Zn2062	Zr3391
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	10.013	2.0145	1.0035	.00285	.99788	2.0393	.04459	.99762	.99119	1.0094
Stddev	.048	.0009	.0003	.00134	.00093	.0046	.00514	.00139	.00453	.0024
%RSD	.47768	.04592	.03390	47.119	.09341	.22557	11.535	.13954	.45727	.23711

#1	9.9794	2.0138	1.0033	.00190	.99853	2.0360	.04823	.99861	.98798	1.0077
#2	10.047	2.0151	1.0038	.00380	.99722	2.0425	.04095	.99664	.99439	1.0111

Check ?	Chk Pass	Chk Pass	Chk Pass	None	Chk Pass	Chk Pass	None	Chk Pass	Chk Pass	Chk Pass
Value										
Range										

Int. Std.	Y_2243	Y_3600	Y_3774
Units	Cts/S	Cts/S	Cts/S
Avg	1521.1	30958.	6251.0
Stddev	1.3	75.	69.0
%RSD	.08635	.24265	1.1031

#1	1522.0	30905.	6299.8
#2	1520.1	31011.	6202.2

Sample Name: S2-3900194 Acquired: 5/20/2016 14:33:55 Type: QC
Method: 6500_026(v10) Mode: CONC Corr. Factor: 1.000000
User: kellyca Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	Ag3280	Al3092	As1890	B_2089	Ba4554	Be3130	Bi2230	Ca3179	Cd2288	Co2286	Cr2055	Cu3247	Fe2714
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.00088	101.42	-.00028	.00479	.00064	-.00021	2.0422	-.04941	-.00202	.00586	-.00093	.01623	101.08
Stddev	.00065	.30	.00041	.00123	.00012	.00000	.0034	.00352	.00065	.00004	.00018	.00043	.62
%RSD	73.546	.29290	148.18	25.611	18.502	1.0844	.16898	7.1218	32.259	.67934	19.167	2.6720	.60977

#1	.00042	101.21	.00001	.00566	.00072	-.00021	2.0447	-.05190	-.00248	.00584	-.00080	.01592	100.64
#2	.00134	101.63	-.00057	.00393	.00055	-.00020	2.0398	-.04692	-.00156	.00589	-.00105	.01653	101.51

Check ?	None	Chk Pass	None	None	None	None	Chk Pass	None	None	None	None	None	Chk Pass
Value													
Range													

Elem	K_7664	Li6707	Mg2790	Mn2576	Mo2020	Na8183	Ni2316	P_1782	Pb2203	S_1820	Sb2068	Se1960	Si2881
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.14237	.00036	.28771	-.00114	-.00357	508.70	-.00073	.00978	.00188	10.249	.00132	-.00093	-.02771
Stddev	.00292	.00035	.00243	.00015	.00058	1.29	.00042	.00148	.00256	.021	.00116	.00161	.00891
%RSD	2.0526	97.978	.84547	13.522	16.231	.25454	57.405	15.103	135.89	.20748	88.060	173.90	32.149

#1	.14030	.00011	.28599	-.00103	-.00398	507.79	-.00102	.01083	.00369	10.264	.00050	-.00207	-.03401
#2	.14444	.00060	.28943	-.00124	-.00316	509.62	-.00043	.00874	.00007	10.234	.00214	.00021	-.02141

Check ?	None	None	None	None	None	Chk Pass	None	None	None	Chk Pass	None	None	None
Value													
Range													

Elem	Sn1899	Sr4077	Th2837	Ti3349	Tl1908	U_3701	V_2924	Zn2062	Zr3391
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.00751	.00090	10.149	.05208	-.00343	20.415	-.03336	.00998	.00340
Stddev	.00140	.00010	.022	.00027	.00215	.125	.00025	.00114	.00221
%RSD	18.623	11.077	.21944	.52721	62.596	.61345	.75681	11.449	64.913

#1	.00849	.00097	10.165	.05228	-.00495	20.504	-.03318	.00917	.00184
#2	.00652	.00083	10.133	.05189	-.00191	20.327	-.03354	.01079	.00496

Check ?	None	None	Chk Pass	None	None	Chk Pass	None	None	None
Value									
Range									

Int. Std.	Y_2243	Y_3600	Y_3774
Units	Cts/S	Cts/S	Cts/S
Avg	1483.1	29819.	6088.3
Stddev	1.4	7.	59.7
%RSD	.09616	.02229	.98080

#1	1484.1	29823.	6130.5
#2	1482.1	29814.	6046.0

Sample Name: icvh-3897651 Acquired: 5/20/2016 14:37:02 Type: QC
Method: 6500_026(v10) Mode: CONC Corr. Factor: 1.000000
User: kellyca Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	Ag3280	Al3092	As1890	B_2089	Ba4554	Be3130	Bi2230	Ca3179	Cd2288	Co2286	Cr2055	Cu3247	Fe2714
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.00020	40.013	-.00405	.00081	.00055	-.00022	.50587	-.03412	-.00058	.00119	-.00007	.00390	80.150
Stddev	.00015	.143	.00113	.00048	.00011	.00005	.00434	.00052	.00033	.00001	.00012	.00023	.206
%RSD	77.132	.35811	27.839	59.561	20.583	22.121	.85862	1.5144	57.250	1.0335	186.94	5.8820	.25725

#1	.00030	39.912	-.00325	.00115	.00063	-.00018	.50894	-.03375	-.00082	.00120	.00002	.00406	80.004
#2	.00009	40.115	-.00485	.00047	.00047	-.00025	.50280	-.03448	-.00035	.00118	-.00015	.00374	80.295

Check ?	None	Chk Pass	None	None	None	None	Chk Pass	None	None	None	None	None	Chk Pass
Value													
Range													

Elem	K_7664	Li6707	Mg2790	Mn2576	Mo2020	Na8183	Ni2316	P_1782	Pb2203	S_1820	Sb2068	Se1960	Si2881
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.00058	-.00048	.07495	-.00127	-.00149	41.191	-.00053	.00213	-.00398	3.8579	-.00003	.00363	-.00787
Stddev	.01488	.00017	.00330	.00004	.00051	.007	.00007	.00044	.00278	.0004	.00118	.00094	.00092
%RSD	2569.3	36.134	4.4042	3.0184	34.544	.01662	13.845	20.779	69.705	.01158	4547.0	26.027	11.631

#1	-.00995	-.00060	.07728	-.00125	-.00185	41.196	-.00048	.00244	-.00594	3.8576	-.00086	.00429	-.00722
#2	.01110	-.00036	.07261	-.00130	-.00112	41.186	-.00058	.00182	-.00202	3.8582	.00081	.00296	-.00852

Check ?	None	None	None	None	None	Chk Pass	None	None	None	Chk Pass	None	None	None
Value													
Range													

Elem	Sn1899	Sr4077	Th2837	Ti3349	Ti1908	U_3701	V_2924	Zn2062	Zr3391
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.00299	.00016	3.0168	.01636	-.00267	5.2157	-.00738	-.00156	.00123
Stddev	.00014	.00003	.0142	.00019	.00154	.0065	.00065	.00001	.00020
%RSD	4.7087	16.394	.46979	1.1580	57.875	.12521	8.8059	.73869	15.997

#1	.00309	.00018	3.0268	.01649	-.00158	5.2111	-.00692	-.00155	.00109
#2	.00290	.00014	3.0068	.01622	-.00376	5.2203	-.00784	-.00157	.00137

Check ?	None	None	Chk Pass	None	None	Chk Pass	None	None	None
Value									
Range									

Int. Std.	Y_2243	Y_3600	Y_3774
Units	Cts/S	Cts/S	Cts/S
Avg	1574.0	31828.	6177.9
Stddev	.8	4.	3.1
%RSD	.05193	.01239	.05093

#1	1574.6	31831.	6175.7
#2	1573.4	31825.	6180.2

Sample Name: icv-3897847 Acquired: 5/20/2016 14:41:16 Type: QC
Method: 6500_026(v10) Mode: CONC Corr. Factor: 1.000000
User: kellyca Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	Ag3280	Al1670	As1890	B_2089	Ba4554	Be3130	Bi2230	Ca3179	Cd2288	Co2286	Cr2055	Cu3247
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.24834	W .26471	.25458	.25623	.25301	.25323	.00158	2.0388	.25280	.25464	.25644	.24917
Stddev	.00053	.00061	.00325	.00041	.00060	.00056	.00006	.0128	.00087	.00096	.00035	.00131
%RSD	.21463	.22982	1.2749	.16147	.23864	.22137	3.5144	.62838	.34317	.37801	.13654	.52416

#1	.24872	.26514	.25228	.25594	.25259	.25284	.00154	2.0297	.25341	.25532	.25668	.25009
#2	.24796	.26428	.25687	.25653	.25344	.25363	.00162	2.0478	.25219	.25396	.25619	.24824

Check ?	Chk Pass	Chk Warn	Chk Pass	Chk Pass	Chk Pass	Chk Pass	None	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Value		.25000										
Range		5.0000%										

Elem	Fe2599	K_7664	Li6707	Mg2790	Mn2576	Mo2020	Na5895	Ni2316	P_1782	Pb2203	S_1820	Sb2068
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.26005	20.253	.25368	10.123	.25559	.25266	2.0501	.25885	2.0051	.26065	.00323	.25826
Stddev	.00244	.132	.00015	.032	.00059	.00123	.0196	.00205	.0143	.00029	.00030	.00074
%RSD	.93915	.65006	.05980	.31968	.22931	.48798	.95781	.79336	.71346	.11315	9.3401	.28582

#1	.25832	20.159	.25358	10.146	.25600	.25353	2.0362	.26030	2.0152	.26044	.00301	.25774
#2	.26177	20.346	.25379	10.100	.25517	.25179	2.0639	.25740	1.9950	.26086	.00344	.25878

Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	None	Chk Pass
Value												
Range												

Elem	Se1960	Si2881	Sn1899	Sr4077	Th2837	Ti3349	Ti1908	U_3701	V_2924	Zn2062	Zr3391
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.51202	2.0622	.50634	.25067	-.00308	.24492	W .52935	.03010	.24778	.25023	.25112
Stddev	.00743	.0182	.00038	.00080	.00079	.00027	.00172	.00009	.00022	.00085	.00052
%RSD	1.4516	.88166	.07574	.32098	25.812	.11059	.32526	.29450	.08765	.33841	.20834

#1	.51728	2.0493	.50607	.25010	-.00252	.24511	.52813	.03004	.24763	.25082	.25149
#2	.50677	2.0750	.50661	.25124	-.00364	.24472	.53057	.03016	.24793	.24963	.25075

Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	None	Chk Pass	Chk Warn	None	Chk Pass	Chk Pass	Chk Pass
Value							.50000				
Range							5.0000%				

Int. Std.	Y_2243	Y_3600	Y_3774
Units	Cts/S	Cts/S	Cts/S
Avg	1577.6	32179.	6163.3
Stddev	2.7	9.	14.7
%RSD	.16946	.02818	.23779

#1	1575.7	32173.	6153.0
#2	1579.5	32185.	6173.7

Sample Name: icvl-3903059 Acquired: 5/20/2016 14:45:21 Type: QC
Method: 6500_026(v10) Mode: CONC Corr. Factor: 1.000000
User: kellyca Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	Ag3280	Al1670	As1890	B_2089	Ba4554	Be3130	Bi2230	Ca3179	Cd2288	Co2286	Cr2055	Cu3247
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.01009	.10544	F .00798	.10254	.01010	.00092	.10922	.19929	.00511	.01019	.01035	.01450
Stddev	.00074	.00086	.00137	.00067	.00006	.00011	.00050	.00169	.00009	.00005	.00017	.00005
%RSD	7.3641	.81280	17.167	.64898	.64067	11.829	.45490	.84812	1.6730	.52690	1.6261	.35445

#1	.01062	.10483	.00895	.10207	.01015	.00085	.10957	.19809	.00517	.01022	.01047	.01446
#2	.00957	.10604	.00701	.10301	.01006	.00100	.10886	.20048	.00505	.01015	.01023	.01453

Check ?	Chk Pass	Chk Pass	Chk Fail	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Value			.01500									
Range			-30.000%									

Elem	Fe2599	K_7664	Li6707	Mg2790	Mn2576	Mo2020	Na5895	Ni2316	P_1782	Pb2203	S_1820	Sb2068
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.10705	3.0080	.00841	.20665	.01014	.02053	1.0113	.04119	2.9155	.00874	.00277	.02179
Stddev	.00116	.0610	.00002	.00175	.00011	.00028	.0014	.00027	.0108	.00143	.00015	.00115
%RSD	1.0858	2.0291	.22974	.84557	1.1055	1.3668	.13519	.64841	.37067	16.339	5.2628	5.2614

#1	.10787	2.9648	.00840	.20541	.01022	.02033	1.0103	.04138	2.9231	.00773	.00287	.02260
#2	.10622	3.0511	.00843	.20789	.01006	.02073	1.0123	.04101	2.9078	.00975	.00267	.02098

Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	None	Chk Pass
Value												
Range												

Elem	Se1960	Si2881	Sn1899	Sr4077	Th2837	Ti3349	Ti1908	U_3701	V_2924	Zn2062	Zr3391
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.01169	.48952	.10344	.00982	.01095	.00997	.01493	F .07852	.00928	.02022	.01702
Stddev	.00054	.00134	.00040	.00003	.00107	.00031	.00021	.01633	.00027	.00023	.00178
%RSD	4.6552	.27304	.38802	.26823	9.8076	3.0604	1.3809	20.802	2.9242	1.1327	10.466

#1	.01207	.48857	.10316	.00980	.01019	.00976	.01479	.06697	.00909	.02039	.01576
#2	.01130	.49046	.10373	.00983	.01171	.01019	.01508	.09007	.00947	.02006	.01828

Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Fail	Chk Pass	Chk Pass	Chk Pass
Value								.06000			
Range								30.000%			

Int. Std.	Y_2243	Y_3600	Y_3774
Units	Cts/S	Cts/S	Cts/S
Avg	1598.7	32600.	6109.6
Stddev	2.7	48.	7.0
%RSD	.17126	.14721	.11480

#1	1600.6	32634.	6114.6
#2	1596.8	32566.	6104.7

Sample Name: ccvh-3900196 Acquired: 5/20/2016 14:56:53 Type: QC
Method: 6500_026(v10) Mode: CONC Corr. Factor: 1.000000
User: kellyca Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	Ag3280	Al3092	As1890	B_2089	Ba4554	Be3130	Bi2230	Ca3179	Cd2288	Co2286	Cr2055	Cu3247	Fe2714
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.00036	50.179	-.00102	.00132	.00017	-.00036	1.0078	-.06033	-.00131	.00306	-.00037	.00801	50.219
Stddev	.00087	.363	.00481	.00030	.00001	.00008	.0083	.00613	.00005	.00025	.00029	.00008	.685
%RSD	242.06	.72274	469.99	22.453	5.3906	21.610	.82143	10.154	4.1319	8.1014	78.049	.99505	1.3636

#1	-.00026	50.435	-.00442	.00153	.00018	-.00042	1.0020	-.06466	-.00127	.00288	-.00016	.00807	50.703
#2	.00097	49.922	.00238	.00111	.00016	-.00031	1.0137	-.05600	-.00134	.00323	-.00057	.00795	49.735

Check ?	None	Chk Pass	None	None	None	None	Chk Pass	None	None	None	None	None	Chk Pass
Value													
Range													

Elem	K_7664	Li6707	Mg2790	Mn2576	Mo2020	Na8183	Ni2316	P_1782	Pb2203	S_1820	Sb2068	Se1960	Si2881
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.00884	.00065	.14626	-.00072	-.00233	255.83	-.00018	.00122	.00077	4.9216	.00059	.00088	-.00056
Stddev	.03668	.00045	.00357	.00005	.00039	1.97	.00049	.00108	.00226	.0201	.00011	.00840	.00261
%RSD	414.99	69.277	2.4394	7.4993	16.778	.77099	274.14	88.391	291.79	.40821	18.605	955.01	469.51

#1	.03477	.00033	.14374	-.00068	-.00205	257.23	.00017	.00046	.00237	4.9073	.00051	-.00506	.00129
#2	-.01710	.00097	.14878	-.00075	-.00260	254.44	-.00053	.00198	-.00082	4.9358	.00066	.00682	-.00240

Check ?	None	None	None	None	None	Chk Pass	None	None	None	Chk Pass	None	None	None
Value													
Range													

Elem	Sn1899	Sr4077	Th2837	Ti3349	Ti1908	U_3701	V_2924	Zn2062	Zr3391
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.00241	.00028	5.0074	.02540	-.00297	10.255	-.01635	-.00217	-.00194
Stddev	.00188	.00004	.0063	.00026	.00180	.095	.00053	.00131	.00158
%RSD	78.003	14.937	.12688	1.0217	60.456	.93039	3.2262	60.372	81.351

#1	.00108	.00031	5.0119	.02522	-.00170	10.322	-.01598	-.00310	-.00082
#2	.00374	.00025	5.0029	.02558	-.00424	10.187	-.01672	-.00124	-.00306

Check ?	None	None	Chk Pass	None	None	Chk Pass	None	None	None
Value									
Range									

Int. Std.	Y_2243	Y_3600	Y_3774
Units	Cts/S	Cts/S	Cts/S
Avg	1529.7	30480.	6003.3
Stddev	4.7	31.	33.4
%RSD	.30683	.10123	.55571

#1	1533.0	30502.	5979.7
#2	1526.4	30458.	6026.9

Sample Name: ccv-3900195 Acquired: 5/20/2016 14:59:40 Type: QC
Method: 6500_026(v10) Mode: CONC Corr. Factor: 1.000000
User: kellyca Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	Ag3280	Al1670	As1890	B_2089	Ba4554	Be3130	Bi2230	Ca3179	Cd2288	Co2286	Cr2055	Cu3247	Fe2599
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.49416	.51758	1.0086	.51661	.50118	.50384	-.00204	5.0917	.50840	.51229	.50617	.49907	2.5514
Stddev	.00502	.00268	.0034	.00254	.00101	.00113	.00490	.0072	.00092	.00035	.00144	.00146	.0097
%RSD	1.0164	.51694	.33443	.49217	.20089	.22486	240.51	.14115	.18188	.06808	.28503	.29304	.38078

#1	.49772	.51947	1.0110	.51840	.50047	.50304	.00143	5.0866	.50905	.51254	.50719	.50010	2.5446
#2	.49061	.51569	1.0062	.51481	.50189	.50464	-.00551	5.0968	.50775	.51205	.50515	.49803	2.5583

Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	None	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Value													
Range													

Elem	K_7664	Li6707	Mg2790	Mn2576	Mo2020	Na5895	Ni2316	P_1782	Pb2203	S_1820	Sb2068	Se1960	Si2881
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	50.233	1.0036	20.030	.50707	.51228	5.0664	.51169	.99912	1.0291	.01564	1.0303	1.0176	5.0892
Stddev	.148	.0015	.081	.00373	.00055	.0029	.00118	.00577	.0040	.00309	.0020	.0006	.0609
%RSD	.29557	.14643	.40233	.73590	.10805	.05723	.23074	.57714	.38347	19.767	.19308	.05837	1.1977

#1	50.128	1.0026	20.087	.50971	.51267	5.0685	.51253	.99505	1.0319	.01345	1.0317	1.0172	5.0461
#2	50.338	1.0046	19.973	.50443	.51189	5.0644	.51086	1.0032	1.0263	.01783	1.0289	1.0180	5.1323

Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	None	Chk Pass	Chk Pass	Chk Pass
Value													
Range													

Elem	Sn1899	Sr4077	Th2837	Ti3349	Ti1908	U_3701	V_2924	Zn2062	Zr3391
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	1.0139	.49551	.00138	.49558	1.0470	.01466	.49653	.50366	.50339
Stddev	.0057	.00010	.00202	.00236	.0041	.02154	.00623	.00093	.00233
%RSD	.55975	.02021	145.95	.47577	.39086	146.91	1.2540	.18469	.46364

#1	1.0179	.49544	-.00004	.49725	1.0499	.02989	.50093	.50431	.50174
#2	1.0099	.49558	.00281	.49391	1.0442	-.00057	.49213	.50300	.50504

Check ?	Chk Pass	Chk Pass	None	Chk Pass	Chk Pass	None	Chk Pass	Chk Pass	Chk Pass
Value									
Range									

Int. Std.	Y_2243	Y_3600	Y_3774
Units	Cts/S	Cts/S	Cts/S
Avg	1555.5	31470.	6080.9
Stddev	.9	241.	3.7
%RSD	.05949	.76710	.06015

#1	1554.8	31299.	6078.3
#2	1556.1	31640.	6083.5

Sample Name: ICB Acquired: 5/20/2016 15:02:15 Type: QC
Method: 6500_026(v10) Mode: CONC Corr. Factor: 1.000000
User: kellyca Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	Ag3280	Al1670	As1890	B_2089	Ba4554	Be3130	Bi2230	Ca3179	Cd2288	Co2286	Cr2055
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.00004	-.00085	W -.00624	.00108	-.00003	-.00006	.00005	.00106	.00015	-.00010	-.00001
Stddev	.00028	.00019	.00701	.00092	.00018	.00001	.00243	.00011	.00021	.00003	.00001
%RSD	704.64	22.826	112.44	84.991	591.67	11.263	5130.2	10.232	135.07	30.227	108.86

#1	.00023	-.00071	-.00128	.00043	-.00015	-.00006	.00177	.00098	.00001	-.00008	-.00002
#2	-.00016	-.00098	-.01119	.00173	.00009	-.00007	-.00167	.00113	.00030	-.00012	-.00000

Check ?	Chk Pass	Chk Pass	Chk Warn	Chk Pass	Chk Pass	Chk Pass	None	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit			.00440								
Low Limit			-.00440								

Elem	Cu3247	Fe2599	K_7664	Li6707	Mg2790	Mn2576	Mo2020	Na5895	Ni2316	P_1782	Pb2203
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	-.00040	.00953	-.01555	-.00052	.00471	.00013	.00047	.00225	-.00008	-.00172	.00117
Stddev	.00010	.00067	.01796	.00025	.00105	.00001	.00001	.00551	.00012	.00017	.00018
%RSD	23.931	7.0007	115.54	47.964	22.377	6.0452	1.2379	245.08	144.36	10.020	15.123

#1	-.00033	.01000	-.02825	-.00034	.00396	.00012	.00047	.00614	.00000	-.00160	.00105
#2	-.00046	.00906	-.00285	-.00070	.00545	.00013	.00047	-.00165	-.00016	-.00184	.00130

Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit											
Low Limit											

Elem	S_1820	Sb2068	Se1960	Si2881	Sn1899	Sr4077	Th2837	Ti3349	Ti1908	U_3701	V_2924
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.00495	.00026	-.00372	.00735	.00052	.00002	-.00041	.00031	-.00070	.00840	.00044
Stddev	.00030	.00067	.00563	.00692	.00018	.00000	.00170	.00006	.00030	.00145	.00006
%RSD	6.0360	257.73	151.25	94.040	33.448	5.7937	414.37	18.058	42.267	17.293	13.654

#1	.00516	.00073	.00026	.01225	.00065	.00002	-.00162	.00027	-.00091	.00943	.00039
#2	.00474	-.00021	-.00771	.00246	.00040	.00002	.00079	.00034	-.00049	.00737	.00048

Check ?	None	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit											
Low Limit											

Elem	Zn2062	Zr3391
Units	ppm	ppm
Avg	.00029	.00127
Stddev	.00032	.00049
%RSD	111.21	38.747

#1	.00006	.00092
#2	.00051	.00162

Check ?	Chk Pass	Chk Pass
High Limit		
Low Limit		

Int. Std.	Y_2243	Y_3600	Y_3774
Units	Cts/S	Cts/S	Cts/S
Avg	1558.4	32362.	6174.6
Stddev	2.5	73.	13.9
%RSD	.16264	.22539	.22553

#1	1560.2	32311.	6164.7
#2	1556.6	32414.	6184.4

Sample Name: cri-3903063 Acquired: 5/20/2016 15:05:00 Type: QC
Method: 6500_026(v10) Mode: CONC Corr. Factor: 1.000000
User: kellyca Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	Ag3280	Al1670	As1890	B_2089	Ba4554	Be3130	Bi2230	Ca3179	Cd2288	Co2286	Cr2055	Cu3247
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.00948	.11376	W .00565	.11124	.00537	.00096	.11889	.21999	.00545	.00513	.01121	.01059
Stddev	.00081	.00151	.00123	.00065	.00009	.00003	.00026	.00038	.00030	.00031	.00013	.00003
%RSD	8.5723	1.3243	21.722	.58743	1.6831	3.4083	.21887	.17225	5.5388	5.9705	1.1971	.26900
#1	.00890	.11270	.00478	.11171	.00544	.00098	.11871	.22026	.00524	.00535	.01130	.01057
#2	.01005	.11483	.00652	.11078	.00531	.00094	.11907	.21973	.00567	.00492	.01111	.01061
Check ?	Chk Pass	Chk Pass	Chk Warn	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Value			.01000									
Range			-20.000%									
Elem	Fe2599	K_7664	Li6707	Mg2790	Mn2576	Mo2020	Na5895	Ni2316	P_1782	Pb2203	S_1820	Sb2068
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.03582	1.0723	.01017	.22272	.00328	.01041	1.0975	.01176	1.0582	W .00429	.10692	.01048
Stddev	.00038	.0234	.00105	.00290	.00002	.00005	.0124	.00023	.0095	.00161	.00195	.00081
%RSD	1.0554	2.1805	10.341	1.3027	.57173	.44310	1.1258	1.9424	.89478	37.459	1.8224	7.7264
#1	.03556	1.0888	.01092	.22067	.00330	.01038	1.1063	.01192	1.0649	.00315	.10830	.01105
#2	.03609	1.0557	.00943	.22478	.00327	.01044	1.0888	.01160	1.0515	.00542	.10555	.00991
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Warn	None	Chk Pass
Value										.00300		
Range										20.000%		
Elem	Se1960	Si2881	Sn1899	Sr4077	Th2837	Ti3349	Ti1908	U_3701	V_2924	Zn2062	Zr3391	
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	
Avg	.00857	.49124	.02084	.00533	.01134	.00993	.01054	F .10898	.00986	.01033	.01028	
Stddev	.00319	.00001	.00042	.00010	.00156	.00027	.00053	.00796	.00073	.00083	.00024	
%RSD	37.227	.00243	1.9962	1.9673	13.775	2.7297	5.0570	7.3070	7.4420	8.0114	2.3772	
#1	.00631	.49124	.02055	.00540	.01023	.01012	.01016	.11461	.00934	.00974	.01045	
#2	.01082	.49125	.02114	.00525	.01244	.00973	.01092	.10335	.01038	.01091	.01010	
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Fail	Chk Pass	Chk Pass	Chk Pass	
Value								.06000				
Range								50.000%				
Int. Std.	Y_2243	Y_3600	Y_3774									
Units	Cts/S	Cts/S	Cts/S									
Avg	1587.5	32851.	6214.0									
Stddev	.5	89.	42.5									
%RSD	.02988	.27098	.68367									
#1	1587.1	32914.	6183.9									
#2	1587.8	32789.	6244.0									

Sample Name: icsa-3894254 Acquired: 5/20/2016 15:08:31 Type: QC
Method: 6500_026(v10) Mode: CONC Corr. Factor: 1.000000
User: kellyca Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	Ag3280	Al3092	As1890	B_2089	Ba4554	Be3130	Bi2230	Ca3179	Cd2288	Co2286	Cr2055
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	-.00047	508.74	F -.01656	W -.00159	-.00009	-.00011	.00785	469.13	W .00065	-.00025	.00087
Stddev	.00103	.97	.00285	.00048	.00004	.00001	.00218	3.41	.00029	.00030	.00011
%RSD	216.00	.19116	17.225	30.367	40.955	12.326	27.750	.72781	44.547	121.63	12.115
#1	.00025	509.42	-.01454	-.00125	-.00007	-.00010	.00631	471.55	.00044	-.00003	.00094
#2	-.00120	508.05	-.01858	-.00193	-.00012	-.00012	.00939	466.72	.00085	-.00046	.00079
Check ?	Chk Pass	Chk Pass	Chk Fail	Chk Warn	Chk Pass	Chk Pass	None	Chk Pass	Chk Warn	Chk Pass	Chk Pass
High Limit			.00880	.00156					.00045		
Low Limit			-.00880	-.00156					-.00045		
Elem	Cu3247	Fe2714	K_7664	Li6707	Mg2790	Mn2576	Mo2020	Na5895	Ni2316	P_1782	Pb2203
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	W .00248	181.66	-.01376	W .00284	516.28	W -.00032	-.00189	.03720	-.00092	-.00563	F -.01218
Stddev	.00008	.30	.00382	.00019	1.03	.00001	.00067	.00037	.00004	.00148	.00052
%RSD	3.0626	.16242	27.730	6.6983	.20007	3.1550	35.577	.98437	3.9753	26.381	4.2779
#1	.00242	181.86	-.01646	.00271	515.55	-.00032	-.00237	.03694	-.00095	-.00668	-.01255
#2	.00253	181.45	-.01107	.00298	517.01	-.00031	-.00141	.03746	-.00090	-.00458	-.01182
Check ?	Chk Warn	Chk Pass	Chk Pass	Chk Warn	Chk Pass	Chk Warn	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Fail
High Limit	.00136			.00261		.00025					.00522
Low Limit	-.00136			-.00261		-.00025					-.00522
Elem	S_1820	Sb2068	Se1960	Si2881	Sn1899	Sr4077	Th2837	Ti3349	Ti1908	U_3701	V_2924
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	-.05005	F .00863	W .00509	.01146	W .00799	F .00409	F -.01371	F .00153	.00217	-.18776	F .00574
Stddev	.00149	.00252	.00088	.01654	.00237	.00001	.00027	.00034	.00220	.00764	.00031
%RSD	2.9755	29.193	17.367	144.41	29.590	.26981	1.9591	22.381	101.39	4.0698	5.3414
#1	-.05110	.00685	.00447	.02316	.00967	.00408	-.01352	.00129	.00061	-.18236	.00596
#2	-.04900	.01041	.00572	-.00024	.00632	.00410	-.01390	.00177	.00372	-.19316	.00553
Check ?	None	Chk Fail	Chk Warn	Chk Pass	Chk Warn	Chk Fail	Chk Fail	Chk Fail	Chk Pass	None	Chk Fail
High Limit		.00628	.00486		.00583	.00060	.01000	.00119			.00222
Low Limit		-.00628	-.00486		-.00583	-.00060	-.01000	-.00119			-.00222
Elem	Zn2062	Zr3391									
Units	ppm	ppm									
Avg	-.00190	.00101									
Stddev	.00143	.00121									
%RSD	75.217	120.38									
#1	-.00089	.00015									
#2	-.00291	.00186									
Check ?	Chk Pass	Chk Pass									
High Limit											
Low Limit											
Int. Std.	Y_2243	Y_3600	Y_3774								
Units	Cts/S	Cts/S	Cts/S								
Avg	1388.7	27327.	6226.0								
Stddev	2.1	70.	10.1								
%RSD	.15272	.25458	.16265								
#1	1387.2	27376.	6218.8								
#2	1390.2	27278.	6233.1								

Sample Name: icsab-3900166 Acquired: 5/20/2016 15:13:01 Type: QC
Method: 6500_026(v10) Mode: CONC Corr. Factor: 1.000000
User: kellyca Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	Ag3280	Al3092	As1890	B_2089	Ba4554	Be3130	Bi2230	Ca3179	Cd2288	Co2286	Cr2055	Cu3247
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	1.1321	504.34	2.1045	2.0139	.49423	.48608	1.1009	467.85	1.0902	.47452	.49517	.56237
Stddev	.0015	.31	.0125	.0057	.00046	.00059	.0015	1.05	.0014	.00044	.00034	.00031
%RSD	.13442	.06109	.59373	.28550	.09262	.12066	.13775	.22369	.13142	.09211	.06883	.05594

#1	1.1311	504.13	2.0957	2.0099	.49390	.48567	1.0998	467.11	1.0912	.47483	.49541	.56260
#2	1.1332	504.56	2.1134	2.0180	.49455	.48650	1.1020	468.59	1.0892	.47421	.49493	.56215

Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Value												
Range												

Elem	Fe2714	K_7664	Li6707	Mg2790	Mn2576	Mo2020	Na8183	Ni2316	P_1782	Pb2203	S_1820	Sb2068
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	180.98	51.677	1.0295	509.54	.50227	.98035	50.950	.94276	2.0524	.95961	F 10.354	1.0749
Stddev	.12	.072	.0002	.20	.00105	.00081	.184	.00076	.0123	.00641	.001	.0020
%RSD	.06873	.13989	.02078	.03852	.20946	.08280	.36060	.08013	.59929	.66848	.01161	.18549

#1	181.06	51.728	1.0297	509.40	.50153	.98092	50.820	.94330	2.0437	.96415	10.355	1.0763
#2	180.89	51.626	1.0294	509.68	.50302	.97977	51.080	.94223	2.0611	.95508	10.353	1.0735

Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Fail	Chk Pass
Value											1.0000	
Range											20.000%	

Elem	Se1960	Si2881	Sn1899	Sr4077	Th2837	Ti3349	Ti1908	U_3701	V_2924	Zn2062	Zr3391
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	5.1486	10.053	9.3084	.94891	2.0259	1.0121	8.6907	-.16488	.50071	.96856	.98357
Stddev	.0081	.056	.0092	.00034	.0027	.0020	.0084	.01810	.00041	.00038	.00057
%RSD	.15807	.56099	.09852	.03612	.13533	.20197	.09674	10.978	.08097	.03878	.05803

#1	5.1428	10.093	9.3149	.94867	2.0278	1.0135	8.6966	-.17768	.50099	.96882	.98317
#2	5.1544	10.013	9.3019	.94915	2.0239	1.0106	8.6847	-.15208	.50042	.96829	.98398

Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	None	Chk Pass	Chk Pass	Chk Pass
Value											
Range											

Int. Std.	Y_2243	Y_3600	Y_3774
Units	Cts/S	Cts/S	Cts/S
Avg	1370.1	26942.	6075.4
Stddev	2.3	19.	14.5
%RSD	.17087	.07130	.23871

#1	1368.5	26956.	6065.1
#2	1371.8	26928.	6085.6

Sample Name: Ira-3900165 Acquired: 5/20/2016 15:18:19 Type: QC
Method: 6500_026(v10) Mode: CONC Corr. Factor: 1.000000
User: kellyca Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	Ag3280	Al1670	As1890	B_2089	Ba4554	Be3130	Bi2230	Ca3179	Cd2288	Co2286	Cr2055	Cu3247	Fe2714
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.00026	.08416	10.023	10.007	12.003	.00014	.00587	.03887	2.0138	5.0331	10.116	10.236	491.09
Stddev	.00049	.00266	.009	.012	.007	.00001	.00235	.00565	.0008	.0018	.003	.054	2.24
%RSD	189.77	3.1565	.08910	.12418	.05661	3.7533	39.994	14.529	.04228	.03499	.02840	.52856	.45578

#1	.00061	.08229	10.029	10.016	12.007	.00015	.00753	.04286	2.0144	5.0318	10.114	10.274	492.67
#2	-.00009	.08604	10.017	9.9983	11.998	.00014	.00421	.03488	2.0132	5.0343	10.118	10.198	489.51

Check ?	None	None	Chk Pass	Chk Pass	Chk Pass	None	None	None	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Value													
Range													

Elem	K_7664	Li6707	Mg2790	Mn2576	Mo2020	Na5895	Ni2316	P_1782	Pb2203	S_1820	Sb2068	Se1960	Si2881
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	-.05415	-.00097	-.02164	9.7049	5.2196	.04149	10.088	-.02014	10.093	.01611	-.01349	5.0088	48.559
Stddev	.00777	.00094	.00824	.0152	.0052	.00028	.006	.00915	.004	.00213	.00110	.0046	.238
%RSD	14.348	97.161	38.098	.15692	.09994	.66310	.06271	45.413	.04010	13.241	8.1390	.09139	.48971

#1	-.04866	-.00163	-.01581	9.7157	5.2159	.04130	10.084	-.01367	10.095	.01761	-.01271	5.0120	48.391
#2	-.05964	-.00030	-.02747	9.6941	5.2233	.04169	10.092	-.02661	10.090	.01460	-.01427	5.0055	48.727

Check ?	None	None	None	Chk Pass	None	None	Chk Pass	None	Chk Pass	None	None	None	None
Value													
Range													

Elem	Sn1899	Sr4077	Th2837	Ti3349	Tl1908	U_3701	V_2924	Zn2062	Zr3391
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	-.00659	9.7510	-.01918	9.6068	4.9079	-.36830	9.7540	9.5605	.00235
Stddev	.00133	.1626	.00095	.0261	.0049	.00254	.0411	.0070	.00058
%RSD	20.158	1.6674	4.9330	.27160	.09889	.68845	.42159	.07371	24.804

#1	-.00565	9.8660	-.01985	9.6252	4.9113	-.36651	9.7831	9.5654	.00276
#2	-.00753	9.6361	-.01851	9.5883	4.9045	-.37009	9.7249	9.5555	.00194

Check ?	None	Chk Pass	None	Chk Pass	None	None	Chk Pass	Chk Pass	None
Value									
Range									

Int. Std.	Y_2243	Y_3600	Y_3774
Units	Cts/S	Cts/S	Cts/S
Avg	1516.5	31625.	6218.5
Stddev	.4	32.	37.1
%RSD	.02872	.10192	.59633

#1	1516.8	31602.	6192.3
#2	1516.2	31648.	6244.7

Sample Name: ccvh-3900196 Acquired: 5/20/2016 15:22:51 Type: QC
Method: 6500_026(v10) Mode: CONC Corr. Factor: 1.000000
User: kellyca Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	Ag3280	Al3092	As1890	B_2089	Ba4554	Be3130	Bi2230	Ca3179	Cd2288	Co2286	Cr2055	Cu3247	Fe2714
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	-.00140	48.562	.00136	.01650	.00055	-.00037	1.0156	-.04966	-.00106	.00303	-.00040	.00707	48.640
Stddev	.00038	.056	.00438	.00051	.00007	.00001	.0020	.00076	.00019	.00054	.00036	.00043	.278
%RSD	27.323	.11460	322.93	3.0892	13.265	3.4925	.19931	1.5265	17.712	17.943	90.102	6.0395	.57167

#1	-.00113	48.523	.00445	.01686	.00050	-.00036	1.0170	-.05019	-.00120	.00341	-.00066	.00677	48.443
#2	-.00167	48.601	-.00174	.01614	.00061	-.00038	1.0141	-.04912	-.00093	.00264	-.00015	.00737	48.836

Check ?	None	Chk Pass	None	None	None	None	Chk Pass	None	None	None	None	None	Chk Pass
Value													
Range													

Elem	K_7664	Li6707	Mg2790	Mn2576	Mo2020	Na8183	Ni2316	P_1782	Pb2203	S_1820	Sb2068	Se1960	Si2881
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	-.00065	-.00016	.14902	-.00041	-.00135	249.82	-.00004	.00264	.00137	4.9322	-.00170	.00267	.00664
Stddev	.01735	.00073	.00018	.00007	.00043	.13	.00064	.00022	.00305	.0108	.00414	.00173	.00301
%RSD	2652.8	445.68	.12280	17.963	32.317	.05194	1790.4	8.3209	222.20	.21885	243.72	64.803	45.426

#1	-.01292	.00035	.14915	-.00036	-.00104	249.72	-.00049	.00279	-.00078	4.9246	.00123	.00145	.00451
#2	.01161	-.00068	.14889	-.00046	-.00165	249.91	.00042	.00248	.00353	4.9399	-.00462	.00390	.00877

Check ?	None	None	None	None	None	Chk Pass	None	None	None	Chk Pass	None	None	None
Value													
Range													

Elem	Sn1899	Sr4077	Th2837	Ti3349	Tl1908	U_3701	V_2924	Zn2062	Zr3391
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.00296	.00060	4.9520	.02612	-.00164	10.153	-.01661	-.00061	-.00924
Stddev	.00010	.00000	.0293	.00059	.00203	.022	.00013	.00075	.00400
%RSD	3.2731	.25029	.59179	2.2760	123.78	.21888	.80030	122.66	43.261

#1	.00290	.00060	4.9727	.02570	-.00020	10.169	-.01652	-.00114	-.01206
#2	.00303	.00060	4.9313	.02654	-.00307	10.137	-.01671	-.00008	-.00641

Check ?	None	None	Chk Pass	None	None	Chk Pass	None	None	None
Value									
Range									

Int. Std.	Y_2243	Y_3600	Y_3774
Units	Cts/S	Cts/S	Cts/S
Avg	1529.5	30988.	6068.8
Stddev	2.2	300.	25.0
%RSD	.14079	.96831	.41144

#1	1531.0	30775.	6086.5
#2	1528.0	31200.	6051.2

Sample Name: ccv-3900195 Acquired: 5/20/2016 15:25:39 Type: QC
Method: 6500_026(v10) Mode: CONC Corr. Factor: 1.000000
User: kellyca Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	Ag3280	Al1670	As1890	B_2089	Ba4554	Be3130	Bi2230	Ca3179	Cd2288	Co2286	Cr2055	Cu3247	Fe2599
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.48686	.51499	1.0005	.51960	.49661	.50227	-.00144	5.0838	.50862	.51129	.50649	.48549	2.5305
Stddev	.00034	.00139	.0024	.00149	.00164	.00271	.00129	.0431	.00067	.00139	.00089	.00022	.0118
%RSD	.06948	.26990	.24087	.28665	.33110	.53956	89.712	.84701	.13214	.27232	.17479	.04484	.46528

#1	.48710	.51401	.99880	.52065	.49545	.50035	-.00053	5.0534	.50910	.51227	.50711	.48564	2.5222
#2	.48662	.51597	1.0022	.51854	.49777	.50418	-.00236	5.1143	.50815	.51030	.50586	.48534	2.5388

Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	None	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Value													
Range													

Elem	K_7664	Li6707	Mg2790	Mn2576	Mo2020	Na5895	Ni2316	P_1782	Pb2203	S_1820	Sb2068	Se1960	Si2881
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	49.988	.99956	19.699	.50297	.51343	5.0404	.50561	.98531	1.0280	.01445	1.0078	.99747	5.0732
Stddev	.245	.00297	.032	.00008	.00107	.0161	.00141	.00198	.0028	.00372	.0022	.00256	.0289
%RSD	.49027	.29749	.16285	.01623	.20795	.31996	.27821	.20120	.27000	25.750	.21680	.25714	.56953

#1	49.815	.99746	19.721	.50302	.51419	5.0290	.50661	.98391	1.0300	.01709	1.0094	.99565	5.0527
#2	50.161	1.0017	19.676	.50291	.51268	5.0518	.50462	.98671	1.0261	.01182	1.0063	.99928	5.0936

Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	None	Chk Pass	Chk Pass	Chk Pass
Value													
Range													

Elem	Sn1899	Sr4077	Th2837	Ti3349	Ti1908	U_3701	V_2924	Zn2062	Zr3391
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.99872	.48844	.00101	.48890	1.0327	.01110	.48649	.50275	.50068
Stddev	.00067	.00236	.00003	.00076	.0034	.01991	.00063	.00057	.00280
%RSD	.06699	.48239	2.5015	.15455	.33448	179.42	.12949	.11303	.55915

#1	.99920	.48678	.00103	.48836	1.0351	.02517	.48605	.50235	.49870
#2	.99825	.49011	.00099	.48943	1.0303	-.00298	.48694	.50315	.50266

Check ?	Chk Pass	Chk Pass	None	Chk Pass	Chk Pass	None	Chk Pass	Chk Pass	Chk Pass
Value									
Range									

Int. Std.	Y_2243	Y_3600	Y_3774
Units	Cts/S	Cts/S	Cts/S
Avg	1554.6	31612.	6049.1
Stddev	1.6	17.	48.2
%RSD	.10028	.05381	.79700

#1	1553.5	31600.	6083.2
#2	1555.7	31624.	6015.0

Sample Name: ccb Acquired: 5/20/2016 15:28:13 Type: QC
Method: 6500_026(v10) Mode: CONC Corr. Factor: 1.000000
User: kellyca Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	Ag3280	Al1670	As1890	B_2089	Ba4554	Be3130	Bi2230	Ca3179	Cd2288	Co2286	Cr2055	Cu3247
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	-.00013	.00184	.00215	F .00824	.00010	-.00005	-.00009	.00534	.00012	-.00028	.00014	-.00020
Stddev	.00041	.00016	.00547	.00105	.00010	.00007	.00218	.00168	.00015	.00041	.00010	.00004
%RSD	303.45	8.5314	254.46	12.681	96.484	130.26	2306.9	31.394	124.36	150.37	72.855	19.926
#1	.00015	.00173	.00602	.00898	.00017	-.00000	.00144	.00653	.00001	-.00057	.00021	-.00018
#2	-.00042	.00195	-.00172	.00751	.00003	-.00011	-.00163	.00415	.00023	.00002	.00007	-.00023
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Fail	Chk Pass	Chk Pass	None	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit				.00312								
Low Limit				-.00312								
Elem	Fe2599	K_7664	Li6707	Mg2790	Mn2576	Mo2020	Na5895	Ni2316	P_1782	Pb2203	S_1820	Sb2068
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.00742	.01996	-.00004	.00796	.00008	.00086	.00038	.00007	-.00150	.00037	.00588	-.00045
Stddev	.00194	.01847	.00042	.00216	.00001	.00019	.00115	.00003	.00040	.00107	.00286	.00047
%RSD	26.161	92.554	1136.5	27.122	6.4559	22.217	302.49	48.631	26.680	289.51	48.599	104.40
#1	.00604	.00690	-.00033	.00644	.00009	.00100	-.00043	.00005	-.00179	.00113	.00791	-.00079
#2	.00879	.03302	.00026	.00949	.00008	.00073	.00119	.00009	-.00122	-.00039	.00386	-.00012
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	None	Chk Pass
High Limit												
Low Limit												
Elem	Se1960	Si2881	Sn1899	Sr4077	Th2837	Ti3349	Ti1908	U_3701	V_2924	Zn2062	Zr3391	
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	
Avg	.00329	.00212	.00089	.00011	-.00212	W .00069	-.00004	.01951	.00028	-.00029	.00033	
Stddev	.00220	.00622	.00096	.00002	.00066	.00003	.00157	.00789	.00070	.00022	.00008	
%RSD	67.026	292.67	107.38	15.119	31.032	4.2486	4001.7	40.418	246.52	77.167	23.123	
#1	.00484	-.00227	.00157	.00010	-.00258	.00071	.00107	.02509	.00078	-.00045	.00028	
#2	.00173	.00652	.00021	.00012	-.00165	.00067	-.00115	.01393	-.00021	-.00013	.00039	
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Warn	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	
High Limit						.00060						
Low Limit						-.00060						
Int. Std.	Y_2243	Y_3600	Y_3774									
Units	Cts/S	Cts/S	Cts/S									
Avg	1571.4	32601.	6089.6									
Stddev	2.3	63.	57.8									
%RSD	.14902	.19235	.94975									
#1	1573.1	32646.	6048.7									
#2	1569.8	32557.	6130.5									

Sample Name: ccvl-3903059 Acquired: 5/20/2016 15:30:59 Type: QC
Method: 6500_026(v10) Mode: CONC Corr. Factor: 1.000000
User: kellyca Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	Ag3280	Al1670	As1890	B_2089	Ba4554	Be3130	Bi2230	Ca3179	Cd2288	Co2286	Cr2055	Cu3247
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.01001	.10631	.01275	.10897	.01014	.00083	.11289	.20513	.00511	.00988	.01028	.01435
Stddev	.00004	.00176	.00072	.00077	.00003	.00003	.00034	.00170	.00008	.00026	.00017	.00013
%RSD	.43353	1.6553	5.6816	.70203	.34298	3.7341	.29680	.82677	1.5245	2.6466	1.6073	.91730

#1	.00997	.10507	.01326	.10843	.01016	.00085	.11313	.20633	.00516	.01007	.01040	.01445
#2	.01004	.10756	.01223	.10951	.01011	.00081	.11265	.20393	.00505	.00970	.01017	.01426

Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Value												
Range												

Elem	Fe2599	K_7664	Li6707	Mg2790	Mn2576	Mo2020	Na5895	Ni2316	P_1782	Pb2203	S_1820	Sb2068
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	F .14437	3.0086	.00974	.20167	.01042	.02099	1.0118	.04213	2.9253	.01072	.00566	.02028
Stddev	.00514	.0241	.00004	.00512	.00002	.00070	.0008	.00023	.0013	.00059	.00456	.00079
%RSD	3.5580	.80000	.37118	2.5396	.14521	3.3334	.08331	.55679	.04567	5.4790	80.551	3.8933

#1	.14074	2.9916	.00971	.20529	.01043	.02148	1.0124	.04230	2.9262	.01114	.00244	.02084
#2	.14800	3.0256	.00976	.19804	.01041	.02049	1.0112	.04197	2.9243	.01031	.00888	.01972

Check ?	Chk Fail	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	None	Chk Pass
Value	.10000											
Range	30.000%											

Elem	Se1960	Si2881	Sn1899	Sr4077	Th2837	Ti3349	Ti1908	U_3701	V_2924	Zn2062	Zr3391
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.01222	.49469	.10194	.00974	.01517	.00970	.01354	.06472	.00940	.02064	.01506
Stddev	.01101	.01327	.00001	.00005	.00248	.00028	.00051	.00435	.00029	.00137	.00043
%RSD	90.135	2.6834	.00967	.49114	16.372	2.8548	3.7864	6.7143	3.0922	6.6470	2.8373

#1	.02001	.48530	.10195	.00977	.01693	.00990	.01390	.06165	.00920	.02161	.01536
#2	.00443	.50408	.10193	.00970	.01341	.00951	.01317	.06779	.00961	.01967	.01475

Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Value											
Range											

Int. Std.	Y_2243	Y_3600	Y_3774
Units	Cts/S	Cts/S	Cts/S
Avg	1581.5	33078.	6261.6
Stddev	2.1	15.	13.2
%RSD	.12986	.04516	.21034

#1	1583.0	33068.	6270.9
#2	1580.1	33089.	6252.3

Sample Name: MB Acquired: 5/20/2016 15:33:44 Type: Unk
Method: 6500_026(v10) Mode: CONC Corr. Factor: 1.000000
User: kellyca Custom ID1: Custom ID2: Custom ID3:
Comment: SAR

Elem	Ag3280	Al1670	As1890	B_2089	Ba4554	Be3130	Bi2230	Ca3179	Cd2288
Line	328.068 {103}	167.079 {502}	189.042 {478}	208.959 {461}	455.403 { 74}	313.042 {108}	223.061 {451}	317.933 {106}	228.802 {447}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.00003	.00035	-.00213	.00418	-.00004	-.00008	.00014	.00103	.00000
Stddev	.00012	.00038	.00132	.00048	.00005	.00002	.00140	.00007	.00009
%RSD	456.43	107.06	61.871	11.375	122.10	25.947	978.45	6.8227	2152.8

#1	.00011	.00062	-.00306	.00452	-.00008	-.00007	.00114	.00108	-.00006
#2	-.00006	.00009	-.00120	.00384	-.00001	-.00010	-.00085	.00098	.00007

Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Elem	Co2286	Cr2055	Cu3247	Fe2599	K_7664	Li6707	Mg2790	Mn2576	Mo2020
Line	228.616 {447}	205.560 {464}	324.754 {104}	259.940 {130}	766.490 { 44}	670.784 { 50}	279.079 {121}2	257.610 {131}	202.030 {467}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	-.00031	.00037	.00006	.00242	.01516	-.00016	.00367	.00009	.00027
Stddev	.00030	.00005	.00008	.00165	.01671	.00178	.00436	.00005	.00015
%RSD	97.576	12.434	122.51	68.237	110.23	1090.3	118.72	63.316	56.274

#1	-.00010	.00034	.00001	.00358	.00334	.00109	.00675	.00005	.00016
#2	-.00053	.00040	.00012	.00125	.02698	-.00142	.00059	.00013	.00037

Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Elem	Na5895	Ni2316	P_1782	Pb2203	S_1820	Sb2068	Se1960	Si2881	Sn1899
Line	589.592 { 57}	231.604 {446}	178.284 {489}	220.353 {453}	182.034 {485}	206.833 {463}	196.090 {472}	288.158 {117}	189.989 {477}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.00864	-.00036	-.00548	-.00135	.00905	-.00081	-.00296	-.00076	.00065
Stddev	.00670	.00050	.00160	.00012	.00006	.00028	.00132	.00277	.00035
%RSD	77.465	140.32	29.227	9.2183	.61971	34.958	44.676	363.36	54.279

#1	.01338	-.00000	-.00434	-.00127	.00909	-.00102	-.00389	.00119	.00090
#2	.00391	-.00071	-.00661	-.00144	.00901	-.00061	-.00202	-.00272	.00040

Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Elem	Sr4077	Th2837	Ti3349	Ti1908	U_3701	V_2924	Zn2062	Zr3391	
Line	407.771 { 83}	283.730 {119}	334.904 {101}	190.856 {477}	370.152 { 91}	292.402 {115}	206.200 {163}	339.198 { 99}	
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	
Avg	.00001	-.00054	-.00004	-.00324	.01941	.00065	.00098	.00065	
Stddev	.00009	.00247	.00008	.00089	.02526	.00008	.00015	.00077	
%RSD	1611.3	454.32	237.78	27.487	130.15	12.026	15.376	118.95	

#1	-.00006	-.00229	-.00009	-.00387	.03728	.00070	.00087	.00120	
#2	.00007	.00121	.00002	-.00261	.00155	.00059	.00108	.00010	

Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	
High Limit									
Low Limit									

Int. Std.	Y_2243	Y_3600	Y_3774						
Line	224.306 {450}	360.073 { 94}	377.433 { 89}						
Units	Cts/S	Cts/S	Cts/S						
Avg	1574.5	32740.	6055.7						
Stddev	.4	29.	23.6						
%RSD	.02236	.08711	.38951						

#1	1574.3	32760.	6039.0						
#2	1574.8	32719.	6072.4						

Sample Name: 280-83311-B-1 Acquired: 5/20/2016 15:36:29 Type: Unk
Method: 6500_026(v10) Mode: CONC Corr. Factor: 1.000000
User: kellyca Custom ID1: Custom ID2: Custom ID3:
Comment: SAR

Elem	Ag3280	Al1670	As1890	B_2089	Ba4554	Be3130	Bi2230	Ca3179	Cd2288
Line	328.068 {103}	167.079 {502}	189.042 {478}	208.959 {461}	455.403 { 74}	313.042 {108}	223.061 {451}	317.933 {106}	228.802 {447}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	-.00011	.19749	.00197	.03580	.07229	-.00009	.00592	127.32	-.00005
Stddev	.00007	.00141	.00049	.00098	.00059	.00012	.00390	.73	.00040
%RSD	65.741	.71186	25.088	2.7500	.81364	135.69	65.882	.57580	798.54

#1	-.00006	.19849	.00232	.03510	.07187	-.00000	.00316	126.80	-.00034
#2	-.00016	.19650	.00162	.03649	.07271	-.00017	.00868	127.84	.00023

Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Elem	Co2286	Cr2055	Cu3247	Fe2599	K_7664	Li6707	Mg2790	Mn2576	Mo2020
Line	228.616 {447}	205.560 {464}	324.754 {104}	259.940 {130}	766.490 { 44}	670.784 { 50}	279.079 {121}2	257.610 {131}	202.030 {467}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.00100	.00011	.00120	.12463	2.3494	.02076	48.881	.01066	.00016
Stddev	.00024	.00034	.00099	.00096	.0147	.00062	.083	.00004	.00008
%RSD	24.219	306.70	82.829	.77060	.62617	2.9719	.16957	.33747	53.681

#1	.00118	.00035	.00050	.12531	2.3389	.02032	48.823	.01068	.00022
#2	.00083	-.00013	.00190	.12395	2.3598	.02119	48.940	.01063	.00010

Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Elem	Na8183	Ni2316	P_1782	Pb2203	S_1820	Sb2068	Se1960	Si2881	Sn1899
Line	818.326 { 41}	231.604 {446}	178.284 {489}	220.353 {453}	182.034 {485}	206.833 {463}	196.090 {472}	288.158 {117}	189.989 {477}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	170.37	.00197	.01416	-.00213	93.214	-.00426	.00241	7.3940	-.00029
Stddev	1.93	.00066	.00291	.00068	.592	.00198	.00085	.0513	.00179
%RSD	1.1355	33.487	20.555	31.686	.63527	46.556	35.478	.69419	621.14

#1	169.00	.00244	.01210	-.00261	93.633	-.00566	.00181	7.3577	.00098
#2	171.74	.00151	.01621	-.00165	92.796	-.00285	.00301	7.4302	-.00156

Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Elem	Sr4077	Th2837	Ti3349	Ti1908	U_3701	V_2924	Zn2062	Zr3391	
Line	407.771 { 83}	283.730 {119}	334.904 {101}	190.856 {477}	370.152 { 91}	292.402 {115}	206.200 {163}	339.198 { 99}	
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	
Avg	1.8573	-.00373	.00877	.00214	.01224	.00116	-.00145	.00083	
Stddev	.0194	.00186	.00055	.00179	.00141	.00082	.00048	.00034	
%RSD	1.0439	49.744	6.2943	83.744	11.517	71.135	33.032	40.406	

#1	1.8436	-.00242	.00838	.00087	.01124	.00174	-.00178	.00107	
#2	1.8710	-.00504	.00916	.00340	.01323	.00058	-.00111	.00059	

Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	
High Limit									
Low Limit									

Int. Std.	Y_2243	Y_3600	Y_3774						
Line	224.306 {450}	360.073 { 94}	377.433 { 89}						
Units	Cts/S	Cts/S	Cts/S						
Avg	1542.1	31459.	6299.6						
Stddev	6.7	153.	66.8						
%RSD	.43739	.48632	1.0606						

#1	1546.9	31567.	6346.9						
#2	1537.3	31350.	6252.4						

Sample Name: 280-83311-B-1sd@5 Acquired: 5/20/2016 15:39:10 Type: Unk

Method: 6500_026(v10) Mode: CONC Corr. Factor: 1.000000

User: kellyca Custom ID1: Custom ID2: Custom ID3:

Comment: SAR

Elem	Ag3280	Al1670	As1890	B_2089	Ba4554	Be3130	Bi2230	Ca3179	Cd2288
Line	328.068 {103}	167.079 {502}	189.042 {478}	208.959 {461}	455.403 {74}	313.042 {108}	223.061 {451}	317.933 {106}	228.802 {447}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	-0.00047	.04173	-0.00545	.00898	.01509	-0.00011	.00078	24.667	.00018
Stddev	.00015	.00038	.00001	.00002	.00020	.00002	.00004	.091	.00016
%RSD	31.714	.91408	.25725	.23886	1.3463	18.410	5.6537	.36710	91.029

#1	-0.00037	.04200	-0.00544	.00900	.01523	-0.00013	.00075	24.731	.00006
#2	-0.00058	.04146	-0.00546	.00897	.01494	-0.00010	.00082	24.603	.00029

Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Elem	Co2286	Cr2055	Cu3247	Fe2599	K_7664	Li6707	Mg2790	Mn2576	Mo2020
Line	228.616 {447}	205.560 {464}	324.754 {104}	259.940 {130}	766.490 {44}	670.784 {50}	279.079 {121}2	257.610 {131}	202.030 {467}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	-0.00020	.00007	-0.00017	.03373	.47668	.00315	9.2856	.00274	.00025
Stddev	.00001	.00030	.00072	.00246	.01405	.00030	.0068	.00013	.00032
%RSD	4.7827	438.67	435.35	7.2963	2.9474	9.4196	.07295	4.8681	127.91

#1	-0.00019	-0.00015	-0.00068	.03199	.48661	.00336	9.2808	.00264	.00047
#2	-0.00020	.00028	.00034	.03547	.46674	.00294	9.2904	.00283	.00002

Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Elem	Na8183	Ni2316	P_1782	Pb2203	S_1820	Sb2068	Se1960	Si2881	Sn1899
Line	818.326 {41}	231.604 {446}	178.284 {489}	220.353 {453}	182.034 {485}	206.833 {463}	196.090 {472}	288.158 {117}	189.989 {477}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	33.328	.00013	.00351	-0.00236	16.807	-0.00253	-0.00100	1.3933	.00078
Stddev	.111	.00058	.00199	.00095	.106	.00294	.00038	.0087	.00107
%RSD	.33269	445.58	56.590	40.364	.62885	116.19	38.005	.62511	137.36

#1	33.406	-0.00028	.00211	-0.00303	16.881	-0.00045	-0.00127	1.3871	.00154
#2	33.249	.00054	.00491	-0.00168	16.732	-0.00461	-0.00073	1.3994	.00002

Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Elem	Sr4077	Th2837	Ti3349	Ti1908	U_3701	V_2924	Zn2062	Zr3391
Line	407.771 {83}	283.730 {119}	334.904 {101}	190.856 {477}	370.152 {91}	292.402 {115}	206.200 {163}	339.198 {99}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.36770	-0.00287	.00168	-0.00101	.01615	.00038	-0.00084	-0.00071
Stddev	.00001	.00112	.00011	.00125	.00048	.00083	.00008	.00015
%RSD	.00295	39.140	6.4238	123.74	2.9966	216.60	9.3887	21.058

#1	.36771	-0.00207	.00161	-0.00013	.01581	-0.00020	-0.00079	-0.00082
#2	.36769	-0.00366	.00176	-0.00189	.01649	.00096	-0.00090	-0.00061

Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit								
Low Limit								

Int. Std.	Y_2243	Y_3600	Y_3774
Line	224.306 {450}	360.073 {94}	377.433 {89}
Units	Cts/S	Cts/S	Cts/S
Avg	1553.0	32046.	6111.5
Stddev	3.0	58.	57.3
%RSD	.19422	.17960	.93788

#1	1550.9	32005.	6071.0
#2	1555.1	32087.	6152.0

Sample Name: 280-83311-B-1 DU Acquired: 5/20/2016 15:41:52 Type: Unk
Method: 6500_026(v10) Mode: CONC Corr. Factor: 1.000000
User: kellyca Custom ID1: Custom ID2: Custom ID3:
Comment: SAR

Elem	Ag3280	Al1670	As1890	B_2089	Ba4554	Be3130	Bi2230	Ca3179	Cd2288
Line	328.068 {103}	167.079 {502}	189.042 {478}	208.959 {461}	455.403 { 74}	313.042 {108}	223.061 {451}	317.933 {106}	228.802 {447}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	-.00034	.18821	.00172	.03525	.07217	-.00006	.00650	126.54	-.00024
Stddev	.00005	.00477	.00087	.00019	.00015	.00001	.00010	1.24	.00008
%RSD	14.935	2.5319	50.791	.54937	.21245	24.171	1.6099	.98211	34.099

#1	-.00031	.19158	.00110	.03539	.07207	-.00005	.00643	127.42	-.00018
#2	-.00038	.18484	.00233	.03511	.07228	-.00007	.00658	125.66	-.00030

Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Elem	Co2286	Cr2055	Cu3247	Fe2599	K_7664	Li6707	Mg2790	Mn2576	Mo2020
Line	228.616 {447}	205.560 {464}	324.754 {104}	259.940 {130}	766.490 { 44}	670.784 { 50}	279.079 {121}2	257.610 {131}	202.030 {467}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.00148	-.00015	.00079	.12173	2.3332	.02026	48.918	.01045	.00023
Stddev	.00027	.00009	.00043	.00872	.0064	.00044	.145	.00017	.00004
%RSD	18.360	59.336	54.588	7.1632	.27348	2.1822	.29567	1.6037	18.484

#1	.00168	-.00009	.00110	.12790	2.3377	.01995	49.021	.01057	.00020
#2	.00129	-.00021	.00049	.11557	2.3287	.02058	48.816	.01033	.00026

Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Elem	Na8183	Ni2316	P_1782	Pb2203	S_1820	Sb2068	Se1960	Si2881	Sn1899
Line	818.326 { 41}	231.604 {446}	178.284 {489}	220.353 {453}	182.034 {485}	206.833 {463}	196.090 {472}	288.158 {117}	189.989 {477}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	170.08	.00182	.01369	-.00021	94.959	-.00152	.00215	7.3971	-.00031
Stddev	.30	.00085	.00186	.00154	.880	.00038	.00230	.0779	.00067
%RSD	.17697	46.414	13.566	739.04	.92663	24.739	106.96	1.0536	217.16

#1	169.87	.00242	.01501	.00088	95.581	-.00178	.00052	7.4522	-.00078
#2	170.29	.00122	.01238	-.00130	94.337	-.00125	.00378	7.3420	.00016

Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Elem	Sr4077	Th2837	Ti3349	Ti1908	U_3701	V_2924	Zn2062	Zr3391
Line	407.771 { 83}	283.730 {119}	334.904 {101}	190.856 {477}	370.152 { 91}	292.402 {115}	206.200 {163}	339.198 { 99}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	1.8561	-.00407	.00753	.00044	.00853	.00155	-.00078	.00133
Stddev	.0060	.00106	.00019	.00156	.03121	.00001	.00044	.00026
%RSD	.32212	25.976	2.4910	352.99	365.79	.81385	56.820	19.580

#1	1.8519	-.00332	.00740	.00154	-.01354	.00154	-.00109	.00114
#2	1.8603	-.00481	.00766	-.00066	.03060	.00156	-.00046	.00151

Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit								
Low Limit								

Int. Std.	Y_2243	Y_3600	Y_3774
Line	224.306 {450}	360.073 { 94}	377.433 { 89}
Units	Cts/S	Cts/S	Cts/S
Avg	1518.7	31717.	6345.0
Stddev	2.6	43.	59.4
%RSD	.17054	.13530	.93652

#1	1520.5	31747.	6303.0
#2	1516.9	31686.	6387.0

Sample Name: 280-83311-B-2 Acquired: 5/20/2016 15:44:34 Type: Unk
Method: 6500_026(v10) Mode: CONC Corr. Factor: 1.000000
User: kellyca Custom ID1: Custom ID2: Custom ID3:
Comment: SAR

Elem	Ag3280	Al1670	As1890	B_2089	Ba4554	Be3130	Bi2230	Ca3179	Cd2288
Line	328.068 {103}	167.079 {502}	189.042 {478}	208.959 {461}	455.403 { 74}	313.042 {108}	223.061 {451}	317.933 {106}	228.802 {447}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.00010	.06326	.00792	.03171	.06491	-.00009	.00733	34.078	-.00012
Stddev	.00012	.00018	.00413	.00099	.00127	.00003	.00023	.855	.00042
%RSD	125.48	.28717	52.178	3.1338	1.9593	28.492	3.1216	2.5079	367.11

#1	.00001	.06313	.00500	.03101	.06581	-.00011	.00749	34.682	.00018
#2	.00018	.06339	.01084	.03241	.06401	-.00007	.00717	33.474	-.00041

Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Elem	Co2286	Cr2055	Cu3247	Fe2599	K_7664	Li6707	Mg2790	Mn2576	Mo2020
Line	228.616 {447}	205.560 {464}	324.754 {104}	259.940 {130}	766.490 { 44}	670.784 { 50}	279.079 {121}2	257.610 {131}	202.030 {467}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.00567	-.00023	.00094	.10986	7.3680	.13218	17.251	.11290	.00186
Stddev	.00003	.00009	.00011	.00077	.1584	.00197	.003	.00077	.00026
%RSD	.52245	38.035	11.389	7.9863	2.1499	1.4916	.01833	.68465	14.022

#1	.00565	-.00030	.00101	.11606	7.4800	.13358	17.253	.11345	.00205
#2	.00569	-.00017	.00086	.10366	7.2560	.13079	17.248	.11236	.00168

Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Elem	Na8183	Ni2316	P_1782	Pb2203	S_1820	Sb2068	Se1960	Si2881	Sn1899
Line	818.326 { 41}	231.604 {446}	178.284 {489}	220.353 {453}	182.034 {485}	206.833 {463}	196.090 {472}	288.158 {117}	189.989 {477}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	W 589.35	.00374	.05200	-.00051	58.523	.00117	.00101	3.4040	.00160
Stddev	10.97	.00016	.00253	.00002	.055	.00299	.00093	.0648	.00084
%RSD	1.8617	4.2560	4.8659	4.4947	.09339	255.31	92.017	1.9029	52.877

#1	597.11	.00385	.05021	-.00050	58.484	.00328	.00035	3.4498	.00100
#2	581.59	.00363	.05379	-.00053	58.561	-.00094	.00167	3.3582	.00219

Check ?	Chk Warn	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit	500.00								
Low Limit	10.000								

Elem	Sr4077	Th2837	Ti3349	Ti1908	U_3701	V_2924	Zn2062	Zr3391	
Line	407.771 { 83}	283.730 {119}	334.904 {101}	190.856 {477}	370.152 { 91}	292.402 {115}	206.200 {163}	339.198 { 99}	
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	
Avg	3.1357	-.00646	.00298	.00163	.01988	-.00048	-.00238	.00131	
Stddev	.0549	.00074	.00021	.00252	.00846	.00090	.00107	.00087	
%RSD	1.7518	11.505	7.0889	154.79	42.557	186.95	44.896	66.659	

#1	3.1745	-.00699	.00284	.00341	.01390	-.00112	-.00163	.00193	
#2	3.0968	-.00593	.00313	-.00015	.02586	.00015	-.00314	.00069	

Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	
High Limit									
Low Limit									

Int. Std.	Y_2243	Y_3600	Y_3774						
Line	224.306 {450}	360.073 { 94}	377.433 { 89}						
Units	Cts/S	Cts/S	Cts/S						
Avg	1472.7	30667.	6100.6						
Stddev	13.1	128.	65.5						
%RSD	.88690	.41628	1.0744						

#1	1481.9	30577.	6054.3						
#2	1463.5	30757.	6147.0						

Sample Name: 280-83311-B-3 Acquired: 5/20/2016 15:47:44 Type: Unk
Method: 6500_026(v10) Mode: CONC Corr. Factor: 1.000000
User: kellyca Custom ID1: Custom ID2: Custom ID3:
Comment: SAR

Elem	Ag3280	Al1670	As1890	B_2089	Ba4554	Be3130	Bi2230	Ca3179	Cd2288
Line	328.068 {103}	167.079 {502}	189.042 {478}	208.959 {461}	455.403 { 74}	313.042 {108}	223.061 {451}	317.933 {106}	228.802 {447}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	-.00046	.00210	-.00222	.00362	-.00007	-.00010	.00306	.02485	-.00039
Stddev	.00013	.00049	.00283	.00007	.00009	.00005	.00064	.00118	.00000
%RSD	27.654	23.549	127.93	1.8271	120.27	51.856	20.962	4.7494	.89457

#1	-.00055	.00175	-.00021	.00367	-.00001	-.00007	.00351	.02568	-.00039
#2	-.00037	.00245	-.00422	.00358	-.00014	-.00014	.00260	.02401	-.00040

Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Elem	Co2286	Cr2055	Cu3247	Fe2599	K_7664	Li6707	Mg2790	Mn2576	Mo2020
Line	228.616 {447}	205.560 {464}	324.754 {104}	259.940 {130}	766.490 { 44}	670.784 { 50}	279.079 {121}2	257.610 {131}	202.030 {467}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	-.00022	-.00015	-.00012	.00058	.01357	-.00105	.00813	.00007	.00014
Stddev	.00040	.00017	.00005	.00141	.02579	.00054	.00689	.00008	.00017
%RSD	182.69	115.77	45.799	240.95	190.01	51.792	84.671	102.77	121.86

#1	.00006	-.00027	-.00016	.00158	.03180	-.00067	.00326	.00013	.00025
#2	-.00050	-.00003	-.00008	-.00041	-.00466	-.00144	.01300	.00002	.00002

Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Elem	Na5895	Ni2316	P_1782	Pb2203	S_1820	Sb2068	Se1960	Si2881	Sn1899
Line	589.592 { 57}	231.604 {446}	178.284 {489}	220.353 {453}	182.034 {485}	206.833 {463}	196.090 {472}	288.158 {117}	189.989 {477}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.08622	.00045	-.00238	-.00106	.01649	.00023	-.00069	.00274	-.00078
Stddev	.00084	.00043	.00552	.00147	.00112	.00210	.00470	.00846	.00030
%RSD	.96983	94.246	232.15	139.30	6.7919	911.58	684.01	308.28	38.189

#1	.08681	.00015	.00153	-.00209	.01728	.00171	.00264	.00872	-.00057
#2	.08563	.00076	-.00628	-.00002	.01569	-.00125	-.00401	-.00324	-.00099

Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Elem	Sr4077	Th2837	Ti3349	Ti1908	U_3701	V_2924	Zn2062	Zr3391	
Line	407.771 { 83}	283.730 {119}	334.904 {101}	190.856 {477}	370.152 { 91}	292.402 {115}	206.200 {163}	339.198 { 99}	
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	
Avg	.00044	-.00264	.00035	.00265	.01006	-.00020	.00032	.00069	
Stddev	.00002	.00035	.00027	.00241	.00820	.00083	.00040	.00056	
%RSD	4.5432	13.083	78.532	90.913	81.551	405.43	125.60	80.664	

#1	.00042	-.00289	.00054	.00436	.00426	.00038	.00004	.00108	
#2	.00045	-.00240	.00015	.00095	.01586	-.00079	.00060	.00030	

Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	
High Limit									
Low Limit									

Int. Std.	Y_2243	Y_3600	Y_3774						
Line	224.306 {450}	360.073 { 94}	377.433 { 89}						
Units	Cts/S	Cts/S	Cts/S						
Avg	1618.1	33368.	6256.0						
Stddev	2.3	96.	33.3						
%RSD	.14479	.28733	.53279						

#1	1619.8	33436.	6279.6						
#2	1616.5	33300.	6232.4						

Sample Name: 280-83313-E-1 Acquired: 5/20/2016 15:50:29 Type: Unk
Method: 6500_026(v10) Mode: CONC Corr. Factor: 1.000000
User: kellyca Custom ID1: Custom ID2: Custom ID3:
Comment: SAR

Elem	Ag3280	Al1670	As1890	B_2089	Ba4554	Be3130	Bi2230	Ca3179	Cd2288
Line	328.068 {103}	167.079 {502}	189.042 {478}	208.959 {461}	455.403 { 74}	313.042 {108}	223.061 {451}	317.933 {106}	228.802 {447}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	-.00037	.07215	.00114	.02271	.04625	-.00009	.00556	81.854	.00001
Stddev	.00055	.00038	.00471	.00054	.00014	.00006	.00063	.531	.00002
%RSD	149.89	.53340	412.46	2.3762	.29513	69.615	11.256	.64823	250.39

#1	.00002	.07243	-.00219	.02233	.04615	-.00014	.00512	82.230	.00003
#2	-.00075	.07188	.00447	.02309	.04634	-.00005	.00600	81.479	-.00001

Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Elem	Co2286	Cr2055	Cu3247	Fe2599	K_7664	Li6707	Mg2790	Mn2576	Mo2020
Line	228.616 {447}	205.560 {464}	324.754 {104}	259.940 {130}	766.490 { 44}	670.784 { 50}	279.079 {121}2	257.610 {131}	202.030 {467}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.00294	-.00021	.00139	.08998	5.1584	.06141	63.538	.01669	.00050
Stddev	.00011	.00022	.00005	.00002	.0010	.00017	.191	.00006	.00031
%RSD	3.5896	104.02	3.6000	.02070	.01838	.28096	.30121	.35833	62.127

#1	.00302	-.00036	.00135	.08999	5.1577	.06128	63.403	.01665	.00028
#2	.00287	-.00006	.00142	.08996	5.1591	.06153	63.673	.01673	.00072

Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Elem	Na8183	Ni2316	P_1782	Pb2203	S_1820	Sb2068	Se1960	Si2881	Sn1899
Line	818.326 { 41}	231.604 {446}	178.284 {489}	220.353 {453}	182.034 {485}	206.833 {463}	196.090 {472}	288.158 {117}	189.989 {477}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	349.71	.00231	.00646	-.00051	W 190.93	-.00136	-.00081	4.5313	.00001
Stddev	.17	.00002	.00232	.00253	.65	.00037	.01318	.0099	.00078
%RSD	.04747	.88852	35.973	499.40	.33947	27.488	1618.7	.21800	10091.

#1	349.83	.00233	.00482	.00128	191.39	-.00109	.00851	4.5383	-.00054
#2	349.60	.00230	.00810	-.00229	190.47	-.00162	-.01013	4.5243	.00056

Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Warn	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit					190.00				
Low Limit					-.01000				

Elem	Sr4077	Th2837	Ti3349	Ti1908	U_3701	V_2924	Zn2062	Zr3391
Line	407.771 { 83}	283.730 {119}	334.904 {101}	190.856 {477}	370.152 { 91}	292.402 {115}	206.200 {163}	339.198 { 99}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	2.5763	-.00646	.00297	-.00039	.00914	.00134	.00060	.00087
Stddev	.0007	.00034	.00013	.00091	.02558	.00046	.00026	.00001
%RSD	.02700	5.2458	4.4041	235.56	279.72	34.219	42.765	1.1192

#1	2.5758	-.00622	.00307	-.00103	-.00894	.00167	.00042	.00086
#2	2.5768	-.00670	.00288	.00026	.02723	.00102	.00078	.00087

Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit								
Low Limit								

Int. Std.	Y_2243	Y_3600	Y_3774
Line	224.306 {450}	360.073 { 94}	377.433 { 89}
Units	Cts/S	Cts/S	Cts/S
Avg	1485.6	30617.	6111.6
Stddev	9.3	52.	12.7
%RSD	.62800	.16933	.20711

#1	1492.2	30580.	6120.5
#2	1479.0	30654.	6102.6

Sample Name: 280-83314-C-1 Acquired: 5/20/2016 15:53:17 Type: Unk
Method: 6500_026(v10) Mode: CONC Corr. Factor: 1.000000
User: kellyca Custom ID1: Custom ID2: Custom ID3:
Comment: SAR

Elem	Ag3280	Al1670	As1890	B_2089	Ba4554	Be3130	Bi2230	Ca3179	Cd2288
Line	328.068 {103}	167.079 {502}	189.042 {478}	208.959 {461}	455.403 { 74}	313.042 {108}	223.061 {451}	317.933 {106}	228.802 {447}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	-0.00031	.13911	-0.00105	.03408	.07517	-0.00011	.00326	126.37	-0.00007
Stddev	.00023	.00212	.00174	.00003	.00077	.00001	.00387	2.02	.00010
%RSD	73.831	1.5251	164.73	.09524	1.0303	10.009	118.66	1.5968	154.29

#1	-0.00047	.14061	-0.00228	.03405	.07572	-0.00012	.00600	127.79	.00001
#2	-0.00015	.13761	.00017	.03410	.07462	-0.00010	.00052	124.94	-0.00014

Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Elem	Co2286	Cr2055	Cu3247	Fe2599	K_7664	Li6707	Mg2790	Mn2576	Mo2020
Line	228.616 {447}	205.560 {464}	324.754 {104}	259.940 {130}	766.490 { 44}	670.784 { 50}	279.079 {121}2	257.610 {131}	202.030 {467}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.00177	-0.00008	.00098	.13058	2.3754	.02155	47.943	.01294	-0.00001
Stddev	.00030	.00011	.00002	.00646	.0207	.00005	.099	.00009	.00025
%RSD	16.958	147.45	2.2048	4.9468	.87266	.24631	.20578	.71819	3537.6

#1	.00198	-0.00016	.00096	.13515	2.3608	.02159	47.873	.01300	-0.00018
#2	.00156	.00000	.00099	.12601	2.3901	.02151	48.013	.01287	.00017

Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Elem	Na8183	Ni2316	P_1782	Pb2203	S_1820	Sb2068	Se1960	Si2881	Sn1899
Line	818.326 { 41}	231.604 {446}	178.284 {489}	220.353 {453}	182.034 {485}	206.833 {463}	196.090 {472}	288.158 {117}	189.989 {477}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	171.47	.00129	.02127	-0.00102	94.247	.00137	-0.00070	7.1797	-0.00076
Stddev	2.33	.00036	.00028	.00042	.496	.00318	.00697	.1422	.00040
%RSD	1.3561	27.518	1.3204	40.712	.52637	232.57	998.08	1.9807	52.999

#1	173.11	.00154	.02147	-0.00073	94.598	.00362	.00423	7.2802	-0.00048
#2	169.82	.00104	.02107	-0.00132	93.896	-0.00088	-0.00562	7.0791	-0.00105

Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Elem	Sr4077	Th2837	Ti3349	Ti1908	U_3701	V_2924	Zn2062	Zr3391	
Line	407.771 { 83}	283.730 {119}	334.904 {101}	190.856 {477}	370.152 { 91}	292.402 {115}	206.200 {163}	339.198 { 99}	
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	
Avg	1.8757	-0.00402	.00561	.00325	.01445	.00077	-0.00154	.00029	
Stddev	.0191	.00251	.00190	.00054	.00253	.00025	.00030	.00050	
%RSD	1.0185	62.353	33.805	16.467	17.530	33.075	19.260	170.69	

#1	1.8892	-0.00225	.00427	.00287	.01266	.00059	-0.00133	-0.00006	
#2	1.8622	-0.00579	.00695	.00363	.01624	.00095	-0.00175	.00065	

Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	
High Limit									
Low Limit									

Int. Std.	Y_2243	Y_3600	Y_3774						
Line	224.306 {450}	360.073 { 94}	377.433 { 89}						
Units	Cts/S	Cts/S	Cts/S						
Avg	1504.1	31351.	6228.4						
Stddev	.1	133.	30.1						
%RSD	.00654	.42434	.48374						

#1	1504.1	31445.	6207.1						
#2	1504.0	31257.	6249.7						

Sample Name: 280-83194-J-1 Acquired: 5/20/2016 15:56:00 Type: Unk
Method: 6500_026(v10) Mode: CONC Corr. Factor: 1.000000
User: kellyca Custom ID1: Custom ID2: Custom ID3:
Comment: SAR

Elem	Ag3280	Al1670	As1890	B_2089	Ba4554	Be3130	Bi2230	Ca3179	Cd2288
Line	328.068 {103}	167.079 {502}	189.042 {478}	208.959 {461}	455.403 { 74}	313.042 {108}	223.061 {451}	317.933 {106}	228.802 {447}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.00012	.00373	.00332	.24265	.02139	-.00009	.00578	1.0271	-.00022
Stddev	.00027	.00018	.00172	.00015	.00016	.00003	.00060	.0038	.00005
%RSD	220.49	4.7691	51.694	.06132	.72979	33.649	10.351	.36696	24.194

#1	.00032	.00386	.00453	.24275	.02128	-.00007	.00536	1.0297	-.00018
#2	-.00007	.00361	.00211	.24254	.02150	-.00011	.00621	1.0244	-.00026

Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Elem	Co2286	Cr2055	Cu3247	Fe2599	K_7664	Li6707	Mg2790	Mn2576	Mo2020
Line	228.616 {447}	205.560 {464}	324.754 {104}	259.940 {130}	766.490 { 44}	670.784 { 50}	279.079 {121}2	257.610 {131}	202.030 {467}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.00149	-.00022	.06010	.01494	.87661	.02038	.23000	.00210	-.00006
Stddev	.00038	.00012	.00007	.00110	.01471	.00014	.00421	.00006	.00001
%RSD	25.411	53.298	.11258	7.3986	1.6778	.67534	1.8307	2.7502	24.105

#1	.00175	-.00030	.06005	.01572	.88701	.02028	.23298	.00206	-.00007
#2	.00122	-.00014	.06015	.01415	.86621	.02047	.22703	.00214	-.00005

Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Elem	Na8183	Ni2316	P_1782	Pb2203	S_1820	Sb2068	Se1960	Si2881	Sn1899
Line	818.326 { 41}	231.604 {446}	178.284 {489}	220.353 {453}	182.034 {485}	206.833 {463}	196.090 {472}	288.158 {117}	189.989 {477}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	208.97	.00086	.12484	.00493	.03769	-.00276	.00446	5.5575	.00045
Stddev	.35	.00046	.00187	.00144	.00460	.00099	.00884	.0350	.00028
%RSD	.16772	53.479	1.5012	29.213	12.196	35.759	198.28	.63063	62.379

#1	209.21	.00118	.12351	.00595	.04094	-.00345	-.00179	5.5822	.00065
#2	208.72	.00053	.12616	.00391	.03444	-.00206	.01072	5.5327	.00025

Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Elem	Sr4077	Th2837	Ti3349	Ti1908	U_3701	V_2924	Zn2062	Zr3391
Line	407.771 { 83}	283.730 {119}	334.904 {101}	190.856 {477}	370.152 { 91}	292.402 {115}	206.200 {163}	339.198 { 99}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.02975	-.00366	.00021	.00111	.03094	.00011	.00483	-.00068
Stddev	.00000	.00020	.00026	.00276	.01595	.00026	.00094	.00109
%RSD	.01223	5.3928	124.96	247.84	51.550	241.65	19.498	160.39

#1	.02974	-.00352	.00040	.00306	.01966	-.00008	.00549	.00009
#2	.02975	-.00380	.00002	-.00084	.04222	.00030	.00416	-.00145

Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit								
Low Limit								

Int. Std.	Y_2243	Y_3600	Y_3774
Line	224.306 {450}	360.073 { 94}	377.433 { 89}
Units	Cts/S	Cts/S	Cts/S
Avg	1536.8	31570.	6218.9
Stddev	4.6	162.	24.6
%RSD	.30066	.51295	.39540

#1	1540.0	31684.	6201.5
#2	1533.5	31455.	6236.3

Sample Name: ccvh-3900196 Acquired: 5/20/2016 15:58:50 Type: QC
Method: 6500_026(v10) Mode: CONC Corr. Factor: 1.000000
User: kellyca Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	Ag3280	Al3092	As1890	B_2089	Ba4554	Be3130	Bi2230	Ca3179	Cd2288	Co2286	Cr2055	Cu3247	Fe2714
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	-.00106	48.312	-.00477	.00317	.00003	-.00039	1.0217	-.05159	-.00124	.00305	-.00027	.00663	48.105
Stddev	.00002	.093	.00206	.00020	.00003	.00004	.0065	.00264	.00040	.00009	.00065	.00036	.272
%RSD	1.7065	.19174	43.321	6.4534	99.092	10.599	.63766	5.1164	32.594	2.8435	243.94	5.3510	.56645

#1	-.00107	48.377	-.00331	.00302	.00005	-.00036	1.0263	-.04972	-.00095	.00298	.00019	.00638	48.298
#2	-.00105	48.246	-.00623	.00331	.00001	-.00042	1.0171	-.05345	-.00152	.00311	-.00073	.00689	47.913

Check ?	None	Chk Pass	None	None	None	None	Chk Pass	None	None	None	None	None	Chk Pass
Value													
Range													

Elem	K_7664	Li6707	Mg2790	Mn2576	Mo2020	Na8183	Ni2316	P_1782	Pb2203	S_1820	Sb2068	Se1960	Si2881
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.01327	-.00041	.15169	-.00057	-.00240	252.01	.00001	.00504	.00253	4.9581	-.00046	.00320	-.00927
Stddev	.00725	.00124	.00193	.00005	.00037	.82	.00112	.00184	.00197	.0137	.00343	.00116	.00160
%RSD	54.622	301.00	1.2751	8.0121	15.218	.32540	8207.8	36.500	77.980	.27676	750.45	36.315	17.276

#1	.00814	.00046	.15306	-.00060	-.00214	252.59	.00081	.00374	.00114	4.9678	.00197	.00237	-.00814
#2	.01839	-.00129	.15033	-.00054	-.00266	251.43	-.00078	.00634	.00393	4.9484	-.00288	.00402	-.01040

Check ?	None	None	None	None	None	Chk Pass	None	None	None	Chk Pass	None	None	None
Value													
Range													

Elem	Sn1899	Sr4077	Th2837	Ti3349	Tl1908	U_3701	V_2924	Zn2062	Zr3391
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.00239	.00040	4.9328	.02543	-.00418	10.168	-.01684	-.00169	-.00511
Stddev	.00259	.00001	.0039	.00071	.00073	.000	.00034	.00001	.00250
%RSD	108.13	3.1840	.07818	2.7939	17.396	.00212	1.9943	.76303	48.914

#1	.00056	.00039	4.9355	.02593	-.00470	10.168	-.01660	-.00168	-.00334
#2	.00422	.00040	4.9300	.02493	-.00367	10.168	-.01707	-.00170	-.00688

Check ?	None	None	Chk Pass	None	None	Chk Pass	None	None	None
Value									
Range									

Int. Std.	Y_2243	Y_3600	Y_3774
Units	Cts/S	Cts/S	Cts/S
Avg	1502.2	30684.	6067.8
Stddev	.6	36.	11.8
%RSD	.04003	.11706	.19523

#1	1501.8	30659.	6076.2
#2	1502.6	30710.	6059.4

Sample Name: ccv-3900195 Acquired: 5/20/2016 16:01:37 Type: QC
Method: 6500_026(v10) Mode: CONC Corr. Factor: 1.000000
User: kellyca Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	Ag3280	Al1670	As1890	B_2089	Ba4554	Be3130	Bi2230	Ca3179	Cd2288	Co2286	Cr2055	Cu3247	Fe2599
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.48112	.51180	1.0031	.51831	.49464	.49824	-.00075	4.9876	.51039	.51177	.50708	.48222	2.5129
Stddev	.00145	.00289	.0025	.00502	.00162	.00363	.00153	.0350	.00228	.00103	.00149	.00255	.0163
%RSD	.30216	.56440	.24742	.96935	.32666	.72764	204.51	.70216	.44595	.20124	.29376	.52869	.64739

#1	.48010	.51385	1.0013	.52186	.49350	.49568	-.00183	4.9628	.51200	.51249	.50813	.48042	2.5014
#2	.48215	.50976	1.0048	.51476	.49579	.50081	.00033	5.0123	.50878	.51104	.50603	.48402	2.5244

Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	None	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Value													
Range													

Elem	K_7664	Li6707	Mg2790	Mn2576	Mo2020	Na5895	Ni2316	P_1782	Pb2203	S_1820	Sb2068	Se1960	Si2881
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	50.025	1.0078	19.334	.49292	.51446	5.0934	.50591	.99619	1.0299	.01225	1.0232	1.0022	5.0239
Stddev	.233	.0013	.072	.00045	.00185	.0227	.00056	.00580	.0052	.00472	.0048	.0056	.0670
%RSD	.46610	.13280	.37046	.09192	.35904	.44633	.11143	.58183	.50730	38.552	.46532	.56356	1.3337

#1	49.860	1.0069	19.284	.49260	.51576	5.0773	.50631	1.0003	1.0336	.01559	1.0266	.99825	4.9765
#2	50.190	1.0088	19.385	.49324	.51315	5.1095	.50551	.99210	1.0262	.00891	1.0199	1.0062	5.0713

Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	None	Chk Pass	Chk Pass	Chk Pass
Value													
Range													

Elem	Sn1899	Sr4077	Th2837	Ti3349	Ti1908	U_3701	V_2924	Zn2062	Zr3391
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.99837	.48274	.00158	.47980	1.0338	.01670	.47379	.48784	.49588
Stddev	.00531	.00177	.00086	.00012	.0056	.01680	.00277	.00019	.00262
%RSD	.53143	.36659	54.418	.02397	.53818	100.58	.58441	.03990	.52753

#1	1.0021	.48149	.00097	.47988	1.0298	.02858	.47183	.48798	.49403
#2	.99462	.48399	.00219	.47971	1.0377	.00482	.47575	.48770	.49773

Check ?	Chk Pass	Chk Pass	None	Chk Pass	Chk Pass	None	Chk Pass	Chk Pass	Chk Pass
Value									
Range									

Int. Std.	Y_2243	Y_3600	Y_3774
Units	Cts/S	Cts/S	Cts/S
Avg	1541.4	32010.	6120.3
Stddev	2.8	92.	49.5
%RSD	.17902	.28639	.80857

#1	1539.5	32075.	6155.3
#2	1543.4	31946.	6085.3

Sample Name: ccb Acquired: 5/20/2016 16:04:12 Type: QC
Method: 6500_026(v10) Mode: CONC Corr. Factor: 1.000000
User: kellyca Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	Ag3280	Al1670	As1890	B_2089	Ba4554	Be3130	Bi2230	Ca3179	Cd2288	Co2286	Cr2055	Cu3247
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.00045	-.00070	-.00173	W .00173	-.00007	-.00004	-.00130	-.00158	-.00020	-.00031	-.00009	-.00074
Stddev	.00080	.00132	.00098	.00006	.00003	.00003	.00110	.00088	.00042	.00016	.00000	.00003
%RSD	176.49	188.84	56.661	3.4537	36.755	72.383	85.070	55.953	210.35	49.930	4.8750	4.1295

#1	-.00011	.00023	-.00243	.00178	-.00005	-.00006	-.00052	-.00095	-.00049	-.00042	-.00009	-.00072
#2	.00102	-.00164	-.00104	.00169	-.00009	-.00002	-.00208	-.00220	.00010	-.00020	-.00010	-.00076

Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Warn	Chk Pass	Chk Pass	None	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit				.00156								
Low Limit				-.00156								

Elem	Fe2599	K_7664	Li6707	Mg2790	Mn2576	Mo2020	Na5895	Ni2316	P_1782	Pb2203	S_1820	Sb2068
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.00887	.02809	-.00016	.00455	.00012	.00025	.03578	-.00027	-.00470	.00037	.00997	.00067
Stddev	.00007	.00110	.00024	.00219	.00004	.00089	.00834	.00038	.00131	.00250	.00286	.00068
%RSD	.77865	3.9079	156.81	48.126	29.888	349.11	23.311	140.90	27.916	671.49	28.652	101.51

#1	.00892	.02731	-.00033	.00300	.00009	-.00037	.04168	-.00053	-.00563	-.00139	.00795	.00116
#2	.00882	.02887	.00002	.00610	.00014	.00088	.02988	-.00000	-.00377	.00214	.01199	.00019

Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	None	Chk Pass
High Limit												
Low Limit												

Elem	Se1960	Si2881	Sn1899	Sr4077	Th2837	Ti3349	Ti1908	U_3701	V_2924	Zn2062	Zr3391
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	-.00084	-.00603	.00178	.00008	-.00060	-.00015	-.00136	.00538	.00002	.00064	.00041
Stddev	.00288	.00557	.00114	.00003	.00105	.00016	.00072	.00840	.00020	.00047	.00204
%RSD	344.57	92.406	64.133	42.987	176.14	104.93	52.835	156.18	1080.8	72.775	500.18

#1	.00120	-.00209	.00097	.00010	-.00134	-.00026	-.00085	.01132	-.00012	.00031	.00185
#2	-.00288	-.00997	.00259	.00006	.00015	-.00004	-.00187	-.00056	.00016	.00097	-.00104

Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit											
Low Limit											

Int. Std.	Y_2243	Y_3600	Y_3774
Units	Cts/S	Cts/S	Cts/S
Avg	1543.6	33066.	6210.1
Stddev	.5	258.	11.1
%RSD	.03212	.78029	.17915

#1	1543.9	33249.	6202.2
#2	1543.2	32884.	6218.0

Sample Name: ccvl-3903059 Acquired: 5/20/2016 16:06:58 Type: QC
Method: 6500_026(v10) Mode: CONC Corr. Factor: 1.000000
User: kellyca Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	Ag3280	Al1670	As1890	B_2089	Ba4554	Be3130	Bi2230	Ca3179	Cd2288	Co2286	Cr2055	Cu3247
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.01021	.11036	.01414	.10548	.01023	.00093	.11166	F .26893	.00519	.01040	.01056	.01444
Stddev	.00017	.00056	.00196	.00076	.00000	.00000	.00101	.00073	.00003	.00031	.00005	.00055
%RSD	1.6904	.50867	13.839	.72435	.00727	.17987	.90725	.27295	.62379	2.9532	.49730	3.8168

#1	.01008	.10997	.01553	.10602	.01023	.00093	.11095	.26841	.00517	.01018	.01060	.01405
#2	.01033	.11076	.01276	.10494	.01023	.00093	.11238	.26945	.00521	.01062	.01053	.01482

Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Fail	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Value								.20000				
Range								30.000%				

Elem	Fe2599	K_7664	Li6707	Mg2790	Mn2576	Mo2020	Na5895	Ni2316	P_1782	Pb2203	S_1820	Sb2068
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	F .16117	3.1011	.01008	.21236	.01053	.02082	1.1210	.04217	2.9699	.00762	.01225	.02321
Stddev	.00443	.0244	.00059	.00121	.00013	.00015	.0023	.00014	.0003	.00127	.00052	.00166
%RSD	2.7470	.78671	5.8274	.57017	1.2633	.70145	.20144	.34090	.00999	16.639	4.2255	7.1420

#1	.16430	3.1183	.00967	.21150	.01062	.02072	1.1226	.04207	2.9697	.00851	.01188	.02204
#2	.15804	3.0838	.01050	.21322	.01043	.02092	1.1194	.04228	2.9701	.00672	.01261	.02438

Check ?	Chk Fail	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	None	Chk Pass
Value	.10000											
Range	30.000%											

Elem	Se1960	Si2881	Sn1899	Sr4077	Th2837	Ti3349	Ti1908	U_3701	V_2924	Zn2062	Zr3391
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.01904	.51098	.10371	.00993	.01441	.01000	.01426	F .08723	.01006	.02583	.01725
Stddev	.00529	.01027	.00103	.00006	.00015	.00001	.00114	.01579	.00027	.00072	.00139
%RSD	27.795	2.0091	.99036	.64536	1.0409	.07819	8.0064	18.101	2.6690	2.7814	8.0801

#1	.02278	.50372	.10299	.00988	.01452	.00999	.01507	.07606	.01025	.02634	.01626
#2	.01530	.51823	.10444	.00997	.01431	.01001	.01345	.09839	.00987	.02532	.01823

Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Fail	Chk Pass	Chk Pass	Chk Pass
Value								.06000			
Range								30.000%			

Int. Std.	Y_2243	Y_3600	Y_3774
Units	Cts/S	Cts/S	Cts/S
Avg	1572.5	33021.	6252.9
Stddev	3.9	89.	.3
%RSD	.24937	.27065	.00461

#1	1575.3	33084.	6253.1
#2	1569.7	32958.	6252.7

Sample Name: 280-83089-M-5-D Acquired: 5/20/2016 16:09:42 Type: Unk
Method: 6500_026(v10) Mode: CONC Corr. Factor: 1.000000
User: kellyca Custom ID1: 5/18 Custom ID2: Custom ID3:
Comment: 325567 6010C q5 (Fe)

Elem	Ag3280	Al1670	As1890	B_2089	Ba4554	Be3130	Bi2230	Ca3179	Cd2288
Line	328.068 {103}	167.079 {502}	189.042 {478}	208.959 {461}	455.403 { 74}	313.042 {108}	223.061 {451}	317.933 {106}	228.802 {447}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.00030	.00982	.01433	.08060	.04074	-.00016	.00059	89.163	.00015
Stddev	.00043	.00046	.00234	.00000	.00005	.00000	.00084	.708	.00014
%RSD	143.30	4.7261	16.320	.00456	.13070	1.8937	141.50	.79424	93.818

#1	.00061	.01014	.01268	.08060	.04078	-.00016	-.00000	89.664	.00025
#2	-.00000	.00949	.01599	.08059	.04071	-.00016	.00119	88.662	.00005

Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Elem	Co2286	Cr2055	Cu3247	Fe2599	K_7664	Li6707	Mg2790	Mn2576	Mo2020
Line	228.616 {447}	205.560 {464}	324.754 {104}	259.940 {130}	766.490 { 44}	670.784 { 50}	279.079 {121}2	257.610 {131}	202.030 {467}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	-.00024	-.00010	.00045	.50969	2.5068	.02045	27.909	.07607	.00156
Stddev	.00010	.00006	.00021	.00164	.00055	.00029	.078	.00022	.00034
%RSD	43.160	66.112	47.788	.32094	.21982	1.4373	.27820	.29475	22.018

#1	-.00016	-.00005	.00060	.50853	2.5107	.02066	27.854	.07592	.00132
#2	-.00031	-.00014	.00030	.51085	2.5029	.02024	27.964	.07623	.00181

Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Elem	Na8183	Ni2316	P_1782	Pb2203	S_1820	Sb2068	Se1960	Si2881	Sn1899
Line	818.326 { 41}	231.604 {446}	178.284 {489}	220.353 {453}	182.034 {485}	206.833 {463}	196.090 {472}	288.158 {117}	189.989 {477}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	20.681	.00069	.01508	-.00195	29.795	-.00115	.00151	8.2795	.00051
Stddev	.114	.00060	.00038	.00233	.002	.00348	.00585	.1025	.00008
%RSD	.54984	86.602	2.4940	119.37	.00610	302.94	388.73	1.2375	16.025

#1	20.600	.00111	.01535	-.00360	29.794	.00131	.00564	8.3520	.00057
#2	20.761	.00027	.01481	-.00030	29.796	-.00361	-.00263	8.2071	.00046

Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Elem	Sr4077	Th2837	Ti3349	Ti1908	U_3701	V_2924	Zn2062	Zr3391
Line	407.771 { 83}	283.730 {119}	334.904 {101}	190.856 {477}	370.152 { 91}	292.402 {115}	206.200 {163}	339.198 { 99}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.40375	-.00295	.00057	.00031	.00835	.00037	-.00083	.00030
Stddev	.00117	.00012	.00029	.00073	.00150	.00020	.00037	.00078
%RSD	.28964	3.9261	51.529	232.51	17.928	55.134	44.931	262.44

#1	.40293	-.00303	.00036	.00083	.00941	.00051	-.00110	-.00026
#2	.40458	-.00287	.00078	-.00020	.00729	.00022	-.00057	.00085

Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit								
Low Limit								

Int. Std.	Y_2243	Y_3600	Y_3774
Line	224.306 {450}	360.073 { 94}	377.433 { 89}
Units	Cts/S	Cts/S	Cts/S
Avg	1512.0	31492.	6092.0
Stddev	1.0	16.	92.6
%RSD	.06844	.05006	1.5199

#1	1512.7	31503.	6026.6
#2	1511.2	31481.	6157.5

Sample Name: 280-83089-M-5-Dsd@5 Acquired: 5/20/2016 16:12:24 Type: Unk
Method: 6500_026(v10) Mode: CONC Corr. Factor: 1.000000
User: kellyca Custom ID1: Custom ID2: Custom ID3:
Comment: 325567 6010C q5 (Fe)

Elem	Ag3280	Al1670	As1890	B_2089	Ba4554	Be3130	Bi2230	Ca3179	Cd2288
Line	328.068 {103}	167.079 {502}	189.042 {478}	208.959 {461}	455.403 { 74}	313.042 {108}	223.061 {451}	317.933 {106}	228.802 {447}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	-0.00030	.00420	-0.00126	.01682	.00818	-0.00013	-0.00017	17.947	.00002
Stddev	.00018	.00019	.00432	.00005	.00017	.00006	.00100	.068	.00025
%RSD	61.656	4.4081	342.37	.27253	2.0333	46.313	593.25	.37991	1209.3

#1	-0.00043	.00433	.00179	.01679	.00806	-0.00017	.00054	17.899	.00019
#2	-0.00017	.00407	-.00432	.01686	.00830	-0.00009	-0.00088	17.995	-0.00015

Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Elem	Co2286	Cr2055	Cu3247	Fe2599	K_7664	Li6707	Mg2790	Mn2576	Mo2020
Line	228.616 {447}	205.560 {464}	324.754 {104}	259.940 {130}	766.490 { 44}	670.784 { 50}	279.079 {121}2	257.610 {131}	202.030 {467}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	-0.00010	-0.00008	-0.00037	.12920	.51493	.00247	5.5654	.01556	.00087
Stddev	.00020	.00002	.00021	.00060	.01629	.00038	.0181	.00003	.00033
%RSD	197.29	30.601	55.479	.46315	3.1626	15.350	.32506	.20037	37.788

#1	-0.00024	-0.00010	-0.00052	.12962	.50341	.00220	5.5527	.01558	.00064
#2	.00004	-0.00006	-0.00023	.12878	.52644	.00274	5.5782	.01553	.00110

Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Elem	Na5895	Ni2316	P_1782	Pb2203	S_1820	Sb2068	Se1960	Si2881	Sn1899
Line	589.592 { 57}	231.604 {446}	178.284 {489}	220.353 {453}	182.034 {485}	206.833 {463}	196.090 {472}	288.158 {117}	189.989 {477}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	4.1217	.00049	.00045	-0.00260	5.7825	.00024	-0.00223	1.6332	.00115
Stddev	.0292	.00012	.00242	.00203	.0037	.00175	.00845	.0220	.00088
%RSD	.70821	24.923	535.28	78.105	.06386	724.86	379.14	1.3482	76.618

#1	4.1011	.00040	-.00126	-.00117	5.7852	-.00100	-.00820	1.6176	.00053
#2	4.1423	.00057	.00216	-.00404	5.7799	.00148	.00375	1.6488	.00178

Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Elem	Sr4077	Th2837	Ti3349	Ti1908	U_3701	V_2924	Zn2062	Zr3391
Line	407.771 { 83}	283.730 {119}	334.904 {101}	190.856 {477}	370.152 { 91}	292.402 {115}	206.200 {163}	339.198 { 99}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.08126	-0.00282	.00039	.00178	.01534	-0.00012	.00074	.00086
Stddev	.00043	.00064	.00036	.00158	.02062	.00061	.00024	.00043
%RSD	.53269	22.593	91.308	89.095	134.39	499.48	32.651	49.281

#1	.08095	-.00327	.00064	.00290	.00076	.00031	.00057	.00116
#2	.08156	-.00237	.00014	.00066	.02992	-.00055	.00091	.00056

Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit								
Low Limit								

Int. Std.	Y_2243	Y_3600	Y_3774
Line	224.306 {450}	360.073 { 94}	377.433 { 89}
Units	Cts/S	Cts/S	Cts/S
Avg	1553.2	32781.	6142.7
Stddev	2.6	28.	21.1
%RSD	.16826	.08470	.34330

#1	1555.1	32801.	6157.6
#2	1551.4	32762.	6127.7

Sample Name: 280-83089-M-5-E MS Acquired: 5/20/2016 16:15:07 Type: Unk

Method: 6500_026(v10) Mode: CONC Corr. Factor: 1.000000

User: kellyca Custom ID1: Custom ID2: Custom ID3:

Comment: 325567 6010C q5 (Fe)

Elem	Ag3280	Al1670	As1890	B_2089	Ba4554	Be3130	Bi2230	Ca3179	Cd2288
Line	328.068 {103}	167.079 {502}	189.042 {478}	208.959 {461}	455.403 { 74}	313.042 {108}	223.061 {451}	317.933 {106}	228.802 {447}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.05085	1.9753	1.0911	1.1695	2.0803	.05125	2.2087	137.58	.10495
Stddev	.00028	.0068	.0035	.0032	.0056	.00018	.0067	.70	.00076
%RSD	.55066	.34510	.32357	.27526	.26705	.35310	.30221	.50598	.72271

#1	.05105	1.9802	1.0936	1.1672	2.0764	.05138	2.2040	138.07	.10442
#2	.05065	1.9705	1.0886	1.1717	2.0843	.05112	2.2134	137.09	.10549

Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Elem	Co2286	Cr2055	Cu3247	Fe2599	K_7664	Li6707	Mg2790	Mn2576	Mo2020
Line	228.616 {447}	205.560 {464}	324.754 {104}	259.940 {130}	766.490 { 44}	670.784 { 50}	279.079 {121}2	257.610 {131}	202.030 {467}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.50633	W .20459	.25882	1.4997	54.975	1.0762	77.886	.56720	1.0763
Stddev	.00023	.00021	.00153	.0046	.123	.0022	.359	.00168	.0004
%RSD	.04479	.10198	.59048	.30523	.22323	.20485	.46105	.29653	.03216

#1	.50617	.20445	.25990	1.4965	54.888	1.0746	78.140	.56839	1.0766
#2	.50649	.20474	.25774	1.5030	55.062	1.0777	77.632	.56601	1.0761

Check ?	Chk Pass	Chk Warn	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit		.10000							
Low Limit		-.01000							

Elem	Na8183	Ni2316	P_1782	Pb2203	S_1820	Sb2068	Se1960	Si2881	Sn1899
Line	818.326 { 41}	231.604 {446}	178.284 {489}	220.353 {453}	182.034 {485}	206.833 {463}	196.090 {472}	288.158 {117}	189.989 {477}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	72.741	.50206	10.906	.51944	32.553	.54280	2.1386	18.348	1.9945
Stddev	.166	.00039	.047	.00167	.043	.00263	.0020	.078	.0027
%RSD	.22816	.07692	.42934	.32210	.13206	.48382	.09333	.42631	.13325

#1	72.624	.50179	10.873	.52062	32.522	.54466	2.1372	18.403	1.9926
#2	72.858	.50233	10.939	.51825	32.583	.54094	2.1400	18.293	1.9964

Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Elem	Sr4077	Th2837	Ti3349	Ti1908	U_3701	V_2924	Zn2062	Zr3391
Line	407.771 { 83}	283.730 {119}	334.904 {101}	190.856 {477}	370.152 { 91}	292.402 {115}	206.200 {163}	339.198 { 99}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	1.3842	1.0124	.98789	2.0014	2.1860	.49021	.48366	.50365
Stddev	.0024	.0058	.00125	.0028	.0135	.00375	.00575	.00245
%RSD	.17494	.57617	.12654	.13990	.61671	.76481	1.1886	.48674

#1	1.3825	1.0165	.98878	2.0034	2.1955	.49286	.48773	.50192
#2	1.3859	1.0083	.98701	1.9994	2.1765	.48756	.47960	.50539

Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit								
Low Limit								

Int. Std.	Y_2243	Y_3600	Y_3774
Line	224.306 {450}	360.073 { 94}	377.433 { 89}
Units	Cts/S	Cts/S	Cts/S
Avg	1466.5	30490.	6162.5
Stddev	.2	70.	56.0
%RSD	.01117	.23045	.90827

#1	1466.6	30440.	6123.0
#2	1466.4	30539.	6202.1

Sample Name: 280-83089-M-5-F MSD Acquired: 5/20/2016 16:17:39 Type: Unk
Method: 6500_026(v10) Mode: CONC Corr. Factor: 1.000000
User: kellyca Custom ID1: Custom ID2: Custom ID3:
Comment: 325567 6010C q5 (Fe)

Elem	Ag3280	Al1670	As1890	B_2089	Ba4554	Be3130	Bi2230	Ca3179	Cd2288
Line	328.068 {103}	167.079 {502}	189.042 {478}	208.959 {461}	455.403 { 74}	313.042 {108}	223.061 {451}	317.933 {106}	228.802 {447}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.05053	1.9784	1.0823	1.1351	2.0848	.05132	2.1738	136.84	.10456
Stddev	.00140	.0060	.0011	.0003	.0083	.00007	.0092	.38	.00019
%RSD	2.7746	.30365	.10028	.02174	.40028	.14155	.42193	.27953	.18338

#1	.05152	1.9826	1.0831	1.1352	2.0789	.05137	2.1674	137.11	.10469
#2	.04954	1.9741	1.0816	1.1349	2.0907	.05127	2.1803	136.57	.10442

Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Elem	Co2286	Cr2055	Cu3247	Fe2599	K_7664	Li6707	Mg2790	Mn2576	Mo2020
Line	228.616 {447}	205.560 {464}	324.754 {104}	259.940 {130}	766.490 { 44}	670.784 { 50}	279.079 {121}2	257.610 {131}	202.030 {467}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.50718	W .20760	.25674	1.5831	55.200	1.0757	76.664	.56963	1.0862
Stddev	.00086	.00025	.00067	.0062	.204	.0017	.089	.00093	.0010
%RSD	.16952	.11935	.26032	.39092	.36943	.15482	.11649	.16303	.09321

#1	.50779	.20778	.25721	1.5875	55.056	1.0745	76.727	.57028	1.0854
#2	.50658	.20743	.25627	1.5787	55.344	1.0769	76.601	.56897	1.0869

Check ?	Chk Pass	Chk Warn	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit		.10000							
Low Limit		-.01000							

Elem	Na8183	Ni2316	P_1782	Pb2203	S_1820	Sb2068	Se1960	Si2881	Sn1899
Line	818.326 { 41}	231.604 {446}	178.284 {489}	220.353 {453}	182.034 {485}	206.833 {463}	196.090 {472}	288.158 {117}	189.989 {477}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	72.454	.50362	10.700	.51370	31.154	.53456	2.0918	18.135	1.9944
Stddev	.045	.00153	.006	.00457	.058	.00270	.0074	.002	.0062
%RSD	.06264	.30294	.05532	.88897	.18771	.50542	.35344	.01303	.31210

#1	72.421	.50470	10.695	.51693	31.112	.53265	2.0970	18.137	1.9988
#2	72.486	.50254	10.704	.51047	31.195	.53647	2.0866	18.133	1.9900

Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Elem	Sr4077	Th2837	Ti3349	Ti1908	U_3701	V_2924	Zn2062	Zr3391
Line	407.771 { 83}	283.730 {119}	334.904 {101}	190.856 {477}	370.152 { 91}	292.402 {115}	206.200 {163}	339.198 { 99}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	1.3813	1.0094	.99657	1.9776	2.1525	.49216	.48549	.50679
Stddev	.0060	.0043	.00191	.0018	.0154	.00134	.00025	.00236
%RSD	.43664	.43009	.19198	.08904	.71501	.27296	.05049	.46516

#1	1.3770	1.0124	.99792	1.9764	2.1416	.49311	.48532	.50513
#2	1.3856	1.0063	.99522	1.9789	2.1634	.49121	.48566	.50846

Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit								
Low Limit								

Int. Std.	Y_2243	Y_3600	Y_3774
Line	224.306 {450}	360.073 { 94}	377.433 { 89}
Units	Cts/S	Cts/S	Cts/S
Avg	1462.2	30242.	6029.9
Stddev	1.6	39.	26.3
%RSD	.10813	.12796	.43662

#1	1463.3	30215.	6011.2
#2	1461.0	30269.	6048.5

Sample Name: 280-83089-M-5-Dpds Acquired: 5/20/2016 16:20:11 Type: Unk

Method: 6500_026(v10) Mode: CONC Corr. Factor: 1.000000

User: kellyca Custom ID1: Custom ID2: Custom ID3:

Comment: 325567 6010C q5 (Fe)

Elem	Ag3280	Al1670	As1890	B_2089	Ba4554	Be3130	Bi2230	Ca3179	Cd2288
Line	328.068 {103}	167.079 {502}	189.042 {478}	208.959 {461}	455.403 { 74}	313.042 {108}	223.061 {451}	317.933 {106}	228.802 {447}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.04978	1.0230	.21993	.18986	.14092	.05093	.00065	107.91	.05307
Stddev	.00047	.0036	.00665	.00107	.00035	.00017	.00024	.21	.00023
%RSD	.94099	.35383	3.0238	.56397	.24575	.33008	36.838	.19189	.43000

#1	.05011	1.0204	.21523	.18911	.14067	.05081	.00082	108.06	.05291
#2	.04945	1.0255	.22463	.19062	.14116	.05105	.00048	107.76	.05323

Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Elem	Co2286	Cr2055	Cu3247	Fe2599	K_7664	Li6707	Mg2790	Mn2576	Mo2020
Line	228.616 {447}	205.560 {464}	324.754 {104}	259.940 {130}	766.490 { 44}	670.784 { 50}	279.079 {121}2	257.610 {131}	202.030 {467}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.05030	.05102	.05032	1.5129	23.192	.12437	47.035	.12484	.05568
Stddev	.00062	.00018	.00006	.0068	.054	.00091	.125	.00001	.00013
%RSD	1.2241	.34499	.11175	.44996	.23441	.73227	.26583	.01008	.23048

#1	.04986	.05115	.05036	1.5081	23.153	.12372	46.946	.12485	.05559
#2	.05074	.05090	.05028	1.5177	23.230	.12501	47.123	.12483	.05577

Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Elem	Na8183	Ni2316	P_1782	Pb2203	S_1820	Sb2068	Se1960	Si2881	Sn1899
Line	818.326 { 41}	231.604 {446}	178.284 {489}	220.353 {453}	182.034 {485}	206.833 {463}	196.090 {472}	288.158 {117}	189.989 {477}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	41.244	.05198	2.1428	.10017	29.431	.10338	.20507	13.225	.10198
Stddev	.113	.00119	.0028	.00180	.063	.00092	.00123	.022	.00134
%RSD	.27380	2.2946	.13240	1.7998	.21349	.89260	.60162	.16363	1.3113

#1	41.324	.05114	2.1408	.10145	29.386	.10273	.20419	13.209	.10103
#2	41.164	.05283	2.1449	.09890	29.475	.10403	.20594	13.240	.10292

Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Elem	Sr4077	Th2837	Ti3349	Ti1908	U_3701	V_2924	Zn2062	Zr3391
Line	407.771 { 83}	283.730 {119}	334.904 {101}	190.856 {477}	370.152 { 91}	292.402 {115}	206.200 {163}	339.198 { 99}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.44571	.19816	.05112	.20558	.54513	.04769	.19499	.05136
Stddev	.00089	.00318	.00067	.00189	.00997	.00051	.00233	.00147
%RSD	.19887	1.6047	1.3144	.92023	1.8296	1.0611	1.1950	2.8709

#1	.44508	.19591	.05160	.20424	.55218	.04805	.19664	.05032
#2	.44634	.20041	.05065	.20692	.53807	.04734	.19334	.05241

Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit								
Low Limit								

Int. Std.	Y_2243	Y_3600	Y_3774
Line	224.306 {450}	360.073 { 94}	377.433 { 89}
Units	Cts/S	Cts/S	Cts/S
Avg	1490.0	30921.	5999.6
Stddev	4.0	6.	26.7
%RSD	.26592	.02027	.44535

#1	1492.8	30925.	5980.7
#2	1487.2	30916.	6018.5

Sample Name: ccvh-3900196 Acquired: 5/20/2016 16:22:51 Type: QC
Method: 6500_026(v10) Mode: CONC Corr. Factor: 1.000000
User: kellyca Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	Ag3280	Al3092	As1890	B_2089	Ba4554	Be3130	Bi2230	Ca3179	Cd2288	Co2286	Cr2055	Cu3247	Fe2714
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	-.00127	47.899	-.00506	.00460	.00027	-.00036	1.0343	-.03910	-.00107	.00297	-.00052	.00620	47.383
Stddev	.00032	.115	.00058	.00081	.00007	.00010	.0052	.00332	.00022	.00026	.00033	.00064	.026
%RSD	24.959	.24000	11.480	17.649	27.423	26.408	.50662	8.4875	20.725	8.8341	63.286	10.317	.05542

#1	-.00149	47.817	-.00465	.00402	.00022	-.00043	1.0380	-.03676	-.00122	.00279	-.00029	.00575	47.402
#2	-.00104	47.980	-.00547	.00517	.00032	-.00029	1.0306	-.04145	-.00091	.00316	-.00075	.00665	47.365

Check ?	None	Chk Pass	None	None	None	None	Chk Pass	None	None	None	None	None	Chk Pass
Value													
Range													

Elem	K_7664	Li6707	Mg2790	Mn2576	Mo2020	Na8183	Ni2316	P_1782	Pb2203	S_1820	Sb2068	Se1960	Si2881
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.04250	-.00010	.14861	-.00063	-.00187	250.94	-.00046	.00185	.00121	5.0198	-.00273	-.00450	-.01585
Stddev	.00333	.00001	.00421	.00005	.00050	1.05	.00019	.00260	.00151	.0108	.00229	.00067	.00645
%RSD	7.8279	10.434	2.8356	8.1204	26.861	.41673	41.509	140.96	124.68	.21530	83.821	14.878	40.688

#1	.04014	-.00009	.15159	-.00060	-.00222	250.20	-.00033	.00001	.00014	5.0274	-.00435	-.00403	-.02041
#2	.04485	-.00011	.14563	-.00067	-.00151	251.68	-.00060	.00369	.00228	5.0121	-.00111	-.00497	-.01129

Check ?	None	None	None	None	None	Chk Pass	None	None	None	Chk Pass	None	None	None
Value													
Range													

Elem	Sn1899	Sr4077	Th2837	Ti3349	Tl1908	U_3701	V_2924	Zn2062	Zr3391
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.00165	.00030	4.9297	.02544	-.00450	10.202	-.01672	-.00170	-.00870
Stddev	.00014	.00006	.0145	.00039	.00228	.008	.00005	.00085	.00243
%RSD	8.2961	20.731	.29498	1.5223	50.694	.07642	.27357	49.842	27.903

#1	.00156	.00026	4.9400	.02572	-.00611	10.207	-.01669	-.00110	-.01042
#2	.00175	.00034	4.9194	.02517	-.00289	10.196	-.01675	-.00229	-.00698

Check ?	None	None	Chk Pass	None	None	Chk Pass	None	None	None
Value									
Range									

Int. Std.	Y_2243	Y_3600	Y_3774
Units	Cts/S	Cts/S	Cts/S
Avg	1502.0	31141.	6252.6
Stddev	2.4	39.	40.2
%RSD	.16078	.12560	.64356

#1	1500.3	31113.	6281.1
#2	1503.7	31168.	6224.1

Sample Name: ccv-3900195 Acquired: 5/20/2016 16:25:40 Type: QC
Method: 6500_026(v10) Mode: CONC Corr. Factor: 1.000000
User: kellyca Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	Ag3280	Al1670	As1890	B_2089	Ba4554	Be3130	Bi2230	Ca3179	Cd2288	Co2286	Cr2055	Cu3247	Fe2599
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.48420	.51081	1.0053	.52166	.49983	.50415	-.00474	5.0007	.51174	.51522	.50986	.48796	2.5301
Stddev	.00122	.00238	.0026	.00147	.00081	.00070	.00171	.0003	.00234	.00266	.00210	.00015	.0151
%RSD	.25109	.46600	.26189	.28271	.16117	.13825	36.084	.00576	.45751	.51718	.41228	.03023	.59694

#1	.48334	.51249	1.0072	.52270	.49926	.50366	-.00353	5.0009	.51339	.51710	.51135	.48806	2.5408
#2	.48506	.50913	1.0035	.52062	.50040	.50465	-.00595	5.0005	.51008	.51333	.50837	.48786	2.5194

Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	None	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Value													
Range													

Elem	K_7664	Li6707	Mg2790	Mn2576	Mo2020	Na5895	Ni2316	P_1782	Pb2203	S_1820	Sb2068	Se1960	Si2881
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	50.467	1.0224	19.460	.49667	.51857	5.1237	.50720	.99643	1.0360	.00557	1.0217	.99861	5.0730
Stddev	.147	.0039	.011	.00178	.00203	.0002	.00073	.00492	.0034	.00299	.0025	.00184	.0281
%RSD	.29035	.38514	.05891	.35818	.39126	.00399	.14489	.49406	.32780	53.704	.24186	.18462	.55328

#1	50.363	1.0196	19.452	.49541	.52001	5.1238	.50772	.99992	1.0336	.00346	1.0200	.99992	5.0531
#2	50.571	1.0252	19.468	.49792	.51714	5.1235	.50668	.99295	1.0384	.00769	1.0235	.99731	5.0928

Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	None	Chk Pass	Chk Pass	Chk Pass
Value													
Range													

Elem	Sn1899	Sr4077	Th2837	Ti3349	Ti1908	U_3701	V_2924	Zn2062	Zr3391
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	1.0040	.48640	.00290	.48170	1.0330	.00796	.47771	.48974	.50152
Stddev	.0007	.00126	.00115	.00025	.0048	.01486	.00032	.00329	.00228
%RSD	.06944	.25956	39.788	.05270	.46571	186.55	.06767	.67144	.45466

#1	1.0035	.48550	.00208	.48188	1.0296	.01847	.47748	.49206	.49990
#2	1.0045	.48729	.00371	.48152	1.0364	-.00254	.47793	.48741	.50313

Check ?	Chk Pass	Chk Pass	None	Chk Pass	Chk Pass	None	Chk Pass	Chk Pass	Chk Pass
Value									
Range									

Int. Std.	Y_2243	Y_3600	Y_3774
Units	Cts/S	Cts/S	Cts/S
Avg	1539.0	31952.	6108.5
Stddev	1.8	39.	7.9
%RSD	.11722	.12105	.12876

#1	1537.7	31925.	6103.0
#2	1540.3	31980.	6114.1

Sample Name: ccb Acquired: 5/20/2016 16:28:16 Type: QC
Method: 6500_026(v10) Mode: CONC Corr. Factor: 1.000000
User: kellyca Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	Ag3280	Al1670	As1890	B_2089	Ba4554	Be3130	Bi2230	Ca3179	Cd2288	Co2286	Cr2055	Cu3247
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	-.00018	-.00051	.00081	W .00208	-.00003	-.00017	.00229	.00119	-.00008	-.00064	.00009	-.00073
Stddev	.00004	.00046	.00168	.00041	.00001	.00000	.00125	.00127	.00014	.00028	.00006	.00000
%RSD	20.759	90.281	205.65	19.963	35.046	1.5732	54.645	106.30	172.81	43.863	63.698	.41162

#1	-.00015	-.00019	.00200	.00237	-.00004	-.00017	.00317	.00209	-.00019	-.00044	.00013	-.00073
#2	-.00021	-.00084	-.00037	.00178	-.00002	-.00017	.00140	.00030	.00002	-.00083	.00005	-.00072

Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Warn	Chk Pass	Chk Pass	None	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit				.00156								
Low Limit				-.00156								

Elem	Fe2599	K_7664	Li6707	Mg2790	Mn2576	Mo2020	Na5895	Ni2316	P_1782	Pb2203	S_1820	Sb2068
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.00091	.05929	-.00078	.00522	.00012	.00056	.02771	.00025	-.00482	-.00106	.00938	W .00471
Stddev	.00069	.02342	.00079	.00282	.00000	.00023	.00457	.00059	.00361	.00323	.00261	.00035
%RSD	75.431	39.494	101.02	53.946	2.8328	40.367	16.486	236.44	74.879	305.02	27.782	7.4989

#1	.00140	.07585	-.00022	.00323	.00011	.00040	.03094	-.00017	-.00227	-.00335	.00754	.00495
#2	.00043	.04273	-.00133	.00721	.00012	.00073	.02448	.00066	-.00738	.00123	.01122	.00446

Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	None	Chk Warn
High Limit												.00314
Low Limit												-.00314

Elem	Se1960	Si2881	Sn1899	Sr4077	Th2837	Ti3349	Ti1908	U_3701	V_2924	Zn2062	Zr3391
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.00343	-.01194	.00200	.00006	-.00115	.00042	.00116	.02554	-.00007	.00020	.00014
Stddev	.00460	.00131	.00159	.00006	.00025	.00039	.00017	.00183	.00064	.00004	.00079
%RSD	134.22	11.006	79.429	94.202	22.029	93.033	14.440	7.1746	865.59	19.399	548.07

#1	.00668	-.01101	.00312	.00002	-.00097	.00070	.00128	.02683	-.00052	.00017	.00070
#2	.00017	-.01287	.00088	.00011	-.00133	.00014	.00104	.02424	.00038	.00022	-.00041

Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit											
Low Limit											

Int. Std.	Y_2243	Y_3600	Y_3774
Units	Cts/S	Cts/S	Cts/S
Avg	1552.7	32433.	5983.5
Stddev	2.3	52.	22.8
%RSD	.14492	.16045	.38141

#1	1551.1	32470.	5999.7
#2	1554.2	32396.	5967.4

Sample Name: ccvl-3903059 Acquired: 5/20/2016 16:31:02 Type: QC
Method: 6500_026(v10) Mode: CONC Corr. Factor: 1.000000
User: kellyca Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	Ag3280	Al1670	As1890	B_2089	Ba4554	Be3130	Bi2230	Ca3179	Cd2288	Co2286	Cr2055	Cu3247
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.01006	.10439	F .00999	.10738	.01004	.00093	.11253	.20200	.00541	.01019	.01054	.01441
Stddev	.00053	.00170	.00809	.00114	.00001	.00005	.00309	.00479	.00001	.00022	.00018	.00019
%RSD	5.3164	1.6329	81.003	1.0619	.13058	5.4631	2.7495	2.3713	.17564	2.1278	1.7162	1.3379

#1	.01043	.10318	.01571	.10658	.01005	.00090	.11035	.20539	.00542	.01004	.01042	.01455
#2	.00968	.10559	.00427	.10819	.01003	.00097	.11472	.19861	.00540	.01035	.01067	.01428

Check ?	Chk Pass	Chk Pass	Chk Fail	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Value			.01500									
Range			-30.000%									

Elem	Fe2599	K_7664	Li6707	Mg2790	Mn2576	Mo2020	Na5895	Ni2316	P_1782	Pb2203	S_1820	Sb2068
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.11953	3.0964	.00916	.20996	.01022	.02182	1.0484	.04215	2.9688	.00680	.00723	.02148
Stddev	.00111	.0539	.00004	.00219	.00001	.00062	.0007	.00046	.0038	.00158	.00225	.00178
%RSD	.93269	1.7418	.46533	1.0423	.13563	2.8582	.06744	1.0891	.12650	23.172	31.175	8.2818

#1	.11874	3.1346	.00919	.20841	.01023	.02226	1.0479	.04247	2.9714	.00792	.00564	.02274
#2	.12031	3.0583	.00913	.21150	.01021	.02138	1.0489	.04182	2.9661	.00569	.00883	.02023

Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	None	Chk Pass
Value												
Range												

Elem	Se1960	Si2881	Sn1899	Sr4077	Th2837	Ti3349	Ti1908	U_3701	V_2924	Zn2062	Zr3391
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.01140	.49269	.10350	.00975	.01549	.00996	.01549	.07516	.01023	.01829	.01666
Stddev	.00404	.00913	.00060	.00004	.00025	.00018	.00134	.00001	.00027	.00046	.00052
%RSD	35.395	1.8522	.58242	.37020	1.5948	1.7654	8.6638	.01029	2.6214	2.5203	3.0957

#1	.00855	.49915	.10392	.00978	.01567	.00984	.01454	.07516	.01042	.01862	.01702
#2	.01425	.48624	.10307	.00972	.01532	.01009	.01644	.07515	.01004	.01797	.01629

Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Value											
Range											

Int. Std.	Y_2243	Y_3600	Y_3774
Units	Cts/S	Cts/S	Cts/S
Avg	1572.3	33153.	6177.7
Stddev	1.8	68.	102.7
%RSD	.11397	.20642	1.6630

#1	1571.0	33105.	6105.1
#2	1573.5	33202.	6250.4

Sample Name: MB 280-325566/1-A Acquired: 5/20/2016 16:33:48 Type: Unk
Method: 6500_026(v10) Mode: CONC Corr. Factor: 1.000000
User: kellyca Custom ID1: 5/17 Custom ID2: Custom ID3:
Comment: 325566 6010c q4 (Mn)

Elem	Ag3280	Al1670	As1890	B_2089	Ba4554	Be3130	Bi2230	Ca3179	Cd2288
Line	328.068 {103}	167.079 {502}	189.042 {478}	208.959 {461}	455.403 {74}	313.042 {108}	223.061 {451}	317.933 {106}	228.802 {447}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	-.00004	.00526	-.00370	.00168	.00016	-.00006	-.00294	.01425	-.00005
Stddev	.00048	.00066	.00389	.00066	.00010	.00006	.00044	.00270	.00003
%RSD	1148.2	12.640	105.05	39.577	62.112	88.289	14.903	18.920	67.483

#1	-.00038	.00479	-.00645	.00215	.00009	-.00010	-.00325	.01234	-.00007
#2	.00030	.00573	-.00095	.00121	.00023	-.00002	-.00263	.01615	-.00002

Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Elem	Co2286	Cr2055	Cu3247	Fe2599	K_7664	Li6707	Mg2790	Mn2576	Mo2020
Line	228.616 {447}	205.560 {464}	324.754 {104}	259.940 {130}	766.490 {44}	670.784 {50}	279.079 {121}2	257.610 {131}	202.030 {467}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	-.00004	.00001	-.00015	.02076	.02601	-.00098	.00772	.00021	-.00008
Stddev	.00000	.00010	.00032	.00150	.00369	.00032	.00070	.00005	.00028
%RSD	9.0510	1469.2	212.55	7.2163	14.193	32.922	9.0726	21.570	362.10

#1	-.00005	.00008	.00008	.02182	.02862	-.00120	.00723	.00018	-.00027
#2	-.00004	-.00007	-.00037	.01970	.02340	-.00075	.00822	.00024	.00012

Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Elem	Na5895	Ni2316	P_1782	Pb2203	S_1820	Sb2068	Se1960	Si2881	Sn1899
Line	589.592 {57}	231.604 {446}	178.284 {489}	220.353 {453}	182.034 {485}	206.833 {463}	196.090 {472}	288.158 {117}	189.989 {477}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.03435	.00014	-.00005	-.00122	.01675	.00098	W -.00828	.00189	.00173
Stddev	.00111	.00011	.00203	.00020	.00147	.00022	.00190	.01215	.00008
%RSD	3.2221	76.995	4238.3	16.531	8.7716	22.135	22.965	644.09	4.5353

#1	.03357	.00006	.00139	-.00107	.01571	.00083	-.00694	-.00671	.00178
#2	.03514	.00021	-.00148	-.00136	.01779	.00113	-.00963	.01048	.00167

Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Warn	Chk Pass	Chk Pass
High Limit							.00500		
Low Limit							-.00500		

Elem	Sr4077	Th2837	Ti3349	Ti1908	U_3701	V_2924	Zn2062	Zr3391
Line	407.771 {83}	283.730 {119}	334.904 {101}	190.856 {477}	370.152 {91}	292.402 {115}	206.200 {163}	339.198 {99}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.00014	-.00081	.00047	-.00100	.00457	.00013	.00247	.00169
Stddev	.00001	.00026	.00005	.00071	.01028	.00047	.00087	.00037
%RSD	8.3903	31.578	10.834	70.207	224.83	375.97	35.408	21.740

#1	.00013	-.00099	.00051	-.00150	.01184	-.00021	.00185	.00196
#2	.00015	-.00063	.00043	-.00051	-.00270	.00046	.00308	.00143

Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit								
Low Limit								

Int. Std.	Y_2243	Y_3600	Y_3774
Line	224.306 {450}	360.073 {94}	377.433 {89}
Units	Cts/S	Cts/S	Cts/S
Avg	1560.1	33365.	6375.1
Stddev	1.4	95.	26.1
%RSD	.08810	.28391	.41005

#1	1561.0	33432.	6393.6
#2	1559.1	33298.	6356.7

Sample Name: LCS 280-325566/2-A Acquired: 5/20/2016 16:36:34 Type: Unk

Method: 6500_026(v10) Mode: CONC Corr. Factor: 1.000000

User: kellyca Custom ID1: Custom ID2: Custom ID3:

Comment: 325566 6010c q4 (Mn)

Elem	Ag3280	Al1670	As1890	B_2089	Ba4554	Be3130	Bi2230	Ca3179	Cd2288
Line	328.068 {103}	167.079 {502}	189.042 {478}	208.959 {461}	455.403 {74}	313.042 {108}	223.061 {451}	317.933 {106}	228.802 {447}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.05011	1.9913	1.0639	1.0969	2.0509	.05150	2.1787	51.099	1.0467
Stddev	.00040	.0005	.0013	.0009	.0010	.00012	.0042	.055	.00051
%RSD	.79004	.02506	.12038	.07867	.04859	.23440	.19051	.10683	.48578

#1	.04983	1.9916	1.0630	1.0963	2.0502	.05142	2.1758	51.060	.10431
#2	.05039	1.9909	1.0648	1.0975	2.0516	.05159	2.1817	51.138	.10502

Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Elem	Co2286	Cr2055	Cu3247	Fe2599	K_7664	Li6707	Mg2790	Mn2576	Mo2020
Line	228.616 {447}	205.560 {464}	324.754 {104}	259.940 {130}	766.490 {44}	670.784 {50}	279.079 {121}2	257.610 {131}	202.030 {467}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.51650	F .20800	.25248	1.0906	52.607	1.0543	49.807	.49863	F 1.1017
Stddev	.00018	.00006	.00028	.0023	.108	.0003	.036	.00008	.0029
%RSD	.03564	.02945	.10935	.20779	.20436	.02823	.07156	.01682	.26010

#1	.51637	.20795	.25229	1.0889	52.531	1.0541	49.782	.49857	1.1037
#2	.51663	.20804	.25268	1.0922	52.683	1.0545	49.832	.49869	1.0996

Check ?	Chk Pass	Chk Fail	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Fail
High Limit		.05750							1.1000
Low Limit		.04300							.90000

Elem	Na8183	Ni2316	P_1782	Pb2203	S_1820	Sb2068	Se1960	Si2881	Sn1899
Line	818.326 {41}	231.604 {446}	178.284 {489}	220.353 {453}	182.034 {485}	206.833 {463}	196.090 {472}	288.158 {117}	189.989 {477}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	52.249	.50990	10.576	.52922	2.1155	F .54200	2.0951	10.431	2.0435
Stddev	.026	.00094	.027	.00130	.0026	.00633	.0034	.032	.0030
%RSD	.05062	.18462	.25760	.24562	.12079	1.1676	.16152	.30755	.14582

#1	52.268	.50924	10.596	.52830	2.1173	.53752	2.0975	10.454	2.0456
#2	52.230	.51057	10.557	.53014	2.1137	.54647	2.0927	10.409	2.0414

Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Fail	Chk Pass	Chk Pass	Chk Pass
High Limit						.54000			
Low Limit						.44000			

Elem	Sr4077	Th2837	Ti3349	Ti1908	U_3701	V_2924	Zn2062	Zr3391
Line	407.771 {83}	283.730 {119}	334.904 {101}	190.856 {477}	370.152 {91}	292.402 {115}	206.200 {163}	339.198 {99}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.98815	1.0138	1.0016	2.0504	2.1680	.48678	.49798	.51593
Stddev	.00134	.0004	.0015	.0029	.0128	.00275	.00262	.00143
%RSD	.13548	.03773	.14863	.14295	.59235	.56522	.52619	.27791

#1	.98721	1.0135	1.0006	2.0525	2.1771	.48484	.49983	.51695
#2	.98910	1.0141	1.0027	2.0483	2.1589	.48873	.49612	.51492

Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit								
Low Limit								

Int. Std.	Y_2243	Y_3600	Y_3774
Line	224.306 {450}	360.073 {94}	377.433 {89}
Units	Cts/S	Cts/S	Cts/S
Avg	1494.2	31053.	6085.3
Stddev	1.6	24.	12.1
%RSD	.10581	.07715	.19928

#1	1495.3	31036.	6093.9
#2	1493.1	31070.	6076.8

Sample Name: 280-83196-A-1-A@10 Acquired: 5/20/2016 16:39:07 Type: Unk

Method: 6500_026(v10) Mode: CONC Corr. Factor: 1.000000

User: kellyca Custom ID1: Custom ID2: Custom ID3:

Comment: 325566 6010c q4 (Mn)

Elem	Ag3280	Al1670	As1890	B_2089	Ba4554	Be3130	Bi2230	Ca3179	Cd2288
Line	328.068 {103}	167.079 {502}	189.042 {478}	208.959 {461}	455.403 {74}	313.042 {108}	223.061 {451}	317.933 {106}	228.802 {447}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.00013	.00955	.00057	.01978	.01420	-.00011	.00236	26.500	.00012
Stddev	.00019	.00196	.00421	.00029	.00007	.00011	.00059	.037	.00021
%RSD	141.58	20.530	739.15	1.4576	.46259	99.800	24.944	.13821	184.26

#1	-.00000	.01093	-.00240	.01957	.01424	-.00019	.00278	26.475	.00027
#2	.00026	.00816	.00354	.01998	.01415	-.00003	.00195	26.526	-.00004

Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Elem	Co2286	Cr2055	Cu3247	Fe2599	K_7664	Li6707	Mg2790	Mn2576	Mo2020
Line	228.616 {447}	205.560 {464}	324.754 {104}	259.940 {130}	766.490 {44}	670.784 {50}	279.079 {121}2	257.610 {131}	202.030 {467}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	-.00046	.04103	-.00024	.04755	.78147	.00286	5.3598	4.1307	.00107
Stddev	.00005	.00013	.00008	.00055	.00297	.00006	.0105	.0105	.00062
%RSD	10.703	.31921	32.373	1.1589	.37989	1.9880	.19529	.25435	58.421

#1	-.00050	.04112	-.00018	.04794	.78357	.00282	5.3672	4.1382	.00063
#2	-.00043	.04094	-.00029	.04716	.77938	.00290	5.3524	4.1233	.00151

Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Elem	Na8183	Ni2316	P_1782	Pb2203	S_1820	Sb2068	Se1960	Si2881	Sn1899
Line	818.326 {41}	231.604 {446}	178.284 {489}	220.353 {453}	182.034 {485}	206.833 {463}	196.090 {472}	288.158 {117}	189.989 {477}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	14.341	.00167	.00136	-.00189	7.3079	-.00131	.00046	1.8394	-.00046
Stddev	.036	.00019	.00020	.00191	.0177	.00013	.00484	.0070	.00117
%RSD	.24762	11.677	14.971	100.85	.24240	9.5502	1053.4	.38157	253.15

#1	14.316	.00153	.00121	-.00054	7.3204	-.00122	-.00296	1.8443	.00037
#2	14.366	.00180	.00150	-.00324	7.2953	-.00140	.00388	1.8344	-.00129

Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Elem	Sr4077	Th2837	Ti3349	Ti1908	U_3701	V_2924	Zn2062	Zr3391
Line	407.771 {83}	283.730 {119}	334.904 {101}	190.856 {477}	370.152 {91}	292.402 {115}	206.200 {163}	339.198 {99}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.20101	-.00397	.00037	-.00009	.02061	.00003	.00819	.00061
Stddev	.00049	.00100	.00008	.00013	.00196	.00031	.00014	.00120
%RSD	.24332	25.299	21.120	150.06	9.4988	998.71	1.6844	197.47

#1	.20067	-.00326	.00032	-.00018	.02200	-.00019	.00829	-.00024
#2	.20136	-.00468	.00043	.00001	.01923	.00025	.00809	.00145

Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit								
Low Limit								

Int. Std.	Y_2243	Y_3600	Y_3774
Line	224.306 {450}	360.073 {94}	377.433 {89}
Units	Cts/S	Cts/S	Cts/S
Avg	1547.1	32191.	6108.7
Stddev	.7	12.	13.3
%RSD	.04395	.03817	.21709

#1	1547.6	32200.	6099.3
#2	1546.6	32183.	6118.0

Sample Name: 280-83196-A-1-Asd@50 Acquired: 5/20/2016 16:41:49 Type: Unk
Method: 6500_026(v10) Mode: CONC Corr. Factor: 1.000000
User: kellyca Custom ID1: Custom ID2: Custom ID3:
Comment: 325566 6010c q4 (Mn)

Elem	Ag3280	Al1670	As1890	B_2089	Ba4554	Be3130	Bi2230	Ca3179	Cd2288
Line	328.068 {103}	167.079 {502}	189.042 {478}	208.959 {461}	455.403 { 74}	313.042 {108}	223.061 {451}	317.933 {106}	228.802 {447}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	-0.00021	.00396	-0.00171	.00452	.00275	-0.00003	-0.00209	5.3251	.00010
Stddev	.00064	.00131	.00326	.00024	.00001	.00002	.00043	.0180	.00017
%RSD	313.73	33.168	190.88	5.4094	.39602	72.413	20.348	.33865	179.40

#1	.00025	.00303	-.00401	.00435	.00275	-.00001	-.00179	5.3378	-.00003
#2	-.00066	.00489	.00060	.00469	.00276	-.00004	-.00239	5.3123	.00022

Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Elem	Co2286	Cr2055	Cu3247	Fe2599	K_7664	Li6707	Mg2790	Mn2576	Mo2020
Line	228.616 {447}	205.560 {464}	324.754 {104}	259.940 {130}	766.490 { 44}	670.784 { 50}	279.079 {121}2	257.610 {131}	202.030 {467}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	-0.00050	.00760	-0.00074	.03247	.15057	-0.00062	1.0668	.83549	.00042
Stddev	.00021	.00006	.00001	.00052	.00937	.00105	.0096	.00191	.00003
%RSD	40.928	.79350	.90515	1.5977	6.2259	169.24	.90098	.22853	6.3803

#1	-.00065	.00764	-.00074	.03284	.14394	.00012	1.0736	.83685	.00040
#2	-.00036	.00756	-.00073	.03210	.15720	-.00136	1.0600	.83414	.00044

Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Elem	Na5895	Ni2316	P_1782	Pb2203	S_1820	Sb2068	Se1960	Si2881	Sn1899
Line	589.592 { 57}	231.604 {446}	178.284 {489}	220.353 {453}	182.034 {485}	206.833 {463}	196.090 {472}	288.158 {117}	189.989 {477}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	2.7718	.00040	-0.00234	-0.00061	1.4193	.00090	-0.00344	.36261	.00071
Stddev	.0004	.00086	.00058	.00037	.0053	.00078	.00153	.00182	.00046
%RSD	.01492	214.50	24.896	60.340	.36958	86.991	44.417	.50170	64.783

#1	2.7715	.00101	-.00193	-.00035	1.4156	.00145	-.00236	.36390	.00038
#2	2.7721	-.00021	-.00275	-.00087	1.4230	.00034	-.00452	.36133	.00103

Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Elem	Sr4077	Th2837	Ti3349	Ti1908	U_3701	V_2924	Zn2062	Zr3391
Line	407.771 { 83}	283.730 {119}	334.904 {101}	190.856 {477}	370.152 { 91}	292.402 {115}	206.200 {163}	339.198 { 99}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.03965	-0.00089	.00007	-0.00103	.01536	.00061	.00087	.00014
Stddev	.00019	.00091	.00031	.00068	.02004	.00079	.00004	.00164
%RSD	.48332	102.01	441.00	65.912	130.42	129.28	4.4188	1208.9

#1	.03952	-.00154	-.00015	-.00055	.02953	.00116	.00085	.00129
#2	.03979	-.00025	.00029	-.00150	.00120	.00005	.00090	-.00102

Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit								
Low Limit								

Int. Std.	Y_2243	Y_3600	Y_3774
Line	224.306 {450}	360.073 { 94}	377.433 { 89}
Units	Cts/S	Cts/S	Cts/S
Avg	1571.8	32363.	5912.1
Stddev	.6	90.	17.7
%RSD	.04002	.27725	.29890

#1	1571.4	32300.	5899.6
#2	1572.3	32427.	5924.6

Sample Name: 83196-A-1-B MS@10 Acquired: 5/20/2016 16:44:33 Type: Unk
Method: 6500_026(v10) Mode: CONC Corr. Factor: 1.000000
User: kellyca Custom ID1: Custom ID2: Custom ID3:
Comment: 325566 6010c q4 (Mn)

Elem	Ag3280	Al1670	As1890	B_2089	Ba4554	Be3130	Bi2230	Ca3179	Cd2288
Line	328.068 {103}	167.079 {502}	189.042 {478}	208.959 {461}	455.403 { 74}	313.042 {108}	223.061 {451}	317.933 {106}	228.802 {447}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.00527	.23515	.11432	.13360	.22387	.00523	.23317	31.493	.01077
Stddev	.00033	.00264	.00550	.00149	.00169	.00007	.00391	.070	.00022
%RSD	6.2911	1.1223	4.8142	1.1135	.75602	1.4318	1.6769	.22093	2.0775
#1	.00551	.23328	.11042	.13255	.22267	.00528	.23040	31.444	.01061
#2	.00504	.23701	.11821	.13465	.22506	.00517	.23593	31.542	.01092

Check ? Chk Pass Chk Pass Chk Pass Chk Pass Chk Pass Chk Pass Chk Pass Chk Pass Chk Pass
High Limit
Low Limit

Elem	Co2286	Cr2055	Cu3247	Fe2599	K_7664	Li6707	Mg2790	Mn2576	Mo2020
Line	228.616 {447}	205.560 {464}	324.754 {104}	259.940 {130}	766.490 { 44}	670.784 { 50}	279.079 {121}2	257.610 {131}	202.030 {467}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.05469	.06396	.02664	.14075	6.1062	.11242	10.627	4.2102	.11538
Stddev	.00024	.00114	.00028	.00222	.0531	.00045	.079	.0243	.00152
%RSD	.43626	1.7783	1.0665	1.5745	.87024	.39747	.74304	.57699	1.3209
#1	.05452	.06316	.02643	.14232	6.0686	.11210	10.571	4.1931	.11430
#2	.05486	.06476	.02684	.13919	6.1437	.11274	10.683	4.2274	.11645

Check ? Chk Pass Chk Pass Chk Pass Chk Pass Chk Pass Chk Pass Chk Pass Chk Pass Chk Pass
High Limit
Low Limit

Elem	Na8183	Ni2316	P_1782	Pb2203	S_1820	Sb2068	Se1960	Si2881	Sn1899
Line	818.326 { 41}	231.604 {446}	178.284 {489}	220.353 {453}	182.034 {485}	206.833 {463}	196.090 {472}	288.158 {117}	189.989 {477}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	19.428	.05652	1.1188	.05581	7.7169	.05602	.22189	2.8752	.21825
Stddev	.091	.00069	.0200	.00156	.1095	.00026	.00518	.0065	.00450
%RSD	.47022	1.2239	1.7855	2.8038	1.4195	.46636	2.3365	.22587	2.0637
#1	19.492	.05603	1.1047	.05470	7.6394	.05583	.22556	2.8706	.21506
#2	19.363	.05700	1.1330	.05691	7.7943	.05620	.21823	2.8798	.22143

Check ? Chk Pass Chk Pass Chk Pass Chk Pass Chk Pass Chk Pass Chk Pass Chk Pass Chk Pass
High Limit
Low Limit

Elem	Sr4077	Th2837	Ti3349	Ti1908	U_3701	V_2924	Zn2062	Zr3391
Line	407.771 { 83}	283.730 {119}	334.904 {101}	190.856 {477}	370.152 { 91}	292.402 {115}	206.200 {163}	339.198 { 99}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.30227	.10053	.10350	.22263	.23980	.04972	.05231	.05284
Stddev	.00164	.00075	.00000	.00506	.00869	.00138	.00147	.00040
%RSD	.54188	.74487	.00351	2.2735	3.6256	2.7732	2.8140	.75753
#1	.30112	.10000	.10351	.21905	.23365	.04874	.05336	.05313
#2	.30343	.10106	.10350	.22621	.24595	.05069	.05127	.05256

Check ? Chk Pass Chk Pass Chk Pass Chk Pass Chk Pass Chk Pass Chk Pass Chk Pass
High Limit
Low Limit

Int. Std.	Y_2243	Y_3600	Y_3774
Line	224.306 {450}	360.073 { 94}	377.433 { 89}
Units	Cts/S	Cts/S	Cts/S
Avg	1537.1	32139.	6136.3
Stddev	11.4	105.	23.0
%RSD	.74153	.32572	.37556
#1	1545.1	32213.	6120.0
#2	1529.0	32065.	6152.6

Sample Name: 83196-A-1-C MSD@10 Acquired: 5/20/2016 16:47:15 Type: Unk
Method: 6500_026(v10) Mode: CONC Corr. Factor: 1.000000
User: kellyca Custom ID1: Custom ID2: Custom ID3:
Comment: 325566 6010c q4 (Mn)

Elem	Ag3280	Al1670	As1890	B_2089	Ba4554	Be3130	Bi2230	Ca3179	Cd2288
Line	328.068 {103}	167.079 {502}	189.042 {478}	208.959 {461}	455.403 { 74}	313.042 {108}	223.061 {451}	317.933 {106}	228.802 {447}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.00562	.22550	.10076	.12834	.22169	.00515	.22838	30.444	.01061
Stddev	.00020	.00245	.00296	.00128	.00186	.00007	.00147	.083	.00026
%RSD	3.5708	1.0862	2.9363	.99839	.83742	1.2989	.64348	.27209	2.4881

#1	.00548	.22377	.09866	.12743	.22038	.00520	.22734	30.385	.01079
#2	.00577	.22723	.10285	.12925	.22301	.00511	.22942	30.503	.01042

Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Elem	Co2286	Cr2055	Cu3247	Fe2599	K_7664	Li6707	Mg2790	Mn2576	Mo2020
Line	228.616 {447}	205.560 {464}	324.754 {104}	259.940 {130}	766.490 { 44}	670.784 { 50}	279.079 {121}2	257.610 {131}	202.030 {467}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.05329	.06040	.02554	.13576	6.0721	.11076	10.288	4.0503	.11137
Stddev	.00040	.00027	.00014	.00061	.0577	.00051	.023	.0098	.00042
%RSD	.74301	.45324	.54436	.44864	.95093	.46211	.22787	.24130	.37851

#1	.05357	.06060	.02564	.13533	6.0313	.11040	10.304	4.0572	.11167
#2	.05301	.06021	.02544	.13619	6.1129	.11112	10.271	4.0434	.11108

Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Elem	Na8183	Ni2316	P_1782	Pb2203	S_1820	Sb2068	Se1960	Si2881	Sn1899
Line	818.326 { 41}	231.604 {446}	178.284 {489}	220.353 {453}	182.034 {485}	206.833 {463}	196.090 {472}	288.158 {117}	189.989 {477}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	19.329	.05507	1.0763	.05465	7.3283	.05460	.20964	2.8081	.20854
Stddev	.047	.00020	.0016	.00075	.0071	.00225	.00243	.0242	.00236
%RSD	.24212	.36107	.14653	1.3650	.09641	4.1261	1.1602	.86098	1.1333

#1	19.296	.05493	1.0774	.05518	7.3233	.05300	.20792	2.7910	.21021
#2	19.362	.05521	1.0752	.05412	7.3333	.05619	.21136	2.8252	.20687

Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Elem	Sr4077	Th2837	Ti3349	Ti1908	U_3701	V_2924	Zn2062	Zr3391
Line	407.771 { 83}	283.730 {119}	334.904 {101}	190.856 {477}	370.152 { 91}	292.402 {115}	206.200 {163}	339.198 { 99}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.29577	.09837	.10164	.21685	.23539	.04980	.05038	.05167
Stddev	.00199	.00046	.00106	.00235	.02059	.00004	.00103	.00091
%RSD	.67338	.47220	1.0416	1.0838	8.7487	.07953	2.0391	1.7663

#1	.29436	.09804	.10089	.21851	.24995	.04977	.04965	.05102
#2	.29718	.09870	.10239	.21519	.22083	.04983	.05110	.05231

Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit								
Low Limit								

Int. Std.	Y_2243	Y_3600	Y_3774
Line	224.306 {450}	360.073 { 94}	377.433 { 89}
Units	Cts/S	Cts/S	Cts/S
Avg	1533.7	32016.	6164.1
Stddev	1.7	14.	.7
%RSD	.10901	.04440	.01086

#1	1534.9	32006.	6163.6
#2	1532.5	32026.	6164.6

Sample Name: 83196-A-1-Apds@10 Acquired: 5/20/2016 16:49:56 Type: Unk

Method: 6500_026(v10) Mode: CONC Corr. Factor: 1.000000

User: kellyca Custom ID1: Custom ID2: Custom ID3:

Comment: 325566 6010c q4 (Mn)

Elem	Ag3280	Al1670	As1890	B_2089	Ba4554	Be3130	Bi2230	Ca3179	Cd2288
Line	328.068 {103}	167.079 {502}	189.042 {478}	208.959 {461}	455.403 { 74}	313.042 {108}	223.061 {451}	317.933 {106}	228.802 {447}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.04881	1.0162	.20535	.12330	.11392	.05088	-.00100	45.501	.05182
Stddev	.00004	.0032	.00903	.00138	.00087	.00037	.00072	.292	.00045
%RSD	.08803	.31611	4.3961	1.1200	.76668	.73413	71.576	.64276	.86122

#1	.04878	1.0185	.21174	.12233	.11331	.05061	-.00151	45.294	.05151
#2	.04884	1.0140	.19897	.12428	.11454	.05114	-.00050	45.708	.05214

Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Elem	Co2286	Cr2055	Cu3247	Fe2599	K_7664	Li6707	Mg2790	Mn2576	Mo2020
Line	228.616 {447}	205.560 {464}	324.754 {104}	259.940 {130}	766.490 { 44}	670.784 { 50}	279.079 {121}2	257.610 {131}	202.030 {467}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.05059	.09020	.04908	1.0448	21.239	.10636	24.731	4.0430	.05253
Stddev	.00056	.00053	.00033	.0116	.185	.00126	.034	.0125	.00048
%RSD	1.1071	.58288	.67503	1.1099	.87216	1.1830	.13663	.30836	.90424

#1	.05098	.08983	.04931	1.0366	21.108	.10547	24.755	4.0518	.05287
#2	.05019	.09057	.04884	1.0530	21.370	.10725	24.707	4.0342	.05220

Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Elem	Na8183	Ni2316	P_1782	Pb2203	S_1820	Sb2068	Se1960	Si2881	Sn1899
Line	818.326 { 41}	231.604 {446}	178.284 {489}	220.353 {453}	182.034 {485}	206.833 {463}	196.090 {472}	288.158 {117}	189.989 {477}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	34.316	.05163	2.0645	.10487	7.2180	.10406	.20519	6.8024	.09972
Stddev	.173	.00013	.0027	.00230	.0098	.00372	.00203	.0426	.00016
%RSD	.50320	.24617	.13105	2.1894	.13568	3.5795	.98967	.62671	.16306

#1	34.438	.05154	2.0665	.10650	7.2111	.10143	.20662	6.7723	.09961
#2	34.194	.05172	2.0626	.10325	7.2249	.10669	.20375	6.8326	.09984

Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Elem	Sr4077	Th2837	Ti3349	Ti1908	U_3701	V_2924	Zn2062	Zr3391
Line	407.771 { 83}	283.730 {119}	334.904 {101}	190.856 {477}	370.152 { 91}	292.402 {115}	206.200 {163}	339.198 { 99}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.24520	.19424	.04898	.20261	.54877	.04736	.19852	.05066
Stddev	.00159	.00177	.00021	.00175	.00674	.00019	.00024	.00166
%RSD	.64824	.91086	.43255	.86527	1.2276	.39274	.11839	3.2705

#1	.24408	.19299	.04884	.20137	.55353	.04750	.19869	.05183
#2	.24633	.19549	.04913	.20385	.54400	.04723	.19836	.04949

Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit								
Low Limit								

Int. Std.	Y_2243	Y_3600	Y_3774
Line	224.306 {450}	360.073 { 94}	377.433 { 89}
Units	Cts/S	Cts/S	Cts/S
Avg	1519.6	31336.	6034.8
Stddev	2.9	24.	26.6
%RSD	.19368	.07810	.44064

#1	1521.7	31319.	6053.6
#2	1517.5	31354.	6016.0

Sample Name: 280-83196-A-2-A@10 Acquired: 5/20/2016 16:52:38 Type: Unk

Method: 6500_026(v10) Mode: CONC Corr. Factor: 1.000000

User: kellyca Custom ID1: Custom ID2: Custom ID3:

Comment: 325566 6010c q4 (Mn)

Elem	Ag3280	Al1670	As1890	B_2089	Ba4554	Be3130	Bi2230	Ca3179	Cd2288
Line	328.068 {103}	167.079 {502}	189.042 {478}	208.959 {461}	455.403 { 74}	313.042 {108}	223.061 {451}	317.933 {106}	228.802 {447}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.00039	.23539	.00131	.01536	.07619	-.00008	.00076	25.100	-.00005
Stddev	.00022	.00178	.00185	.00008	.00037	.00001	.00040	.060	.00005
%RSD	55.496	.75727	140.66	.50120	.48615	7.9907	52.367	.23890	102.78

#1	.00024	.23665	.00262	.01542	.07593	-.00008	.00104	25.057	-.00009
#2	.00054	.23413	.00001	.01531	.07646	-.00007	.00048	25.142	-.00001

Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Elem	Co2286	Cr2055	Cu3247	Fe2599	K_7664	Li6707	Mg2790	Mn2576	Mo2020
Line	228.616 {447}	205.560 {464}	324.754 {104}	259.940 {130}	766.490 { 44}	670.784 { 50}	279.079 {121}2	257.610 {131}	202.030 {467}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.00014	.03729	.00091	.26515	.77747	.00392	5.1145	4.4198	-.00015
Stddev	.00053	.00018	.00055	.00062	.01852	.00079	.0087	.0039	.00043
%RSD	367.93	.47370	60.123	.23199	2.3826	20.084	.17020	.08925	278.58

#1	-.00023	.03742	.00129	.26559	.76437	.00336	5.1206	4.4170	-.00046
#2	.00052	.03717	.00052	.26472	.79057	.00447	5.1083	4.4226	.00015

Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Elem	Na8183	Ni2316	P_1782	Pb2203	S_1820	Sb2068	Se1960	Si2881	Sn1899
Line	818.326 { 41}	231.604 {446}	178.284 {489}	220.353 {453}	182.034 {485}	206.833 {463}	196.090 {472}	288.158 {117}	189.989 {477}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	13.904	.00296	.00302	-.00176	6.9672	-.00151	.00150	2.3144	.00127
Stddev	.013	.00017	.00493	.00064	.0058	.00182	.00257	.0026	.00046
%RSD	.09294	5.6511	163.31	36.160	.08384	120.52	170.73	.11062	36.158

#1	13.913	.00284	-.00047	-.00221	6.9713	-.00022	.00332	2.3126	.00095
#2	13.895	.00308	.00651	-.00131	6.9631	-.00279	-.00031	2.3162	.00160

Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Elem	Sr4077	Th2837	Ti3349	Ti1908	U_3701	V_2924	Zn2062	Zr3391
Line	407.771 { 83}	283.730 {119}	334.904 {101}	190.856 {477}	370.152 { 91}	292.402 {115}	206.200 {163}	339.198 { 99}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.19491	-.00296	.00819	.00063	.02427	.00253	.00230	.00069
Stddev	.00093	.00028	.00047	.00285	.00608	.00030	.00015	.00120
%RSD	.47832	9.5719	5.7403	453.80	25.067	11.728	6.7333	175.52

#1	.19425	-.00276	.00852	-.00139	.02857	.00274	.00241	.00154
#2	.19557	-.00316	.00785	.00264	.01997	.00232	.00219	-.00017

Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit								
Low Limit								

Int. Std.	Y_2243	Y_3600	Y_3774
Line	224.306 {450}	360.073 { 94}	377.433 { 89}
Units	Cts/S	Cts/S	Cts/S
Avg	1552.3	32511.	6188.1
Stddev	1.6	9.	4.0
%RSD	.10577	.02664	.06487

#1	1553.4	32505.	6190.9
#2	1551.1	32517.	6185.3

Sample Name: ccvh-3900196 Acquired: 5/20/2016 16:55:20 Type: QC
Method: 6500_026(v10) Mode: CONC Corr. Factor: 1.000000
User: kellyca Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	Ag3280	Al3092	As1890	B_2089	Ba4554	Be3130	Bi2230	Ca3179	Cd2288	Co2286	Cr2055	Cu3247	Fe2714
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	-.00104	47.820	-.00475	.00147	.00009	-.00035	1.0496	-.05060	-.00107	.00317	-.00043	.00668	47.777
Stddev	.00025	.714	.00125	.00041	.00003	.00001	.0011	.00471	.00013	.00039	.00023	.00030	.729
%RSD	24.497	1.4922	26.302	27.841	28.187	1.5072	.10143	9.3089	12.072	12.373	54.642	4.4529	1.5252

#1	-.00122	47.316	-.00387	.00118	.00007	-.00035	1.0489	-.04727	-.00097	.00289	-.00026	.00647	47.262
#2	-.00086	48.325	-.00563	.00176	.00011	-.00035	1.0504	-.05393	-.00116	.00345	-.00059	.00689	48.292

Check ?	None	Chk Pass	None	None	None	None	Chk Pass	None	None	None	None	None	Chk Pass
Value													
Range													

Elem	K_7664	Li6707	Mg2790	Mn2576	Mo2020	Na8183	Ni2316	P_1782	Pb2203	S_1820	Sb2068	Se1960	Si2881
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.05534	.00012	.14738	-.00008	-.00263	252.88	-.00044	.00353	.00313	5.0104	-.00110	.00311	-.00730
Stddev	.01754	.00028	.00371	.00003	.00043	3.77	.00025	.00308	.00060	.0006	.00003	.00399	.00924
%RSD	31.692	243.69	2.5158	36.856	16.452	1.4904	56.672	87.404	19.046	.01293	2.5138	128.27	126.50

#1	.06775	-.00008	.14476	-.00006	-.00293	250.22	-.00027	.00570	.00355	5.0099	-.00112	.00029	-.01383
#2	.04294	.00031	.15000	-.00010	-.00232	255.55	-.00062	.00135	.00271	5.0108	-.00108	.00594	-.00077

Check ?	None	None	None	None	None	Chk Pass	None	None	None	Chk Pass	None	None	None
Value													
Range													

Elem	Sn1899	Sr4077	Th2837	Ti3349	Tl1908	U_3701	V_2924	Zn2062	Zr3391
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.00234	.00026	4.8932	.02591	-.00071	10.238	-.01670	-.00107	-.00310
Stddev	.00009	.00004	.0119	.00002	.00020	.016	.00004	.00028	.00608
%RSD	3.9283	14.696	.24366	.08707	28.561	.15139	.24100	26.096	196.26

#1	.00241	.00029	4.9017	.02592	-.00085	10.249	-.01672	-.00087	-.00740
#2	.00228	.00023	4.8848	.02589	-.00057	10.227	-.01667	-.00127	.00120

Check ?	None	None	Chk Pass	None	None	Chk Pass	None	None	None
Value									
Range									

Int. Std.	Y_2243	Y_3600	Y_3774
Units	Cts/S	Cts/S	Cts/S
Avg	1498.0	31134.	6143.7
Stddev	.4	41.	85.2
%RSD	.02818	.13093	1.3875

#1	1498.3	31106.	6204.0
#2	1497.7	31163.	6083.4

Sample Name: ccv-3900195 Acquired: 5/20/2016 16:58:12 Type: QC

Method: 6500_026(v10) Mode: CONC Corr. Factor: 1.000000

User: kellyca Custom ID1: Custom ID2: Custom ID3:

Comment:

Elem	Ag3280	Al1670	As1890	B_2089	Ba4554	Be3130	Bi2230	Ca3179	Cd2288	Co2286	Cr2055	Cu3247	Fe2599
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.48324	.51295	1.0131	.52108	.49704	.50280	-.00178	4.9299	.51201	.51500	.50990	.48885	2.4972
Stddev	.00066	.00315	.0010	.00420	.00238	.00422	.00056	.0305	.00283	.00092	.00178	.00027	.0178
%RSD	.13659	.61448	.10170	.80641	.47876	.83948	31.416	.61954	.55334	.17782	.34977	.05606	.71204

#1	.48278	.51518	1.0124	.52406	.49536	.49981	-.00138	4.9083	.51401	.51565	.51116	.48865	2.4846
#2	.48371	.51072	1.0138	.51811	.49873	.50578	-.00218	4.9515	.51000	.51435	.50864	.48904	2.5097

Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	None	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Value													
Range													

Elem	K_7664	Li6707	Mg2790	Mn2576	Mo2020	Na5895	Ni2316	P_1782	Pb2203	S_1820	Sb2068	Se1960	Si2881
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	50.786	1.0364	19.368	.49071	.51478	5.1151	.50535	.99922	1.0392	.01439	1.0337	1.0113	5.0241
Stddev	.415	.0082	.044	.00028	.00128	.0306	.00255	.00440	.0050	.00318	.0090	.0078	.0302
%RSD	.81810	.79054	.22656	.05723	.24959	.59836	.50429	.44047	.47858	22.109	.86893	.76927	.60012

#1	50.493	1.0306	19.337	.49052	.51569	5.0934	.50715	1.0023	1.0427	.01664	1.0401	1.0058	5.0028
#2	51.080	1.0422	19.399	.49091	.51387	5.1367	.50355	.99611	1.0357	.01214	1.0274	1.0168	5.0454

Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	None	Chk Pass	Chk Pass	Chk Pass
Value													
Range													

Elem	Sn1899	Sr4077	Th2837	Ti3349	Ti1908	U_3701	V_2924	Zn2062	Zr3391
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	1.0016	.48734	.00223	.47667	1.0372	.01067	.47188	.47919	.50011
Stddev	.0031	.00353	.00044	.00137	.0022	.00393	.00165	.00141	.00075
%RSD	.31286	.72395	19.620	.28818	.21404	36.830	.34884	.29321	.14947

#1	1.0038	.48484	.00254	.47764	1.0388	.00789	.47072	.47820	.49958
#2	.99937	.48983	.00192	.47570	1.0357	.01344	.47305	.48019	.50064

Check ?	Chk Pass	Chk Pass	None	Chk Pass	Chk Pass	None	Chk Pass	Chk Pass	Chk Pass
Value									
Range									

Int. Std.	Y_2243	Y_3600	Y_3774
Units	Cts/S	Cts/S	Cts/S
Avg	1529.9	32033.	6084.3
Stddev	2.9	2.	30.5
%RSD	.19029	.00728	.50083

#1	1527.8	32031.	6105.9
#2	1531.9	32035.	6062.8

Sample Name: ccb Acquired: 5/20/2016 17:00:49 Type: QC
Method: 6500_026(v10) Mode: CONC Corr. Factor: 1.000000
User: kellyca Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	Ag3280	Al1670	As1890	B_2089	Ba4554	Be3130	Bi2230	Ca3179	Cd2288	Co2286	Cr2055	Cu3247	Fe2599
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.00020	-.00109	-.00311	.00068	.00000	-.00002	-.00018	-.00254	-.00021	-.00045	-.00010	.00005	.00250
Stddev	.00026	.00103	.00122	.00008	.00002	.00008	.00267	.00070	.00008	.00015	.00019	.00026	.00025
%RSD	127.05	94.186	39.382	11.164	651.03	488.31	1451.6	27.658	36.891	32.492	186.64	545.93	10.005

#1	.00002	-.00182	-.00224	.00074	-.00001	-.00007	.00171	-.00204	-.00027	-.00055	-.00023	-.00013	.00268
#2	.00039	-.00036	-.00398	.00063	.00002	.00004	-.00208	-.00303	-.00016	-.00034	.00003	.00023	.00232

Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	None	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit													
Low Limit													

Elem	K_7664	Li6707	Mg2790	Mn2576	Mo2020	Na5895	Ni2316	P_1782	Pb2203	S_1820	Sb2068	Se1960	Si2881
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.05608	-.00020	.00355	.00023	.00054	.01565	.00004	-.00177	-.00102	.00798	.00048	-.00350	.00402
Stddev	.02894	.00078	.00407	.00010	.00017	.00758	.00018	.00310	.00244	.00266	.00047	.00404	.01318
%RSD	51.602	393.67	114.92	44.534	31.325	48.460	523.55	174.90	240.49	33.323	98.033	115.53	327.90

#1	.07655	-.00075	.00643	.00030	.00042	.02101	-.00010	.00042	.00071	.00610	.00082	-.00636	-.00530
#2	.03562	.00035	.00066	.00016	.00066	.01029	.00017	-.00396	-.00275	.00986	.00015	-.00064	.01334

Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	None	Chk Pass	Chk Pass	Chk Pass
High Limit													
Low Limit													

Elem	Sn1899	Sr4077	Th2837	Ti3349	Ti1908	U_3701	V_2924	Zn2062	Zr3391
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	-.00038	.00008	-.00201	.00015	-.00017	.01305	.00062	.00068	.00154
Stddev	.00090	.00000	.00143	.00007	.00269	.02414	.00059	.00051	.00227
%RSD	236.32	5.7232	71.162	48.656	1564.6	185.01	94.831	75.479	147.51

#1	-.00101	.00008	-.00303	.00010	.00173	.03011	.00103	.00105	-.00007
#2	.00025	.00009	-.00100	.00020	-.00208	-.00402	.00020	.00032	.00315

Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Int. Std.	Y_2243	Y_3600	Y_3774
Units	Cts/S	Cts/S	Cts/S
Avg	1554.5	32697.	6059.7
Stddev	1.6	5.	12.0
%RSD	.10570	.01475	.19881

#1	1555.6	32700.	6051.2
#2	1553.3	32694.	6068.2

Sample Name: ccvl-3903059 Acquired: 5/20/2016 17:03:35 Type: QC
Method: 6500_026(v10) Mode: CONC Corr. Factor: 1.000000
User: kellyca Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	Ag3280	Al1670	As1890	B_2089	Ba4554	Be3130	Bi2230	Ca3179	Cd2288	Co2286	Cr2055	Cu3247
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.00992	.10638	.01483	.10587	.01004	.00091	.11038	.20404	.00515	.01050	.01041	.01488
Stddev	.00014	.00188	.00208	.00108	.00006	.00008	.00525	.00227	.00005	.00032	.00016	.00016
%RSD	1.4490	1.7671	14.009	1.0159	.57729	8.3313	4.7584	1.1101	.88861	3.0757	1.5362	1.0860

#1	.01002	.10505	.01629	.10511	.01000	.00096	.10667	.20244	.00518	.01072	.01052	.01477
#2	.00982	.10771	.01336	.10664	.01009	.00086	.11409	.20565	.00511	.01027	.01030	.01500

Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Value												
Range												

Elem	Fe2599	K_7664	Li6707	Mg2790	Mn2576	Mo2020	Na5895	Ni2316	P_1782	Pb2203	S_1820	Sb2068
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.12182	3.0842	.00962	.20264	.01041	.02091	1.0255	.04283	2.9598	.01004	.00497	.02321
Stddev	.00076	.0212	.00012	.00415	.00004	.00036	.0025	.00126	.0268	.00058	.00271	.00148
%RSD	.62212	.68593	1.2230	2.0501	.37644	1.7093	.24220	2.9344	.90680	5.7391	54.650	6.3762

#1	.12128	3.0692	.00970	.20558	.01038	.02116	1.0238	.04372	2.9409	.01044	.00689	.02216
#2	.12235	3.0991	.00953	.19971	.01044	.02066	1.0273	.04194	2.9788	.00963	.00305	.02426

Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	None	Chk Pass
Value												
Range												

Elem	Se1960	Si2881	Sn1899	Sr4077	Th2837	Ti3349	Ti1908	U_3701	V_2924	Zn2062	Zr3391
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.01286	.49994	.10423	.00972	F .01024	.00958	.01242	F .07982	.00915	.02149	.01583
Stddev	.00356	.00846	.00211	.00009	.00185	.00002	.00021	.01367	.00005	.00099	.00065
%RSD	27.703	1.6929	2.0202	.93575	18.087	.18547	1.7223	17.120	.56334	4.6090	4.0824

#1	.01538	.50592	.10572	.00965	.01155	.00959	.01227	.07016	.00919	.02079	.01537
#2	.01034	.49395	.10274	.00978	.00893	.00956	.01257	.08949	.00912	.02219	.01629

Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Fail	Chk Pass	Chk Pass	Chk Fail	Chk Pass	Chk Pass	Chk Pass
Value					.01500			.06000			
Range					-30.000%			30.000%			

Int. Std.	Y_2243	Y_3600	Y_3774
Units	Cts/S	Cts/S	Cts/S
Avg	1572.7	32871.	6021.2
Stddev	2.7	64.	5.4
%RSD	.17111	.19399	.08909

#1	1574.6	32826.	6017.4
#2	1570.8	32916.	6025.0

Sample Name: 280-83196-A-3-A@2 Acquired: 5/20/2016 17:06:23 Type: Unk

Method: 6500_026(v10) Mode: CONC Corr. Factor: 1.000000

User: kellyca Custom ID1: Custom ID2: Custom ID3:

Comment: 325566 6010c q4 (Mn)

Elem	Ag3280	Al1670	As1890	B_2089	Ba4554	Be3130	Bi2230	Ca3179	Cd2288
Line	328.068 {103}	167.079 {502}	189.042 {478}	208.959 {461}	455.403 { 74}	313.042 {108}	223.061 {451}	317.933 {106}	228.802 {447}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.00020	.10563	-.00139	.07924	.05529	-.00015	-.00152	123.90	.00026
Stddev	.00000	.00271	.00707	.00147	.00047	.00003	.00330	.76	.00010
%RSD	1.3581	2.5641	507.94	1.8529	.85092	19.636	216.84	.61579	39.718

#1	.00020	.10372	-.00639	.07820	.05495	-.00013	.00081	123.36	.00034
#2	.00019	.10755	.00361	.08027	.05562	-.00017	-.00385	124.44	.00019

Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Elem	Co2286	Cr2055	Cu3247	Fe2599	K_7664	Li6707	Mg2790	Mn2576	Mo2020
Line	228.616 {447}	205.560 {464}	324.754 {104}	259.940 {130}	766.490 { 44}	670.784 { 50}	279.079 {121}2	257.610 {131}	202.030 {467}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.00010	W .22004	.00124	.23709	3.3991	.03349	26.744	5.2158	.00083
Stddev	.00021	.00387	.00007	.00067	.0698	.00093	.288	.0567	.00050
%RSD	209.94	1.7577	5.3342	.28300	2.0520	2.7710	1.0778	1.0878	60.344

#1	.00025	.21730	.00129	.23662	3.3497	.03284	26.540	5.1756	.00047
#2	-.00005	.22277	.00120	.23757	3.4484	.03415	26.947	5.2559	.00118

Check ?	Chk Pass	Chk Warn	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit		.10000							
Low Limit		-.01000							

Elem	Na8183	Ni2316	P_1782	Pb2203	S_1820	Sb2068	Se1960	Si2881	Sn1899
Line	818.326 { 41}	231.604 {446}	178.284 {489}	220.353 {453}	182.034 {485}	206.833 {463}	196.090 {472}	288.158 {117}	189.989 {477}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	47.878	.01728	.00735	-.00089	36.884	-.00293	-.00008	11.490	.00182
Stddev	.116	.00031	.00022	.00119	.753	.00320	.00082	.094	.00146
%RSD	.24168	1.7838	2.9683	133.73	2.0417	109.37	1031.0	.82121	80.332

#1	47.796	.01706	.00719	-.00174	36.352	-.00066	-.00066	11.423	.00079
#2	47.959	.01750	.00750	-.00005	37.417	-.00519	.00050	11.556	.00286

Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Elem	Sr4077	Th2837	Ti3349	Ti1908	U_3701	V_2924	Zn2062	Zr3391	
Line	407.771 { 83}	283.730 {119}	334.904 {101}	190.856 {477}	370.152 { 91}	292.402 {115}	206.200 {163}	339.198 { 99}	
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	
Avg	1.1167	-.00417	.00479	-.00237	.01518	.00273	.00102	.00114	
Stddev	.0097	.00087	.00115	.00107	.00152	.00098	.00084	.00042	
%RSD	.86988	20.799	23.889	45.385	10.023	35.981	82.456	36.600	

#1	1.1099	-.00479	.00398	-.00313	.01410	.00203	.00161	.00085	
#2	1.1236	-.00356	.00560	-.00161	.01625	.00342	.00042	.00144	

Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	
High Limit									
Low Limit									

Int. Std.	Y_2243	Y_3600	Y_3774						
Line	224.306 {450}	360.073 { 94}	377.433 { 89}						
Units	Cts/S	Cts/S	Cts/S						
Avg	1484.9	31228.	6136.3						
Stddev	3.1	60.	19.3						
%RSD	.20903	.19309	.31531						

#1	1487.1	31270.	6122.6						
#2	1482.7	31185.	6150.0						

Sample Name: 280-83196-A-4-A@10 Acquired: 5/20/2016 17:09:05 Type: Unk

Method: 6500_026(v10) Mode: CONC Corr. Factor: 1.000000

User: kellyca Custom ID1: Custom ID2: Custom ID3:

Comment: 325566 6010c q4 (Mn)

Elem	Ag3280	Al1670	As1890	B_2089	Ba4554	Be3130	Bi2230	Ca3179	Cd2288
Line	328.068 {103}	167.079 {502}	189.042 {478}	208.959 {461}	455.403 {74}	313.042 {108}	223.061 {451}	317.933 {106}	228.802 {447}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.00038	.00514	-.00582	.01229	.00822	-.00006	.00349	27.837	.00014
Stddev	.00031	.00060	.00516	.00057	.00002	.00001	.00194	.074	.00024
%RSD	80.233	11.757	88.687	4.6250	.23772	16.283	55.700	.26456	175.09

#1	.00060	.00557	-.00217	.01270	.00821	-.00005	.00487	27.785	-.00003
#2	.00016	.00471	-.00947	.01189	.00823	-.00006	.00212	27.889	.00030

Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Elem	Co2286	Cr2055	Cu3247	Fe2599	K_7664	Li6707	Mg2790	Mn2576	Mo2020
Line	228.616 {447}	205.560 {464}	324.754 {104}	259.940 {130}	766.490 {44}	670.784 {50}	279.079 {121}2	257.610 {131}	202.030 {467}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	-.00012	.02027	-.00010	.04621	.73627	.00246	5.5209	3.9213	.00000
Stddev	.00005	.00039	.00060	.00149	.01435	.00070	.0204	.0006	.00025
%RSD	39.101	1.9370	593.18	3.2184	1.9493	28.447	.36976	.01499	6178.8

#1	-.00009	.02055	.00032	.04727	.74642	.00295	5.5065	3.9209	.00018
#2	-.00016	.01999	-.00052	.04516	.72612	.00196	5.5353	3.9217	-.00017

Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Elem	Na8183	Ni2316	P_1782	Pb2203	S_1820	Sb2068	Se1960	Si2881	Sn1899
Line	818.326 {41}	231.604 {446}	178.284 {489}	220.353 {453}	182.034 {485}	206.833 {463}	196.090 {472}	288.158 {117}	189.989 {477}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	13.510	.00336	-.00060	.00018	6.9431	.00160	-.00117	1.5503	-.00010
Stddev	.003	.00037	.00054	.00032	.0149	.00065	.00820	.0029	.00133
%RSD	.02198	10.914	90.978	176.70	.21476	40.635	698.15	.18356	1396.2

#1	13.512	.00362	-.00098	.00040	6.9325	.00206	-.00697	1.5482	.00085
#2	13.508	.00310	-.00021	-.00004	6.9536	.00114	.00462	1.5523	-.00104

Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Elem	Sr4077	Th2837	Ti3349	Ti1908	U_3701	V_2924	Zn2062	Zr3391
Line	407.771 {83}	283.730 {119}	334.904 {101}	190.856 {477}	370.152 {91}	292.402 {115}	206.200 {163}	339.198 {99}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.18678	-.00415	.00008	-.00226	.01897	.00033	-.00024	.00097
Stddev	.00110	.00082	.00002	.00136	.01291	.00021	.00100	.00013
%RSD	.58664	19.747	27.432	59.981	68.074	62.655	426.39	13.703

#1	.18600	-.00357	.00006	-.00130	.02810	.00048	.00047	.00106
#2	.18755	-.00472	.00009	-.00322	.00984	.00018	-.00095	.00087

Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit								
Low Limit								

Int. Std.	Y_2243	Y_3600	Y_3774
Line	224.306 {450}	360.073 {94}	377.433 {89}
Units	Cts/S	Cts/S	Cts/S
Avg	1558.0	32394.	6099.0
Stddev	.7	16.	1.0
%RSD	.04496	.04855	.01616

#1	1558.4	32405.	6098.3
#2	1557.5	32382.	6099.7

Sample Name: 280-83196-A-5-A@10 Acquired: 5/20/2016 17:11:48 Type: Unk

Method: 6500_026(v10) Mode: CONC Corr. Factor: 1.000000

User: kellyca Custom ID1: Custom ID2: Custom ID3:

Comment: 325566 6010c q4 (Mn)

Elem	Ag3280	Al1670	As1890	B_2089	Ba4554	Be3130	Bi2230	Ca3179	Cd2288
Line	328.068 {103}	167.079 {502}	189.042 {478}	208.959 {461}	455.403 { 74}	313.042 {108}	223.061 {451}	317.933 {106}	228.802 {447}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.00031	.00622	-.00134	.01281	.00817	-.00015	.00157	27.724	.00004
Stddev	.00017	.00101	.00162	.00038	.00002	.00003	.00358	.047	.00017
%RSD	54.108	16.209	120.96	2.9797	.25799	21.578	227.69	.17127	467.97

#1	.00043	.00550	-.00019	.01254	.00816	-.00018	.00410	27.691	.00015
#2	.00019	.00693	-.00249	.01308	.00819	-.00013	-.00096	27.758	-.00008

Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Elem	Co2286	Cr2055	Cu3247	Fe2599	K_7664	Li6707	Mg2790	Mn2576	Mo2020
Line	228.616 {447}	205.560 {464}	324.754 {104}	259.940 {130}	766.490 { 44}	670.784 { 50}	279.079 {121}2	257.610 {131}	202.030 {467}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	-.00014	.02022	-.00031	.04416	.73053	.00303	5.5135	3.7956	-.00013
Stddev	.00042	.00002	.00006	.00308	.01782	.00069	.0109	.0092	.00003
%RSD	310.51	.10903	21.086	6.9745	2.4396	22.847	.19690	.24234	20.321

#1	-.00044	.02021	-.00035	.04198	.71792	.00352	5.5211	3.8021	-.00015
#2	.00016	.02024	-.00026	.04634	.74313	.00254	5.5058	3.7891	-.00011

Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Elem	Na8183	Ni2316	P_1782	Pb2203	S_1820	Sb2068	Se1960	Si2881	Sn1899
Line	818.326 { 41}	231.604 {446}	178.284 {489}	220.353 {453}	182.034 {485}	206.833 {463}	196.090 {472}	288.158 {117}	189.989 {477}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	13.298	.00292	-.00207	-.00190	6.9365	-.00024	-.00076	1.5571	.00010
Stddev	.165	.00034	.00082	.00160	.0176	.00280	.00295	.0026	.00099
%RSD	1.2394	11.487	39.504	84.053	.25339	1192.6	387.65	.16424	961.23

#1	13.182	.00268	-.00149	-.00304	6.9489	-.00222	.00133	1.5553	.00080
#2	13.415	.00316	-.00264	-.00077	6.9241	.00175	-.00285	1.5589	-.00060

Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Elem	Sr4077	Th2837	Ti3349	Ti1908	U_3701	V_2924	Zn2062	Zr3391
Line	407.771 { 83}	283.730 {119}	334.904 {101}	190.856 {477}	370.152 { 91}	292.402 {115}	206.200 {163}	339.198 { 99}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.18629	-.00208	.00095	-.00130	.01942	-.00003	.00146	-.00010
Stddev	.00020	.00103	.00032	.00146	.00616	.00006	.00090	.00022
%RSD	.10970	49.259	33.666	112.02	31.705	199.14	61.478	213.31

#1	.18615	-.00136	.00118	-.00027	.02377	.00001	.00209	-.00026
#2	.18643	-.00281	.00073	-.00234	.01507	-.00007	.00082	.00005

Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit								
Low Limit								

Int. Std.	Y_2243	Y_3600	Y_3774
Line	224.306 {450}	360.073 { 94}	377.433 { 89}
Units	Cts/S	Cts/S	Cts/S
Avg	1554.2	32294.	6087.5
Stddev	2.7	69.	3.0
%RSD	.17500	.21336	.04971

#1	1556.1	32245.	6085.3
#2	1552.3	32343.	6089.6

Sample Name: 280-83196-A-6-A@10 Acquired: 5/20/2016 17:14:31 Type: Unk
Method: 6500_026(v10) Mode: CONC Corr. Factor: 1.000000
User: kellyca Custom ID1: Custom ID2: Custom ID3:
Comment: 325566 6010c q4 (Mn)

Elem	Ag3280	Al1670	As1890	B_2089	Ba4554	Be3130	Bi2230	Ca3179	Cd2288
Line	328.068 {103}	167.079 {502}	189.042 {478}	208.959 {461}	455.403 { 74}	313.042 {108}	223.061 {451}	317.933 {106}	228.802 {447}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.00016	.00390	-.00428	.01673	.01310	-.00011	-.00071	25.053	-.00006
Stddev	.00060	.00013	.00004	.00070	.00003	.00001	.00189	.106	.00039
%RSD	370.61	3.2961	.87902	4.1745	.25474	8.0161	263.77	.42302	687.13

#1	.00058	.00381	-.00430	.01624	.01308	-.00010	.00062	24.978	-.00033
#2	-.00026	.00400	-.00425	.01722	.01313	-.00011	-.00205	25.128	.00022

Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Elem	Co2286	Cr2055	Cu3247	Fe2599	K_7664	Li6707	Mg2790	Mn2576	Mo2020
Line	228.616 {447}	205.560 {464}	324.754 {104}	259.940 {130}	766.490 { 44}	670.784 { 50}	279.079 {121}2	257.610 {131}	202.030 {467}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	-.00025	.03864	-.00056	.03771	.71777	.00339	5.0569	3.9138	-.00012
Stddev	.00050	.00016	.00037	.00019	.01763	.00056	.0118	.0021	.00035
%RSD	195.48	.42265	66.158	.49991	2.4567	16.419	.23427	.05340	279.39

#1	.00010	.03876	-.00030	.03758	.70530	.00300	5.0652	3.9152	-.00037
#2	-.00060	.03852	-.00082	.03785	.73024	.00379	5.0485	3.9123	.00012

Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Elem	Na8183	Ni2316	P_1782	Pb2203	S_1820	Sb2068	Se1960	Si2881	Sn1899
Line	818.326 { 41}	231.604 {446}	178.284 {489}	220.353 {453}	182.034 {485}	206.833 {463}	196.090 {472}	288.158 {117}	189.989 {477}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	13.506	.00163	-.00078	-.00115	6.8327	-.00232	.00555	1.7222	.00024
Stddev	.030	.00018	.00254	.00162	.0440	.00151	.00108	.0074	.00093
%RSD	.21870	11.287	326.83	140.77	.64329	64.975	19.425	.42780	382.21

#1	13.485	.00150	.00102	-.00001	6.8638	-.00125	.00479	1.7170	-.00041
#2	13.527	.00176	-.00258	-.00230	6.8017	-.00338	.00632	1.7274	.00090

Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Elem	Sr4077	Th2837	Ti3349	Ti1908	U_3701	V_2924	Zn2062	Zr3391
Line	407.771 { 83}	283.730 {119}	334.904 {101}	190.856 {477}	370.152 { 91}	292.402 {115}	206.200 {163}	339.198 { 99}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.18963	-.00214	.00049	-.00067	.01426	.00004	.00206	.00017
Stddev	.00108	.00065	.00006	.00089	.00097	.00042	.00065	.00045
%RSD	.56985	30.497	12.159	133.31	6.8241	1076.3	31.617	270.78

#1	.18887	-.00260	.00044	-.00004	.01357	.00034	.00253	-.00015
#2	.19040	-.00168	.00053	-.00129	.01495	-.00026	.00160	.00048

Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit								
Low Limit								

Int. Std.	Y_2243	Y_3600	Y_3774
Line	224.306 {450}	360.073 { 94}	377.433 { 89}
Units	Cts/S	Cts/S	Cts/S
Avg	1557.2	32176.	5986.7
Stddev	5.0	64.	8.5
%RSD	.31944	.19904	.14265

#1	1553.7	32131.	5992.7
#2	1560.7	32221.	5980.6

Sample Name: 280-83196-A-7-A@25 Acquired: 5/20/2016 17:17:14 Type: Unk
Method: 6500_026(v10) Mode: CONC Corr. Factor: 1.000000
User: kellyca Custom ID1: Custom ID2: Custom ID3:
Comment: 325566 6010c q4 (Mn)

Elem	Ag3280	Al1670	As1890	B_2089	Ba4554	Be3130	Bi2230	Ca3179	Cd2288
Line	328.068 {103}	167.079 {502}	189.042 {478}	208.959 {461}	455.403 { 74}	313.042 {108}	223.061 {451}	317.933 {106}	228.802 {447}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.00039	.01006	-.00381	.00452	.00410	-.00006	-.00053	11.827	-.00003
Stddev	.00003	.00029	.00016	.00040	.00008	.00002	.00097	.025	.00009
%RSD	8.6393	2.9189	4.2817	8.9182	2.0600	32.303	181.35	.21140	285.36

#1	.00041	.00985	-.00392	.00423	.00404	-.00008	-.00122	11.845	.00003
#2	.00037	.01027	-.00369	.00480	.00416	-.00005	.00015	11.810	-.00009

Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Elem	Co2286	Cr2055	Cu3247	Fe2599	K_7664	Li6707	Mg2790	Mn2576	Mo2020
Line	228.616 {447}	205.560 {464}	324.754 {104}	259.940 {130}	766.490 { 44}	670.784 { 50}	279.079 {121}2	257.610 {131}	202.030 {467}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	-.00020	.03167	.00009	.03685	.29046	.00091	2.3345	6.4973	-.00019
Stddev	.00013	.00027	.00030	.00011	.01446	.00006	.0113	.0134	.00041
%RSD	65.624	.84279	354.81	.31069	4.9771	6.8618	.48291	.20571	215.49

#1	-.00011	.03186	.00030	.03693	.30069	.00096	2.3425	6.5067	-.00048
#2	-.00029	.03149	-.00013	.03677	.28024	.00087	2.3265	6.4878	.00010

Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Elem	Na5895	Ni2316	P_1782	Pb2203	S_1820	Sb2068	Se1960	Si2881	Sn1899
Line	589.592 { 57}	231.604 {446}	178.284 {489}	220.353 {453}	182.034 {485}	206.833 {463}	196.090 {472}	288.158 {117}	189.989 {477}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	4.9945	.00175	-.00311	-.00056	2.9739	.00019	-.00070	.58311	.00123
Stddev	.0124	.00008	.00045	.00212	.0066	.00104	.00882	.00151	.00011
%RSD	.24729	4.3212	14.441	381.34	.22040	536.68	1256.1	.25850	9.2335

#1	4.9858	.00181	-.00343	-.00205	2.9693	-.00054	.00554	.58417	.00131
#2	5.0032	.00170	-.00279	.00094	2.9785	.00093	-.00694	.58204	.00115

Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Elem	Sr4077	Th2837	Ti3349	Ti1908	U_3701	V_2924	Zn2062	Zr3391
Line	407.771 { 83}	283.730 {119}	334.904 {101}	190.856 {477}	370.152 { 91}	292.402 {115}	206.200 {163}	339.198 { 99}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.08336	-.00211	.00021	-.00269	.00817	-.00086	.00232	.00123
Stddev	.00012	.00012	.00017	.00186	.00559	.00040	.00066	.00093
%RSD	.14634	5.6738	81.168	69.122	68.449	46.780	28.351	76.074

#1	.08327	-.00203	.00032	-.00400	.01213	-.00057	.00186	.00057
#2	.08344	-.00220	.00009	-.00138	.00422	-.00114	.00279	.00189

Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit								
Low Limit								

Int. Std.	Y_2243	Y_3600	Y_3774
Line	224.306 {450}	360.073 { 94}	377.433 { 89}
Units	Cts/S	Cts/S	Cts/S
Avg	1572.8	33184.	6046.4
Stddev	4.2	24.	1.3
%RSD	.27005	.07116	.02072

#1	1575.8	33167.	6045.5
#2	1569.8	33200.	6047.3

Sample Name: 280-83196-A-8-A@20 Acquired: 5/20/2016 17:19:58 Type: Unk

Method: 6500_026(v10) Mode: CONC Corr. Factor: 1.000000

User: kellyca Custom ID1: Custom ID2: Custom ID3:

Comment: 325566 6010c q4 (Mn)

Elem	Ag3280	Al1670	As1890	B_2089	Ba4554	Be3130	Bi2230	Ca3179	Cd2288
Line	328.068 {103}	167.079 {502}	189.042 {478}	208.959 {461}	455.403 { 74}	313.042 {108}	223.061 {451}	317.933 {106}	228.802 {447}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.00049	.10277	.00094	.00677	.00673	-.00016	.00098	13.263	.00000
Stddev	.00047	.00169	.00927	.00008	.00005	.00003	.00199	.113	.00052
%RSD	97.087	1.6400	982.66	1.2140	.67128	17.029	202.32	.85078	117150.

#1	.00015	.10396	.00749	.00683	.00676	-.00018	-.00042	13.343	-.00037
#2	.00082	.10158	-.00561	.00671	.00670	-.00014	.00239	13.183	.00037

Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Elem	Co2286	Cr2055	Cu3247	Fe2599	K_7664	Li6707	Mg2790	Mn2576	Mo2020
Line	228.616 {447}	205.560 {464}	324.754 {104}	259.940 {130}	766.490 { 44}	670.784 { 50}	279.079 {121}2	257.610 {131}	202.030 {467}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	-.00026	.03928	-.00037	.12493	.45672	.00257	2.7623	4.2855	.00022
Stddev	.00001	.00038	.00049	.00198	.01389	.00052	.0117	.0081	.00012
%RSD	5.1516	.96910	131.39	1.5879	3.0407	20.131	.42513	.18806	54.641

#1	-.00027	.03901	-.00071	.12633	.44690	.00294	2.7540	4.2798	.00013
#2	-.00025	.03955	-.00003	.12352	.46654	.00220	2.7706	4.2912	.00030

Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Elem	Na5895	Ni2316	P_1782	Pb2203	S_1820	Sb2068	Se1960	Si2881	Sn1899
Line	589.592 { 57}	231.604 {446}	178.284 {489}	220.353 {453}	182.034 {485}	206.833 {463}	196.090 {472}	288.158 {117}	189.989 {477}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	5.5078	.00446	.00198	.00054	3.3898	.00000	.00843	1.1250	.00105
Stddev	.0372	.00008	.00127	.00163	.0227	.00080	.00099	.0206	.00110
%RSD	.67544	1.8843	64.206	299.76	.67124	81120.	11.729	1.8288	104.60

#1	5.5341	.00440	.00288	-.00061	3.4058	-.00056	.00773	1.1396	.00027
#2	5.4815	.00452	.00108	.00169	3.3737	.00056	.00912	1.1105	.00182

Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Elem	Sr4077	Th2837	Ti3349	Ti1908	U_3701	V_2924	Zn2062	Zr3391
Line	407.771 { 83}	283.730 {119}	334.904 {101}	190.856 {477}	370.152 { 91}	292.402 {115}	206.200 {163}	339.198 { 99}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.14564	-.00310	.00483	-.00238	.01700	.00022	.00219	.00090
Stddev	.00110	.00220	.00023	.00043	.02326	.00048	.00077	.00043
%RSD	.75844	70.811	4.8211	18.079	136.84	219.04	35.233	48.108

#1	.14642	-.00466	.00499	-.00268	.03345	-.00012	.00164	.00121
#2	.14486	-.00155	.00466	-.00207	.00055	.00056	.00273	.00060

Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit								
Low Limit								

Int. Std.	Y_2243	Y_3600	Y_3774
Line	224.306 {450}	360.073 { 94}	377.433 { 89}
Units	Cts/S	Cts/S	Cts/S
Avg	1569.0	32579.	6096.0
Stddev	1.0	68.	30.3
%RSD	.06293	.20794	.49639

#1	1568.3	32627.	6074.6
#2	1569.7	32531.	6117.3

Sample Name: 280-83196-A-9-A@2 Acquired: 5/20/2016 17:22:42 Type: Unk

Method: 6500_026(v10) Mode: CONC Corr. Factor: 1.000000

User: kellyca Custom ID1: Custom ID2: Custom ID3:

Comment: 325566 6010c q4 (Mn)

Elem	Ag3280	Al1670	As1890	B_2089	Ba4554	Be3130	Bi2230	Ca3179	Cd2288
Line	328.068 {103}	167.079 {502}	189.042 {478}	208.959 {461}	455.403 { 74}	313.042 {108}	223.061 {451}	317.933 {106}	228.802 {447}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	-.00029	.07323	.00120	.08434	.07178	-.00008	-.00216	145.35	.00008
Stddev	.00092	.00213	.00139	.00328	.00134	.00003	.00405	3.77	.00003
%RSD	317.59	2.9135	115.67	3.8907	1.8665	33.511	187.84	2.5952	37.800

#1	.00036	.07172	.00219	.08202	.07083	-.00006	.00071	142.68	.00010
#2	-.00094	.07473	.00022	.08666	.07272	-.00010	-.00502	148.01	.00006

Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Elem	Co2286	Cr2055	Cu3247	Fe2599	K_7664	Li6707	Mg2790	Mn2576	Mo2020
Line	228.616 {447}	205.560 {464}	324.754 {104}	259.940 {130}	766.490 { 44}	670.784 { 50}	279.079 {121}2	257.610 {131}	202.030 {467}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.00007	W .15965	.00070	.18616	3.6720	.01760	29.859	4.6768	.00005
Stddev	.00028	.00369	.00011	.00158	.0951	.00103	.529	.0613	.00005
%RSD	411.21	2.3111	16.413	.85119	2.5911	5.8382	1.7718	1.3116	106.57

#1	-.00013	.15704	.00062	.18504	3.6047	.01688	29.485	4.6334	.00008
#2	.00027	.16226	.00078	.18728	3.7393	.01833	30.233	4.7201	.00001

Check ?	Chk Pass	Chk Warn	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit		.10000							
Low Limit		-.01000							

Elem	Na8183	Ni2316	P_1782	Pb2203	S_1820	Sb2068	Se1960	Si2881	Sn1899
Line	818.326 { 41}	231.604 {446}	178.284 {489}	220.353 {453}	182.034 {485}	206.833 {463}	196.090 {472}	288.158 {117}	189.989 {477}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	71.973	.01473	-.00210	-.00022	41.191	.00135	.00721	8.3236	-.00016
Stddev	1.347	.00052	.00008	.00009	1.118	.00168	.00432	.1583	.00019
%RSD	1.8719	3.5651	3.6986	41.045	2.7148	125.03	59.921	1.9020	123.46

#1	71.021	.01435	-.00205	-.00028	40.400	.00254	.00416	8.2116	-.00002
#2	72.926	.01510	-.00215	-.00016	41.982	.00016	.01027	8.4355	-.00029

Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Elem	Sr4077	Th2837	Ti3349	Ti1908	U_3701	V_2924	Zn2062	Zr3391
Line	407.771 { 83}	283.730 {119}	334.904 {101}	190.856 {477}	370.152 { 91}	292.402 {115}	206.200 {163}	339.198 { 99}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.93131	-.00449	.00277	-.00063	-.00027	.00409	-.00047	.00019
Stddev	.01777	.00118	.00018	.00399	.00334	.00007	.00111	.00047
%RSD	1.9077	26.366	6.6865	629.25	1243.2	1.7982	234.75	249.49

#1	.91875	-.00532	.00264	.00219	.00209	.00404	-.00126	.00052
#2	.94387	-.00365	.00290	-.00345	-.00263	.00414	.00031	-.00014

Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit								
Low Limit								

Int. Std.	Y_2243	Y_3600	Y_3774
Line	224.306 {450}	360.073 { 94}	377.433 { 89}
Units	Cts/S	Cts/S	Cts/S
Avg	1470.9	30425.	5949.9
Stddev	6.2	95.	112.1
%RSD	.42340	.31349	1.8842

#1	1475.3	30492.	6029.2
#2	1466.5	30357.	5870.6

Sample Name: ccvh-3900196 Acquired: 5/20/2016 17:25:25 Type: QC
Method: 6500_026(v10) Mode: CONC Corr. Factor: 1.000000
User: kellyca Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	Ag3280	Al3092	As1890	B_2089	Ba4554	Be3130	Bi2230	Ca3179	Cd2288	Co2286	Cr2055	Cu3247	Fe2714
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	-.00159	47.454	-.00267	.00155	.00011	-.00034	1.0299	-.04050	-.00112	.00281	-.00077	.00624	48.035
Stddev	.00018	.252	.00316	.00032	.00006	.00002	.0004	.00884	.00003	.00008	.00018	.00009	.143
%RSD	11.509	.53037	118.69	20.388	52.259	5.8640	.04224	21.836	2.7863	2.9162	22.675	1.4385	.29868

#1	-.00172	47.276	-.00043	.00178	.00007	-.00032	1.0296	-.03425	-.00114	.00287	-.00065	.00617	47.933
#2	-.00146	47.632	-.00490	.00133	.00015	-.00035	1.0302	-.04675	-.00110	.00275	-.00090	.00630	48.136

Check ?	None	Chk Pass	None	None	None	None	Chk Pass	None	None	None	None	None	Chk Pass
Value													
Range													

Elem	K_7664	Li6707	Mg2790	Mn2576	Mo2020	Na8183	Ni2316	P_1782	Pb2203	S_1820	Sb2068	Se1960	Si2881
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.03957	-.00048	.14827	-.00019	-.00258	250.96	-.00037	.00303	.00179	4.9662	.00005	-.00311	-.00048
Stddev	.00899	.00061	.00342	.00001	.00007	.67	.00010	.00231	.00111	.0070	.00047	.00137	.01067
%RSD	22.712	125.57	2.3034	3.1630	2.7712	.26594	27.334	76.317	61.955	.14019	870.52	44.180	2214.8

#1	.03322	-.00005	.14586	-.00020	-.00253	250.49	-.00044	.00139	.00258	4.9613	-.00028	-.00408	.00706
#2	.04592	-.00091	.15069	-.00019	-.00263	251.43	-.00030	.00466	.00101	4.9711	.00038	-.00214	-.00803

Check ?	None	None	None	None	None	Chk Pass	None	None	None	Chk Pass	None	None	None
Value													
Range													

Elem	Sn1899	Sr4077	Th2837	Ti3349	Ti1908	U_3701	V_2924	Zn2062	Zr3391
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.00083	.00035	4.9034	.02557	-.00460	10.078	-.01644	-.00190	-.01162
Stddev	.00229	.00001	.0083	.00007	.00374	.012	.00021	.00054	.00338
%RSD	276.36	3.6807	.16953	.26971	81.319	.12287	1.2909	28.114	29.060

#1	-.00079	.00036	4.8976	.02562	-.00196	10.070	-.01629	-.00153	-.01401
#2	.00245	.00034	4.9093	.02553	-.00725	10.087	-.01659	-.00228	-.00923

Check ?	None	None	Chk Pass	None	None	Chk Pass	None	None	None
Value									
Range									

Int. Std.	Y_2243	Y_3600	Y_3774
Units	Cts/S	Cts/S	Cts/S
Avg	1515.4	30888.	5869.0
Stddev	.7	5.	5.6
%RSD	.04709	.01698	.09575

#1	1514.9	30892.	5873.0
#2	1515.9	30884.	5865.0

Sample Name: ccv-3900195 Acquired: 5/20/2016 17:28:13 Type: QC
Method: 6500_026(v10) Mode: CONC Corr. Factor: 1.000000
User: kellyca Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	Ag3280	Al1670	As1890	B_2089	Ba4554	Be3130	Bi2230	Ca3179	Cd2288	Co2286	Cr2055	Cu3247	Fe2599
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.48193	.51036	.99795	.51482	.48990	.50044	-.00353	4.9795	.51026	.51315	.50867	.48504	2.4910
Stddev	.00494	.00038	.00122	.00316	.00345	.00225	.00085	.0259	.00035	.00047	.00147	.00166	.0265
%RSD	1.0252	.07493	.12203	.61312	.70350	.44880	24.198	.51983	.06916	.09198	.28803	.34132	1.0617

#1	.47844	.51063	.99881	.51259	.48746	.49885	-.00293	4.9612	.51001	.51282	.50763	.48387	2.4723
#2	.48543	.51009	.99709	.51705	.49233	.50203	-.00413	4.9978	.51051	.51349	.50971	.48621	2.5097

Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	None	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Value													
Range													

Elem	K_7664	Li6707	Mg2790	Mn2576	Mo2020	Na5895	Ni2316	P_1782	Pb2203	S_1820	Sb2068	Se1960	Si2881
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	50.108	1.0197	19.384	.49317	.51167	5.0498	.50144	.98549	1.0250	.00866	1.0206	.99979	4.9813
Stddev	.294	.0079	.028	.00175	.00193	.0363	.00067	.00829	.0044	.00255	.0048	.00287	.0413
%RSD	.58596	.77198	.14350	.35445	.37702	.71899	.13451	.84105	.42580	29.451	.47099	.28730	.82960

#1	49.901	1.0142	19.364	.49193	.51303	5.0242	.50096	.99135	1.0219	.00686	1.0172	.99776	4.9521
#2	50.316	1.0253	19.404	.49440	.51030	5.0755	.50192	.97963	1.0280	.01046	1.0240	1.0018	5.0106

Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	None	Chk Pass	Chk Pass	Chk Pass
Value													
Range													

Elem	Sn1899	Sr4077	Th2837	Ti3349	Tl1908	U_3701	V_2924	Zn2062	Zr3391
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.99752	.47798	.00141	.47367	1.0245	.01686	.47697	.48799	.49399
Stddev	.00071	.00296	.00177	.00180	.0046	.00342	.00049	.00331	.00239
%RSD	.07107	.61889	125.76	.37915	.44543	20.313	.10176	.67922	.48450

#1	.99802	.47589	.00266	.47240	1.0213	.01928	.47731	.48564	.49230
#2	.99702	.48007	.00016	.47494	1.0277	.01444	.47663	.49033	.49568

Check ?	Chk Pass	Chk Pass	None	Chk Pass	Chk Pass	None	Chk Pass	Chk Pass	Chk Pass
Value									
Range									

Int. Std.	Y_2243	Y_3600	Y_3774
Units	Cts/S	Cts/S	Cts/S
Avg	1551.7	31980.	6006.4
Stddev	1.8	64.	21.3
%RSD	.11854	.20137	.35491

#1	1553.0	32025.	6021.5
#2	1550.4	31934.	5991.4

Sample Name: ccb Acquired: 5/20/2016 17:30:50 Type: QC
Method: 6500_026(v10) Mode: CONC Corr. Factor: 1.000000
User: kellyca Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	Ag3280	Al1670	As1890	B_2089	Ba4554	Be3130	Bi2230	Ca3179	Cd2288	Co2286	Cr2055	Cu3247
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	-.00008	-.00066	.00121	.00042	-.00002	-.00014	.00054	.00125	.00014	-.00059	.00014	-.00064
Stddev	.00027	.00051	.00256	.00122	.00008	.00003	.00021	.00064	.00007	.00023	.00020	.00015
%RSD	332.60	77.227	211.68	291.32	355.83	23.288	38.902	50.901	47.216	39.103	141.16	23.433

#1	.00011	-.00103	.00302	.00128	.00004	-.00012	.00069	.00080	.00018	-.00043	.00028	-.00054
#2	-.00027	-.00030	-.00060	-.00044	-.00008	-.00017	.00039	.00170	.00009	-.00075	.00000	-.00075

Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	None	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit												
Low Limit												

Elem	Fe2599	K_7664	Li6707	Mg2790	Mn2576	Mo2020	Na5895	Ni2316	P_1782	Pb2203	S_1820	Sb2068
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.00625	.02429	-.00075	.00311	W .00025	.00045	.01358	-.00027	.00173	.00076	.00574	-.00061
Stddev	.00066	.01223	.00026	.00472	.00002	.00054	.00775	.00019	.00017	.00220	.00067	.00262
%RSD	10.495	50.328	35.056	151.40	8.4816	118.45	57.098	71.227	9.6822	287.82	11.612	427.21

#1	.00671	.03294	-.00094	.00645	.00024	.00007	.01906	-.00041	.00161	-.00079	.00527	-.00247
#2	.00578	.01565	-.00057	-.00022	.00027	.00084	.00809	-.00014	.00185	.00232	.00621	.00124

Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Warn	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	None	Chk Pass
High Limit					.00025							
Low Limit					-.00025							

Elem	Se1960	Si2881	Sn1899	Sr4077	Th2837	Ti3349	Ti1908	U_3701	V_2924	Zn2062	Zr3391
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	-.00103	.00857	.00122	.00008	-.00149	.00044	.00081	.02706	.00027	.00038	.00031
Stddev	.00065	.00736	.00044	.00005	.00075	.00019	.00283	.03185	.00049	.00031	.00004
%RSD	63.486	85.878	36.288	65.199	50.631	43.488	348.58	117.72	178.08	81.547	11.416

#1	-.00057	.00337	.00090	.00012	-.00202	.00031	-.00119	.00453	-.00007	.00016	.00029
#2	-.00149	.01377	.00153	.00004	-.00096	.00058	.00282	.04958	.00062	.00059	.00034

Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit											
Low Limit											

Int. Std.	Y_2243	Y_3600	Y_3774
Units	Cts/S	Cts/S	Cts/S
Avg	1560.9	32692.	5966.4
Stddev	3.0	3.	112.5
%RSD	.19172	.00917	1.8858

#1	1558.8	32695.	6046.0
#2	1563.0	32690.	5886.9

Sample Name: ccvl-3903059 Acquired: 5/20/2016 17:33:36 Type: QC
Method: 6500_026(v10) Mode: CONC Corr. Factor: 1.000000
User: kellyca Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	Ag3280	Al1670	As1890	B_2089	Ba4554	Be3130	Bi2230	Ca3179	Cd2288	Co2286	Cr2055	Cu3247
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.00980	.10603	.01419	.10481	.00997	.00086	.10998	.20054	.00512	.01029	.01020	.01416
Stddev	.00050	.00042	.00302	.00037	.00003	.00009	.00065	.00193	.00014	.00011	.00022	.00025
%RSD	5.0744	.40007	21.275	.35382	.33912	10.618	.59263	.96079	2.6462	1.0969	2.1417	1.7665

#1	.01015	.10573	.01206	.10507	.00994	.00080	.11044	.20190	.00503	.01037	.01004	.01434
#2	.00945	.10633	.01633	.10454	.00999	.00093	.10952	.19918	.00522	.01021	.01035	.01398

Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Value												
Range												

Elem	Fe2599	K_7664	Li6707	Mg2790	Mn2576	Mo2020	Na5895	Ni2316	P_1782	Pb2203	S_1820	Sb2068
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	F .15713	3.0679	.00973	.20592	.01052	.02100	1.0210	.04193	2.9261	.00973	.00909	.02088
Stddev	.00610	.0198	.00093	.00429	.00025	.00003	.0041	.00054	.0154	.00173	.00472	.00352
%RSD	3.8804	.64655	9.5312	2.0819	2.3537	.11994	.40523	1.2937	.52463	17.828	51.916	16.860

#1	.16145	3.0538	.00908	.20895	.01035	.02098	1.0180	.04154	2.9152	.00850	.01242	.02337
#2	.15282	3.0819	.01039	.20289	.01070	.02102	1.0239	.04231	2.9369	.01096	.00575	.01839

Check ?	Chk Fail	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	None	Chk Pass
Value	.10000											
Range	30.000%											

Elem	Se1960	Si2881	Sn1899	Sr4077	Th2837	Ti3349	Ti1908	U_3701	V_2924	Zn2062	Zr3391
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.01426	.49705	.10133	.00967	.01476	.00979	.01522	.07454	.00968	.01938	.01462
Stddev	.00146	.02503	.00180	.00002	.00073	.00010	.00138	.01356	.00048	.00169	.00171
%RSD	10.212	5.0365	1.7760	.24146	4.9561	.99185	9.0888	18.197	4.9655	8.7021	11.721

#1	.01323	.47935	.10006	.00966	.01425	.00986	.01619	.06495	.00934	.02057	.01584
#2	.01529	.51475	.10261	.00969	.01528	.00973	.01424	.08413	.01002	.01818	.01341

Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Value											
Range											

Int. Std.	Y_2243	Y_3600	Y_3774
Units	Cts/S	Cts/S	Cts/S
Avg	1581.3	32759.	5952.9
Stddev	4.3	88.	15.1
%RSD	.27083	.26719	.25283

#1	1584.4	32821.	5963.5
#2	1578.3	32697.	5942.2

Sample Name: 280-83196-A-10-A Acquired: 5/20/2016 17:36:22 Type: Unk
Method: 6500_026(v10) Mode: CONC Corr. Factor: 1.000000
User: kellyca Custom ID1: Custom ID2: Custom ID3:
Comment: 325566 6010c q4 (Mn Se)

Elem	Ag3280	Al1670	As1890	B_2089	Ba4554	Be3130	Bi2230	Ca3179	Cd2288
Line	328.068 {103}	167.079 {502}	189.042 {478}	208.959 {461}	455.403 { 74}	313.042 {108}	223.061 {451}	317.933 {106}	228.802 {447}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.00063	.26470	-.00197	.15762	.06842	-.00001	.00000	250.33	.00020
Stddev	.00007	.00406	.00463	.00014	.00057	.00005	.00148	1.15	.00008
%RSD	11.866	1.5345	234.83	.08722	.83783	344.22	57332.	.45911	42.223

#1	.00068	.26757	.00130	.15772	.06802	.00002	.00105	249.51	.00014
#2	.00058	.26182	-.00525	.15752	.06883	-.00005	-.00104	251.14	.00026

Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Elem	Co2286	Cr2055	Cu3247	Fe2599	K_7664	Li6707	Mg2790	Mn2576	Mo2020
Line	228.616 {447}	205.560 {464}	324.754 {104}	259.940 {130}	766.490 { 44}	670.784 { 50}	279.079 {121}2	257.610 {131}	202.030 {467}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.00023	W .20248	.00052	.33366	6.2473	.03698	50.424	6.0987	-.00013
Stddev	.00029	.00010	.00025	.00059	.0574	.00016	.209	.0221	.00011
%RSD	125.25	.05150	47.511	.17690	.91877	.42076	.41516	.36263	85.086

#1	.00003	.20240	.00034	.33408	6.2067	.03687	50.276	6.0830	-.00005
#2	.00044	.20255	.00069	.33324	6.2879	.03709	50.572	6.1143	-.00021

Check ?	Chk Pass	Chk Warn	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit		.10000							
Low Limit		-.01000							

Elem	Na8183	Ni2316	P_1782	Pb2203	S_1820	Sb2068	Se1960	Si2881	Sn1899
Line	818.326 { 41}	231.604 {446}	178.284 {489}	220.353 {453}	182.034 {485}	206.833 {463}	196.090 {472}	288.158 {117}	189.989 {477}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	117.26	.01679	.00889	-.00179	72.750	.00001	.00073	17.628	.00070
Stddev	.75	.00086	.00054	.00071	.001	.00114	.00140	.075	.00135
%RSD	.63792	5.1138	6.1319	39.786	.00131	8097.5	193.22	.42560	191.67

#1	116.73	.01739	.00927	-.00129	72.751	.00082	-.00027	17.575	.00166
#2	117.79	.01618	.00850	-.00230	72.749	-.00079	.00172	17.682	-.00025

Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Elem	Sr4077	Th2837	Ti3349	Ti1908	U_3701	V_2924	Zn2062	Zr3391	
Line	407.771 { 83}	283.730 {119}	334.904 {101}	190.856 {477}	370.152 { 91}	292.402 {115}	206.200 {163}	339.198 { 99}	
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	
Avg	1.6221	-.00519	.00973	-.00610	-.00103	.00498	.00051	.00193	
Stddev	.0077	.00073	.00035	.00099	.02097	.00077	.00050	.00225	
%RSD	.47662	14.094	3.5683	16.262	2039.2	15.459	97.989	116.44	

#1	1.6166	-.00467	.00948	-.00681	.01380	.00552	.00016	.00034	
#2	1.6275	-.00571	.00998	-.00540	-.01586	.00444	.00086	.00352	

Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	
High Limit									
Low Limit									

Int. Std.	Y_2243	Y_3600	Y_3774						
Line	224.306 {450}	360.073 { 94}	377.433 { 89}						
Units	Cts/S	Cts/S	Cts/S						
Avg	1444.4	30068.	5946.4						
Stddev	.1	156.	9.0						
%RSD	.01023	.51820	.15143						

#1	1444.2	30178.	5952.7						
#2	1444.5	29957.	5940.0						

Sample Name: 280-83196-A-11-A Acquired: 5/20/2016 17:39:05 Type: Unk
Method: 6500_026(v10) Mode: CONC Corr. Factor: 1.000000
User: kellyca Custom ID1: Custom ID2: Custom ID3:
Comment: 325566 6010c q4 (Mn Se)

Elem	Ag3280	Al1670	As1890	B_2089	Ba4554	Be3130	Bi2230	Ca3179	Cd2288
Line	328.068 {103}	167.079 {502}	189.042 {478}	208.959 {461}	455.403 { 74}	313.042 {108}	223.061 {451}	317.933 {106}	228.802 {447}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.00010	.02744	-.00481	.08276	.13640	-.00009	-.00027	253.74	.00023
Stddev	.00032	.00036	.00887	.00036	.00065	.00006	.00052	1.06	.00017
%RSD	336.10	1.3031	184.40	.43009	.47922	65.374	191.69	.41583	72.079

#1	-.00013	.02770	-.01108	.08250	.13594	-.00013	.00010	252.99	.00011
#2	.00033	.02719	.00146	.08301	.13686	-.00005	-.00064	254.49	.00035

Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Elem	Co2286	Cr2055	Cu3247	Fe2599	K_7664	Li6707	Mg2790	Mn2576	Mo2020
Line	228.616 {447}	205.560 {464}	324.754 {104}	259.940 {130}	766.490 { 44}	670.784 { 50}	279.079 {121}2	257.610 {131}	202.030 {467}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.00047	.04481	.00134	.17316	7.3115	.03330	48.995	.03236	.00037
Stddev	.00005	.00017	.00034	.00121	.0264	.00088	.181	.00009	.00008
%RSD	10.331	.38554	25.467	.69612	.36058	2.6518	.37010	.28064	21.883

#1	.00043	.04494	.00159	.17231	7.2928	.03268	49.123	.03242	.00031
#2	.00050	.04469	.00110	.17401	7.3301	.03393	48.866	.03229	.00043

Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Elem	Na8183	Ni2316	P_1782	Pb2203	S_1820	Sb2068	Se1960	Si2881	Sn1899
Line	818.326 { 41}	231.604 {446}	178.284 {489}	220.353 {453}	182.034 {485}	206.833 {463}	196.090 {472}	288.158 {117}	189.989 {477}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	94.793	.02577	.00269	-.00277	45.560	.00012	-.00076	14.832	.00070
Stddev	.680	.00002	.00057	.00179	.010	.00079	.00111	.080	.00040
%RSD	.71706	.07752	21.210	64.578	.02183	656.66	145.27	.54026	57.014

#1	94.312	.02578	.00310	-.00403	45.567	-.00044	.00002	14.776	.00042
#2	95.273	.02575	.00229	-.00150	45.553	.00068	-.00155	14.889	.00098

Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Elem	Sr4077	Th2837	Ti3349	Ti1908	U_3701	V_2924	Zn2062	Zr3391
Line	407.771 { 83}	283.730 {119}	334.904 {101}	190.856 {477}	370.152 { 91}	292.402 {115}	206.200 {163}	339.198 { 99}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	1.9776	-.00560	.00216	.00233	.01757	.00484	-.00021	.00072
Stddev	.0109	.00091	.00034	.00093	.01054	.00069	.00065	.00040
%RSD	.55169	16.183	15.533	39.623	60.013	14.187	305.74	55.538

#1	1.9699	-.00496	.00240	.00299	.01011	.00532	.00025	.00044
#2	1.9854	-.00624	.00192	.00168	.02502	.00435	-.00067	.00100

Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit								
Low Limit								

Int. Std.	Y_2243	Y_3600	Y_3774
Line	224.306 {450}	360.073 { 94}	377.433 { 89}
Units	Cts/S	Cts/S	Cts/S
Avg	1442.9	30095.	6010.0
Stddev	3.3	36.	35.3
%RSD	.23122	.12053	.58789

#1	1445.3	30069.	6035.0
#2	1440.6	30120.	5985.0

Sample Name: 280-83196-A-12-A Acquired: 5/20/2016 17:41:49 Type: Unk
Method: 6500_026(v10) Mode: CONC Corr. Factor: 1.000000
User: kellyca Custom ID1: Custom ID2: Custom ID3:
Comment: 325566 6010c q4 (Mn Se)

Elem	Ag3280	Al1670	As1890	B_2089	Ba4554	Be3130	Bi2230	Ca3179	Cd2288
Line	328.068 {103}	167.079 {502}	189.042 {478}	208.959 {461}	455.403 { 74}	313.042 {108}	223.061 {451}	317.933 {106}	228.802 {447}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.00029	.06125	-.00514	.08509	.06932	-.00011	.00063	281.11	.00048
Stddev	.00029	.00044	.00011	.00102	.00004	.00002	.00085	.96	.00012
%RSD	99.925	.71487	2.0717	1.1958	.05962	21.826	134.90	.34317	26.144

#1	.00009	.06094	-.00521	.08581	.06929	-.00009	.00124	280.43	.00039
#2	.00050	.06156	-.00506	.08437	.06935	-.00012	.00003	281.79	.00057

Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Elem	Co2286	Cr2055	Cu3247	Fe2599	K_7664	Li6707	Mg2790	Mn2576	Mo2020
Line	228.616 {447}	205.560 {464}	324.754 {104}	259.940 {130}	766.490 { 44}	670.784 { 50}	279.079 {121}2	257.610 {131}	202.030 {467}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.00002	.03437	.00280	.18052	7.3059	.04449	53.796	.09136	.00097
Stddev	.00026	.00017	.00024	.00504	.0248	.00087	.127	.00014	.00044
%RSD	1402.3	.50344	8.4538	2.7923	.34002	1.9573	.23622	.15455	45.478

#1	.00020	.03449	.00263	.17696	7.2884	.04511	53.886	.09146	.00066
#2	-.00016	.03425	.00297	.18409	7.3235	.04388	53.706	.09126	.00129

Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Elem	Na8183	Ni2316	P_1782	Pb2203	S_1820	Sb2068	Se1960	Si2881	Sn1899
Line	818.326 { 41}	231.604 {446}	178.284 {489}	220.353 {453}	182.034 {485}	206.833 {463}	196.090 {472}	288.158 {117}	189.989 {477}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	82.946	.02075	.00303	-.00186	78.057	-.00061	.00523	15.921	.00162
Stddev	.644	.00012	.00655	.00298	.108	.00442	.00044	.035	.00152
%RSD	.77654	.57692	216.02	160.16	.13844	730.46	8.3860	.21927	93.770

#1	82.491	.02067	-.00160	.00025	78.133	-.00373	.00492	15.897	.00269
#2	83.402	.02084	.00767	-.00397	77.980	.00252	.00554	15.946	.00055

Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Elem	Sr4077	Th2837	Ti3349	Ti1908	U_3701	V_2924	Zn2062	Zr3391
Line	407.771 { 83}	283.730 {119}	334.904 {101}	190.856 {477}	370.152 { 91}	292.402 {115}	206.200 {163}	339.198 { 99}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	2.3152	-.00535	.00296	-.00264	.02787	.00490	.00081	.00141
Stddev	.0118	.00215	.00036	.00217	.00845	.00043	.00081	.00008
%RSD	.51021	40.164	12.059	82.291	30.323	8.7561	100.95	5.7988

#1	2.3069	-.00686	.00322	-.00417	.03385	.00459	.00138	.00146
#2	2.3236	-.00383	.00271	-.00110	.02189	.00520	.00023	.00135

Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit								
Low Limit								

Int. Std.	Y_2243	Y_3600	Y_3774
Line	224.306 {450}	360.073 { 94}	377.433 { 89}
Units	Cts/S	Cts/S	Cts/S
Avg	1422.8	29799.	5890.2
Stddev	2.6	45.	3.9
%RSD	.18292	.15108	.06607

#1	1421.0	29767.	5887.5
#2	1424.7	29831.	5893.0

Sample Name: 280-83196-A-7-A Acquired: 5/20/2016 17:44:32 Type: Unk
Method: 6500_026(v10) Mode: CONC Corr. Factor: 1.000000
User: kellyca Custom ID1: Custom ID2: Custom ID3:
Comment: 325566 6010c q4 (Se)

Elem	Ag3280	Al1670	As1890	B_2089	Ba4554	Be3130	Bi2230	Ca3179	Cd2288
Line	328.068 {103}	167.079 {502}	189.042 {478}	208.959 {461}	455.403 { 74}	313.042 {108}	223.061 {451}	317.933 {106}	228.802 {447}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.01051	.21152	.00477	.12283	.10414	-.00006	.01083	289.28	.00058
Stddev	.00067	.00389	.00353	.00069	.00053	.00005	.00198	.04	.00015
%RSD	6.4061	1.8379	74.006	.55938	.50662	79.315	18.244	.01432	25.599

#1	.01004	.21426	.00726	.12332	.10377	-.00010	.01223	289.25	.00068
#2	.01099	.20877	.00227	.12235	.10451	-.00003	.00943	289.31	.00047

Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Elem	Co2286	Cr2055	Cu3247	Fe2599	K_7664	Li6707	Mg2790	Mn2576	Mo2020
Line	228.616 {447}	205.560 {464}	324.754 {104}	259.940 {130}	766.490 { 44}	670.784 { 50}	279.079 {121}2	257.610 {131}	202.030 {467}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.00065	W .78437	.00036	.31670	6.8931	.04189	57.887	F 95.660	-.00388
Stddev	.00029	.00202	.00000	.00570	.0306	.00056	.190	.847	.00026
%RSD	44.852	.25716	.07166	1.8009	.44450	1.3437	.32896	.88547	6.6113

#1	.00086	.78580	.00036	.32073	6.8715	.04229	58.021	96.259	-.00406
#2	.00044	.78295	.00036	.31266	6.9148	.04149	57.752	95.061	-.00370

Check ?	Chk Pass	Chk Warn	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Fail	Chk Pass
High Limit		.10000						20.000	
Low Limit		-.01000						-.02000	

Elem	Na8183	Ni2316	P_1782	Pb2203	S_1820	Sb2068	Se1960	Si2881	Sn1899
Line	818.326 { 41}	231.604 {446}	178.284 {489}	220.353 {453}	182.034 {485}	206.833 {463}	196.090 {472}	288.158 {117}	189.989 {477}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	128.44	.04432	-.00020	.01136	80.260	-.00426	.05464	15.159	-.00246
Stddev	.07	.00006	.00020	.00271	.109	.00051	.00555	.002	.00036
%RSD	.05835	.13728	97.699	23.888	.13528	11.904	10.159	.01587	14.568

#1	128.39	.04428	-.00006	.01327	80.337	-.00462	.05072	15.160	-.00221
#2	128.49	.04436	-.00034	.00944	80.183	-.00391	.05857	15.157	-.00271

Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Elem	Sr4077	Th2837	Ti3349	Ti1908	U_3701	V_2924	Zn2062	Zr3391	
Line	407.771 { 83}	283.730 {119}	334.904 {101}	190.856 {477}	370.152 { 91}	292.402 {115}	206.200 {163}	339.198 { 99}	
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	
Avg	2.0771	W -.01172	.00831	.02463	.01992	F -.02607	.00194	.00104	
Stddev	.0058	.00182	.00046	.00293	.00566	.00044	.00138	.00100	
%RSD	.28050	15.510	5.5665	11.914	28.406	1.7063	70.921	96.924	

#1	2.0730	-.01301	.00863	.02670	.01592	-.02576	.00097	.00033	
#2	2.0812	-.01044	.00798	.02255	.02393	-.02639	.00292	.00175	

Check ?	Chk Pass	Chk Warn	Chk Pass	Chk Pass	Chk Pass	Chk Fail	Chk Pass	Chk Pass	
High Limit		45.000				50.000			
Low Limit		-.01000				-.02000			

Int. Std.	Y_2243	Y_3600	Y_3774						
Line	224.306 {450}	360.073 { 94}	377.433 { 89}						
Units	Cts/S	Cts/S	Cts/S						
Avg	1447.9	29922.	5973.7						
Stddev	.2	33.	12.2						
%RSD	.01473	.11195	.20427						

#1	1448.0	29899.	5965.1						
#2	1447.7	29946.	5982.4						

Sample Name: 280-83196-A-8-A Acquired: 5/20/2016 17:47:19 Type: Unk
Method: 6500_026(v10) Mode: CONC Corr. Factor: 1.000000
User: kellyca Custom ID1: Custom ID2: Custom ID3:
Comment: 325566 6010c q4 (Se)

Elem	Ag3280	Al1670	As1890	B_2089	Ba4554	Be3130	Bi2230	Ca3179	Cd2288
Line	328.068 {103}	167.079 {502}	189.042 {478}	208.959 {461}	455.403 { 74}	313.042 {108}	223.061 {451}	317.933 {106}	228.802 {447}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.00513	1.8225	-.00429	.14726	.13380	.00005	.00808	259.66	.00055
Stddev	.00024	.0062	.00375	.00040	.00079	.00003	.00370	2.17	.00014
%RSD	4.6984	.34101	87.265	.27073	.59220	49.882	45.784	.83636	24.862

#1	.00530	1.8269	-.00164	.14754	.13324	.00003	.00546	258.12	.00046
#2	.00496	1.8181	-.00694	.14698	.13436	.00007	.01069	261.19	.00065

Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Elem	Co2286	Cr2055	Cu3247	Fe2599	K_7664	Li6707	Mg2790	Mn2576	Mo2020
Line	228.616 {447}	205.560 {464}	324.754 {104}	259.940 {130}	766.490 { 44}	670.784 { 50}	279.079 {121}2	257.610 {131}	202.030 {467}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.00202	W .76504	.00476	2.0101	9.1320	.06856	54.278	F 62.861	-.00142
Stddev	.00014	.00053	.00008	.0107	.1101	.00021	.014	.055	.00020
%RSD	6.7728	.06894	1.7087	.53347	1.2058	.31256	.02525	.08725	14.033

#1	.00211	.76542	.00470	2.0177	9.0541	.06841	54.268	62.900	-.00157
#2	.00192	.76467	.00482	2.0025	9.2098	.06871	54.287	62.822	-.00128

Check ?	Chk Pass	Chk Warn	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Fail	Chk Pass
High Limit		.10000						20.000	
Low Limit		-.01000						-.02000	

Elem	Na8183	Ni2316	P_1782	Pb2203	S_1820	Sb2068	Se1960	Si2881	Sn1899
Line	818.326 { 41}	231.604 {446}	178.284 {489}	220.353 {453}	182.034 {485}	206.833 {463}	196.090 {472}	288.158 {117}	189.989 {477}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	111.14	.07841	.04370	.00482	71.801	-.00038	.02639	23.019	-.00070
Stddev	.71	.00003	.00233	.00236	.538	.00131	.00103	.113	.00105
%RSD	.63664	.04412	5.3256	48.909	.74890	342.20	3.9039	.48983	149.56

#1	110.64	.07843	.04206	.00648	71.421	-.00131	.02567	22.940	.00004
#2	111.64	.07839	.04535	.00315	72.181	.00054	.02712	23.099	-.00144

Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Elem	Sr4077	Th2837	Ti3349	Ti1908	U_3701	V_2924	Zn2062	Zr3391
Line	407.771 { 83}	283.730 {119}	334.904 {101}	190.856 {477}	370.152 { 91}	292.402 {115}	206.200 {163}	339.198 { 99}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	2.8583	-.00941	.07579	-.00328	.04033	-.00369	.01252	.00168
Stddev	.0182	.00234	.00008	.00102	.01818	.00042	.00009	.00010
%RSD	.63791	24.829	.11042	30.999	45.073	11.406	.74945	5.6610

#1	2.8454	-.00776	.07573	-.00256	.05318	-.00399	.01259	.00161
#2	2.8712	-.01106	.07585	-.00399	.02747	-.00339	.01246	.00175

Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit								
Low Limit								

Int. Std.	Y_2243	Y_3600	Y_3774
Line	224.306 {450}	360.073 { 94}	377.433 { 89}
Units	Cts/S	Cts/S	Cts/S
Avg	1459.5	30033.	5936.0
Stddev	4.1	82.	36.9
%RSD	.28183	.27425	.62111

#1	1462.4	30092.	5962.1
#2	1456.6	29975.	5910.0

Sample Name: 280-83196-A-9-A Acquired: 5/20/2016 17:50:06 Type: Unk
Method: 6500_026(v10) Mode: CONC Corr. Factor: 1.000000
User: kellyca Custom ID1: Custom ID2: Custom ID3:
Comment: 325566 6010c q4 (Se)

Elem	Ag3280	Al1670	As1890	B_2089	Ba4554	Be3130	Bi2230	Ca3179	Cd2288
Line	328.068 {103}	167.079 {502}	189.042 {478}	208.959 {461}	455.403 { 74}	313.042 {108}	223.061 {451}	317.933 {106}	228.802 {447}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.00081	.12473	-.00317	.15760	.14373	-.00014	-.00137	288.07	.00029
Stddev	.00038	.00197	.00289	.00370	.00058	.00011	.00210	.18	.00007
%RSD	46.546	1.5821	91.280	2.3452	.40033	81.292	153.64	.06112	24.251

#1	.00108	.12333	-.00112	.15499	.14332	-.00022	-.00286	288.20	.00024
#2	.00055	.12612	-.00521	.16021	.14413	-.00006	.00012	287.95	.00034

Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Elem	Co2286	Cr2055	Cu3247	Fe2599	K_7664	Li6707	Mg2790	Mn2576	Mo2020
Line	228.616 {447}	205.560 {464}	324.754 {104}	259.940 {130}	766.490 { 44}	670.784 { 50}	279.079 {121}2	257.610 {131}	202.030 {467}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.00099	W .28640	.00171	.33949	7.4896	.03728	57.387	8.8223	.00016
Stddev	.00063	.00017	.00047	.00177	.0153	.00051	.071	.0175	.00016
%RSD	63.598	.06050	27.226	.52195	.20369	1.3690	.12360	.19873	97.521

#1	.00054	.28652	.00138	.33824	7.4788	.03692	57.438	8.8347	.00005
#2	.00143	.28628	.00204	.34075	7.5004	.03764	57.337	8.8099	.00028

Check ?	Chk Pass	Chk Warn	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit		.10000							
Low Limit		-.01000							

Elem	Na8183	Ni2316	P_1782	Pb2203	S_1820	Sb2068	Se1960	Si2881	Sn1899
Line	818.326 { 41}	231.604 {446}	178.284 {489}	220.353 {453}	182.034 {485}	206.833 {463}	196.090 {472}	288.158 {117}	189.989 {477}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	144.69	.02602	.00605	-.00010	77.160	-.00081	-.00165	16.728	.00017
Stddev	.49	.00056	.00569	.00266	.747	.00096	.00918	.026	.00002
%RSD	.33532	2.1355	94.056	2687.9	.96821	118.15	557.69	.15443	9.4693

#1	144.35	.02563	.00203	.00178	76.632	-.00013	-.00814	16.746	.00015
#2	145.04	.02642	.01007	-.00198	77.688	-.00150	.00485	16.710	.00018

Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Elem	Sr4077	Th2837	Ti3349	Ti1908	U_3701	V_2924	Zn2062	Zr3391
Line	407.771 { 83}	283.730 {119}	334.904 {101}	190.856 {477}	370.152 { 91}	292.402 {115}	206.200 {163}	339.198 { 99}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	1.8606	-.00758	.00502	-.00335	.01851	.00717	.00129	.00086
Stddev	.0058	.00008	.00025	.00063	.00805	.00015	.00016	.00012
%RSD	.31021	1.0948	4.9719	18.756	43.482	2.0404	12.109	14.027

#1	1.8565	-.00764	.00520	-.00379	.01282	.00727	.00140	.00078
#2	1.8647	-.00752	.00484	-.00291	.02420	.00706	.00118	.00095

Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit								
Low Limit								

Int. Std.	Y_2243	Y_3600	Y_3774
Line	224.306 {450}	360.073 { 94}	377.433 { 89}
Units	Cts/S	Cts/S	Cts/S
Avg	1432.6	29692.	5903.6
Stddev	5.9	47.	40.8
%RSD	.41297	.15954	.69049

#1	1436.8	29659.	5874.8
#2	1428.4	29726.	5932.4

Sample Name: ccvh-3900196 Acquired: 5/20/2016 17:52:48 Type: QC
Method: 6500_026(v10) Mode: CONC Corr. Factor: 1.000000
User: kellyca Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	Ag3280	Al3092	As1890	B_2089	Ba4554	Be3130	Bi2230	Ca3179	Cd2288	Co2286	Cr2055	Cu3247	Fe2714
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	-.00244	46.979	.00110	.00280	.00016	-.00037	1.0411	-.01630	-.00105	.00297	-.00076	.00614	46.518
Stddev	.00050	.214	.00017	.00016	.00004	.00009	.0007	.00095	.00001	.00026	.00004	.00010	.099
%RSD	20.404	.45638	15.107	5.6065	27.295	24.292	.06620	5.8255	.62927	8.8722	5.1771	1.5558	.21241

#1	-.00280	46.828	.00098	.00291	.00019	-.00031	1.0407	-.01563	-.00105	.00316	-.00079	.00620	46.448
#2	-.00209	47.131	.00122	.00269	.00013	-.00043	1.0416	-.01697	-.00106	.00279	-.00074	.00607	46.588

Check ?	None	Chk Pass	None	None	None	None	Chk Pass	None	None	None	None	None	Chk Pass
Value													
Range													

Elem	K_7664	Li6707	Mg2790	Mn2576	Mo2020	Na8183	Ni2316	P_1782	Pb2203	S_1820	Sb2068	Se1960	Si2881
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.03992	.00160	.15335	.00323	-.00261	251.07	-.00013	.00165	.00274	5.0057	-.00043	.00058	-.01417
Stddev	.00523	.00057	.00181	.00003	.00008	.21	.00007	.00108	.00153	.0058	.00185	.00463	.00779
%RSD	13.100	35.384	1.1779	.93535	3.0866	.08500	49.021	65.198	55.748	.11558	428.70	797.94	54.995

#1	.03622	.00200	.15207	.00325	-.00256	251.22	-.00018	.00089	.00166	5.0098	.00088	-.00269	-.00866
#2	.04362	.00120	.15462	.00321	-.00267	250.92	-.00009	.00241	.00382	5.0016	-.00174	.00385	-.01967

Check ?	None	None	None	None	None	Chk Pass	None	None	None	Chk Pass	None	None	None
Value													
Range													

Elem	Sn1899	Sr4077	Th2837	Ti3349	Tl1908	U_3701	V_2924	Zn2062	Zr3391
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.00225	.00050	4.8790	.02581	-.00250	10.124	-.01675	-.00274	-.00987
Stddev	.00001	.00001	.0203	.00044	.00051	.014	.00124	.00060	.00074
%RSD	.47171	2.4467	.41666	1.6930	20.324	.13670	7.3794	21.774	7.5045

#1	.00226	.00051	4.8646	.02550	-.00214	10.114	-.01588	-.00316	-.01039
#2	.00225	.00049	4.8934	.02612	-.00286	10.134	-.01763	-.00232	-.00934

Check ?	None	None	Chk Pass	None	None	Chk Pass	None	None	None
Value									
Range									

Int. Std.	Y_2243	Y_3600	Y_3774
Units	Cts/S	Cts/S	Cts/S
Avg	1518.4	31298.	6138.0
Stddev	.9	119.	12.2
%RSD	.05878	.37955	.19917

#1	1517.8	31382.	6146.6
#2	1519.1	31214.	6129.3

Sample Name: ccv-3900195 Acquired: 5/20/2016 17:55:38 Type: QC
Method: 6500_026(v10) Mode: CONC Corr. Factor: 1.000000
User: kellyca Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	Ag3280	Al1670	As1890	B_2089	Ba4554	Be3130	Bi2230	Ca3179	Cd2288	Co2286	Cr2055	Cu3247	Fe2599
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.48622	.51423	1.0152	.52561	.49660	.50092	-.00304	4.9058	.51614	.51891	.51309	.50144	2.4685
Stddev	.00155	.00175	.0028	.00055	.00118	.00125	.00108	.0161	.00102	.00066	.00251	.00068	.0121
%RSD	.31833	.34084	.27393	.10552	.23681	.24888	35.414	.32789	.19806	.12727	.48976	.13483	.49221

#1	.48731	.51299	1.0133	.52522	.49576	.50004	-.00381	4.8944	.51541	.51938	.51131	.50096	2.4599
#2	.48513	.51547	1.0172	.52600	.49743	.50180	-.00228	4.9171	.51686	.51845	.51487	.50192	2.4771

Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	None	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Value													
Range													

Elem	K_7664	Li6707	Mg2790	Mn2576	Mo2020	Na5895	Ni2316	P_1782	Pb2203	S_1820	Sb2068	Se1960	Si2881
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	50.790	1.0531	19.683	.49419	.51839	5.1690	.50602	1.0040	1.0366	.00915	1.0353	1.0097	4.9449
Stddev	.287	.0043	.023	.00025	.00042	.0098	.00011	.0011	.0039	.00071	.0016	.0029	.0373
%RSD	.56491	.41135	.11642	.05135	.08162	.18926	.02170	.11198	.37637	7.7812	.15042	.28913	.75501

#1	50.587	1.0500	19.699	.49401	.51809	5.1760	.50594	1.0032	1.0338	.00865	1.0342	1.0077	4.9185
#2	50.993	1.0561	19.666	.49437	.51869	5.1621	.50610	1.0048	1.0393	.00966	1.0364	1.0118	4.9713

Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	None	Chk Pass	Chk Pass	Chk Pass
Value													
Range													

Elem	Sn1899	Sr4077	Th2837	Ti3349	Ti1908	U_3701	V_2924	Zn2062	Zr3391
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	1.0026	.48368	.00209	.47548	1.0396	.02063	.47611	.47968	.49713
Stddev	.0054	.00210	.00044	.00089	.0049	.01039	.00091	.00281	.00068
%RSD	.54189	.43432	21.098	.18804	.46725	50.368	.19095	.58538	.13591

#1	.99875	.48220	.00178	.47485	1.0362	.02798	.47676	.48166	.49761
#2	1.0064	.48517	.00240	.47611	1.0430	.01328	.47547	.47769	.49665

Check ?	Chk Pass	Chk Pass	None	Chk Pass	Chk Pass	None	Chk Pass	Chk Pass	Chk Pass
Value									
Range									

Int. Std.	Y_2243	Y_3600	Y_3774
Units	Cts/S	Cts/S	Cts/S
Avg	1537.7	32240.	6184.0
Stddev	7.9	118.	20.7
%RSD	.51159	.36474	.33417

#1	1543.2	32157.	6198.7
#2	1532.1	32323.	6169.4

Sample Name: ccb Acquired: 5/20/2016 17:58:14 Type: QC
Method: 6500_026(v10) Mode: CONC Corr. Factor: 1.000000
User: kellyca Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	Ag3280	Al1670	As1890	B_2089	Ba4554	Be3130	Bi2230	Ca3179	Cd2288	Co2286	Cr2055	Cu3247
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.00045	-.00118	.00136	.00068	-.00001	-.00002	-.00215	.00680	.00011	-.00055	-.00003	-.00064
Stddev	.00017	.00055	.00180	.00036	.00005	.00001	.00187	.00097	.00008	.00025	.00024	.00009
%RSD	37.154	46.869	132.56	53.393	533.63	39.029	87.268	14.286	68.690	45.912	766.44	13.503

#1	.00057	-.00079	.00009	.00093	.00003	-.00002	-.00347	.00611	.00016	-.00037	.00014	-.00058
#2	.00033	-.00157	.00263	.00042	-.00005	-.00001	-.00082	.00748	.00006	-.00072	-.00020	-.00070

Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	None	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit												
Low Limit												

Elem	Fe2599	K_7664	Li6707	Mg2790	Mn2576	Mo2020	Na5895	Ni2316	P_1782	Pb2203	S_1820	Sb2068
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.01093	.06638	-.00013	.00147	F .00203	.00061	.01832	-.00029	-.00421	.00110	.00690	-.00032
Stddev	.00257	.03523	.00051	.00106	.00003	.00013	.00383	.00008	.00155	.00011	.00165	.00050
%RSD	23.468	53.063	379.39	72.634	1.4587	21.524	20.895	29.799	36.781	10.116	23.887	156.22

#1	.00912	.09129	-.00049	.00071	.00205	.00052	.01562	-.00035	-.00531	.00118	.00806	-.00067
#2	.01275	.04148	.00022	.00222	.00201	.00070	.02103	-.00023	-.00312	.00102	.00573	.00003

Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Fail	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	None	Chk Pass
High Limit					.00051							
Low Limit					-.00051							

Elem	Se1960	Si2881	Sn1899	Sr4077	Th2837	Ti3349	Ti1908	U_3701	V_2924	Zn2062	Zr3391
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.00090	.00467	-.00046	.00009	-.00302	.00010	-.00168	.01709	.00004	-.00009	.00118
Stddev	.00139	.00651	.00098	.00000	.00148	.00022	.00037	.02375	.00037	.00112	.00006
%RSD	154.69	139.22	215.61	5.0723	49.059	222.50	22.037	138.95	825.17	1279.3	4.9964

#1	.00188	.00007	.00024	.00009	-.00197	.00026	-.00142	.00030	-.00022	-.00088	.00122
#2	-.00008	.00927	-.00115	.00009	-.00407	-.00006	-.00194	.03389	.00031	.00070	.00114

Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit											
Low Limit											

Int. Std.	Y_2243	Y_3600	Y_3774
Units	Cts/S	Cts/S	Cts/S
Avg	1557.2	32654.	5956.3
Stddev	.5	75.	7.8
%RSD	.03511	.23038	.13029

#1	1556.8	32601.	5950.8
#2	1557.5	32707.	5961.7

Sample Name: ccvl-3903059 Acquired: 5/20/2016 18:01:01 Type: QC
Method: 6500_026(v10) Mode: CONC Corr. Factor: 1.000000
User: kellyca Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	Ag3280	Al1670	As1890	B_2089	Ba4554	Be3130	Bi2230	Ca3179	Cd2288	Co2286	Cr2055	Cu3247	Fe2599	K_7664
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.01032	.10606	.01244	.10542	.01013	.00089	.11548	.20428	.00520	.01038	.01059	.01402	.10555	3.1007
Stddev	.00010	.00009	.00606	.00019	.00001	.00006	.00012	.00234	.00027	.00009	.00006	.00025	.00084	.0112
%RSD	.96668	.08518	48.745	.17799	.12092	6.2377	.10122	1.1462	5.2621	.83282	.53488	1.8167	.79813	.36165

#1	.01025	.10600	.00815	.10555	.01014	.00093	.11540	.20262	.00539	.01032	.01055	.01420	.10615	3.0928
#2	.01039	.10613	.01673	.10528	.01013	.00085	.11556	.20593	.00501	.01044	.01063	.01384	.10496	3.1087

Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Value														
Range														

Elem	Li6707	Mg2790	Mn2576	Mo2020	Na5895	Ni2316	P_1782	Pb2203	S_1820	Sb2068	Se1960	Si2881	Sn1899	Sr4077
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.01042	.20430	.01197	.02079	1.0405	.04226	2.9592	.00768	.00745	.02122	.01137	.48069	.10297	.00981
Stddev	.00030	.00362	.00009	.00040	.0081	.00009	.0068	.00091	.00594	.00046	.00146	.00022	.00047	.00004
%RSD	2.8674	1.7731	.72571	1.9028	.78205	.20586	.22936	11.782	79.681	2.1829	12.824	.04601	.45789	.35785

#1	.01021	.20174	.01191	.02051	1.0347	.04219	2.9544	.00704	.00325	.02155	.01240	.48054	.10330	.00978
#2	.01063	.20686	.01203	.02107	1.0462	.04232	2.9640	.00832	.01165	.02089	.01034	.48085	.10264	.00983

Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	None	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Value														
Range														

Elem	Th2837	Ti3349	Ti1908	U_3701	V_2924	Zn2062	Zr3391
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.01382	.01010	.01406	.07648	.00929	.01976	.01580
Stddev	.00080	.00008	.00137	.00798	.00001	.00005	.00030
%RSD	5.7589	.81018	9.7680	10.436	.15240	.25900	1.8852

#1	.01439	.01016	.01309	.08212	.00928	.01972	.01559
#2	.01326	.01005	.01503	.07083	.00930	.01979	.01601

Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Value							
Range							

Int. Std.	Y_2243	Y_3600	Y_3774
Units	Cts/S	Cts/S	Cts/S
Avg	1569.2	33083.	6073.8
Stddev	4.3	54.	1.9
%RSD	.27486	.16296	.03101

#1	1572.3	33121.	6072.5
#2	1566.2	33044.	6075.1

Sample Name: 280-83021-A-7-A Acquired: 5/20/2016 18:03:47 Type: Unk
Method: 6500_026(v10) Mode: CONC Corr. Factor: 1.000000
User: kellyca Custom ID1: 5/18 Custom ID2: Custom ID3:
Comment: 325405 6010c s

Elem	Ag3280	Al3092	As1890	B_2089	Ba4554	Be3130	Bi2230	Ca3179	Cd2288
Line	328.068 {103}	309.271 {109}	189.042 {478}	208.959 {461}	455.403 { 74}	313.042 {108}	223.061 {451}	317.933 {106}	228.802 {447}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.00039	22.209	.00295	.00613	.06624	.00009	-.00236	.31606	.00273
Stddev	.00062	.010	.00225	.00020	.00033	.00003	.00312	.00169	.00020
%RSD	158.61	.04423	76.427	3.3135	.50250	32.303	132.36	.53468	7.3705

#1	-.00005	22.216	.00135	.00627	.06648	.00007	-.00015	.31487	.00259
#2	.00083	22.202	.00454	.00598	.06601	.00012	-.00457	.31726	.00288

Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Elem	Co2286	Cr2055	Cu3247	Fe2599	K_7664	Li6707	Mg2790	Mn2576	Mo2020
Line	228.616 {447}	205.560 {464}	324.754 {104}	259.940 {130}	766.490 { 44}	670.784 { 50}	279.079 {121}2	257.610 {131}	202.030 {467}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.00041	.02129	.53597	10.824	.53959	.01248	.71955	.03722	.00122
Stddev	.00009	.00044	.00113	.034	.01002	.00034	.00183	.00027	.00004
%RSD	20.872	2.0608	.21155	.31623	1.8577	2.7246	.25439	.73342	3.5923

#1	.00047	.02160	.53677	10.848	.54667	.01272	.72085	.03741	.00125
#2	.00035	.02098	.53517	10.800	.53250	.01224	.71826	.03702	.00118

Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Elem	Na5895	Ni2316	P_1782	Pb2203	S_1820	Sb2068	Se1960	Si2881	Sn1899
Line	589.592 { 57}	231.604 {446}	178.284 {489}	220.353 {453}	182.034 {485}	206.833 {463}	196.090 {472}	288.158 {117}	189.989 {477}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.08486	.01287	.33333	.34429	.53920	.00712	W -.00674	12.631	.00796
Stddev	.00386	.00014	.00455	.00101	.01068	.00377	.00576	.323	.00062
%RSD	4.5461	1.0943	1.3642	.29329	1.9812	53.014	85.495	2.5575	7.7674

#1	.08759	.01277	.33011	.34501	.54676	.00979	-.01082	12.859	.00752
#2	.08214	.01297	.33654	.34358	.53165	.00445	-.00267	12.402	.00840

Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Warn	Chk Pass	Chk Pass
High Limit							5.0000		
Low Limit							-.00500		

Elem	Sr4077	Th2837	Ti3349	Ti1908	U_3701	V_2924	Zn2062	Zr3391
Line	407.771 { 83}	283.730 {119}	334.904 {101}	190.856 {477}	370.152 { 91}	292.402 {115}	206.200 {163}	339.198 { 99}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.00564	.00023	.53560	-.00002	.01249	.02750	.59522	.01951
Stddev	.00005	.00002	.01197	.00040	.00671	.00065	.00227	.00050
%RSD	.91274	7.1093	2.2348	1898.2	53.712	2.3457	.38084	2.5584

#1	.00568	.00022	.54406	.00026	.00775	.02796	.59362	.01986
#2	.00561	.00024	.52713	-.00031	.01723	.02704	.59682	.01916

Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit								
Low Limit								

Int. Std.	Y_2243	Y_3600	Y_3774
Line	224.306 {450}	360.073 { 94}	377.433 { 89}
Units	Cts/S	Cts/S	Cts/S
Avg	1590.5	33757.	6144.9
Stddev	1.6	52.	72.9
%RSD	.10016	.15465	1.1859

#1	1591.7	33794.	6093.4
#2	1589.4	33720.	6196.4

Sample Name: 280-83021-A-8-A Acquired: 5/20/2016 18:06:30 Type: Unk
Method: 6500_026(v10) Mode: CONC Corr. Factor: 1.000000
User: kellyca Custom ID1: Custom ID2: Custom ID3:
Comment: 325405 6010c s

Elem	Ag3280	Al3092	As1890	B_2089	Ba4554	Be3130	Bi2230	Ca3179	Cd2288
Line	328.068 {103}	309.271 {109}	189.042 {478}	208.959 {461}	455.403 { 74}	313.042 {108}	223.061 {451}	317.933 {106}	228.802 {447}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.00065	22.746	.00229	.00278	.02657	-.00009	-.00018	.09502	.00019
Stddev	.00005	.024	.00349	.00052	.00027	.00005	.00271	.00065	.00022
%RSD	8.3431	.10720	152.66	18.596	1.0161	55.349	1540.8	.68321	119.63

#1	.00069	22.729	-.00018	.00241	.02637	-.00005	-.00210	.09548	.00034
#2	.00062	22.763	.00476	.00314	.02676	-.00012	.00174	.09456	.00003

Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Elem	Co2286	Cr2055	Cu3247	Fe2599	K_7664	Li6707	Mg2790	Mn2576	Mo2020
Line	228.616 {447}	205.560 {464}	324.754 {104}	259.940 {130}	766.490 { 44}	670.784 { 50}	279.079 {121}2	257.610 {131}	202.030 {467}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.00026	.02476	.05003	11.398	.21423	.00617	.30802	.02108	.00137
Stddev	.00004	.00051	.00023	.002	.00311	.00054	.00243	.00002	.00023
%RSD	15.131	2.0561	.46499	.02092	1.4522	8.7127	.78894	.09337	16.533

#1	.00023	.02440	.04986	11.400	.21643	.00579	.30973	.02107	.00121
#2	.00029	.02512	.05019	11.397	.21203	.00655	.30630	.02110	.00153

Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Elem	Na5895	Ni2316	P_1782	Pb2203	S_1820	Sb2068	Se1960	Si2881	Sn1899
Line	589.592 { 57}	231.604 {446}	178.284 {489}	220.353 {453}	182.034 {485}	206.833 {463}	196.090 {472}	288.158 {117}	189.989 {477}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.03531	.00568	.13674	.04946	.23006	.00302	-.00279	2.3444	.00422
Stddev	.00431	.00018	.00324	.00223	.00073	.00333	.00287	.0292	.00072
%RSD	12.196	3.1224	2.3699	4.5177	.31942	110.40	102.97	1.2442	17.007

#1	.03835	.00580	.13445	.04788	.22954	.00066	-.00076	2.3650	.00473
#2	.03226	.00555	.13903	.05104	.23057	.00537	-.00482	2.3238	.00371

Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Elem	Sr4077	Th2837	Ti3349	Ti1908	U_3701	V_2924	Zn2062	Zr3391
Line	407.771 { 83}	283.730 {119}	334.904 {101}	190.856 {477}	370.152 { 91}	292.402 {115}	206.200 {163}	339.198 { 99}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.00326	.00295	.36224	-.00322	.01112	.03503	.04513	.01911
Stddev	.00008	.00088	.00023	.00068	.00520	.00045	.00205	.00184
%RSD	2.5754	29.793	.06422	21.133	46.735	1.2790	4.5370	9.6191

#1	.00332	.00233	.36241	-.00370	.00744	.03471	.04658	.01781
#2	.00320	.00357	.36208	-.00274	.01479	.03535	.04368	.02041

Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit								
Low Limit								

Int. Std.	Y_2243	Y_3600	Y_3774
Line	224.306 {450}	360.073 { 94}	377.433 { 89}
Units	Cts/S	Cts/S	Cts/S
Avg	1584.4	33307.	6263.0
Stddev	1.0	56.	4.7
%RSD	.06180	.16825	.07458

#1	1585.1	33347.	6266.3
#2	1583.7	33268.	6259.7

Sample Name: 280-83021-A-9-A Acquired: 5/20/2016 18:09:13 Type: Unk
Method: 6500_026(v10) Mode: CONC Corr. Factor: 1.000000
User: kellyca Custom ID1: Custom ID2: Custom ID3:
Comment: 325405 6010c s

Elem	Ag3280	Al3092	As1890	B_2089	Ba4554	Be3130	Bi2230	Ca3179	Cd2288
Line	328.068 {103}	309.271 {109}	189.042 {478}	208.959 {461}	455.403 { 74}	313.042 {108}	223.061 {451}	317.933 {106}	228.802 {447}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.00060	13.966	-.00221	.00212	.03208	.00000	-.00187	.27980	.00059
Stddev	.00102	.097	.00074	.00047	.00018	.00007	.00063	.00128	.00004
%RSD	171.00	.69547	33.325	22.375	.57543	28944.	33.559	.45860	6.4088

#1	-.00013	13.897	-.00169	.00178	.03195	-.00005	-.00231	.27890	.00061
#2	.00132	14.035	-.00273	.00246	.03221	.00005	-.00142	.28071	.00056

Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Elem	Co2286	Cr2055	Cu3247	Fe2599	K_7664	Li6707	Mg2790	Mn2576	Mo2020
Line	228.616 {447}	205.560 {464}	324.754 {104}	259.940 {130}	766.490 { 44}	670.784 { 50}	279.079 {121}2	257.610 {131}	202.030 {467}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.00067	.01361	.07167	9.5268	.31827	.00892	.51283	.04813	.00068
Stddev	.00025	.00022	.00012	.0027	.00756	.00036	.00399	.00027	.00018
%RSD	37.633	1.6068	.16776	.02849	2.3744	4.0053	.77858	.55564	26.887

#1	.00049	.01346	.07176	9.5249	.32361	.00867	.51001	.04794	.00055
#2	.00085	.01377	.07159	9.5287	.31292	.00917	.51565	.04832	.00081

Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Elem	Na5895	Ni2316	P_1782	Pb2203	S_1820	Sb2068	Se1960	Si2881	Sn1899
Line	589.592 { 57}	231.604 {446}	178.284 {489}	220.353 {453}	182.034 {485}	206.833 {463}	196.090 {472}	288.158 {117}	189.989 {477}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.04170	.01129	.15549	.22767	.18102	.00213	W -.00613	2.5342	.00382
Stddev	.00178	.00078	.00155	.00067	.00227	.00083	.00150	.0156	.00039
%RSD	4.2610	6.9166	.99932	.29285	1.2544	39.148	24.520	.61590	10.318

#1	.04045	.01185	.15440	.22719	.18262	.00154	-.00507	2.5232	.00354
#2	.04296	.01074	.15659	.22814	.17941	.00271	-.00720	2.5452	.00410

Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Warn	Chk Pass	Chk Pass
High Limit							5.0000		
Low Limit							-.00500		

Elem	Sr4077	Th2837	Ti3349	Ti1908	U_3701	V_2924	Zn2062	Zr3391
Line	407.771 { 83}	283.730 {119}	334.904 {101}	190.856 {477}	370.152 { 91}	292.402 {115}	206.200 {163}	339.198 { 99}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.00753	.00187	.33623	-.00047	.00732	.01903	.12301	.01108
Stddev	.00007	.00076	.00069	.00109	.00508	.00072	.00069	.00103
%RSD	.87743	40.692	.20526	233.90	69.473	3.8017	.56026	9.2843

#1	.00748	.00240	.33574	-.00124	.00372	.01852	.12253	.01035
#2	.00757	.00133	.33671	.00031	.01091	.01954	.12350	.01181

Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit								
Low Limit								

Int. Std.	Y_2243	Y_3600	Y_3774
Line	224.306 {450}	360.073 { 94}	377.433 { 89}
Units	Cts/S	Cts/S	Cts/S
Avg	1582.6	33364.	6081.2
Stddev	.9	80.	49.9
%RSD	.05596	.24023	.82126

#1	1583.2	33421.	6045.9
#2	1582.0	33308.	6116.5

Sample Name: 280-83021-A-10-A Acquired: 5/20/2016 18:11:56 Type: Unk
Method: 6500_026(v10) Mode: CONC Corr. Factor: 1.000000
User: kellyca Custom ID1: Custom ID2: Custom ID3:
Comment: 325405 6010c s

Elem	Ag3280	Al3092	As1890	B_2089	Ba4554	Be3130	Bi2230	Ca3179	Cd2288
Line	328.068 {103}	309.271 {109}	189.042 {478}	208.959 {461}	455.403 { 74}	313.042 {108}	223.061 {451}	317.933 {106}	228.802 {447}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.00028	10.161	-.00091	.00195	.01990	-.00003	-.00048	.10528	.00014
Stddev	.00025	.007	.00161	.00058	.00011	.00002	.00142	.00456	.00029
%RSD	87.453	.06695	178.03	29.603	.53509	76.418	297.26	4.3309	204.34

#1	.00011	10.156	-.00205	.00236	.01998	-.00001	.00052	.10850	-.00006
#2	.00045	10.166	.00023	.00155	.01983	-.00005	-.00148	.10205	.00035

Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Elem	Co2286	Cr2055	Cu3247	Fe2599	K_7664	Li6707	Mg2790	Mn2576	Mo2020
Line	228.616 {447}	205.560 {464}	324.754 {104}	259.940 {130}	766.490 { 44}	670.784 { 50}	279.079 {121}2	257.610 {131}	202.030 {467}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.00002	.01259	.03775	21.002	.21869	.00439	.28013	.02837	.00042
Stddev	.00026	.00012	.00022	.059	.02718	.00007	.00302	.00005	.00030
%RSD	1466.1	.91946	.57139	.27925	12.428	1.6629	1.0795	.18977	72.211

#1	.00020	.01251	.03790	21.043	.19947	.00434	.28226	.02841	.00063
#2	-.00017	.01267	.03759	20.960	.23791	.00444	.27799	.02833	.00021

Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Elem	Na5895	Ni2316	P_1782	Pb2203	S_1820	Sb2068	Se1960	Si2881	Sn1899
Line	589.592 { 57}	231.604 {446}	178.284 {489}	220.353 {453}	182.034 {485}	206.833 {463}	196.090 {472}	288.158 {117}	189.989 {477}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.04722	.00527	.13660	.10505	.43300	.00161	.00350	2.0067	.00445
Stddev	.00474	.00105	.00271	.00164	.00298	.00126	.00128	.0133	.00129
%RSD	10.036	19.829	1.9819	1.5637	.68756	78.468	36.545	.66341	28.900

#1	.05057	.00453	.13851	.10621	.43090	.00072	.00260	2.0161	.00536
#2	.04387	.00601	.13469	.10389	.43511	.00250	.00440	1.9972	.00354

Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Elem	Sr4077	Th2837	Ti3349	Ti1908	U_3701	V_2924	Zn2062	Zr3391
Line	407.771 { 83}	283.730 {119}	334.904 {101}	190.856 {477}	370.152 { 91}	292.402 {115}	206.200 {163}	339.198 { 99}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.00266	-.00055	.18900	-.00146	.00244	.01735	.03672	.00785
Stddev	.00012	.00222	.00008	.00263	.01784	.00023	.00051	.00008
%RSD	4.5071	405.56	.04357	180.24	731.17	1.3183	1.3902	1.0431

#1	.00258	-.00212	.18906	-.00332	-.01017	.01751	.03709	.00791
#2	.00275	.00102	.18894	.00040	.01505	.01718	.03636	.00779

Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit								
Low Limit								

Int. Std.	Y_2243	Y_3600	Y_3774
Line	224.306 {450}	360.073 { 94}	377.433 { 89}
Units	Cts/S	Cts/S	Cts/S
Avg	1581.7	33323.	6088.8
Stddev	.6	26.	4.7
%RSD	.03492	.07848	.07784

#1	1582.1	33342.	6092.2
#2	1581.3	33305.	6085.5

Sample Name: 280-83021-A-19-A Acquired: 5/20/2016 18:14:41 Type: Unk
Method: 6500_026(v10) Mode: CONC Corr. Factor: 1.000000
User: kellyca Custom ID1: Custom ID2: Custom ID3:
Comment: 325405 6010c s

Elem	Ag3280	Al3092	As1890	B_2089	Ba4554	Be3130	Bi2230	Ca3179	Cd2288
Line	328.068 {103}	309.271 {109}	189.042 {478}	208.959 {461}	455.403 { 74}	313.042 {108}	223.061 {451}	317.933 {106}	228.802 {447}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.00066	22.979	.00715	.00295	.21887	-.00005	-.00248	.81734	.01193
Stddev	.00005	.022	.00312	.00000	.00138	.00002	.00112	.00140	.00000
%RSD	7.1632	.09666	43.594	.01395	.63172	44.758	45.069	.17171	.02185

#1	.00063	22.994	.00935	.00295	.21790	-.00006	-.00169	.81635	.01193
#2	.00069	22.963	.00495	.00295	.21985	-.00003	-.00327	.81834	.01193

Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Elem	Co2286	Cr2055	Cu3247	Fe2599	K_7664	Li6707	Mg2790	Mn2576	Mo2020
Line	228.616 {447}	205.560 {464}	324.754 {104}	259.940 {130}	766.490 { 44}	670.784 { 50}	279.079 {121}2	257.610 {131}	202.030 {467}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.00293	.07030	.44589	32.188	.44470	.01354	1.0387	.27507	.00532
Stddev	.00026	.00031	.00182	.052	.01941	.00066	.0002	.00103	.00029
%RSD	9.0077	.44332	.40717	.16215	4.3646	4.8521	.02197	.37543	5.4314

#1	.00275	.07008	.44717	32.151	.45843	.01400	1.0389	.27434	.00552
#2	.00312	.07052	.44461	32.225	.43098	.01307	1.0386	.27580	.00511

Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Elem	Na5895	Ni2316	P_1782	Pb2203	S_1820	Sb2068	Se1960	Si2881	Sn1899
Line	589.592 { 57}	231.604 {446}	178.284 {489}	220.353 {453}	182.034 {485}	206.833 {463}	196.090 {472}	288.158 {117}	189.989 {477}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.06677	.04431	.47958	2.3410	.26054	.04067	.00110	2.9424	.13384
Stddev	.00578	.00027	.00845	.0075	.00619	.00496	.00048	.0048	.00002
%RSD	8.6633	.60329	1.7621	.32173	2.3768	12.199	44.006	.16383	.01201

#1	.06268	.04450	.48556	2.3464	.25616	.03716	.00144	2.9458	.13383
#2	.07086	.04412	.47361	2.3357	.26492	.04418	.00075	2.9390	.13385

Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Elem	Sr4077	Th2837	Ti3349	Ti1908	U_3701	V_2924	Zn2062	Zr3391
Line	407.771 { 83}	283.730 {119}	334.904 {101}	190.856 {477}	370.152 { 91}	292.402 {115}	206.200 {163}	339.198 { 99}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.09555	.00090	.25959	.00093	-.02307	.02529	.53195	.01307
Stddev	.00026	.00061	.00094	.00072	.00226	.00031	.01212	.00024
%RSD	.26858	67.865	.36336	76.914	9.8175	1.2404	2.2791	1.8226

#1	.09537	.00133	.25893	.00043	-.02147	.02507	.52337	.01290
#2	.09573	.00047	.26026	.00144	-.02467	.02551	.54052	.01324

Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit								
Low Limit								

Int. Std.	Y_2243	Y_3600	Y_3774
Line	224.306 {450}	360.073 { 94}	377.433 { 89}
Units	Cts/S	Cts/S	Cts/S
Avg	1580.6	33174.	6148.7
Stddev	.5	38.	8.7
%RSD	.03185	.11359	.14104

#1	1580.2	33201.	6142.6
#2	1580.9	33147.	6154.8

Sample Name: 280-83021-A-20-A Acquired: 5/20/2016 18:17:24 Type: Unk
Method: 6500_026(v10) Mode: CONC Corr. Factor: 1.000000
User: kellyca Custom ID1: Custom ID2: Custom ID3:
Comment: 325405 6010c s

Elem	Ag3280	Al3092	As1890	B_2089	Ba4554	Be3130	Bi2230	Ca3179	Cd2288
Line	328.068 {103}	309.271 {109}	189.042 {478}	208.959 {461}	455.403 { 74}	313.042 {108}	223.061 {451}	317.933 {106}	228.802 {447}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	-.00005	20.549	.00405	.00261	.04489	.00004	-.00064	.59459	.00200
Stddev	.00073	.080	.00597	.00026	.00021	.00003	.00193	.00260	.00011
%RSD	1385.2	.39160	147.53	10.072	.46052	64.679	301.56	.43645	5.2912

#1	-.00057	20.606	-.00017	.00279	.04474	.00002	-.00200	.59275	.00193
#2	.00046	20.492	.00827	.00242	.04503	.00007	.00072	.59642	.00208

Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Elem	Co2286	Cr2055	Cu3247	Fe2599	K_7664	Li6707	Mg2790	Mn2576	Mo2020
Line	228.616 {447}	205.560 {464}	324.754 {104}	259.940 {130}	766.490 { 44}	670.784 { 50}	279.079 {121}2	257.610 {131}	202.030 {467}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.00064	.01623	.08385	10.339	.41335	.01226	.69481	.07916	.00123
Stddev	.00023	.00026	.00537	.011	.00664	.00101	.04413	.00568	.00015
%RSD	35.023	1.5929	6.4012	.10711	1.6052	8.2447	6.3515	7.1748	12.308

#1	.00080	.01642	.08005	10.331	.40866	.01155	.66360	.07514	.00113
#2	.00048	.01605	.08764	10.347	.41804	.01298	.72601	.08318	.00134

Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Elem	Na5895	Ni2316	P_1782	Pb2203	S_1820	Sb2068	Se1960	Si2881	Sn1899
Line	589.592 { 57}	231.604 {446}	178.284 {489}	220.353 {453}	182.034 {485}	206.833 {463}	196.090 {472}	288.158 {117}	189.989 {477}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.06470	.00999	.23549	.23539	.30280	.00065	.00258	3.1677	.00472
Stddev	.00024	.00017	.00008	.00240	.00338	.00017	.00260	.0101	.00040
%RSD	.37609	1.7139	.03261	1.0191	1.1150	26.102	100.87	.31905	8.4454

#1	.06487	.01011	.23544	.23709	.30519	.00077	.00074	3.1748	.00444
#2	.06453	.00987	.23555	.23370	.30041	.00053	.00442	3.1605	.00500

Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Elem	Sr4077	Th2837	Ti3349	Ti1908	U_3701	V_2924	Zn2062	Zr3391
Line	407.771 { 83}	283.730 {119}	334.904 {101}	190.856 {477}	370.152 { 91}	292.402 {115}	206.200 {163}	339.198 { 99}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.00707	.00127	.26413	.00034	.00712	.02588	.16091	.01080
Stddev	.00001	.00001	.01971	.00027	.01115	.00106	.01162	.00125
%RSD	.13064	.71970	7.4633	80.893	156.61	4.1074	7.2194	11.563

#1	.00708	.00127	.25019	.00014	.01501	.02513	.15270	.01169
#2	.00706	.00126	.27807	.00053	-.00076	.02663	.16913	.00992

Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit								
Low Limit								

Int. Std.	Y_2243	Y_3600	Y_3774
Line	224.306 {450}	360.073 { 94}	377.433 { 89}
Units	Cts/S	Cts/S	Cts/S
Avg	1591.2	32348.	6237.8
Stddev	2.4	1791.	15.8
%RSD	.14798	5.5360	.25297

#1	1589.5	33614.	6226.6
#2	1592.8	31082.	6249.0

Sample Name: 280-83021-A-21-A Acquired: 5/20/2016 18:20:08 Type: Unk
Method: 6500_026(v10) Mode: CONC Corr. Factor: 1.000000
User: kellyca Custom ID1: Custom ID2: Custom ID3:
Comment: 325405 6010c s

Elem	Ag3280	Al3092	As1890	B_2089	Ba4554	Be3130	Bi2230	Ca3179	Cd2288
Line	328.068 {103}	309.271 {109}	189.042 {478}	208.959 {461}	455.403 { 74}	313.042 {108}	223.061 {451}	317.933 {106}	228.802 {447}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	-.00013	24.223	-.00236	.00300	.05712	.00003	-.00324	.19425	.00246
Stddev	.00053	.095	.00195	.00057	.00043	.00001	.00170	.00336	.00002
%RSD	415.38	.39040	82.832	19.092	.75943	24.914	52.400	1.7281	.78284

#1	-.00050	24.290	-.00374	.00341	.05681	.00004	-.00204	.19663	.00247
#2	.00025	24.157	-.00098	.00260	.05743	.00003	-.00444	.19188	.00245

Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Elem	Co2286	Cr2055	Cu3247	Fe2599	K_7664	Li6707	Mg2790	Mn2576	Mo2020
Line	228.616 {447}	205.560 {464}	324.754 {104}	259.940 {130}	766.490 { 44}	670.784 { 50}	279.079 {121}2	257.610 {131}	202.030 {467}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.00047	.01747	.08978	11.800	.47985	.01560	.78786	.07447	.00128
Stddev	.00034	.00027	.00026	.056	.00116	.00051	.00050	.00013	.00006
%RSD	73.333	1.5185	.28506	.47340	.24151	3.2526	.06396	.17047	4.6650

#1	.00023	.01766	.08960	11.840	.48067	.01524	.78821	.07438	.00123
#2	.00071	.01728	.08996	11.761	.47903	.01596	.78750	.07456	.00132

Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Elem	Na5895	Ni2316	P_1782	Pb2203	S_1820	Sb2068	Se1960	Si2881	Sn1899
Line	589.592 { 57}	231.604 {446}	178.284 {489}	220.353 {453}	182.034 {485}	206.833 {463}	196.090 {472}	288.158 {117}	189.989 {477}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.03512	.01188	.21842	.09824	.22554	.00254	-.00473	3.9831	.00295
Stddev	.00001	.00061	.00126	.00187	.00696	.00400	.00107	.0133	.00075
%RSD	.02101	5.1538	.57486	1.9001	3.0881	157.58	22.587	.33383	25.391

#1	.03513	.01145	.21753	.09692	.22061	.00537	-.00548	3.9925	.00348
#2	.03512	.01231	.21930	.09956	.23046	-.00029	-.00397	3.9737	.00242

Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Elem	Sr4077	Th2837	Ti3349	Ti1908	U_3701	V_2924	Zn2062	Zr3391
Line	407.771 { 83}	283.730 {119}	334.904 {101}	190.856 {477}	370.152 { 91}	292.402 {115}	206.200 {163}	339.198 { 99}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.00398	.00051	.28309	.00017	.01579	.02851	.15604	.01261
Stddev	.00001	.00162	.00137	.00071	.00935	.00048	.00101	.00040
%RSD	.28013	314.47	.48499	418.27	59.228	1.6746	.65040	3.1414

#1	.00397	-.00063	.28406	.00067	.02240	.02817	.15532	.01289
#2	.00399	.00166	.28212	-.00033	.00917	.02885	.15676	.01233

Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit								
Low Limit								

Int. Std.	Y_2243	Y_3600	Y_3774
Line	224.306 {450}	360.073 { 94}	377.433 { 89}
Units	Cts/S	Cts/S	Cts/S
Avg	1582.0	33065.	6119.1
Stddev	6.5	105.	29.9
%RSD	.41099	.31660	.48895

#1	1586.6	32991.	6097.9
#2	1577.4	33139.	6140.2

Sample Name: ccvh-3900196 Acquired: 5/20/2016 18:22:52 Type: QC
Method: 6500_026(v10) Mode: CONC Corr. Factor: 1.000000
User: kellyca Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	Ag3280	Al3092	As1890	B_2089	Ba4554	Be3130	Bi2230	Ca3179	Cd2288	Co2286	Cr2055	Cu3247	Fe2714
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	-.00221	47.241	-.00253	.00161	.00010	-.00037	1.0450	-.05499	-.00096	.00293	-.00050	.00565	47.653
Stddev	.00123	.156	.00133	.00137	.00001	.00001	.0007	.00034	.00019	.00073	.00019	.00003	.141
%RSD	55.578	.33084	52.620	85.222	5.6110	2.0873	.06960	.62319	20.065	25.052	39.287	.45416	.29607

#1	-.00134	47.130	-.00348	.00064	.00010	-.00037	1.0455	-.05475	-.00110	.00345	-.00036	.00564	47.554
#2	-.00308	47.351	-.00159	.00258	.00010	-.00038	1.0445	-.05523	-.00082	.00241	-.00063	.00567	47.753

Check ?	None	Chk Pass	None	None	None	None	Chk Pass	None	None	None	None	None	Chk Pass
Value													
Range													

Elem	K_7664	Li6707	Mg2790	Mn2576	Mo2020	Na8183	Ni2316	P_1782	Pb2203	S_1820	Sb2068	Se1960	Si2881
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.00404	.00011	.14316	-.00049	-.00262	253.18	-.00014	.00147	.00060	4.9998	-.00031	.00444	-.00770
Stddev	.00598	.00050	.00748	.00000	.00010	.42	.00009	.00674	.00085	.0420	.00122	.00357	.00373
%RSD	148.16	453.97	5.2224	.38790	3.7485	.16442	63.900	459.32	141.09	.84003	392.20	80.388	48.444

#1	-.00019	.00047	.13788	-.00049	-.00255	252.89	-.00008	.00624	.00120	5.0295	.00055	.00696	-.00506
#2	.00826	-.00024	.14845	-.00049	-.00269	253.48	-.00020	-.00330	.00000	4.9701	-.00117	.00192	-.01034

Check ?	None	None	None	None	None	Chk Pass	None	None	None	Chk Pass	None	None	None
Value													
Range													

Elem	Sn1899	Sr4077	Th2837	Ti3349	Ti1908	U_3701	V_2924	Zn2062	Zr3391
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.00071	.00029	4.9118	.02583	-.00272	10.096	-.01644	-.00233	-.01327
Stddev	.00068	.00001	.0020	.00014	.00149	.036	.00110	.00075	.00402
%RSD	95.759	2.2021	.04137	.52513	54.754	.35195	6.7189	32.245	30.280

#1	.00023	.00029	4.9133	.02592	-.00167	10.071	-.01722	-.00286	-.01612
#2	.00120	.00028	4.9104	.02573	-.00377	10.121	-.01566	-.00180	-.01043

Check ?	None	None	Chk Pass	None	None	Chk Pass	None	None	None
Value									
Range									

Int. Std.	Y_2243	Y_3600	Y_3774
Units	Cts/S	Cts/S	Cts/S
Avg	1515.1	30984.	5849.5
Stddev	5.8	150.	26.8
%RSD	.38233	.48367	.45770

#1	1511.0	30878.	5868.4
#2	1519.2	31090.	5830.6

Sample Name: ccv-3900195 Acquired: 5/20/2016 18:25:43 Type: QC
Method: 6500_026(v10) Mode: CONC Corr. Factor: 1.000000
User: kellyca Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	Ag3280	Al1670	As1890	B_2089	Ba4554	Be3130	Bi2230	Ca3179	Cd2288	Co2286	Cr2055	Cu3247	Fe2599
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.48818	.51701	1.0159	.52674	.49668	.51173	-.00100	5.1075	.52322	.52287	.51647	.49044	2.5336
Stddev	.00055	.00142	.0007	.00288	.00164	.00131	.00172	.0429	.00121	.00024	.00181	.00077	.0079
%RSD	.11238	.27552	.07321	.54592	.32971	.25582	173.03	.84018	.23189	.04517	.35138	.15739	.31278

#1	.48779	.51802	1.0165	.52470	.49552	.51080	.00022	5.0771	.52237	.52270	.51518	.48989	2.5280
#2	.48857	.51601	1.0154	.52877	.49783	.51265	-.00222	5.1378	.52408	.52303	.51775	.49099	2.5392

Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	None	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Value													
Range													

Elem	K_7664	Li6707	Mg2790	Mn2576	Mo2020	Na5895	Ni2316	P_1782	Pb2203	S_1820	Sb2068	Se1960	Si2881
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	51.167	1.0464	19.767	.50429	.52169	5.1874	.50733	1.0022	1.0453	.00542	1.0358	1.0129	5.0829
Stddev	.243	.0021	.012	.00163	.00033	.0195	.00036	.0055	.0074	.00051	.0010	.0048	.0308
%RSD	.47450	.19920	.06178	.32317	.06318	.37619	.07165	.54428	.70477	9.4825	.09717	.47054	.60512

#1	50.996	1.0449	19.775	.50545	.52145	5.2012	.50759	.99834	1.0401	.00579	1.0365	1.0163	5.0611
#2	51.339	1.0479	19.758	.50314	.52192	5.1736	.50707	1.0061	1.0505	.00506	1.0351	1.0096	5.1046

Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	None	Chk Pass	Chk Pass	Chk Pass
Value													
Range													

Elem	Sn1899	Sr4077	Th2837	Ti3349	Tl1908	U_3701	V_2924	Zn2062	Zr3391
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	1.0048	.48212	.00125	.47826	1.0428	.01797	.48244	.50908	.49919
Stddev	.0041	.00212	.00038	.00061	.0084	.00314	.00118	.00548	.00168
%RSD	.40473	.44059	30.657	.12734	.80336	17.468	.24525	1.0766	.33742

#1	1.0077	.48062	.00098	.47869	1.0369	.02019	.48327	.51296	.49800
#2	1.0019	.48362	.00152	.47783	1.0487	.01575	.48160	.50521	.50038

Check ?	Chk Pass	Chk Pass	None	Chk Pass	Chk Pass	None	Chk Pass	Chk Pass	Chk Pass
Value									
Range									

Int. Std.	Y_2243	Y_3600	Y_3774
Units	Cts/S	Cts/S	Cts/S
Avg	1542.8	31480.	5759.4
Stddev	5.7	155.	43.1
%RSD	.36823	.49242	.74859

#1	1546.8	31371.	5789.8
#2	1538.8	31590.	5728.9

Sample Name: ccb Acquired: 5/20/2016 18:28:23 Type: QC
Method: 6500_026(v10) Mode: CONC Corr. Factor: 1.000000
User: kellyca Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	Ag3280	Al1670	As1890	B_2089	Ba4554	Be3130	Bi2230	Ca3179	Cd2288	Co2286	Cr2055	Cu3247
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	-.00014	-.00078	-.00015	.00110	-.00000	-.00010	-.00398	-.00552	W .00053	-.00028	-.00002	-.00048
Stddev	.00018	.00103	.00264	.00115	.00003	.00015	.00236	.00120	.00022	.00013	.00003	.00032
%RSD	131.28	132.80	1709.3	104.10	2716.1	152.90	59.336	21.743	41.060	47.479	178.90	66.342

#1	-.00001	-.00005	.00171	.00192	.00002	.00001	-.00564	-.00637	.00068	-.00018	.00001	-.00070
#2	-.00027	-.00150	-.00202	.00029	-.00002	-.00021	-.00231	-.00467	.00038	-.00037	-.00004	-.00025

Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	None	Chk Pass	Chk Warn	Chk Pass	Chk Pass	Chk Pass
High Limit									.00045			
Low Limit									-.00045			

Elem	Fe2599	K_7664	Li6707	Mg2790	Mn2576	Mo2020	Na5895	Ni2316	P_1782	Pb2203	S_1820	Sb2068
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.00176	.06678	-.00004	.00493	.00017	.00029	.01085	-.00040	-.00387	.00048	.00727	-.00054
Stddev	.00156	.02299	.00070	.00242	.00005	.00038	.00187	.00026	.00100	.00043	.00200	.00010
%RSD	88.384	34.421	1621.8	49.011	30.013	129.92	17.233	65.629	25.904	88.968	27.511	18.675

#1	.00066	.05053	.00045	.00322	.00013	.00002	.01217	-.00021	-.00316	.00079	.00586	-.00061
#2	.00287	.08304	-.00054	.00664	.00021	.00057	.00953	-.00058	-.00458	.00018	.00868	-.00047

Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	None	Chk Pass
High Limit												
Low Limit												

Elem	Se1960	Si2881	Sn1899	Sr4077	Th2837	Ti3349	Ti1908	U_3701	V_2924	Zn2062	Zr3391
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	-.00292	-.00512	.00010	.00007	-.00255	.00009	-.00084	.02659	.00034	-.00057	.00187
Stddev	.00355	.00157	.00169	.00001	.00178	.00008	.00075	.00677	.00076	.00122	.00013
%RSD	121.75	30.641	1704.6	9.5897	69.779	90.541	89.216	25.481	223.64	213.29	6.8708

#1	-.00543	-.00623	.00129	.00006	-.00381	.00003	-.00137	.02180	.00088	.00029	.00196
#2	-.00041	-.00401	-.00109	.00007	-.00129	.00014	-.00031	.03138	-.00020	-.00144	.00178

Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit											
Low Limit											

Int. Std.	Y_2243	Y_3600	Y_3774
Units	Cts/S	Cts/S	Cts/S
Avg	1547.5	33092.	6000.1
Stddev	.4	53.	34.3
%RSD	.02612	.16052	.57116

#1	1547.8	33129.	6024.4
#2	1547.2	33054.	5975.9

Sample Name: ccvl-3903059 Acquired: 5/20/2016 18:31:10 Type: QC
Method: 6500_026(v10) Mode: CONC Corr. Factor: 1.000000
User: kellyca Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	Ag3280	Al1670	As1890	B_2089	Ba4554	Be3130	Bi2230	Ca3179	Cd2288	Co2286	Cr2055	Cu3247
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.00987	.10595	.01399	.10698	.01028	.00090	.11512	.20166	.00548	.01046	.01049	.01455
Stddev	.00064	.00061	.00274	.00073	.00011	.00009	.00167	.00355	.00024	.00006	.00025	.00010
%RSD	6.5242	.57804	19.571	.67934	1.0634	9.7325	1.4478	1.7604	4.3792	.55412	2.3372	.67842

#1	.01033	.10638	.01205	.10749	.01035	.00083	.11630	.20417	.00565	.01042	.01066	.01462
#2	.00942	.10551	.01592	.10646	.01020	.00096	.11394	.19915	.00531	.01050	.01031	.01448

Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Value												
Range												

Elem	Fe2599	K_7664	Li6707	Mg2790	Mn2576	Mo2020	Na5895	Ni2316	P_1782	Pb2203	S_1820	Sb2068
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.11043	3.1465	.01029	.20539	.01026	.02101	1.0449	.04234	2.9818	.00973	.00421	.02313
Stddev	.00010	.0100	.00057	.00203	.00003	.00046	.0009	.00051	.0009	.00117	.00265	.00035
%RSD	.08795	.31856	5.5486	.98989	.24847	2.1853	.08337	1.2093	.02898	12.063	63.060	1.4983

#1	.11037	3.1536	.00989	.20682	.01027	.02134	1.0443	.04271	2.9812	.00890	.00608	.02338
#2	.11050	3.1394	.01069	.20395	.01024	.02069	1.0455	.04198	2.9824	.01056	.00233	.02289

Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	None	Chk Pass
Value												
Range												

Elem	Se1960	Si2881	Sn1899	Sr4077	Th2837	Ti3349	Ti1908	U_3701	V_2924	Zn2062	Zr3391
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	F .00739	.50841	.10341	.00970	.01289	.00944	.01582	.06887	.00920	.02014	.01529
Stddev	.00352	.01388	.00025	.00008	.00135	.00039	.00041	.00518	.00010	.00088	.00060
%RSD	47.637	2.7310	.23825	.84553	10.480	4.1651	2.5964	7.5218	1.0726	4.3454	3.9137

#1	.00490	.51823	.10359	.00965	.01385	.00972	.01553	.06521	.00913	.01952	.01572
#2	.00988	.49860	.10324	.00976	.01194	.00917	.01611	.07253	.00927	.02076	.01487

Check ?	Chk Fail	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Value	.01500										
Range	-30.000%										

Int. Std.	Y_2243	Y_3600	Y_3774
Units	Cts/S	Cts/S	Cts/S
Avg	1569.9	32984.	5966.5
Stddev	3.6	163.	21.9
%RSD	.22728	.49549	.36774

#1	1567.4	32869.	5982.0
#2	1572.4	33100.	5951.0

Sample Name: MB 280-325571/1-A Acquired: 5/20/2016 18:33:57 Type: Unk
Method: 6500_026(v10) Mode: CONC Corr. Factor: 1.000000
User: kellyca Custom ID1: 5/17 Custom ID2: Custom ID3:
Comment: 325571 6010c q5

Elem	Ag3280	Al1670	As1890	B_2089	Ba4554	Be3130	Bi2230	Ca3179	Cd2288
Line	328.068 {103}	167.079 {502}	189.042 {478}	208.959 {461}	455.403 { 74}	313.042 {108}	223.061 {451}	317.933 {106}	228.802 {447}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	-0.00014	.00476	-0.00243	.00005	-0.00001	-0.00011	-0.00223	.01579	.00006
Stddev	.00032	.00063	.00342	.00156	.00005	.00001	.00057	.00452	.00016
%RSD	231.45	13.268	140.68	3289.5	442.91	12.067	25.699	28.617	259.36

#1	-0.00036	.00431	-0.00485	-0.00105	-0.00004	-0.00010	-0.00263	.01259	.00018
#2	.00009	.00521	-0.00001	.00115	.00002	-0.00011	-0.00182	.01898	-0.00005

Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Elem	Co2286	Cr2055	Cu3247	Fe2599	K_7664	Li6707	Mg2790	Mn2576	Mo2020
Line	228.616 {447}	205.560 {464}	324.754 {104}	259.940 {130}	766.490 { 44}	670.784 { 50}	279.079 {121}2	257.610 {131}	202.030 {467}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	-0.00036	.00010	-0.00065	.02113	.03173	-0.00018	.00362	.00040	-0.00039
Stddev	.00010	.00013	.00010	.00001	.00270	.00054	.00112	.00010	.00019
%RSD	27.108	125.42	15.001	.06842	8.5193	298.13	30.786	24.503	49.742

#1	-0.00029	.00019	-0.00072	.02112	.03364	.00020	.00284	.00047	-0.00052
#2	-0.00042	.00001	-0.00058	.02114	.02982	-0.00057	.00441	.00033	-0.00025

Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Elem	Na5895	Ni2316	P_1782	Pb2203	S_1820	Sb2068	Se1960	Si2881	Sn1899
Line	589.592 { 57}	231.604 {446}	178.284 {489}	220.353 {453}	182.034 {485}	206.833 {463}	196.090 {472}	288.158 {117}	189.989 {477}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.01532	.00050	-0.00052	.00109	.00791	.00191	-0.00448	.00163	.00073
Stddev	.00091	.00034	.00270	.00079	.00453	.00264	.00354	.00293	.00062
%RSD	5.9494	67.455	515.15	72.359	57.267	138.66	78.972	180.13	84.807

#1	.01596	.00074	-0.00243	.00165	.01111	.00004	-0.00198	-0.00045	.00029
#2	.01468	.00026	.00139	.00053	.00471	.00377	-0.00698	.00370	.00117

Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Elem	Sr4077	Th2837	Ti3349	Ti1908	U_3701	V_2924	Zn2062	Zr3391
Line	407.771 { 83}	283.730 {119}	334.904 {101}	190.856 {477}	370.152 { 91}	292.402 {115}	206.200 {163}	339.198 { 99}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.00012	-0.00208	.00008	-0.00198	.01766	.00005	.00235	-0.00009
Stddev	.00005	.00109	.00005	.00342	.00743	.00028	.00114	.00015
%RSD	40.392	52.427	69.032	172.38	42.086	584.48	48.583	167.77

#1	.00016	-0.00131	.00011	-0.00440	.01240	.00024	.00154	.00002
#2	.00009	-0.00285	.00004	.00043	.02291	-0.00015	.00316	-0.00020

Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit								
Low Limit								

Int. Std.	Y_2243	Y_3600	Y_3774
Line	224.306 {450}	360.073 { 94}	377.433 { 89}
Units	Cts/S	Cts/S	Cts/S
Avg	1560.3	32994.	6002.2
Stddev	1.3	15.	5.4
%RSD	.08531	.04550	.08975

#1	1561.2	33004.	5998.4
#2	1559.4	32983.	6006.0

Sample Name: LCS 280-325571/2-A Acquired: 5/20/2016 18:36:45 Type: Unk

Method: 6500_026(v10) Mode: CONC Corr. Factor: 1.000000

User: kellyca Custom ID1: Custom ID2: Custom ID3:

Comment: 325571 6010c q5

Elem	Ag3280	Al1670	As1890	B_2089	Ba4554	Be3130	Bi2230	Ca3179	Cd2288
Line	328.068 {103}	167.079 {502}	189.042 {478}	208.959 {461}	455.403 {74}	313.042 {108}	223.061 {451}	317.933 {106}	228.802 {447}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.05023	2.0298	1.0689	F 1.1161	2.0652	.05267	F 2.2399	51.442	.10675
Stddev	.00055	.0057	.0045	.0008	.0054	.00012	.0030	.047	.00004
%RSD	1.0888	.28139	.41950	.07091	.25978	.22543	.13510	.09219	.04131

#1	.05062	2.0339	1.0657	1.1155	2.0614	.05258	2.2377	51.409	.10679
#2	.04984	2.0258	1.0721	1.1167	2.0690	.05275	2.2420	51.476	.10672

Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Fail	Chk Pass	Chk Pass	Chk Fail	Chk Pass	Chk Pass
High Limit				1.1000			2.2000		
Low Limit				.89000			1.8000		

Elem	Co2286	Cr2055	Cu3247	Fe2599	K_7664	Li6707	Mg2790	Mn2576	Mo2020
Line	228.616 {447}	205.560 {464}	324.754 {104}	259.940 {130}	766.490 {44}	670.784 {50}	279.079 {121}2	257.610 {131}	202.030 {467}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.52787	F .21288	.25588	1.0589	53.657	1.0987	50.315	.50351	F 1.1198
Stddev	.00152	.00022	.00053	.0008	.192	.0020	.122	.00211	.0003
%RSD	.28871	.10279	.20764	.07834	.35844	.18294	.24196	.42004	.02789

#1	.52895	.21273	.25625	1.0583	53.521	1.0973	50.229	.50201	1.1195
#2	.52679	.21304	.25550	1.0595	53.793	1.1001	50.401	.50500	1.1200

Check ?	Chk Pass	Chk Fail	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Fail
High Limit		.05750							1.1000
Low Limit		.04300							.90000

Elem	Na8183	Ni2316	P_1782	Pb2203	S_1820	Sb2068	Se1960	Si2881	Sn1899
Line	818.326 {41}	231.604 {446}	178.284 {489}	220.353 {453}	182.034 {485}	206.833 {463}	196.090 {472}	288.158 {117}	189.989 {477}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	52.961	.51361	10.695	.53453	2.1348	F .54638	2.1158	10.493	2.0529
Stddev	.109	.00165	.015	.00028	.0058	.00117	.0086	.024	.0032
%RSD	.20658	.32141	.14420	.05174	.27080	.21428	.40554	.22528	.15563

#1	52.884	.51478	10.706	.53473	2.1308	.54555	2.1219	10.476	2.0552
#2	53.038	.51245	10.684	.53434	2.1389	.54721	2.1097	10.509	2.0506

Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Fail	Chk Pass	Chk Pass	Chk Pass
High Limit						.54000			
Low Limit						.44000			

Elem	Sr4077	Th2837	Ti3349	Ti1908	U_3701	V_2924	Zn2062	Zr3391
Line	407.771 {83}	283.730 {119}	334.904 {101}	190.856 {477}	370.152 {91}	292.402 {115}	206.200 {163}	339.198 {99}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.98752	1.0139	.99333	2.0540	2.1802	.48645	.50753	.51825
Stddev	.00322	.0051	.00215	.0032	.0030	.00064	.00554	.00281
%RSD	.32652	.50244	.21648	.15415	.13608	.13142	1.0922	.54241

#1	.98524	1.0103	.99181	2.0518	2.1823	.48599	.50361	.51626
#2	.98980	1.0175	.99485	2.0563	2.1781	.48690	.51145	.52024

Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit								
Low Limit								

Int. Std.	Y_2243	Y_3600	Y_3774
Line	224.306 {450}	360.073 {94}	377.433 {89}
Units	Cts/S	Cts/S	Cts/S
Avg	1494.9	31038.	5923.8
Stddev	.6	133.	7.6
%RSD	.04279	.42752	.12867

#1	1495.4	31132.	5918.4
#2	1494.5	30944.	5929.2

Sample Name: 280-82980-A-67-A Acquired: 5/20/2016 18:39:20 Type: Unk
Method: 6500_026(v10) Mode: CONC Corr. Factor: 1.000000
User: kellyca Custom ID1: Custom ID2: Custom ID3:
Comment: 325571 6010c q5

Elem	Ag3280	Al1670	As1890	B_2089	Ba4554	Be3130	Bi2230	Ca3179	Cd2288
Line	328.068 {103}	167.079 {502}	189.042 {478}	208.959 {461}	455.403 { 74}	313.042 {108}	223.061 {451}	317.933 {106}	228.802 {447}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.00004	.00453	-.00300	.08772	.20404	-.00010	-.00104	95.342	.00028
Stddev	.00042	.00069	.00168	.00075	.00148	.00006	.00100	.347	.00015
%RSD	1132.8	15.248	55.994	.85393	.72302	65.371	96.310	.36416	55.426

#1	-.00026	.00404	-.00418	.08825	.20299	-.00014	-.00175	95.096	.00017
#2	.00033	.00501	-.00181	.08719	.20508	-.00005	-.00033	95.587	.00039

Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Elem	Co2286	Cr2055	Cu3247	Fe2599	K_7664	Li6707	Mg2790	Mn2576	Mo2020
Line	228.616 {447}	205.560 {464}	324.754 {104}	259.940 {130}	766.490 { 44}	670.784 { 50}	279.079 {121}2	257.610 {131}	202.030 {467}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.00004	.00043	.00122	.02279	6.2124	.03846	22.256	.00073	.00095
Stddev	.00042	.00069	.00036	.00131	.0074	.00116	.142	.00013	.00012
%RSD	1186.4	159.29	29.350	5.7436	.11981	3.0223	.63748	17.891	12.299

#1	-.00026	.00092	.00097	.02372	6.2071	.03764	22.356	.00082	.00104
#2	.00033	-.00005	.00148	.02187	6.2177	.03928	22.156	.00064	.00087

Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Elem	Na8183	Ni2316	P_1782	Pb2203	S_1820	Sb2068	Se1960	Si2881	Sn1899
Line	818.326 { 41}	231.604 {446}	178.284 {489}	220.353 {453}	182.034 {485}	206.833 {463}	196.090 {472}	288.158 {117}	189.989 {477}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	22.109	.00130	.02005	-.00156	5.5395	.00081	-.00196	14.261	.00197
Stddev	.135	.00018	.00345	.00121	.0091	.00246	.00262	.016	.00148
%RSD	.60838	14.174	17.189	77.788	.16495	302.75	133.87	.11447	75.340

#1	22.014	.00143	.02248	-.00242	5.5460	.00255	-.00010	14.249	.00092
#2	22.205	.00117	.01761	-.00070	5.5331	-.00093	-.00381	14.272	.00301

Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Elem	Sr4077	Th2837	Ti3349	Ti1908	U_3701	V_2924	Zn2062	Zr3391
Line	407.771 { 83}	283.730 {119}	334.904 {101}	190.856 {477}	370.152 { 91}	292.402 {115}	206.200 {163}	339.198 { 99}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.24710	-.00437	.00028	-.00147	.02010	.00203	.00125	.00152
Stddev	.00217	.00030	.00001	.00526	.02475	.00034	.00005	.00076
%RSD	.87742	6.9659	2.9975	356.70	123.17	16.904	4.3110	50.218

#1	.24557	-.00416	.00027	-.00519	.00259	.00227	.00122	.00098
#2	.24864	-.00459	.00028	.00224	.03760	.00179	.00129	.00206

Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit								
Low Limit								

Int. Std.	Y_2243	Y_3600	Y_3774
Line	224.306 {450}	360.073 { 94}	377.433 { 89}
Units	Cts/S	Cts/S	Cts/S
Avg	1509.3	31388.	5897.0
Stddev	2.1	51.	.8
%RSD	.14229	.16101	.01397

#1	1510.8	31352.	5896.4
#2	1507.8	31423.	5897.6

Sample Name: 280-82980-A-67-Asd@5 Acquired: 5/20/2016 18:42:04 Type: Unk
Method: 6500_026(v10) Mode: CONC Corr. Factor: 1.000000
User: kellyca Custom ID1: Custom ID2: Custom ID3:
Comment: 325571 6010c q5

Elem	Ag3280	Al1670	As1890	B_2089	Ba4554	Be3130	Bi2230	Ca3179	Cd2288
Line	328.068 {103}	167.079 {502}	189.042 {478}	208.959 {461}	455.403 {74}	313.042 {108}	223.061 {451}	317.933 {106}	228.802 {447}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.00003	.00177	-.00192	.01785	.04072	-.00008	.00015	19.005	.00006
Stddev	.00003	.00211	.00107	.00076	.00021	.00002	.00048	.037	.00021
%RSD	90.032	118.81	55.564	4.2414	.52416	30.730	308.87	.19237	338.90

#1	.00001	.00327	-.00267	.01839	.04057	-.00006	.00049	18.980	.00021
#2	.00005	.00028	-.00116	.01732	.04087	-.00009	-.00018	19.031	-.00008

Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Elem	Co2286	Cr2055	Cu3247	Fe2599	K_7664	Li6707	Mg2790	Mn2576	Mo2020
Line	228.616 {447}	205.560 {464}	324.754 {104}	259.940 {130}	766.490 {44}	670.784 {50}	279.079 {121}2	257.610 {131}	202.030 {467}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	-.00046	-.00009	-.00042	.02811	1.2410	.00655	4.4953	.00035	.00014
Stddev	.00048	.00019	.00070	.00007	.0044	.00061	.0105	.00005	.00028
%RSD	104.26	216.90	165.68	.24060	.35560	9.3204	.23363	14.378	199.09

#1	-.00012	-.00022	.00007	.02807	1.2442	.00698	4.5027	.00031	.00034
#2	-.00079	.00005	-.00092	.02816	1.2379	.00612	4.4879	.00039	-.00006

Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Elem	Na5895	Ni2316	P_1782	Pb2203	S_1820	Sb2068	Se1960	Si2881	Sn1899
Line	589.592 {57}	231.604 {446}	178.284 {489}	220.353 {453}	182.034 {485}	206.833 {463}	196.090 {472}	288.158 {117}	189.989 {477}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	4.4461	-.00020	.00505	-.00163	1.0930	-.00036	-.00415	2.7943	.00062
Stddev	.0113	.00003	.00102	.00106	.0030	.00205	.00068	.0186	.00129
%RSD	.25390	16.674	20.246	65.203	.27644	570.84	16.431	.66695	207.17

#1	4.4381	-.00018	.00578	-.00238	1.0952	-.00181	-.00463	2.7812	-.00029
#2	4.4541	-.00022	.00433	-.00088	1.0909	.00109	-.00367	2.8075	.00154

Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Elem	Sr4077	Th2837	Ti3349	Ti1908	U_3701	V_2924	Zn2062	Zr3391
Line	407.771 {83}	283.730 {119}	334.904 {101}	190.856 {477}	370.152 {91}	292.402 {115}	206.200 {163}	339.198 {99}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.04959	-.00392	.00022	-.00195	.02669	.00072	.00152	.00121
Stddev	.00017	.00164	.00002	.00052	.01748	.00103	.00057	.00013
%RSD	.35247	41.797	9.5315	26.379	65.491	142.70	37.911	10.891

#1	.04947	-.00507	.00021	-.00159	.03905	.00145	.00111	.00130
#2	.04972	-.00276	.00024	-.00232	.01433	-.00001	.00192	.00112

Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit								
Low Limit								

Int. Std.	Y_2243	Y_3600	Y_3774
Line	224.306 {450}	360.073 {94}	377.433 {89}
Units	Cts/S	Cts/S	Cts/S
Avg	1554.2	32718.	6022.8
Stddev	5.0	1.	15.3
%RSD	.32215	.00305	.25407

#1	1557.7	32719.	6033.6
#2	1550.7	32717.	6011.9

Sample Name: 280-82980-A-67-B MS Acquired: 5/20/2016 18:44:48 Type: Unk

Method: 6500_026(v10) Mode: CONC Corr. Factor: 1.000000

User: kellyca Custom ID1: Custom ID2: Custom ID3:

Comment: 325571 6010c q5

Elem	Ag3280	Al1670	As1890	B_2089	Ba4554	Be3130	Bi2230	Ca3179	Cd2288
Line	328.068 {103}	167.079 {502}	189.042 {478}	208.959 {461}	455.403 { 74}	313.042 {108}	223.061 {451}	317.933 {106}	228.802 {447}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.04947	1.9657	1.0751	1.1980	2.2121	.05160	2.2269	142.10	.10569
Stddev	.00054	.0070	.0040	.0023	.0107	.00022	.0064	.31	.00010
%RSD	1.0925	.35813	.37181	.19476	.48134	.43189	.28763	.22070	.09698

#1	.04985	1.9608	1.0723	1.1964	2.2046	.05144	2.2224	141.88	.10576
#2	.04909	1.9707	1.0780	1.1997	2.2197	.05175	2.2315	142.32	.10561

Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Elem	Co2286	Cr2055	Cu3247	Fe2599	K_7664	Li6707	Mg2790	Mn2576	Mo2020
Line	228.616 {447}	205.560 {464}	324.754 {104}	259.940 {130}	766.490 { 44}	670.784 { 50}	279.079 {121}2	257.610 {131}	202.030 {467}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.50979	W .20588	.25645	1.0252	59.197	1.1273	70.727	.48362	1.0950
Stddev	.00109	.00005	.00128	.0029	.164	.0054	.106	.00101	.0017
%RSD	.21354	.02396	.49740	.27901	.27682	.47592	.15048	.20850	.15870

#1	.50902	.20591	.25555	1.0272	59.082	1.1235	70.652	.48290	1.0963
#2	.51056	.20584	.25735	1.0232	59.313	1.1311	70.803	.48433	1.0938

Check ?	Chk Pass	Chk Warn	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit		.10000							
Low Limit		-.01000							

Elem	Na8183	Ni2316	P_1782	Pb2203	S_1820	Sb2068	Se1960	Si2881	Sn1899
Line	818.326 { 41}	231.604 {446}	178.284 {489}	220.353 {453}	182.034 {485}	206.833 {463}	196.090 {472}	288.158 {117}	189.989 {477}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	73.540	.49542	10.797	.51402	7.7330	.54682	2.0952	24.158	2.0033
Stddev	.381	.00005	.017	.00130	.0039	.00174	.0103	.076	.0007
%RSD	.51779	.01053	.15438	.25215	.04976	.31830	.48954	.31330	.03617

#1	73.271	.49545	10.785	.51494	7.7303	.54559	2.0879	24.104	2.0028
#2	73.809	.49538	10.809	.51310	7.7357	.54805	2.1025	24.211	2.0039

Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Elem	Sr4077	Th2837	Ti3349	Ti1908	U_3701	V_2924	Zn2062	Zr3391
Line	407.771 { 83}	283.730 {119}	334.904 {101}	190.856 {477}	370.152 { 91}	292.402 {115}	206.200 {163}	339.198 { 99}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	1.2054	.99214	.97014	1.9745	2.1478	.47551	.48291	.50806
Stddev	.0046	.00043	.00222	.0039	.0170	.00361	.00314	.00261
%RSD	.37821	.04309	.22878	.19599	.78972	.75908	.65119	.51385

#1	1.2022	.99184	.96857	1.9772	2.1358	.47295	.48069	.50621
#2	1.2086	.99244	.97171	1.9717	2.1598	.47806	.48513	.50990

Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit								
Low Limit								

Int. Std.	Y_2243	Y_3600	Y_3774
Line	224.306 {450}	360.073 { 94}	377.433 { 89}
Units	Cts/S	Cts/S	Cts/S
Avg	1460.1	30548.	5888.3
Stddev	.7	101.	3.7
%RSD	.04653	.33208	.06332

#1	1460.6	30620.	5890.9
#2	1459.6	30477.	5885.7

Sample Name: 280-82980-A-67-C MSD Acquired: 5/20/2016 18:47:22 Type: Unk

Method: 6500_026(v10) Mode: CONC Corr. Factor: 1.000000

User: kellyca Custom ID1: Custom ID2: Custom ID3:

Comment: 325571 6010c q5

Elem	Ag3280	Al1670	As1890	B_2089	Ba4554	Be3130	Bi2230	Ca3179	Cd2288
Line	328.068 {103}	167.079 {502}	189.042 {478}	208.959 {461}	455.403 { 74}	313.042 {108}	223.061 {451}	317.933 {106}	228.802 {447}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.05061	1.9839	1.0705	1.2006	2.2296	.05209	2.2366	143.98	.10688
Stddev	.00048	.0030	.0045	.0021	.0051	.00001	.0030	.20	.00012
%RSD	.94899	.15038	.41660	.17357	.22745	.02593	.13598	.13854	.11386

#1	.05027	1.9818	1.0674	1.1991	2.2260	.05210	2.2387	143.83	.10680
#2	.05095	1.9860	1.0737	1.2020	2.2332	.05208	2.2344	144.12	.10697

Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Elem	Co2286	Cr2055	Cu3247	Fe2599	K_7664	Li6707	Mg2790	Mn2576	Mo2020
Line	228.616 {447}	205.560 {464}	324.754 {104}	259.940 {130}	766.490 { 44}	670.784 { 50}	279.079 {121}2	257.610 {131}	202.030 {467}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.51363	W .20807	.25907	1.0088	59.792	1.1356	71.549	.48964	1.0947
Stddev	.00023	.00115	.00067	.0030	.006	.0027	.070	.00046	.0017
%RSD	.04513	.55488	.26035	.29454	.00949	.23486	.09764	.09344	.15441

#1	.51379	.20726	.25955	1.0109	59.788	1.1337	71.598	.48931	1.0935
#2	.51346	.20889	.25859	1.0067	59.796	1.1375	71.500	.48996	1.0959

Check ?	Chk Pass	Chk Warn	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit		.10000							
Low Limit		-.01000							

Elem	Na8183	Ni2316	P_1782	Pb2203	S_1820	Sb2068	Se1960	Si2881	Sn1899
Line	818.326 { 41}	231.604 {446}	178.284 {489}	220.353 {453}	182.034 {485}	206.833 {463}	196.090 {472}	288.158 {117}	189.989 {477}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	74.246	.49990	10.844	.51991	7.7983	.54409	2.1096	24.304	2.0076
Stddev	.358	.00073	.002	.00260	.0050	.00131	.0057	.028	.0008
%RSD	.48229	.14654	.02130	.49945	.06427	.24168	.26996	.11423	.04212

#1	73.993	.49938	10.845	.51807	7.7948	.54502	2.1136	24.285	2.0070
#2	74.499	.50042	10.842	.52175	7.8019	.54316	2.1056	24.324	2.0082

Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Elem	Sr4077	Th2837	Ti3349	Ti1908	U_3701	V_2924	Zn2062	Zr3391
Line	407.771 { 83}	283.730 {119}	334.904 {101}	190.856 {477}	370.152 { 91}	292.402 {115}	206.200 {163}	339.198 { 99}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	1.2165	.99764	.97675	1.9737	2.1489	.48041	.48681	.50575
Stddev	.0004	.00013	.00194	.0103	.0115	.00022	.00376	.00309
%RSD	.03713	.01284	.19857	.52367	.53700	.04591	.77141	.61007

#1	1.2162	.99773	.97813	1.9811	2.1570	.48025	.48946	.50793
#2	1.2169	.99755	.97538	1.9664	2.1407	.48056	.48415	.50357

Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit								
Low Limit								

Int. Std.	Y_2243	Y_3600	Y_3774
Line	224.306 {450}	360.073 { 94}	377.433 { 89}
Units	Cts/S	Cts/S	Cts/S
Avg	1461.6	30509.	5869.9
Stddev	1.7	6.	3.4
%RSD	.11797	.01813	.05764

#1	1462.9	30505.	5872.3
#2	1460.4	30513.	5867.5

Sample Name: 280-82980-A-67-Apds Acquired: 5/20/2016 18:49:56 Type: Unk
Method: 6500_026(v10) Mode: CONC Corr. Factor: 1.000000
User: kellyca Custom ID1: Custom ID2: Custom ID3:
Comment: 325571 6010c q5

Elem	Ag3280	Al1670	As1890	B_2089	Ba4554	Be3130	Bi2230	Ca3179	Cd2288
Line	328.068 {103}	167.079 {502}	189.042 {478}	208.959 {461}	455.403 {74}	313.042 {108}	223.061 {451}	317.933 {106}	228.802 {447}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.05043	1.0263	.21232	.19951	.30054	.05220	-.00460	112.38	.05448
Stddev	.00008	.0054	.01169	.00063	.00172	.00006	.00284	.18	.00017
%RSD	.15671	.52418	5.5041	.31335	.57141	.11652	61.754	.16207	.31339

#1	.05038	1.0301	.20405	.19907	.29933	.05225	-.00661	112.26	.05460
#2	.05049	1.0225	.22058	.19995	.30175	.05216	-.00259	112.51	.05436

Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Elem	Co2286	Cr2055	Cu3247	Fe2599	K_7664	Li6707	Mg2790	Mn2576	Mo2020
Line	228.616 {447}	205.560 {464}	324.754 {104}	259.940 {130}	766.490 {44}	670.784 {50}	279.079 {121}2	257.610 {131}	202.030 {467}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.05139	.05194	.05373	1.0298	27.492	.14763	41.525	.05005	.05535
Stddev	.00051	.00020	.00007	.0083	.166	.00142	.224	.00043	.00018
%RSD	.99654	.38466	.13937	.80273	.60244	.96497	.53974	.85290	.32459

#1	.05175	.05180	.05367	1.0240	27.375	.14662	41.683	.05035	.05522
#2	.05102	.05209	.05378	1.0356	27.609	.14864	41.366	.04974	.05547

Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Elem	Na8183	Ni2316	P_1782	Pb2203	S_1820	Sb2068	Se1960	Si2881	Sn1899
Line	818.326 {41}	231.604 {446}	178.284 {489}	220.353 {453}	182.034 {485}	206.833 {463}	196.090 {472}	288.158 {117}	189.989 {477}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	42.458	.05129	2.1913	.10279	5.5044	.10617	.21200	18.966	.10165
Stddev	.134	.00062	.0214	.00083	.0335	.00225	.00240	.083	.00300
%RSD	.31589	1.2077	.97699	.80780	.60855	2.1229	1.1299	.43895	2.9472

#1	42.553	.05085	2.2064	.10338	5.5281	.10776	.21031	18.907	.09953
#2	42.363	.05173	2.1761	.10220	5.4807	.10457	.21370	19.025	.10377

Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Elem	Sr4077	Th2837	Ti3349	Ti1908	U_3701	V_2924	Zn2062	Zr3391
Line	407.771 {83}	283.730 {119}	334.904 {101}	190.856 {477}	370.152 {91}	292.402 {115}	206.200 {163}	339.198 {99}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.28941	.19763	.04959	.20423	.55551	.05007	.19506	.05198
Stddev	.00121	.00121	.00004	.00399	.00029	.00006	.00362	.00047
%RSD	.41911	.61351	.07924	1.9538	.05154	.11864	1.8543	.90549

#1	.28855	.19678	.04962	.20705	.55571	.05011	.19761	.05165
#2	.29026	.19849	.04956	.20141	.55531	.05002	.19250	.05232

Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit								
Low Limit								

Int. Std.	Y_2243	Y_3600	Y_3774
Line	224.306 {450}	360.073 {94}	377.433 {89}
Units	Cts/S	Cts/S	Cts/S
Avg	1492.5	31363.	5913.7
Stddev	2.2	109.	27.2
%RSD	.14714	.34758	.45910

#1	1490.9	31286.	5894.5
#2	1494.0	31440.	5932.9

Sample Name: ccvh-3900196 Acquired: 5/20/2016 18:52:39 Type: QC
Method: 6500_026(v10) Mode: CONC Corr. Factor: 1.000000
User: kellyca Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	Ag3280	Al3092	As1890	B_2089	Ba4554	Be3130	Bi2230	Ca3179	Cd2288	Co2286	Cr2055	Cu3247	Fe2714
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	-.00168	47.154	-.00682	.00476	.00029	-.00034	1.0532	-.03920	-.00085	.00317	-.00075	.00571	46.969
Stddev	.00038	.089	.00211	.00130	.00007	.00011	.0012	.00017	.00005	.00038	.00012	.00004	.007
%RSD	22.288	.18809	30.981	27.379	24.450	33.601	.11340	.42468	5.5830	12.047	16.375	.73410	.01593

#1	-.00195	47.216	-.00831	.00568	.00034	-.00026	1.0523	-.03932	-.00082	.00344	-.00066	.00568	46.974
#2	-.00142	47.091	-.00532	.00384	.00024	-.00042	1.0540	-.03908	-.00089	.00290	-.00084	.00574	46.963

Check ?	None	Chk Pass	None	None	None	None	Chk Pass	None	None	None	None	None	Chk Pass
Value													
Range													

Elem	K_7664	Li6707	Mg2790	Mn2576	Mo2020	Na8183	Ni2316	P_1782	Pb2203	S_1820	Sb2068	Se1960	Si2881
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.07497	.00053	.15486	-.00073	-.00246	253.38	-.00015	.00253	.00028	5.0453	.00312	.00497	.00394
Stddev	.00037	.00018	.00039	.00001	.00058	.26	.00046	.00164	.00304	.0211	.00004	.00144	.00980
%RSD	.48739	34.137	.25024	1.1951	23.600	.10323	315.32	64.770	1066.7	.41834	1.2298	28.867	248.99

#1	.07523	.00066	.15513	-.00073	-.00287	253.19	.00018	.00137	-.00186	5.0603	.00315	.00599	.01087
#2	.07471	.00040	.15458	-.00072	-.00205	253.56	-.00047	.00369	.00243	5.0304	.00310	.00396	-.00299

Check ?	None	None	None	None	None	Chk Pass	None	None	None	Chk Pass	None	None	None
Value													
Range													

Elem	Sn1899	Sr4077	Th2837	Ti3349	Tl1908	U_3701	V_2924	Zn2062	Zr3391
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.00054	.00032	4.9199	.02607	-.00442	10.168	-.01632	-.00182	-.01455
Stddev	.00034	.00001	.0240	.00013	.00013	.039	.00069	.00106	.00036
%RSD	62.218	2.9705	.48884	.50271	2.8937	.38238	4.2318	57.997	2.4720

#1	.00078	.00031	4.9029	.02598	-.00451	10.141	-.01583	-.00257	-.01430
#2	.00030	.00032	4.9369	.02617	-.00433	10.196	-.01681	-.00107	-.01481

Check ?	None	None	Chk Pass	None	None	Chk Pass	None	None	None
Value									
Range									

Int. Std.	Y_2243	Y_3600	Y_3774
Units	Cts/S	Cts/S	Cts/S
Avg	1507.3	31087.	5919.9
Stddev	1.4	126.	18.8
%RSD	.09337	.40385	.31697

#1	1506.3	31176.	5933.2
#2	1508.3	30999.	5906.6

Sample Name: ccv-3900195 Acquired: 5/20/2016 18:55:30 Type: QC
Method: 6500_026(v10) Mode: CONC Corr. Factor: 1.000000
User: kellyca Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	Ag3280	Al1670	As1890	B_2089	Ba4554	Be3130	Bi2230	Ca3179	Cd2288	Co2286	Cr2055	Cu3247	Fe2599
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.48679	.51754	1.0210	.53458	.49886	.51182	-.00257	5.0156	.52256	.52321	.51594	.49862	2.5093
Stddev	.00066	.00024	.0003	.00184	.00013	.00068	.00205	.0051	.00063	.00137	.00000	.00251	.0054
%RSD	.13544	.04608	.03028	.34408	.02523	.13252	79.545	.10172	.12029	.26200	.00043	.50345	.21635

#1	.48726	.51770	1.0212	.53588	.49877	.51135	-.00113	5.0192	.52301	.52418	.51594	.49684	2.5055
#2	.48633	.51737	1.0208	.53328	.49894	.51230	-.00402	5.0120	.52212	.52224	.51594	.50039	2.5131

Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	None	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Value													
Range													

Elem	K_7664	Li6707	Mg2790	Mn2576	Mo2020	Na5895	Ni2316	P_1782	Pb2203	S_1820	Sb2068	Se1960	Si2881
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	51.473	1.0612	19.722	.49704	.52414	5.2244	.50800	1.0146	1.0470	.00997	1.0393	1.0203	5.0471
Stddev	.126	.0015	.022	.00031	.00311	.0175	.00032	.0046	.0019	.00040	.0089	.0000	.0069
%RSD	.24473	.14318	.11070	.06165	.59329	.33420	.06252	.45701	.17793	4.0255	.85436	.00236	.13585

#1	51.384	1.0601	19.707	.49726	.52633	5.2121	.50822	1.0179	1.0483	.01026	1.0456	1.0204	5.0520
#2	51.562	1.0622	19.737	.49683	.52194	5.2368	.50777	1.0113	1.0456	.00969	1.0330	1.0203	5.0423

Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	None	Chk Pass	Chk Pass	Chk Pass
Value													
Range													

Elem	Sn1899	Sr4077	Th2837	Ti3349	Tl1908	U_3701	V_2924	Zn2062	Zr3391
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	1.0012	.48422	.00056	.47468	1.0364	.01242	.47811	.49416	.50216
Stddev	.0083	.00117	.00094	.00089	.0097	.01831	.00053	.00111	.00114
%RSD	.82877	.24148	169.06	.18782	.93742	147.36	.11064	.22374	.22718

#1	1.0071	.48339	.00122	.47531	1.0433	-.00052	.47773	.49494	.50135
#2	.99533	.48504	-.00011	.47405	1.0295	.02537	.47848	.49337	.50297

Check ?	Chk Pass	Chk Pass	None	Chk Pass	Chk Pass	None	Chk Pass	Chk Pass	Chk Pass
Value									
Range									

Int. Std.	Y_2243	Y_3600	Y_3774
Units	Cts/S	Cts/S	Cts/S
Avg	1534.6	31815.	5866.7
Stddev	4.5	9.	17.6
%RSD	.29268	.02673	.29933

#1	1531.4	31821.	5854.3
#2	1537.7	31809.	5879.1

Sample Name: ccb Acquired: 5/20/2016 18:58:07 Type: QC
Method: 6500_026(v10) Mode: CONC Corr. Factor: 1.000000
User: kellyca Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	Ag3280	Al1670	As1890	B_2089	Ba4554	Be3130	Bi2230	Ca3179	Cd2288	Co2286	Cr2055	Cu3247
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.00060	-.00028	-.00322	W .00306	-.00003	-.00010	-.00290	.00048	.00017	-.00038	.00030	-.00046
Stddev	.00047	.00084	.00061	.00047	.00007	.00007	.00042	.00075	.00011	.00014	.00006	.00007
%RSD	77.792	297.03	18.921	15.213	193.46	73.013	14.356	154.56	66.379	36.958	18.404	15.143
#1	.00094	.00031	-.00279	.00339	.00001	-.00005	-.00260	.00101	.00009	-.00028	.00034	-.00041
#2	.00027	-.00088	-.00365	.00273	-.00008	-.00016	-.00319	-.00005	.00025	-.00048	.00026	-.00051

Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Warn	Chk Pass	Chk Pass	None	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit				.00156								
Low Limit				-.00156								

Elem	Fe2599	K_7664	Li6707	Mg2790	Mn2576	Mo2020	Na5895	Ni2316	P_1782	Pb2203	S_1820	Sb2068
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	F .39751	.06248	-.00118	.00684	F .00343	.00048	.02133	-.00043	-.00237	.00012	.00517	.00092
Stddev	.00400	.00037	.00022	.00117	.00000	.00015	.00079	.00055	.00005	.00036	.00031	.00019
%RSD	1.0054	.59839	18.489	17.126	.04534	30.896	3.7101	129.03	1.9101	301.55	5.9105	20.501
#1	.39468	.06274	-.00102	.00766	.00343	.00037	.02077	-.00082	-.00240	.00037	.00538	.00079
#2	.40033	.06222	-.00133	.00601	.00343	.00058	.02189	-.00004	-.00234	-.00013	.00495	.00106

Check ?	Chk Fail	Chk Pass	Chk Pass	Chk Pass	Chk Fail	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	None	Chk Pass
High Limit	.04400				.00051							
Low Limit	-.04400				-.00051							

Elem	Se1960	Si2881	Sn1899	Sr4077	Th2837	Ti3349	Ti1908	U_3701	V_2924	Zn2062	Zr3391
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.00103	.00449	.00072	.00005	-.00314	.00012	-.00148	.02525	.00005	.00251	.00089
Stddev	.01063	.00265	.00118	.00002	.00068	.00015	.00132	.01754	.00020	.00067	.00088
%RSD	1034.9	59.022	163.42	35.093	21.796	121.90	89.166	69.492	368.75	26.678	99.319
#1	-.00649	.00261	.00156	.00004	-.00363	.00023	-.00055	.01284	.00020	.00204	.00026
#2	.00854	.00636	-.00011	.00007	-.00266	.00002	-.00241	.03765	-.00009	.00299	.00151

Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit											
Low Limit											

Int. Std.	Y_2243	Y_3600	Y_3774
Units	Cts/S	Cts/S	Cts/S
Avg	1549.3	32528.	5850.7
Stddev	2.7	80.	21.9
%RSD	.17729	.24658	.37466
#1	1547.4	32585.	5866.2
#2	1551.3	32471.	5835.2

Sample Name: ccvl-3903059 Acquired: 5/20/2016 19:00:54 Type: QC
Method: 6500_026(v10) Mode: CONC Corr. Factor: 1.000000
User: kellyca Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	Ag3280	Al1670	As1890	B_2089	Ba4554	Be3130	Bi2230	Ca3179	Cd2288	Co2286	Cr2055	Cu3247
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.00943	.10723	.01210	.10917	.01014	.00095	.11641	.20749	.00559	.01072	.01023	.01462
Stddev	.00011	.00016	.00047	.00073	.00024	.00003	.00207	.00549	.00013	.00000	.00000	.00006
%RSD	1.1473	.14589	3.9209	.67235	2.3382	3.1598	1.7784	2.6436	2.3746	.01425	.04838	.44046

#1	.00935	.10734	.01177	.10969	.01031	.00093	.11495	.20361	.00569	.01071	.01023	.01467
#2	.00951	.10712	.01244	.10865	.00998	.00097	.11788	.21137	.00550	.01072	.01022	.01458

Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Value												
Range												

Elem	Fe2599	K_7664	Li6707	Mg2790	Mn2576	Mo2020	Na5895	Ni2316	P_1782	Pb2203	S_1820	Sb2068
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.10711	3.1738	.01063	.21578	.01042	.02183	1.0544	.04173	3.0266	.00898	.00648	.02238
Stddev	.00064	.0201	.00041	.00322	.00011	.00060	.0024	.00005	.0061	.00094	.00610	.00030
%RSD	.59323	.63222	3.8752	1.4932	1.0881	2.7472	.22631	.12929	.20284	10.470	94.219	1.3404

#1	.10756	3.1596	.01092	.21806	.01034	.02226	1.0561	.04170	3.0310	.00832	.01079	.02260
#2	.10666	3.1880	.01034	.21350	.01050	.02141	1.0527	.04177	3.0223	.00965	.00216	.02217

Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	None	Chk Pass
Value												
Range												

Elem	Se1960	Si2881	Sn1899	Sr4077	Th2837	Ti3349	Ti1908	U_3701	V_2924	Zn2062	Zr3391
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.01401	.50429	.10380	.00970	.01285	.00992	.01532	F .07845	.00989	.02025	.01575
Stddev	.00120	.00180	.00165	.00008	.00023	.00042	.00159	.01093	.00008	.00003	.00063
%RSD	8.5977	.35715	1.5849	.78002	1.7810	4.1946	10.408	13.928	.80958	.16084	4.0102

#1	.01316	.50302	.10497	.00965	.01301	.01022	.01645	.08618	.00994	.02027	.01530
#2	.01486	.50556	.10264	.00975	.01269	.00963	.01420	.07072	.00983	.02023	.01620

Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Fail	Chk Pass	Chk Pass	Chk Pass
Value								.06000			
Range								30.000%			

Int. Std.	Y_2243	Y_3600	Y_3774
Units	Cts/S	Cts/S	Cts/S
Avg	1569.5	32743.	5767.3
Stddev	3.1	37.	52.4
%RSD	.19976	.11278	.90795

#1	1571.7	32717.	5804.3
#2	1567.3	32769.	5730.2

Sample Name: 280-82980-A-68-A Acquired: 5/20/2016 19:03:41 Type: Unk
Method: 6500_026(v10) Mode: CONC Corr. Factor: 1.000000
User: kellyca Custom ID1: Custom ID2: Custom ID3:
Comment: 325571 6010c q5

Elem	Ag3280	Al1670	As1890	B_2089	Ba4554	Be3130	Bi2230	Ca3179	Cd2288
Line	328.068 {103}	167.079 {502}	189.042 {478}	208.959 {461}	455.403 { 74}	313.042 {108}	223.061 {451}	317.933 {106}	228.802 {447}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.00012	.00264	.00132	.09102	.20963	-.00014	-.00074	96.316	.00022
Stddev	.00050	.00028	.00509	.00076	.00040	.00006	.00158	.217	.00003
%RSD	399.04	10.542	385.11	.83150	.18970	39.581	213.60	.22517	12.995

#1	-.00023	.00284	.00492	.09155	.20935	-.00010	-.00186	96.163	.00020
#2	.00047	.00245	-.00228	.09048	.20992	-.00018	.00038	96.470	.00025

Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Elem	Co2286	Cr2055	Cu3247	Fe2599	K_7664	Li6707	Mg2790	Mn2576	Mo2020
Line	228.616 {447}	205.560 {464}	324.754 {104}	259.940 {130}	766.490 { 44}	670.784 { 50}	279.079 {121}2	257.610 {131}	202.030 {467}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	-.00082	.00031	.00093	.01117	6.3651	.04049	23.073	.00026	.00029
Stddev	.00023	.00001	.00014	.00045	.0502	.00125	.083	.00002	.00014
%RSD	28.382	3.9467	15.542	4.0161	.78903	3.0847	.35935	6.0340	45.976

#1	-.00065	.00031	.00103	.01149	6.3296	.03961	23.132	.00025	.00039
#2	-.00098	.00030	.00083	.01085	6.4006	.04137	23.015	.00027	.00020

Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Elem	Na8183	Ni2316	P_1782	Pb2203	S_1820	Sb2068	Se1960	Si2881	Sn1899
Line	818.326 { 41}	231.604 {446}	178.284 {489}	220.353 {453}	182.034 {485}	206.833 {463}	196.090 {472}	288.158 {117}	189.989 {477}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	22.366	.00076	.01720	-.00175	5.6805	-.00057	.00199	14.313	.00182
Stddev	.488	.00087	.00140	.00098	.0198	.00036	.00257	.090	.00112
%RSD	2.1803	114.34	8.1539	55.994	.34893	62.137	129.04	.62898	61.210

#1	22.021	.00015	.01621	-.00244	5.6946	-.00082	.00381	14.250	.00261
#2	22.711	.00137	.01819	-.00106	5.6665	-.00032	.00017	14.377	.00103

Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Elem	Sr4077	Th2837	Ti3349	Ti1908	U_3701	V_2924	Zn2062	Zr3391
Line	407.771 { 83}	283.730 {119}	334.904 {101}	190.856 {477}	370.152 { 91}	292.402 {115}	206.200 {163}	339.198 { 99}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.25295	-.00573	-.00003	-.00447	.02121	.00198	.00159	-.00004
Stddev	.00133	.00261	.00022	.00188	.00609	.00075	.00082	.00072
%RSD	.52434	45.522	773.48	42.153	28.728	37.869	51.475	2046.3

#1	.25201	-.00758	-.00019	-.00314	.01690	.00251	.00217	-.00055
#2	.25389	-.00389	.00013	-.00580	.02552	.00145	.00101	.00048

Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit								
Low Limit								

Int. Std.	Y_2243	Y_3600	Y_3774
Line	224.306 {450}	360.073 { 94}	377.433 { 89}
Units	Cts/S	Cts/S	Cts/S
Avg	1506.8	31460.	5921.7
Stddev	1.2	61.	12.5
%RSD	.07648	.19276	.21103

#1	1507.6	31417.	5930.5
#2	1506.0	31503.	5912.9

Sample Name: 280-82987-B-1-C Acquired: 5/20/2016 19:06:25 Type: Unk
Method: 6500_026(v10) Mode: CONC Corr. Factor: 1.000000
User: kellyca Custom ID1: Custom ID2: Custom ID3:
Comment: 325571 6010c q5

Elem	Ag3280	Al1670	As1890	B_2089	Ba4554	Be3130	Bi2230	Ca3179	Cd2288
Line	328.068 {103}	167.079 {502}	189.042 {478}	208.959 {461}	455.403 { 74}	313.042 {108}	223.061 {451}	317.933 {106}	228.802 {447}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.00017	.00089	-.00347	.51392	.05713	-.00007	.00036	72.440	.00023
Stddev	.00009	.00020	.00445	.00082	.00018	.00004	.00026	.374	.00010
%RSD	53.535	22.235	128.21	.15863	.31278	54.697	72.990	.51623	41.139

#1	.00023	.00103	-.00662	.51449	.05700	-.00010	.00017	72.176	.00016
#2	.00010	.00075	-.00032	.51334	.05726	-.00004	.00054	72.705	.00030

Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Elem	Co2286	Cr2055	Cu3247	Fe2599	K_7664	Li6707	Mg2790	Mn2576	Mo2020
Line	228.616 {447}	205.560 {464}	324.754 {104}	259.940 {130}	766.490 { 44}	670.784 { 50}	279.079 {121}2	257.610 {131}	202.030 {467}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	-.00033	.00102	.00042	.00720	.89540	.00565	23.815	.03651	.00042
Stddev	.00026	.00003	.00034	.00135	.00870	.00006	.038	.00008	.00006
%RSD	77.611	2.8730	81.350	18.722	.97111	1.1322	.15772	.22809	14.901

#1	-.00051	.00104	.00066	.00625	.88926	.00569	23.841	.03657	.00037
#2	-.00015	.00100	.00018	.00815	.90155	.00560	23.788	.03645	.00046

Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Elem	Na8183	Ni2316	P_1782	Pb2203	S_1820	Sb2068	Se1960	Si2881	Sn1899
Line	818.326 { 41}	231.604 {446}	178.284 {489}	220.353 {453}	182.034 {485}	206.833 {463}	196.090 {472}	288.158 {117}	189.989 {477}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	22.079	.00080	.01086	-.00190	17.672	.00284	-.00080	12.520	.00096
Stddev	.046	.00000	.00193	.00134	.003	.00212	.00181	.072	.00199
%RSD	.20980	.32259	17.756	70.444	.01618	74.684	226.51	.57143	206.85

#1	22.047	.00080	.00949	-.00095	17.674	.00134	-.00208	12.470	-.00045
#2	22.112	.00081	.01222	-.00285	17.670	.00434	.00048	12.571	.00237

Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Elem	Sr4077	Th2837	Ti3349	Ti1908	U_3701	V_2924	Zn2062	Zr3391
Line	407.771 { 83}	283.730 {119}	334.904 {101}	190.856 {477}	370.152 { 91}	292.402 {115}	206.200 {163}	339.198 { 99}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.27384	-.00506	.00011	-.00010	.01937	.00258	-.00081	-.00008
Stddev	.00107	.00009	.00024	.00027	.02755	.00112	.00087	.00004
%RSD	.39039	1.6871	214.31	264.29	142.20	43.436	107.29	56.455

#1	.27309	-.00512	.00029	.00009	-.00011	.00179	-.00142	-.00005
#2	.27460	-.00500	-.00006	-.00030	.03885	.00337	-.00019	-.00011

Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit								
Low Limit								

Int. Std.	Y_2243	Y_3600	Y_3774
Line	224.306 {450}	360.073 { 94}	377.433 { 89}
Units	Cts/S	Cts/S	Cts/S
Avg	1510.4	31347.	5777.4
Stddev	3.1	67.	18.6
%RSD	.20394	.21377	.32258

#1	1512.6	31299.	5790.5
#2	1508.3	31394.	5764.2

Sample Name: 280-82987-B-2-C Acquired: 5/20/2016 19:09:09 Type: Unk
Method: 6500_026(v10) Mode: CONC Corr. Factor: 1.000000
User: kellyca Custom ID1: Custom ID2: Custom ID3:
Comment: 325571 6010c q5

Elem	Ag3280	Al1670	As1890	B_2089	Ba4554	Be3130	Bi2230	Ca3179	Cd2288
Line	328.068 {103}	167.079 {502}	189.042 {478}	208.959 {461}	455.403 { 74}	313.042 {108}	223.061 {451}	317.933 {106}	228.802 {447}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.00017	.00239	-.00315	.53091	.05976	-.00013	-.00493	77.260	.00010
Stddev	.00029	.00021	.00100	.00037	.00027	.00001	.00047	.478	.00002
%RSD	165.38	8.7579	31.854	.06988	.45742	9.3619	9.5437	.61933	15.921

#1	-.00003	.00224	-.00385	.53117	.05956	-.00014	-.00460	76.922	.00009
#2	.00038	.00253	-.00244	.53065	.05995	-.00012	-.00527	77.598	.00011

Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Elem	Co2286	Cr2055	Cu3247	Fe2599	K_7664	Li6707	Mg2790	Mn2576	Mo2020
Line	228.616 {447}	205.560 {464}	324.754 {104}	259.940 {130}	766.490 { 44}	670.784 { 50}	279.079 {121}2	257.610 {131}	202.030 {467}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	-.00008	.00062	.00101	.00577	.94436	.00491	25.363	.04523	.00110
Stddev	.00010	.00001	.00006	.00062	.02304	.00006	.041	.00000	.00025
%RSD	117.61	1.8004	5.5874	10.829	2.4399	1.1997	.16312	.00674	23.097

#1	-.00001	.00061	.00097	.00621	.96065	.00487	25.334	.04523	.00128
#2	-.00016	.00062	.00105	.00533	.92807	.00495	25.393	.04524	.00092

Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Elem	Na8183	Ni2316	P_1782	Pb2203	S_1820	Sb2068	Se1960	Si2881	Sn1899
Line	818.326 { 41}	231.604 {446}	178.284 {489}	220.353 {453}	182.034 {485}	206.833 {463}	196.090 {472}	288.158 {117}	189.989 {477}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	22.901	.00048	.01344	-.00169	18.403	-.00037	.00107	13.131	.00030
Stddev	.330	.00002	.00053	.00172	.023	.00375	.00394	.072	.00033
%RSD	1.4418	3.6958	3.9470	101.72	.12564	1012.0	369.00	.54592	109.80

#1	22.667	.00049	.01381	-.00047	18.420	-.00302	.00385	13.081	.00054
#2	23.134	.00047	.01306	-.00290	18.387	.00228	-.00172	13.182	.00007

Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Elem	Sr4077	Th2837	Ti3349	Ti1908	U_3701	V_2924	Zn2062	Zr3391
Line	407.771 { 83}	283.730 {119}	334.904 {101}	190.856 {477}	370.152 { 91}	292.402 {115}	206.200 {163}	339.198 { 99}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.29268	-.00611	.00041	-.00274	.00583	.00258	.00053	-.00095
Stddev	.00165	.00156	.00023	.00038	.00726	.00005	.00088	.00077
%RSD	.56290	25.591	57.184	13.924	124.61	2.0384	167.73	80.590

#1	.29152	-.00721	.00024	-.00247	.01097	.00255	-.00010	-.00041
#2	.29385	-.00500	.00058	-.00301	.00069	.00262	.00115	-.00150

Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit								
Low Limit								

Int. Std.	Y_2243	Y_3600	Y_3774
Line	224.306 {450}	360.073 { 94}	377.433 { 89}
Units	Cts/S	Cts/S	Cts/S
Avg	1508.6	31215.	5788.8
Stddev	.9	80.	26.9
%RSD	.05964	.25614	.46401

#1	1509.3	31271.	5807.7
#2	1508.0	31158.	5769.8

Sample Name: 280-82987-D-3-D Acquired: 5/20/2016 19:11:52 Type: Unk
Method: 6500_026(v10) Mode: CONC Corr. Factor: 1.000000
User: kellyca Custom ID1: Custom ID2: Custom ID3:
Comment: 325571 6010c q5

Elem	Ag3280	Al1670	As1890	B_2089	Ba4554	Be3130	Bi2230	Ca3179	Cd2288
Line	328.068 {103}	167.079 {502}	189.042 {478}	208.959 {461}	455.403 { 74}	313.042 {108}	223.061 {451}	317.933 {106}	228.802 {447}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	-.00023	.00575	-.00247	.13053	.10618	-.00009	-.00166	164.51	.00005
Stddev	.00022	.00023	.00238	.00377	.00001	.00003	.00021	.06	.00006
%RSD	96.093	4.0440	96.451	2.8850	.01345	30.601	12.795	.03663	122.68

#1	-.00007	.00592	-.00416	.12787	.10619	-.00007	-.00151	164.47	.00009
#2	-.00039	.00559	-.00079	.13319	.10617	-.00011	-.00181	164.56	.00001

Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Elem	Co2286	Cr2055	Cu3247	Fe2599	K_7664	Li6707	Mg2790	Mn2576	Mo2020
Line	228.616 {447}	205.560 {464}	324.754 {104}	259.940 {130}	766.490 { 44}	670.784 { 50}	279.079 {121}2	257.610 {131}	202.030 {467}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	-.00064	-.00004	.00129	.01946	2.1533	.00612	30.882	.04113	.00018
Stddev	.00001	.00017	.00020	.00143	.0101	.00133	.081	.00043	.00045
%RSD	2.0177	430.96	15.137	7.3375	.46788	21.722	.26372	1.0563	254.41

#1	-.00065	-.00016	.00143	.01845	2.1605	.00706	30.940	.04082	.00049
#2	-.00063	.00008	.00115	.02047	2.1462	.00518	30.825	.04144	-.00014

Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Elem	Na8183	Ni2316	P_1782	Pb2203	S_1820	Sb2068	Se1960	Si2881	Sn1899
Line	818.326 { 41}	231.604 {446}	178.284 {489}	220.353 {453}	182.034 {485}	206.833 {463}	196.090 {472}	288.158 {117}	189.989 {477}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	11.331	.00060	.00456	-.00209	5.3325	.00151	-.00416	15.625	.00135
Stddev	.182	.00064	.00420	.00230	.0425	.00198	.00493	.046	.00004
%RSD	1.6060	106.10	92.090	110.35	.79659	131.29	118.35	.29381	2.9976

#1	11.202	.00105	.00752	-.00046	5.3625	.00011	-.00765	15.657	.00132
#2	11.460	.00015	.00159	-.00372	5.3025	.00290	-.00068	15.592	.00138

Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Elem	Sr4077	Th2837	Ti3349	Ti1908	U_3701	V_2924	Zn2062	Zr3391
Line	407.771 { 83}	283.730 {119}	334.904 {101}	190.856 {477}	370.152 { 91}	292.402 {115}	206.200 {163}	339.198 { 99}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.90640	-.00487	.00069	-.00175	.02324	.00350	.00038	.00055
Stddev	.00232	.00186	.00004	.00028	.02876	.00008	.00124	.00035
%RSD	.25638	38.133	6.2530	16.149	123.71	2.1776	324.72	63.702

#1	.90476	-.00619	.00072	-.00155	.04358	.00355	-.00050	.00079
#2	.90805	-.00356	.00066	-.00195	.00291	.00344	.00126	.00030

Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit								
Low Limit								

Int. Std.	Y_2243	Y_3600	Y_3774
Line	224.306 {450}	360.073 { 94}	377.433 { 89}
Units	Cts/S	Cts/S	Cts/S
Avg	1485.7	30845.	5847.4
Stddev	1.1	38.	1.4
%RSD	.07658	.12324	.02474

#1	1484.9	30818.	5848.4
#2	1486.5	30871.	5846.4

Sample Name: 280-82987-D-3-E MS Acquired: 5/20/2016 19:14:37 Type: Unk

Method: 6500_026(v10) Mode: CONC Corr. Factor: 1.000000

User: kellyca Custom ID1: Custom ID2: Custom ID3:

Comment: 325571 6010c q5

Elem	Ag3280	Al1670	As1890	B_2089	Ba4554	Be3130	Bi2230	Ca3179	Cd2288
Line	328.068 {103}	167.079 {502}	189.042 {478}	208.959 {461}	455.403 { 74}	313.042 {108}	223.061 {451}	317.933 {106}	228.802 {447}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.05145	1.9967	1.0887	1.2576	2.1356	.05236	2.2749	215.74	.10785
Stddev	.00076	.0044	.0106	.0085	.0039	.00013	.0077	.69	.00019
%RSD	1.4730	.22168	.97583	.67248	.18391	.24010	.33669	.31964	.17505

#1	.05091	1.9936	1.0812	1.2516	2.1328	.05245	2.2695	215.25	.10771
#2	.05198	1.9999	1.0962	1.2635	2.1384	.05227	2.2803	216.22	.10798

Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Elem	Co2286	Cr2055	Cu3247	Fe2599	K_7664	Li6707	Mg2790	Mn2576	Mo2020
Line	228.616 {447}	205.560 {464}	324.754 {104}	259.940 {130}	766.490 { 44}	670.784 { 50}	279.079 {121}2	257.610 {131}	202.030 {467}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.51102	W .20683	.26351	1.0266	56.911	1.1255	81.525	.53286	1.0952
Stddev	.00025	.00033	.00050	.0046	.124	.0024	.127	.00157	.0039
%RSD	.04953	.16031	.18894	.44952	.21741	.21568	.15623	.29548	.35337

#1	.51084	.20660	.26316	1.0234	56.824	1.1238	81.435	.53174	1.0924
#2	.51120	.20707	.26387	1.0299	56.999	1.1272	81.615	.53397	1.0979

Check ?	Chk Pass	Chk Warn	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit		.10000							
Low Limit		-.01000							

Elem	Na8183	Ni2316	P_1782	Pb2203	S_1820	Sb2068	Se1960	Si2881	Sn1899
Line	818.326 { 41}	231.604 {446}	178.284 {489}	220.353 {453}	182.034 {485}	206.833 {463}	196.090 {472}	288.158 {117}	189.989 {477}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	64.164	.49947	11.128	.51700	7.6507	.55548	2.1524	26.009	2.0142
Stddev	.496	.00081	.048	.00325	.0425	.00355	.0095	.061	.0022
%RSD	.77248	.16227	.43080	.62789	.55585	.63985	.43991	.23379	.10651

#1	63.813	.49890	11.094	.51929	7.6206	.55297	2.1457	25.966	2.0127
#2	64.514	.50004	11.162	.51470	7.6807	.55799	2.1591	26.052	2.0157

Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Elem	Sr4077	Th2837	Ti3349	Ti1908	U_3701	V_2924	Zn2062	Zr3391
Line	407.771 { 83}	283.730 {119}	334.904 {101}	190.856 {477}	370.152 { 91}	292.402 {115}	206.200 {163}	339.198 { 99}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	1.8835	1.0059	.98677	1.9911	2.1520	.48921	.48863	.51250
Stddev	.0051	.0008	.00179	.0053	.0052	.00061	.00232	.00351
%RSD	.27222	.08037	.18128	.26386	.24086	.12407	.47472	.68495

#1	1.8799	1.0053	.98551	1.9874	2.1556	.48878	.49027	.51002
#2	1.8871	1.0065	.98804	1.9948	2.1483	.48964	.48699	.51498

Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit								
Low Limit								

Int. Std.	Y_2243	Y_3600	Y_3774
Line	224.306 {450}	360.073 { 94}	377.433 { 89}
Units	Cts/S	Cts/S	Cts/S
Avg	1456.3	30086.	5773.2
Stddev	2.1	94.	11.1
%RSD	.14396	.31171	.19158

#1	1457.8	30153.	5781.1
#2	1454.8	30020.	5765.4

Sample Name: 280-82987-D-3-F MSD Acquired: 5/20/2016 19:17:11 Type: Unk

Method: 6500_026(v10) Mode: CONC Corr. Factor: 1.000000

User: kellyca Custom ID1: Custom ID2: Custom ID3:

Comment: 325571 6010c q5

Elem	Ag3280	Al1670	As1890	B_2089	Ba4554	Be3130	Bi2230	Ca3179	Cd2288
Line	328.068 {103}	167.079 {502}	189.042 {478}	208.959 {461}	455.403 { 74}	313.042 {108}	223.061 {451}	317.933 {106}	228.802 {447}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.05060	1.9829	1.0844	1.2372	2.1346	.05242	2.2488	217.53	.10620
Stddev	.00060	.0009	.0081	.0063	.0147	.00039	.0024	.83	.00065
%RSD	1.1833	.04375	.74314	.51121	.68721	.73620	.10814	.38259	.61577

#1	.05102	1.9823	1.0787	1.2417	2.1242	.05215	2.2471	216.94	.10667
#2	.05018	1.9835	1.0900	1.2328	2.1450	.05269	2.2505	218.11	.10574

Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Elem	Co2286	Cr2055	Cu3247	Fe2599	K_7664	Li6707	Mg2790	Mn2576	Mo2020
Line	228.616 {447}	205.560 {464}	324.754 {104}	259.940 {130}	766.490 { 44}	670.784 { 50}	279.079 {121}2	257.610 {131}	202.030 {467}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.50875	W .20590	.26101	.99910	56.820	1.1204	81.176	.52931	1.0831
Stddev	.00289	.00047	.00066	.00567	.327	.0073	.052	.00084	.0001
%RSD	.56888	.23010	.25282	.56787	.57603	.65229	.06457	.15919	.00771

#1	.51080	.20556	.26054	.99508	56.588	1.1153	81.139	.52990	1.0831
#2	.50670	.20623	.26147	1.0031	57.051	1.1256	81.213	.52871	1.0830

Check ?	Chk Pass	Chk Warn	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit		.10000							
Low Limit		-.01000							

Elem	Na8183	Ni2316	P_1782	Pb2203	S_1820	Sb2068	Se1960	Si2881	Sn1899
Line	818.326 { 41}	231.604 {446}	178.284 {489}	220.353 {453}	182.034 {485}	206.833 {463}	196.090 {472}	288.158 {117}	189.989 {477}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	64.280	.49547	10.990	.51377	7.6184	.54507	2.1375	26.122	1.9871
Stddev	.614	.00034	.007	.00003	.0017	.00402	.0053	.161	.0013
%RSD	.95563	.06892	.06695	.00529	.02176	.73736	.24663	.61715	.06636

#1	63.846	.49571	10.995	.51379	7.6196	.54791	2.1413	26.008	1.9861
#2	64.714	.49523	10.985	.51375	7.6173	.54223	2.1338	26.236	1.9880

Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Elem	Sr4077	Th2837	Ti3349	Ti1908	U_3701	V_2924	Zn2062	Zr3391
Line	407.771 { 83}	283.730 {119}	334.904 {101}	190.856 {477}	370.152 { 91}	292.402 {115}	206.200 {163}	339.198 { 99}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	1.8922	.99785	.97446	1.9650	2.1348	.48685	.48776	.50743
Stddev	.0144	.00027	.00085	.0058	.0171	.00127	.00571	.00082
%RSD	.76033	.02682	.08749	.29551	.80185	.26003	1.1697	.16186

#1	1.8820	.99804	.97386	1.9691	2.1469	.48774	.49180	.50685
#2	1.9023	.99766	.97506	1.9609	2.1227	.48595	.48373	.50801

Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit								
Low Limit								

Int. Std.	Y_2243	Y_3600	Y_3774
Line	224.306 {450}	360.073 { 94}	377.433 { 89}
Units	Cts/S	Cts/S	Cts/S
Avg	1455.4	30064.	5713.0
Stddev	.4	36.	20.4
%RSD	.03000	.11968	.35649

#1	1455.7	30038.	5727.4
#2	1455.1	30089.	5698.6

Sample Name: 280-83124-A-1-A Acquired: 5/20/2016 19:19:45 Type: Unk
Method: 6500_026(v10) Mode: CONC Corr. Factor: 1.000000
User: kellyca Custom ID1: Custom ID2: Custom ID3:
Comment: 325571 6010c q5

Elem	Ag3280	Al1670	As1890	B_2089	Ba4554	Be3130	Bi2230	Ca3179	Cd2288
Line	328.068 {103}	167.079 {502}	189.042 {478}	208.959 {461}	455.403 { 74}	313.042 {108}	223.061 {451}	317.933 {106}	228.802 {447}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	-.00029	.00287	.00028	.03575	.01037	-.00014	-.00092	53.982	.00016
Stddev	.00010	.00066	.00085	.00027	.00001	.00004	.00066	.837	.00011
%RSD	35.817	23.078	298.56	.75015	.06507	26.638	71.450	1.5499	68.671

#1	-.00022	.00334	-.00032	.03594	.01037	-.00012	-.00138	53.391	.00024
#2	-.00036	.00240	.00088	.03556	.01038	-.00017	-.00045	54.574	.00008

Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Elem	Co2286	Cr2055	Cu3247	Fe2599	K_7664	Li6707	Mg2790	Mn2576	Mo2020
Line	228.616 {447}	205.560 {464}	324.754 {104}	259.940 {130}	766.490 { 44}	670.784 { 50}	279.079 {121}2	257.610 {131}	202.030 {467}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	-.00065	.00527	.00119	.02703	2.2940	.00219	15.946	.00744	.00132
Stddev	.00034	.00016	.00022	.00107	.0510	.00055	.058	.00001	.00006
%RSD	52.162	3.0260	18.329	3.9763	2.2222	25.263	.36334	.13267	4.9098

#1	-.00089	.00538	.00135	.02779	2.2580	.00258	15.987	.00743	.00127
#2	-.00041	.00516	.00104	.02627	2.3301	.00180	15.905	.00745	.00136

Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Elem	Na8183	Ni2316	P_1782	Pb2203	S_1820	Sb2068	Se1960	Si2881	Sn1899
Line	818.326 { 41}	231.604 {446}	178.284 {489}	220.353 {453}	182.034 {485}	206.833 {463}	196.090 {472}	288.158 {117}	189.989 {477}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	11.744	.00082	.08635	-.00245	7.1984	.00038	-.00125	21.391	.00143
Stddev	.266	.00012	.00448	.00282	.0194	.00073	.00187	.329	.00042
%RSD	2.2649	14.115	5.1877	115.00	.26968	195.87	150.05	1.5397	29.211

#1	11.556	.00074	.08319	-.00046	7.2121	-.00014	-.00257	21.158	.00173
#2	11.932	.00090	.08952	-.00445	7.1847	.00089	.00008	21.624	.00114

Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Elem	Sr4077	Th2837	Ti3349	Ti1908	U_3701	V_2924	Zn2062	Zr3391
Line	407.771 { 83}	283.730 {119}	334.904 {101}	190.856 {477}	370.152 { 91}	292.402 {115}	206.200 {163}	339.198 { 99}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.23548	-.00358	.00046	-.00345	.02897	.00982	.00578	.00052
Stddev	.00314	.00107	.00024	.00257	.01284	.00039	.00020	.00009
%RSD	1.3316	30.032	52.542	74.372	44.310	4.0087	3.4373	17.683

#1	.23326	-.00282	.00029	-.00527	.03805	.00954	.00564	.00058
#2	.23770	-.00434	.00063	-.00164	.01989	.01010	.00592	.00045

Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit								
Low Limit								

Int. Std.	Y_2243	Y_3600	Y_3774
Line	224.306 {450}	360.073 { 94}	377.433 { 89}
Units	Cts/S	Cts/S	Cts/S
Avg	1534.1	31774.	5862.7
Stddev	3.0	124.	68.1
%RSD	.19507	.39016	1.1619

#1	1532.0	31686.	5910.9
#2	1536.2	31861.	5814.5

Sample Name: ccvh-3900196 Acquired: 5/20/2016 19:22:29 Type: QC
Method: 6500_026(v10) Mode: CONC Corr. Factor: 1.000000
User: kellyca Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	Ag3280	Al3092	As1890	B_2089	Ba4554	Be3130	Bi2230	Ca3179	Cd2288	Co2286	Cr2055	Cu3247	Fe2714
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	-.00205	47.016	-.00228	.00359	.00010	-.00023	1.0500	-.04302	-.00105	.00302	-.00058	.00625	47.743
Stddev	.00003	.398	.00135	.00054	.00002	.00001	.0032	.00190	.00015	.00016	.00025	.00019	.500
%RSD	1.5911	.84628	59.218	14.983	18.416	4.1474	.30436	4.4224	13.937	5.3963	43.463	2.9692	1.0468

#1	-.00203	46.734	-.00132	.00397	.00009	-.00024	1.0478	-.04437	-.00095	.00313	-.00076	.00612	47.390
#2	-.00208	47.297	-.00323	.00321	.00012	-.00023	1.0523	-.04168	-.00116	.00290	-.00040	.00638	48.096

Check ?	None	Chk Pass	None	None	None	None	Chk Pass	None	None	None	None	None	Chk Pass
Value													
Range													

Elem	K_7664	Li6707	Mg2790	Mn2576	Mo2020	Na8183	Ni2316	P_1782	Pb2203	S_1820	Sb2068	Se1960	Si2881
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.04782	.00046	.15543	-.00081	-.00237	252.67	.00021	.00574	.00282	5.0365	-.00130	.00579	-.00432
Stddev	.01302	.00005	.00500	.00010	.00020	1.72	.00038	.00242	.00342	.0056	.00117	.00636	.00540
%RSD	27.219	11.838	3.2194	11.909	8.5565	.67998	182.95	42.114	121.50	.11044	90.176	109.79	125.13

#1	.05703	.00050	.15189	-.00074	-.00252	251.46	.00048	.00403	.00040	5.0325	-.00047	.00129	-.00813
#2	.03862	.00042	.15897	-.00087	-.00223	253.89	-.00006	.00745	.00524	5.0404	-.00213	.01028	-.00050

Check ?	None	None	None	None	None	Chk Pass	None	None	None	Chk Pass	None	None	None
Value													
Range													

Elem	Sn1899	Sr4077	Th2837	Ti3349	Tl1908	U_3701	V_2924	Zn2062	Zr3391
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.00192	.00039	4.9353	.02610	-.00560	10.121	-.01632	-.00315	-.01405
Stddev	.00008	.00005	.0247	.00008	.00100	.014	.00034	.00120	.00311
%RSD	4.4234	13.442	.50124	.31294	17.891	.13602	2.1109	38.226	22.121

#1	.00198	.00042	4.9528	.02615	-.00489	10.112	-.01608	-.00400	-.01625
#2	.00186	.00035	4.9178	.02604	-.00631	10.131	-.01657	-.00230	-.01185

Check ?	None	None	Chk Pass	None	None	Chk Pass	None	None	None
Value									
Range									

Int. Std.	Y_2243	Y_3600	Y_3774
Units	Cts/S	Cts/S	Cts/S
Avg	1506.8	30744.	5727.5
Stddev	3.0	26.	92.9
%RSD	.19639	.08442	1.6222

#1	1508.9	30726.	5793.2
#2	1504.7	30762.	5661.8

Sample Name: ccv-3900195 Acquired: 5/20/2016 19:25:19 Type: QC
Method: 6500_026(v10) Mode: CONC Corr. Factor: 1.000000
User: kellyca Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	Ag3280	Al1670	As1890	B_2089	Ba4554	Be3130	Bi2230	Ca3179	Cd2288	Co2286	Cr2055	Cu3247	Fe2599
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.49094	.52230	1.0272	.53669	.49921	.51075	-.00226	4.9604	.52375	.52416	.51717	.50488	2.4988
Stddev	.00085	.00299	.0039	.00176	.00187	.00096	.00102	.0563	.00003	.00002	.00059	.00009	.0172
%RSD	.17302	.57158	.38257	.32783	.37451	.18780	45.083	1.1356	.00512	.00326	.11497	.01863	.68789

#1	.49034	.52019	1.0245	.53794	.49789	.51143	-.00154	5.0002	.52373	.52417	.51675	.50481	2.5110
#2	.49154	.52441	1.0300	.53545	.50053	.51007	-.00298	4.9205	.52377	.52415	.51759	.50494	2.4867

Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	None	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Value													
Range													

Elem	K_7664	Li6707	Mg2790	Mn2576	Mo2020	Na5895	Ni2316	P_1782	Pb2203	S_1820	Sb2068	Se1960	Si2881
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	51.982	1.0788	19.889	.49429	.52260	5.2531	.50878	1.0176	1.0453	.00502	1.0388	1.0229	4.9999
Stddev	.076	.0041	.042	.00127	.00086	.0103	.00090	.0043	.0060	.00267	.0029	.0074	.0265
%RSD	.14611	.38377	.21237	.25727	.16474	.19539	.17651	.41765	.57440	53.114	.27653	.72280	.52925

#1	51.929	1.0759	19.859	.49339	.52320	5.2604	.50815	1.0146	1.0410	.00313	1.0368	1.0281	4.9812
#2	52.036	1.0817	19.919	.49518	.52199	5.2459	.50942	1.0206	1.0495	.00690	1.0408	1.0176	5.0186

Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	None	Chk Pass	Chk Pass	Chk Pass
Value													
Range													

Elem	Sn1899	Sr4077	Th2837	Ti3349	Ti1908	U_3701	V_2924	Zn2062	Zr3391
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	1.0094	.48761	-.00118	.47463	1.0422	.03175	.47610	.48587	.50212
Stddev	.0008	.00228	.00119	.00140	.0008	.01133	.00189	.00440	.00060
%RSD	.08213	.46721	101.04	.29428	.07227	35.681	.39768	.90573	.12035

#1	1.0100	.48600	-.00203	.47364	1.0417	.03976	.47476	.48276	.50255
#2	1.0088	.48923	-.00034	.47562	1.0428	.02374	.47744	.48898	.50170

Check ?	Chk Pass	Chk Pass	None	Chk Pass	Chk Pass	None	Chk Pass	Chk Pass	Chk Pass
Value									
Range									

Int. Std.	Y_2243	Y_3600	Y_3774
Units	Cts/S	Cts/S	Cts/S
Avg	1535.6	32057.	5918.2
Stddev	2.6	112.	77.7
%RSD	.17168	.34781	1.3126

#1	1537.4	32136.	5863.2
#2	1533.7	31979.	5973.1

Sample Name: ccb Acquired: 5/20/2016 19:27:56 Type: QC
Method: 6500_026(v10) Mode: CONC Corr. Factor: 1.000000
User: kellyca Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	Ag3280	Al1670	As1890	B_2089	Ba4554	Be3130	Bi2230	Ca3179	Cd2288	Co2286	Cr2055	Cu3247
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	-.00008	.00017	-.00160	W .00171	-.00005	-.00010	-.00266	.00389	.00008	-.00039	-.00003	-.00044
Stddev	.00006	.00069	.00376	.00027	.00004	.00002	.00044	.00017	.00001	.00042	.00012	.00018
%RSD	79.921	410.35	235.79	15.514	82.174	16.303	16.393	4.3403	5.9924	107.79	460.19	39.922

#1	-.00012	.00065	-.00426	.00152	-.00002	-.00011	-.00297	.00401	.00008	-.00069	-.00011	-.00057
#2	-.00003	-.00032	.00106	.00190	-.00008	-.00009	-.00235	.00377	.00009	-.00009	.00006	-.00032

Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Warn	Chk Pass	Chk Pass	None	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit				.00156								
Low Limit				-.00156								

Elem	Fe2599	K_7664	Li6707	Mg2790	Mn2576	Mo2020	Na5895	Ni2316	P_1782	Pb2203	S_1820	Sb2068
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.00131	.06508	-.00112	.00876	.00006	.00022	.01882	-.00031	.00112	.00036	.00702	.00067
Stddev	.00024	.00953	.00046	.00204	.00009	.00010	.01087	.00018	.00393	.00198	.00362	.00129
%RSD	18.116	14.650	41.385	23.278	141.31	42.739	57.751	58.928	351.87	546.83	51.601	191.47

#1	.00148	.05834	-.00145	.00732	.00000	.00016	.01114	-.00018	-.00166	-.00104	.00446	.00158
#2	.00114	.07182	-.00079	.01021	.00012	.00029	.02651	-.00044	.00390	.00176	.00958	-.00024

Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	None	Chk Pass
High Limit												
Low Limit												

Elem	Se1960	Si2881	Sn1899	Sr4077	Th2837	Ti3349	Ti1908	U_3701	V_2924	Zn2062	Zr3391
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	-.00189	-.00761	.00169	.00004	-.00460	.00017	-.00150	.01426	.00029	.00029	.00114
Stddev	.00074	.00813	.00087	.00007	.00199	.00004	.00281	.01328	.00036	.00120	.00014
%RSD	39.143	106.85	51.624	151.15	43.222	23.622	186.82	93.112	126.22	409.24	12.308

#1	-.00137	-.01336	.00231	.00009	-.00601	.00014	.00048	.00487	.00054	-.00056	.00104
#2	-.00242	-.00186	.00107	-.00000	-.00319	.00020	-.00349	.02365	.00003	.00114	.00124

Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit											
Low Limit											

Int. Std.	Y_2243	Y_3600	Y_3774
Units	Cts/S	Cts/S	Cts/S
Avg	1553.0	32209.	5734.9
Stddev	.2	18.	10.3
%RSD	.01344	.05510	.18046

#1	1552.8	32221.	5727.5
#2	1553.1	32196.	5742.2

Sample Name: ccvl-3903059 Acquired: 5/20/2016 19:30:43 Type: QC
Method: 6500_026(v10) Mode: CONC Corr. Factor: 1.000000
User: kellyca Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	Ag3280	Al1670	As1890	B_2089	Ba4554	Be3130	Bi2230	Ca3179	Cd2288	Co2286	Cr2055	Cu3247
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.01017	.10655	.01433	.10998	.01013	.00099	.11573	.20595	.00545	.01051	.01044	.01473
Stddev	.00049	.00122	.00011	.00061	.00003	.00002	.00056	.00112	.00004	.00032	.00023	.00023
%RSD	4.8114	1.1455	.78393	.55194	.33502	1.8878	.48251	.54439	.81220	3.0476	2.1819	1.5752

#1	.01052	.10741	.01425	.10955	.01011	.00100	.11534	.20515	.00548	.01074	.01060	.01456
#2	.00983	.10568	.01441	.11041	.01016	.00098	.11613	.20674	.00542	.01028	.01028	.01489

Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Value												
Range												

Elem	Fe2599	K_7664	Li6707	Mg2790	Mn2576	Mo2020	Na5895	Ni2316	P_1782	Pb2203	S_1820	Sb2068
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.11368	3.1676	.01089	.21433	.01040	.02156	1.0625	.04193	3.0321	.00784	.01091	.02202
Stddev	.00196	.0069	.00069	.00394	.00007	.00039	.0033	.00031	.0049	.00007	.00704	.00026
%RSD	1.7218	.21866	6.3771	1.8394	.65843	1.7914	.30945	.75004	.16186	.83486	64.521	1.1684

#1	.11229	3.1627	.01040	.21154	.01035	.02129	1.0648	.04171	3.0286	.00788	.00593	.02184
#2	.11506	3.1725	.01138	.21712	.01044	.02183	1.0601	.04216	3.0356	.00779	.01589	.02221

Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	None	Chk Pass
Value												
Range												

Elem	Se1960	Si2881	Sn1899	Sr4077	Th2837	Ti3349	Ti1908	U_3701	V_2924	Zn2062	Zr3391
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.01215	.51010	.10301	.00984	.01156	.00998	.01633	F .08654	.01036	.01968	.01535
Stddev	.00068	.01797	.00081	.00000	.00042	.00012	.00067	.01934	.00013	.00101	.00000
%RSD	5.6072	3.5222	.78240	.05003	3.6627	1.2389	4.1312	22.345	1.2746	5.1311	.00967

#1	.01263	.52281	.10358	.00985	.01126	.01007	.01585	.07287	.01046	.01896	.01534
#2	.01166	.49740	.10244	.00984	.01185	.00989	.01681	.10021	.01027	.02039	.01535

Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Fail	Chk Pass	Chk Pass	Chk Pass
Value								.06000			
Range								30.000%			

Int. Std.	Y_2243	Y_3600	Y_3774
Units	Cts/S	Cts/S	Cts/S
Avg	1568.3	32323.	5769.8
Stddev	.9	113.	6.4
%RSD	.06049	.34933	.11078

#1	1567.6	32403.	5774.3
#2	1568.9	32243.	5765.3

Sample Name: MB 280-325404/1-A Acquired: 5/20/2016 19:33:30 Type: Unk

Method: 6500_026(v10) Mode: CONC Corr. Factor: 1.000000

User: kellyca Custom ID1: 5/18 Custom ID2: Custom ID3:

Comment: 325404 6010c s

Elem	Ag3280	Al1670	As1890	B_2089	Ba4554	Be3130	Bi2230	Ca3179	Cd2288
Line	328.068 {103}	167.079 {502}	189.042 {478}	208.959 {461}	455.403 { 74}	313.042 {108}	223.061 {451}	317.933 {106}	228.802 {447}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.00013	.00547	.00082	F .01108	.00025	-.00009	-.00029	.01321	-.00014
Stddev	.00003	.00012	.00096	.00016	.00018	.00008	.00397	.00028	.00032
%RSD	25.572	2.2845	116.78	1.4723	73.463	89.445	1376.5	2.1238	234.28

#1	.00011	.00556	.00150	.01120	.00012	-.00003	-.00309	.01341	-.00036
#2	.00016	.00538	.00014	.01096	.00038	-.00014	.00252	.01302	.00009

Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Fail	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit				.01000					
Low Limit				-.01000					

Elem	Co2286	Cr2055	Cu3247	Fe2599	K_7664	Li6707	Mg2790	Mn2576	Mo2020
Line	228.616 {447}	205.560 {464}	324.754 {104}	259.940 {130}	766.490 { 44}	670.784 { 50}	279.079 {121}2	257.610 {131}	202.030 {467}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	-.00046	.00026	-.00021	.00773	.03517	-.00035	.00526	.00011	.00014
Stddev	.00030	.00048	.00037	.00098	.00524	.00034	.00228	.00006	.00071
%RSD	65.651	184.11	177.83	12.726	14.906	97.074	43.332	58.485	522.63

#1	-.00067	.00060	.00005	.00843	.03888	-.00011	.00687	.00006	.00064
#2	-.00024	-.00008	-.00047	.00704	.03147	-.00059	.00365	.00015	-.00036

Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Elem	Na5895	Ni2316	P_1782	Pb2203	S_1820	Sb2068	Se1960	Si2881	Sn1899
Line	589.592 { 57}	231.604 {446}	178.284 {489}	220.353 {453}	182.034 {485}	206.833 {463}	196.090 {472}	288.158 {117}	189.989 {477}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.03917	-.00028	.00200	-.00127	.00953	.00283	W -.00625	W .06209	.00133
Stddev	.00272	.00041	.00254	.00051	.00019	.00050	.00033	.01372	.00051
%RSD	6.9443	144.91	126.99	40.571	1.9629	17.627	5.2628	22.090	38.568

#1	.04109	-.00057	.00379	-.00163	.00940	.00248	-.00602	.05239	.00096
#2	.03725	.00001	.00020	-.00090	.00966	.00319	-.00648	.07178	.00169

Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Warn	Chk Warn	Chk Pass
High Limit							.00500	.05000	
Low Limit							-.00500	-.05000	

Elem	Sr4077	Th2837	Ti3349	Ti1908	U_3701	V_2924	Zn2062	Zr3391	
Line	407.771 { 83}	283.730 {119}	334.904 {101}	190.856 {477}	370.152 { 91}	292.402 {115}	206.200 {163}	339.198 { 99}	
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	
Avg	-.00001	-.00451	.00023	-.00115	.00373	.00036	-.00027	.00009	
Stddev	.00002	.00012	.00005	.00147	.02077	.00070	.00103	.00037	
%RSD	406.95	2.5642	20.390	127.53	556.89	193.99	382.14	415.85	

#1	.00001	-.00459	.00020	-.00011	-.01096	.00086	-.00099	.00035	
#2	-.00002	-.00443	.00027	-.00219	.01842	-.00013	.00046	-.00017	

Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	
High Limit									
Low Limit									

Int. Std.	Y_2243	Y_3600	Y_3774						
Line	224.306 {450}	360.073 { 94}	377.433 { 89}						
Units	Cts/S	Cts/S	Cts/S						
Avg	1580.0	32768.	5933.3						
Stddev	1.0	187.	19.1						
%RSD	.06394	.56960	.32128						

#1	1579.3	32900.	5946.8						
#2	1580.8	32636.	5919.8						

Sample Name: LCS 280-325404/2-A Acquired: 5/20/2016 19:36:18 Type: Unk

Method: 6500_026(v10) Mode: CONC Corr. Factor: 1.000000

User: kellyca Custom ID1: Custom ID2: Custom ID3:

Comment: 325404 6010c s

Elem	Ag3280	Al1670	As1890	B_2089	Ba4554	Be3130	Bi2230	Ca3179	Cd2288
Line	328.068 {103}	167.079 {502}	189.042 {478}	208.959 {461}	455.403 { 74}	313.042 {108}	223.061 {451}	317.933 {106}	228.802 {447}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.04981	2.0160	1.0418	F 1.2115	1.9984	.05125	F 2.2012	50.317	.10400
Stddev	.00019	.0088	.0007	.0009	.0020	.00000	.0057	.062	.00007
%RSD	.37789	.43606	.06502	.07660	.10198	.00753	.25715	.12356	.06980

#1	.04995	2.0222	1.0413	1.2108	1.9998	.05126	2.1972	50.273	.10395
#2	.04968	2.0098	1.0423	1.2122	1.9970	.05125	2.2052	50.361	.10405

Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Fail	Chk Pass	Chk Pass	Chk Fail	Chk Pass	Chk Pass
High Limit				1.1000			2.2000		
Low Limit				.81000			1.8000		

Elem	Co2286	Cr2055	Cu3247	Fe2599	K_7664	Li6707	Mg2790	Mn2576	Mo2020
Line	228.616 {447}	205.560 {464}	324.754 {104}	259.940 {130}	766.490 { 44}	670.784 { 50}	279.079 {121}2	257.610 {131}	202.030 {467}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.51086	F .20480	.25330	1.0312	53.028	1.0793	49.531	.48946	1.0721
Stddev	.00036	.00001	.00015	.0019	.135	.0012	.131	.00071	.0017
%RSD	.07022	.00516	.06074	.18588	.25530	.10687	.26382	.14432	.15901

#1	.51112	.20481	.25319	1.0299	53.124	1.0801	49.624	.48996	1.0733
#2	.51061	.20479	.25341	1.0326	52.932	1.0785	49.439	.48896	1.0709

Check ?	Chk Pass	Chk Fail	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit		.05700							
Low Limit		.04350							

Elem	Na8183	Ni2316	P_1782	Pb2203	S_1820	Sb2068	Se1960	Si2881	Sn1899
Line	818.326 { 41}	231.604 {446}	178.284 {489}	220.353 {453}	182.034 {485}	206.833 {463}	196.090 {472}	288.158 {117}	189.989 {477}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	51.606	.49963	10.548	.51930	2.0525	.53038	2.0565	2.5211	1.9769
Stddev	.003	.00136	.021	.00216	.0059	.00121	.0056	.0042	.0044
%RSD	.00590	.27123	.20365	.41667	.28548	.22753	.27217	.16720	.22080

#1	51.604	.50059	10.563	.52083	2.0484	.52953	2.0526	2.5181	1.9800
#2	51.608	.49868	10.533	.51777	2.0567	.53123	2.0605	2.5241	1.9739

Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	None	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Elem	Sr4077	Th2837	Ti3349	Ti1908	U_3701	V_2924	Zn2062	Zr3391
Line	407.771 { 83}	283.730 {119}	334.904 {101}	190.856 {477}	370.152 { 91}	292.402 {115}	206.200 {163}	339.198 { 99}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.96710	.98361	.95890	2.0171	2.1139	.47735	.49221	.50073
Stddev	.00285	.00380	.00233	.0095	.0217	.00177	.00147	.00071
%RSD	.29423	.38668	.24310	.47219	1.0278	.37047	.29953	.14177

#1	.96912	.98630	.96055	2.0238	2.0986	.47860	.49326	.50023
#2	.96509	.98092	.95725	2.0104	2.1293	.47610	.49117	.50123

Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit								
Low Limit								

Int. Std.	Y_2243	Y_3600	Y_3774
Line	224.306 {450}	360.073 { 94}	377.433 { 89}
Units	Cts/S	Cts/S	Cts/S
Avg	1497.4	30871.	5716.0
Stddev	2.2	71.	4.4
%RSD	.14669	.23093	.07658

#1	1495.8	30820.	5712.9
#2	1499.0	30921.	5719.1

Sample Name: 280-83054-A-6-A Acquired: 5/20/2016 19:38:53 Type: Unk
Method: 6500_026(v10) Mode: CONC Corr. Factor: 1.000000
User: kellyca Custom ID1: Custom ID2: Custom ID3:
Comment: 325404 6010c s

Elem	Ag3280	Al3092	As1890	B_2089	Ba4554	Be3130	Bi2230	Ca3179	Cd2288
Line	328.068 {103}	309.271 {109}	189.042 {478}	208.959 {461}	455.403 { 74}	313.042 {108}	223.061 {451}	317.933 {106}	228.802 {447}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	-.00009	7.3603	-.00410	.00452	.02059	-.00008	-.00331	.14468	.00224
Stddev	.00034	.0764	.00029	.00142	.00028	.00007	.00198	.00042	.00001
%RSD	370.49	1.0375	7.1132	31.544	1.3551	82.792	59.858	.28976	.63541

#1	-.00034	7.3063	-.00389	.00552	.02040	-.00013	-.00471	.14498	.00223
#2	.00015	7.4143	-.00431	.00351	.02079	-.00003	-.00191	.14439	.00225

Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Elem	Co2286	Cr2055	Cu3247	Fe2599	K_7664	Li6707	Mg2790	Mn2576	Mo2020
Line	228.616 {447}	205.560 {464}	324.754 {104}	259.940 {130}	766.490 { 44}	670.784 { 50}	279.079 {121}2	257.610 {131}	202.030 {467}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.00021	.06044	.11241	1.4992	.22701	.00246	.16856	.02103	.00179
Stddev	.00010	.00021	.00042	.0260	.01113	.00006	.00565	.00030	.00038
%RSD	48.139	.34750	.36958	1.7358	4.9049	2.4589	3.3541	1.4110	21.249

#1	.00014	.06059	.11212	1.4808	.23488	.00250	.17255	.02082	.00152
#2	.00029	.06029	.11271	1.5176	.21913	.00241	.16456	.02124	.00205

Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Elem	Na5895	Ni2316	P_1782	Pb2203	S_1820	Sb2068	Se1960	Si2881	Sn1899
Line	589.592 { 57}	231.604 {446}	178.284 {489}	220.353 {453}	182.034 {485}	206.833 {463}	196.090 {472}	288.158 {117}	189.989 {477}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.07178	.02926	.19829	.05234	.43585	.00332	.00067	5.8642	.00267
Stddev	.00518	.00031	.00229	.00067	.00022	.00039	.00044	.0747	.00119
%RSD	7.2195	1.0550	1.1546	1.2759	.04938	11.838	65.841	1.2741	44.450

#1	.07545	.02904	.19667	.05186	.43600	.00304	.00036	5.9171	.00183
#2	.06812	.02948	.19991	.05281	.43570	.00360	.00098	5.8114	.00350

Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Elem	Sr4077	Th2837	Ti3349	Ti1908	U_3701	V_2924	Zn2062	Zr3391
Line	407.771 { 83}	283.730 {119}	334.904 {101}	190.856 {477}	370.152 { 91}	292.402 {115}	206.200 {163}	339.198 { 99}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.00420	-.00094	.30398	-.00205	.02502	.00510	.08034	.00676
Stddev	.00005	.00099	.00367	.00459	.01748	.00001	.00044	.00021
%RSD	1.2812	105.96	1.2060	223.57	69.874	.12117	.55374	3.1531

#1	.00424	-.00164	.30139	-.00530	.03738	.00510	.08065	.00661
#2	.00416	-.00024	.30658	.00119	.01266	.00511	.08003	.00691

Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit								
Low Limit								

Int. Std.	Y_2243	Y_3600	Y_3774
Line	224.306 {450}	360.073 { 94}	377.433 { 89}
Units	Cts/S	Cts/S	Cts/S
Avg	1581.4	33267.	6030.6
Stddev	3.1	38.	55.6
%RSD	.19596	.11400	.92219

#1	1583.6	33294.	6070.0
#2	1579.2	33240.	5991.3

Sample Name: 280-83054-A-6-Asd@5 Acquired: 5/20/2016 19:41:38 Type: Unk
Method: 6500_026(v10) Mode: CONC Corr. Factor: 1.000000
User: kellyca Custom ID1: Custom ID2: Custom ID3:
Comment: 325404 6010c s

Elem	Ag3280	Al1670	As1890	B_2089	Ba4554	Be3130	Bi2230	Ca3179	Cd2288
Line	328.068 {103}	167.079 {502}	189.042 {478}	208.959 {461}	455.403 { 74}	313.042 {108}	223.061 {451}	317.933 {106}	228.802 {447}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.00012	1.8307	-.00069	.00212	.00546	-.00005	-.00120	.03032	.00042
Stddev	.00025	.0047	.00096	.00044	.00004	.00004	.00153	.00029	.00005
%RSD	211.17	.25565	139.29	20.602	.72729	82.885	127.54	.94119	12.226

#1	.00029	1.8340	-.00137	.00243	.00543	-.00002	-.00012	.03052	.00046
#2	-.00006	1.8274	-.00001	.00181	.00548	-.00008	-.00229	.03012	.00038

Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Elem	Co2286	Cr2055	Cu3247	Fe2599	K_7664	Li6707	Mg2790	Mn2576	Mo2020
Line	228.616 {447}	205.560 {464}	324.754 {104}	259.940 {130}	766.490 { 44}	670.784 { 50}	279.079 {121}2	257.610 {131}	202.030 {467}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	-.00018	.01296	.02220	.35498	.10944	.00030	.04921	.00478	.00030
Stddev	.00024	.00018	.00003	.00142	.01020	.00016	.00314	.00018	.00007
%RSD	129.70	1.4089	.13254	.40048	9.3186	51.922	6.3772	3.7530	22.528

#1	-.00002	.01309	.02218	.35599	.10223	.00019	.04699	.00491	.00025
#2	-.00035	.01283	.02223	.35398	.11665	.00041	.05143	.00466	.00035

Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Elem	Na5895	Ni2316	P_1782	Pb2203	S_1820	Sb2068	Se1960	Si2881	Sn1899
Line	589.592 { 57}	231.604 {446}	178.284 {489}	220.353 {453}	182.034 {485}	206.833 {463}	196.090 {472}	288.158 {117}	189.989 {477}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.02603	.00662	.04054	.01115	.09011	.00129	.00651	3.7722	.00100
Stddev	.00066	.00035	.00110	.00088	.00258	.00044	.00284	.0216	.00027
%RSD	2.5508	5.3549	2.7213	7.9171	2.8657	33.654	43.702	.57215	26.983

#1	.02650	.00687	.03976	.01177	.08829	.00099	.00852	3.7570	.00120
#2	.02556	.00637	.04132	.01052	.09194	.00160	.00450	3.7875	.00081

Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Elem	Sr4077	Th2837	Ti3349	Ti1908	U_3701	V_2924	Zn2062	Zr3391
Line	407.771 { 83}	283.730 {119}	334.904 {101}	190.856 {477}	370.152 { 91}	292.402 {115}	206.200 {163}	339.198 { 99}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.00124	-.00214	.19675	-.00185	.01815	.00222	.01798	.00515
Stddev	.00001	.00102	.00244	.00109	.00236	.00038	.00160	.00125
%RSD	1.1491	47.495	1.2388	58.800	13.017	17.124	8.8797	24.383

#1	.00125	-.00142	.19502	-.00262	.01982	.00195	.01911	.00603
#2	.00123	-.00286	.19847	-.00108	.01648	.00248	.01685	.00426

Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit								
Low Limit								

Int. Std.	Y_2243	Y_3600	Y_3774
Line	224.306 {450}	360.073 { 94}	377.433 { 89}
Units	Cts/S	Cts/S	Cts/S
Avg	1582.0	32925.	5847.3
Stddev	.6	74.	36.6
%RSD	.03958	.22332	.62669

#1	1582.5	32977.	5821.3
#2	1581.6	32873.	5873.2

Sample Name: 280-83054-A-6-B MS Acquired: 5/20/2016 19:44:24 Type: Unk
Method: 6500_026(v10) Mode: CONC Corr. Factor: 1.000000
User: kellyca Custom ID1: Custom ID2: Custom ID3:
Comment: 325404 6010c s

Elem	Ag3280	Al3092	As1890	B_2089	Ba4554	Be3130	Bi2230	Ca3179	Cd2288
Line	328.068 {103}	309.271 {109}	189.042 {478}	208.959 {461}	455.403 { 74}	313.042 {108}	223.061 {451}	317.933 {106}	228.802 {447}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.04834	6.1545	.99378	1.0121	1.9416	.04913	2.0992	48.278	.10059
Stddev	.00009	.0167	.01671	.0067	.0047	.00005	.0143	.026	.00027
%RSD	.18104	.27087	1.6815	.66344	.24460	.11166	.68289	.05403	.27276

#1	.04828	6.1427	1.0056	1.0168	1.9383	.04909	2.1094	48.296	.10078
#2	.04840	6.1663	.98196	1.0073	1.9450	.04917	2.0891	48.259	.10039

Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Elem	Co2286	Cr2055	Cu3247	Fe2599	K_7664	Li6707	Mg2790	Mn2576	Mo2020
Line	228.616 {447}	205.560 {464}	324.754 {104}	259.940 {130}	766.490 { 44}	670.784 { 50}	279.079 {121}2	257.610 {131}	202.030 {467}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.49133	W .23673	.31810	2.2116	51.169	1.0360	47.904	.48053	1.0241
Stddev	.00098	.00053	.00077	.0027	.158	.0040	.052	.00044	.0054
%RSD	.19879	.22525	.24274	.12379	.30905	.38236	.10923	.09118	.52862

#1	.49202	.23711	.31865	2.2096	51.058	1.0332	47.867	.48084	1.0279
#2	.49064	.23635	.31756	2.2135	51.281	1.0388	47.941	.48022	1.0203

Check ?	Chk Pass	Chk Warn	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit		.10000							
Low Limit		-.01000							

Elem	Na8183	Ni2316	P_1782	Pb2203	S_1820	Sb2068	Se1960	Si2881	Sn1899
Line	818.326 { 41}	231.604 {446}	178.284 {489}	220.353 {453}	182.034 {485}	206.833 {463}	196.090 {472}	288.158 {117}	189.989 {477}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	49.570	.49900	10.139	.54216	2.1389	.50445	1.9480	3.6440	1.8836
Stddev	.096	.00048	.047	.00094	.0272	.00126	.0055	.0032	.0091
%RSD	.19403	.09667	.46468	.17336	1.2696	.25018	.28383	.08725	.48044

#1	49.502	.49934	10.172	.54283	2.1581	.50534	1.9519	3.6462	1.8900
#2	49.638	.49866	10.106	.54150	2.1197	.50355	1.9441	3.6417	1.8772

Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Elem	Sr4077	Th2837	Ti3349	Ti1908	U_3701	V_2924	Zn2062	Zr3391
Line	407.771 { 83}	283.730 {119}	334.904 {101}	190.856 {477}	370.152 { 91}	292.402 {115}	206.200 {163}	339.198 { 99}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.93418	.93242	1.0337	1.9192	2.0403	.46168	.53124	.47447
Stddev	.00249	.00093	.0007	.0153	.0229	.00134	.00442	.00001
%RSD	.26653	.09977	.06421	.79714	1.1230	.29016	.83276	.00108

#1	.93242	.93176	1.0342	1.9301	2.0565	.46263	.52811	.47447
#2	.93594	.93308	1.0332	1.9084	2.0241	.46073	.53437	.47447

Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit								
Low Limit								

Int. Std.	Y_2243	Y_3600	Y_3774
Line	224.306 {450}	360.073 { 94}	377.433 { 89}
Units	Cts/S	Cts/S	Cts/S
Avg	1508.3	31070.	5798.1
Stddev	1.1	18.	8.4
%RSD	.07438	.05650	.14462

#1	1507.5	31057.	5804.1
#2	1509.1	31082.	5792.2

Sample Name: 280-83054-A-6-C MSD Acquired: 5/20/2016 19:47:00 Type: Unk
Method: 6500_026(v10) Mode: CONC Corr. Factor: 1.000000
User: kellyca Custom ID1: Custom ID2: Custom ID3:
Comment: 325404 6010c s

Elem	Ag3280	Al3092	As1890	B_2089	Ba4554	Be3130	Bi2230	Ca3179	Cd2288
Line	328.068 {103}	309.271 {109}	189.042 {478}	208.959 {461}	455.403 { 74}	313.042 {108}	223.061 {451}	317.933 {106}	228.802 {447}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.04930	7.6311	1.0365	1.0615	2.0233	.05125	2.1920	49.467	.10495
Stddev	.00000	.0060	.0068	.0037	.0050	.00011	.0238	.166	.00040
%RSD	.00650	.07807	.65503	.34579	.24745	.20923	1.0837	.33494	.38036

#1	.04930	7.6353	1.0317	1.0589	2.0197	.05117	2.1752	49.350	.10467
#2	.04930	7.6269	1.0413	1.0641	2.0268	.05132	2.2088	49.584	.10524

Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Elem	Co2286	Cr2055	Cu3247	Fe2599	K_7664	Li6707	Mg2790	Mn2576	Mo2020
Line	228.616 {447}	205.560 {464}	324.754 {104}	259.940 {130}	766.490 { 44}	670.784 { 50}	279.079 {121}2	257.610 {131}	202.030 {467}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.51178	W .28717	.36260	2.5662	53.175	1.0861	50.074	.50533	1.0624
Stddev	.00079	.00158	.00177	.0055	.009	.0063	.030	.00048	.0039
%RSD	.15383	.55144	.48870	.21504	.01646	.57772	.06057	.09406	.36836

#1	.51122	.28605	.36385	2.5623	53.181	1.0817	50.095	.50499	1.0596
#2	.51234	.28829	.36134	2.5701	53.169	1.0906	50.052	.50566	1.0652

Check ?	Chk Pass	Chk Warn	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit		.10000							
Low Limit		-.01000							

Elem	Na8183	Ni2316	P_1782	Pb2203	S_1820	Sb2068	Se1960	Si2881	Sn1899
Line	818.326 { 41}	231.604 {446}	178.284 {489}	220.353 {453}	182.034 {485}	206.833 {463}	196.090 {472}	288.158 {117}	189.989 {477}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	51.452	.53735	10.567	.56429	2.2798	.52713	2.0349	4.2768	1.9598
Stddev	.336	.00020	.035	.00388	.0293	.00434	.0124	.0207	.0075
%RSD	.65383	.03691	.33534	.68692	1.2851	.82279	.60765	.48481	.38476

#1	51.214	.53721	10.542	.56155	2.2591	.52406	2.0262	4.2621	1.9545
#2	51.689	.53749	10.592	.56703	2.3005	.53020	2.0437	4.2915	1.9652

Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Elem	Sr4077	Th2837	Ti3349	Ti1908	U_3701	V_2924	Zn2062	Zr3391
Line	407.771 { 83}	283.730 {119}	334.904 {101}	190.856 {477}	370.152 { 91}	292.402 {115}	206.200 {163}	339.198 { 99}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.97123	.97560	1.1129	1.9988	2.1243	.48641	.55478	.49146
Stddev	.00186	.00107	.0086	.0106	.0266	.00038	.00006	.00111
%RSD	.19105	.10938	.77330	.53120	1.2529	.07806	.01157	.22536

#1	.96992	.97635	1.1190	1.9913	2.1431	.48614	.55482	.49224
#2	.97255	.97484	1.1068	2.0064	2.1055	.48668	.55473	.49067

Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit								
Low Limit								

Int. Std.	Y_2243	Y_3600	Y_3774
Line	224.306 {450}	360.073 { 94}	377.433 { 89}
Units	Cts/S	Cts/S	Cts/S
Avg	1505.2	30850.	5886.3
Stddev	.4	41.	.6
%RSD	.02335	.13137	.00966

#1	1505.5	30879.	5885.9
#2	1505.0	30821.	5886.7

Sample Name: 280-83054-A-6-Apds Acquired: 5/20/2016 19:49:34 Type: Unk

Method: 6500_026(v10) Mode: CONC Corr. Factor: 1.000000

User: kellyca Custom ID1: Custom ID2: Custom ID3:

Comment: 325404 6010c s

Elem	Ag3280	Al3092	As1890	B_2089	Ba4554	Be3130	Bi2230	Ca3179	Cd2288
Line	328.068 {103}	309.271 {109}	189.042 {478}	208.959 {461}	455.403 { 74}	313.042 {108}	223.061 {451}	317.933 {106}	228.802 {447}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.04937	8.4661	.20897	.11093	.12258	.05047	-.00488	19.649	.05433
Stddev	.00059	.0636	.00227	.00126	.00046	.00036	.00014	.022	.00037
%RSD	1.2043	.75154	1.0851	1.1366	.37679	.70931	2.7977	.11260	.67990

#1	.04895	8.4211	.21057	.11182	.12226	.05022	-.00478	19.634	.05407
#2	.04979	8.5111	.20736	.11004	.12291	.05072	-.00498	19.665	.05459

Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Elem	Co2286	Cr2055	Cu3247	Fe2599	K_7664	Li6707	Mg2790	Mn2576	Mo2020
Line	228.616 {447}	205.560 {464}	324.754 {104}	259.940 {130}	766.490 { 44}	670.784 { 50}	279.079 {121}2	257.610 {131}	202.030 {467}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.05185	W .11060	.16063	2.4694	20.976	.11041	20.084	.07051	.05404
Stddev	.00009	.00042	.00015	.0109	.068	.00012	.002	.00021	.00028
%RSD	.16928	.37713	.09322	.44168	.32190	.11167	.01061	.29778	.51151

#1	.05191	.11030	.16073	2.4616	20.928	.11050	20.083	.07066	.05384
#2	.05178	.11089	.16052	2.4771	21.024	.11032	20.086	.07037	.05423

Check ?	Chk Pass	Chk Warn	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit		.10000							
Low Limit		-.01000							

Elem	Na8183	Ni2316	P_1782	Pb2203	S_1820	Sb2068	Se1960	Si2881	Sn1899
Line	818.326 { 41}	231.604 {446}	178.284 {489}	220.353 {453}	182.034 {485}	206.833 {463}	196.090 {472}	288.158 {117}	189.989 {477}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	20.595	.07828	2.2535	.14999	.43049	.10487	.20214	16.029	.09888
Stddev	.040	.00018	.0014	.00016	.00293	.00253	.00085	.173	.00124
%RSD	.19603	.22553	.06211	.10907	.68104	2.4151	.41906	1.0774	1.2518

#1	20.623	.07816	2.2525	.15011	.42842	.10666	.20154	16.151	.09801
#2	20.566	.07841	2.2545	.14988	.43257	.10308	.20274	15.907	.09976

Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Elem	Sr4077	Th2837	Ti3349	Ti1908	U_3701	V_2924	Zn2062	Zr3391
Line	407.771 { 83}	283.730 {119}	334.904 {101}	190.856 {477}	370.152 { 91}	292.402 {115}	206.200 {163}	339.198 { 99}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.05357	.19467	.61918	.20675	.53894	.05429	.26862	.06693
Stddev	.00033	.00317	.00699	.00086	.01331	.00008	.00133	.00010
%RSD	.61906	1.6273	1.1282	.41559	2.4692	.14831	.49604	.15217

#1	.05380	.19243	.62412	.20614	.54835	.05424	.26768	.06700
#2	.05334	.19691	.61424	.20736	.52953	.05435	.26956	.06685

Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit								
Low Limit								

Int. Std.	Y_2243	Y_3600	Y_3774
Line	224.306 {450}	360.073 { 94}	377.433 { 89}
Units	Cts/S	Cts/S	Cts/S
Avg	1548.7	32160.	5997.1
Stddev	3.7	90.	16.9
%RSD	.23969	.27990	.28186

#1	1551.4	32223.	6009.0
#2	1546.1	32096.	5985.1

Sample Name: 280-83054-A-7-A Acquired: 5/20/2016 19:52:16 Type: Unk
Method: 6500_026(v10) Mode: CONC Corr. Factor: 1.000000
User: kellyca Custom ID1: Custom ID2: Custom ID3:
Comment: 325404 6010c s

Elem	Ag3280	Al3092	As1890	B_2089	Ba4554	Be3130	Bi2230	Ca3179	Cd2288
Line	328.068 {103}	309.271 {109}	189.042 {478}	208.959 {461}	455.403 { 74}	313.042 {108}	223.061 {451}	317.933 {106}	228.802 {447}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	-.00028	11.579	.00164	.00443	.02925	-.00006	-.00239	.18819	.00182
Stddev	.00045	.079	.00263	.00002	.00030	.00002	.00009	.00140	.00004
%RSD	162.92	.68056	160.12	.46724	1.0364	37.112	3.8256	.74574	2.2317

#1	-.00059	11.523	-.00022	.00442	.02904	-.00005	-.00246	.18918	.00185
#2	.00004	11.634	.00350	.00445	.02947	-.00008	-.00233	.18720	.00180

Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Elem	Co2286	Cr2055	Cu3247	Fe2599	K_7664	Li6707	Mg2790	Mn2576	Mo2020
Line	228.616 {447}	205.560 {464}	324.754 {104}	259.940 {130}	766.490 { 44}	670.784 { 50}	279.079 {121}2	257.610 {131}	202.030 {467}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.00062	.07698	.12399	2.9819	.34152	.00901	.36952	.02863	.00135
Stddev	.00056	.00000	.00026	.0043	.01091	.00002	.00452	.00003	.00003
%RSD	91.128	.00056	.20687	.14251	3.1940	.27235	1.2222	.09826	2.3352

#1	.00101	.07698	.12381	2.9789	.33380	.00899	.36633	.02861	.00133
#2	.00022	.07698	.12417	2.9849	.34923	.00903	.37272	.02865	.00137

Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Elem	Na5895	Ni2316	P_1782	Pb2203	S_1820	Sb2068	Se1960	Si2881	Sn1899
Line	589.592 { 57}	231.604 {446}	178.284 {489}	220.353 {453}	182.034 {485}	206.833 {463}	196.090 {472}	288.158 {117}	189.989 {477}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.07167	.03710	.14385	.14666	.37402	.00007	.00308	2.2143	.00248
Stddev	.00108	.00004	.00065	.00199	.00396	.00426	.00488	.0224	.00000
%RSD	1.5004	.09716	.45458	1.3544	1.0596	6170.5	158.53	1.0129	.06028

#1	.07243	.03712	.14431	.14526	.37682	.00308	-.00037	2.1985	.00249
#2	.07091	.03707	.14339	.14807	.37122	-.00294	.00653	2.2302	.00248

Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Elem	Sr4077	Th2837	Ti3349	Ti1908	U_3701	V_2924	Zn2062	Zr3391
Line	407.771 { 83}	283.730 {119}	334.904 {101}	190.856 {477}	370.152 { 91}	292.402 {115}	206.200 {163}	339.198 { 99}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.00545	-.00050	.18149	-.00120	.01206	.01311	.14612	.00702
Stddev	.00003	.00013	.00170	.00019	.00010	.00036	.00000	.00074
%RSD	.61999	25.773	.93508	15.806	.78861	2.7229	.00243	10.560

#1	.00542	-.00041	.18269	-.00133	.01200	.01286	.14612	.00755
#2	.00547	-.00059	.18029	-.00106	.01213	.01336	.14612	.00650

Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit								
Low Limit								

Int. Std.	Y_2243	Y_3600	Y_3774
Line	224.306 {450}	360.073 { 94}	377.433 { 89}
Units	Cts/S	Cts/S	Cts/S
Avg	1597.2	33055.	5919.4
Stddev	.6	1.	24.6
%RSD	.03816	.00234	.41642

#1	1596.7	33056.	5902.0
#2	1597.6	33055.	5936.9

Sample Name: 280-83054-A-8-A Acquired: 5/20/2016 19:55:01 Type: Unk
Method: 6500_026(v10) Mode: CONC Corr. Factor: 1.000000
User: kellyca Custom ID1: Custom ID2: Custom ID3:
Comment: 325404 6010c s

Elem	Ag3280	Al3092	As1890	B_2089	Ba4554	Be3130	Bi2230	Ca3179	Cd2288
Line	328.068 {103}	309.271 {109}	189.042 {478}	208.959 {461}	455.403 {74}	313.042 {108}	223.061 {451}	317.933 {106}	228.802 {447}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.00005	17.553	.00239	.00488	.03397	-.00003	-.00299	.15950	.00083
Stddev	.00010	.146	.00945	.00098	.00015	.00003	.00276	.00032	.00022
%RSD	217.72	.83026	394.88	20.072	.44615	104.18	92.122	.20313	26.864

#1	-.00003	17.450	.00907	.00419	.03386	-.00001	-.00494	.15973	.00067
#2	.00012	17.656	-.00429	.00558	.03407	-.00005	-.00104	.15927	.00098

Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Elem	Co2286	Cr2055	Cu3247	Fe2599	K_7664	Li6707	Mg2790	Mn2576	Mo2020
Line	228.616 {447}	205.560 {464}	324.754 {104}	259.940 {130}	766.490 {44}	670.784 {50}	279.079 {121}2	257.610 {131}	202.030 {467}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.00134	.09093	.03185	3.4944	.40490	.01388	.56372	.02435	.00154
Stddev	.00040	.00014	.00001	.0055	.00221	.00080	.00258	.00005	.00007
%RSD	30.141	.15270	.04212	.15592	.54587	5.7791	.45748	.18794	4.8328

#1	.00106	.09083	.03186	3.4906	.40646	.01445	.56190	.02432	.00160
#2	.00163	.09103	.03185	3.4983	.40333	.01331	.56554	.02438	.00149

Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Elem	Na5895	Ni2316	P_1782	Pb2203	S_1820	Sb2068	Se1960	Si2881	Sn1899
Line	589.592 {57}	231.604 {446}	178.284 {489}	220.353 {453}	182.034 {485}	206.833 {463}	196.090 {472}	288.158 {117}	189.989 {477}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.06431	.04239	.15715	.03076	.31871	.00015	.00053	2.8732	.00201
Stddev	.00449	.00058	.00148	.00125	.00236	.00167	.00060	.0042	.00130
%RSD	6.9884	1.3590	.94055	4.0508	.73926	1091.4	112.81	.14751	64.655

#1	.06113	.04198	.15610	.02988	.32038	-.00103	.00096	2.8702	.00293
#2	.06749	.04280	.15819	.03165	.31704	.00134	.00011	2.8762	.00109

Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Elem	Sr4077	Th2837	Ti3349	Ti1908	U_3701	V_2924	Zn2062	Zr3391
Line	407.771 {83}	283.730 {119}	334.904 {101}	190.856 {477}	370.152 {91}	292.402 {115}	206.200 {163}	339.198 {99}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.00385	-.00117	.18812	-.00231	.02012	.01878	.16789	.00878
Stddev	.00007	.00147	.00126	.00115	.01491	.00045	.00150	.00076
%RSD	1.7436	126.05	.66837	49.699	74.137	2.4226	.89208	8.6535

#1	.00381	-.00220	.18724	-.00150	.03066	.01846	.16895	.00931
#2	.00390	-.00013	.18901	-.00313	.00957	.01910	.16684	.00824

Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit								
Low Limit								

Int. Std.	Y_2243	Y_3600	Y_3774
Line	224.306 {450}	360.073 {94}	377.433 {89}
Units	Cts/S	Cts/S	Cts/S
Avg	1584.7	32749.	5899.5
Stddev	.9	71.	13.1
%RSD	.05764	.21543	.22260

#1	1585.4	32699.	5908.8
#2	1584.1	32799.	5890.2

Sample Name: 280-83054-A-9-A Acquired: 5/20/2016 19:57:46 Type: Unk
Method: 6500_026(v10) Mode: CONC Corr. Factor: 1.000000
User: kellyca Custom ID1: Custom ID2: Custom ID3:
Comment: 325404 6010c s

Elem	Ag3280	Al3092	As1890	B_2089	Ba4554	Be3130	Bi2230	Ca3179	Cd2288
Line	328.068 {103}	309.271 {109}	189.042 {478}	208.959 {461}	455.403 { 74}	313.042 {108}	223.061 {451}	317.933 {106}	228.802 {447}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	-.00049	18.568	-.00228	.00470	.03435	-.00006	-.00275	.14809	.00071
Stddev	.00003	.146	.00583	.00043	.00012	.00010	.00054	.01151	.00002
%RSD	5.3783	.78506	255.03	9.1842	.34812	183.93	19.709	7.7744	2.9953

#1	-.00047	18.465	.00184	.00501	.03427	.00002	-.00313	.13995	.00073
#2	-.00051	18.671	-.00640	.00440	.03444	-.00013	-.00237	.15623	.00070

Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Elem	Co2286	Cr2055	Cu3247	Fe2599	K_7664	Li6707	Mg2790	Mn2576	Mo2020
Line	228.616 {447}	205.560 {464}	324.754 {104}	259.940 {130}	766.490 { 44}	670.784 { 50}	279.079 {121}2	257.610 {131}	202.030 {467}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.00104	.06838	.02315	3.1592	.44425	.01417	.60253	.02258	.00137
Stddev	.00012	.00044	.00024	.0019	.00955	.00044	.00241	.00005	.00016
%RSD	11.055	.63832	1.0420	.05861	2.1488	3.0954	.39953	.21004	11.953

#1	.00096	.06807	.02298	3.1579	.43750	.01448	.60423	.02254	.00149
#2	.00112	.06868	.02333	3.1605	.45100	.01386	.60083	.02261	.00126

Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Elem	Na5895	Ni2316	P_1782	Pb2203	S_1820	Sb2068	Se1960	Si2881	Sn1899
Line	589.592 { 57}	231.604 {446}	178.284 {489}	220.353 {453}	182.034 {485}	206.833 {463}	196.090 {472}	288.158 {117}	189.989 {477}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.05754	.03162	.15155	.02354	.32028	.00246	-.00254	2.9698	.00141
Stddev	.00290	.00014	.00282	.00072	.00027	.00022	.00398	.0153	.00044
%RSD	5.0463	.44683	1.8638	3.0748	.08463	9.0053	156.75	.51617	30.891

#1	.05959	.03152	.15355	.02303	.32009	.00262	-.00535	2.9807	.00111
#2	.05549	.03172	.14956	.02406	.32047	.00230	.00027	2.9590	.00172

Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Elem	Sr4077	Th2837	Ti3349	Ti1908	U_3701	V_2924	Zn2062	Zr3391	
Line	407.771 { 83}	283.730 {119}	334.904 {101}	190.856 {477}	370.152 { 91}	292.402 {115}	206.200 {163}	339.198 { 99}	
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	
Avg	.00394	-.00120	.19029	-.00233	.01854	.01928	.15672	.01025	
Stddev	.00004	.00026	.00111	.00138	.00370	.00098	.00020	.00053	
%RSD	.96562	21.456	.58484	59.405	19.940	5.0743	.12487	5.1588	

#1	.00392	-.00138	.19108	-.00135	.01592	.01859	.15658	.01063	
#2	.00397	-.00102	.18951	-.00330	.02115	.01997	.15686	.00988	

Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	
High Limit									
Low Limit									

Int. Std.	Y_2243	Y_3600	Y_3774						
Line	224.306 {450}	360.073 { 94}	377.433 { 89}						
Units	Cts/S	Cts/S	Cts/S						
Avg	1590.4	33001.	5933.0						
Stddev	9.0	98.	1.9						
%RSD	.56698	.29743	.03271						

#1	1596.8	32932.	5934.3						
#2	1584.1	33071.	5931.6						

Sample Name: ccvh-3900196 Acquired: 5/20/2016 20:00:32 Type: QC
Method: 6500_026(v10) Mode: CONC Corr. Factor: 1.000000
User: kellyca Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	Ag3280	Al3092	As1890	B_2089	Ba4554	Be3130	Bi2230	Ca3179	Cd2288	Co2286	Cr2055	Cu3247	Fe2714
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	-.00168	47.439	.00082	.00232	.00020	-.00034	1.0566	-.05559	-.00094	.00282	-.00073	.00632	47.402
Stddev	.00029	.321	.00118	.00142	.00024	.00005	.0060	.00407	.00030	.00001	.00005	.00004	.332
%RSD	17.071	.67643	144.32	61.131	120.94	15.486	.56955	7.3177	32.194	.33050	7.4290	.58444	.69940

#1	-.00188	47.212	-.00002	.00132	.00037	-.00031	1.0524	-.05272	-.00115	.00281	-.00076	.00635	47.167
#2	-.00148	47.666	.00166	.00333	.00003	-.00038	1.0609	-.05847	-.00072	.00282	-.00069	.00630	47.636

Check ?	None	Chk Pass	None	None	None	None	Chk Pass	None	None	None	None	None	Chk Pass
Value													
Range													

Elem	K_7664	Li6707	Mg2790	Mn2576	Mo2020	Na8183	Ni2316	P_1782	Pb2203	S_1820	Sb2068	Se1960	Si2881
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.03361	.00020	.14721	-.00064	-.00240	256.80	-.00012	.00457	.00170	5.0653	.00090	.00126	-.00645
Stddev	.02600	.00011	.00736	.00008	.00023	1.38	.00022	.00514	.00076	.0392	.00097	.00763	.00294
%RSD	77.372	57.333	4.9977	11.733	9.7932	.53885	177.08	112.50	44.475	.77329	108.05	604.37	45.606

#1	.01522	.00012	.15241	-.00070	-.00223	255.83	.00003	.00821	.00116	5.0930	.00021	.00666	-.00852
#2	.05199	.00028	.14201	-.00059	-.00256	257.78	-.00028	.00093	.00223	5.0376	.00158	-.00413	-.00437

Check ?	None	None	None	None	None	Chk Pass	None	None	None	Chk Pass	None	None	None
Value													
Range													

Elem	Sn1899	Sr4077	Th2837	Ti3349	Tl1908	U_3701	V_2924	Zn2062	Zr3391
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.00156	.00024	4.9254	.02608	-.00294	10.165	-.01672	-.00209	-.01175
Stddev	.00016	.00003	.0062	.00023	.00137	.024	.00052	.00122	.00304
%RSD	10.509	12.346	.12525	.86805	46.515	.23767	3.0924	58.713	25.902

#1	.00144	.00026	4.9210	.02592	-.00197	10.182	-.01708	-.00122	-.01390
#2	.00167	.00022	4.9297	.02624	-.00390	10.147	-.01635	-.00295	-.00960

Check ?	None	None	Chk Pass	None	None	Chk Pass	None	None	None
Value									
Range									

Int. Std.	Y_2243	Y_3600	Y_3774
Units	Cts/S	Cts/S	Cts/S
Avg	1510.1	30756.	5764.7
Stddev	1.9	4.	13.3
%RSD	.12480	.01208	.23051

#1	1508.7	30754.	5774.1
#2	1511.4	30759.	5755.3

Sample Name: ccv-3900195 Acquired: 5/20/2016 20:03:23 Type: QC
Method: 6500_026(v10) Mode: CONC Corr. Factor: 1.000000
User: kellyca Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	Ag3280	Al1670	As1890	B_2089	Ba4554	Be3130	Bi2230	Ca3179	Cd2288	Co2286	Cr2055	Cu3247	Fe2599
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.49347	.52021	1.0223	.53537	.49844	.51434	-.00385	4.9968	.52140	.52063	.51427	.50033	2.4945
Stddev	.00206	.00370	.0076	.00192	.00017	.00003	.00111	.0112	.00094	.00049	.00073	.00164	.0105
%RSD	.41787	.71101	.74638	.35934	.03467	.00664	28.706	.22354	.18085	.09409	.14141	.32846	.42266

#1	.49493	.52283	1.0169	.53673	.49857	.51436	-.00464	4.9889	.52207	.52098	.51376	.50149	2.4871
#2	.49201	.51759	1.0277	.53401	.49832	.51431	-.00307	5.0047	.52074	.52028	.51479	.49916	2.5020

Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	None	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Value													
Range													

Elem	K_7664	Li6707	Mg2790	Mn2576	Mo2020	Na5895	Ni2316	P_1782	Pb2203	S_1820	Sb2068	Se1960	Si2881
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	52.311	1.0768	20.017	.49857	.52106	5.2284	.50974	1.0242	1.0479	.01245	1.0418	1.0218	5.0249
Stddev	.115	.0009	.092	.00248	.00065	.0096	.00063	.0023	.0007	.00226	.0039	.0113	.0179
%RSD	.22034	.08674	.46212	.49840	.12380	.18380	.12335	.22464	.06619	18.135	.37337	1.1076	.35587

#1	52.230	1.0774	20.082	.50033	.52151	5.2216	.51018	1.0258	1.0474	.01405	1.0390	1.0138	5.0123
#2	52.393	1.0761	19.951	.49682	.52060	5.2352	.50929	1.0225	1.0483	.01086	1.0445	1.0298	5.0376

Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	None	Chk Pass	Chk Pass	Chk Pass
Value													
Range													

Elem	Sn1899	Sr4077	Th2837	Ti3349	Ti1908	U_3701	V_2924	Zn2062	Zr3391
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	1.0070	.49005	-.00090	.47719	1.0433	.00907	.47725	.49836	.49913
Stddev	.0037	.00105	.00056	.00127	.0004	.01269	.00371	.00454	.00235
%RSD	.37193	.21496	62.861	.26565	.03560	139.88	.77712	.91006	.46984

#1	1.0097	.48930	-.00129	.47808	1.0436	.01805	.47988	.50157	.50079
#2	1.0044	.49079	-.00050	.47629	1.0430	.00010	.47463	.49516	.49747

Check ?	Chk Pass	Chk Pass	None	Chk Pass	Chk Pass	None	Chk Pass	Chk Pass	Chk Pass
Value									
Range									

Int. Std.	Y_2243	Y_3600	Y_3774
Units	Cts/S	Cts/S	Cts/S
Avg	1535.8	31480.	5752.7
Stddev	.0	125.	4.1
%RSD	.00219	.39759	.07174

#1	1535.8	31392.	5755.6
#2	1535.8	31569.	5749.8

Sample Name: ccb Acquired: 5/20/2016 20:06:01 Type: QC
Method: 6500_026(v10) Mode: CONC Corr. Factor: 1.000000
User: kellyca Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	Ag3280	Al1670	As1890	B_2089	Ba4554	Be3130	Bi2230	Ca3179	Cd2288	Co2286	Cr2055	Cu3247
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.00024	.00008	-.00140	W .00171	.00001	-.00008	-.00193	-.00304	-.00007	-.00062	.00005	-.00031
Stddev	.00003	.00052	.00070	.00063	.00001	.00005	.00516	.00131	.00013	.00005	.00004	.00012
%RSD	13.729	661.95	49.946	36.666	215.54	56.535	267.24	43.175	185.76	7.2870	92.573	39.053

#1	.00026	-.00029	-.00189	.00215	-.00000	-.00005	-.00558	-.00211	-.00017	-.00065	.00008	-.00040
#2	.00021	.00045	-.00090	.00127	.00002	-.00012	.00172	-.00396	.00002	-.00059	.00002	-.00022

Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Warn	Chk Pass	Chk Pass	None	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit				.00156								
Low Limit				-.00156								

Elem	Fe2599	K_7664	Li6707	Mg2790	Mn2576	Mo2020	Na5895	Ni2316	P_1782	Pb2203	S_1820	Sb2068
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.00149	.06531	-.00144	.00383	.00001	.00048	.01595	-.00059	-.00346	-.00078	.00711	.00135
Stddev	.00079	.00970	.00017	.00279	.00013	.00010	.00559	.00015	.00233	.00034	.00580	.00408
%RSD	52.847	14.854	11.615	72.976	2290.2	20.716	35.034	25.668	67.207	43.341	81.670	302.48

#1	.00093	.05845	-.00132	.00580	.00009	.00055	.01990	-.00069	-.00511	-.00054	.00300	-.00154
#2	.00205	.07217	-.00156	.00185	-.00008	.00041	.01200	-.00048	-.00182	-.00102	.01121	.00423

Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	None	Chk Pass
High Limit												
Low Limit												

Elem	Se1960	Si2881	Sn1899	Sr4077	Th2837	Ti3349	Ti1908	U_3701	V_2924	Zn2062	Zr3391
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	-.00308	.00262	.00048	.00006	-.00433	.00024	.00004	.02925	.00007	-.00041	.00021
Stddev	.00113	.00063	.00037	.00001	.00166	.00020	.00083	.01263	.00002	.00078	.00056
%RSD	36.729	23.954	75.465	13.622	38.297	84.765	2087.3	43.174	31.540	191.66	266.25

#1	-.00388	.00218	.00074	.00005	-.00551	.00038	-.00055	.03817	.00009	.00014	.00061
#2	-.00228	.00307	.00023	.00007	-.00316	.00009	.00063	.02032	.00006	-.00096	-.00019

Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit											
Low Limit											

Int. Std.	Y_2243	Y_3600	Y_3774
Units	Cts/S	Cts/S	Cts/S
Avg	1549.1	31848.	5719.2
Stddev	1.8	32.	24.0
%RSD	.11393	.10025	.41987

#1	1550.4	31870.	5736.2
#2	1547.9	31825.	5702.3

Sample Name: ccvl-3903059 Acquired: 5/20/2016 20:08:49 Type: QC
Method: 6500_026(v10) Mode: CONC Corr. Factor: 1.000000
User: kellyca Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	Ag3280	Al1670	As1890	B_2089	Ba4554	Be3130	Bi2230	Ca3179	Cd2288	Co2286	Cr2055	Cu3247
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.01040	.10858	.01607	.10932	.00999	.00099	.11459	.20468	.00541	.01049	.01061	.01539
Stddev	.00028	.00066	.00256	.00063	.00004	.00010	.00081	.00162	.00013	.00034	.00047	.00016
%RSD	2.6533	.60954	15.934	.57192	.42138	10.417	.70381	.79182	2.4629	3.2223	4.4439	1.0548

#1	.01060	.10905	.01426	.10977	.00996	.00106	.11516	.20583	.00550	.01025	.01094	.01551
#2	.01021	.10811	.01788	.10888	.01002	.00092	.11402	.20353	.00532	.01073	.01027	.01528

Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Value												
Range												

Elem	Fe2599	K_7664	Li6707	Mg2790	Mn2576	Mo2020	Na5895	Ni2316	P_1782	Pb2203	S_1820	Sb2068
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	F .39209	3.2387	.01013	.21214	.01248	.02100	1.0623	.04224	3.0235	.00906	.00719	.02422
Stddev	.00325	.0081	.00099	.00187	.00010	.00056	.0110	.00102	.0003	.00052	.00214	.00203
%RSD	.82885	.25042	9.7748	.88376	.82002	2.6654	1.0319	2.4234	.00884	5.7830	29.808	8.3939

#1	.38980	3.2330	.00943	.21347	.01255	.02140	1.0546	.04296	3.0233	.00869	.00871	.02566
#2	.39439	3.2445	.01083	.21081	.01241	.02060	1.0701	.04151	3.0237	.00943	.00568	.02278

Check ?	Chk Fail	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	None	Chk Pass
Value	.10000											
Range	30.000%											

Elem	Se1960	Si2881	Sn1899	Sr4077	Th2837	Ti3349	Ti1908	U_3701	V_2924	Zn2062	Zr3391
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.01307	.50933	.10336	.00989	F .01049	.00983	.01447	F .08657	.00946	.02358	.01594
Stddev	.00567	.00432	.00057	.00015	.00263	.00045	.00288	.01051	.00082	.00064	.00059
%RSD	43.335	.84814	.54838	1.5266	25.040	4.5958	19.918	12.141	8.6800	2.7129	3.6807

#1	.00907	.50628	.10296	.00978	.01234	.01015	.01243	.07914	.01004	.02403	.01552
#2	.01708	.51239	.10377	.01000	.00863	.00951	.01651	.09400	.00888	.02313	.01635

Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Fail	Chk Pass	Chk Pass	Chk Fail	Chk Pass	Chk Pass	Chk Pass
Value					.01500			.06000			
Range					-30.000%			30.000%			

Int. Std.	Y_2243	Y_3600	Y_3774
Units	Cts/S	Cts/S	Cts/S
Avg	1566.0	32255.	5672.7
Stddev	.7	1.	29.3
%RSD	.04545	.00437	.51676

#1	1565.5	32254.	5652.0
#2	1566.5	32256.	5693.5

Sample Name: 280-83054-A-11-A Acquired: 5/20/2016 20:11:36 Type: Unk
Method: 6500_026(v10) Mode: CONC Corr. Factor: 1.000000
User: kellyca Custom ID1: Custom ID2: Custom ID3:
Comment: 325404 6010c s

Elem	Ag3280	Al1670	As1890	B_2089	Ba4554	Be3130	Bi2230	Ca3179	Cd2288
Line	328.068 {103}	167.079 {502}	189.042 {478}	208.959 {461}	455.403 { 74}	313.042 {108}	223.061 {451}	317.933 {106}	228.802 {447}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.00054	2.0491	-.00297	.00190	.01656	-.00007	-.00410	.14273	.01364
Stddev	.00028	.0105	.00716	.00096	.00007	.00001	.00136	.00288	.00018
%RSD	52.334	.51111	240.88	50.574	.42665	17.213	33.072	2.0202	1.3192

#1	.00074	2.0417	.00209	.00122	.01661	-.00006	-.00506	.14477	.01351
#2	.00034	2.0565	-.00803	.00258	.01651	-.00008	-.00314	.14069	.01377

Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Elem	Co2286	Cr2055	Cu3247	Fe2599	K_7664	Li6707	Mg2790	Mn2576	Mo2020
Line	228.616 {447}	205.560 {464}	324.754 {104}	259.940 {130}	766.490 { 44}	670.784 { 50}	279.079 {121}2	257.610 {131}	202.030 {467}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	-.00003	.01990	.00287	.79699	.09356	.00098	.13786	.00765	.00077
Stddev	.00003	.00010	.00041	.00712	.01491	.00002	.00308	.00005	.00007
%RSD	83.447	.52721	14.294	.89367	15.939	1.9956	2.2329	.64089	8.6895

#1	-.00005	.01997	.00258	.80202	.08302	.00096	.14004	.00762	.00072
#2	-.00001	.01982	.00316	.79195	.10411	.00099	.13568	.00769	.00081

Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Elem	Na5895	Ni2316	P_1782	Pb2203	S_1820	Sb2068	Se1960	Si2881	Sn1899
Line	589.592 { 57}	231.604 {446}	178.284 {489}	220.353 {453}	182.034 {485}	206.833 {463}	196.090 {472}	288.158 {117}	189.989 {477}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.03454	.00895	.02358	.00398	.04258	-.00075	.00066	1.1286	.00124
Stddev	.00021	.00020	.00237	.00012	.00624	.00067	.00370	.0108	.00036
%RSD	.61800	2.1858	10.065	2.9535	14.643	89.142	556.64	.95653	29.221

#1	.03439	.00909	.02526	.00390	.04699	-.00122	.00328	1.1362	.00150
#2	.03469	.00882	.02190	.00407	.03817	-.00028	-.00195	1.1210	.00099

Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Elem	Sr4077	Th2837	Ti3349	Ti1908	U_3701	V_2924	Zn2062	Zr3391
Line	407.771 { 83}	283.730 {119}	334.904 {101}	190.856 {477}	370.152 { 91}	292.402 {115}	206.200 {163}	339.198 { 99}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.00142	-.00336	.10365	-.00110	.03599	.00304	.02591	.00401
Stddev	.00001	.00015	.00144	.00206	.00888	.00007	.00028	.00015
%RSD	.36712	4.5040	1.3905	188.16	24.675	2.1689	1.0688	3.7778

#1	.00142	-.00325	.10466	-.00256	.02971	.00299	.02611	.00412
#2	.00142	-.00346	.10263	.00036	.04227	.00309	.02572	.00390

Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit								
Low Limit								

Int. Std.	Y_2243	Y_3600	Y_3774
Line	224.306 {450}	360.073 { 94}	377.433 { 89}
Units	Cts/S	Cts/S	Cts/S
Avg	1583.6	33173.	5962.2
Stddev	7.1	60.	71.7
%RSD	.44897	.18064	1.2026

#1	1588.7	33131.	5911.5
#2	1578.6	33215.	6012.9

Sample Name: 280-83054-A-12-A Acquired: 5/20/2016 20:14:22 Type: Unk
Method: 6500_026(v10) Mode: CONC Corr. Factor: 1.000000
User: kellyca Custom ID1: Custom ID2: Custom ID3:
Comment: 325404 6010c s

Elem	Ag3280	Al3092	As1890	B_2089	Ba4554	Be3130	Bi2230	Ca3179	Cd2288
Line	328.068 {103}	309.271 {109}	189.042 {478}	208.959 {461}	455.403 { 74}	313.042 {108}	223.061 {451}	317.933 {106}	228.802 {447}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	-0.00022	4.1383	-0.00219	.00213	.01925	-0.00007	-0.00173	.13212	.00130
Stddev	.00065	.0064	.00132	.00013	.00020	.00001	.00069	.00074	.00009
%RSD	292.78	.15568	60.543	6.0568	1.0268	20.133	39.843	.55981	6.8297

#1	.00024	4.1338	-.00312	.00204	.01911	-.00006	-.00221	.13264	.00124
#2	-.00068	4.1429	-.00125	.00222	.01939	-.00008	-.00124	.13160	.00136

Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Elem	Co2286	Cr2055	Cu3247	Fe2599	K_7664	Li6707	Mg2790	Mn2576	Mo2020
Line	228.616 {447}	205.560 {464}	324.754 {104}	259.940 {130}	766.490 { 44}	670.784 { 50}	279.079 {121}2	257.610 {131}	202.030 {467}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	-0.00020	.01914	.00539	1.5050	.18561	.00163	.23048	.01172	.00074
Stddev	.00032	.00054	.00026	.0139	.01943	.00035	.00057	.00003	.00024
%RSD	163.49	2.8472	4.7792	.92569	10.470	21.524	.24698	.27171	32.007

#1	-.00042	.01952	.00557	1.4952	.17187	.00138	.23088	.01169	.00057
#2	.00003	.01875	.00521	1.5149	.19935	.00188	.23008	.01174	.00091

Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Elem	Na5895	Ni2316	P_1782	Pb2203	S_1820	Sb2068	Se1960	Si2881	Sn1899
Line	589.592 { 57}	231.604 {446}	178.284 {489}	220.353 {453}	182.034 {485}	206.833 {463}	196.090 {472}	288.158 {117}	189.989 {477}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.04914	.00862	.04653	.01655	.04074	.00142	-0.00011	1.4401	.00066
Stddev	.00003	.00052	.00020	.00065	.00670	.00239	.00008	.0421	.00018
%RSD	.07034	6.0162	.42277	3.9093	16.440	167.92	68.635	2.9221	26.805

#1	.04912	.00898	.04667	.01610	.03600	-.00027	-.00006	1.4104	.00054
#2	.04917	.00825	.04639	.01701	.04548	.00311	-.00017	1.4699	.00079

Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Elem	Sr4077	Th2837	Ti3349	Ti1908	U_3701	V_2924	Zn2062	Zr3391
Line	407.771 { 83}	283.730 {119}	334.904 {101}	190.856 {477}	370.152 { 91}	292.402 {115}	206.200 {163}	339.198 { 99}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.00191	-0.00065	.15303	.00013	.01585	.00587	.02984	.00354
Stddev	.00000	.00051	.00189	.00026	.00411	.00091	.00054	.00075
%RSD	.11995	77.784	1.2348	194.17	25.924	15.559	1.7947	21.201

#1	.00191	-.00101	.15437	-.00005	.01294	.00651	.02946	.00301
#2	.00191	-.00029	.15170	.00032	.01875	.00522	.03022	.00407

Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit								
Low Limit								

Int. Std.	Y_2243	Y_3600	Y_3774
Line	224.306 {450}	360.073 { 94}	377.433 { 89}
Units	Cts/S	Cts/S	Cts/S
Avg	1591.4	33031.	5880.3
Stddev	2.3	46.	53.0
%RSD	.14525	.14050	.90170

#1	1593.0	33064.	5917.8
#2	1589.7	32998.	5842.8

Sample Name: 280-83054-A-13-A Acquired: 5/20/2016 20:17:08 Type: Unk
Method: 6500_026(v10) Mode: CONC Corr. Factor: 1.000000
User: kellyca Custom ID1: Custom ID2: Custom ID3:
Comment: 325404 6010c s

Elem	Ag3280	Al3092	As1890	B_2089	Ba4554	Be3130	Bi2230	Ca3179	Cd2288
Line	328.068 {103}	309.271 {109}	189.042 {478}	208.959 {461}	455.403 { 74}	313.042 {108}	223.061 {451}	317.933 {106}	228.802 {447}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	-.00066	12.312	.00408	.00238	.05330	-.00004	-.00172	.17414	.01083
Stddev	.00006	.168	.00399	.00053	.00038	.00007	.00034	.00145	.00001
%RSD	9.0386	1.3606	97.855	22.097	.72083	153.73	19.473	.83306	.06108

#1	-.00071	12.194	.00126	.00275	.05303	.00000	-.00148	.17311	.01082
#2	-.00062	12.431	.00691	.00201	.05357	-.00009	-.00196	.17516	.01083

Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Elem	Co2286	Cr2055	Cu3247	Fe2599	K_7664	Li6707	Mg2790	Mn2576	Mo2020
Line	228.616 {447}	205.560 {464}	324.754 {104}	259.940 {130}	766.490 { 44}	670.784 { 50}	279.079 {121}2	257.610 {131}	202.030 {467}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.00038	.02853	.23294	7.1681	.20301	.00343	.30024	.02683	.00142
Stddev	.00018	.00007	.00024	.0416	.00389	.00067	.00287	.00002	.00005
%RSD	47.324	.25653	.10243	.58065	1.9148	19.417	.95609	.06066	3.6045

#1	.00051	.02848	.23311	7.1387	.20026	.00296	.29821	.02682	.00145
#2	.00025	.02858	.23277	7.1975	.20576	.00390	.30226	.02684	.00138

Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Elem	Na5895	Ni2316	P_1782	Pb2203	S_1820	Sb2068	Se1960	Si2881	Sn1899
Line	589.592 { 57}	231.604 {446}	178.284 {489}	220.353 {453}	182.034 {485}	206.833 {463}	196.090 {472}	288.158 {117}	189.989 {477}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.04120	.01181	.11560	.24605	.27690	.00532	.00234	1.7767	.00910
Stddev	.00609	.00034	.00526	.00190	.00040	.00060	.00322	.0475	.00094
%RSD	14.787	2.8806	4.5498	.77073	.14585	11.215	137.42	2.6716	10.274

#1	.03689	.01205	.11188	.24471	.27661	.00490	.00007	1.7432	.00977
#2	.04550	.01157	.11932	.24739	.27718	.00575	.00462	1.8103	.00844

Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Elem	Sr4077	Th2837	Ti3349	Ti1908	U_3701	V_2924	Zn2062	Zr3391
Line	407.771 { 83}	283.730 {119}	334.904 {101}	190.856 {477}	370.152 { 91}	292.402 {115}	206.200 {163}	339.198 { 99}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.00664	-.00151	.13891	-.00283	.00413	.00869	.27794	.00497
Stddev	.00008	.00114	.00082	.00179	.00616	.00048	.00014	.00210
%RSD	1.1489	75.680	.59180	63.489	149.25	5.5835	.04879	42.286

#1	.00659	-.00231	.13949	-.00409	-.00023	.00903	.27785	.00348
#2	.00670	-.00070	.13832	-.00156	.00849	.00834	.27804	.00646

Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit								
Low Limit								

Int. Std.	Y_2243	Y_3600	Y_3774
Line	224.306 {450}	360.073 { 94}	377.433 { 89}
Units	Cts/S	Cts/S	Cts/S
Avg	1579.1	32762.	5949.8
Stddev	6.4	78.	15.1
%RSD	.40671	.23839	.25431

#1	1583.6	32706.	5960.5
#2	1574.5	32817.	5939.1

Sample Name: 280-83054-A-14-A Acquired: 5/20/2016 20:19:54 Type: Unk
Method: 6500_026(v10) Mode: CONC Corr. Factor: 1.000000
User: kellyca Custom ID1: Custom ID2: Custom ID3:
Comment: 325404 6010c s

Elem	Ag3280	Al3092	As1890	B_2089	Ba4554	Be3130	Bi2230	Ca3179	Cd2288
Line	328.068 {103}	309.271 {109}	189.042 {478}	208.959 {461}	455.403 { 74}	313.042 {108}	223.061 {451}	317.933 {106}	228.802 {447}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	-.00005	8.4853	-.00411	.00292	.05969	-.00007	-.00311	.13776	.00210
Stddev	.00031	.0304	.00567	.00016	.00029	.00009	.00024	.00138	.00005
%RSD	602.60	.35817	137.82	5.4985	.48811	134.84	7.7440	1.0010	2.3824

#1	.00017	8.4638	-.00812	.00280	.05948	-.00000	-.00328	.13679	.00213
#2	-.00027	8.5068	-.00010	.00303	.05989	-.00013	-.00294	.13874	.00206

Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Elem	Co2286	Cr2055	Cu3247	Fe2599	K_7664	Li6707	Mg2790	Mn2576	Mo2020
Line	228.616 {447}	205.560 {464}	324.754 {104}	259.940 {130}	766.490 { 44}	670.784 { 50}	279.079 {121}2	257.610 {131}	202.030 {467}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.00068	.01928	.01581	6.2124	.28192	.00849	.44372	.01899	.00112
Stddev	.00006	.00002	.00035	.0255	.00474	.00002	.00283	.00004	.00038
%RSD	8.3258	.12502	2.1930	.40972	1.6826	.22104	.63764	.19381	34.342

#1	.00064	.01926	.01556	6.1944	.27856	.00847	.44172	.01901	.00139
#2	.00072	.01929	.01605	6.2304	.28527	.00850	.44572	.01896	.00085

Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Elem	Na5895	Ni2316	P_1782	Pb2203	S_1820	Sb2068	Se1960	Si2881	Sn1899
Line	589.592 { 57}	231.604 {446}	178.284 {489}	220.353 {453}	182.034 {485}	206.833 {463}	196.090 {472}	288.158 {117}	189.989 {477}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.04285	.01016	.11652	.02231	.08672	.00228	.00011	2.0297	.00222
Stddev	.00440	.00013	.00015	.00110	.00873	.00237	.00253	.0225	.00045
%RSD	10.263	1.3228	.13294	4.9367	10.072	103.84	2289.0	1.1069	20.127

#1	.04596	.01007	.11641	.02308	.09289	.00395	-.00168	2.0138	.00253
#2	.03974	.01026	.11663	.02153	.08054	.00061	.00190	2.0456	.00190

Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Elem	Sr4077	Th2837	Ti3349	Ti1908	U_3701	V_2924	Zn2062	Zr3391
Line	407.771 { 83}	283.730 {119}	334.904 {101}	190.856 {477}	370.152 { 91}	292.402 {115}	206.200 {163}	339.198 { 99}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.00380	.00004	.18396	-.00056	.01059	.01555	.22850	.00974
Stddev	.00000	.00307	.00175	.00049	.00532	.00019	.00047	.00034
%RSD	.03882	7259.0	.95084	88.722	50.211	1.2488	.20582	3.5049

#1	.00380	.00221	.18520	-.00021	.01435	.01568	.22817	.00998
#2	.00380	-.00213	.18272	-.00090	.00683	.01541	.22883	.00950

Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit								
Low Limit								

Int. Std.	Y_2243	Y_3600	Y_3774
Line	224.306 {450}	360.073 { 94}	377.433 { 89}
Units	Cts/S	Cts/S	Cts/S
Avg	1584.1	32530.	5825.8
Stddev	2.9	38.	52.3
%RSD	.18274	.11756	.89837

#1	1582.0	32557.	5862.8
#2	1586.1	32503.	5788.8

Sample Name: 280-83054-A-15-A Acquired: 5/20/2016 20:22:40 Type: Unk
Method: 6500_026(v10) Mode: CONC Corr. Factor: 1.000000
User: kellyca Custom ID1: Custom ID2: Custom ID3:
Comment: 325404 6010c s

Elem	Ag3280	Al3092	As1890	B_2089	Ba4554	Be3130	Bi2230	Ca3179	Cd2288
Line	328.068 {103}	309.271 {109}	189.042 {478}	208.959 {461}	455.403 {74}	313.042 {108}	223.061 {451}	317.933 {106}	228.802 {447}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.00016	6.4557	.00046	.00119	.01790	-.00004	-.00345	.11087	.00043
Stddev	.00021	.0059	.00453	.00069	.00024	.00001	.00092	.00774	.00011
%RSD	129.42	.09105	984.33	57.782	1.3232	38.925	26.598	6.9803	26.626

#1	.00031	6.4599	-.00274	.00167	.01773	-.00003	-.00280	.10539	.00035
#2	.00001	6.4516	.00366	.00070	.01807	-.00005	-.00410	.11634	.00051

Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Elem	Co2286	Cr2055	Cu3247	Fe2599	K_7664	Li6707	Mg2790	Mn2576	Mo2020
Line	228.616 {447}	205.560 {464}	324.754 {104}	259.940 {130}	766.490 {44}	670.784 {50}	279.079 {121}2	257.610 {131}	202.030 {467}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	-.00001	.01638	.00465	5.7933	.21303	.00301	.30793	.01242	.00131
Stddev	.00017	.00035	.00007	.0230	.00514	.00118	.00301	.00010	.00013
%RSD	1139.5	2.1566	1.4606	.39709	2.4137	39.254	.97658	.84379	9.9047

#1	.00011	.01663	.00460	5.7770	.20939	.00217	.30580	.01249	.00122
#2	-.00014	.01613	.00470	5.8096	.21667	.00384	.31005	.01234	.00141

Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Elem	Na5895	Ni2316	P_1782	Pb2203	S_1820	Sb2068	Se1960	Si2881	Sn1899
Line	589.592 {57}	231.604 {446}	178.284 {489}	220.353 {453}	182.034 {485}	206.833 {463}	196.090 {472}	288.158 {117}	189.989 {477}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.03317	.00728	.10179	.00815	.04130	.00260	-.00341	1.7614	.00115
Stddev	.00674	.00086	.00224	.00066	.00000	.00111	.00208	.0049	.00147
%RSD	20.331	11.748	2.2046	8.0438	.00925	42.842	60.849	.28046	128.50

#1	.03793	.00788	.10021	.00861	.04130	.00181	-.00488	1.7649	.00219
#2	.02840	.00667	.10338	.00768	.04130	.00338	-.00194	1.7579	.00010

Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Elem	Sr4077	Th2837	Ti3349	Ti1908	U_3701	V_2924	Zn2062	Zr3391
Line	407.771 {83}	283.730 {119}	334.904 {101}	190.856 {477}	370.152 {91}	292.402 {115}	206.200 {163}	339.198 {99}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.00220	-.00221	.17857	-.00051	.01432	.01298	.02719	.00676
Stddev	.00005	.00195	.00150	.00254	.00691	.00054	.00038	.00037
%RSD	2.3899	88.394	.83990	500.19	48.262	4.1775	1.3852	5.5326

#1	.00223	-.00083	.17963	.00129	.01920	.01337	.02693	.00649
#2	.00216	-.00359	.17751	-.00230	.00943	.01260	.02746	.00702

Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit								
Low Limit								

Int. Std.	Y_2243	Y_3600	Y_3774
Line	224.306 {450}	360.073 {94}	377.433 {89}
Units	Cts/S	Cts/S	Cts/S
Avg	1575.2	32710.	5872.9
Stddev	1.9	63.	4.1
%RSD	.12156	.19329	.07037

#1	1573.9	32755.	5875.8
#2	1576.6	32666.	5870.0

Sample Name: 280-83054-A-16-A Acquired: 5/20/2016 20:25:27 Type: Unk
Method: 6500_026(v10) Mode: CONC Corr. Factor: 1.000000
User: kellyca Custom ID1: Custom ID2: Custom ID3:
Comment: 325404 6010c s

Elem	Ag3280	Al3092	As1890	B_2089	Ba4554	Be3130	Bi2230	Ca3179	Cd2288
Line	328.068 {103}	309.271 {109}	189.042 {478}	208.959 {461}	455.403 { 74}	313.042 {108}	223.061 {451}	317.933 {106}	228.802 {447}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.00014	6.9842	-.00414	.00172	.01629	-.00005	-.00312	.05750	.00043
Stddev	.00064	.0077	.00448	.00022	.00006	.00006	.00349	.00119	.00010
%RSD	443.58	.10973	108.07	12.796	.35390	140.42	111.89	2.0754	23.111

#1	-.00031	6.9896	-.00098	.00157	.01633	-.00009	-.00559	.05834	.00050
#2	.00060	6.9787	-.00731	.00188	.01625	-.00000	-.00065	.05666	.00036

Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Elem	Co2286	Cr2055	Cu3247	Fe2599	K_7664	Li6707	Mg2790	Mn2576	Mo2020
Line	228.616 {447}	205.560 {464}	324.754 {104}	259.940 {130}	766.490 { 44}	670.784 { 50}	279.079 {121}2	257.610 {131}	202.030 {467}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.00031	.01957	.00440	4.2530	.22530	.00391	.34797	.01702	.00032
Stddev	.00017	.00040	.00012	.0042	.02649	.00064	.00034	.00002	.00003
%RSD	53.146	2.0336	2.7481	.09894	11.756	16.476	.09769	.10576	8.7948

#1	.00043	.01985	.00449	4.2500	.24403	.00346	.34773	.01701	.00030
#2	.00020	.01929	.00432	4.2560	.20657	.00437	.34821	.01703	.00034

Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Elem	Na5895	Ni2316	P_1782	Pb2203	S_1820	Sb2068	Se1960	Si2881	Sn1899
Line	589.592 { 57}	231.604 {446}	178.284 {489}	220.353 {453}	182.034 {485}	206.833 {463}	196.090 {472}	288.158 {117}	189.989 {477}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.02318	.01076	.08649	.00604	.04544	-.00028	.00223	1.7878	.00257
Stddev	.01472	.00074	.00481	.00235	.00135	.00087	.00619	.0097	.00154
%RSD	63.490	6.9088	5.5620	38.899	2.9666	313.03	277.85	.54369	60.127

#1	.03359	.01023	.08309	.00770	.04449	-.00089	-.00215	1.7809	.00366
#2	.01277	.01128	.08989	.00438	.04640	.00034	.00661	1.7947	.00147

Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Elem	Sr4077	Th2837	Ti3349	Ti1908	U_3701	V_2924	Zn2062	Zr3391
Line	407.771 { 83}	283.730 {119}	334.904 {101}	190.856 {477}	370.152 { 91}	292.402 {115}	206.200 {163}	339.198 { 99}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.00134	.00126	.17844	-.00068	-.00758	.01023	.01975	.00638
Stddev	.00003	.00102	.00096	.00146	.01102	.00029	.00027	.00237
%RSD	1.9803	80.754	.54048	216.48	145.29	2.8782	1.3577	37.134

#1	.00136	.00198	.17776	-.00171	.00021	.01044	.01994	.00471
#2	.00133	.00054	.17912	.00036	-.01537	.01002	.01956	.00806

Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit								
Low Limit								

Int. Std.	Y_2243	Y_3600	Y_3774
Line	224.306 {450}	360.073 { 94}	377.433 { 89}
Units	Cts/S	Cts/S	Cts/S
Avg	1591.4	32774.	5804.5
Stddev	.4	30.	28.9
%RSD	.02268	.09287	.49708

#1	1591.7	32753.	5824.9
#2	1591.2	32796.	5784.1

Sample Name: 280-83054-A-17-A Acquired: 5/20/2016 20:28:13 Type: Unk
Method: 6500_026(v10) Mode: CONC Corr. Factor: 1.000000
User: kellyca Custom ID1: Custom ID2: Custom ID3:
Comment: 325404 6010c s

Elem	Ag3280	Al1670	As1890	B_2089	Ba4554	Be3130	Bi2230	Ca3179	Cd2288
Line	328.068 {103}	167.079 {502}	189.042 {478}	208.959 {461}	455.403 { 74}	313.042 {108}	223.061 {451}	317.933 {106}	228.802 {447}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.00023	1.0240	-.00506	.00095	.00399	-.00014	-.00318	.03638	.00002
Stddev	.00004	.0017	.00193	.00083	.00019	.00004	.00104	.00059	.00002
%RSD	15.187	.16640	38.261	86.930	4.6599	28.151	32.647	1.6220	102.05

#1	.00026	1.0252	-.00369	.00154	.00386	-.00017	-.00245	.03680	.00003
#2	.00021	1.0228	-.00642	.00037	.00412	-.00011	-.00391	.03597	.00001

Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Elem	Co2286	Cr2055	Cu3247	Fe2599	K_7664	Li6707	Mg2790	Mn2576	Mo2020
Line	228.616 {447}	205.560 {464}	324.754 {104}	259.940 {130}	766.490 { 44}	670.784 { 50}	279.079 {121}2	257.610 {131}	202.030 {467}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	-.00006	.01321	.00054	.46673	.09390	-.00071	.05957	.00399	.00033
Stddev	.00004	.00005	.00013	.00222	.03106	.00148	.00001	.00006	.00014
%RSD	71.247	.37977	24.735	.47526	33.081	209.15	.02307	1.4630	43.413

#1	-.00003	.01324	.00044	.46517	.07194	.00034	.05958	.00394	.00043
#2	-.00009	.01317	.00063	.46830	.11587	-.00176	.05956	.00403	.00023

Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Elem	Na5895	Ni2316	P_1782	Pb2203	S_1820	Sb2068	Se1960	Si2881	Sn1899
Line	589.592 { 57}	231.604 {446}	178.284 {489}	220.353 {453}	182.034 {485}	206.833 {463}	196.090 {472}	288.158 {117}	189.989 {477}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.03430	.00523	.01543	.00504	.02169	.00150	-.00310	.63243	.00168
Stddev	.00107	.00077	.00171	.00167	.00253	.00249	.01028	.00193	.00150
%RSD	3.1284	14.772	11.060	33.176	11.662	166.27	331.72	.30477	89.550

#1	.03506	.00578	.01664	.00386	.02348	-.00026	.00417	.63379	.00062
#2	.03355	.00468	.01423	.00623	.01990	.00326	-.01037	.63106	.00274

Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Elem	Sr4077	Th2837	Ti3349	Ti1908	U_3701	V_2924	Zn2062	Zr3391
Line	407.771 { 83}	283.730 {119}	334.904 {101}	190.856 {477}	370.152 { 91}	292.402 {115}	206.200 {163}	339.198 { 99}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.00041	-.00275	.15776	-.00295	.00733	.00277	.00608	.00195
Stddev	.00003	.00117	.00132	.00208	.00452	.00082	.00037	.00033
%RSD	6.6874	42.585	.83685	70.513	61.684	29.740	6.0084	16.905

#1	.00039	-.00357	.15869	-.00148	.01052	.00219	.00634	.00218
#2	.00043	-.00192	.15683	-.00442	.00413	.00336	.00582	.00172

Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit								
Low Limit								

Int. Std.	Y_2243	Y_3600	Y_3774
Line	224.306 {450}	360.073 { 94}	377.433 { 89}
Units	Cts/S	Cts/S	Cts/S
Avg	1576.3	32715.	5842.9
Stddev	.6	35.	9.3
%RSD	.03541	.10666	.15873

#1	1576.7	32690.	5849.5
#2	1576.0	32739.	5836.4

Sample Name: 280-83054-A-18-A Acquired: 5/20/2016 20:31:02 Type: Unk
Method: 6500_026(v10) Mode: CONC Corr. Factor: 1.000000
User: kellyca Custom ID1: Custom ID2: Custom ID3:
Comment: 325404 6010c s

Elem	Ag3280	Al1670	As1890	B_2089	Ba4554	Be3130	Bi2230	Ca3179	Cd2288
Line	328.068 {103}	167.079 {502}	189.042 {478}	208.959 {461}	455.403 { 74}	313.042 {108}	223.061 {451}	317.933 {106}	228.802 {447}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.00003	.89935	-.00364	-.00001	.00190	-.00008	-.00301	.02381	.00026
Stddev	.00016	.00215	.00686	.00047	.00018	.00002	.00008	.00141	.00011
%RSD	565.57	.23950	188.38	3601.5	9.4036	27.272	2.8238	5.9204	44.285

#1	-.00009	.90087	.00121	-.00035	.00203	-.00007	-.00295	.02282	.00033
#2	.00015	.89782	-.00849	.00032	.00178	-.00010	-.00307	.02481	.00018

Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Elem	Co2286	Cr2055	Cu3247	Fe2599	K_7664	Li6707	Mg2790	Mn2576	Mo2020
Line	228.616 {447}	205.560 {464}	324.754 {104}	259.940 {130}	766.490 { 44}	670.784 { 50}	279.079 {121}2	257.610 {131}	202.030 {467}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	-.00023	.00575	.00082	.43362	.07634	-.00082	.04518	.00272	.00061
Stddev	.00007	.00004	.00043	.00041	.00831	.00000	.00101	.00001	.00052
%RSD	28.842	.77550	52.524	.09472	10.881	.52440	2.2306	.22931	85.681

#1	-.00028	.00578	.00113	.43391	.08221	-.00082	.04447	.00272	.00098
#2	-.00018	.00572	.00052	.43333	.07047	-.00082	.04589	.00271	.00024

Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Elem	Na5895	Ni2316	P_1782	Pb2203	S_1820	Sb2068	Se1960	Si2881	Sn1899
Line	589.592 { 57}	231.604 {446}	178.284 {489}	220.353 {453}	182.034 {485}	206.833 {463}	196.090 {472}	288.158 {117}	189.989 {477}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.02021	.00181	.01907	.00333	.01121	.00064	-.00098	.58947	.00080
Stddev	.00065	.00001	.00209	.00239	.00026	.00178	.00418	.00271	.00004
%RSD	3.2037	.39347	10.959	71.947	2.3554	277.60	426.34	.45921	4.7708

#1	.02067	.00181	.02055	.00502	.01140	-.00062	-.00394	.58756	.00083
#2	.01975	.00182	.01759	.00163	.01102	.00190	.00198	.59139	.00077

Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Elem	Sr4077	Th2837	Ti3349	Ti1908	U_3701	V_2924	Zn2062	Zr3391
Line	407.771 { 83}	283.730 {119}	334.904 {101}	190.856 {477}	370.152 { 91}	292.402 {115}	206.200 {163}	339.198 { 99}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.00036	-.00429	.16051	-.00131	.01619	.00249	.00347	.00170
Stddev	.00002	.00218	.00055	.00105	.03302	.00059	.00007	.00060
%RSD	4.1931	50.838	.34474	80.124	203.89	23.582	1.9141	35.591

#1	.00037	-.00275	.16012	-.00057	-.00715	.00291	.00352	.00213
#2	.00035	-.00583	.16090	-.00205	.03954	.00208	.00342	.00127

Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit								
Low Limit								

Int. Std.	Y_2243	Y_3600	Y_3774
Line	224.306 {450}	360.073 { 94}	377.433 { 89}
Units	Cts/S	Cts/S	Cts/S
Avg	1572.2	32677.	5831.0
Stddev	1.5	43.	33.1
%RSD	.09785	.13151	.56802

#1	1573.3	32707.	5807.6
#2	1571.1	32646.	5854.4

Sample Name: 280-83054-A-19-A Acquired: 5/20/2016 20:33:50 Type: Unk
Method: 6500_026(v10) Mode: CONC Corr. Factor: 1.000000
User: kellyca Custom ID1: Custom ID2: Custom ID3:
Comment: 325404 6010c s

Elem	Ag3280	Al1670	As1890	B_2089	Ba4554	Be3130	Bi2230	Ca3179	Cd2288
Line	328.068 {103}	167.079 {502}	189.042 {478}	208.959 {461}	455.403 { 74}	313.042 {108}	223.061 {451}	317.933 {106}	228.802 {447}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.00009	1.8091	-.00595	.00070	.00497	-.00010	-.00454	.04007	.00027
Stddev	.00002	.0061	.00113	.00055	.00025	.00015	.00044	.00299	.00012
%RSD	20.337	.33663	19.014	77.738	4.9635	158.07	9.6338	7.4694	46.720

#1	.00008	1.8047	-.00675	.00109	.00479	-.00021	-.00484	.03796	.00018
#2	.00010	1.8134	-.00515	.00032	.00514	.00001	-.00423	.04219	.00035

Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Elem	Co2286	Cr2055	Cu3247	Fe2599	K_7664	Li6707	Mg2790	Mn2576	Mo2020
Line	228.616 {447}	205.560 {464}	324.754 {104}	259.940 {130}	766.490 { 44}	670.784 { 50}	279.079 {121}2	257.610 {131}	202.030 {467}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	-.00038	.00845	.00074	.68765	.11487	.00012	.10443	.00578	.00033
Stddev	.00010	.00020	.00018	.03209	.01673	.00005	.00558	.00004	.00037
%RSD	25.753	2.3758	24.776	4.6671	14.568	39.781	5.3454	.60762	112.03

#1	-.00045	.00859	.00061	.66495	.10304	.00009	.10048	.00580	.00007
#2	-.00031	.00830	.00087	.71034	.12670	.00015	.10837	.00575	.00059

Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Elem	Na5895	Ni2316	P_1782	Pb2203	S_1820	Sb2068	Se1960	Si2881	Sn1899
Line	589.592 { 57}	231.604 {446}	178.284 {489}	220.353 {453}	182.034 {485}	206.833 {463}	196.090 {472}	288.158 {117}	189.989 {477}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.02388	.00257	.02441	.00320	.02118	.00093	.00030	1.1294	.00263
Stddev	.00119	.00018	.00334	.00011	.00318	.00162	.01138	.0583	.00167
%RSD	4.9869	7.1848	13.680	3.4378	15.034	174.33	3753.7	5.1638	63.642

#1	.02472	.00270	.02205	.00328	.02343	-.00022	-.00774	1.0882	.00381
#2	.02304	.00244	.02677	.00313	.01893	.00207	.00835	1.1706	.00144

Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Elem	Sr4077	Th2837	Ti3349	Ti1908	U_3701	V_2924	Zn2062	Zr3391
Line	407.771 { 83}	283.730 {119}	334.904 {101}	190.856 {477}	370.152 { 91}	292.402 {115}	206.200 {163}	339.198 { 99}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.00065	-.00283	.19335	-.00115	.01946	.00392	.00490	.00220
Stddev	.00004	.00164	.00146	.00142	.00820	.00031	.00052	.00000
%RSD	6.3183	58.004	.75627	123.96	42.151	7.9755	10.546	.11049

#1	.00062	-.00167	.19438	-.00014	.01366	.00414	.00527	.00220
#2	.00068	-.00399	.19232	-.00215	.02527	.00370	.00454	.00221

Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit								
Low Limit								

Int. Std.	Y_2243	Y_3600	Y_3774
Line	224.306 {450}	360.073 { 94}	377.433 { 89}
Units	Cts/S	Cts/S	Cts/S
Avg	1570.0	32604.	5693.8
Stddev	.9	11.	259.0
%RSD	.05451	.03388	4.5494

#1	1569.4	32596.	5877.0
#2	1570.6	32612.	5510.7

Sample Name: ccvh-3900196 Acquired: 5/20/2016 20:36:37 Type: QC

Method: 6500_026(v10) Mode: CONC Corr. Factor: 1.000000

User: kellyca Custom ID1: Custom ID2: Custom ID3:

Comment:

Elem	Ag3280	Al3092	As1890	B_2089	Ba4554	Be3130	Bi2230	Ca3179	Cd2288	Co2286	Cr2055	Cu3247	Fe2714
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	-.00143	47.722	-.00319	.00101	.00027	-.00031	1.0613	-.05874	-.00085	.00300	-.00055	.00725	47.684
Stddev	.00028	.427	.00326	.00063	.00003	.00001	.0149	.00116	.00009	.00014	.00023	.00032	.274
%RSD	19.573	.89481	102.19	62.684	10.540	4.4021	1.4035	1.9748	10.965	4.7967	41.517	4.3677	.57472

#1	-.00162	47.420	-.00549	.00146	.00029	-.00032	1.0508	-.05956	-.00092	.00311	-.00039	.00703	47.490
#2	-.00123	48.024	-.00088	.00056	.00025	-.00030	1.0719	-.05792	-.00078	.00290	-.00071	.00748	47.878

Check ?	None	Chk Pass	None	None	None	None	Chk Pass	None	None	None	None	None	Chk Pass
Value													
Range													

Elem	K_7664	Li6707	Mg2790	Mn2576	Mo2020	Na8183	Ni2316	P_1782	Pb2203	S_1820	Sb2068	Se1960	Si2881
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.06001	-.00056	.14281	-.00067	-.00252	258.25	-.00061	.00554	.00158	5.0858	-.00140	.00374	.00110
Stddev	.01458	.00140	.00455	.00002	.00041	.93	.00017	.00252	.00105	.0297	.00302	.00981	.00771
%RSD	24.301	250.39	3.1890	3.6343	16.249	.35911	27.509	45.554	66.687	.58502	214.90	262.20	701.60

#1	.04970	-.00155	.13959	-.00065	-.00223	257.60	-.00072	.00376	.00232	5.0647	-.00354	-.00320	-.00435
#2	.07032	.00043	.14603	-.00068	-.00281	258.91	-.00049	.00733	.00083	5.1068	.00073	.01068	.00655

Check ?	None	None	None	None	None	Chk Pass	None	None	None	Chk Pass	None	None	None
Value													
Range													

Elem	Sn1899	Sr4077	Th2837	Ti3349	Tl1908	U_3701	V_2924	Zn2062	Zr3391
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.00308	.00027	4.9335	.02553	-.00209	10.191	-.01613	-.00237	-.00676
Stddev	.00049	.00003	.0103	.00051	.00030	.011	.00026	.00033	.00194
%RSD	16.031	12.782	.20881	1.9833	14.375	.10575	1.6275	13.927	28.700

#1	.00273	.00025	4.9408	.02517	-.00188	10.198	-.01631	-.00261	-.00813
#2	.00343	.00030	4.9262	.02588	-.00231	10.183	-.01594	-.00214	-.00538

Check ?	None	None	Chk Pass	None	None	Chk Pass	None	None	None
Value									
Range									

Int. Std.	Y_2243	Y_3600	Y_3774
Units	Cts/S	Cts/S	Cts/S
Avg	1514.6	30476.	5717.7
Stddev	.2	78.	20.7
%RSD	.01483	.25459	.36284

#1	1514.5	30422.	5732.4
#2	1514.8	30531.	5703.1

Sample Name: ccv-3900195 Acquired: 5/20/2016 20:39:29 Type: QC
Method: 6500_026(v10) Mode: CONC Corr. Factor: 1.000000
User: kellyca Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	Ag3280	Al1670	As1890	B_2089	Ba4554	Be3130	Bi2230	Ca3179	Cd2288	Co2286	Cr2055	Cu3247	Fe2599
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.49888	.52038	1.0220	.52986	.50021	.51522	-.00363	5.0092	.52057	.52015	.51292	.50101	2.4878
Stddev	.00061	.00097	.0030	.00002	.00066	.00071	.00361	.0026	.00176	.00141	.00077	.00094	.0052
%RSD	.12327	.18653	.29646	.00286	.13148	.13767	99.391	.05197	.33719	.27108	.15067	.18860	.20999

#1	.49931	.52107	1.0199	.52987	.50068	.51472	-.00619	5.0073	.52181	.52114	.51346	.50167	2.4841
#2	.49844	.51970	1.0241	.52985	.49975	.51572	-.00108	5.0110	.51933	.51915	.51237	.50034	2.4915

Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	None	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Value													
Range													

Elem	K_7664	Li6707	Mg2790	Mn2576	Mo2020	Na5895	Ni2316	P_1782	Pb2203	S_1820	Sb2068	Se1960	Si2881
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	52.597	1.0864	20.169	.50122	.51700	5.2699	.50996	1.0198	1.0445	.00709	1.0386	1.0176	5.0374
Stddev	.086	.0035	.035	.00187	.00124	.0075	.00119	.0016	.0026	.00017	.0014	.0010	.0158
%RSD	.16426	.32045	.17253	.37357	.24021	.14173	.23249	.15602	.24489	2.3894	.13016	.10182	.31324

#1	52.658	1.0888	20.194	.50254	.51788	5.2752	.51080	1.0187	1.0463	.00721	1.0376	1.0169	5.0263
#2	52.536	1.0839	20.145	.49990	.51613	5.2646	.50913	1.0209	1.0427	.00697	1.0396	1.0184	5.0486

Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	None	Chk Pass	Chk Pass	Chk Pass
Value													
Range													

Elem	Sn1899	Sr4077	Th2837	Ti3349	Ti1908	U_3701	V_2924	Zn2062	Zr3391
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	1.0110	.49403	-.00306	.48150	1.0459	.02376	.48186	.49926	.50176
Stddev	.0002	.00093	.00034	.00043	.0014	.00660	.00077	.00265	.00093
%RSD	.02063	.18803	11.267	.08936	.13392	27.778	.16022	.53051	.18548

#1	1.0111	.49337	-.00282	.48180	1.0449	.01909	.48240	.50113	.50110
#2	1.0108	.49468	-.00330	.48119	1.0469	.02843	.48131	.49738	.50242

Check ?	Chk Pass	Chk Pass	None	Chk Pass	Chk Pass	None	Chk Pass	Chk Pass	Chk Pass
Value									
Range									

Int. Std.	Y_2243	Y_3600	Y_3774
Units	Cts/S	Cts/S	Cts/S
Avg	1541.1	31281.	5745.1
Stddev	2.1	110.	4.4
%RSD	.13340	.35129	.07613

#1	1539.7	31204.	5748.2
#2	1542.6	31359.	5742.0

Sample Name: ccb Acquired: 5/20/2016 20:42:07 Type: QC
Method: 6500_026(v10) Mode: CONC Corr. Factor: 1.000000
User: kellyca Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	Ag3280	Al1670	As1890	B_2089	Ba4554	Be3130	Bi2230	Ca3179	Cd2288	Co2286	Cr2055
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.00010	.00009	W -.00491	.00141	-.00002	-.00006	-.00330	-.00305	.00019	-.00074	.00000
Stddev	.00031	.00133	.00283	.00003	.00003	.00000	.00134	.00153	.00000	.00003	.00014
%RSD	294.96	1541.6	57.654	1.8424	187.77	1.5673	40.480	50.299	2.2831	4.5109	3040.7

#1	.00032	.00102	-.00291	.00143	.00001	-.00006	-.00424	-.00413	.00019	-.00076	-.00009
#2	-.00011	-.00085	-.00692	.00139	-.00004	-.00005	-.00236	-.00196	.00019	-.00071	.00010

Check ?	Chk Pass	Chk Pass	Chk Warn	Chk Pass	Chk Pass	Chk Pass	None	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit			.00440								
Low Limit			-.00440								

Elem	Cu3247	Fe2599	K_7664	Li6707	Mg2790	Mn2576	Mo2020	Na5895	Ni2316	P_1782	Pb2203
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.00004	.01357	.09538	-.00132	.00172	.00008	.00050	.01096	.00023	-.00182	-.00181
Stddev	.00019	.00017	.01604	.00064	.00184	.00001	.00007	.00420	.00062	.00476	.00021
%RSD	447.83	1.2310	16.814	48.417	107.22	9.8900	13.155	38.344	272.84	261.61	11.362

#1	.00018	.01345	.10672	-.00087	.00042	.00008	.00055	.01393	.00067	.00155	-.00166
#2	-.00009	.01369	.08404	-.00178	.00302	.00009	.00046	.00799	-.00021	-.00519	-.00195

Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit											
Low Limit											

Elem	S_1820	Sb2068	Se1960	Si2881	Sn1899	Sr4077	Th2837	Ti3349	Ti1908	U_3701	V_2924
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.00552	.00220	-.00338	-.01122	.00088	.00000	-.00413	.00037	-.00378	.02093	.00070
Stddev	.00093	.00042	.00160	.00296	.00015	.00007	.00101	.00017	.00050	.01767	.00010
%RSD	16.859	18.999	47.320	26.391	17.027	1582.1	24.398	45.626	13.125	84.438	14.629

#1	.00618	.00250	-.00451	-.01331	.00077	-.00004	-.00484	.00025	-.00413	.03343	.00063
#2	.00486	.00191	-.00225	-.00912	.00098	.00005	-.00342	.00049	-.00343	.00843	.00077

Check ?	None	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit											
Low Limit											

Elem	Zn2062	Zr3391
Units	ppm	ppm
Avg	-.00063	.00061
Stddev	.00170	.00023
%RSD	271.76	36.889

#1	.00058	.00077
#2	-.00183	.00045

Check ?	Chk Pass	Chk Pass
High Limit		
Low Limit		

Int. Std.	Y_2243	Y_3600	Y_3774
Units	Cts/S	Cts/S	Cts/S
Avg	1553.9	31808.	5689.8
Stddev	1.7	32.	21.2
%RSD	.11034	.10139	.37340

#1	1555.1	31831.	5704.8
#2	1552.7	31786.	5674.7

Sample Name: ccvl-3903059 Acquired: 5/20/2016 20:44:55 Type: QC
Method: 6500_026(v10) Mode: CONC Corr. Factor: 1.000000
User: kellyca Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	Ag3280	Al1670	As1890	B_2089	Ba4554	Be3130	Bi2230	Ca3179	Cd2288	Co2286	Cr2055	Cu3247
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.01008	.10846	F .01023	.10569	.01027	.00100	.11162	.20486	.00536	.01039	.01052	.01583
Stddev	.00101	.00168	.00155	.00017	.00003	.00004	.00412	.00372	.00010	.00019	.00012	.00008
%RSD	10.013	1.5525	15.142	.16447	.24812	4.3521	3.6898	1.8174	1.9230	1.8358	1.1016	.47857

#1	.00936	.10966	.00913	.10557	.01025	.00096	.10870	.20750	.00529	.01026	.01060	.01578
#2	.01079	.10727	.01132	.10582	.01029	.00103	.11453	.20223	.00543	.01053	.01044	.01588

Check ?	Chk Pass	Chk Pass	Chk Fail	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Value			.01500									
Range			-30.000%									

Elem	Fe2599	K_7664	Li6707	Mg2790	Mn2576	Mo2020	Na5895	Ni2316	P_1782	Pb2203	S_1820	Sb2068
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.12021	3.2188	.01022	.20964	.01040	.02102	1.0627	.04165	2.9870	.00771	.00278	.02244
Stddev	.00032	.0087	.00050	.00096	.00003	.00049	.0083	.00017	.0119	.00077	.00023	.00530
%RSD	.26541	.27105	4.8712	.45879	.27678	2.3212	.78000	.41943	.39836	10.016	8.3254	23.609

#1	.11999	3.2250	.00987	.21032	.01042	.02067	1.0568	.04177	2.9954	.00717	.00294	.01869
#2	.12044	3.2126	.01057	.20896	.01038	.02136	1.0685	.04153	2.9786	.00826	.00262	.02619

Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	None	Chk Pass
Value												
Range												

Elem	Se1960	Si2881	Sn1899	Sr4077	Th2837	Ti3349	Ti1908	U_3701	V_2924	Zn2062	Zr3391
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	F .00977	.49482	.10448	.00984	.01136	.00922	.01437	F .08362	.00956	.01987	.01449
Stddev	.00008	.00462	.00226	.00008	.00125	.00020	.00116	.00731	.00021	.00023	.00027
%RSD	.86027	.93458	2.1639	.84194	10.961	2.1426	8.0539	8.7433	2.2283	1.1453	1.8573

#1	.00971	.49809	.10289	.00978	.01224	.00908	.01355	.07845	.00971	.01971	.01430
#2	.00983	.49155	.10608	.00990	.01048	.00936	.01519	.08879	.00941	.02003	.01468

Check ?	Chk Fail	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Fail	Chk Pass	Chk Pass	Chk Pass
Value	.01500							.06000			
Range	-30.000%							30.000%			

Int. Std.	Y_2243	Y_3600	Y_3774
Units	Cts/S	Cts/S	Cts/S
Avg	1575.8	32090.	5736.4
Stddev	2.2	42.	14.9
%RSD	.13950	.13015	.25900

#1	1577.4	32060.	5725.9
#2	1574.2	32119.	5746.9

Sample Name: 280-83054-A-20-A Acquired: 5/20/2016 20:47:43 Type: Unk
Method: 6500_026(v10) Mode: CONC Corr. Factor: 1.000000
User: kellyca Custom ID1: Custom ID2: Custom ID3:
Comment: 325404 6010c s

Elem	Ag3280	Al3092	As1890	B_2089	Ba4554	Be3130	Bi2230	Ca3179	Cd2288
Line	328.068 {103}	309.271 {109}	189.042 {478}	208.959 {461}	455.403 { 74}	313.042 {108}	223.061 {451}	317.933 {106}	228.802 {447}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	-.00013	7.2472	-.00180	.00200	.01421	-.00004	-.00281	.05448	.00023
Stddev	.00027	.0090	.00069	.00019	.00015	.00007	.00412	.00118	.00000
%RSD	203.69	.12372	38.325	9.4619	1.0220	158.40	146.76	2.1652	.53747

#1	.00006	7.2408	-.00131	.00213	.01432	-.00009	-.00572	.05532	.00023
#2	-.00032	7.2535	-.00228	.00186	.01411	.00001	.00011	.05365	.00023

Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Elem	Co2286	Cr2055	Cu3247	Fe2599	K_7664	Li6707	Mg2790	Mn2576	Mo2020
Line	228.616 {447}	205.560 {464}	324.754 {104}	259.940 {130}	766.490 { 44}	670.784 { 50}	279.079 {121}2	257.610 {131}	202.030 {467}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.00029	.03088	.00398	3.0426	.27635	.00407	.34423	.01263	.00094
Stddev	.00035	.00003	.00018	.0007	.01132	.00037	.00070	.00002	.00040
%RSD	120.53	.09240	4.6355	.02321	4.0956	9.2032	.20405	.12567	42.740

#1	.00053	.03090	.00385	3.0421	.28435	.00380	.34472	.01264	.00122
#2	.00004	.03086	.00411	3.0431	.26835	.00433	.34373	.01262	.00066

Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Elem	Na5895	Ni2316	P_1782	Pb2203	S_1820	Sb2068	Se1960	Si2881	Sn1899
Line	589.592 { 57}	231.604 {446}	178.284 {489}	220.353 {453}	182.034 {485}	206.833 {463}	196.090 {472}	288.158 {117}	189.989 {477}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.02987	.01428	.06408	.00924	.04739	.00086	-.00406	1.8891	.00241
Stddev	.00237	.00004	.00157	.00163	.00250	.00274	.00194	.0017	.00025
%RSD	7.9429	.28338	2.4446	17.676	5.2739	318.67	47.793	.08952	10.209

#1	.02819	.01425	.06519	.00809	.04916	-.00108	-.00269	1.8903	.00258
#2	.03155	.01431	.06297	.01040	.04563	.00280	-.00543	1.8879	.00223

Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Elem	Sr4077	Th2837	Ti3349	Ti1908	U_3701	V_2924	Zn2062	Zr3391
Line	407.771 { 83}	283.730 {119}	334.904 {101}	190.856 {477}	370.152 { 91}	292.402 {115}	206.200 {163}	339.198 { 99}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.00135	-.00186	.13595	-.00096	.01252	.00954	.01585	.00491
Stddev	.00001	.00017	.00132	.00234	.00455	.00018	.00128	.00031
%RSD	.68151	9.0166	.97455	245.28	36.360	1.8336	8.0764	6.3209

#1	.00136	-.00174	.13689	-.00261	.01573	.00967	.01675	.00513
#2	.00134	-.00198	.13502	.00070	.00930	.00942	.01494	.00469

Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit								
Low Limit								

Int. Std.	Y_2243	Y_3600	Y_3774
Line	224.306 {450}	360.073 { 94}	377.433 { 89}
Units	Cts/S	Cts/S	Cts/S
Avg	1593.9	32602.	5703.9
Stddev	.2	171.	6.8
%RSD	.01159	.52582	.11985

#1	1594.0	32481.	5708.7
#2	1593.8	32723.	5699.1

Sample Name: 280-83054-A-21-A Acquired: 5/20/2016 20:50:29 Type: Unk
Method: 6500_026(v10) Mode: CONC Corr. Factor: 1.000000
User: kellyca Custom ID1: Custom ID2: Custom ID3:
Comment: 325404 6010c s

Elem	Ag3280	Al3092	As1890	B_2089	Ba4554	Be3130	Bi2230	Ca3179	Cd2288
Line	328.068 {103}	309.271 {109}	189.042 {478}	208.959 {461}	455.403 { 74}	313.042 {108}	223.061 {451}	317.933 {106}	228.802 {447}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	-.00024	13.054	.00176	.00235	.02544	-.00003	-.00440	.10932	.00001
Stddev	.00066	.086	.00144	.00056	.00023	.00002	.00227	.00016	.00022
%RSD	279.41	.65875	82.060	23.662	.90695	57.667	51.443	.14265	2344.9

#1	.00023	12.993	.00074	.00196	.02527	-.00005	-.00280	.10943	-.00015
#2	-.00070	13.115	.00278	.00275	.02560	-.00002	-.00601	.10921	.00017

Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Elem	Co2286	Cr2055	Cu3247	Fe2599	K_7664	Li6707	Mg2790	Mn2576	Mo2020
Line	228.616 {447}	205.560 {464}	324.754 {104}	259.940 {130}	766.490 { 44}	670.784 { 50}	279.079 {121}2	257.610 {131}	202.030 {467}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.00042	.03920	.00874	6.6347	.38626	.00802	.61314	.02337	.00067
Stddev	.00015	.00010	.00023	.0313	.00005	.00030	.00133	.00008	.00013
%RSD	35.005	.25672	2.5929	.47217	.01389	3.7059	.21721	.35409	19.427

#1	.00052	.03927	.00890	6.6126	.38622	.00823	.61408	.02342	.00076
#2	.00031	.03913	.00858	6.6569	.38630	.00781	.61220	.02331	.00058

Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Elem	Na5895	Ni2316	P_1782	Pb2203	S_1820	Sb2068	Se1960	Si2881	Sn1899
Line	589.592 { 57}	231.604 {446}	178.284 {489}	220.353 {453}	182.034 {485}	206.833 {463}	196.090 {472}	288.158 {117}	189.989 {477}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.04636	.01857	.11859	.01283	.07401	.00111	-.00062	2.4465	.00154
Stddev	.00574	.00011	.00753	.00039	.00400	.00119	.00096	.0497	.00056
%RSD	12.383	.59542	6.3453	3.0534	5.4108	106.78	155.29	2.0328	36.362

#1	.04230	.01849	.12392	.01255	.07118	.00027	.00006	2.4113	.00194
#2	.05042	.01865	.11327	.01311	.07684	.00195	-.00130	2.4817	.00114

Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Elem	Sr4077	Th2837	Ti3349	Ti1908	U_3701	V_2924	Zn2062	Zr3391
Line	407.771 { 83}	283.730 {119}	334.904 {101}	190.856 {477}	370.152 { 91}	292.402 {115}	206.200 {163}	339.198 { 99}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.00231	-.00166	.22189	-.00280	.02135	.01858	.02592	.01110
Stddev	.00007	.00190	.00216	.00006	.02839	.00020	.00036	.00081
%RSD	2.9954	114.77	.97504	1.9765	132.98	1.0989	1.3762	7.3138

#1	.00236	-.00031	.22342	-.00284	.00127	.01844	.02618	.01053
#2	.00226	-.00300	.22036	-.00276	.04143	.01872	.02567	.01168

Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit								
Low Limit								

Int. Std.	Y_2243	Y_3600	Y_3774
Line	224.306 {450}	360.073 { 94}	377.433 { 89}
Units	Cts/S	Cts/S	Cts/S
Avg	1589.2	32831.	5869.8
Stddev	3.1	209.	16.0
%RSD	.19389	.63784	.27263

#1	1591.4	32683.	5881.1
#2	1587.1	32979.	5858.5

Sample Name: 280-83054-A-22-A Acquired: 5/20/2016 20:53:15 Type: Unk
Method: 6500_026(v10) Mode: CONC Corr. Factor: 1.000000
User: kellyca Custom ID1: Custom ID2: Custom ID3:
Comment: 325404 6010c s

Elem	Ag3280	Al3092	As1890	B_2089	Ba4554	Be3130	Bi2230	Ca3179	Cd2288
Line	328.068 {103}	309.271 {109}	189.042 {478}	208.959 {461}	455.403 { 74}	313.042 {108}	223.061 {451}	317.933 {106}	228.802 {447}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	-.00028	36.171	.00243	.00508	.09137	.00014	-.00191	.30099	.00296
Stddev	.00024	.101	.00169	.00055	.00021	.00003	.00184	.00339	.00000
%RSD	85.008	.27872	69.298	10.796	.23102	25.704	96.272	1.1265	.08364

#1	-.00011	36.100	.00124	.00547	.09152	.00016	-.00061	.30339	.00296
#2	-.00045	36.243	.00362	.00469	.09122	.00011	-.00321	.29860	.00295

Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Elem	Co2286	Cr2055	Cu3247	Fe2599	K_7664	Li6707	Mg2790	Mn2576	Mo2020
Line	228.616 {447}	205.560 {464}	324.754 {104}	259.940 {130}	766.490 { 44}	670.784 { 50}	279.079 {121}2	257.610 {131}	202.030 {467}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.00179	.06768	.09698	16.888	.85019	.01999	1.5422	.07319	.00199
Stddev	.00016	.00014	.00025	.018	.01894	.00017	.0051	.00015	.00010
%RSD	8.6791	.20690	.26161	.10820	2.2278	.86507	.32984	.19822	5.0135

#1	.00168	.06758	.09680	16.875	.86358	.02011	1.5386	.07308	.00206
#2	.00190	.06778	.09716	16.901	.83680	.01986	1.5458	.07329	.00192

Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Elem	Na5895	Ni2316	P_1782	Pb2203	S_1820	Sb2068	Se1960	Si2881	Sn1899
Line	589.592 { 57}	231.604 {446}	178.284 {489}	220.353 {453}	182.034 {485}	206.833 {463}	196.090 {472}	288.158 {117}	189.989 {477}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.06133	.03449	.30599	.08592	.23507	-.00067	-.00150	4.4179	.00226
Stddev	.00381	.00029	.00369	.00150	.00311	.00100	.00418	.0053	.00245
%RSD	6.2155	.83817	1.2053	1.7459	1.3242	147.99	279.80	.12074	108.43

#1	.06403	.03470	.30859	.08698	.23728	.00003	-.00445	4.4217	.00399
#2	.05863	.03429	.30338	.08485	.23287	-.00138	.00146	4.4142	.00053

Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Elem	Sr4077	Th2837	Ti3349	Ti1908	U_3701	V_2924	Zn2062	Zr3391
Line	407.771 { 83}	283.730 {119}	334.904 {101}	190.856 {477}	370.152 { 91}	292.402 {115}	206.200 {163}	339.198 { 99}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.00671	.00222	.40254	-.00236	-.00210	.04344	.13310	.02147
Stddev	.00003	.00067	.00123	.00029	.00165	.00054	.00087	.00052
%RSD	.51130	30.349	.30579	12.413	78.197	1.2353	.65308	2.4337

#1	.00669	.00269	.40167	-.00215	-.00094	.04382	.13371	.02110
#2	.00673	.00174	.40341	-.00257	-.00327	.04306	.13248	.02184

Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit								
Low Limit								

Int. Std.	Y_2243	Y_3600	Y_3774
Line	224.306 {450}	360.073 { 94}	377.433 { 89}
Units	Cts/S	Cts/S	Cts/S
Avg	1591.8	32228.	5885.9
Stddev	.9	11.	15.0
%RSD	.05715	.03369	.25494

#1	1591.2	32221.	5896.5
#2	1592.4	32236.	5875.3

Sample Name: 280-83054-A-23-A Acquired: 5/20/2016 20:56:00 Type: Unk
Method: 6500_026(v10) Mode: CONC Corr. Factor: 1.000000
User: kellyca Custom ID1: Custom ID2: Custom ID3:
Comment: 325404 6010c s

Elem	Ag3280	Al3092	As1890	B_2089	Ba4554	Be3130	Bi2230	Ca3179	Cd2288
Line	328.068 {103}	309.271 {109}	189.042 {478}	208.959 {461}	455.403 { 74}	313.042 {108}	223.061 {451}	317.933 {106}	228.802 {447}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.00006	8.0470	-.00273	.00161	.01558	-.00010	-.00388	.05037	.00017
Stddev	.00093	.0701	.00127	.00061	.00011	.00003	.00280	.00219	.00001
%RSD	1675.1	.87138	46.496	37.709	.73788	28.477	72.178	4.3380	7.1990

#1	-.00060	7.9974	-.00363	.00204	.01550	-.00008	-.00190	.05192	.00018
#2	.00071	8.0966	-.00183	.00118	.01566	-.00012	-.00586	.04883	.00016

Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Elem	Co2286	Cr2055	Cu3247	Fe2599	K_7664	Li6707	Mg2790	Mn2576	Mo2020
Line	228.616 {447}	205.560 {464}	324.754 {104}	259.940 {130}	766.490 { 44}	670.784 { 50}	279.079 {121}2	257.610 {131}	202.030 {467}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.00005	.02211	.00506	2.6043	.26947	.00477	.39266	.01213	.00081
Stddev	.00008	.00004	.00020	.0097	.00507	.00097	.00546	.00011	.00009
%RSD	175.91	.19984	3.9800	.37064	1.8829	20.396	1.3916	.94071	10.959

#1	-.00001	.02214	.00492	2.5975	.26588	.00409	.39653	.01221	.00075
#2	.00010	.02208	.00521	2.6112	.27306	.00546	.38880	.01205	.00087

Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Elem	Na5895	Ni2316	P_1782	Pb2203	S_1820	Sb2068	Se1960	Si2881	Sn1899
Line	589.592 { 57}	231.604 {446}	178.284 {489}	220.353 {453}	182.034 {485}	206.833 {463}	196.090 {472}	288.158 {117}	189.989 {477}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.03520	.01038	.06579	.00580	.06021	-.00036	-.00133	2.0749	.00196
Stddev	.01050	.00044	.00036	.00062	.00088	.00171	.00461	.0244	.00052
%RSD	29.840	4.1961	.54269	10.717	1.4690	476.81	347.76	1.1740	26.678

#1	.02777	.01007	.06554	.00536	.05959	.00085	-.00459	2.0921	.00233
#2	.04262	.01069	.06604	.00624	.06084	-.00157	.00194	2.0577	.00159

Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Elem	Sr4077	Th2837	Ti3349	Ti1908	U_3701	V_2924	Zn2062	Zr3391
Line	407.771 { 83}	283.730 {119}	334.904 {101}	190.856 {477}	370.152 { 91}	292.402 {115}	206.200 {163}	339.198 { 99}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.00154	-.00240	.16352	-.00202	.00524	.01117	.01595	.00592
Stddev	.00002	.00105	.00018	.00364	.01441	.00027	.00082	.00007
%RSD	1.2131	43.788	.11095	180.02	274.86	2.4022	5.1283	1.1684

#1	.00153	-.00314	.16365	.00055	-.00494	.01098	.01538	.00597
#2	.00155	-.00166	.16339	-.00460	.01543	.01136	.01653	.00588

Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit								
Low Limit								

Int. Std.	Y_2243	Y_3600	Y_3774
Line	224.306 {450}	360.073 { 94}	377.433 { 89}
Units	Cts/S	Cts/S	Cts/S
Avg	1575.5	32555.	5917.0
Stddev	6.8	68.	4.8
%RSD	.43422	.20916	.08122

#1	1580.4	32507.	5920.4
#2	1570.7	32603.	5913.6

Sample Name: 280-83054-A-24-A Acquired: 5/20/2016 20:58:48 Type: Unk
Method: 6500_026(v10) Mode: CONC Corr. Factor: 1.000000
User: kellyca Custom ID1: Custom ID2: Custom ID3:
Comment: 325404 6010c s

Elem	Ag3280	Al3092	As1890	B_2089	Ba4554	Be3130	Bi2230	Ca3179	Cd2288
Line	328.068 {103}	309.271 {109}	189.042 {478}	208.959 {461}	455.403 { 74}	313.042 {108}	223.061 {451}	317.933 {106}	228.802 {447}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	-.00005	28.481	.00358	.00308	.06909	.00012	-.00199	.31048	.00466
Stddev	.00010	.308	.00118	.00024	.00070	.00003	.00155	.00018	.00007
%RSD	212.86	1.0823	33.076	7.7284	1.0099	27.442	77.993	.05776	1.4849

#1	.00002	28.263	.00442	.00324	.06859	.00010	-.00089	.31036	.00470
#2	-.00012	28.699	.00274	.00291	.06958	.00014	-.00308	.31061	.00461

Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Elem	Co2286	Cr2055	Cu3247	Fe2599	K_7664	Li6707	Mg2790	Mn2576	Mo2020
Line	228.616 {447}	205.560 {464}	324.754 {104}	259.940 {130}	766.490 { 44}	670.784 { 50}	279.079 {121}2	257.610 {131}	202.030 {467}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.00144	.05590	.09723	13.861	.59639	.01795	1.0425	.08329	.00159
Stddev	.00035	.00022	.00031	.094	.01602	.00097	.0034	.00026	.00012
%RSD	24.209	.39589	.32266	.67683	2.6869	5.4149	.32088	.31698	7.8468

#1	.00169	.05575	.09745	13.795	.60772	.01726	1.0449	.08310	.00168
#2	.00120	.05606	.09701	13.928	.58506	.01864	1.0402	.08348	.00150

Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Elem	Na5895	Ni2316	P_1782	Pb2203	S_1820	Sb2068	Se1960	Si2881	Sn1899
Line	589.592 { 57}	231.604 {446}	178.284 {489}	220.353 {453}	182.034 {485}	206.833 {463}	196.090 {472}	288.158 {117}	189.989 {477}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.04993	.02934	.22541	.11199	.20738	.00318	-.00185	3.4493	.00423
Stddev	.00117	.00002	.00090	.00098	.00029	.00179	.00829	.0238	.00261
%RSD	2.3524	.06058	.40066	.87318	.14184	56.430	448.32	.68966	61.863

#1	.04910	.02935	.22605	.11268	.20759	.00445	.00401	3.4325	.00238
#2	.05076	.02933	.22477	.11130	.20717	.00191	-.00771	3.4662	.00607

Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Elem	Sr4077	Th2837	Ti3349	Ti1908	U_3701	V_2924	Zn2062	Zr3391
Line	407.771 { 83}	283.730 {119}	334.904 {101}	190.856 {477}	370.152 { 91}	292.402 {115}	206.200 {163}	339.198 { 99}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.00506	.00004	.30067	-.00236	-.00532	.03488	.26147	.01775
Stddev	.00001	.00240	.00002	.00114	.01248	.00100	.00358	.00102
%RSD	.25808	6833.8	.00786	48.063	234.43	2.8657	1.3683	5.7211

#1	.00507	.00173	.30069	-.00317	-.01414	.03559	.25894	.01703
#2	.00505	-.00166	.30066	-.00156	.00350	.03417	.26400	.01847

Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit								
Low Limit								

Int. Std.	Y_2243	Y_3600	Y_3774
Line	224.306 {450}	360.073 { 94}	377.433 { 89}
Units	Cts/S	Cts/S	Cts/S
Avg	1586.0	32372.	5898.6
Stddev	1.0	116.	22.0
%RSD	.06437	.35860	.37303

#1	1585.3	32455.	5914.2
#2	1586.7	32290.	5883.1

Sample Name: 280-83054-A-25-A Acquired: 5/20/2016 21:01:34 Type: Unk
Method: 6500_026(v10) Mode: CONC Corr. Factor: 1.000000
User: kellyca Custom ID1: Custom ID2: Custom ID3:
Comment: 325404 6010c s

Elem	Ag3280	Al3092	As1890	B_2089	Ba4554	Be3130	Bi2230	Ca3179	Cd2288
Line	328.068 {103}	309.271 {109}	189.042 {478}	208.959 {461}	455.403 { 74}	313.042 {108}	223.061 {451}	317.933 {106}	228.802 {447}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	-0.00001	8.6918	-0.00372	.00114	.02068	.00003	-0.00327	.12968	.00009
Stddev	.00018	.0353	.00049	.00041	.00001	.00007	.00186	.00061	.00002
%RSD	1243.9	.40614	13.082	35.675	.05640	209.21	56.862	.47348	21.413

#1	-0.00014	8.6669	-0.00407	.00143	.02067	.00008	-0.00459	.12924	.00008
#2	.00012	8.7168	-.00338	.00085	.02069	-.00002	-.00196	.13011	.00011

Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Elem	Co2286	Cr2055	Cu3247	Fe2599	K_7664	Li6707	Mg2790	Mn2576	Mo2020
Line	228.616 {447}	205.560 {464}	324.754 {104}	259.940 {130}	766.490 { 44}	670.784 { 50}	279.079 {121}2	257.610 {131}	202.030 {467}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.00025	.02031	.00846	3.1264	.29748	.00597	.42404	.01574	.00059
Stddev	.00030	.00017	.00003	.0128	.01648	.00053	.00435	.00002	.00037
%RSD	121.63	.84568	.39327	.40875	5.5394	8.8881	1.0250	.15571	62.271

#1	.00046	.02043	.00843	3.1174	.30914	.00635	.42711	.01575	.00033
#2	.00003	.02019	.00848	3.1354	.28583	.00559	.42097	.01572	.00084

Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Elem	Na5895	Ni2316	P_1782	Pb2203	S_1820	Sb2068	Se1960	Si2881	Sn1899
Line	589.592 { 57}	231.604 {446}	178.284 {489}	220.353 {453}	182.034 {485}	206.833 {463}	196.090 {472}	288.158 {117}	189.989 {477}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.03625	.00865	.06455	.01055	.05890	-.00038	W -.00740	2.3231	.00054
Stddev	.00661	.00010	.00247	.00059	.00206	.00043	.00122	.0096	.00048
%RSD	18.243	1.1906	3.8248	5.5876	3.5033	113.34	16.478	.41438	88.681

#1	.03158	.00858	.06630	.01013	.05744	-.00069	-.00826	2.3299	.00089
#2	.04093	.00872	.06281	.01096	.06036	-.00008	-.00654	2.3163	.00020

Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Warn	Chk Pass	Chk Pass
High Limit							5.0000		
Low Limit							-.00500		

Elem	Sr4077	Th2837	Ti3349	Ti1908	U_3701	V_2924	Zn2062	Zr3391
Line	407.771 { 83}	283.730 {119}	334.904 {101}	190.856 {477}	370.152 { 91}	292.402 {115}	206.200 {163}	339.198 { 99}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.00207	-.00116	.17056	-.00170	.01231	.01157	.02559	.00889
Stddev	.00002	.00054	.00065	.00096	.02640	.00011	.00094	.00044
%RSD	.81015	46.893	.38123	56.723	214.50	.93726	3.6669	4.9159

#1	.00208	-.00154	.17010	-.00102	.03098	.01149	.02492	.00920
#2	.00206	-.00077	.17102	-.00238	-.00636	.01165	.02625	.00858

Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit								
Low Limit								

Int. Std.	Y_2243	Y_3600	Y_3774
Line	224.306 {450}	360.073 { 94}	377.433 { 89}
Units	Cts/S	Cts/S	Cts/S
Avg	1588.5	32641.	5850.9
Stddev	3.8	20.	15.5
%RSD	.24054	.06214	.26408

#1	1585.8	32627.	5861.8
#2	1591.2	32655.	5840.0

Sample Name: 280-83054-A-26-A Acquired: 5/20/2016 21:04:21 Type: Unk
Method: 6500_026(v10) Mode: CONC Corr. Factor: 1.000000
User: kellyca Custom ID1: Custom ID2: Custom ID3:
Comment: 325404 6010c s

Elem	Ag3280	Al3092	As1890	B_2089	Ba4554	Be3130	Bi2230	Ca3179	Cd2288
Line	328.068 {103}	309.271 {109}	189.042 {478}	208.959 {461}	455.403 {74}	313.042 {108}	223.061 {451}	317.933 {106}	228.802 {447}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	-0.00005	7.8539	.00106	.00149	.01392	-0.00005	.00063	.03894	-0.00000
Stddev	.00001	.0190	.00104	.00106	.00010	.00006	.00179	.00441	.00003
%RSD	18.242	.24184	98.466	70.642	.71679	110.78	285.41	11.327	1650.8

#1	-0.00004	7.8673	.00179	.00224	.01399	-0.00009	-0.00064	.03582	-0.00002
#2	-0.00005	7.8404	.00032	.00075	.01385	-0.00001	.00189	.04206	.00002

Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Elem	Co2286	Cr2055	Cu3247	Fe2599	K_7664	Li6707	Mg2790	Mn2576	Mo2020
Line	228.616 {447}	205.560 {464}	324.754 {104}	259.940 {130}	766.490 {44}	670.784 {50}	279.079 {121}2	257.610 {131}	202.030 {467}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.00006	.01884	.00474	2.8084	.24560	.00384	.35113	.01171	.00054
Stddev	.00003	.00023	.00018	.0146	.04328	.00010	.00910	.00022	.00012
%RSD	58.973	1.2242	3.7002	.52131	17.621	2.4876	2.5922	1.8978	21.832

#1	.00008	.01868	.00462	2.8188	.21499	.00378	.34470	.01187	.00046
#2	.00003	.01901	.00487	2.7981	.27620	.00391	.35757	.01155	.00062

Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Elem	Na5895	Ni2316	P_1782	Pb2203	S_1820	Sb2068	Se1960	Si2881	Sn1899
Line	589.592 {57}	231.604 {446}	178.284 {489}	220.353 {453}	182.034 {485}	206.833 {463}	196.090 {472}	288.158 {117}	189.989 {477}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.02891	.00850	.06258	.00580	.04910	-0.00008	W -.00585	2.0464	.00230
Stddev	.00677	.00008	.00063	.00177	.00593	.00086	.01246	.0191	.00029
%RSD	23.413	.98769	1.0101	30.516	12.085	1037.7	212.83	.93519	12.584

#1	.03369	.00845	.06213	.00705	.04491	.00053	.00296	2.0329	.00209
#2	.02412	.00856	.06302	.00455	.05330	-0.00069	-0.01466	2.0600	.00250

Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Warn	Chk Pass	Chk Pass
High Limit							5.0000		
Low Limit							-0.00500		

Elem	Sr4077	Th2837	Ti3349	Ti1908	U_3701	V_2924	Zn2062	Zr3391
Line	407.771 {83}	283.730 {119}	334.904 {101}	190.856 {477}	370.152 {91}	292.402 {115}	206.200 {163}	339.198 {99}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.00133	-0.00477	.14827	-0.00429	.02924	.01064	.01368	.00584
Stddev	.00002	.00022	.00084	.00152	.01041	.00072	.00036	.00004
%RSD	1.2248	4.5116	.56572	35.563	35.617	6.7460	2.6168	.76209

#1	.00132	-0.00492	.14886	-0.00536	.02187	.01115	.01393	.00581
#2	.00134	-0.00461	.14768	-0.00321	.03660	.01013	.01343	.00587

Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit								
Low Limit								

Int. Std.	Y_2243	Y_3600	Y_3774
Line	224.306 {450}	360.073 {94}	377.433 {89}
Units	Cts/S	Cts/S	Cts/S
Avg	1585.8	32723.	5825.9
Stddev	.7	254.	59.9
%RSD	.04557	.77486	1.0276

#1	1586.3	32544.	5783.6
#2	1585.3	32902.	5868.2

Sample Name: ccvh-3900196 Acquired: 5/20/2016 21:07:08 Type: QC
Method: 6500_026(v10) Mode: CONC Corr. Factor: 1.000000
User: kellyca Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	Ag3280	Al3092	As1890	B_2089	Ba4554	Be3130	Bi2230	Ca3179	Cd2288	Co2286	Cr2055	Cu3247	Fe2714
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	-.00124	47.744	-.00433	.00172	.00019	-.00038	1.0569	-.05993	-.00119	.00294	-.00076	.00737	48.090
Stddev	.00008	.089	.00629	.00059	.00022	.00014	.0003	.00097	.00008	.00035	.00025	.00039	.188
%RSD	6.3429	.18566	145.09	33.969	116.97	38.062	.02666	1.6104	6.3458	12.025	33.101	5.3240	.39094

#1	-.00129	47.681	.00011	.00131	.00035	-.00048	1.0567	-.05925	-.00114	.00319	-.00058	.00709	47.957
#2	-.00118	47.806	-.00878	.00214	.00003	-.00028	1.0571	-.06062	-.00125	.00269	-.00094	.00764	48.223

Check ?	None	Chk Pass	None	None	None	None	Chk Pass	None	None	None	None	None	Chk Pass
Value													
Range													

Elem	K_7664	Li6707	Mg2790	Mn2576	Mo2020	Na8183	Ni2316	P_1782	Pb2203	S_1820	Sb2068	Se1960	Si2881
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.05738	.00008	.14525	-.00059	-.00215	258.25	-.00066	.00344	-.00067	5.0584	.00004	.00332	-.02564
Stddev	.03212	.00017	.00603	.00007	.00043	.78	.00038	.00086	.00166	.0157	.00070	.00839	.00266
%RSD	55.977	227.65	4.1540	11.645	20.126	.30247	58.278	24.948	248.09	.31030	1770.8	252.85	10.389

#1	.03467	.00020	.14952	-.00054	-.00246	257.70	-.00039	.00283	-.00184	5.0695	-.00046	.00925	-.02375
#2	.08010	-.00005	.14098	-.00064	-.00184	258.80	-.00093	.00404	.00050	5.0473	.00054	-.00262	-.02752

Check ?	None	None	None	None	None	Chk Pass	None	None	None	Chk Pass	None	None	None
Value													
Range													

Elem	Sn1899	Sr4077	Th2837	Ti3349	Tl1908	U_3701	V_2924	Zn2062	Zr3391
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.00229	.00024	4.9478	.02591	-.00428	10.173	-.01619	-.00281	-.00777
Stddev	.00081	.00003	.0008	.00030	.00070	.019	.00075	.00154	.00276
%RSD	35.488	13.244	.01681	1.1629	16.413	.18853	4.6493	54.802	35.526

#1	.00171	.00022	4.9472	.02570	-.00378	10.187	-.01566	-.00172	-.00972
#2	.00286	.00026	4.9484	.02613	-.00478	10.160	-.01672	-.00390	-.00582

Check ?	None	None	Chk Pass	None	None	Chk Pass	None	None	None
Value									
Range									

Int. Std.	Y_2243	Y_3600	Y_3774
Units	Cts/S	Cts/S	Cts/S
Avg	1511.4	30495.	5657.6
Stddev	3.3	18.	3.8
%RSD	.21763	.06024	.06687

#1	1509.1	30508.	5654.9
#2	1513.7	30482.	5660.2

Sample Name: ccv-3900195 Acquired: 5/20/2016 21:10:00 Type: QC
Method: 6500_026(v10) Mode: CONC Corr. Factor: 1.000000
User: kellyca Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	Ag3280	Al1670	As1890	B_2089	Ba4554	Be3130	Bi2230	Ca3179	Cd2288	Co2286	Cr2055	Cu3247	Fe2599
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.49449	.51694	1.0200	.52967	.49412	.51164	-.00193	5.0116	.52071	.51941	.51220	.49788	2.4747
Stddev	.00251	.00289	.0049	.00124	.00052	.00055	.00102	.0164	.00156	.00034	.00145	.00032	.0083
%RSD	.50682	.55934	.48427	.23496	.10426	.10774	52.936	.32631	.30050	.06592	.28291	.06387	.33755

#1	.49272	.51899	1.0165	.52879	.49448	.51125	-.00266	5.0001	.52181	.51965	.51322	.49811	2.4806
#2	.49627	.51490	1.0234	.53055	.49376	.51203	-.00121	5.0232	.51960	.51916	.51117	.49766	2.4688

Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	None	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Value													
Range													

Elem	K_7664	Li6707	Mg2790	Mn2576	Mo2020	Na5895	Ni2316	P_1782	Pb2203	S_1820	Sb2068	Se1960	Si2881
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	51.889	1.0699	20.079	.49972	.51688	5.2027	.50852	1.0189	1.0378	.00864	1.0358	1.0135	4.9931
Stddev	.031	.0010	.088	.00107	.00002	.0130	.00177	.0011	.0017	.00289	.0039	.0103	.0171
%RSD	.06055	.09374	.43888	.21334	.00403	.25021	.34869	.10466	.16333	33.380	.37671	1.0159	.34198

#1	51.866	1.0692	20.017	.49896	.51686	5.1935	.50978	1.0196	1.0366	.01068	1.0330	1.0062	5.0052
#2	51.911	1.0706	20.141	.50047	.51689	5.2119	.50727	1.0181	1.0390	.00660	1.0386	1.0208	4.9810

Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	None	Chk Pass	Chk Pass	Chk Pass
Value													
Range													

Elem	Sn1899	Sr4077	Th2837	Ti3349	Ti1908	U_3701	V_2924	Zn2062	Zr3391
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	1.0038	.48663	-.00049	.47745	1.0416	.01396	.47958	.50088	.50024
Stddev	.0061	.00134	.00112	.00250	.0020	.01105	.00077	.00125	.00025
%RSD	.60567	.27583	227.14	.52373	.19244	79.138	.16009	.24889	.04961

#1	1.0081	.48568	-.00129	.47568	1.0430	.00615	.47904	.50176	.50041
#2	.99946	.48758	.00030	.47922	1.0401	.02177	.48012	.50000	.50006

Check ?	Chk Pass	Chk Pass	None	Chk Pass	Chk Pass	None	Chk Pass	Chk Pass	Chk Pass
Value									
Range									

Int. Std.	Y_2243	Y_3600	Y_3774
Units	Cts/S	Cts/S	Cts/S
Avg	1544.4	31360.	5709.1
Stddev	2.0	71.	11.5
%RSD	.13093	.22736	.20228

#1	1543.0	31411.	5700.9
#2	1545.8	31310.	5717.2

Sample Name: ccb Acquired: 5/20/2016 21:12:40 Type: QC
Method: 6500_026(v10) Mode: CONC Corr. Factor: 1.000000
User: kellyca Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	Ag3280	Al1670	As1890	B_2089	Ba4554	Be3130	Bi2230	Ca3179	Cd2288	Co2286	Cr2055	Cu3247	Fe2599
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.00039	.00000	-.00069	.00103	.00000	-.00003	-.00266	-.00456	.00020	-.00036	.00008	.00011	.00604
Stddev	.00021	.00129	.00561	.00027	.00001	.00006	.00204	.00181	.00001	.00059	.00005	.00001	.00007
%RSD	54.010	52968.	816.17	25.786	399.20	219.85	76.824	39.731	3.3151	163.08	59.239	6.1976	1.1083

#1	.00024	-.00091	-.00465	.00122	.00001	.00002	-.00410	-.00328	.00019	-.00078	.00011	.00011	.00609
#2	.00054	.00091	.00328	.00084	-.00001	-.00007	-.00121	-.00584	.00020	.00006	.00004	.00012	.00599

Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	None	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit													
Low Limit													

Elem	K_7664	Li6707	Mg2790	Mn2576	Mo2020	Na5895	Ni2316	P_1782	Pb2203	S_1820	Sb2068	Se1960	Si2881
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.07185	-.00053	.00219	.00007	.00044	.01182	-.00001	-.00157	.00003	.00824	.00055	-.00463	.00080
Stddev	.00314	.00099	.00212	.00003	.00011	.00486	.00044	.00175	.00067	.00129	.00135	.00139	.00835
%RSD	4.3767	189.37	96.544	40.911	25.983	41.067	3350.3	111.67	2608.0	15.662	243.19	29.956	1040.6

#1	.06963	.00018	.00369	.00005	.00036	.00839	.00030	-.00281	.00050	.00733	-.00040	-.00365	.00670
#2	.07407	-.00123	.00070	.00009	.00052	.01526	-.00032	-.00033	-.00045	.00915	.00150	-.00561	-.00510

Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	None	Chk Pass	Chk Pass	Chk Pass
High Limit													
Low Limit													

Elem	Sn1899	Sr4077	Th2837	Ti3349	Ti1908	U_3701	V_2924	Zn2062	Zr3391
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.00118	-.00001	-.00377	.00030	-.00162	.02518	.00049	.00059	.00177
Stddev	.00026	.00005	.00103	.00046	.00289	.00546	.00028	.00002	.00024
%RSD	22.170	406.68	27.318	154.27	179.07	21.686	57.935	3.6116	13.699

#1	.00136	-.00005	-.00304	-.00003	.00043	.02132	.00029	.00060	.00160
#2	.00099	.00002	-.00450	.00062	-.00366	.02904	.00069	.00057	.00194

Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Int. Std.	Y_2243	Y_3600	Y_3774
Units	Cts/S	Cts/S	Cts/S
Avg	1551.9	31710.	5655.2
Stddev	.2	25.	21.1
%RSD	.01467	.07807	.37224

#1	1551.7	31727.	5670.1
#2	1552.1	31692.	5640.3

Sample Name: ccvl-3903059 Acquired: 5/20/2016 21:15:29 Type: QC
Method: 6500_026(v10) Mode: CONC Corr. Factor: 1.000000
User: kellyca Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	Ag3280	Al1670	As1890	B_2089	Ba4554	Be3130	Bi2230	Ca3179	Cd2288	Co2286	Cr2055	Cu3247
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.00985	.10901	.01299	.10955	.01018	.00097	.11687	.19823	.00567	.01066	.01057	.01546
Stddev	.00050	.00049	.00361	.00099	.00008	.00003	.00062	.00360	.00022	.00015	.00029	.00015
%RSD	5.0825	.44980	27.773	.90659	.79719	2.7757	.52985	1.8184	3.8081	1.3747	2.7736	.94390

#1	.00950	.10867	.01044	.10885	.01024	.00099	.11643	.19568	.00582	.01076	.01078	.01557
#2	.01021	.10936	.01554	.11026	.01012	.00095	.11730	.20078	.00552	.01055	.01036	.01536

Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Value												
Range												

Elem	Fe2599	K_7664	Li6707	Mg2790	Mn2576	Mo2020	Na5895	Ni2316	P_1782	Pb2203	S_1820	Sb2068
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	F .23699	3.1944	.01070	.21717	.01146	.02147	1.0486	.04250	3.0372	.00911	.00661	.02176
Stddev	.00244	.0152	.00030	.00604	.00006	.00001	.0036	.00080	.0054	.00097	.00146	.00005
%RSD	1.0294	.47517	2.7770	2.7802	.49052	.03588	.34626	1.8853	.17706	10.610	22.086	.23368

#1	.23871	3.1837	.01049	.21290	.01142	.02147	1.0460	.04306	3.0334	.00979	.00558	.02180
#2	.23526	3.2052	.01091	.22144	.01150	.02146	1.0511	.04193	3.0410	.00842	.00764	.02173

Check ?	Chk Fail	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	None	Chk Pass
Value	.10000											
Range	30.000%											

Elem	Se1960	Si2881	Sn1899	Sr4077	Th2837	Ti3349	Ti1908	U_3701	V_2924	Zn2062	Zr3391
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.01389	.49710	.10439	.00984	.01164	.00931	.01422	F .08682	.00969	.02113	.01685
Stddev	.00412	.00213	.00089	.00006	.00079	.00006	.00033	.00003	.00016	.00066	.00039
%RSD	29.670	.42836	.84849	.56651	6.7946	.65887	2.3125	.03572	1.6997	3.1108	2.3238

#1	.01681	.49860	.10501	.00980	.01108	.00936	.01399	.08680	.00980	.02067	.01713
#2	.01098	.49559	.10376	.00988	.01220	.00927	.01445	.08684	.00957	.02159	.01657

Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Fail	Chk Pass	Chk Pass	Chk Pass
Value								.06000			
Range								30.000%			

Int. Std.	Y_2243	Y_3600	Y_3774
Units	Cts/S	Cts/S	Cts/S
Avg	1577.2	32201.	5653.6
Stddev	5.3	3.	28.1
%RSD	.33887	.01020	.49616

#1	1581.0	32203.	5633.8
#2	1573.4	32199.	5673.5

Sample Name: MB 280-325558/1-A Acquired: 5/20/2016 21:18:18 Type: Unk
Method: 6500_026(v10) Mode: CONC Corr. Factor: 1.000000
User: kellyca Custom ID1: 5/18 Custom ID2: Custom ID3:
Comment: 325558 6010b

Elem	Ag3280	Al1670	As1890	B_2089	Ba4554	Be3130	Bi2230	Ca3179	Cd2288
Line	328.068 {103}	167.079 {502}	189.042 {478}	208.959 {461}	455.403 { 74}	313.042 {108}	223.061 {451}	317.933 {106}	228.802 {447}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.00014	.00265	-.00334	.00064	-.00003	-.00007	-.00038	.00228	-.00013
Stddev	.00048	.00004	.00051	.00046	.00011	.00000	.00054	.00083	.00009
%RSD	351.34	1.5143	15.339	72.182	356.87	2.2881	143.37	36.460	66.335

#1	.00047	.00268	-.00370	.00031	-.00011	-.00007	-.00076	.00287	-.00007
#2	-.00020	.00262	-.00298	.00097	.00005	-.00007	.00001	.00169	-.00019

Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Elem	Co2286	Cr2055	Cu3247	Fe2599	K_7664	Li6707	Mg2790	Mn2576	Mo2020
Line	228.616 {447}	205.560 {464}	324.754 {104}	259.940 {130}	766.490 { 44}	670.784 { 50}	279.079 {121}2	257.610 {131}	202.030 {467}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	-.00028	-.00003	-.00016	.02251	.04947	.00005	.00398	.00010	-.00007
Stddev	.00020	.00002	.00026	.00228	.03870	.00063	.00281	.00001	.00025
%RSD	72.595	66.662	166.78	10.149	78.222	1305.0	70.619	12.337	376.87

#1	-.00042	-.00005	.00003	.02089	.02211	.00049	.00597	.00010	-.00024
#2	-.00014	-.00002	-.00034	.02412	.07684	-.00040	.00199	.00011	.00011

Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Elem	Na5895	Ni2316	P_1782	Pb2203	S_1820	Sb2068	Se1960	Si2881	Sn1899
Line	589.592 { 57}	231.604 {446}	178.284 {489}	220.353 {453}	182.034 {485}	206.833 {463}	196.090 {472}	288.158 {117}	189.989 {477}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.01675	.00028	-.00157	.00034	.00697	-.00057	-.00069	.00061	.00154
Stddev	.00977	.00052	.00126	.00166	.00054	.00030	.00241	.01260	.00012
%RSD	58.364	190.20	80.109	480.82	7.7110	52.367	350.87	2062.3	7.4846

#1	.00984	-.00009	-.00246	-.00083	.00735	-.00036	.00102	.00952	.00162
#2	.02366	.00065	-.00068	.00152	.00659	-.00079	-.00239	-.00830	.00146

Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Elem	Sr4077	Th2837	Ti3349	Ti1908	U_3701	V_2924	Zn2062	Zr3391
Line	407.771 { 83}	283.730 {119}	334.904 {101}	190.856 {477}	370.152 { 91}	292.402 {115}	206.200 {163}	339.198 { 99}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.00101	-.00418	.00019	-.00242	.02034	.00039	.00069	-.00054
Stddev	.00003	.00201	.00004	.00097	.00414	.00004	.00013	.00093
%RSD	2.5619	48.102	21.315	40.085	20.336	11.609	18.215	171.92

#1	.00102	-.00276	.00022	-.00174	.01741	.00042	.00078	.00012
#2	.00099	-.00560	.00016	-.00311	.02326	.00035	.00060	-.00119

Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit								
Low Limit								

Int. Std.	Y_2243	Y_3600	Y_3774
Line	224.306 {450}	360.073 { 94}	377.433 { 89}
Units	Cts/S	Cts/S	Cts/S
Avg	1584.8	32833.	5851.1
Stddev	1.9	68.	34.4
%RSD	.12204	.20778	.58731

#1	1583.5	32881.	5875.4
#2	1586.2	32784.	5826.8

Sample Name: LCS 280-325558/2-A Acquired: 5/20/2016 21:21:07 Type: Unk
Method: 6500_026(v10) Mode: CONC Corr. Factor: 1.000000
User: kellyca Custom ID1: Custom ID2: Custom ID3:
Comment: 325558 6010b

Elem	Ag3280	Al1670	As1890	B_2089	Ba4554	Be3130	Bi2230	Ca3179	Cd2288
Line	328.068 {103}	167.079 {502}	189.042 {478}	208.959 {461}	455.403 { 74}	313.042 {108}	223.061 {451}	317.933 {106}	228.802 {447}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.05066	2.0021	1.0576	1.0931	2.0019	.05146	2.1985	50.772	.10515
Stddev	.00076	.0019	.0104	.0010	.0059	.00010	.0055	.015	.00019
%RSD	1.4920	.09437	.98565	.08848	.29609	.19285	.25156	.03040	.17693

#1	.05013	2.0007	1.0650	1.0924	1.9977	.05139	2.2024	50.761	.10502
#2	.05119	2.0034	1.0503	1.0937	2.0061	.05153	2.1946	50.783	.10528

Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Elem	Co2286	Cr2055	Cu3247	Fe2599	K_7664	Li6707	Mg2790	Mn2576	Mo2020
Line	228.616 {447}	205.560 {464}	324.754 {104}	259.940 {130}	766.490 { 44}	670.784 { 50}	279.079 {121}2	257.610 {131}	202.030 {467}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.51080	F .20447	.25529	1.0130	53.548	1.0861	50.822	.49395	1.0642
Stddev	.00179	.00025	.00090	.0005	.106	.0011	.138	.00171	.0042
%RSD	.35046	.12353	.35074	.04680	.19810	.10457	.27119	.34654	.39367

#1	.51206	.20429	.25466	1.0126	53.473	1.0853	50.725	.49274	1.0672
#2	.50953	.20465	.25592	1.0133	53.623	1.0869	50.920	.49516	1.0613

Check ?	Chk Pass	Chk Fail	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit		.05750							
Low Limit		.04300							

Elem	Na8183	Ni2316	P_1782	Pb2203	S_1820	Sb2068	Se1960	Si2881	Sn1899
Line	818.326 { 41}	231.604 {446}	178.284 {489}	220.353 {453}	182.034 {485}	206.833 {463}	196.090 {472}	288.158 {117}	189.989 {477}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	52.283	.50298	10.654	.52329	2.0915	.53030	2.1092	10.149	1.9924
Stddev	.179	.00024	.007	.00197	.0107	.00218	.0124	.018	.0047
%RSD	.34257	.04847	.06657	.37625	.50988	.41055	.58983	.18077	.23696

#1	52.410	.50316	10.659	.52468	2.0990	.52876	2.1004	10.136	1.9957
#2	52.156	.50281	10.649	.52190	2.0840	.53184	2.1180	10.162	1.9890

Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Elem	Sr4077	Th2837	Ti3349	Ti1908	U_3701	V_2924	Zn2062	Zr3391
Line	407.771 { 83}	283.730 {119}	334.904 {101}	190.856 {477}	370.152 { 91}	292.402 {115}	206.200 {163}	339.198 { 99}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.97643	.99136	.96505	2.0314	2.0802	.48233	.50128	.49794
Stddev	.00149	.00109	.00179	.0035	.0097	.00094	.00105	.00206
%RSD	.15274	.11032	.18592	.17275	.46831	.19427	.20929	.41337

#1	.97537	.99059	.96378	2.0339	2.0871	.48167	.50053	.49648
#2	.97748	.99213	.96632	2.0289	2.0734	.48299	.50202	.49939

Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit								
Low Limit								

Int. Std.	Y_2243	Y_3600	Y_3774
Line	224.306 {450}	360.073 { 94}	377.433 { 89}
Units	Cts/S	Cts/S	Cts/S
Avg	1514.9	30857.	5708.8
Stddev	1.1	44.	3.1
%RSD	.07078	.14234	.05462

#1	1514.1	30888.	5706.6
#2	1515.6	30826.	5711.0

Sample Name: 280-83082-C-1-A Acquired: 5/20/2016 21:23:44 Type: Unk
Method: 6500_026(v10) Mode: CONC Corr. Factor: 1.000000
User: kellyca Custom ID1: Custom ID2: Custom ID3:
Comment: 325558 6010b

Elem	Ag3280	Al1670	As1890	B_2089	Ba4554	Be3130	Bi2230	Ca3179	Cd2288
Line	328.068 {103}	167.079 {502}	189.042 {478}	208.959 {461}	455.403 { 74}	313.042 {108}	223.061 {451}	317.933 {106}	228.802 {447}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.00167	.00982	.00514	.05575	.30659	-.00009	.00152	W 705.84	.00056
Stddev	.00038	.00189	.00514	.00076	.00132	.00002	.00087	6.89	.00037
%RSD	22.650	19.269	100.06	1.3669	.43053	22.166	56.913	.97557	65.524
#1	.00140	.01116	.00150	.05629	.30565	-.00011	.00213	700.97	.00030
#2	.00194	.00848	.00878	.05521	.30752	-.00008	.00091	710.71	.00083
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Warn	Chk Pass
High Limit								500.00	
Low Limit								-.05000	
Elem	Co2286	Cr2055	Cu3247	Fe2599	K_7664	Li6707	Mg2790	Mn2576	Mo2020
Line	228.616 {447}	205.560 {464}	324.754 {104}	259.940 {130}	766.490 { 44}	670.784 { 50}	279.079 {121}2	257.610 {131}	202.030 {467}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.04429	.00038	.00246	11.504	6.5488	.00264	103.18	F 26.105	.00056
Stddev	.00062	.00015	.00002	.061	.0393	.00082	.16	.024	.00007
%RSD	1.4082	40.208	.66738	.53325	.60003	31.122	.15225	.09334	12.751
#1	.04385	.00048	.00247	11.461	6.5210	.00206	103.07	26.088	.00061
#2	.04473	.00027	.00245	11.548	6.5766	.00321	103.29	26.123	.00051
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Fail	Chk Pass
High Limit								20.000	
Low Limit								-.02000	
Elem	Na8183	Ni2316	P_1782	Pb2203	S_1820	Sb2068	Se1960	Si2881	Sn1899
Line	818.326 { 41}	231.604 {446}	178.284 {489}	220.353 {453}	182.034 {485}	206.833 {463}	196.090 {472}	288.158 {117}	189.989 {477}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	W 701.81	.01596	1.0546	W -.00313	30.047	-.00168	.01168	6.3791	-.00127
Stddev	2.54	.00042	.0025	.00046	.036	.00294	.00370	.0049	.00076
%RSD	.36166	2.6272	.23956	14.658	.11925	174.23	31.691	.07730	59.690
#1	700.02	.01567	1.0564	-.00346	30.073	-.00376	.01430	6.3756	-.00181
#2	703.60	.01626	1.0528	-.00281	30.022	.00039	.00907	6.3826	-.00074
Check ?	Chk Warn	Chk Pass	Chk Pass	Chk Warn	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit	500.00			10.000					
Low Limit	10.000			-.00300					
Elem	Sr4077	Th2837	Ti3349	Ti1908	U_3701	V_2924	Zn2062	Zr3391	
Line	407.771 { 83}	283.730 {119}	334.904 {101}	190.856 {477}	370.152 { 91}	292.402 {115}	206.200 {163}	339.198 { 99}	
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	
Avg	.52519	W -.01108	.00269	-.00875	-.00478	-.00382	.00662	.00066	
Stddev	.00155	.00172	.00012	.00219	.03968	.00028	.00016	.00049	
%RSD	.29520	15.497	4.3422	24.987	829.33	7.3835	2.4661	74.177	
#1	.52409	-.01229	.00277	-.01030	.02327	-.00402	.00650	.00100	
#2	.52628	-.00986	.00261	-.00721	-.03284	-.00362	.00673	.00031	
Check ?	Chk Pass	Chk Warn	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	
High Limit		45.000							
Low Limit		-.01000							
Int. Std.	Y_2243	Y_3600	Y_3774						
Line	224.306 {450}	360.073 { 94}	377.433 { 89}						
Units	Cts/S	Cts/S	Cts/S						
Avg	1349.0	27353.	5419.7						
Stddev	.5	27.	8.8						
%RSD	.03390	.10044	.16247						
#1	1349.3	27373.	5426.0						
#2	1348.6	27334.	5413.5						

Sample Name: 280-83127-A-1-A Acquired: 5/20/2016 21:27:07 Type: Unk
 Method: 6500_026(v10) Mode: CONC Corr. Factor: 1.000000
 User: kellyca Custom ID1: Custom ID2: Custom ID3:
 Comment: 325558 6010b

Elem	Ag3280	Al1670	As1890	B_2089	Ba4554	Be3130	Bi2230	Ca3179	Cd2288
Line	328.068 {103}	167.079 {502}	189.042 {478}	208.959 {461}	455.403 { 74}	313.042 {108}	223.061 {451}	317.933 {106}	228.802 {447}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.00003	.02009	-.00055	.74457	.05020	-.00018	-.00008	299.52	.00030
Stddev	.00084	.00326	.00061	.00115	.00025	.00002	.00002	.74	.00020
%RSD	3189.7	16.241	111.27	.15390	.49761	12.535	24.520	.24584	64.681

#1	.00062	.01778	-.00098	.74538	.05002	-.00016	-.00010	298.99	.00044
#2	-.00057	.02240	-.00012	.74376	.05038	-.00019	-.00007	300.04	.00016

Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Elem	Co2286	Cr2055	Cu3247	Fe2599	K_7664	Li6707	Mg2790	Mn2576	Mo2020
Line	228.616 {447}	205.560 {464}	324.754 {104}	259.940 {130}	766.490 { 44}	670.784 { 50}	279.079 {121}2	257.610 {131}	202.030 {467}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.00128	.00047	.00318	2.0832	.65390	.00120	40.077	2.3572	.00040
Stddev	.00007	.00005	.00023	.0004	.02917	.00176	.000	.0035	.00019
%RSD	5.5527	10.980	7.2744	.01695	4.4611	146.46	.00079	.14737	48.081

#1	.00133	.00050	.00302	2.0830	.67453	-.00004	40.077	2.3548	.00026
#2	.00123	.00043	.00335	2.0835	.63328	.00245	40.077	2.3597	.00054

Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Elem	Na8183	Ni2316	P_1782	Pb2203	S_1820	Sb2068	Se1960	Si2881	Sn1899
Line	818.326 { 41}	231.604 {446}	178.284 {489}	220.353 {453}	182.034 {485}	206.833 {463}	196.090 {472}	288.158 {117}	189.989 {477}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	34.368	.00873	.45016	-.00170	F 257.30	.00206	-.00065	4.3176	.00117
Stddev	.005	.00160	.00136	.00087	.27	.00278	.00475	.0108	.00036
%RSD	.01390	18.317	.30270	50.901	.10325	135.14	729.64	.24994	30.496

#1	34.364	.00760	.44920	-.00109	257.49	.00403	.00271	4.3252	.00142
#2	34.371	.00986	.45112	-.00232	257.11	.00009	-.00401	4.3099	.00092

Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Fail	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit					200.00				
Low Limit					-.02000				

Elem	Sr4077	Th2837	Ti3349	Ti1908	U_3701	V_2924	Zn2062	Zr3391
Line	407.771 { 83}	283.730 {119}	334.904 {101}	190.856 {477}	370.152 { 91}	292.402 {115}	206.200 {163}	339.198 { 99}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.82641	-.00654	.00116	-.00294	.02659	.00114	.00484	.00433
Stddev	.00201	.00116	.00023	.00215	.00766	.00066	.00115	.00110
%RSD	.24321	17.666	19.451	73.262	28.799	57.882	23.802	25.358

#1	.82499	-.00572	.00100	-.00142	.02117	.00067	.00402	.00355
#2	.82783	-.00736	.00132	-.00446	.03200	.00160	.00565	.00511

Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit								
Low Limit								

Int. Std.	Y_2243	Y_3600	Y_3774
Line	224.306 {450}	360.073 { 94}	377.433 { 89}
Units	Cts/S	Cts/S	Cts/S
Avg	1448.8	30150.	5764.2
Stddev	2.8	68.	22.9
%RSD	.19614	.22537	.39812

#1	1446.8	30198.	5780.4
#2	1450.8	30102.	5748.0

Sample Name: 280-83127-A-1-Asd@5 Acquired: 5/20/2016 21:29:53 Type: Unk
Method: 6500_026(v10) Mode: CONC Corr. Factor: 1.000000
User: kellyca Custom ID1: Custom ID2: Custom ID3:
Comment: 325558 6010b

Elem	Ag3280	Al1670	As1890	B_2089	Ba4554	Be3130	Bi2230	Ca3179	Cd2288
Line	328.068 {103}	167.079 {502}	189.042 {478}	208.959 {461}	455.403 { 74}	313.042 {108}	223.061 {451}	317.933 {106}	228.802 {447}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.00021	.00505	-.00527	.14743	.00983	-.00014	-.00189	59.583	-.00004
Stddev	.00026	.00070	.00027	.00152	.00014	.00001	.00195	.052	.00014
%RSD	124.40	13.923	5.1403	1.0330	1.4046	8.0031	103.40	.08809	307.57

#1	.00039	.00456	-.00547	.14850	.00973	-.00014	-.00051	59.546	-.00014
#2	.00002	.00555	-.00508	.14635	.00993	-.00013	-.00327	59.621	.00005

Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Elem	Co2286	Cr2055	Cu3247	Fe2599	K_7664	Li6707	Mg2790	Mn2576	Mo2020
Line	228.616 {447}	205.560 {464}	324.754 {104}	259.940 {130}	766.490 { 44}	670.784 { 50}	279.079 {121}2	257.610 {131}	202.030 {467}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.00011	-.00005	.00053	.43263	.14208	-.00044	8.0055	.48056	-.00003
Stddev	.00015	.00019	.00011	.00358	.01618	.00096	.0418	.00125	.00004
%RSD	131.51	387.16	20.621	.82670	11.386	215.42	.52246	.25978	104.54

#1	.00001	.00008	.00060	.43010	.13064	-.00112	7.9759	.47968	-.00001
#2	.00022	-.00018	.00045	.43516	.15351	.00023	8.0350	.48144	-.00006

Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Elem	Na5895	Ni2316	P_1782	Pb2203	S_1820	Sb2068	Se1960	Si2881	Sn1899
Line	589.592 { 57}	231.604 {446}	178.284 {489}	220.353 {453}	182.034 {485}	206.833 {463}	196.090 {472}	288.158 {117}	189.989 {477}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	6.7451	.00143	.07928	-.00068	48.531	.00177	-.00130	.84058	.00020
Stddev	.0138	.00011	.00291	.00003	.041	.00048	.00369	.00703	.00056
%RSD	.20483	7.7606	3.6665	5.0835	.08394	26.959	283.25	.83619	281.37

#1	6.7353	.00135	.08133	-.00071	48.559	.00143	-.00391	.84555	-.00020
#2	6.7549	.00150	.07722	-.00066	48.502	.00211	.00131	.83561	.00059

Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Elem	Sr4077	Th2837	Ti3349	Ti1908	U_3701	V_2924	Zn2062	Zr3391	
Line	407.771 { 83}	283.730 {119}	334.904 {101}	190.856 {477}	370.152 { 91}	292.402 {115}	206.200 {163}	339.198 { 99}	
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	
Avg	.16350	-.00593	.00023	-.00399	-.00765	-.00005	.00176	.00042	
Stddev	.00023	.00147	.00051	.00140	.01276	.00038	.00020	.00023	
%RSD	.14117	24.754	225.06	35.080	166.66	694.88	11.265	56.109	

#1	.16367	-.00489	.00059	-.00498	.00137	-.00032	.00162	.00058	
#2	.16334	-.00697	-.00013	-.00300	-.01667	.00021	.00190	.00025	

Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	
High Limit									
Low Limit									

Int. Std.	Y_2243	Y_3600	Y_3774						
Line	224.306 {450}	360.073 { 94}	377.433 { 89}						
Units	Cts/S	Cts/S	Cts/S						
Avg	1528.5	31491.	5761.9						
Stddev	3.1	104.	3.7						
%RSD	.19985	.33086	.06443						

#1	1526.3	31564.	5759.3						
#2	1530.6	31417.	5764.5						

Sample Name: 280-83127-A-1-B MS Acquired: 5/20/2016 21:32:38 Type: Unk
Method: 6500_026(v10) Mode: CONC Corr. Factor: 1.000000
User: kellyca Custom ID1: Custom ID2: Custom ID3:
Comment: 325558 6010b

Elem	Ag3280	Al1670	As1890	B_2089	Ba4554	Be3130	Bi2230	Ca3179	Cd2288
Line	328.068 {103}	167.079 {502}	189.042 {478}	208.959 {461}	455.403 { 74}	313.042 {108}	223.061 {451}	317.933 {106}	228.802 {447}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.05363	2.0380	1.1433	1.8932	2.1156	.05199	2.3332	349.05	.11054
Stddev	.00143	.0003	.0029	.0058	.0004	.00006	.0146	.11	.00045
%RSD	2.6582	.01422	.25365	.30844	.01928	.11878	.62472	.03066	.41139

#1	.05263	2.0382	1.1454	1.8974	2.1153	.05194	2.3435	348.98	.11086
#2	.05464	2.0378	1.1413	1.8891	2.1159	.05203	2.3229	349.13	.11021

Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Elem	Co2286	Cr2055	Cu3247	Fe2599	K_7664	Li6707	Mg2790	Mn2576	Mo2020
Line	228.616 {447}	205.560 {464}	324.754 {104}	259.940 {130}	766.490 { 44}	670.784 { 50}	279.079 {121}2	257.610 {131}	202.030 {467}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.51680	W .20873	.27315	3.0610	57.456	1.1588	91.336	2.8048	1.0917
Stddev	.00133	.00018	.00046	.0005	.054	.0003	.071	.0039	.0022
%RSD	.25666	.08565	.16841	.01651	.09433	.02471	.07821	.13764	.20558

#1	.51774	.20885	.27283	3.0607	57.418	1.1586	91.286	2.8021	1.0933
#2	.51586	.20860	.27348	3.0614	57.494	1.1590	91.387	2.8076	1.0902

Check ?	Chk Pass	Chk Warn	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit		.10000							
Low Limit		-.01000							

Elem	Na8183	Ni2316	P_1782	Pb2203	S_1820	Sb2068	Se1960	Si2881	Sn1899
Line	818.326 { 41}	231.604 {446}	178.284 {489}	220.353 {453}	182.034 {485}	206.833 {463}	196.090 {472}	288.158 {117}	189.989 {477}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	88.483	.51131	12.082	.52704	F 262.51	.56498	2.2965	14.730	2.0221
Stddev	.250	.00181	.011	.00066	.40	.00156	.0117	.039	.0072
%RSD	.28203	.35415	.09369	.12526	.15169	.27537	.50890	.26150	.35484

#1	88.306	.51003	12.074	.52657	262.80	.56388	2.3047	14.757	2.0272
#2	88.659	.51259	12.090	.52751	262.23	.56608	2.2882	14.702	2.0170

Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Fail	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit					200.00				
Low Limit					-.02000				

Elem	Sr4077	Th2837	Ti3349	Ti1908	U_3701	V_2924	Zn2062	Zr3391	
Line	407.771 { 83}	283.730 {119}	334.904 {101}	190.856 {477}	370.152 { 91}	292.402 {115}	206.200 {163}	339.198 { 99}	
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	
Avg	1.8167	1.0038	.98245	1.9954	2.1348	.49137	.49703	.50569	
Stddev	.0017	.0018	.00170	.0035	.0022	.00191	.00271	.00368	
%RSD	.09452	.18198	.17328	.17361	.10562	.38782	.54565	.72765	

#1	1.8155	1.0051	.98125	1.9930	2.1364	.49002	.49512	.50309	
#2	1.8179	1.0025	.98365	1.9979	2.1332	.49272	.49895	.50829	

Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	
High Limit									
Low Limit									

Int. Std.	Y_2243	Y_3600	Y_3774
Line	224.306 {450}	360.073 { 94}	377.433 { 89}
Units	Cts/S	Cts/S	Cts/S
Avg	1421.2	29510.	5633.2
Stddev	2.4	5.	6.4
%RSD	.17056	.01648	.11305

#1	1419.5	29507.	5637.7
#2	1422.9	29513.	5628.6

Sample Name: 280-83127-A-1-C MSD Acquired: 5/20/2016 21:35:13 Type: Unk
Method: 6500_026(v10) Mode: CONC Corr. Factor: 1.000000
User: kellyca Custom ID1: Custom ID2: Custom ID3:
Comment: 325558 6010b

Elem	Ag3280	Al1670	As1890	B_2089	Ba4554	Be3130	Bi2230	Ca3179	Cd2288
Line	328.068 {103}	167.079 {502}	189.042 {478}	208.959 {461}	455.403 { 74}	313.042 {108}	223.061 {451}	317.933 {106}	228.802 {447}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.05267	2.0104	1.1283	1.8730	2.0982	.05150	2.3166	347.61	.10972
Stddev	.00054	.0032	.0014	.0085	.0102	.00041	.0038	2.39	.00016
%RSD	1.0338	.15912	.12570	.45446	.48541	.79615	.16266	.68694	.14783

#1	.05228	2.0127	1.1293	1.8670	2.0910	.05121	2.3140	345.92	.10960
#2	.05305	2.0082	1.1273	1.8791	2.1054	.05179	2.3193	349.30	.10983

Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Elem	Co2286	Cr2055	Cu3247	Fe2599	K_7664	Li6707	Mg2790	Mn2576	Mo2020
Line	228.616 {447}	205.560 {464}	324.754 {104}	259.940 {130}	766.490 { 44}	670.784 { 50}	279.079 {121}2	257.610 {131}	202.030 {467}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.51183	W .20725	.26881	3.0636	57.044	1.1505	89.802	2.7778	1.0851
Stddev	.00210	.00021	.00063	.0319	.289	.0035	.156	.0070	.0018
%RSD	.40979	.10110	.23288	1.0395	.50720	.30792	.17384	.25282	.16305

#1	.51035	.20740	.26837	3.0411	56.839	1.1480	89.912	2.7828	1.0863
#2	.51331	.20711	.26925	3.0861	57.249	1.1530	89.692	2.7728	1.0838

Check ?	Chk Pass	Chk Warn	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit		.10000							
Low Limit		-.01000							

Elem	Na8183	Ni2316	P_1782	Pb2203	S_1820	Sb2068	Se1960	Si2881	Sn1899
Line	818.326 { 41}	231.604 {446}	178.284 {489}	220.353 {453}	182.034 {485}	206.833 {463}	196.090 {472}	288.158 {117}	189.989 {477}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	87.994	.50594	11.927	.51980	F 259.30	.56295	2.2711	14.622	2.0108
Stddev	.656	.00029	.057	.00082	.69	.00754	.0051	.060	.0047
%RSD	.74561	.05776	.47902	.15755	.26744	1.3385	.22536	.41252	.23629

#1	87.530	.50615	11.887	.51922	258.81	.55763	2.2674	14.579	2.0075
#2	88.458	.50573	11.967	.52038	259.79	.56828	2.2747	14.665	2.0142

Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Fail	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit					200.00				
Low Limit					-.02000				

Elem	Sr4077	Th2837	Ti3349	Ti1908	U_3701	V_2924	Zn2062	Zr3391
Line	407.771 { 83}	283.730 {119}	334.904 {101}	190.856 {477}	370.152 { 91}	292.402 {115}	206.200 {163}	339.198 { 99}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	1.8041	.99035	.96947	1.9778	2.1296	.48474	.49668	.50401
Stddev	.0123	.00401	.00156	.0001	.0075	.00120	.00240	.00491
%RSD	.68158	.40458	.16122	.00730	.35181	.24844	.48264	.97496

#1	1.7954	.99318	.97057	1.9777	2.1243	.48559	.49837	.50053
#2	1.8128	.98751	.96836	1.9779	2.1349	.48389	.49498	.50748

Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit								
Low Limit								

Int. Std.	Y_2243	Y_3600	Y_3774
Line	224.306 {450}	360.073 { 94}	377.433 { 89}
Units	Cts/S	Cts/S	Cts/S
Avg	1423.2	29477.	5575.2
Stddev	1.5	74.	32.1
%RSD	.10793	.25118	.57562

#1	1424.3	29425.	5597.9
#2	1422.1	29530.	5552.5

Sample Name: 280-83127-A-2-A Acquired: 5/20/2016 21:37:49 Type: Unk
Method: 6500_026(v10) Mode: CONC Corr. Factor: 1.000000
User: kellyca Custom ID1: Custom ID2: Custom ID3:
Comment: 325558 6010b

Elem	Ag3280	Al1670	As1890	B_2089	Ba4554	Be3130	Bi2230	Ca3179	Cd2288
Line	328.068 {103}	167.079 {502}	189.042 {478}	208.959 {461}	455.403 { 74}	313.042 {108}	223.061 {451}	317.933 {106}	228.802 {447}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.00006	.00593	-.00438	.02711	.04146	-.00009	.00098	133.27	.00046
Stddev	.00058	.00094	.00600	.00066	.00010	.00008	.00350	.22	.00044
%RSD	1017.2	15.805	137.05	2.4290	.25026	92.842	356.63	.16741	94.969

#1	.00047	.00660	-.00014	.02758	.04154	-.00014	.00346	133.11	.00015
#2	-.00035	.00527	-.00862	.02665	.04139	-.00003	-.00149	133.43	.00077

Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Elem	Co2286	Cr2055	Cu3247	Fe2599	K_7664	Li6707	Mg2790	Mn2576	Mo2020
Line	228.616 {447}	205.560 {464}	324.754 {104}	259.940 {130}	766.490 { 44}	670.784 { 50}	279.079 {121}2	257.610 {131}	202.030 {467}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.00030	.00053	.00159	.62742	2.0336	.00030	14.994	2.7569	.00152
Stddev	.00003	.00006	.00007	.00542	.0037	.00093	.031	.0026	.00010
%RSD	10.300	11.869	4.4078	.86449	.18164	307.86	.20822	.09341	6.2658

#1	.00027	.00049	.00164	.63126	2.0310	-.00035	14.972	2.7587	.00146
#2	.00032	.00058	.00154	.62359	2.0362	.00096	15.016	2.7551	.00159

Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Elem	Na8183	Ni2316	P_1782	Pb2203	S_1820	Sb2068	Se1960	Si2881	Sn1899
Line	818.326 { 41}	231.604 {446}	178.284 {489}	220.353 {453}	182.034 {485}	206.833 {463}	196.090 {472}	288.158 {117}	189.989 {477}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	15.264	.00701	.08692	-.00272	84.390	-.00004	.00369	5.6191	.00214
Stddev	.045	.00008	.00355	.00012	.444	.00004	.00399	.0490	.00143
%RSD	.29310	1.1066	4.0808	4.5338	.52568	102.92	108.12	.87243	66.867

#1	15.232	.00706	.08942	-.00281	84.703	-.00006	.00087	5.5845	.00113
#2	15.295	.00695	.08441	-.00264	84.076	-.00001	.00652	5.6538	.00316

Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Elem	Sr4077	Th2837	Ti3349	Ti1908	U_3701	V_2924	Zn2062	Zr3391
Line	407.771 { 83}	283.730 {119}	334.904 {101}	190.856 {477}	370.152 { 91}	292.402 {115}	206.200 {163}	339.198 { 99}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.27091	-.00668	.00038	-.00118	.01754	.00008	.00235	.00079
Stddev	.00052	.00009	.00005	.00029	.00002	.00045	.00141	.00131
%RSD	.19019	1.3881	13.199	24.477	.08995	555.65	60.136	164.78

#1	.27054	-.00661	.00041	-.00097	.01755	.00040	.00135	.00172
#2	.27127	-.00674	.00034	-.00138	.01753	-.00024	.00335	-.00013

Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit								
Low Limit								

Int. Std.	Y_2243	Y_3600	Y_3774
Line	224.306 {450}	360.073 { 94}	377.433 { 89}
Units	Cts/S	Cts/S	Cts/S
Avg	1498.5	31162.	5845.9
Stddev	1.6	58.	7.3
%RSD	.10705	.18587	.12567

#1	1497.4	31121.	5851.1
#2	1499.6	31203.	5840.7

Sample Name: 280-83127-A-3-A Acquired: 5/20/2016 21:40:35 Type: Unk
Method: 6500_026(v10) Mode: CONC Corr. Factor: 1.000000
User: kellyca Custom ID1: Custom ID2: Custom ID3:
Comment: 325558 6010b

Elem	Ag3280	Al1670	As1890	B_2089	Ba4554	Be3130	Bi2230	Ca3179	Cd2288
Line	328.068 {103}	167.079 {502}	189.042 {478}	208.959 {461}	455.403 { 74}	313.042 {108}	223.061 {451}	317.933 {106}	228.802 {447}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.00159	.22031	.00521	.88715	.16994	-.00005	.00205	173.91	.00493
Stddev	.00040	.00454	.00872	.00123	.00043	.00003	.00039	.26	.00038
%RSD	24.965	2.0630	167.33	.13838	.25132	62.626	18.881	.14960	7.7933

#1	.00131	.21709	.01137	.88802	.17024	-.00007	.00178	174.09	.00466
#2	.00187	.22352	-.00095	.88628	.16964	-.00003	.00233	173.72	.00520

Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Elem	Co2286	Cr2055	Cu3247	Fe2599	K_7664	Li6707	Mg2790	Mn2576	Mo2020
Line	228.616 {447}	205.560 {464}	324.754 {104}	259.940 {130}	766.490 { 44}	670.784 { 50}	279.079 {121}2	257.610 {131}	202.030 {467}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.13433	.00206	.00232	38.816	1.3080	.00261	18.148	F 23.040	-.00029
Stddev	.00039	.00003	.00010	.184	.0001	.00009	.009	.112	.00053
%RSD	.29010	1.4258	4.1303	.47499	.00897	3.5368	.04989	.48483	181.31

#1	.13406	.00204	.00225	38.947	1.3079	.00254	18.141	23.119	-.00067
#2	.13461	.00209	.00239	38.686	1.3080	.00267	18.154	22.961	.00008

Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Fail	Chk Pass
High Limit								20.000	
Low Limit								-.02000	

Elem	Na8183	Ni2316	P_1782	Pb2203	S_1820	Sb2068	Se1960	Si2881	Sn1899
Line	818.326 { 41}	231.604 {446}	178.284 {489}	220.353 {453}	182.034 {485}	206.833 {463}	196.090 {472}	288.158 {117}	189.989 {477}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	70.270	.08152	1.4129	-.00155	61.384	.00183	.01008	9.3205	.00158
Stddev	.093	.00053	.0027	.00151	.029	.00136	.00042	.0473	.00089
%RSD	.13294	.65160	.19115	97.490	.04759	74.148	4.1590	.50752	56.174

#1	70.336	.08115	1.4110	-.00262	61.364	.00279	.00979	9.3540	.00221
#2	70.204	.08190	1.4148	-.00048	61.405	.00087	.01038	9.2871	.00095

Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Elem	Sr4077	Th2837	Ti3349	Ti1908	U_3701	V_2924	Zn2062	Zr3391
Line	407.771 { 83}	283.730 {119}	334.904 {101}	190.856 {477}	370.152 { 91}	292.402 {115}	206.200 {163}	339.198 { 99}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.40781	-.00999	.00582	-.00593	-.02147	-.00226	.02183	.00046
Stddev	.00044	.00037	.00200	.00044	.00393	.00022	.00042	.00080
%RSD	.10693	3.7463	34.306	7.3609	18.322	9.6608	1.9049	173.88

#1	.40812	-.01025	.00723	-.00623	-.01868	-.00242	.02154	.00103
#2	.40751	-.00972	.00441	-.00562	-.02425	-.00211	.02213	-.00011

Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit								
Low Limit								

Int. Std.	Y_2243	Y_3600	Y_3774
Line	224.306 {450}	360.073 { 94}	377.433 { 89}
Units	Cts/S	Cts/S	Cts/S
Avg	1473.2	30494.	5711.3
Stddev	1.7	315.	5.0
%RSD	.11791	1.0329	.08818

#1	1474.4	30272.	5714.9
#2	1472.0	30717.	5707.7

Sample Name: 280-83127-A-4-A Acquired: 5/20/2016 21:43:25 Type: Unk
Method: 6500_026(v10) Mode: CONC Corr. Factor: 1.000000
User: kellyca Custom ID1: Custom ID2: Custom ID3:
Comment: 325558 6010b

Elem	Ag3280	Al1670	As1890	B_2089	Ba4554	Be3130	Bi2230	Ca3179	Cd2288
Line	328.068 {103}	167.079 {502}	189.042 {478}	208.959 {461}	455.403 { 74}	313.042 {108}	223.061 {451}	317.933 {106}	228.802 {447}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.00038	.01992	-.00393	.01378	.04208	-.00006	-.00434	24.607	.00035
Stddev	.00013	.00027	.00129	.00071	.00028	.00005	.00112	.034	.00006
%RSD	33.609	1.3615	32.721	5.1855	.65623	94.779	25.780	.13644	18.295

#1	.00047	.01973	-.00484	.01428	.04188	-.00010	-.00513	24.631	.00039
#2	.00029	.02011	-.00302	.01327	.04227	-.00002	-.00354	24.583	.00030

Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Elem	Co2286	Cr2055	Cu3247	Fe2599	K_7664	Li6707	Mg2790	Mn2576	Mo2020
Line	228.616 {447}	205.560 {464}	324.754 {104}	259.940 {130}	766.490 { 44}	670.784 { 50}	279.079 {121}2	257.610 {131}	202.030 {467}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	-.00074	.00071	.00036	.04687	.35826	.00062	2.3677	.01647	.00041
Stddev	.00008	.00002	.00001	.00061	.02669	.00003	.0145	.00042	.00041
%RSD	10.744	2.9617	3.1259	1.2978	7.4498	5.2391	.61256	2.5769	99.669

#1	-.00069	.00069	.00037	.04644	.37713	.00060	2.3575	.01677	.00012
#2	-.00080	.00072	.00035	.04730	.33939	.00065	2.3780	.01617	.00070

Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Elem	Na5895	Ni2316	P_1782	Pb2203	S_1820	Sb2068	Se1960	Si2881	Sn1899
Line	589.592 { 57}	231.604 {446}	178.284 {489}	220.353 {453}	182.034 {485}	206.833 {463}	196.090 {472}	288.158 {117}	189.989 {477}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	3.5206	.00139	.23069	.00140	13.366	.00263	-.00274	6.6087	-.00023
Stddev	.0133	.00024	.00140	.00018	.022	.00064	.00302	.0046	.00031
%RSD	.37665	17.620	.60653	12.974	.16126	24.450	110.12	.06920	136.26

#1	3.5112	.00156	.23168	.00127	13.351	.00309	-.00061	6.6054	-.00001
#2	3.5300	.00121	.22970	.00153	13.381	.00218	-.00488	6.6119	-.00044

Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Elem	Sr4077	Th2837	Ti3349	Ti1908	U_3701	V_2924	Zn2062	Zr3391
Line	407.771 { 83}	283.730 {119}	334.904 {101}	190.856 {477}	370.152 { 91}	292.402 {115}	206.200 {163}	339.198 { 99}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.06585	-.00486	.00035	-.00188	.02047	.00019	.00282	.00210
Stddev	.00001	.00199	.00044	.00181	.00021	.00060	.00014	.00009
%RSD	.01068	41.001	124.48	96.186	1.0095	313.78	5.0445	4.4488

#1	.06585	-.00345	.00004	-.00060	.02033	-.00023	.00292	.00203
#2	.06586	-.00627	.00066	-.00316	.02062	.00061	.00272	.00217

Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit								
Low Limit								

Int. Std.	Y_2243	Y_3600	Y_3774
Line	224.306 {450}	360.073 { 94}	377.433 { 89}
Units	Cts/S	Cts/S	Cts/S
Avg	1563.5	32230.	5783.8
Stddev	.1	52.	13.2
%RSD	.00717	.16251	.22773

#1	1563.5	32267.	5774.5
#2	1563.6	32193.	5793.1

Sample Name: ccvh-3900196 Acquired: 5/20/2016 21:46:12 Type: QC
Method: 6500_026(v10) Mode: CONC Corr. Factor: 1.000000
User: kellyca Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	Ag3280	Al3092	As1890	B_2089	Ba4554	Be3130	Bi2230	Ca3179	Cd2288	Co2286	Cr2055	Cu3247	Fe2714
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	-.00160	47.771	-.00706	.00420	.00019	-.00037	1.0618	-.03898	-.00107	.00313	-.00070	.00689	48.059
Stddev	.00033	.150	.00432	.00067	.00014	.00003	.0015	.00403	.00010	.00003	.00001	.00052	.015
%RSD	20.354	.31345	61.211	16.078	70.157	8.1099	.14225	10.350	9.5998	1.1175	1.0935	7.4759	.03200

#1	-.00137	47.665	-.00401	.00467	.00010	-.00039	1.0629	-.03613	-.00100	.00316	-.00069	.00725	48.070
#2	-.00183	47.877	-.01012	.00372	.00029	-.00035	1.0607	-.04184	-.00115	.00311	-.00070	.00653	48.048

Check ?	None	Chk Pass	None	None	None	None	Chk Pass	None	None	None	None	None	Chk Pass
Value													
Range													

Elem	K_7664	Li6707	Mg2790	Mn2576	Mo2020	Na8183	Ni2316	P_1782	Pb2203	S_1820	Sb2068	Se1960	Si2881
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.03910	-.00116	.14202	-.00003	-.00269	258.75	-.00026	.00383	-.00040	5.0877	-.00289	.00144	.00241
Stddev	.03990	.00016	.00533	.00004	.00047	.80	.00130	.00363	.00029	.0037	.00381	.00426	.00378
%RSD	102.06	13.520	3.7562	158.99	17.552	.30808	507.19	94.805	72.327	.07248	132.05	296.56	157.06

#1	.01088	-.00127	.13825	-.00006	-.00302	258.19	-.00118	.00639	-.00061	5.0851	-.00558	.00444	.00508
#2	.06731	-.00105	.14579	.00000	-.00236	259.32	.00066	.00126	-.00020	5.0903	-.00019	-.00157	-.00027

Check ?	None	None	None	None	None	Chk Pass	None	None	None	Chk Pass	None	None	None
Value													
Range													

Elem	Sn1899	Sr4077	Th2837	Ti3349	Ti1908	U_3701	V_2924	Zn2062	Zr3391
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.00180	.00030	4.9686	.02554	-.00335	10.246	-.01636	-.00214	-.01343
Stddev	.00176	.00001	.0222	.00024	.00216	.008	.00068	.00067	.00367
%RSD	97.764	4.3247	.44644	.92821	64.510	.07997	4.1287	31.468	27.293

#1	.00055	.00031	4.9842	.02537	-.00182	10.241	-.01684	-.00167	-.01603
#2	.00304	.00029	4.9529	.02571	-.00487	10.252	-.01588	-.00262	-.01084

Check ?	None	None	Chk Pass	None	None	Chk Pass	None	None	None
Value									
Range									

Int. Std.	Y_2243	Y_3600	Y_3774
Units	Cts/S	Cts/S	Cts/S
Avg	1504.7	30310.	5605.6
Stddev	3.2	147.	21.6
%RSD	.21378	.48440	.38543

#1	1507.0	30206.	5590.3
#2	1502.5	30414.	5620.8

Sample Name: ccv-3900195 Acquired: 5/20/2016 21:49:05 Type: QC
Method: 6500_026(v10) Mode: CONC Corr. Factor: 1.000000
User: kellyca Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	Ag3280	Al1670	As1890	B_2089	Ba4554	Be3130	Bi2230	Ca3179	Cd2288	Co2286	Cr2055	Cu3247	Fe2599
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.49349	.52255	1.0234	.53506	.49692	.51375	-.00488	5.0109	.52240	.52234	.51500	.49507	2.4880
Stddev	.00011	.00469	.0041	.00102	.00119	.00186	.00032	.0054	.00044	.00127	.00121	.00188	.0010
%RSD	.02285	.89737	.39972	.19091	.23995	.36241	6.6035	.10694	.08507	.24222	.23561	.37967	.04019

#1	.49341	.52587	1.0263	.53434	.49608	.51244	-.00465	5.0071	.52209	.52324	.51414	.49640	2.4873
#2	.49357	.51924	1.0205	.53578	.49776	.51507	-.00510	5.0147	.52271	.52145	.51585	.49374	2.4887

Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	None	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Value													
Range													

Elem	K_7664	Li6707	Mg2790	Mn2576	Mo2020	Na5895	Ni2316	P_1782	Pb2203	S_1820	Sb2068	Se1960	Si2881
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	52.188	1.0781	20.088	.50257	.52052	5.2508	.50970	1.0181	1.0399	.00839	1.0339	1.0165	5.0512
Stddev	.061	.0026	.016	.00126	.00198	.0067	.00033	.0032	.0009	.00324	.0013	.0028	.0405
%RSD	.11667	.24492	.08139	.25136	.37975	.12726	.06474	.31042	.08406	38.556	.12745	.27359	.80080

#1	52.145	1.0763	20.099	.50346	.52192	5.2556	.50993	1.0203	1.0405	.00611	1.0329	1.0184	5.0226
#2	52.231	1.0800	20.076	.50168	.51913	5.2461	.50946	1.0158	1.0393	.01068	1.0348	1.0145	5.0798

Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	None	Chk Pass	Chk Pass	Chk Pass
Value													
Range													

Elem	Sn1899	Sr4077	Th2837	Ti3349	Ti1908	U_3701	V_2924	Zn2062	Zr3391
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	1.0045	.48687	-.00190	.47784	1.0414	.00697	.48021	.50472	.49879
Stddev	.0012	.00086	.00098	.00025	.0014	.01954	.00017	.00253	.00153
%RSD	.11431	.17674	51.649	.05297	.13951	280.60	.03507	.50122	.30611

#1	1.0037	.48627	-.00120	.47802	1.0424	-.00685	.48033	.50294	.49987
#2	1.0054	.48748	-.00259	.47767	1.0404	.02079	.48010	.50651	.49771

Check ?	Chk Pass	Chk Pass	None	Chk Pass	Chk Pass	None	Chk Pass	Chk Pass	Chk Pass
Value									
Range									

Int. Std.	Y_2243	Y_3600	Y_3774
Units	Cts/S	Cts/S	Cts/S
Avg	1539.2	31236.	5705.0
Stddev	.5	12.	18.4
%RSD	.03320	.03821	.32222

#1	1539.5	31228.	5718.0
#2	1538.8	31245.	5692.0

Sample Name: ccb Acquired: 5/20/2016 21:51:45 Type: QC
Method: 6500_026(v10) Mode: CONC Corr. Factor: 1.000000
User: kellyca Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	Ag3280	Al1670	As1890	B_2089	Ba4554	Be3130	Bi2230	Ca3179	Cd2288	Co2286	Cr2055	Cu3247
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	-.00041	.00004	-.00152	W .00246	-.00013	-.00009	-.00409	.00509	.00024	-.00093	.00019	-.00054
Stddev	.00024	.00072	.00060	.00123	.00002	.00010	.00062	.00066	.00008	.00022	.00016	.00053
%RSD	58.527	1619.8	39.709	50.031	12.354	115.36	15.205	13.062	33.117	23.140	83.633	97.562

#1	-.00024	-.00047	-.00195	.00333	-.00014	-.00002	-.00453	.00462	.00029	-.00108	.00031	-.00091
#2	-.00058	.00056	-.00109	.00159	-.00011	-.00016	-.00365	.00556	.00018	-.00078	.00008	-.00017

Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Warn	Chk Pass	Chk Pass	None	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit				.00156								
Low Limit				-.00156								

Elem	Fe2599	K_7664	Li6707	Mg2790	Mn2576	Mo2020	Na5895	Ni2316	P_1782	Pb2203	S_1820	Sb2068
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.00620	.05556	-.00040	.00283	W .00028	.00046	.01768	-.00059	.00220	-.00044	.01150	.00052
Stddev	.00091	.01052	.00048	.00254	.00004	.00013	.00455	.00014	.00392	.00014	.00288	.00058
%RSD	14.699	18.943	122.45	89.762	13.145	28.136	25.743	24.619	178.11	32.876	25.074	112.10

#1	.00684	.04812	-.00005	.00462	.00025	.00055	.01446	-.00048	-.00057	-.00054	.00946	.00011
#2	.00555	.06300	-.00074	.00103	.00031	.00037	.02090	-.00069	.00497	-.00034	.01354	.00094

Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Warn	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	None	Chk Pass
High Limit					.00025							
Low Limit					-.00025							

Elem	Se1960	Si2881	Sn1899	Sr4077	Th2837	Ti3349	Ti1908	U_3701	V_2924	Zn2062	Zr3391
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.00008	-.01274	.00117	-.00003	-.00235	.00028	-.00082	.00526	-.00000	-.00010	.00065
Stddev	.00146	.00588	.00037	.00006	.00106	.00012	.00045	.01654	.00051	.00053	.00076
%RSD	1892.8	46.152	31.665	178.23	44.946	41.952	55.043	314.32	13713.	560.02	116.40

#1	.00111	-.00858	.00143	.00001	-.00160	.00020	-.00050	-.00643	-.00036	.00028	.00118
#2	-.00095	-.01689	.00091	-.00007	-.00310	.00036	-.00115	.01696	.00036	-.00047	.00011

Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit											
Low Limit											

Int. Std.	Y_2243	Y_3600	Y_3774
Units	Cts/S	Cts/S	Cts/S
Avg	1561.5	31904.	5583.9
Stddev	3.2	78.	69.6
%RSD	.20614	.24307	1.2468

#1	1559.2	31959.	5534.7
#2	1563.8	31850.	5633.2

Sample Name: ccvl-3903059 Acquired: 5/20/2016 21:54:35 Type: QC
Method: 6500_026(v10) Mode: CONC Corr. Factor: 1.000000
User: kellyca Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	Ag3280	Al1670	As1890	B_2089	Ba4554	Be3130	Bi2230	Ca3179	Cd2288	Co2286	Cr2055	Cu3247	Fe2599	K_7664
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.00981	.10860	.01642	.11036	.01002	.00089	.11508	.20520	.00535	.01039	.01037	.01470	.10675	3.2259
Stddev	.00001	.00139	.00029	.00063	.00004	.00010	.00086	.00058	.00004	.00029	.00010	.00093	.00021	.0030
%RSD	.06962	1.2829	1.7391	.57222	.42272	11.372	.75073	.28264	.70254	2.7975	.95293	6.2973	.19281	.09243
#1	.00982	.10958	.01622	.10992	.01005	.00082	.11569	.20561	.00538	.01059	.01030	.01405	.10661	3.2238
#2	.00981	.10761	.01662	.11081	.00999	.00096	.11447	.20479	.00533	.01018	.01044	.01536	.10690	3.2280

Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Value														
Range														

Elem	Li6707	Mg2790	Mn2576	Mo2020	Na5895	Ni2316	P_1782	Pb2203	S_1820	Sb2068	Se1960	Si2881	Sn1899	Sr4077
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.01027	.20890	.01039	.02148	1.0673	.04218	3.0368	.00932	.00857	.02373	.01918	.49178	.10501	.00983
Stddev	.00090	.00316	.00019	.00040	.0055	.00031	.0054	.00373	.00035	.00077	.00185	.00946	.00026	.00006
%RSD	8.7881	1.5104	1.8297	1.8537	.51296	.74209	.17859	39.981	4.0575	3.2275	9.6255	1.9238	.25012	.64132
#1	.01091	.20667	.01026	.02176	1.0634	.04240	3.0406	.00669	.00832	.02428	.02049	.49847	.10519	.00987
#2	.00963	.21113	.01053	.02120	1.0712	.04196	3.0330	.01196	.00882	.02319	.01788	.48510	.10482	.00978

Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	None	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Value														
Range														

Elem	Th2837	Ti3349	Ti1908	U_3701	V_2924	Zn2062	Zr3391
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.01132	.00943	.01547	.06403	.00920	.02041	.01475
Stddev	.00067	.00011	.00055	.01904	.00019	.00113	.00143
%RSD	5.8867	1.2108	3.5712	29.735	2.0631	5.5334	9.6814
#1	.01179	.00951	.01586	.05057	.00933	.01961	.01374
#2	.01085	.00935	.01508	.07750	.00906	.02121	.01576

Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Value							
Range							

Int. Std.	Y_2243	Y_3600	Y_3774
Units	Cts/S	Cts/S	Cts/S
Avg	1562.2	32653.	5789.2
Stddev	4.6	483.	18.0
%RSD	.29242	1.4789	.31110
#1	1559.0	32994.	5776.5
#2	1565.5	32311.	5802.0

Sample Name: MB 280-325999/1-A Acquired: 5/20/2016 21:57:24 Type: Unk
Method: 6500_026(v10) Mode: CONC Corr. Factor: 1.000000
User: kellyca Custom ID1: 5/19 Custom ID2: Custom ID3:
Comment: 325999 6010B

Elem	Ag3280	Al1670	As1890	B_2089	Ba4554	Be3130	Bi2230	Ca3179	Cd2288
Line	328.068 {103}	167.079 {502}	189.042 {478}	208.959 {461}	455.403 { 74}	313.042 {108}	223.061 {451}	317.933 {106}	228.802 {447}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.00057	.00226	.00018	.00112	-.00010	-.00014	-.00249	.01765	.00008
Stddev	.00018	.00017	.00136	.00094	.00010	.00007	.00208	.00116	.00009
%RSD	30.945	7.3767	763.77	83.920	101.79	45.427	83.527	6.5877	113.77

#1	.00070	.00214	-.00078	.00045	-.00017	-.00010	-.00396	.01847	.00014
#2	.00045	.00238	.00114	.00178	-.00003	-.00019	-.00102	.01683	.00001

Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Elem	Co2286	Cr2055	Cu3247	Fe2599	K_7664	Li6707	Mg2790	Mn2576	Mo2020
Line	228.616 {447}	205.560 {464}	324.754 {104}	259.940 {130}	766.490 { 44}	670.784 { 50}	279.079 {121}2	257.610 {131}	202.030 {467}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	-.00061	.00327	-.00028	.00886	.03794	-.00065	.00594	.00039	.00010
Stddev	.00005	.00002	.00017	.00102	.02915	.00000	.00225	.00003	.00026
%RSD	9.0161	.63917	60.007	11.541	76.837	.52739	37.823	8.2493	258.11

#1	-.00065	.00326	-.00039	.00958	.01733	-.00064	.00435	.00041	-.00008
#2	-.00057	.00329	-.00016	.00813	.05855	-.00065	.00752	.00037	.00028

Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Elem	Na5895	Ni2316	P_1782	Pb2203	S_1820	Sb2068	Se1960	Si2881	Sn1899
Line	589.592 { 57}	231.604 {446}	178.284 {489}	220.353 {453}	182.034 {485}	206.833 {463}	196.090 {472}	288.158 {117}	189.989 {477}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.01509	-.00019	-.00014	.00001	.01416	.00035	.00158	.00064	.00117
Stddev	.00312	.00020	.00249	.00101	.00085	.00401	.00476	.00048	.00068
%RSD	20.653	103.92	1817.1	10796.	5.9875	1140.1	301.76	75.462	57.869

#1	.01289	-.00033	.00162	-.00070	.01356	-.00248	-.00179	.00030	.00165
#2	.01730	-.00005	-.00189	.00072	.01475	.00318	.00494	.00098	.00069

Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Elem	Sr4077	Th2837	Ti3349	Ti1908	U_3701	V_2924	Zn2062	Zr3391	
Line	407.771 { 83}	283.730 {119}	334.904 {101}	190.856 {477}	370.152 { 91}	292.402 {115}	206.200 {163}	339.198 { 99}	
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	
Avg	.00003	-.00384	.00052	.00018	.00840	.00040	.00213	-.00095	
Stddev	.00006	.00061	.00018	.00224	.03418	.00002	.00010	.00050	
%RSD	196.15	15.780	34.273	1250.6	406.96	6.0910	4.6605	52.207	

#1	.00007	-.00341	.00039	.00176	-.01577	.00038	.00221	-.00060	
#2	-.00001	-.00426	.00064	-.00141	.03257	.00041	.00206	-.00130	

Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	
High Limit									
Low Limit									

Int. Std.	Y_2243	Y_3600	Y_3774						
Line	224.306 {450}	360.073 { 94}	377.433 { 89}						
Units	Cts/S	Cts/S	Cts/S						
Avg	1570.6	32763.	5806.5						
Stddev	.3	100.	16.7						
%RSD	.01785	.30588	.28696						

#1	1570.4	32834.	5794.7						
#2	1570.8	32692.	5818.2						

Sample Name: LCS 280-325999/2-A Acquired: 5/20/2016 22:00:14 Type: Unk

Method: 6500_026(v10) Mode: CONC Corr. Factor: 1.000000

User: kellyca Custom ID1: Custom ID2: Custom ID3:

Comment: 325999 6010B

Elem	Ag3280	Al1670	As1890	B_2089	Ba4554	Be3130	Bi2230	Ca3179	Cd2288
Line	328.068 {103}	167.079 {502}	189.042 {478}	208.959 {461}	455.403 { 74}	313.042 {108}	223.061 {451}	317.933 {106}	228.802 {447}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.05155	2.0480	1.0888	F 1.1353	2.0681	.05326	F 2.2803	51.950	.10837
Stddev	.00020	.0013	.0056	.0057	.0169	.00044	.0046	.350	.00005
%RSD	.39706	.06433	.51888	.50527	.81516	.82139	.20330	.67300	.04279

#1	.05169	2.0471	1.0928	1.1313	2.0562	.05295	2.2770	51.702	.10833
#2	.05140	2.0489	1.0848	1.1394	2.0800	.05357	2.2835	52.197	.10840

Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Fail	Chk Pass	Chk Pass	Chk Fail	Chk Pass	Chk Pass
High Limit				1.1000			2.2000		
Low Limit				.89000			1.8000		

Elem	Co2286	Cr2055	Cu3247	Fe2599	K_7664	Li6707	Mg2790	Mn2576	Mo2020
Line	228.616 {447}	205.560 {464}	324.754 {104}	259.940 {130}	766.490 { 44}	670.784 { 50}	279.079 {121}2	257.610 {131}	202.030 {467}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.52805	F .21174	.26077	1.0384	55.026	1.1217	51.438	.50363	F 1.1006
Stddev	.00086	.00069	.00100	.0086	.497	.0128	.035	.00108	.0006
%RSD	.16352	.32786	.38536	.83159	.90398	1.1418	.06845	.21378	.05199

#1	.52866	.21125	.26148	1.0323	54.675	1.1126	51.463	.50439	1.1010
#2	.52744	.21223	.26006	1.0445	55.378	1.1307	51.413	.50287	1.1002

Check ?	Chk Pass	Chk Fail	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Fail
High Limit		.05750							1.1000
Low Limit		.04300							.90000

Elem	Na8183	Ni2316	P_1782	Pb2203	S_1820	Sb2068	Se1960	Si2881	Sn1899
Line	818.326 { 41}	231.604 {446}	178.284 {489}	220.353 {453}	182.034 {485}	206.833 {463}	196.090 {472}	288.158 {117}	189.989 {477}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	53.349	.51658	10.985	.53610	2.1486	F .54675	2.1632	10.446	2.0400
Stddev	.413	.00019	.011	.00007	.0144	.00168	.0008	.094	.0035
%RSD	.77471	.03678	.09664	.01340	.67033	.30743	.03887	.90323	.17033

#1	53.056	.51671	10.978	.53605	2.1588	.54556	2.1626	10.379	2.0424
#2	53.641	.51645	10.993	.53615	2.1384	.54793	2.1638	10.513	2.0375

Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Fail	Chk Pass	Chk Pass	Chk Pass
High Limit						.54000			
Low Limit						.44000			

Elem	Sr4077	Th2837	Ti3349	Ti1908	U_3701	V_2924	Zn2062	Zr3391
Line	407.771 { 83}	283.730 {119}	334.904 {101}	190.856 {477}	370.152 { 91}	292.402 {115}	206.200 {163}	339.198 { 99}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.99690	1.0079	.97825	2.0849	2.1662	.48512	.50600	.51407
Stddev	.00958	.0042	.00023	.0019	.0162	.00307	.00080	.00631
%RSD	.96083	.41141	.02321	.09213	.74599	.63239	.15721	1.2275

#1	.99012	1.0109	.97841	2.0836	2.1776	.48729	.50656	.50961
#2	1.0037	1.0050	.97809	2.0863	2.1548	.48295	.50543	.51854

Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit								
Low Limit								

Int. Std.	Y_2243	Y_3600	Y_3774
Line	224.306 {450}	360.073 { 94}	377.433 { 89}
Units	Cts/S	Cts/S	Cts/S
Avg	1499.1	31000.	5684.9
Stddev	.2	4.	32.6
%RSD	.01060	.01361	.57381

#1	1499.2	30997.	5707.9
#2	1499.0	31003.	5661.8

Sample Name: 280-83319-B-1-A Acquired: 5/20/2016 22:02:52 Type: Unk
Method: 6500_026(v10) Mode: CONC Corr. Factor: 1.000000
User: kellyca Custom ID1: Custom ID2: Custom ID3:
Comment: 325999 6010B

Elem	Ag3280	Al1670	As1890	B_2089	Ba4554	Be3130	Bi2230	Ca3179	Cd2288
Line	328.068 {103}	167.079 {502}	189.042 {478}	208.959 {461}	455.403 { 74}	313.042 {108}	223.061 {451}	317.933 {106}	228.802 {447}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.00011	.38272	.12256	8.3270	.39183	-.00011	-.00600	100.99	.00031
Stddev	.00101	.00229	.00496	.0283	.00182	.00003	.00419	1.21	.00014
%RSD	931.11	.59829	4.0445	.34025	.46573	25.788	69.755	1.1996	45.911

#1	.00082	.38434	.11906	8.3471	.39054	-.00009	-.00896	100.13	.00021
#2	-.00061	.38110	.12607	8.3070	.39312	-.00013	-.00304	101.85	.00041

Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Elem	Co2286	Cr2055	Cu3247	Fe2599	K_7664	Li6707	Mg2790	Mn2576	Mo2020
Line	228.616 {447}	205.560 {464}	324.754 {104}	259.940 {130}	766.490 { 44}	670.784 { 50}	279.079 {121}2	257.610 {131}	202.030 {467}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.02310	W .10801	.00804	3.2312	W 334.57	.03336	118.94	.97593	.00630
Stddev	.00013	.00023	.00016	.0106	.85	.00092	1.96	.01606	.00049
%RSD	.54851	.21440	2.0393	.32939	.25328	2.7538	1.6467	1.6458	7.7085

#1	.02301	.10817	.00792	3.2237	333.97	.03400	117.56	.96457	.00664
#2	.02319	.10784	.00815	3.2387	335.17	.03271	120.33	.98729	.00595

Check ?	Chk Pass	Chk Warn	Chk Pass	Chk Pass	Chk Warn	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit		.10000			100.00				
Low Limit		-.01000			-.50000				

Elem	Na8183	Ni2316	P_1782	Pb2203	S_1820	Sb2068	Se1960	Si2881	Sn1899
Line	818.326 { 41}	231.604 {446}	178.284 {489}	220.353 {453}	182.034 {485}	206.833 {463}	196.090 {472}	288.158 {117}	189.989 {477}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	W 1135.6	.07689	4.1788	.00206	19.757	.01745	.01069	20.877	.00708
Stddev	6.1	.00035	.0073	.00102	.026	.00012	.00306	.244	.00026
%RSD	.53474	.45305	.17522	49.666	.12952	.69194	28.660	1.1683	3.6180

#1	1131.4	.07664	4.1840	.00278	19.775	.01753	.01286	20.704	.00690
#2	1139.9	.07713	4.1736	.00133	19.739	.01736	.00853	21.049	.00726

Check ?	Chk Warn	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit	500.00								
Low Limit	10.000								

Elem	Sr4077	Th2837	Ti3349	Ti1908	U_3701	V_2924	Zn2062	Zr3391
Line	407.771 { 83}	283.730 {119}	334.904 {101}	190.856 {477}	370.152 { 91}	292.402 {115}	206.200 {163}	339.198 { 99}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	1.2523	-.00898	.22227	-.00250	.02531	.07947	.06797	.05097
Stddev	.0040	.00043	.00406	.00109	.00879	.00094	.00063	.00033
%RSD	.31645	4.8158	1.8260	43.636	34.745	1.1791	.92823	.65617

#1	1.2495	-.00868	.21940	-.00173	.03152	.07881	.06753	.05121
#2	1.2551	-.00929	.22514	-.00327	.01909	.08014	.06842	.05074

Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit								
Low Limit								

Int. Std.	Y_2243	Y_3600	Y_3774
Line	224.306 {450}	360.073 { 94}	377.433 { 89}
Units	Cts/S	Cts/S	Cts/S
Avg	1327.7	26974.	5521.6
Stddev	3.8	340.	67.0
%RSD	.28662	1.2613	1.2133

#1	1325.0	27214.	5569.0
#2	1330.4	26733.	5474.2

Sample Name: 280-83319-B-1-A SD@5 Acquired: 5/20/2016 22:06:07 Type: Unk
Method: 6500_026(v10) Mode: CONC Corr. Factor: 1.000000
User: kellyca Custom ID1: Custom ID2: Custom ID3:
Comment: 325999 6010B

Elem	Ag3280	Al1670	As1890	B_2089	Ba4554	Be3130	Bi2230	Ca3179	Cd2288
Line	328.068 {103}	167.079 {502}	189.042 {478}	208.959 {461}	455.403 { 74}	313.042 {108}	223.061 {451}	317.933 {106}	228.802 {447}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.00018	.07698	.02012	1.5791	.06535	-.00012	-.00418	17.085	.00022
Stddev	.00039	.00258	.00212	.0497	.00067	.00003	.00334	.170	.00006
%RSD	214.11	3.3564	10.511	3.1440	1.0249	26.843	79.870	.99278	28.271

#1	.00045	.07515	.01863	1.5440	.06487	-.00014	-.00654	16.965	.00027
#2	-.00009	.07881	.02162	1.6142	.06582	-.00010	-.00182	17.205	.00018

Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Elem	Co2286	Cr2055	Cu3247	Fe2599	K_7664	Li6707	Mg2790	Mn2576	Mo2020
Line	228.616 {447}	205.560 {464}	324.754 {104}	259.940 {130}	766.490 { 44}	670.784 { 50}	279.079 {121}2	257.610 {131}	202.030 {467}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.00523	.01963	.00157	.56677	55.081	.00440	20.861	.16892	.00137
Stddev	.00040	.00071	.00023	.00104	.397	.00060	.118	.00182	.00046
%RSD	7.5790	3.6215	14.956	.18312	.72080	13.662	.56483	1.0800	33.530

#1	.00495	.01913	.00173	.56751	54.801	.00397	20.777	.16763	.00169
#2	.00551	.02014	.00140	.56604	55.362	.00482	20.944	.17021	.00104

Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Elem	Na8183	Ni2316	P_1782	Pb2203	S_1820	Sb2068	Se1960	Si2881	Sn1899
Line	818.326 { 41}	231.604 {446}	178.284 {489}	220.353 {453}	182.034 {485}	206.833 {463}	196.090 {472}	288.158 {117}	189.989 {477}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	184.72	.01409	.74564	-.00077	3.4377	.00591	.00893	3.4111	.00228
Stddev	2.19	.00052	.02415	.00115	.1086	.00127	.00083	.0566	.00026
%RSD	1.1831	3.6920	3.2384	148.58	3.1578	21.508	9.2479	1.6587	11.289

#1	183.18	.01372	.72856	-.00158	3.3610	.00501	.00834	3.3711	.00247
#2	186.27	.01445	.76271	.00004	3.5145	.00681	.00951	3.4511	.00210

Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Elem	Sr4077	Th2837	Ti3349	Ti1908	U_3701	V_2924	Zn2062	Zr3391
Line	407.771 { 83}	283.730 {119}	334.904 {101}	190.856 {477}	370.152 { 91}	292.402 {115}	206.200 {163}	339.198 { 99}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.20822	-.00700	.03745	-.00323	.03154	.01295	.01184	.00975
Stddev	.00218	.00082	.00003	.00131	.01843	.00014	.00077	.00059
%RSD	1.0455	11.769	.06712	40.613	58.424	1.1190	6.4720	6.0278

#1	.20668	-.00758	.03743	-.00415	.01851	.01285	.01130	.01016
#2	.20975	-.00641	.03747	-.00230	.04457	.01305	.01238	.00933

Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit								
Low Limit								

Int. Std.	Y_2243	Y_3600	Y_3774
Line	224.306 {450}	360.073 { 94}	377.433 { 89}
Units	Cts/S	Cts/S	Cts/S
Avg	1483.3	30723.	5817.0
Stddev	2.7	4.	7.0
%RSD	.18146	.01306	.11965

#1	1485.2	30725.	5812.1
#2	1481.4	30720.	5821.9

Sample Name: 280-83319-B-1-B MS Acquired: 5/20/2016 22:08:54 Type: Unk
Method: 6500_026(v10) Mode: CONC Corr. Factor: 1.000000
User: kellyca Custom ID1: Custom ID2: Custom ID3:
Comment: 325999 6010B

Elem	Ag3280	Al1670	As1890	B_2089	Ba4554	Be3130	Bi2230	Ca3179	Cd2288
Line	328.068 {103}	167.079 {502}	189.042 {478}	208.959 {461}	455.403 { 74}	313.042 {108}	223.061 {451}	317.933 {106}	228.802 {447}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.05630	2.3773	1.2736	9.6185	2.4410	.05176	2.3234	151.77	.11385
Stddev	.00030	.0050	.0010	.0134	.0003	.00003	.0014	.12	.00006
%RSD	.53770	.20942	.07862	.13950	.01166	.05616	.06255	.08120	.05465

#1	.05651	2.3737	1.2729	9.6090	2.4408	.05178	2.3223	151.86	.11381
#2	.05608	2.3808	1.2743	9.6280	2.4412	.05174	2.3244	151.69	.11390

Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Elem	Co2286	Cr2055	Cu3247	Fe2599	K_7664	Li6707	Mg2790	Mn2576	Mo2020
Line	228.616 {447}	205.560 {464}	324.754 {104}	259.940 {130}	766.490 { 44}	670.784 { 50}	279.079 {121}2	257.610 {131}	202.030 {467}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.51919	W .31019	.28337	4.2354	W 397.79	1.2195	167.49	1.4483	1.0682
Stddev	.00059	.00008	.00071	.0006	.25	.0032	.43	.0034	.0006
%RSD	.11351	.02460	.24978	.01502	.06251	.26407	.25910	.23134	.05343

#1	.51960	.31013	.28287	4.2359	397.96	1.2172	167.19	1.4460	1.0678
#2	.51877	.31024	.28387	4.2350	397.61	1.2218	167.80	1.4507	1.0686

Check ?	Chk Pass	Chk Warn	Chk Pass	Chk Pass	Chk Warn	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit		.10000			100.00				
Low Limit		-.01000			-.50000				

Elem	Na8183	Ni2316	P_1782	Pb2203	S_1820	Sb2068	Se1960	Si2881	Sn1899
Line	818.326 { 41}	231.604 {446}	178.284 {489}	220.353 {453}	182.034 {485}	206.833 {463}	196.090 {472}	288.158 {117}	189.989 {477}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	W 1218.8	.55482	15.630	.49244	22.424	.58004	2.2663	27.463	1.9135
Stddev	.7	.00115	.016	.00061	.003	.00152	.0090	.120	.0028
%RSD	.05769	.20645	.10207	.12425	.01199	.26250	.39559	.43602	.14502

#1	1219.3	.55563	15.618	.49287	22.422	.58112	2.2726	27.548	1.9154
#2	1218.3	.55401	15.641	.49201	22.425	.57897	2.2600	27.379	1.9115

Check ?	Chk Warn	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit	500.00								
Low Limit	10.000								

Elem	Sr4077	Th2837	Ti3349	Ti1908	U_3701	V_2924	Zn2062	Zr3391
Line	407.771 { 83}	283.730 {119}	334.904 {101}	190.856 {477}	370.152 { 91}	292.402 {115}	206.200 {163}	339.198 { 99}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	2.2635	.88376	1.1721	1.7232	2.0946	.55849	.53412	.53987
Stddev	.0006	.00188	.0010	.0005	.0138	.00066	.00274	.00192
%RSD	.02645	.21255	.08954	.02929	.65860	.11778	.51379	.35507

#1	2.2639	.88243	1.1714	1.7236	2.0848	.55895	.53218	.54122
#2	2.2631	.88509	1.1729	1.7229	2.1043	.55802	.53607	.53851

Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit								
Low Limit								

Int. Std.	Y_2243	Y_3600	Y_3774
Line	224.306 {450}	360.073 { 94}	377.433 { 89}
Units	Cts/S	Cts/S	Cts/S
Avg	1306.2	27108.	5505.9
Stddev	1.0	1.	7.2
%RSD	.07862	.00449	.13051

#1	1305.5	27109.	5500.8
#2	1306.9	27107.	5511.0

Sample Name: 280-83319-B-1-C MSD Acquired: 5/20/2016 22:12:00 Type: Unk

Method: 6500_026(v10) Mode: CONC Corr. Factor: 1.000000

User: kellyca Custom ID1: Custom ID2: Custom ID3:

Comment: 325999 6010B

Elem	Ag3280	Al1670	As1890	B_2089	Ba4554	Be3130	Bi2230	Ca3179	Cd2288
Line	328.068 {103}	167.079 {502}	189.042 {478}	208.959 {461}	455.403 { 74}	313.042 {108}	223.061 {451}	317.933 {106}	228.802 {447}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.05763	2.3508	1.2767	9.7848	2.4705	.05214	2.3543	154.19	.11558
Stddev	.00101	.0063	.0063	.0456	.0003	.00001	.0183	.22	.00053
%RSD	1.7482	.26638	.49277	.46559	.01036	.02856	.77594	.14358	.46266

#1	.05834	2.3552	1.2723	9.7526	2.4707	.05213	2.3414	154.35	.11596
#2	.05692	2.3463	1.2812	9.8170	2.4703	.05215	2.3672	154.04	.11520

Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Elem	Co2286	Cr2055	Cu3247	Fe2599	K_7664	Li6707	Mg2790	Mn2576	Mo2020
Line	228.616 {447}	205.560 {464}	324.754 {104}	259.940 {130}	766.490 { 44}	670.784 { 50}	279.079 {121}2	257.610 {131}	202.030 {467}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.52412	W .31393	.28779	4.2104	W 401.21	1.2298	171.60	1.4861	1.0860
Stddev	.00136	.00099	.00255	.0023	.03	.0001	.87	.0031	.0043
%RSD	.25940	.31428	.88687	.05388	.00835	.01234	.50892	.20680	.39254

#1	.52316	.31463	.28960	4.2120	401.23	1.2297	172.22	1.4883	1.0830
#2	.52508	.31323	.28599	4.2088	401.18	1.2299	170.98	1.4840	1.0890

Check ?	Chk Pass	Chk Warn	Chk Pass	Chk Pass	Chk Warn	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit		.10000			100.00				
Low Limit		-.01000			-.50000				

Elem	Na8183	Ni2316	P_1782	Pb2203	S_1820	Sb2068	Se1960	Si2881	Sn1899
Line	818.326 { 41}	231.604 {446}	178.284 {489}	220.353 {453}	182.034 {485}	206.833 {463}	196.090 {472}	288.158 {117}	189.989 {477}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	W 1241.2	.56047	15.853	.50019	22.738	.59121	2.3022	27.558	1.9292
Stddev	1.2	.00014	.065	.00301	.080	.00680	.0223	.075	.0056
%RSD	.09521	.02568	.40839	.60191	.35037	1.1509	.96716	.27262	.29213

#1	1242.0	.56037	15.807	.50232	22.681	.58639	2.2865	27.612	1.9252
#2	1240.3	.56057	15.899	.49806	22.794	.59602	2.3179	27.505	1.9331

Check ?	Chk Warn	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit	500.00								
Low Limit	10.000								

Elem	Sr4077	Th2837	Ti3349	Ti1908	U_3701	V_2924	Zn2062	Zr3391
Line	407.771 { 83}	283.730 {119}	334.904 {101}	190.856 {477}	370.152 { 91}	292.402 {115}	206.200 {163}	339.198 { 99}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	2.2866	.88012	1.1778	1.7373	2.1008	.57086	.55499	.54773
Stddev	.0039	.01364	.0050	.0087	.0032	.00044	.00093	.00030
%RSD	.16954	1.5501	.42883	.49849	.15066	.07634	.16727	.05466

#1	2.2839	.88977	1.1814	1.7312	2.0986	.57117	.55565	.54751
#2	2.2894	.87047	1.1743	1.7434	2.1031	.57056	.55434	.54794

Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit								
Low Limit								

Int. Std.	Y_2243	Y_3600	Y_3774
Line	224.306 {450}	360.073 { 94}	377.433 { 89}
Units	Cts/S	Cts/S	Cts/S
Avg	1304.5	26877.	5510.1
Stddev	3.3	62.	2.6
%RSD	.25321	.22929	.04754

#1	1306.8	26833.	5508.3
#2	1302.2	26920.	5512.0

Sample Name: 280-83319-B-2-A Acquired: 5/20/2016 22:15:03 Type: Unk
Method: 6500_026(v10) Mode: CONC Corr. Factor: 1.000000
User: kellyca Custom ID1: Custom ID2: Custom ID3:
Comment: 325999 6010B

Elem	Ag3280	Al1670	As1890	B_2089	Ba4554	Be3130	Bi2230	Ca3179	Cd2288
Line	328.068 {103}	167.079 {502}	189.042 {478}	208.959 {461}	455.403 { 74}	313.042 {108}	223.061 {451}	317.933 {106}	228.802 {447}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	-0.00042	.44378	.50007	26.468	.38146	-0.00021	-0.00597	41.604	-0.00031
Stddev	.00023	.00300	.00989	.013	.00046	.00012	.00653	.195	.00007
%RSD	55.465	.67578	1.9775	.04831	.12108	58.220	109.22	.46890	23.652

#1	-0.00058	.44590	.49308	26.477	.38178	-0.00012	-0.00136	41.466	-0.00036
#2	-0.00025	.44166	.50706	26.459	.38113	-0.00029	-0.01059	41.742	-0.00026

Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Elem	Co2286	Cr2055	Cu3247	Fe2599	K_7664	Li6707	Mg2790	Mn2576	Mo2020
Line	228.616 {447}	205.560 {464}	324.754 {104}	259.940 {130}	766.490 { 44}	670.784 { 50}	279.079 {121}2	257.610 {131}	202.030 {467}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.04700	W .48481	.00967	5.5712	F 1049.7	.19430	144.47	.28232	.01967
Stddev	.00068	.00122	.00021	.0261	4.9	.00087	.04	.00089	.00073
%RSD	1.4392	.25235	2.1209	.46909	.46677	.44642	.02690	.31504	3.6870

#1	.04748	.48568	.00953	5.5527	1053.1	.19492	144.49	.28169	.01915
#2	.04652	.48394	.00982	5.5897	1046.2	.19369	144.44	.28295	.02018

Check ?	Chk Pass	Chk Warn	Chk Pass	Chk Pass	Chk Fail	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit		.10000			500.00				
Low Limit		-.01000			-2.0000				

Elem	Na8183	Ni2316	P_1782	Pb2203	S_1820	Sb2068	Se1960	Si2881	Sn1899
Line	818.326 { 41}	231.604 {446}	178.284 {489}	220.353 {453}	182.034 {485}	206.833 {463}	196.090 {472}	288.158 {117}	189.989 {477}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	W 3475.8	.14686	11.082	W -0.00357	69.497	.06528	.02978	39.582	.04474
Stddev	3.9	.00027	.001	.00367	.001	.00143	.01074	.389	.00173
%RSD	.11316	.18654	.00514	102.68	.00202	2.1847	36.055	.98401	3.8614

#1	3478.6	.14705	11.081	-0.00098	69.496	.06628	.02219	39.307	.04596
#2	3473.0	.14667	11.082	-0.00617	69.498	.06427	.03737	39.858	.04352

Check ?	Chk Warn	Chk Pass	Chk Pass	Chk Warn	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit	500.00			10.000					
Low Limit	10.000			-.00300					

Elem	Sr4077	Th2837	Ti3349	Ti1908	U_3701	V_2924	Zn2062	Zr3391
Line	407.771 { 83}	283.730 {119}	334.904 {101}	190.856 {477}	370.152 { 91}	292.402 {115}	206.200 {163}	339.198 { 99}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.65059	W -0.01017	.64073	W -0.01064	.02971	.22089	.08002	.26999
Stddev	.00208	.00037	.00082	.00156	.02251	.00053	.00122	.00066
%RSD	.31992	3.6807	.12760	14.686	75.777	.24032	1.5262	.24560

#1	.65206	-0.00991	.64015	-0.00953	.04562	.22126	.08088	.27046
#2	.64911	-0.01044	.64131	-0.01174	.01379	.22051	.07915	.26952

Check ?	Chk Pass	Chk Warn	Chk Pass	Chk Warn	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit		45.000		5.0000				
Low Limit		-.01000		-.01000				

Int. Std.	Y_2243	Y_3600	Y_3774
Line	224.306 {450}	360.073 { 94}	377.433 { 89}
Units	Cts/S	Cts/S	Cts/S
Avg	1172.2	24193.	5363.2
Stddev	.5	12.	38.6
%RSD	.03907	.04970	.71992

#1	1171.8	24185.	5390.5
#2	1172.5	24202.	5335.9

Sample Name: 280-83162-A-5-A@5 Acquired: 5/20/2016 22:18:10 Type: Unk

Method: 6500_026(v10) Mode: CONC Corr. Factor: 1.000000

User: kellyca Custom ID1: Custom ID2: Custom ID3:

Comment: 325399 6010b s Mn

Elem	Ag3280	Al3092	As1890	B_2089	Ba4554	Be3130	Bi2230	Ca3179	Cd2288
Line	328.068 {103}	309.271 {109}	189.042 {478}	208.959 {461}	455.403 {74}	313.042 {108}	223.061 {451}	317.933 {106}	228.802 {447}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.00015	37.768	.03346	.05968	.69067	.00223	-.00019	8.1079	.00106
Stddev	.00029	.008	.00081	.00453	.00068	.00003	.00236	.0227	.00011
%RSD	197.30	.02026	2.4119	7.5857	.09883	1.4863	1221.4	.27956	10.064

#1	.00036	37.763	.03289	.06288	.69018	.00221	.00148	8.0919	.00098
#2	-.00006	37.774	.03403	.05648	.69115	.00226	-.00186	8.1240	.00114

Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Elem	Co2286	Cr2055	Cu3247	Fe2714	K_7664	Li6707	Mg2790	Mn2576	Mo2020
Line	228.616 {447}	205.560 {464}	324.754 {104}	271.441 {124}	766.490 {44}	670.784 {50}	279.079 {121}2	257.610 {131}	202.030 {467}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.07019	.03948	.07415	46.844	5.1047	.02856	6.1025	5.1254	.00335
Stddev	.00007	.00007	.00042	.229	.0532	.00078	.0076	.0060	.00132
%RSD	.09563	.17381	.56093	.48943	1.0422	2.7143	.12438	.11813	39.250

#1	.07024	.03953	.07386	46.682	5.1423	.02910	6.0971	5.1211	.00242
#2	.07014	.03943	.07444	47.006	5.0671	.02801	6.1078	5.1297	.00429

Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Elem	Na5895	Ni2316	P_1782	Pb2203	S_1820	Sb2068	Se1960	Si2881	Sn1899
Line	589.592 {57}	231.604 {446}	178.284 {489}	220.353 {453}	182.034 {485}	206.833 {463}	196.090 {472}	288.158 {117}	189.989 {477}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.65634	.06222	.70331	.09546	.40070	.00410	.00023	3.7858	.00068
Stddev	.04457	.00038	.00127	.00042	.00111	.00201	.00616	.0841	.00130
%RSD	6.7904	.61145	.18059	.43972	.27646	49.144	2677.5	2.2221	190.91

#1	.68786	.06249	.70420	.09576	.39991	.00552	.00459	3.8453	-.00024
#2	.62483	.06195	.70241	.09517	.40148	.00267	-.00413	3.7263	.00160

Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Elem	Sr4077	Th2837	Ti3349	Ti1908	U_3701	V_2924	Zn2062	Zr3391
Line	407.771 {83}	283.730 {119}	334.904 {101}	190.856 {477}	370.152 {91}	292.402 {115}	206.200 {163}	339.198 {99}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.06957	.01150	.27868	-.00165	-.02611	.10487	.12310	.02311
Stddev	.00025	.00097	.00010	.00073	.00261	.00009	.00081	.00221
%RSD	.35805	8.4729	.03716	43.980	9.9926	.08558	.65917	9.5569

#1	.06940	.01219	.27875	-.00217	-.02427	.10493	.12253	.02155
#2	.06975	.01081	.27861	-.00114	-.02796	.10481	.12368	.02467

Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit								
Low Limit								

Int. Std.	Y_2243	Y_3600	Y_3774
Line	224.306 {450}	360.073 {94}	377.433 {89}
Units	Cts/S	Cts/S	Cts/S
Avg	1610.1	32678.	5886.8
Stddev	1.7	64.	20.0
%RSD	.10747	.19485	.33997

#1	1608.9	32723.	5901.0
#2	1611.3	32633.	5872.7

Sample Name: 280-83162-A-13-A@5 Acquired: 5/20/2016 22:20:47 Type: Unk

Method: 6500_026(v10) Mode: CONC Corr. Factor: 1.000000

User: kellyca Custom ID1: Custom ID2: Custom ID3:

Comment: 325399 6010b s Mn

Elem	Ag3280	Al3092	As1890	B_2089	Ba4554	Be3130	Bi2230	Ca3179	Cd2288
Line	328.068 {103}	309.271 {109}	189.042 {478}	208.959 {461}	455.403 {74}	313.042 {108}	223.061 {451}	317.933 {106}	228.802 {447}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	-.00028	45.944	.01721	.04313	.96922	.00229	-.00056	10.945	.00108
Stddev	.00019	.088	.00558	.00125	.00301	.00000	.00216	.018	.00011
%RSD	69.267	.19143	32.452	2.8982	.31098	.15458	385.41	.16644	10.430

#1	-.00014	46.006	.02115	.04401	.97135	.00229	-.00209	10.958	.00100
#2	-.00041	45.882	.01326	.04225	.96709	.00229	.00097	10.932	.00116

Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Elem	Co2286	Cr2055	Cu3247	Fe2714	K_7664	Li6707	Mg2790	Mn2576	Mo2020
Line	228.616 {447}	205.560 {464}	324.754 {104}	271.441 {124}	766.490 {44}	670.784 {50}	279.079 {121}2	257.610 {131}	202.030 {467}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.05289	.04706	.03741	47.787	4.3737	.02871	8.4659	3.2931	.00141
Stddev	.00018	.00049	.00003	.007	.0064	.00019	.0037	.0159	.00029
%RSD	.34833	1.0467	.09145	.01556	.14648	.66902	.04389	.48269	20.299

#1	.05302	.04741	.03744	47.792	4.3692	.02885	8.4685	3.2818	.00121
#2	.05276	.04671	.03739	47.782	4.3782	.02858	8.4633	3.3043	.00161

Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Elem	Na5895	Ni2316	P_1782	Pb2203	S_1820	Sb2068	Se1960	Si2881	Sn1899
Line	589.592 {57}	231.604 {446}	178.284 {489}	220.353 {453}	182.034 {485}	206.833 {463}	196.090 {472}	288.158 {117}	189.989 {477}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.58106	.07191	.62653	.06950	.39987	.00114	.00088	2.3570	.00299
Stddev	.00004	.00009	.00061	.00077	.00561	.00025	.00161	.0199	.00114
%RSD	.00707	.11863	.09746	1.1056	1.4027	21.550	182.21	.84399	37.977

#1	.58109	.07197	.62610	.07005	.40383	.00131	-.00026	2.3710	.00379
#2	.58103	.07185	.62696	.06896	.39590	.00097	.00202	2.3429	.00219

Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Elem	Sr4077	Th2837	Ti3349	Ti1908	U_3701	V_2924	Zn2062	Zr3391
Line	407.771 {83}	283.730 {119}	334.904 {101}	190.856 {477}	370.152 {91}	292.402 {115}	206.200 {163}	339.198 {99}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.09465	.01224	.20736	-.00090	-.02912	.09190	.13742	.02739
Stddev	.00017	.00093	.00083	.00101	.02592	.00061	.00209	.00045
%RSD	.17463	7.5851	.39878	112.69	89.017	.66204	1.5178	1.6399

#1	.09477	.01158	.20678	-.00162	-.01079	.09233	.13595	.02770
#2	.09453	.01290	.20795	-.00018	-.04744	.09147	.13890	.02707

Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit								
Low Limit								

Int. Std.	Y_2243	Y_3600	Y_3774
Line	224.306 {450}	360.073 {94}	377.433 {89}
Units	Cts/S	Cts/S	Cts/S
Avg	1620.1	33067.	6056.2
Stddev	1.4	186.	5.2
%RSD	.08517	.56202	.08609

#1	1621.1	33198.	6052.5
#2	1619.1	32936.	6059.9

Sample Name: ccvh-3900196 Acquired: 5/20/2016 22:23:26 Type: QC
Method: 6500_026(v10) Mode: CONC Corr. Factor: 1.000000
User: kellyca Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	Ag3280	Al3092	As1890	B_2089	Ba4554	Be3130	Bi2230	Ca3179	Cd2288	Co2286	Cr2055	Cu3247	Fe2714
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	-.00274	47.125	-.00273	.02829	.00029	-.00036	1.0859	-.05400	-.00097	.00324	-.00055	.00643	47.265
Stddev	.00040	.112	.00399	.00152	.00005	.00006	.0014	.00001	.00011	.00027	.00001	.00013	.209
%RSD	14.679	.23738	146.28	5.3807	18.283	15.770	.13075	.02554	11.047	8.3186	1.9088	1.9759	.44261

#1	-.00303	47.046	-.00555	.02937	.00033	-.00032	1.0849	-.05401	-.00105	.00343	-.00056	.00652	47.413
#2	-.00246	47.204	.00009	.02722	.00025	-.00040	1.0869	-.05399	-.00089	.00305	-.00054	.00634	47.117

Check ?	None	Chk Pass	None	None	None	None	Chk Pass	None	None	None	None	None	Chk Pass
Value													
Range													

Elem	K_7664	Li6707	Mg2790	Mn2576	Mo2020	Na8183	Ni2316	P_1782	Pb2203	S_1820	Sb2068	Se1960	Si2881
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.18107	.00005	.14787	-.00029	-.00197	258.01	-.00074	.00669	.00276	5.1510	-.00271	.00743	.07447
Stddev	.01263	.00042	.00026	.00002	.00012	.07	.00011	.00492	.00124	.0149	.00064	.00004	.00487
%RSD	6.9778	881.82	.17563	7.6954	6.1715	.02598	14.374	73.520	44.936	.28945	23.693	.57011	6.5359

#1	.19000	.00034	.14805	-.00027	-.00189	257.96	-.00082	.01016	.00188	5.1616	-.00226	.00740	.07791
#2	.17214	-.00025	.14768	-.00030	-.00206	258.06	-.00067	.00321	.00364	5.1405	-.00317	.00746	.07103

Check ?	None	None	None	None	None	Chk Pass	None	None	None	Chk Pass	None	None	None
Value													
Range													

Elem	Sn1899	Sr4077	Th2837	Ti3349	Tl1908	U_3701	V_2924	Zn2062	Zr3391
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.00299	.00031	4.9268	.02615	-.00313	10.143	-.01624	.01573	-.01407
Stddev	.00002	.00004	.0085	.00014	.00116	.069	.00003	.00061	.00287
%RSD	.54925	12.323	.17216	.52312	37.153	.68098	.18730	3.8667	20.422

#1	.00298	.00028	4.9328	.02605	-.00230	10.094	-.01626	.01616	-.01610
#2	.00300	.00034	4.9208	.02624	-.00395	10.192	-.01622	.01530	-.01204

Check ?	None	None	Chk Pass	None	None	Chk Pass	None	None	None
Value									
Range									

Int. Std.	Y_2243	Y_3600	Y_3774
Units	Cts/S	Cts/S	Cts/S
Avg	1516.6	31292.	5725.0
Stddev	2.9	49.	12.9
%RSD	.19066	.15575	.22507

#1	1514.6	31326.	5734.1
#2	1518.7	31257.	5715.9

Sample Name: ccv-3900195 Acquired: 5/20/2016 22:26:13 Type: QC
Method: 6500_026(v10) Mode: CONC Corr. Factor: 1.000000
User: kellyca Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	Ag3280	Al1670	As1890	B_2089	Ba4554	Be3130	Bi2230	Ca3179	Cd2288	Co2286	Cr2055	Cu3247
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.48816	.52046	1.0301	F .56422	.50055	.51496	-.00305	5.0185	.52991	.52784	.51834	.49913
Stddev	.00185	.00227	.0036	.00018	.00077	.00173	.00109	.0285	.00089	.00165	.00074	.00170
%RSD	.37935	.43526	.34929	.03249	.15315	.33517	35.793	.56760	.16827	.31281	.14290	.33985

#1	.48947	.52206	1.0326	.56409	.50001	.51374	-.00382	4.9983	.53054	.52900	.51781	.50033
#2	.48686	.51886	1.0275	.56435	.50110	.51618	-.00228	5.0386	.52928	.52667	.51886	.49794

Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Fail	Chk Pass	Chk Pass	None	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Value				.50000								
Range				10.000%								

Elem	Fe2599	K_7664	Li6707	Mg2790	Mn2576	Mo2020	Na5895	Ni2316	P_1782	Pb2203	S_1820	Sb2068
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	2.4997	52.179	1.0775	19.852	.49901	.52478	5.3650	.51117	1.0238	1.0554	.00774	1.0474
Stddev	.0015	.178	.0001	.111	.00201	.00338	.0073	.00241	.0014	.0040	.00229	.0033
%RSD	.05966	.34123	.00898	.55968	.40318	.64418	.13604	.47212	.13713	.37925	29.618	.31824

#1	2.5008	52.053	1.0774	19.931	.50043	.52717	5.3599	.51288	1.0228	1.0526	.00612	1.0451
#2	2.4987	52.305	1.0775	19.774	.49758	.52239	5.3702	.50946	1.0248	1.0583	.00936	1.0498

Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	None	Chk Pass
Value												
Range												

Elem	Se1960	Si2881	Sn1899	Sr4077	Th2837	Ti3349	Ti1908	U_3701	V_2924	Zn2062	Zr3391
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	1.0256	5.1649	1.0064	.48341	.00124	.46906	1.0425	.01175	.47429	.49631	.50175
Stddev	.0045	.0004	.0019	.00055	.00079	.00184	.0026	.01235	.00079	.00266	.00077
%RSD	.44036	.00825	.19126	.11443	63.483	.39162	.24851	105.10	.16578	.53525	.15395

#1	1.0288	5.1646	1.0078	.48302	.00180	.47036	1.0444	.00302	.47484	.49819	.50230
#2	1.0224	5.1653	1.0051	.48380	.00068	.46776	1.0407	.02048	.47373	.49443	.50120

Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	None	Chk Pass	Chk Pass	None	Chk Pass	Chk Pass	Chk Pass
Value											
Range											

Int. Std.	Y_2243	Y_3600	Y_3774
Units	Cts/S	Cts/S	Cts/S
Avg	1541.9	32073.	5797.6
Stddev	.5	159.	3.5
%RSD	.03537	.49634	.06031

#1	1541.5	31961.	5800.1
#2	1542.3	32186.	5795.1

Sample Name: ccb Acquired: 5/20/2016 22:28:47 Type: QC
Method: 6500_026(v10) Mode: CONC Corr. Factor: 1.000000
User: kellyca Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	Ag3280	Al1670	As1890	B_2089	Ba4554	Be3130	Bi2230	Ca3179	Cd2288	Co2286	Cr2055	Cu3247
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.00052	.00121	-.00192	F .01881	-.00002	-.00008	-.00231	-.00018	.00012	-.00031	.00007	-.00071
Stddev	.00018	.00036	.00200	.00073	.00012	.00012	.00134	.00191	.00000	.00034	.00040	.00018
%RSD	35.569	29.800	103.89	3.8806	606.84	135.92	57.988	1040.2	2.3340	108.71	557.14	24.941

#1	.00039	.00147	-.00051	.01933	.00007	-.00017	-.00136	-.00153	.00012	-.00007	.00035	-.00058
#2	.00065	.00096	-.00334	.01830	-.00011	-.00000	-.00325	.00117	.00012	-.00055	-.00021	-.00083

Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Fail	Chk Pass	Chk Pass	None	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit				.00312								
Low Limit				-.00312								

Elem	Fe2599	K_7664	Li6707	Mg2790	Mn2576	Mo2020	Na5895	Ni2316	P_1782	Pb2203	S_1820	Sb2068
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.01098	.15954	-.00052	.00386	.00019	.00040	.08101	-.00033	.00057	-.00039	.00104	.00045
Stddev	.00097	.00890	.00030	.00465	.00004	.00017	.00655	.00055	.00165	.00079	.00567	.00094
%RSD	8.8381	5.5784	57.447	120.38	23.255	42.455	8.0833	168.52	287.53	204.01	547.54	209.90

#1	.01166	.16583	-.00073	.00715	.00022	.00052	.08564	.00006	-.00059	.00017	.00505	.00111
#2	.01029	.15324	-.00031	.00057	.00016	.00028	.07638	-.00072	.00174	-.00095	-.00298	-.00022

Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	None	Chk Pass
High Limit												
Low Limit												

Elem	Se1960	Si2881	Sn1899	Sr4077	Th2837	Ti3349	Ti1908	U_3701	V_2924	Zn2062	Zr3391
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.00048	.04934	.00111	.00008	-.00332	.00006	-.00354	.02876	.00017	.00012	.00099
Stddev	.00313	.00444	.00002	.00005	.00005	.00012	.00052	.00125	.00062	.00149	.00176
%RSD	652.94	9.0065	1.6467	67.200	1.4669	188.77	14.836	4.3446	366.07	1268.4	178.37

#1	.00269	.05248	.00110	.00011	-.00329	-.00002	-.00316	.02965	.00061	.00117	.00223
#2	-.00173	.04620	.00112	.00004	-.00336	.00015	-.00391	.02788	-.00027	-.00093	-.00026

Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit											
Low Limit											

Int. Std.	Y_2243	Y_3600	Y_3774
Units	Cts/S	Cts/S	Cts/S
Avg	1558.3	32669.	5773.4
Stddev	1.3	134.	26.3
%RSD	.08026	.41106	.45579

#1	1559.2	32574.	5754.8
#2	1557.4	32764.	5792.0

Sample Name: ccvl-3903059 Acquired: 5/20/2016 22:31:31 Type: QC
Method: 6500_026(v10) Mode: CONC Corr. Factor: 1.000000
User: kellyca Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	Ag3280	Al1670	As1890	B_2089	Ba4554	Be3130	Bi2230	Ca3179	Cd2288	Co2286	Cr2055	Cu3247
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.01025	.10967	.01264	.12585	.01012	.00088	.11483	.19905	.00536	.01032	.01072	.01506
Stddev	.00020	.00097	.00163	.00150	.00008	.00009	.00076	.00328	.00014	.00015	.00002	.00005
%RSD	1.9333	.88732	12.929	1.1918	.82642	10.700	.65824	1.6493	2.6543	1.4881	.20272	.33648

#1	.01011	.11035	.01148	.12691	.01006	.00095	.11429	.20137	.00547	.01043	.01073	.01509
#2	.01039	.10898	.01379	.12479	.01018	.00081	.11536	.19673	.00526	.01022	.01070	.01502

Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Value												
Range												

Elem	Fe2599	K_7664	Li6707	Mg2790	Mn2576	Mo2020	Na5895	Ni2316	P_1782	Pb2203	S_1820	Sb2068
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.10791	3.2526	.00922	.21016	.01030	.02137	1.1036	.04210	3.0314	.00698	.00398	.02129
Stddev	.00033	.0161	.00089	.00045	.00007	.00018	.0027	.00001	.0147	.00284	.00044	.00088
%RSD	.30370	.49615	9.6477	.21354	.64084	.83542	.24740	.02177	.48657	40.718	11.079	4.1550

#1	.10768	3.2640	.00859	.21048	.01034	.02125	1.1017	.04210	3.0418	.00898	.00429	.02191
#2	.10814	3.2412	.00985	.20984	.01025	.02150	1.1055	.04209	3.0210	.00497	.00367	.02066

Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	None	Chk Pass
Value												
Range												

Elem	Se1960	Si2881	Sn1899	Sr4077	Th2837	Ti3349	Ti1908	U_3701	V_2924	Zn2062	Zr3391
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	F .00930	.53032	.10483	.00971	.01241	.00934	.01507	.07171	.00978	.01877	.01569
Stddev	.00327	.01653	.00085	.00005	.00021	.00019	.00252	.01948	.00009	.00000	.00111
%RSD	35.120	3.1174	.81408	.50077	1.6795	2.0528	16.733	27.172	.91964	.01208	7.0897

#1	.00699	.51863	.10544	.00974	.01226	.00920	.01328	.08549	.00971	.01877	.01648
#2	.01161	.54201	.10423	.00968	.01255	.00947	.01685	.05793	.00984	.01876	.01490

Check ?	Chk Fail	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Value	.01500										
Range	-30.000%										

Int. Std.	Y_2243	Y_3600	Y_3774
Units	Cts/S	Cts/S	Cts/S
Avg	1573.2	32976.	5877.1
Stddev	2.9	58.	61.2
%RSD	.18147	.17439	1.0417

#1	1575.2	33017.	5833.8
#2	1571.2	32935.	5920.4

Sample Name: MB 280-325709/1-C Acquired: 5/20/2016 22:34:14 Type: Unk
Method: 6500_026(v10) Mode: CONC Corr. Factor: 1.000000
User: kellyca Custom ID1: 5/19 Custom ID2: Custom ID3:
Comment: 325989 6010C Q5 (Fe)

Elem	Ag3280	Al1670	As1890	B_2089	Ba4554	Be3130	Bi2230	Ca3179	Cd2288
Line	328.068 {103}	167.079 {502}	189.042 {478}	208.959 {461}	455.403 { 74}	313.042 {108}	223.061 {451}	317.933 {106}	228.802 {447}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	-.00026	.00562	.00107	F .01269	.00010	-.00008	-.00066	.00806	.00000
Stddev	.00027	.00023	.00309	.00101	.00007	.00002	.00266	.00091	.00008
%RSD	102.64	4.1270	289.28	7.9233	65.234	21.273	403.88	11.335	45704.

#1	-.00007	.00579	.00325	.01341	.00006	-.00007	-.00254	.00870	.00005
#2	-.00045	.00546	-.00112	.01198	.00015	-.00009	.00122	.00741	-.00005

Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Fail	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit				.01000					
Low Limit				-.01000					

Elem	Co2286	Cr2055	Cu3247	Fe2599	K_7664	Li6707	Mg2790	Mn2576	Mo2020
Line	228.616 {447}	205.560 {464}	324.754 {104}	259.940 {130}	766.490 { 44}	670.784 { 50}	279.079 {121}2	257.610 {131}	202.030 {467}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	-.00042	.00003	-.00060	.01854	.12987	-.00085	.00569	.00139	-.00054
Stddev	.00041	.00027	.00033	.00093	.02865	.00046	.00505	.00001	.00045
%RSD	98.474	1067.3	55.468	5.0287	22.063	53.518	88.821	.70857	82.760

#1	-.00013	-.00017	-.00084	.01920	.15013	-.00118	.00926	.00140	-.00086
#2	-.00071	.00022	-.00036	.01788	.10961	-.00053	.00212	.00139	-.00023

Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Elem	Na5895	Ni2316	P_1782	Pb2203	S_1820	Sb2068	Se1960	Si2881	Sn1899
Line	589.592 { 57}	231.604 {446}	178.284 {489}	220.353 {453}	182.034 {485}	206.833 {463}	196.090 {472}	288.158 {117}	189.989 {477}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.06528	-.00023	.00028	-.00055	.01129	-.00011	-.00242	.01567	.00038
Stddev	.00709	.00036	.00262	.00100	.00358	.00311	.00202	.00072	.00071
%RSD	10.862	154.12	953.93	181.47	31.725	2824.7	83.406	4.5924	188.13

#1	.06026	.00002	-.00158	-.00126	.01383	.00209	-.00099	.01516	.00088
#2	.07029	-.00049	.00213	.00016	.00876	-.00231	-.00385	.01617	-.00012

Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Elem	Sr4077	Th2837	Ti3349	Ti1908	U_3701	V_2924	Zn2062	Zr3391
Line	407.771 { 83}	283.730 {119}	334.904 {101}	190.856 {477}	370.152 { 91}	292.402 {115}	206.200 {163}	339.198 { 99}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.00002	-.00082	.00017	-.00165	.00708	-.00022	.00142	.00023
Stddev	.00003	.00027	.00024	.00274	.01197	.00046	.00159	.00027
%RSD	152.14	32.808	141.73	166.01	169.17	206.66	111.48	119.52

#1	-.00000	-.00063	-.00000	.00029	.01554	.00010	.00030	.00042
#2	.00005	-.00101	.00034	-.00359	-.00139	-.00055	.00255	.00004

Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit								
Low Limit								

Int. Std.	Y_2243	Y_3600	Y_3774
Line	224.306 {450}	360.073 { 94}	377.433 { 89}
Units	Cts/S	Cts/S	Cts/S
Avg	1580.5	32815.	5762.3
Stddev	1.3	32.	.4
%RSD	.08134	.09661	.00684

#1	1581.4	32792.	5762.0
#2	1579.6	32837.	5762.5

Sample Name: LCS 280-325709/2-C Acquired: 5/20/2016 22:36:58 Type: Unk
Method: 6500_026(v10) Mode: CONC Corr. Factor: 1.000000
User: kellyca Custom ID1: Custom ID2: Custom ID3:
Comment: 325989 6010C Q5 (Fe)

Elem	Ag3280	Al1670	As1890	B_2089	Ba4554	Be3130	Bi2230	Ca3179	Cd2288
Line	328.068 {103}	167.079 {502}	189.042 {478}	208.959 {461}	455.403 { 74}	313.042 {108}	223.061 {451}	317.933 {106}	228.802 {447}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.04996	1.9823	1.0508	F 1.1032	1.9957	.05140	F 2.2102	50.222	.10491
Stddev	.00080	.0025	.0023	.0027	.0026	.00009	.0136	.140	.00063
%RSD	1.6052	.12615	.21660	.24743	.12838	.16854	.61706	.27927	.60079

#1	.05053	1.9805	1.0524	1.1052	1.9939	.05134	2.2199	50.123	.10536
#2	.04939	1.9840	1.0491	1.1013	1.9975	.05146	2.2006	50.321	.10447

Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Fail	Chk Pass	Chk Pass	Chk Fail	Chk Pass	Chk Pass
High Limit				1.1000			2.2000		
Low Limit				.89000			1.8000		

Elem	Co2286	Cr2055	Cu3247	Fe2599	K_7664	Li6707	Mg2790	Mn2576	Mo2020
Line	228.616 {447}	205.560 {464}	324.754 {104}	259.940 {130}	766.490 { 44}	670.784 { 50}	279.079 {121}2	257.610 {131}	202.030 {467}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.51199	F .20509	.25336	.99627	52.976	1.0789	50.020	.49022	1.0565
Stddev	.00097	.00053	.00006	.00364	.131	.0016	.063	.00113	.0030
%RSD	.18853	.25989	.02429	.36552	.24700	.15041	.12651	.23118	.28218

#1	.51267	.20546	.25341	.99369	52.883	1.0777	49.975	.48942	1.0587
#2	.51130	.20471	.25332	.99884	53.068	1.0800	50.065	.49102	1.0544

Check ?	Chk Pass	Chk Fail	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit		.05750							
Low Limit		.04300							

Elem	Na8183	Ni2316	P_1782	Pb2203	S_1820	Sb2068	Se1960	Si2881	Sn1899
Line	818.326 { 41}	231.604 {446}	178.284 {489}	220.353 {453}	182.034 {485}	206.833 {463}	196.090 {472}	288.158 {117}	189.989 {477}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	51.558	.49892	10.636	.52450	2.0766	.52823	2.0982	9.9859	1.9554
Stddev	.193	.00081	.015	.00379	.0002	.00150	.0018	.0351	.0101
%RSD	.37446	.16136	.14128	.72240	.00789	.28451	.08426	.35118	.51764

#1	51.421	.49949	10.647	.52182	2.0765	.52929	2.0994	9.9611	1.9625
#2	51.694	.49835	10.625	.52717	2.0768	.52716	2.0969	10.011	1.9482

Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Elem	Sr4077	Th2837	Ti3349	Ti1908	U_3701	V_2924	Zn2062	Zr3391
Line	407.771 { 83}	283.730 {119}	334.904 {101}	190.856 {477}	370.152 { 91}	292.402 {115}	206.200 {163}	339.198 { 99}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.95691	.97608	.93722	2.0225	2.1101	.47390	.49958	.48864
Stddev	.00144	.00215	.00278	.0060	.0016	.00070	.00466	.00383
%RSD	.15026	.22050	.29672	.29513	.07602	.14697	.93365	.78390

#1	.95590	.97456	.93525	2.0267	2.1113	.47341	.49628	.48593
#2	.95793	.97760	.93918	2.0182	2.1090	.47440	.50288	.49134

Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit								
Low Limit								

Int. Std.	Y_2243	Y_3600	Y_3774
Line	224.306 {450}	360.073 { 94}	377.433 { 89}
Units	Cts/S	Cts/S	Cts/S
Avg	1506.2	31027.	5774.2
Stddev	.2	41.	29.8
%RSD	.01291	.13262	.51548

#1	1506.0	31057.	5795.2
#2	1506.3	30998.	5753.1

Sample Name: 320-18796-C-5-B Acquired: 5/20/2016 22:39:28 Type: Unk
Method: 6500_026(v10) Mode: CONC Corr. Factor: 1.000000
User: kellyca Custom ID1: Custom ID2: Custom ID3:
Comment: 325989 6010C Q5 (Fe)

Elem	Ag3280	Al1670	As1890	B_2089	Ba4554	Be3130	Bi2230	Ca3179	Cd2288
Line	328.068 {103}	167.079 {502}	189.042 {478}	208.959 {461}	455.403 { 74}	313.042 {108}	223.061 {451}	317.933 {106}	228.802 {447}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	-.00006	.00461	-.00461	.07160	.00519	-.00012	-.00339	34.461	.00036
Stddev	.00002	.00046	.00012	.00038	.00018	.00003	.00343	.100	.00002
%RSD	32.383	9.8798	2.5646	.53390	3.4915	26.666	101.45	.28937	5.0485

#1	-.00004	.00494	-.00453	.07187	.00507	-.00014	-.00096	34.531	.00035
#2	-.00007	.00429	-.00469	.07133	.00532	-.00009	-.00581	34.390	.00037

Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Elem	Co2286	Cr2055	Cu3247	Fe2599	K_7664	Li6707	Mg2790	Mn2576	Mo2020
Line	228.616 {447}	205.560 {464}	324.754 {104}	259.940 {130}	766.490 { 44}	670.784 { 50}	279.079 {121}2	257.610 {131}	202.030 {467}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	-.00038	.00099	.00292	.57831	5.6444	.00947	6.7159	.02420	.00114
Stddev	.00015	.00005	.00008	.00264	.0209	.00073	.0330	.00010	.00002
%RSD	40.728	5.3119	2.6273	.45636	.37037	7.6813	.49199	.40798	1.5214

#1	-.00027	.00103	.00298	.58018	5.6297	.00999	6.6925	.02413	.00113
#2	-.00049	.00096	.00287	.57644	5.6592	.00896	6.7393	.02427	.00116

Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Elem	Na8183	Ni2316	P_1782	Pb2203	S_1820	Sb2068	Se1960	Si2881	Sn1899
Line	818.326 { 41}	231.604 {446}	178.284 {489}	220.353 {453}	182.034 {485}	206.833 {463}	196.090 {472}	288.158 {117}	189.989 {477}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	29.113	.00063	.04655	-.00151	.59444	-.00101	-.00253	14.885	.00148
Stddev	.164	.00008	.00085	.00081	.00284	.00115	.00802	.002	.00086
%RSD	.56233	13.246	1.8306	53.632	.47731	113.95	316.84	.01141	58.489

#1	29.228	.00057	.04715	-.00093	.59243	-.00020	.00314	14.886	.00087
#2	28.997	.00069	.04594	-.00208	.59645	-.00182	-.00820	14.883	.00209

Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Elem	Sr4077	Th2837	Ti3349	Ti1908	U_3701	V_2924	Zn2062	Zr3391
Line	407.771 { 83}	283.730 {119}	334.904 {101}	190.856 {477}	370.152 { 91}	292.402 {115}	206.200 {163}	339.198 { 99}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.18938	-.00557	.00035	-.00004	.03955	.00038	.00095	.00137
Stddev	.00044	.00031	.00030	.00098	.00008	.00047	.00048	.00067
%RSD	.23327	5.6513	83.970	2687.9	.20095	122.55	50.848	48.623

#1	.18907	-.00534	.00056	.00066	.03949	.00005	.00129	.00090
#2	.18970	-.00579	.00014	-.00073	.03961	.00071	.00061	.00185

Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit								
Low Limit								

Int. Std.	Y_2243	Y_3600	Y_3774
Line	224.306 {450}	360.073 { 94}	377.433 { 89}
Units	Cts/S	Cts/S	Cts/S
Avg	1552.4	32052.	5732.5
Stddev	.1	87.	33.2
%RSD	.00488	.26998	.57966

#1	1552.5	32113.	5709.0
#2	1552.4	31991.	5756.0

Sample Name: 320-18796-E-6-B Acquired: 5/20/2016 22:42:10 Type: Unk
Method: 6500_026(v10) Mode: CONC Corr. Factor: 1.000000
User: kellyca Custom ID1: Custom ID2: Custom ID3:
Comment: 325989 6010C Q5 (Fe)

Elem	Ag3280	Al1670	As1890	B_2089	Ba4554	Be3130	Bi2230	Ca3179	Cd2288
Line	328.068 {103}	167.079 {502}	189.042 {478}	208.959 {461}	455.403 { 74}	313.042 {108}	223.061 {451}	317.933 {106}	228.802 {447}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.00014	.00791	-.00557	.07516	.00693	-.00014	-.00328	36.297	.00019
Stddev	.00013	.00076	.00047	.00042	.00003	.00008	.00304	.004	.00003
%RSD	93.058	9.6100	8.4139	.56455	.39956	53.587	92.630	.00970	14.158

#1	.00022	.00737	-.00591	.07546	.00691	-.00020	-.00543	36.294	.00017
#2	.00005	.00845	-.00524	.07486	.00695	-.00009	-.00113	36.299	.00021

Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Elem	Co2286	Cr2055	Cu3247	Fe2599	K_7664	Li6707	Mg2790	Mn2576	Mo2020
Line	228.616 {447}	205.560 {464}	324.754 {104}	259.940 {130}	766.490 { 44}	670.784 { 50}	279.079 {121}2	257.610 {131}	202.030 {467}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	-.00088	.00029	.00778	.01013	6.0119	.00916	6.7355	.00149	.00039
Stddev	.00038	.00009	.00035	.00300	.0280	.00074	.0222	.00004	.00029
%RSD	43.366	32.713	4.5492	29.589	.46577	8.0703	.32982	2.5715	73.733

#1	-.00115	.00035	.00753	.00801	5.9921	.00864	6.7512	.00151	.00019
#2	-.00061	.00022	.00803	.01225	6.0317	.00968	6.7198	.00146	.00060

Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Elem	Na8183	Ni2316	P_1782	Pb2203	S_1820	Sb2068	Se1960	Si2881	Sn1899
Line	818.326 { 41}	231.604 {446}	178.284 {489}	220.353 {453}	182.034 {485}	206.833 {463}	196.090 {472}	288.158 {117}	189.989 {477}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	29.057	.00069	.03304	-.00229	.61431	.00134	.00150	17.784	.00190
Stddev	.016	.00079	.00047	.00342	.01212	.00049	.00876	.042	.00033
%RSD	.05368	113.67	1.4264	149.25	1.9730	36.559	584.87	.23512	17.409

#1	29.068	.00014	.03337	-.00471	.62288	.00169	.00769	17.813	.00213
#2	29.046	.00125	.03271	.00013	.60573	.00100	-.00470	17.754	.00167

Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Elem	Sr4077	Th2837	Ti3349	Ti1908	U_3701	V_2924	Zn2062	Zr3391
Line	407.771 { 83}	283.730 {119}	334.904 {101}	190.856 {477}	370.152 { 91}	292.402 {115}	206.200 {163}	339.198 { 99}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.23497	-.00512	.00020	-.00224	.02544	.00058	.00822	.00025
Stddev	.00029	.00034	.00048	.00200	.01458	.00043	.00162	.00046
%RSD	.12419	6.7030	235.81	89.018	57.317	74.281	19.675	182.54

#1	.23477	-.00487	.00054	-.00083	.03575	.00088	.00708	.00058
#2	.23518	-.00536	-.00013	-.00365	.01513	.00028	.00936	-.00007

Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit								
Low Limit								

Int. Std.	Y_2243	Y_3600	Y_3774
Line	224.306 {450}	360.073 { 94}	377.433 { 89}
Units	Cts/S	Cts/S	Cts/S
Avg	1531.4	32014.	5854.7
Stddev	3.7	92.	12.6
%RSD	.24341	.28657	.21552

#1	1528.7	32078.	5863.7
#2	1534.0	31949.	5845.8

Sample Name: 320-18794-C-1-C Acquired: 5/20/2016 22:44:52 Type: Unk
Method: 6500_026(v10) Mode: CONC Corr. Factor: 1.000000
User: kellyca Custom ID1: Custom ID2: Custom ID3:
Comment: 325989 6010C Q5 (Fe)

Elem	Ag3280	Al1670	As1890	B_2089	Ba4554	Be3130	Bi2230	Ca3179	Cd2288
Line	328.068 {103}	167.079 {502}	189.042 {478}	208.959 {461}	455.403 { 74}	313.042 {108}	223.061 {451}	317.933 {106}	228.802 {447}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.00023	.00139	-.00868	.08455	.02270	-.00014	.00008	45.416	.00033
Stddev	.00017	.00092	.00250	.00008	.00004	.00000	.00020	.116	.00007
%RSD	72.960	66.750	28.780	.09958	.15754	2.2406	247.95	.25550	21.876

#1	.00035	.00073	-.00691	.08461	.02272	-.00014	-.00006	45.498	.00038
#2	.00011	.00204	-.01044	.08449	.02267	-.00014	.00023	45.334	.00028

Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Elem	Co2286	Cr2055	Cu3247	Fe2599	K_7664	Li6707	Mg2790	Mn2576	Mo2020
Line	228.616 {447}	205.560 {464}	324.754 {104}	259.940 {130}	766.490 { 44}	670.784 { 50}	279.079 {121}2	257.610 {131}	202.030 {467}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	-.00066	-.00003	-.00013	.17352	5.5284	.00908	7.9801	.19304	.00020
Stddev	.00023	.00022	.00036	.00063	.0533	.00133	.0290	.00004	.00008
%RSD	35.114	714.08	270.08	.36548	.96357	14.614	.36396	.01928	40.406

#1	-.00082	.00013	.00012	.17307	5.5661	.00814	7.9595	.19301	.00026
#2	-.00049	-.00019	-.00039	.17397	5.4908	.01001	8.0006	.19307	.00014

Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Elem	Na8183	Ni2316	P_1782	Pb2203	S_1820	Sb2068	Se1960	Si2881	Sn1899
Line	818.326 { 41}	231.604 {446}	178.284 {489}	220.353 {453}	182.034 {485}	206.833 {463}	196.090 {472}	288.158 {117}	189.989 {477}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	33.182	.00234	.00462	.00014	.70779	.00072	W -.00540	17.270	.00093
Stddev	.305	.00023	.00091	.00036	.00047	.00088	.00078	.039	.00082
%RSD	.91819	10.000	19.773	267.12	.06609	121.84	14.454	.22723	87.463

#1	32.966	.00250	.00398	.00039	.70812	.00010	-.00595	17.298	.00151
#2	33.397	.00217	.00527	-.00012	.70746	.00134	-.00485	17.242	.00036

Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Warn	Chk Pass	Chk Pass
High Limit							5.0000		
Low Limit							-.00500		

Elem	Sr4077	Th2837	Ti3349	Ti1908	U_3701	V_2924	Zn2062	Zr3391
Line	407.771 { 83}	283.730 {119}	334.904 {101}	190.856 {477}	370.152 { 91}	292.402 {115}	206.200 {163}	339.198 { 99}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.29379	-.00690	.00017	-.00185	.00920	-.00014	.00091	.00148
Stddev	.00092	.00115	.00013	.00295	.00189	.00000	.00040	.00156
%RSD	.31414	16.592	77.690	159.93	20.556	2.2161	44.543	105.87

#1	.29445	-.00609	.00007	.00024	.00786	-.00014	.00119	.00258
#2	.29314	-.00771	.00026	-.00393	.01053	-.00014	.00062	.00037

Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit								
Low Limit								

Int. Std.	Y_2243	Y_3600	Y_3774
Line	224.306 {450}	360.073 { 94}	377.433 { 89}
Units	Cts/S	Cts/S	Cts/S
Avg	1538.3	31606.	5674.4
Stddev	4.2	8.	17.7
%RSD	.27358	.02406	.31253

#1	1541.3	31601.	5661.9
#2	1535.3	31612.	5687.0

Sample Name: 320-18794-C-1-C SD@5 Acquired: 5/20/2016 22:47:33 Type: Unk
Method: 6500_026(v10) Mode: CONC Corr. Factor: 1.000000
User: kellyca Custom ID1: Custom ID2: Custom ID3:
Comment: 325989 6010C Q5 (Fe)

Elem	Ag3280	Al1670	As1890	B_2089	Ba4554	Be3130	Bi2230	Ca3179	Cd2288
Line	328.068 {103}	167.079 {502}	189.042 {478}	208.959 {461}	455.403 { 74}	313.042 {108}	223.061 {451}	317.933 {106}	228.802 {447}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.00572	1.0305	.20723	.19273	.12316	.05204	-.00080	63.159	.05351
Stddev	.00030	.0044	.00188	.00058	.00032	.00041	.00002	.054	.00008
%RSD	5.2186	.42574	.90648	.30331	.26349	.78738	2.9597	.08531	.14662

#1	.00593	1.0336	.20856	.19232	.12293	.05175	-.00082	63.121	.05356
#2	.00551	1.0274	.20590	.19315	.12339	.05233	-.00079	63.197	.05345

Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Elem	Co2286	Cr2055	Cu3247	Fe2599	K_7664	Li6707	Mg2790	Mn2576	Mo2020
Line	228.616 {447}	205.560 {464}	324.754 {104}	259.940 {130}	766.490 { 44}	670.784 { 50}	279.079 {121}2	257.610 {131}	202.030 {467}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.05210	.05106	.05123	1.1624	26.740	.12087	27.658	.23579	.05329
Stddev	.00006	.00037	.00037	.0001	.066	.00094	.006	.00081	.00070
%RSD	.11622	.72650	.72454	.01135	.24796	.77468	.02298	.34187	1.3146

#1	.05214	.05080	.05097	1.1625	26.787	.12153	27.662	.23522	.05379
#2	.05206	.05132	.05149	1.1623	26.693	.12021	27.653	.23636	.05280

Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Elem	Na8183	Ni2316	P_1782	Pb2203	S_1820	Sb2068	Se1960	Si2881	Sn1899
Line	818.326 { 41}	231.604 {446}	178.284 {489}	220.353 {453}	182.034 {485}	206.833 {463}	196.090 {472}	288.158 {117}	189.989 {477}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	53.609	.05218	2.1529	.10379	.69377	.10396	.21251	21.786	.10077
Stddev	.028	.00006	.0146	.00432	.00167	.00160	.00091	.029	.00036
%RSD	.05153	.11636	.67998	4.1594	.24041	1.5401	.42963	.13328	.36087

#1	53.628	.05222	2.1633	.10685	.69259	.10510	.21315	21.807	.10051
#2	53.589	.05214	2.1426	.10074	.69495	.10283	.21186	21.766	.10102

Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Elem	Sr4077	Th2837	Ti3349	Ti1908	U_3701	V_2924	Zn2062	Zr3391
Line	407.771 { 83}	283.730 {119}	334.904 {101}	190.856 {477}	370.152 { 91}	292.402 {115}	206.200 {163}	339.198 { 99}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.33665	.19450	.04842	.20677	.51670	.04770	.20009	.05057
Stddev	.00082	.00322	.00027	.00278	.02562	.00078	.00298	.00038
%RSD	.24234	1.6531	.56517	1.3441	4.9588	1.6361	1.4892	.76028

#1	.33608	.19222	.04822	.20873	.53482	.04714	.19798	.05085
#2	.33723	.19677	.04861	.20480	.49858	.04825	.20220	.05030

Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit								
Low Limit								

Int. Std.	Y_2243	Y_3600	Y_3774
Line	224.306 {450}	360.073 { 94}	377.433 { 89}
Units	Cts/S	Cts/S	Cts/S
Avg	1511.0	31323.	5857.9
Stddev	3.8	124.	12.5
%RSD	.24920	.39649	.21265

#1	1513.6	31411.	5866.7
#2	1508.3	31235.	5849.1

Sample Name: 320-18794-C-1-D MS Acquired: 5/20/2016 22:50:13 Type: Unk

Method: 6500_026(v10) Mode: CONC Corr. Factor: 1.000000

User: kellyca Custom ID1: Custom ID2: Custom ID3:

Comment: 325989 6010C Q5 (Fe)

Elem	Ag3280	Al1670	As1890	B_2089	Ba4554	Be3130	Bi2230	Ca3179	Cd2288
Line	328.068 {103}	167.079 {502}	189.042 {478}	208.959 {461}	455.403 { 74}	313.042 {108}	223.061 {451}	317.933 {106}	228.802 {447}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.04872	1.9438	1.0317	1.1668	1.9663	.05062	2.1664	94.193	.10343
Stddev	.00002	.0073	.0032	.0013	.0004	.00010	.0050	.062	.00003
%RSD	.04445	.37429	.30571	.10694	.02106	.20004	.23213	.06618	.03029

#1	.04873	1.9489	1.0295	1.1677	1.9660	.05055	2.1628	94.149	.10345
#2	.04870	1.9386	1.0339	1.1659	1.9666	.05069	2.1699	94.237	.10341

Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Elem	Co2286	Cr2055	Cu3247	Fe2599	K_7664	Li6707	Mg2790	Mn2576	Mo2020
Line	228.616 {447}	205.560 {464}	324.754 {104}	259.940 {130}	766.490 { 44}	670.784 { 50}	279.079 {121}2	257.610 {131}	202.030 {467}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.49746	W .19984	.24890	1.1508	57.751	1.0718	56.773	.66655	1.0427
Stddev	.00034	.00076	.00105	.0030	.077	.0002	.213	.00180	.0003
%RSD	.06799	.38195	.41994	.25943	.13385	.02062	.37515	.27017	.02415

#1	.49722	.20038	.24816	1.1529	57.805	1.0716	56.623	.66528	1.0429
#2	.49770	.19930	.24964	1.1487	57.696	1.0719	56.924	.66782	1.0425

Check ?	Chk Pass	Chk Warn	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit		.10000							
Low Limit		-.01000							

Elem	Na8183	Ni2316	P_1782	Pb2203	S_1820	Sb2068	Se1960	Si2881	Sn1899
Line	818.326 { 41}	231.604 {446}	178.284 {489}	220.353 {453}	182.034 {485}	206.833 {463}	196.090 {472}	288.158 {117}	189.989 {477}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	83.879	.48445	10.481	.50230	2.7812	.52518	2.0631	27.167	1.9307
Stddev	.372	.00022	.001	.00231	.0073	.00415	.0226	.094	.0028
%RSD	.44378	.04568	.01161	.46038	.26433	.79091	1.0961	.34628	.14401

#1	83.616	.48430	10.480	.50394	2.7760	.52812	2.0471	27.101	1.9327
#2	84.142	.48461	10.481	.50066	2.7864	.52224	2.0791	27.234	1.9287

Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Elem	Sr4077	Th2837	Ti3349	Ti1908	U_3701	V_2924	Zn2062	Zr3391	
Line	407.771 { 83}	283.730 {119}	334.904 {101}	190.856 {477}	370.152 { 91}	292.402 {115}	206.200 {163}	339.198 { 99}	
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	
Avg	1.2270	.95687	.93293	1.9363	2.0649	.46509	.48471	.48536	
Stddev	.0009	.00727	.00581	.0090	.0273	.00225	.00661	.00097	
%RSD	.07517	.75994	.62264	.46709	1.3219	.48399	1.3637	.20055	

#1	1.2264	.96201	.92882	1.9299	2.0456	.46350	.48938	.48467	
#2	1.2277	.95173	.93704	1.9427	2.0842	.46668	.48003	.48605	

Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	
High Limit									
Low Limit									

Int. Std.	Y_2243	Y_3600	Y_3774						
Line	224.306 {450}	360.073 { 94}	377.433 { 89}						
Units	Cts/S	Cts/S	Cts/S						
Avg	1481.7	30424.	5627.2						
Stddev	1.3	67.	12.6						
%RSD	.08741	.22113	.22418						

#1	1482.6	30472.	5636.1						
#2	1480.8	30377.	5618.3						

Sample Name: 320-18794-C-1-E MSD Acquired: 5/20/2016 22:52:44 Type: Unk
Method: 6500_026(v10) Mode: CONC Corr. Factor: 1.000000
User: kellyca Custom ID1: Custom ID2: Custom ID3:
Comment: 325989 6010C Q5 (Fe)

Elem	Ag3280	Al1670	As1890	B_2089	Ba4554	Be3130	Bi2230	Ca3179	Cd2288
Line	328.068 {103}	167.079 {502}	189.042 {478}	208.959 {461}	455.403 { 74}	313.042 {108}	223.061 {451}	317.933 {106}	228.802 {447}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.04991	1.9842	1.0641	1.1944	2.0272	.05173	2.2173	95.380	.10566
Stddev	.00013	.0047	.0067	.0021	.0049	.00034	.0011	.164	.00038
%RSD	.26293	.23683	.63154	.17584	.24244	.66171	.04925	.17216	.35952

#1	.05000	1.9875	1.0689	1.1959	2.0237	.05197	2.2165	95.264	.10592
#2	.04982	1.9809	1.0594	1.1930	2.0306	.05149	2.2180	95.496	.10539

Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Elem	Co2286	Cr2055	Cu3247	Fe2599	K_7664	Li6707	Mg2790	Mn2576	Mo2020
Line	228.616 {447}	205.560 {464}	324.754 {104}	259.940 {130}	766.490 { 44}	670.784 { 50}	279.079 {121}2	257.610 {131}	202.030 {467}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.50954	W .20483	.25499	1.1561	59.386	1.1100	57.574	.67573	1.0715
Stddev	.00030	.00057	.00132	.0114	.053	.0008	.161	.00232	.0038
%RSD	.05866	.27720	.51712	.98899	.08891	.07350	.28008	.34316	.35056

#1	.50932	.20443	.25406	1.1480	59.349	1.1094	57.460	.67409	1.0742
#2	.50975	.20523	.25593	1.1642	59.424	1.1105	57.688	.67736	1.0689

Check ?	Chk Pass	Chk Warn	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit		.10000							
Low Limit		-.01000							

Elem	Na8183	Ni2316	P_1782	Pb2203	S_1820	Sb2068	Se1960	Si2881	Sn1899
Line	818.326 { 41}	231.604 {446}	178.284 {489}	220.353 {453}	182.034 {485}	206.833 {463}	196.090 {472}	288.158 {117}	189.989 {477}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	86.156	.49602	10.713	.51560	2.8476	.53713	2.1022	27.632	1.9700
Stddev	.449	.00178	.007	.00000	.0062	.00108	.0016	.057	.0040
%RSD	.52084	.35958	.06199	.00003	.21875	.20094	.07731	.20589	.20137

#1	85.839	.49728	10.718	.51560	2.8432	.53789	2.1011	27.592	1.9728
#2	86.474	.49476	10.709	.51560	2.8520	.53637	2.1034	27.672	1.9672

Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Elem	Sr4077	Th2837	Ti3349	Ti1908	U_3701	V_2924	Zn2062	Zr3391
Line	407.771 { 83}	283.730 {119}	334.904 {101}	190.856 {477}	370.152 { 91}	292.402 {115}	206.200 {163}	339.198 { 99}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	1.2637	.98271	.94912	1.9763	2.0792	.47179	.48956	.49812
Stddev	.0011	.00191	.00438	.0012	.0194	.00126	.00082	.00215
%RSD	.08947	.19422	.46189	.05794	.93358	.26771	.16779	.43215

#1	1.2629	.98136	.94602	1.9771	2.0655	.47090	.48898	.49660
#2	1.2645	.98406	.95222	1.9755	2.0930	.47268	.49014	.49964

Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit								
Low Limit								

Int. Std.	Y_2243	Y_3600	Y_3774
Line	224.306 {450}	360.073 { 94}	377.433 { 89}
Units	Cts/S	Cts/S	Cts/S
Avg	1477.7	30586.	5723.0
Stddev	3.1	76.	18.5
%RSD	.20731	.24832	.32321

#1	1475.5	30640.	5736.1
#2	1479.8	30533.	5709.9

Sample Name: 320-18794-C-1-C PDS Acquired: 5/20/2016 22:55:15 Type: Unk

Method: 6500_026(v10) Mode: CONC Corr. Factor: 1.000000

User: kellyca Custom ID1: Custom ID2: Custom ID3:

Comment: 325989 6010C Q5 (Fe)

Elem	Ag3280	Al1670	As1890	B_2089	Ba4554	Be3130	Bi2230	Ca3179	Cd2288
Line	328.068 {103}	167.079 {502}	189.042 {478}	208.959 {461}	455.403 { 74}	313.042 {108}	223.061 {451}	317.933 {106}	228.802 {447}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	-0.00007	.00270	-0.00194	.02415	.00497	-0.00004	-0.00081	9.0664	-0.00019
Stddev	.00076	.00010	.00045	.00075	.00010	.00010	.00163	.0090	.00031
%RSD	1091.0	3.8038	22.983	3.0867	1.9453	268.28	201.31	.09915	165.84

#1	-0.00060	.00277	-0.00163	.02467	.00504	.00003	.00034	9.0727	.00003
#2	.00047	.00262	-.00226	.02362	.00490	-.00011	-.00196	9.0600	-.00041

Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Elem	Co2286	Cr2055	Cu3247	Fe2599	K_7664	Li6707	Mg2790	Mn2576	Mo2020
Line	228.616 {447}	205.560 {464}	324.754 {104}	259.940 {130}	766.490 { 44}	670.784 { 50}	279.079 {121}2	257.610 {131}	202.030 {467}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	-0.00031	-0.00020	-0.00055	.05509	1.2196	.00197	1.5974	.03886	.00098
Stddev	.00000	.00013	.00011	.00082	.0073	.00046	.0085	.00010	.00093
%RSD	.98715	68.788	20.084	1.4795	.59655	23.257	.53317	.26691	94.949

#1	-0.00031	-0.00010	-0.00063	.05566	1.2145	.00164	1.5914	.03878	.00032
#2	-0.00031	-0.00029	-0.00047	.05451	1.2247	.00229	1.6035	.03893	.00163

Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Elem	Na5895	Ni2316	P_1782	Pb2203	S_1820	Sb2068	Se1960	Si2881	Sn1899
Line	589.592 { 57}	231.604 {446}	178.284 {489}	220.353 {453}	182.034 {485}	206.833 {463}	196.090 {472}	288.158 {117}	189.989 {477}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	6.7283	.00062	-0.00051	.00084	.13841	-0.00071	.00293	3.3966	-0.00047
Stddev	.0163	.00010	.00401	.00144	.00633	.00229	.00486	.0043	.00052
%RSD	.24157	15.353	790.66	172.09	4.5742	323.54	165.80	.12810	110.58

#1	6.7397	.00069	.00233	.00186	.14288	-.00233	-.00051	3.3997	-0.00010
#2	6.7168	.00055	-.00334	-.00018	.13393	.00091	.00637	3.3935	-.00084

Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Elem	Sr4077	Th2837	Ti3349	Ti1908	U_3701	V_2924	Zn2062	Zr3391
Line	407.771 { 83}	283.730 {119}	334.904 {101}	190.856 {477}	370.152 { 91}	292.402 {115}	206.200 {163}	339.198 { 99}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.05935	-0.00349	.00032	.00030	-0.00471	-0.00019	.00193	.00133
Stddev	.00024	.00214	.00005	.00369	.02135	.00029	.00011	.00094
%RSD	.41196	61.378	15.493	1223.3	453.04	154.54	5.5302	70.907

#1	.05952	-0.00197	.00028	.00291	-.01981	.00002	.00186	.00200
#2	.05917	-0.00500	.00035	-.00231	.01038	-.00039	.00201	.00066

Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit								
Low Limit								

Int. Std.	Y_2243	Y_3600	Y_3774
Line	224.306 {450}	360.073 { 94}	377.433 { 89}
Units	Cts/S	Cts/S	Cts/S
Avg	1568.5	32851.	5864.5
Stddev	3.2	44.	5.3
%RSD	.20131	.13370	.09122

#1	1566.3	32882.	5860.7
#2	1570.8	32820.	5868.3

Sample Name: ccvh-3900196 Acquired: 5/20/2016 22:57:57 Type: QC
Method: 6500_026(v10) Mode: CONC Corr. Factor: 1.000000
User: kellyca Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	Ag3280	Al3092	As1890	B_2089	Ba4554	Be3130	Bi2230	Ca3179	Cd2288	Co2286	Cr2055	Cu3247	Fe2714
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	-.00307	46.160	-.00286	.00692	.00020	-.00036	1.0478	-.05175	-.00117	.00257	-.00052	.00572	46.818
Stddev	.00081	.059	.00529	.00061	.00014	.00002	.0006	.00233	.00001	.00015	.00011	.00033	.074
%RSD	26.451	.12845	184.76	8.7517	70.559	6.5946	.06173	4.4940	.49851	5.7523	22.160	5.7730	.15784

#1	-.00250	46.202	-.00660	.00649	.00029	-.00034	1.0473	-.05011	-.00117	.00246	-.00060	.00595	46.765
#2	-.00365	46.118	.00088	.00734	.00010	-.00038	1.0482	-.05339	-.00118	.00267	-.00044	.00549	46.870

Check ?	None	Chk Pass	None	None	None	None	Chk Pass	None	None	None	None	None	Chk Pass
Value													
Range													

Elem	K_7664	Li6707	Mg2790	Mn2576	Mo2020	Na8183	Ni2316	P_1782	Pb2203	S_1820	Sb2068	Se1960	Si2881
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.07574	.00040	.14755	-.00075	-.00205	250.96	-.00000	.00247	.00161	5.0176	.00118	-.00372	-.01914
Stddev	.00167	.00049	.00461	.00012	.00033	.06	.00058	.00250	.00082	.0195	.00375	.00724	.03379
%RSD	2.2020	119.96	3.1245	15.752	16.092	.02418	22511.	101.05	50.956	.38806	318.30	194.52	176.51

#1	.07692	.00006	.15081	-.00066	-.00229	251.01	-.00041	.00424	.00218	5.0039	.00383	-.00884	-.04304
#2	.07456	.00075	.14429	-.00083	-.00182	250.92	.00041	.00071	.00103	5.0314	-.00148	.00140	.00475

Check ?	None	None	None	None	None	Chk Pass	None	None	None	Chk Pass	None	None	None
Value													
Range													

Elem	Sn1899	Sr4077	Th2837	Ti3349	Tl1908	U_3701	V_2924	Zn2062	Zr3391
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.00167	.00023	4.8657	.02637	-.00372	9.9892	-.01660	-.00165	-.01456
Stddev	.00051	.00004	.0208	.00042	.00119	.0052	.00009	.00032	.00102
%RSD	30.809	18.997	.42660	1.5922	32.044	.05226	.53530	19.439	6.9791

#1	.00130	.00020	4.8804	.02667	-.00456	9.9929	-.01666	-.00142	-.01384
#2	.00203	.00026	4.8510	.02607	-.00287	9.9855	-.01653	-.00187	-.01528

Check ?	None	None	Chk Pass	None	None	Chk Pass	None	None	None
Value									
Range									

Int. Std.	Y_2243	Y_3600	Y_3774
Units	Cts/S	Cts/S	Cts/S
Avg	1507.1	30862.	5714.7
Stddev	.6	56.	12.1
%RSD	.03752	.18303	.21247

#1	1507.5	30822.	5706.2
#2	1506.7	30902.	5723.3

Sample Name: ccv-3900195 Acquired: 5/20/2016 23:00:43 Type: QC
Method: 6500_026(v10) Mode: CONC Corr. Factor: 1.000000
User: kellyca Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	Ag3280	Al1670	As1890	B_2089	Ba4554	Be3130	Bi2230	Ca3179	Cd2288	Co2286	Cr2055	Cu3247	Fe2599
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.49361	.52107	1.0224	.54373	.50081	.51834	-.00234	5.0856	.52751	.52629	.51648	.50078	2.5212
Stddev	.00219	.00406	.0068	.00068	.00050	.00118	.00114	.0339	.00057	.00028	.00029	.00365	.0012
%RSD	.44368	.77845	.66564	.12515	.09998	.22701	48.467	.66647	.10840	.05308	.05567	.72909	.04749

#1	.49207	.52394	1.0272	.54422	.50046	.51751	-.00154	5.1096	.52711	.52649	.51668	.49820	2.5220
#2	.49516	.51820	1.0176	.54325	.50117	.51917	-.00315	5.0616	.52792	.52609	.51627	.50336	2.5203

Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	None	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Value													
Range													

Elem	K_7664	Li6707	Mg2790	Mn2576	Mo2020	Na5895	Ni2316	P_1782	Pb2203	S_1820	Sb2068	Se1960	Si2881
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	52.410	1.0761	19.975	.50220	.52418	5.2890	.51050	1.0257	1.0483	.00889	1.0288	1.0123	5.0722
Stddev	.004	.0024	.119	.00154	.00246	.0185	.00092	.0051	.0012	.00133	.0004	.0028	.0220
%RSD	.00823	.22069	.59700	.30748	.47022	.34939	.17930	.49611	.11590	14.937	.03805	.27424	.43298

#1	52.413	1.0744	19.890	.50111	.52592	5.3021	.50985	1.0221	1.0475	.00983	1.0291	1.0103	5.0877
#2	52.407	1.0778	20.059	.50329	.52243	5.2759	.51114	1.0293	1.0492	.00796	1.0285	1.0142	5.0566

Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	None	Chk Pass	Chk Pass	Chk Pass
Value													
Range													

Elem	Sn1899	Sr4077	Th2837	Ti3349	Tl1908	U_3701	V_2924	Zn2062	Zr3391
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	1.0021	.48576	.00053	.47378	1.0343	.01676	.47944	.50400	.50538
Stddev	.0005	.00024	.00177	.00039	.0048	.02473	.00341	.00503	.00000
%RSD	.04867	.05014	336.25	.08278	.46065	147.59	.71212	.99719	.00020

#1	1.0017	.48593	.00178	.47406	1.0310	-.00073	.47703	.50045	.50538
#2	1.0024	.48558	-.00073	.47350	1.0377	.03424	.48186	.50755	.50538

Check ?	Chk Pass	Chk Pass	None	Chk Pass	Chk Pass	None	Chk Pass	Chk Pass	Chk Pass
Value									
Range									

Int. Std.	Y_2243	Y_3600	Y_3774
Units	Cts/S	Cts/S	Cts/S
Avg	1534.3	31584.	5644.8
Stddev	4.1	45.	45.5
%RSD	.26734	.14192	.80693

#1	1537.2	31616.	5612.5
#2	1531.4	31552.	5677.0

Sample Name: ccb Acquired: 5/20/2016 23:03:19 Type: QC
Method: 6500_026(v10) Mode: CONC Corr. Factor: 1.000000
User: kellyca Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	Ag3280	Al1670	As1890	B_2089	Ba4554	Be3130	Bi2230	Ca3179	Cd2288	Co2286	Cr2055	Cu3247
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.00004	-.00099	.00130	F .00528	-.00023	-.00008	-.00166	.00115	.00003	-.00045	-.00014	-.00043
Stddev	.00001	.00085	.00167	.00019	.00009	.00009	.00125	.00029	.00008	.00017	.00008	.00026
%RSD	26.266	86.571	128.13	3.5791	40.551	107.63	75.051	25.537	249.13	37.759	58.123	62.082

#1	.00005	-.00159	.00012	.00541	-.00016	-.00002	-.00078	.00136	.00008	-.00033	-.00020	-.00061
#2	.00003	-.00038	.00248	.00514	-.00029	-.00014	-.00255	.00094	-.00002	-.00057	-.00008	-.00024

Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Fail	Chk Pass	Chk Pass	None	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit				.00312								
Low Limit				-.00312								

Elem	Fe2599	K_7664	Li6707	Mg2790	Mn2576	Mo2020	Na5895	Ni2316	P_1782	Pb2203	S_1820	Sb2068
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.00385	.09638	-.00025	.00357	.00002	.00078	.02984	-.00030	.00040	-.00121	.00805	.00151
Stddev	.00003	.01541	.00034	.00198	.00011	.00007	.00706	.00027	.00171	.00137	.00368	.00011
%RSD	.83974	15.984	133.68	55.531	708.80	8.7613	23.653	89.565	427.91	113.72	45.656	7.1883

#1	.00383	.08549	-.00001	.00498	-.00006	.00073	.03484	-.00049	-.00081	-.00218	.00545	.00159
#2	.00387	.10727	-.00049	.00217	.00009	.00082	.02485	-.00011	.00161	-.00024	.01065	.00143

Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	None	Chk Pass
High Limit												
Low Limit												

Elem	Se1960	Si2881	Sn1899	Sr4077	Th2837	Ti3349	Ti1908	U_3701	V_2924	Zn2062	Zr3391
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	-.00060	-.00315	.00028	.00005	-.00378	.00028	-.00123	.02038	.00004	-.00020	.00106
Stddev	.00478	.00088	.00112	.00004	.00185	.00041	.00133	.00759	.00007	.00007	.00098
%RSD	794.13	27.923	396.50	71.253	49.000	145.83	108.31	37.225	157.39	36.410	92.957

#1	-.00398	-.00253	.00108	.00008	-.00247	.00057	-.00029	.02575	.00009	-.00025	.00036
#2	.00278	-.00377	-.00051	.00003	-.00509	-.00001	-.00218	.01502	-.00000	-.00015	.00175

Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit											
Low Limit											

Int. Std.	Y_2243	Y_3600	Y_3774
Units	Cts/S	Cts/S	Cts/S
Avg	1563.2	32697.	5769.8
Stddev	2.0	48.	23.8
%RSD	.12913	.14709	.41165

#1	1564.6	32731.	5786.6
#2	1561.8	32663.	5753.0

Sample Name: ccvl-3903059 Acquired: 5/20/2016 23:06:05 Type: QC
Method: 6500_026(v10) Mode: CONC Corr. Factor: 1.000000
User: kellyca Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	Ag3280	Al1670	As1890	B_2089	Ba4554	Be3130	Bi2230	Ca3179	Cd2288	Co2286	Cr2055	Cu3247
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.01014	.10536	.01321	.11262	.00990	.00092	.11432	.19813	.00557	.01033	.01035	.01474
Stddev	.00044	.00062	.00299	.00024	.00006	.00003	.00005	.00058	.00004	.00014	.00001	.00033
%RSD	4.3685	.59282	22.626	.21656	.62379	3.4175	.04716	.29180	.65330	1.3603	.11266	2.2151

#1	.00982	.10492	.01533	.11244	.00986	.00089	.11435	.19854	.00555	.01023	.01035	.01451
#2	.01045	.10580	.01110	.11279	.00995	.00094	.11428	.19772	.00560	.01043	.01036	.01497

Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Value												
Range												

Elem	Fe2599	K_7664	Li6707	Mg2790	Mn2576	Mo2020	Na5895	Ni2316	P_1782	Pb2203	S_1820	Sb2068
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.12331	3.1855	.00960	.20294	.01045	.02132	1.0603	.04199	2.9773	.00844	.00215	.02202
Stddev	.00111	.0177	.00024	.00524	.00001	.00011	.0027	.00018	.0342	.00005	.00060	.00028
%RSD	.89632	.55613	2.4604	2.5806	.06346	.53898	.25780	.42668	1.1487	.57363	27.814	1.2575

#1	.12409	3.1730	.00977	.19924	.01044	.02140	1.0584	.04212	3.0015	.00847	.00257	.02222
#2	.12253	3.1980	.00944	.20664	.01045	.02123	1.0622	.04186	2.9532	.00840	.00172	.02183

Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	None	Chk Pass
Value												
Range												

Elem	Se1960	Si2881	Sn1899	Sr4077	Th2837	Ti3349	Ti1908	U_3701	V_2924	Zn2062	Zr3391
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.01506	.49284	.10145	.00958	.01161	.00942	.01321	F .08735	.00957	.02184	.01508
Stddev	.00195	.01055	.00021	.00004	.00118	.00012	.00036	.01539	.00085	.00075	.00088
%RSD	12.958	2.1416	.20703	.45831	10.138	1.2234	2.7253	17.614	8.8697	3.4288	5.8403

#1	.01368	.48538	.10159	.00961	.01245	.00934	.01296	.07647	.01017	.02237	.01446
#2	.01644	.50030	.10130	.00954	.01078	.00950	.01346	.09823	.00897	.02131	.01570

Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Fail	Chk Pass	Chk Pass	Chk Pass
Value								.06000			
Range								30.000%			

Int. Std.	Y_2243	Y_3600	Y_3774
Units	Cts/S	Cts/S	Cts/S
Avg	1573.5	32872.	5824.5
Stddev	3.2	68.	23.9
%RSD	.20413	.20551	.41105

#1	1571.2	32920.	5807.6
#2	1575.8	32825.	5841.4

Sample Name: MB 280-325983/1-A Acquired: 5/20/2016 23:08:49 Type: Unk
Method: 6500_026(v10) Mode: CONC Corr. Factor: 1.000000
User: kellyca Custom ID1: 5/20 Custom ID2: Custom ID3:
Comment: 325983 6010C Q4 soil

Elem	Ag3280	Al1670	As1890	B_2089	Ba4554	Be3130	Bi2230	Ca3179	Cd2288
Line	328.068 {103}	167.079 {502}	189.042 {478}	208.959 {461}	455.403 {74}	313.042 {108}	223.061 {451}	317.933 {106}	228.802 {447}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.00020	.01618	-.00250	F .02926	.00042	-.00011	-.00071	.06783	.00012
Stddev	.00006	.00011	.00234	.00036	.00018	.00003	.00057	.00022	.00002
%RSD	30.168	.64910	93.512	1.2415	42.887	21.878	79.413	.31987	15.343
#1	.00024	.01626	-.00416	.02900	.00029	-.00010	-.00111	.06798	.00011
#2	.00016	.01611	-.00085	.02951	.00055	-.00013	-.00031	.06768	.00013
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Fail	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit				.01000					
Low Limit				-.01000					

Elem	Co2286	Cr2055	Cu3247	Fe2599	K_7664	Li6707	Mg2790	Mn2576	Mo2020
Line	228.616 {447}	205.560 {464}	324.754 {104}	259.940 {130}	766.490 {44}	670.784 {50}	279.079 {121}2	257.610 {131}	202.030 {467}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	-.00045	.00058	-.00044	W .03972	.11688	-.00158	.02902	.00066	.00015
Stddev	.00019	.00010	.00027	.00147	.00769	.00009	.00118	.00018	.00016
%RSD	42.391	17.442	62.016	3.6919	6.5749	5.5819	4.0802	27.132	104.00
#1	-.00031	.00051	-.00064	.03869	.12232	-.00152	.02986	.00054	.00004
#2	-.00058	.00065	-.00025	.04076	.11145	-.00164	.02818	.00079	.00026
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Warn	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit				.03000					
Low Limit				-.05000					

Elem	Na5895	Ni2316	P_1782	Pb2203	S_1820	Sb2068	Se1960	Si2881	Sn1899
Line	589.592 {57}	231.604 {446}	178.284 {489}	220.353 {453}	182.034 {485}	206.833 {463}	196.090 {472}	288.158 {117}	189.989 {477}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.10564	-.00030	W .00503	-.00269	.01406	.00208	-.00049	W .09468	.00161
Stddev	.00399	.00041	.00676	.00022	.00579	.00107	.00265	.00604	.00116
%RSD	3.7754	136.03	134.29	8.3293	41.193	51.492	545.37	6.3836	72.142
#1	.10282	-.00059	.00025	-.00285	.00997	.00283	-.00236	.09896	.00079
#2	.10846	-.00001	.00981	-.00253	.01816	.00132	.00139	.09041	.00243
Check ?	Chk Pass	Chk Pass	Chk Warn	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Warn	Chk Pass
High Limit			.00500					.05000	
Low Limit			-.00500					-.05000	

Elem	Sr4077	Th2837	Ti3349	Ti1908	U_3701	V_2924	Zn2062	Zr3391	
Line	407.771 {83}	283.730 {119}	334.904 {101}	190.856 {477}	370.152 {91}	292.402 {115}	206.200 {163}	339.198 {99}	
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	
Avg	.00017	-.00288	.00051	-.00246	.02285	.00028	.00051	.00005	
Stddev	.00001	.00018	.00052	.00371	.00231	.00011	.00088	.00003	
%RSD	5.5645	6.2063	101.23	150.88	10.111	38.362	170.30	50.786	
#1	.00016	-.00300	.00088	.00016	.02122	.00035	.00114	.00007	
#2	.00018	-.00275	.00015	-.00508	.02449	.00020	-.00011	.00003	
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	
High Limit									
Low Limit									

Int. Std.	Y_2243	Y_3600	Y_3774						
Line	224.306 {450}	360.073 {94}	377.433 {89}						
Units	Cts/S	Cts/S	Cts/S						
Avg	1558.0	32437.	5720.9						
Stddev	.3	34.	47.3						
%RSD	.01720	.10353	.82736						
#1	1558.2	32414.	5754.4						
#2	1557.8	32461.	5687.5						

Sample Name: LCS 280-325983/2-A Acquired: 5/20/2016 23:11:33 Type: Unk

Method: 6500_026(v10) Mode: CONC Corr. Factor: 1.000000

User: kellyca Custom ID1: Custom ID2: Custom ID3:

Comment: 325983 6010C Q4 soil

Elem	Ag3280	Al1670	As1890	B_2089	Ba4554	Be3130	Bi2230	Ca3179	Cd2288
Line	328.068 {103}	167.079 {502}	189.042 {478}	208.959 {461}	455.403 { 74}	313.042 {108}	223.061 {451}	317.933 {106}	228.802 {447}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.05032	2.0724	1.0645	F 1.2924	2.0321	.05219	F 2.2187	51.426	.10579
Stddev	.00076	.0062	.0078	.0044	.0011	.00014	.0011	.192	.00011
%RSD	1.5026	.29890	.73121	.34138	.05246	.26701	.05077	.37238	.10642

#1	.05085	2.0680	1.0700	1.2955	2.0313	.05209	2.2179	51.290	.10571
#2	.04978	2.0768	1.0590	1.2893	2.0328	.05229	2.2195	51.561	.10587

Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Fail	Chk Pass	Chk Pass	Chk Fail	Chk Pass	Chk Pass
High Limit				1.1000			2.2000		
Low Limit				.81000			1.8000		

Elem	Co2286	Cr2055	Cu3247	Fe2599	K_7664	Li6707	Mg2790	Mn2576	Mo2020
Line	228.616 {447}	205.560 {464}	324.754 {104}	259.940 {130}	766.490 { 44}	670.784 { 50}	279.079 {121}2	257.610 {131}	202.030 {467}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.52072	F .20948	.25486	1.0377	53.733	1.0963	50.208	.50204	1.0958
Stddev	.00119	.00047	.00012	.0050	.212	.0016	.045	.00019	.0054
%RSD	.22854	.22529	.04836	.48600	.39410	.14203	.08930	.03861	.49390

#1	.52156	.20982	.25478	1.0341	53.583	1.0974	50.240	.50218	1.0996
#2	.51987	.20915	.25495	1.0412	53.882	1.0952	50.177	.50191	1.0920

Check ?	Chk Pass	Chk Fail	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit		.05700							
Low Limit		.04350							

Elem	Na8183	Ni2316	P_1782	Pb2203	S_1820	Sb2068	Se1960	Si2881	Sn1899
Line	818.326 { 41}	231.604 {446}	178.284 {489}	220.353 {453}	182.034 {485}	206.833 {463}	196.090 {472}	288.158 {117}	189.989 {477}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	52.718	.50811	10.675	.52479	2.0833	.53039	2.0730	2.5683	1.9999
Stddev	.273	.00152	.008	.00410	.0144	.00125	.0076	.0059	.0021
%RSD	.51752	.29944	.07846	.78064	.69140	.23565	.36922	.23089	.10717

#1	52.911	.50919	10.681	.52768	2.0935	.52951	2.0676	2.5641	1.9984
#2	52.525	.50703	10.669	.52189	2.0731	.53127	2.0784	2.5725	2.0014

Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	None	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Elem	Sr4077	Th2837	Ti3349	Ti1908	U_3701	V_2924	Zn2062	Zr3391
Line	407.771 { 83}	283.730 {119}	334.904 {101}	190.856 {477}	370.152 { 91}	292.402 {115}	206.200 {163}	339.198 { 99}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.97377	.99764	.96766	2.0277	2.1481	.48442	.51107	.50228
Stddev	.00096	.00024	.00036	.0059	.0102	.00040	.00322	.00252
%RSD	.09878	.02397	.03757	.28939	.47485	.08289	.62951	.50089

#1	.97309	.99747	.96791	2.0318	2.1553	.48470	.51334	.50050
#2	.97445	.99781	.96740	2.0235	2.1409	.48414	.50879	.50406

Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit								
Low Limit								

Int. Std.	Y_2243	Y_3600	Y_3774
Line	224.306 {450}	360.073 { 94}	377.433 { 89}
Units	Cts/S	Cts/S	Cts/S
Avg	1487.6	30440.	5594.2
Stddev	2.7	13.	11.5
%RSD	.17913	.04320	.20625

#1	1485.7	30431.	5602.4
#2	1489.5	30450.	5586.1

Sample Name: 280-82954-A-14-J Acquired: 5/20/2016 23:14:06 Type: Unk
Method: 6500_026(v10) Mode: CONC Corr. Factor: 1.000000
User: kellyca Custom ID1: Custom ID2: Custom ID3:
Comment: 325983 6010C Q4 soil

Elem	Ag3280	Al3092	As1890	B_2089	Ba4554	Be3130	Bi2230	Ca3179	Cd2288
Line	328.068 {103}	309.271 {109}	189.042 {478}	208.959 {461}	455.403 { 74}	313.042 {108}	223.061 {451}	317.933 {106}	228.802 {447}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.00023	50.893	.00225	.00880	.15434	.00032	-.00016	.95245	.01179
Stddev	.00073	.199	.00177	.00047	.00010	.00007	.00238	.00406	.00004
%RSD	310.31	.39124	78.460	5.3397	.06574	23.752	1446.4	.42599	.29736

#1	.00075	50.753	.00350	.00847	.15441	.00026	.00152	.94958	.01177
#2	-.00028	51.034	.00100	.00914	.15426	.00037	-.00185	.95531	.01182

Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Elem	Co2286	Cr2055	Cu3247	Fe2599	K_7664	Li6707	Mg2790	Mn2576	Mo2020
Line	228.616 {447}	205.560 {464}	324.754 {104}	259.940 {130}	766.490 { 44}	670.784 { 50}	279.079 {121}2	257.610 {131}	202.030 {467}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.00184	.06787	1.0493	22.662	.75715	.02369	1.5052	.11116	.00318
Stddev	.00027	.00043	.0040	.002	.00419	.00036	.0041	.00042	.00014
%RSD	14.508	.63594	.38086	.00702	.55386	1.5388	.27247	.37981	4.3496

#1	.00203	.06817	1.0465	22.660	.75419	.02395	1.5023	.11086	.00308
#2	.00165	.06756	1.0522	22.663	.76012	.02343	1.5081	.11146	.00328

Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Elem	Na5895	Ni2316	P_1782	Pb2203	S_1820	Sb2068	Se1960	Si2881	Sn1899
Line	589.592 { 57}	231.604 {446}	178.284 {489}	220.353 {453}	182.034 {485}	206.833 {463}	196.090 {472}	288.158 {117}	189.989 {477}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.16854	.05093	.49795	.87796	.50748	.07482	-.00220	1.9668	.01302
Stddev	.00386	.00073	.00520	.00309	.00159	.00272	.00215	.0231	.00179
%RSD	2.2927	1.4283	1.0450	.35173	.31332	3.6419	97.579	1.1729	13.760

#1	.17128	.05144	.49427	.88015	.50636	.07675	-.00373	1.9831	.01175
#2	.16581	.05041	.50163	.87578	.50861	.07290	-.00068	1.9505	.01429

Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Elem	Sr4077	Th2837	Ti3349	Ti1908	U_3701	V_2924	Zn2062	Zr3391
Line	407.771 { 83}	283.730 {119}	334.904 {101}	190.856 {477}	370.152 { 91}	292.402 {115}	206.200 {163}	339.198 { 99}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.01319	.00344	.21520	-.00086	-.00660	.04639	1.3194	.01827
Stddev	.00001	.00053	.00197	.00024	.00888	.00006	.0058	.00196
%RSD	.09100	15.295	.91739	27.896	134.55	.12193	.43671	10.707

#1	.01318	.00307	.21381	-.00069	-.00032	.04643	1.3235	.01689
#2	.01320	.00381	.21660	-.00103	-.01288	.04635	1.3153	.01966

Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit								
Low Limit								

Int. Std.	Y_2243	Y_3600	Y_3774
Line	224.306 {450}	360.073 { 94}	377.433 { 89}
Units	Cts/S	Cts/S	Cts/S
Avg	1588.5	32739.	5947.3
Stddev	1.7	80.	6.6
%RSD	.10808	.24361	.11099

#1	1589.7	32795.	5942.7
#2	1587.3	32682.	5952.0

Sample Name: 280-82954-A-14-JSD@5 Acquired: 5/20/2016 23:16:47 Type: Unk
Method: 6500_026(v10) Mode: CONC Corr. Factor: 1.000000
User: kellyca Custom ID1: Custom ID2: Custom ID3:
Comment: 325983 6010C Q4 soil

Elem	Ag3280	Al3092	As1890	B_2089	Ba4554	Be3130	Bi2230	Ca3179	Cd2288
Line	328.068 {103}	309.271 {109}	189.042 {478}	208.959 {461}	455.403 { 74}	313.042 {108}	223.061 {451}	317.933 {106}	228.802 {447}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	-.00011	10.285	-.00251	.00425	.03123	-.00002	-.00268	.21389	.00256
Stddev	.00023	.073	.00753	.00042	.00011	.00004	.00173	.00057	.00019
%RSD	213.46	.71305	299.87	9.7842	.36238	189.72	64.507	.26698	7.2921

#1	-.00027	10.234	.00281	.00395	.03131	-.00005	-.00390	.21429	.00243
#2	.00005	10.337	-.00784	.00454	.03115	.00001	-.00146	.21348	.00269

Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Elem	Co2286	Cr2055	Cu3247	Fe2599	K_7664	Li6707	Mg2790	Mn2576	Mo2020
Line	228.616 {447}	205.560 {464}	324.754 {104}	259.940 {130}	766.490 { 44}	670.784 { 50}	279.079 {121}2	257.610 {131}	202.030 {467}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	-.00017	.01362	.20618	4.6056	.21895	.00423	.30976	.02691	.00093
Stddev	.00006	.00027	.00070	.0199	.00413	.00026	.00200	.00017	.00010
%RSD	38.526	1.9884	.34010	.43207	1.8870	6.0488	.64560	.64464	11.117

#1	-.00012	.01382	.20569	4.5915	.21603	.00405	.30835	.02704	.00086
#2	-.00021	.01343	.20668	4.6196	.22187	.00441	.31118	.02679	.00101

Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Elem	Na5895	Ni2316	P_1782	Pb2203	S_1820	Sb2068	Se1960	Si2881	Sn1899
Line	589.592 { 57}	231.604 {446}	178.284 {489}	220.353 {453}	182.034 {485}	206.833 {463}	196.090 {472}	288.158 {117}	189.989 {477}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.19299	.01045	.10378	.18153	.18440	.01584	-.00063	.41552	.00373
Stddev	.00020	.00005	.00510	.00046	.00231	.00266	.00930	.00085	.00036
%RSD	.10400	.49748	4.9181	.25448	1.2549	16.787	1483.1	.20385	9.6030

#1	.19314	.01048	.10739	.18121	.18604	.01396	.00595	.41492	.00398
#2	.19285	.01041	.10017	.18186	.18277	.01772	-.00720	.41612	.00348

Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Elem	Sr4077	Th2837	Ti3349	Ti1908	U_3701	V_2924	Zn2062	Zr3391
Line	407.771 { 83}	283.730 {119}	334.904 {101}	190.856 {477}	370.152 { 91}	292.402 {115}	206.200 {163}	339.198 { 99}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.00270	-.00253	.04183	-.00182	.01414	.00895	.27028	.00482
Stddev	.00003	.00072	.00002	.00209	.00912	.00004	.00029	.00003
%RSD	1.0966	28.530	.04905	115.01	64.499	.45940	.10900	.53690

#1	.00268	-.00304	.04182	-.00330	.02059	.00898	.27049	.00483
#2	.00272	-.00202	.04185	-.00034	.00769	.00892	.27008	.00480

Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit								
Low Limit								

Int. Std.	Y_2243	Y_3600	Y_3774
Line	224.306 {450}	360.073 { 94}	377.433 { 89}
Units	Cts/S	Cts/S	Cts/S
Avg	1591.7	33063.	5895.3
Stddev	.1	58.	26.3
%RSD	.00324	.17585	.44655

#1	1591.7	33104.	5913.9
#2	1591.8	33021.	5876.6

Sample Name: 280-82954-A-14-K MS Acquired: 5/20/2016 23:19:28 Type: Unk

Method: 6500_026(v10) Mode: CONC Corr. Factor: 1.000000

User: kellyca Custom ID1: Custom ID2: Custom ID3:

Comment: 325983 6010C Q4 soil

Elem	Ag3280	Al3092	As1890	B_2089	Ba4554	Be3130	Bi2230	Ca3179	Cd2288
Line	328.068 {103}	309.271 {109}	189.042 {478}	208.959 {461}	455.403 { 74}	313.042 {108}	223.061 {451}	317.933 {106}	228.802 {447}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.04847	51.101	1.0093	1.0368	2.1001	.04946	2.1272	48.889	.11140
Stddev	.00105	.216	.0065	.0014	.0151	.00029	.0032	.131	.00015
%RSD	2.1667	.42312	.64548	.13961	.71722	.57835	.14787	.26708	.13260

#1	.04921	50.948	1.0139	1.0357	2.0895	.04926	2.1294	48.796	.11150
#2	.04772	51.254	1.0047	1.0378	2.1108	.04966	2.1250	48.981	.11129

Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Elem	Co2286	Cr2055	Cu3247	Fe2599	K_7664	Li6707	Mg2790	Mn2576	Mo2020
Line	228.616 {447}	205.560 {464}	324.754 {104}	259.940 {130}	766.490 { 44}	670.784 { 50}	279.079 {121}2	257.610 {131}	202.030 {467}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.49518	W .23837	.65893	21.415	52.998	1.0857	49.795	.57662	1.0164
Stddev	.00023	.00042	.00010	.075	.401	.0094	.137	.00171	.0022
%RSD	.04575	.17739	.01522	.35133	.75573	.86594	.27488	.29716	.21499

#1	.49534	.23807	.65900	21.362	52.714	1.0790	49.892	.57783	1.0179
#2	.49502	.23867	.65886	21.468	53.281	1.0923	49.699	.57541	1.0148

Check ?	Chk Pass	Chk Warn	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit		.10000							
Low Limit		-.01000							

Elem	Na8183	Ni2316	P_1782	Pb2203	S_1820	Sb2068	Se1960	Si2881	Sn1899
Line	818.326 { 41}	231.604 {446}	178.284 {489}	220.353 {453}	182.034 {485}	206.833 {463}	196.090 {472}	288.158 {117}	189.989 {477}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	50.013	.52610	10.388	.95775	2.4174	.47258	1.9883	5.7341	1.8519
Stddev	.638	.00060	.032	.00243	.0092	.00111	.0265	.0363	.0053
%RSD	1.2762	.11480	.30687	.25395	.38029	.23393	1.3305	.63307	.28323

#1	49.562	.52567	10.411	.95947	2.4109	.47336	2.0070	5.7598	1.8556
#2	50.464	.52652	10.366	.95603	2.4239	.47180	1.9696	5.7084	1.8482

Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Elem	Sr4077	Th2837	Ti3349	Ti1908	U_3701	V_2924	Zn2062	Zr3391
Line	407.771 { 83}	283.730 {119}	334.904 {101}	190.856 {477}	370.152 { 91}	292.402 {115}	206.200 {163}	339.198 { 99}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.94720	.94499	1.3760	1.9097	2.0401	.51348	1.0505	.49402
Stddev	.00594	.00053	.0019	.0093	.0207	.00289	.0084	.00225
%RSD	.62694	.05592	.13439	.48526	1.0159	.56255	.80072	.45483

#1	.94300	.94461	1.3773	1.9162	2.0254	.51553	1.0565	.49243
#2	.95140	.94536	1.3747	1.9031	2.0547	.51144	1.0446	.49561

Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit								
Low Limit								

Int. Std.	Y_2243	Y_3600	Y_3774
Line	224.306 {450}	360.073 { 94}	377.433 { 89}
Units	Cts/S	Cts/S	Cts/S
Avg	1520.9	31228.	5874.4
Stddev	.0	52.	4.4
%RSD	.00030	.16661	.07416

#1	1520.9	31191.	5871.3
#2	1520.9	31264.	5877.4

Sample Name: 280-82954-A-14-L MSD Acquired: 5/20/2016 23:22:00 Type: Unk
Method: 6500_026(v10) Mode: CONC Corr. Factor: 1.000000
User: kellyca Custom ID1: Custom ID2: Custom ID3:
Comment: 325983 6010C Q4 soil

Elem	Ag3280	Al3092	As1890	B_2089	Ba4554	Be3130	Bi2230	Ca3179	Cd2288
Line	328.068 {103}	309.271 {109}	189.042 {478}	208.959 {461}	455.403 { 74}	313.042 {108}	223.061 {451}	317.933 {106}	228.802 {447}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.05337	64.077	1.0890	1.1204	2.3052	.05395	2.3055	52.806	.12000
Stddev	.00088	.036	.0027	.0002	.0035	.00006	.0033	.131	.00022
%RSD	1.6527	.05682	.25146	.01628	.15167	.10467	.14311	.24762	.18695

#1	.05275	64.051	1.0909	1.1205	2.3077	.05399	2.3031	52.714	.12016
#2	.05400	64.102	1.0871	1.1203	2.3028	.05391	2.3078	52.899	.11984

Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Elem	Co2286	Cr2055	Cu3247	Fe2599	K_7664	Li6707	Mg2790	Mn2576	Mo2020
Line	228.616 {447}	205.560 {464}	324.754 {104}	259.940 {130}	766.490 { 44}	670.784 { 50}	279.079 {121}2	257.610 {131}	202.030 {467}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.53591	W .26509	.84069	25.661	57.499	1.1873	54.189	.64369	1.1057
Stddev	.00025	.00052	.00201	.024	.050	.0039	.153	.00153	.0022
%RSD	.04572	.19434	.23920	.09478	.08645	.32581	.28269	.23800	.20004

#1	.53574	.26473	.84211	25.644	57.464	1.1901	54.081	.64261	1.1041
#2	.53608	.26546	.83927	25.678	57.534	1.1846	54.298	.64478	1.1072

Check ?	Chk Pass	Chk Warn	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit		.10000							
Low Limit		-.01000							

Elem	Na8183	Ni2316	P_1782	Pb2203	S_1820	Sb2068	Se1960	Si2881	Sn1899
Line	818.326 { 41}	231.604 {446}	178.284 {489}	220.353 {453}	182.034 {485}	206.833 {463}	196.090 {472}	288.158 {117}	189.989 {477}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	54.472	.57485	11.233	1.0926	2.6406	.50299	2.1492	5.4551	2.0168
Stddev	.043	.00003	.022	.0026	.0041	.00269	.0051	.0516	.0038
%RSD	.07829	.00440	.19834	.23847	.15497	.53418	.23707	.94591	.18805

#1	54.442	.57487	11.249	1.0907	2.6377	.50109	2.1456	5.4187	2.0195
#2	54.503	.57483	11.218	1.0944	2.6435	.50489	2.1528	5.4916	2.0142

Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Elem	Sr4077	Th2837	Ti3349	Ti1908	U_3701	V_2924	Zn2062	Zr3391	
Line	407.771 { 83}	283.730 {119}	334.904 {101}	190.856 {477}	370.152 { 91}	292.402 {115}	206.200 {163}	339.198 { 99}	
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	
Avg	1.0314	1.0284	1.4879	2.0535	2.2266	.56345	1.1965	.54267	
Stddev	.0021	.0030	.0037	.0019	.0081	.00403	.0066	.00205	
%RSD	.20625	.28882	.24911	.09259	.36514	.71528	.55114	.37810	

#1	1.0329	1.0263	1.4853	2.0548	2.2208	.56060	1.1918	.54412	
#2	1.0299	1.0305	1.4905	2.0521	2.2323	.56630	1.2012	.54122	

Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	
High Limit									
Low Limit									

Int. Std.	Y_2243	Y_3600	Y_3774						
Line	224.306 {450}	360.073 { 94}	377.433 { 89}						
Units	Cts/S	Cts/S	Cts/S						
Avg	1506.5	30877.	5928.3						
Stddev	1.8	38.	19.1						
%RSD	.11689	.12361	.32258						

#1	1507.8	30904.	5941.9						
#2	1505.3	30850.	5914.8						

Sample Name: 280-82954-A-14-J PDS Acquired: 5/20/2016 23:24:30 Type: Unk
Method: 6500_026(v10) Mode: CONC Corr. Factor: 1.000000
User: kellyca Custom ID1: Custom ID2: Custom ID3:
Comment: 325983 6010C Q4 soil

Elem	Ag3280	Al3092	As1890	B_2089	Ba4554	Be3130	Bi2230	Ca3179	Cd2288
Line	328.068 {103}	309.271 {109}	189.042 {478}	208.959 {461}	455.403 { 74}	313.042 {108}	223.061 {451}	317.933 {106}	228.802 {447}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.00613	51.183	.20831	.11435	.24754	.05039	-.00328	20.649	.06333
Stddev	.00055	.019	.00124	.00031	.00041	.00001	.00175	.011	.00038
%RSD	9.0575	.03793	.59383	.26829	.16582	.02274	53.454	.05332	.60221

#1	.00652	51.169	.20919	.11456	.24725	.05039	-.00204	20.641	.06360
#2	.00573	51.197	.20744	.11413	.24783	.05040	-.00452	20.656	.06306

Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Elem	Co2286	Cr2055	Cu3247	Fe2599	K_7664	Li6707	Mg2790	Mn2576	Mo2020
Line	228.616 {447}	205.560 {464}	324.754 {104}	259.940 {130}	766.490 { 44}	670.784 { 50}	279.079 {121}2	257.610 {131}	202.030 {467}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.05261	W .11580	1.0622	22.977	21.192	.12712	21.048	.15772	.05591
Stddev	.00020	.00054	.0049	.095	.121	.00081	.083	.00012	.00027
%RSD	.37555	.46666	.45685	.41501	.57108	.63649	.39369	.07370	.47780

#1	.05275	.11618	1.0588	22.909	21.107	.12655	20.989	.15780	.05572
#2	.05247	.11542	1.0656	23.044	21.278	.12769	21.107	.15763	.05610

Check ?	Chk Pass	Chk Warn	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit		.10000							
Low Limit		-.01000							

Elem	Na8183	Ni2316	P_1782	Pb2203	S_1820	Sb2068	Se1960	Si2881	Sn1899
Line	818.326 { 41}	231.604 {446}	178.284 {489}	220.353 {453}	182.034 {485}	206.833 {463}	196.090 {472}	288.158 {117}	189.989 {477}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	20.240	.09834	2.4902	.94256	.50575	.17545	.19922	6.8897	.10828
Stddev	.072	.00046	.0016	.00318	.00087	.00026	.00095	.0313	.00298
%RSD	.35334	.46985	.06583	.33704	.17207	.14983	.47833	.45358	2.7501

#1	20.290	.09866	2.4891	.94481	.50637	.17526	.19855	6.8676	.10618
#2	20.189	.09801	2.4914	.94032	.50514	.17563	.19990	6.9118	.11039

Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Elem	Sr4077	Th2837	Ti3349	Ti1908	U_3701	V_2924	Zn2062	Zr3391
Line	407.771 { 83}	283.730 {119}	334.904 {101}	190.856 {477}	370.152 { 91}	292.402 {115}	206.200 {163}	339.198 { 99}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.06030	.20010	.25779	.20256	.51990	.09168	1.5053	.06687
Stddev	.00022	.00272	.00323	.00022	.01113	.00074	.0009	.00074
%RSD	.36450	1.3587	1.2536	.10838	2.1408	.80815	.05713	1.1086

#1	.06014	.20202	.25550	.20240	.51203	.09116	1.5059	.06740
#2	.06045	.19818	.26007	.20271	.52778	.09220	1.5047	.06635

Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit								
Low Limit								

Int. Std.	Y_2243	Y_3600	Y_3774
Line	224.306 {450}	360.073 { 94}	377.433 { 89}
Units	Cts/S	Cts/S	Cts/S
Avg	1555.3	31770.	5836.2
Stddev	.2	30.	9.6
%RSD	.01006	.09436	.16467

#1	1555.4	31791.	5829.4
#2	1555.2	31749.	5843.0

Sample Name: 280-82954-A-13-I Acquired: 5/20/2016 23:27:09 Type: Unk
Method: 6500_026(v10) Mode: CONC Corr. Factor: 1.000000
User: kellyca Custom ID1: Custom ID2: Custom ID3:
Comment: 325983 6010C Q4 soil

Elem	Ag3280	Al3092	As1890	B_2089	Ba4554	Be3130	Bi2230	Ca3179	Cd2288
Line	328.068 {103}	309.271 {109}	189.042 {478}	208.959 {461}	455.403 { 74}	313.042 {108}	223.061 {451}	317.933 {106}	228.802 {447}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.00005	39.351	.00127	.00853	.16488	.00027	.00031	.98554	.01297
Stddev	.00033	.090	.00401	.00015	.00021	.00001	.00100	.00227	.00005
%RSD	658.78	.22940	315.86	1.7041	.12880	2.0930	322.21	.23008	.41029

#1	-.00019	39.287	.00411	.00863	.16473	.00026	.00102	.98394	.01301
#2	.00029	39.415	-.00157	.00842	.16503	.00027	-.00040	.98715	.01294

Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Elem	Co2286	Cr2055	Cu3247	Fe2599	K_7664	Li6707	Mg2790	Mn2576	Mo2020
Line	228.616 {447}	205.560 {464}	324.754 {104}	259.940 {130}	766.490 { 44}	670.784 { 50}	279.079 {121}2	257.610 {131}	202.030 {467}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.00194	.04212	.42082	22.997	.76656	.02253	1.1848	.11884	.00323
Stddev	.00001	.00008	.00044	.039	.00443	.00086	.0073	.00010	.00001
%RSD	.34923	.18961	.10434	.16787	.57845	3.8136	.61739	.08318	.28673

#1	.00195	.04207	.42051	22.970	.76969	.02192	1.1899	.11891	.00323
#2	.00194	.04218	.42113	23.024	.76342	.02314	1.1796	.11877	.00324

Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Elem	Na5895	Ni2316	P_1782	Pb2203	S_1820	Sb2068	Se1960	Si2881	Sn1899
Line	589.592 { 57}	231.604 {446}	178.284 {489}	220.353 {453}	182.034 {485}	206.833 {463}	196.090 {472}	288.158 {117}	189.989 {477}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.25499	.05034	.56949	.62851	.49223	.01285	-.00387	2.5514	.01411
Stddev	.00216	.00028	.00302	.00247	.00478	.00063	.00851	.0382	.00002
%RSD	.84520	.56044	.53077	.39304	.97112	4.8724	220.05	1.4954	.13000

#1	.25652	.05054	.57163	.63026	.49561	.01241	-.00988	2.5783	.01410
#2	.25347	.05014	.56735	.62677	.48885	.01330	.00215	2.5244	.01412

Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Elem	Sr4077	Th2837	Ti3349	Ti1908	U_3701	V_2924	Zn2062	Zr3391	
Line	407.771 { 83}	283.730 {119}	334.904 {101}	190.856 {477}	370.152 { 91}	292.402 {115}	206.200 {163}	339.198 { 99}	
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	
Avg	.01434	.00417	.24168	.00236	-.00032	.04492	.65100	.01191	
Stddev	.00010	.00185	.00486	.00012	.02441	.00124	.00160	.00002	
%RSD	.71133	44.377	2.0125	4.9431	7579.0	2.7512	.24609	.17088	

#1	.01426	.00286	.23824	.00245	.01694	.04580	.65213	.01193	
#2	.01441	.00548	.24512	.00228	-.01758	.04405	.64986	.01190	

Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	
High Limit									
Low Limit									

Int. Std.	Y_2243	Y_3600	Y_3774
Line	224.306 {450}	360.073 { 94}	377.433 { 89}
Units	Cts/S	Cts/S	Cts/S
Avg	1592.9	32557.	5835.4
Stddev	1.1	11.	7.5
%RSD	.07038	.03417	.12878

#1	1593.7	32550.	5840.7
#2	1592.1	32565.	5830.1

Sample Name: 280-82954-A-13-J DU Acquired: 5/20/2016 23:29:49 Type: Unk
Method: 6500_026(v10) Mode: CONC Corr. Factor: 1.000000
User: kellyca Custom ID1: Custom ID2: Custom ID3:
Comment: 325983 6010C Q4 soil

Elem	Ag3280	Al3092	As1890	B_2089	Ba4554	Be3130	Bi2230	Ca3179	Cd2288
Line	328.068 {103}	309.271 {109}	189.042 {478}	208.959 {461}	455.403 { 74}	313.042 {108}	223.061 {451}	317.933 {106}	228.802 {447}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.00067	37.235	.00856	.00802	.15087	.00017	-.00028	1.0171	.01163
Stddev	.00001	.224	.00336	.00001	.00014	.00003	.00072	.0109	.00024
%RSD	.99298	.60030	39.210	.15478	.08999	15.484	260.42	1.0740	2.0642

#1	.00067	37.077	.01093	.00803	.15077	.00019	.00023	1.0094	.01146
#2	.00066	37.393	.00619	.00801	.15096	.00015	-.00079	1.0249	.01180

Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Elem	Co2286	Cr2055	Cu3247	Fe2599	K_7664	Li6707	Mg2790	Mn2576	Mo2020
Line	228.616 {447}	205.560 {464}	324.754 {104}	259.940 {130}	766.490 { 44}	670.784 { 50}	279.079 {121}2	257.610 {131}	202.030 {467}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.00173	.03599	.37456	21.070	.66708	.02049	1.1474	.11576	.00293
Stddev	.00003	.00008	.00024	.088	.01001	.00038	.0001	.00026	.00011
%RSD	1.5099	.21544	.06376	.41966	1.4998	1.8447	.00789	.22281	3.7943

#1	.00171	.03604	.37439	21.008	.67416	.02076	1.1475	.11558	.00285
#2	.00175	.03593	.37473	21.133	.66001	.02022	1.1473	.11595	.00300

Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Elem	Na5895	Ni2316	P_1782	Pb2203	S_1820	Sb2068	Se1960	Si2881	Sn1899
Line	589.592 { 57}	231.604 {446}	178.284 {489}	220.353 {453}	182.034 {485}	206.833 {463}	196.090 {472}	288.158 {117}	189.989 {477}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.22845	.04822	.46982	.49930	.47603	.00811	.00079	2.0051	.01091
Stddev	.00811	.00020	.00156	.00281	.00440	.00027	.00444	.0512	.00065
%RSD	3.5501	.40686	.33146	.56241	.92512	3.3301	559.36	2.5547	5.9488

#1	.22271	.04836	.47092	.49731	.47915	.00792	.00393	2.0413	.01045
#2	.23418	.04808	.46872	.50129	.47292	.00831	-.00235	1.9688	.01137

Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Elem	Sr4077	Th2837	Ti3349	Ti1908	U_3701	V_2924	Zn2062	Zr3391
Line	407.771 { 83}	283.730 {119}	334.904 {101}	190.856 {477}	370.152 { 91}	292.402 {115}	206.200 {163}	339.198 { 99}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.01420	.00399	.21175	.00125	-.00178	.04134	.64799	.01150
Stddev	.00006	.00023	.00003	.00150	.02745	.00053	.00226	.00027
%RSD	.44942	5.8203	.01289	120.19	1541.3	1.2875	.34818	2.3647

#1	.01415	.00416	.21177	.00019	.01763	.04096	.64639	.01169
#2	.01424	.00383	.21173	.00231	-.02119	.04171	.64959	.01130

Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit								
Low Limit								

Int. Std.	Y_2243	Y_3600	Y_3774
Line	224.306 {450}	360.073 { 94}	377.433 { 89}
Units	Cts/S	Cts/S	Cts/S
Avg	1595.0	32551.	5860.2
Stddev	1.2	11.	29.3
%RSD	.07423	.03360	.50046

#1	1594.2	32558.	5880.9
#2	1595.8	32543.	5839.5

Sample Name: 280-82954-A-15-F Acquired: 5/20/2016 23:32:30 Type: Unk
Method: 6500_026(v10) Mode: CONC Corr. Factor: 1.000000
User: kellyca Custom ID1: Custom ID2: Custom ID3:
Comment: 325983 6010C Q4 soil

Elem	Ag3280	Al3092	As1890	B_2089	Ba4554	Be3130	Bi2230	Ca3179	Cd2288
Line	328.068 {103}	309.271 {109}	189.042 {478}	208.959 {461}	455.403 { 74}	313.042 {108}	223.061 {451}	317.933 {106}	228.802 {447}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.00095	39.749	.00631	.00727	.15391	.00025	.00797	1.0061	.01179
Stddev	.00045	.121	.00252	.00060	.00119	.00003	.00016	.0012	.00017
%RSD	47.365	.30518	39.889	8.3014	.77447	11.552	2.0123	.12067	1.4234

#1	.00127	39.663	.00453	.00684	.15307	.00027	.00785	1.0052	.01167
#2	.00063	39.835	.00809	.00770	.15476	.00023	.00808	1.0069	.01190

Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Elem	Co2286	Cr2055	Cu3247	Fe2599	K_7664	Li6707	Mg2790	Mn2576	Mo2020
Line	228.616 {447}	205.560 {464}	324.754 {104}	259.940 {130}	766.490 { 44}	670.784 { 50}	279.079 {121}2	257.610 {131}	202.030 {467}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.00215	.03608	.45972	22.173	.71304	.02235	1.4433	.11731	.00338
Stddev	.00019	.00008	.00210	.192	.01944	.00051	.0010	.00019	.00018
%RSD	8.7772	.22783	.45614	.86693	2.7266	2.2687	.06951	.15881	5.2584

#1	.00228	.03613	.46120	22.037	.69929	.02200	1.4426	.11744	.00351
#2	.00201	.03602	.45824	22.309	.72679	.02271	1.4440	.11718	.00326

Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Elem	Na5895	Ni2316	P_1782	Pb2203	S_1820	Sb2068	Se1960	Si2881	Sn1899
Line	589.592 { 57}	231.604 {446}	178.284 {489}	220.353 {453}	182.034 {485}	206.833 {463}	196.090 {472}	288.158 {117}	189.989 {477}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.19716	.04885	.53625	4.1671	.48105	.19274	-.00090	3.0662	.03571
Stddev	.00095	.00030	.00039	.0056	.00371	.00046	.00021	.0226	.00139
%RSD	.48322	.62001	.07201	.13380	.77136	.24075	23.287	.73684	3.9009

#1	.19649	.04906	.53653	4.1631	.47843	.19306	-.00076	3.0502	.03473
#2	.19784	.04864	.53598	4.1710	.48367	.19241	-.00105	3.0822	.03670

Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Elem	Sr4077	Th2837	Ti3349	Ti1908	U_3701	V_2924	Zn2062	Zr3391
Line	407.771 { 83}	283.730 {119}	334.904 {101}	190.856 {477}	370.152 { 91}	292.402 {115}	206.200 {163}	339.198 { 99}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.01292	.00273	.25127	.00138	.01006	.04391	.65906	.01266
Stddev	.00010	.00024	.00920	.00046	.00798	.00071	.00061	.00059
%RSD	.74403	8.6466	3.6611	33.001	79.322	1.6089	.09268	4.6600

#1	.01299	.00257	.24477	.00170	.01570	.04441	.65949	.01307
#2	.01285	.00290	.25778	.00106	.00442	.04341	.65863	.01224

Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit								
Low Limit								

Int. Std.	Y_2243	Y_3600	Y_3774
Line	224.306 {450}	360.073 { 94}	377.433 { 89}
Units	Cts/S	Cts/S	Cts/S
Avg	1596.5	32722.	5822.5
Stddev	.8	83.	28.9
%RSD	.05048	.25299	.49635

#1	1597.1	32664.	5842.9
#2	1596.0	32781.	5802.0

Sample Name: ccvh-3900196 Acquired: 5/20/2016 23:35:10 Type: QC
Method: 6500_026(v10) Mode: CONC Corr. Factor: 1.000000
User: kellyca Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	Ag3280	Al3092	As1890	B_2089	Ba4554	Be3130	Bi2230	Ca3179	Cd2288	Co2286	Cr2055	Cu3247	Fe2714
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	-.00268	46.147	-.00405	.00368	.00017	-.00039	1.0438	-.05697	-.00104	.00309	-.00026	.00548	46.894
Stddev	.00025	.020	.00287	.00029	.00010	.00002	.0091	.00002	.00010	.00013	.00001	.00041	.017
%RSD	9.4728	.04225	70.931	7.9094	56.118	6.1882	.87225	.03900	10.078	4.1780	3.6882	7.4743	.03665

#1	-.00286	46.133	-.00202	.00389	.00024	-.00037	1.0373	-.05696	-.00111	.00300	-.00026	.00577	46.882
#2	-.00250	46.161	-.00608	.00348	.00010	-.00041	1.0502	-.05699	-.00096	.00319	-.00027	.00519	46.907

Check ?	None	Chk Pass	None	None	None	None	Chk Pass	None	None	None	None	None	Chk Pass
Value													
Range													

Elem	K_7664	Li6707	Mg2790	Mn2576	Mo2020	Na8183	Ni2316	P_1782	Pb2203	S_1820	Sb2068	Se1960	Si2881
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.05167	-.00023	.14086	-.00079	-.00198	250.56	-.00030	.00116	.00038	4.9987	-.00077	-.00022	-.00787
Stddev	.02158	.00030	.00029	.00002	.00042	.21	.00121	.00018	.00235	.0466	.00137	.00760	.00320
%RSD	41.764	129.96	.20385	2.3232	21.113	.08362	403.52	15.948	627.42	.93204	178.69	3405.0	40.627

#1	.03641	-.00002	.14066	-.00077	-.00168	250.70	.00056	.00129	-.00129	4.9657	.00020	-.00560	-.01013
#2	.06693	-.00045	.14107	-.00080	-.00227	250.41	-.00116	.00103	.00204	5.0316	-.00174	.00515	-.00561

Check ?	None	None	None	None	None	Chk Pass	None	None	None	Chk Pass	None	None	None
Value													
Range													

Elem	Sn1899	Sr4077	Th2837	Ti3349	Tl1908	U_3701	V_2924	Zn2062	Zr3391
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.00179	.00027	4.8670	.02597	-.00214	9.9169	-.01679	-.00142	-.01602
Stddev	.00188	.00004	.0217	.00034	.00088	.0193	.00172	.00002	.00021
%RSD	105.14	14.745	.44497	1.3139	41.253	.19512	10.222	1.6519	1.3015

#1	.00313	.00029	4.8824	.02573	-.00277	9.9305	-.01800	-.00141	-.01617
#2	.00046	.00024	4.8517	.02621	-.00152	9.9032	-.01557	-.00144	-.01587

Check ?	None	None	Chk Pass	None	None	Chk Pass	None	None	None
Value									
Range									

Int. Std.	Y_2243	Y_3600	Y_3774
Units	Cts/S	Cts/S	Cts/S
Avg	1512.3	30894.	5659.1
Stddev	6.5	161.	5.4
%RSD	.42689	.51988	.09540

#1	1516.9	30781.	5662.9
#2	1507.8	31008.	5655.2

Sample Name: ccv-3900195 Acquired: 5/20/2016 23:37:57 Type: QC
Method: 6500_026(v10) Mode: CONC Corr. Factor: 1.000000
User: kellyca Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	Ag3280	Al1670	As1890	B_2089	Ba4554	Be3130	Bi2230	Ca3179	Cd2288	Co2286	Cr2055	Cu3247	Fe2599
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.48794	.52347	1.0095	.54237	.49813	.51504	-.00059	5.0529	.52848	.52632	.51718	.49714	2.5004
Stddev	.00057	.00078	.0033	.00252	.00073	.00184	.00111	.0062	.00013	.00008	.00021	.00097	.0076
%RSD	.11658	.14940	.32859	.46374	.14560	.35727	188.47	.12184	.02388	.01611	.04034	.19522	.30460

#1	.48834	.52402	1.0071	.54415	.49761	.51373	.00020	5.0485	.52857	.52626	.51733	.49645	2.5058
#2	.48753	.52292	1.0118	.54059	.49864	.51634	-.00137	5.0572	.52840	.52638	.51704	.49782	2.4950

Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	None	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Value													
Range													

Elem	K_7664	Li6707	Mg2790	Mn2576	Mo2020	Na5895	Ni2316	P_1782	Pb2203	S_1820	Sb2068	Se1960	Si2881
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	51.920	1.0698	19.807	.49980	.52736	5.2647	.50965	1.0215	1.0473	.00997	1.0245	1.0108	5.0140
Stddev	.033	.0005	.016	.00041	.00059	.0140	.00039	.0060	.0027	.00194	.0003	.0007	.0264
%RSD	.06320	.04653	.07920	.08223	.11179	.26500	.07651	.58655	.25368	19.443	.02784	.07169	.52610

#1	51.896	1.0701	19.796	.49951	.52778	5.2746	.50937	1.0173	1.0454	.00860	1.0247	1.0103	5.0327
#2	51.943	1.0694	19.818	.50009	.52694	5.2549	.50993	1.0257	1.0491	.01134	1.0243	1.0113	4.9954

Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	None	Chk Pass	Chk Pass	Chk Pass
Value													
Range													

Elem	Sn1899	Sr4077	Th2837	Ti3349	Ti1908	U_3701	V_2924	Zn2062	Zr3391
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.99987	.48076	.00229	.46899	1.0306	.02236	.47555	.50116	.50103
Stddev	.00146	.00029	.00260	.00008	.0010	.01870	.00031	.00017	.00143
%RSD	.14579	.06093	113.53	.01665	.09778	83.650	.06432	.03433	.28516

#1	1.0009	.48056	.00413	.46893	1.0299	.00913	.47533	.50128	.50002
#2	.99883	.48097	.00045	.46904	1.0313	.03558	.47576	.50104	.50204

Check ?	Chk Pass	Chk Pass	None	Chk Pass	Chk Pass	None	Chk Pass	Chk Pass	Chk Pass
Value									
Range									

Int. Std.	Y_2243	Y_3600	Y_3774
Units	Cts/S	Cts/S	Cts/S
Avg	1533.6	31704.	5700.3
Stddev	.4	84.	22.5
%RSD	.02932	.26565	.39503

#1	1533.2	31764.	5684.3
#2	1533.9	31644.	5716.2

Sample Name: ccb Acquired: 5/20/2016 23:40:34 Type: QC
Method: 6500_026(v10) Mode: CONC Corr. Factor: 1.000000
User: kellyca Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	Ag3280	Al1670	As1890	B_2089	Ba4554	Be3130	Bi2230	Ca3179	Cd2288	Co2286	Cr2055
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.00021	.00104	W -.00520	F .00338	-.00003	-.00005	-.00129	-.00535	.00004	-.00011	-.00019
Stddev	.00009	.00081	.00103	.00067	.00016	.00003	.00036	.00242	.00021	.00022	.00004
%RSD	42.293	78.045	19.858	19.755	583.68	68.822	27.858	45.243	597.89	201.32	21.686

#1	.00027	.00046	-.00447	.00386	.00009	-.00002	-.00104	-.00706	.00019	-.00027	-.00016
#2	.00014	.00161	-.00593	.00291	-.00014	-.00007	-.00154	-.00364	-.00011	.00005	-.00021

Check ?	Chk Pass	Chk Pass	Chk Warn	Chk Fail	Chk Pass	Chk Pass	None	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit			.00440	.00312							
Low Limit			-.00440	-.00312							

Elem	Cu3247	Fe2599	K_7664	Li6707	Mg2790	Mn2576	Mo2020	Na5895	Ni2316	P_1782	Pb2203
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	-.00049	.00403	.10413	-.00106	.00148	.00003	.00059	.02204	-.00060	-.00236	.00009
Stddev	.00025	.00295	.01151	.00179	.00302	.00005	.00032	.00068	.00008	.00027	.00107
%RSD	50.492	73.198	11.050	168.48	204.21	204.39	53.665	3.0796	13.087	11.276	1217.6

#1	-.00031	.00194	.11227	-.00233	-.00066	-.00001	.00081	.02156	-.00065	-.00255	-.00067
#2	-.00066	.00612	.09600	.00020	.00361	.00006	.00037	.02252	-.00054	-.00218	.00085

Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit											
Low Limit											

Elem	S_1820	Sb2068	Se1960	Si2881	Sn1899	Sr4077	Th2837	Ti3349	Ti1908	U_3701	V_2924
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.00285	.00104	-.00313	.00392	.00085	.00005	-.00348	.00016	-.00236	.01265	.00039
Stddev	.00532	.00080	.00194	.00281	.00042	.00008	.00069	.00003	.00091	.00919	.00086
%RSD	186.44	76.406	61.874	71.664	49.162	141.46	19.805	16.373	38.626	72.648	219.69

#1	.00661	.00161	-.00450	.00193	.00114	.00011	-.00396	.00014	-.00301	.00615	-.00022
#2	-.00091	.00048	-.00176	.00590	.00055	-.00000	-.00299	.00018	-.00172	.01914	.00100

Check ?	None	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit											
Low Limit											

Elem	Zn2062	Zr3391
Units	ppm	ppm
Avg	.00036	.00059
Stddev	.00088	.00118
%RSD	243.17	200.48

#1	-.00026	-.00025
#2	.00098	.00143

Check ?	Chk Pass	Chk Pass
High Limit		
Low Limit		

Int. Std.	Y_2243	Y_3600	Y_3774
Units	Cts/S	Cts/S	Cts/S
Avg	1565.9	32517.	5750.1
Stddev	2.8	.	7.0
%RSD	.18146	.00147	.12118

#1	1567.9	32517.	5745.1
#2	1563.9	32517.	5755.0

Sample Name: ccvl-3903059 Acquired: 5/20/2016 23:43:19 Type: QC
Method: 6500_026(v10) Mode: CONC Corr. Factor: 1.000000
User: kellyca Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	Ag3280	Al1670	As1890	B_2089	Ba4554	Be3130	Bi2230	Ca3179	Cd2288	Co2286	Cr2055	Cu3247
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.00992	.10733	.01470	.11008	.01003	.00089	.11175	.19824	.00519	.01070	.01044	.01418
Stddev	.00032	.00005	.00421	.00002	.00006	.00002	.00282	.00816	.00018	.00025	.00004	.00026
%RSD	3.1904	.05067	28.673	.01522	.55077	2.4465	2.5196	4.1142	3.4882	2.2977	.35645	1.8179

#1	.01015	.10737	.01172	.11009	.01007	.00087	.10976	.19247	.00531	.01087	.01041	.01400
#2	.00970	.10729	.01768	.11007	.00999	.00090	.11374	.20400	.00506	.01052	.01047	.01436

Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Value												
Range												

Elem	Fe2599	K_7664	Li6707	Mg2790	Mn2576	Mo2020	Na5895	Ni2316	P_1782	Pb2203	S_1820	Sb2068
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.11859	3.1521	.00966	.20246	.01031	.02112	1.0520	.04145	2.9772	.00894	.00728	.02155
Stddev	.00124	.0347	.00051	.00712	.00010	.00079	.0018	.00071	.0024	.00199	.00392	.00474
%RSD	1.0458	1.1018	5.3181	3.5186	.96897	3.7289	.16738	1.7029	.08059	22.232	53.774	22.001

#1	.11771	3.1275	.01002	.20750	.01024	.02167	1.0507	.04095	2.9789	.01035	.00451	.01820
#2	.11946	3.1766	.00930	.19743	.01038	.02056	1.0532	.04195	2.9755	.00754	.01005	.02490

Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	None	Chk Pass
Value												
Range												

Elem	Se1960	Si2881	Sn1899	Sr4077	Th2837	Ti3349	Ti1908	U_3701	V_2924	Zn2062	Zr3391
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.01212	.49654	.10117	.00953	.01140	.00925	.01508	F .08434	.00998	.01914	.01550
Stddev	.00262	.01340	.00054	.00004	.00039	.00050	.00113	.02849	.00013	.00173	.00046
%RSD	21.605	2.6987	.53800	.45153	3.4129	5.4280	7.5038	33.773	1.2851	9.0254	2.9733

#1	.01397	.48706	.10078	.00950	.01112	.00889	.01588	.10448	.01007	.01792	.01517
#2	.01027	.50601	.10155	.00956	.01167	.00960	.01428	.06420	.00988	.02036	.01582

Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Fail	Chk Pass	Chk Pass	Chk Pass
Value								.06000			
Range								30.000%			

Int. Std.	Y_2243	Y_3600	Y_3774
Units	Cts/S	Cts/S	Cts/S
Avg	1570.5	32711.	5738.8
Stddev	2.0	80.	17.2
%RSD	.12959	.24461	.30045

#1	1569.0	32767.	5751.0
#2	1571.9	32654.	5726.6

Sample Name: 280-82954-A-18-F Acquired: 5/20/2016 23:46:03 Type: Unk
Method: 6500_026(v10) Mode: CONC Corr. Factor: 1.000000
User: kellyca Custom ID1: Custom ID2: Custom ID3:
Comment: 325983 6010C Q4 soil

Elem	Ag3280	Al3092	As1890	B_2089	Ba4554	Be3130	Bi2230	Ca3179	Cd2288
Line	328.068 {103}	309.271 {109}	189.042 {478}	208.959 {461}	455.403 { 74}	313.042 {108}	223.061 {451}	317.933 {106}	228.802 {447}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.00047	28.396	.00036	.00392	.12109	.00010	.00038	.62615	.01005
Stddev	.00080	.209	.00603	.00110	.00059	.00004	.00139	.00396	.00012
%RSD	170.29	.73525	1678.4	28.011	.48946	39.562	370.69	.63210	1.2308

#1	.00104	28.248	-.00391	.00315	.12067	.00007	-.00061	.62895	.00996
#2	-.00010	28.544	.00462	.00470	.12150	.00013	.00136	.62335	.01014

Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Elem	Co2286	Cr2055	Cu3247	Fe2599	K_7664	Li6707	Mg2790	Mn2576	Mo2020
Line	228.616 {447}	205.560 {464}	324.754 {104}	259.940 {130}	766.490 { 44}	670.784 { 50}	279.079 {121}2	257.610 {131}	202.030 {467}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.00127	.03328	.61083	17.975	.46592	.02013	.76758	.11433	.00329
Stddev	.00052	.00039	.00012	.015	.01966	.00028	.00136	.00005	.00025
%RSD	41.030	1.1611	.01950	.08223	4.2195	1.3974	.17720	.04525	7.5137

#1	.00090	.03355	.61074	17.965	.45202	.02032	.76854	.11429	.00347
#2	.00164	.03300	.61091	17.986	.47982	.01993	.76662	.11437	.00312

Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Elem	Na5895	Ni2316	P_1782	Pb2203	S_1820	Sb2068	Se1960	Si2881	Sn1899
Line	589.592 { 57}	231.604 {446}	178.284 {489}	220.353 {453}	182.034 {485}	206.833 {463}	196.090 {472}	288.158 {117}	189.989 {477}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.11155	.05243	.41938	.53820	.59864	.00676	-.00002	1.7735	.01170
Stddev	.00420	.00008	.00672	.00045	.00858	.00100	.00312	.0248	.00145
%RSD	3.7643	.15754	1.6029	.08431	1.4340	14.759	19731.	1.3978	12.369

#1	.11452	.05237	.42413	.53788	.59257	.00605	-.00222	1.7910	.01067
#2	.10858	.05248	.41462	.53852	.60471	.00746	.00219	1.7560	.01272

Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Elem	Sr4077	Th2837	Ti3349	Ti1908	U_3701	V_2924	Zn2062	Zr3391
Line	407.771 { 83}	283.730 {119}	334.904 {101}	190.856 {477}	370.152 { 91}	292.402 {115}	206.200 {163}	339.198 { 99}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.01198	.00079	.16412	-.00154	.03420	.03160	.71527	.00618
Stddev	.00017	.00037	.00406	.00109	.01005	.00115	.00261	.00073
%RSD	1.4551	47.537	2.4723	70.570	29.376	3.6423	.36448	11.747

#1	.01185	.00052	.16125	-.00077	.02710	.03242	.71712	.00567
#2	.01210	.00105	.16699	-.00231	.04130	.03079	.71343	.00670

Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit								
Low Limit								

Int. Std.	Y_2243	Y_3600	Y_3774
Line	224.306 {450}	360.073 { 94}	377.433 { 89}
Units	Cts/S	Cts/S	Cts/S
Avg	1595.5	32756.	5811.3
Stddev	1.0	5.	4.0
%RSD	.05984	.01587	.06927

#1	1594.8	32752.	5814.2
#2	1596.2	32760.	5808.5

Sample Name: 280-82954-A-19-L Acquired: 5/20/2016 23:48:45 Type: Unk
Method: 6500_026(v10) Mode: CONC Corr. Factor: 1.000000
User: kellyca Custom ID1: Custom ID2: Custom ID3:
Comment: 325983 6010C Q4 soil

Elem	Ag3280	Al3092	As1890	B_2089	Ba4554	Be3130	Bi2230	Ca3179	Cd2288
Line	328.068 {103}	309.271 {109}	189.042 {478}	208.959 {461}	455.403 { 74}	313.042 {108}	223.061 {451}	317.933 {106}	228.802 {447}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.00026	30.725	.00411	.00529	.12495	.00007	-.00208	.65640	.00829
Stddev	.00009	.075	.00479	.00007	.00005	.00004	.00035	.00005	.00015
%RSD	35.111	.24332	116.50	1.3703	.03918	57.885	16.650	.00788	1.8674

#1	.00032	30.672	.00072	.00524	.12498	.00004	-.00183	.65644	.00840
#2	.00019	30.778	.00750	.00534	.12491	.00010	-.00232	.65637	.00818

Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Elem	Co2286	Cr2055	Cu3247	Fe2599	K_7664	Li6707	Mg2790	Mn2576	Mo2020
Line	228.616 {447}	205.560 {464}	324.754 {104}	259.940 {130}	766.490 { 44}	670.784 { 50}	279.079 {121}2	257.610 {131}	202.030 {467}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.00138	.03661	.67547	19.402	.53124	.02440	.86724	.11252	.00328
Stddev	.00017	.00008	.00532	.036	.00883	.00045	.00536	.00089	.00044
%RSD	12.185	.20510	.78748	.18518	1.6625	1.8252	.61785	.79311	13.287

#1	.00150	.03655	.67171	19.377	.52500	.02472	.86345	.11189	.00297
#2	.00126	.03666	.67923	19.428	.53749	.02409	.87103	.11315	.00359

Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Elem	Na5895	Ni2316	P_1782	Pb2203	S_1820	Sb2068	Se1960	Si2881	Sn1899
Line	589.592 { 57}	231.604 {446}	178.284 {489}	220.353 {453}	182.034 {485}	206.833 {463}	196.090 {472}	288.158 {117}	189.989 {477}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.13401	.05904	.44653	.74148	.60315	.00677	.00491	2.3866	.01557
Stddev	.01154	.00017	.00047	.00120	.00076	.00130	.00165	.0422	.00000
%RSD	8.6110	.29267	.10530	.16125	.12655	19.247	33.547	1.7663	.01245

#1	.14217	.05892	.44686	.74063	.60261	.00585	.00374	2.4164	.01557
#2	.12585	.05916	.44620	.74232	.60369	.00769	.00607	2.3568	.01557

Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Elem	Sr4077	Th2837	Ti3349	Ti1908	U_3701	V_2924	Zn2062	Zr3391
Line	407.771 { 83}	283.730 {119}	334.904 {101}	190.856 {477}	370.152 { 91}	292.402 {115}	206.200 {163}	339.198 { 99}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.01150	.00135	.22011	-.00225	.00866	.03599	.72316	.00942
Stddev	.00016	.00158	.00223	.00056	.01238	.00105	.00250	.00172
%RSD	1.4349	117.43	1.0154	25.007	143.05	2.9132	.34505	18.286

#1	.01138	.00023	.21853	-.00265	.01741	.03525	.72139	.01063
#2	.01162	.00247	.22169	-.00185	-.00010	.03673	.72492	.00820

Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit								
Low Limit								

Int. Std.	Y_2243	Y_3600	Y_3774
Line	224.306 {450}	360.073 { 94}	377.433 { 89}
Units	Cts/S	Cts/S	Cts/S
Avg	1584.3	32795.	5938.1
Stddev	3.0	128.	13.1
%RSD	.19164	.39067	.22048

#1	1586.4	32885.	5928.9
#2	1582.1	32704.	5947.4

Sample Name: 280-82954-A-19-M DU Acquired: 5/20/2016 23:51:26 Type: Unk

Method: 6500_026(v10) Mode: CONC Corr. Factor: 1.000000

User: kellyca Custom ID1: Custom ID2: Custom ID3:

Comment: 325983 6010C Q4 soil

Elem	Ag3280	Al3092	As1890	B_2089	Ba4554	Be3130	Bi2230	Ca3179	Cd2288
Line	328.068 {103}	309.271 {109}	189.042 {478}	208.959 {461}	455.403 { 74}	313.042 {108}	223.061 {451}	317.933 {106}	228.802 {447}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.00017	32.119	-.00065	.00590	.11990	.00016	-.00278	.62579	.00823
Stddev	.00037	.058	.00191	.00060	.00085	.00007	.00165	.00334	.00021
%RSD	212.64	.18169	294.31	10.166	.71305	41.839	59.461	.53321	2.5170

#1	-.00009	32.160	.00070	.00632	.11930	.00011	-.00394	.62814	.00809
#2	.00043	32.077	-.00200	.00547	.12050	.00021	-.00161	.62343	.00838

Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Elem	Co2286	Cr2055	Cu3247	Fe2599	K_7664	Li6707	Mg2790	Mn2576	Mo2020
Line	228.616 {447}	205.560 {464}	324.754 {104}	259.940 {130}	766.490 { 44}	670.784 { 50}	279.079 {121}2	257.610 {131}	202.030 {467}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.00129	.03619	.66312	19.021	.53711	.02346	.89854	.10373	.00383
Stddev	.00007	.00026	.00051	.088	.01413	.00047	.00771	.00010	.00024
%RSD	5.7195	.70495	.07744	.46055	2.6308	1.9936	.85817	.09835	6.1789

#1	.00134	.03637	.66349	18.959	.52712	.02379	.90400	.10366	.00366
#2	.00124	.03601	.66276	19.083	.54710	.02313	.89309	.10380	.00399

Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Elem	Na5895	Ni2316	P_1782	Pb2203	S_1820	Sb2068	Se1960	Si2881	Sn1899
Line	589.592 { 57}	231.604 {446}	178.284 {489}	220.353 {453}	182.034 {485}	206.833 {463}	196.090 {472}	288.158 {117}	189.989 {477}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.13199	.06117	.44903	.77407	.65596	.00737	.00375	2.4425	.01317
Stddev	.00418	.00115	.00689	.00513	.00312	.00053	.00559	.0072	.00125
%RSD	3.1654	1.8740	1.5354	.66300	.47565	7.2236	149.23	.29549	9.4643

#1	.12904	.06198	.45390	.77770	.65817	.00775	.00770	2.4476	.01405
#2	.13495	.06036	.44415	.77044	.65375	.00700	-.00021	2.4374	.01229

Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Elem	Sr4077	Th2837	Ti3349	Ti1908	U_3701	V_2924	Zn2062	Zr3391
Line	407.771 { 83}	283.730 {119}	334.904 {101}	190.856 {477}	370.152 { 91}	292.402 {115}	206.200 {163}	339.198 { 99}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.01086	.00337	.23815	-.00028	.01204	.03635	.69346	.00780
Stddev	.00003	.00215	.00061	.00090	.02054	.00038	.00843	.00050
%RSD	.30669	63.885	.25405	320.92	170.61	1.0399	1.2157	6.4710

#1	.01088	.00185	.23772	.00036	.02657	.03662	.69942	.00816
#2	.01083	.00489	.23858	-.00092	-.00249	.03608	.68749	.00745

Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit								
Low Limit								

Int. Std.	Y_2243	Y_3600	Y_3774
Line	224.306 {450}	360.073 { 94}	377.433 { 89}
Units	Cts/S	Cts/S	Cts/S
Avg	1573.3	32775.	5882.1
Stddev	3.4	80.	29.9
%RSD	.21642	.24368	.50757

#1	1570.9	32719.	5861.0
#2	1575.7	32832.	5903.2

Sample Name: 280-83021-A-1-F Acquired: 5/20/2016 23:54:08 Type: Unk
Method: 6500_026(v10) Mode: CONC Corr. Factor: 1.000000
User: kellyca Custom ID1: Custom ID2: Custom ID3:
Comment: 325983 6010C Q4 soil

Elem	Ag3280	Al3092	As1890	B_2089	Ba4554	Be3130	Bi2230	Ca3179	Cd2288
Line	328.068 {103}	309.271 {109}	189.042 {478}	208.959 {461}	455.403 { 74}	313.042 {108}	223.061 {451}	317.933 {106}	228.802 {447}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.00001	28.489	.00699	.00429	.05582	.00014	-.00274	.75556	.00225
Stddev	.00035	.056	.00921	.00073	.00052	.00004	.00006	.00058	.00006
%RSD	4316.7	.19649	131.73	17.134	.92313	25.136	2.0318	.07617	2.8774

#1	.00025	28.449	.00048	.00377	.05618	.00012	-.00278	.75515	.00221
#2	-.00024	28.529	.01350	.00481	.05545	.00017	-.00270	.75597	.00230

Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Elem	Co2286	Cr2055	Cu3247	Fe2599	K_7664	Li6707	Mg2790	Mn2576	Mo2020
Line	228.616 {447}	205.560 {464}	324.754 {104}	259.940 {130}	766.490 { 44}	670.784 { 50}	279.079 {121}2	257.610 {131}	202.030 {467}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.00080	.03372	.17126	17.465	.44938	.01025	.67303	.04487	.00174
Stddev	.00009	.00003	.00024	.050	.01317	.00090	.00280	.00010	.00003
%RSD	10.679	.09273	.14125	.28453	2.9318	8.7543	.41552	.23355	1.7653

#1	.00086	.03374	.17143	17.500	.44006	.00961	.67105	.04479	.00172
#2	.00074	.03370	.17109	17.430	.45870	.01088	.67501	.04494	.00176

Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Elem	Na5895	Ni2316	P_1782	Pb2203	S_1820	Sb2068	Se1960	Si2881	Sn1899
Line	589.592 { 57}	231.604 {446}	178.284 {489}	220.353 {453}	182.034 {485}	206.833 {463}	196.090 {472}	288.158 {117}	189.989 {477}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.11498	.04557	.26716	.23857	.56740	.00229	.00165	1.7986	.00694
Stddev	.00045	.00133	.00100	.00263	.00517	.00503	.01201	.0012	.00056
%RSD	.38931	2.9228	.37275	1.1017	.91046	219.27	728.61	.06710	8.0312

#1	.11530	.04651	.26787	.24043	.57106	.00585	.01014	1.7995	.00655
#2	.11467	.04463	.26646	.23671	.56375	-.00126	-.00684	1.7978	.00734

Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Elem	Sr4077	Th2837	Ti3349	Ti1908	U_3701	V_2924	Zn2062	Zr3391
Line	407.771 { 83}	283.730 {119}	334.904 {101}	190.856 {477}	370.152 { 91}	292.402 {115}	206.200 {163}	339.198 { 99}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.00995	.00477	.27263	-.00131	-.00904	.04116	.18665	.01183
Stddev	.00005	.00072	.00054	.00024	.00533	.00103	.00214	.00019
%RSD	.49470	15.157	.19714	18.609	58.943	2.5124	1.1473	1.6416

#1	.00991	.00426	.27301	-.00149	-.01281	.04043	.18514	.01169
#2	.00998	.00528	.27225	-.00114	-.00527	.04189	.18817	.01196

Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit								
Low Limit								

Int. Std.	Y_2243	Y_3600	Y_3774
Line	224.306 {450}	360.073 { 94}	377.433 { 89}
Units	Cts/S	Cts/S	Cts/S
Avg	1564.7	32660.	5937.8
Stddev	1.5	24.	45.6
%RSD	.09779	.07268	.76863

#1	1563.6	32643.	5905.6
#2	1565.8	32677.	5970.1

Sample Name: 280-83021-A-2-F Acquired: 5/20/2016 23:56:49 Type: Unk
Method: 6500_026(v10) Mode: CONC Corr. Factor: 1.000000
User: kellyca Custom ID1: Custom ID2: Custom ID3:
Comment: 325983 6010C Q4 soil

Elem	Ag3280	Al3092	As1890	B_2089	Ba4554	Be3130	Bi2230	Ca3179	Cd2288
Line	328.068 {103}	309.271 {109}	189.042 {478}	208.959 {461}	455.403 { 74}	313.042 {108}	223.061 {451}	317.933 {106}	228.802 {447}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	-.00027	28.537	.00333	.00457	.05400	.00012	-.00193	.64377	.00137
Stddev	.00003	.199	.00108	.00070	.00009	.00001	.00221	.00277	.00042
%RSD	10.608	.69867	32.332	15.313	.17122	4.3581	114.89	.43088	30.824

#1	-.00029	28.396	.00409	.00407	.05394	.00013	-.00349	.64181	.00107
#2	-.00025	28.678	.00257	.00506	.05407	.00012	-.00036	.64573	.00167

Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Elem	Co2286	Cr2055	Cu3247	Fe2599	K_7664	Li6707	Mg2790	Mn2576	Mo2020
Line	228.616 {447}	205.560 {464}	324.754 {104}	259.940 {130}	766.490 { 44}	670.784 { 50}	279.079 {121}2	257.610 {131}	202.030 {467}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.00098	.03510	.15839	18.319	.49063	.01135	.68419	.04991	.00255
Stddev	.00021	.00004	.00108	.071	.00727	.00080	.00299	.00002	.00011
%RSD	21.081	.11879	.68197	.38585	1.4818	7.0471	.43699	.03047	4.4188

#1	.00083	.03513	.15916	18.269	.48549	.01191	.68630	.04990	.00247
#2	.00113	.03507	.15763	18.369	.49577	.01078	.68207	.04992	.00263

Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Elem	Na5895	Ni2316	P_1782	Pb2203	S_1820	Sb2068	Se1960	Si2881	Sn1899
Line	589.592 { 57}	231.604 {446}	178.284 {489}	220.353 {453}	182.034 {485}	206.833 {463}	196.090 {472}	288.158 {117}	189.989 {477}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.15778	.04494	.27888	.18598	.66290	.00102	.00137	1.9328	.00622
Stddev	.00072	.00012	.00149	.00170	.00662	.00074	.00135	.0044	.00007
%RSD	.45669	.26559	.53425	.91491	.99884	73.151	99.027	.22661	1.0461

#1	.15829	.04502	.27994	.18478	.66758	.00155	.00233	1.9297	.00627
#2	.15727	.04486	.27783	.18719	.65822	.00049	.00041	1.9359	.00617

Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Elem	Sr4077	Th2837	Ti3349	Ti1908	U_3701	V_2924	Zn2062	Zr3391
Line	407.771 { 83}	283.730 {119}	334.904 {101}	190.856 {477}	370.152 { 91}	292.402 {115}	206.200 {163}	339.198 { 99}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.00870	.00318	.30010	-.00197	-.00244	.04097	.22192	.01155
Stddev	.00011	.00060	.00181	.00142	.00528	.00050	.00269	.00234
%RSD	1.2869	18.738	.60296	72.048	215.85	1.2083	1.2118	20.220

#1	.00862	.00360	.30138	-.00298	.00129	.04132	.22002	.01321
#2	.00878	.00276	.29882	-.00097	-.00618	.04062	.22382	.00990

Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit								
Low Limit								

Int. Std.	Y_2243	Y_3600	Y_3774
Line	224.306 {450}	360.073 { 94}	377.433 { 89}
Units	Cts/S	Cts/S	Cts/S
Avg	1573.9	32743.	5931.0
Stddev	1.2	14.	20.0
%RSD	.07562	.04397	.33684

#1	1573.0	32754.	5945.1
#2	1574.7	32733.	5916.9

Sample Name: 280-83021-A-3-J Acquired: 5/20/2016 23:59:32 Type: Unk
Method: 6500_026(v10) Mode: CONC Corr. Factor: 1.000000
User: kellyca Custom ID1: Custom ID2: Custom ID3:
Comment: 325983 6010C Q4 soil

Elem	Ag3280	Al3092	As1890	B_2089	Ba4554	Be3130	Bi2230	Ca3179	Cd2288
Line	328.068 {103}	309.271 {109}	189.042 {478}	208.959 {461}	455.403 { 74}	313.042 {108}	223.061 {451}	317.933 {106}	228.802 {447}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.00015	16.587	-.00259	.00215	.03402	.00008	.00012	.38587	.00092
Stddev	.00010	.140	.00147	.00033	.00002	.00003	.00078	.00344	.00019
%RSD	63.541	.84559	56.704	15.218	.05511	36.017	665.83	.89266	21.052

#1	.00022	16.488	-.00363	.00192	.03401	.00010	.00067	.38343	.00079
#2	.00008	16.686	-.00155	.00238	.03403	.00006	-.00043	.38830	.00106

Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Elem	Co2286	Cr2055	Cu3247	Fe2599	K_7664	Li6707	Mg2790	Mn2576	Mo2020
Line	228.616 {447}	205.560 {464}	324.754 {104}	259.940 {130}	766.490 { 44}	670.784 { 50}	279.079 {121}2	257.610 {131}	202.030 {467}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.00031	.02089	.10620	11.047	.29596	.00619	.42518	.02682	.00093
Stddev	.00012	.00052	.00051	.044	.04858	.00010	.00310	.00009	.00008
%RSD	38.639	2.4879	.48133	.39408	16.413	1.5360	.72845	.33608	9.0517

#1	.00039	.02126	.10584	11.017	.26161	.00626	.42299	.02676	.00087
#2	.00022	.02053	.10657	11.078	.33031	.00612	.42737	.02688	.00099

Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Elem	Na5895	Ni2316	P_1782	Pb2203	S_1820	Sb2068	Se1960	Si2881	Sn1899
Line	589.592 { 57}	231.604 {446}	178.284 {489}	220.353 {453}	182.034 {485}	206.833 {463}	196.090 {472}	288.158 {117}	189.989 {477}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.07420	.02853	.17758	.09833	.38046	.00393	-.00400	1.1835	.00352
Stddev	.00374	.00008	.00047	.00069	.00290	.00331	.00032	.0324	.00038
%RSD	5.0398	.29761	.26551	.70200	.76167	84.026	8.0511	2.7368	10.849

#1	.07684	.02847	.17725	.09882	.37841	.00160	-.00377	1.1606	.00379
#2	.07155	.02859	.17792	.09784	.38250	.00627	-.00423	1.2064	.00325

Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Elem	Sr4077	Th2837	Ti3349	Ti1908	U_3701	V_2924	Zn2062	Zr3391
Line	407.771 { 83}	283.730 {119}	334.904 {101}	190.856 {477}	370.152 { 91}	292.402 {115}	206.200 {163}	339.198 { 99}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.00530	.00165	.15816	.00186	-.00861	.02390	.12320	.00686
Stddev	.00019	.00106	.00417	.00050	.01589	.00047	.00033	.00110
%RSD	3.5810	64.116	2.6361	26.887	184.47	1.9820	.26709	16.086

#1	.00517	.00090	.16111	.00151	.00262	.02357	.12297	.00764
#2	.00544	.00240	.15521	.00222	-.01985	.02424	.12343	.00608

Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit								
Low Limit								

Int. Std.	Y_2243	Y_3600	Y_3774
Line	224.306 {450}	360.073 { 94}	377.433 { 89}
Units	Cts/S	Cts/S	Cts/S
Avg	1590.9	33245.	5926.2
Stddev	1.8	2.	7.8
%RSD	.11427	.00584	.13245

#1	1589.6	33244.	5920.7
#2	1592.2	33246.	5931.8

Sample Name: 280-83021-A-3-K DU Acquired: 5/21/2016 0:02:14 Type: Unk

Method: 6500_026(v10) Mode: CONC Corr. Factor: 1.000000

User: kellyca Custom ID1: Custom ID2: Custom ID3:

Comment: 325983 6010C Q4 soil

Elem	Ag3280	Al3092	As1890	B_2089	Ba4554	Be3130	Bi2230	Ca3179	Cd2288
Line	328.068 {103}	309.271 {109}	189.042 {478}	208.959 {461}	455.403 { 74}	313.042 {108}	223.061 {451}	317.933 {106}	228.802 {447}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.00019	23.483	.00116	.00252	.05381	.00006	-.00093	.55048	.00165
Stddev	.00072	.064	.00493	.00087	.00016	.00000	.00151	.00237	.00039
%RSD	380.35	.27461	426.28	34.631	.29139	3.8050	162.28	.43047	23.459

#1	.00070	23.437	.00464	.00190	.05392	.00007	-.00200	.54880	.00137
#2	-.00032	23.528	-.00233	.00314	.05370	.00006	.00014	.55215	.00192

Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Elem	Co2286	Cr2055	Cu3247	Fe2599	K_7664	Li6707	Mg2790	Mn2576	Mo2020
Line	228.616 {447}	205.560 {464}	324.754 {104}	259.940 {130}	766.490 { 44}	670.784 { 50}	279.079 {121}2	257.610 {131}	202.030 {467}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.00075	.02885	.16791	16.393	.42048	.00854	.54809	.03854	.00183
Stddev	.00024	.00008	.00035	.080	.01783	.00020	.00670	.00009	.00040
%RSD	32.268	.26051	.21132	.48940	4.2406	2.3415	1.2226	.23451	21.637

#1	.00058	.02880	.16816	16.337	.43309	.00840	.55283	.03861	.00155
#2	.00093	.02890	.16766	16.450	.40787	.00868	.54335	.03848	.00211

Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Elem	Na5895	Ni2316	P_1782	Pb2203	S_1820	Sb2068	Se1960	Si2881	Sn1899
Line	589.592 { 57}	231.604 {446}	178.284 {489}	220.353 {453}	182.034 {485}	206.833 {463}	196.090 {472}	288.158 {117}	189.989 {477}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.12030	.04262	.26644	.13473	.55095	.00239	.00582	1.9089	.00571
Stddev	.00126	.00048	.00474	.00040	.00159	.00161	.00012	.0017	.00249
%RSD	1.0450	1.1380	1.7782	.29967	.28863	67.607	2.0432	.08826	43.594

#1	.12118	.04296	.26979	.13502	.55208	.00125	.00573	1.9077	.00395
#2	.11941	.04228	.26309	.13445	.54983	.00353	.00590	1.9100	.00747

Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Elem	Sr4077	Th2837	Ti3349	Ti1908	U_3701	V_2924	Zn2062	Zr3391
Line	407.771 { 83}	283.730 {119}	334.904 {101}	190.856 {477}	370.152 { 91}	292.402 {115}	206.200 {163}	339.198 { 99}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.00799	.00573	.19679	-.00168	-.00046	.03467	.18021	.00847
Stddev	.00001	.00073	.00034	.00282	.00428	.00022	.00070	.00044
%RSD	.18539	12.729	.17051	168.08	940.91	.64647	.38883	5.2191

#1	.00797	.00625	.19655	-.00368	.00257	.03482	.18070	.00816
#2	.00800	.00522	.19702	.00032	-.00349	.03451	.17971	.00879

Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit								
Low Limit								

Int. Std.	Y_2243	Y_3600	Y_3774
Line	224.306 {450}	360.073 { 94}	377.433 { 89}
Units	Cts/S	Cts/S	Cts/S
Avg	1565.2	32582.	5847.1
Stddev	1.3	131.	5.4
%RSD	.08309	.40133	.09238

#1	1564.2	32490.	5850.9
#2	1566.1	32675.	5843.2

Sample Name: 280-83021-A-11-J Acquired: 5/21/2016 0:04:56 Type: Unk
Method: 6500_026(v10) Mode: CONC Corr. Factor: 1.000000
User: kellyca Custom ID1: Custom ID2: Custom ID3:
Comment: 325983 6010C Q4 soil

Elem	Ag3280	Al3092	As1890	B_2089	Ba4554	Be3130	Bi2230	Ca3179	Cd2288
Line	328.068 {103}	309.271 {109}	189.042 {478}	208.959 {461}	455.403 { 74}	313.042 {108}	223.061 {451}	317.933 {106}	228.802 {447}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	-.00015	36.641	.00326	.00406	.09770	.00023	-.00318	.74384	.00530
Stddev	.00041	.042	.00194	.00084	.00019	.00002	.00152	.00669	.00012
%RSD	275.76	.11336	59.457	20.625	.19670	9.1249	47.806	.89896	2.2451

#1	-.00044	36.612	.00189	.00347	.09756	.00025	-.00425	.73911	.00538
#2	.00014	36.670	.00463	.00465	.09783	.00022	-.00210	.74857	.00521

Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Elem	Co2286	Cr2055	Cu3247	Fe2599	K_7664	Li6707	Mg2790	Mn2576	Mo2020
Line	228.616 {447}	205.560 {464}	324.754 {104}	259.940 {130}	766.490 { 44}	670.784 { 50}	279.079 {121}2	257.610 {131}	202.030 {467}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.00144	.03328	.33083	20.400	.69531	.02138	1.1390	.09561	.00235
Stddev	.00060	.00022	.00022	.086	.00036	.00096	.0034	.00021	.00004
%RSD	41.608	.65513	.06730	.42283	.05155	4.5069	.30180	.22071	1.7819

#1	.00102	.03344	.33067	20.339	.69506	.02070	1.1415	.09576	.00232
#2	.00186	.03313	.33098	20.461	.69557	.02207	1.1366	.09546	.00238

Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Elem	Na5895	Ni2316	P_1782	Pb2203	S_1820	Sb2068	Se1960	Si2881	Sn1899
Line	589.592 { 57}	231.604 {446}	178.284 {489}	220.353 {453}	182.034 {485}	206.833 {463}	196.090 {472}	288.158 {117}	189.989 {477}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.13157	.07244	.42978	.39434	.53860	.00393	-.00352	2.2175	.00878
Stddev	.00373	.00062	.00067	.00375	.00520	.00228	.00195	.0479	.00067
%RSD	2.8364	.85576	.15635	.95206	.96549	57.911	55.425	2.1581	7.6427

#1	.13421	.07288	.43025	.39700	.53492	.00554	-.00490	2.2514	.00830
#2	.12893	.07200	.42930	.39169	.54228	.00232	-.00214	2.1837	.00925

Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Elem	Sr4077	Th2837	Ti3349	Ti1908	U_3701	V_2924	Zn2062	Zr3391
Line	407.771 { 83}	283.730 {119}	334.904 {101}	190.856 {477}	370.152 { 91}	292.402 {115}	206.200 {163}	339.198 { 99}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.00799	.00320	.20875	-.00120	.01758	.04497	.45805	.01067
Stddev	.00007	.00224	.00012	.00029	.00190	.00009	.00237	.00002
%RSD	.93602	70.011	.05819	24.443	10.814	.20191	.51776	.23261

#1	.00793	.00479	.20866	-.00141	.01624	.04504	.45638	.01065
#2	.00804	.00162	.20883	-.00099	.01893	.04491	.45973	.01068

Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit								
Low Limit								

Int. Std.	Y_2243	Y_3600	Y_3774
Line	224.306 {450}	360.073 { 94}	377.433 { 89}
Units	Cts/S	Cts/S	Cts/S
Avg	1576.2	32702.	5965.8
Stddev	1.8	82.	1.2
%RSD	.11308	.25197	.02020

#1	1574.9	32644.	5965.0
#2	1577.4	32761.	5966.7

Sample Name: 280-83021-A-12-I Acquired: 5/21/2016 0:07:38 Type: Unk
Method: 6500_026(v10) Mode: CONC Corr. Factor: 1.000000
User: kellyca Custom ID1: Custom ID2: Custom ID3:
Comment: 325983 6010C Q4 soil

Elem	Ag3280	Al3092	As1890	B_2089	Ba4554	Be3130	Bi2230	Ca3179	Cd2288
Line	328.068 {103}	309.271 {109}	189.042 {478}	208.959 {461}	455.403 { 74}	313.042 {108}	223.061 {451}	317.933 {106}	228.802 {447}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.00028	36.754	.00112	.00457	.12277	.00019	.00158	.76356	.00705
Stddev	.00034	.063	.00405	.00058	.00043	.00005	.00380	.00519	.00000
%RSD	122.09	.17020	361.03	12.749	.34649	26.337	240.16	.68035	.04779

#1	.00052	36.799	.00399	.00498	.12247	.00015	-.00110	.76723	.00705
#2	.00004	36.710	-.00174	.00415	.12308	.00022	.00426	.75989	.00706

Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Elem	Co2286	Cr2055	Cu3247	Fe2599	K_7664	Li6707	Mg2790	Mn2576	Mo2020
Line	228.616 {447}	205.560 {464}	324.754 {104}	259.940 {130}	766.490 { 44}	670.784 { 50}	279.079 {121}2	257.610 {131}	202.030 {467}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.00159	.03480	.48267	23.866	.66578	.02158	1.1205	.10310	.00256
Stddev	.00038	.00014	.00075	.000	.01691	.00032	.0033	.00011	.00011
%RSD	24.072	.40894	.15556	.00111	2.5399	1.4883	.29568	.10848	4.4849

#1	.00132	.03470	.48214	23.866	.65382	.02181	1.1229	.10302	.00248
#2	.00186	.03490	.48321	23.866	.67774	.02135	1.1182	.10318	.00264

Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Elem	Na5895	Ni2316	P_1782	Pb2203	S_1820	Sb2068	Se1960	Si2881	Sn1899
Line	589.592 { 57}	231.604 {446}	178.284 {489}	220.353 {453}	182.034 {485}	206.833 {463}	196.090 {472}	288.158 {117}	189.989 {477}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.11761	.06589	.41872	.40020	.51356	.00413	-.00400	2.3083	.00997
Stddev	.00309	.00042	.00492	.00474	.00257	.00239	.00194	.0335	.00092
%RSD	2.6232	.64384	1.1739	1.1836	.50101	57.757	48.620	1.4529	9.2212

#1	.11542	.06619	.42220	.40355	.51174	.00582	-.00537	2.3321	.01062
#2	.11979	.06559	.41525	.39685	.51538	.00244	-.00262	2.2846	.00932

Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Elem	Sr4077	Th2837	Ti3349	Ti1908	U_3701	V_2924	Zn2062	Zr3391
Line	407.771 { 83}	283.730 {119}	334.904 {101}	190.856 {477}	370.152 { 91}	292.402 {115}	206.200 {163}	339.198 { 99}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.00841	.00546	.21469	-.00222	.00680	.04442	.48788	.01573
Stddev	.00021	.00220	.00384	.00022	.01923	.00013	.00128	.00133
%RSD	2.4641	40.318	1.7885	9.7640	282.98	.30140	.26165	8.4240

#1	.00826	.00701	.21740	-.00207	-.00680	.04452	.48879	.01479
#2	.00855	.00390	.21197	-.00237	.02040	.04433	.48698	.01667

Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit								
Low Limit								

Int. Std.	Y_2243	Y_3600	Y_3774
Line	224.306 {450}	360.073 { 94}	377.433 { 89}
Units	Cts/S	Cts/S	Cts/S
Avg	1579.5	32857.	5890.3
Stddev	2.0	33.	11.9
%RSD	.12693	.10086	.20251

#1	1580.9	32881.	5881.9
#2	1578.0	32834.	5898.7

Sample Name: 280-83021-A-13-I Acquired: 5/21/2016 0:10:20 Type: Unk
Method: 6500_026(v10) Mode: CONC Corr. Factor: 1.000000
User: kellyca Custom ID1: Custom ID2: Custom ID3:
Comment: 325983 6010C Q4 soil

Elem	Ag3280	Al3092	As1890	B_2089	Ba4554	Be3130	Bi2230	Ca3179	Cd2288
Line	328.068 {103}	309.271 {109}	189.042 {478}	208.959 {461}	455.403 { 74}	313.042 {108}	223.061 {451}	317.933 {106}	228.802 {447}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.00062	37.583	.00541	.00396	.10073	.00015	-.00047	.74606	.00628
Stddev	.00002	.026	.00270	.00208	.00033	.00003	.00141	.00139	.00010
%RSD	3.3513	.06920	49.951	52.496	.33245	17.260	297.61	.18644	1.5254

#1	.00064	37.564	.00731	.00249	.10049	.00013	-.00147	.74507	.00621
#2	.00061	37.601	.00350	.00544	.10097	.00017	.00052	.74704	.00635

Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Elem	Co2286	Cr2055	Cu3247	Fe2599	K_7664	Li6707	Mg2790	Mn2576	Mo2020
Line	228.616 {447}	205.560 {464}	324.754 {104}	259.940 {130}	766.490 { 44}	670.784 { 50}	279.079 {121}2	257.610 {131}	202.030 {467}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.00157	.03313	.50943	21.310	.66050	.02095	1.1195	.09138	.00245
Stddev	.00008	.00005	.00050	.145	.00506	.00046	.0026	.00020	.00006
%RSD	5.3813	.14712	.09718	.67835	.76658	2.1974	.23169	.22226	2.6048

#1	.00163	.03310	.50908	21.208	.65692	.02062	1.1214	.09124	.00241
#2	.00151	.03317	.50978	21.412	.66408	.02128	1.1177	.09153	.00250

Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Elem	Na5895	Ni2316	P_1782	Pb2203	S_1820	Sb2068	Se1960	Si2881	Sn1899
Line	589.592 { 57}	231.604 {446}	178.284 {489}	220.353 {453}	182.034 {485}	206.833 {463}	196.090 {472}	288.158 {117}	189.989 {477}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.11551	.06768	.44127	.45159	.58394	.00428	W -.00699	2.1847	.01080
Stddev	.00350	.00050	.00191	.00004	.00773	.00281	.00625	.0665	.00004
%RSD	3.0311	.73484	.43203	.00903	1.3245	65.709	89.351	3.0419	.36364

#1	.11304	.06803	.44262	.45156	.57847	.00627	-.00257	2.2317	.01083
#2	.11799	.06733	.43992	.45162	.58941	.00229	-.01141	2.1377	.01078

Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Warn	Chk Pass	Chk Pass
High Limit							5.0000		
Low Limit							-.00500		

Elem	Sr4077	Th2837	Ti3349	Ti1908	U_3701	V_2924	Zn2062	Zr3391
Line	407.771 { 83}	283.730 {119}	334.904 {101}	190.856 {477}	370.152 { 91}	292.402 {115}	206.200 {163}	339.198 { 99}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.00818	.00120	.19479	-.00120	-.00392	.04449	.46736	.01000
Stddev	.00006	.00095	.00057	.00038	.01099	.00062	.00051	.00147
%RSD	.68674	79.171	.29307	31.656	280.41	1.3918	.10906	14.700

#1	.00814	.00187	.19439	-.00146	-.01169	.04493	.46700	.01104
#2	.00822	.00053	.19519	-.00093	.00385	.04405	.46772	.00896

Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit								
Low Limit								

Int. Std.	Y_2243	Y_3600	Y_3774
Line	224.306 {450}	360.073 { 94}	377.433 { 89}
Units	Cts/S	Cts/S	Cts/S
Avg	1579.3	32669.	5839.2
Stddev	4.8	17.	34.4
%RSD	.30698	.05160	.58881

#1	1582.8	32657.	5863.5
#2	1575.9	32681.	5814.8

Sample Name: ccvh-3900196 Acquired: 5/21/2016 0:13:02 Type: QC
Method: 6500_026(v10) Mode: CONC Corr. Factor: 1.000000
User: kellyca Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	Ag3280	Al3092	As1890	B_2089	Ba4554	Be3130	Bi2230	Ca3179	Cd2288	Co2286	Cr2055	Cu3247	Fe2714
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	-.00330	46.123	-.00643	.00155	.00006	-.00033	1.0561	-.05824	-.00085	.00269	-.00015	.00488	46.920
Stddev	.00012	.040	.00085	.00126	.00000	.00004	.0036	.00367	.00006	.00025	.00003	.00000	.121
%RSD	3.7535	.08650	13.195	81.516	4.8667	12.891	.34364	6.2970	6.5968	9.3036	23.435	.09022	.25856

#1	-.00339	46.151	-.00703	.00244	.00006	-.00036	1.0586	-.06083	-.00089	.00287	-.00017	.00488	46.834
#2	-.00321	46.095	-.00583	.00066	.00005	-.00030	1.0535	-.05564	-.00081	.00251	-.00012	.00488	47.006

Check ?	None	Chk Pass	None	None	None	None	Chk Pass	None	None	None	None	None	Chk Pass
Value													
Range													

Elem	K_7664	Li6707	Mg2790	Mn2576	Mo2020	Na8183	Ni2316	P_1782	Pb2203	S_1820	Sb2068	Se1960	Si2881
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.03601	-.00035	.14829	-.00086	-.00218	251.81	.00010	.00247	.00006	5.0401	-.00069	.00527	-.01681
Stddev	.00686	.00096	.00551	.00007	.00030	.60	.00048	.00300	.00236	.0166	.00061	.00360	.00388
%RSD	19.043	272.55	3.7170	8.6266	13.593	.23633	482.51	121.57	3957.5	.32985	88.273	68.206	23.109

#1	.04086	.00033	.14439	-.00092	-.00239	251.39	.00044	.00459	.00173	5.0519	-.00026	.00782	-.01955
#2	.03117	-.00104	.15219	-.00081	-.00197	252.23	-.00024	.00035	-.00161	5.0284	-.00113	.00273	-.01406

Check ?	None	None	None	None	None	Chk Pass	None	None	None	Chk Pass	None	None	None
Value													
Range													

Elem	Sn1899	Sr4077	Th2837	Ti3349	Tl1908	U_3701	V_2924	Zn2062	Zr3391
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.00196	.00021	4.8726	.02628	-.00571	10.022	-.01663	-.00176	-.01784
Stddev	.00060	.00005	.0114	.00012	.00161	.013	.00010	.00082	.00038
%RSD	30.414	25.060	.23322	.46519	28.206	.12758	.60770	46.550	2.1367

#1	.00154	.00025	4.8645	.02619	-.00457	10.013	-.01656	-.00118	-.01757
#2	.00238	.00017	4.8806	.02636	-.00685	10.031	-.01670	-.00233	-.01811

Check ?	None	None	Chk Pass	None	None	Chk Pass	None	None	None
Value									
Range									

Int. Std.	Y_2243	Y_3600	Y_3774
Units	Cts/S	Cts/S	Cts/S
Avg	1509.5	31143.	5690.4
Stddev	.6	4.	1.3
%RSD	.03825	.01233	.02239

#1	1509.9	31141.	5689.5
#2	1509.1	31146.	5691.3

Sample Name: ccv-3900195 Acquired: 5/21/2016 0:15:50 Type: QC
Method: 6500_026(v10) Mode: CONC Corr. Factor: 1.000000
User: kellyca Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	Ag3280	Al1670	As1890	B_2089	Ba4554	Be3130	Bi2230	Ca3179	Cd2288	Co2286	Cr2055	Cu3247	Fe2599
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.48683	.52196	1.0225	.54765	.49909	.51690	-.00311	5.0927	.53482	.53133	.52199	.49466	2.5278
Stddev	.00078	.00100	.0019	.00168	.00354	.00033	.00376	.0222	.00005	.00093	.00039	.00315	.0004
%RSD	.15956	.19136	.18554	.30689	.70890	.06437	120.74	.43651	.00968	.17528	.07444	.63660	.01462

#1	.48738	.52267	1.0239	.54646	.49659	.51714	-.00045	5.1084	.53479	.53067	.52226	.49243	2.5275
#2	.48628	.52126	1.0212	.54884	.50159	.51667	-.00577	5.0769	.53486	.53198	.52171	.49689	2.5281

Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	None	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Value													
Range													

Elem	K_7664	Li6707	Mg2790	Mn2576	Mo2020	Na5895	Ni2316	P_1782	Pb2203	S_1820	Sb2068	Se1960	Si2881
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	51.719	1.0678	19.651	.49927	.53224	5.2862	.51137	1.0207	1.0594	.01368	1.0323	1.0042	5.0832
Stddev	.156	.0070	.006	.00001	.00046	.0133	.00010	.0026	.0036	.00261	.0004	.0069	.0298
%RSD	.30161	.65216	.03147	.00225	.08695	.25193	.01999	.25483	.34108	19.043	.03659	.68629	.58580

#1	51.609	1.0629	19.646	.49926	.53257	5.2768	.51130	1.0225	1.0569	.01184	1.0326	.99932	5.0621
#2	51.829	1.0727	19.655	.49927	.53192	5.2956	.51144	1.0189	1.0620	.01553	1.0321	1.0091	5.1042

Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	None	Chk Pass	Chk Pass	Chk Pass
Value													
Range													

Elem	Sn1899	Sr4077	Th2837	Ti3349	Tl1908	U_3701	V_2924	Zn2062	Zr3391
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	1.0045	.47687	.00008	.46438	1.0304	.02284	.47100	.49635	.50294
Stddev	.0006	.00061	.00299	.00015	.0046	.00480	.00244	.00538	.00262
%RSD	.06434	.12737	3898.9	.03185	.44688	21.000	.51762	1.0833	.52142

#1	1.0041	.47644	-.00204	.46427	1.0271	.01945	.46928	.50015	.50479
#2	1.0050	.47730	.00219	.46448	1.0337	.02623	.47272	.49255	.50109

Check ?	Chk Pass	Chk Pass	None	Chk Pass	Chk Pass	None	Chk Pass	Chk Pass	Chk Pass
Value									
Range									

Int. Std.	Y_2243	Y_3600	Y_3774
Units	Cts/S	Cts/S	Cts/S
Avg	1527.7	31966.	5620.9
Stddev	1.0	61.	53.4
%RSD	.06425	.19071	.94959

#1	1528.4	31923.	5583.1
#2	1527.0	32009.	5658.6

Sample Name: ccb Acquired: 5/21/2016 0:18:25 Type: QC
Method: 6500_026(v10) Mode: CONC Corr. Factor: 1.000000
User: kellyca Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	Ag3280	Al1670	As1890	B_2089	Ba4554	Be3130	Bi2230	Ca3179	Cd2288	Co2286	Cr2055
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.00024	.00192	W -.00500	W .00175	.00010	.00001	-.00099	-.00409	.00003	-.00049	-.00005
Stddev	.00009	.00019	.00661	.00011	.00002	.00002	.00254	.00074	.00032	.00017	.00029
%RSD	36.680	9.8591	132.17	6.1735	21.156	345.96	256.77	18.033	968.31	35.293	565.94

#1	.00018	.00178	-.00033	.00183	.00012	-.00001	-.00279	-.00357	-.00019	-.00037	.00015
#2	.00030	.00205	-.00968	.00168	.00009	.00002	.00081	-.00462	.00026	-.00062	-.00025

Check ?	Chk Pass	Chk Pass	Chk Warn	Chk Warn	Chk Pass	Chk Pass	None	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit			.00440	.00156							
Low Limit			-.00440	-.00156							

Elem	Cu3247	Fe2599	K_7664	Li6707	Mg2790	Mn2576	Mo2020	Na5895	Ni2316	P_1782	Pb2203
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	-.00134	.00401	.09012	.00033	.00389	.00003	.00027	.02022	-.00051	-.00196	-.00028
Stddev	.00017	.00203	.00469	.00086	.00046	.00003	.00011	.00027	.00069	.00248	.00003
%RSD	12.393	50.680	5.2062	263.08	11.859	114.39	41.975	1.3342	135.09	126.56	10.974

#1	-.00122	.00257	.08681	.00094	.00357	.00005	.00035	.02041	-.00099	-.00021	-.00030
#2	-.00146	.00545	.09344	-.00028	.00422	.00001	.00019	.02003	-.00002	-.00371	-.00026

Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit											
Low Limit											

Elem	S_1820	Sb2068	Se1960	Si2881	Sn1899	Sr4077	Th2837	Ti3349	Ti1908	U_3701	V_2924
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.00225	.00277	-.00088	.01374	.00141	.00006	-.00180	.00049	-.00122	.02040	.00064
Stddev	.00298	.00152	.00430	.00108	.00072	.00001	.00074	.00010	.00131	.00452	.00013
%RSD	132.57	55.035	487.90	7.8329	51.118	11.000	41.063	20.998	107.23	22.177	20.202

#1	.00014	.00169	-.00392	.01450	.00090	.00006	-.00128	.00056	-.00030	.02360	.00073
#2	.00436	.00385	.00216	.01298	.00192	.00006	-.00232	.00041	-.00215	.01720	.00055

Check ?	None	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit											
Low Limit											

Elem	Zn2062	Zr3391
Units	ppm	ppm
Avg	.00080	-.00029
Stddev	.00007	.00104
%RSD	8.6449	355.91

#1	.00085	.00044
#2	.00075	-.00103

Check ?	Chk Pass	Chk Pass
High Limit		
Low Limit		

Int. Std.	Y_2243	Y_3600	Y_3774
Units	Cts/S	Cts/S	Cts/S
Avg	1550.3	32657.	5733.4
Stddev	2.1	15.	41.1
%RSD	.13489	.04668	.71601

#1	1551.8	32668.	5762.4
#2	1548.8	32647.	5704.3

Sample Name: ccvl-3903059 Acquired: 5/21/2016 0:21:10 Type: QC
Method: 6500_026(v10) Mode: CONC Corr. Factor: 1.000000
User: kellyca Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	Ag3280	Al1670	As1890	B_2089	Ba4554	Be3130	Bi2230	Ca3179	Cd2288	Co2286	Cr2055	Cu3247
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.01015	.10856	.01195	.11195	.00989	.00086	.11508	.20147	.00570	.01055	.01070	.01363
Stddev	.00042	.00135	.00154	.00026	.00001	.00008	.00097	.00355	.00024	.00059	.00014	.00009
%RSD	4.1605	1.2400	12.869	.23518	.05357	9.2051	.83972	1.7620	4.2356	5.6131	1.2809	.69125

#1	.01045	.10951	.01304	.11214	.00990	.00081	.11440	.20398	.00588	.01097	.01060	.01370
#2	.00985	.10760	.01087	.11176	.00989	.00092	.11576	.19896	.00553	.01013	.01079	.01357

Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Value												
Range												

Elem	Fe2599	K_7664	Li6707	Mg2790	Mn2576	Mo2020	Na5895	Ni2316	P_1782	Pb2203	S_1820	Sb2068
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.10823	3.1817	.01071	.20598	.01020	.02200	1.0512	.04236	3.0221	.00883	.00759	.02196
Stddev	.00091	.0034	.00091	.00452	.00001	.00047	.0060	.00009	.0111	.00029	.00102	.00199
%RSD	.83952	.10566	8.4816	2.1920	.11127	2.1273	.57256	.21827	.36678	3.2820	13.402	9.0754

#1	.10758	3.1841	.01135	.20279	.01019	.02167	1.0470	.04230	3.0299	.00862	.00687	.02337
#2	.10887	3.1793	.01007	.20917	.01021	.02233	1.0555	.04243	3.0143	.00903	.00831	.02055

Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	None	Chk Pass
Value												
Range												

Elem	Se1960	Si2881	Sn1899	Sr4077	Th2837	Ti3349	Ti1908	U_3701	V_2924	Zn2062	Zr3391
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.01397	.51260	.10226	.00941	.01205	.00947	.01401	F .08986	.00938	.02004	.01539
Stddev	.00072	.00419	.00107	.00015	.00245	.00047	.00357	.03811	.00093	.00041	.00011
%RSD	5.1482	.81742	1.0429	1.5724	20.346	4.9289	25.494	42.408	9.8849	2.0480	.73158

#1	.01346	.50964	.10302	.00930	.01031	.00980	.01149	.06292	.01004	.01975	.01531
#2	.01448	.51556	.10151	.00951	.01378	.00914	.01654	.11681	.00873	.02033	.01547

Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Fail	Chk Pass	Chk Pass	Chk Pass
Value								.06000			
Range								30.000%			

Int. Std.	Y_2243	Y_3600	Y_3774
Units	Cts/S	Cts/S	Cts/S
Avg	1554.5	32817.	5724.1
Stddev	4.0	55.	16.3
%RSD	.25877	.16679	.28561

#1	1551.7	32778.	5735.7
#2	1557.4	32856.	5712.6

Sample Name: 280-82954-A-17-L Acquired: 5/21/2016 0:23:56 Type: Unk
Method: 6500_026(v10) Mode: CONC Corr. Factor: 1.000000
User: kellyca Custom ID1: Custom ID2: Custom ID3:
Comment: 325983 6010C Q4 soil

Elem	Ag3280	Al3092	As1890	B_2089	Ba4554	Be3130	Bi2230	Ca3179	Cd2288
Line	328.068 {103}	309.271 {109}	189.042 {478}	208.959 {461}	455.403 { 74}	313.042 {108}	223.061 {451}	317.933 {106}	228.802 {447}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.00021	32.744	.00383	.00453	.15135	.00022	-.00013	.80846	.01179
Stddev	.00033	.125	.00752	.00021	.00015	.00001	.00256	.00429	.00007
%RSD	158.89	.38073	196.11	4.5694	.10200	3.0041	2009.5	.53086	.58503

#1	-.00003	32.832	.00915	.00438	.15145	.00023	.00168	.80543	.01175
#2	.00044	32.656	-.00148	.00468	.15124	.00022	-.00194	.81150	.01184

Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Elem	Co2286	Cr2055	Cu3247	Fe2599	K_7664	Li6707	Mg2790	Mn2576	Mo2020
Line	228.616 {447}	205.560 {464}	324.754 {104}	259.940 {130}	766.490 { 44}	670.784 { 50}	279.079 {121}2	257.610 {131}	202.030 {467}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.00153	.04196	.71906	23.496	.51167	.02303	.86408	.11181	.00394
Stddev	.00019	.00021	.00448	.043	.00209	.00091	.00159	.00005	.00008
%RSD	12.584	.50223	.62255	.18232	.40942	3.9562	.18354	.04515	2.1116

#1	.00139	.04211	.72223	23.466	.51019	.02239	.86521	.11178	.00400
#2	.00167	.04181	.71589	23.526	.51315	.02367	.86296	.11185	.00388

Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Elem	Na5895	Ni2316	P_1782	Pb2203	S_1820	Sb2068	Se1960	Si2881	Sn1899
Line	589.592 { 57}	231.604 {446}	178.284 {489}	220.353 {453}	182.034 {485}	206.833 {463}	196.090 {472}	288.158 {117}	189.989 {477}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.12424	.06840	.51196	.80572	.66652	.01891	.00104	2.3768	.01748
Stddev	.00732	.00089	.00512	.00865	.00569	.00008	.00216	.0579	.00204
%RSD	5.8941	1.2960	.99928	1.0732	.85367	.41012	208.29	2.4376	11.696

#1	.11906	.06777	.50834	.81183	.67054	.01897	-.00049	2.4177	.01604
#2	.12942	.06903	.51558	.79960	.66250	.01886	.00257	2.3358	.01893

Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Elem	Sr4077	Th2837	Ti3349	Ti1908	U_3701	V_2924	Zn2062	Zr3391
Line	407.771 { 83}	283.730 {119}	334.904 {101}	190.856 {477}	370.152 { 91}	292.402 {115}	206.200 {163}	339.198 { 99}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.01311	.00215	.19588	-.00209	.01699	.03446	.90175	.01003
Stddev	.00011	.00075	.00348	.00255	.00915	.00032	.00391	.00060
%RSD	.87338	34.792	1.7756	121.76	53.862	.91933	.43385	5.9870

#1	.01303	.00268	.19342	-.00389	.01052	.03424	.89899	.01046
#2	.01319	.00162	.19834	-.00029	.02346	.03469	.90452	.00961

Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit								
Low Limit								

Int. Std.	Y_2243	Y_3600	Y_3774
Line	224.306 {450}	360.073 { 94}	377.433 { 89}
Units	Cts/S	Cts/S	Cts/S
Avg	1577.8	33009.	5934.1
Stddev	1.4	12.	2.4
%RSD	.08840	.03567	.04096

#1	1578.8	33018.	5935.8
#2	1576.8	33001.	5932.3

Sample Name: 280-82954-A-17-M MS Acquired: 5/21/2016 0:26:38 Type: Unk
Method: 6500_026(v10) Mode: CONC Corr. Factor: 1.000000
User: kellyca Custom ID1: Custom ID2: Custom ID3:
Comment: 325983 6010C Q4 soil

Elem	Ag3280	Al3092	As1890	B_2089	Ba4554	Be3130	Bi2230	Ca3179	Cd2288
Line	328.068 {103}	309.271 {109}	189.042 {478}	208.959 {461}	455.403 { 74}	313.042 {108}	223.061 {451}	317.933 {106}	228.802 {447}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.04688	46.090	.98969	1.0290	2.0641	.04883	2.1060	48.570	.11119
Stddev	.00129	.131	.00584	.0003	.0125	.00046	.0065	.324	.00050
%RSD	2.7592	.28391	.58984	.02618	.60658	.93459	.30644	.66658	.45279

#1	.04597	45.998	.98556	1.0289	2.0552	.04850	2.1014	48.341	.11155
#2	.04780	46.183	.99382	1.0292	2.0729	.04915	2.1105	48.799	.11084

Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Elem	Co2286	Cr2055	Cu3247	Fe2599	K_7664	Li6707	Mg2790	Mn2576	Mo2020
Line	228.616 {447}	205.560 {464}	324.754 {104}	259.940 {130}	766.490 { 44}	670.784 { 50}	279.079 {121}2	257.610 {131}	202.030 {467}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.49547	W .24257	.92501	19.886	51.226	1.0592	48.461	.58006	1.0216
Stddev	.00212	.00034	.00144	.158	.260	.0048	.073	.00005	.0028
%RSD	.42756	.13965	.15562	.79324	.50730	.45084	.15001	.00886	.27581

#1	.49697	.24280	.92399	19.774	51.043	1.0558	48.512	.58002	1.0236
#2	.49397	.24233	.92603	19.998	51.410	1.0626	48.410	.58010	1.0196

Check ?	Chk Pass	Chk Warn	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit		.10000							
Low Limit		-.01000							

Elem	Na8183	Ni2316	P_1782	Pb2203	S_1820	Sb2068	Se1960	Si2881	Sn1899
Line	818.326 { 41}	231.604 {446}	178.284 {489}	220.353 {453}	182.034 {485}	206.833 {463}	196.090 {472}	288.158 {117}	189.989 {477}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	49.061	.54193	10.277	1.1073	2.5685	.46563	1.9300	6.4059	1.8467
Stddev	.476	.00033	.001	.0000	.0031	.00039	.0031	.0187	.0003
%RSD	.97096	.06167	.00728	.00047	.11928	.08306	.15855	.29268	.01394

#1	48.724	.54169	10.276	1.1073	2.5663	.46536	1.9321	6.3926	1.8469
#2	49.398	.54216	10.277	1.1073	2.5706	.46591	1.9278	6.4191	1.8465

Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Elem	Sr4077	Th2837	Ti3349	Ti1908	U_3701	V_2924	Zn2062	Zr3391
Line	407.771 { 83}	283.730 {119}	334.904 {101}	190.856 {477}	370.152 { 91}	292.402 {115}	206.200 {163}	339.198 { 99}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.91621	.92202	1.3369	1.8725	2.0021	.49387	1.2168	.47845
Stddev	.00386	.00415	.0138	.0026	.0425	.00055	.0053	.00088
%RSD	.42171	.45046	1.0283	.13889	2.1220	.11234	.43539	.18300

#1	.91348	.92496	1.3467	1.8707	1.9721	.49426	1.2130	.47783
#2	.91894	.91909	1.3272	1.8743	2.0322	.49348	1.2205	.47907

Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit								
Low Limit								

Int. Std.	Y_2243	Y_3600	Y_3774
Line	224.306 {450}	360.073 { 94}	377.433 { 89}
Units	Cts/S	Cts/S	Cts/S
Avg	1511.7	31266.	5846.2
Stddev	.6	9.	22.9
%RSD	.04035	.02928	.39122

#1	1512.1	31260.	5862.3
#2	1511.3	31272.	5830.0

Sample Name: 280-82954-A-17-N MSD Acquired: 5/21/2016 0:29:10 Type: Unk
Method: 6500_026(v10) Mode: CONC Corr. Factor: 1.000000
User: kellyca Custom ID1: Custom ID2: Custom ID3:
Comment: 325983 6010C Q4 soil

Elem	Ag3280	Al3092	As1890	B_2089	Ba4554	Be3130	Bi2230	Ca3179	Cd2288
Line	328.068 {103}	309.271 {109}	189.042 {478}	208.959 {461}	455.403 { 74}	313.042 {108}	223.061 {451}	317.933 {106}	228.802 {447}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.04856	43.867	1.0345	1.0781	2.4399	.05086	2.1907	49.940	.11539
Stddev	.00063	.220	.0040	.0005	.0090	.00046	.0025	.303	.00077
%RSD	1.2924	.50184	.38486	.04962	.36845	.90001	.11571	.60731	.66444
#1	.04900	43.711	1.0373	1.0785	2.4335	.05053	2.1925	49.726	.11594
#2	.04811	44.022	1.0317	1.0777	2.4462	.05118	2.1889	50.155	.11485

Check ? Chk Pass Chk Pass Chk Pass Chk Pass Chk Pass Chk Pass Chk Pass Chk Pass Chk Pass
High Limit
Low Limit

Elem	Co2286	Cr2055	Cu3247	Fe2599	K_7664	Li6707	Mg2790	Mn2576	Mo2020
Line	228.616 {447}	205.560 {464}	324.754 {104}	259.940 {130}	766.490 { 44}	670.784 { 50}	279.079 {121}2	257.610 {131}	202.030 {467}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.51298	W .25233	.85102	19.621	53.129	1.1031	49.742	.59174	1.0635
Stddev	.00022	.00080	.00681	.097	.129	.0058	.232	.00008	.0035
%RSD	.04374	.31712	.79985	.49636	.24370	.52769	.46703	.01396	.33225
#1	.51314	.25289	.85584	19.553	53.037	1.0990	49.906	.59180	1.0660
#2	.51282	.25176	.84621	19.690	53.220	1.1072	49.577	.59168	1.0610

Check ? Chk Pass Chk Warn Chk Pass Chk Pass Chk Pass Chk Pass Chk Pass Chk Pass Chk Pass
High Limit .10000
Low Limit -.01000

Elem	Na8183	Ni2316	P_1782	Pb2203	S_1820	Sb2068	Se1960	Si2881	Sn1899
Line	818.326 { 41}	231.604 {446}	178.284 {489}	220.353 {453}	182.034 {485}	206.833 {463}	196.090 {472}	288.158 {117}	189.989 {477}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	50.844	.55679	10.635	1.1768	2.6579	.48531	2.0118	6.4182	1.8972
Stddev	.135	.00050	.037	.0016	.0127	.00471	.0191	.0133	.0030
%RSD	.26491	.08953	.35201	.13426	.47808	.96959	.95000	.20707	.15707
#1	50.749	.55644	10.662	1.1757	2.6669	.48199	2.0253	6.4088	1.8993
#2	50.939	.55715	10.609	1.1779	2.6489	.48864	1.9983	6.4276	1.8951

Check ? Chk Pass Chk Pass Chk Pass Chk Pass Chk Pass Chk Pass Chk Pass Chk Pass Chk Pass
High Limit
Low Limit

Elem	Sr4077	Th2837	Ti3349	Ti1908	U_3701	V_2924	Zn2062	Zr3391
Line	407.771 { 83}	283.730 {119}	334.904 {101}	190.856 {477}	370.152 { 91}	292.402 {115}	206.200 {163}	339.198 { 99}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.95274	.95744	1.4201	1.9416	2.0864	.50544	1.2153	.50296
Stddev	.00284	.00318	.0086	.0008	.0013	.00386	.0061	.00010
%RSD	.29830	.33163	.60343	.04017	.06322	.76429	.50434	.01970
#1	.95073	.95520	1.4262	1.9411	2.0855	.50817	1.2110	.50303
#2	.95475	.95969	1.4141	1.9422	2.0873	.50271	1.2196	.50289

Check ? Chk Pass Chk Pass Chk Pass Chk Pass Chk Pass Chk Pass Chk Pass Chk Pass
High Limit
Low Limit

Int. Std.	Y_2243	Y_3600	Y_3774
Line	224.306 {450}	360.073 { 94}	377.433 { 89}
Units	Cts/S	Cts/S	Cts/S
Avg	1500.5	31370.	5908.2
Stddev	1.0	80.	11.8
%RSD	.06484	.25399	.19905
#1	1499.8	31314.	5916.5
#2	1501.2	31426.	5899.9

Sample Name: ccvh-3900196 Acquired: 5/21/2016 0:31:43 Type: QC
Method: 6500_026(v10) Mode: CONC Corr. Factor: 1.000000
User: kellyca Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	Ag3280	Al3092	As1890	B_2089	Ba4554	Be3130	Bi2230	Ca3179	Cd2288	Co2286	Cr2055	Cu3247	Fe2714
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	-.00460	45.924	-.00038	.00463	.00035	-.00038	1.0585	-.05166	-.00086	.00318	-.00032	.00455	46.997
Stddev	.00052	.192	.00123	.00023	.00010	.00012	.0017	.01069	.00004	.00027	.00003	.00040	.077
%RSD	11.374	.41831	327.16	4.9568	29.440	31.230	.16191	20.684	4.5989	8.4548	7.7430	8.7338	.16441

#1	-.00497	45.788	.00050	.00479	.00042	-.00029	1.0597	-.04411	-.00084	.00299	-.00031	.00484	46.942
#2	-.00423	46.060	-.00125	.00447	.00027	-.00046	1.0573	-.05922	-.00089	.00337	-.00034	.00427	47.051

Check ?	None	Chk Pass	None	None	None	None	Chk Pass	None	None	None	None	None	Chk Pass
Value													
Range													

Elem	K_7664	Li6707	Mg2790	Mn2576	Mo2020	Na8183	Ni2316	P_1782	Pb2203	S_1820	Sb2068	Se1960	Si2881
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.12236	.00034	.14913	-.00012	-.00164	251.27	-.00046	.00455	.00296	5.0577	-.00097	.00436	-.01123
Stddev	.00982	.00020	.00012	.00000	.00021	1.60	.00051	.00573	.00092	.0076	.00049	.00737	.02331
%RSD	8.0219	59.963	.08217	1.5200	12.616	.63586	108.97	125.83	31.050	.15043	50.262	169.06	207.69

#1	.11542	.00049	.14922	-.00012	-.00149	250.14	-.00082	.00050	.00231	5.0630	-.00062	.00957	.00526
#2	.12930	.00020	.14904	-.00012	-.00179	252.40	-.00011	.00861	.00361	5.0523	-.00131	-.00085	-.02771

Check ?	None	None	None	None	None	Chk Pass	None	None	None	Chk Pass	None	None	None
Value													
Range													

Elem	Sn1899	Sr4077	Th2837	Ti3349	Tl1908	U_3701	V_2924	Zn2062	Zr3391
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.00261	.00039	4.8816	.02726	-.00646	9.9621	-.01687	-.00239	-.02132
Stddev	.00034	.00006	.0147	.00030	.00051	.0154	.00031	.00125	.00087
%RSD	13.186	15.581	.30101	1.0862	7.9164	.15417	1.8131	52.197	4.1018

#1	.00237	.00043	4.8920	.02747	-.00682	9.9513	-.01709	-.00151	-.02193
#2	.00286	.00035	4.8712	.02705	-.00610	9.9730	-.01666	-.00327	-.02070

Check ?	None	None	Chk Pass	None	None	Chk Pass	None	None	None
Value									
Range									

Int. Std.	Y_2243	Y_3600	Y_3774
Units	Cts/S	Cts/S	Cts/S
Avg	1500.8	31163.	5625.3
Stddev	3.5	22.	39.0
%RSD	.23048	.06985	.69417

#1	1498.4	31148.	5597.7
#2	1503.2	31179.	5652.9

Sample Name: ccv-3900195 Acquired: 5/21/2016 0:34:32 Type: QC
Method: 6500_026(v10) Mode: CONC Corr. Factor: 1.000000
User: kellyca Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	Ag3280	Al1670	As1890	B_2089	Ba4554	Be3130	Bi2230	Ca3179	Cd2288	Co2286	Cr2055	Cu3247	Fe2599
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.48419	.52022	1.0173	.54961	.49715	.51293	-.00482	5.0076	.53524	.53147	.52175	.49506	2.5108
Stddev	.00212	.00165	.0014	.00115	.00194	.00138	.00072	.0002	.00042	.00058	.00048	.00032	.0060
%RSD	.43710	.31679	.14217	.20915	.38954	.26830	14.871	.00473	.07871	.10840	.09106	.06432	.23891

#1	.48269	.51905	1.0162	.55042	.49578	.51196	-.00533	5.0075	.53494	.53188	.52141	.49529	2.5066
#2	.48569	.52138	1.0183	.54880	.49852	.51391	-.00431	5.0078	.53554	.53106	.52209	.49484	2.5150

Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	None	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Value													
Range													

Elem	K_7664	Li6707	Mg2790	Mn2576	Mo2020	Na5895	Ni2316	P_1782	Pb2203	S_1820	Sb2068	Se1960	Si2881
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	51.254	1.0692	19.583	.49859	.53332	5.2415	.50864	1.0200	1.0508	.00363	1.0245	1.0027	5.0298
Stddev	.261	.0050	.011	.00086	.00075	.0039	.00174	.0091	.0026	.00401	.0017	.0066	.0046
%RSD	.50831	.46871	.05713	.17161	.14152	.07469	.34293	.89336	.24873	110.30	.16799	.66002	.09246

#1	51.069	1.0656	19.575	.49920	.53386	5.2388	.50987	1.0264	1.0526	.00080	1.0233	1.0074	5.0265
#2	51.438	1.0727	19.591	.49799	.53279	5.2443	.50740	1.0135	1.0489	.00647	1.0257	.99801	5.0331

Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	None	Chk Pass	Chk Pass	Chk Pass
Value													
Range													

Elem	Sn1899	Sr4077	Th2837	Ti3349	Ti1908	U_3701	V_2924	Zn2062	Zr3391
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.99602	.47247	.00076	.46175	1.0224	.03336	.46797	.49471	.49928
Stddev	.00029	.00167	.00152	.00030	.0025	.01542	.00079	.00165	.00600
%RSD	.02908	.35374	199.90	.06458	.24723	46.213	.16914	.33293	1.2020

#1	.99581	.47129	.00183	.46196	1.0206	.04427	.46741	.49588	.49503
#2	.99622	.47365	-.00031	.46154	1.0242	.02246	.46853	.49355	.50352

Check ?	Chk Pass	Chk Pass	None	Chk Pass	Chk Pass	None	Chk Pass	Chk Pass	Chk Pass
Value									
Range									

Int. Std.	Y_2243	Y_3600	Y_3774
Units	Cts/S	Cts/S	Cts/S
Avg	1527.0	32063.	5785.1
Stddev	1.8	43.	2.8
%RSD	.11727	.13383	.04817

#1	1525.7	32033.	5783.1
#2	1528.3	32093.	5787.0

Sample Name: ccb Acquired: 5/21/2016 0:37:08 Type: QC
Method: 6500_026(v10) Mode: CONC Corr. Factor: 1.000000
User: kellyca Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	Ag3280	Al1670	As1890	B_2089	Ba4554	Be3130	Bi2230	Ca3179	Cd2288	Co2286	Cr2055	Cu3247
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.00068	.00063	-.00068	W .00276	.00006	-.00009	-.00358	-.00784	.00028	-.00034	-.00015	-.00050
Stddev	.00012	.00131	.00051	.00073	.00019	.00007	.00142	.00059	.00003	.00011	.00006	.00000
%RSD	17.549	208.26	74.938	26.440	316.02	80.531	39.692	7.5751	11.867	30.701	41.023	.35880

#1	.00060	.00156	-.00032	.00328	.00019	-.00004	-.00458	-.00742	.00026	-.00027	-.00011	-.00050
#2	.00077	-.00030	-.00104	.00225	-.00007	-.00014	-.00258	-.00826	.00031	-.00042	-.00020	-.00050

Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Warn	Chk Pass	Chk Pass	None	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit				.00156								
Low Limit				-.00156								

Elem	Fe2599	K_7664	Li6707	Mg2790	Mn2576	Mo2020	Na5895	Ni2316	P_1782	Pb2203	S_1820	Sb2068
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.00165	.09635	.00022	.00221	.00002	.00054	.01317	.00009	-.00483	-.00184	.00209	.00065
Stddev	.00061	.03660	.00074	.00336	.00006	.00033	.00008	.00000	.00072	.00121	.00064	.00000
%RSD	37.183	37.989	336.39	152.35	297.21	59.824	.61136	5.0917	14.820	65.492	30.750	.45562

#1	.00209	.07047	-.00030	.00459	.00006	.00031	.01311	.00009	-.00533	-.00269	.00255	.00065
#2	.00122	.12223	.00075	-.00017	-.00002	.00077	.01322	.00008	-.00432	-.00099	.00164	.00066

Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	None	Chk Pass
High Limit												
Low Limit												

Elem	Se1960	Si2881	Sn1899	Sr4077	Th2837	Ti3349	Ti1908	U_3701	V_2924	Zn2062	Zr3391
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.00227	-.00093	.00109	.00008	-.00282	.00016	-.00035	.02202	.00015	.00117	.00081
Stddev	.00181	.00640	.00010	.00002	.00121	.00026	.00043	.01492	.00027	.00032	.00118
%RSD	79.942	689.85	9.0672	21.273	42.898	158.55	122.44	67.751	173.88	27.652	145.53

#1	.00098	-.00545	.00116	.00009	-.00368	.00034	-.00005	.03257	-.00004	.00094	.00165
#2	.00355	.00360	.00102	.00007	-.00196	-.00002	-.00065	.01147	.00034	.00139	-.00002

Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit											
Low Limit											

Int. Std.	Y_2243	Y_3600	Y_3774
Units	Cts/S	Cts/S	Cts/S
Avg	1542.2	32828.	5801.3
Stddev	.3	88.	3.7
%RSD	.01713	.26777	.06337

#1	1542.0	32891.	5803.9
#2	1542.4	32766.	5798.7

Sample Name: ccvl-3903059 Acquired: 5/21/2016 0:39:54 Type: QC
Method: 6500_026(v10) Mode: CONC Corr. Factor: 1.000000
User: kellyca Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	Ag3280	Al1670	As1890	B_2089	Ba4554	Be3130	Bi2230	Ca3179	Cd2288	Co2286	Cr2055	Cu3247	Fe2599	K_7664
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.00991	.11268	.01268	.11230	.01005	.00093	.11258	.19974	.00539	.01028	.01044	.01353	.11339	3.1388
Stddev	.00033	.00026	.00267	.00109	.00010	.00005	.00256	.00304	.00002	.00005	.00008	.00040	.00100	.0087
%RSD	3.3212	.23306	21.094	.96905	1.0387	5.7297	2.2738	1.5240	.42353	.46663	.80915	2.9498	.88044	.27585

#1	.00967	.11286	.01079	.11153	.00998	.00097	.11077	.19759	.00541	.01025	.01050	.01324	.11410	3.1327
#2	.01014	.11249	.01457	.11307	.01013	.00089	.11439	.20190	.00537	.01031	.01038	.01381	.11268	3.1450

Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Value														
Range														

Elem	Li6707	Mg2790	Mn2576	Mo2020	Na5895	Ni2316	P_1782	Pb2203	S_1820	Sb2068	Se1960	Si2881	Sn1899	Sr4077
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.01025	.20516	.01015	.02141	1.0504	.04107	2.9934	.01020	.00310	.02158	.01224	.49492	.10152	.00934
Stddev	.00005	.00225	.00004	.00037	.0031	.00010	.0107	.00328	.00480	.00007	.00365	.01131	.00029	.00004
%RSD	.53169	1.0975	.42616	1.7459	.29697	.24302	.35831	32.101	154.74	.31382	29.817	2.2853	.28562	.39854

#1	.01029	.20676	.01012	.02168	1.0482	.04100	3.0010	.01252	.00649	.02153	.01482	.48693	.10131	.00932
#2	.01021	.20357	.01018	.02115	1.0526	.04114	2.9858	.00789	-.00029	.02163	.00966	.50292	.10172	.00937

Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	None	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Value															
Range															

Elem	Th2837	Ti3349	Ti1908	U_3701	V_2924	Zn2062	Zr3391
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.01188	.00906	.01492	.06790	.00934	.01928	.01469
Stddev	.00041	.00027	.00071	.00545	.00039	.00017	.00074
%RSD	3.4647	2.9787	4.7427	8.0325	4.2046	.86861	5.0614

#1	.01217	.00925	.01542	.06404	.00962	.01916	.01521
#2	.01159	.00887	.01442	.07175	.00906	.01940	.01416

Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Value							
Range							

Int. Std.	Y_2243	Y_3600	Y_3774
Units	Cts/S	Cts/S	Cts/S
Avg	1575.4	33303.	5803.1
Stddev	9.1	101.	2.9
%RSD	.57709	.30347	.05038

#1	1568.9	33374.	5801.1
#2	1581.8	33231.	5805.2

Sample Name: MB 280-325962/1-A Acquired: 5/21/2016 0:42:39 Type: Unk
Method: 6500_026(v10) Mode: CONC Corr. Factor: 1.000000
User: kellyca Custom ID1: 5/19 Custom ID2: Custom ID3:
Comment: 325962 6010C Q4

Elem	Ag3280	Al1670	As1890	B_2089	Ba4554	Be3130	Bi2230	Ca3179	Cd2288
Line	328.068 {103}	167.079 {502}	189.042 {478}	208.959 {461}	455.403 { 74}	313.042 {108}	223.061 {451}	317.933 {106}	228.802 {447}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.00011	.00681	-.00374	.00238	.00006	-.00011	-.00192	.00739	.00010
Stddev	.00031	.00105	.00308	.00060	.00002	.00002	.00151	.00530	.00010
%RSD	282.24	15.440	82.406	25.327	32.808	13.311	78.410	71.716	103.60

#1	.00033	.00755	-.00592	.00195	.00007	-.00010	-.00299	.01113	.00017
#2	-.00011	.00606	-.00156	.00281	.00004	-.00012	-.00086	.00364	.00003

Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Elem	Co2286	Cr2055	Cu3247	Fe2599	K_7664	Li6707	Mg2790	Mn2576	Mo2020
Line	228.616 {447}	205.560 {464}	324.754 {104}	259.940 {130}	766.490 { 44}	670.784 { 50}	279.079 {121}2	257.610 {131}	202.030 {467}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	-.00005	.00228	-.00133	.02840	.06432	.00014	.00069	.00031	-.00009
Stddev	.00025	.00027	.00081	.00021	.02022	.00000	.00118	.00006	.00025
%RSD	492.87	11.741	60.858	.75638	31.440	3.3584	171.16	18.737	259.82

#1	.00013	.00247	-.00076	.02855	.05002	.00014	.00153	.00027	-.00027
#2	-.00023	.00209	-.00190	.02824	.07862	.00015	-.00015	.00035	.00008

Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Elem	Na5895	Ni2316	P_1782	Pb2203	S_1820	Sb2068	Se1960	Si2881	Sn1899
Line	589.592 { 57}	231.604 {446}	178.284 {489}	220.353 {453}	182.034 {485}	206.833 {463}	196.090 {472}	288.158 {117}	189.989 {477}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.01441	-.00033	.00186	-.00143	.00516	.00094	-.00052	W .06131	.00194
Stddev	.00296	.00018	.00303	.00088	.00224	.00297	.00590	.00017	.00086
%RSD	20.514	53.670	163.32	61.600	43.443	315.10	1123.8	.27267	44.453

#1	.01650	-.00045	.00400	-.00080	.00358	-.00116	.00365	.06142	.00133
#2	.01232	-.00020	-.00029	-.00205	.00675	.00304	-.00470	.06119	.00255

Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Warn	Chk Pass
High Limit								.05000	
Low Limit								-.05000	

Elem	Sr4077	Th2837	Ti3349	Ti1908	U_3701	V_2924	Zn2062	Zr3391	
Line	407.771 { 83}	283.730 {119}	334.904 {101}	190.856 {477}	370.152 { 91}	292.402 {115}	206.200 {163}	339.198 { 99}	
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	
Avg	.00002	-.00179	.00040	-.00043	.02184	.00013	.00031	.00069	
Stddev	.00001	.00165	.00051	.00213	.01301	.00055	.00052	.00090	
%RSD	54.245	92.056	127.70	489.59	59.553	426.87	169.45	131.19	

#1	.00001	-.00295	.00075	-.00194	.03104	-.00026	.00067	.00133	
#2	.00003	-.00062	.00004	.00107	.01265	.00052	-.00006	.00005	

Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	
High Limit									
Low Limit									

Int. Std.	Y_2243	Y_3600	Y_3774						
Line	224.306 {450}	360.073 { 94}	377.433 { 89}						
Units	Cts/S	Cts/S	Cts/S						
Avg	1558.8	33359.	5893.9						
Stddev	.1	33.	29.6						
%RSD	.00638	.09952	.50281						

#1	1558.9	33336.	5914.9						
#2	1558.8	33383.	5873.0						

Sample Name: LCS 280-325962/2-A Acquired: 5/21/2016 0:45:25 Type: Unk

Method: 6500_026(v10) Mode: CONC Corr. Factor: 1.000000

User: kellyca Custom ID1: Custom ID2: Custom ID3:

Comment: 325962 6010C Q4

Elem	Ag3280	Al1670	As1890	B_2089	Ba4554	Be3130	Bi2230	Ca3179	Cd2288
Line	328.068 {103}	167.079 {502}	189.042 {478}	208.959 {461}	455.403 {74}	313.042 {108}	223.061 {451}	317.933 {106}	228.802 {447}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.04906	2.0012	1.0653	F 1.1224	2.0089	.05178	F 2.2514	50.589	.10668
Stddev	.00050	.0056	.0082	.0017	.0004	.00007	.0111	.054	.00034
%RSD	1.0193	.27715	.77153	.15174	.01801	.13067	.49349	.10772	.31873

#1	.04941	2.0051	1.0711	1.1236	2.0087	.05183	2.2593	50.627	.10692
#2	.04870	1.9973	1.0595	1.1212	2.0092	.05173	2.2436	50.550	.10644

Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Fail	Chk Pass	Chk Pass	Chk Fail	Chk Pass	Chk Pass
High Limit				1.1000			2.2000		
Low Limit				.89000			1.8000		

Elem	Co2286	Cr2055	Cu3247	Fe2599	K_7664	Li6707	Mg2790	Mn2576	Mo2020
Line	228.616 {447}	205.560 {464}	324.754 {104}	259.940 {130}	766.490 {44}	670.784 {50}	279.079 {121}2	257.610 {131}	202.030 {467}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.52397	F .20932	.24964	1.0190	52.812	1.0888	48.940	.49035	F 1.1034
Stddev	.00007	.00012	.00040	.0001	.126	.0014	.069	.00031	.0064
%RSD	.01254	.05585	.16135	.00852	.23801	.12530	.14126	.06304	.57997

#1	.52392	.20940	.24992	1.0191	52.723	1.0878	48.891	.49013	1.1079
#2	.52402	.20924	.24935	1.0190	52.901	1.0897	48.989	.49057	1.0989

Check ?	Chk Pass	Chk Fail	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Fail
High Limit		.05750							1.1000
Low Limit		.04300							.90000

Elem	Na8183	Ni2316	P_1782	Pb2203	S_1820	Sb2068	Se1960	Si2881	Sn1899
Line	818.326 {41}	231.604 {446}	178.284 {489}	220.353 {453}	182.034 {485}	206.833 {463}	196.090 {472}	288.158 {117}	189.989 {477}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	52.014	.50384	10.635	.52910	2.1049	.53749	2.0705	10.205	1.9846
Stddev	.293	.00033	.043	.00082	.0089	.00338	.0064	.061	.0019
%RSD	.56254	.06453	.40817	.15544	.42172	.62816	.30865	.59669	.09330

#1	52.221	.50361	10.666	.52852	2.0986	.53988	2.0750	10.161	1.9859
#2	51.807	.50407	10.604	.52968	2.1111	.53510	2.0660	10.248	1.9833

Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Elem	Sr4077	Th2837	Ti3349	Ti1908	U_3701	V_2924	Zn2062	Zr3391
Line	407.771 {83}	283.730 {119}	334.904 {101}	190.856 {477}	370.152 {91}	292.402 {115}	206.200 {163}	339.198 {99}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.94625	.97890	.93818	2.0142	2.1304	.46636	.49476	.49822
Stddev	.00201	.00350	.00310	.0081	.0166	.00164	.00098	.00211
%RSD	.21211	.35716	.33085	.40158	.78014	.35220	.19886	.42265

#1	.94483	.97643	.93599	2.0199	2.1186	.46520	.49406	.49673
#2	.94767	.98138	.94038	2.0085	2.1421	.46752	.49545	.49971

Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit								
Low Limit								

Int. Std.	Y_2243	Y_3600	Y_3774
Line	224.306 {450}	360.073 {94}	377.433 {89}
Units	Cts/S	Cts/S	Cts/S
Avg	1486.7	31348.	5742.4
Stddev	2.8	71.	1.7
%RSD	.18885	.22542	.02960

#1	1484.8	31398.	5743.6
#2	1488.7	31298.	5741.2

Sample Name: 280-83263-A-1-A Acquired: 5/21/2016 0:47:59 Type: Unk
Method: 6500_026(v10) Mode: CONC Corr. Factor: 1.000000
User: kellyca Custom ID1: Custom ID2: Custom ID3:
Comment: 325962 6010C Q4

Elem	Ag3280	Al1670	As1890	B_2089	Ba4554	Be3130	Bi2230	Ca3179	Cd2288
Line	328.068 {103}	167.079 {502}	189.042 {478}	208.959 {461}	455.403 { 74}	313.042 {108}	223.061 {451}	317.933 {106}	228.802 {447}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.00088	.23336	-.00198	.16479	.10257	-.00007	-.00318	314.80	.00034
Stddev	.00024	.00016	.00193	.00142	.00060	.00001	.00478	2.06	.00008
%RSD	26.719	.06834	97.588	.85965	.58250	17.515	150.50	.65431	22.166

#1	.00105	.23325	-.00334	.16379	.10214	-.00008	-.00656	313.35	.00039
#2	.00072	.23348	-.00061	.16580	.10299	-.00006	.00020	316.26	.00029

Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Elem	Co2286	Cr2055	Cu3247	Fe2599	K_7664	Li6707	Mg2790	Mn2576	Mo2020
Line	228.616 {447}	205.560 {464}	324.754 {104}	259.940 {130}	766.490 { 44}	670.784 { 50}	279.079 {121}2	257.610 {131}	202.030 {467}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.00056	W .19240	.00039	.35588	7.7782	.03967	61.397	.15025	.00034
Stddev	.00017	.00068	.00004	.00060	.0047	.00030	.102	.00008	.00072
%RSD	29.632	.35399	10.213	.16869	.06067	.76342	.16694	.05316	211.05

#1	.00044	.19192	.00036	.35630	7.7816	.03988	61.469	.15031	-.00017
#2	.00068	.19288	.00042	.35546	7.7749	.03945	61.324	.15020	.00084

Check ?	Chk Pass	Chk Warn	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit		.10000							
Low Limit		-.01000							

Elem	Na8183	Ni2316	P_1782	Pb2203	S_1820	Sb2068	Se1960	Si2881	Sn1899
Line	818.326 { 41}	231.604 {446}	178.284 {489}	220.353 {453}	182.034 {485}	206.833 {463}	196.090 {472}	288.158 {117}	189.989 {477}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	114.15	.01885	.01395	-.00144	102.87	-.00092	.00141	17.975	.00072
Stddev	.56	.00078	.00091	.00051	.43	.00096	.00084	.133	.00005
%RSD	.48856	4.1540	6.5484	35.218	.41946	104.67	59.581	.73967	6.5587

#1	113.76	.01829	.01331	-.00108	102.56	-.00024	.00201	17.881	.00069
#2	114.55	.01940	.01460	-.00180	103.17	-.00160	.00082	18.069	.00076

Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Elem	Sr4077	Th2837	Ti3349	Ti1908	U_3701	V_2924	Zn2062	Zr3391	
Line	407.771 { 83}	283.730 {119}	334.904 {101}	190.856 {477}	370.152 { 91}	292.402 {115}	206.200 {163}	339.198 { 99}	
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	
Avg	2.0698	-.00487	.00746	-.00114	.02062	.00327	.00073	.00101	
Stddev	.0060	.00046	.00009	.00050	.00000	.00097	.00162	.00060	
%RSD	.28980	9.3592	1.2285	43.806	.00953	29.729	221.83	59.535	

#1	2.0656	-.00455	.00740	-.00079	.02063	.00259	.00187	.00058	
#2	2.0741	-.00519	.00753	-.00149	.02062	.00396	-.00041	.00143	

Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	
High Limit									
Low Limit									

Int. Std.	Y_2243	Y_3600	Y_3774						
Line	224.306 {450}	360.073 { 94}	377.433 { 89}						
Units	Cts/S	Cts/S	Cts/S						
Avg	1411.5	29637.	5548.0						
Stddev	1.4	23.	45.2						
%RSD	.09892	.07845	.81476						

#1	1412.5	29653.	5579.9						
#2	1410.5	29620.	5516.0						

Sample Name: 280-83263-A-1-A SD@5 Acquired: 5/21/2016 0:50:41 Type: Unk
Method: 6500_026(v10) Mode: CONC Corr. Factor: 1.000000
User: kellyca Custom ID1: Custom ID2: Custom ID3:
Comment: 325962 6010C Q4

Elem	Ag3280	Al1670	As1890	B_2089	Ba4554	Be3130	Bi2230	Ca3179	Cd2288
Line	328.068 {103}	167.079 {502}	189.042 {478}	208.959 {461}	455.403 { 74}	313.042 {108}	223.061 {451}	317.933 {106}	228.802 {447}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.00096	.05236	-.00259	.03507	.02035	-.00016	-.00098	62.343	-.00008
Stddev	.00020	.00093	.00410	.00084	.00008	.00006	.00013	.050	.00002
%RSD	20.627	1.7681	158.38	2.3858	.40873	39.470	12.916	.07993	21.786

#1	.00082	.05301	.00031	.03448	.02029	-.00020	-.00089	62.379	-.00009
#2	.00110	.05170	-.00549	.03566	.02041	-.00011	-.00107	62.308	-.00007

Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Elem	Co2286	Cr2055	Cu3247	Fe2599	K_7664	Li6707	Mg2790	Mn2576	Mo2020
Line	228.616 {447}	205.560 {464}	324.754 {104}	259.940 {130}	766.490 { 44}	670.784 { 50}	279.079 {121}2	257.610 {131}	202.030 {467}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	-.00034	.03853	-.00048	.09778	1.5358	.00813	12.278	.03028	.00050
Stddev	.00005	.00026	.00034	.00185	.0234	.00054	.011	.00002	.00020
%RSD	15.989	.66707	70.193	1.8959	1.5220	6.6620	.08859	.07871	41.226

#1	-.00038	.03871	-.00072	.09909	1.5192	.00775	12.285	.03026	.00064
#2	-.00030	.03835	-.00024	.09647	1.5523	.00851	12.270	.03029	.00035

Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Elem	Na8183	Ni2316	P_1782	Pb2203	S_1820	Sb2068	Se1960	Si2881	Sn1899
Line	818.326 { 41}	231.604 {446}	178.284 {489}	220.353 {453}	182.034 {485}	206.833 {463}	196.090 {472}	288.158 {117}	189.989 {477}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	22.340	.00365	-.00059	-.00217	19.515	.00022	.00705	3.4578	.00159
Stddev	.056	.00019	.00428	.00139	.022	.00055	.00583	.0080	.00056
%RSD	.24898	5.2899	722.97	63.916	.11119	254.34	82.711	.23216	35.251

#1	22.301	.00379	.00244	-.00119	19.531	.00060	.01117	3.4521	.00119
#2	22.379	.00351	-.00362	-.00315	19.500	-.00017	.00293	3.4635	.00199

Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Elem	Sr4077	Th2837	Ti3349	Ti1908	U_3701	V_2924	Zn2062	Zr3391
Line	407.771 { 83}	283.730 {119}	334.904 {101}	190.856 {477}	370.152 { 91}	292.402 {115}	206.200 {163}	339.198 { 99}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.40850	-.00306	.00121	-.00023	.02326	.00083	.00109	.00040
Stddev	.00047	.00099	.00019	.00011	.00628	.00018	.00132	.00112
%RSD	.11472	32.511	15.563	50.577	26.982	21.916	120.44	276.50

#1	.40817	-.00235	.00135	-.00031	.01882	.00070	.00203	-.00039
#2	.40883	-.00376	.00108	-.00014	.02770	.00096	.00016	.00119

Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit								
Low Limit								

Int. Std.	Y_2243	Y_3600	Y_3774
Line	224.306 {450}	360.073 { 94}	377.433 { 89}
Units	Cts/S	Cts/S	Cts/S
Avg	1507.3	32127.	5787.6
Stddev	3.0	13.	15.2
%RSD	.20165	.04002	.26220

#1	1509.4	32137.	5776.9
#2	1505.1	32118.	5798.3

Sample Name: 280-83263-A-1-B MS Acquired: 5/21/2016 0:53:25 Type: Unk
Method: 6500_026(v10) Mode: CONC Corr. Factor: 1.000000
User: kellyca Custom ID1: Custom ID2: Custom ID3:
Comment: 325962 6010C Q4

Elem	Ag3280	Al1670	As1890	B_2089	Ba4554	Be3130	Bi2230	Ca3179	Cd2288
Line	328.068 {103}	167.079 {502}	189.042 {478}	208.959 {461}	455.403 { 74}	313.042 {108}	223.061 {451}	317.933 {106}	228.802 {447}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.05086	2.5981	1.1128	1.2975	2.1256	.05184	2.3025	359.17	.11051
Stddev	.00084	.0076	.0075	.0102	.0044	.00004	.0225	1.56	.00010
%RSD	1.6426	.29225	.67319	.78545	.20495	.06780	.97578	.43451	.09181

#1	.05027	2.6035	1.1181	1.3047	2.1225	.05187	2.3184	358.07	.11058
#2	.05146	2.5928	1.1075	1.2903	2.1287	.05182	2.2866	360.28	.11044

Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Elem	Co2286	Cr2055	Cu3247	Fe2599	K_7664	Li6707	Mg2790	Mn2576	Mo2020
Line	228.616 {447}	205.560 {464}	324.754 {104}	259.940 {130}	766.490 { 44}	670.784 { 50}	279.079 {121}2	257.610 {131}	202.030 {467}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.51380	W .40402	.25831	1.5920	62.823	1.1686	109.57	.67387	1.1025
Stddev	.00271	.00167	.00080	.0086	.257	.0009	.29	.00024	.0076
%RSD	.52751	.41385	.30802	.54185	.40909	.07502	.26093	.03557	.69253

#1	.51572	.40520	.25887	1.5859	62.642	1.1680	109.77	.67404	1.1079
#2	.51189	.40284	.25775	1.5981	63.005	1.1692	109.37	.67370	1.0971

Check ?	Chk Pass	Chk Warn	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit		.10000							
Low Limit		-.01000							

Elem	Na8183	Ni2316	P_1782	Pb2203	S_1820	Sb2068	Se1960	Si2881	Sn1899
Line	818.326 { 41}	231.604 {446}	178.284 {489}	220.353 {453}	182.034 {485}	206.833 {463}	196.090 {472}	288.158 {117}	189.989 {477}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	165.51	.50907	11.214	.51407	104.86	.55235	2.1732	29.291	1.9626
Stddev	.08	.00326	.075	.00150	.61	.00365	.0214	.009	.0138
%RSD	.04840	.64102	.66783	.29227	.58040	.66023	.98262	.03149	.70092

#1	165.57	.51137	11.267	.51301	105.29	.55493	2.1883	29.285	1.9724
#2	165.46	.50676	11.161	.51513	104.43	.54977	2.1581	29.298	1.9529

Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Elem	Sr4077	Th2837	Ti3349	Ti1908	U_3701	V_2924	Zn2062	Zr3391
Line	407.771 { 83}	283.730 {119}	334.904 {101}	190.856 {477}	370.152 { 91}	292.402 {115}	206.200 {163}	339.198 { 99}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	2.9964	.98157	.94706	1.8939	2.0833	.47045	.48223	.49958
Stddev	.0046	.00393	.00009	.0133	.0037	.00001	.00135	.00630
%RSD	.15338	.40063	.00981	.70054	.17921	.00220	.28013	1.2620

#1	2.9931	.97879	.94712	1.9033	2.0859	.47044	.48319	.49513
#2	2.9996	.98435	.94699	1.8845	2.0806	.47046	.48127	.50404

Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit								
Low Limit								

Int. Std.	Y_2243	Y_3600	Y_3774
Line	224.306 {450}	360.073 { 94}	377.433 { 89}
Units	Cts/S	Cts/S	Cts/S
Avg	1390.4	29465.	5562.4
Stddev	4.8	30.	28.0
%RSD	.34581	.10278	.50394

#1	1387.0	29444.	5582.2
#2	1393.8	29487.	5542.5

Sample Name: 280-83263-A-1-C MSD Acquired: 5/21/2016 0:55:56 Type: Unk

Method: 6500_026(v10) Mode: CONC Corr. Factor: 1.000000

User: kellyca Custom ID1: Custom ID2: Custom ID3:

Comment: 325962 6010C Q4

Elem	Ag3280	Al1670	As1890	B_2089	Ba4554	Be3130	Bi2230	Ca3179	Cd2288
Line	328.068 {103}	167.079 {502}	189.042 {478}	208.959 {461}	455.403 { 74}	313.042 {108}	223.061 {451}	317.933 {106}	228.802 {447}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.05103	2.6534	1.1077	1.2910	2.1161	.05182	2.2918	358.31	.11072
Stddev	.00044	.0070	.0022	.0009	.0041	.00008	.0051	.74	.00051
%RSD	.86756	.26263	.19447	.06728	.19420	.15343	.22422	.20724	.45899

#1	.05134	2.6584	1.1062	1.2904	2.1132	.05177	2.2881	357.78	.11108
#2	.05072	2.6485	1.1092	1.2916	2.1190	.05188	2.2954	358.83	.11037

Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Elem	Co2286	Cr2055	Cu3247	Fe2599	K_7664	Li6707	Mg2790	Mn2576	Mo2020
Line	228.616 {447}	205.560 {464}	324.754 {104}	259.940 {130}	766.490 { 44}	670.784 { 50}	279.079 {121}2	257.610 {131}	202.030 {467}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.51157	W .39584	.25801	1.6403	62.875	1.1638	109.45	.68334	1.0968
Stddev	.00138	.00123	.00039	.0076	.104	.0007	.25	.00173	.0049
%RSD	.27061	.31010	.15196	.46542	.16490	.06136	.22937	.25357	.44776

#1	.51255	.39671	.25773	1.6349	62.802	1.1633	109.62	.68457	1.1003
#2	.51059	.39497	.25829	1.6457	62.948	1.1643	109.27	.68212	1.0934

Check ?	Chk Pass	Chk Warn	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit		.10000							
Low Limit		-.01000							

Elem	Na8183	Ni2316	P_1782	Pb2203	S_1820	Sb2068	Se1960	Si2881	Sn1899
Line	818.326 { 41}	231.604 {446}	178.284 {489}	220.353 {453}	182.034 {485}	206.833 {463}	196.090 {472}	288.158 {117}	189.989 {477}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	164.40	.50753	11.150	.51398	104.04	.54727	2.1656	29.443	1.9502
Stddev	1.02	.00184	.019	.00276	.02	.00031	.0008	.020	.0029
%RSD	.62320	.36181	.17329	.53659	.02088	.05739	.03893	.06747	.15138

#1	163.67	.50883	11.136	.51593	104.02	.54705	2.1662	29.457	1.9523
#2	165.12	.50623	11.164	.51203	104.06	.54749	2.1651	29.429	1.9481

Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Elem	Sr4077	Th2837	Ti3349	Ti1908	U_3701	V_2924	Zn2062	Zr3391
Line	407.771 { 83}	283.730 {119}	334.904 {101}	190.856 {477}	370.152 { 91}	292.402 {115}	206.200 {163}	339.198 { 99}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	2.9816	.98619	.94894	1.8839	2.0912	.47199	.49461	.49462
Stddev	.0016	.00389	.00422	.0040	.0260	.00156	.00065	.00158
%RSD	.05488	.39405	.44516	.21194	1.2412	.33069	.13156	.31871

#1	2.9804	.98894	.95193	1.8811	2.1095	.47309	.49507	.49351
#2	2.9827	.98344	.94596	1.8867	2.0728	.47089	.49415	.49574

Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit								
Low Limit								

Int. Std.	Y_2243	Y_3600	Y_3774
Line	224.306 {450}	360.073 { 94}	377.433 { 89}
Units	Cts/S	Cts/S	Cts/S
Avg	1390.4	29301.	5542.7
Stddev	2.3	4.	4.8
%RSD	.16222	.01228	.08722

#1	1392.0	29303.	5546.1
#2	1388.9	29298.	5539.3

Sample Name: 280-83263-A-1-A PDS Acquired: 5/21/2016 0:58:28 Type: Unk

Method: 6500_026(v10) Mode: CONC Corr. Factor: 1.000000

User: kellyca Custom ID1: Custom ID2: Custom ID3:

Comment: 325962 6010C Q4

Elem	Ag3280	Al1670	As1890	B_2089	Ba4554	Be3130	Bi2230	Ca3179	Cd2288
Line	328.068 {103}	167.079 {502}	189.042 {478}	208.959 {461}	455.403 { 74}	313.042 {108}	223.061 {451}	317.933 {106}	228.802 {447}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.00579	1.2161	.22089	.27813	.20025	.05093	-.00723	324.58	.05665
Stddev	.00040	.0010	.00224	.00210	.00100	.00029	.00050	1.42	.00038
%RSD	6.8463	.08661	1.0122	.75522	.50125	.56489	6.9362	.43902	.67750

#1	.00551	1.2169	.22247	.27665	.19954	.05072	-.00688	323.57	.05693
#2	.00607	1.2154	.21931	.27962	.20096	.05113	-.00758	325.59	.05638

Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Elem	Co2286	Cr2055	Cu3247	Fe2599	K_7664	Li6707	Mg2790	Mn2576	Mo2020
Line	228.616 {447}	205.560 {464}	324.754 {104}	259.940 {130}	766.490 { 44}	670.784 { 50}	279.079 {121}2	257.610 {131}	202.030 {467}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.05223	W .23981	.05179	1.3355	29.295	.15034	79.407	.19571	.05604
Stddev	.00019	.00168	.00001	.0007	.132	.00016	.209	.00048	.00003
%RSD	.36534	.70106	.01801	.05038	.45140	.10789	.26372	.24386	.04938

#1	.05236	.24100	.05179	1.3360	29.201	.15045	79.259	.19538	.05602
#2	.05209	.23862	.05180	1.3350	29.388	.15022	79.555	.19605	.05606

Check ?	Chk Pass	Chk Warn	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit		.10000							
Low Limit		-.01000							

Elem	Na8183	Ni2316	P_1782	Pb2203	S_1820	Sb2068	Se1960	Si2881	Sn1899
Line	818.326 { 41}	231.604 {446}	178.284 {489}	220.353 {453}	182.034 {485}	206.833 {463}	196.090 {472}	288.158 {117}	189.989 {477}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	132.04	.06795	2.2398	.09964	101.18	.10613	.22787	22.590	.09972
Stddev	.27	.00012	.0083	.00008	.15	.00401	.00038	.029	.00378
%RSD	.20146	.17021	.37217	.07984	.14928	3.7737	.16791	.13035	3.7917

#1	131.85	.06803	2.2457	.09970	101.08	.10897	.22760	22.569	.10239
#2	132.23	.06787	2.2339	.09958	101.29	.10330	.22814	22.611	.09705

Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Elem	Sr4077	Th2837	Ti3349	Ti1908	U_3701	V_2924	Zn2062	Zr3391
Line	407.771 { 83}	283.730 {119}	334.904 {101}	190.856 {477}	370.152 { 91}	292.402 {115}	206.200 {163}	339.198 { 99}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	2.0573	.19257	.05451	.19378	.54106	.04976	.19871	.05071
Stddev	.0077	.00068	.00038	.00090	.02365	.00010	.00075	.00060
%RSD	.37684	.35560	.70598	.46467	4.3709	.19385	.37700	1.1844

#1	2.0518	.19208	.05423	.19442	.52434	.04983	.19924	.05029
#2	2.0628	.19305	.05478	.19314	.55778	.04969	.19818	.05114

Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit								
Low Limit								

Int. Std.	Y_2243	Y_3600	Y_3774
Line	224.306 {450}	360.073 { 94}	377.433 { 89}
Units	Cts/S	Cts/S	Cts/S
Avg	1399.0	29575.	5598.6
Stddev	1.0	60.	28.1
%RSD	.07283	.20290	.50234

#1	1398.3	29618.	5618.5
#2	1399.7	29533.	5578.7

Sample Name: ccvh-3900196 Acquired: 5/21/2016 1:01:13 Type: QC
Method: 6500_026(v10) Mode: CONC Corr. Factor: 1.000000
User: kellyca Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	Ag3280	Al3092	As1890	B_2089	Ba4554	Be3130	Bi2230	Ca3179	Cd2288	Co2286	Cr2055	Cu3247	Fe2714
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	-.00452	45.808	-.00264	.00468	.00021	-.00039	1.0691	-.01817	-.00091	.00302	-.00055	.00398	46.609
Stddev	.00085	.004	.00197	.00135	.00003	.00011	.0022	.00563	.00012	.00010	.00013	.00004	.137
%RSD	18.687	.00945	74.348	28.956	14.630	28.453	.20232	30.973	12.807	3.3425	23.067	1.0073	.29461

#1	-.00512	45.805	-.00125	.00372	.00019	-.00031	1.0706	-.01419	-.00099	.00309	-.00046	.00401	46.512
#2	-.00392	45.811	-.00403	.00564	.00023	-.00047	1.0676	-.02215	-.00083	.00295	-.00063	.00395	46.706

Check ?	None	Chk Pass	None	None	None	None	Chk Pass	None	None	None	None	None	Chk Pass
Value													
Range													

Elem	K_7664	Li6707	Mg2790	Mn2576	Mo2020	Na8183	Ni2316	P_1782	Pb2203	S_1820	Sb2068	Se1960	Si2881
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.08916	-.00030	.15007	-.00071	-.00236	250.52	-.00071	.00385	-.00178	5.0978	-.00030	.00544	.00270
Stddev	.01895	.00091	.00444	.00002	.00060	.07	.00038	.00035	.00081	.0051	.00023	.00771	.01691
%RSD	21.256	305.22	2.9568	3.4691	25.424	.02824	53.164	9.0336	45.441	.09949	76.306	141.71	627.04

#1	.07576	.00035	.15321	-.00073	-.00193	250.47	-.00045	.00361	-.00121	5.1014	-.00047	.01090	-.00926
#2	.10256	-.00095	.14694	-.00070	-.00278	250.57	-.00098	.00410	-.00236	5.0943	-.00014	-.00001	.01466

Check ?	None	None	None	None	None	Chk Pass	None	None	None	Chk Pass	None	None	None
Value													
Range													

Elem	Sn1899	Sr4077	Th2837	Ti3349	Tl1908	U_3701	V_2924	Zn2062	Zr3391
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.00175	.00050	4.8750	.02679	-.00505	9.9992	-.01670	-.00252	-.02182
Stddev	.00098	.00001	.0094	.00045	.00048	.0086	.00013	.00039	.00081
%RSD	55.795	1.2461	.19259	1.6655	9.4196	.08634	.78490	15.597	3.6912

#1	.00106	.00050	4.8817	.02710	-.00471	10.005	-.01661	-.00280	-.02125
#2	.00244	.00049	4.8684	.02647	-.00538	9.9931	-.01679	-.00224	-.02239

Check ?	None	None	Chk Pass	None	None	Chk Pass	None	None	None
Value									
Range									

Int. Std.	Y_2243	Y_3600	Y_3774
Units	Cts/S	Cts/S	Cts/S
Avg	1494.6	31086.	5668.3
Stddev	1.9	59.	6.8
%RSD	.12845	.18871	.12022

#1	1496.0	31045.	5663.5
#2	1493.3	31128.	5673.1

Sample Name: ccv-3900195 Acquired: 5/21/2016 1:04:03 Type: QC
Method: 6500_026(v10) Mode: CONC Corr. Factor: 1.000000
User: kellyca Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	Ag3280	Al1670	As1890	B_2089	Ba4554	Be3130	Bi2230	Ca3179	Cd2288	Co2286	Cr2055	Cu3247	Fe2599
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.47898	.51706	1.0167	.54594	.49468	.51192	-.00223	4.9998	.53474	.53388	.52167	.48831	2.5222
Stddev	.00188	.00174	.0033	.00006	.00403	.00308	.00003	.0268	.00161	.00147	.00033	.00011	.0107
%RSD	.39301	.33637	.32622	.01109	.81488	.60221	1.5423	.53575	.30095	.27575	.06375	.02173	.42425

#1	.48031	.51829	1.0190	.54598	.49183	.50974	-.00225	4.9808	.53360	.53283	.52190	.48839	2.5146
#2	.47765	.51583	1.0143	.54589	.49753	.51410	-.00220	5.0187	.53588	.53492	.52143	.48824	2.5298

Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	None	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Value													
Range													

Elem	K_7664	Li6707	Mg2790	Mn2576	Mo2020	Na5895	Ni2316	P_1782	Pb2203	S_1820	Sb2068	Se1960	Si2881
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	51.238	1.0644	19.359	.49579	.53327	5.2323	.50890	1.0161	1.0538	.00740	1.0222	.98865	5.0564
Stddev	.306	.0047	.029	.00123	.00004	.0163	.00186	.0000	.0002	.00191	.0128	.00377	.0123
%RSD	.59795	.44241	.14875	.24839	.00816	.31099	.36594	.00229	.01750	25.820	1.2535	.38098	.24275

#1	51.021	1.0610	19.339	.49492	.53331	5.2208	.50758	1.0161	1.0539	.00605	1.0131	.98599	5.0478
#2	51.454	1.0677	19.379	.49666	.53324	5.2438	.51021	1.0161	1.0536	.00875	1.0313	.99131	5.0651

Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	None	Chk Pass	Chk Pass	Chk Pass
Value													
Range													

Elem	Sn1899	Sr4077	Th2837	Ti3349	Ti1908	U_3701	V_2924	Zn2062	Zr3391
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.99446	.46741	.00118	.45729	1.0261	.03684	.46494	.49650	.49757
Stddev	.00372	.00191	.00181	.00066	.0098	.02157	.00168	.00246	.00298
%RSD	.37417	.40760	152.64	.14425	.95230	58.537	.36068	.49565	.59956

#1	.99709	.46606	.00246	.45775	1.0192	.02159	.46376	.49476	.49546
#2	.99183	.46876	-.00009	.45682	1.0330	.05209	.46613	.49824	.49968

Check ?	Chk Pass	Chk Pass	None	Chk Pass	Chk Pass	None	Chk Pass	Chk Pass	Chk Pass
Value									
Range									

Int. Std.	Y_2243	Y_3600	Y_3774
Units	Cts/S	Cts/S	Cts/S
Avg	1527.5	32076.	5785.4
Stddev	3.9	114.	13.1
%RSD	.25562	.35673	.22716

#1	1530.2	32157.	5794.7
#2	1524.7	31995.	5776.1

Sample Name: ccb Acquired: 5/21/2016 1:06:41 Type: QC
Method: 6500_026(v10) Mode: CONC Corr. Factor: 1.000000
User: kellyca Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	Ag3280	Al1670	As1890	B_2089	Ba4554	Be3130	Bi2230	Ca3179	Cd2288	Co2286	Cr2055	Cu3247
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.00076	-.00023	-.00106	F .00349	-.00005	-.00007	-.00198	.00066	.00011	-.00045	.00014	.00039
Stddev	.00038	.00047	.00354	.00006	.00011	.00003	.00152	.00514	.00014	.00014	.00006	.00007
%RSD	50.527	202.27	333.15	1.7029	229.29	38.383	77.040	779.64	133.00	31.407	45.061	18.990

#1	.00103	.00010	.00144	.00353	.00003	-.00005	-.00305	.00429	.00021	-.00055	.00018	.00044
#2	.00049	-.00056	-.00357	.00344	-.00012	-.00009	-.00090	-.00297	.00001	-.00035	.00009	.00034

Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Fail	Chk Pass	Chk Pass	None	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit				.00312								
Low Limit				-.00312								

Elem	Fe2599	K_7664	Li6707	Mg2790	Mn2576	Mo2020	Na5895	Ni2316	P_1782	Pb2203	S_1820	Sb2068
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.00256	.11525	-.00016	.00548	.00014	.00048	.02719	-.00035	-.00360	.00183	.00695	.00043
Stddev	.00238	.01219	.00009	.00094	.00001	.00010	.00360	.00018	.00095	.00095	.00201	.00057
%RSD	93.033	10.575	56.433	17.141	5.0774	21.020	13.247	51.382	26.524	51.719	28.874	133.02

#1	.00088	.12387	-.00010	.00614	.00013	.00055	.02464	-.00022	-.00292	.00250	.00553	.00083
#2	.00425	.10663	-.00023	.00481	.00014	.00041	.02974	-.00048	-.00427	.00116	.00837	.00003

Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	None	Chk Pass
High Limit												
Low Limit												

Elem	Se1960	Si2881	Sn1899	Sr4077	Th2837	Ti3349	Ti1908	U_3701	V_2924	Zn2062	Zr3391
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	-.00074	-.00059	.00182	.00009	-.00203	.00012	.00075	.02022	.00045	-.00012	.00018
Stddev	.00052	.01398	.00189	.00000	.00116	.00011	.00214	.00056	.00033	.00147	.00170
%RSD	70.136	2361.3	104.24	2.0979	56.978	87.436	284.87	2.7856	72.564	1182.5	966.29

#1	-.00037	.00930	.00316	.00008	-.00121	.00005	.00227	.01982	.00022	-.00117	-.00103
#2	-.00110	-.01048	.00048	.00009	-.00285	.00020	-.00076	.02062	.00068	.00092	.00138

Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit											
Low Limit											

Int. Std.	Y_2243	Y_3600	Y_3774
Units	Cts/S	Cts/S	Cts/S
Avg	1545.4	32527.	5669.1
Stddev	6.8	50.	56.1
%RSD	.44001	.15236	.98898

#1	1550.2	32492.	5708.8
#2	1540.6	32562.	5629.5

Sample Name: ccvl-3903059 Acquired: 5/21/2016 1:09:27 Type: QC
Method: 6500_026(v10) Mode: CONC Corr. Factor: 1.000000
User: kellyca Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	Ag3280	Al1670	As1890	B_2089	Ba4554	Be3130	Bi2230	Ca3179	Cd2288	Co2286	Cr2055	Cu3247
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.00984	.10803	.01212	.11192	.01004	.00086	.11298	.20605	.00548	.01076	.01053	.01290
Stddev	.00020	.00084	.00654	.00074	.00009	.00001	.00395	.00238	.00042	.00023	.00044	.00051
%RSD	2.0126	.77900	53.974	.66190	.85647	1.7030	3.4926	1.1531	7.6008	2.1143	4.2012	3.9629

#1	.00998	.10862	.00749	.11139	.01010	.00085	.11577	.20773	.00577	.01092	.01084	.01254
#2	.00970	.10743	.01675	.11244	.00998	.00087	.11019	.20437	.00518	.01060	.01021	.01326

Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Value												
Range												

Elem	Fe2599	K_7664	Li6707	Mg2790	Mn2576	Mo2020	Na5895	Ni2316	P_1782	Pb2203	S_1820	Sb2068
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.10890	3.1460	.01051	.20794	.01025	.02142	1.0525	.04132	3.0053	.00784	.00998	.02207
Stddev	.00372	.0250	.00042	.00059	.00008	.00003	.0031	.00033	.0061	.00079	.00192	.00263
%RSD	3.4120	.79502	4.0173	.28145	.80987	.16293	.29371	.78998	.20343	10.123	19.210	11.932

#1	.11153	3.1284	.01021	.20836	.01019	.02144	1.0503	.04156	3.0009	.00728	.01134	.02021
#2	.10627	3.1637	.01081	.20753	.01030	.02139	1.0546	.04109	3.0096	.00840	.00863	.02393

Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	None	Chk Pass
Value												
Range												

Elem	Se1960	Si2881	Sn1899	Sr4077	Th2837	Ti3349	Ti1908	U_3701	V_2924	Zn2062	Zr3391
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.01352	.50807	.10195	.00944	.01238	.00937	.01304	F .08497	.00941	.01951	.01473
Stddev	.00139	.01189	.00181	.00006	.00176	.00030	.00145	.00452	.00009	.00049	.00212
%RSD	10.283	2.3399	1.7765	.66018	14.223	3.2126	11.148	5.3214	.99224	2.5115	14.409

#1	.01254	.49966	.10067	.00939	.01363	.00958	.01201	.08817	.00947	.01986	.01323
#2	.01451	.51647	.10323	.00948	.01114	.00916	.01407	.08177	.00934	.01917	.01623

Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Fail	Chk Pass	Chk Pass	Chk Pass
Value								.06000			
Range								30.000%			

Int. Std.	Y_2243	Y_3600	Y_3774
Units	Cts/S	Cts/S	Cts/S
Avg	1553.6	32818.	5701.2
Stddev	.2	34.	1.8
%RSD	.00976	.10456	.03201

#1	1553.7	32793.	5699.9
#2	1553.4	32842.	5702.5

Sample Name: 280-83263-A-2-A Acquired: 5/21/2016 1:12:13 Type: Unk
Method: 6500_026(v10) Mode: CONC Corr. Factor: 1.000000
User: kellyca Custom ID1: Custom ID2: Custom ID3:
Comment: 325962 6010C Q4

Elem	Ag3280	Al1670	As1890	B_2089	Ba4554	Be3130	Bi2230	Ca3179	Cd2288
Line	328.068 {103}	167.079 {502}	189.042 {478}	208.959 {461}	455.403 { 74}	313.042 {108}	223.061 {451}	317.933 {106}	228.802 {447}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.00008	.37129	-.00249	.16454	.10434	-.00018	-.00116	308.01	.00043
Stddev	.00011	.00362	.00868	.00084	.00030	.00012	.00230	.02	.00003
%RSD	140.99	.97431	348.98	.50996	.29012	64.589	198.39	.00646	7.4344

#1	.00000	.37385	-.00862	.16395	.10413	-.00010	.00047	308.02	.00046
#2	.00016	.36873	.00365	.16514	.10455	-.00026	-.00279	307.99	.00041

Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Elem	Co2286	Cr2055	Cu3247	Fe2599	K_7664	Li6707	Mg2790	Mn2576	Mo2020
Line	228.616 {447}	205.560 {464}	324.754 {104}	259.940 {130}	766.490 { 44}	670.784 { 50}	279.079 {121}2	257.610 {131}	202.030 {467}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.00041	W .18932	.00010	.49230	7.6979	.03999	60.630	.21092	.00037
Stddev	.00026	.00133	.00007	.00259	.0445	.00005	.038	.00011	.00007
%RSD	63.444	.70351	67.495	.52559	.57803	.11881	.06286	.05200	19.331

#1	.00059	.19026	.00015	.49047	7.6664	.04002	60.603	.21100	.00032
#2	.00022	.18838	.00005	.49413	7.7294	.03996	60.657	.21084	.00042

Check ?	Chk Pass	Chk Warn	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit		.10000							
Low Limit		-.01000							

Elem	Na8183	Ni2316	P_1782	Pb2203	S_1820	Sb2068	Se1960	Si2881	Sn1899
Line	818.326 { 41}	231.604 {446}	178.284 {489}	220.353 {453}	182.034 {485}	206.833 {463}	196.090 {472}	288.158 {117}	189.989 {477}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	113.15	.02043	.01412	W -.00377	101.87	.00177	-.00096	18.099	.00117
Stddev	.04	.00058	.00129	.00278	.11	.00221	.00431	.044	.00191
%RSD	.03570	2.8526	9.1361	73.945	.10786	124.40	447.96	.24286	163.16

#1	113.13	.02002	.01321	-.00573	101.95	.00333	.00208	18.130	.00253
#2	113.18	.02084	.01503	-.00180	101.80	.00021	-.00401	18.068	-.00018

Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Warn	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit				10.000					
Low Limit				-.00300					

Elem	Sr4077	Th2837	Ti3349	Ti1908	U_3701	V_2924	Zn2062	Zr3391	
Line	407.771 { 83}	283.730 {119}	334.904 {101}	190.856 {477}	370.152 { 91}	292.402 {115}	206.200 {163}	339.198 { 99}	
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	
Avg	2.0503	-.00579	.01159	-.00030	.00883	.00384	.00094	.00093	
Stddev	.0012	.00212	.00015	.00101	.00753	.00100	.00112	.00086	
%RSD	.05742	36.566	1.3118	335.22	85.197	26.134	118.78	92.533	

#1	2.0511	-.00429	.01169	.00041	.00351	.00313	.00173	.00032	
#2	2.0494	-.00728	.01148	-.00101	.01416	.00455	.00015	.00155	

Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	
High Limit									
Low Limit									

Int. Std.	Y_2243	Y_3600	Y_3774						
Line	224.306 {450}	360.073 { 94}	377.433 { 89}						
Units	Cts/S	Cts/S	Cts/S						
Avg	1405.2	29690.	5666.4						
Stddev	2.3	60.	28.4						
%RSD	.16610	.20330	.50166						

#1	1403.6	29648.	5646.3						
#2	1406.9	29733.	5686.5						

Sample Name: 280-83263-A-3-A Acquired: 5/21/2016 1:14:56 Type: Unk
Method: 6500_026(v10) Mode: CONC Corr. Factor: 1.000000
User: kellyca Custom ID1: Custom ID2: Custom ID3:
Comment: 325962 6010C Q4

Elem	Ag3280	Al1670	As1890	B_2089	Ba4554	Be3130	Bi2230	Ca3179	Cd2288
Line	328.068 {103}	167.079 {502}	189.042 {478}	208.959 {461}	455.403 { 74}	313.042 {108}	223.061 {451}	317.933 {106}	228.802 {447}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.00054	.10660	-.00586	.10288	.10920	-.00015	-.00449	256.52	.00038
Stddev	.00028	.00092	.00284	.00186	.00055	.00001	.00144	.98	.00030
%RSD	52.099	.86424	48.419	1.8109	.50154	4.4329	32.022	.38068	80.153

#1	.00034	.10595	-.00786	.10156	.10882	-.00014	-.00347	255.83	.00016
#2	.00073	.10725	-.00385	.10420	.10959	-.00015	-.00551	257.21	.00059

Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Elem	Co2286	Cr2055	Cu3247	Fe2599	K_7664	Li6707	Mg2790	Mn2576	Mo2020
Line	228.616 {447}	205.560 {464}	324.754 {104}	259.940 {130}	766.490 { 44}	670.784 { 50}	279.079 {121}2	257.610 {131}	202.030 {467}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	-.00006	.07196	.00022	.15052	8.3944	.09627	53.766	.16666	.00074
Stddev	.00003	.00015	.00040	.00254	.0250	.00062	.192	.00021	.00000
%RSD	39.537	.21354	185.64	1.6886	.29743	.64891	.35650	.12741	.44778

#1	-.00005	.07185	-.00007	.15232	8.3767	.09582	53.631	.16681	.00074
#2	-.00008	.07207	.00050	.14872	8.4120	.09671	53.902	.16651	.00074

Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Elem	Na8183	Ni2316	P_1782	Pb2203	S_1820	Sb2068	Se1960	Si2881	Sn1899
Line	818.326 { 41}	231.604 {446}	178.284 {489}	220.353 {453}	182.034 {485}	206.833 {463}	196.090 {472}	288.158 {117}	189.989 {477}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	80.017	.01841	.01011	W -.00389	58.319	-.00212	.00316	29.122	.00317
Stddev	.456	.00025	.00006	.00403	.173	.00290	.00013	.141	.00068
%RSD	.57032	1.3848	.63168	103.76	.29586	136.80	3.9913	.48527	21.325

#1	79.695	.01823	.01015	-.00674	58.197	-.00417	.00307	29.022	.00365
#2	80.340	.01859	.01006	-.00104	58.441	-.00007	.00325	29.222	.00269

Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Warn	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit				10.000					
Low Limit				-.00300					

Elem	Sr4077	Th2837	Ti3349	Ti1908	U_3701	V_2924	Zn2062	Zr3391
Line	407.771 { 83}	283.730 {119}	334.904 {101}	190.856 {477}	370.152 { 91}	292.402 {115}	206.200 {163}	339.198 { 99}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	2.7782	-.00467	.00365	-.00224	.01032	.00594	.00298	.00049
Stddev	.0096	.00070	.00002	.00287	.02624	.00016	.00038	.00131
%RSD	.34457	14.926	.56315	127.98	254.29	2.7090	12.638	269.11

#1	2.7715	-.00516	.00364	-.00021	-.00824	.00605	.00324	.00141
#2	2.7850	-.00418	.00367	-.00427	.02888	.00582	.00271	-.00044

Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit								
Low Limit								

Int. Std.	Y_2243	Y_3600	Y_3774
Line	224.306 {450}	360.073 { 94}	377.433 { 89}
Units	Cts/S	Cts/S	Cts/S
Avg	1426.6	30116.	5603.7
Stddev	1.9	31.	11.2
%RSD	.13582	.10458	.19992

#1	1428.0	30094.	5611.6
#2	1425.3	30138.	5595.7

Sample Name: 280-83263-A-4-A Acquired: 5/21/2016 1:17:39 Type: Unk
Method: 6500_026(v10) Mode: CONC Corr. Factor: 1.000000
User: kellyca Custom ID1: Custom ID2: Custom ID3:
Comment: 325962 6010C Q4

Elem	Ag3280	Al1670	As1890	B_2089	Ba4554	Be3130	Bi2230	Ca3179	Cd2288
Line	328.068 {103}	167.079 {502}	189.042 {478}	208.959 {461}	455.403 {74}	313.042 {108}	223.061 {451}	317.933 {106}	228.802 {447}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.00022	.03314	-.00433	.08221	.09919	-.00015	-.00320	221.61	.00062
Stddev	.00011	.00028	.00092	.00059	.00012	.00004	.00094	1.33	.00021
%RSD	51.247	.85253	21.125	.71492	.11735	27.003	29.397	.60159	33.642

#1	.00014	.03294	-.00369	.08263	.09911	-.00017	-.00253	220.67	.00047
#2	.00031	.03334	-.00498	.08180	.09927	-.00012	-.00386	222.55	.00077

Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Elem	Co2286	Cr2055	Cu3247	Fe2599	K_7664	Li6707	Mg2790	Mn2576	Mo2020
Line	228.616 {447}	205.560 {464}	324.754 {104}	259.940 {130}	766.490 {44}	670.784 {50}	279.079 {121}2	257.610 {131}	202.030 {467}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	-.00030	.01626	-.00037	.08427	8.1648	.07668	42.720	.11711	.00013
Stddev	.00012	.00024	.00013	.00105	.0692	.00175	.309	.00067	.00069
%RSD	39.378	1.5008	33.786	1.2432	.84689	2.2809	.72264	.56975	550.10

#1	-.00038	.01609	-.00046	.08353	8.1160	.07544	42.501	.11664	.00061
#2	-.00021	.01643	-.00028	.08501	8.2137	.07791	42.938	.11758	-.00036

Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Elem	Na8183	Ni2316	P_1782	Pb2203	S_1820	Sb2068	Se1960	Si2881	Sn1899
Line	818.326 {41}	231.604 {446}	178.284 {489}	220.353 {453}	182.034 {485}	206.833 {463}	196.090 {472}	288.158 {117}	189.989 {477}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	73.062	.01381	.00431	-.00179	37.476	-.00151	.00127	34.371	-.00031
Stddev	.080	.00012	.00115	.00106	.001	.00087	.00035	.273	.00241
%RSD	.10902	.83871	26.682	59.219	.00209	57.951	27.340	.79300	770.17

#1	73.006	.01390	.00350	-.00255	37.475	-.00213	.00102	34.178	.00139
#2	73.119	.01373	.00513	-.00104	37.476	-.00089	.00151	34.564	-.00202

Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Elem	Sr4077	Th2837	Ti3349	Ti1908	U_3701	V_2924	Zn2062	Zr3391
Line	407.771 {83}	283.730 {119}	334.904 {101}	190.856 {477}	370.152 {91}	292.402 {115}	206.200 {163}	339.198 {99}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	2.3418	-.00440	.00144	-.00149	.01369	.00689	.00104	.00009
Stddev	.0156	.00139	.00000	.00029	.01704	.00059	.00077	.00025
%RSD	.66621	31.511	.29908	19.197	124.40	8.6200	74.445	281.69

#1	2.3308	-.00538	.00144	-.00129	.00165	.00731	.00158	-.00009
#2	2.3528	-.00342	.00144	-.00169	.02574	.00647	.00049	.00027

Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit								
Low Limit								

Int. Std.	Y_2243	Y_3600	Y_3774
Line	224.306 {450}	360.073 {94}	377.433 {89}
Units	Cts/S	Cts/S	Cts/S
Avg	1447.9	30453.	5657.6
Stddev	1.1	43.	24.0
%RSD	.07673	.14068	.42500

#1	1447.1	30483.	5674.6
#2	1448.7	30422.	5640.6

Sample Name: 280-83263-A-5-A Acquired: 5/21/2016 1:20:22 Type: Unk
Method: 6500_026(v10) Mode: CONC Corr. Factor: 1.000000
User: kellyca Custom ID1: Custom ID2: Custom ID3:
Comment: 325962 6010C Q4

Elem	Ag3280	Al1670	As1890	B_2089	Ba4554	Be3130	Bi2230	Ca3179	Cd2288
Line	328.068 {103}	167.079 {502}	189.042 {478}	208.959 {461}	455.403 { 74}	313.042 {108}	223.061 {451}	317.933 {106}	228.802 {447}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.00061	.14488	-.00064	.10045	.14177	-.00017	-.00299	256.15	.00008
Stddev	.00006	.00025	.01219	.00137	.00028	.00007	.00200	1.76	.00004
%RSD	10.258	.17045	1900.8	1.3594	.20006	39.258	66.989	.68593	57.724

#1	.00066	.14506	-.00926	.10142	.14157	-.00022	-.00157	254.91	.00011
#2	.00057	.14471	.00798	.09949	.14197	-.00013	-.00440	257.39	.00004

Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Elem	Co2286	Cr2055	Cu3247	Fe2599	K_7664	Li6707	Mg2790	Mn2576	Mo2020
Line	228.616 {447}	205.560 {464}	324.754 {104}	259.940 {130}	766.490 { 44}	670.784 { 50}	279.079 {121}2	257.610 {131}	202.030 {467}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.00007	.00483	-.00007	.19676	6.8606	.04203	49.761	.05700	-.00044
Stddev	.00053	.00046	.00008	.00640	.0025	.00067	.159	.00032	.00054
%RSD	769.90	9.4713	125.24	3.2519	.03692	1.5824	.32011	.56300	123.24

#1	.00044	.00515	-.00012	.19224	6.8588	.04250	49.874	.05723	-.00006
#2	-.00031	.00450	-.00001	.20129	6.8624	.04156	49.648	.05677	-.00083

Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Elem	Na8183	Ni2316	P_1782	Pb2203	S_1820	Sb2068	Se1960	Si2881	Sn1899
Line	818.326 { 41}	231.604 {446}	178.284 {489}	220.353 {453}	182.034 {485}	206.833 {463}	196.090 {472}	288.158 {117}	189.989 {477}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	105.60	.00570	.01901	W -.00325	41.008	.00025	-.00373	19.909	.00107
Stddev	.63	.00024	.00338	.00101	.079	.00330	.00158	.094	.00101
%RSD	.60005	4.1680	17.776	31.003	.19197	1335.6	42.467	.47312	94.700

#1	105.15	.00553	.01662	-.00397	41.064	-.00208	-.00485	19.843	.00035
#2	106.05	.00587	.02140	-.00254	40.953	.00258	-.00261	19.976	.00179

Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Warn	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit				10.000					
Low Limit				-.00300					

Elem	Sr4077	Th2837	Ti3349	Ti1908	U_3701	V_2924	Zn2062	Zr3391	
Line	407.771 { 83}	283.730 {119}	334.904 {101}	190.856 {477}	370.152 { 91}	292.402 {115}	206.200 {163}	339.198 { 99}	
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	
Avg	1.6619	-.00610	.00535	-.00342	.03544	.00549	.00178	.00047	
Stddev	.0009	.00057	.00015	.00041	.00302	.00036	.00145	.00100	
%RSD	.05638	9.3629	2.8509	11.908	8.5192	6.5204	81.656	211.09	

#1	1.6626	-.00569	.00524	-.00313	.03330	.00524	.00075	.00118	
#2	1.6613	-.00650	.00545	-.00370	.03757	.00574	.00281	-.00023	

Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	
High Limit									
Low Limit									

Int. Std.	Y_2243	Y_3600	Y_3774						
Line	224.306 {450}	360.073 { 94}	377.433 { 89}						
Units	Cts/S	Cts/S	Cts/S						
Avg	1426.8	30213.	5562.9						
Stddev	1.2	107.	33.0						
%RSD	.08529	.35289	.59243						

#1	1427.7	30137.	5586.2						
#2	1426.0	30288.	5539.6						

Sample Name: 280-83263-A-6-A Acquired: 5/21/2016 1:23:05 Type: Unk
Method: 6500_026(v10) Mode: CONC Corr. Factor: 1.000000
User: kellyca Custom ID1: Custom ID2: Custom ID3:
Comment: 325962 6010C Q4

Elem	Ag3280	Al1670	As1890	B_2089	Ba4554	Be3130	Bi2230	Ca3179	Cd2288
Line	328.068 {103}	167.079 {502}	189.042 {478}	208.959 {461}	455.403 { 74}	313.042 {108}	223.061 {451}	317.933 {106}	228.802 {447}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	-0.00015	.07384	-0.00752	.07592	.12820	-0.00011	-0.00481	250.01	.00033
Stddev	.00005	.00161	.00498	.00177	.00055	.00014	.00814	.78	.00010
%RSD	29.781	2.1765	66.206	2.3338	.42878	130.78	169.22	.31222	28.963

#1	-0.00012	.07270	-.01104	.07717	.12781	-0.00021	-.01057	249.46	.00026
#2	-0.00019	.07498	-.00400	.07466	.12859	-0.00001	.00095	250.57	.00040

Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Elem	Co2286	Cr2055	Cu3247	Fe2599	K_7664	Li6707	Mg2790	Mn2576	Mo2020
Line	228.616 {447}	205.560 {464}	324.754 {104}	259.940 {130}	766.490 { 44}	670.784 { 50}	279.079 {121}2	257.610 {131}	202.030 {467}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	-0.00025	.00576	-0.00032	.09031	6.5909	.05594	49.503	.00910	-0.00041
Stddev	.00021	.00002	.00035	.00189	.0022	.00066	.114	.00003	.00034
%RSD	83.556	.28199	110.88	2.0892	.03287	1.1767	.22965	.38310	84.639

#1	-0.00010	.00575	-0.00057	.08897	6.5925	.05641	49.423	.00908	-0.00016
#2	-0.00039	.00577	-0.00007	.09164	6.5894	.05548	49.584	.00913	-0.00065

Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Elem	Na8183	Ni2316	P_1782	Pb2203	S_1820	Sb2068	Se1960	Si2881	Sn1899
Line	818.326 { 41}	231.604 {446}	178.284 {489}	220.353 {453}	182.034 {485}	206.833 {463}	196.090 {472}	288.158 {117}	189.989 {477}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	80.360	.00206	.01503	W -.00320	38.756	.00032	W -.00522	22.912	.00221
Stddev	.458	.00012	.00020	.00202	.291	.00061	.00436	.134	.00093
%RSD	.57036	5.8316	1.3628	63.267	.74963	193.17	83.601	.58605	42.166

#1	80.036	.00214	.01489	-0.00177	38.961	-0.00012	-.00830	22.817	.00287
#2	80.684	.00197	.01518	-0.00463	38.551	.00075	-.00213	23.007	.00155

Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Warn	Chk Pass	Chk Pass	Chk Warn	Chk Pass	Chk Pass
High Limit				10.000			5.0000		
Low Limit				-.00300			-.00500		

Elem	Sr4077	Th2837	Ti3349	Ti1908	U_3701	V_2924	Zn2062	Zr3391	
Line	407.771 { 83}	283.730 {119}	334.904 {101}	190.856 {477}	370.152 { 91}	292.402 {115}	206.200 {163}	339.198 { 99}	
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	
Avg	1.7820	-.00482	.00325	-.00148	.00014	.00484	-.00046	.00196	
Stddev	.0071	.00334	.00012	.00354	.00995	.00037	.00102	.00040	
%RSD	.39654	69.157	3.7795	239.17	7071.0	7.6227	222.58	20.267	

#1	1.7770	-.00246	.00316	-0.00398	.00718	.00511	-.00118	.00224	
#2	1.7870	-.00718	.00333	.00102	-.00690	.00458	.00026	.00168	

Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	
High Limit									
Low Limit									

Int. Std.	Y_2243	Y_3600	Y_3774						
Line	224.306 {450}	360.073 { 94}	377.433 { 89}						
Units	Cts/S	Cts/S	Cts/S						
Avg	1436.0	30324.	5678.7						
Stddev	2.1	4.	.2						
%RSD	.14452	.01433	.00435						

#1	1434.6	30327.	5678.5						
#2	1437.5	30321.	5678.9						

Sample Name: ccvh-3900196 Acquired: 5/21/2016 1:25:49 Type: QC
Method: 6500_026(v10) Mode: CONC Corr. Factor: 1.000000
User: kellyca Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	Ag3280	Al3092	As1890	B_2089	Ba4554	Be3130	Bi2230	Ca3179	Cd2288	Co2286	Cr2055	Cu3247	Fe2714
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	-.00372	45.599	-.00239	.00273	.00013	-.00040	1.0696	-.02258	-.00065	.00306	-.00048	.00356	46.233
Stddev	.00010	.265	.00859	.00079	.00002	.00005	.0028	.00591	.00006	.00045	.00029	.00022	.474
%RSD	2.7532	.58181	359.58	28.997	17.155	12.444	.26342	26.179	9.3110	14.550	60.455	6.1963	1.0262

#1	-.00379	45.411	-.00846	.00329	.00015	-.00044	1.0716	-.01840	-.00060	.00275	-.00028	.00340	45.897
#2	-.00364	45.787	.00368	.00217	.00011	-.00037	1.0676	-.02676	-.00069	.00338	-.00069	.00371	46.568

Check ?	None	Chk Pass	None	None	None	None	Chk Pass	None	None	None	None	None	Chk Pass
Value													
Range													

Elem	K_7664	Li6707	Mg2790	Mn2576	Mo2020	Na8183	Ni2316	P_1782	Pb2203	S_1820	Sb2068	Se1960	Si2881
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.06869	-.00040	.15057	-.00086	-.00238	249.94	-.00083	.00172	.00040	5.0752	-.00218	.00831	-.00969
Stddev	.04600	.00092	.00297	.00001	.00062	1.36	.00080	.00026	.00235	.0031	.00182	.00099	.00517
%RSD	66.964	226.75	1.9739	.92588	26.010	.54594	96.417	15.154	592.32	.06057	83.419	11.858	53.330

#1	.03616	.00024	.15267	-.00085	-.00194	248.98	-.00026	.00153	-.00127	5.0730	-.00089	.00900	-.01335
#2	.10121	-.00105	.14846	-.00086	-.00282	250.91	-.00140	.00190	.00206	5.0773	-.00347	.00761	-.00604

Check ?	None	None	None	None	None	Chk Pass	None	None	None	Chk Pass	None	None	None
Value													
Range													

Elem	Sn1899	Sr4077	Th2837	Ti3349	Tl1908	U_3701	V_2924	Zn2062	Zr3391
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.00191	.00050	4.8747	.02690	-.00474	9.9539	-.01669	-.00343	-.02689
Stddev	.00030	.00009	.0052	.00025	.00037	.0121	.00013	.00069	.00301
%RSD	15.832	17.736	.10581	.92538	7.8915	.12182	.76849	20.119	11.206

#1	.00170	.00056	4.8783	.02707	-.00448	9.9625	-.01660	-.00392	-.02902
#2	.00212	.00044	4.8710	.02672	-.00501	9.9454	-.01678	-.00294	-.02475

Check ?	None	None	Chk Pass	None	None	Chk Pass	None	None	None
Value									
Range									

Int. Std.	Y_2243	Y_3600	Y_3774
Units	Cts/S	Cts/S	Cts/S
Avg	1491.4	30945.	5652.3
Stddev	1.4	15.	83.9
%RSD	.09579	.04989	1.4844

#1	1490.4	30934.	5711.6
#2	1492.5	30956.	5592.9

Sample Name: ccv-3900195 Acquired: 5/21/2016 1:28:38 Type: QC
Method: 6500_026(v10) Mode: CONC Corr. Factor: 1.000000
User: kellyca Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	Ag3280	Al1670	As1890	B_2089	Ba4554	Be3130	Bi2230	Ca3179	Cd2288	Co2286	Cr2055	Cu3247	Fe2599
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.48042	.52262	1.0173	.54940	.49462	.51317	-.00061	5.0594	.53957	.53547	.52543	.48503	2.5016
Stddev	.00202	.00195	.0010	.00026	.00100	.00179	.00082	.0368	.00054	.00047	.00013	.00006	.0177
%RSD	.41950	.37232	.09794	.04673	.20229	.34931	134.19	.72804	.10078	.08690	.02465	.01167	.70780

#1	.48185	.52399	1.0180	.54922	.49391	.51190	-.00003	5.0334	.53996	.53580	.52552	.48499	2.4891
#2	.47900	.52124	1.0165	.54958	.49533	.51444	-.00119	5.0855	.53919	.53514	.52534	.48507	2.5142

Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	None	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Value													
Range													

Elem	K_7664	Li6707	Mg2790	Mn2576	Mo2020	Na5895	Ni2316	P_1782	Pb2203	S_1820	Sb2068	Se1960	Si2881
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	51.169	1.0617	19.387	.49844	.53639	5.2321	.51040	1.0175	1.0592	.00767	1.0283	.99202	5.0463
Stddev	.262	.0024	.025	.00189	.00063	.0122	.00027	.0071	.0029	.00343	.0079	.00781	.0045
%RSD	.51259	.22736	.12715	.37870	.11757	.23309	.05340	.69683	.27375	44.651	.76861	.78728	.08848

#1	50.983	1.0600	19.370	.49711	.53594	5.2408	.51059	1.0125	1.0571	.00525	1.0227	.98650	5.0432
#2	51.354	1.0634	19.405	.49978	.53684	5.2235	.51021	1.0225	1.0612	.01009	1.0339	.99754	5.0495

Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	None	Chk Pass	Chk Pass	Chk Pass
Value													
Range													

Elem	Sn1899	Sr4077	Th2837	Ti3349	Ti1908	U_3701	V_2924	Zn2062	Zr3391
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.99833	.46603	.00382	.45610	1.0248	.01478	.46458	.50169	.49790
Stddev	.00073	.00170	.00029	.00132	.0011	.00266	.00118	.00096	.00052
%RSD	.07329	.36557	7.4876	.29035	.10402	18.028	.25431	.19149	.10511

#1	.99885	.46482	.00402	.45704	1.0241	.01666	.46542	.50237	.49753
#2	.99781	.46723	.00362	.45516	1.0256	.01290	.46375	.50101	.49827

Check ?	Chk Pass	Chk Pass	None	Chk Pass	Chk Pass	None	Chk Pass	Chk Pass	Chk Pass
Value									
Range									

Int. Std.	Y_2243	Y_3600	Y_3774
Units	Cts/S	Cts/S	Cts/S
Avg	1518.4	31958.	5664.4
Stddev	.9	14.	55.1
%RSD	.05610	.04233	.97194

#1	1519.0	31948.	5703.3
#2	1517.8	31967.	5625.4

Sample Name: ccb Acquired: 5/21/2016 1:31:15 Type: QC
Method: 6500_026(v10) Mode: CONC Corr. Factor: 1.000000
User: kellyca Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	Ag3280	Al1670	As1890	B_2089	Ba4554	Be3130	Bi2230	Ca3179	Cd2288	Co2286	Cr2055
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.00090	-.00140	-.00144	W .00166	.00005	-.00013	-.00289	.00037	-.00009	-.00036	-.00013
Stddev	.00056	.00186	.00140	.00062	.00021	.00000	.00006	.00045	.00021	.00004	.00007
%RSD	62.752	132.29	96.822	37.333	399.96	3.7687	2.0904	123.45	237.24	11.400	55.496

#1	.00130	-.00009	-.00046	.00210	.00020	-.00013	-.00293	.00005	.00006	-.00039	-.00018
#2	.00050	-.00272	-.00243	.00122	-.00009	-.00012	-.00284	.00069	-.00024	-.00034	-.00008

Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Warn	Chk Pass	Chk Pass	None	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit				.00156							
Low Limit				-.00156							

Elem	Cu3247	Fe2599	K_7664	Li6707	Mg2790	Mn2576	Mo2020	Na5895	Ni2316	P_1782	Pb2203
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	W -.00206	.00074	.08713	-.00002	.00804	-.00003	.00077	.02605	.00002	.00044	.00011
Stddev	.00019	.00054	.03016	.00018	.00091	.00003	.00012	.00718	.00056	.00044	.00080
%RSD	9.2268	73.262	34.609	918.67	11.341	94.282	15.774	27.556	2372.3	98.210	753.32

#1	-.00219	.00112	.10845	.00011	.00869	-.00001	.00085	.03113	-.00037	.00014	.00068
#2	-.00192	.00035	.06581	-.00015	.00740	-.00005	.00068	.02098	.00042	.00075	-.00046

Check ?	Chk Warn	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit	.00136										
Low Limit	-.00136										

Elem	S_1820	Sb2068	Se1960	Si2881	Sn1899	Sr4077	Th2837	Ti3349	Ti1908	U_3701	V_2924
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.00593	.00268	-.00087	.00243	.00090	.00013	-.00188	.00031	-.00325	.02223	.00012
Stddev	.00109	.00001	.00628	.00322	.00216	.00003	.00071	.00022	.00158	.00365	.00028
%RSD	18.369	.51214	723.82	132.37	240.14	24.657	37.754	70.091	48.773	16.403	228.53

#1	.00516	.00269	-.00531	.00471	.00243	.00011	-.00238	.00016	-.00213	.01965	.00032
#2	.00670	.00267	.00357	.00016	-.00063	.00016	-.00138	.00046	-.00437	.02480	-.00007

Check ?	None	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit											
Low Limit											

Elem	Zn2062	Zr3391
Units	ppm	ppm
Avg	-.00028	.00072
Stddev	.00036	.00157
%RSD	128.52	217.48

#1	-.00053	-.00039
#2	-.00003	.00184

Check ?	Chk Pass	Chk Pass
High Limit		
Low Limit		

Int. Std.	Y_2243	Y_3600	Y_3774
Units	Cts/S	Cts/S	Cts/S
Avg	1540.5	32683.	5693.5
Stddev	4.2	29.	23.5
%RSD	.27217	.08883	.41235

#1	1537.6	32663.	5710.1
#2	1543.5	32704.	5676.9

Sample Name: ccvl-3903059 Acquired: 5/21/2016 1:34:02 Type: QC
Method: 6500_026(v10) Mode: CONC Corr. Factor: 1.000000
User: kellyca Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	Ag3280	Al1670	As1890	B_2089	Ba4554	Be3130	Bi2230	Ca3179	Cd2288	Co2286	Cr2055	Cu3247
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.01004	.10637	.01453	.11277	.00993	.00085	.11656	.20468	.00543	.01067	.01066	.01347
Stddev	.00026	.00051	.00171	.00056	.00009	.00002	.00036	.00102	.00013	.00043	.00007	.00057
%RSD	2.5670	.47786	11.764	.49455	.87635	2.2914	.31312	.49811	2.4837	4.0340	.61488	4.2301

#1	.01023	.10673	.01574	.11317	.00987	.00087	.11682	.20541	.00534	.01037	.01070	.01307
#2	.00986	.10601	.01332	.11238	.00999	.00084	.11630	.20396	.00553	.01097	.01061	.01388

Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Value												
Range												

Elem	Fe2599	K_7664	Li6707	Mg2790	Mn2576	Mo2020	Na5895	Ni2316	P_1782	Pb2203	S_1820	Sb2068
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.11056	3.1736	.01027	.20570	.01019	.02163	1.0527	.04175	2.9867	.00814	.00779	.02194
Stddev	.00307	.0135	.00010	.00192	.00005	.00016	.0007	.00031	.0012	.00019	.00112	.00091
%RSD	2.7783	.42479	.97491	.93150	.46159	.72756	.06665	.75019	.04148	2.3111	14.378	4.1477

#1	.11274	3.1832	.01034	.20434	.01016	.02175	1.0522	.04197	2.9876	.00801	.00859	.02259
#2	.10839	3.1641	.01020	.20705	.01023	.02152	1.0532	.04153	2.9858	.00827	.00700	.02130

Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	None	Chk Pass
Value												
Range												

Elem	Se1960	Si2881	Sn1899	Sr4077	Th2837	Ti3349	Ti1908	U_3701	V_2924	Zn2062	Zr3391
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.01230	.49421	.10277	.00937	.01278	.00908	.01715	F .08494	.00893	.01990	.01514
Stddev	.01017	.00094	.00212	.00006	.00040	.00060	.00282	.00819	.00029	.00047	.00068
%RSD	82.741	.19055	2.0580	.59498	3.1072	6.5999	16.465	9.6417	3.2828	2.3538	4.4712

#1	.01949	.49487	.10427	.00933	.01306	.00950	.01516	.09073	.00914	.02024	.01562
#2	.00510	.49354	.10128	.00941	.01250	.00866	.01915	.07915	.00872	.01957	.01467

Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Fail	Chk Pass	Chk Pass	Chk Pass
Value								.06000			
Range								30.000%			

Int. Std.	Y_2243	Y_3600	Y_3774
Units	Cts/S	Cts/S	Cts/S
Avg	1552.3	32886.	5658.7
Stddev	3.4	65.	21.4
%RSD	.21675	.19643	.37741

#1	1554.7	32840.	5673.8
#2	1550.0	32932.	5643.6

Sample Name: MB 280-325958/1-A Acquired: 5/21/2016 1:36:47 Type: Unk
Method: 6500_026(v10) Mode: CONC Corr. Factor: 1.000000
User: kellyca Custom ID1: 5/19 Custom ID2: Custom ID3:
Comment: 325958 6010C

Elem	Ag3280	Al1670	As1890	B_2089	Ba4554	Be3130	Bi2230	Ca3179	Cd2288
Line	328.068 {103}	167.079 {502}	189.042 {478}	208.959 {461}	455.403 { 74}	313.042 {108}	223.061 {451}	317.933 {106}	228.802 {447}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.00049	.00208	-.00328	.00126	-.00009	-.00008	-.00262	.00889	.00020
Stddev	.00027	.00075	.00066	.00058	.00005	.00002	.00189	.00045	.00005
%RSD	56.020	35.918	20.047	46.262	51.063	27.219	72.112	5.0729	23.450

#1	.00029	.00155	-.00375	.00167	-.00013	-.00006	-.00395	.00857	.00017
#2	.00068	.00260	-.00282	.00084	-.00006	-.00009	-.00128	.00921	.00024

Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Elem	Co2286	Cr2055	Cu3247	Fe2599	K_7664	Li6707	Mg2790	Mn2576	Mo2020
Line	228.616 {447}	205.560 {464}	324.754 {104}	259.940 {130}	766.490 { 44}	670.784 { 50}	279.079 {121}2	257.610 {131}	202.030 {467}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	-.00040	.00413	-.00196	.01123	.04370	-.00107	.00376	.00012	.00021
Stddev	.00006	.00003	.00022	.00184	.02630	.00057	.00042	.00005	.00026
%RSD	15.522	.77756	11.131	16.371	60.191	53.579	11.253	46.419	121.25

#1	-.00044	.00411	-.00180	.01253	.06230	-.00067	.00346	.00008	.00039
#2	-.00036	.00416	-.00211	.00993	.02510	-.00148	.00406	.00016	.00003

Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Elem	Na5895	Ni2316	P_1782	Pb2203	S_1820	Sb2068	Se1960	Si2881	Sn1899
Line	589.592 { 57}	231.604 {446}	178.284 {489}	220.353 {453}	182.034 {485}	206.833 {463}	196.090 {472}	288.158 {117}	189.989 {477}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.02081	.00020	.00205	-.00074	.01065	.00291	.00009	-.00252	.00116
Stddev	.00348	.00025	.00161	.00144	.00043	.00247	.00649	.01373	.00110
%RSD	16.703	126.16	78.123	193.56	4.0518	84.681	6932.8	545.69	95.209

#1	.01835	.00002	.00319	-.00176	.01035	.00465	-.00450	-.01222	.00038
#2	.02327	.00038	.00092	.00027	.01096	.00117	.00468	.00719	.00193

Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Elem	Sr4077	Th2837	Ti3349	Ti1908	U_3701	V_2924	Zn2062	Zr3391
Line	407.771 { 83}	283.730 {119}	334.904 {101}	190.856 {477}	370.152 { 91}	292.402 {115}	206.200 {163}	339.198 { 99}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.00004	-.00093	.00020	-.00085	.00749	.00038	.00078	.00037
Stddev	.00002	.00109	.00018	.00000	.00505	.00002	.00017	.00056
%RSD	50.954	117.61	89.799	.15402	67.384	4.9440	21.147	153.38

#1	.00003	-.00170	.00007	-.00084	.01106	.00040	.00090	-.00003
#2	.00006	-.00016	.00033	-.00085	.00392	.00037	.00066	.00076

Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit								
Low Limit								

Int. Std.	Y_2243	Y_3600	Y_3774
Line	224.306 {450}	360.073 { 94}	377.433 { 89}
Units	Cts/S	Cts/S	Cts/S
Avg	1545.6	32925.	5595.5
Stddev	1.6	185.	60.0
%RSD	.10671	.56048	1.0728

#1	1546.7	32794.	5638.0
#2	1544.4	33055.	5553.1

Sample Name: LCS 280-325958/2-A Acquired: 5/21/2016 1:39:34 Type: Unk

Method: 6500_026(v10) Mode: CONC Corr. Factor: 1.000000

User: kellyca Custom ID1: Custom ID2: Custom ID3:

Comment: 325958 6010C

Elem	Ag3280	Al1670	As1890	B_2089	Ba4554	Be3130	Bi2230	Ca3179	Cd2288
Line	328.068 {103}	167.079 {502}	189.042 {478}	208.959 {461}	455.403 { 74}	313.042 {108}	223.061 {451}	317.933 {106}	228.802 {447}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.04803	2.0199	1.0754	F 1.1398	2.0174	.05222	F 2.2932	51.068	.10833
Stddev	.00040	.0052	.0040	.0043	.0104	.00043	.0140	.013	.00009
%RSD	.82618	.25692	.37186	.37925	.51425	.81897	.61064	.02464	.08385

#1	.04775	2.0236	1.0726	1.1367	2.0100	.05191	2.2833	51.077	.10839
#2	.04832	2.0162	1.0783	1.1428	2.0247	.05252	2.3031	51.059	.10826

Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Fail	Chk Pass	Chk Pass	Chk Fail	Chk Pass	Chk Pass
High Limit				1.1000			2.2000		
Low Limit				.89000			1.8000		

Elem	Co2286	Cr2055	Cu3247	Fe2599	K_7664	Li6707	Mg2790	Mn2576	Mo2020
Line	228.616 {447}	205.560 {464}	324.754 {104}	259.940 {130}	766.490 { 44}	670.784 { 50}	279.079 {121}2	257.610 {131}	202.030 {467}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.53264	F .21272	.24767	1.0165	52.737	1.0860	48.562	.49225	F 1.1196
Stddev	.00250	.00019	.00089	.0011	.352	.0058	.119	.00018	.0013
%RSD	.46864	.08736	.35984	.10755	.66824	.53599	.24533	.03663	.11914

#1	.53088	.21259	.24704	1.0173	52.488	1.0819	48.478	.49212	1.1206
#2	.53441	.21285	.24830	1.0158	52.986	1.0901	48.646	.49237	1.1187

Check ?	Chk Pass	Chk Fail	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Fail
High Limit		.05750							1.1000
Low Limit		.04300							.90000

Elem	Na8183	Ni2316	P_1782	Pb2203	S_1820	Sb2068	Se1960	Si2881	Sn1899
Line	818.326 { 41}	231.604 {446}	178.284 {489}	220.353 {453}	182.034 {485}	206.833 {463}	196.090 {472}	288.158 {117}	189.989 {477}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	51.646	.50752	10.718	.53617	2.1613	F .54016	2.0764	10.223	1.9861
Stddev	.249	.00013	.019	.00327	.0180	.00141	.0151	.090	.0015
%RSD	.48143	.02658	.17737	.60927	.83360	.26088	.72816	.88427	.07408

#1	51.470	.50742	10.705	.53848	2.1486	.53917	2.0657	10.159	1.9871
#2	51.822	.50761	10.731	.53386	2.1741	.54116	2.0871	10.287	1.9850

Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Fail	Chk Pass	Chk Pass	Chk Pass
High Limit						.54000			
Low Limit						.44000			

Elem	Sr4077	Th2837	Ti3349	Ti1908	U_3701	V_2924	Zn2062	Zr3391
Line	407.771 { 83}	283.730 {119}	334.904 {101}	190.856 {477}	370.152 { 91}	292.402 {115}	206.200 {163}	339.198 { 99}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.93475	.98329	.91851	2.0254	2.0874	.46122	.49716	.49654
Stddev	.00399	.00395	.00317	.0037	.0286	.00126	.00220	.00713
%RSD	.42638	.40134	.34509	.18121	1.3726	.27364	.44238	1.4353

#1	.93194	.98608	.92076	2.0228	2.1076	.46211	.49561	.49150
#2	.93757	.98050	.91627	2.0280	2.0671	.46033	.49872	.50158

Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit								
Low Limit								

Int. Std.	Y_2243	Y_3600	Y_3774
Line	224.306 {450}	360.073 { 94}	377.433 { 89}
Units	Cts/S	Cts/S	Cts/S
Avg	1473.9	31440.	5695.1
Stddev	2.0	37.	19.0
%RSD	.13864	.11622	.33355

#1	1475.3	31466.	5681.7
#2	1472.4	31415.	5708.6

Sample Name: 280-83295-B-1-A Acquired: 5/21/2016 1:42:08 Type: Unk
Method: 6500_026(v10) Mode: CONC Corr. Factor: 1.000000
User: kellyca Custom ID1: Custom ID2: Custom ID3:
Comment: 325958 6010C

Elem	Ag3280	Al3092	As1890	B_2089	Ba4554	Be3130	Bi2230	Ca3179	Cd2288
Line	328.068 {103}	309.271 {109}	189.042 {478}	208.959 {461}	455.403 { 74}	313.042 {108}	223.061 {451}	317.933 {106}	228.802 {447}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.00189	8.6977	.00245	.46245	.22395	.00036	-.00487	53.284	.00344
Stddev	.00008	.0559	.00147	.00004	.00022	.00004	.00044	.064	.00004
%RSD	4.1476	.64295	59.877	.00866	.09733	9.7354	9.0515	.11973	1.0317

#1	.00194	8.7372	.00141	.46242	.22380	.00039	-.00518	53.239	.00341
#2	.00183	8.6581	.00349	.46248	.22410	.00034	-.00456	53.329	.00346

Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Elem	Co2286	Cr2055	Cu3247	Fe2599	K_7664	Li6707	Mg2790	Mn2576	Mo2020
Line	228.616 {447}	205.560 {464}	324.754 {104}	259.940 {130}	766.490 { 44}	670.784 { 50}	279.079 {121}2	257.610 {131}	202.030 {467}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.00447	.02501	.15294	11.961	15.835	.03279	4.1783	.27451	.11460
Stddev	.00001	.00014	.00142	.016	.007	.00039	.0042	.00123	.00078
%RSD	.17350	.57289	.92965	.12975	.04349	1.2036	.10134	.44728	.67701

#1	.00447	.02511	.15395	11.950	15.830	.03307	4.1813	.27364	.11515
#2	.00446	.02491	.15194	11.972	15.839	.03251	4.1753	.27538	.11405

Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Elem	Na8183	Ni2316	P_1782	Pb2203	S_1820	Sb2068	Se1960	Si2881	Sn1899
Line	818.326 { 41}	231.604 {446}	178.284 {489}	220.353 {453}	182.034 {485}	206.833 {463}	196.090 {472}	288.158 {117}	189.989 {477}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	31.710	.02280	1.0565	.23131	14.535	.01640	.00320	22.945	.00842
Stddev	.089	.00073	.0005	.00090	.001	.00081	.00336	.052	.00068
%RSD	.27989	3.2168	.04552	.38913	.00931	4.9671	104.96	.22838	8.1158

#1	31.772	.02332	1.0562	.23194	14.534	.01698	.00082	22.908	.00794
#2	31.647	.02229	1.0569	.23067	14.536	.01582	.00557	22.982	.00891

Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Elem	Sr4077	Th2837	Ti3349	Ti1908	U_3701	V_2924	Zn2062	Zr3391
Line	407.771 { 83}	283.730 {119}	334.904 {101}	190.856 {477}	370.152 { 91}	292.402 {115}	206.200 {163}	339.198 { 99}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.25888	-.00112	.33262	-.00261	.01423	.03675	.49840	.00832
Stddev	.00031	.00185	.00101	.00081	.00155	.00018	.00068	.00168
%RSD	.11920	165.20	.30276	31.135	10.904	.47963	.13732	20.224

#1	.25910	-.00243	.33333	-.00319	.01533	.03662	.49791	.00950
#2	.25866	.00019	.33190	-.00204	.01313	.03687	.49888	.00713

Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit								
Low Limit								

Int. Std.	Y_2243	Y_3600	Y_3774
Line	224.306 {450}	360.073 { 94}	377.433 { 89}
Units	Cts/S	Cts/S	Cts/S
Avg	1493.2	32413.	6032.7
Stddev	.5	20.	.4
%RSD	.03264	.06132	.00630

#1	1492.8	32427.	6032.5
#2	1493.5	32399.	6033.0

Sample Name: 280-83309-A-1-A Acquired: 5/21/2016 1:44:49 Type: Unk
Method: 6500_026(v10) Mode: CONC Corr. Factor: 1.000000
User: kellyca Custom ID1: Custom ID2: Custom ID3:
Comment: 325958 6010C

Elem	Ag3280	Al1670	As1890	B_2089	Ba4554	Be3130	Bi2230	Ca3179	Cd2288
Line	328.068 {103}	167.079 {502}	189.042 {478}	208.959 {461}	455.403 { 74}	313.042 {108}	223.061 {451}	317.933 {106}	228.802 {447}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.00018	.02350	.00776	.57580	.01768	-.00016	-.00051	428.54	.00125
Stddev	.00011	.00076	.00605	.00196	.00007	.00009	.00300	.92	.00022
%RSD	59.294	3.2236	77.935	.34035	.42174	54.120	592.90	.21424	17.353

#1	.00010	.02297	.00349	.57719	.01773	-.00010	-.00263	427.89	.00140
#2	.00025	.02404	.01204	.57442	.01762	-.00022	.00162	429.19	.00109

Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Elem	Co2286	Cr2055	Cu3247	Fe2599	K_7664	Li6707	Mg2790	Mn2576	Mo2020
Line	228.616 {447}	205.560 {464}	324.754 {104}	259.940 {130}	766.490 { 44}	670.784 { 50}	279.079 {121}2	257.610 {131}	202.030 {467}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.00806	.00076	.00095	.61156	47.159	3.0000	111.96	.34806	.00172
Stddev	.00059	.00006	.00017	.00239	.229	.0106	.07	.00083	.00040
%RSD	7.3096	7.2426	17.998	.39119	.48612	.35408	.06674	.23736	23.245

#1	.00848	.00080	.00083	.61325	46.997	2.9925	111.91	.34747	.00200
#2	.00765	.00072	.00108	.60987	47.321	3.0075	112.01	.34864	.00143

Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Elem	Na8183	Ni2316	P_1782	Pb2203	S_1820	Sb2068	Se1960	Si2881	Sn1899
Line	818.326 { 41}	231.604 {446}	178.284 {489}	220.353 {453}	182.034 {485}	206.833 {463}	196.090 {472}	288.158 {117}	189.989 {477}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	W 1491.7	.00417	.01778	W -.00559	F 1362.7	.00087	-.00363	4.6613	-.00208
Stddev	4.8	.00005	.00153	.00129	2.3	.00573	.00218	.0622	.00014
%RSD	.32108	1.1065	8.6189	22.994	.17215	656.17	60.089	1.3342	6.9656

#1	1488.3	.00421	.01887	-.00650	1364.3	.00492	-.00209	4.6173	-.00197
#2	1495.0	.00414	.01670	-.00468	1361.0	-.00318	-.00518	4.7052	-.00218

Check ?	Chk Warn	Chk Pass	Chk Pass	Chk Warn	Chk Fail	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit	500.00			10.000	200.00				
Low Limit	10.000			-.00300	-.02000				

Elem	Sr4077	Th2837	Ti3349	Ti1908	U_3701	V_2924	Zn2062	Zr3391	
Line	407.771 { 83}	283.730 {119}	334.904 {101}	190.856 {477}	370.152 { 91}	292.402 {115}	206.200 {163}	339.198 { 99}	
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	
Avg	8.8750	-.00520	.00230	-.00253	-.00350	.00018	.02488	.00022	
Stddev	.0715	.00413	.00006	.00105	.00194	.00056	.00026	.00139	
%RSD	.80505	79.266	2.3889	41.638	55.414	316.65	1.0565	633.79	

#1	8.8244	-.00229	.00226	-.00327	-.00213	.00057	.02507	-.00076	
#2	8.9255	-.00812	.00234	-.00178	-.00487	-.00022	.02469	.00120	

Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	
High Limit									
Low Limit									

Int. Std.	Y_2243	Y_3600	Y_3774						
Line	224.306 {450}	360.073 { 94}	377.433 { 89}						
Units	Cts/S	Cts/S	Cts/S						
Avg	1306.4	27641.	5570.6						
Stddev	1.1	9.	4.0						
%RSD	.08242	.03190	.07167						

#1	1305.6	27647.	5573.4						
#2	1307.1	27634.	5567.7						

Sample Name: 280-83309-A-2-A Acquired: 5/21/2016 1:48:06 Type: Unk
Method: 6500_026(v10) Mode: CONC Corr. Factor: 1.000000
User: kellyca Custom ID1: Custom ID2: Custom ID3:
Comment: 325958 6010C

Elem	Ag3280	Al3092	As1890	B_2089	Ba4554	Be3130	Bi2230	Ca3179	Cd2288
Line	328.068 {103}	309.271 {109}	189.042 {478}	208.959 {461}	455.403 { 74}	313.042 {108}	223.061 {451}	317.933 {106}	228.802 {447}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	-.00001	6.0824	.00606	.33187	.24584	.00056	-.00234	147.77	.00089
Stddev	.00040	.0036	.00088	.00079	.00083	.00006	.00132	.41	.00013
%RSD	4337.2	.05841	14.587	.23860	.33758	11.396	56.371	.27901	15.136

#1	-.00029	6.0849	.00543	.33243	.24525	.00051	-.00327	147.48	.00098
#2	.00027	6.0799	.00668	.33131	.24643	.00060	-.00141	148.06	.00079

Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Elem	Co2286	Cr2055	Cu3247	Fe2599	K_7664	Li6707	Mg2790	Mn2576	Mo2020
Line	228.616 {447}	205.560 {464}	324.754 {104}	259.940 {130}	766.490 { 44}	670.784 { 50}	279.079 {121}2	257.610 {131}	202.030 {467}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.00921	.00777	.00742	6.8776	23.521	1.3141	60.294	.70177	.08361
Stddev	.00025	.00061	.00003	.0384	.217	.0062	.207	.00205	.00059
%RSD	2.7357	7.8202	.36435	.55845	.92306	.46795	.34343	.29202	.70446

#1	.00903	.00820	.00744	6.8505	23.367	1.3097	60.148	.70032	.08403
#2	.00938	.00734	.00741	6.9048	23.674	1.3184	60.440	.70322	.08320

Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Elem	Na8183	Ni2316	P_1782	Pb2203	S_1820	Sb2068	Se1960	Si2881	Sn1899
Line	818.326 { 41}	231.604 {446}	178.284 {489}	220.353 {453}	182.034 {485}	206.833 {463}	196.090 {472}	288.158 {117}	189.989 {477}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	W 1043.6	.00843	.16328	.00234	F 706.28	.00096	.00046	17.928	.00067
Stddev	2.1	.00031	.00115	.00043	3.52	.00001	.00420	.161	.00105
%RSD	.20488	3.7248	.70210	18.551	.49781	.90189	909.56	.90023	155.41

#1	1042.1	.00865	.16409	.00265	708.77	.00095	.00343	17.814	-.00007
#2	1045.1	.00821	.16247	.00203	703.80	.00096	-.00251	18.042	.00141

Check ?	Chk Warn	Chk Pass	Chk Pass	Chk Pass	Chk Fail	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit	500.00				200.00				
Low Limit	10.000				-.02000				

Elem	Sr4077	Th2837	Ti3349	Ti1908	U_3701	V_2924	Zn2062	Zr3391	
Line	407.771 { 83}	283.730 {119}	334.904 {101}	190.856 {477}	370.152 { 91}	292.402 {115}	206.200 {163}	339.198 { 99}	
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	
Avg	6.5801	.00001	.04182	-.00679	.02301	.00596	.08216	.00393	
Stddev	.0116	.00083	.00131	.00275	.03055	.00090	.00240	.00249	
%RSD	.17602	10894.	3.1266	40.455	132.80	15.184	2.9245	63.510	

#1	6.5883	-.00058	.04090	-.00485	.04461	.00660	.08046	.00569	
#2	6.5719	.00059	.04275	-.00874	.00140	.00532	.08386	.00216	

Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	
High Limit									
Low Limit									

Int. Std.	Y_2243	Y_3600	Y_3774						
Line	224.306 {450}	360.073 { 94}	377.433 { 89}						
Units	Cts/S	Cts/S	Cts/S						
Avg	1383.6	29150.	5675.3						
Stddev	3.5	30.	11.9						
%RSD	.25411	.10368	.20891						

#1	1381.1	29171.	5666.9						
#2	1386.1	29128.	5683.7						

Sample Name: 280-83309-A-2-A SD@5 Acquired: 5/21/2016 1:51:21 Type: Unk
Method: 6500_026(v10) Mode: CONC Corr. Factor: 1.000000
User: kellyca Custom ID1: Custom ID2: Custom ID3:
Comment: 325958 6010C

Elem	Ag3280	Al1670	As1890	B_2089	Ba4554	Be3130	Bi2230	Ca3179	Cd2288
Line	328.068 {103}	167.079 {502}	189.042 {478}	208.959 {461}	455.403 { 74}	313.042 {108}	223.061 {451}	317.933 {106}	228.802 {447}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.00060	1.3404	-.00143	.07075	.04958	-.00002	-.00071	30.064	.00007
Stddev	.00040	.0042	.00120	.00138	.00019	.00007	.00013	.082	.00038
%RSD	66.965	.31218	84.099	1.9565	.38917	284.77	17.775	.27352	528.29

#1	.00088	1.3374	-.00058	.06977	.04944	.00002	-.00062	30.006	.00034
#2	.00031	1.3433	-.00228	.07173	.04971	-.00007	-.00080	30.122	-.00019

Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Elem	Co2286	Cr2055	Cu3247	Fe2599	K_7664	Li6707	Mg2790	Mn2576	Mo2020
Line	228.616 {447}	205.560 {464}	324.754 {104}	259.940 {130}	766.490 { 44}	670.784 { 50}	279.079 {121}2	257.610 {131}	202.030 {467}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.00191	.00158	.00062	1.4242	4.5390	.25508	12.637	.14566	.01771
Stddev	.00003	.00018	.00028	.0142	.0046	.00180	.033	.00033	.00005
%RSD	1.5064	11.502	45.909	.99891	.10153	.70395	.25989	.22364	.29767

#1	.00193	.00145	.00042	1.4142	4.5423	.25381	12.614	.14542	.01767
#2	.00189	.00171	.00082	1.4343	4.5358	.25635	12.661	.14589	.01775

Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Elem	Na8183	Ni2316	P_1782	Pb2203	S_1820	Sb2068	Se1960	Si2881	Sn1899
Line	818.326 { 41}	231.604 {446}	178.284 {489}	220.353 {453}	182.034 {485}	206.833 {463}	196.090 {472}	288.158 {117}	189.989 {477}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	205.38	.00175	.02659	.00075	139.06	.00067	-.00176	3.5398	.00004
Stddev	1.25	.00004	.00342	.00153	.06	.00551	.00439	.0190	.00078
%RSD	.60967	2.0046	12.845	202.98	.04472	823.59	248.96	.53538	1874.9

#1	204.50	.00177	.02417	-.00033	139.02	.00457	.00134	3.5264	.00059
#2	206.27	.00172	.02900	.00183	139.10	-.00323	-.00486	3.5532	-.00051

Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Elem	Sr4077	Th2837	Ti3349	Ti1908	U_3701	V_2924	Zn2062	Zr3391
Line	407.771 { 83}	283.730 {119}	334.904 {101}	190.856 {477}	370.152 { 91}	292.402 {115}	206.200 {163}	339.198 { 99}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	1.3332	-.00280	.00860	-.00111	.01302	.00094	.01635	.00008
Stddev	.0090	.00044	.00012	.00183	.02070	.00101	.00130	.00130
%RSD	.67332	15.863	1.3716	164.03	159.01	107.42	7.9460	1609.6

#1	1.3268	-.00311	.00851	-.00241	-.00162	.00023	.01543	.00100
#2	1.3395	-.00249	.00868	.00018	.02766	.00166	.01727	-.00084

Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit								
Low Limit								

Int. Std.	Y_2243	Y_3600	Y_3774
Line	224.306 {450}	360.073 { 94}	377.433 { 89}
Units	Cts/S	Cts/S	Cts/S
Avg	1484.7	31437.	5810.9
Stddev	3.1	8.	21.6
%RSD	.20980	.02676	.37089

#1	1486.9	31431.	5826.1
#2	1482.5	31443.	5795.6

Sample Name: 280-83309-A-2-B MS Acquired: 5/21/2016 1:54:06 Type: Unk
Method: 6500_026(v10) Mode: CONC Corr. Factor: 1.000000
User: kellyca Custom ID1: Custom ID2: Custom ID3:
Comment: 325958 6010C

Elem	Ag3280	Al3092	As1890	B_2089	Ba4554	Be3130	Bi2230	Ca3179	Cd2288
Line	328.068 {103}	309.271 {109}	189.042 {478}	208.959 {461}	455.403 { 74}	313.042 {108}	223.061 {451}	317.933 {106}	228.802 {447}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.05135	20.802	1.1205	1.4145	2.2049	.05134	2.2638	195.68	.11141
Stddev	.00017	.090	.0138	.0034	.0092	.00046	.0009	1.48	.00014
%RSD	.34059	.43459	1.2356	.24407	.41838	.90255	.03965	.75838	.12772

#1	.05123	20.739	1.1303	1.4170	2.1984	.05167	2.2644	196.73	.11151
#2	.05148	20.866	1.1107	1.4121	2.2114	.05102	2.2632	194.63	.11131

Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Elem	Co2286	Cr2055	Cu3247	Fe2599	K_7664	Li6707	Mg2790	Mn2576	Mo2020
Line	228.616 {447}	205.560 {464}	324.754 {104}	259.940 {130}	766.490 { 44}	670.784 { 50}	279.079 {121}2	257.610 {131}	202.030 {467}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.50012	W .20966	.26564	10.725	80.816	2.4464	105.62	1.1527	1.1353
Stddev	.00077	.00014	.00183	.046	.058	.0182	.10	.0015	.0026
%RSD	.15438	.06487	.68748	.43129	.07199	.74538	.09528	.12764	.22949

#1	.50067	.20976	.26435	10.757	80.775	2.4336	105.69	1.1537	1.1372
#2	.49957	.20957	.26693	10.692	80.858	2.4593	105.55	1.1516	1.1335

Check ?	Chk Pass	Chk Warn	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit		.10000							
Low Limit		-.01000							

Elem	Na8183	Ni2316	P_1782	Pb2203	S_1820	Sb2068	Se1960	Si2881	Sn1899
Line	818.326 { 41}	231.604 {446}	178.284 {489}	220.353 {453}	182.034 {485}	206.833 {463}	196.090 {472}	288.158 {117}	189.989 {477}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	W 1093.1	.47396	11.334	.48055	F 705.51	.52847	2.2590	W 51.823	1.7307
Stddev	.9	.00204	.046	.00246	1.65	.00443	.0021	.353	.0005
%RSD	.07871	.42982	.40504	.51191	.23331	.83764	.09081	.68213	.02663

#1	1092.5	.47541	11.366	.48229	706.67	.53160	2.2576	52.073	1.7310
#2	1093.7	.47252	11.302	.47882	704.34	.52534	2.2605	51.573	1.7304

Check ?	Chk Warn	Chk Pass	Chk Pass	Chk Pass	Chk Fail	Chk Pass	Chk Pass	Chk Warn	Chk Pass
High Limit	500.00				200.00			50.000	
Low Limit	10.000				-.02000			-.10000	

Elem	Sr4077	Th2837	Ti3349	Ti1908	U_3701	V_2924	Zn2062	Zr3391	
Line	407.771 { 83}	283.730 {119}	334.904 {101}	190.856 {477}	370.152 { 91}	292.402 {115}	206.200 {163}	339.198 { 99}	
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	
Avg	7.4010	.96108	.92731	1.6597	1.9882	.45734	.54670	.49631	
Stddev	.0063	.00214	.00091	.0070	.0112	.00079	.00417	.00195	
%RSD	.08520	.22245	.09770	.41994	.56412	.17244	.76287	.39237	

#1	7.3965	.96260	.92795	1.6548	1.9962	.45789	.54965	.49494	
#2	7.4054	.95957	.92667	1.6647	1.9803	.45678	.54375	.49769	

Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	
High Limit									
Low Limit									

Int. Std.	Y_2243	Y_3600	Y_3774
Line	224.306 {450}	360.073 { 94}	377.433 { 89}
Units	Cts/S	Cts/S	Cts/S
Avg	1356.6	29027.	5613.7
Stddev	.1	11.	102.2
%RSD	.01049	.03711	1.8203

#1	1356.5	29020.	5541.4
#2	1356.7	29035.	5685.9

Sample Name: 280-83309-A-2-C MSD Acquired: 5/21/2016 1:57:13 Type: Unk
Method: 6500_026(v10) Mode: CONC Corr. Factor: 1.000000
User: kellyca Custom ID1: Custom ID2: Custom ID3:
Comment: 325958 6010C

Elem	Ag3280	Al3092	As1890	B_2089	Ba4554	Be3130	Bi2230	Ca3179	Cd2288
Line	328.068 {103}	309.271 {109}	189.042 {478}	208.959 {461}	455.403 { 74}	313.042 {108}	223.061 {451}	317.933 {106}	228.802 {447}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.05333	21.467	1.1568	1.4759	2.2723	.05294	2.3569	205.82	.11647
Stddev	.00027	.324	.0010	.0007	.0421	.00081	.0058	3.18	.00076
%RSD	.50635	1.5075	.09107	.04981	1.8510	1.5307	.24688	1.5463	.65581

#1	.05352	21.696	1.1575	1.4764	2.3021	.05351	2.3528	208.07	.11593
#2	.05314	21.238	1.1560	1.4754	2.2426	.05236	2.3610	203.57	.11701

Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Elem	Co2286	Cr2055	Cu3247	Fe2599	K_7664	Li6707	Mg2790	Mn2576	Mo2020
Line	228.616 {447}	205.560 {464}	324.754 {104}	259.940 {130}	766.490 { 44}	670.784 { 50}	279.079 {121}2	257.610 {131}	202.030 {467}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.52183	W .22086	.27176	11.088	83.645	2.5443	111.91	1.2300	1.1933
Stddev	.00030	.00007	.00031	.183	1.697	.0529	.13	.0031	.0044
%RSD	.05800	.03094	.11484	1.6487	2.0290	2.0789	.11323	.25196	.37238

#1	.52205	.22091	.27198	11.217	84.845	2.5817	111.82	1.2278	1.1964
#2	.52162	.22081	.27154	10.959	82.445	2.5069	112.00	1.2322	1.1902

Check ?	Chk Pass	Chk Warn	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit		.10000							
Low Limit		-.01000							

Elem	Na8183	Ni2316	P_1782	Pb2203	S_1820	Sb2068	Se1960	Si2881	Sn1899
Line	818.326 { 41}	231.604 {446}	178.284 {489}	220.353 {453}	182.034 {485}	206.833 {463}	196.090 {472}	288.158 {117}	189.989 {477}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	W 1151.7	.49252	11.765	.49750	F 747.96	.55189	2.3582	W 52.961	1.8035
Stddev	20.3	.00025	.007	.00073	1.20	.00058	.0005	.868	.0045
%RSD	1.7661	.05063	.06123	.14611	.16008	.10521	.01974	1.6381	.25174

#1	1166.1	.49270	11.770	.49802	748.81	.55230	2.3578	53.575	1.8003
#2	1137.3	.49234	11.760	.49699	747.11	.55148	2.3585	52.348	1.8067

Check ?	Chk Warn	Chk Pass	Chk Pass	Chk Pass	Chk Fail	Chk Pass	Chk Pass	Chk Warn	Chk Pass
High Limit	500.00				200.00			50.000	
Low Limit	10.000				-.02000			-.10000	

Elem	Sr4077	Th2837	Ti3349	Ti1908	U_3701	V_2924	Zn2062	Zr3391
Line	407.771 { 83}	283.730 {119}	334.904 {101}	190.856 {477}	370.152 { 91}	292.402 {115}	206.200 {163}	339.198 { 99}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	7.7187	1.0197	.97733	1.7277	2.0632	.48073	.58306	.51524
Stddev	.0780	.0018	.00425	.0040	.0018	.00145	.00072	.00888
%RSD	1.0109	.17127	.43530	.22908	.08728	.30204	.12359	1.7241

#1	7.7739	1.0185	.97432	1.7305	2.0620	.47970	.58255	.52152
#2	7.6635	1.0209	.98033	1.7249	2.0645	.48176	.58357	.50896

Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit								
Low Limit								

Int. Std.	Y_2243	Y_3600	Y_3774
Line	224.306 {450}	360.073 { 94}	377.433 { 89}
Units	Cts/S	Cts/S	Cts/S
Avg	1357.5	28636.	5617.6
Stddev	.8	7.	72.9
%RSD	.05558	.02355	1.2977

#1	1357.0	28632.	5566.0
#2	1358.0	28641.	5669.1

Sample Name: 280-83309-A-2-A PDS Acquired: 5/21/2016 2:00:21 Type: Unk
Method: 6500_026(v10) Mode: CONC Corr. Factor: 1.000000
User: kellyca Custom ID1: Custom ID2: Custom ID3:
Comment: 325958 6010C

Elem	Ag3280	Al3092	As1890	B_2089	Ba4554	Be3130	Bi2230	Ca3179	Cd2288
Line	328.068 {103}	309.271 {109}	189.042 {478}	208.959 {461}	455.403 {74}	313.042 {108}	223.061 {451}	317.933 {106}	228.802 {447}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.00570	6.8819	.22340	.43645	.33735	.05131	-.00379	163.37	.05733
Stddev	.00017	.0151	.00624	.00171	.00205	.00012	.00313	.15	.00012
%RSD	2.9250	.21887	2.7920	.39111	.60774	.22704	82.606	.09365	.20811

#1	.00582	6.8713	.22781	.43525	.33590	.05123	-.00157	163.27	.05742
#2	.00558	6.8926	.21899	.43766	.33880	.05139	-.00600	163.48	.05725

Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Elem	Co2286	Cr2055	Cu3247	Fe2599	K_7664	Li6707	Mg2790	Mn2576	Mo2020
Line	228.616 {447}	205.560 {464}	324.754 {104}	259.940 {130}	766.490 {44}	670.784 {50}	279.079 {121}2	257.610 {131}	202.030 {467}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.05896	.05699	.05817	7.6700	44.803	1.3921	77.390	.73545	.13637
Stddev	.00075	.00012	.00043	.0181	.209	.0109	.335	.00327	.00125
%RSD	1.2668	.21066	.74074	.23587	.46670	.78134	.43232	.44512	.91300

#1	.05843	.05708	.05787	7.6572	44.655	1.3844	77.627	.73776	.13725
#2	.05949	.05691	.05847	7.6828	44.950	1.3998	77.154	.73313	.13549

Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Elem	Na8183	Ni2316	P_1782	Pb2203	S_1820	Sb2068	Se1960	Si2881	Sn1899
Line	818.326 {41}	231.604 {446}	178.284 {489}	220.353 {453}	182.034 {485}	206.833 {463}	196.090 {472}	288.158 {117}	189.989 {477}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	W 1038.6	.05660	2.4344	.09834	F 693.01	.10853	.22488	22.568	.09441
Stddev	3.7	.00141	.0029	.00037	1.12	.00024	.00459	.057	.00345
%RSD	.35255	2.4848	.12121	.37951	.16127	.22485	2.0402	.25245	3.6540

#1	1036.1	.05760	2.4365	.09861	693.80	.10835	.22163	22.527	.09685
#2	1041.2	.05561	2.4323	.09808	692.22	.10870	.22812	22.608	.09197

Check ?	Chk Warn	Chk Pass	Chk Pass	Chk Pass	Chk Fail	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit	500.00				200.00				
Low Limit	10.000				-.02000				

Elem	Sr4077	Th2837	Ti3349	Ti1908	U_3701	V_2924	Zn2062	Zr3391
Line	407.771 {83}	283.730 {119}	334.904 {101}	190.856 {477}	370.152 {91}	292.402 {115}	206.200 {163}	339.198 {99}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	6.3655	.19680	.08710	.16880	.52510	.05067	.27832	.05119
Stddev	.0095	.00129	.00006	.00079	.00030	.00029	.00462	.00081
%RSD	.14862	.65645	.07373	.46835	.05798	.57772	1.6607	1.5769

#1	6.3588	.19771	.08706	.16936	.52532	.05087	.28159	.05062
#2	6.3722	.19589	.08715	.16824	.52489	.05046	.27505	.05176

Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit								
Low Limit								

Int. Std.	Y_2243	Y_3600	Y_3774
Line	224.306 {450}	360.073 {94}	377.433 {89}
Units	Cts/S	Cts/S	Cts/S
Avg	1371.6	28968.	5646.0
Stddev	2.9	96.	13.0
%RSD	.21141	.33071	.23080

#1	1369.5	28901.	5636.8
#2	1373.6	29036.	5655.2

Sample Name: 280-83309-B-3-A Acquired: 5/21/2016 2:03:36 Type: Unk
Method: 6500_026(v10) Mode: CONC Corr. Factor: 1.000000
User: kellyca Custom ID1: Custom ID2: Custom ID3:
Comment: 325958 6010C

Elem	Ag3280	Al3092	As1890	B_2089	Ba4554	Be3130	Bi2230	Ca3179	Cd2288
Line	328.068 {103}	309.271 {109}	189.042 {478}	208.959 {461}	455.403 { 74}	313.042 {108}	223.061 {451}	317.933 {106}	228.802 {447}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	-0.00112	176.95	.14230	.27189	2.1224	.02473	.00869	215.12	.00623
Stddev	.00030	.43	.00576	.00016	.0073	.00001	.00095	.44	.00034
%RSD	26.438	.24244	4.0478	.06009	.34173	.03175	10.924	.20414	5.5322

#1	-0.00091	176.65	.13823	.27177	2.1173	.02473	.00802	214.81	.00647
#2	-0.00133	177.25	.14638	.27200	2.1275	.02472	.00936	215.43	.00598

Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Elem	Co2286	Cr2055	Cu3247	Fe2714	K_7664	Li6707	Mg2790	Mn2576	Mo2020
Line	228.616 {447}	205.560 {464}	324.754 {104}	271.441 {124}	766.490 { 44}	670.784 { 50}	279.079 {121}2	257.610 {131}	202.030 {467}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.14794	W .51605	.32228	298.01	51.815	.93779	52.787	4.4232	.08456
Stddev	.00018	.00003	.00056	.43	.121	.00291	.029	.0058	.00012
%RSD	.12206	.00616	.17441	.14500	.23280	.31006	.05476	.13145	.14614

#1	.14806	.51603	.32268	297.71	51.730	.93573	52.807	4.4273	.08465
#2	.14781	.51608	.32188	298.32	51.900	.93984	52.766	4.4190	.08447

Check ?	Chk Pass	Chk Warn	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit		.10000							
Low Limit		-.01000							

Elem	Na8183	Ni2316	P_1782	Pb2203	S_1820	Sb2068	Se1960	Si2881	Sn1899
Line	818.326 { 41}	231.604 {446}	178.284 {489}	220.353 {453}	182.034 {485}	206.833 {463}	196.090 {472}	288.158 {117}	189.989 {477}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	W 551.82	.18676	3.8981	.34933	F 230.72	.00095	.00883	W 51.568	.03033
Stddev	1.76	.00087	.0173	.00274	.55	.00081	.00471	.194	.00331
%RSD	.31865	.46336	.44457	.78574	.23919	85.122	53.330	.37533	10.911

#1	550.58	.18615	3.9103	.35127	231.11	.00038	.00550	51.431	.03267
#2	553.07	.18737	3.8858	.34739	230.33	.00153	.01216	51.705	.02799

Check ?	Chk Warn	Chk Pass	Chk Pass	Chk Pass	Chk Fail	Chk Pass	Chk Pass	Chk Warn	Chk Pass
High Limit	500.00				200.00			50.000	
Low Limit	10.000				-.02000			-.10000	

Elem	Sr4077	Th2837	Ti3349	Ti1908	U_3701	V_2924	Zn2062	Zr3391	
Line	407.771 { 83}	283.730 {119}	334.904 {101}	190.856 {477}	370.152 { 91}	292.402 {115}	206.200 {163}	339.198 { 99}	
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	
Avg	3.7058	.21577	.18141	-.00847	F -.22700	.18110	1.8955	.02813	
Stddev	.0179	.00074	.00046	.00337	.00191	.00096	.0080	.00070	
%RSD	.48326	.34343	.25185	39.792	.84182	.52930	.42473	2.4910	

#1	3.7185	.21630	.18109	-.01086	-.22565	.18042	1.9012	.02863	
#2	3.6931	.21525	.18173	-.00609	-.22835	.18178	1.8898	.02764	

Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Fail	Chk Pass	Chk Pass	Chk Pass	
High Limit					50.000				
Low Limit					-.10000				

Int. Std.	Y_2243	Y_3600	Y_3774						
Line	224.306 {450}	360.073 { 94}	377.433 { 89}						
Units	Cts/S	Cts/S	Cts/S						
Avg	1617.6	33941.	6846.6						
Stddev	.2	9.	10.1						
%RSD	.01099	.02771	.14683						

#1	1617.5	33947.	6853.7						
#2	1617.7	33934.	6839.5						

Sample Name: ccvh-3900196 Acquired: 5/21/2016 2:06:44 Type: QC
Method: 6500_026(v10) Mode: CONC Corr. Factor: 1.000000
User: kellyca Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	Ag3280	Al3092	As1890	B_2089	Ba4554	Be3130	Bi2230	Ca3179	Cd2288	Co2286	Cr2055	Cu3247
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	-.00503	F 44.478	-.00002	.00392	.00015	-.00039	1.0907	-.03174	-.00078	.00294	-.00075	.00356
Stddev	.00090	.284	.00004	.00006	.00007	.00002	.0059	.00215	.00003	.00027	.00018	.00004
%RSD	17.827	.63895	231.98	1.6113	45.052	5.4754	.53986	6.7643	4.0568	9.0711	23.379	1.0325

#1	-.00566	44.678	.00001	.00387	.00010	-.00038	1.0949	-.03022	-.00076	.00275	-.00088	.00353
#2	-.00439	44.277	-.00005	.00396	.00020	-.00041	1.0866	-.03325	-.00081	.00313	-.00063	.00359

Check ?	None	Chk Fail	None	None	None	None	Chk Pass	None	None	None	None	None
Value		50.000										
Range		-10.000%										

Elem	Fe2714	K_7664	Li6707	Mg2790	Mn2576	Mo2020	Na8183	Ni2316	P_1782	Pb2203	S_1820	Sb2068
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	45.301	.11498	.00035	.14875	-.00060	-.00225	247.38	-.00076	.00375	-.00014	5.1663	-.00190
Stddev	.290	.00668	.00009	.00013	.00012	.00032	1.01	.00001	.00255	.00020	.0145	.00024
%RSD	.63965	5.8085	27.123	.09030	20.342	14.035	.40828	.71403	68.042	140.82	.28058	12.574

#1	45.506	.11970	.00028	.14865	-.00051	-.00247	248.09	-.00076	.00556	-.00029	5.1766	-.00173
#2	45.096	.11026	.00041	.14884	-.00068	-.00202	246.67	-.00075	.00195	-.00000	5.1561	-.00207

Check ?	Chk Pass	None	None	None	None	None	Chk Pass	None	None	None	Chk Pass	None
Value												
Range												

Elem	Se1960	Si2881	Sn1899	Sr4077	Th2837	Ti3349	Ti1908	U_3701	V_2924	Zn2062	Zr3391
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	-.00051	.09744	.00082	.00072	4.8228	.02735	-.00407	9.9414	-.01654	-.00361	-.03136
Stddev	.00244	.00707	.00087	.00010	.0038	.00027	.00413	.0255	.00041	.00150	.00378
%RSD	481.11	7.2537	105.72	14.015	.07812	.98479	101.55	.25649	2.4944	41.551	12.061

#1	.00122	.09244	.00021	.00079	4.8201	.02716	-.00115	9.9234	-.01625	-.00255	-.02869
#2	-.00224	.10244	.00144	.00065	4.8254	.02754	-.00699	9.9595	-.01683	-.00467	-.03404

Check ?	None	None	None	None	Chk Pass	None	None	Chk Pass	None	None	None
Value											
Range											

Int. Std.	Y_2243	Y_3600	Y_3774
Units	Cts/S	Cts/S	Cts/S
Avg	1494.2	31711.	5745.3
Stddev	7.7	60.	35.1
%RSD	.51595	.18810	.61084

#1	1488.8	31754.	5720.5
#2	1499.7	31669.	5770.1

Sample Name: ccv-3900195 Acquired: 5/21/2016 2:09:34 Type: QC
Method: 6500_026(v10) Mode: CONC Corr. Factor: 1.000000
User: kellyca Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	Ag3280	Al1670	As1890	B_2089	Ba4554	Be3130	Bi2230	Ca3179	Cd2288	Co2286	Cr2055	Cu3247
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.47614	.52359	1.0373	F .55716	.49619	.50979	-.00497	4.9577	.54473	.54064	.52886	.48492
Stddev	.00019	.00177	.0044	.00219	.00179	.00076	.00085	.0218	.00107	.00102	.00183	.00102
%RSD	.03971	.33879	.42265	.39352	.35976	.14960	17.046	.43994	.19611	.18876	.34644	.20941

#1	.47628	.52484	1.0404	.55871	.49493	.50926	-.00557	4.9423	.54549	.54137	.53016	.48421
#2	.47601	.52233	1.0342	.55561	.49745	.51033	-.00438	4.9732	.54398	.53992	.52757	.48564

Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Fail	Chk Pass	Chk Pass	None	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Value				.50000								
Range				10.000%								

Elem	Fe2599	K_7664	Li6707	Mg2790	Mn2576	Mo2020	Na5895	Ni2316	P_1782	Pb2203	S_1820	Sb2068
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	2.4851	50.969	1.0687	19.144	.49489	.54390	5.3479	.51198	1.0229	1.0690	.02446	1.0290
Stddev	.0040	.133	.0024	.034	.00065	.00048	.0015	.00116	.0034	.0012	.00788	.0019
%RSD	.16305	.26040	.22296	.17927	.13128	.08820	.02768	.22598	.33166	.11070	32.206	.18100

#1	2.4822	50.875	1.0671	19.120	.49443	.54356	5.3469	.51280	1.0205	1.0681	.03003	1.0276
#2	2.4879	51.063	1.0704	19.169	.49535	.54424	5.3489	.51116	1.0253	1.0698	.01889	1.0303

Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	None	Chk Pass
Value												
Range												

Elem	Se1960	Si2881	Sn1899	Sr4077	Th2837	Ti3349	Ti1908	U_3701	V_2924	Zn2062	Zr3391
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	1.0071	5.0578	.99661	.46209	.00319	.45077	1.0278	.02990	.45480	.49329	.49582
Stddev	.0025	.0391	.00034	.00182	.00196	.00012	.0035	.01193	.00071	.00428	.00158
%RSD	.24563	.77408	.03448	.39369	61.396	.02738	.34400	39.888	.15691	.86693	.31908

#1	1.0088	5.0301	.99637	.46080	.00458	.45085	1.0303	.02147	.45429	.49632	.49470
#2	1.0053	5.0854	.99686	.46338	.00181	.45068	1.0253	.03833	.45530	.49027	.49694

Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	None	Chk Pass	Chk Pass	None	Chk Pass	Chk Pass	Chk Pass
Value											
Range											

Int. Std.	Y_2243	Y_3600	Y_3774
Units	Cts/S	Cts/S	Cts/S
Avg	1517.6	32506.	5904.2
Stddev	.5	11.	15.3
%RSD	.03245	.03510	.25994

#1	1517.2	32514.	5915.1
#2	1517.9	32497.	5893.4

Sample Name: ccb Acquired: 5/21/2016 2:12:12 Type: QC
Method: 6500_026(v10) Mode: CONC Corr. Factor: 1.000000
User: kellyca Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	Ag3280	Al1670	As1890	B_2089	Ba4554	Be3130	Bi2230	Ca3179	Cd2288	Co2286	Cr2055
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	W .00096	.00183	.00300	W .00275	.00002	-.00003	-.00480	-.00385	.00009	-.00059	.00010
Stddev	.00017	.00021	.00801	.00018	.00008	.00003	.00004	.00032	.00000	.00048	.00004
%RSD	17.419	11.719	266.70	6.5944	463.43	85.730	.90472	8.2680	3.3457	81.741	41.714

#1	.00108	.00168	-.00266	.00288	.00008	-.00005	-.00477	-.00362	.00009	-.00092	.00013
#2	.00085	.00198	.00867	.00262	-.00004	-.00001	-.00483	-.00407	.00009	-.00025	.00007

Check ?	Chk Warn	Chk Pass	Chk Pass	Chk Warn	Chk Pass	Chk Pass	None	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit	.00093			.00156							
Low Limit	-.00093			-.00156							

Elem	Cu3247	Fe2599	K_7664	Li6707	Mg2790	Mn2576	Mo2020	Na5895	Ni2316	P_1782	Pb2203
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	W -.00187	.00593	.12719	-.00010	.00333	.00009	.00042	W .10711	-.00026	-.00382	-.00039
Stddev	.00011	.00196	.01027	.00041	.00174	.00001	.00000	.00907	.00039	.00290	.00163
%RSD	5.8286	33.012	8.0712	411.49	52.248	7.0670	.93683	8.4669	147.51	75.779	416.33

#1	-.00195	.00732	.11993	-.00039	.00210	.00009	.00043	.11353	-.00054	-.00587	-.00154
#2	-.00179	.00455	.13445	.00019	.00456	.00009	.00042	.10070	.00001	-.00178	.00076

Check ?	Chk Warn	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Warn	Chk Pass	Chk Pass	Chk Pass
High Limit	.00136							.09160			
Low Limit	-.00136							-.09160			

Elem	S_1820	Sb2068	Se1960	Si2881	Sn1899	Sr4077	Th2837	Ti3349	Ti1908	U_3701	V_2924
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.02731	.00046	.00026	.00066	.00146	.00029	-.00138	.00016	-.00120	.00115	.00010
Stddev	.00181	.00270	.00210	.01242	.00059	.00008	.00089	.00014	.00034	.00118	.00023
%RSD	6.6219	587.29	794.49	1890.8	40.667	28.193	64.603	89.953	28.318	103.23	240.76

#1	.02858	.00237	-.00122	.00944	.00188	.00034	-.00200	.00026	-.00144	.00198	-.00007
#2	.02603	-.00145	.00175	-.00812	.00104	.00023	-.00075	.00006	-.00096	.00031	.00026

Check ?	None	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit											
Low Limit											

Elem	Zn2062	Zr3391
Units	ppm	ppm
Avg	-.00017	.00043
Stddev	.00070	.00107
%RSD	408.43	247.48

#1	.00032	-.00032
#2	-.00066	.00119

Check ?	Chk Pass	Chk Pass
High Limit		
Low Limit		

Int. Std.	Y_2243	Y_3600	Y_3774
Units	Cts/S	Cts/S	Cts/S
Avg	1540.2	33214.	5793.0
Stddev	3.4	181.	6.4
%RSD	.21819	.54428	.10969

#1	1542.6	33341.	5797.5
#2	1537.9	33086.	5788.5

Sample Name: ccvl-3903059 Acquired: 5/21/2016 2:15:00 Type: QC
Method: 6500_026(v10) Mode: CONC Corr. Factor: 1.000000
User: kellyca Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	Ag3280	Al1670	As1890	B_2089	Ba4554	Be3130	Bi2230	Ca3179	Cd2288	Co2286	Cr2055	Cu3247
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.01041	.10750	.01330	.11361	.01016	.00087	.11621	.20181	.00561	.01084	.01039	.01294
Stddev	.00010	.00021	.00515	.00012	.00009	.00005	.00117	.00049	.00030	.00033	.00019	.00037
%RSD	.92300	.19848	38.726	.10603	.90480	6.0853	1.0088	.24205	5.3476	3.0374	1.8706	2.8794

#1	.01034	.10765	.01695	.11369	.01010	.00083	.11704	.20147	.00539	.01061	.01025	.01320
#2	.01048	.10735	.00966	.11352	.01023	.00091	.11538	.20216	.00582	.01108	.01053	.01268

Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Value												
Range												

Elem	Fe2599	K_7664	Li6707	Mg2790	Mn2576	Mo2020	Na5895	Ni2316	P_1782	Pb2203	S_1820	Sb2068
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.10829	3.1658	.01023	.19992	.01016	.02182	1.1261	.04231	3.0286	.00724	.02176	.02103
Stddev	.00181	.0170	.00012	.00505	.00004	.00003	.0138	.00048	.0067	.00238	.00062	.00031
%RSD	1.6677	.53780	1.1907	2.5239	.42705	.14608	1.2237	1.1343	.22249	32.948	2.8607	1.4540

#1	.10957	3.1538	.01032	.20348	.01019	.02185	1.1163	.04265	3.0334	.00892	.02220	.02082
#2	.10701	3.1778	.01015	.19635	.01013	.02180	1.1358	.04197	3.0238	.00555	.02132	.02125

Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	None	Chk Pass
Value												
Range												

Elem	Se1960	Si2881	Sn1899	Sr4077	Th2837	Ti3349	Ti1908	U_3701	V_2924	Zn2062	Zr3391
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	F .01000	.50910	.10244	.00951	.01363	.00906	.01561	.07781	.00931	.01948	.01407
Stddev	.00084	.01365	.00018	.00004	.00024	.00026	.00129	.00134	.00009	.00212	.00104
%RSD	8.3765	2.6820	.17236	.43612	1.7574	2.8656	8.2348	1.7219	.92220	10.880	7.4076

#1	.01059	.49945	.10257	.00948	.01346	.00888	.01652	.07876	.00925	.01798	.01480
#2	.00941	.51876	.10232	.00954	.01380	.00925	.01470	.07686	.00937	.02098	.01333

Check ?	Chk Fail	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Value	.01500										
Range	-30.000%										

Int. Std.	Y_2243	Y_3600	Y_3774
Units	Cts/S	Cts/S	Cts/S
Avg	1548.9	33540.	5861.0
Stddev	1.3	82.	7.8
%RSD	.08340	.24381	.13232

#1	1547.9	33598.	5866.5
#2	1549.8	33482.	5855.5

Sample Name: MB 280-326260/1-A Acquired: 5/21/2016 2:17:46 Type: Unk

Method: 6500_026(v10) Mode: CONC Corr. Factor: 1.000000

User: kellyca Custom ID1: 5/20 Custom ID2: Custom ID3:

Comment: 326260 6010B

Elem	Ag3280	Al1670	As1890	B_2089	Ba4554	Be3130	Bi2230	Ca3179	Cd2288
Line	328.068 {103}	167.079 {502}	189.042 {478}	208.959 {461}	455.403 { 74}	313.042 {108}	223.061 {451}	317.933 {106}	228.802 {447}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.00024	.00416	W -.00717	.00210	.00009	-.00017	-.00296	.02190	.00005
Stddev	.00008	.00109	.00127	.00045	.00004	.00004	.00054	.00100	.00014
%RSD	34.870	26.177	17.766	21.573	43.230	22.306	18.247	4.5707	260.89

#1	.00030	.00493	-.00627	.00178	.00011	-.00014	-.00258	.02261	.00015
#2	.00018	.00339	-.00807	.00242	.00006	-.00019	-.00335	.02119	-.00004

Check ?	Chk Pass	Chk Pass	Chk Warn	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit			.00500						
Low Limit			-.00500						

Elem	Co2286	Cr2055	Cu3247	Fe2599	K_7664	Li6707	Mg2790	Mn2576	Mo2020
Line	228.616 {447}	205.560 {464}	324.754 {104}	259.940 {130}	766.490 { 44}	670.784 { 50}	279.079 {121}2	257.610 {131}	202.030 {467}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	-.00054	.00003	-.00198	.01359	.07916	-.00040	.00615	.00042	.00036
Stddev	.00013	.00033	.00000	.00044	.00704	.00030	.00219	.00002	.00024
%RSD	23.509	950.30	.02651	3.2233	8.8961	75.849	35.585	4.5227	66.614

#1	-.00063	-.00020	-.00198	.01390	.08414	-.00061	.00461	.00043	.00019
#2	-.00045	.00026	-.00198	.01328	.07418	-.00019	.00770	.00040	.00053

Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Elem	Na5895	Ni2316	P_1782	Pb2203	S_1820	Sb2068	Se1960	Si2881	Sn1899
Line	589.592 { 57}	231.604 {446}	178.284 {489}	220.353 {453}	182.034 {485}	206.833 {463}	196.090 {472}	288.158 {117}	189.989 {477}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.06766	.00024	-.00297	-.00164	.02215	.00056	.00270	.00541	.00155
Stddev	.00847	.00019	.00083	.00173	.00080	.00060	.00376	.01087	.00017
%RSD	12.524	79.891	27.866	105.21	3.6233	107.20	139.20	201.10	10.770

#1	.07365	.00037	-.00355	-.00042	.02158	.00014	.00004	.01309	.00144
#2	.06167	.00010	-.00238	-.00286	.02272	.00098	.00535	-.00228	.00167

Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Elem	Sr4077	Th2837	Ti3349	Ti1908	U_3701	V_2924	Zn2062	Zr3391	
Line	407.771 { 83}	283.730 {119}	334.904 {101}	190.856 {477}	370.152 { 91}	292.402 {115}	206.200 {163}	339.198 { 99}	
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	
Avg	.00018	-.00202	.00029	-.00307	W .05305	.00022	.00184	.00008	
Stddev	.00002	.00048	.00043	.00156	.00655	.00071	.00115	.00046	
%RSD	9.2544	23.941	146.93	50.989	12.341	315.45	62.517	601.04	

#1	.00017	-.00168	.00059	-.00196	.05768	-.00028	.00265	-.00025	
#2	.00020	-.00236	-.00001	-.00417	.04842	.00072	.00103	.00040	

Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Warn	Chk Pass	Chk Pass	Chk Pass	
High Limit					.05000				
Low Limit					-.05000				

Int. Std.	Y_2243	Y_3600	Y_3774						
Line	224.306 {450}	360.073 { 94}	377.433 { 89}						
Units	Cts/S	Cts/S	Cts/S						
Avg	1555.1	33888.	5935.9						
Stddev	2.4	31.	31.3						
%RSD	.15150	.09255	.52698						

#1	1556.7	33910.	5958.0						
#2	1553.4	33866.	5913.8						

Sample Name: LCS 280-326260/2-A Acquired: 5/21/2016 2:20:33 Type: Unk
Method: 6500_026(v10) Mode: CONC Corr. Factor: 1.000000
User: kellyca Custom ID1: p Custom ID2: Custom ID3:
Comment: 326260 6010B

Elem	Ag3280	Al1670	As1890	B_2089	Ba4554	Be3130	Bi2230	Ca3179	Cd2288
Line	328.068 {103}	167.079 {502}	189.042 {478}	208.959 {461}	455.403 { 74}	313.042 {108}	223.061 {451}	317.933 {106}	228.802 {447}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.04729	1.9911	1.0547	F 1.1219	1.9694	.05072	F 2.2380	49.427	.10597
Stddev	.00027	.0001	.0124	.0050	.0088	.00030	.0056	.008	.00108
%RSD	.56550	.00631	1.1723	.44151	.44722	.58498	.24802	.01554	1.0176

#1	.04710	1.9912	1.0460	1.1254	1.9632	.05051	2.2420	49.432	.10674
#2	.04748	1.9910	1.0635	1.1184	1.9756	.05093	2.2341	49.421	.10521

Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Fail	Chk Pass	Chk Pass	Chk Fail	Chk Pass	Chk Pass
High Limit				1.1000			2.2000		
Low Limit				.89000			1.8000		

Elem	Co2286	Cr2055	Cu3247	Fe2599	K_7664	Li6707	Mg2790	Mn2576	Mo2020
Line	228.616 {447}	205.560 {464}	324.754 {104}	259.940 {130}	766.490 { 44}	670.784 { 50}	279.079 {121}2	257.610 {131}	202.030 {467}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.52080	F .20697	.24326	.98572	51.624	1.0647	47.543	.47881	1.0952
Stddev	.00123	.00017	.00140	.00882	.247	.0045	.127	.00026	.0045
%RSD	.23712	.08424	.57741	.89522	.47897	.42084	.26797	.05354	.41462

#1	.51993	.20710	.24426	.97948	51.449	1.0616	47.633	.47899	1.0984
#2	.52167	.20685	.24227	.99196	51.798	1.0679	47.453	.47862	1.0920

Check ?	Chk Pass	Chk Fail	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit		.05750							
Low Limit		.04300							

Elem	Na8183	Ni2316	P_1782	Pb2203	S_1820	Sb2068	Se1960	Si2881	Sn1899
Line	818.326 { 41}	231.604 {446}	178.284 {489}	220.353 {453}	182.034 {485}	206.833 {463}	196.090 {472}	288.158 {117}	189.989 {477}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	50.328	.49540	10.519	.52250	2.1005	.52717	2.0355	9.9473	1.9530
Stddev	.072	.00138	.029	.00013	.0006	.00273	.0027	.0474	.0047
%RSD	.14305	.27928	.27440	.02398	.02654	.51786	.13331	.47655	.23854

#1	50.379	.49638	10.539	.52241	2.1008	.52910	2.0336	9.9138	1.9563
#2	50.277	.49442	10.498	.52258	2.1001	.52524	2.0375	9.9808	1.9497

Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Elem	Sr4077	Th2837	Ti3349	Ti1908	U_3701	V_2924	Zn2062	Zr3391	
Line	407.771 { 83}	283.730 {119}	334.904 {101}	190.856 {477}	370.152 { 91}	292.402 {115}	206.200 {163}	339.198 { 99}	
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	
Avg	F .90934	.95829	F .89717	1.9810	2.0482	.44880	.47962	.48611	
Stddev	.00648	.00226	.00104	.0031	.0185	.00367	.00069	.00080	
%RSD	.71243	.23561	.11592	.15676	.90223	.81828	.14401	.16541	

#1	.90476	.95670	.89791	1.9832	2.0613	.45140	.47913	.48668	
#2	.91392	.95989	.89644	1.9788	2.0352	.44620	.48011	.48555	

Check ?	Chk Fail	Chk Pass	Chk Fail	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	
High Limit	1.1000		1.1000						
Low Limit	.91000		.90000						

Int. Std.	Y_2243	Y_3600	Y_3774						
Line	224.306 {450}	360.073 { 94}	377.433 { 89}						
Units	Cts/S	Cts/S	Cts/S						
Avg	1485.9	31905.	5817.5						
Stddev	2.0	32.	10.8						
%RSD	.13722	.10073	.18483						

#1	1484.5	31927.	5825.1						
#2	1487.4	31882.	5809.9						

Sample Name: 280-83016-D-1-B Acquired: 5/21/2016 2:23:07 Type: Unk
Method: 6500_026(v10) Mode: CONC Corr. Factor: 1.000000
User: kellyca Custom ID1: Custom ID2: Custom ID3:
Comment: 326260 6010B

Elem	Ag3280	Al1670	As1890	B_2089	Ba4554	Be3130	Bi2230	Ca3179	Cd2288
Line	328.068 {103}	167.079 {502}	189.042 {478}	208.959 {461}	455.403 { 74}	313.042 {108}	223.061 {451}	317.933 {106}	228.802 {447}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.00020	.00235	W -.01130	.01656	.04817	.00002	-.00612	1.0227	.00057
Stddev	.00034	.00017	.00309	.00003	.00044	.00000	.00132	.0039	.00001
%RSD	168.08	7.4180	27.340	.17077	.90433	22.221	21.613	.37758	2.3009

#1	.00044	.00247	-.01349	.01654	.04848	.00002	-.00706	1.0254	.00058
#2	-.00004	.00223	-.00912	.01658	.04786	.00002	-.00519	1.0200	.00056

Check ?	Chk Pass	Chk Pass	Chk Warn	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit			45.000						
Low Limit			-.01000						

Elem	Co2286	Cr2055	Cu3247	Fe2599	K_7664	Li6707	Mg2790	Mn2576	Mo2020
Line	228.616 {447}	205.560 {464}	324.754 {104}	259.940 {130}	766.490 { 44}	670.784 { 50}	279.079 {121}2	257.610 {131}	202.030 {467}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	-.00091	.00036	-.00170	.01895	1.6018	.01214	1.0627	.00483	.00098
Stddev	.00017	.00003	.00004	.00042	.0070	.00039	.0009	.00001	.00013
%RSD	18.340	6.9766	2.2423	2.2034	.43822	3.2522	.08348	.13624	13.199

#1	-.00079	.00038	-.00167	.01865	1.5969	.01186	1.0633	.00484	.00089
#2	-.00103	.00035	-.00173	.01924	1.6068	.01242	1.0620	.00483	.00107

Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Elem	Na8183	Ni2316	P_1782	Pb2203	S_1820	Sb2068	Se1960	Si2881	Sn1899
Line	818.326 { 41}	231.604 {446}	178.284 {489}	220.353 {453}	182.034 {485}	206.833 {463}	196.090 {472}	288.158 {117}	189.989 {477}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	11.447	.00112	.03804	W -.00316	1.1377	.00046	-.00294	45.603	.00042
Stddev	.132	.00030	.00108	.00109	.0069	.00062	.00076	.072	.00025
%RSD	1.1543	26.442	2.8501	34.369	.60285	133.26	25.818	.15719	59.898

#1	11.353	.00133	.03881	-.00393	1.1426	.00003	-.00241	45.653	.00024
#2	11.540	.00091	.03728	-.00239	1.1329	.00090	-.00348	45.552	.00060

Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Warn	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit				10.000					
Low Limit				-.00300					

Elem	Sr4077	Th2837	Ti3349	Ti1908	U_3701	V_2924	Zn2062	Zr3391
Line	407.771 { 83}	283.730 {119}	334.904 {101}	190.856 {477}	370.152 { 91}	292.402 {115}	206.200 {163}	339.198 { 99}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.03724	-.00221	.00021	-.00001	.02862	.00103	-.00009	.00095
Stddev	.00021	.00123	.00022	.00199	.00753	.00002	.00080	.00062
%RSD	.57429	55.426	104.31	34285.	26.309	1.8053	845.54	64.724

#1	.03709	-.00135	.00006	-.00141	.02329	.00104	-.00066	.00139
#2	.03739	-.00308	.00037	.00140	.03394	.00101	.00047	.00052

Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit								
Low Limit								

Int. Std.	Y_2243	Y_3600	Y_3774
Line	224.306 {450}	360.073 { 94}	377.433 { 89}
Units	Cts/S	Cts/S	Cts/S
Avg	1543.3	33403.	5955.4
Stddev	1.1	29.	7.6
%RSD	.07446	.08675	.12834

#1	1542.5	33383.	5960.8
#2	1544.1	33424.	5950.0

Sample Name: 280-83016-D-2-B Acquired: 5/21/2016 2:25:53 Type: Unk
Method: 6500_026(v10) Mode: CONC Corr. Factor: 1.000000
User: kellyca Custom ID1: Custom ID2: Custom ID3:
Comment: 326260 6010B

Elem	Ag3280	Al1670	As1890	B_2089	Ba4554	Be3130	Bi2230	Ca3179	Cd2288
Line	328.068 {103}	167.079 {502}	189.042 {478}	208.959 {461}	455.403 { 74}	313.042 {108}	223.061 {451}	317.933 {106}	228.802 {447}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.00055	.00271	-.00520	.01245	.02648	-.00004	-.00256	1.0129	.00042
Stddev	.00005	.00154	.00230	.00038	.00010	.00004	.00159	.0052	.00042
%RSD	8.7330	57.055	44.256	3.0197	.37266	110.64	62.296	.51088	99.735

#1	.00059	.00162	-.00357	.01218	.02641	-.00001	-.00143	1.0092	.00012
#2	.00052	.00380	-.00683	.01271	.02655	-.00007	-.00369	1.0165	.00072

Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Elem	Co2286	Cr2055	Cu3247	Fe2599	K_7664	Li6707	Mg2790	Mn2576	Mo2020
Line	228.616 {447}	205.560 {464}	324.754 {104}	259.940 {130}	766.490 { 44}	670.784 { 50}	279.079 {121}2	257.610 {131}	202.030 {467}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	-.00063	.00163	-.00181	.00685	1.6351	.00503	.52819	.00125	.00028
Stddev	.00030	.00042	.00007	.00318	.0037	.00110	.00028	.00001	.00038
%RSD	47.842	25.563	4.0306	46.385	.22673	21.913	.05341	1.1941	136.67

#1	-.00042	.00193	-.00186	.00910	1.6325	.00581	.52799	.00126	.00001
#2	-.00084	.00134	-.00176	.00460	1.6377	.00425	.52839	.00124	.00055

Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Elem	Na5895	Ni2316	P_1782	Pb2203	S_1820	Sb2068	Se1960	Si2881	Sn1899
Line	589.592 { 57}	231.604 {446}	178.284 {489}	220.353 {453}	182.034 {485}	206.833 {463}	196.090 {472}	288.158 {117}	189.989 {477}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	6.7279	.00018	.00972	-.00268	.63566	.00120	-.00344	21.885	.00069
Stddev	.0344	.00019	.00402	.00162	.00252	.00077	.00068	.078	.00016
%RSD	.51181	102.26	41.413	60.558	.39660	64.451	19.730	.35783	23.393

#1	6.7036	.00032	.01256	-.00382	.63744	.00065	-.00392	21.829	.00057
#2	6.7523	.00005	.00687	-.00153	.63387	.00175	-.00296	21.940	.00080

Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Elem	Sr4077	Th2837	Ti3349	Ti1908	U_3701	V_2924	Zn2062	Zr3391
Line	407.771 { 83}	283.730 {119}	334.904 {101}	190.856 {477}	370.152 { 91}	292.402 {115}	206.200 {163}	339.198 { 99}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.03725	-.00136	.00022	-.00010	.02444	.00011	.00111	.00003
Stddev	.00010	.00088	.00038	.00009	.00077	.00040	.00033	.00149
%RSD	.26819	64.785	171.19	86.499	3.1674	355.45	29.582	5263.0

#1	.03718	-.00198	-.00005	-.00016	.02389	-.00017	.00088	-.00103
#2	.03732	-.00073	.00049	-.00004	.02498	.00040	.00134	.00109

Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit								
Low Limit								

Int. Std.	Y_2243	Y_3600	Y_3774
Line	224.306 {450}	360.073 { 94}	377.433 { 89}
Units	Cts/S	Cts/S	Cts/S
Avg	1549.2	33552.	5965.5
Stddev	2.0	59.	6.0
%RSD	.13199	.17528	.10132

#1	1547.8	33593.	5969.8
#2	1550.7	33510.	5961.2

Sample Name: 280-83016-D-3-B Acquired: 5/21/2016 2:28:39 Type: Unk
Method: 6500_026(v10) Mode: CONC Corr. Factor: 1.000000
User: kellyca Custom ID1: Custom ID2: Custom ID3:
Comment: 326260 6010B

Elem	Ag3280	Al1670	As1890	B_2089	Ba4554	Be3130	Bi2230	Ca3179	Cd2288
Line	328.068 {103}	167.079 {502}	189.042 {478}	208.959 {461}	455.403 { 74}	313.042 {108}	223.061 {451}	317.933 {106}	228.802 {447}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.00069	.00284	-.00303	.00939	.05492	.00023	-.00436	1.2728	.00014
Stddev	.00005	.00003	.00517	.00016	.00022	.00002	.00342	.0006	.00022
%RSD	7.9574	1.1594	170.75	1.6614	.40501	9.9999	78.495	.04391	152.50

#1	.00065	.00281	-.00668	.00928	.05476	.00022	-.00678	1.2724	.00030
#2	.00073	.00286	.00063	.00950	.05508	.00025	-.00194	1.2732	-.00001

Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Elem	Co2286	Cr2055	Cu3247	Fe2599	K_7664	Li6707	Mg2790	Mn2576	Mo2020
Line	228.616 {447}	205.560 {464}	324.754 {104}	259.940 {130}	766.490 { 44}	670.784 { 50}	279.079 {121}2	257.610 {131}	202.030 {467}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.00177	.00008	-.00142	.75486	1.7086	.00212	1.0183	.00584	.00038
Stddev	.00038	.00006	.00036	.00091	.0190	.00026	.0090	.00005	.00027
%RSD	21.690	69.805	25.362	.12004	1.1090	12.314	.88791	.93532	72.230

#1	.00205	.00004	-.00117	.75550	1.6952	.00230	1.0247	.00580	.00057
#2	.00150	.00012	-.00168	.75422	1.7220	.00193	1.0119	.00588	.00018

Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Elem	Na5895	Ni2316	P_1782	Pb2203	S_1820	Sb2068	Se1960	Si2881	Sn1899
Line	589.592 { 57}	231.604 {446}	178.284 {489}	220.353 {453}	182.034 {485}	206.833 {463}	196.090 {472}	288.158 {117}	189.989 {477}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	8.3002	.00270	.01321	-.00157	.24710	.00185	-.00364	23.410	.00103
Stddev	.0490	.00038	.00043	.00104	.00833	.00420	.00089	.079	.00054
%RSD	.59005	14.261	3.2298	66.028	3.3706	227.50	24.333	.33957	52.834

#1	8.2656	.00242	.01351	-.00230	.25299	-.00112	-.00302	23.354	.00064
#2	8.3348	.00297	.01291	-.00084	.24121	.00482	-.00427	23.466	.00141

Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Elem	Sr4077	Th2837	Ti3349	Ti1908	U_3701	V_2924	Zn2062	Zr3391
Line	407.771 { 83}	283.730 {119}	334.904 {101}	190.856 {477}	370.152 { 91}	292.402 {115}	206.200 {163}	339.198 { 99}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.03609	-.00277	.00028	-.00055	-.01155	-.00005	.00552	.00057
Stddev	.00021	.00239	.00045	.00078	.02652	.00069	.00006	.00087
%RSD	.58708	86.499	157.39	142.38	229.61	1349.5	1.0564	154.42

#1	.03594	-.00446	-.00003	.00000	.00720	.00043	.00556	-.00005
#2	.03624	-.00108	.00060	-.00109	-.03031	-.00054	.00548	.00118

Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit								
Low Limit								

Int. Std.	Y_2243	Y_3600	Y_3774
Line	224.306 {450}	360.073 { 94}	377.433 { 89}
Units	Cts/S	Cts/S	Cts/S
Avg	1549.3	33639.	5975.8
Stddev	3.1	59.	15.2
%RSD	.19740	.17595	.25513

#1	1547.2	33597.	5986.5
#2	1551.5	33681.	5965.0

Sample Name: 280-83016-D-4-B Acquired: 5/21/2016 2:31:25 Type: Unk
Method: 6500_026(v10) Mode: CONC Corr. Factor: 1.000000
User: kellyca Custom ID1: Custom ID2: Custom ID3:
Comment: 326260 6010B

Elem	Ag3280	Al1670	As1890	B_2089	Ba4554	Be3130	Bi2230	Ca3179	Cd2288
Line	328.068 {103}	167.079 {502}	189.042 {478}	208.959 {461}	455.403 { 74}	313.042 {108}	223.061 {451}	317.933 {106}	228.802 {447}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.00050	.05919	-.00213	.01175	.03635	.00015	-.00357	.67432	.00066
Stddev	.00030	.00003	.00069	.00089	.00011	.00002	.00344	.00015	.00016
%RSD	59.163	.04977	32.462	7.5698	.31623	13.177	96.415	.02225	24.688

#1	.00029	.05917	-.00164	.01112	.03627	.00013	-.00114	.67443	.00078
#2	.00071	.05921	-.00261	.01238	.03643	.00016	-.00600	.67422	.00055

Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Elem	Co2286	Cr2055	Cu3247	Fe2599	K_7664	Li6707	Mg2790	Mn2576	Mo2020
Line	228.616 {447}	205.560 {464}	324.754 {104}	259.940 {130}	766.490 { 44}	670.784 { 50}	279.079 {121}2	257.610 {131}	202.030 {467}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	-.00063	.00004	-.00152	.18066	1.0386	.00671	.55277	.00622	-.00016
Stddev	.00003	.00016	.00034	.00425	.0266	.00069	.00281	.00004	.00004
%RSD	4.9309	399.50	22.175	2.3500	2.5642	10.216	.50795	.66376	23.367

#1	-.00066	.00015	-.00128	.17766	1.0198	.00720	.55476	.00619	-.00013
#2	-.00061	-.00007	-.00175	.18367	1.0574	.00623	.55079	.00625	-.00018

Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Elem	Na8183	Ni2316	P_1782	Pb2203	S_1820	Sb2068	Se1960	Si2881	Sn1899
Line	818.326 { 41}	231.604 {446}	178.284 {489}	220.353 {453}	182.034 {485}	206.833 {463}	196.090 {472}	288.158 {117}	189.989 {477}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	11.017	.00097	.01334	-.00067	.50294	.00045	-.00062	38.312	-.00018
Stddev	.010	.00034	.00031	.00053	.00053	.00026	.00617	.019	.00213
%RSD	.09182	35.199	2.3268	79.067	.10509	58.575	993.62	.04871	1191.7

#1	11.010	.00122	.01356	-.00029	.50332	.00026	.00374	38.326	.00132
#2	11.024	.00073	.01312	-.00104	.50257	.00064	-.00499	38.299	-.00168

Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Elem	Sr4077	Th2837	Ti3349	Ti1908	U_3701	V_2924	Zn2062	Zr3391
Line	407.771 { 83}	283.730 {119}	334.904 {101}	190.856 {477}	370.152 { 91}	292.402 {115}	206.200 {163}	339.198 { 99}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.02187	-.00172	.00180	-.00348	-.00761	.00042	-.00020	.00055
Stddev	.00010	.00082	.00012	.00116	.01905	.00019	.00073	.00069
%RSD	.45365	47.438	6.4414	33.359	250.51	44.409	366.50	126.17

#1	.02180	-.00114	.00188	-.00430	-.02108	.00029	-.00071	.00104
#2	.02194	-.00230	.00172	-.00266	.00587	.00055	.00031	.00006

Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit								
Low Limit								

Int. Std.	Y_2243	Y_3600	Y_3774
Line	224.306 {450}	360.073 { 94}	377.433 { 89}
Units	Cts/S	Cts/S	Cts/S
Avg	1556.1	33505.	5970.3
Stddev	2.2	21.	20.1
%RSD	.13982	.06342	.33736

#1	1554.6	33520.	5956.0
#2	1557.7	33490.	5984.5

Sample Name: 280-83016-D-5-B Acquired: 5/21/2016 2:34:12 Type: Unk
Method: 6500_026(v10) Mode: CONC Corr. Factor: 1.000000
User: kellyca Custom ID1: Custom ID2: Custom ID3:
Comment: 326260 6010B

Elem	Ag3280	Al1670	As1890	B_2089	Ba4554	Be3130	Bi2230	Ca3179	Cd2288
Line	328.068 {103}	167.079 {502}	189.042 {478}	208.959 {461}	455.403 { 74}	313.042 {108}	223.061 {451}	317.933 {106}	228.802 {447}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.00064	.00844	.01530	.01276	.29958	-.00007	-.00127	7.8807	.00048
Stddev	.00030	.00006	.00179	.00035	.00091	.00006	.00165	.0072	.00018
%RSD	46.238	.70366	11.715	2.7816	.30315	81.087	129.48	.09143	37.585
#1	.00043	.00840	.01656	.01301	.29894	-.00012	-.00244	7.8858	.00035
#2	.00085	.00848	.01403	.01251	.30022	-.00003	-.00011	7.8756	.00061

Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Elem	Co2286	Cr2055	Cu3247	Fe2599	K_7664	Li6707	Mg2790	Mn2576	Mo2020
Line	228.616 {447}	205.560 {464}	324.754 {104}	259.940 {130}	766.490 { 44}	670.784 { 50}	279.079 {121}2	257.610 {131}	202.030 {467}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.00163	.00012	-.00137	17.723	1.8907	.00736	7.3944	.10732	-.00033
Stddev	.00004	.00030	.00012	.024	.0197	.00029	.0112	.00005	.00023
%RSD	2.4363	252.64	8.6439	.13504	1.0403	3.9553	.15085	.04677	69.513
#1	.00166	-.00009	-.00129	17.706	1.8768	.00756	7.3866	.10728	-.00049
#2	.00161	.00033	-.00146	17.740	1.9046	.00715	7.4023	.10735	-.00017

Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Elem	Na8183	Ni2316	P_1782	Pb2203	S_1820	Sb2068	Se1960	Si2881	Sn1899
Line	818.326 { 41}	231.604 {446}	178.284 {489}	220.353 {453}	182.034 {485}	206.833 {463}	196.090 {472}	288.158 {117}	189.989 {477}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	42.614	.00123	.36195	W -.00500	.68701	.00030	.00026	40.540	.00186
Stddev	.132	.00125	.00657	.00133	.00248	.00358	.00381	.118	.00025
%RSD	.30965	101.98	1.8159	26.657	.36161	1196.0	1490.6	.29063	13.480
#1	42.520	.00034	.35730	-.00406	.68877	.00283	-.00244	40.457	.00203
#2	42.707	.00211	.36660	-.00594	.68526	-.00223	.00295	40.624	.00168

Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Warn	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit				10.000					
Low Limit				-.00300					

Elem	Sr4077	Th2837	Ti3349	Ti1908	U_3701	V_2924	Zn2062	Zr3391
Line	407.771 { 83}	283.730 {119}	334.904 {101}	190.856 {477}	370.152 { 91}	292.402 {115}	206.200 {163}	339.198 { 99}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.21834	-.00489	-.00004	.00005	.00796	.00093	-.00079	.00050
Stddev	.00001	.00168	.00026	.00031	.00000	.00054	.00147	.00016
%RSD	.00345	34.322	651.08	593.31	.01227	58.001	185.68	32.472
#1	.21834	-.00607	.00014	.00027	.00796	.00055	-.00183	.00062
#2	.21835	-.00370	-.00022	-.00017	.00796	.00131	.00025	.00039

Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit								
Low Limit								

Int. Std.	Y_2243	Y_3600	Y_3774
Line	224.306 {450}	360.073 { 94}	377.433 { 89}
Units	Cts/S	Cts/S	Cts/S
Avg	1532.1	33010.	5984.9
Stddev	1.1	11.	12.7
%RSD	.06906	.03411	.21273
#1	1531.4	33018.	5993.9
#2	1532.9	33002.	5975.9

Sample Name: 280-83016-D-6-B Acquired: 5/21/2016 2:36:56 Type: Unk
Method: 6500_026(v10) Mode: CONC Corr. Factor: 1.000000
User: kellyca Custom ID1: Custom ID2: Custom ID3:
Comment: 326260 6010B

Elem	Ag3280	Al1670	As1890	B_2089	Ba4554	Be3130	Bi2230	Ca3179	Cd2288
Line	328.068 {103}	167.079 {502}	189.042 {478}	208.959 {461}	455.403 { 74}	313.042 {108}	223.061 {451}	317.933 {106}	228.802 {447}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.00037	.01698	-.00611	.00956	.04142	-.00003	-.00098	.89262	.00024
Stddev	.00015	.00084	.00100	.00058	.00007	.00004	.00040	.00469	.00022
%RSD	40.203	4.9643	16.382	6.0562	.16418	153.54	40.582	.52491	94.346

#1	.00047	.01758	-.00682	.00915	.04137	.00000	-.00070	.88931	.00039
#2	.00026	.01639	-.00541	.00997	.04147	-.00006	-.00126	.89594	.00008

Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Elem	Co2286	Cr2055	Cu3247	Fe2599	K_7664	Li6707	Mg2790	Mn2576	Mo2020
Line	228.616 {447}	205.560 {464}	324.754 {104}	259.940 {130}	766.490 { 44}	670.784 { 50}	279.079 {121}2	257.610 {131}	202.030 {467}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.00059	.00108	-.00164	.31725	.79026	.00228	.74812	.00677	-.00025
Stddev	.00027	.00003	.00007	.00308	.01121	.00081	.00268	.00000	.00028
%RSD	46.289	2.6890	4.5473	.97177	1.4185	35.386	.35820	.01327	115.35

#1	.00078	.00106	-.00169	.31943	.79818	.00171	.75002	.00677	-.00045
#2	.00040	.00110	-.00158	.31507	.78233	.00285	.74623	.00677	-.00005

Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Elem	Na5895	Ni2316	P_1782	Pb2203	S_1820	Sb2068	Se1960	Si2881	Sn1899
Line	589.592 { 57}	231.604 {446}	178.284 {489}	220.353 {453}	182.034 {485}	206.833 {463}	196.090 {472}	288.158 {117}	189.989 {477}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	5.3966	.00168	.00542	.00050	.10496	.00139	.00269	9.7786	.00092
Stddev	.0081	.00027	.00479	.00163	.00030	.00447	.00569	.0637	.00086
%RSD	.14988	15.909	88.308	323.23	.28746	322.11	211.89	.65151	93.745

#1	5.3908	.00149	.00881	.00166	.10474	.00455	.00671	9.7335	.00031
#2	5.4023	.00187	.00204	-.00065	.10517	-.00177	-.00134	9.8236	.00152

Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Elem	Sr4077	Th2837	Ti3349	Ti1908	U_3701	V_2924	Zn2062	Zr3391	
Line	407.771 { 83}	283.730 {119}	334.904 {101}	190.856 {477}	370.152 { 91}	292.402 {115}	206.200 {163}	339.198 { 99}	
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	
Avg	.02194	-.00140	.00009	-.00298	.02275	.00015	.00153	.00185	
Stddev	.00011	.00021	.00044	.00356	.03302	.00026	.00035	.00004	
%RSD	.48687	14.884	507.90	119.34	145.17	175.20	23.206	2.2156	

#1	.02186	-.00126	-.00022	-.00550	-.00060	-.00004	.00128	.00188	
#2	.02201	-.00155	.00040	-.00047	.04610	.00033	.00178	.00182	

Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	
High Limit									
Low Limit									

Int. Std.	Y_2243	Y_3600	Y_3774						
Line	224.306 {450}	360.073 { 94}	377.433 { 89}						
Units	Cts/S	Cts/S	Cts/S						
Avg	1552.0	33631.	5922.6						
Stddev	6.5	3.	33.7						
%RSD	.42017	.01014	.56830						

#1	1556.6	33634.	5946.4						
#2	1547.4	33629.	5898.8						

Sample Name: ccvh-3900196 Acquired: 5/21/2016 2:39:43 Type: QC
Method: 6500_026(v10) Mode: CONC Corr. Factor: 1.000000
User: kellyca Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	Ag3280	Al3092	As1890	B_2089	Ba4554	Be3130	Bi2230	Ca3179	Cd2288	Co2286	Cr2055	Cu3247
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	-.00554	F 44.843	-.00701	.00175	.00021	-.00031	1.0800	-.05376	-.00082	.00286	-.00053	.00303
Stddev	.00042	.022	.00003	.00178	.00007	.00014	.0023	.00342	.00034	.00006	.00012	.00009
%RSD	7.5501	.04888	.36666	101.86	33.492	46.794	.21175	6.3689	40.931	1.9898	22.518	2.8993

#1	-.00525	44.858	-.00699	.00049	.00026	-.00021	1.0816	-.05134	-.00058	.00282	-.00045	.00297
#2	-.00584	44.827	-.00703	.00300	.00016	-.00041	1.0784	-.05618	-.00106	.00290	-.00062	.00310

Check ?	None	Chk Fail	None	None	None	None	Chk Pass	None	None	None	None	None
Value		50.000										
Range		-10.000%										

Elem	Fe2714	K_7664	Li6707	Mg2790	Mn2576	Mo2020	Na8183	Ni2316	P_1782	Pb2203	S_1820	Sb2068
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	45.598	.05759	.00068	.15028	-.00082	-.00272	248.68	.00009	.00409	.00247	5.1120	.00027
Stddev	.055	.03822	.00004	.00792	.00006	.00022	.44	.00010	.00065	.00045	.0127	.00124
%RSD	.12086	66.369	5.7980	5.2700	7.3169	8.2581	.17605	110.48	15.898	18.068	.24851	453.10

#1	45.637	.03056	.00071	.14468	-.00078	-.00288	248.37	.00002	.00363	.00279	5.1030	.00115
#2	45.559	.08461	.00065	.15588	-.00086	-.00256	248.99	.00017	.00455	.00216	5.1210	-.00060

Check ?	Chk Pass	None	None	None	None	None	Chk Pass	None	None	None	Chk Pass	None
Value												
Range												

Elem	Se1960	Si2881	Sn1899	Sr4077	Th2837	Ti3349	Ti1908	U_3701	V_2924	Zn2062	Zr3391
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.00439	-.00928	.00252	.00030	4.8386	.02658	-.00460	9.9699	-.01604	-.00181	-.02716
Stddev	.00260	.00857	.00180	.00005	.0063	.00025	.00201	.0012	.00042	.00020	.00029
%RSD	59.244	92.365	71.258	15.386	.13108	.95247	43.608	.01238	2.5969	10.993	1.0588

#1	.00623	-.00322	.00380	.00033	4.8341	.02676	-.00602	9.9690	-.01575	-.00195	-.02696
#2	.00255	-.01534	.00125	.00026	4.8431	.02640	-.00318	9.9707	-.01634	-.00167	-.02737

Check ?	None	None	None	None	Chk Pass	None	None	Chk Pass	None	None	None
Value											
Range											

Int. Std.	Y_2243	Y_3600	Y_3774
Units	Cts/S	Cts/S	Cts/S
Avg	1487.7	31580.	5735.1
Stddev	1.5	14.	6.9
%RSD	.10187	.04280	.12051

#1	1486.6	31590.	5730.2
#2	1488.7	31571.	5740.0

Sample Name: ccv-3900195 Acquired: 5/21/2016 2:42:34 Type: QC
Method: 6500_026(v10) Mode: CONC Corr. Factor: 1.000000
User: kellyca Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	Ag3280	Al1670	As1890	B_2089	Ba4554	Be3130	Bi2230	Ca3179	Cd2288	Co2286	Cr2055	Cu3247
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.47409	.51835	1.0271	F .55197	.49601	.51292	-.00687	5.0095	.53985	.53655	.52687	.48298
Stddev	.00088	.00025	.0001	.00005	.00170	.00406	.00048	.0393	.00103	.00113	.00211	.00016
%RSD	.18529	.04757	.01149	.00856	.34366	.79247	7.0082	.78462	.18999	.21107	.40139	.03401

#1	.47471	.51853	1.0270	.55200	.49480	.51005	-.00721	4.9817	.54057	.53735	.52836	.48309
#2	.47347	.51818	1.0272	.55194	.49721	.51580	-.00653	5.0373	.53912	.53575	.52537	.48286

Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Fail	Chk Pass	Chk Pass	None	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Value				.50000								
Range				10.000%								

Elem	Fe2599	K_7664	Li6707	Mg2790	Mn2576	Mo2020	Na5895	Ni2316	P_1782	Pb2203	S_1820	Sb2068
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	2.5134	50.982	1.0655	19.092	.49389	.54028	5.2519	.50678	1.0227	1.0601	.00710	1.0265
Stddev	.0013	.321	.0057	.117	.00042	.00087	.0038	.00067	.0033	.0036	.00195	.0027
%RSD	.05188	.62966	.53558	.61273	.08432	.16011	.07284	.13153	.32326	.34224	27.416	.26419

#1	2.5125	50.755	1.0615	19.175	.49418	.53966	5.2492	.50725	1.0204	1.0627	.00573	1.0246
#2	2.5143	51.209	1.0696	19.010	.49359	.54089	5.2546	.50631	1.0250	1.0575	.00848	1.0285

Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	None	Chk Pass
Value												
Range												

Elem	Se1960	Si2881	Sn1899	Sr4077	Th2837	Ti3349	Ti1908	U_3701	V_2924	Zn2062	Zr3391
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.99094	5.0596	.98867	.46144	.00150	F .44870	1.0163	.02432	.45718	.49026	.50068
Stddev	.00880	.0270	.00254	.00380	.00199	.00184	.0025	.01272	.00063	.00186	.00017
%RSD	.88837	.53450	.25693	.82346	132.17	.40935	.24679	52.311	.13751	.37909	.03456

#1	.98471	5.0404	.99047	.45876	.00010	.45000	1.0180	.03331	.45763	.49158	.50056
#2	.99716	5.0787	.98688	.46413	.00291	.44740	1.0145	.01532	.45674	.48895	.50081

Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	None	Chk Fail	Chk Pass	None	Chk Pass	Chk Pass	Chk Pass
Value						.50000					
Range						-10.000%					

Int. Std.	Y_2243	Y_3600	Y_3774
Units	Cts/S	Cts/S	Cts/S
Avg	1523.2	32437.	5755.6
Stddev	3.9	59.	32.6
%RSD	.25488	.18203	.56607

#1	1520.5	32395.	5778.6
#2	1525.9	32479.	5732.5

Sample Name: ccb Acquired: 5/21/2016 2:45:13 Type: QC
Method: 6500_026(v10) Mode: CONC Corr. Factor: 1.000000
User: kellyca Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	Ag3280	Al1670	As1890	B_2089	Ba4554	Be3130	Bi2230	Ca3179	Cd2288	Co2286	Cr2055
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.00073	-.00048	W -.00604	.00145	.00002	-.00011	-.00052	-.00818	.00003	-.00026	.00018
Stddev	.00024	.00050	.00593	.00041	.00007	.00008	.00090	.00409	.00014	.00014	.00001
%RSD	32.155	103.62	98.244	28.240	472.61	73.930	174.37	50.008	427.08	54.289	3.5953

#1	.00090	-.00084	-.00184	.00116	.00007	-.00016	.00012	-.01107	-.00007	-.00035	.00018
#2	.00056	-.00013	-.01023	.00173	-.00004	-.00005	-.00116	-.00529	.00014	-.00016	.00017

Check ?	Chk Pass	Chk Pass	Chk Warn	Chk Pass	Chk Pass	Chk Pass	None	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit			.00440								
Low Limit			-.00440								

Elem	Cu3247	Fe2599	K_7664	Li6707	Mg2790	Mn2576	Mo2020	Na5895	Ni2316	P_1782	Pb2203
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	W -.00187	.00288	.09156	-.00032	.00363	.00011	.00055	.02390	-.00028	.00075	-.00027
Stddev	.00006	.00074	.01425	.00059	.00111	.00001	.00011	.00167	.00044	.00064	.00032
%RSD	3.2240	25.794	15.564	186.41	30.650	6.5094	19.731	6.9841	154.31	85.277	119.84

#1	-.00182	.00236	.10163	.00010	.00442	.00010	.00047	.02272	-.00059	.00120	-.00004
#2	-.00191	.00341	.08148	-.00073	.00284	.00011	.00063	.02508	.00003	.00030	-.00049

Check ?	Chk Warn	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit	.00136										
Low Limit	-.00136										

Elem	S_1820	Sb2068	Se1960	Si2881	Sn1899	Sr4077	Th2837	Ti3349	Ti1908	U_3701	V_2924
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.00161	.00273	.00136	-.00935	.00107	.00006	-.00362	.00014	-.00117	.02916	.00057
Stddev	.00305	.00113	.00349	.01902	.00227	.00001	.00030	.00005	.00125	.00951	.00017
%RSD	189.32	41.363	256.53	203.57	211.68	19.559	8.4087	32.573	106.61	32.612	30.097

#1	-.00055	.00353	.00382	.00411	-.00053	.00006	-.00341	.00011	-.00206	.03588	.00069
#2	.00377	.00193	-.00111	-.02280	.00268	.00005	-.00384	.00018	-.00029	.02243	.00045

Check ?	None	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit											
Low Limit											

Elem	Zn2062	Zr3391
Units	ppm	ppm
Avg	-.00022	.00056
Stddev	.00017	.00033
%RSD	78.505	59.043

#1	-.00035	.00033
#2	-.00010	.00080

Check ?	Chk Pass	Chk Pass
High Limit		
Low Limit		

Int. Std.	Y_2243	Y_3600	Y_3774
Units	Cts/S	Cts/S	Cts/S
Avg	1541.8	33146.	5783.9
Stddev	3.3	48.	46.9
%RSD	.21541	.14416	.81044

#1	1539.5	33112.	5817.1
#2	1544.2	33180.	5750.8

Sample Name: ccvl-3903059 Acquired: 5/21/2016 2:48:01 Type: QC
Method: 6500_026(v10) Mode: CONC Corr. Factor: 1.000000
User: kellyca Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	Ag3280	Al1670	As1890	B_2089	Ba4554	Be3130	Bi2230	Ca3179	Cd2288	Co2286	Cr2055	Cu3247	Fe2599	K_7664
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.01013	.10594	.01361	.11210	.01012	.00089	.11362	.19514	.00556	.01060	.01092	.01318	.10914	3.1202
Stddev	.00000	.00022	.00267	.00000	.00003	.00004	.00300	.00445	.00007	.00001	.00028	.00029	.00170	.0439
%RSD	.03682	.20828	19.654	.00248	.32947	4.7061	2.6395	2.2788	1.3310	.10418	2.5252	2.2228	1.5556	1.4065

#1	.01013	.10609	.01550	.11210	.01014	.00092	.11150	.19199	.00551	.01060	.01111	.01338	.10794	3.0891
#2	.01012	.10578	.01172	.11210	.01010	.00086	.11574	.19828	.00561	.01061	.01072	.01297	.11034	3.1512

Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Value														
Range														

Elem	Li6707	Mg2790	Mn2576	Mo2020	Na5895	Ni2316	P_1782	Pb2203	S_1820	Sb2068	Se1960	Si2881	Sn1899	Sr4077
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.01039	.20445	.01022	.02175	1.0672	.04196	3.0185	.01130	.00354	.02166	.01388	.49789	.10283	.00932
Stddev	.00058	.00537	.00007	.00042	.0028	.00060	.0138	.00260	.00041	.00387	.00106	.01795	.00035	.00005
%RSD	5.6033	2.6245	.73257	1.9115	.26249	1.4226	.45624	23.047	11.539	17.882	7.6206	3.6049	.34418	.50245

#1	.00998	.20825	.01028	.02145	1.0692	.04239	3.0282	.01314	.00383	.01892	.01313	.48520	.10258	.00928
#2	.01080	.20066	.01017	.02204	1.0652	.04154	3.0087	.00945	.00325	.02440	.01463	.51058	.10308	.00935

Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	None	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Value														
Range														

Elem	Th2837	Ti3349	Ti1908	U_3701	V_2924	Zn2062	Zr3391
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.01328	.00918	.01617	.07615	.00973	.01962	.01568
Stddev	.00069	.00031	.00112	.00464	.00028	.00118	.00019
%RSD	5.1626	3.3371	6.9343	6.0876	2.8562	6.0324	1.2031

#1	.01376	.00896	.01697	.07287	.00993	.02045	.01555
#2	.01279	.00939	.01538	.07943	.00954	.01878	.01581

Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Value							
Range							

Int. Std.	Y_2243	Y_3600	Y_3774
Units	Cts/S	Cts/S	Cts/S
Avg	1553.6	33463.	5811.3
Stddev	7.1	58.	16.8
%RSD	.45667	.17349	.28941

#1	1558.6	33422.	5823.1
#2	1548.6	33504.	5799.4

Sample Name: 280-83016-D-7-B Acquired: 5/21/2016 2:50:48 Type: Unk
Method: 6500_026(v10) Mode: CONC Corr. Factor: 1.000000
User: kellyca Custom ID1: Custom ID2: Custom ID3:
Comment: 326260 6010B

Elem	Ag3280	Al1670	As1890	B_2089	Ba4554	Be3130	Bi2230	Ca3179	Cd2288
Line	328.068 {103}	167.079 {502}	189.042 {478}	208.959 {461}	455.403 { 74}	313.042 {108}	223.061 {451}	317.933 {106}	228.802 {447}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.00011	.05678	-.00695	.01054	.03933	.00008	.00049	2.3209	.00021
Stddev	.00009	.00036	.00434	.00065	.00008	.00001	.00073	.0341	.00008
%RSD	79.949	.63874	62.455	6.1478	.20344	15.941	148.56	1.4702	38.952
#1	.00005	.05652	-.00388	.01008	.03927	.00009	.00101	2.2967	.00015
#2	.00017	.05703	-.01002	.01100	.03938	.00007	-.00002	2.3450	.00027

Check ? Chk Pass Chk Pass Chk Pass Chk Pass Chk Pass Chk Pass Chk Pass Chk Pass Chk Pass
High Limit
Low Limit

Elem	Co2286	Cr2055	Cu3247	Fe2599	K_7664	Li6707	Mg2790	Mn2576	Mo2020
Line	228.616 {447}	205.560 {464}	324.754 {104}	259.940 {130}	766.490 { 44}	670.784 { 50}	279.079 {121}2	257.610 {131}	202.030 {467}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	-.00003	.00009	-.00183	.13489	1.0281	.00399	1.1231	.03532	-.00056
Stddev	.00025	.00008	.00023	.00415	.0053	.00069	.0015	.00006	.00022
%RSD	779.05	86.121	12.735	3.0751	.52050	17.304	.13167	.16201	40.258
#1	-.00021	.00014	-.00199	.13196	1.0319	.00350	1.1241	.03527	-.00072
#2	.00014	.00003	-.00166	.13782	1.0243	.00447	1.1220	.03536	-.00040

Check ? Chk Pass Chk Pass Chk Pass Chk Pass Chk Pass Chk Pass Chk Pass Chk Pass Chk Pass
High Limit
Low Limit

Elem	Na5895	Ni2316	P_1782	Pb2203	S_1820	Sb2068	Se1960	Si2881	Sn1899
Line	589.592 { 57}	231.604 {446}	178.284 {489}	220.353 {453}	182.034 {485}	206.833 {463}	196.090 {472}	288.158 {117}	189.989 {477}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	7.1948	.00105	.00960	-.00130	.20988	.00042	-.00294	16.669	-.00033
Stddev	.0449	.00067	.00370	.00062	.00075	.00159	.00261	.146	.00064
%RSD	.62425	63.550	38.539	47.638	.35966	383.74	88.628	.87417	192.20
#1	7.1630	.00058	.00698	-.00086	.21041	.00154	-.00478	16.566	.00012
#2	7.2265	.00152	.01221	-.00174	.20934	-.00071	-.00110	16.772	-.00078

Check ? Chk Pass Chk Pass Chk Pass Chk Pass Chk Pass Chk Pass Chk Pass Chk Pass Chk Pass
High Limit
Low Limit

Elem	Sr4077	Th2837	Ti3349	Ti1908	U_3701	V_2924	Zn2062	Zr3391	
Line	407.771 { 83}	283.730 {119}	334.904 {101}	190.856 {477}	370.152 { 91}	292.402 {115}	206.200 {163}	339.198 { 99}	
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	
Avg	.04997	-.00141	.00225	-.00114	.00605	.00083	.00427	.00069	
Stddev	.00016	.00196	.00172	.00086	.00103	.00004	.00061	.00009	
%RSD	.32881	138.59	76.433	75.830	16.963	5.0425	14.308	13.387	
#1	.04985	-.00003	.00104	-.00175	.00678	.00086	.00384	.00063	
#2	.05008	-.00280	.00347	-.00053	.00533	.00080	.00470	.00076	

Check ? Chk Pass Chk Pass Chk Pass Chk Pass Chk Pass Chk Pass Chk Pass Chk Pass Chk Pass
High Limit
Low Limit

Int. Std.	Y_2243	Y_3600	Y_3774						
Line	224.306 {450}	360.073 { 94}	377.433 { 89}						
Units	Cts/S	Cts/S	Cts/S						
Avg	1551.5	33390.	5864.8						
Stddev	1.2	41.	74.3						
%RSD	.07653	.12406	1.2674						
#1	1550.6	33361.	5917.3						
#2	1552.3	33420.	5812.2						

Sample Name: 280-83016-D-7-B SD@5 Acquired: 5/21/2016 2:53:34 Type: Unk
Method: 6500_026(v10) Mode: CONC Corr. Factor: 1.000000
User: kellyca Custom ID1: Custom ID2: Custom ID3:
Comment: 326260 6010B

Elem	Ag3280	Al1670	As1890	B_2089	Ba4554	Be3130	Bi2230	Ca3179	Cd2288
Line	328.068 {103}	167.079 {502}	189.042 {478}	208.959 {461}	455.403 { 74}	313.042 {108}	223.061 {451}	317.933 {106}	228.802 {447}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.00057	.01335	-.00542	.00250	.00791	-.00009	-.00368	.46430	.00008
Stddev	.00018	.00056	.00238	.00016	.00008	.00006	.00041	.00102	.00020
%RSD	32.099	4.1949	43.947	6.5534	.96414	62.980	11.255	.22068	240.80

#1	.00070	.01375	-.00710	.00238	.00796	-.00005	-.00398	.46502	.00023
#2	.00044	.01295	-.00373	.00262	.00785	-.00013	-.00339	.46358	-.00006

Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Elem	Co2286	Cr2055	Cu3247	Fe2599	K_7664	Li6707	Mg2790	Mn2576	Mo2020
Line	228.616 {447}	205.560 {464}	324.754 {104}	259.940 {130}	766.490 { 44}	670.784 { 50}	279.079 {121}2	257.610 {131}	202.030 {467}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	-.00041	-.00018	-.00166	.06005	.23608	.00061	.22432	.00732	.00033
Stddev	.00000	.00002	.00024	.00104	.02061	.00061	.00279	.00004	.00003
%RSD	.21774	12.071	14.590	1.7274	8.7291	100.14	1.2435	.59647	8.0013

#1	-.00041	-.00016	-.00184	.05932	.25065	.00018	.22235	.00729	.00035
#2	-.00041	-.00019	-.00149	.06079	.22151	.00104	.22629	.00735	.00031

Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Elem	Na5895	Ni2316	P_1782	Pb2203	S_1820	Sb2068	Se1960	Si2881	Sn1899
Line	589.592 { 57}	231.604 {446}	178.284 {489}	220.353 {453}	182.034 {485}	206.833 {463}	196.090 {472}	288.158 {117}	189.989 {477}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	1.4480	.00001	.00158	-.00084	.04927	.00112	-.00336	3.2900	.00036
Stddev	.0009	.00065	.00342	.00082	.00613	.00117	.00206	.0121	.00164
%RSD	.05967	4367.0	215.76	97.595	12.445	103.80	61.351	.36757	453.31

#1	1.4474	-.00045	-.00083	-.00026	.04494	.00030	-.00482	3.2814	-.00080
#2	1.4486	.00048	.00400	-.00141	.05361	.00195	-.00190	3.2985	.00152

Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Elem	Sr4077	Th2837	Ti3349	Ti1908	U_3701	V_2924	Zn2062	Zr3391	
Line	407.771 { 83}	283.730 {119}	334.904 {101}	190.856 {477}	370.152 { 91}	292.402 {115}	206.200 {163}	339.198 { 99}	
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	
Avg	.00989	-.00153	.00040	-.00074	.01594	-.00057	.00134	.00054	
Stddev	.00011	.00014	.00003	.00153	.00410	.00012	.00068	.00131	
%RSD	1.1338	9.2207	7.3977	205.62	25.756	21.395	51.166	244.13	

#1	.00997	-.00143	.00042	.00034	.01884	-.00048	.00085	.00146	
#2	.00981	-.00162	.00038	-.00182	.01303	-.00065	.00182	-.00039	

Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	
High Limit									
Low Limit									

Int. Std.	Y_2243	Y_3600	Y_3774						
Line	224.306 {450}	360.073 { 94}	377.433 { 89}						
Units	Cts/S	Cts/S	Cts/S						
Avg	1556.5	33553.	5823.4						
Stddev	.6	77.	4.7						
%RSD	.03581	.23032	.08154						

#1	1556.9	33607.	5826.7						
#2	1556.1	33498.	5820.0						

Sample Name: 280-83016-D-7-C MS Acquired: 5/21/2016 2:56:21 Type: Unk
Method: 6500_026(v10) Mode: CONC Corr. Factor: 1.000000
User: kellyca Custom ID1: Custom ID2: Custom ID3:
Comment: 326260 6010B

Elem	Ag3280	Al1670	As1890	B_2089	Ba4554	Be3130	Bi2230	Ca3179	Cd2288
Line	328.068 {103}	167.079 {502}	189.042 {478}	208.959 {461}	455.403 { 74}	313.042 {108}	223.061 {451}	317.933 {106}	228.802 {447}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.04749	2.0745	1.0660	1.1470	2.0336	.05165	2.2769	52.596	.10809
Stddev	.00034	.0055	.0125	.0011	.0098	.00016	.0032	.253	.00048
%RSD	.71992	.26696	1.1696	.09542	.47957	.31584	.14296	.48054	.44217

#1	.04725	2.0706	1.0572	1.1478	2.0267	.05154	2.2746	52.417	.10842
#2	.04773	2.0784	1.0748	1.1462	2.0405	.05177	2.2792	52.775	.10775

Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Elem	Co2286	Cr2055	Cu3247	Fe2599	K_7664	Li6707	Mg2790	Mn2576	Mo2020
Line	228.616 {447}	205.560 {464}	324.754 {104}	259.940 {130}	766.490 { 44}	670.784 { 50}	279.079 {121}2	257.610 {131}	202.030 {467}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.52807	W .21022	.24563	1.1204	52.991	1.0785	49.180	.51882	1.1053
Stddev	.00052	.00033	.00046	.0044	.200	.0055	.098	.00043	.0006
%RSD	.09903	.15600	.18912	.39634	.37715	.50549	.19919	.08234	.05486

#1	.52770	.21045	.24596	1.1172	52.850	1.0747	49.111	.51852	1.1058
#2	.52844	.20999	.24530	1.1235	53.133	1.0824	49.249	.51912	1.1049

Check ?	Chk Pass	Chk Warn	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit		.10000							
Low Limit		-.01000							

Elem	Na8183	Ni2316	P_1782	Pb2203	S_1820	Sb2068	Se1960	Si2881	Sn1899
Line	818.326 { 41}	231.604 {446}	178.284 {489}	220.353 {453}	182.034 {485}	206.833 {463}	196.090 {472}	288.158 {117}	189.989 {477}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	58.246	.50338	10.594	.52748	2.3136	.53433	2.0840	26.149	1.9666
Stddev	.815	.00052	.002	.00007	.0035	.00165	.0061	.118	.0024
%RSD	1.3998	.10323	.02018	.01307	.14950	.30846	.29463	.44990	.12211

#1	57.670	.50375	10.595	.52753	2.3111	.53550	2.0797	26.066	1.9683
#2	58.823	.50302	10.592	.52743	2.3160	.53316	2.0884	26.232	1.9649

Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Elem	Sr4077	Th2837	Ti3349	Ti1908	U_3701	V_2924	Zn2062	Zr3391	
Line	407.771 { 83}	283.730 {119}	334.904 {101}	190.856 {477}	370.152 { 91}	292.402 {115}	206.200 {163}	339.198 { 99}	
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	
Avg	.96862	.97634	.90802	1.9976	2.0834	.45545	.49623	.49116	
Stddev	.00482	.00084	.00094	.0089	.0294	.00025	.00157	.00547	
%RSD	.49793	.08624	.10303	.44639	1.4112	.05489	.31547	1.1133	

#1	.96521	.97574	.90869	2.0039	2.0626	.45527	.49512	.48729	
#2	.97203	.97694	.90736	1.9913	2.1042	.45563	.49734	.49503	

Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	
High Limit									
Low Limit									

Int. Std.	Y_2243	Y_3600	Y_3774
Line	224.306 {450}	360.073 { 94}	377.433 { 89}
Units	Cts/S	Cts/S	Cts/S
Avg	1484.2	31717.	5738.9
Stddev	.6	29.	16.9
%RSD	.03836	.09079	.29431

#1	1483.8	31696.	5750.8
#2	1484.6	31737.	5727.0

Sample Name: 280-83016-D-7-D MSD Acquired: 5/21/2016 2:58:57 Type: Unk
Method: 6500_026(v10) Mode: CONC Corr. Factor: 1.000000
User: kellyca Custom ID1: Custom ID2: Custom ID3:
Comment: 326260 6010B

Elem	Ag3280	Al1670	As1890	B_2089	Ba4554	Be3130	Bi2230	Ca3179	Cd2288
Line	328.068 {103}	167.079 {502}	189.042 {478}	208.959 {461}	455.403 { 74}	313.042 {108}	223.061 {451}	317.933 {106}	228.802 {447}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.04780	2.0910	1.0658	1.1466	2.0425	.05191	2.2844	52.726	.10787
Stddev	.00012	.0141	.0012	.0015	.0065	.00015	.0013	.282	.00038
%RSD	.24227	.67605	.11150	.12751	.31907	.29393	.05839	.53506	.35101

#1	.04772	2.1010	1.0649	1.1455	2.0379	.05181	2.2834	52.527	.10814
#2	.04789	2.0810	1.0666	1.1476	2.0471	.05202	2.2853	52.926	.10761

Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Elem	Co2286	Cr2055	Cu3247	Fe2599	K_7664	Li6707	Mg2790	Mn2576	Mo2020
Line	228.616 {447}	205.560 {464}	324.754 {104}	259.940 {130}	766.490 { 44}	670.784 { 50}	279.079 {121}2	257.610 {131}	202.030 {467}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.52894	W .21029	.24705	1.1339	53.313	1.0839	49.516	.52374	1.1043
Stddev	.00083	.00049	.00106	.0070	.209	.0015	.269	.00297	.0014
%RSD	.15702	.23399	.42997	.61470	.39242	.13951	.54398	.56684	.12698

#1	.52952	.21064	.24630	1.1290	53.165	1.0828	49.326	.52164	1.1052
#2	.52835	.20994	.24780	1.1388	53.461	1.0850	49.707	.52584	1.1033

Check ?	Chk Pass	Chk Warn	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit		.10000							
Low Limit		-.01000							

Elem	Na8183	Ni2316	P_1782	Pb2203	S_1820	Sb2068	Se1960	Si2881	Sn1899
Line	818.326 { 41}	231.604 {446}	178.284 {489}	220.353 {453}	182.034 {485}	206.833 {463}	196.090 {472}	288.158 {117}	189.989 {477}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	58.573	.50406	10.618	.52773	2.3144	.53048	2.0678	26.655	1.9660
Stddev	.222	.00241	.022	.00441	.0018	.00085	.0100	.183	.0025
%RSD	.37946	.47857	.20401	.83561	.07849	.16044	.48101	.68512	.12693

#1	58.416	.50576	10.633	.53085	2.3131	.53109	2.0748	26.526	1.9677
#2	58.730	.50235	10.602	.52461	2.3156	.52988	2.0607	26.784	1.9642

Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Elem	Sr4077	Th2837	Ti3349	Ti1908	U_3701	V_2924	Zn2062	Zr3391
Line	407.771 { 83}	283.730 {119}	334.904 {101}	190.856 {477}	370.152 { 91}	292.402 {115}	206.200 {163}	339.198 { 99}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.97493	.97425	.91556	2.0038	2.0964	.46086	.49953	.49391
Stddev	.00330	.00794	.00232	.0084	.0410	.00222	.00368	.00538
%RSD	.33865	.81505	.25332	.42097	1.9551	.48225	.73754	1.0900

#1	.97259	.96863	.91392	2.0098	2.0674	.45929	.49693	.49010
#2	.97726	.97986	.91720	1.9978	2.1254	.46244	.50214	.49772

Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit								
Low Limit								

Int. Std.	Y_2243	Y_3600	Y_3774
Line	224.306 {450}	360.073 { 94}	377.433 { 89}
Units	Cts/S	Cts/S	Cts/S
Avg	1487.4	31591.	5755.9
Stddev	.5	78.	31.7
%RSD	.03109	.24580	.55054

#1	1487.7	31646.	5778.3
#2	1487.0	31536.	5733.5

Sample Name: 280-83016-D-8-C Acquired: 5/21/2016 3:01:32 Type: Unk
Method: 6500_026(v10) Mode: CONC Corr. Factor: 1.000000
User: kellyca Custom ID1: Custom ID2: Custom ID3:
Comment: 326260 6010B

Elem	Ag3280	Al1670	As1890	B_2089	Ba4554	Be3130	Bi2230	Ca3179	Cd2288
Line	328.068 {103}	167.079 {502}	189.042 {478}	208.959 {461}	455.403 { 74}	313.042 {108}	223.061 {451}	317.933 {106}	228.802 {447}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.00067	.00037	-.00152	.00310	.00034	-.00016	-.00262	.02199	.00018
Stddev	.00047	.00031	.00088	.00022	.00005	.00000	.00336	.00104	.00034
%RSD	70.600	84.005	57.753	7.0917	15.668	.74867	128.16	4.7452	189.06

#1	.00033	.00015	-.00214	.00325	.00038	-.00016	-.00500	.02125	.00042
#2	.00100	.00059	-.00090	.00294	.00030	-.00017	-.00025	.02272	-.00006

Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Elem	Co2286	Cr2055	Cu3247	Fe2599	K_7664	Li6707	Mg2790	Mn2576	Mo2020
Line	228.616 {447}	205.560 {464}	324.754 {104}	259.940 {130}	766.490 { 44}	670.784 { 50}	279.079 {121}2	257.610 {131}	202.030 {467}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	-.00068	.00010	-.00210	.00536	.12843	-.00059	.00488	.00019	.00119
Stddev	.00001	.00001	.00006	.00063	.00977	.00035	.00020	.00007	.00035
%RSD	1.3749	9.8196	2.8148	11.750	7.6053	59.647	4.1642	36.488	29.408

#1	-.00068	.00010	-.00206	.00492	.13534	-.00084	.00474	.00014	.00144
#2	-.00067	.00009	-.00214	.00581	.12153	-.00034	.00502	.00025	.00094

Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Elem	Na5895	Ni2316	P_1782	Pb2203	S_1820	Sb2068	Se1960	Si2881	Sn1899
Line	589.592 { 57}	231.604 {446}	178.284 {489}	220.353 {453}	182.034 {485}	206.833 {463}	196.090 {472}	288.158 {117}	189.989 {477}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.04586	.00027	.00280	-.00079	.00682	-.00014	.00403	.00806	.00208
Stddev	.00012	.00035	.00281	.00043	.00198	.00020	.00489	.00008	.00006
%RSD	.25445	128.89	100.13	54.286	29.038	146.15	121.31	.93821	2.7001

#1	.04594	.00052	.00479	-.00109	.00542	-.00028	.00750	.00801	.00212
#2	.04578	.00002	.00082	-.00048	.00822	.00000	.00057	.00811	.00204

Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Elem	Sr4077	Th2837	Ti3349	Ti1908	U_3701	V_2924	Zn2062	Zr3391	
Line	407.771 { 83}	283.730 {119}	334.904 {101}	190.856 {477}	370.152 { 91}	292.402 {115}	206.200 {163}	339.198 { 99}	
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	
Avg	.00011	-.00027	.00035	-.00268	.01445	-.00003	-.00024	-.00107	
Stddev	.00001	.00074	.00001	.00157	.01556	.00081	.00013	.00111	
%RSD	11.160	276.90	4.0734	58.715	107.69	2886.1	53.850	103.94	

#1	.00012	-.00079	.00036	-.00379	.00345	.00055	-.00033	-.00028	
#2	.00011	.00026	.00034	-.00157	.02546	-.00060	-.00015	-.00185	

Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	
High Limit									
Low Limit									

Int. Std.	Y_2243	Y_3600	Y_3774						
Line	224.306 {450}	360.073 { 94}	377.433 { 89}						
Units	Cts/S	Cts/S	Cts/S						
Avg	1556.2	33316.	5753.1						
Stddev	3.3	28.	47.4						
%RSD	.20950	.08419	.82453						

#1	1553.9	33336.	5786.7						
#2	1558.5	33296.	5719.6						

Sample Name: 280-83016-D-9-E Acquired: 5/21/2016 3:04:19 Type: Unk
Method: 6500_026(v10) Mode: CONC Corr. Factor: 1.000000
User: kellyca Custom ID1: Custom ID2: Custom ID3:
Comment: 326260 6010B

Elem	Ag3280	Al1670	As1890	B_2089	Ba4554	Be3130	Bi2230	Ca3179	Cd2288
Line	328.068 {103}	167.079 {502}	189.042 {478}	208.959 {461}	455.403 { 74}	313.042 {108}	223.061 {451}	317.933 {106}	228.802 {447}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.00029	.00144	-.00793	.01569	.04779	-.00001	-.00780	1.0241	.00032
Stddev	.00051	.00035	.00039	.00047	.00001	.00005	.00117	.0036	.00023
%RSD	176.77	24.139	4.9661	2.9701	.02673	444.70	14.994	.35368	69.467

#1	-.00007	.00120	-.00821	.01602	.04780	-.00005	-.00697	1.0267	.00048
#2	.00064	.00169	-.00765	.01536	.04778	.00002	-.00862	1.0216	.00017

Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Elem	Co2286	Cr2055	Cu3247	Fe2599	K_7664	Li6707	Mg2790	Mn2576	Mo2020
Line	228.616 {447}	205.560 {464}	324.754 {104}	259.940 {130}	766.490 { 44}	670.784 { 50}	279.079 {121}2	257.610 {131}	202.030 {467}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	-.00095	.00046	-.00130	.00777	1.5554	.01189	1.0564	.00490	.00028
Stddev	.00001	.00010	.00029	.00329	.0066	.00007	.0081	.00005	.00013
%RSD	1.0412	21.901	22.452	42.302	.42188	.61955	.76681	1.0764	47.156

#1	-.00096	.00039	-.00151	.00544	1.5508	.01194	1.0622	.00494	.00019
#2	-.00094	.00053	-.00110	.01009	1.5600	.01184	1.0507	.00486	.00038

Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Elem	Na8183	Ni2316	P_1782	Pb2203	S_1820	Sb2068	Se1960	Si2881	Sn1899
Line	818.326 { 41}	231.604 {446}	178.284 {489}	220.353 {453}	182.034 {485}	206.833 {463}	196.090 {472}	288.158 {117}	189.989 {477}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	11.538	.00145	.03543	-.00227	1.1440	.00139	.00464	45.999	.00017
Stddev	.104	.00064	.00534	.00048	.0004	.00131	.00018	.112	.00141
%RSD	.90342	44.286	15.071	21.272	.03936	93.982	3.7999	.24358	829.16

#1	11.464	.00099	.03921	-.00261	1.1443	.00047	.00452	45.920	.00117
#2	11.612	.00190	.03165	-.00193	1.1436	.00232	.00477	46.079	-.00083

Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Elem	Sr4077	Th2837	Ti3349	Ti1908	U_3701	V_2924	Zn2062	Zr3391
Line	407.771 { 83}	283.730 {119}	334.904 {101}	190.856 {477}	370.152 { 91}	292.402 {115}	206.200 {163}	339.198 { 99}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.03715	-.00282	-.00005	-.00158	.01788	.00048	.00028	.00089
Stddev	.00001	.00044	.00017	.00149	.02713	.00040	.00056	.00123
%RSD	.01395	15.466	352.50	94.078	151.75	83.436	202.33	138.52

#1	.03715	-.00312	.00007	-.00053	.03707	.00019	.00067	.00002
#2	.03714	-.00251	-.00017	-.00264	-.00131	.00076	-.00012	.00176

Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit								
Low Limit								

Int. Std.	Y_2243	Y_3600	Y_3774
Line	224.306 {450}	360.073 { 94}	377.433 { 89}
Units	Cts/S	Cts/S	Cts/S
Avg	1551.4	33127.	5837.2
Stddev	.1	73.	18.7
%RSD	.00926	.22146	.32099

#1	1551.3	33179.	5850.5
#2	1551.5	33075.	5824.0

Sample Name: 280-83087-F-8-E Acquired: 5/21/2016 3:07:06 Type: Unk
Method: 6500_026(v10) Mode: CONC Corr. Factor: 1.000000
User: kellyca Custom ID1: Custom ID2: Custom ID3:
Comment: 326260 6010B

Elem	Ag3280	Al3092	As1890	B_2089	Ba4554	Be3130	Bi2230	Ca3179	Cd2288
Line	328.068 {103}	309.271 {109}	189.042 {478}	208.959 {461}	455.403 { 74}	313.042 {108}	223.061 {451}	317.933 {106}	228.802 {447}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.00021	9.4432	.01199	.47641	.11585	.00040	-.00110	393.91	.00070
Stddev	.00044	.0152	.00322	.00232	.00038	.00004	.00058	1.96	.00011
%RSD	211.33	.16054	26.855	.48720	.32933	8.8286	52.735	.49641	15.994

#1	-.00010	9.4324	.01427	.47805	.11558	.00037	-.00151	392.53	.00078
#2	.00052	9.4539	.00972	.47477	.11611	.00042	-.00069	395.29	.00062

Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Elem	Co2286	Cr2055	Cu3247	Fe2599	K_7664	Li6707	Mg2790	Mn2576	Mo2020
Line	228.616 {447}	205.560 {464}	324.754 {104}	259.940 {130}	766.490 { 44}	670.784 { 50}	279.079 {121}2	257.610 {131}	202.030 {467}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.02538	.01841	.01193	15.040	7.2050	.06162	167.56	2.6820	.00317
Stddev	.00036	.00019	.00011	.052	.0008	.00055	.55	.0071	.00020
%RSD	1.4258	1.0158	.95090	.34659	.01110	.88958	.32732	.26408	6.4635

#1	.02512	.01828	.01185	15.003	7.2056	.06200	167.95	2.6870	.00302
#2	.02563	.01854	.01201	15.077	7.2045	.06123	167.18	2.6770	.00331

Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Elem	Na8183	Ni2316	P_1782	Pb2203	S_1820	Sb2068	Se1960	Si2881	Sn1899
Line	818.326 { 41}	231.604 {446}	178.284 {489}	220.353 {453}	182.034 {485}	206.833 {463}	196.090 {472}	288.158 {117}	189.989 {477}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	50.969	.03357	.45793	.00388	F 312.09	.00040	.00958	25.940	.00142
Stddev	.168	.00129	.00349	.00539	1.15	.00186	.00281	.032	.00011
%RSD	.32892	3.8474	.76130	139.10	.36690	458.45	29.329	.12362	7.9567

#1	50.850	.03448	.46039	.00006	312.90	.00172	.01157	25.918	.00134
#2	51.087	.03266	.45546	.00769	311.28	-.00091	.00759	25.963	.00150

Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Fail	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit					200.00				
Low Limit					-.02000				

Elem	Sr4077	Th2837	Ti3349	Ti1908	U_3701	V_2924	Zn2062	Zr3391
Line	407.771 { 83}	283.730 {119}	334.904 {101}	190.856 {477}	370.152 { 91}	292.402 {115}	206.200 {163}	339.198 { 99}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.95700	-.00423	.25513	-.00210	.00229	.01709	.05447	.00885
Stddev	.00483	.00175	.00417	.00029	.02366	.00022	.00062	.00103
%RSD	.50498	41.287	1.6336	13.615	1034.3	1.2881	1.1335	11.584

#1	.95359	-.00547	.25219	-.00190	.01901	.01693	.05404	.00958
#2	.96042	-.00300	.25808	-.00231	-.01444	.01724	.05491	.00813

Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit								
Low Limit								

Int. Std.	Y_2243	Y_3600	Y_3774
Line	224.306 {450}	360.073 { 94}	377.433 { 89}
Units	Cts/S	Cts/S	Cts/S
Avg	1400.5	30571.	5713.0
Stddev	2.4	72.	31.2
%RSD	.17370	.23417	.54607

#1	1398.8	30520.	5735.1
#2	1402.2	30621.	5691.0

Sample Name: ccvh-3900196 Acquired: 5/21/2016 3:09:47 Type: QC
Method: 6500_026(v10) Mode: CONC Corr. Factor: 1.000000
User: kellyca Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	Ag3280	Al3092	As1890	B_2089	Ba4554	Be3130	Bi2230	Ca3179	Cd2288	Co2286	Cr2055	Cu3247
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	k -.01417	F 44.800	k -.00214	.00305	.00008	-.00039	1.0906	-.02522	k -.00089	.00288	-.00039	k .01016
Stddev	.01371	.078	.00327	.00032	.00001	.00004	.0036	.00567	.00009	.00001	.00012	.00910
%RSD	96.748	.17485	152.51	10.366	14.156	10.419	.32804	22.476	9.7144	.33849	31.252	89.531

#1	k -.02386	44.744	k .00017	.00283	.00007	-.00036	1.0931	-.02121	k -.00083	.00287	-.00030	k .01660
#2	-.00448	44.855	-.00445	.00328	.00009	-.00042	1.0880	-.02923	-.00095	.00289	-.00047	.00373

Check ?	None	Chk Fail	None	None	None	None	Chk Pass	None	None	None	None	None
Value		50.000										
Range		-10.000%										

Elem	Fe2714	K_7664	Li6707	Mg2790	Mn2576	Mo2020	Na8183	Ni2316	P_1782	Pb2203	S_1820	Sb2068
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	F 44.866	.07359	-.00046	.16154	k -.00000	-.00220	247.88	-.00004	.00434	k .00170	5.1290	k -.00025
Stddev	.426	.03298	.00012	.00687	.00039	.00016	.77	.00056	.00181	.00081	.0212	.00070
%RSD	.94905	44.824	25.567	4.2526	10302.	7.0732	.31224	1423.5	41.836	47.629	.41278	276.60

#1	44.565	.09691	-.00038	.15668	k .00027	-.00231	247.33	.00035	.00562	k .00227	5.1440	k -.00074
#2	45.167	.05026	-.00054	.16639	-.00028	-.00209	248.43	-.00043	.00305	.00113	5.1141	.00024

Check ?	Chk Fail	None	None	None	None	None	Chk Pass	None	None	None	Chk Pass	None
Value	50.000											
Range	-10.000%											

Elem	Se1960	Si2881	Sn1899	Sr4077	Th2837	Ti3349	Ti1908	U_3701	V_2924	Zn2062	Zr3391
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	k .00236	-.00898	.00123	.00033	k 4.8304	.02695	k -.00500	9.9353	k -.00859	-.00261	k .14373
Stddev	.00687	.01203	.00014	.00005	.0088	.00008	.00221	.0228	.01005	.00085	.23961
%RSD	290.99	133.97	10.975	14.685	.18254	.28491	44.263	.22997	116.95	32.776	166.71

#1	k .00722	-.01749	.00114	.00036	k 4.8366	.02700	k -.00657	9.9514	k -.00149	-.00200	k .31316
#2	-.00250	-.00047	.00133	.00030	4.8241	.02689	-.00344	9.9191	-.01570	-.00321	-.02570

Check ?	None	None	None	None	Chk Pass	None	None	Chk Pass	None	None	None
Value											
Range											

Int. Std.	Y_2243	Y_3600	Y_3774
Units	Cts/S	Cts/S	Cts/S
Avg	1483.9	31824.	5893.8
Stddev	5.4	11.	15.0
%RSD	.36322	.03339	.25434

#1	1480.1	31816.	5904.4
#2	1487.7	31831.	5883.2

Sample Name: ccv-3900195 Acquired: 5/21/2016 3:12:38 Type: QC
Method: 6500_026(v10) Mode: CONC Corr. Factor: 1.000000
User: kellyca Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	Ag3280	Al1670	As1890	B_2089	Ba4554	Be3130	Bi2230	Ca3179	Cd2288	Co2286	Cr2055	Cu3247
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.47563	.52079	1.0355	F .56112	.49918	.51035	-.00752	4.9308	.54374	.54074	.52802	.49305
Stddev	.00023	.00326	.0028	.00032	.00005	.00066	.00142	.0192	.00000	.00009	.00023	.00094
%RSD	.04732	.62596	.27226	.05778	.01007	.12856	18.813	.38986	.00011	.01609	.04269	.19051

#1	.47579	.52310	1.0335	.56089	.49914	.50988	-.00652	4.9173	.54374	.54080	.52786	.49239
#2	.47547	.51849	1.0375	.56135	.49922	.51081	-.00852	4.9444	.54374	.54067	.52818	.49372

Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Fail	Chk Pass	Chk Pass	None	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Value				.50000								
Range				10.000%								

Elem	Fe2599	K_7664	Li6707	Mg2790	Mn2576	Mo2020	Na5895	Ni2316	P_1782	Pb2203	S_1820	Sb2068
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	2.4861	51.166	1.0735	19.262	.49520	.54243	5.2687	.51247	1.0352	1.0690	.01041	1.0409
Stddev	.0031	.119	.0020	.034	.00156	.00125	.0066	.00044	.0004	.0020	.00232	.0075
%RSD	.12611	.23288	.18276	.17806	.31580	.23039	.12529	.08682	.03598	.18596	22.285	.71787

#1	2.4884	51.081	1.0722	19.238	.49409	.54331	5.2640	.51215	1.0355	1.0704	.00877	1.0356
#2	2.4839	51.250	1.0749	19.287	.49631	.54154	5.2733	.51278	1.0350	1.0676	.01205	1.0462

Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	None	Chk Pass
Value												
Range												

Elem	Se1960	Si2881	Sn1899	Sr4077	Th2837	Ti3349	Ti1908	U_3701	V_2924	Zn2062	Zr3391
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	1.0050	4.9758	.99497	.46454	.00130	.45146	1.0315	.02477	.46130	.48963	.49841
Stddev	.0048	.0381	.00355	.00123	.00196	.00188	.0056	.00248	.00022	.00086	.00292
%RSD	.47701	.76591	.35686	.26563	150.44	.41714	.54480	10.025	.04768	.17488	.58501

#1	1.0084	4.9489	.99748	.46366	.00269	.45013	1.0275	.02302	.46146	.48903	.49634
#2	1.0016	5.0028	.99246	.46541	-.00008	.45279	1.0355	.02653	.46115	.49024	.50047

Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	None	Chk Pass	Chk Pass	None	Chk Pass	Chk Pass	Chk Pass
Value											
Range											

Int. Std.	Y_2243	Y_3600	Y_3774
Units	Cts/S	Cts/S	Cts/S
Avg	1513.5	32469.	5902.0
Stddev	.0	51.	22.8
%RSD	.00048	.15729	.38626

#1	1513.5	32433.	5918.1
#2	1513.5	32505.	5885.8

Sample Name: ccb Acquired: 5/21/2016 3:15:17 Type: QC
Method: 6500_026(v10) Mode: CONC Corr. Factor: 1.000000
User: kellyca Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	Ag3280	Al1670	As1890	B_2089	Ba4554	Be3130	Bi2230	Ca3179	Cd2288	Co2286	Cr2055
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	-.00005	-.00103	W -.00626	W .00198	.00010	-.00001	-.00420	-.00341	.00014	-.00025	.00004
Stddev	.00005	.00008	.00208	.00013	.00005	.00012	.00071	.00475	.00007	.00015	.00012
%RSD	111.50	7.8304	33.144	6.5307	53.516	976.71	16.846	139.06	52.124	61.802	268.33
#1	-.00008	-.00098	-.00773	.00207	.00013	-.00009	-.00370	-.00006	.00019	-.00035	.00013
#2	-.00001	-.00109	-.00480	.00189	.00006	.00007	-.00470	-.00677	.00009	-.00014	-.00004
Check ?	Chk Pass	Chk Pass	Chk Warn	Chk Warn	Chk Pass	Chk Pass	None	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit			.00440	.00156							
Low Limit			-.00440	-.00156							
Elem	Cu3247	Fe2599	K_7664	Li6707	Mg2790	Mn2576	Mo2020	Na5895	Ni2316	P_1782	Pb2203
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	W -.00184	.01250	.08209	-.00069	.00500	.00018	.00020	.02714	-.00047	-.00229	-.00037
Stddev	.00010	.00019	.03020	.00140	.00228	.00009	.00019	.00247	.00032	.00239	.00219
%RSD	5.5127	1.5388	36.785	202.15	45.718	51.266	97.127	9.0976	69.202	104.64	589.37
#1	-.00191	.01236	.10344	-.00169	.00661	.00024	.00034	.02539	-.00024	-.00060	.00118
#2	-.00177	.01264	.06074	.00030	.00338	.00011	.00006	.02888	-.00070	-.00398	-.00192
Check ?	Chk Warn	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit	.00136										
Low Limit	-.00136										
Elem	S_1820	Sb2068	Se1960	Si2881	Sn1899	Sr4077	Th2837	Ti3349	Ti1908	U_3701	V_2924
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.00974	.00120	.00214	-.00819	.00103	.00003	-.00157	.00027	-.00411	.01981	-.00030
Stddev	.00039	.00193	.00059	.00528	.00012	.00001	.00168	.00014	.00052	.00319	.00091
%RSD	4.0382	160.80	27.449	64.528	11.602	19.111	107.52	53.988	12.631	16.115	308.06
#1	.00947	-.00016	.00255	-.00445	.00095	.00003	-.00038	.00037	-.00374	.01755	.00035
#2	.01002	.00256	.00172	-.01192	.00112	.00003	-.00276	.00016	-.00448	.02207	-.00094
Check ?	None	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit											
Low Limit											
Elem	Zn2062	Zr3391									
Units	ppm	ppm									
Avg	-.00024	.00021									
Stddev	.00082	.00021									
%RSD	343.77	99.279									
#1	.00034	.00006									
#2	-.00082	.00036									
Check ?	Chk Pass	Chk Pass									
High Limit											
Low Limit											
Int. Std.	Y_2243	Y_3600	Y_3774								
Units	Cts/S	Cts/S	Cts/S								
Avg	1539.1	33487.	5896.1								
Stddev	2.3	3.	6.7								
%RSD	.14659	.00785	.11295								
#1	1537.5	33485.	5891.4								
#2	1540.7	33489.	5900.8								

Sample Name: ccvl-3903059 Acquired: 5/21/2016 3:18:07 Type: QC
Method: 6500_026(v10) Mode: CONC Corr. Factor: 1.000000
User: kellyca Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	Ag3280	Al1670	As1890	B_2089	Ba4554	Be3130	Bi2230	Ca3179	Cd2288	Co2286	Cr2055	Cu3247	Fe2599	K_7664
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.00967	.10553	.01228	.11304	.01011	.00087	.11700	.19792	.00575	.01056	.01057	.01680	.11903	3.1384
Stddev	.00003	.00059	.00082	.00090	.00001	.00009	.00123	.00442	.00002	.00004	.00008	.00032	.00039	.0220
%RSD	.36181	.55780	6.7059	.79469	.10839	9.8944	1.0541	2.2325	.43168	.38184	.74855	1.8830	.32660	.70226
#1	.00964	.10595	.01169	.11241	.01010	.00081	.11787	.19480	.00577	.01053	.01062	.01702	.11876	3.1229
#2	.00969	.10511	.01286	.11368	.01012	.00093	.11613	.20105	.00574	.01059	.01051	.01658	.11931	3.1540

Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Value														
Range														

Elem	Li6707	Mg2790	Mn2576	Mo2020	Na5895	Ni2316	P_1782	Pb2203	S_1820	Sb2068	Se1960	Si2881	Sn1899	Sr4077
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.01095	.20555	.01032	.02155	1.0495	.04206	3.0179	.00822	.00638	.02051	.01585	.49723	.10292	.00928
Stddev	.00002	.00225	.00011	.00009	.0070	.00012	.0073	.00060	.00286	.00248	.01005	.00491	.00035	.00003
%RSD	.14372	1.0923	1.0440	.42857	.67224	.28647	.24135	7.3026	44.863	12.097	63.405	.98747	.34166	.28846
#1	.01094	.20713	.01040	.02149	1.0445	.04198	3.0127	.00864	.00436	.01876	.02296	.50070	.10268	.00930
#2	.01096	.20396	.01024	.02162	1.0545	.04215	3.0230	.00779	.00841	.02226	.00875	.49376	.10317	.00926

Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	None	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Value														
Range														

Elem	Th2837	Ti3349	Ti1908	U_3701	V_2924	Zn2062	Zr3391
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.01323	.00946	.01516	.07736	.00895	.01860	.01467
Stddev	.00214	.00023	.00165	.00225	.00091	.00086	.00100
%RSD	16.179	2.3848	10.878	2.9059	10.140	4.6407	6.8224
#1	.01172	.00930	.01632	.07577	.00959	.01799	.01538
#2	.01475	.00962	.01399	.07895	.00831	.01921	.01397

Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Value							
Range							

Int. Std.	Y_2243	Y_3600	Y_3774
Units	Cts/S	Cts/S	Cts/S
Avg	1556.6	33477.	5801.2
Stddev	.8	94.	8.4
%RSD	.04857	.28175	.14488
#1	1557.1	33410.	5807.1
#2	1556.1	33544.	5795.2

Sample Name: MB 280-326194/1-A Acquired: 5/21/2016 3:20:55 Type: Unk
Method: 6500_026(v10) Mode: CONC Corr. Factor: 1.000000
User: kellyca Custom ID1: 5/20 Custom ID2: Custom ID3:
Comment: 326194 6010C dupont

Elem	Ag3280	Al1670	As1890	B_2089	Ba4554	Be3130	Bi2230	Ca3179	Cd2288
Line	328.068 {103}	167.079 {502}	189.042 {478}	208.959 {461}	455.403 { 74}	313.042 {108}	223.061 {451}	317.933 {106}	228.802 {447}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.00041	.00463	-.00179	.00143	.00007	-.00016	-.00092	.05693	-.00020
Stddev	.00022	.00036	.00484	.00019	.00007	.00002	.00218	.00336	.00006
%RSD	54.057	7.7510	269.77	13.058	104.29	9.1237	235.76	5.9004	31.605

#1	.00057	.00488	-.00521	.00156	.00011	-.00015	.00062	.05931	-.00025
#2	.00025	.00437	.00163	.00130	.00002	-.00018	-.00246	.05456	-.00016

Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Elem	Co2286	Cr2055	Cu3247	Fe2599	K_7664	Li6707	Mg2790	Mn2576	Mo2020
Line	228.616 {447}	205.560 {464}	324.754 {104}	259.940 {130}	766.490 { 44}	670.784 { 50}	279.079 {121}2	257.610 {131}	202.030 {467}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	-.00065	.00007	-.00103	.01321	.07611	-.00075	.00853	.00017	-.00036
Stddev	.00014	.00041	.00027	.00073	.01659	.00007	.00601	.00002	.00018
%RSD	21.702	553.46	26.447	5.5407	21.803	8.9094	70.389	9.5605	49.288

#1	-.00075	-.00021	-.00084	.01270	.08784	-.00070	.00429	.00018	-.00049
#2	-.00055	.00036	-.00122	.01373	.06437	-.00080	.01278	.00016	-.00024

Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Elem	Na5895	Ni2316	P_1782	Pb2203	S_1820	Sb2068	Se1960	Si2881	Sn1899
Line	589.592 { 57}	231.604 {446}	178.284 {489}	220.353 {453}	182.034 {485}	206.833 {463}	196.090 {472}	288.158 {117}	189.989 {477}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.03888	.00112	-.00295	-.00094	.01528	.00068	.00111	.00485	.00036
Stddev	.01071	.00023	.00227	.00042	.00047	.00097	.00226	.00593	.00191
%RSD	27.545	20.187	77.086	44.778	3.0867	142.36	203.62	122.21	535.51

#1	.04645	.00096	-.00456	-.00064	.01494	.00137	.00271	.00904	-.00099
#2	.03130	.00128	-.00134	-.00123	.01561	-.00000	-.00049	.00066	.00170

Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Elem	Sr4077	Th2837	Ti3349	Ti1908	U_3701	V_2924	Zn2062	Zr3391	
Line	407.771 { 83}	283.730 {119}	334.904 {101}	190.856 {477}	370.152 { 91}	292.402 {115}	206.200 {163}	339.198 { 99}	
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	
Avg	.00003	-.00163	.00014	-.00083	.00578	-.00005	.00228	.00088	
Stddev	.00000	.00057	.00029	.00077	.00149	.00026	.00072	.00097	
%RSD	3.2886	35.216	213.62	93.059	25.871	561.69	31.427	110.14	

#1	.00003	-.00203	.00034	-.00028	.00684	.00014	.00279	.00019	
#2	.00003	-.00122	-.00007	-.00138	.00472	-.00023	.00178	.00156	

Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	
High Limit									
Low Limit									

Int. Std.	Y_2243	Y_3600	Y_3774						
Line	224.306 {450}	360.073 { 94}	377.433 { 89}						
Units	Cts/S	Cts/S	Cts/S						
Avg	1556.5	33838.	5885.9						
Stddev	1.7	75.	18.6						
%RSD	.10690	.22030	.31517						

#1	1557.7	33891.	5872.7						
#2	1555.3	33785.	5899.0						

Sample Name: LCS 280-326194/2-A Acquired: 5/21/2016 3:23:42 Type: Unk

Method: 6500_026(v10) Mode: CONC Corr. Factor: 1.000000

User: kellyca Custom ID1: Custom ID2: Custom ID3:

Comment: 326194 6010C dupont

Elem	Ag3280	Al1670	As1890	B_2089	Ba4554	Be3130	Bi2230	Ca3179	Cd2288
Line	328.068 {103}	167.079 {502}	189.042 {478}	208.959 {461}	455.403 { 74}	313.042 {108}	223.061 {451}	317.933 {106}	228.802 {447}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.04668	1.9804	1.0547	F 1.1310	1.9674	.05072	F 2.2590	49.451	.10637
Stddev	.00031	.0040	.0050	.0045	.0065	.00004	.0011	.219	.00002
%RSD	.66022	.19933	.47775	.39664	.32956	.08619	.04681	.44339	.01443

#1	.04646	1.9832	1.0511	1.1278	1.9628	.05069	2.2583	49.296	.10638
#2	.04689	1.9776	1.0582	1.1341	1.9720	.05075	2.2598	49.606	.10636

Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Fail	Chk Pass	Chk Pass	Chk Fail	Chk Pass	Chk Pass
High Limit				1.1000			2.2000		
Low Limit				.89000			1.8000		

Elem	Co2286	Cr2055	Cu3247	Fe2599	K_7664	Li6707	Mg2790	Mn2576	Mo2020
Line	228.616 {447}	205.560 {464}	324.754 {104}	259.940 {130}	766.490 { 44}	670.784 { 50}	279.079 {121}2	257.610 {131}	202.030 {467}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.52159	F .20779	.24023	1.0045	51.546	1.0597	47.281	.47833	1.0920
Stddev	.00196	.00057	.00066	.0032	.118	.0027	.189	.00200	.0048
%RSD	.37529	.27380	.27481	.31943	.22863	.25526	.39954	.41768	.44014

#1	.52021	.20819	.23977	1.0022	51.463	1.0578	47.147	.47691	1.0886
#2	.52298	.20738	.24070	1.0068	51.630	1.0616	47.414	.47974	1.0954

Check ?	Chk Pass	Chk Fail	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit		.05750							
Low Limit		.04300							

Elem	Na8183	Ni2316	P_1782	Pb2203	S_1820	Sb2068	Se1960	Si2881	Sn1899
Line	818.326 { 41}	231.604 {446}	178.284 {489}	220.353 {453}	182.034 {485}	206.833 {463}	196.090 {472}	288.158 {117}	189.989 {477}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	50.427	.49703	10.561	.52431	2.0970	.52670	2.0500	9.9464	1.9413
Stddev	.148	.00069	.024	.00063	.0057	.00454	.0095	.0488	.0018
%RSD	.29319	.13785	.22574	.12105	.27190	.86107	.46222	.49018	.09462

#1	50.323	.49752	10.545	.52386	2.1010	.52349	2.0567	9.9120	1.9426
#2	50.532	.49655	10.578	.52476	2.0929	.52991	2.0433	9.9809	1.9400

Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Elem	Sr4077	Th2837	Ti3349	Ti1908	U_3701	V_2924	Zn2062	Zr3391
Line	407.771 { 83}	283.730 {119}	334.904 {101}	190.856 {477}	370.152 { 91}	292.402 {115}	206.200 {163}	339.198 { 99}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	F .90659	.95954	F .88863	1.9849	2.0565	.44614	.47812	.48375
Stddev	.00133	.00713	.00090	.0014	.0057	.00101	.00304	.00315
%RSD	.14652	.74353	.10100	.07322	.27873	.22582	.63663	.65201

#1	.90565	.95450	.88799	1.9839	2.0525	.44543	.47596	.48152
#2	.90753	.96458	.88926	1.9859	2.0606	.44685	.48027	.48598

Check ?	Chk Fail	Chk Pass	Chk Fail	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit	1.1000		1.1000					
Low Limit	.91000		.90000					

Int. Std.	Y_2243	Y_3600	Y_3774
Line	224.306 {450}	360.073 { 94}	377.433 { 89}
Units	Cts/S	Cts/S	Cts/S
Avg	1489.8	32036.	5820.3
Stddev	1.6	96.	12.2
%RSD	.10669	.29931	.20883

#1	1490.9	32104.	5828.9
#2	1488.6	31968.	5811.7

Sample Name: 280-83148-A-2-A Acquired: 5/21/2016 3:26:18 Type: Unk
Method: 6500_026(v10) Mode: CONC Corr. Factor: 1.000000
User: kellyca Custom ID1: Custom ID2: Custom ID3:
Comment: 326194 6010C dupont

Elem	Ag3280	Al1670	As1890	B_2089	Ba4554	Be3130	Bi2230	Ca3179	Cd2288
Line	328.068 {103}	167.079 {502}	189.042 {478}	208.959 {461}	455.403 { 74}	313.042 {108}	223.061 {451}	317.933 {106}	228.802 {447}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.00080	.00671	-.00179	.06168	.03149	-.00010	-.00011	46.868	.00034
Stddev	.00006	.00050	.00231	.00112	.00031	.00003	.00005	.174	.00010
%RSD	7.5497	7.4008	128.88	1.8088	.97317	27.208	46.564	.37085	29.613

#1	.00084	.00706	-.00342	.06247	.03127	-.00008	-.00015	46.745	.00041
#2	.00076	.00636	-.00016	.06089	.03171	-.00012	-.00008	46.991	.00027

Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Elem	Co2286	Cr2055	Cu3247	Fe2599	K_7664	Li6707	Mg2790	Mn2576	Mo2020
Line	228.616 {447}	205.560 {464}	324.754 {104}	259.940 {130}	766.490 { 44}	670.784 { 50}	279.079 {121}2	257.610 {131}	202.030 {467}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	-.00000	-.00007	-.00115	.05796	12.462	.00204	7.3095	.10396	.00888
Stddev	.00032	.00032	.00021	.00024	.122	.00050	.0028	.00031	.00061
%RSD	11749.	456.95	18.177	.42172	.97517	24.600	.03797	.29826	6.8172

#1	.00023	-.00029	-.00101	.05779	12.377	.00239	7.3115	.10418	.00845
#2	-.00023	.00016	-.00130	.05813	12.548	.00168	7.3076	.10374	.00931

Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Elem	Na8183	Ni2316	P_1782	Pb2203	S_1820	Sb2068	Se1960	Si2881	Sn1899
Line	818.326 { 41}	231.604 {446}	178.284 {489}	220.353 {453}	182.034 {485}	206.833 {463}	196.090 {472}	288.158 {117}	189.989 {477}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	53.516	.00128	.26863	W -.00331	22.589	.00056	-.00019	14.135	.00222
Stddev	.332	.00025	.00376	.00232	.072	.00013	.00186	.034	.00052
%RSD	.62017	19.570	1.4013	69.990	.31780	24.305	968.29	.23984	23.345

#1	53.282	.00146	.27130	-.00167	22.640	.00065	.00112	14.111	.00185
#2	53.751	.00110	.26597	-.00495	22.538	.00046	-.00150	14.159	.00259

Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Warn	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit				10.000					
Low Limit				-.00300					

Elem	Sr4077	Th2837	Ti3349	Ti1908	U_3701	V_2924	Zn2062	Zr3391	
Line	407.771 { 83}	283.730 {119}	334.904 {101}	190.856 {477}	370.152 { 91}	292.402 {115}	206.200 {163}	339.198 { 99}	
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	
Avg	.22226	-.00333	.00024	-.00156	.02012	.00070	.00054	.00073	
Stddev	.00201	.00049	.00009	.00061	.01647	.00072	.00028	.00072	
%RSD	.90592	14.775	38.348	39.088	81.832	102.05	51.179	97.792	

#1	.22083	-.00299	.00017	-.00113	.00848	.00121	.00074	.00124	
#2	.22368	-.00368	.00030	-.00199	.03177	.00020	.00034	.00023	

Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	
High Limit									
Low Limit									

Int. Std.	Y_2243	Y_3600	Y_3774
Line	224.306 {450}	360.073 { 94}	377.433 { 89}
Units	Cts/S	Cts/S	Cts/S
Avg	1506.2	32679.	5923.8
Stddev	1.1	11.	.1
%RSD	.07038	.03278	.00236

#1	1505.5	32686.	5923.7
#2	1507.0	32671.	5923.8

Sample Name: 280-83148-A-4-A Acquired: 5/21/2016 3:29:02 Type: Unk
Method: 6500_026(v10) Mode: CONC Corr. Factor: 1.000000
User: kellyca Custom ID1: Custom ID2: Custom ID3:
Comment: 326194 6010C dupont

Elem	Ag3280	Al1670	As1890	B_2089	Ba4554	Be3130	Bi2230	Ca3179	Cd2288
Line	328.068 {103}	167.079 {502}	189.042 {478}	208.959 {461}	455.403 { 74}	313.042 {108}	223.061 {451}	317.933 {106}	228.802 {447}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.00065	.00478	-.00168	.01220	.00327	-.00013	-.00423	8.7965	.00039
Stddev	.00007	.00015	.00069	.00056	.00010	.00007	.00109	.0347	.00022
%RSD	10.335	3.1599	40.963	4.6233	3.0543	50.612	25.848	.39388	55.922

#1	.00069	.00489	-.00119	.01180	.00334	-.00009	-.00346	8.7720	.00023
#2	.00060	.00468	-.00216	.01260	.00320	-.00018	-.00500	8.8210	.00054

Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Elem	Co2286	Cr2055	Cu3247	Fe2599	K_7664	Li6707	Mg2790	Mn2576	Mo2020
Line	228.616 {447}	205.560 {464}	324.754 {104}	259.940 {130}	766.490 { 44}	670.784 { 50}	279.079 {121}2	257.610 {131}	202.030 {467}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	-.00048	.00111	-.00155	.01508	1.3248	.00165	3.1556	.00053	.00076
Stddev	.00001	.00043	.00026	.00189	.0024	.00046	.0117	.00001	.00019
%RSD	1.6643	38.603	16.908	12.515	.18045	27.863	.37206	1.0279	24.511

#1	-.00048	.00142	-.00173	.01375	1.3231	.00198	3.1473	.00053	.00063
#2	-.00049	.00081	-.00136	.01642	1.3265	.00133	3.1639	.00052	.00089

Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Elem	Na5895	Ni2316	P_1782	Pb2203	S_1820	Sb2068	Se1960	Si2881	Sn1899
Line	589.592 { 57}	231.604 {446}	178.284 {489}	220.353 {453}	182.034 {485}	206.833 {463}	196.090 {472}	288.158 {117}	189.989 {477}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	5.5382	.00090	.00077	-.00109	.78051	.00071	.00172	9.2478	.00144
Stddev	.0232	.00026	.00149	.00092	.00965	.00089	.00814	.0042	.00082
%RSD	.41894	28.383	194.81	84.043	1.2365	125.32	474.23	.04559	57.221

#1	5.5218	.00072	-.00029	-.00044	.77369	.00008	-.00404	9.2448	.00202
#2	5.5546	.00108	.00182	-.00174	.78733	.00134	.00748	9.2508	.00086

Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Elem	Sr4077	Th2837	Ti3349	Ti1908	U_3701	V_2924	Zn2062	Zr3391
Line	407.771 { 83}	283.730 {119}	334.904 {101}	190.856 {477}	370.152 { 91}	292.402 {115}	206.200 {163}	339.198 { 99}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.12271	-.00165	.00019	-.00172	.02203	.00032	.01952	.00115
Stddev	.00030	.00073	.00001	.00024	.01118	.00038	.00080	.00009
%RSD	.24143	44.436	6.3360	14.215	50.768	119.63	4.0982	7.4730

#1	.12250	-.00217	.00019	-.00189	.02994	.00005	.02009	.00109
#2	.12292	-.00113	.00018	-.00155	.01412	.00059	.01896	.00121

Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit								
Low Limit								

Int. Std.	Y_2243	Y_3600	Y_3774
Line	224.306 {450}	360.073 { 94}	377.433 { 89}
Units	Cts/S	Cts/S	Cts/S
Avg	1553.2	33363.	5886.0
Stddev	3.6	67.	17.0
%RSD	.23361	.20051	.28875

#1	1555.7	33410.	5898.1
#2	1550.6	33315.	5874.0

Sample Name: 280-83148-A-7-A Acquired: 5/21/2016 3:31:48 Type: Unk
Method: 6500_026(v10) Mode: CONC Corr. Factor: 1.000000
User: kellyca Custom ID1: Custom ID2: Custom ID3:
Comment: 326194 6010C dupont

Elem	Ag3280	Al1670	As1890	B_2089	Ba4554	Be3130	Bi2230	Ca3179	Cd2288
Line	328.068 {103}	167.079 {502}	189.042 {478}	208.959 {461}	455.403 { 74}	313.042 {108}	223.061 {451}	317.933 {106}	228.802 {447}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.00044	.01910	-.00282	.00842	.03471	-.00010	-.00352	13.848	.00003
Stddev	.00001	.00102	.00440	.00098	.00023	.00008	.00417	.030	.00004
%RSD	3.0083	5.3595	156.12	11.639	.65324	81.244	118.46	.21970	125.91

#1	.00045	.01837	.00029	.00773	.03487	-.00015	-.00057	13.826	.00000
#2	.00043	.01982	-.00593	.00911	.03455	-.00004	-.00647	13.869	.00006

Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Elem	Co2286	Cr2055	Cu3247	Fe2599	K_7664	Li6707	Mg2790	Mn2576	Mo2020
Line	228.616 {447}	205.560 {464}	324.754 {104}	259.940 {130}	766.490 { 44}	670.784 { 50}	279.079 {121}2	257.610 {131}	202.030 {467}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.00496	-.00014	.00283	.02935	1.2417	.00174	4.1319	.32617	.00024
Stddev	.00034	.00008	.00010	.00119	.0051	.00091	.0061	.00102	.00047
%RSD	6.8688	55.497	3.6166	4.0414	.40770	52.519	.14864	.31294	195.67

#1	.00472	-.00009	.00291	.03019	1.2453	.00239	4.1275	.32545	-.00009
#2	.00520	-.00020	.00276	.02852	1.2381	.00109	4.1362	.32689	.00057

Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Elem	Na8183	Ni2316	P_1782	Pb2203	S_1820	Sb2068	Se1960	Si2881	Sn1899
Line	818.326 { 41}	231.604 {446}	178.284 {489}	220.353 {453}	182.034 {485}	206.833 {463}	196.090 {472}	288.158 {117}	189.989 {477}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	10.395	.00716	.43419	-.00063	.20766	-.00215	-.00049	14.656	.00165
Stddev	.012	.00012	.00002	.00140	.00422	.00009	.00716	.040	.00006
%RSD	.11450	1.6432	.00414	224.12	2.0343	4.2605	1459.9	.27458	3.6558

#1	10.403	.00724	.43420	-.00162	.21065	-.00209	-.00555	14.684	.00160
#2	10.387	.00707	.43417	.00037	.20467	-.00222	.00457	14.627	.00169

Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Elem	Sr4077	Th2837	Ti3349	Ti1908	U_3701	V_2924	Zn2062	Zr3391
Line	407.771 { 83}	283.730 {119}	334.904 {101}	190.856 {477}	370.152 { 91}	292.402 {115}	206.200 {163}	339.198 { 99}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.18241	-.00363	.00166	-.00085	.02417	.00141	.00722	-.00021
Stddev	.00030	.00126	.00019	.00010	.01003	.00081	.00134	.00182
%RSD	.16220	34.656	11.357	11.457	41.488	57.456	18.617	879.66

#1	.18220	-.00452	.00179	-.00092	.03126	.00198	.00627	.00108
#2	.18262	-.00274	.00152	-.00078	.01708	.00084	.00817	-.00149

Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit								
Low Limit								

Int. Std.	Y_2243	Y_3600	Y_3774
Line	224.306 {450}	360.073 { 94}	377.433 { 89}
Units	Cts/S	Cts/S	Cts/S
Avg	1543.8	33202.	5871.1
Stddev	2.7	50.	1.7
%RSD	.17698	.15046	.02915

#1	1541.8	33238.	5872.3
#2	1545.7	33167.	5869.9

Sample Name: 280-83148-A-8-A Acquired: 5/21/2016 3:34:32 Type: Unk
Method: 6500_026(v10) Mode: CONC Corr. Factor: 1.000000
User: kellyca Custom ID1: Custom ID2: Custom ID3:
Comment: 326194 6010C dupont

Elem	Ag3280	Al1670	As1890	B_2089	Ba4554	Be3130	Bi2230	Ca3179	Cd2288
Line	328.068 {103}	167.079 {502}	189.042 {478}	208.959 {461}	455.403 { 74}	313.042 {108}	223.061 {451}	317.933 {106}	228.802 {447}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.00059	.01788	-.00420	.00698	.03555	-.00011	.00008	14.181	.00030
Stddev	.00023	.00164	.00582	.00037	.00019	.00002	.00050	.030	.00039
%RSD	39.350	9.1734	138.64	5.2304	.53033	18.404	654.41	.21223	131.38

#1	.00043	.01904	-.00832	.00672	.03541	-.00013	.00043	14.159	.00057
#2	.00075	.01672	-.00008	.00724	.03568	-.00010	-.00028	14.202	.00002

Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Elem	Co2286	Cr2055	Cu3247	Fe2599	K_7664	Li6707	Mg2790	Mn2576	Mo2020
Line	228.616 {447}	205.560 {464}	324.754 {104}	259.940 {130}	766.490 { 44}	670.784 { 50}	279.079 {121}2	257.610 {131}	202.030 {467}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.00509	.00024	.00026	.02982	1.2738	.00120	4.2826	.33689	.00043
Stddev	.00025	.00020	.00042	.00088	.0173	.00080	.0033	.00081	.00021
%RSD	4.8835	83.173	160.38	2.9518	1.3570	66.847	.07742	.24089	48.339

#1	.00491	.00038	.00056	.02920	1.2860	.00176	4.2803	.33747	.00058
#2	.00526	.00010	-.00004	.03045	1.2615	.00063	4.2850	.33632	.00028

Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Elem	Na8183	Ni2316	P_1782	Pb2203	S_1820	Sb2068	Se1960	Si2881	Sn1899
Line	818.326 { 41}	231.604 {446}	178.284 {489}	220.353 {453}	182.034 {485}	206.833 {463}	196.090 {472}	288.158 {117}	189.989 {477}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	10.749	.00698	.44353	-.00038	.21722	-.00110	.00292	14.923	.00051
Stddev	.080	.00003	.00070	.00139	.00241	.00147	.00075	.012	.00052
%RSD	.74662	.47403	.15736	368.26	1.1102	133.11	25.489	.08215	103.36

#1	10.692	.00701	.44402	.00060	.21552	-.00006	.00345	14.914	.00088
#2	10.806	.00696	.44304	-.00136	.21893	-.00214	.00240	14.931	.00014

Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Elem	Sr4077	Th2837	Ti3349	Ti1908	U_3701	V_2924	Zn2062	Zr3391	
Line	407.771 { 83}	283.730 {119}	334.904 {101}	190.856 {477}	370.152 { 91}	292.402 {115}	206.200 {163}	339.198 { 99}	
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	
Avg	.18710	-.00350	.00083	-.00357	.01574	.00112	.00227	.00077	
Stddev	.00062	.00236	.00011	.00079	.01229	.00032	.00010	.00119	
%RSD	.33089	67.476	13.318	22.079	78.090	28.659	4.5560	155.09	

#1	.18666	-.00183	.00091	-.00301	.00705	.00135	.00219	-.00007	
#2	.18753	-.00517	.00075	-.00412	.02444	.00089	.00234	.00161	

Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	
High Limit									
Low Limit									

Int. Std.	Y_2243	Y_3600	Y_3774						
Line	224.306 {450}	360.073 { 94}	377.433 { 89}						
Units	Cts/S	Cts/S	Cts/S						
Avg	1545.3	33460.	5970.2						
Stddev	.5	74.	2.9						
%RSD	.03014	.22184	.04778						

#1	1545.6	33408.	5972.2						
#2	1545.0	33513.	5968.2						

Sample Name: 280-83148-A-10-A Acquired: 5/21/2016 3:37:17 Type: Unk
Method: 6500_026(v10) Mode: CONC Corr. Factor: 1.000000
User: kellyca Custom ID1: Custom ID2: Custom ID3:
Comment: 326194 6010C dupont

Elem	Ag3280	Al1670	As1890	B_2089	Ba4554	Be3130	Bi2230	Ca3179	Cd2288
Line	328.068 {103}	167.079 {502}	189.042 {478}	208.959 {461}	455.403 { 74}	313.042 {108}	223.061 {451}	317.933 {106}	228.802 {447}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.00052	.69234	-.00671	.00562	.01772	-.00011	-.00117	5.9006	-.00000
Stddev	.00037	.00789	.00262	.00059	.00001	.00003	.00098	.0373	.00002
%RSD	69.788	1.1396	39.074	10.494	.05202	28.163	83.724	.63191	5201.4

#1	.00027	.69792	-.00857	.00521	.01773	-.00009	-.00048	5.8742	-.00001
#2	.00078	.68677	-.00486	.00604	.01772	-.00013	-.00186	5.9269	.00001

Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Elem	Co2286	Cr2055	Cu3247	Fe2599	K_7664	Li6707	Mg2790	Mn2576	Mo2020
Line	228.616 {447}	205.560 {464}	324.754 {104}	259.940 {130}	766.490 { 44}	670.784 { 50}	279.079 {121}2	257.610 {131}	202.030 {467}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	-.00073	.00508	.00052	.48906	.61658	-.00031	1.6124	.01018	-.00009
Stddev	.00022	.00017	.00048	.00633	.00590	.00066	.0070	.00005	.00045
%RSD	29.836	3.3118	93.930	1.2940	.95709	215.84	.43668	.48045	504.22

#1	-.00088	.00496	.00017	.48459	.61240	.00016	1.6074	.01015	-.00040
#2	-.00058	.00520	.00086	.49354	.62075	-.00077	1.6173	.01022	.00023

Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Elem	Na5895	Ni2316	P_1782	Pb2203	S_1820	Sb2068	Se1960	Si2881	Sn1899
Line	589.592 { 57}	231.604 {446}	178.284 {489}	220.353 {453}	182.034 {485}	206.833 {463}	196.090 {472}	288.158 {117}	189.989 {477}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	8.8104	.00155	.08326	.00169	6.1404	.00055	.00418	22.731	.00062
Stddev	.0337	.00050	.00124	.00080	.0217	.00084	.00563	.211	.00122
%RSD	.38228	32.408	1.4910	47.274	.35347	153.21	134.64	.92618	197.87

#1	8.7865	.00119	.08239	.00226	6.1558	.00114	.00817	22.583	.00148
#2	8.8342	.00190	.08414	.00113	6.1251	-.00005	.00020	22.880	-.00025

Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Elem	Sr4077	Th2837	Ti3349	Ti1908	U_3701	V_2924	Zn2062	Zr3391
Line	407.771 { 83}	283.730 {119}	334.904 {101}	190.856 {477}	370.152 { 91}	292.402 {115}	206.200 {163}	339.198 { 99}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.07164	-.00333	.03083	-.00181	.01845	.00349	.00494	.00066
Stddev	.00047	.00021	.00096	.00038	.00076	.00049	.00003	.00059
%RSD	.65964	6.2082	3.0984	21.195	4.1002	14.071	.52071	89.468

#1	.07131	-.00348	.03015	-.00153	.01898	.00383	.00495	.00108
#2	.07197	-.00318	.03150	-.00208	.01791	.00314	.00492	.00024

Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit								
Low Limit								

Int. Std.	Y_2243	Y_3600	Y_3774
Line	224.306 {450}	360.073 { 94}	377.433 { 89}
Units	Cts/S	Cts/S	Cts/S
Avg	1559.2	33603.	5990.7
Stddev	.9	59.	84.5
%RSD	.05506	.17500	1.4097

#1	1558.6	33561.	6050.5
#2	1559.8	33644.	5931.0

Sample Name: 280-83148-A-12-A Acquired: 5/21/2016 3:40:03 Type: Unk
Method: 6500_026(v10) Mode: CONC Corr. Factor: 1.000000
User: kellyca Custom ID1: Custom ID2: Custom ID3:
Comment: 326194 6010C dupont

Elem	Ag3280	Al1670	As1890	B_2089	Ba4554	Be3130	Bi2230	Ca3179	Cd2288
Line	328.068 {103}	167.079 {502}	189.042 {478}	208.959 {461}	455.403 { 74}	313.042 {108}	223.061 {451}	317.933 {106}	228.802 {447}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.00043	.00373	-.00832	.02117	.01195	-.00015	-.00618	7.9719	.00030
Stddev	.00011	.00085	.00060	.00065	.00014	.00004	.00070	.0859	.00016
%RSD	25.060	22.906	7.1833	3.0775	1.1533	24.618	11.380	1.0772	55.540

#1	.00051	.00313	-.00874	.02071	.01186	-.00012	-.00568	7.9112	.00018
#2	.00036	.00433	-.00790	.02163	.01205	-.00018	-.00667	8.0326	.00041

Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Elem	Co2286	Cr2055	Cu3247	Fe2599	K_7664	Li6707	Mg2790	Mn2576	Mo2020
Line	228.616 {447}	205.560 {464}	324.754 {104}	259.940 {130}	766.490 { 44}	670.784 { 50}	279.079 {121}2	257.610 {131}	202.030 {467}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	-.00069	.00203	.00115	.01625	1.3199	.00159	1.6885	.00051	.00193
Stddev	.00009	.00001	.00009	.00164	.0171	.00027	.0087	.00008	.00005
%RSD	12.389	.34533	7.9159	10.070	1.2964	16.859	.51510	15.782	2.3902

#1	-.00063	.00204	.00121	.01509	1.3078	.00140	1.6824	.00046	.00189
#2	-.00075	.00203	.00108	.01741	1.3320	.00178	1.6947	.00057	.00196

Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Elem	Na5895	Na8183	Ni2316	P_1782	Pb2203	S_1820	Sb2068	Se1960	Si2881
Line	589.592 { 57}	818.326 { 41}	231.604 {446}	178.284 {489}	220.353 {453}	182.034 {485}	206.833 {463}	196.090 {472}	288.158 {117}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	F 10.071	W 9.8711	.00067	.17865	-.00066	3.2388	.00136	-.00093	20.669
Stddev	.066	.1419	.00054	.00071	.00266	.0101	.00037	.00975	.162
%RSD	.65133	1.4371	79.360	.39894	406.29	.31164	27.261	1042.8	.78582

#1	10.024	9.9714	.00105	.17815	.00123	3.2317	.00110	.00596	20.554
#2	10.117	9.7708	.00030	.17915	-.00254	3.2459	.00163	-.00783	20.784

Check ?	Chk Fail	Chk Warn	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit	10.000	500.00							
Low Limit	-1.0000	10.000							

Elem	Sn1899	Sr4077	Th2837	Ti3349	Ti1908	U_3701	V_2924	Zn2062	Zr3391
Line	189.989 {477}	407.771 { 83}	283.730 {119}	334.904 {101}	190.856 {477}	370.152 { 91}	292.402 {115}	206.200 {163}	339.198 { 99}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.00060	.07957	-.00239	.00040	-.00174	.01829	.00166	.00285	.00011
Stddev	.00062	.00047	.00004	.00007	.00015	.00480	.00033	.00068	.00069
%RSD	102.28	.59648	1.6648	17.934	8.5498	26.226	19.700	23.773	599.03

#1	.00104	.07924	-.00242	.00045	-.00185	.01490	.00143	.00333	.00060
#2	.00017	.07991	-.00237	.00035	-.00164	.02168	.00189	.00237	-.00037

Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Int. Std.	Y_2243	Y_3600	Y_3774
Line	224.306 {450}	360.073 { 94}	377.433 { 89}
Units	Cts/S	Cts/S	Cts/S
Avg	1551.2	33474.	5945.1
Stddev	3.0	15.	52.2
%RSD	.19100	.04629	.87805

#1	1553.3	33485.	5982.0
#2	1549.2	33463.	5908.2

Sample Name: 280-83148-A-18-A Acquired: 5/21/2016 3:42:49 Type: Unk
Method: 6500_026(v10) Mode: CONC Corr. Factor: 1.000000
User: kellyca Custom ID1: Custom ID2: Custom ID3:
Comment: 326194 6010C dupont

Elem	Ag3280	Al1670	As1890	B_2089	Ba4554	Be3130	Bi2230	Ca3179	Cd2288
Line	328.068 {103}	167.079 {502}	189.042 {478}	208.959 {461}	455.403 { 74}	313.042 {108}	223.061 {451}	317.933 {106}	228.802 {447}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.00068	.02465	-.00317	.00360	.01597	-.00013	-.00384	4.1983	.00007
Stddev	.00030	.00041	.00348	.00002	.00007	.00005	.00131	.0109	.00001
%RSD	43.261	1.6734	109.75	.54590	.44670	37.326	34.152	.26058	18.777

#1	.00089	.02494	-.00564	.00359	.01592	-.00010	-.00292	4.1906	.00006
#2	.00047	.02436	-.00071	.00361	.01602	-.00017	-.00477	4.2060	.00008

Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Elem	Co2286	Cr2055	Cu3247	Fe2599	K_7664	Li6707	Mg2790	Mn2576	Mo2020
Line	228.616 {447}	205.560 {464}	324.754 {104}	259.940 {130}	766.490 { 44}	670.784 { 50}	279.079 {121}2	257.610 {131}	202.030 {467}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	-.00065	.00003	.00012	.08699	.85671	.00020	1.8353	.01434	.00150
Stddev	.00003	.00029	.00001	.00007	.00445	.00032	.0003	.00001	.00000
%RSD	4.9052	1055.1	8.9878	.07541	.51984	156.03	.01644	.03620	.28734

#1	-.00067	.00023	.00011	.08704	.85986	-.00002	1.8351	.01435	.00150
#2	-.00063	-.00018	.00013	.08695	.85356	.00043	1.8356	.01434	.00150

Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Elem	Na5895	Ni2316	P_1782	Pb2203	S_1820	Sb2068	Se1960	Si2881	Sn1899
Line	589.592 { 57}	231.604 {446}	178.284 {489}	220.353 {453}	182.034 {485}	206.833 {463}	196.090 {472}	288.158 {117}	189.989 {477}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	6.6216	.00207	.01942	-.00121	.20032	.00184	-.00018	15.125	.00048
Stddev	.0339	.00052	.00276	.00151	.00359	.00165	.01201	.054	.00103
%RSD	.51207	25.218	14.223	125.32	1.7939	89.662	6566.6	.36000	215.63

#1	6.5976	.00244	.01746	-.00228	.19778	.00067	-.00868	15.086	-.00025
#2	6.6456	.00170	.02137	-.00014	.20286	.00300	.00831	15.163	.00121

Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Elem	Sr4077	Th2837	Ti3349	Ti1908	U_3701	V_2924	Zn2062	Zr3391
Line	407.771 { 83}	283.730 {119}	334.904 {101}	190.856 {477}	370.152 { 91}	292.402 {115}	206.200 {163}	339.198 { 99}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.04221	-.00292	.00121	-.00304	.01099	.00114	.00280	.00062
Stddev	.00032	.00092	.00013	.00116	.01011	.00003	.00143	.00048
%RSD	.75552	31.577	10.356	38.219	91.995	3.0543	50.962	77.709

#1	.04199	-.00227	.00130	-.00222	.01814	.00116	.00380	.00028
#2	.04244	-.00357	.00112	-.00386	.00384	.00111	.00179	.00096

Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit								
Low Limit								

Int. Std.	Y_2243	Y_3600	Y_3774
Line	224.306 {450}	360.073 { 94}	377.433 { 89}
Units	Cts/S	Cts/S	Cts/S
Avg	1564.5	33892.	5888.8
Stddev	2.4	156.	14.7
%RSD	.15274	.45921	.24888

#1	1566.2	33781.	5899.2
#2	1562.8	34002.	5878.5

Sample Name: 280-83148-A-20-A Acquired: 5/21/2016 3:45:35 Type: Unk
Method: 6500_026(v10) Mode: CONC Corr. Factor: 1.000000
User: kellyca Custom ID1: Custom ID2: Custom ID3:
Comment: 326194 6010C dupont

Elem	Ag3280	Al1670	As1890	B_2089	Ba4554	Be3130	Bi2230	Ca3179	Cd2288
Line	328.068 {103}	167.079 {502}	189.042 {478}	208.959 {461}	455.403 { 74}	313.042 {108}	223.061 {451}	317.933 {106}	228.802 {447}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.00082	.01695	-.00383	.00312	.02340	-.00014	-.00182	14.430	.00002
Stddev	.00014	.00102	.00172	.00031	.00001	.00002	.00144	.075	.00008
%RSD	16.691	6.0035	44.870	9.9219	.04135	12.822	78.789	.51932	436.59

#1	.00091	.01624	-.00261	.00290	.02340	-.00012	-.00284	14.377	.00008
#2	.00072	.01767	-.00504	.00334	.02339	-.00015	-.00081	14.483	-.00004

Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Elem	Co2286	Cr2055	Cu3247	Fe2599	K_7664	Li6707	Mg2790	Mn2576	Mo2020
Line	228.616 {447}	205.560 {464}	324.754 {104}	259.940 {130}	766.490 { 44}	670.784 { 50}	279.079 {121}2	257.610 {131}	202.030 {467}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	-.00068	.00257	.00081	.03788	1.1854	-.00015	5.9715	.00557	.00075
Stddev	.00007	.00019	.00050	.00127	.0043	.00001	.0266	.00002	.00092
%RSD	9.9359	7.3702	61.814	3.3499	.36637	6.2879	.44498	.33779	122.79

#1	-.00064	.00271	.00046	.03699	1.1885	-.00016	5.9527	.00559	.00141
#2	-.00073	.00244	.00117	.03878	1.1823	-.00014	5.9903	.00556	.00010

Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Elem	Na8183	Ni2316	P_1782	Pb2203	S_1820	Sb2068	Se1960	Si2881	Sn1899
Line	818.326 { 41}	231.604 {446}	178.284 {489}	220.353 {453}	182.034 {485}	206.833 {463}	196.090 {472}	288.158 {117}	189.989 {477}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	15.253	.00406	.02958	-.00203	.40710	.00050	-.00064	21.386	.00233
Stddev	.314	.00066	.00394	.00206	.00756	.00396	.00072	.009	.00141
%RSD	2.0564	16.263	13.314	101.00	1.8582	795.29	112.57	.04160	60.471

#1	15.031	.00359	.03236	-.00349	.40175	-.00230	-.00114	21.380	.00134
#2	15.475	.00452	.02680	-.00058	.41245	.00330	-.00013	21.393	.00333

Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Elem	Sr4077	Th2837	Ti3349	Ti1908	U_3701	V_2924	Zn2062	Zr3391
Line	407.771 { 83}	283.730 {119}	334.904 {101}	190.856 {477}	370.152 { 91}	292.402 {115}	206.200 {163}	339.198 { 99}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.14783	-.00359	.00037	-.00246	.01334	.00196	.01240	-.00042
Stddev	.00071	.00252	.00004	.00041	.01288	.00011	.00000	.00056
%RSD	.48329	70.144	11.490	16.683	96.577	5.4300	.03039	132.06

#1	.14733	-.00181	.00034	-.00217	.00423	.00204	.01240	-.00082
#2	.14834	-.00537	.00040	-.00275	.02245	.00189	.01239	-.00003

Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit								
Low Limit								

Int. Std.	Y_2243	Y_3600	Y_3774
Line	224.306 {450}	360.073 { 94}	377.433 { 89}
Units	Cts/S	Cts/S	Cts/S
Avg	1539.7	33237.	5914.5
Stddev	2.4	70.	20.8
%RSD	.15392	.20913	.35117

#1	1541.4	33286.	5929.2
#2	1538.1	33188.	5899.9

Sample Name: ccvh-3900196 Acquired: 5/21/2016 3:48:21 Type: QC
Method: 6500_026(v10) Mode: CONC Corr. Factor: 1.000000
User: kellyca Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	Ag3280	Al3092	As1890	B_2089	Ba4554	Be3130	Bi2230	Ca3179	Cd2288	Co2286	Cr2055	Cu3247
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	k -.01362	F 44.679	k -.00331	.00157	.00021	-.00048	1.0810	-.05272	k -.00083	.00299	-.00054	k .00949
Stddev	.01314	.074	.00335	.00029	.00007	.00002	.0048	.00242	.00023	.00088	.00003	.00901
%RSD	96.489	.16498	101.06	18.343	35.048	4.4126	.44738	4.5993	28.002	29.245	6.3316	95.005

#1	-.00433	44.627	-.00095	.00137	.00026	-.00046	1.0844	-.05443	-.00100	.00361	-.00052	.00311
#2	k -.02291	44.731	k -.00568	.00178	.00016	-.00049	1.0775	-.05100	k -.00067	.00237	-.00056	k .01586

Check ?	None	Chk Fail	None	None	None	None	Chk Pass	None	None	None	None	None
Value		50.000										
Range		-10.000%										

Elem	Fe2714	K_7664	Li6707	Mg2790	Mn2576	Mo2020	Na8183	Ni2316	P_1782	Pb2203	S_1820	Sb2068
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	F 44.949	.06032	-.00003	.14891	k -.00049	-.00215	247.82	-.00041	.00354	k .00259	5.1037	k .00465
Stddev	.084	.00458	.00135	.00399	.00028	.00044	.56	.00136	.00197	.00128	.0112	.00103
%RSD	.18599	7.5929	4450.0	2.6827	57.210	20.405	.22606	328.91	55.495	49.245	.21949	22.111

#1	45.008	.06356	-.00099	.14608	-.00069	-.00184	247.42	.00055	.00493	.00169	5.1117	.00393
#2	44.890	.05708	.00093	.15173	k -.00029	-.00247	248.21	-.00138	.00215	k .00349	5.0958	k .00538

Check ?	Chk Fail	None	None	None	None	None	Chk Pass	None	None	None	Chk Pass	None
Value	50.000											
Range	-10.000%											

Elem	Se1960	Si2881	Sn1899	Sr4077	Th2837	Ti3349	Ti1908	U_3701	V_2924	Zn2062	Zr3391
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	k .00370	-.00360	.00353	.00026	k 4.8291	.02667	k -.00505	9.9609	k -.00917	-.00258	k .14227
Stddev	.01087	.01982	.00081	.00005	.0317	.00017	.00181	.0686	.01025	.00069	.23986
%RSD	293.60	550.26	22.924	18.109	.65681	.62679	35.774	.68910	111.77	26.613	168.59

#1	-.00398	.01041	.00296	.00023	4.8067	.02679	-.00377	9.9124	-.01641	-.00209	-.02734
#2	k .01138	-.01762	.00410	.00030	k 4.8515	.02656	k -.00633	10.009	k -.00192	-.00306	k .31188

Check ?	None	None	None	None	Chk Pass	None	None	Chk Pass	None	None	None
Value											
Range											

Int. Std.	Y_2243	Y_3600	Y_3774
Units	Cts/S	Cts/S	Cts/S
Avg	1494.6	31799.	5864.3
Stddev	1.6	95.	1.0
%RSD	.10817	.29892	.01686

#1	1493.4	31867.	5865.0
#2	1495.7	31732.	5863.6

Sample Name: ccv-3900195 Acquired: 5/21/2016 3:51:11 Type: QC
Method: 6500_026(v10) Mode: CONC Corr. Factor: 1.000000
User: kellyca Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	Ag3280	Al1670	As1890	B_2089	Ba4554	Be3130	Bi2230	Ca3179	Cd2288	Co2286	Cr2055	Cu3247
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.47332	.51765	1.0264	F .55717	.49442	.50858	-.00661	4.9403	.54138	.53682	.52532	.48815
Stddev	.00098	.00540	.0046	.00104	.00095	.00047	.00229	.0103	.00187	.00250	.00227	.00052
%RSD	.20723	1.0437	.44479	.18679	.19210	.09275	34.602	.20769	.34489	.46654	.43130	.10614

#1	.47401	.52147	1.0296	.55791	.49375	.50892	-.00823	4.9475	.54270	.53859	.52692	.48778
#2	.47263	.51383	1.0232	.55644	.49509	.50825	-.00500	4.9330	.54006	.53505	.52372	.48851

Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Fail	Chk Pass	Chk Pass	None	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Value				.50000								
Range				10.000%								

Elem	Fe2599	K_7664	Li6707	Mg2790	Mn2576	Mo2020	Na5895	Ni2316	P_1782	Pb2203	S_1820	Sb2068
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	2.4721	50.880	1.0645	19.114	.49067	.54175	5.2365	.50886	1.0269	1.0660	.00868	1.0321
Stddev	.0016	.096	.0022	.013	.00061	.00115	.0061	.00107	.0080	.0059	.00509	.0044
%RSD	.06541	.18778	.20660	.07021	.12362	.21141	.11642	.21034	.77441	.55111	58.594	.42619

#1	2.4732	50.813	1.0630	19.124	.49024	.54256	5.2322	.50962	1.0326	1.0701	.01228	1.0352
#2	2.4709	50.948	1.0661	19.105	.49110	.54094	5.2408	.50810	1.0213	1.0618	.00508	1.0290

Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	None	Chk Pass
Value												
Range												

Elem	Se1960	Si2881	Sn1899	Sr4077	Th2837	Ti3349	Ti1908	U_3701	V_2924	Zn2062	Zr3391
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.99873	4.9986	.98935	.46092	.00161	F .44922	1.0242	.01614	.45598	.48358	.49512
Stddev	.00723	.0207	.00004	.00195	.00006	.00258	.0037	.00930	.00094	.00268	.00190
%RSD	.72423	.41444	.00418	.42288	3.4698	.57453	.36338	57.593	.20627	.55355	.38461

#1	1.0038	5.0132	.98932	.45954	.00164	.45104	1.0269	.00957	.45664	.48169	.49377
#2	.99361	4.9839	.98938	.46229	.00157	.44739	1.0216	.02272	.45531	.48548	.49646

Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	None	Chk Fail	Chk Pass	None	Chk Pass	Chk Pass	Chk Pass
Value						.50000					
Range						-10.000%					

Int. Std.	Y_2243	Y_3600	Y_3774
Units	Cts/S	Cts/S	Cts/S
Avg	1523.0	32802.	5878.5
Stddev	1.2	70.	31.6
%RSD	.07553	.21363	.53754

#1	1522.2	32753.	5856.2
#2	1523.9	32852.	5900.9

Sample Name: ccb Acquired: 5/21/2016 3:53:50 Type: QC
Method: 6500_026(v10) Mode: CONC Corr. Factor: 1.000000
User: kellyca Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	Ag3280	Al1670	As1890	B_2089	Ba4554	Be3130	Bi2230	Ca3179	Cd2288	Co2286	Cr2055
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.00059	.00030	-.00231	W .00207	-.00014	-.00013	-.00036	-.01028	.00013	-.00057	-.00017
Stddev	.00005	.00127	.00585	.00006	.00009	.00015	.00112	.00248	.00007	.00000	.00013
%RSD	8.4702	417.56	253.42	2.7952	64.846	116.02	312.60	24.158	55.394	.49933	71.546

#1	.00063	-.00060	.00183	.00211	-.00007	-.00024	-.00115	-.01204	.00008	-.00057	-.00026
#2	.00055	.00121	-.00644	.00203	-.00020	-.00002	.00043	-.00853	.00018	-.00057	-.00009

Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Warn	Chk Pass	Chk Pass	None	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit				.00156							
Low Limit				-.00156							

Elem	Cu3247	Fe2599	K_7664	Li6707	Mg2790	Mn2576	Mo2020	Na5895	Ni2316	P_1782	Pb2203
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	W -.00189	.00142	.07336	-.00026	.00172	.00005	.00043	.01858	-.00013	.00271	-.00106
Stddev	.00007	.00195	.00738	.00010	.00275	.00004	.00008	.00066	.00024	.00149	.00253
%RSD	3.7741	137.30	10.055	37.940	160.07	67.361	19.126	3.5297	182.85	54.892	237.72

#1	-.00184	.00280	.06814	-.00019	-.00023	.00003	.00037	.01904	.00004	.00376	.00072
#2	-.00194	.00004	.07857	-.00033	.00366	.00008	.00049	.01811	-.00030	.00166	-.00285

Check ?	Chk Warn	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit	.00136										
Low Limit	-.00136										

Elem	S_1820	Sb2068	Se1960	Si2881	Sn1899	Sr4077	Th2837	Ti3349	Ti1908	U_3701	V_2924
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.00449	.00231	.00303	-.00097	-.00030	.00009	-.00029	.00032	-.00023	.01071	.00062
Stddev	.00632	.00183	.00050	.00390	.00029	.00008	.00162	.00044	.00284	.00972	.00008
%RSD	140.62	79.080	16.626	400.38	94.541	90.393	557.66	140.06	1219.6	90.772	12.153

#1	.00896	.00360	.00267	.00179	-.00050	.00014	.00086	.00063	-.00224	.00384	.00057
#2	.00003	.00102	.00338	-.00374	-.00010	.00003	-.00144	.00000	.00177	.01759	.00068

Check ?	None	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit											
Low Limit											

Elem	Zn2062	Zr3391
Units	ppm	ppm
Avg	-.00021	-.00001
Stddev	.00020	.00068
%RSD	95.956	8009.2

#1	-.00007	-.00049
#2	-.00036	.00048

Check ?	Chk Pass	Chk Pass
High Limit		
Low Limit		

Int. Std.	Y_2243	Y_3600	Y_3774
Units	Cts/S	Cts/S	Cts/S
Avg	1549.8	33303.	5732.2
Stddev	.7	38.	19.6
%RSD	.04745	.11538	.34136

#1	1549.3	33276.	5746.1
#2	1550.3	33330.	5718.4

Sample Name: ccvl-3903059 Acquired: 5/21/2016 3:56:39 Type: QC
Method: 6500_026(v10) Mode: CONC Corr. Factor: 1.000000
User: kellyca Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	Ag3280	Al1670	As1890	B_2089	Ba4554	Be3130	Bi2230	Ca3179	Cd2288	Co2286	Cr2055	Cu3247
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.01020	.10650	.01134	.11157	.01010	.00089	.11491	.19192	.00573	.01099	.01060	.01293
Stddev	.00051	.00086	.00426	.00011	.00024	.00010	.00059	.00199	.00030	.00028	.00004	.00005
%RSD	4.9969	.80993	37.540	.09952	2.3965	11.537	.51675	1.0378	5.2412	2.5550	.38457	.39077

#1	.00984	.10711	.00833	.11165	.01027	.00096	.11449	.19051	.00595	.01079	.01057	.01296
#2	.01056	.10589	.01435	.11149	.00993	.00081	.11533	.19332	.00552	.01119	.01063	.01289

Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Value												
Range												

Elem	Fe2599	K_7664	Li6707	Mg2790	Mn2576	Mo2020	Na5895	Ni2316	P_1782	Pb2203	S_1820	Sb2068
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.10827	3.1309	.01060	.20038	.01019	.02164	1.0540	.04213	3.0110	.01032	.00497	.02448
Stddev	.00416	.0014	.00100	.00059	.00001	.00040	.0081	.00041	.0024	.00063	.00070	.00112
%RSD	3.8430	.04394	9.4738	.29355	.05545	1.8537	.76634	.96426	.08046	6.1191	14.038	4.5803

#1	.11121	3.1318	.00989	.19996	.01019	.02192	1.0597	.04184	3.0127	.01076	.00447	.02369
#2	.10533	3.1299	.01131	.20080	.01019	.02135	1.0483	.04241	3.0093	.00987	.00546	.02527

Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	None	Chk Pass
Value												
Range												

Elem	Se1960	Si2881	Sn1899	Sr4077	Th2837	Ti3349	Ti1908	U_3701	V_2924	Zn2062	Zr3391
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	F .02048	.49599	.10253	.00929	.01358	.00893	.01603	.07643	.00838	.02022	.01534
Stddev	.00221	.00397	.00198	.00002	.00271	.00012	.00293	.01884	.00058	.00056	.00018
%RSD	10.815	.79964	1.9318	.21657	19.967	1.3534	18.258	24.647	6.9316	2.7792	1.1628

#1	.02204	.49319	.10113	.00928	.01166	.00885	.01396	.08974	.00879	.02062	.01547
#2	.01891	.49880	.10393	.00930	.01550	.00902	.01810	.06311	.00796	.01983	.01522

Check ?	Chk Fail	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Value	.01500										
Range	30.000%										

Int. Std.	Y_2243	Y_3600	Y_3774
Units	Cts/S	Cts/S	Cts/S
Avg	1553.1	33315.	5796.3
Stddev	6.0	20.	.7
%RSD	.38467	.05855	.01226

#1	1548.9	33301.	5795.8
#2	1557.3	33329.	5796.8

Sample Name: 280-83148-A-22-A Acquired: 5/21/2016 3:59:27 Type: Unk
Method: 6500_026(v10) Mode: CONC Corr. Factor: 1.000000
User: kellyca Custom ID1: Custom ID2: Custom ID3:
Comment: 326194 6010C dupont

Elem	Ag3280	Al1670	As1890	B_2089	Ba4554	Be3130	Bi2230	Ca3179	Cd2288
Line	328.068 {103}	167.079 {502}	189.042 {478}	208.959 {461}	455.403 { 74}	313.042 {108}	223.061 {451}	317.933 {106}	228.802 {447}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.00045	.00074	-.00248	.02632	.00713	-.00015	-.00402	21.922	.00024
Stddev	.00015	.00015	.00053	.00057	.00008	.00002	.00166	.138	.00021
%RSD	34.259	19.776	21.197	2.1783	1.0616	13.406	41.429	.62754	87.401

#1	.00034	.00085	-.00211	.02672	.00708	-.00014	-.00520	21.825	.00039
#2	.00056	.00064	-.00285	.02591	.00719	-.00017	-.00284	22.019	.00009

Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Elem	Co2286	Cr2055	Cu3247	Fe2599	K_7664	Li6707	Mg2790	Mn2576	Mo2020
Line	228.616 {447}	205.560 {464}	324.754 {104}	259.940 {130}	766.490 { 44}	670.784 { 50}	279.079 {121}2	257.610 {131}	202.030 {467}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	-.00078	.00008	-.00076	.00837	3.1646	.00655	7.9561	.00042	.00118
Stddev	.00004	.00029	.00012	.00037	.0409	.00034	.0228	.00009	.00010
%RSD	5.4215	336.50	16.213	4.4216	1.2938	5.2651	.28649	22.321	8.6440

#1	-.00075	-.00012	-.00067	.00810	3.1356	.00630	7.9400	.00048	.00111
#2	-.00081	.00029	-.00085	.00863	3.1935	.00679	7.9723	.00035	.00125

Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Elem	Na8183	Ni2316	P_1782	Pb2203	S_1820	Sb2068	Se1960	Si2881	Sn1899
Line	818.326 { 41}	231.604 {446}	178.284 {489}	220.353 {453}	182.034 {485}	206.833 {463}	196.090 {472}	288.158 {117}	189.989 {477}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	13.274	.00124	.00147	W -.00347	1.9417	-.00083	-.00052	23.339	.00153
Stddev	.149	.00047	.00363	.00134	.0131	.00048	.00751	.142	.00107
%RSD	1.1211	38.208	246.77	38.710	.67430	57.890	1442.4	.60666	69.653

#1	13.168	.00157	-.00110	-.00442	1.9324	-.00118	.00479	23.238	.00078
#2	13.379	.00090	.00404	-.00252	1.9510	-.00049	-.00583	23.439	.00229

Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Warn	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit				10.000					
Low Limit				-.00300					

Elem	Sr4077	Th2837	Ti3349	Ti1908	U_3701	V_2924	Zn2062	Zr3391	
Line	407.771 { 83}	283.730 {119}	334.904 {101}	190.856 {477}	370.152 { 91}	292.402 {115}	206.200 {163}	339.198 { 99}	
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	
Avg	.30442	-.00470	.00002	-.00171	.03030	.00039	.01837	-.00081	
Stddev	.00190	.00085	.00000	.00025	.00340	.00062	.00074	.00062	
%RSD	.62430	18.049	1.5226	14.331	11.234	160.79	4.0488	76.082	

#1	.30308	-.00410	.00002	-.00189	.03271	-.00005	.01784	-.00125	
#2	.30577	-.00530	.00002	-.00154	.02790	.00083	.01890	-.00038	

Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	
High Limit									
Low Limit									

Int. Std.	Y_2243	Y_3600	Y_3774						
Line	224.306 {450}	360.073 { 94}	377.433 { 89}						
Units	Cts/S	Cts/S	Cts/S						
Avg	1548.6	32823.	5781.9						
Stddev	2.4	22.	30.1						
%RSD	.15465	.06810	.52038						

#1	1550.3	32839.	5803.2						
#2	1547.0	32807.	5760.7						

Sample Name: 280-83148-A-24-A Acquired: 5/21/2016 4:02:13 Type: Unk
Method: 6500_026(v10) Mode: CONC Corr. Factor: 1.000000
User: kellyca Custom ID1: Custom ID2: Custom ID3:
Comment: 326194 6010C dupont

Elem	Ag3280	Al1670	As1890	B_2089	Ba4554	Be3130	Bi2230	Ca3179	Cd2288
Line	328.068 {103}	167.079 {502}	189.042 {478}	208.959 {461}	455.403 { 74}	313.042 {108}	223.061 {451}	317.933 {106}	228.802 {447}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.00033	.02430	.00284	.00365	.03592	-.00003	-.00315	1.1154	.00025
Stddev	.00061	.00038	.00355	.00017	.00008	.00009	.00071	.0154	.00016
%RSD	187.12	1.5475	124.72	4.7721	.22393	351.22	22.652	1.3828	63.536

#1	-.00011	.02456	.00034	.00352	.03586	.00004	-.00264	1.1045	.00036
#2	.00076	.02403	.00535	.00377	.03598	-.00009	-.00365	1.1263	.00014

Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Elem	Co2286	Cr2055	Cu3247	Fe2599	K_7664	Li6707	Mg2790	Mn2576	Mo2020
Line	228.616 {447}	205.560 {464}	324.754 {104}	259.940 {130}	766.490 { 44}	670.784 { 50}	279.079 {121}2	257.610 {131}	202.030 {467}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.00088	.00343	.00282	.01539	.66290	-.00022	1.8628	.00992	.00003
Stddev	.00002	.00001	.00012	.00031	.01125	.00040	.0010	.00003	.00044
%RSD	2.5818	.32842	4.2171	2.0323	1.6967	184.51	.05621	.32795	1387.7

#1	.00090	.00344	.00274	.01516	.67085	-.00050	1.8636	.00990	.00034
#2	.00087	.00342	.00290	.01561	.65495	.00007	1.8621	.00995	-.00028

Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Elem	Na5895	Ni2316	P_1782	Pb2203	S_1820	Sb2068	Se1960	Si2881	Sn1899
Line	589.592 { 57}	231.604 {446}	178.284 {489}	220.353 {453}	182.034 {485}	206.833 {463}	196.090 {472}	288.158 {117}	189.989 {477}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	4.4830	.00236	.00249	W -.00302	.09580	-.00022	.00124	9.8242	.00062
Stddev	.0071	.00106	.00493	.00169	.00352	.00165	.00877	.0335	.00037
%RSD	.15871	44.727	198.34	56.044	3.6723	762.16	708.23	.34121	60.567

#1	4.4780	.00311	-.00100	-.00422	.09829	.00095	.00744	9.8005	.00088
#2	4.4881	.00162	.00598	-.00182	.09331	-.00138	-.00497	9.8479	.00035

Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Warn	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit				10.000					
Low Limit				-.00300					

Elem	Sr4077	Th2837	Ti3349	Ti1908	U_3701	V_2924	Zn2062	Zr3391	
Line	407.771 { 83}	283.730 {119}	334.904 {101}	190.856 {477}	370.152 { 91}	292.402 {115}	206.200 {163}	339.198 { 99}	
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	
Avg	.01840	-.00318	-.00001	-.00186	.00128	.00054	.01487	.00089	
Stddev	.00020	.00004	.00044	.00252	.02636	.00005	.00099	.00056	
%RSD	1.1119	1.2260	4046.7	135.55	2060.2	8.4920	6.6597	62.257	

#1	.01825	-.00315	.00030	-.00364	.01992	.00058	.01557	.00129	
#2	.01854	-.00321	-.00032	-.00008	-.01736	.00051	.01417	.00050	

Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	
High Limit									
Low Limit									

Int. Std.	Y_2243	Y_3600	Y_3774						
Line	224.306 {450}	360.073 { 94}	377.433 { 89}						
Units	Cts/S	Cts/S	Cts/S						
Avg	1572.1	33527.	5906.3						
Stddev	4.4	24.	38.6						
%RSD	.28019	.07166	.65293						

#1	1575.3	33544.	5933.5						
#2	1569.0	33510.	5879.0						

Sample Name: 280-83148-A-24-ASD@5 Acquired: 5/21/2016 4:05:00 Type: Unk
Method: 6500_026(v10) Mode: CONC Corr. Factor: 1.000000
User: kellyca Custom ID1: Custom ID2: Custom ID3:
Comment: 326194 6010C dupont

Elem	Ag3280	Al1670	As1890	B_2089	Ba4554	Be3130	Bi2230	Ca3179	Cd2288
Line	328.068 {103}	167.079 {502}	189.042 {478}	208.959 {461}	455.403 { 74}	313.042 {108}	223.061 {451}	317.933 {106}	228.802 {447}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.00073	.00641	-.00174	.00077	.00758	-.00008	.00076	.23142	-.00017
Stddev	.00032	.00181	.00069	.00001	.00008	.00006	.00066	.00059	.00001
%RSD	44.254	28.265	39.587	.79873	1.0574	80.527	87.315	.25631	4.5778

#1	.00050	.00770	-.00223	.00077	.00763	-.00012	.00123	.23100	-.00016
#2	.00096	.00513	-.00125	.00078	.00752	-.00003	.00029	.23184	-.00017

Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Elem	Co2286	Cr2055	Cu3247	Fe2599	K_7664	Li6707	Mg2790	Mn2576	Mo2020
Line	228.616 {447}	205.560 {464}	324.754 {104}	259.940 {130}	766.490 { 44}	670.784 { 50}	279.079 {121}2	257.610 {131}	202.030 {467}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	-.00010	.00042	-.00061	.02298	.17819	-.00097	.38569	.00219	.00005
Stddev	.00028	.00024	.00014	.00178	.00747	.00065	.00155	.00001	.00001
%RSD	283.84	56.169	22.959	7.7265	4.1931	66.868	.40177	.60739	30.202

#1	.00010	.00059	-.00071	.02172	.18347	-.00051	.38459	.00220	.00004
#2	-.00030	.00025	-.00051	.02423	.17290	-.00143	.38679	.00218	.00005

Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Elem	Na5895	Ni2316	P_1782	Pb2203	S_1820	Sb2068	Se1960	Si2881	Sn1899
Line	589.592 { 57}	231.604 {446}	178.284 {489}	220.353 {453}	182.034 {485}	206.833 {463}	196.090 {472}	288.158 {117}	189.989 {477}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.94438	.00066	.00191	-.00034	.02614	.00213	.00155	2.0217	.00036
Stddev	.00423	.00048	.00104	.00084	.00359	.00208	.00490	.0182	.00089
%RSD	.44739	72.763	54.422	245.39	13.717	97.888	316.66	.90290	250.10

#1	.94736	.00032	.00265	.00025	.02868	.00065	.00501	2.0346	-.00027
#2	.94139	.00099	.00118	-.00094	.02361	.00360	-.00192	2.0088	.00099

Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Elem	Sr4077	Th2837	Ti3349	Ti1908	U_3701	V_2924	Zn2062	Zr3391
Line	407.771 { 83}	283.730 {119}	334.904 {101}	190.856 {477}	370.152 { 91}	292.402 {115}	206.200 {163}	339.198 { 99}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.00389	-.00144	.00011	-.00098	.00337	-.00003	.00422	.00047
Stddev	.00005	.00057	.00071	.00061	.01121	.00103	.00034	.00075
%RSD	1.1941	39.587	672.08	62.872	333.10	3596.4	8.1009	160.83

#1	.00393	-.00104	.00061	-.00054	-.00456	.00070	.00446	.00100
#2	.00386	-.00185	-.00040	-.00141	.01129	-.00076	.00398	-.00006

Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit								
Low Limit								

Int. Std.	Y_2243	Y_3600	Y_3774
Line	224.306 {450}	360.073 { 94}	377.433 { 89}
Units	Cts/S	Cts/S	Cts/S
Avg	1565.4	33929.	5974.9
Stddev	1.7	41.	1.7
%RSD	.10723	.12053	.02905

#1	1566.6	33958.	5973.7
#2	1564.2	33900.	5976.2

Sample Name: 280-83148-A-24-B MS Acquired: 5/21/2016 4:07:48 Type: Unk
Method: 6500_026(v10) Mode: CONC Corr. Factor: 1.000000
User: kellyca Custom ID1: Custom ID2: Custom ID3:
Comment: 326194 6010C dupont

Elem	Ag3280	Al1670	As1890	B_2089	Ba4554	Be3130	Bi2230	Ca3179	Cd2288
Line	328.068 {103}	167.079 {502}	189.042 {478}	208.959 {461}	455.403 { 74}	313.042 {108}	223.061 {451}	317.933 {106}	228.802 {447}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.04787	2.0155	1.0698	1.1319	2.0301	.05137	2.2663	50.896	.10664
Stddev	.00032	.0088	.0062	.0015	.0054	.00026	.0054	.159	.00047
%RSD	.66545	.43459	.57811	.12903	.26804	.49947	.24010	.31323	.44215

#1	.04809	2.0217	1.0742	1.1330	2.0263	.05118	2.2701	50.784	.10697
#2	.04764	2.0093	1.0654	1.1309	2.0340	.05155	2.2624	51.009	.10631

Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Elem	Co2286	Cr2055	Cu3247	Fe2599	K_7664	Li6707	Mg2790	Mn2576	Mo2020
Line	228.616 {447}	205.560 {464}	324.754 {104}	259.940 {130}	766.490 { 44}	670.784 { 50}	279.079 {121}2	257.610 {131}	202.030 {467}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.52210	W .21180	.25122	1.0012	52.922	1.0783	49.950	.49095	1.0906
Stddev	.00056	.00037	.00088	.0006	.322	.0031	.053	.00068	.0020
%RSD	.10633	.17480	.35005	.05643	.60882	.28528	.10695	.13828	.18336

#1	.52170	.21154	.25185	1.0016	52.694	1.0761	49.912	.49143	1.0920
#2	.52249	.21206	.25060	1.0008	53.149	1.0805	49.988	.49047	1.0891

Check ?	Chk Pass	Chk Warn	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit		.10000							
Low Limit		-.01000							

Elem	Na8183	Ni2316	P_1782	Pb2203	S_1820	Sb2068	Se1960	Si2881	Sn1899
Line	818.326 { 41}	231.604 {446}	178.284 {489}	220.353 {453}	182.034 {485}	206.833 {463}	196.090 {472}	288.158 {117}	189.989 {477}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	55.990	.50163	10.620	.52324	2.2040	.53024	2.0795	20.248	1.9593
Stddev	.236	.00003	.008	.00036	.0057	.00016	.0158	.013	.0047
%RSD	.42205	.00611	.07079	.06793	.25710	.02991	.76068	.06578	.23836

#1	55.823	.50165	10.615	.52349	2.2080	.53036	2.0907	20.257	1.9626
#2	56.157	.50160	10.625	.52298	2.2000	.53013	2.0683	20.238	1.9560

Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Elem	Sr4077	Th2837	Ti3349	Ti1908	U_3701	V_2924	Zn2062	Zr3391
Line	407.771 { 83}	283.730 {119}	334.904 {101}	190.856 {477}	370.152 { 91}	292.402 {115}	206.200 {163}	339.198 { 99}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.94634	.96936	.90800	2.0015	2.0783	.45297	.49740	.49054
Stddev	.00296	.00011	.00110	.0055	.0120	.00026	.00033	.00054
%RSD	.31278	.01169	.12151	.27409	.57803	.05679	.06725	.11059

#1	.94425	.96944	.90722	2.0054	2.0698	.45315	.49717	.49016
#2	.94844	.96928	.90878	1.9976	2.0868	.45279	.49764	.49093

Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit								
Low Limit								

Int. Std.	Y_2243	Y_3600	Y_3774
Line	224.306 {450}	360.073 { 94}	377.433 { 89}
Units	Cts/S	Cts/S	Cts/S
Avg	1491.8	31879.	5808.5
Stddev	1.7	17.	25.2
%RSD	.11287	.05181	.43449

#1	1493.0	31891.	5826.3
#2	1490.6	31867.	5790.6

Sample Name: 280-83148-A-24-C MSD Acquired: 5/21/2016 4:10:24 Type: Unk

Method: 6500_026(v10) Mode: CONC Corr. Factor: 1.000000

User: kellyca Custom ID1: Custom ID2: Custom ID3:

Comment: 326194 6010C dupont

Elem	Ag3280	Al1670	As1890	B_2089	Ba4554	Be3130	Bi2230	Ca3179	Cd2288
Line	328.068 {103}	167.079 {502}	189.042 {478}	208.959 {461}	455.403 { 74}	313.042 {108}	223.061 {451}	317.933 {106}	228.802 {447}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.04819	2.0345	1.0620	1.1363	2.0468	.05178	2.2666	51.060	.10818
Stddev	.00052	.0012	.0058	.0036	.0003	.00019	.0060	.003	.00019
%RSD	1.0864	.05960	.54685	.31710	.01547	.36768	.26246	.00509	.17318

#1	.04856	2.0337	1.0661	1.1388	2.0470	.05165	2.2708	51.062	.10831
#2	.04782	2.0354	1.0579	1.1337	2.0465	.05192	2.2624	51.058	.10805

Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Elem	Co2286	Cr2055	Cu3247	Fe2599	K_7664	Li6707	Mg2790	Mn2576	Mo2020
Line	228.616 {447}	205.560 {464}	324.754 {104}	259.940 {130}	766.490 { 44}	670.784 { 50}	279.079 {121}2	257.610 {131}	202.030 {467}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.52835	W .21297	.25312	1.0053	53.360	1.0853	50.413	.49517	1.1003
Stddev	.00012	.00051	.00071	.0034	.032	.0010	.000	.00101	.0033
%RSD	.02288	.23859	.28089	.33516	.06067	.08951	.00025	.20411	.30051

#1	.52844	.21261	.25362	1.0077	53.382	1.0846	50.413	.49445	1.1026
#2	.52827	.21333	.25261	1.0029	53.337	1.0860	50.413	.49588	1.0979

Check ?	Chk Pass	Chk Warn	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit		.10000							
Low Limit		-.01000							

Elem	Na8183	Ni2316	P_1782	Pb2203	S_1820	Sb2068	Se1960	Si2881	Sn1899
Line	818.326 { 41}	231.604 {446}	178.284 {489}	220.353 {453}	182.034 {485}	206.833 {463}	196.090 {472}	288.158 {117}	189.989 {477}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	56.257	.50679	10.667	.52713	2.2019	.53209	2.0922	20.360	1.9701
Stddev	.021	.00206	.042	.00153	.0160	.00030	.0052	.032	.0015
%RSD	.03794	.40737	.39766	.28944	.72772	.05646	.25055	.15484	.07823

#1	56.241	.50825	10.697	.52820	2.2132	.53230	2.0959	20.382	1.9712
#2	56.272	.50533	10.637	.52605	2.1906	.53188	2.0885	20.338	1.9690

Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Elem	Sr4077	Th2837	Ti3349	Ti1908	U_3701	V_2924	Zn2062	Zr3391	
Line	407.771 { 83}	283.730 {119}	334.904 {101}	190.856 {477}	370.152 { 91}	292.402 {115}	206.200 {163}	339.198 { 99}	
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	
Avg	.95378	.97535	.91585	2.0119	2.1050	.45872	.50443	.49460	
Stddev	.00183	.00033	.00012	.0084	.0200	.00148	.00087	.00147	
%RSD	.19135	.03420	.01362	.41856	.95108	.32181	.17190	.29737	

#1	.95507	.97511	.91577	2.0179	2.1192	.45976	.50504	.49356	
#2	.95249	.97559	.91594	2.0060	2.0909	.45768	.50382	.49564	

Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	
High Limit									
Low Limit									

Int. Std.	Y_2243	Y_3600	Y_3774						
Line	224.306 {450}	360.073 { 94}	377.433 { 89}						
Units	Cts/S	Cts/S	Cts/S						
Avg	1491.9	31691.	5834.9						
Stddev	3.3	23.	5.2						
%RSD	.22195	.07118	.08841						

#1	1489.5	31707.	5838.5						
#2	1494.2	31675.	5831.2						

Sample Name: 280-83148-A-24-A PDS Acquired: 5/21/2016 4:13:00 Type: Unk

Method: 6500_026(v10) Mode: CONC Corr. Factor: 1.000000

User: kellyca Custom ID1: Custom ID2: Custom ID3:

Comment: 326194 6010C dupont

Elem	Ag3280	Al1670	As1890	B_2089	Ba4554	Be3130	Bi2230	Ca3179	Cd2288
Line	328.068 {103}	167.079 {502}	189.042 {478}	208.959 {461}	455.403 { 74}	313.042 {108}	223.061 {451}	317.933 {106}	228.802 {447}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.00601	1.0538	.20558	.11954	.13592	.05120	-.00596	20.908	.05424
Stddev	.00026	.0029	.00231	.00080	.00104	.00028	.00150	.107	.00029
%RSD	4.3017	.27291	1.1241	.67135	.76230	.54450	25.171	.51086	.52626

#1	.00583	1.0559	.20395	.12010	.13519	.05100	-.00490	20.833	.05444
#2	.00620	1.0518	.20722	.11897	.13666	.05140	-.00702	20.984	.05404

Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Elem	Co2286	Cr2055	Cu3247	Fe2599	K_7664	Li6707	Mg2790	Mn2576	Mo2020
Line	228.616 {447}	205.560 {464}	324.754 {104}	259.940 {130}	766.490 { 44}	670.784 { 50}	279.079 {121}2	257.610 {131}	202.030 {467}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.05400	.05493	.05340	1.0089	21.405	.10775	21.429	.05897	.05510
Stddev	.00015	.00006	.00001	.0032	.195	.00017	.018	.00001	.00036
%RSD	.28373	.11182	.01904	.32038	.90947	.15368	.08349	.00968	.64455

#1	.05411	.05489	.05341	1.0067	21.268	.10763	21.416	.05898	.05485
#2	.05389	.05498	.05339	1.0112	21.543	.10787	21.442	.05897	.05535

Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Elem	Na8183	Ni2316	P_1782	Pb2203	S_1820	Sb2068	Se1960	Si2881	Sn1899
Line	818.326 { 41}	231.604 {446}	178.284 {489}	220.353 {453}	182.034 {485}	206.833 {463}	196.090 {472}	288.158 {117}	189.989 {477}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	24.846	.05306	2.1057	.10646	.09613	.10404	.20539	14.616	.10077
Stddev	.305	.00009	.0175	.00229	.00089	.00169	.00446	.059	.00068
%RSD	1.2269	.16918	.83262	2.1525	.92255	1.6204	2.1713	.40082	.67611

#1	24.631	.05300	2.1181	.10484	.09676	.10523	.20223	14.575	.10125
#2	25.062	.05313	2.0933	.10808	.09551	.10284	.20854	14.657	.10029

Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Elem	Sr4077	Th2837	Ti3349	Ti1908	U_3701	V_2924	Zn2062	Zr3391	
Line	407.771 { 83}	283.730 {119}	334.904 {101}	190.856 {477}	370.152 { 91}	292.402 {115}	206.200 {163}	339.198 { 99}	
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	
Avg	.06504	.19164	.04729	.21217	.53723	.04616	.21576	.04865	
Stddev	.00032	.00057	.00009	.00132	.00674	.00129	.00320	.00331	
%RSD	.48895	.29662	.18559	.61992	1.2540	2.8005	1.4837	6.8111	

#1	.06481	.19124	.04723	.21310	.53247	.04525	.21802	.04631	
#2	.06526	.19204	.04735	.21124	.54200	.04708	.21349	.05100	

Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	
High Limit									
Low Limit									

Int. Std.	Y_2243	Y_3600	Y_3774						
Line	224.306 {450}	360.073 { 94}	377.433 { 89}						
Units	Cts/S	Cts/S	Cts/S						
Avg	1543.9	32691.	5910.2						
Stddev	2.3	18.	18.1						
%RSD	.15181	.05440	.30692						

#1	1545.6	32678.	5923.0						
#2	1542.3	32703.	5897.4						

Sample Name: ccvh-3900196 Acquired: 5/21/2016 4:15:45 Type: QC

Method: 6500_026(v10) Mode: CONC Corr. Factor: 1.000000

User: kellyca Custom ID1: Custom ID2: Custom ID3:

Comment:

Elem	Ag3280	Al3092	As1890	B_2089	Ba4554	Be3130	Bi2230	Ca3179	Cd2288	Co2286	Cr2055	Cu3247	Fe2714
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	-.00354	45.103	-.00463	.00414	.00024	-.00039	1.0682	-.05413	-.00079	.00310	-.00010	.00423	45.528
Stddev	.00031	.085	.00221	.00088	.00014	.00002	.0017	.00308	.00005	.00031	.00018	.00018	.359
%RSD	8.7798	.18878	47.790	21.198	57.340	3.9726	.16319	5.6888	6.8048	10.161	187.96	4.2357	.78915

#1	-.00332	45.043	-.00307	.00476	.00014	-.00038	1.0694	-.05195	-.00083	.00288	-.00022	.00436	45.274
#2	-.00376	45.164	-.00620	.00352	.00033	-.00040	1.0669	-.05631	-.00075	.00332	.00003	.00410	45.782

Check ?	None	Chk Pass	None	None	None	None	Chk Pass	None	None	None	None	None	Chk Pass
Value													
Range													

Elem	K_7664	Li6707	Mg2790	Mn2576	Mo2020	Na8183	Ni2316	P_1782	Pb2203	S_1820	Sb2068	Se1960	Si2881
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.06674	.00035	.15426	-.00068	-.00230	249.29	-.00075	.00063	.00016	5.0647	-.00152	.00681	-.00113
Stddev	.02332	.00006	.00005	.00001	.00081	1.21	.00014	.00069	.00040	.0060	.00075	.00128	.00162
%RSD	34.935	18.418	.03543	.88845	34.994	.48665	18.752	109.41	249.31	.11880	49.257	18.725	143.41

#1	.08323	.00030	.15430	-.00068	-.00287	248.43	-.00065	.00111	.00045	5.0605	-.00205	.00772	.00002
#2	.05026	.00039	.15422	-.00068	-.00173	250.15	-.00085	.00014	-.00012	5.0690	-.00099	.00591	-.00227

Check ?	None	None	None	None	None	Chk Pass	None	None	None	Chk Pass	None	None	None
Value													
Range													

Elem	Sn1899	Sr4077	Th2837	Ti3349	Tl1908	U_3701	V_2924	Zn2062	Zr3391
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.00119	.00024	4.8239	.02698	-.00508	9.9693	-.01703	-.00284	-.02205
Stddev	.00083	.00004	.0063	.00034	.00112	.0534	.00004	.00076	.00082
%RSD	70.169	17.334	.13036	1.2758	22.084	.53611	.21372	26.578	3.7393

#1	.00060	.00021	4.8284	.02673	-.00428	10.007	-.01700	-.00231	-.02264
#2	.00177	.00027	4.8195	.02722	-.00587	9.9315	-.01705	-.00338	-.02147

Check ?	None	None	Chk Pass	None	None	Chk Pass	None	None	None
Value									
Range									

Int. Std.	Y_2243	Y_3600	Y_3774
Units	Cts/S	Cts/S	Cts/S
Avg	1502.6	31553.	5798.9
Stddev	.2	90.	20.1
%RSD	.01455	.28544	.34746

#1	1502.5	31617.	5813.2
#2	1502.8	31490.	5784.7

Sample Name: ccv-3900195 Acquired: 5/21/2016 4:18:36 Type: QC
Method: 6500_026(v10) Mode: CONC Corr. Factor: 1.000000
User: kellyca Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	Ag3280	Al1670	As1890	B_2089	Ba4554	Be3130	Bi2230	Ca3179	Cd2288	Co2286	Cr2055	Cu3247
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.48276	.52265	1.0231	F .55103	.49721	.51098	-.00280	4.9953	.53802	.53449	.52417	.49122
Stddev	.00308	.00070	.0030	.00047	.00302	.00188	.00085	.0012	.00066	.00216	.00136	.00147
%RSD	.63828	.13358	.29424	.08477	.60645	.36751	30.277	.02482	.12291	.40340	.25980	.29884

#1	.48494	.52216	1.0252	.55136	.49508	.50965	-.00339	4.9944	.53848	.53297	.52514	.49226
#2	.48058	.52315	1.0210	.55069	.49934	.51230	-.00220	4.9962	.53755	.53602	.52321	.49018

Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Fail	Chk Pass	Chk Pass	None	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Value				.50000								
Range				10.000%								

Elem	Fe2599	K_7664	Li6707	Mg2790	Mn2576	Mo2020	Na5895	Ni2316	P_1782	Pb2203	S_1820	Sb2068
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	2.4803	51.421	1.0670	19.541	.49765	.53587	5.2486	.51152	1.0351	1.0628	.00407	1.0330
Stddev	.0079	.335	.0062	.059	.00031	.00017	.0286	.00040	.0089	.0028	.00133	.0022
%RSD	.31780	.65162	.58008	.30290	.06155	.03094	.54571	.07833	.86066	.26392	32.581	.20766

#1	2.4747	51.184	1.0626	19.582	.49787	.53575	5.2283	.51180	1.0288	1.0647	.00501	1.0345
#2	2.4859	51.658	1.0714	19.499	.49744	.53598	5.2688	.51123	1.0414	1.0608	.00313	1.0315

Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	None	Chk Pass
Value												
Range												

Elem	Se1960	Si2881	Sn1899	Sr4077	Th2837	Ti3349	Ti1908	U_3701	V_2924	Zn2062	Zr3391
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	1.0091	4.9905	.99694	.46964	.00185	.45866	1.0281	.01456	.46688	.49852	.49866
Stddev	.0037	.0029	.00310	.00254	.00016	.00132	.0006	.01527	.00130	.00203	.00291
%RSD	.37085	.05792	.31093	.54000	8.6246	.28779	.05519	104.85	.27944	.40657	.58264

#1	1.0117	4.9885	.99475	.46785	.00173	.45959	1.0285	.02536	.46780	.49996	.49660
#2	1.0064	4.9925	.99914	.47143	.00196	.45773	1.0277	.00377	.46595	.49709	.50071

Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	None	Chk Pass	Chk Pass	None	Chk Pass	Chk Pass	Chk Pass
Value											
Range											

Int. Std.	Y_2243	Y_3600	Y_3774
Units	Cts/S	Cts/S	Cts/S
Avg	1532.4	32193.	5797.9
Stddev	.6	108.	1.3
%RSD	.03986	.33583	.02308

#1	1532.8	32117.	5798.8
#2	1532.0	32270.	5796.9

Sample Name: ccb Acquired: 5/21/2016 4:21:14 Type: QC
Method: 6500_026(v10) Mode: CONC Corr. Factor: 1.000000
User: kellyca Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	Ag3280	Al1670	As1890	B_2089	Ba4554	Be3130	Bi2230	Ca3179	Cd2288	Co2286	Cr2055
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.00049	-.00108	-.00101	W .00207	-.00004	-.00006	-.00170	-.00968	-.00008	-.00025	-.00032
Stddev	.00026	.00120	.00307	.00026	.00002	.00002	.00102	.00452	.00021	.00011	.00011
%RSD	52.438	111.04	305.01	12.788	54.054	38.650	60.247	46.622	284.01	44.714	33.669

#1	.00067	-.00193	-.00318	.00188	-.00002	-.00008	-.00242	-.01288	.00008	-.00033	-.00039
#2	.00031	-.00023	.00116	.00226	-.00005	-.00005	-.00097	-.00649	-.00023	-.00017	-.00024

Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Warn	Chk Pass	Chk Pass	None	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit				.00156							
Low Limit				-.00156							

Elem	Cu3247	Fe2599	K_7664	Li6707	Mg2790	Mn2576	Mo2020	Na5895	Ni2316	P_1782	Pb2203
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	W -.00163	.00052	.07931	-.00092	.00384	.00003	.00089	.01473	-.00040	-.00072	-.00071
Stddev	.00028	.00047	.00007	.00006	.00052	.00009	.00001	.00280	.00002	.00534	.00021
%RSD	17.300	90.726	.09084	6.3721	13.467	325.57	1.4557	18.992	4.3032	739.95	29.455

#1	-.00183	.00085	.07925	-.00088	.00348	-.00004	.00088	.01275	-.00041	-.00450	-.00056
#2	-.00143	.00019	.07936	-.00096	.00421	.00009	.00090	.01671	-.00038	.00306	-.00086

Check ?	Chk Warn	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit	.00136										
Low Limit	-.00136										

Elem	S_1820	Sb2068	Se1960	Si2881	Sn1899	Sr4077	Th2837	Ti3349	Ti1908	U_3701	V_2924
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.00594	.00210	-.00016	-.00639	.00207	.00001	-.00219	.00001	-.00088	.01117	.00026
Stddev	.00436	.00110	.00315	.00445	.00118	.00003	.00208	.00041	.00204	.03537	.00079
%RSD	73.367	52.531	2021.1	69.570	56.910	395.62	95.218	2903.0	232.48	316.79	304.44

#1	.00286	.00288	.00207	-.00954	.00291	-.00001	-.00366	.00030	-.00232	.03618	.00082
#2	.00903	.00132	-.00238	-.00325	.00124	.00003	-.00071	-.00027	.00057	-.01385	-.00030

Check ?	None	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit											
Low Limit											

Elem	Zn2062	Zr3391
Units	ppm	ppm
Avg	-.00131	-.00064
Stddev	.00062	.00028
%RSD	47.621	43.698

#1	-.00087	-.00084
#2	-.00175	-.00045

Check ?	Chk Pass	Chk Pass
High Limit		
Low Limit		

Int. Std.	Y_2243	Y_3600	Y_3774
Units	Cts/S	Cts/S	Cts/S
Avg	1564.3	33313.	5808.7
Stddev	.6	96.	15.2
%RSD	.03971	.28866	.26177

#1	1564.8	33245.	5797.9
#2	1563.9	33381.	5819.4

Sample Name: ccvl-3903059 Acquired: 5/21/2016 4:24:03 Type: QC
Method: 6500_026(v10) Mode: CONC Corr. Factor: 1.000000
User: kellyca Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	Ag3280	Al1670	As1890	B_2089	Ba4554	Be3130	Bi2230	Ca3179	Cd2288	Co2286	Cr2055	Cu3247
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.01027	.10696	.01507	.11251	.00997	.00089	.11544	.19767	.00540	.01028	.01029	.01394
Stddev	.00034	.00032	.00108	.00098	.00000	.00006	.00004	.00245	.00005	.00009	.00046	.00001
%RSD	3.3598	.30274	7.1394	.86987	.00241	7.2205	.03358	1.2388	1.0185	.90928	4.4736	.06247

#1	.01002	.10718	.01583	.11320	.00997	.00094	.11541	.19940	.00543	.01035	.00996	.01395
#2	.01051	.10673	.01431	.11182	.00997	.00085	.11547	.19594	.00536	.01022	.01061	.01394

Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Value												
Range												

Elem	Fe2599	K_7664	Li6707	Mg2790	Mn2576	Mo2020	Na5895	Ni2316	P_1782	Pb2203	S_1820	Sb2068
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.11369	3.1602	.00998	.20753	.01024	.02135	1.0544	.04210	3.0334	.01088	.00191	.02505
Stddev	.00091	.0260	.00078	.00322	.00004	.00052	.0089	.00033	.0122	.00025	.00125	.00090
%RSD	.80455	.82406	7.7813	1.5502	.35167	2.4544	.84378	.78748	.40154	2.2521	65.636	3.6124

#1	.11304	3.1787	.00943	.20981	.01026	.02172	1.0481	.04234	3.0248	.01071	.00280	.02441
#2	.11434	3.1418	.01053	.20526	.01021	.02098	1.0607	.04187	3.0420	.01105	.00102	.02569

Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	None	Chk Pass
Value												
Range												

Elem	Se1960	Si2881	Sn1899	Sr4077	Th2837	Ti3349	Ti1908	U_3701	V_2924	Zn2062	Zr3391
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.01436	.49443	.10312	.00944	.01352	.00925	.01558	F .08742	.00934	.02072	.01522
Stddev	.00022	.01720	.00148	.00002	.00335	.00038	.00061	.01569	.00000	.00058	.00077
%RSD	1.5528	3.4778	1.4338	.16332	24.764	4.1043	3.9097	17.947	.04414	2.8173	5.0464

#1	.01451	.50659	.10207	.00943	.01589	.00952	.01601	.07632	.00933	.02031	.01576
#2	.01420	.48227	.10417	.00945	.01115	.00899	.01515	.09851	.00934	.02113	.01468

Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Fail	Chk Pass	Chk Pass	Chk Pass
Value								.06000			
Range								30.000%			

Int. Std.	Y_2243	Y_3600	Y_3774
Units	Cts/S	Cts/S	Cts/S
Avg	1567.3	33018.	5695.7
Stddev	2.3	63.	27.1
%RSD	.14693	.19120	.47574

#1	1569.0	33062.	5676.5
#2	1565.7	32973.	5714.8

Sample Name: MB 280-326155/1-A Acquired: 5/21/2016 4:26:50 Type: Unk
Method: 6500_026(v10) Mode: CONC Corr. Factor: 1.000000
User: kellyca Custom ID1: 5/20 Custom ID2: Custom ID3:
Comment: 326155 200.7

Elem	Ag3280	Al1670	As1890	B_2089	Ba4554	Be3130	Bi2230	Ca3179	Cd2288
Line	328.068 {103}	167.079 {502}	189.042 {478}	208.959 {461}	455.403 { 74}	313.042 {108}	223.061 {451}	317.933 {106}	228.802 {447}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.00091	.00199	-.00497	.00161	.00010	-.00014	-.00254	.01059	.00029
Stddev	.00023	.00018	.00166	.00146	.00006	.00003	.00209	.00212	.00028
%RSD	25.751	9.2647	33.416	90.592	60.470	19.919	82.395	20.055	96.472

#1	.00107	.00212	-.00379	.00058	.00006	-.00015	-.00402	.00909	.00048
#2	.00074	.00185	-.00614	.00264	.00014	-.00012	-.00106	.01209	.00009

Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Elem	Co2286	Cr2055	Cu3247	Fe2599	K_7664	Li6707	Mg2790	Mn2576	Mo2020
Line	228.616 {447}	205.560 {464}	324.754 {104}	259.940 {130}	766.490 { 44}	670.784 { 50}	279.079 {121}2	257.610 {131}	202.030 {467}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	-.00002	.00000	-.00099	.01174	.03661	-.00092	.00346	.00018	.00010
Stddev	.00000	.00000	.00003	.00008	.02648	.00113	.00198	.00001	.00000
%RSD	1.4392	70.541	3.2888	.69714	72.348	122.50	57.254	4.6783	4.1631

#1	-.00002	.00001	-.00102	.01180	.01788	-.00012	.00206	.00019	.00010
#2	-.00002	.00000	-.00097	.01169	.05533	-.00172	.00486	.00018	.00010

Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Elem	Na5895	Ni2316	P_1782	Pb2203	S_1820	Sb2068	Se1960	Si2881	Sn1899
Line	589.592 { 57}	231.604 {446}	178.284 {489}	220.353 {453}	182.034 {485}	206.833 {463}	196.090 {472}	288.158 {117}	189.989 {477}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.03381	.00073	-.00203	-.00085	.01206	.00209	.00335	-.00690	.00157
Stddev	.00466	.00021	.00053	.00059	.00715	.00108	.00395	.00004	.00027
%RSD	13.790	29.208	26.273	69.679	59.311	51.870	118.09	.54125	16.973

#1	.03051	.00088	-.00165	-.00043	.01711	.00132	.00055	-.00687	.00176
#2	.03711	.00058	-.00241	-.00127	.00700	.00285	.00614	-.00693	.00139

Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Elem	Sr4077	Th2837	Ti3349	Ti1908	U_3701	V_2924	Zn2062	Zr3391	
Line	407.771 { 83}	283.730 {119}	334.904 {101}	190.856 {477}	370.152 { 91}	292.402 {115}	206.200 {163}	339.198 { 99}	
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	
Avg	.00006	-.00382	.00023	-.00170	.01144	-.00007	.00320	.00122	
Stddev	.00004	.00176	.00028	.00214	.01122	.00005	.00078	.00122	
%RSD	60.279	46.203	120.09	125.98	98.138	80.900	24.414	99.909	

#1	.00009	-.00506	.00003	-.00321	.00350	-.00003	.00376	.00209	
#2	.00003	-.00257	.00043	-.00019	.01937	-.00010	.00265	.00036	

Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	
High Limit									
Low Limit									

Int. Std.	Y_2243	Y_3600	Y_3774
Line	224.306 {450}	360.073 { 94}	377.433 { 89}
Units	Cts/S	Cts/S	Cts/S
Avg	1574.5	33639.	5836.9
Stddev	5.2	1.	6.9
%RSD	.32807	.00365	.11893

#1	1570.8	33640.	5841.8
#2	1578.1	33638.	5832.0

Sample Name: LCS 280-326155/2-A Acquired: 5/21/2016 4:29:38 Type: Unk
Method: 6500_026(v10) Mode: CONC Corr. Factor: 1.000000
User: kellyca Custom ID1: Custom ID2: Custom ID3:
Comment: 326155 200.7

Elem	Ag3280	Al1670	As1890	B_2089	Ba4554	Be3130	Bi2230	Ca3179	Cd2288
Line	328.068 {103}	167.079 {502}	189.042 {478}	208.959 {461}	455.403 { 74}	313.042 {108}	223.061 {451}	317.933 {106}	228.802 {447}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.04808	1.9676	1.0464	1.0873	1.9875	.05106	F 2.2130	49.782	.10467
Stddev	.00051	.0063	.0039	.0034	.0140	.00028	.0049	.334	.00023
%RSD	1.0634	.32175	.37379	.31767	.70313	.55159	.22324	.67174	.22368

#1	.04844	1.9631	1.0436	1.0848	1.9777	.05086	2.2165	49.545	.10450
#2	.04772	1.9721	1.0491	1.0897	1.9974	.05126	2.2095	50.018	.10484

Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Fail	Chk Pass	Chk Pass
High Limit							2.2000		
Low Limit							1.8000		

Elem	Co2286	Cr2055	Cu3247	Fe2599	K_7664	Li6707	Mg2790	Mn2576	Mo2020
Line	228.616 {447}	205.560 {464}	324.754 {104}	259.940 {130}	766.490 { 44}	670.784 { 50}	279.079 {121}2	257.610 {131}	202.030 {467}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.51374	F .20460	.24550	1.0078	52.386	1.0709	48.322	.48132	1.0654
Stddev	.00078	.00020	.00086	.0069	.315	.0072	.010	.00120	.0002
%RSD	.15105	.09967	.34928	.68520	.60059	.67360	.02035	.25009	.02255

#1	.51319	.20446	.24489	1.0029	52.163	1.0658	48.329	.48217	1.0656
#2	.51429	.20475	.24610	1.0127	52.608	1.0760	48.316	.48047	1.0652

Check ?	Chk Pass	Chk Fail	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit		.05750							
Low Limit		.04300							

Elem	Na8183	Ni2316	P_1782	Pb2203	S_1820	Sb2068	Se1960	Si2881	Sn1899
Line	818.326 { 41}	231.604 {446}	178.284 {489}	220.353 {453}	182.034 {485}	206.833 {463}	196.090 {472}	288.158 {117}	189.989 {477}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	51.258	.49669	10.481	.51595	2.0385	.52168	2.0522	9.8921	1.9320
Stddev	.721	.00121	.005	.00148	.0052	.00205	.0059	.0795	.0119
%RSD	1.4072	.24431	.04743	.28594	.25639	.39343	.28652	.80347	.61655

#1	50.748	.49584	10.477	.51699	2.0348	.52023	2.0564	9.8359	1.9236
#2	51.768	.49755	10.484	.51490	2.0422	.52313	2.0481	9.9483	1.9405

Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Elem	Sr4077	Th2837	Ti3349	Ti1908	U_3701	V_2924	Zn2062	Zr3391
Line	407.771 { 83}	283.730 {119}	334.904 {101}	190.856 {477}	370.152 { 91}	292.402 {115}	206.200 {163}	339.198 { 99}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.93775	.96569	.91091	1.9789	2.0643	.45954	.48671	.48914
Stddev	.00724	.00252	.00044	.0041	.0125	.00069	.00062	.00418
%RSD	.77216	.26102	.04796	.20622	.60358	.15094	.12753	.85423

#1	.93263	.96391	.91122	1.9760	2.0555	.46003	.48715	.48619
#2	.94287	.96747	.91060	1.9818	2.0731	.45905	.48627	.49210

Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit								
Low Limit								

Int. Std.	Y_2243	Y_3600	Y_3774
Line	224.306 {450}	360.073 { 94}	377.433 { 89}
Units	Cts/S	Cts/S	Cts/S
Avg	1499.7	31489.	5730.9
Stddev	.4	15.	10.6
%RSD	.02974	.04644	.18559

#1	1499.3	31499.	5738.4
#2	1500.0	31478.	5723.4

Sample Name: 280-83358-B-1-A Acquired: 5/21/2016 4:32:14 Type: Unk
Method: 6500_026(v10) Mode: CONC Corr. Factor: 1.000000
User: kellyca Custom ID1: Custom ID2: Custom ID3:
Comment: 326155 200.7

Elem	Ag3280	Al3092	As1890	B_2089	Ba4554	Be3130	Bi2230	Ca3179	Cd2288
Line	328.068 {103}	309.271 {109}	189.042 {478}	208.959 {461}	455.403 { 74}	313.042 {108}	223.061 {451}	317.933 {106}	228.802 {447}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	-.00021	6.2831	.00503	.24427	.12863	.00020	-.00407	33.452	.00017
Stddev	.00007	.0062	.00352	.00046	.00078	.00005	.00467	.041	.00010
%RSD	35.994	.09811	70.058	.18726	.60509	23.758	114.83	.12246	59.215

#1	-.00015	6.2787	.00752	.24395	.12808	.00016	-.00738	33.423	.00025
#2	-.00026	6.2874	.00254	.24460	.12918	.00023	-.00077	33.481	.00010

Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Elem	Co2286	Cr2055	Cu3247	Fe2599	K_7664	Li6707	Mg2790	Mn2576	Mo2020
Line	228.616 {447}	205.560 {464}	324.754 {104}	259.940 {130}	766.490 { 44}	670.784 { 50}	279.079 {121}2	257.610 {131}	202.030 {467}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.00329	.00844	.00369	5.0087	5.6182	.01994	11.845	.06665	.00257
Stddev	.00011	.00013	.00002	.0107	.0073	.00077	.017	.00010	.00050
%RSD	3.2941	1.5914	.57252	.21368	.12937	3.8794	.14235	.15736	19.431

#1	.00322	.00835	.00370	5.0011	5.6233	.02049	11.857	.06657	.00222
#2	.00337	.00854	.00367	5.0162	5.6131	.01939	11.833	.06672	.00292

Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Elem	Na8183	Ni2316	P_1782	Pb2203	S_1820	Sb2068	Se1960	Si2881	Sn1899
Line	818.326 { 41}	231.604 {446}	178.284 {489}	220.353 {453}	182.034 {485}	206.833 {463}	196.090 {472}	288.158 {117}	189.989 {477}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	132.76	.00864	.18786	.00022	15.765	.00038	-.00045	16.969	-.00010
Stddev	.39	.00013	.00312	.00047	.010	.00020	.00263	.047	.00069
%RSD	.29549	1.5177	1.6631	217.05	.06376	52.627	577.91	.27987	676.54

#1	132.48	.00855	.18565	.00055	15.772	.00024	-.00231	17.003	.00039
#2	133.04	.00874	.19006	-.00012	15.758	.00052	.00140	16.936	-.00059

Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Elem	Sr4077	Th2837	Ti3349	Ti1908	U_3701	V_2924	Zn2062	Zr3391
Line	407.771 { 83}	283.730 {119}	334.904 {101}	190.856 {477}	370.152 { 91}	292.402 {115}	206.200 {163}	339.198 { 99}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.28279	-.00188	.20866	-.00286	.01824	.01302	.01288	.00711
Stddev	.00145	.00132	.00022	.00267	.00534	.00017	.00010	.00138
%RSD	.51124	70.475	.10619	93.175	29.262	1.2822	.79676	19.405

#1	.28177	-.00281	.20851	-.00098	.01446	.01314	.01280	.00809
#2	.28382	-.00094	.20882	-.00475	.02201	.01290	.01295	.00614

Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit								
Low Limit								

Int. Std.	Y_2243	Y_3600	Y_3774
Line	224.306 {450}	360.073 { 94}	377.433 { 89}
Units	Cts/S	Cts/S	Cts/S
Avg	1519.4	31730.	5790.0
Stddev	.1	69.	26.3
%RSD	.00673	.21686	.45436

#1	1519.4	31681.	5771.4
#2	1519.5	31778.	5808.6

Sample Name: 280-83358-B-2-A Acquired: 5/21/2016 4:34:58 Type: Unk
Method: 6500_026(v10) Mode: CONC Corr. Factor: 1.000000
User: kellyca Custom ID1: Custom ID2: Custom ID3:
Comment: 326155 200.7

Elem	Ag3280	Al3092	As1890	B_2089	Ba4554	Be3130	Bi2230	Ca3179	Cd2288
Line	328.068 {103}	309.271 {109}	189.042 {478}	208.959 {461}	455.403 { 74}	313.042 {108}	223.061 {451}	317.933 {106}	228.802 {447}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.00071	22.232	.00091	.05745	.42915	.00128	-.00307	115.08	.00095
Stddev	.00013	.113	.00409	.00068	.00031	.00000	.00248	.39	.00019
%RSD	18.801	.50927	447.38	1.1855	.07133	.38323	81.003	.33591	20.120

#1	.00081	22.152	-.00198	.05794	.42893	.00127	-.00482	115.35	.00081
#2	.00062	22.312	.00381	.05697	.42936	.00128	-.00131	114.81	.00108

Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Elem	Co2286	Cr2055	Cu3247	Fe2599	K_7664	Li6707	Mg2790	Mn2576	Mo2020
Line	228.616 {447}	205.560 {464}	324.754 {104}	259.940 {130}	766.490 { 44}	670.784 { 50}	279.079 {121}2	257.610 {131}	202.030 {467}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.00984	.03158	.02069	26.652	9.7828	.02694	8.9703	.66341	.00293
Stddev	.00016	.00076	.00013	.047	.0136	.00129	.0757	.00110	.00018
%RSD	1.6763	2.4058	.63656	.17677	.13864	4.7854	.84443	.16547	6.1856

#1	.00972	.03104	.02078	26.685	9.7733	.02785	9.0238	.66264	.00280
#2	.00995	.03211	.02060	26.619	9.7924	.02603	8.9167	.66419	.00306

Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Elem	Na5895	Ni2316	P_1782	Pb2203	S_1820	Sb2068	Se1960	Si2881	Sn1899
Line	589.592 { 57}	231.604 {446}	178.284 {489}	220.353 {453}	182.034 {485}	206.833 {463}	196.090 {472}	288.158 {117}	189.989 {477}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	3.7564	.03138	.53217	.01489	1.5856	.00045	.00149	36.847	.00278
Stddev	.0198	.00070	.00378	.00178	.0070	.00010	.00404	.037	.00194
%RSD	.52796	2.2179	.70993	11.955	.44008	22.491	272.16	.09997	69.814

#1	3.7424	.03089	.52950	.01363	1.5905	.00052	.00434	36.873	.00141
#2	3.7704	.03188	.53484	.01615	1.5807	.00038	-.00137	36.821	.00415

Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Elem	Sr4077	Th2837	Ti3349	Ti1908	U_3701	V_2924	Zn2062	Zr3391
Line	407.771 { 83}	283.730 {119}	334.904 {101}	190.856 {477}	370.152 { 91}	292.402 {115}	206.200 {163}	339.198 { 99}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.29905	.00254	.31352	-.00216	-.00679	.04512	.09714	.00905
Stddev	.00090	.00056	.00402	.00130	.00696	.00016	.00038	.00119
%RSD	.30173	21.837	1.2823	60.125	102.55	.35025	.39081	13.161

#1	.29841	.00215	.31636	-.00124	-.01172	.04500	.09741	.00989
#2	.29969	.00294	.31068	-.00308	-.00187	.04523	.09688	.00820

Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit								
Low Limit								

Int. Std.	Y_2243	Y_3600	Y_3774
Line	224.306 {450}	360.073 { 94}	377.433 { 89}
Units	Cts/S	Cts/S	Cts/S
Avg	1534.4	32264.	5997.7
Stddev	2.2	50.	32.1
%RSD	.14093	.15599	.53528

#1	1532.9	32229.	5975.0
#2	1536.0	32300.	6020.4

Sample Name: 280-83324-A-1-A Acquired: 5/21/2016 4:37:42 Type: Unk
Method: 6500_026(v10) Mode: CONC Corr. Factor: 1.000000
User: kellyca Custom ID1: Custom ID2: Custom ID3:
Comment: 326155 200.7

Elem	Ag3280	Al1670	As1890	B_2089	Ba4554	Be3130	Bi2230	Ca3179	Cd2288
Line	328.068 {103}	167.079 {502}	189.042 {478}	208.959 {461}	455.403 { 74}	313.042 {108}	223.061 {451}	317.933 {106}	228.802 {447}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.00112	.25888	-.00853	.04658	.83574	-.00010	W -.01124	24.726	.00056
Stddev	.00025	.00151	.00700	.00055	.00242	.00001	.00107	.228	.00006
%RSD	22.563	.58492	82.045	1.1817	.28980	8.4390	9.5662	.92266	11.420

#1	.00130	.25995	-.01348	.04619	.83402	-.00009	-.01048	24.564	.00052
#2	.00094	.25781	-.00358	.04697	.83745	-.00010	-.01200	24.887	.00061

Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Warn	Chk Pass	Chk Pass
High Limit							3.0000		
Low Limit							-.01000		

Elem	Co2286	Cr2055	Cu3247	Fe2599	K_7664	Li6707	Mg2790	Mn2576	Mo2020
Line	228.616 {447}	205.560 {464}	324.754 {104}	259.940 {130}	766.490 { 44}	670.784 { 50}	279.079 {121}2	257.610 {131}	202.030 {467}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.00009	.00178	.50746	.50228	13.101	.00648	5.6865	.10605	.00259
Stddev	.00020	.00010	.00033	.00104	.059	.00016	.0327	.00108	.00031
%RSD	221.77	5.6439	.06528	.20632	.44895	2.4024	.57570	1.0197	11.791

#1	.00023	.00185	.50723	.50155	13.059	.00637	5.6633	.10528	.00280
#2	-.00005	.00171	.50770	.50301	13.142	.00659	5.7096	.10681	.00237

Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Elem	Na8183	Ni2316	P_1782	Pb2203	S_1820	Sb2068	Se1960	Si2881	Sn1899
Line	818.326 { 41}	231.604 {446}	178.284 {489}	220.353 {453}	182.034 {485}	206.833 {463}	196.090 {472}	288.158 {117}	189.989 {477}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	102.15	.02618	.65593	.00398	56.617	.00398	.00402	3.2762	.37866
Stddev	.53	.00020	.00646	.00112	.165	.00103	.00710	.0120	.00019
%RSD	.52015	.75656	.98532	28.091	.29213	25.865	176.94	.36573	.05008

#1	101.77	.02604	.65136	.00319	56.734	.00325	.00904	3.2678	.37879
#2	102.52	.02632	.66050	.00477	56.500	.00471	-.00101	3.2847	.37853

Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Elem	Sr4077	Th2837	Ti3349	Ti1908	U_3701	V_2924	Zn2062	Zr3391
Line	407.771 { 83}	283.730 {119}	334.904 {101}	190.856 {477}	370.152 { 91}	292.402 {115}	206.200 {163}	339.198 { 99}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.21252	-.00583	.00174	-.00506	.02003	-.00005	.01532	.00097
Stddev	.00060	.00036	.00057	.00055	.00175	.00016	.00024	.00167
%RSD	.28219	6.2436	32.849	10.873	8.7459	325.81	1.5550	171.04

#1	.21210	-.00557	.00134	-.00467	.02127	-.00016	.01515	.00215
#2	.21295	-.00608	.00214	-.00544	.01879	.00006	.01549	-.00020

Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit								
Low Limit								

Int. Std.	Y_2243	Y_3600	Y_3774
Line	224.306 {450}	360.073 { 94}	377.433 { 89}
Units	Cts/S	Cts/S	Cts/S
Avg	1444.8	30708.	5831.9
Stddev	8.4	49.	9.9
%RSD	.58281	.15992	.16965

#1	1438.8	30673.	5838.9
#2	1450.8	30742.	5824.9

Sample Name: 280-83324-A-1-A SD@5 Acquired: 5/21/2016 4:40:27 Type: Unk
Method: 6500_026(v10) Mode: CONC Corr. Factor: 1.000000
User: kellyca Custom ID1: Custom ID2: Custom ID3:
Comment: 326155 200.7

Elem	Ag3280	Al1670	As1890	B_2089	Ba4554	Be3130	Bi2230	Ca3179	Cd2288
Line	328.068 {103}	167.079 {502}	189.042 {478}	208.959 {461}	455.403 { 74}	313.042 {108}	223.061 {451}	317.933 {106}	228.802 {447}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.00081	.05541	-.00565	.00982	.16399	-.00012	-.00393	5.0816	.00030
Stddev	.00035	.00112	.00496	.00095	.00029	.00000	.00002	.0072	.00045
%RSD	43.233	2.0132	87.817	9.7223	.17741	2.3146	.48931	.14217	150.57

#1	.00056	.05620	-.00214	.01050	.16419	-.00012	-.00391	5.0765	-.00002
#2	.00106	.05463	-.00916	.00915	.16378	-.00013	-.00394	5.0867	.00062

Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Elem	Co2286	Cr2055	Cu3247	Fe2599	K_7664	Li6707	Mg2790	Mn2576	Mo2020
Line	228.616 {447}	205.560 {464}	324.754 {104}	259.940 {130}	766.490 { 44}	670.784 { 50}	279.079 {121}2	257.610 {131}	202.030 {467}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	-.00063	-.00003	.09751	.12245	2.6174	.00128	1.1908	.02143	.00027
Stddev	.00015	.00004	.00003	.00015	.0093	.00029	.0012	.00017	.00040
%RSD	23.634	109.08	.03218	.11890	.35603	23.071	.10206	.77128	147.68

#1	-.00074	-.00001	.09753	.12256	2.6240	.00107	1.1900	.02132	-.00001
#2	-.00053	-.00006	.09749	.12235	2.6108	.00148	1.1917	.02155	.00055

Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Elem	Na8183	Ni2316	P_1782	Pb2203	S_1820	Sb2068	Se1960	Si2881	Sn1899
Line	818.326 { 41}	231.604 {446}	178.284 {489}	220.353 {453}	182.034 {485}	206.833 {463}	196.090 {472}	288.158 {117}	189.989 {477}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	20.477	.00558	.12685	.00020	11.406	.00177	W -.00734	.65448	.07876
Stddev	.098	.00024	.00393	.00133	.007	.00143	.00039	.00307	.00044
%RSD	.47841	4.3212	3.0944	677.55	.05939	80.873	5.2487	.46848	.55302

#1	20.547	.00541	.12408	-.00074	11.401	.00076	-.00761	.65231	.07907
#2	20.408	.00575	.12963	.00114	11.410	.00278	-.00706	.65665	.07845

Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Warn	Chk Pass	Chk Pass
High Limit							5.0000		
Low Limit							-.00500		

Elem	Sr4077	Th2837	Ti3349	Ti1908	U_3701	V_2924	Zn2062	Zr3391
Line	407.771 { 83}	283.730 {119}	334.904 {101}	190.856 {477}	370.152 { 91}	292.402 {115}	206.200 {163}	339.198 { 99}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.04194	-.00453	.00045	-.00084	.00932	-.00006	.00381	.00108
Stddev	.00015	.00152	.00055	.00135	.02197	.00020	.00093	.00088
%RSD	.35405	33.514	122.98	162.03	235.68	337.01	24.493	81.958

#1	.04184	-.00345	.00084	.00012	-.00621	.00008	.00447	.00170
#2	.04205	-.00560	.00006	-.00179	.02486	-.00020	.00315	.00045

Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit								
Low Limit								

Int. Std.	Y_2243	Y_3600	Y_3774
Line	224.306 {450}	360.073 { 94}	377.433 { 89}
Units	Cts/S	Cts/S	Cts/S
Avg	1552.3	32904.	5877.7
Stddev	2.5	46.	11.6
%RSD	.15868	.13966	.19808

#1	1554.0	32936.	5885.9
#2	1550.6	32871.	5869.5

Sample Name: 280-83324-A-1-B MS Acquired: 5/21/2016 4:43:14 Type: Unk
Method: 6500_026(v10) Mode: CONC Corr. Factor: 1.000000
User: kellyca Custom ID1: Custom ID2: Custom ID3:
Comment: 326155 200.7

Elem	Ag3280	Al1670	As1890	B_2089	Ba4554	Be3130	Bi2230	Ca3179	Cd2288
Line	328.068 {103}	167.079 {502}	189.042 {478}	208.959 {461}	455.403 { 74}	313.042 {108}	223.061 {451}	317.933 {106}	228.802 {447}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.04937	2.1165	1.0337	1.0557	2.8186	.05022	2.1816	72.666	.10316
Stddev	.00105	.0064	.0072	.0015	.0094	.00015	.0096	.161	.00030
%RSD	2.1243	.30046	.69794	.14490	.33189	.30503	.43935	.22156	.29400

#1	.04862	2.1210	1.0388	1.0568	2.8252	.05033	2.1884	72.780	.10337
#2	.05011	2.1120	1.0286	1.0546	2.8120	.05011	2.1749	72.552	.10294

Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Elem	Co2286	Cr2055	Cu3247	Fe2599	K_7664	Li6707	Mg2790	Mn2576	Mo2020
Line	228.616 {447}	205.560 {464}	324.754 {104}	259.940 {130}	766.490 { 44}	670.784 { 50}	279.079 {121}2	257.610 {131}	202.030 {467}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.50795	W .20695	.75714	1.6484	65.483	1.1030	51.767	.58009	1.0818
Stddev	.00066	.00064	.00125	.0005	.246	.0018	.086	.00132	.0018
%RSD	.13022	.30997	.16509	.03043	.37555	.15891	.16567	.22751	.16489

#1	.50841	.20740	.75626	1.6488	65.657	1.1043	51.707	.57916	1.0805
#2	.50748	.20650	.75802	1.6481	65.309	1.1018	51.828	.58103	1.0831

Check ?	Chk Pass	Chk Warn	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit		.10000							
Low Limit		-.01000							

Elem	Na8183	Ni2316	P_1782	Pb2203	S_1820	Sb2068	Se1960	Si2881	Sn1899
Line	818.326 { 41}	231.604 {446}	178.284 {489}	220.353 {453}	182.034 {485}	206.833 {463}	196.090 {472}	288.158 {117}	189.989 {477}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	151.84	.51398	10.906	.49998	58.632	.52199	1.9919	12.610	2.2206
Stddev	.79	.00288	.030	.00068	.140	.00376	.0043	.092	.0055
%RSD	.51912	.56043	.27688	.13564	.23807	.72029	.21570	.72621	.24888

#1	152.40	.51601	10.928	.50046	58.731	.52464	1.9949	12.675	2.2245
#2	151.28	.51194	10.885	.49950	58.533	.51933	1.9889	12.545	2.2167

Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Elem	Sr4077	Th2837	Ti3349	Ti1908	U_3701	V_2924	Zn2062	Zr3391	
Line	407.771 { 83}	283.730 {119}	334.904 {101}	190.856 {477}	370.152 { 91}	292.402 {115}	206.200 {163}	339.198 { 99}	
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	
Avg	1.1577	.97316	.93070	1.8550	2.1051	.46628	.48143	.48476	
Stddev	.0032	.00435	.00270	.0018	.0027	.00130	.00265	.00401	
%RSD	.27995	.44745	.28995	.09532	.12899	.27838	.55145	.82697	

#1	1.1599	.97008	.92880	1.8563	2.1032	.46536	.48331	.48759	
#2	1.1554	.97624	.93261	1.8538	2.1070	.46720	.47956	.48192	

Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	
High Limit									
Low Limit									

Int. Std.	Y_2243	Y_3600	Y_3774						
Line	224.306 {450}	360.073 { 94}	377.433 { 89}						
Units	Cts/S	Cts/S	Cts/S						
Avg	1406.9	29680.	5636.8						
Stddev	5.7	85.	41.9						
%RSD	.40606	.28495	.74254						

#1	1402.9	29620.	5607.2						
#2	1411.0	29739.	5666.4						

Sample Name: 280-83324-A-1-C MSD Acquired: 5/21/2016 4:45:50 Type: Unk
Method: 6500_026(v10) Mode: CONC Corr. Factor: 1.000000
User: kellyca Custom ID1: Custom ID2: Custom ID3:
Comment: 326155 200.7

Elem	Ag3280	Al1670	As1890	B_2089	Ba4554	Be3130	Bi2230	Ca3179	Cd2288
Line	328.068 {103}	167.079 {502}	189.042 {478}	208.959 {461}	455.403 { 74}	313.042 {108}	223.061 {451}	317.933 {106}	228.802 {447}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.04873	2.0753	1.0159	1.0365	2.7694	.04907	2.1399	71.576	.10163
Stddev	.00044	.0051	.0014	.0020	.0080	.00009	.0035	.378	.00008
%RSD	.90144	.24735	.13597	.18918	.28720	.18489	.16255	.52834	.08250

#1	.04905	2.0789	1.0169	1.0351	2.7637	.04901	2.1375	71.308	.10169
#2	.04842	2.0717	1.0150	1.0379	2.7750	.04914	2.1424	71.843	.10157

Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Elem	Co2286	Cr2055	Cu3247	Fe2599	K_7664	Li6707	Mg2790	Mn2576	Mo2020
Line	228.616 {447}	205.560 {464}	324.754 {104}	259.940 {130}	766.490 { 44}	670.784 { 50}	279.079 {121}2	257.610 {131}	202.030 {467}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.49912	W .20280	.75056	1.4176	64.581	1.0808	51.067	.57049	1.0635
Stddev	.00172	.00026	.00244	.0101	.246	.0025	.268	.00126	.0022
%RSD	.34550	.12748	.32446	.71608	.38022	.23515	.52473	.22063	.20964

#1	.50033	.20262	.75229	1.4105	64.408	1.0790	51.257	.57138	1.0650
#2	.49790	.20298	.74884	1.4248	64.755	1.0826	50.878	.56960	1.0619

Check ?	Chk Pass	Chk Warn	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit		.10000							
Low Limit		-.01000							

Elem	Na8183	Ni2316	P_1782	Pb2203	S_1820	Sb2068	Se1960	Si2881	Sn1899
Line	818.326 { 41}	231.604 {446}	178.284 {489}	220.353 {453}	182.034 {485}	206.833 {463}	196.090 {472}	288.158 {117}	189.989 {477}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	150.34	.50496	10.686	.49422	58.211	.51010	1.9737	12.396	2.1810
Stddev	.52	.00352	.014	.00241	.090	.00510	.0017	.080	.0048
%RSD	.34460	.69798	.12874	.48683	.15444	1.00000	.08674	.64834	.22099

#1	149.98	.50745	10.696	.49592	58.274	.51371	1.9725	12.339	2.1844
#2	150.71	.50247	10.676	.49252	58.147	.50649	1.9749	12.452	2.1776

Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Elem	Sr4077	Th2837	Ti3349	Ti1908	U_3701	V_2924	Zn2062	Zr3391
Line	407.771 { 83}	283.730 {119}	334.904 {101}	190.856 {477}	370.152 { 91}	292.402 {115}	206.200 {163}	339.198 { 99}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	1.1401	.95019	.91349	1.8334	2.0699	.45992	.46898	.47550
Stddev	.0049	.00880	.00503	.0020	.0043	.00094	.00028	.00162
%RSD	.43340	.92659	.55107	.10878	.20601	.20357	.05888	.33967

#1	1.1366	.95641	.91705	1.8349	2.0669	.46058	.46878	.47436
#2	1.1436	.94396	.90993	1.8320	2.0729	.45926	.46917	.47665

Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit								
Low Limit								

Int. Std.	Y_2243	Y_3600	Y_3774
Line	224.306 {450}	360.073 { 94}	377.433 { 89}
Units	Cts/S	Cts/S	Cts/S
Avg	1412.3	29710.	5645.4
Stddev	7.0	232.	6.4
%RSD	.49658	.77971	.11344

#1	1407.4	29546.	5649.9
#2	1417.3	29874.	5640.8

Sample Name: 280-83346-B-1-A Acquired: 5/21/2016 4:48:26 Type: Unk
Method: 6500_026(v10) Mode: CONC Corr. Factor: 1.000000
User: kellyca Custom ID1: Custom ID2: Custom ID3:
Comment: 326155 200.7

Elem	Ag3280	Al1670	As1890	B_2089	Ba4554	Be3130	Bi2230	Ca3179	Cd2288
Line	328.068 {103}	167.079 {502}	189.042 {478}	208.959 {461}	455.403 { 74}	313.042 {108}	223.061 {451}	317.933 {106}	228.802 {447}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.00043	.01274	.00591	.35705	.17961	-.00016	-.00383	248.00	.00024
Stddev	.00009	.00039	.00769	.00006	.00008	.00005	.00140	.02	.00005
%RSD	20.861	3.0666	130.01	.01781	.04482	31.095	36.495	.00919	21.620

#1	.00049	.01302	.00048	.35709	.17956	-.00020	-.00482	248.02	.00020
#2	.00036	.01246	.01135	.35700	.17967	-.00013	-.00284	247.99	.00027

Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Elem	Co2286	Cr2055	Cu3247	Fe2599	K_7664	Li6707	Mg2790	Mn2576	Mo2020
Line	228.616 {447}	205.560 {464}	324.754 {104}	259.940 {130}	766.490 { 44}	670.784 { 50}	279.079 {121}2	257.610 {131}	202.030 {467}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.00967	.00150	.00553	.14571	W 137.53	.43966	45.616	.03080	.03045
Stddev	.00002	.00038	.00035	.00039	.06	.00190	.085	.00002	.00001
%RSD	.20015	25.140	6.3984	.26563	.04640	.43185	.18734	.07496	.03627

#1	.00968	.00176	.00578	.14543	137.49	.43832	45.556	.03082	.03045
#2	.00965	.00123	.00528	.14598	137.58	.44101	45.677	.03078	.03044

Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Warn	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit					100.00				
Low Limit					-.50000				

Elem	Na8183	Ni2316	P_1782	Pb2203	S_1820	Sb2068	Se1960	Si2881	Sn1899
Line	818.326 { 41}	231.604 {446}	178.284 {489}	220.353 {453}	182.034 {485}	206.833 {463}	196.090 {472}	288.158 {117}	189.989 {477}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	W 511.93	.01988	.07381	-.00044	F 377.79	.00424	.01096	.50112	.00206
Stddev	.15	.00017	.00181	.00341	.20	.00083	.00219	.00870	.00051
%RSD	.02945	.87211	2.4532	771.43	.05397	19.658	20.011	1.7370	25.032

#1	511.82	.01976	.07253	-.00286	377.93	.00482	.00941	.49496	.00242
#2	512.04	.02000	.07510	.00197	377.65	.00365	.01251	.50727	.00169

Check ?	Chk Warn	Chk Pass	Chk Pass	Chk Pass	Chk Fail	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit	500.00				200.00				
Low Limit	10.000				-.02000				

Elem	Sr4077	Th2837	Ti3349	Ti1908	U_3701	V_2924	Zn2062	Zr3391
Line	407.771 { 83}	283.730 {119}	334.904 {101}	190.856 {477}	370.152 { 91}	292.402 {115}	206.200 {163}	339.198 { 99}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	2.1486	-.00607	.00130	-.00684	.01975	.00133	.00332	.00015
Stddev	.0009	.00253	.00039	.00052	.00784	.00044	.00161	.00040
%RSD	.04007	41.579	29.983	7.5950	39.685	32.929	48.388	261.33

#1	2.1480	-.00786	.00102	-.00647	.02530	.00102	.00445	-.00013
#2	2.1492	-.00429	.00157	-.00721	.01421	.00164	.00218	.00044

Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit								
Low Limit								

Int. Std.	Y_2243	Y_3600	Y_3774
Line	224.306 {450}	360.073 { 94}	377.433 { 89}
Units	Cts/S	Cts/S	Cts/S
Avg	1407.9	29294.	5609.4
Stddev	2.9	2.	17.1
%RSD	.20712	.00523	.30569

#1	1409.9	29293.	5621.6
#2	1405.8	29295.	5597.3

Sample Name: 280-83346-B-2-A Acquired: 5/21/2016 4:51:42 Type: Unk
Method: 6500_026(v10) Mode: CONC Corr. Factor: 1.000000
User: kellyca Custom ID1: Custom ID2: Custom ID3:
Comment: 326155 200.7

Elem	Ag3280	Al1670	As1890	B_2089	Ba4554	Be3130	Bi2230	Ca3179	Cd2288
Line	328.068 {103}	167.079 {502}	189.042 {478}	208.959 {461}	455.403 { 74}	313.042 {108}	223.061 {451}	317.933 {106}	228.802 {447}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.00019	.00995	.00203	.35078	.17667	-.00010	-.00352	240.54	.00010
Stddev	.00009	.00114	.00288	.00015	.00106	.00003	.00243	.38	.00046
%RSD	46.082	11.503	142.33	.04222	.59867	32.458	69.107	.15890	456.58

#1	.00025	.00914	.00406	.35089	.17592	-.00007	-.00180	240.81	-.00022
#2	.00013	.01076	-.00001	.35068	.17742	-.00012	-.00524	240.27	.00042

Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Elem	Co2286	Cr2055	Cu3247	Fe2599	K_7664	Li6707	Mg2790	Mn2576	Mo2020
Line	228.616 {447}	205.560 {464}	324.754 {104}	259.940 {130}	766.490 { 44}	670.784 { 50}	279.079 {121}2	257.610 {131}	202.030 {467}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.00954	.00146	.00506	.10015	W 134.62	.43051	45.056	.03002	.02952
Stddev	.00006	.00010	.00015	.00194	.54	.00150	.015	.00023	.00051
%RSD	.57892	6.6844	2.9313	1.9340	.39867	.34814	.03415	.75174	1.7348

#1	.00958	.00153	.00516	.09878	134.24	.42945	45.067	.02986	.02989
#2	.00950	.00139	.00495	.10152	135.00	.43157	45.045	.03018	.02916

Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Warn	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit					100.00				
Low Limit					-.50000				

Elem	Na8183	Ni2316	P_1782	Pb2203	S_1820	Sb2068	Se1960	Si2881	Sn1899
Line	818.326 { 41}	231.604 {446}	178.284 {489}	220.353 {453}	182.034 {485}	206.833 {463}	196.090 {472}	288.158 {117}	189.989 {477}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	W 502.66	.01851	.07775	-.00085	F 370.37	.00254	.01130	.48478	.00360
Stddev	.99	.00035	.00432	.00024	.74	.00038	.00803	.01079	.00009
%RSD	.19676	1.8735	5.5620	28.454	.19938	14.809	71.083	2.2261	2.6137

#1	501.96	.01876	.07469	-.00102	370.89	.00281	.01698	.47715	.00367
#2	503.36	.01827	.08081	-.00068	369.85	.00227	.00562	.49241	.00354

Check ?	Chk Warn	Chk Pass	Chk Pass	Chk Pass	Chk Fail	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit	500.00				200.00				
Low Limit	10.000				-.02000				

Elem	Sr4077	Th2837	Ti3349	Ti1908	U_3701	V_2924	Zn2062	Zr3391
Line	407.771 { 83}	283.730 {119}	334.904 {101}	190.856 {477}	370.152 { 91}	292.402 {115}	206.200 {163}	339.198 { 99}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	2.1106	-.00736	.00119	-.00216	.01164	.00126	.00413	.00040
Stddev	.0091	.00123	.00004	.00065	.00022	.00006	.00240	.00139
%RSD	.42892	16.663	3.3656	29.892	1.8510	4.5227	58.076	345.13

#1	2.1042	-.00823	.00122	-.00170	.01179	.00122	.00243	-.00058
#2	2.1170	-.00649	.00117	-.00261	.01149	.00130	.00582	.00138

Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit								
Low Limit								

Int. Std.	Y_2243	Y_3600	Y_3774
Line	224.306 {450}	360.073 { 94}	377.433 { 89}
Units	Cts/S	Cts/S	Cts/S
Avg	1406.6	29120.	5631.6
Stddev	3.0	10.	14.9
%RSD	.21325	.03509	.26382

#1	1404.5	29113.	5621.1
#2	1408.7	29127.	5642.1

Sample Name: ccvh-3900196 Acquired: 5/21/2016 4:54:56 Type: QC
Method: 6500_026(v10) Mode: CONC Corr. Factor: 1.000000
User: kellyca Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	Ag3280	Al3092	As1890	B_2089	Ba4554	Be3130	Bi2230	Ca3179	Cd2288	Co2286	Cr2055	Cu3247	Fe2714
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	-.00212	45.960	-.00732	.00287	.00024	-.00030	1.0528	-.03470	-.00070	.00277	-.00062	.00553	46.333
Stddev	.00086	.058	.00071	.00030	.00003	.00006	.0037	.00440	.00016	.00018	.00041	.00025	.266
%RSD	40.503	.12655	9.7276	10.392	13.768	19.137	.35062	12.681	23.424	6.5379	66.876	4.5014	.57466

#1	-.00273	45.919	-.00681	.00309	.00026	-.00034	1.0554	-.03159	-.00059	.00290	-.00091	.00536	46.145
#2	-.00152	46.001	-.00782	.00266	.00021	-.00026	1.0502	-.03782	-.00082	.00265	-.00033	.00571	46.521

Check ?	None	Chk Pass	None	None	None	None	Chk Pass	None	None	None	None	None	Chk Pass
Value													
Range													

Elem	K_7664	Li6707	Mg2790	Mn2576	Mo2020	Na8183	Ni2316	P_1782	Pb2203	S_1820	Sb2068	Se1960	Si2881
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.12598	-.00012	.14870	-.00073	-.00262	252.80	-.00073	.00205	.00249	5.0443	.00044	.00073	-.01449
Stddev	.00194	.00086	.00692	.00007	.00005	.74	.00006	.00182	.00287	.0083	.00266	.00010	.01832
%RSD	1.5362	708.59	4.6545	9.7651	1.9429	.29172	7.4976	89.007	115.47	.16542	607.68	13.226	126.44

#1	.12462	.00049	.15359	-.00078	-.00266	252.28	-.00069	.00076	.00452	5.0502	-.00144	.00080	-.00153
#2	.12735	-.00073	.14380	-.00068	-.00259	253.32	-.00077	.00333	.00046	5.0384	.00232	.00066	-.02744

Check ?	None	None	None	None	None	Chk Pass	None	None	None	Chk Pass	None	None	None
Value													
Range													

Elem	Sn1899	Sr4077	Th2837	Ti3349	Tl1908	U_3701	V_2924	Zn2062	Zr3391
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.00301	.00045	4.8667	.02616	-.00484	10.023	-.01653	-.00133	-.01440
Stddev	.00143	.00003	.0048	.00016	.00024	.020	.00042	.00069	.00114
%RSD	47.629	5.8014	.09942	.62226	4.8799	.19951	2.5706	51.752	7.9294

#1	.00200	.00047	4.8633	.02628	-.00468	10.037	-.01623	-.00181	-.01359
#2	.00403	.00043	4.8701	.02605	-.00501	10.009	-.01683	-.00084	-.01521

Check ?	None	None	Chk Pass	None	None	Chk Pass	None	None	None
Value									
Range									

Int. Std.	Y_2243	Y_3600	Y_3774
Units	Cts/S	Cts/S	Cts/S
Avg	1515.6	31276.	5754.9
Stddev	.0	95.	13.5
%RSD	.00002	.30252	.23498

#1	1515.6	31343.	5764.5
#2	1515.6	31210.	5745.4

Sample Name: ccv-3900195 Acquired: 5/21/2016 4:57:48 Type: QC
Method: 6500_026(v10) Mode: CONC Corr. Factor: 1.000000
User: kellyca Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	Ag3280	Al1670	As1890	B_2089	Ba4554	Be3130	Bi2230	Ca3179	Cd2288	Co2286	Cr2055	Cu3247	Fe2599
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.48869	.51954	1.0132	.53505	.49658	.50973	-.00391	4.9879	.52560	.52418	.51505	.49632	2.4638
Stddev	.00154	.00235	.0120	.00091	.00079	.00110	.00404	.0023	.00068	.00098	.00184	.00249	.0007
%RSD	.31434	.45137	1.1806	.16954	.15884	.21668	103.44	.04681	.12890	.18759	.35763	.50187	.02826

#1	.48760	.52120	1.0217	.53569	.49603	.50895	-.00105	4.9895	.52608	.52487	.51635	.49456	2.4633
#2	.48977	.51788	1.0048	.53440	.49714	.51051	-.00677	4.9862	.52512	.52348	.51375	.49808	2.4643

Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	None	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Value													
Range													

Elem	K_7664	Li6707	Mg2790	Mn2576	Mo2020	Na5895	Ni2316	P_1782	Pb2203	S_1820	Sb2068	Se1960	Si2881
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	52.168	1.0720	19.838	.49697	.52084	5.2891	.50863	1.0199	1.0463	.02036	1.0260	1.0059	4.9395
Stddev	.076	.0029	.041	.00162	.00200	.0015	.00067	.0080	.0022	.00308	.0011	.0053	.0360
%RSD	.14598	.26654	.20483	.32603	.38415	.02812	.13113	.78195	.20536	15.138	.11009	.53119	.72900

#1	52.114	1.0700	19.810	.49582	.52226	5.2901	.50910	1.0255	1.0448	.01818	1.0268	1.0021	4.9140
#2	52.222	1.0740	19.867	.49811	.51943	5.2880	.50816	1.0142	1.0479	.02253	1.0252	1.0097	4.9649

Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	None	Chk Pass	Chk Pass	Chk Pass
Value													
Range													

Elem	Sn1899	Sr4077	Th2837	Ti3349	Ti1908	U_3701	V_2924	Zn2062	Zr3391
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	1.0012	.48093	-.00043	.46922	1.0308	.02002	.47368	.49930	.49915
Stddev	.0081	.00116	.00082	.00022	.0012	.00021	.00168	.00273	.00155
%RSD	.80759	.24047	193.87	.04759	.11730	1.0531	.35567	.54657	.31065

#1	1.0070	.48011	.00016	.46906	1.0317	.01987	.47249	.49737	.50025
#2	.99552	.48175	-.00101	.46938	1.0300	.02017	.47487	.50123	.49806

Check ?	Chk Pass	Chk Pass	None	Chk Pass	Chk Pass	None	Chk Pass	Chk Pass	Chk Pass
Value									
Range									

Int. Std.	Y_2243	Y_3600	Y_3774
Units	Cts/S	Cts/S	Cts/S
Avg	1548.4	31901.	5708.3
Stddev	6.1	21.	16.3
%RSD	.39621	.06610	.28573

#1	1544.1	31916.	5696.8
#2	1552.7	31886.	5719.8

Sample Name: ccb Acquired: 5/21/2016 5:00:27 Type: QC
Method: 6500_026(v10) Mode: CONC Corr. Factor: 1.000000
User: kellyca Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	Ag3280	Al1670	As1890	B_2089	Ba4554	Be3130	Bi2230	Ca3179	Cd2288	Co2286	Cr2055	Cu3247
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.00045	-.00146	.00107	W .00203	-.00006	-.00009	-.00024	.00346	-.00011	-.00033	-.00011	-.00054
Stddev	.00015	.00020	.00212	.00004	.00002	.00010	.00056	.00056	.00015	.00029	.00003	.00077
%RSD	32.355	13.477	197.89	1.8640	26.295	113.05	234.39	16.250	138.25	86.981	25.411	141.81

#1	.00035	-.00160	.00257	.00200	-.00005	-.00002	-.00064	.00306	-.00021	-.00054	-.00009	.00000
#2	.00056	-.00132	-.00043	.00206	-.00007	-.00016	.00016	.00386	-.00000	-.00013	-.00013	-.00108

Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Warn	Chk Pass	Chk Pass	None	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit				.00156								
Low Limit				-.00156								

Elem	Fe2599	K_7664	Li6707	Mg2790	Mn2576	Mo2020	Na5895	Ni2316	P_1782	Pb2203	S_1820	Sb2068
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.00149	.12182	-.00050	.00131	-.00004	.00065	.04388	-.00012	-.00069	.00037	.01739	.00044
Stddev	.00125	.00772	.00015	.00201	.00002	.00039	.00532	.00005	.00030	.00106	.00069	.00075
%RSD	83.895	6.3379	29.699	153.37	60.260	60.475	12.129	37.446	43.896	287.10	3.9548	172.47

#1	.00237	.12728	-.00060	.00273	-.00002	.00037	.04765	-.00016	-.00091	.00112	.01788	.00097
#2	.00061	.11636	-.00039	-.00011	-.00005	.00093	.04012	-.00009	-.00048	-.00038	.01690	-.00010

Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	None	Chk Pass
High Limit												
Low Limit												

Elem	Se1960	Si2881	Sn1899	Sr4077	Th2837	Ti3349	Ti1908	U_3701	V_2924	Zn2062	Zr3391
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	-.00362	.00840	.00058	.00009	-.00291	.00008	-.00044	.02208	.00013	-.00003	.00003
Stddev	.00521	.01701	.00009	.00001	.00044	.00025	.00100	.00739	.00023	.00026	.00044
%RSD	143.69	202.49	15.372	8.4222	15.276	322.89	229.14	33.474	181.39	818.17	1308.0

#1	.00006	.02043	.00064	.00009	-.00322	.00025	-.00115	.02731	.00029	-.00022	-.00027
#2	-.00730	-.00363	.00052	.00010	-.00259	-.00010	.00027	.01685	-.00004	.00015	.00034

Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit											
Low Limit											

Int. Std.	Y_2243	Y_3600	Y_3774
Units	Cts/S	Cts/S	Cts/S
Avg	1575.1	33017.	5817.7
Stddev	.3	89.	33.0
%RSD	.02114	.27043	.56680

#1	1574.9	33081.	5794.4
#2	1575.4	32954.	5841.1

Sample Name: ccvl-3903059 Acquired: 5/21/2016 5:03:16 Type: QC
Method: 6500_026(v10) Mode: CONC Corr. Factor: 1.000000
User: kellyca Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	Ag3280	Al1670	As1890	B_2089	Ba4554	Be3130	Bi2230	Ca3179	Cd2288	Co2286	Cr2055	Cu3247
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.00992	.10787	F .00801	.10958	.01003	.00089	.11365	.20483	.00541	.01056	.01051	.01528
Stddev	.00031	.00005	.00150	.00049	.00015	.00010	.00118	.00183	.00013	.00051	.00020	.00013
%RSD	3.1304	.04179	18.742	.44607	1.4978	10.784	1.0388	.89343	2.3215	4.8598	1.9271	.85184

#1	.01014	.10783	.00695	.10923	.01013	.00095	.11281	.20613	.00532	.01020	.01037	.01519
#2	.00970	.10790	.00908	.10992	.00992	.00082	.11448	.20354	.00550	.01092	.01065	.01537

Check ?	Chk Pass	Chk Pass	Chk Fail	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Value			.01500									
Range			-30.000%									

Elem	Fe2599	K_7664	Li6707	Mg2790	Mn2576	Mo2020	Na5895	Ni2316	P_1782	Pb2203	S_1820	Sb2068
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.10548	3.2003	.01031	.21314	.01028	.02146	1.0769	.04184	3.0284	.00887	.01339	.02342
Stddev	.00061	.0001	.00009	.00567	.00004	.00027	.0085	.00023	.0001	.00021	.00102	.00106
%RSD	.57372	.00243	.89205	2.6582	.36015	1.2801	.78779	.54474	.00315	2.3125	7.5855	4.5427

#1	.10506	3.2003	.01025	.21715	.01030	.02127	1.0709	.04167	3.0284	.00873	.01267	.02418
#2	.10591	3.2002	.01038	.20913	.01025	.02165	1.0829	.04200	3.0285	.00902	.01410	.02267

Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	None	Chk Pass
Value												
Range												

Elem	Se1960	Si2881	Sn1899	Sr4077	Th2837	Ti3349	Ti1908	U_3701	V_2924	Zn2062	Zr3391
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.01275	.49331	.10443	.00984	.01201	.00953	.01431	F .08879	.00909	.02043	.01470
Stddev	.00088	.00895	.00096	.00001	.00129	.00000	.00084	.01401	.00060	.00027	.00051
%RSD	6.8988	1.8145	.91867	.06831	10.772	.02362	5.8351	15.778	6.6303	1.3101	3.4682

#1	.01337	.49964	.10376	.00983	.01110	.00953	.01372	.09870	.00952	.02062	.01433
#2	.01213	.48698	.10511	.00984	.01293	.00953	.01490	.07889	.00867	.02024	.01506

Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Fail	Chk Pass	Chk Pass	Chk Pass
Value								.06000			
Range								30.000%			

Int. Std.	Y_2243	Y_3600	Y_3774
Units	Cts/S	Cts/S	Cts/S
Avg	1581.9	33031.	5785.0
Stddev	5.1	24.	33.3
%RSD	.32408	.07382	.57563

#1	1585.6	33049.	5761.5
#2	1578.3	33014.	5808.6

Sample Name: MB 280-326000/1-A Acquired: 5/21/2016 5:06:05 Type: Unk
Method: 6500_026(v10) Mode: CONC Corr. Factor: 1.000000
User: kellyca Custom ID1: 5/20 Custom ID2: Custom ID3:
Comment: 326000 200.7

Elem	Ag3280	Al1670	As1890	B_2089	Ba4554	Be3130	Bi2230	Ca3179	Cd2288
Line	328.068 {103}	167.079 {502}	189.042 {478}	208.959 {461}	455.403 { 74}	313.042 {108}	223.061 {451}	317.933 {106}	228.802 {447}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.00002	.00986	W -.00663	.00313	.00042	-.00011	-.00352	.02972	.00013
Stddev	.00003	.00088	.00402	.00044	.00006	.00002	.00031	.00195	.00021
%RSD	140.60	8.8811	60.710	14.116	13.796	20.371	8.7484	6.5541	156.70

#1	.00005	.01048	-.00378	.00282	.00046	-.00012	-.00330	.03110	.00028
#2	.00000	.00924	-.00947	.00344	.00038	-.00009	-.00373	.02834	-.00001

Check ?	Chk Pass	Chk Pass	Chk Warn	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit			.00500						
Low Limit			-.00500						

Elem	Co2286	Cr2055	Cu3247	Fe2599	K_7664	Li6707	Mg2790	Mn2576	Mo2020
Line	228.616 {447}	205.560 {464}	324.754 {104}	259.940 {130}	766.490 { 44}	670.784 { 50}	279.079 {121}2	257.610 {131}	202.030 {467}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	-.00050	-.00023	-.00009	.01728	.04597	-.00083	.01421	.00044	.00014
Stddev	.00024	.00037	.00014	.00196	.00732	.00009	.00656	.00009	.00002
%RSD	46.961	163.93	160.69	11.338	15.914	10.280	46.139	21.076	16.988

#1	-.00034	-.00049	-.00019	.01589	.05115	-.00077	.01884	.00051	.00013
#2	-.00067	.00004	.00001	.01866	.04080	-.00089	.00957	.00038	.00016

Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Elem	Na5895	Ni2316	P_1782	Pb2203	S_1820	Sb2068	Se1960	Si2881	Sn1899
Line	589.592 { 57}	231.604 {446}	178.284 {489}	220.353 {453}	182.034 {485}	206.833 {463}	196.090 {472}	288.158 {117}	189.989 {477}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.05386	.00042	.00212	.00075	.02360	.00088	-.00011	.00509	.00028
Stddev	.00124	.00059	.00238	.00031	.00667	.00019	.00398	.00626	.00044
%RSD	2.3067	138.07	112.34	41.310	28.253	21.754	3686.1	123.09	157.80

#1	.05298	.00084	.00381	.00053	.01889	.00074	-.00292	.00952	.00059
#2	.05474	.00001	.00044	.00097	.02832	.00101	.00271	.00066	-.00003

Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Elem	Sr4077	Th2837	Ti3349	Ti1908	U_3701	V_2924	Zn2062	Zr3391	
Line	407.771 { 83}	283.730 {119}	334.904 {101}	190.856 {477}	370.152 { 91}	292.402 {115}	206.200 {163}	339.198 { 99}	
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	
Avg	.00021	-.00279	.00027	-.00337	.01727	.00031	.00308	.00016	
Stddev	.00004	.00109	.00030	.00115	.00497	.00045	.00025	.00070	
%RSD	16.923	38.971	111.01	34.020	28.771	147.76	8.2295	451.42	

#1	.00018	-.00356	.00006	-.00256	.02078	-.00001	.00326	-.00034	
#2	.00023	-.00202	.00048	-.00419	.01376	.00063	.00290	.00065	

Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	
High Limit									
Low Limit									

Int. Std.	Y_2243	Y_3600	Y_3774						
Line	224.306 {450}	360.073 { 94}	377.433 { 89}						
Units	Cts/S	Cts/S	Cts/S						
Avg	1578.6	32939.	5836.9						
Stddev	1.7	50.	12.7						
%RSD	.10895	.15101	.21686						

#1	1579.8	32903.	5827.9						
#2	1577.4	32974.	5845.8						

Sample Name: LCS 280-326000/2-A Acquired: 5/21/2016 5:08:53 Type: Unk
Method: 6500_026(v10) Mode: CONC Corr. Factor: 1.000000
User: kellyca Custom ID1: Custom ID2: Custom ID3:
Comment: 326000 200.7

Elem	Ag3280	Al1670	As1890	B_2089	Ba4554	Be3130	Bi2230	Ca3179	Cd2288
Line	328.068 {103}	167.079 {502}	189.042 {478}	208.959 {461}	455.403 {74}	313.042 {108}	223.061 {451}	317.933 {106}	228.802 {447}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.05102	2.0195	1.0733	F 1.1003	2.0415	.05207	F 2.2231	50.542	.10594
Stddev	.00077	.0089	.0015	.0001	.0037	.00002	.0015	.019	.00075
%RSD	1.5018	.44195	.14463	.00766	.18074	.03198	.06849	.03824	.71192

#1	.05156	2.0132	1.0744	1.1003	2.0389	.05205	2.2220	50.528	.10647
#2	.05048	2.0258	1.0722	1.1002	2.0441	.05208	2.2242	50.556	.10540

Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Fail	Chk Pass	Chk Pass	Chk Fail	Chk Pass	Chk Pass
High Limit				1.1000			2.2000		
Low Limit				.89000			1.8000		

Elem	Co2286	Cr2055	Cu3247	Fe2599	K_7664	Li6707	Mg2790	Mn2576	Mo2020
Line	228.616 {447}	205.560 {464}	324.754 {104}	259.940 {130}	766.490 {44}	670.784 {50}	279.079 {121}2	257.610 {131}	202.030 {467}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.51867	F .20703	.25891	1.0307	54.491	1.1117	50.973	.49905	1.0719
Stddev	.00052	.00005	.00020	.0071	.188	.0032	.078	.00163	.0001
%RSD	.10012	.02199	.07814	.68975	.34494	.28783	.15307	.32752	.00536

#1	.51830	.20700	.25876	1.0257	54.358	1.1095	51.028	.50020	1.0719
#2	.51903	.20706	.25905	1.0357	54.624	1.1140	50.918	.49789	1.0718

Check ?	Chk Pass	Chk Fail	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit		.05750							
Low Limit		.04300							

Elem	Na8183	Ni2316	P_1782	Pb2203	S_1820	Sb2068	Se1960	Si2881	Sn1899
Line	818.326 {41}	231.604 {446}	178.284 {489}	220.353 {453}	182.034 {485}	206.833 {463}	196.090 {472}	288.158 {117}	189.989 {477}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	52.880	.50850	10.778	.52809	2.0863	.53144	2.1210	10.018	1.9868
Stddev	.323	.00245	.012	.00059	.0021	.00197	.0033	.014	.0034
%RSD	.61129	.48169	.11517	.11265	.10008	.36975	.15646	.13878	.17030

#1	52.652	.51023	10.787	.52851	2.0848	.53005	2.1233	10.008	1.9844
#2	53.109	.50677	10.770	.52767	2.0877	.53283	2.1186	10.028	1.9892

Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Elem	Sr4077	Th2837	Ti3349	Ti1908	U_3701	V_2924	Zn2062	Zr3391
Line	407.771 {83}	283.730 {119}	334.904 {101}	190.856 {477}	370.152 {91}	292.402 {115}	206.200 {163}	339.198 {99}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.98725	1.0023	.96472	2.0445	2.1417	.48525	.50639	.49544
Stddev	.00400	.0006	.00009	.0053	.0150	.00201	.00209	.00547
%RSD	.40514	.05637	.00975	.26026	.69954	.41370	.41218	1.1031

#1	.98442	1.0019	.96465	2.0408	2.1311	.48667	.50492	.49158
#2	.99008	1.0027	.96478	2.0483	2.1523	.48383	.50787	.49931

Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit								
Low Limit								

Int. Std.	Y_2243	Y_3600	Y_3774
Line	224.306 {450}	360.073 {94}	377.433 {89}
Units	Cts/S	Cts/S	Cts/S
Avg	1510.2	30893.	5717.2
Stddev	1.1	11.	11.5
%RSD	.07361	.03585	.20114

#1	1511.0	30885.	5725.4
#2	1509.4	30901.	5709.1

Sample Name: LCSD 280-326000/3-A Acquired: 5/21/2016 5:11:30 Type: Unk

Method: 6500_026(v10) Mode: CONC Corr. Factor: 1.000000

User: kellyca Custom ID1: Custom ID2: Custom ID3:

Comment: 326000 200.7

Elem	Ag3280	Al1670	As1890	B_2089	Ba4554	Be3130	Bi2230	Ca3179	Cd2288
Line	328.068 {103}	167.079 {502}	189.042 {478}	208.959 {461}	455.403 {74}	313.042 {108}	223.061 {451}	317.933 {106}	228.802 {447}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.05019	2.0149	1.0633	1.0988	2.0338	.05187	F 2.2423	50.974	.10597
Stddev	.00009	.0081	.0045	.0030	.0075	.00002	.0013	.125	.00019
%RSD	.17782	.40156	.42631	.27551	.36914	.04578	.05967	.24611	.18066

#1	.05013	2.0207	1.0601	1.0966	2.0285	.05188	2.2433	50.885	.10611
#2	.05026	2.0092	1.0665	1.1009	2.0391	.05185	2.2414	51.063	.10584

Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Fail	Chk Pass	Chk Pass
High Limit							2.2000		
Low Limit							1.8000		

Elem	Co2286	Cr2055	Cu3247	Fe2599	K_7664	Li6707	Mg2790	Mn2576	Mo2020
Line	228.616 {447}	205.560 {464}	324.754 {104}	259.940 {130}	766.490 {44}	670.784 {50}	279.079 {121}2	257.610 {131}	202.030 {467}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.51646	F .20635	.26016	1.0235	54.540	1.1068	51.043	.49759	1.0708
Stddev	.00047	.00066	.00119	.0022	.032	.0037	.283	.00161	.0006
%RSD	.09155	.32001	.45714	.21406	.05952	.33131	.55431	.32318	.06105

#1	.51680	.20681	.25932	1.0220	54.517	1.1043	50.843	.49645	1.0712
#2	.51613	.20588	.26100	1.0251	54.563	1.1094	51.243	.49873	1.0703

Check ?	Chk Pass	Chk Fail	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit		.05750							
Low Limit		.04300							

Elem	Na8183	Ni2316	P_1782	Pb2203	S_1820	Sb2068	Se1960	Si2881	Sn1899
Line	818.326 {41}	231.604 {446}	178.284 {489}	220.353 {453}	182.034 {485}	206.833 {463}	196.090 {472}	288.158 {117}	189.989 {477}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	52.866	.50876	10.764	.52854	2.0827	.53610	2.1275	10.037	1.9846
Stddev	.219	.00099	.004	.00234	.0047	.00253	.0128	.048	.0029
%RSD	.41468	.19473	.03984	.44274	.22584	.47186	.60215	.48113	.14744

#1	52.711	.50806	10.767	.52688	2.0794	.53789	2.1184	10.003	1.9866
#2	53.021	.50946	10.761	.53019	2.0860	.53432	2.1365	10.071	1.9825

Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Elem	Sr4077	Th2837	Ti3349	Ti1908	U_3701	V_2924	Zn2062	Zr3391
Line	407.771 {83}	283.730 {119}	334.904 {101}	190.856 {477}	370.152 {91}	292.402 {115}	206.200 {163}	339.198 {99}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.98436	.99928	.96427	2.0531	2.1457	.48671	.50348	.49710
Stddev	.00061	.00488	.00333	.0039	.0084	.00231	.00118	.00012
%RSD	.06155	.48876	.34528	.18835	.39365	.47429	.23447	.02375

#1	.98479	.99583	.96191	2.0503	2.1517	.48508	.50264	.49718
#2	.98393	1.0027	.96662	2.0558	2.1397	.48834	.50431	.49701

Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit								
Low Limit								

Int. Std.	Y_2243	Y_3600	Y_3774
Line	224.306 {450}	360.073 {94}	377.433 {89}
Units	Cts/S	Cts/S	Cts/S
Avg	1513.7	30898.	5627.8
Stddev	3.4	111.	2.2
%RSD	.22372	.35795	.03991

#1	1516.1	30976.	5626.2
#2	1511.3	30820.	5629.4

Sample Name: 280-83357-A-1-A Acquired: 5/21/2016 5:14:06 Type: Unk
Method: 6500_026(v10) Mode: CONC Corr. Factor: 1.000000
User: kellyca Custom ID1: Custom ID2: Custom ID3:
Comment: 326000 200.7

Elem	Ag3280	Al3092	As1890	B_2089	Ba4554	Be3130	Bi2230	Ca3179	Cd2288
Line	328.068 {103}	309.271 {109}	189.042 {478}	208.959 {461}	455.403 { 74}	313.042 {108}	223.061 {451}	317.933 {106}	228.802 {447}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.00349	4.7657	.92393	13.163	W 15.381	.00074	.01675	W 692.23	.00384
Stddev	.00015	.0435	.00938	.046	.054	.00006	.00375	8.27	.00005
%RSD	4.3502	.91351	1.0152	.34997	.35347	8.8215	22.385	1.1944	1.2785

#1	.00338	4.7349	.93056	13.195	15.343	.00078	.01940	686.38	.00381
#2	.00359	4.7965	.91730	13.130	15.419	.00069	.01410	698.08	.00388

Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Warn	Chk Pass	Chk Pass	Chk Warn	Chk Pass
High Limit					12.000			500.00	
Low Limit					-.01000			-.05000	

Elem	Co2286	Cr2055	Cu3247	Fe2714	K_7664	Li6707	Mg2790	Mn2576	Mo2020
Line	228.616 {447}	205.560 {464}	324.754 {104}	271.441 {124}	766.490 { 44}	670.784 { 50}	279.079 {121}2	257.610 {131}	202.030 {467}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.03353	W .78822	.21099	350.95	W 182.57	.14024	153.72	F 23.045	.12505
Stddev	.00029	.00107	.00081	3.56	1.00	.00067	.37	.010	.00132
%RSD	.86730	.13591	.38176	1.0148	.54951	.47583	.24211	.04354	1.0574

#1	.03333	.78897	.21156	348.43	181.86	.14071	153.98	23.052	.12411
#2	.03374	.78746	.21042	353.46	183.28	.13977	153.45	23.038	.12598

Check ?	Chk Pass	Chk Warn	Chk Pass	Chk Pass	Chk Warn	Chk Pass	Chk Pass	Chk Fail	Chk Pass
High Limit		.10000			100.00			20.000	
Low Limit		-.01000			-.50000			-.02000	

Elem	Na8183	Ni2316	P_1782	Pb2203	S_1820	Sb2068	Se1960	Si2881	Sn1899
Line	818.326 { 41}	231.604 {446}	178.284 {489}	220.353 {453}	182.034 {485}	206.833 {463}	196.090 {472}	288.158 {117}	189.989 {477}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	W 1217.6	.23724	F 232.74	.00480	F 321.74	.08278	.02889	41.296	.04301
Stddev	8.8	.00073	.51	.00010	.83	.00143	.00315	.342	.00145
%RSD	.72667	.30715	.21715	2.1321	.25656	1.7289	10.911	.82850	3.3832

#1	1211.3	.23672	233.10	.00473	322.33	.08177	.03112	41.054	.04403
#2	1223.8	.23775	232.38	.00488	321.16	.08379	.02666	41.538	.04198

Check ?	Chk Warn	Chk Pass	Chk Fail	Chk Pass	Chk Fail	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit	500.00		50.000		200.00				
Low Limit	10.000		-2.0000		-.02000				

Elem	Sr4077	Th2837	Ti3349	Ti1908	U_3701	V_2924	Zn2062	Zr3391
Line	407.771 { 83}	283.730 {119}	334.904 {101}	190.856 {477}	370.152 { 91}	292.402 {115}	206.200 {163}	339.198 { 99}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	W 10.613	F -.02278	.32380	W -.01321	F -.27939	.16674	1.4800	.00668
Stddev	.136	.00224	.00088	.00154	.02112	.00120	.0132	.00059
%RSD	1.2787	9.8198	.27280	11.692	7.5601	.71695	.89303	8.8352

#1	10.517	-.02120	.32318	-.01212	-.26446	.16759	1.4894	.00709
#2	10.709	-.02436	.32443	-.01430	-.29433	.16590	1.4707	.00626

Check ?	Chk Warn	Chk Fail	Chk Pass	Chk Warn	Chk Fail	Chk Pass	Chk Pass	Chk Pass
High Limit	10.000	50.000		5.0000	50.000			
Low Limit	-.01000	-.02000		-.01000	-.10000			

Int. Std.	Y_2243	Y_3600	Y_3774
Line	224.306 {450}	360.073 { 94}	377.433 { 89}
Units	Cts/S	Cts/S	Cts/S
Avg	1261.3	26258.	5431.1
Stddev	3.2	128.	31.6
%RSD	.25100	.48925	.58158

#1	1259.1	26167.	5453.5
#2	1263.6	26349.	5408.8

Sample Name: 280-83357-D-2-C Acquired: 5/21/2016 5:17:36 Type: Unk
Method: 6500_026(v10) Mode: CONC Corr. Factor: 1.000000
User: kellyca Custom ID1: Custom ID2: Custom ID3:
Comment: 326000 200.7

Elem	Ag3280	Al1670	As1890	B_2089	Ba4554	Be3130	Bi2230	Ca3179	Cd2288
Line	328.068 {103}	167.079 {502}	189.042 {478}	208.959 {461}	455.403 { 74}	313.042 {108}	223.061 {451}	317.933 {106}	228.802 {447}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	-.00016	.01967	.04153	13.427	.45429	-.00023	-.00624	454.64	.00078
Stddev	.00048	.00052	.00061	.006	.00290	.00005	.00004	.56	.00012
%RSD	291.93	2.6650	1.4749	.04755	.63858	20.871	.64586	.12386	15.406

#1	.00017	.01929	.04110	13.432	.45223	-.00020	-.00621	454.24	.00087
#2	-.00050	.02004	.04197	13.423	.45634	-.00026	-.00627	455.04	.00070

Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Elem	Co2286	Cr2055	Cu3247	Fe2599	K_7664	Li6707	Mg2790	Mn2576	Mo2020
Line	228.616 {447}	205.560 {464}	324.754 {104}	259.940 {130}	766.490 { 44}	670.784 { 50}	279.079 {121}2	257.610 {131}	202.030 {467}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.01073	.01388	.00307	.35475	W 176.41	.14927	147.58	.01257	.05009
Stddev	.00036	.00002	.00038	.00630	1.22	.00058	.01	.00014	.00017
%RSD	3.3659	.16172	12.276	1.7749	.69303	.38539	.00864	1.1185	.34282

#1	.01048	.01387	.00334	.35920	175.54	.14886	147.57	.01267	.04997
#2	.01099	.01390	.00281	.35030	177.27	.14968	147.59	.01247	.05021

Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Warn	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit					100.00				
Low Limit					-.50000				

Elem	Na8183	Ni2316	P_1782	Pb2203	S_1820	Sb2068	Se1960	Si2881	Sn1899
Line	818.326 { 41}	231.604 {446}	178.284 {489}	220.353 {453}	182.034 {485}	206.833 {463}	196.090 {472}	288.158 {117}	189.989 {477}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	W 1351.4	.04297	2.5682	W -.00591	F 297.28	.03633	-.00351	26.048	.00029
Stddev	9.6	.00028	.0183	.00240	.83	.00311	.00041	.300	.00124
%RSD	.71358	.64221	.71110	40.551	.27789	8.5667	11.578	1.1512	432.80

#1	1344.6	.04317	2.5811	-.00422	297.86	.03413	-.00380	25.836	-.00059
#2	1358.3	.04278	2.5553	-.00761	296.69	.03853	-.00322	26.261	.00116

Check ?	Chk Warn	Chk Pass	Chk Pass	Chk Warn	Chk Fail	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit	500.00			10.000	200.00				
Low Limit	10.000			-.00300	-.02000				

Elem	Sr4077	Th2837	Ti3349	Ti1908	U_3701	V_2924	Zn2062	Zr3391
Line	407.771 { 83}	283.730 {119}	334.904 {101}	190.856 {477}	370.152 { 91}	292.402 {115}	206.200 {163}	339.198 { 99}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	4.4760	W -.01121	.00154	-.00283	.03318	.00725	.01578	.00134
Stddev	.0290	.00268	.00003	.00135	.00490	.00064	.00001	.00003
%RSD	.64910	23.888	1.9064	47.894	14.769	8.8782	.04301	2.1468

#1	4.4554	-.00932	.00156	-.00378	.02972	.00680	.01578	.00136
#2	4.4965	-.01310	.00151	-.00187	.03665	.00771	.01577	.00132

Check ?	Chk Pass	Chk Warn	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit		45.000						
Low Limit		-.01000						

Int. Std.	Y_2243	Y_3600	Y_3774
Line	224.306 {450}	360.073 { 94}	377.433 { 89}
Units	Cts/S	Cts/S	Cts/S
Avg	1326.9	26989.	5399.9
Stddev	1.0	15.	32.9
%RSD	.07835	.05640	.60983

#1	1326.2	26999.	5423.2
#2	1327.7	26978.	5376.6

Sample Name: 280-83357-D-2-C SD@5 Acquired: 5/21/2016 5:20:52 Type: Unk
Method: 6500_026(v10) Mode: CONC Corr. Factor: 1.000000
User: kellyca Custom ID1: Custom ID2: Custom ID3:
Comment: 326000 200.7

Elem	Ag3280	Al1670	As1890	B_2089	Ba4554	Be3130	Bi2230	Ca3179	Cd2288
Line	328.068 {103}	167.079 {502}	189.042 {478}	208.959 {461}	455.403 { 74}	313.042 {108}	223.061 {451}	317.933 {106}	228.802 {447}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	-.00012	.00407	.00121	2.7456	.09043	-.00021	-.00102	93.471	.00010
Stddev	.00041	.00154	.00027	.0031	.00026	.00000	.00247	.464	.00017
%RSD	343.78	37.735	22.480	.11336	.29139	.98860	242.59	.49656	161.26

#1	.00017	.00298	.00140	2.7478	.09024	-.00020	-.00276	93.142	.00022
#2	-.00041	.00516	.00102	2.7434	.09061	-.00021	.00073	93.799	-.00001

Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Elem	Co2286	Cr2055	Cu3247	Fe2599	K_7664	Li6707	Mg2790	Mn2576	Mo2020
Line	228.616 {447}	205.560 {464}	324.754 {104}	259.940 {130}	766.490 { 44}	670.784 { 50}	279.079 {121}2	257.610 {131}	202.030 {467}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.00261	.00249	.00097	.09541	33.490	.02709	30.510	.00279	.01040
Stddev	.00031	.00012	.00008	.00223	.165	.00099	.001	.00007	.00017
%RSD	11.709	4.8930	8.0651	2.3376	.49266	3.6585	.00281	2.5532	1.6636

#1	.00239	.00240	.00103	.09698	33.373	.02639	30.509	.00274	.01028
#2	.00282	.00258	.00091	.09383	33.607	.02779	30.510	.00284	.01053

Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Elem	Na8183	Ni2316	P_1782	Pb2203	S_1820	Sb2068	Se1960	Si2881	Sn1899
Line	818.326 { 41}	231.604 {446}	178.284 {489}	220.353 {453}	182.034 {485}	206.833 {463}	196.090 {472}	288.158 {117}	189.989 {477}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	259.47	.01000	.50628	W -.00306	55.779	.00743	-.00374	5.1080	-.00041
Stddev	.98	.00032	.00102	.00151	.017	.00036	.00993	.0415	.00313
%RSD	.37622	3.1785	.20049	49.353	.03096	4.8487	265.13	.81229	756.72

#1	258.78	.01022	.50700	-.00200	55.791	.00718	.00328	5.0786	-.00262
#2	260.16	.00977	.50556	-.00413	55.767	.00769	-.01077	5.1373	.00180

Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Warn	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit				10.000					
Low Limit				-.00300					

Elem	Sr4077	Th2837	Ti3349	Ti1908	U_3701	V_2924	Zn2062	Zr3391	
Line	407.771 { 83}	283.730 {119}	334.904 {101}	190.856 {477}	370.152 { 91}	292.402 {115}	206.200 {163}	339.198 { 99}	
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	
Avg	.89152	-.00589	.00033	-.00056	.01413	.00218	.00191	.00142	
Stddev	.00225	.00093	.00048	.00123	.00568	.00062	.00127	.00018	
%RSD	.25235	15.768	147.79	220.38	40.196	28.382	66.802	12.690	

#1	.88993	-.00524	-.00001	.00031	.01011	.00174	.00101	.00129	
#2	.89311	-.00655	.00067	-.00143	.01814	.00261	.00281	.00155	

Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	
High Limit									
Low Limit									

Int. Std.	Y_2243	Y_3600	Y_3774						
Line	224.306 {450}	360.073 { 94}	377.433 { 89}						
Units	Cts/S	Cts/S	Cts/S						
Avg	1484.4	29967.	5608.0						
Stddev	3.5	48.	27.4						
%RSD	.23380	.15921	.48808						

#1	1481.9	30001.	5627.4						
#2	1486.8	29933.	5588.7						

Sample Name: 280-83357-D-2-D MS Acquired: 5/21/2016 5:23:43 Type: Unk
Method: 6500_026(v10) Mode: CONC Corr. Factor: 1.000000
User: kellyca Custom ID1: Custom ID2: Custom ID3:
Comment: 326000 200.7

Elem	Ag3280	Al1670	As1890	B_2089	Ba4554	Be3130	Bi2230	Ca3179	Cd2288
Line	328.068 {103}	167.079 {502}	189.042 {478}	208.959 {461}	455.403 { 74}	313.042 {108}	223.061 {451}	317.933 {106}	228.802 {447}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.05576	1.8622	1.1764	13.623	2.4462	.05127	2.2556	469.21	.11168
Stddev	.00110	.0026	.0032	.019	.0219	.00028	.0095	.40	.00004
%RSD	1.9744	.13974	.27428	.13738	.89707	.55011	.42048	.08433	.03338

#1	.05654	1.8641	1.1742	13.636	2.4307	.05107	2.2623	469.49	.11165
#2	.05498	1.8604	1.1787	13.610	2.4617	.05147	2.2489	468.93	.11171

Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Elem	Co2286	Cr2055	Cu3247	Fe2599	K_7664	Li6707	Mg2790	Mn2576	Mo2020
Line	228.616 {447}	205.560 {464}	324.754 {104}	259.940 {130}	766.490 { 44}	670.784 { 50}	279.079 {121}2	257.610 {131}	202.030 {467}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.48545	W .21011	.27859	1.2534	W 222.06	1.3311	186.84	.48457	1.0773
Stddev	.00132	.00087	.00279	.0150	2.00	.0189	.13	.00115	.0010
%RSD	.27185	.41313	1.0005	1.1967	.90047	1.4175	.06819	.23633	.08976

#1	.48452	.21073	.28056	1.2428	220.64	1.3178	186.75	.48376	1.0780
#2	.48639	.20950	.27662	1.2640	223.47	1.3445	186.93	.48538	1.0767

Check ?	Chk Pass	Chk Warn	Chk Pass	Chk Pass	Chk Warn	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit		.10000			100.00				
Low Limit		-.01000			-.50000				

Elem	Na8183	Ni2316	P_1782	Pb2203	S_1820	Sb2068	Se1960	Si2881	Sn1899
Line	818.326 { 41}	231.604 {446}	178.284 {489}	220.353 {453}	182.034 {485}	206.833 {463}	196.090 {472}	288.158 {117}	189.989 {477}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	W 1322.3	.50231	14.056	.46990	F 280.40	.59336	2.2870	33.061	1.8528
Stddev	9.9	.00039	.037	.00335	.31	.00032	.0116	.161	.0040
%RSD	.74770	.07726	.26233	.71279	.11105	.05412	.50821	.48698	.21662

#1	1315.3	.50203	14.082	.46753	280.62	.59359	2.2952	32.948	1.8500
#2	1329.3	.50258	14.030	.47227	280.18	.59314	2.2788	33.175	1.8556

Check ?	Chk Warn	Chk Pass	Chk Pass	Chk Pass	Chk Fail	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit	500.00				200.00				
Low Limit	10.000				-.02000				

Elem	Sr4077	Th2837	Ti3349	Ti1908	U_3701	V_2924	Zn2062	Zr3391	
Line	407.771 { 83}	283.730 {119}	334.904 {101}	190.856 {477}	370.152 { 91}	292.402 {115}	206.200 {163}	339.198 { 99}	
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	
Avg	5.1276	.98932	.96107	1.6724	2.0985	.48764	.47859	.49526	
Stddev	.0238	.00078	.00303	.0028	.0007	.00055	.00477	.00165	
%RSD	.46467	.07861	.31483	.16809	.03459	.11287	.99653	.33297	

#1	5.1108	.98987	.96321	1.6744	2.0990	.48802	.47522	.49409	
#2	5.1445	.98877	.95893	1.6704	2.0980	.48725	.48197	.49642	

Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	
High Limit									
Low Limit									

Int. Std.	Y_2243	Y_3600	Y_3774						
Line	224.306 {450}	360.073 { 94}	377.433 { 89}						
Units	Cts/S	Cts/S	Cts/S						
Avg	1319.3	26892.	5387.4						
Stddev	.0	46.	26.1						
%RSD	.00165	.17219	.48514						

#1	1319.3	26925.	5368.9						
#2	1319.3	26859.	5405.9						

Sample Name: 280-83357-D-2-E MSD Acquired: 5/21/2016 5:27:03 Type: Unk
Method: 6500_026(v10) Mode: CONC Corr. Factor: 1.000000
User: kellyca Custom ID1: Custom ID2: Custom ID3:
Comment: 326000 200.7

Elem	Ag3280	Al1670	As1890	B_2089	Ba4554	Be3130	Bi2230	Ca3179	Cd2288
Line	328.068 {103}	167.079 {502}	189.042 {478}	208.959 {461}	455.403 { 74}	313.042 {108}	223.061 {451}	317.933 {106}	228.802 {447}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.05828	1.9214	1.2170	13.773	2.5073	.05281	2.3378	476.42	.11536
Stddev	.00009	.0001	.0008	.019	.0129	.00002	.0004	1.13	.00052
%RSD	.15651	.00731	.06348	.13476	.51358	.02853	.01933	.23660	.45167

#1	.05822	1.9213	1.2175	13.786	2.4982	.05280	2.3375	475.62	.11499
#2	.05835	1.9215	1.2164	13.760	2.5164	.05282	2.3381	477.22	.11573

Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Elem	Co2286	Cr2055	Cu3247	Fe2599	K_7664	Li6707	Mg2790	Mn2576	Mo2020
Line	228.616 {447}	205.560 {464}	324.754 {104}	259.940 {130}	766.490 { 44}	670.784 { 50}	279.079 {121}2	257.610 {131}	202.030 {467}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.50235	W .21740	.28599	1.2968	W 224.61	1.3652	189.08	.50095	1.1143
Stddev	.00016	.00003	.00114	.0042	1.08	.0105	.07	.00026	.0007
%RSD	.03123	.01566	.39925	.32217	.47925	.76652	.03696	.05248	.06366

#1	.50224	.21743	.28680	1.2938	223.85	1.3578	189.13	.50077	1.1148
#2	.50246	.21738	.28519	1.2997	225.37	1.3726	189.03	.50114	1.1138

Check ?	Chk Pass	Chk Warn	Chk Pass	Chk Pass	Chk Warn	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit		.10000			100.00				
Low Limit		-.01000			-.50000				

Elem	Na8183	Ni2316	P_1782	Pb2203	S_1820	Sb2068	Se1960	Si2881	Sn1899
Line	818.326 { 41}	231.604 {446}	178.284 {489}	220.353 {453}	182.034 {485}	206.833 {463}	196.090 {472}	288.158 {117}	189.989 {477}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	W 1332.3	.51815	14.460	.48487	F 282.65	.61678	2.3573	33.522	1.9225
Stddev	5.0	.00055	.042	.00144	.38	.00339	.0100	.083	.0026
%RSD	.37704	.10645	.28827	.29628	.13324	.54956	.42352	.24849	.13458

#1	1328.8	.51854	14.489	.48589	282.91	.61918	2.3502	33.463	1.9243
#2	1335.9	.51776	14.430	.48386	282.38	.61438	2.3644	33.581	1.9206

Check ?	Chk Warn	Chk Pass	Chk Pass	Chk Pass	Chk Fail	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit	500.00				200.00				
Low Limit	10.000				-.02000				

Elem	Sr4077	Th2837	Ti3349	Ti1908	U_3701	V_2924	Zn2062	Zr3391
Line	407.771 { 83}	283.730 {119}	334.904 {101}	190.856 {477}	370.152 { 91}	292.402 {115}	206.200 {163}	339.198 { 99}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	5.1467	1.0316	.99467	1.7325	2.1404	.49987	.49706	.50737
Stddev	.0181	.0022	.00035	.0060	.0232	.00189	.00101	.00328
%RSD	.35272	.20939	.03483	.34787	1.0823	.37781	.20362	.64609

#1	5.1595	1.0301	.99491	1.7282	2.1240	.50120	.49778	.50505
#2	5.1339	1.0331	.99442	1.7367	2.1568	.49853	.49635	.50969

Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit								
Low Limit								

Int. Std.	Y_2243	Y_3600	Y_3774
Line	224.306 {450}	360.073 { 94}	377.433 { 89}
Units	Cts/S	Cts/S	Cts/S
Avg	1314.3	26853.	5336.0
Stddev	1.5	38.	23.4
%RSD	.11656	.14036	.43916

#1	1313.2	26880.	5319.5
#2	1315.4	26827.	5352.6

Sample Name: 280-83357-D-3-C Acquired: 5/21/2016 5:30:22 Type: Unk
Method: 6500_026(v10) Mode: CONC Corr. Factor: 1.000000
User: kellyca Custom ID1: Custom ID2: Custom ID3:
Comment: 326000 200.7

Elem	Ag3280	Al1670	As1890	B_2089	Ba4554	Be3130	Bi2230	Ca3179	Cd2288
Line	328.068 {103}	167.079 {502}	189.042 {478}	208.959 {461}	455.403 {74}	313.042 {108}	223.061 {451}	317.933 {106}	228.802 {447}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	-.00035	.07339	.06958	12.817	.74080	-.00008	.00019	431.63	.00045
Stddev	.00053	.00265	.00288	.035	.00302	.00010	.00080	.34	.00033
%RSD	151.23	3.6146	4.1351	.27686	.40719	121.16	427.83	.07771	74.539

#1	-.00073	.07151	.06755	12.842	.73866	-.00001	.00075	431.39	.00021
#2	.00002	.07526	.07161	12.792	.74293	-.00015	-.00038	431.87	.00068

Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Elem	Co2286	Cr2055	Cu3247	Fe2599	K_7664	Li6707	Mg2790	Mn2576	Mo2020
Line	228.616 {447}	205.560 {464}	324.754 {104}	259.940 {130}	766.490 {44}	670.784 {50}	279.079 {121}2	257.610 {131}	202.030 {467}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.01040	.02443	.00647	8.6372	W 163.59	.13866	138.13	.79714	.05083
Stddev	.00088	.00030	.00059	.0292	.90	.00100	1.15	.00816	.00032
%RSD	8.4625	1.2272	9.0526	.33837	.54761	.71787	.83556	1.0239	.63061

#1	.01102	.02465	.00605	8.6166	162.95	.13796	137.31	.79137	.05060
#2	.00978	.02422	.00688	8.6579	164.22	.13937	138.95	.80291	.05105

Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Warn	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit					100.00				
Low Limit					-.50000				

Elem	Na8183	Ni2316	P_1782	Pb2203	S_1820	Sb2068	Se1960	Si2881	Sn1899
Line	818.326 {41}	231.604 {446}	178.284 {489}	220.353 {453}	182.034 {485}	206.833 {463}	196.090 {472}	288.158 {117}	189.989 {477}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	W 983.99	.04466	1.4266	W -.00313	F 279.29	.03489	.00630	25.125	.00103
Stddev	4.37	.00019	.0049	.00088	.61	.00069	.00942	.114	.00089
%RSD	.44369	.43524	.34574	28.130	.21930	1.9716	149.65	.45490	86.659

#1	980.90	.04452	1.4301	-.00250	279.73	.03537	-.00037	25.044	.00166
#2	987.08	.04480	1.4232	-.00375	278.86	.03440	.01296	25.205	.00040

Check ?	Chk Warn	Chk Pass	Chk Pass	Chk Warn	Chk Fail	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit	500.00			10.000	200.00				
Low Limit	10.000			-.00300	-.02000				

Elem	Sr4077	Th2837	Ti3349	Ti1908	U_3701	V_2924	Zn2062	Zr3391
Line	407.771 {83}	283.730 {119}	334.904 {101}	190.856 {477}	370.152 {91}	292.402 {115}	206.200 {163}	339.198 {99}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	4.3230	W -.01152	.01009	-.00575	.01198	.01246	.02003	.00203
Stddev	.0248	.00088	.00059	.00396	.00195	.00054	.00174	.00080
%RSD	.57330	7.6107	5.8224	68.836	16.251	4.3423	8.7076	39.315

#1	4.3055	-.01090	.01051	-.00295	.01336	.01284	.01880	.00260
#2	4.3405	-.01214	.00968	-.00855	.01060	.01207	.02127	.00147

Check ?	Chk Pass	Chk Warn	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit		45.000						
Low Limit		-.01000						

Int. Std.	Y_2243	Y_3600	Y_3774
Line	224.306 {450}	360.073 {94}	377.433 {89}
Units	Cts/S	Cts/S	Cts/S
Avg	1330.4	27265.	5399.0
Stddev	3.9	198.	1.9
%RSD	.29157	.72782	.03601

#1	1327.7	27406.	5397.6
#2	1333.2	27125.	5400.3

Sample Name: ccvh-3900196 Acquired: 5/21/2016 5:33:34 Type: QC
Method: 6500_026(v10) Mode: CONC Corr. Factor: 1.000000
User: kellyca Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	Ag3280	Al3092	As1890	B_2089	Ba4554	Be3130	Bi2230	Ca3179	Cd2288	Co2286	Cr2055	Cu3247	Fe2714
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	-.00146	46.886	-.00273	.04681	.00012	-.00038	1.0537	-.01428	-.00092	.00273	-.00069	.00733	47.203
Stddev	.00014	.190	.00591	.00172	.00002	.00001	.0016	.01556	.00010	.00044	.00007	.00018	.223
%RSD	9.5200	.40551	216.55	3.6679	18.212	2.4322	.15594	108.94	10.917	15.997	10.306	2.4715	.47160

#1	-.00156	46.752	.00145	.04803	.00011	-.00039	1.0549	-.00328	-.00099	.00242	-.00074	.00746	47.046
#2	-.00136	47.021	-.00691	.04560	.00014	-.00038	1.0526	-.02528	-.00085	.00304	-.00064	.00720	47.361

Check ?	None	Chk Pass	None	None	None	None	Chk Pass	None	None	None	None	None	Chk Pass
Value													
Range													

Elem	K_7664	Li6707	Mg2790	Mn2576	Mo2020	Na8183	Ni2316	P_1782	Pb2203	S_1820	Sb2068	Se1960	Si2881
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.28560	-.00025	.15616	-.00077	-.00213	258.44	-.00068	.01408	-.00203	5.0688	-.00027	-.00001	.02071
Stddev	.06962	.00094	.00282	.00007	.00052	1.18	.00012	.00171	.00011	.0076	.00323	.00058	.01459
%RSD	24.376	371.56	1.8082	8.8063	24.417	.45514	17.966	12.120	5.3492	.15030	1195.4	7107.8	70.438

#1	.33482	.00041	.15416	-.00082	-.00249	257.60	-.00076	.01288	-.00211	5.0634	-.00256	.00040	.03102
#2	.23637	-.00092	.15815	-.00072	-.00176	259.27	-.00059	.01529	-.00196	5.0742	.00201	-.00042	.01039

Check ?	None	None	None	None	None	Chk Pass	None	None	None	Chk Pass	None	None	None
Value													
Range													

Elem	Sn1899	Sr4077	Th2837	Ti3349	Tl1908	U_3701	V_2924	Zn2062	Zr3391
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.00164	.00074	4.9394	.02549	-.00274	10.127	-.01649	-.00259	-.00747
Stddev	.00136	.00006	.0180	.00044	.00171	.001	.00035	.00148	.00325
%RSD	82.927	8.6433	.36435	1.7159	62.569	.01402	2.0944	56.921	43.450

#1	.00260	.00079	4.9521	.02580	-.00395	10.128	-.01624	-.00155	-.00976
#2	.00068	.00070	4.9267	.02519	-.00153	10.126	-.01673	-.00364	-.00517

Check ?	None	None	Chk Pass	None	None	Chk Pass	None	None	None
Value									
Range									

Int. Std.	Y_2243	Y_3600	Y_3774
Units	Cts/S	Cts/S	Cts/S
Avg	1519.7	30841.	5663.9
Stddev	2.0	81.	.9
%RSD	.13039	.26256	.01544

#1	1518.3	30784.	5663.2
#2	1521.1	30899.	5664.5

Sample Name: ccv-3900195 Acquired: 5/21/2016 5:36:29 Type: QC
Method: 6500_026(v10) Mode: CONC Corr. Factor: 1.000000
User: kellyca Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	Ag3280	Al1670	As1890	B_2089	Ba4554	Be3130	Bi2230	Ca3179	Cd2288	Co2286	Cr2055	Cu3247
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.50021	.52079	1.0152	F .56502	.50261	.51156	-.00303	5.0254	.51959	.51920	.51076	.50355
Stddev	.00085	.00161	.0098	.00030	.00255	.00257	.00280	.0463	.00041	.00046	.00178	.00075
%RSD	.16972	.30861	.96790	.05290	.50795	.50167	92.486	.92049	.07976	.08902	.34890	.14936

#1	.49961	.52193	1.0082	.56481	.50081	.50975	-.00105	4.9927	.51930	.51953	.50950	.50301
#2	.50081	.51966	1.0221	.56523	.50442	.51338	-.00501	5.0581	.51988	.51888	.51202	.50408

Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Fail	Chk Pass	Chk Pass	None	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Value				.50000								
Range				10.000%								

Elem	Fe2599	K_7664	Li6707	Mg2790	Mn2576	Mo2020	Na5895	Ni2316	P_1782	Pb2203	S_1820	Sb2068
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	2.4642	53.288	1.0927	20.247	.49953	.51506	5.3828	.50993	1.0364	1.0466	.02057	1.0367
Stddev	.0140	.199	.0058	.010	.00046	.00231	.0317	.00116	.0035	.0016	.00151	.0009
%RSD	.56821	.37432	.53410	.04938	.09166	.44766	.58873	.22755	.33808	.15058	7.3630	.08261

#1	2.4543	53.147	1.0886	20.255	.49920	.51343	5.3604	.51075	1.0389	1.0477	.01949	1.0361
#2	2.4741	53.429	1.0968	20.240	.49985	.51669	5.4052	.50911	1.0339	1.0455	.02164	1.0373

Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	None	Chk Pass
Value												
Range												

Elem	Se1960	Si2881	Sn1899	Sr4077	Th2837	Ti3349	Ti1908	U_3701	V_2924	Zn2062	Zr3391
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	1.0150	5.0022	1.0085	.49441	-.00185	.48054	1.0437	.02251	.48270	.49823	.49886
Stddev	.0058	.0051	.0006	.00324	.00114	.00070	.0060	.02549	.00223	.00167	.00025
%RSD	.56938	.10212	.05786	.65474	61.615	.14509	.57158	113.24	.46233	.33425	.05098

#1	1.0109	5.0058	1.0081	.49212	-.00266	.48005	1.0479	.04053	.48427	.49705	.49868
#2	1.0191	4.9986	1.0090	.49670	-.00105	.48104	1.0395	.00448	.48112	.49941	.49904

Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	None	Chk Pass	Chk Pass	None	Chk Pass	Chk Pass	Chk Pass
Value											
Range											

Int. Std.	Y_2243	Y_3600	Y_3774
Units	Cts/S	Cts/S	Cts/S
Avg	1554.4	31631.	5635.4
Stddev	6.0	15.	3.2
%RSD	.38845	.04896	.05729

#1	1558.7	31620.	5637.6
#2	1550.2	31642.	5633.1

Sample Name: ccb Acquired: 5/21/2016 5:39:09 Type: QC
Method: 6500_026(v10) Mode: CONC Corr. Factor: 1.000000
User: kellyca Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	Ag3280	Al1670	As1890	B_2089	Ba4554	Be3130	Bi2230	Ca3179	Cd2288	Co2286	Cr2055
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.00008	.00022	W -.00448	F .02538	.00013	-.00002	-.00295	.01520	.00001	-.00038	-.00026
Stddev	.00011	.00131	.00214	.00075	.00010	.00005	.00164	.00463	.00006	.00003	.00015
%RSD	133.10	590.09	47.691	2.9427	75.286	248.74	55.533	30.435	515.21	9.0772	58.259

#1	.00000	-.00071	-.00297	.02590	.00020	-.00005	-.00179	.01847	-.00003	-.00040	-.00036
#2	.00016	.00115	-.00600	.02485	.00006	.00001	-.00411	.01193	.00006	-.00036	-.00015

Check ?	Chk Pass	Chk Pass	Chk Warn	Chk Fail	Chk Pass	Chk Pass	None	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit			.00440	.00312							
Low Limit			-.00440	-.00312							

Elem	Cu3247	Fe2599	K_7664	Li6707	Mg2790	Mn2576	Mo2020	Na5895	Ni2316	P_1782	Pb2203
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.00027	.00179	.14221	-.00049	.00907	.00008	.00065	W .09378	-.00052	.00848	.00006
Stddev	.00020	.00176	.00339	.00045	.00231	.00006	.00005	.00308	.00026	.00368	.00113
%RSD	73.049	98.349	2.3821	92.776	25.519	74.092	7.9866	3.2821	49.771	43.398	1804.8

#1	.00013	.00304	.14460	-.00081	.01071	.00012	.00062	.09160	-.00071	.01108	.00086
#2	.00041	.00055	.13981	-.00017	.00743	.00004	.00069	.09596	-.00034	.00588	-.00073

Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Warn	Chk Pass	Chk Pass	Chk Pass
High Limit								.09160			
Low Limit								-.09160			

Elem	S_1820	Sb2068	Se1960	Si2881	Sn1899	Sr4077	Th2837	Ti3349	Ti1908	U_3701	V_2924
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.01512	W .00341	.00102	-.00731	.00091	.00017	-.00439	-.00003	-.00074	.02363	.00069
Stddev	.00051	.00135	.00518	.00522	.00043	.00002	.00004	.00051	.00158	.00650	.00003
%RSD	3.3921	39.446	506.93	71.397	47.353	11.729	.87745	1664.5	213.67	27.487	4.6193

#1	.01476	.00246	.00468	-.01100	.00060	.00015	-.00442	.00033	.00038	.01904	.00066
#2	.01548	.00437	-.00264	-.00362	.00121	.00018	-.00436	-.00039	-.00186	.02823	.00071

Check ?	None	Chk Warn	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit		.00314									
Low Limit		-.00314									

Elem	Zn2062	Zr3391
Units	ppm	ppm
Avg	-.00058	.00118
Stddev	.00172	.00022
%RSD	296.42	18.915

#1	.00064	.00134
#2	-.00180	.00102

Check ?	Chk Pass	Chk Pass
High Limit		
Low Limit		

Int. Std.	Y_2243	Y_3600	Y_3774
Units	Cts/S	Cts/S	Cts/S
Avg	1584.8	32267.	5681.0
Stddev	3.5	130.	26.7
%RSD	.22054	.40263	.47083

#1	1587.2	32359.	5700.0
#2	1582.3	32176.	5662.1

Sample Name: ccvl-3903059 Acquired: 5/21/2016 5:41:58 Type: QC
Method: 6500_026(v10) Mode: CONC Corr. Factor: 1.000000
User: kellyca Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	Ag3280	Al1670	As1890	B_2089	Ba4554	Be3130	Bi2230	Ca3179	Cd2288	Co2286	Cr2055	Cu3247
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.00994	.10542	.01242	.12807	.01021	.00095	.11266	.20755	.00504	.00985	.01028	.01608
Stddev	.00030	.00016	.00287	.00068	.00003	.00004	.00170	.00502	.00013	.00018	.00009	.00038
%RSD	3.0266	.14730	23.140	.52838	.27486	4.1446	1.5049	2.4193	2.5001	1.8494	.85700	2.3863

#1	.00973	.10531	.01445	.12855	.01023	.00092	.11146	.21110	.00513	.00972	.01034	.01581
#2	.01015	.10553	.01039	.12759	.01019	.00097	.11386	.20400	.00495	.00998	.01021	.01635

Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Value												
Range												

Elem	Fe2599	K_7664	Li6707	Mg2790	Mn2576	Mo2020	Na5895	Ni2316	P_1782	Pb2203	S_1820	Sb2068
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.10452	3.3204	.01089	.21710	.01035	.02127	1.1242	.04188	3.0340	.01037	.00984	.02145
Stddev	.00281	.0175	.00052	.00934	.00009	.00013	.0019	.00015	.0003	.00288	.00221	.00025
%RSD	2.6899	.52794	4.7691	4.3033	.84379	.62347	.16466	.35223	.00821	27.813	22.466	1.1835

#1	.10253	3.3080	.01125	.22371	.01041	.02136	1.1255	.04178	3.0338	.01241	.00827	.02163
#2	.10650	3.3328	.01052	.21050	.01029	.02118	1.1229	.04199	3.0341	.00833	.01140	.02128

Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	None	Chk Pass
Value												
Range												

Elem	Se1960	Si2881	Sn1899	Sr4077	Th2837	Ti3349	Ti1908	U_3701	V_2924	Zn2062	Zr3391
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.01740	.50313	.10549	.01001	F .01014	.00953	.01472	F .11505	.00960	.01924	.01572
Stddev	.00208	.01010	.00243	.00007	.00098	.00002	.00222	.01039	.00015	.00068	.00196
%RSD	11.949	2.0075	2.3042	.68503	9.6638	.22195	15.067	9.0338	1.5760	3.5169	12.445

#1	.01593	.51028	.10721	.00996	.00945	.00952	.01315	.12240	.00971	.01876	.01710
#2	.01887	.49599	.10378	.01006	.01083	.00955	.01628	.10770	.00949	.01972	.01434

Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Fail	Chk Pass	Chk Pass	Chk Fail	Chk Pass	Chk Pass	Chk Pass
Value					.01500			.06000			
Range					-30.000%			30.000%			

Int. Std.	Y_2243	Y_3600	Y_3774
Units	Cts/S	Cts/S	Cts/S
Avg	1580.1	32242.	5700.5
Stddev	4.7	17.	31.8
%RSD	.29712	.05340	.55720

#1	1583.4	32254.	5678.0
#2	1576.8	32230.	5722.9

Sample Name: MB 280-326087/1-B Acquired: 5/21/2016 5:44:47 Type: Unk
Method: 6500_026(v10) Mode: CONC Corr. Factor: 1.000000
User: kellyca Custom ID1: 5/20 Custom ID2: Custom ID3:
Comment: 326184 200.7

Elem	Ag3280	Al1670	As1890	B_2089	Ba4554	Be3130	Bi2230	Ca3179	Cd2288
Line	328.068 {103}	167.079 {502}	189.042 {478}	208.959 {461}	455.403 { 74}	313.042 {108}	223.061 {451}	317.933 {106}	228.802 {447}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.00017	.00157	.00076	F .01596	.00009	-.00004	-.00086	.02233	.00005
Stddev	.00075	.00019	.00061	.00038	.00007	.00005	.00148	.00238	.00002
%RSD	443.36	12.327	80.588	2.3946	84.802	118.44	171.74	10.653	45.848
#1	-.00036	.00171	.00033	.01623	.00004	-.00008	-.00191	.02065	.00007
#2	.00070	.00143	.00119	.01569	.00014	-.00001	.00018	.02401	.00003
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Fail	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit				.01000					
Low Limit				-.01000					

Elem	Co2286	Cr2055	Cu3247	Fe2599	K_7664	Li6707	Mg2790	Mn2576	Mo2020
Line	228.616 {447}	205.560 {464}	324.754 {104}	259.940 {130}	766.490 { 44}	670.784 { 50}	279.079 {121}2	257.610 {131}	202.030 {467}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	-.00016	-.00016	.00041	.00811	.08194	-.00046	.00861	.00038	-.00009
Stddev	.00035	.00038	.00006	.00010	.00756	.00075	.00241	.00005	.00027
%RSD	226.22	246.02	15.610	1.2014	9.2220	160.76	27.950	12.115	287.70
#1	-.00041	-.00043	.00036	.00818	.08729	.00006	.01031	.00042	.00010
#2	.00009	.00011	.00045	.00804	.07660	-.00099	.00691	.00035	-.00028
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Elem	Na5895	Ni2316	P_1782	Pb2203	S_1820	Sb2068	Se1960	Si2881	Sn1899
Line	589.592 { 57}	231.604 {446}	178.284 {489}	220.353 {453}	182.034 {485}	206.833 {463}	196.090 {472}	288.158 {117}	189.989 {477}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.05598	.00013	W .00578	-.00192	.01626	.00215	-.00392	-.00306	.00072
Stddev	.00346	.00039	.00000	.00305	.00371	.00261	.00248	.01147	.00061
%RSD	6.1757	296.17	.07960	158.81	22.847	121.19	63.341	374.54	84.951
#1	.05354	.00040	.00578	.00024	.01888	.00031	-.00217	.00505	.00116
#2	.05843	-.00014	.00578	-.00408	.01363	.00400	-.00568	-.01118	.00029
Check ?	Chk Pass	Chk Pass	Chk Warn	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit			.00500						
Low Limit			-.00500						

Elem	Sr4077	Th2837	Ti3349	Ti1908	U_3701	V_2924	Zn2062	Zr3391	
Line	407.771 { 83}	283.730 {119}	334.904 {101}	190.856 {477}	370.152 { 91}	292.402 {115}	206.200 {163}	339.198 { 99}	
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	
Avg	.00010	-.00411	.00012	-.00077	.02450	.00021	.00182	.00078	
Stddev	.00003	.00065	.00019	.00108	.01051	.00010	.00024	.00014	
%RSD	27.241	15.918	161.01	141.20	42.916	48.832	12.927	17.933	
#1	.00012	-.00365	-.00002	-.00153	.03193	.00014	.00165	.00068	
#2	.00008	-.00457	.00025	-.00000	.01706	.00028	.00198	.00088	
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	
High Limit									
Low Limit									

Int. Std.	Y_2243	Y_3600	Y_3774						
Line	224.306 {450}	360.073 { 94}	377.433 { 89}						
Units	Cts/S	Cts/S	Cts/S						
Avg	1585.0	32593.	5708.1						
Stddev	.4	10.	22.5						
%RSD	.02368	.03136	.39455						
#1	1585.3	32586.	5724.0						
#2	1584.8	32600.	5692.1						

Sample Name: LCS 280-326087/2-B Acquired: 5/21/2016 5:47:36 Type: Unk

Method: 6500_026(v10) Mode: CONC Corr. Factor: 1.000000

User: kellyca Custom ID1: Custom ID2: Custom ID3:

Comment: 326184 200.7

Elem	Ag3280	Al1670	As1890	B_2089	Ba4554	Be3130	Bi2230	Ca3179	Cd2288
Line	328.068 {103}	167.079 {502}	189.042 {478}	208.959 {461}	455.403 { 74}	313.042 {108}	223.061 {451}	317.933 {106}	228.802 {447}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.05136	2.0097	1.0621	F 1.1108	2.0222	.05156	F 2.2095	49.839	.10492
Stddev	.00031	.0004	.0073	.0012	.0042	.00024	.0014	.036	.00022
%RSD	.59394	.01801	.68798	.11148	.20639	.46514	.06288	.07185	.20594

#1	.05115	2.0094	1.0672	1.1099	2.0251	.05173	2.2085	49.865	.10476
#2	.05158	2.0100	1.0569	1.1117	2.0192	.05139	2.2105	49.814	.10507

Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Fail	Chk Pass	Chk Pass	Chk Fail	Chk Pass	Chk Pass
High Limit				1.1000			2.2000		
Low Limit				.89000			1.8000		

Elem	Co2286	Cr2055	Cu3247	Fe2599	K_7664	Li6707	Mg2790	Mn2576	Mo2020
Line	228.616 {447}	205.560 {464}	324.754 {104}	259.940 {130}	766.490 { 44}	670.784 { 50}	279.079 {121}2	257.610 {131}	202.030 {467}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.51084	F .20452	.25781	.97477	54.681	1.1107	51.126	.49334	1.0591
Stddev	.00007	.00016	.00090	.00054	.086	.0034	.110	.00061	.0017
%RSD	.01429	.07633	.34746	.05560	.15685	.30828	.21482	.12296	.16084

#1	.51078	.20441	.25718	.97515	54.742	1.1131	51.048	.49291	1.0578
#2	.51089	.20463	.25845	.97439	54.620	1.1083	51.203	.49377	1.0603

Check ?	Chk Pass	Chk Fail	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit		.05750							
Low Limit		.04300							

Elem	Na8183	Ni2316	P_1782	Pb2203	S_1820	Sb2068	Se1960	Si2881	Sn1899
Line	818.326 { 41}	231.604 {446}	178.284 {489}	220.353 {453}	182.034 {485}	206.833 {463}	196.090 {472}	288.158 {117}	189.989 {477}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	52.911	.50598	10.783	.52543	2.0865	.53899	2.1317	9.9007	1.9979
Stddev	.004	.00031	.008	.00381	.0078	.00374	.0086	.0133	.0056
%RSD	.00712	.06094	.07827	.72591	.37638	.69319	.40201	.13423	.28189

#1	52.913	.50620	10.789	.52813	2.0920	.53635	2.1257	9.8913	1.9939
#2	52.908	.50576	10.777	.52273	2.0809	.54164	2.1378	9.9101	2.0019

Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Elem	Sr4077	Th2837	Ti3349	Ti1908	U_3701	V_2924	Zn2062	Zr3391	
Line	407.771 { 83}	283.730 {119}	334.904 {101}	190.856 {477}	370.152 { 91}	292.402 {115}	206.200 {163}	339.198 { 99}	
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	
Avg	.98874	.98980	.96984	2.0526	2.1197	.48238	.49691	.49430	
Stddev	.00149	.00170	.00179	.0004	.0130	.00119	.00398	.00519	
%RSD	.15059	.17189	.18486	.02032	.61366	.24664	.80193	1.0504	

#1	.98980	.98860	.97110	2.0523	2.1105	.48154	.49973	.49797	
#2	.98769	.99100	.96857	2.0529	2.1288	.48322	.49409	.49063	

Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	
High Limit									
Low Limit									

Int. Std.	Y_2243	Y_3600	Y_3774						
Line	224.306 {450}	360.073 { 94}	377.433 { 89}						
Units	Cts/S	Cts/S	Cts/S						
Avg	1511.0	30773.	5690.8						
Stddev	2.6	1.	2.9						
%RSD	.17020	.00337	.05101						

#1	1512.8	30772.	5692.9						
#2	1509.2	30773.	5688.8						

Sample Name: 280-82991-D-1-B Acquired: 5/21/2016 5:50:13 Type: Unk
Method: 6500_026(v10) Mode: CONC Corr. Factor: 1.000000
User: kellyca Custom ID1: Custom ID2: Custom ID3:
Comment: 326184 200.7

Elem	Ag3280	Al1670	As1890	B_2089	Ba4554	Be3130	Bi2230	Ca3179	Cd2288
Line	328.068 {103}	167.079 {502}	189.042 {478}	208.959 {461}	455.403 { 74}	313.042 {108}	223.061 {451}	317.933 {106}	228.802 {447}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.00011	.00304	.00122	.21858	1.3457	-.00005	-.00099	W 604.69	.00157
Stddev	.00072	.00025	.00242	.00113	.0042	.00002	.00208	1.11	.00049
%RSD	632.25	8.1226	198.06	.51481	.31195	37.227	210.93	.18315	31.411
#1	-.00039	.00287	.00294	.21937	1.3427	-.00004	-.00245	603.91	.00122
#2	.00062	.00322	-.00049	.21778	1.3486	-.00006	.00048	605.48	.00191
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Warn	Chk Pass
High Limit								500.00	
Low Limit								-.05000	

Elem	Co2286	Cr2055	Cu3247	Fe2599	K_7664	Li6707	Mg2790	Mn2576	Mo2020
Line	228.616 {447}	205.560 {464}	324.754 {104}	259.940 {130}	766.490 { 44}	670.784 { 50}	279.079 {121}2	257.610 {131}	202.030 {467}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.00842	.00015	.00384	.01043	6.4942	.09137	293.28	3.7122	.00210
Stddev	.00056	.00003	.00016	.00112	.0229	.00116	1.27	.0108	.00000
%RSD	6.6590	16.492	4.1373	10.768	.35289	1.2707	.43292	.29169	.13476
#1	.00802	.00017	.00395	.01122	6.4780	.09055	294.18	3.7198	.00210
#2	.00881	.00014	.00372	.00964	6.5104	.09219	292.38	3.7045	.00210
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Elem	Na8183	Ni2316	P_1782	Pb2203	S_1820	Sb2068	Se1960	Si2881	Sn1899
Line	818.326 { 41}	231.604 {446}	178.284 {489}	220.353 {453}	182.034 {485}	206.833 {463}	196.090 {472}	288.158 {117}	189.989 {477}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	W 1353.4	.00603	.01539	W -.00550	44.846	-.00156	-.00093	6.1742	-.00196
Stddev	3.2	.00072	.00100	.00131	.058	.00065	.00171	.0293	.00022
%RSD	.23356	11.928	6.5172	23.917	.12975	41.681	182.62	.47373	11.074
#1	1351.1	.00552	.01610	-.00457	44.887	-.00110	.00027	6.1535	-.00211
#2	1355.6	.00654	.01468	-.00642	44.804	-.00202	-.00214	6.1949	-.00180
Check ?	Chk Warn	Chk Pass	Chk Pass	Chk Warn	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit	500.00			10.000					
Low Limit	10.000			-.00300					

Elem	Sr4077	Th2837	Ti3349	Ti1908	U_3701	V_2924	Zn2062	Zr3391
Line	407.771 { 83}	283.730 {119}	334.904 {101}	190.856 {477}	370.152 { 91}	292.402 {115}	206.200 {163}	339.198 { 99}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	6.4310	W -.01292	.00215	-.00471	.06341	.00062	.00328	.00191
Stddev	.0647	.00184	.00025	.00055	.00598	.00015	.00239	.00061
%RSD	1.0066	14.214	11.803	11.703	9.4363	24.058	72.675	31.750
#1	6.3852	-.01162	.00233	-.00432	.06764	.00052	.00160	.00148
#2	6.4768	-.01422	.00197	-.00510	.05917	.00073	.00497	.00234
Check ?	Chk Pass	Chk Warn	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit		45.000						
Low Limit		-.01000						

Int. Std.	Y_2243	Y_3600	Y_3774
Line	224.306 {450}	360.073 { 94}	377.433 { 89}
Units	Cts/S	Cts/S	Cts/S
Avg	1283.6	26093.	5289.7
Stddev	1.0	9.	35.7
%RSD	.08048	.03448	.67482
#1	1284.4	26086.	5314.9
#2	1282.9	26099.	5264.4

Sample Name: 280-82991-D-1-B SD@5 Acquired: 5/21/2016 5:53:42 Type: Unk
 Method: 6500_026(v10) Mode: CONC Corr. Factor: 1.000000
 User: kellyca Custom ID1: Custom ID2: Custom ID3:
 Comment: 326184 200.7

Elem	Ag3280	Al1670	As1890	B_2089	Ba4554	Be3130	Bi2230	Ca3179	Cd2288
Line	328.068 {103}	167.079 {502}	189.042 {478}	208.959 {461}	455.403 { 74}	313.042 {108}	223.061 {451}	317.933 {106}	228.802 {447}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	-.00021	.00441	-.00087	.05110	.26620	-.00007	-.00176	124.97	.00035
Stddev	.00057	.00055	.00639	.00117	.00061	.00003	.00188	.07	.00031
%RSD	275.66	12.567	737.79	2.2884	.23008	38.325	106.96	.05331	88.081

#1	-.00061	.00402	-.00538	.05192	.26576	-.00009	-.00309	125.02	.00013
#2	.00020	.00480	.00365	.05027	.26663	-.00005	-.00043	124.92	.00057

Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Elem	Co2286	Cr2055	Cu3247	Fe2599	K_7664	Li6707	Mg2790	Mn2576	Mo2020
Line	228.616 {447}	205.560 {464}	324.754 {104}	259.940 {130}	766.490 { 44}	670.784 { 50}	279.079 {121}2	257.610 {131}	202.030 {467}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.00234	-.00032	.00116	.02472	1.2230	.01524	58.477	.76223	.00053
Stddev	.00021	.00010	.00025	.00189	.0038	.00067	.071	.00000	.00090
%RSD	8.7816	30.786	21.350	7.6393	.31089	4.4269	.12149	.00053	171.07

#1	.00220	-.00025	.00134	.02339	1.2257	.01476	58.427	.76223	-.00011
#2	.00249	-.00039	.00099	.02606	1.2203	.01572	58.527	.76222	.00116

Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Elem	Na8183	Ni2316	P_1782	Pb2203	S_1820	Sb2068	Se1960	Si2881	Sn1899
Line	818.326 { 41}	231.604 {446}	178.284 {489}	220.353 {453}	182.034 {485}	206.833 {463}	196.090 {472}	288.158 {117}	189.989 {477}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	257.45	.00174	.00084	-.00194	8.1398	.00008	.00950	1.1833	.00116
Stddev	.02	.00037	.00087	.00371	.0144	.00062	.00390	.0053	.00253
%RSD	.00862	21.043	104.11	190.72	.17656	769.57	41.000	.45076	218.05

#1	257.43	.00200	.00022	.00068	8.1296	.00052	.00675	1.1795	-.00063
#2	257.46	.00148	.00145	-.00457	8.1499	-.00036	.01226	1.1870	.00295

Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Elem	Sr4077	Th2837	Ti3349	Ti1908	U_3701	V_2924	Zn2062	Zr3391	
Line	407.771 { 83}	283.730 {119}	334.904 {101}	190.856 {477}	370.152 { 91}	292.402 {115}	206.200 {163}	339.198 { 99}	
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	
Avg	1.2822	-.00712	.00032	-.00345	.02981	.00055	-.00044	.00197	
Stddev	.0020	.00112	.00028	.00049	.00789	.00090	.00168	.00102	
%RSD	.15768	15.771	86.764	14.335	26.459	163.34	382.41	51.838	

#1	1.2808	-.00633	.00052	-.00310	.03538	.00119	.00075	.00125	
#2	1.2837	-.00792	.00012	-.00380	.02423	-.00009	-.00163	.00269	

Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	
High Limit									
Low Limit									

Int. Std.	Y_2243	Y_3600	Y_3774						
Line	224.306 {450}	360.073 { 94}	377.433 { 89}						
Units	Cts/S	Cts/S	Cts/S						
Avg	1456.7	29378.	5508.2						
Stddev	.3	70.	20.3						
%RSD	.01862	.23873	.36787						

#1	1456.9	29427.	5493.8						
#2	1456.5	29328.	5522.5						

Sample Name: 280-82991-D-1-C MS Acquired: 5/21/2016 5:56:34 Type: Unk
Method: 6500_026(v10) Mode: CONC Corr. Factor: 1.000000
User: kellyca Custom ID1: Custom ID2: Custom ID3:
Comment: 326184 200.7

Elem	Ag3280	Al1670	As1890	B_2089	Ba4554	Be3130	Bi2230	Ca3179	Cd2288
Line	328.068 {103}	167.079 {502}	189.042 {478}	208.959 {461}	455.403 { 74}	313.042 {108}	223.061 {451}	317.933 {106}	228.802 {447}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.05760	1.8303	1.1235	1.2846	3.3674	.04952	2.2818	W 657.17	.11307
Stddev	.00078	.0043	.0034	.0043	.0317	.00031	.0006	.07	.00081
%RSD	1.3553	.23240	.30071	.33623	.94091	.63503	.02772	.01127	.71692

#1	.05705	1.8333	1.1211	1.2876	3.3450	.04929	2.2823	657.12	.11365
#2	.05815	1.8273	1.1259	1.2815	3.3898	.04974	2.2814	657.22	.11250

Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Warn	Chk Pass
High Limit								500.00	
Low Limit								-.05000	

Elem	Co2286	Cr2055	Cu3247	Fe2599	K_7664	Li6707	Mg2790	Mn2576	Mo2020
Line	228.616 {447}	205.560 {464}	324.754 {104}	259.940 {130}	766.490 { 44}	670.784 { 50}	279.079 {121}2	257.610 {131}	202.030 {467}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.47619	W .19427	.27781	.93193	66.982	1.2925	345.48	4.1949	1.0144
Stddev	.00205	.00007	.00011	.00609	.581	.0135	.18	.0030	.0045
%RSD	.43127	.03620	.04004	.65378	.86733	1.0423	.05072	.07148	.44591

#1	.47764	.19432	.27789	.92762	66.571	1.2830	345.36	4.1971	1.0176
#2	.47473	.19422	.27773	.93623	67.393	1.3020	345.61	4.1928	1.0112

Check ?	Chk Pass	Chk Warn	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit		.10000							
Low Limit		-.01000							

Elem	Na8183	Ni2316	P_1782	Pb2203	S_1820	Sb2068	Se1960	Si2881	Sn1899
Line	818.326 { 41}	231.604 {446}	178.284 {489}	220.353 {453}	182.034 {485}	206.833 {463}	196.090 {472}	288.158 {117}	189.989 {477}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	W 1430.5	.46017	11.655	.46766	47.808	.56201	2.2742	16.363	1.8519
Stddev	13.2	.00113	.021	.00157	.103	.00012	.0088	.079	.0085
%RSD	.91979	.24577	.17903	.33607	.21473	.02097	.38756	.48366	.45918

#1	1421.2	.46097	11.670	.46878	47.881	.56192	2.2804	16.307	1.8579
#2	1439.8	.45937	11.641	.46655	47.736	.56209	2.2680	16.419	1.8459

Check ?	Chk Warn	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit	500.00								
Low Limit	10.000								

Elem	Sr4077	Th2837	Ti3349	Ti1908	U_3701	V_2924	Zn2062	Zr3391	
Line	407.771 { 83}	283.730 {119}	334.904 {101}	190.856 {477}	370.152 { 91}	292.402 {115}	206.200 {163}	339.198 { 99}	
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	
Avg	7.4173	.97956	.95480	1.6736	2.0275	.47827	.46205	.48558	
Stddev	.0743	.00475	.00092	.0046	.0204	.00056	.00026	.00078	
%RSD	1.0018	.48539	.09600	.27370	1.0076	.11623	.05601	.15997	

#1	7.3647	.97620	.95545	1.6768	2.0131	.47866	.46187	.48503	
#2	7.4698	.98292	.95416	1.6704	2.0420	.47788	.46224	.48613	

Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	
High Limit									
Low Limit									

Int. Std.	Y_2243	Y_3600	Y_3774
Line	224.306 {450}	360.073 { 94}	377.433 { 89}
Units	Cts/S	Cts/S	Cts/S
Avg	1275.6	25946.	5253.9
Stddev	2.1	15.	12.9
%RSD	.16748	.05881	.24459

#1	1274.1	25956.	5244.8
#2	1277.2	25935.	5262.9

Sample Name: 280-82991-D-1-D MSD Acquired: 5/21/2016 5:59:54 Type: Unk
Method: 6500_026(v10) Mode: CONC Corr. Factor: 1.000000
User: kellyca Custom ID1: Custom ID2: Custom ID3:
Comment: 326184 200.7

Elem	Ag3280	Al1670	As1890	B_2089	Ba4554	Be3130	Bi2230	Ca3179	Cd2288
Line	328.068 {103}	167.079 {502}	189.042 {478}	208.959 {461}	455.403 {74}	313.042 {108}	223.061 {451}	317.933 {106}	228.802 {447}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.05804	1.8377	1.1310	1.2869	3.3819	.05000	2.2939	W 660.37	.11370
Stddev	.00030	.0061	.0039	.0035	.0051	.00001	.0074	.16	.00003
%RSD	.52272	.33000	.34297	.27400	.15179	.02475	.32240	.02400	.02788

#1	.05783	1.8419	1.1338	1.2894	3.3783	.04999	2.2992	660.48	.11368
#2	.05826	1.8334	1.1283	1.2844	3.3856	.05000	2.2887	660.25	.11373

Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Warn	Chk Pass
High Limit								500.00	
Low Limit								-.05000	

Elem	Co2286	Cr2055	Cu3247	Fe2599	K_7664	Li6707	Mg2790	Mn2576	Mo2020
Line	228.616 {447}	205.560 {464}	324.754 {104}	259.940 {130}	766.490 {44}	670.784 {50}	279.079 {121}2	257.610 {131}	202.030 {467}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.47898	W .19620	.28031	.93753	67.410	1.3015	341.47	4.1703	1.0383
Stddev	.00029	.00007	.00074	.01160	.131	.0039	.06	.0055	.0024
%RSD	.06085	.03416	.26514	1.2374	.19388	.29885	.01897	.13088	.23302

#1	.47918	.19615	.27978	.92933	67.318	1.2987	341.52	4.1741	1.0400
#2	.47877	.19624	.28083	.94573	67.502	1.3042	341.43	4.1664	1.0366

Check ?	Chk Pass	Chk Warn	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit		.10000							
Low Limit		-.01000							

Elem	Na8183	Ni2316	P_1782	Pb2203	S_1820	Sb2068	Se1960	Si2881	Sn1899
Line	818.326 {41}	231.604 {446}	178.284 {489}	220.353 {453}	182.034 {485}	206.833 {463}	196.090 {472}	288.158 {117}	189.989 {477}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	W 1427.5	.46284	11.618	.46752	47.145	.57151	2.2605	16.616	1.8781
Stddev	2.0	.00203	.054	.00192	.190	.00300	.0118	.010	.0021
%RSD	.13750	.43887	.46211	.41086	.40325	.52472	.52097	.06195	.11068

#1	1426.1	.46427	11.656	.46888	47.279	.56939	2.2688	16.623	1.8766
#2	1428.9	.46140	11.580	.46616	47.010	.57363	2.2522	16.609	1.8795

Check ?	Chk Warn	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit	500.00								
Low Limit	10.000								

Elem	Sr4077	Th2837	Ti3349	Ti1908	U_3701	V_2924	Zn2062	Zr3391
Line	407.771 {83}	283.730 {119}	334.904 {101}	190.856 {477}	370.152 {91}	292.402 {115}	206.200 {163}	339.198 {99}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	7.4832	.97579	.96861	1.6712	2.0791	.48037	.45733	.49228
Stddev	.0114	.00366	.00049	.0019	.0158	.00135	.00018	.00048
%RSD	.15189	.37559	.05046	.11447	.76007	.28149	.04038	.09695

#1	7.4752	.97320	.96896	1.6699	2.0679	.47941	.45720	.49262
#2	7.4913	.97838	.96826	1.6726	2.0903	.48133	.45746	.49195

Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit								
Low Limit								

Int. Std.	Y_2243	Y_3600	Y_3774
Line	224.306 {450}	360.073 {94}	377.433 {89}
Units	Cts/S	Cts/S	Cts/S
Avg	1270.2	25955.	5173.9
Stddev	2.3	35.	40.6
%RSD	.18323	.13535	.78379

#1	1268.5	25930.	5145.2
#2	1271.8	25980.	5202.5

Sample Name: 280-82991-D-2-B Acquired: 5/21/2016 6:03:14 Type: Unk
Method: 6500_026(v10) Mode: CONC Corr. Factor: 1.000000
User: kellyca Custom ID1: Custom ID2: Custom ID3:
Comment: 326184 200.7

Elem	Ag3280	Al1670	As1890	B_2089	Ba4554	Be3130	Bi2230	Ca3179	Cd2288
Line	328.068 {103}	167.079 {502}	189.042 {478}	208.959 {461}	455.403 { 74}	313.042 {108}	223.061 {451}	317.933 {106}	228.802 {447}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	-.00006	.00383	-.00070	.14394	.19944	-.00007	-.00122	156.72	.00030
Stddev	.00031	.00069	.00514	.00095	.00058	.00008	.00067	.05	.00015
%RSD	511.59	17.900	730.46	.66027	.28941	102.51	54.718	.02989	50.672

#1	-.00028	.00431	-.00434	.14327	.19903	-.00002	-.00169	156.75	.00041
#2	.00016	.00334	.00293	.14461	.19985	-.00013	-.00075	156.68	.00019

Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Elem	Co2286	Cr2055	Cu3247	Fe2599	K_7664	Li6707	Mg2790	Mn2576	Mo2020
Line	228.616 {447}	205.560 {464}	324.754 {104}	259.940 {130}	766.490 { 44}	670.784 { 50}	279.079 {121}2	257.610 {131}	202.030 {467}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.00269	-.00011	.00179	.01057	3.0719	.02354	69.732	.33615	.00256
Stddev	.00025	.00017	.00030	.00227	.0184	.00084	.131	.00020	.00061
%RSD	9.4496	161.02	16.917	21.490	.59824	3.5771	.18833	.06095	23.957

#1	.00287	-.00023	.00201	.01218	3.0589	.02295	69.639	.33629	.00213
#2	.00251	.00001	.00158	.00896	3.0849	.02414	69.825	.33600	.00299

Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Elem	Na8183	Ni2316	P_1782	Pb2203	S_1820	Sb2068	Se1960	Si2881	Sn1899
Line	818.326 { 41}	231.604 {446}	178.284 {489}	220.353 {453}	182.034 {485}	206.833 {463}	196.090 {472}	288.158 {117}	189.989 {477}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	111.10	.00285	.00405	-.00255	18.333	.00326	.01142	8.3097	.00030
Stddev	.06	.00023	.00372	.00243	.003	.00263	.00531	.0315	.00097
%RSD	.04951	8.1014	91.974	95.107	.01871	80.828	46.518	.37910	323.67

#1	111.07	.00302	.00668	-.00084	18.331	.00139	.00767	8.2875	-.00039
#2	111.14	.00269	.00142	-.00427	18.335	.00512	.01518	8.3320	.00098

Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Elem	Sr4077	Th2837	Ti3349	Ti1908	U_3701	V_2924	Zn2062	Zr3391
Line	407.771 { 83}	283.730 {119}	334.904 {101}	190.856 {477}	370.152 { 91}	292.402 {115}	206.200 {163}	339.198 { 99}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	1.6213	-.00871	.00090	-.00009	.05505	.00102	.00015	.00016
Stddev	.0025	.00258	.00011	.00068	.00903	.00003	.00028	.00101
%RSD	.15219	29.587	12.097	712.25	16.397	2.6913	190.59	632.02

#1	1.6196	-.00689	.00097	-.00057	.06143	.00104	-.00005	-.00055
#2	1.6231	-.01053	.00082	.00038	.04867	.00100	.00034	.00087

Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit								
Low Limit								

Int. Std.	Y_2243	Y_3600	Y_3774
Line	224.306 {450}	360.073 { 94}	377.433 { 89}
Units	Cts/S	Cts/S	Cts/S
Avg	1473.9	30102.	5551.4
Stddev	4.3	6.	.8
%RSD	.29263	.02060	.01361

#1	1477.0	30106.	5552.0
#2	1470.9	30097.	5550.9

Sample Name: 280-83284-D-1-B Acquired: 5/21/2016 6:06:00 Type: Unk
Method: 6500_026(v10) Mode: CONC Corr. Factor: 1.000000
User: kellyca Custom ID1: Custom ID2: Custom ID3:
Comment: 326184 200.7

Elem	Ag3280	Al1670	As1890	B_2089	Ba4554	Be3130	Bi2230	Ca3179	Cd2288
Line	328.068 {103}	167.079 {502}	189.042 {478}	208.959 {461}	455.403 { 74}	313.042 {108}	223.061 {451}	317.933 {106}	228.802 {447}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.00025	1.3952	-.00245	.01491	.01888	-.00014	.00165	404.46	.00068
Stddev	.00030	.0032	.00606	.00061	.00001	.00010	.00028	.60	.00022
%RSD	119.03	.22767	247.34	4.1073	.06255	72.470	16.852	.14861	32.492

#1	.00047	1.3975	-.00673	.01448	.01889	-.00007	.00145	404.04	.00084
#2	.00004	1.3930	.00183	.01534	.01887	-.00022	.00185	404.89	.00052

Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Elem	Co2286	Cr2055	Cu3247	Fe2599	K_7664	Li6707	Mg2790	Mn2576	Mo2020
Line	228.616 {447}	205.560 {464}	324.754 {104}	259.940 {130}	766.490 { 44}	670.784 { 50}	279.079 {121}2	257.610 {131}	202.030 {467}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.00134	.00068	.01391	.00838	3.7783	.01968	28.488	2.0734	.00172
Stddev	.00038	.00009	.00002	.00108	.0165	.00131	.017	.0033	.00058
%RSD	28.373	13.578	.16149	12.903	.43703	6.6663	.05922	.16056	33.766

#1	.00107	.00061	.01393	.00914	3.7666	.01875	28.476	2.0710	.00212
#2	.00161	.00074	.01390	.00761	3.7900	.02061	28.500	2.0757	.00131

Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Elem	Na8183	Ni2316	P_1782	Pb2203	S_1820	Sb2068	Se1960	Si2881	Sn1899
Line	818.326 { 41}	231.604 {446}	178.284 {489}	220.353 {453}	182.034 {485}	206.833 {463}	196.090 {472}	288.158 {117}	189.989 {477}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	23.687	.00291	-.00073	-.00172	F 399.41	-.00352	.00222	.27122	-.00082
Stddev	.248	.00005	.00224	.00102	.19	.00305	.01566	.00436	.00091
%RSD	1.0473	1.7063	307.13	59.118	.04754	86.589	705.75	1.6059	110.97

#1	23.862	.00294	-.00232	-.00100	399.55	-.00137	.01329	.27430	-.00146
#2	23.511	.00287	.00086	-.00244	399.28	-.00568	-.00886	.26814	-.00018

Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Fail	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit					200.00				
Low Limit					-.02000				

Elem	Sr4077	Th2837	Ti3349	Ti1908	U_3701	V_2924	Zn2062	Zr3391	
Line	407.771 { 83}	283.730 {119}	334.904 {101}	190.856 {477}	370.152 { 91}	292.402 {115}	206.200 {163}	339.198 { 99}	
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	
Avg	1.2190	-.00854	.00138	-.00210	.02927	.00062	.00263	.00060	
Stddev	.0051	.00189	.00018	.00034	.02919	.00016	.00192	.00095	
%RSD	.41526	22.164	13.264	16.268	99.750	26.200	73.005	157.84	

#1	1.2155	-.00720	.00125	-.00186	.00862	.00073	.00127	.00128	
#2	1.2226	-.00988	.00151	-.00234	.04991	.00050	.00398	-.00007	

Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	
High Limit									
Low Limit									

Int. Std.	Y_2243	Y_3600	Y_3774						
Line	224.306 {450}	360.073 { 94}	377.433 { 89}						
Units	Cts/S	Cts/S	Cts/S						
Avg	1458.2	29858.	5561.2						
Stddev	.8	33.	1.7						
%RSD	.05545	.11063	.03060						

#1	1457.6	29881.	5560.0						
#2	1458.8	29835.	5562.4						

Sample Name: ccvh-3900196 Acquired: 5/21/2016 6:08:47 Type: QC
Method: 6500_026(v10) Mode: CONC Corr. Factor: 1.000000
User: kellyca Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	Ag3280	Al3092	As1890	B_2089	Ba4554	Be3130	Bi2230	Ca3179	Cd2288	Co2286	Cr2055	Cu3247	Fe2714
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	-.00171	46.436	-.00674	.00702	.00015	-.00035	1.0371	-.00966	-.00105	.00278	-.00054	.00720	46.913
Stddev	.00010	.124	.00317	.00100	.00007	.00012	.0033	.00852	.00016	.00034	.00001	.00037	.050
%RSD	5.9803	.26660	47.025	14.290	42.622	33.205	.31509	88.224	14.881	12.160	1.4962	5.1598	.10701

#1	-.00178	46.348	-.00898	.00773	.00020	-.00027	1.0394	-.00363	-.00094	.00254	-.00054	.00693	46.878
#2	-.00164	46.524	-.00450	.00631	.00011	-.00044	1.0348	-.01568	-.00116	.00302	-.00053	.00746	46.949

Check ?	None	Chk Pass	None	None	None	None	Chk Pass	None	None	None	None	None	Chk Pass
Value													
Range													

Elem	K_7664	Li6707	Mg2790	Mn2576	Mo2020	Na8183	Ni2316	P_1782	Pb2203	S_1820	Sb2068	Se1960	Si2881
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.07550	-.00063	.14520	-.00054	-.00198	257.02	-.00043	.00330	-.00046	5.0117	-.00138	-.00046	-.01993
Stddev	.01318	.00063	.00264	.00017	.00022	.71	.00067	.00209	.00087	.0044	.00091	.00249	.01089
%RSD	17.460	100.21	1.8197	31.702	10.869	.27771	156.25	63.339	188.09	.08841	66.267	545.20	54.635

#1	.06618	-.00108	.14334	-.00066	-.00183	256.51	-.00090	.00478	.00015	5.0149	-.00202	-.00222	-.02764
#2	.08482	-.00018	.14707	-.00042	-.00214	257.52	.00004	.00182	-.00108	5.0086	-.00073	.00131	-.01223

Check ?	None	None	None	None	None	Chk Pass	None	None	None	Chk Pass	None	None	None
Value													
Range													

Elem	Sn1899	Sr4077	Th2837	Ti3349	Tl1908	U_3701	V_2924	Zn2062	Zr3391
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.00347	.00044	4.9094	.02497	-.00233	10.101	-.01660	-.00201	-.00922
Stddev	.00078	.00006	.0134	.00034	.00141	.014	.00055	.00022	.00067
%RSD	22.563	12.876	.27305	1.3520	60.517	.13691	3.3319	11.140	7.3236

#1	.00292	.00048	4.9189	.02473	-.00133	10.111	-.01699	-.00185	-.00969
#2	.00403	.00040	4.8999	.02521	-.00333	10.091	-.01621	-.00217	-.00874

Check ?	None	None	Chk Pass	None	None	Chk Pass	None	None	None
Value									
Range									

Int. Std.	Y_2243	Y_3600	Y_3774
Units	Cts/S	Cts/S	Cts/S
Avg	1524.6	30603.	5593.1
Stddev	1.0	94.	6.4
%RSD	.06363	.30710	.11410

#1	1523.9	30537.	5597.6
#2	1525.3	30670.	5588.6

Sample Name: ccv-3900195 Acquired: 5/21/2016 6:11:39 Type: QC
Method: 6500_026(v10) Mode: CONC Corr. Factor: 1.000000
User: kellyca Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	Ag3280	Al1670	As1890	B_2089	Ba4554	Be3130	Bi2230	Ca3179	Cd2288	Co2286	Cr2055	Cu3247	Fe2599
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.50151	.51757	1.0082	.52827	.49916	.50691	-.00323	4.9515	.51761	.51643	.50894	.50164	2.4093
Stddev	.00013	.00358	.0035	.00051	.00073	.00133	.00039	.0109	.00133	.00009	.00180	.00025	.0025
%RSD	.02685	.69227	.34550	.09654	.14714	.26299	12.149	.21937	.25665	.01697	.35273	.04996	.10543

#1	.50161	.52010	1.0057	.52791	.49968	.50785	-.00351	4.9592	.51667	.51649	.50767	.50146	2.4111
#2	.50142	.51504	1.0107	.52863	.49864	.50597	-.00295	4.9439	.51855	.51637	.51021	.50181	2.4075

Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	None	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Value													
Range													

Elem	K_7664	Li6707	Mg2790	Mn2576	Mo2020	Na5895	Ni2316	P_1782	Pb2203	S_1820	Sb2068	Se1960	Si2881
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	53.230	1.0910	20.250	.50001	.51209	5.3215	.50860	1.0125	1.0367	.01544	1.0222	1.0148	4.8955
Stddev	.041	.0022	.051	.00022	.00168	.0185	.00052	.0035	.0048	.01278	.0062	.0161	.0284
%RSD	.07784	.19900	.25035	.04443	.32764	.34843	.10172	.34832	.46587	82.822	.60837	1.5870	.58058

#1	53.201	1.0895	20.214	.49985	.51090	5.3346	.50824	1.0100	1.0401	.02448	1.0178	1.0262	4.9156
#2	53.259	1.0926	20.286	.50016	.51327	5.3084	.50897	1.0150	1.0332	.00640	1.0266	1.0034	4.8754

Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	None	Chk Pass	Chk Pass	Chk Pass
Value													
Range													

Elem	Sn1899	Sr4077	Th2837	Ti3349	Ti1908	U_3701	V_2924	Zn2062	Zr3391
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.99782	.49345	-.00237	.48138	1.0361	.03721	.48246	.50071	.49586
Stddev	.00040	.00058	.00039	.00074	.0034	.03190	.00009	.00091	.00212
%RSD	.04004	.11741	16.332	.15458	.32583	85.739	.01921	.18095	.42852

#1	.99811	.49304	-.00264	.48086	1.0385	.05977	.48253	.50007	.49737
#2	.99754	.49386	-.00210	.48191	1.0337	.01465	.48240	.50135	.49436

Check ?	Chk Pass	Chk Pass	None	Chk Pass	Chk Pass	None	Chk Pass	Chk Pass	Chk Pass
Value									
Range									

Int. Std.	Y_2243	Y_3600	Y_3774
Units	Cts/S	Cts/S	Cts/S
Avg	1554.7	31395.	5674.0
Stddev	3.6	12.	27.7
%RSD	.23467	.03912	.48820

#1	1557.3	31386.	5654.4
#2	1552.1	31403.	5693.6

Sample Name: ccb Acquired: 5/21/2016 6:14:19 Type: QC
Method: 6500_026(v10) Mode: CONC Corr. Factor: 1.000000
User: kellyca Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	Ag3280	Al1670	As1890	B_2089	Ba4554	Be3130	Bi2230	Ca3179	Cd2288	Co2286	Cr2055	Cu3247
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	-.00033	-.00091	-.00062	F .00540	-.00006	-.00017	-.00058	.00769	-.00007	-.00016	-.00017	.00031
Stddev	.00019	.00040	.00060	.00058	.00007	.00003	.00044	.00535	.00009	.00004	.00001	.00002
%RSD	56.942	43.720	97.349	10.718	106.61	17.711	75.690	69.598	125.36	21.912	7.5253	6.4269
#1	-.00046	-.00063	-.00104	.00499	-.00011	-.00014	-.00027	.00391	-.00001	-.00019	-.00018	.00029
#2	-.00020	-.00120	-.00019	.00581	-.00002	-.00019	-.00089	.01148	-.00013	-.00014	-.00017	.00032
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Fail	Chk Pass	Chk Pass	None	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit				.00312								
Low Limit				-.00312								
Elem	Fe2599	K_7664	Li6707	Mg2790	Mn2576	Mo2020	Na5895	Ni2316	P_1782	Pb2203	S_1820	Sb2068
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.00138	.10435	-.00007	.00112	.00011	.00046	.05344	-.00030	-.00509	-.00151	.01265	W .00380
Stddev	.00000	.01798	.00143	.00325	.00004	.00007	.00269	.00031	.00208	.00172	.00007	.00100
%RSD	.05722	17.233	1957.6	290.05	31.432	15.874	5.0415	104.95	40.844	114.19	.58238	26.421
#1	.00138	.11707	.00094	.00342	.00009	.00041	.05534	-.00052	-.00362	-.00272	.01260	.00450
#2	.00138	.09164	-.00108	-.00118	.00014	.00051	.05153	-.00008	-.00656	-.00029	.01270	.00309
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	None	Chk Warn
High Limit												.00314
Low Limit												-.00314
Elem	Se1960	Si2881	Sn1899	Sr4077	Th2837	Ti3349	Ti1908	U_3701	V_2924	Zn2062	Zr3391	
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	
Avg	-.00184	-.00387	.00150	.00014	-.00378	.00023	-.00196	.00415	-.00010	.00052	.00103	
Stddev	.00420	.01517	.00016	.00006	.00076	.00005	.00312	.02433	.00011	.00007	.00148	
%RSD	227.92	392.26	10.906	44.199	20.191	20.000	159.72	586.24	104.56	13.906	143.95	
#1	.00113	.00686	.00138	.00010	-.00324	.00020	.00025	.02136	-.00018	.00047	.00207	
#2	-.00481	-.01460	.00161	.00018	-.00432	.00026	-.00416	-.01306	-.00003	.00057	-.00002	
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	
High Limit												
Low Limit												
Int. Std.	Y_2243	Y_3600	Y_3774									
Units	Cts/S	Cts/S	Cts/S									
Avg	1591.8	32427.	5651.2									
Stddev	2.2	25.	11.3									
%RSD	.13962	.07686	.19963									
#1	1593.4	32445.	5659.2									
#2	1590.2	32409.	5643.2									

Sample Name: ccvl-3903059 Acquired: 5/21/2016 6:17:09 Type: QC
Method: 6500_026(v10) Mode: CONC Corr. Factor: 1.000000
User: kellyca Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	Ag3280	Al1670	As1890	B_2089	Ba4554	Be3130	Bi2230	Ca3179	Cd2288	Co2286	Cr2055	Cu3247
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.01024	.10718	.01267	.11224	.01011	.00088	.11441	.20824	.00564	.01048	.01037	.01563
Stddev	.00027	.00153	.00349	.00039	.00003	.00004	.00159	.00007	.00025	.00042	.00002	.00030
%RSD	2.6562	1.4311	27.522	.34871	.32150	4.3053	1.3861	.03344	4.4959	4.0234	.16860	1.9078

#1	.01005	.10826	.01021	.11197	.01014	.00091	.11553	.20829	.00582	.01018	.01036	.01542
#2	.01043	.10610	.01514	.11252	.01009	.00085	.11329	.20819	.00546	.01078	.01038	.01584

Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Value												
Range												

Elem	Fe2599	K_7664	Li6707	Mg2790	Mn2576	Mo2020	Na5895	Ni2316	P_1782	Pb2203	S_1820	Sb2068
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.10359	3.2742	.01007	.21669	.01026	.02090	1.0943	.04178	3.0433	.00826	.01180	.02278
Stddev	.00316	.0249	.00051	.00609	.00004	.00012	.0088	.00057	.0055	.00040	.00366	.00013
%RSD	3.0495	.76046	5.0986	2.8091	.39870	.58468	.79959	1.3710	.18201	4.8467	31.011	.58658

#1	.10136	3.2566	.00971	.21238	.01029	.02098	1.0881	.04138	3.0472	.00798	.01439	.02269
#2	.10582	3.2918	.01044	.22099	.01023	.02081	1.1005	.04219	3.0394	.00854	.00921	.02288

Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	None	Chk Pass
Value												
Range												

Elem	Se1960	Si2881	Sn1899	Sr4077	Th2837	Ti3349	Ti1908	U_3701	V_2924	Zn2062	Zr3391
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.01340	.50524	.10287	.01002	F .01030	.00982	.01622	F .08420	.00925	.01915	.01483
Stddev	.00052	.00957	.00195	.00009	.00005	.00002	.00090	.02319	.00022	.00060	.00144
%RSD	3.8971	1.8932	1.8908	.93859	.46870	.24856	5.5547	27.543	2.3364	3.1418	9.7140

#1	.01376	.51201	.10150	.00995	.01027	.00980	.01558	.06780	.00909	.01958	.01584
#2	.01303	.49848	.10425	.01009	.01033	.00984	.01686	.10059	.00940	.01873	.01381

Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Fail	Chk Pass	Chk Pass	Chk Fail	Chk Pass	Chk Pass	Chk Pass
Value					.01500			.06000			
Range					-30.000%			30.000%			

Int. Std.	Y_2243	Y_3600	Y_3774
Units	Cts/S	Cts/S	Cts/S
Avg	1586.2	32326.	5617.6
Stddev	.9	120.	77.7
%RSD	.05598	.37053	1.3837

#1	1585.5	32241.	5562.7
#2	1586.8	32411.	5672.6

Sample Name: MB 280-325203/1-A Acquired: 5/21/2016 6:19:58 Type: Unk
Method: 6500_026(v10) Mode: CONC Corr. Factor: 1.000000
User: kellyca Custom ID1: 5/20 Custom ID2: Custom ID3:
Comment: 325203 6010B

Elem	Ag3280	Al1670	As1890	B_2089	Ba4554	Be3130	Bi2230	Ca3179	Cd2288
Line	328.068 {103}	167.079 {502}	189.042 {478}	208.959 {461}	455.403 { 74}	313.042 {108}	223.061 {451}	317.933 {106}	228.802 {447}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	-.00001	.00505	-.00201	W .00504	.00097	-.00009	W -.00586	F .20663	-.00009
Stddev	.00009	.00032	.00149	.00034	.00008	.00003	.00002	.00279	.00012
%RSD	627.66	6.2465	74.117	6.8198	8.0310	29.769	.28127	1.3494	145.31
#1	.00005	.00527	-.00096	.00528	.00091	-.00011	-.00587	.20860	.00000
#2	-.00008	.00482	-.00307	.00479	.00102	-.00007	-.00585	.20466	-.00017
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Warn	Chk Pass	Chk Pass	Chk Warn	Chk Fail	Chk Pass
High Limit				.00500			.00500	.20000	
Low Limit				-.00500			-.00500	-.20000	
Elem	Co2286	Cr2055	Cu3247	Fe2599	K_7664	Li6707	Mg2790	Mn2576	Mo2020
Line	228.616 {447}	205.560 {464}	324.754 {104}	259.940 {130}	766.490 { 44}	670.784 { 50}	279.079 {121}2	257.610 {131}	202.030 {467}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	-.00061	.00035	.00115	W .03097	.09464	-.00161	W .05107	.00049	.00051
Stddev	.00024	.00020	.00007	.00010	.00651	.00075	.00526	.00013	.00028
%RSD	39.295	57.013	6.0839	.32498	6.8738	46.667	10.302	27.678	54.043
#1	-.00044	.00021	.00110	.03104	.09004	-.00108	.05479	.00039	.00071
#2	-.00078	.00049	.00120	.03090	.09924	-.00215	.04735	.00058	.00032
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Warn	Chk Pass	Chk Pass	Chk Warn	Chk Pass	Chk Pass
High Limit				.03000			.05000		
Low Limit				-.05000			-.05000		
Elem	Na5895	Ni2316	P_1782	Pb2203	S_1820	Sb2068	Se1960	Si2881	Sn1899
Line	589.592 { 57}	231.604 {446}	178.284 {489}	220.353 {453}	182.034 {485}	206.833 {463}	196.090 {472}	288.158 {117}	189.989 {477}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.12280	.00027	W .00511	.00091	.01242	.00004	.00167	.00608	-.00040
Stddev	.00098	.00019	.00123	.00011	.00300	.00064	.00238	.00014	.00066
%RSD	.79521	68.593	24.012	11.825	24.158	1690.2	142.77	2.3788	166.47
#1	.12211	.00040	.00597	.00083	.01030	.00049	.00335	.00598	-.00086
#2	.12349	.00014	.00424	.00098	.01455	-.00042	-.00002	.00618	.00007
Check ?	Chk Pass	Chk Pass	Chk Warn	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit			.00500						
Low Limit			-.00500						
Elem	Sr4077	Th2837	Ti3349	Ti1908	U_3701	V_2924	Zn2062	Zr3391	
Line	407.771 { 83}	283.730 {119}	334.904 {101}	190.856 {477}	370.152 { 91}	292.402 {115}	206.200 {163}	339.198 { 99}	
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	
Avg	.00045	W -.00511	.00038	-.00399	.01787	.00046	.00108	.00034	
Stddev	.00008	.00074	.00003	.00249	.00866	.00011	.00028	.00088	
%RSD	17.469	14.530	8.3088	62.435	48.455	24.634	25.605	259.99	
#1	.00039	-.00564	.00036	-.00575	.02399	.00054	.00127	-.00028	
#2	.00050	-.00459	.00040	-.00223	.01175	.00038	.00088	.00096	
Check ?	Chk Pass	Chk Warn	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	
High Limit		.00500							
Low Limit		-.00500							
Int. Std.	Y_2243	Y_3600	Y_3774						
Line	224.306 {450}	360.073 { 94}	377.433 { 89}						
Units	Cts/S	Cts/S	Cts/S						
Avg	1588.6	32655.	5724.3						
Stddev	.2	2.	7.4						
%RSD	.01297	.00484	.12881						
#1	1588.5	32654.	5719.1						
#2	1588.8	32656.	5729.5						

Sample Name: LCS 280-325203/2-A Acquired: 5/21/2016 6:22:47 Type: Unk

Method: 6500_026(v10) Mode: CONC Corr. Factor: 1.000000

User: kellyca Custom ID1: Custom ID2: Custom ID3:

Comment: 325203 6010B

Elem	Ag3280	Al1670	As1890	B_2089	Ba4554	Be3130	Bi2230	Ca3179	Cd2288
Line	328.068 {103}	167.079 {502}	189.042 {478}	208.959 {461}	455.403 { 74}	313.042 {108}	223.061 {451}	317.933 {106}	228.802 {447}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.04891	1.9164	1.0163	1.0185	1.9369	.04872	2.1079	47.726	.09935
Stddev	.00044	.0005	.0016	.0010	.0025	.00003	.0002	.101	.00080
%RSD	.89401	.02575	.15342	.10143	.13006	.05616	.00872	.21205	.80056

#1	.04860	1.9160	1.0174	1.0178	1.9351	.04874	2.1078	47.655	.09879
#2	.04922	1.9167	1.0152	1.0192	1.9387	.04870	2.1080	47.798	.09992

Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Elem	Co2286	Cr2055	Cu3247	Fe2599	K_7664	Li6707	Mg2790	Mn2576	Mo2020
Line	228.616 {447}	205.560 {464}	324.754 {104}	259.940 {130}	766.490 { 44}	670.784 { 50}	279.079 {121}2	257.610 {131}	202.030 {467}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.48818	F .19483	.24771	.95878	52.751	1.0669	48.389	.46920	1.0108
Stddev	.00054	.00075	.00140	.01059	.105	.0017	.076	.00094	.0008
%RSD	.11056	.38266	.56636	1.1044	.19920	.15645	.15698	.20081	.07450

#1	.48780	.19430	.24871	.95129	52.677	1.0657	48.443	.46853	1.0113
#2	.48857	.19536	.24672	.96627	52.826	1.0681	48.335	.46986	1.0102

Check ?	Chk Pass	Chk Fail	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit		.05750							
Low Limit		.04300							

Elem	Na8183	Ni2316	P_1782	Pb2203	S_1820	Sb2068	Se1960	Si2881	Sn1899
Line	818.326 { 41}	231.604 {446}	178.284 {489}	220.353 {453}	182.034 {485}	206.833 {463}	196.090 {472}	288.158 {117}	189.989 {477}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	50.861	.48338	10.280	.49841	1.9897	.51025	2.0075	F 1.8821	1.8981
Stddev	.115	.00020	.029	.00227	.0002	.00686	.0037	.0051	.0039
%RSD	.22530	.04154	.28046	.45533	.00925	1.3449	.18321	.27269	.20383

#1	50.780	.48323	10.260	.50001	1.9898	.50540	2.0101	1.8785	1.8954
#2	50.942	.48352	10.300	.49681	1.9895	.51511	2.0049	1.8857	1.9009

Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Fail	Chk Pass
High Limit								11.500	
Low Limit								9.4000	

Elem	Sr4077	Th2837	Ti3349	Ti1908	U_3701	V_2924	Zn2062	Zr3391
Line	407.771 { 83}	283.730 {119}	334.904 {101}	190.856 {477}	370.152 { 91}	292.402 {115}	206.200 {163}	339.198 { 99}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.95007	.94084	.93214	1.9593	2.0452	.46004	.47567	.47451
Stddev	.00160	.00177	.00158	.0031	.0029	.00139	.00008	.00387
%RSD	.16884	.18864	.16928	.15816	.14164	.30121	.01746	.81475

#1	.94894	.93958	.93326	1.9571	2.0432	.45906	.47561	.47177
#2	.95120	.94209	.93102	1.9615	2.0473	.46102	.47573	.47724

Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit								
Low Limit								

Int. Std.	Y_2243	Y_3600	Y_3774
Line	224.306 {450}	360.073 { 94}	377.433 { 89}
Units	Cts/S	Cts/S	Cts/S
Avg	1511.8	30861.	5641.6
Stddev	2.0	21.	9.0
%RSD	.13270	.06875	.16007

#1	1513.2	30876.	5635.2
#2	1510.4	30846.	5648.0

Sample Name: 280-82965-A-1-A Acquired: 5/21/2016 6:25:18 Type: Unk
Method: 6500_026(v10) Mode: CONC Corr. Factor: 1.000000
User: kellyca Custom ID1: Custom ID2: Custom ID3:
Comment: 325203 6010B

Elem	Ag3280	Al3092	As1890	B_2089	Ba4554	Be3130	Bi2230	Ca3179	Cd2288
Line	328.068 {103}	309.271 {109}	189.042 {478}	208.959 {461}	455.403 { 74}	313.042 {108}	223.061 {451}	317.933 {106}	228.802 {447}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	-.00043	95.968	.23837	.07901	.73976	.00482	-.00004	38.189	.00025
Stddev	.00006	.006	.00205	.00054	.00014	.00013	.00061	.043	.00010
%RSD	15.060	.00662	.86132	.68300	.01851	2.6438	1676.1	.11384	40.854

#1	-.00047	95.972	.23982	.07863	.73966	.00473	-.00046	38.158	.00018
#2	-.00038	95.963	.23692	.07939	.73985	.00491	.00039	38.219	.00032

Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Elem	Co2286	Cr2055	Cu3247	Fe2714	K_7664	Li6707	Mg2790	Mn2576	Mo2020
Line	228.616 {447}	205.560 {464}	324.754 {104}	271.441 {124}	766.490 { 44}	670.784 { 50}	279.079 {121}2	257.610 {131}	202.030 {467}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.02745	.08273	.20591	106.88	18.179	.05362	22.733	.91932	.02929
Stddev	.00023	.00006	.00067	.34	.019	.00098	.080	.00022	.00014
%RSD	.82720	.07711	.32570	.31608	.10516	1.8360	.35302	.02403	.48640

#1	.02761	.08268	.20544	106.64	18.192	.05293	22.676	.91917	.02919
#2	.02729	.08277	.20638	107.11	18.165	.05432	22.790	.91948	.02939

Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Elem	Na8183	Ni2316	P_1782	Pb2203	S_1820	Sb2068	Se1960	Si2881	Sn1899
Line	818.326 { 41}	231.604 {446}	178.284 {489}	220.353 {453}	182.034 {485}	206.833 {463}	196.090 {472}	288.158 {117}	189.989 {477}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	19.114	.06797	2.9692	.06751	3.6202	.00495	-.00279	3.8878	.00699
Stddev	.004	.00089	.0162	.00104	.0171	.00021	.00256	.0019	.00045
%RSD	.02288	1.3152	.54575	1.5439	.47214	4.3369	91.819	.04954	6.4041

#1	19.110	.06860	2.9806	.06678	3.6323	.00510	-.00098	3.8864	.00730
#2	19.117	.06733	2.9577	.06825	3.6081	.00480	-.00460	3.8891	.00667

Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Elem	Sr4077	Th2837	Ti3349	Ti1908	U_3701	V_2924	Zn2062	Zr3391
Line	407.771 { 83}	283.730 {119}	334.904 {101}	190.856 {477}	370.152 { 91}	292.402 {115}	206.200 {163}	339.198 { 99}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.57292	.03824	2.0534	.00215	W -.06806	.27812	.73445	.14578
Stddev	.00192	.00291	.0022	.00419	.02364	.00033	.00247	.00051
%RSD	.33427	7.6083	.10545	195.36	34.728	.11968	.33677	.35294

#1	.57427	.03618	2.0519	-.00082	-.05135	.27788	.73619	.14541
#2	.57156	.04030	2.0549	.00511	-.08478	.27835	.73270	.14614

Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Warn	Chk Pass	Chk Pass	Chk Pass
High Limit					45.000			
Low Limit					-.05000			

Int. Std.	Y_2243	Y_3600	Y_3774
Line	224.306 {450}	360.073 { 94}	377.433 { 89}
Units	Cts/S	Cts/S	Cts/S
Avg	1621.5	33006.	6221.0
Stddev	1.0	41.	3.6
%RSD	.06275	.12441	.05753

#1	1620.8	33035.	6223.5
#2	1622.2	32977.	6218.5

Sample Name: 280-82965-A-1-A SD@5 Acquired: 5/21/2016 6:27:55 Type: Unk
Method: 6500_026(v10) Mode: CONC Corr. Factor: 1.000000
User: kellyca Custom ID1: Custom ID2: Custom ID3:
Comment: 325203 6010B

Elem	Ag3280	Al3092	As1890	B_2089	Ba4554	Be3130	Bi2230	Ca3179	Cd2288
Line	328.068 {103}	309.271 {109}	189.042 {478}	208.959 {461}	455.403 { 74}	313.042 {108}	223.061 {451}	317.933 {106}	228.802 {447}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	-.00081	20.287	.04866	.01971	.15726	.00087	-.00119	8.2582	.00004
Stddev	.00045	.072	.00869	.00056	.00001	.00000	.00565	.0164	.00014
%RSD	54.727	.35338	17.853	2.8451	.00574	.26229	475.39	.19820	383.13

#1	-.00113	20.237	.04252	.01932	.15726	.00088	.00281	8.2467	-.00006
#2	-.00050	20.338	.05480	.02011	.15725	.00087	-.00518	8.2698	.00014

Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Elem	Co2286	Cr2055	Cu3247	Fe2599	K_7664	Li6707	Mg2790	Mn2576	Mo2020
Line	228.616 {447}	205.560 {464}	324.754 {104}	259.940 {130}	766.490 { 44}	670.784 { 50}	279.079 {121}2	257.610 {131}	202.030 {467}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.00587	.01752	.04307	23.259	3.8471	.01003	4.9487	.19919	.00612
Stddev	.00022	.00035	.00008	.043	.0072	.00061	.0125	.00059	.00018
%RSD	3.7505	1.9772	.17970	.18456	.18744	6.0667	.25322	.29631	2.8880

#1	.00572	.01728	.04313	23.229	3.8420	.00960	4.9398	.19961	.00625
#2	.00603	.01777	.04302	23.290	3.8522	.01046	4.9575	.19878	.00600

Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Elem	Na5895	Ni2316	P_1782	Pb2203	S_1820	Sb2068	Se1960	Si2881	Sn1899
Line	589.592 { 57}	231.604 {446}	178.284 {489}	220.353 {453}	182.034 {485}	206.833 {463}	196.090 {472}	288.158 {117}	189.989 {477}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	3.9859	.01427	.61452	.01189	.75682	.00369	.00106	.81634	.00226
Stddev	.0079	.00002	.00128	.00156	.00932	.00224	.00179	.01232	.00041
%RSD	.19733	.15617	.20885	13.125	1.2310	60.845	167.82	1.5096	18.057

#1	3.9804	.01426	.61362	.01299	.76341	.00527	-.00020	.80763	.00197
#2	3.9915	.01429	.61543	.01079	.75024	.00210	.00233	.82506	.00255

Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Elem	Sr4077	Th2837	Ti3349	Ti1908	U_3701	V_2924	Zn2062	Zr3391	
Line	407.771 { 83}	283.730 {119}	334.904 {101}	190.856 {477}	370.152 { 91}	292.402 {115}	206.200 {163}	339.198 { 99}	
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	
Avg	.12178	.00270	.43244	.00051	-.00940	.05844	.16019	.03190	
Stddev	.00004	.00151	.00036	.00095	.02779	.00046	.00123	.00043	
%RSD	.03577	55.930	.08344	187.33	295.69	.79495	.76810	1.3356	

#1	.12175	.00376	.43270	.00118	-.02904	.05811	.16106	.03160	
#2	.12181	.00163	.43218	-.00016	.01025	.05877	.15932	.03220	

Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	
High Limit									
Low Limit									

Int. Std.	Y_2243	Y_3600	Y_3774						
Line	224.306 {450}	360.073 { 94}	377.433 { 89}						
Units	Cts/S	Cts/S	Cts/S						
Avg	1609.5	32434.	5798.9						
Stddev	.1	32.	9.9						
%RSD	.00434	.09901	.17017						

#1	1609.5	32457.	5805.9						
#2	1609.6	32412.	5791.9						

Sample Name: 280-82965-A-1-B MS Acquired: 5/21/2016 6:30:33 Type: Unk
Method: 6500_026(v10) Mode: CONC Corr. Factor: 1.000000
User: kellyca Custom ID1: Custom ID2: Custom ID3:
Comment: 325203 6010B

Elem	Ag3280	Al3092	As1890	B_2089	Ba4554	Be3130	Bi2230	Ca3179	Cd2288
Line	328.068 {103}	309.271 {109}	189.042 {478}	208.959 {461}	455.403 { 74}	313.042 {108}	223.061 {451}	317.933 {106}	228.802 {447}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.04768	149.34	1.1640	1.0397	2.4063	.04934	1.9697	82.527	.09480
Stddev	.00059	.14	.0043	.0043	.0060	.00020	.0060	.222	.00021
%RSD	1.2327	.09097	.37193	.41345	.24779	.39912	.30611	.26906	.22101

#1	.04727	149.43	1.1671	1.0427	2.4105	.04948	1.9740	82.684	.09495
#2	.04810	149.24	1.1610	1.0366	2.4021	.04920	1.9654	82.370	.09465

Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Elem	Co2286	Cr2055	Cu3247	Fe2714	K_7664	Li6707	Mg2790	Mn2576	Mo2020
Line	228.616 {447}	205.560 {464}	324.754 {104}	271.441 {124}	766.490 { 44}	670.784 { 50}	279.079 {121}2	257.610 {131}	202.030 {467}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.46683	W .30197	.42837	120.91	66.942	1.0692	70.073	1.4604	.91601
Stddev	.00063	.00016	.00175	.03	.170	.0017	.366	.0070	.00297
%RSD	.13592	.05266	.40778	.02174	.25391	.16093	.52292	.47886	.32417

#1	.46727	.30186	.42713	120.89	67.062	1.0704	69.814	1.4554	.91811
#2	.46638	.30208	.42960	120.93	66.822	1.0680	70.332	1.4653	.91391

Check ?	Chk Pass	Chk Warn	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit		.10000							
Low Limit		-.01000							

Elem	Na8183	Ni2316	P_1782	Pb2203	S_1820	Sb2068	Se1960	Si2881	Sn1899
Line	818.326 { 41}	231.604 {446}	178.284 {489}	220.353 {453}	182.034 {485}	206.833 {463}	196.090 {472}	288.158 {117}	189.989 {477}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	63.975	.50715	12.448	.51141	5.3182	.25255	1.8981	5.1225	1.6905
Stddev	.010	.00087	.029	.00003	.0007	.00208	.0011	.0181	.0077
%RSD	.01629	.17220	.23645	.00683	.01267	.82406	.05904	.35283	.45780

#1	63.982	.50653	12.468	.51143	5.3178	.25108	1.8973	5.1353	1.6960
#2	63.968	.50777	12.427	.51138	5.3187	.25402	1.8989	5.1098	1.6850

Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Elem	Sr4077	Th2837	Ti3349	Ti1908	U_3701	V_2924	Zn2062	Zr3391
Line	407.771 { 83}	283.730 {119}	334.904 {101}	190.856 {477}	370.152 { 91}	292.402 {115}	206.200 {163}	339.198 { 99}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	1.3241	.94500	6.3795	1.7258	1.8150	.83045	1.1602	.69162
Stddev	.0039	.00545	.0364	.0046	.0333	.00371	.0007	.00126
%RSD	.29332	.57651	.57022	.26462	1.8337	.44633	.05874	.18238

#1	1.3268	.94115	6.3537	1.7290	1.7915	.82783	1.1597	.69251
#2	1.3213	.94885	6.4052	1.7225	1.8386	.83307	1.1607	.69072

Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit								
Low Limit								

Int. Std.	Y_2243	Y_3600	Y_3774
Line	224.306 {450}	360.073 { 94}	377.433 { 89}
Units	Cts/S	Cts/S	Cts/S
Avg	1581.5	31409.	6057.3
Stddev	2.3	125.	1.1
%RSD	.14427	.39701	.01860

#1	1579.9	31498.	6056.5
#2	1583.1	31321.	6058.1

Sample Name: 280-82965-A-1-C MSD Acquired: 5/21/2016 6:33:01 Type: Unk

Method: 6500_026(v10) Mode: CONC Corr. Factor: 1.000000

User: kellyca Custom ID1: Custom ID2: Custom ID3:

Comment: 325203 6010B

Elem	Ag3280	Al3092	As1890	B_2089	Ba4554	Be3130	Bi2230	Ca3179	Cd2288
Line	328.068 {103}	309.271 {109}	189.042 {478}	208.959 {461}	455.403 { 74}	313.042 {108}	223.061 {451}	317.933 {106}	228.802 {447}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.04696	194.12	1.2341	1.0494	3.4900	.05088	1.9463	89.748	.09432
Stddev	.00048	.12	.0104	.0029	.0067	.00016	.0009	.013	.00038
%RSD	1.0178	.06300	.84673	.27612	.19225	.32131	.04415	.01439	.40025

#1	.04730	194.03	1.2415	1.0473	3.4947	.05077	1.9469	89.739	.09406
#2	.04662	194.21	1.2267	1.0514	3.4852	.05100	1.9457	89.757	.09459

Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Elem	Co2286	Cr2055	Cu3247	Fe2714	K_7664	Li6707	Mg2790	Mn2576	Mo2020
Line	228.616 {447}	205.560 {464}	324.754 {104}	271.441 {124}	766.490 { 44}	670.784 { 50}	279.079 {121}2	257.610 {131}	202.030 {467}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.58327	W .31780	.55933	162.14	71.197	1.0930	74.765	5.8950	1.0180
Stddev	.00037	.00015	.00020	.91	.033	.0002	.021	.0013	.0029
%RSD	.06323	.04658	.03557	.56208	.04606	.02122	.02769	.02157	.28806

#1	.58353	.31791	.55919	161.50	71.220	1.0929	74.779	5.8959	1.0201
#2	.58301	.31770	.55947	162.79	71.174	1.0932	74.750	5.8941	1.0160

Check ?	Chk Pass	Chk Warn	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit		.10000							
Low Limit		-.01000							

Elem	Na8183	Ni2316	P_1782	Pb2203	S_1820	Sb2068	Se1960	Si2881	Sn1899
Line	818.326 { 41}	231.604 {446}	178.284 {489}	220.353 {453}	182.034 {485}	206.833 {463}	196.090 {472}	288.158 {117}	189.989 {477}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	68.976	.52887	12.131	.60582	5.7696	.23961	1.8643	5.6793	1.6521
Stddev	.324	.00009	.031	.00197	.0166	.00059	.0173	.0334	.0075
%RSD	.46960	.01656	.25649	.32525	.28821	.24676	.92630	.58826	.45068

#1	69.205	.52893	12.153	.60443	5.7813	.24003	1.8765	5.7029	1.6574
#2	68.747	.52881	12.109	.60722	5.7578	.23919	1.8521	5.6557	1.6468

Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Elem	Sr4077	Th2837	Ti3349	Ti1908	U_3701	V_2924	Zn2062	Zr3391	
Line	407.771 { 83}	283.730 {119}	334.904 {101}	190.856 {477}	370.152 { 91}	292.402 {115}	206.200 {163}	339.198 { 99}	
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	
Avg	1.4774	.94443	7.6973	1.6863	1.7877	.96690	1.2765	.72984	
Stddev	.0008	.00008	.0022	.0078	.0198	.00008	.0037	.00065	
%RSD	.05068	.00842	.02792	.46370	1.1090	.00779	.28984	.08848	

#1	1.4769	.94449	7.6988	1.6918	1.8017	.96696	1.2739	.72938	
#2	1.4779	.94438	7.6958	1.6807	1.7737	.96685	1.2791	.73029	

Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	
High Limit									
Low Limit									

Int. Std.	Y_2243	Y_3600	Y_3774						
Line	224.306 {450}	360.073 { 94}	377.433 { 89}						
Units	Cts/S	Cts/S	Cts/S						
Avg	1596.0	31621.	6130.2						
Stddev	3.5	24.	3.4						
%RSD	.21653	.07591	.05531						

#1	1593.5	31604.	6132.6						
#2	1598.4	31638.	6127.8						

Sample Name: 280-83195-C-2-A Acquired: 5/21/2016 6:35:29 Type: Unk
Method: 6500_026(v10) Mode: CONC Corr. Factor: 1.000000
User: kellyca Custom ID1: Custom ID2: Custom ID3:
Comment: 325203 6010B

Elem	Ag3280	Al3092	As1890	B_2089	Ba4554	Be3130	Bi2230	Ca3179	Cd2288
Line	328.068 {103}	309.271 {109}	189.042 {478}	208.959 {461}	455.403 {74}	313.042 {108}	223.061 {451}	317.933 {106}	228.802 {447}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	-.00091	174.04	.01066	.01296	2.6266	.01191	.00770	39.713	.00143
Stddev	.00056	.60	.00280	.00003	.0046	.00002	.00080	.019	.00010
%RSD	61.877	.34694	26.311	.26148	.17387	.18971	10.358	.04860	6.9828

#1	-.00051	173.61	.01264	.01298	2.6234	.01189	.00826	39.727	.00136
#2	-.00131	174.47	.00867	.01293	2.6299	.01192	.00713	39.699	.00150

Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Elem	Co2286	Cr2055	Cu3247	Fe2714	K_7664	Li6707	Mg2790	Mn2576	Mo2020
Line	228.616 {447}	205.560 {464}	324.754 {104}	271.441 {124}	766.490 {44}	670.784 {50}	279.079 {121}2	257.610 {131}	202.030 {467}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.07931	W .16756	.21037	233.39	21.355	.12960	43.509	3.4457	.00028
Stddev	.00050	.00067	.00186	.49	.096	.00058	.152	.0109	.00066
%RSD	.63642	.39854	.88535	.20913	.44923	.45082	.34906	.31555	237.30

#1	.07967	.16803	.20905	233.04	21.287	.13002	43.402	3.4380	-.00019
#2	.07895	.16709	.21169	233.73	21.422	.12919	43.617	3.4534	.00074

Check ?	Chk Pass	Chk Warn	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit		.10000							
Low Limit		-.01000							

Elem	Na5895	Ni2316	P_1782	Pb2203	S_1820	Sb2068	Se1960	Si2881	Sn1899
Line	589.592 {57}	231.604 {446}	178.284 {489}	220.353 {453}	182.034 {485}	206.833 {463}	196.090 {472}	288.158 {117}	189.989 {477}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	1.3575	.10819	1.8113	.13353	.45803	.00111	W -.00854	4.0211	.01035
Stddev	.0001	.00004	.0085	.00245	.00329	.00207	.00947	.0220	.00175
%RSD	.00557	.03433	.47014	1.8330	.71869	185.91	110.90	.54634	16.916

#1	1.3574	.10816	1.8053	.13180	.46036	.00258	-.00184	4.0366	.01158
#2	1.3575	.10821	1.8174	.13526	.45570	-.00035	-.01524	4.0055	.00911

Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Warn	Chk Pass	Chk Pass
High Limit							5.0000		
Low Limit							-.00500		

Elem	Sr4077	Th2837	Ti3349	Ti1908	U_3701	V_2924	Zn2062	Zr3391
Line	407.771 {83}	283.730 {119}	334.904 {101}	190.856 {477}	370.152 {91}	292.402 {115}	206.200 {163}	339.198 {99}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.52086	.04294	.79376	.00013	F -.20683	.25713	.65963	.02746
Stddev	.00248	.00143	.00252	.00005	.02991	.00074	.00066	.00020
%RSD	.47616	3.3383	.31780	39.713	14.460	.28684	.09981	.74006

#1	.51911	.04193	.79198	.00010	-.18568	.25661	.65917	.02731
#2	.52262	.04396	.79554	.00017	-.22797	.25765	.66010	.02760

Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Fail	Chk Pass	Chk Pass	Chk Pass
High Limit					50.000			
Low Limit					-.10000			

Int. Std.	Y_2243	Y_3600	Y_3774
Line	224.306 {450}	360.073 {94}	377.433 {89}
Units	Cts/S	Cts/S	Cts/S
Avg	1667.0	32716.	6110.4
Stddev	6.1	85.	15.3
%RSD	.36377	.25886	.24990

#1	1671.3	32776.	6121.2
#2	1662.8	32656.	6099.6

Sample Name: ccvh-3900196 Acquired: 5/21/2016 6:38:05 Type: QC
Method: 6500_026(v10) Mode: CONC Corr. Factor: 1.000000
User: kellyca Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	Ag3280	Al3092	As1890	B_2089	Ba4554	Be3130	Bi2230	Ca3179	Cd2288	Co2286	Cr2055	Cu3247	Fe2714
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	-.00084	46.898	-.00368	.00514	.00050	-.00033	1.0161	-.05079	-.00086	.00281	-.00033	.00810	47.457
Stddev	.00011	.055	.00404	.00093	.00006	.00002	.0060	.00248	.00006	.00013	.00006	.00056	.111
%RSD	12.805	.11794	109.62	18.132	12.163	7.4231	.59430	4.8824	6.6126	4.7199	17.302	6.8853	.23453

#1	-.00076	46.859	-.00654	.00580	.00055	-.00032	1.0204	-.05254	-.00082	.00272	-.00037	.00771	47.535
#2	-.00091	46.937	-.00083	.00448	.00046	-.00035	1.0118	-.04903	-.00091	.00290	-.00029	.00849	47.378

Check ?	None	Chk Pass	None	None	None	None	Chk Pass	None	None	None	None	None	Chk Pass
Value													
Range													

Elem	K_7664	Li6707	Mg2790	Mn2576	Mo2020	Na8183	Ni2316	P_1782	Pb2203	S_1820	Sb2068	Se1960	Si2881
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.11150	-.00038	.19041	.00323	-.00187	259.38	-.00059	.00353	.00131	4.9251	.00014	-.00142	-.01242
Stddev	.05781	.00036	.01507	.00034	.00047	.55	.00030	.00214	.00105	.0079	.00044	.00239	.01529
%RSD	51.852	95.023	7.9141	10.664	24.994	.21182	51.076	60.532	80.448	.16005	301.32	168.78	123.17

#1	.15238	-.00013	.17976	.00299	-.00220	259.00	-.00037	.00202	.00206	4.9195	-.00016	.00027	-.02323
#2	.07062	-.00064	.20107	.00348	-.00154	259.77	-.00080	.00504	.00057	4.9307	.00045	-.00310	-.00160

Check ?	None	None	None	None	None	Chk Pass	None	None	None	Chk Pass	None	None	None
Value													
Range													

Elem	Sn1899	Sr4077	Th2837	Ti3349	Ti1908	U_3701	V_2924	Zn2062	Zr3391
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.00252	.00035	4.9029	.02637	-.00423	9.9983	-.01580	-.00118	-.00561
Stddev	.00210	.00006	.0042	.00019	.00131	.0391	.00008	.00177	.00072
%RSD	83.490	16.500	.08627	.70970	30.912	.39139	.50749	149.80	12.884

#1	.00103	.00040	4.8999	.02651	-.00330	10.026	-.01574	.00007	-.00510
#2	.00401	.00031	4.9059	.02624	-.00515	9.9706	-.01586	-.00244	-.00612

Check ?	None	None	Chk Pass	None	None	Chk Pass	None	None	None
Value									
Range									

Int. Std.	Y_2243	Y_3600	Y_3774
Units	Cts/S	Cts/S	Cts/S
Avg	1535.1	30313.	5488.9
Stddev	.4	29.	10.2
%RSD	.02415	.09641	.18624

#1	1535.4	30333.	5496.1
#2	1534.8	30292.	5481.7

Sample Name: ccv-3900195 Acquired: 5/21/2016 6:40:50 Type: QC
Method: 6500_026(v10) Mode: CONC Corr. Factor: 1.000000
User: kellyca Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	Ag3280	Al1670	As1890	B_2089	Ba4554	Be3130	Bi2230	Ca3179	Cd2288	Co2286	Cr2055	Cu3247
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.50206	F .59868	1.0012	.53009	.50152	.50804	-.00286	5.0002	.51576	.51385	.50495	.50502
Stddev	.00156	.06624	.0024	.00111	.00043	.00083	.00026	.0323	.00027	.00096	.00015	.00030
%RSD	.31124	11.065	.24493	.21002	.08656	.16337	9.1311	.64575	.05264	.18700	.02986	.05887

#1	.50316	.64552	.99948	.52930	.50183	.50862	-.00304	4.9774	.51596	.51317	.50484	.50523
#2	.50095	.55184	1.0029	.53088	.50122	.50745	-.00267	5.0231	.51557	.51453	.50505	.50481

Check ?	Chk Pass	Chk Fail	Chk Pass	Chk Pass	Chk Pass	Chk Pass	None	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Value		.50000										
Range		10.000%										

Elem	Fe2599	K_7664	Li6707	Mg2790	Mn2576	Mo2020	Na5895	Ni2316	P_1782	Pb2203	S_1820	Sb2068
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	2.4446	53.475	1.0964	20.375	.50201	.50995	5.3723	.50820	1.0265	1.0346	.02628	1.0279
Stddev	.0051	.093	.0047	.124	.00259	.00026	.0038	.00003	.0025	.0005	.01264	.0017
%RSD	.21039	.17362	.43193	.60953	.51578	.05052	.07003	.00627	.23933	.05038	48.101	.16394

#1	2.4409	53.541	1.0997	20.463	.50384	.50977	5.3749	.50822	1.0282	1.0350	.03522	1.0291
#2	2.4482	53.410	1.0930	20.287	.50018	.51014	5.3696	.50817	1.0248	1.0342	.01734	1.0267

Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	None	Chk Pass
Value												
Range												

Elem	Se1960	Si2881	Sn1899	Sr4077	Th2837	Ti3349	Ti1908	U_3701	V_2924	Zn2062	Zr3391
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	1.0029	4.9136	.99888	.49648	.00032	.48551	1.0400	.03754	.48693	.50341	.49536
Stddev	.0002	.0330	.00045	.00070	.00169	.00405	.0034	.00428	.00113	.00491	.00372
%RSD	.02160	.67200	.04535	.14182	528.19	.83390	.32271	11.391	.23259	.97591	.75179

#1	1.0031	4.9369	.99920	.49698	-.00087	.48837	1.0424	.04056	.48773	.50688	.49273
#2	1.0028	4.8902	.99856	.49598	.00151	.48265	1.0377	.03451	.48612	.49993	.49800

Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	None	Chk Pass	Chk Pass	None	Chk Pass	Chk Pass	Chk Pass
Value											
Range											

Int. Std.	Y_2243	Y_3600	Y_3774
Units	Cts/S	Cts/S	Cts/S
Avg	1561.1	31270.	5566.7
Stddev	3.2	168.	42.8
%RSD	.20363	.53792	.76841

#1	1563.4	31151.	5597.0
#2	1558.9	31388.	5536.5

Sample Name: ccb Acquired: 5/21/2016 6:43:24 Type: QC
Method: 6500_026(v10) Mode: CONC Corr. Factor: 1.000000
User: kellyca Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	Ag3280	Al1670	As1890	B_2089	Ba4554	Be3130	Bi2230	Ca3179	Cd2288	Co2286	Cr2055	Cu3247
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.00035	.00740	-.00009	F .00469	-.00012	-.00000	.00167	.00062	.00010	-.00008	.00005	.00062
Stddev	.00083	.00106	.00775	.00074	.00007	.00003	.00060	.00138	.00020	.00035	.00043	.00016
%RSD	240.33	14.353	9020.0	15.861	60.837	1289.1	35.795	222.62	201.25	455.23	896.52	25.568

#1	.00094	.00665	-.00557	.00521	-.00007	.00002	.00125	.00160	.00025	-.00033	-.00026	.00073
#2	-.00024	.00815	.00539	.00416	-.00018	-.00002	.00209	-.00036	-.00004	.00017	.00035	.00051

Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Fail	Chk Pass	Chk Pass	None	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit				.00312								
Low Limit				-.00312								

Elem	Fe2599	K_7664	Li6707	Mg2790	Mn2576	Mo2020	Na5895	Ni2316	P_1782	Pb2203	S_1820	Sb2068
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.01119	.13956	-.00065	.00627	.00016	.00061	.02539	-.00001	-.00217	.00113	.00311	.00151
Stddev	.00026	.02861	.00025	.00164	.00001	.00007	.00323	.00081	.00214	.00102	.01005	.00079
%RSD	2.3040	20.500	38.323	26.103	5.3107	12.191	12.708	6393.3	98.424	89.794	323.54	52.494

#1	.01101	.11933	-.00082	.00743	.00015	.00056	.02767	-.00059	-.00066	.00185	-.00400	.00207
#2	.01137	.15979	-.00047	.00512	.00016	.00066	.02311	.00056	-.00368	.00041	.01021	.00095

Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	None	Chk Pass
High Limit												
Low Limit												

Elem	Se1960	Si2881	Sn1899	Sr4077	Th2837	Ti3349	Ti1908	U_3701	V_2924	Zn2062	Zr3391
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	-.00434	-.00974	.00006	.00008	-.00313	.00022	.00093	.01481	-.00020	-.00011	.00015
Stddev	.00187	.00606	.00058	.00007	.00042	.00018	.00116	.00311	.00025	.00019	.00173
%RSD	43.054	62.272	944.73	81.187	13.576	79.466	125.25	21.021	125.28	170.58	1150.2

#1	-.00302	-.00545	-.00035	.00004	-.00343	.00035	.00175	.01261	-.00038	-.00025	-.00107
#2	-.00566	-.01402	.00047	.00013	-.00283	.00010	.00011	.01701	-.00002	.00002	.00138

Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit											
Low Limit											

Int. Std.	Y_2243	Y_3600	Y_3774
Units	Cts/S	Cts/S	Cts/S
Avg	1597.2	32160.	5621.3
Stddev	3.5	75.	12.7
%RSD	.22065	.23343	.22512

#1	1594.7	32107.	5612.3
#2	1599.7	32213.	5630.2

Sample Name: ccvl-3903059 Acquired: 5/21/2016 6:46:09 Type: QC
Method: 6500_026(v10) Mode: CONC Corr. Factor: 1.000000
User: kellyca Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	Ag3280	Al1670	As1890	B_2089	Ba4554	Be3130	Bi2230	Ca3179	Cd2288	Co2286	Cr2055	Cu3247
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	F -.00000	F .00360	F -.00341	F .00341	F .00026	F .00002	F -.00074	F .00407	F .00003	F -.00058	F -.00011	F .00011
Stddev	.00010	.00209	.00002	.00073	.00013	.00001	.00253	.00341	.00030	.00046	.00001	.00034
%RSD	12049.	57.884	.61805	21.314	49.163	61.946	343.90	83.736	1046.1	79.555	12.768	294.06
#1	-.00007	.00213	-.00342	.00392	.00017	.00003	-.00253	.00648	.00024	-.00026	-.00013	-.00012
#2	.00007	.00508	-.00340	.00289	.00034	.00001	.00105	.00166	-.00018	-.00091	-.00010	.00035
Check ?	Chk Fail	Chk Fail	Chk Fail	Chk Fail	Chk Fail	Chk Fail	Chk Fail	Chk Fail	Chk Fail	Chk Fail	Chk Fail	Chk Fail
Value	.01000	.10000	.01500	.10000	.01000	.00100	.10000	.20000	.00500	.01000	.01000	.01500
Range	-30.000%	-30.000%	-30.000%	-30.000%	-30.000%	-30.000%	-30.000%	-30.000%	-30.000%	-30.000%	-30.000%	-30.000%
Elem	Fe2599	K_7664	Li6707	Mg2790	Mn2576	Mo2020	Na5895	Ni2316	P_1782	Pb2203	S_1820	Sb2068
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	F .00872	F .09606	F -.00001	F .00998	F .00014	F .00011	F .02347	F -.00030	F -.00074	F -.00049	.00357	F .00211
Stddev	.00182	.04182	.00035	.00281	.00011	.00077	.00796	.00016	.00006	.00062	.00069	.00035
%RSD	20.891	43.536	3121.2	28.103	78.796	707.22	33.899	54.391	7.9527	127.89	19.456	16.696
#1	.00744	.06649	.00024	.00800	.00006	.00066	.02909	-.00018	-.00070	-.00005	.00308	.00186
#2	.01001	.12563	-.00026	.01197	.00022	-.00044	.01784	-.00042	-.00079	-.00093	.00406	.00236
Check ?	Chk Fail	Chk Fail	Chk Fail	Chk Fail	Chk Fail	Chk Fail	Chk Fail	Chk Fail	Chk Fail	Chk Fail	None	Chk Fail
Value	.10000	3.0000	.01000	.20000	.01000	.02000	1.0000	.04000	3.0000	.00900		.02000
Range	-30.000%	-30.000%	-30.000%	-30.000%	-30.000%	-30.000%	-30.000%	-30.000%	-30.000%	-30.000%		-30.000%
Elem	Se1960	Si2881	Sn1899	Sr4077	Th2837	Ti3349	Tl1908	U_3701	V_2924	Zn2062	Zr3391	
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	
Avg	F .00176	F .00294	F -.00012	F .00012	F -.00592	F .00026	F -.00180	F .03213	F .00023	F -.00042	F .00060	
Stddev	.00273	.00615	.00225	.00004	.00121	.00019	.00153	.00734	.00050	.00092	.00016	
%RSD	154.54	208.95	1894.8	33.801	20.417	74.105	84.983	22.849	220.49	217.37	25.858	
#1	-.00016	.00729	.00147	.00009	-.00507	.00040	-.00288	.03733	.00059	.00023	.00072	
#2	.00369	-.00140	-.00171	.00015	-.00677	.00012	-.00072	.02694	-.00013	-.00107	.00049	
Check ?	Chk Fail	Chk Fail	Chk Fail	Chk Fail	Chk Fail	Chk Fail	Chk Fail	Chk Fail	Chk Fail	Chk Fail	Chk Fail	
Value	.01500	.50000	.10000	.01000	.01500	.01000	.01500	.06000	.01000	.02000	.01500	
Range	-30.000%	-30.000%	-30.000%	-30.000%	-30.000%	-30.000%	-30.000%	-30.000%	-30.000%	-30.000%	-30.000%	
Int. Std.	Y_2243	Y_3600	Y_3774									
Units	Cts/S	Cts/S	Cts/S									
Avg	1590.5	32098.	5563.9									
Stddev	2.5	158.	1.7									
%RSD	.15790	.49297	.03026									
#1	1592.3	32210.	5562.7									
#2	1588.7	31986.	5565.1									

LIMS Batch Number(s): 202310303-5		Filename(s): 26a052010	
Analyst(s) Reviewer(s) Date: CE/ST/11/16		Instrument ID (circle one): ICP25 ICP26 Method (circle): Standard ICP-MS QA/QC: Other: (circle one) Circle: (circle one) (TR) (PD) (GC/MS) (GC/MSD)	
Matrix (circle): Solid			
Leadline			
Review Items			
Yes	No	NA	2 nd Rev
If No, why is data reportable?			
A. Calibration/Instrument Run QC			
1. Instrument calibrated per lab SOP?	✓		
2. Reanalysis of Calibration Standards before samples:	✓		
3. ICP/ICP-MS: run before samples, 10% frequency, & closing	✓		
4. ICP/ICP-MS: Result < LOD/2x MDL (DOD or special project) frequency initial, 10%, & closing - 90-110% recovery, 5% RSD (6010) 95-105% recovery, 3% RSD (200.7)	✓		
5. ICP/ICP-MS: 70-130% recovery (6010)	✓		
6. ICP/ICP-MS: run before samples ICP/ICP-MS for non-spiked 1/2x RL <LOD/2x MDL for DOD or special project ICP/ICP-MS for spiked elements 80-120%	✓		
7. RL level check standard (CNI): 50-150% (routine) 80-120% recovery (DOD or special projects)	✓		
B. Client Sample and QC Sample Results			
1. Samples with target element concentrations > 90% linear range diluted and reanalyzed? (200.7)	✓		
2. Were all hits reported from a run with interfering elements < linear range? (1. Flags investigated?)	✓		
3. Internal standard (IS) response 1.30% of ICP/ICP-MS?	✓		
C. Preparation/Matrix QC			
1. Method Blank: one per preparation batch result < 1% RL (routine)	✓		
2. LCS: one per preparation batch 80-120% recovery or historical (routine) 85-115% recovery or historical (200.7); project limits (other)	✓		
3. MS/MSD or MS/Dup frequency: a pair per batch (routine) a pair per 10 samples (200.7)	✓		
D. Preparation/Matrix QC (cont.)			
4. MS/MSD recovery & RPD: 75-125% recovery or historical (routine) 70-130% recovery or historical (200.7) 20% RPD project limits (other)	✓		

Review Items	Yes	No	NA	2 nd Rev	If No, why is data reportable?
5. If ICP/MS <50% and sample result 80-100% of toxicity characteristic limit, was MSA run?			✓		
6. Serial dilution: present for each prep batch (routine) Required if MS/MSD fail (DOD/VS) run at 5x dilution of parent sample ≤ 10% difference	✓				
7. Post digestion spike: Required if MS/MSD fail (DOD and 6010) or by client request 75-125% recovery	✓				
D. Raw Data & TALS Data Entry					
1. TALS Sample List Tab	✓				
a. LIMS Sample ID's / Containers are correct	✓				
b. Method and matrix are correct	✓				
c. Date and time are correct	✓				
d. Dilutions are correct	✓				
e. Correct suffix designated: e.g., DU, (where applicable)	✓				
2. TALS Sample Results Tab	✓				
a. All reported analytes are marked Primary or Secondary	✓				
b. All unused data are marked Rejected or Accepted	✓				
c. Out of control QC is clearly identified	✓				
d. Any data that has a qualifier is reviewed with appropriate action taken (NCA if needed)	✓				
e. The attached data file includes the filename, instrument, and analyst initials	✓				
3. TALS Worksheet Tab is complete and correct	✓				
4. TALS Reagent Tab is complete and correct	✓				
5. TALS QC Link Tab is correct	✓				
6. TALS Batch Information Screen documentation is complete	✓				
7. TALS Status set to appropriate review level	✓				
E. Final Report and NCA's (2 nd level review only)					
1. Were all job/project requirements met?	✓				
2. Results for samples and QC correct on final report?	✓				
3. Are all necessary scanned documents in TALS?	✓				
4. NCA's reviewed for applicability, correct references to batches, grammar/typographical errors?	✓				
5. Raw Data PDF attached in document	✓				
Comments:					

2nd Reviewer:

Review Date:

5/23/16

Sample Name: ICIS Acquired: 5/23/2016 11:36:30 Type: Cal
Method: 6500_026(v10) Mode: IR Corr. Factor: 1.000000
User: kellyca Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	Ag3280	Al1670	Al3092	As1890	B_2089	Ba4554	Be3130	Bi2230	Ca3179	Cd2288	Co2286	Cr2055
Units	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S
Avg	-.00168	.00056	.00086	-.00058	.00091	-.00093	.00043	-.00177	.00830	.00158	-.00038	.00021
Stddev	.00007	.00009	.00005	.00009	.00002	.00017	.00018	.00001	.00057	.00042	.00009	.00000
%RSD	4.1970	15.767	6.3694	15.320	2.6773	17.804	41.740	.60251	6.8774	26.800	23.869	2.0156
#1	-.00163	.00062	.00090	-.00064	.00089	-.00105	.00056	-.00177	.00871	.00188	-.00031	.00021
#2	-.00173	.00049	.00082	-.00052	.00093	-.00081	.00031	-.00178	.00790	.00128	-.00044	.00022
Elem	Cu3247	Fe2599	Fe2714	K_7664	Li6707	Mg2790	Mn2576	Mo2020	Na5895	Na8183	Ni2316	P_1782
Units	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S
Avg	.00560	.00039	.00009	-.00036	-.00074	-.00002	.00007	.00037	.00230	-.01219	-.00123	.00002
Stddev	.00012	.00004	.00019	.00017	.00057	.00002	.00010	.00011	.00004	.00005	.00031	.00006
%RSD	2.1846	9.0101	214.68	46.490	77.217	93.396	137.47	28.536	1.7413	.37239	25.682	351.94
#1	.00552	.00042	-.00005	-.00048	-.00114	-.00001	.00000	.00029	.00233	-.01222	-.00100	-.00003
#2	.00569	.00037	.00023	-.00024	-.00033	-.00004	.00014	.00044	.00227	-.01216	-.00145	.00006
Elem	Pb2203	S_1820	Sb2068	Se1960	Si2881	Sn1899	Sr4077	Th2837	Ti3349	Ti1908	U_3701	V_2924
Units	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S
Avg	-.00067	.00027	.00017	-.00033	.00065	.00037	-.00277	-.00009	-.00026	-.00045	-.00001	.00016
Stddev	.00011	.00034	.00039	.00024	.00045	.00017	.00098	.00005	.00000	.00004	.00009	.00000
%RSD	15.646	123.05	227.71	72.851	68.926	44.495	35.242	54.138	.93312	8.8111	1451.6	3.0698
#1	-.00075	.00051	-.00011	-.00050	.00033	.00049	-.00346	-.00005	-.00026	-.00048	.00006	.00016
#2	-.00060	.00004	.00045	-.00016	.00097	.00026	-.00208	-.00012	-.00026	-.00043	-.00007	.00016
Elem	Zn2062	Zr3391										
Units	Cts/S	Cts/S										
Avg	.00001	-.00080										
Stddev	.00001	.00007										
%RSD	79.703	8.9867										
#1	.00001	-.00075										
#2	.00002	-.00085										
Int. Std.	Y_2243	Y_3600	Y_3774									
Units	Cts/S	Cts/S	Cts/S									
Avg	1516.9	30672.	6042.8									
Stddev	.8	4.	16.0									
%RSD	.05404	.01358	.26539									
#1	1516.3	30675.	6031.5									
#2	1517.5	30669.	6054.2									

Sample Name: IC1 Acquired: 5/23/2016 11:39:15 Type: Cal
Method: 6500_026(v10) Mode: IR Corr. Factor: 1.000000
User: kellyca Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	Ag3280	Al1670	As1890	B_2089	Ba4554	Be3130	Ca3179	Cd2288	Co2286	Cr2055	Cu3247	Fe2599	K_7664
Units	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S
Avg	.22960	.19955	.12407	.37775	6.3286	5.3806	1.1828	1.6495	.87995	1.0721	.35763	.54159	5.8327
Stddev	.00045	.00042	.00004	.00167	.0159	.0011	.0011	.0029	.00159	.0010	.00085	.00081	.0045
%RSD	.19524	.20892	.03349	.44195	.25175	.02037	.09359	.17590	.18053	.09568	.23704	.14964	.07654

#1	.22992	.19984	.12404	.37657	6.3174	5.3798	1.1821	1.6475	.87883	1.0728	.35823	.54102	5.8358
#2	.22928	.19926	.12410	.37893	6.3399	5.3814	1.1836	1.6516	.88107	1.0714	.35703	.54216	5.8295

Elem	Li6707	Mg2790	Mn2576	Mo2020	Na5895	Ni2316	P_1782	Pb2203	Sb2068	Se1960	Si2881	Sn1899	Sr4077
Units	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S
Avg	3.1265	.48098	.89412	.59712	1.9645	.62477	.11433	.42144	.26144	.10494	.25222	.30006	11.908
Stddev	.0016	.00026	.00117	.00120	.0092	.00027	.00019	.00020	.00109	.00016	.00140	.00004	.004
%RSD	.05011	.05437	.13114	.20020	.46780	.04268	.16240	.04864	.41538	.15192	.55342	.01312	.03627

#1	3.1276	.48116	.89495	.59797	1.9580	.62496	.11420	.42130	.26068	.10483	.25123	.30009	11.905
#2	3.1254	.48079	.89330	.59628	1.9710	.62459	.11446	.42159	.26221	.10506	.25321	.30004	11.911

Elem	Ti3349	Ti1908	V_2924	Zn2062	Zr3391
Units	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S
Avg	.29902	.21727	.15846	.01466	.31164
Stddev	.00009	.00096	.00034	.00004	.00032
%RSD	.03131	.43974	.21193	.25807	.10387

#1	.29909	.21660	.15870	.01464	.31141
#2	.29895	.21795	.15823	.01469	.31187

Int. Std.	Y_2243	Y_3600	Y_3774
Units	Cts/S	Cts/S	Cts/S
Avg	1486.9	29629.	5972.4
Stddev	3.4	35.	25.5
%RSD	.22895	.11875	.42728

#1	1489.3	29654.	5990.5
#2	1484.5	29604.	5954.4

Sample Name: IC2 Acquired: 5/23/2016 11:41:48 Type: Cal
Method: 6500_026(v10) Mode: IR Corr. Factor: 1.000000
User: kellyca Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	Al3092	Bi2230	Fe2714	Na8183	S_1820	Th2837	U_3701
Units	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S
Avg	3.2225	.31718	.54408	2.8069	.47423	.46069	.14501
Stddev	.0039	.00020	.00178	.0095	.00081	.00005	.00011
%RSD	.12221	.06416	.32788	.33940	.17135	.01093	.07572
#1	3.2253	.31733	.54282	2.8137	.47366	.46065	.14509
#2	3.2197	.31704	.54534	2.8002	.47481	.46073	.14493
Int. Std.	Y_2243	Y_3600	Y_3774				
Units	Cts/S	Cts/S	Cts/S				
Avg	1446.9	29167.	6066.4				
Stddev	5.2	18.	33.2				
%RSD	.36182	.06167	.54759				
#1	1450.6	29179.	6089.9				
#2	1443.2	29154.	6043.0				

Sample Name: S1-3900193 Acquired: 5/23/2016 11:44:33 Type: QC
Method: 6500_026(v10) Mode: CONC Corr. Factor: 1.000000
User: kellyca Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	Ag3280	Al1670	As1890	B_2089	Ba4554	Be3130	Bi2230	Ca3179	Cd2288	Co2286	Cr2055	Cu3247	Fe2599	K_7664
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.97788	.99526	1.9615	.98003	.97836	.98032	.00114	9.7762	.98303	.98458	.98651	.97583	4.9065	97.983
Stddev	.00212	.01745	.0043	.00027	.00348	.00351	.00136	.0044	.00304	.00170	.00172	.00176	.0239	.336
%RSD	.21633	1.7534	.22162	.02717	.35571	.35808	119.30	.04492	.30907	.17271	.17460	.17987	.48673	.34339

#1	.97639	1.0076	1.9646	.98021	.97590	.97784	.00210	9.7730	.98518	.98578	.98773	.97459	4.8896	97.745
#2	.97938	.98292	1.9584	.97984	.98082	.98280	.00018	9.7793	.98088	.98338	.98530	.97708	4.9234	98.221

Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	None	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Value														
Range														

Elem	Li6707	Mg2790	Mn2576	Mo2020	Na5895	Na8183	Ni2316	P_1782	Pb2203	S_1820	Sb2068	Se1960	Si2881	Sn1899
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	1.9647	39.011	.97875	.98540	9.8165	10.243	.98467	1.9489	1.9698	.00863	1.9540	1.9510	9.7477	1.9582
Stddev	.0078	.036	.00162	.00185	.0097	.191	.00223	.0002	.0082	.00135	.0039	.0100	.0759	.0080
%RSD	.39656	.09239	.16550	.18825	.09913	1.8654	.22627	.00931	.41499	15.694	.19938	.51416	.77825	.40675

#1	1.9592	38.986	.97760	.98409	9.8097	10.108	.98625	1.9490	1.9756	.00768	1.9513	1.9581	9.6941	1.9638
#2	1.9702	39.037	.97989	.98671	9.8234	10.378	.98310	1.9488	1.9640	.00959	1.9568	1.9439	9.8013	1.9526

Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	None	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Value														
Range														

Elem	Sr4077	Th2837	Ti3349	Ti1908	U_3701	V_2924	Zn2062	Zr3391
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.97581	.00716	.97801	1.9479	.01943	.97210	.98108	.97502
Stddev	.00311	.00345	.00108	.0009	.02810	.00260	.00791	.00100
%RSD	.31911	48.150	.11025	.04523	144.61	.26739	.80619	.10296

#1	.97361	.00472	.97725	1.9485	.03931	.97026	.98668	.97573
#2	.97801	.00960	.97877	1.9473	-.00044	.97394	.97549	.97431

Check ?	Chk Pass	None	Chk Pass	Chk Pass	None	Chk Pass	Chk Pass	Chk Pass
Value								
Range								

Int. Std.	Y_2243	Y_3600	Y_3774
Units	Cts/S	Cts/S	Cts/S
Avg	1509.5	30106.	6072.4
Stddev	1.1	22.	30.7
%RSD	.07565	.07159	.50502

#1	1510.3	30121.	6094.1
#2	1508.6	30091.	6050.7

Sample Name: S2-3900194 Acquired: 5/23/2016 11:47:05 Type: QC
Method: 6500_026(v10) Mode: CONC Corr. Factor: 1.000000
User: kellyca Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	Ag3280	Al3092	As1890	B_2089	Ba4554	Be3130	Bi2230	Ca3179	Cd2288	Co2286	Cr2055	Cu3247	Fe2714
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.00492	100.07	-.00202	.00381	.00061	-.00035	2.0209	-.12166	-.00244	.00560	-.00083	.01535	99.823
Stddev	.00109	.11	.00246	.00030	.00006	.00013	.0069	.00257	.00003	.00034	.00026	.00056	.008
%RSD	22.108	.11285	121.43	7.7450	10.241	36.160	.34091	2.1118	1.3037	6.0620	31.010	3.6667	.00775

#1	.00569	100.15	-.00029	.00402	.00057	-.00044	2.0160	-.11984	-.00241	.00583	-.00101	.01575	99.818
#2	.00415	99.990	-.00376	.00360	.00066	-.00026	2.0257	-.12347	-.00246	.00536	-.00064	.01495	99.829

Check ?	None	Chk Pass	None	None	None	None	Chk Pass	None	None	None	None	None	Chk Pass
Value													
Range													

Elem	K_7664	Li6707	Mg2790	Mn2576	Mo2020	Na8183	Ni2316	P_1782	Pb2203	S_1820	Sb2068	Se1960	Si2881
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.04992	-.00004	.31413	-.00109	-.00387	501.03	-.00149	.00807	-.00470	10.094	.00033	.01982	-.01036
Stddev	.00600	.00034	.03056	.00069	.00034	.55	.00008	.00031	.00005	.020	.00404	.00961	.00195
%RSD	12.023	784.33	9.7281	63.484	8.7340	.10927	5.3068	3.8445	1.1212	.19684	1207.9	48.469	18.865

#1	.04567	.00020	.33574	-.00060	-.00411	501.41	-.00155	.00829	-.00473	10.080	.00319	.01303	-.01174
#2	.05416	-.00028	.29253	-.00159	-.00363	500.64	-.00144	.00785	-.00466	10.108	-.00252	.02661	-.00898

Check ?	None	None	None	None	None	Chk Pass	None	None	None	Chk Pass	None	None	None
Value													
Range													

Elem	Sn1899	Sr4077	Th2837	Ti3349	Ti1908	U_3701	V_2924	Zn2062	Zr3391
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.00259	.00059	9.9506	.04722	-.00505	20.066	-.03233	-.00107	.00493
Stddev	.00076	.00003	.0070	.00070	.00313	.016	.00025	.00093	.00025
%RSD	29.335	5.0289	.07056	1.4840	61.946	.07850	.76771	86.553	5.0562

#1	.00205	.00057	9.9555	.04772	-.00727	20.055	-.03215	-.00042	.00510
#2	.00313	.00062	9.9456	.04673	-.00284	20.077	-.03250	-.00173	.00475

Check ?	None	None	Chk Pass	None	None	Chk Pass	None	None	None
Value									
Range									

Int. Std.	Y_2243	Y_3600	Y_3774
Units	Cts/S	Cts/S	Cts/S
Avg	1443.4	29189.	6070.5
Stddev	2.8	5.	10.4
%RSD	.19449	.01817	.17199

#1	1445.4	29193.	6063.1
#2	1441.4	29185.	6077.9

Sample Name: icvh-3897651 Acquired: 5/23/2016 11:50:12 Type: QC
Method: 6500_026(v10) Mode: CONC Corr. Factor: 1.000000
User: kellyca Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	Ag3280	Al3092	As1890	B_2089	Ba4554	Be3130	Bi2230	Ca3179	Cd2288	Co2286	Cr2055	Cu3247
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.00099	39.289	-.00090	.00077	.00071	-.00005	.50869	-.04009	-.00056	.00178	.00023	.00384
Stddev	.00073	.486	.00074	.00030	.00004	.00016	.00129	.00044	.00038	.00032	.00015	.00004
%RSD	73.625	1.2375	82.984	39.254	5.6293	317.25	.25351	1.0886	68.213	17.952	65.728	1.0966
#1	.00151	38.945	-.00142	.00055	.00074	.00006	.50961	-.03978	-.00083	.00156	.00012	.00387
#2	.00048	39.633	-.00037	.00098	.00068	-.00016	.50778	-.04039	-.00029	.00201	.00034	.00381
Check ?	None	Chk Pass	None	None	None	None	Chk Pass	None	None	None	None	None
Value												
Range												
Elem	Fe2714	K_7664	Li6707	Mg2790	Mn2576	Mo2020	Na8183	Ni2316	P_1782	Pb2203	S_1820	Sb2068
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	77.917	-.02171	-.00108	.07196	-.00138	-.00187	40.303	-.00060	-.00045	-.00330	W 3.7758	.00166
Stddev	.613	.00017	.00061	.00042	.00010	.00031	.058	.00016	.00162	.00342	.0012	.00160
%RSD	.78683	.78469	56.886	.58222	7.4728	16.315	.14313	25.896	356.62	103.65	.03117	96.256
#1	77.484	-.02159	-.00151	.07226	-.00131	-.00166	40.262	-.00071	-.00160	-.00088	3.7767	.00053
#2	78.351	-.02183	-.00064	.07167	-.00146	-.00209	40.344	-.00049	.00069	-.00571	3.7750	.00279
Check ?	Chk Pass	None	None	None	None	None	Chk Pass	None	None	None	Chk Warn	None
Value											4.0000	
Range											-5.0000%	
Elem	Se1960	Si2881	Sn1899	Sr4077	Th2837	Ti3349	Ti1908	U_3701	V_2924	Zn2062	Zr3391	
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	
Avg	.00173	.00665	.00145	.00017	2.9345	.01430	.00114	5.1977	-.00790	-.00132	.00541	
Stddev	.00247	.00586	.00191	.00002	.0020	.00009	.00038	.0236	.00059	.00028	.00238	
%RSD	142.29	88.092	131.24	10.626	.06866	.66057	33.045	.45448	7.4601	20.863	43.941	
#1	-.00001	.01080	.00010	.00018	2.9331	.01423	.00141	5.2144	-.00748	-.00152	.00373	
#2	.00348	.00251	.00280	.00016	2.9360	.01436	.00088	5.1810	-.00831	-.00113	.00710	
Check ?	None	None	None	None	Chk Pass	None	None	Chk Pass	None	None	None	
Value												
Range												
Int. Std.	Y_2243	Y_3600	Y_3774									
Units	Cts/S	Cts/S	Cts/S									
Avg	1531.4	31175.	6315.4									
Stddev	4.3	89.	14.7									
%RSD	.28226	.28521	.23275									
#1	1528.3	31112.	6325.7									
#2	1534.5	31237.	6305.0									

Sample Name: icv-3897847 Acquired: 5/23/2016 11:53:16 Type: QC
Method: 6500_026(v10) Mode: CONC Corr. Factor: 1.000000
User: kellyca Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	Ag3280	Al1670	As1890	B_2089	Ba4554	Be3130	Bi2230	Ca3179	Cd2288	Co2286	Cr2055	Cu3247
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.24520	W .26385	.25565	.25061	.24735	.24606	-.00013	1.9629	.24874	.25164	.25324	.24526
Stddev	.00137	.00188	.00045	.00000	.00004	.00002	.00223	.0024	.00069	.00030	.00031	.00011
%RSD	.55717	.71221	.17492	.00158	.01818	.00892	1743.9	.12270	.27609	.12030	.12276	.04563

#1	.24424	.26518	.25596	.25062	.24732	.24607	-.00170	1.9612	.24923	.25142	.25302	.24518
#2	.24617	.26252	.25533	.25061	.24739	.24604	.00145	1.9646	.24826	.25185	.25346	.24534

Check ?	Chk Pass	Chk Warn	Chk Pass	Chk Pass	Chk Pass	Chk Pass	None	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Value		.25000										
Range		5.0000%										

Elem	Fe2599	K_7664	Li6707	Mg2790	Mn2576	Mo2020	Na5895	Ni2316	P_1782	Pb2203	S_1820	Sb2068
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.25164	19.759	.24842	9.9352	.25071	.24830	1.9623	.25586	1.9638	.25724	.00256	.24831
Stddev	.00141	.027	.00042	.0177	.00086	.00009	.0009	.00045	.0093	.00145	.00452	.00005
%RSD	.55980	.13458	.16714	.17821	.34342	.03765	.04389	.17753	.47370	.56455	176.75	.01907

#1	.25064	19.778	.24871	9.9227	.25011	.24836	1.9617	.25554	1.9572	.25827	-.00064	.24835
#2	.25264	19.740	.24813	9.9477	.25132	.24823	1.9629	.25618	1.9703	.25621	.00575	.24828

Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	None	Chk Pass
Value												
Range												

Elem	Se1960	Si2881	Sn1899	Sr4077	Th2837	Ti3349	Ti1908	U_3701	V_2924	Zn2062	Zr3391
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.50545	1.9865	.50034	.24568	.00301	.24154	.52165	.01078	.24084	.24506	.24163
Stddev	.00209	.0050	.00218	.00009	.00116	.00217	.00178	.00505	.00002	.00095	.00161
%RSD	.41378	.25007	.43601	.03855	38.609	.89939	.34212	46.854	.00949	.38720	.66703

#1	.50693	1.9900	.50188	.24575	.00383	.24001	.52291	.01436	.24086	.24439	.24277
#2	.50398	1.9830	.49880	.24562	.00219	.24308	.52039	.00721	.24082	.24573	.24049

Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	None	Chk Pass	Chk Pass	None	Chk Pass	Chk Pass	Chk Pass
Value											
Range											

Int. Std.	Y_2243	Y_3600	Y_3774
Units	Cts/S	Cts/S	Cts/S
Avg	1534.1	31167.	6180.0
Stddev	3.4	65.	3.9
%RSD	.22368	.20698	.06280

#1	1536.6	31213.	6177.3
#2	1531.7	31122.	6182.7

Sample Name: icvl-3907489 Acquired: 5/23/2016 11:55:54 Type: QC
Method: 6500_026(v10) Mode: CONC Corr. Factor: 1.000000
User: kellyca Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	Ag3280	Al1670	As1890	B_2089	Ba4554	Be3130	Bi2230	Ca3179	Cd2288	Co2286	Cr2055	Cu3247
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.00996	.10431	.01228	.09906	.01017	.00098	.10848	.19791	.00503	.01006	.01047	.01508
Stddev	.00019	.00118	.00172	.00012	.00014	.00009	.00044	.00315	.00010	.00034	.00009	.00020
%RSD	1.8870	1.1284	13.985	.12598	1.3839	9.4741	.40841	1.5925	1.9022	3.3873	.83245	1.3218

#1	.00982	.10348	.01107	.09897	.01027	.00091	.10816	.20014	.00509	.01031	.01040	.01493
#2	.01009	.10515	.01350	.09915	.01007	.00105	.10879	.19568	.00496	.00982	.01053	.01522

Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Value												
Range												

Elem	Fe2599	K_7664	Li6707	Mg2790	Mn2576	Mo2020	Na5895	Ni2316	P_1782	Pb2203	S_1820	Sb2068
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.11121	2.9538	.00978	.20056	.01000	.02021	.99136	.04098	2.8498	.00990	-.00191	.02149
Stddev	.00129	.0108	.00016	.00181	.00001	.00024	.00179	.00086	.0029	.00153	.00211	.00051
%RSD	1.1586	.36711	1.6035	.90472	.14406	1.1761	.18093	2.0873	.10162	15.493	110.90	2.3766

#1	.11212	2.9614	.00989	.19928	.00999	.02004	.99263	.04158	2.8478	.00882	-.00041	.02112
#2	.11030	2.9461	.00967	.20184	.01001	.02037	.99010	.04037	2.8519	.01099	-.00340	.02185

Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	None	Chk Pass
Value												
Range												

Elem	Se1960	Si2881	Sn1899	Sr4077	Th2837	Ti3349	Ti1908	U_3701	V_2924	Zn2062	Zr3391
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	F .02299	.50415	.09968	.00980	.01681	.01006	.01920	.07590	.00982	.01762	.01521
Stddev	.01135	.00674	.00024	.00004	.00013	.00008	.00060	.00461	.00013	.00031	.00027
%RSD	49.374	1.3377	.23721	.43394	.79282	.80905	3.1034	6.0749	1.3379	1.7679	1.7488

#1	.03102	.50892	.09951	.00983	.01691	.01000	.01878	.07264	.00991	.01740	.01540
#2	.01496	.49939	.09984	.00977	.01672	.01012	.01962	.07916	.00973	.01784	.01502

Check ?	Chk Fail	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Value	.01500										
Range	30.000%										

Int. Std.	Y_2243	Y_3600	Y_3774
Units	Cts/S	Cts/S	Cts/S
Avg	1550.1	31553.	6116.6
Stddev	.9	98.	27.8
%RSD	.05905	.31109	.45397

#1	1549.5	31484.	6096.9
#2	1550.8	31623.	6136.2

Sample Name: icvl-3907489 Acquired: 5/23/2016 12:01:13 Type: QC
Method: 6500_026(v10) Mode: CONC Corr. Factor: 1.000000
User: kellyca Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	Ag3280	Al1670	As1890	B_2089	Ba4554	Be3130	Bi2230	Ca3179	Cd2288	Co2286	Cr2055	Cu3247
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.00990	.10559	.01599	.10019	.01025	.00104	.11326	.19892	.00489	.01004	.01031	.01459
Stddev	.00049	.00081	.00230	.00053	.00006	.00003	.00039	.00219	.00007	.00000	.00016	.00004
%RSD	4.9046	.76834	14.353	.53354	.55403	3.2372	.34649	1.1010	1.5032	.04731	1.5193	.29075

#1	.00956	.10616	.01762	.10057	.01021	.00102	.11353	.19738	.00484	.01005	.01020	.01456
#2	.01024	.10501	.01437	.09982	.01029	.00107	.11298	.20047	.00495	.01004	.01042	.01462

Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Value												
Range												

Elem	Fe2599	K_7664	Li6707	Mg2790	Mn2576	Mo2020	Na5895	Ni2316	P_1782	Pb2203	S_1820	Sb2068
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.11187	2.9733	.00936	.19945	.01013	.02013	1.0012	.04187	2.8671	.00877	-.00089	.02079
Stddev	.00067	.0179	.00114	.00214	.00003	.00030	.0074	.00077	.0147	.00074	.00497	.00101
%RSD	.59883	.60046	12.128	1.0747	.28034	1.4740	.73652	1.8366	.51254	8.4909	561.24	4.8418

#1	.11140	2.9860	.00856	.20097	.01015	.01992	1.0064	.04132	2.8567	.00824	.00263	.02008
#2	.11235	2.9607	.01017	.19794	.01011	.02034	.99600	.04241	2.8775	.00929	-.00440	.02150

Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	None	Chk Pass
Value												
Range												

Elem	Se1960	Si2881	Sn1899	Sr4077	Th2837	Ti3349	Ti1908	U_3701	V_2924	Zn2062	Zr3391
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	F .02277	.50240	.10194	.00993	.01666	.01012	.01732	.07195	.00971	.01980	.01443
Stddev	.00066	.00852	.00088	.00004	.00036	.00050	.00248	.00790	.00017	.00027	.00067
%RSD	2.8968	1.6950	.86728	.37427	2.1708	4.9313	14.314	10.986	1.7904	1.3516	4.6404

#1	.02323	.49638	.10257	.00996	.01692	.01048	.01907	.07754	.00958	.01999	.01396
#2	.02230	.50842	.10132	.00991	.01641	.00977	.01557	.06636	.00983	.01961	.01491

Check ?	Chk Fail	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Value	.01500										
Range	30.000%										

Int. Std.	Y_2243	Y_3600	Y_3774
Units	Cts/S	Cts/S	Cts/S
Avg	1540.9	31345.	6089.7
Stddev	5.4	1.	1.2
%RSD	.34822	.00270	.01939

#1	1544.7	31344.	6090.5
#2	1537.1	31345.	6088.8

Sample Name: ccvh-3900196 Acquired: 5/23/2016 12:11:03 Type: QC
Method: 6500_026(v10) Mode: CONC Corr. Factor: 1.000000
User: kellyca Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	Ag3280	Al3092	As1890	B_2089	Ba4554	Be3130	Bi2230	Ca3179	Cd2288	Co2286	Cr2055	Cu3247	Fe2714
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.00442	50.233	.00080	.00302	.00229	.00162	1.0188	-.04432	.00053	.00515	.00114	.01009	50.199
Stddev	.00047	.165	.00598	.00067	.00001	.00002	.0056	.00154	.00010	.00017	.00037	.00052	.159
%RSD	10.664	.32871	743.74	22.032	.60269	1.2569	.54832	3.4746	19.223	3.3474	32.827	5.1959	.31595

#1	.00475	50.349	.00503	.00255	.00228	.00164	1.0149	-.04541	.00060	.00503	.00140	.00972	50.311
#2	.00408	50.116	-.00342	.00349	.00230	.00161	1.0228	-.04323	.00046	.00527	.00087	.01046	50.087

Check ?	None	Chk Pass	None	None	None	None	Chk Pass	None	None	None	None	None	Chk Pass
Value													
Range													

Elem	K_7664	Li6707	Mg2790	Mn2576	Mo2020	Na8183	Ni2316	P_1782	Pb2203	S_1820	Sb2068	Se1960	Si2881
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.16127	.00306	.22897	.00097	-.00095	253.08	.00064	.00885	.00111	4.9694	.00585	.01619	.01981
Stddev	.00528	.00040	.00834	.00003	.00022	.43	.00018	.00363	.00189	.0259	.00086	.00026	.00680
%RSD	3.2762	13.161	3.6420	2.6327	23.047	.17015	28.524	40.996	170.35	.52159	14.670	1.6277	34.309

#1	.15754	.00334	.22308	.00095	-.00080	253.38	.00077	.01141	.00245	4.9511	.00646	.01637	.01500
#2	.16501	.00278	.23487	.00098	-.00111	252.77	.00051	.00628	-.00023	4.9878	.00524	.01600	.02462

Check ?	None	None	None	None	None	Chk Pass	None	None	None	Chk Pass	None	None	None
Value													
Range													

Elem	Sn1899	Sr4077	Th2837	Ti3349	Tl1908	U_3701	V_2924	Zn2062	Zr3391
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.00551	.00213	5.0328	.02479	.00301	10.406	-.01416	.00038	.00272
Stddev	.00089	.00003	.0138	.00025	.00085	.035	.00025	.00083	.00100
%RSD	16.214	1.3176	.27501	.99539	28.122	.33502	1.7341	217.16	36.778

#1	.00487	.00215	5.0426	.02496	.00361	10.381	-.01434	.00097	.00201
#2	.00614	.00211	5.0230	.02462	.00241	10.430	-.01399	-.00021	.00342

Check ?	None	None	Chk Pass	None	None	Chk Pass	None	None	None
Value									
Range									

Int. Std.	Y_2243	Y_3600	Y_3774
Units	Cts/S	Cts/S	Cts/S
Avg	1474.2	29734.	6121.9
Stddev	8.4	54.	2.1
%RSD	.56834	.18049	.03511

#1	1480.2	29696.	6123.4
#2	1468.3	29772.	6120.4

Sample Name: ccv-3900195 Acquired: 5/23/2016 12:13:51 Type: QC
Method: 6500_026(v10) Mode: CONC Corr. Factor: 1.000000
User: kellyca Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	Ag3280	Al1670	As1890	B_2089	Ba4554	Be3130	Bi2230	Ca3179	Cd2288	Co2286	Cr2055	Cu3247	Fe2599	K_7664
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.48583	.53933	.96947	.49433	.48405	.48099	.00429	5.0125	.48268	.48660	.48333	.49174	2.4409	48.536
Stddev	.00097	.00156	.00219	.00154	.00026	.00049	.00011	.0200	.00061	.00168	.00093	.00035	.0172	.000
%RSD	.19993	.28955	.22609	.31148	.05291	.10278	2.5009	.39868	.12542	.34465	.19166	.07098	.70399	.00083

#1	.48514	.54044	.96792	.49541	.48423	.48134	.00436	5.0266	.48311	.48779	.48398	.49150	2.4531	48.536
#2	.48651	.53823	.97102	.49324	.48387	.48064	.00421	4.9983	.48225	.48541	.48267	.49199	2.4288	48.536

Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	None	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Value														
Range														

Elem	Li6707	Mg2790	Mn2576	Mo2020	Na5895	Ni2316	P_1782	Pb2203	S_1820	Sb2068	Se1960	Si2881	Sn1899	Sr4077
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.98132	19.606	.48670	.48382	5.0794	.49261	.96355	.99622	.01023	.96483	.98996	4.8094	.97922	.48643
Stddev	.00172	.007	.00186	.00178	.0101	.00059	.00542	.00141	.00124	.00685	.00357	.0122	.00713	.00013
%RSD	.17567	.03345	.38290	.36860	.19779	.11904	.56234	.14157	12.097	.70953	.36095	.25415	.72817	.02635

#1	.98010	19.602	.48538	.48508	5.0865	.49302	.96738	.99522	.00935	.96967	.99249	4.8007	.98426	.48652
#2	.98254	19.611	.48802	.48256	5.0723	.49219	.95972	.99721	.01110	.95999	.98744	4.8180	.97418	.48634

Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	None	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Value														
Range														

Elem	Th2837	Ti3349	Ti1908	U_3701	V_2924	Zn2062	Zr3391
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.00845	.48502	1.0095	.03037	.48318	.48120	.48128
Stddev	.00049	.00206	.0069	.00477	.00349	.00212	.00109
%RSD	5.7960	.42532	.68536	15.701	.72288	.44120	.22634

#1	.00810	.48356	1.0144	.03374	.48071	.47970	.48205
#2	.00879	.48648	1.0046	.02700	.48565	.48271	.48051

Check ?	None	Chk Pass	Chk Pass	None	Chk Pass	Chk Pass	Chk Pass
Value							
Range							

Int. Std.	Y_2243	Y_3600	Y_3774
Units	Cts/S	Cts/S	Cts/S
Avg	1534.8	30698.	6176.8
Stddev	1.9	123.	24.7
%RSD	.12193	.40101	.39933

#1	1533.5	30785.	6159.4
#2	1536.1	30611.	6194.2

Sample Name: ICB Acquired: 5/23/2016 12:16:26 Type: QC
Method: 6500_026(v10) Mode: CONC Corr. Factor: 1.000000
User: kellyca Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	Ag3280	Al1670	As1890	B_2089	Ba4554	Be3130	Bi2230	Ca3179	Cd2288	Co2286	Cr2055	Cu3247
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.00042	-.00028	-.00048	W .00169	.00013	.00003	.00321	.00310	-.00003	-.00020	-.00002	.00007
Stddev	.00059	.00159	.00245	.00017	.00008	.00003	.00378	.00288	.00002	.00002	.00007	.00017
%RSD	140.45	559.77	507.03	10.065	60.161	85.142	117.70	92.861	46.089	9.0558	312.26	228.69
#1	.00000	.00084	.00125	.00182	.00008	.00005	.00588	.00514	-.00004	-.00021	.00003	.00019
#2	.00084	-.00141	-.00222	.00157	.00019	.00001	.00054	.00107	-.00002	-.00018	-.00008	-.00004
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Warn	Chk Pass	Chk Pass	None	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit				.00156								
Low Limit				-.00156								
Elem	Fe2599	K_7664	Li6707	Mg2790	Mn2576	Mo2020	Na5895	Ni2316	P_1782	Pb2203	S_1820	Sb2068
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.00820	-.01088	-.00044	-.00252	-.00003	.00010	.00873	-.00015	.00021	.00044	.00261	W .00390
Stddev	.00258	.01947	.00021	.00241	.00005	.00002	.00359	.00031	.00097	.00031	.00544	.00061
%RSD	31.437	179.04	48.162	95.578	183.55	21.735	41.145	201.58	457.36	68.780	208.52	15.622
#1	.00637	.00289	-.00029	-.00082	-.00006	.00012	.01127	.00006	-.00048	.00066	-.00124	.00347
#2	.01002	-.02465	-.00059	-.00423	.00001	.00009	.00619	-.00037	.00090	.00023	.00645	.00433
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	None	Chk Warn
High Limit												.00314
Low Limit												-.00314
Elem	Se1960	Si2881	Sn1899	Sr4077	Th2837	Ti3349	Ti1908	U_3701	V_2924	Zn2062	Zr3391	
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	
Avg	W .00551	-.00088	.00042	.00003	.00189	.00054	.00016	.01620	.00031	.00039	.00092	
Stddev	.00378	.00314	.00065	.00000	.00060	.00015	.00053	.01307	.00067	.00065	.00123	
%RSD	68.599	354.82	155.79	5.4513	31.722	27.265	341.07	80.677	219.42	166.18	133.29	
#1	.00284	-.00310	-.00004	.00003	.00146	.00064	.00053	.02544	-.00017	-.00007	.00179	
#2	.00819	.00133	.00088	.00003	.00231	.00043	-.00022	.00696	.00078	.00084	.00005	
Check ?	Chk Warn	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	
High Limit	.00486											
Low Limit	-.00486											
Int. Std.	Y_2243	Y_3600	Y_3774									
Units	Cts/S	Cts/S	Cts/S									
Avg	1549.1	31652.	6192.5									
Stddev	5.6	10.	24.5									
%RSD	.35899	.03311	.39508									
#1	1553.0	31645.	6175.2									
#2	1545.2	31660.	6209.8									

Sample Name: cri-3907493 Acquired: 5/23/2016 12:19:33 Type: QC
Method: 6500_026(v10) Mode: CONC Corr. Factor: 1.000000
User: kellyca Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	Ag3280	Al1670	As1890	B_2089	Ba4554	Be3130	Bi2230	Ca3179	Cd2288	Co2286	Cr2055	Cu3247
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.00922	.10645	W .00768	.10011	.00529	.00103	.11983	.19924	.00489	.00478	.01054	.01018
Stddev	.00034	.00119	.00081	.00022	.00010	.00007	.00541	.00415	.00012	.00037	.00009	.00005
%RSD	3.7257	1.1199	10.606	.22396	1.8117	6.9668	4.5144	2.0850	2.5431	7.6798	.87411	.53022
#1	.00897	.10729	.00826	.10027	.00523	.00098	.11600	.20217	.00480	.00452	.01048	.01022
#2	.00946	.10560	.00711	.09995	.00536	.00108	.12365	.19630	.00498	.00504	.01061	.01014
Check ?	Chk Pass	Chk Pass	Chk Warn	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Value			.01000									
Range			-20.000%									
Elem	Fe2599	K_7664	Li6707	Mg2790	Mn2576	Mo2020	Na5895	Ni2316	P_1782	Pb2203	S_1820	Sb2068
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.03011	.97121	.01024	.20984	.00308	.00998	1.0039	.01050	.96518	F .00490	.09785	W .01311
Stddev	.00153	.04172	.00035	.00000	.00001	.00014	.0031	.00041	.00670	.00072	.00687	.00159
%RSD	5.0772	4.2955	3.4133	.00178	.16855	1.4252	.30760	3.9091	.69366	14.688	7.0243	12.140
#1	.02903	.94171	.00999	.20984	.00308	.01008	1.0061	.01021	.96045	.00439	.10271	.01423
#2	.03119	1.0007	.01048	.20984	.00309	.00988	1.0018	.01079	.96992	.00541	.09299	.01198
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Fail	None	Chk Warn
Value										.00300		.01000
Range										50.000%		20.000%
Elem	Se1960	Si2881	Sn1899	Sr4077	Th2837	Ti3349	Ti1908	U_3701	V_2924	Zn2062	Zr3391	
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	
Avg	F .01993	.49286	.01902	.00499	.01193	.01004	W .01223	W .08167	.00990	.00854	.01072	
Stddev	.00040	.01069	.00034	.00002	.00068	.00008	.00014	.01846	.00105	.00006	.00149	
%RSD	2.0048	2.1682	1.7848	.35306	5.7204	.83469	1.1688	22.597	10.656	.68905	13.922	
#1	.02021	.48530	.01878	.00498	.01145	.01010	.01213	.09472	.01064	.00858	.00966	
#2	.01964	.50041	.01926	.00501	.01241	.00998	.01233	.06862	.00915	.00850	.01177	
Check ?	Chk Fail	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Warn	Chk Warn	Chk Pass	Chk Pass	Chk Pass	
Value	.01000						.01000	.06000				
Range	50.000%						20.000%	20.000%				
Int. Std.	Y_2243	Y_3600	Y_3774									
Units	Cts/S	Cts/S	Cts/S									
Avg	1530.3	31013.	6055.6									
Stddev	.5	67.	.4									
%RSD	.03423	.21620	.00581									
#1	1529.9	30966.	6055.8									
#2	1530.7	31060.	6055.3									

Sample Name: icsa-3894254 Acquired: 5/23/2016 12:27:28 Type: QC
Method: 6500_026(v10) Mode: CONC Corr. Factor: 1.000000
User: kellyca Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	Ag3280	Al3092	As1890	B_2089	Ba4554	Be3130	Bi2230	Ca3179	Cd2288	Co2286	Cr2055
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	-.00061	536.73	F -.01016	W -.00290	.00011	.00008	.01097	464.99	.00038	-.00051	.00019
Stddev	.00043	.64	.00324	.00027	.00015	.00008	.00185	2.37	.00014	.00047	.00008
%RSD	70.524	.11884	31.870	9.4764	140.69	93.957	16.834	.50875	35.929	92.763	43.566

#1	-.00031	537.19	-.01245	-.00309	.00021	.00013	.00967	463.32	.00048	-.00018	.00013
#2	-.00091	536.28	-.00787	-.00271	.00000	.00003	.01228	466.66	.00028	-.00084	.00025

Check ?	Chk Pass	Chk Pass	Chk Fail	Chk Warn	Chk Pass	Chk Pass	None	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit			.00880	.00156							
Low Limit			-.00880	-.00156							

Elem	Cu3247	Fe2714	K_7664	Li6707	Mg2790	Mn2576	Mo2020	Na5895	Ni2316	P_1782	Pb2203
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	F .00340	189.52	-.03885	W .00310	510.64	W -.00027	-.00215	.01804	W -.00170	-.00010	W -.00469
Stddev	.00024	.20	.01213	.00010	.89	.00002	.00067	.00447	.00017	.00501	.00326
%RSD	7.1713	.10730	31.211	3.2624	.17381	6.9729	31.140	24.784	10.200	4775.2	69.535

#1	.00322	189.66	-.03028	.00317	510.01	-.00029	-.00168	.01488	-.00182	.00344	-.00699
#2	.00357	189.37	-.04743	.00303	511.26	-.00026	-.00262	.02120	-.00158	-.00365	-.00238

Check ?	Chk Fail	Chk Pass	Chk Pass	Chk Warn	Chk Pass	Chk Warn	Chk Pass	Chk Pass	Chk Warn	Chk Pass	Chk Warn
High Limit	.00272			.00261		.00025			.00129		.00261
Low Limit	-.00272			-.00261		-.00025			-.00129		-.00261

Elem	S_1820	Sb2068	Se1960	Si2881	Sn1899	Sr4077	Th2837	Ti3349	Ti1908	U_3701	V_2924
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	-.05411	F .01177	W .00697	.01351	W .00599	F .00416	-.00816	F .00175	.00167	.03057	F .00514
Stddev	.00093	.00020	.00865	.00372	.00014	.00000	.00296	.00025	.00019	.00504	.00047
%RSD	1.7235	1.7335	124.09	27.535	2.3738	.00050	36.321	14.345	11.349	16.489	9.1901

#1	-.05477	.01192	.00085	.01614	.00609	.00416	-.00606	.00157	.00180	.03413	.00547
#2	-.05345	.01163	.01309	.01088	.00589	.00416	-.01026	.00193	.00153	.02700	.00480

Check ?	None	Chk Fail	Chk Warn	Chk Pass	Chk Warn	Chk Fail	Chk Pass	Chk Fail	Chk Pass	None	Chk Fail
High Limit		.00628	.00486		.00583	.00060		.00119			.00222
Low Limit		-.00628	-.00486		-.00583	-.00060		-.00119			-.00222

Elem	Zn2062	Zr3391
Units	ppm	ppm
Avg	.00029	.00178
Stddev	.00074	.00160
%RSD	252.69	89.800

#1	-.00023	.00065
#2	.00081	.00292

Check ?	Chk Pass	Chk Pass
High Limit		
Low Limit		

Int. Std.	Y_2243	Y_3600	Y_3774
Units	Cts/S	Cts/S	Cts/S
Avg	1331.5	26350.	6067.5
Stddev	2.3	43.	.4
%RSD	.17529	.16440	.00691

#1	1329.8	26381.	6067.2
#2	1333.1	26320.	6067.8

Sample Name: icsab-3900166 Acquired: 5/23/2016 12:31:55 Type: QC

Method: 6500_026(v10) Mode: CONC Corr. Factor: 1.000000

User: kellyca Custom ID1: Custom ID2: Custom ID3:

Comment:

Elem	Ag3280	Al3092	As1890	B_2089	Ba4554	Be3130	Bi2230	Ca3179	Cd2288	Co2286	Cr2055	Cu3247
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	1.1177	515.66	2.0361	1.8970	.48727	.47495	1.0881	453.91	1.0415	.45485	.47560	.55732
Stddev	.0010	3.92	.0117	.0025	.00403	.00344	.0005	3.16	.0004	.00124	.00047	.00032
%RSD	.08567	.76108	.57309	.13178	.82781	.72363	.04313	.69707	.04192	.27244	.09892	.05706

#1	1.1171	518.43	2.0279	1.8952	.49012	.47738	1.0884	456.15	1.0412	.45397	.47593	.55709
#2	1.1184	512.88	2.0444	1.8987	.48442	.47252	1.0878	451.68	1.0418	.45572	.47527	.55754

Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Value												
Range												

Elem	Fe2714	K_7664	Li6707	Mg2790	Mn2576	Mo2020	Na8183	Ni2316	P_1782	Pb2203	S_1820	Sb2068
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	184.53	51.169	1.0253	491.56	.48268	.93888	51.495	.91270	1.9688	.92631	F 10.121	1.0149
Stddev	.84	.424	.0082	1.35	.00160	.00182	.268	.00038	.0001	.00305	.016	.0066
%RSD	.45558	.82960	.80030	.27455	.33128	.19393	.52088	.04121	.00599	.32910	.15991	.64908

#1	185.12	51.469	1.0311	492.51	.48381	.94017	51.684	.91297	1.9687	.92415	10.132	1.0102
#2	183.93	50.869	1.0195	490.60	.48155	.93760	51.305	.91244	1.9689	.92846	10.110	1.0195

Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Fail	Chk Pass
Value											1.0000	
Range											20.000%	

Elem	Se1960	Si2881	Sn1899	Sr4077	Th2837	Ti3349	Ti1908	U_3701	V_2924	Zn2062	Zr3391
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	4.9788	9.7577	9.0073	.94631	2.0173	.98785	8.2634	.03420	.48972	.91821	.95341
Stddev	.0070	.0977	.0039	.00712	.0075	.00317	.0051	.03144	.00131	.00275	.00820
%RSD	.14095	1.0008	.04364	.75227	.36954	.32103	.06185	91.926	.26761	.29976	.86031

#1	4.9838	9.8268	9.0101	.95134	2.0225	.99009	8.2598	.01197	.49065	.92016	.95921
#2	4.9738	9.6887	9.0045	.94128	2.0120	.98561	8.2670	.05643	.48880	.91626	.94761

Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	None	Chk Pass	Chk Pass	Chk Pass
Value											
Range											

Int. Std.	Y_2243	Y_3600	Y_3774
Units	Cts/S	Cts/S	Cts/S
Avg	1345.4	26348.	5990.2
Stddev	2.3	14.	5.7
%RSD	.16844	.05331	.09459

#1	1343.8	26338.	5994.2
#2	1347.0	26358.	5986.2

Sample Name: Ira-3900165 Acquired: 5/23/2016 12:35:00 Type: QC
Method: 6500_026(v10) Mode: CONC Corr. Factor: 1.000000
User: kellyca Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	Ag3280	Al1670	As1890	B_2089	Ba4554	Be3130	Bi2230	Ca3179	Cd2288	Co2286	Cr2055	Cu3247	Fe2714
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.00004	.08107	10.175	9.9261	11.893	-.00012	.00659	.03997	2.0387	5.1016	10.291	10.157	500.99
Stddev	.00000	.06634	.455	.4331	.047	.00001	.00177	.00158	.0927	.2276	.462	.039	.63
%RSD	3.8127	81.828	4.4722	4.3637	.39807	11.660	26.784	3.9459	4.5462	4.4623	4.4888	.38701	.12624

#1	.00004	.03416	9.8528	9.6198	11.926	-.00011	.00784	.03885	1.9731	4.9407	9.9644	10.129	500.55
#2	.00004	.12798	10.496	10.232	11.859	-.00013	.00534	.04108	2.1042	5.2626	10.618	10.184	501.44

Check ?	None	None	Chk Pass	Chk Pass	Chk Pass	None	None	None	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Value													
Range													

Elem	K_7664	Li6707	Mg2790	Mn2576	Mo2020	Na5895	Ni2316	P_1782	Pb2203	S_1820	Sb2068	Se1960	Si2881
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	-.05378	-.00066	.00023	9.5226	5.2507	.02435	10.298	-.02324	10.231	.00974	-.01138	5.0662	47.107
Stddev	.00320	.00009	.00663	.0211	.2300	.00524	.444	.00527	.448	.00669	.00773	.1993	.080
%RSD	5.9507	14.176	2906.8	.22213	4.3803	21.538	4.3124	22.670	4.3832	68.677	67.937	3.9331	.16950

#1	-.05604	-.00059	.00492	9.5076	5.0880	.02064	9.9844	-.01951	9.9137	.00501	-.00591	4.9253	47.051
#2	-.05152	-.00073	-.00446	9.5376	5.4133	.02806	10.612	-.02696	10.548	.01447	-.01685	5.2071	47.164

Check ?	None	None	None	Chk Pass	None	None	Chk Pass	None	Chk Pass	None	None	None	None
Value													
Range													

Elem	Sn1899	Sr4077	Th2837	Ti3349	Tl1908	U_3701	V_2924	Zn2062	Zr3391
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	-.00733	9.5504	-.01977	9.5336	4.9663	.14679	9.6484	9.3845	.00229
Stddev	.00054	.0424	.00183	.0285	.2056	.01888	.0288	.0074	.00146
%RSD	7.3620	.44369	9.2782	.29871	4.1397	12.862	.29812	.07845	63.913

#1	-.00695	9.5804	-.01847	9.5135	4.8209	.13344	9.6281	9.3793	.00333
#2	-.00771	9.5205	-.02107	9.5537	5.1117	.16015	9.6688	9.3897	.00126

Check ?	None	Chk Pass	None	Chk Pass	None	None	Chk Pass	Chk Pass	None
Value									
Range									

Int. Std.	Y_2243	Y_3600	Y_3774
Units	Cts/S	Cts/S	Cts/S
Avg	1443.0	30547.	6098.3
Stddev	48.9	52.	9.1
%RSD	3.3856	.16879	.14927

#1	1477.6	30584.	6104.8
#2	1408.5	30511.	6091.9

Sample Name: cri-3908120 Acquired: 5/23/2016 12:49:35 Type: QC
Method: 6500_026(v10) Mode: CONC Corr. Factor: 1.000000
User: kellyca Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	Ag3280	Al1670	As1890	B_2089	Ba4554	Be3130	Bi2230	Ca3179	Cd2288	Co2286	Cr2055	Cu3247
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.00057	.00220	F .01342	.00419	.00024	-.00004	.00182	.00012	-.00013	-.00003	.00010	-.00018
Stddev	.00038	.00026	.00082	.00034	.00013	.00007	.00025	.00429	.00020	.00016	.00020	.00030
%RSD	66.412	11.815	6.1107	8.0621	54.418	172.36	13.854	3674.8	155.14	500.99	203.82	165.94

#1	.00084	.00238	.01400	.00395	.00015	-.00008	.00165	.00315	-.00027	-.00015	-.00004	-.00040
#2	.00030	.00202	.01284	.00443	.00034	.00001	.00200	-.00292	.00001	.00008	.00024	.00003

Check ?	Chk Pass	Chk Pass	Chk Fail	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit			.01000									
Low Limit			-.01000									

Elem	Fe2599	K_7664	Li6707	Mg2790	Mn2576	Mo2020	Na5895	Ni2316	P_1782	Pb2203	S_1820	Sb2068
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.00447	-.02355	-.00116	.00054	.00005	-.00051	-.00788	.00005	.00008	F .00997	.00214	F .00984
Stddev	.00109	.00225	.00100	.00033	.00006	.00036	.00466	.00084	.00005	.00199	.00016	.00086
%RSD	24.494	9.5678	86.416	61.164	133.44	70.243	59.066	1607.5	61.544	19.973	7.3491	8.7651

#1	.00369	-.02196	-.00187	.00030	.00009	-.00076	-.00459	-.00054	.00004	.00856	.00225	.01045
#2	.00524	-.02515	-.00045	.00077	.00000	-.00026	-.01118	.00065	.00011	.01138	.00203	.00923

Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Fail	Chk Pass	Chk Fail
High Limit										.00300		.00600
Low Limit										-.00300		-.00600

Elem	Se1960	Si2881	Sn1899	Sr4077	Th2837	Ti3349	Ti1908	U_3701	V_2924	Zn2062	Zr3391
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	F .01318	.00729	-.00056	.00007	.00244	.00040	F .01499	.00102	.00067	.00155	.00150
Stddev	.00148	.00568	.00025	.00000	.00046	.00013	.00068	.01032	.00046	.00082	.00141
%RSD	11.195	77.962	44.406	1.6233	18.690	31.902	4.5503	1008.2	68.867	53.000	93.721

#1	.01422	.01131	-.00039	.00007	.00212	.00031	.01451	-.00627	.00099	.00213	.00051
#2	.01213	.00327	-.00074	.00007	.00277	.00049	.01547	.00832	.00034	.00097	.00249

Check ?	Chk Fail	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Fail	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit	.00500						.01000				
Low Limit	-.00500						-.01000				

Int. Std.	Y_2243	Y_3600	Y_3774
Units	Cts/S	Cts/S	Cts/S
Avg	1539.7	31283.	6086.1
Stddev	3.7	235.	20.6
%RSD	.24040	.75037	.33880

#1	1537.1	31449.	6071.5
#2	1542.3	31117.	6100.6

Sample Name: cri-3908143 Acquired: 5/23/2016 13:03:51 Type: QC
Method: 6500_026(v10) Mode: CONC Corr. Factor: 1.000000
User: kellyca Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	Ag3280	Al1670	As1890	B_2089	Ba4554	Be3130	Bi2230	Ca3179	Cd2288	Co2286	Cr2055	Cu3247
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.00010	-.00008	F .01819	.00129	.00020	.00009	.00399	-.00044	-.00014	-.00010	.00001	.00008
Stddev	.00002	.00054	.00017	.00051	.00003	.00000	.00378	.00050	.00003	.00018	.00002	.00025
%RSD	15.780	712.21	.92268	39.404	12.677	.18225	94.659	112.17	20.369	176.89	166.97	303.64

#1	.00009	-.00046	.01831	.00165	.00019	.00009	.00667	-.00009	-.00016	-.00023	-.00000	.00026
#2	.00011	.00031	.01807	.00093	.00022	.00009	.00132	-.00080	-.00012	.00003	.00003	-.00010

Check ?	Chk Pass	Chk Pass	Chk Fail	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit			.01000									
Low Limit			-.01000									

Elem	Fe2599	K_7664	Li6707	Mg2790	Mn2576	Mo2020	Na5895	Ni2316	P_1782	Pb2203	S_1820	Sb2068
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.00111	-.01027	-.00043	.00235	.00000	-.00010	-.01151	-.00046	.00038	.00184	-.00454	.00141
Stddev	.00124	.02824	.00063	.00233	.00003	.00015	.00052	.00002	.00048	.00010	.00328	.00245
%RSD	111.76	275.13	145.31	99.015	1339.6	148.27	4.5406	3.6441	124.49	5.3077	72.149	173.78

#1	.00023	-.03024	-.00087	.00070	.00002	.00000	-.01115	-.00044	.00005	.00177	-.00686	-.00032
#2	.00198	.00971	.00001	.00399	-.00002	-.00021	-.01188	-.00047	.00072	.00191	-.00223	.00315

Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit												
Low Limit												

Elem	Se1960	Si2881	Sn1899	Sr4077	Th2837	Ti3349	Ti1908	U_3701	V_2924	Zn2062	Zr3391
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	F .02412	.01641	-.00121	-.00002	.00222	.00010	F .01829	.01365	-.00009	.00098	.00047
Stddev	.00147	.00280	.00107	.00002	.00301	.00039	.00223	.01227	.00052	.00072	.00018
%RSD	6.0905	17.057	88.849	79.397	135.73	381.07	12.183	89.913	548.03	73.800	38.871

#1	.02308	.01839	-.00197	-.00003	.00434	.00038	.01986	.00497	-.00046	.00149	.00034
#2	.02515	.01443	-.00045	-.00001	.00009	-.00017	.01671	.02232	.00027	.00047	.00060

Check ?	Chk Fail	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Fail	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit	.00500						.01000				
Low Limit	-.00500						-.01000				

Int. Std.	Y_2243	Y_3600	Y_3774
Units	Cts/S	Cts/S	Cts/S
Avg	1529.9	31303.	6118.2
Stddev	3.0	40.	39.4
%RSD	.19663	.12899	.64393

#1	1532.1	31332.	6090.3
#2	1527.8	31274.	6146.0

Sample Name: cri-3908154 Acquired: 5/23/2016 13:18:07 Type: QC
Method: 6500_026(v10) Mode: CONC Corr. Factor: 1.000000
User: kellyca Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	Ag3280	Al1670	As1890	B_2089	Ba4554	Be3130	Bi2230	Ca3179	Cd2288	Co2286	Cr2055	Cu3247
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.00015	.00002	.00296	-.00034	.00006	.00008	.00536	.00437	-.00033	.00004	-.00010	.00067
Stddev	.00005	.00001	.00276	.00024	.00005	.00005	.00237	.00138	.00009	.00026	.00004	.00033
%RSD	31.850	32.382	93.323	71.012	83.449	69.089	44.209	31.659	26.736	602.68	43.647	49.401

#1	.00012	.00002	.00492	-.00051	.00009	.00012	.00704	.00535	-.00027	.00023	-.00013	.00043
#2	.00019	.00001	.00101	-.00017	.00002	.00004	.00369	.00339	-.00040	-.00014	-.00007	.00090

Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit												
Low Limit												

Elem	Fe2599	K_7664	Li6707	Mg2790	Mn2576	Mo2020	Na5895	Ni2316	P_1782	Pb2203	S_1820	Sb2068
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.00120	-.03614	-.00040	-.00005	.00024	-.00072	-.01203	.00104	-.00341	.00033	.00137	.00049
Stddev	.00071	.00233	.00035	.00000	.00008	.00002	.00448	.00062	.00135	.00153	.00695	.00233
%RSD	59.115	6.4494	85.973	9.7139	35.227	3.0021	37.281	59.841	39.758	465.85	508.69	476.12

#1	.00070	-.03779	-.00016	-.00004	.00018	-.00071	-.00886	.00060	-.00245	-.00076	-.00355	-.00116
#2	.00171	-.03449	-.00065	-.00005	.00030	-.00074	-.01520	.00148	-.00436	.00141	.00628	.00213

Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit												
Low Limit												

Elem	Se1960	Si2881	Sn1899	Sr4077	Th2837	Ti3349	Ti1908	U_3701	V_2924	Zn2062	Zr3391
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	F .02534	.01433	.00016	-.00001	.00188	-.00014	.00497	.01118	.00045	.00335	.00068
Stddev	.00183	.01600	.00129	.00003	.00146	.00008	.00130	.01063	.00011	.00005	.00030
%RSD	7.2098	111.59	807.45	474.37	77.818	57.319	26.100	95.099	24.694	1.5592	43.968

#1	.02405	.00302	.00108	-.00002	.00291	-.00019	.00589	.00366	.00052	.00331	.00047
#2	.02663	.02565	-.00075	.00001	.00085	-.00008	.00405	.01869	.00037	.00339	.00089

Check ?	Chk Fail	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit	.00500										
Low Limit	-.00500										

Int. Std.	Y_2243	Y_3600	Y_3774
Units	Cts/S	Cts/S	Cts/S
Avg	1573.3	30581.	6036.1
Stddev	2.8	23.	9.1
%RSD	.17927	.07473	.15076

#1	1571.3	30565.	6029.7
#2	1575.3	30597.	6042.5

Sample Name: ccvh-3900196 Acquired: 5/23/2016 13:34:54 Type: QC
Method: 6500_026(v10) Mode: CONC Corr. Factor: 1.000000
User: kellyca Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	Ag3280	Al3092	As1890	B_2089	Ba4554	Be3130	Bi2230	Ca3179	Cd2288	Co2286	Cr2055	Cu3247	Fe2714
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.00402	51.600	.00674	.00202	.00187	.00136	1.0146	-.05053	.00046	.00488	.00098	.01013	51.539
Stddev	.00010	.030	.00343	.00084	.00000	.00008	.0133	.00214	.00017	.00017	.00002	.00066	.385
%RSD	2.4468	.05880	50.974	41.333	.05934	5.9775	1.3073	4.2352	36.802	3.5579	2.4691	6.4959	.74734

#1	.00395	51.621	.00431	.00143	.00187	.00131	1.0240	-.04902	.00034	.00500	.00100	.01060	51.811
#2	.00409	51.578	.00916	.00262	.00187	.00142	1.0052	-.05205	.00058	.00475	.00096	.00967	51.266

Check ?	None	Chk Pass	None	None	None	None	Chk Pass	None	None	None	None	None	Chk Pass
Value													
Range													

Elem	K_7664	Li6707	Mg2790	Mn2576	Mo2020	Na8183	Ni2316	P_1782	Pb2203	S_1820	Sb2068	Se1960	Si2881
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.16489	.00219	.21553	.00072	-.00018	258.07	.00150	.00968	.00144	5.0089	.00142	.00974	.01510
Stddev	.03853	.00047	.00070	.00005	.00017	.62	.00010	.00095	.00194	.0316	.00024	.00120	.01901
%RSD	23.367	21.366	.32678	6.7067	90.960	.23939	6.8612	9.8026	134.35	.63088	16.935	12.305	125.91

#1	.13765	.00252	.21603	.00068	-.00006	258.51	.00157	.01035	.00281	5.0313	.00159	.01059	.02854
#2	.19214	.00186	.21504	.00075	-.00030	257.64	.00143	.00901	.00007	4.9866	.00125	.00889	.00166

Check ?	None	None	None	None	None	Chk Pass	None	None	None	Chk Pass	None	None	None
Value													
Range													

Elem	Sn1899	Sr4077	Th2837	Ti3349	Tl1908	U_3701	V_2924	Zn2062	Zr3391
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.00380	.00185	5.1792	.02518	.00235	10.640	-.01399	.00033	.00151
Stddev	.00090	.00004	.0046	.00037	.00084	.041	.00115	.00029	.00019
%RSD	23.799	2.1272	.08895	1.4724	35.693	.38555	8.2132	88.362	12.329

#1	.00316	.00182	5.1759	.02544	.00175	10.611	-.01480	.00053	.00165
#2	.00444	.00188	5.1824	.02492	.00294	10.669	-.01318	.00012	.00138

Check ?	None	None	Chk Pass	None	None	Chk Pass	None	None	None
Value									
Range									

Int. Std.	Y_2243	Y_3600	Y_3774
Units	Cts/S	Cts/S	Cts/S
Avg	1477.3	28926.	6001.2
Stddev	10.2	35.	15.6
%RSD	.68809	.12214	.26052

#1	1470.1	28951.	6012.2
#2	1484.5	28901.	5990.1

Sample Name: ccv-3900195 Acquired: 5/23/2016 13:37:42 Type: QC
Method: 6500_026(v10) Mode: CONC Corr. Factor: 1.000000
User: kellyca Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	Ag3280	Al1670	As1890	B_2089	Ba4554	Be3130	Bi2230	Ca3179	Cd2288	Co2286	Cr2055	Cu3247	Fe2599	K_7664
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.49473	.52105	.98378	.49866	.49032	.48780	.00209	5.0903	.48637	.49161	.48702	.50064	2.4418	49.547
Stddev	.00085	.00876	.00405	.00110	.00314	.00338	.00387	.0137	.00042	.00119	.00081	.00052	.0141	.255
%RSD	.17109	1.6819	.41178	.22126	.64105	.69306	185.41	.26932	.08703	.24168	.16533	.10450	.57804	.51431

#1	.49533	.52725	.98664	.49944	.48810	.48541	-.00065	5.0806	.48667	.49077	.48645	.50101	2.4318	49.367
#2	.49413	.51485	.98091	.49788	.49254	.49019	.00482	5.1000	.48607	.49245	.48759	.50027	2.4517	49.727

Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	None	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Value														
Range														

Elem	Li6707	Mg2790	Mn2576	Mo2020	Na5895	Ni2316	P_1782	Pb2203	S_1820	Sb2068	Se1960	Si2881	Sn1899	Sr4077
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.99126	19.978	.49343	.48684	4.9701	.49695	.97706	1.0093	.00593	.97950	1.0095	4.8993	.99406	.49535
Stddev	.00623	.067	.00051	.00302	.0333	.00148	.00413	.0022	.00244	.00636	.0019	.0373	.00361	.00150
%RSD	.62830	.33389	.10239	.61972	.66892	.29845	.42308	.21852	41.203	.64931	.19094	.76085	.36336	.30309

#1	.98685	20.025	.49379	.48897	4.9466	.49800	.97999	1.0077	.00420	.98399	1.0082	4.8729	.99662	.49429
#2	.99566	19.930	.49307	.48470	4.9937	.49590	.97414	1.0108	.00766	.97500	1.0109	4.9257	.99151	.49641

Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	None	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Value														
Range														

Elem	Th2837	Ti3349	Ti1908	U_3701	V_2924	Zn2062	Zr3391
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.00575	.49404	1.0261	.01759	.49254	.48326	.48700
Stddev	.00070	.00161	.0059	.01125	.00332	.00038	.00598
%RSD	12.240	.32547	.57356	63.955	.67408	.07799	1.2279

#1	.00625	.49517	1.0303	.02554	.49488	.48352	.48277
#2	.00526	.49290	1.0219	.00963	.49019	.48299	.49123

Check ?	None	Chk Pass	Chk Pass	None	Chk Pass	Chk Pass	Chk Pass
Value							
Range							

Int. Std.	Y_2243	Y_3600	Y_3774
Units	Cts/S	Cts/S	Cts/S
Avg	1526.7	30368.	6005.3
Stddev	1.6	4.	8.1
%RSD	.10274	.01238	.13475

#1	1527.8	30365.	6011.1
#2	1525.6	30370.	5999.6

Sample Name: ccb Acquired: 5/23/2016 13:40:16 Type: QC
Method: 6500_026(v10) Mode: CONC Corr. Factor: 1.000000
User: kellyca Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	Ag3280	Al1670	As1890	B_2089	Ba4554	Be3130	Bi2230	Ca3179	Cd2288	Co2286	Cr2055	Cu3247
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	-.00034	-.00052	-.00027	.00068	.00019	.00010	.00037	.00124	-.00002	-.00050	.00012	.00040
Stddev	.00012	.00079	.00174	.00015	.00007	.00004	.00024	.00460	.00013	.00007	.00020	.00035
%RSD	37.063	151.24	636.30	22.667	38.160	43.300	63.243	371.81	601.86	14.357	166.56	88.599

#1	-.00043	.00004	.00096	.00057	.00014	.00007	.00021	.00449	-.00011	-.00045	.00026	.00065
#2	-.00025	-.00108	-.00151	.00079	.00023	.00013	.00054	-.00201	.00007	-.00055	-.00002	.00015

Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	None	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit												
Low Limit												

Elem	Fe2599	K_7664	Li6707	Mg2790	Mn2576	Mo2020	Na5895	Ni2316	P_1782	Pb2203	S_1820	Sb2068
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.00871	-.00677	-.00067	-.00183	.00006	-.00001	.00435	.00013	.00303	.00221	-.00118	.00249
Stddev	.00135	.04559	.00003	.00128	.00007	.00046	.00535	.00013	.00255	.00034	.00274	.00054
%RSD	15.486	673.59	4.8924	70.043	111.55	3802.7	122.90	105.68	84.092	15.460	231.75	21.590

#1	.00967	.02547	-.00065	-.00092	.00001	.00031	.00813	.00022	.00483	.00245	-.00312	.00287
#2	.00776	-.03900	-.00070	-.00273	.00012	-.00034	.00057	.00003	.00123	.00197	.00076	.00211

Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	None	Chk Pass
High Limit												
Low Limit												

Elem	Se1960	Si2881	Sn1899	Sr4077	Th2837	Ti3349	Ti1908	U_3701	V_2924	Zn2062	Zr3391
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	F .01038	.01419	.00011	.00001	.00165	.00006	.00078	.01009	.00055	.00116	.00055
Stddev	.00271	.01483	.00084	.00004	.00092	.00007	.00213	.01386	.00031	.00123	.00046
%RSD	26.152	104.54	786.64	255.03	55.632	128.08	272.56	137.28	57.183	105.72	83.964

#1	.00846	.00370	-.00049	.00004	.00100	.00001	.00229	.01989	.00032	.00203	.00087
#2	.01230	.02468	.00070	-.00001	.00230	.00011	-.00072	.00030	.00077	.00029	.00022

Check ?	Chk Fail	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit	.00972										
Low Limit	-.00972										

Int. Std.	Y_2243	Y_3600	Y_3774
Units	Cts/S	Cts/S	Cts/S
Avg	1544.8	31183.	6166.0
Stddev	3.1	22.	.3
%RSD	.20231	.07082	.00418

#1	1547.0	31198.	6165.8
#2	1542.6	31167.	6166.2

Sample Name: ccvl-3907489 Acquired: 5/23/2016 13:43:01 Type: QC
Method: 6500_026(v10) Mode: CONC Corr. Factor: 1.000000
User: kellyca Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	Ag3280	Al1670	As1890	B_2089	Ba4554	Be3130	Bi2230	Ca3179	Cd2288	Co2286	Cr2055	Cu3247
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.01033	.10763	.01107	.10257	.01040	.00107	.11509	.20137	.00501	.01041	.01049	.01624
Stddev	.00026	.00151	.00212	.00109	.00003	.00002	.00194	.00515	.00034	.00008	.00012	.00012
%RSD	2.4806	1.4052	19.145	1.0592	.31479	1.4677	1.6850	2.5556	6.8662	.77562	1.1037	.76427

#1	.01051	.10870	.00957	.10334	.01042	.00105	.11646	.19773	.00525	.01035	.01041	.01616
#2	.01015	.10656	.01257	.10180	.01037	.00108	.11372	.20501	.00476	.01047	.01057	.01633

Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Value												
Range												

Elem	Fe2599	K_7664	Li6707	Mg2790	Mn2576	Mo2020	Na5895	Ni2316	P_1782	Pb2203	S_1820	Sb2068
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.11967	3.0510	.01001	.20851	.01038	.02063	1.0462	.04229	2.9577	.01042	.00091	.02268
Stddev	.00342	.0134	.00021	.00061	.00010	.00017	.0046	.00024	.0002	.00043	.00447	.00107
%RSD	2.8554	.43748	2.0714	.29126	.99227	.80540	.44168	.57438	.00794	4.1253	492.06	4.7234

#1	.12209	3.0416	.01015	.20808	.01031	.02051	1.0495	.04211	2.9576	.01073	.00407	.02192
#2	.11726	3.0604	.00986	.20894	.01045	.02075	1.0429	.04246	2.9579	.01012	-.00225	.02343

Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	None	Chk Pass
Value												
Range												

Elem	Se1960	Si2881	Sn1899	Sr4077	Th2837	Ti3349	Ti1908	U_3701	V_2924	Zn2062	Zr3391
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	F .02437	.49777	.10355	.01021	.01791	.01007	.01661	.05790	.01013	.01926	.01535
Stddev	.00077	.00236	.00170	.00003	.00049	.00019	.00024	.00461	.00026	.00028	.00100
%RSD	3.1418	.47389	1.6405	.29190	2.7156	1.9156	1.4350	7.9556	2.5278	1.4789	6.5001

#1	.02491	.49610	.10475	.01023	.01826	.00993	.01644	.06115	.00994	.01946	.01606
#2	.02383	.49944	.10235	.01019	.01757	.01020	.01678	.05464	.01031	.01905	.01465

Check ?	Chk Fail	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Value	.01500										
Range	30.000%										

Int. Std.	Y_2243	Y_3600	Y_3774
Units	Cts/S	Cts/S	Cts/S
Avg	1524.8	31187.	6312.8
Stddev	.5	36.	141.3
%RSD	.03344	.11606	2.2381

#1	1524.5	31161.	6412.7
#2	1525.2	31212.	6212.9

Sample Name: 83016-D-6 Acquired: 5/23/2016 13:46:46 Type: Unk
Method: 6500_026(v10) Mode: CONC Corr. Factor: 1.000000
User: kellyca Custom ID1: Custom ID2: Custom ID3:
Comment: Bottle Check Fe

Elem	Ag3280	Al1670	As1890	B_2089	Ba4554	Be3130	Bi2230	Ca3179	Cd2288
Line	328.068 {103}	167.079 {502}	189.042 {478}	208.959 {461}	455.403 { 74}	313.042 {108}	223.061 {451}	317.933 {106}	228.802 {447}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.00051	.01787	.00232	.00743	.04178	.00026	.00589	.93510	-.00031
Stddev	.00061	.00145	.00039	.00014	.00012	.00001	.00109	.01282	.00004
%RSD	119.22	8.1035	16.736	1.8298	.27923	4.5111	18.463	1.3708	12.583

#1	.00094	.01685	.00259	.00752	.04170	.00026	.00512	.94416	-.00028
#2	.00008	.01890	.00204	.00733	.04187	.00027	.00665	.92604	-.00034

Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Elem	Co2286	Cr2055	Cu3247	Fe2599	K_7664	Li6707	Mg2790	Mn2576	Mo2020
Line	228.616 {447}	205.560 {464}	324.754 {104}	259.940 {130}	766.490 { 44}	670.784 { 50}	279.079 {121}2	257.610 {131}	202.030 {467}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.00084	.00092	.00020	.30792	.72282	.00217	.82782	.00706	-.00041
Stddev	.00012	.00011	.00029	.00469	.00972	.00035	.00556	.00002	.00005
%RSD	14.826	11.988	146.33	1.5222	1.3441	16.282	.67206	.26777	11.710

#1	.00093	.00100	-.00001	.31123	.72969	.00192	.82388	.00705	-.00045
#2	.00075	.00085	.00041	.30460	.71595	.00242	.83175	.00707	-.00038

Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Elem	Na5895	Ni2316	P_1782	Pb2203	S_1820	Sb2068	Se1960	Si2881	Sn1899
Line	589.592 { 57}	231.604 {446}	178.284 {489}	220.353 {453}	182.034 {485}	206.833 {463}	196.090 {472}	288.158 {117}	189.989 {477}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	5.2572	.00202	.00480	-.00030	.10790	-.00076	.01372	10.043	-.00237
Stddev	.0013	.00078	.00030	.00104	.00458	.00012	.00076	.108	.00059
%RSD	.02543	38.763	6.1697	348.62	4.2408	15.554	5.5568	1.0756	24.994

#1	5.2582	.00146	.00459	-.00103	.10466	-.00084	.01426	10.119	-.00279
#2	5.2563	.00257	.00501	.00044	.11114	-.00067	.01318	9.9665	-.00195

Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Elem	Sr4077	Th2837	Ti3349	Ti1908	U_3701	V_2924	Zn2062	Zr3391
Line	407.771 { 83}	283.730 {119}	334.904 {101}	190.856 {477}	370.152 { 91}	292.402 {115}	206.200 {163}	339.198 { 99}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.02375	.00030	.00087	.00488	.00255	.00019	.00240	.00044
Stddev	.00002	.00199	.00015	.00091	.01217	.00098	.00084	.00064
%RSD	.06381	667.73	17.373	18.685	477.19	516.33	34.848	146.10

#1	.02376	.00170	.00098	.00423	-.00606	.00089	.00299	.00090
#2	.02374	-.00111	.00076	.00552	.01116	-.00051	.00181	-.00001

Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit								
Low Limit								

Int. Std.	Y_2243	Y_3600	Y_3774
Line	224.306 {450}	360.073 { 94}	377.433 { 89}
Units	Cts/S	Cts/S	Cts/S
Avg	1611.1	32267.	6216.4
Stddev	.1	170.	6.7
%RSD	.00737	.52700	.10700

#1	1611.2	32387.	6211.7
#2	1611.0	32147.	6221.1

Sample Name: 320-18794-C-1-Cpds Acquired: 5/23/2016 13:49:30 Type: Unk
Method: 6500_026(v10) Mode: CONC Corr. Factor: 1.000000
User: kellyca Custom ID1: 5/19 Custom ID2: Custom ID3:
Comment: 325989 6010C Fe

Elem	Ag3280	Al1670	As1890	B_2089	Ba4554	Be3130	Bi2230	Ca3179	Cd2288
Line	328.068 {103}	167.079 {502}	189.042 {478}	208.959 {461}	455.403 { 74}	313.042 {108}	223.061 {451}	317.933 {106}	228.802 {447}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.00031	.52283	.08545	1.3704	1.5107	.00008	.00461	69.589	.00051
Stddev	.00037	.00572	.00138	.0200	.0221	.00004	.00311	1.273	.00018
%RSD	118.19	1.0944	1.6175	1.4611	1.4596	46.758	67.496	1.8294	35.554

#1	.00057	.51879	.08643	1.3563	1.4951	.00005	.00681	68.689	.00064
#2	.00005	.52688	.08447	1.3846	1.5263	.00010	.00241	70.489	.00038

Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Elem	Co2286	Cr2055	Cu3247	Fe2599	K_7664	Li6707	Mg2790	Mn2576	Mo2020
Line	228.616 {447}	205.560 {464}	324.754 {104}	259.940 {130}	766.490 { 44}	670.784 { 50}	279.079 {121}2	257.610 {131}	202.030 {467}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.00408	.08309	.02129	37.114	15.842	.01161	16.551	2.5672	.01229
Stddev	.00046	.00134	.00025	.688	.274	.00061	.099	.0171	.00051
%RSD	11.170	1.6155	1.1900	1.8542	1.7281	5.2760	.59687	.66683	4.1652

#1	.00376	.08214	.02111	36.627	15.648	.01205	16.481	2.5551	.01192
#2	.00441	.08404	.02147	37.600	16.035	.01118	16.621	2.5793	.01265

Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Elem	Na8183	Ni2316	P_1782	Pb2203	S_1820	Sb2068	Se1960	Si2881	Sn1899
Line	818.326 { 41}	231.604 {446}	178.284 {489}	220.353 {453}	182.034 {485}	206.833 {463}	196.090 {472}	288.158 {117}	189.989 {477}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	114.52	.02664	25.558	.00358	32.432	.00387	.01234	3.8332	.00486
Stddev	1.53	.00007	.412	.00041	.523	.00093	.00148	.0772	.00040
%RSD	1.3395	.27281	1.6126	11.328	1.6140	24.060	11.987	2.0151	8.1978

#1	113.44	.02659	25.266	.00329	32.062	.00321	.01129	3.7786	.00458
#2	115.60	.02669	25.849	.00386	32.802	.00453	.01338	3.8878	.00514

Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Elem	Sr4077	Th2837	Ti3349	Ti1908	U_3701	V_2924	Zn2062	Zr3391	
Line	407.771 { 83}	283.730 {119}	334.904 {101}	190.856 {477}	370.152 { 91}	292.402 {115}	206.200 {163}	339.198 { 99}	
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	
Avg	1.0855	.00073	.03310	.00061	.01783	.01771	.15734	.00090	
Stddev	.0154	.00010	.00027	.00125	.00871	.00027	.00064	.00120	
%RSD	1.4159	13.720	.81969	205.12	48.816	1.5251	.40696	133.96	

#1	1.0746	.00080	.03329	-.00028	.02399	.01752	.15779	.00005	
#2	1.0963	.00066	.03290	.00150	.01168	.01790	.15689	.00174	

Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	
High Limit									
Low Limit									

Int. Std.	Y_2243	Y_3600	Y_3774						
Line	224.306 {450}	360.073 { 94}	377.433 { 89}						
Units	Cts/S	Cts/S	Cts/S						
Avg	1446.5	29387.	6209.9						
Stddev	3.4	11.	37.2						
%RSD	.23635	.03588	.59868						

#1	1444.0	29380.	6236.2						
#2	1448.9	29395.	6183.6						

Sample Name: 280-83357-A-1-A@10 Acquired: 5/23/2016 13:52:09 Type: Unk

Method: 6500_026(v10) Mode: CONC Corr. Factor: 1.000000

User: kellyca Custom ID1: 5/20 Custom ID2: Custom ID3:

Comment: 326000 200.7 P

Elem	Ag3280	Al1670	As1890	B_2089	Ba4554	Be3130	Bi2230	Ca3179	Cd2288
Line	328.068 {103}	167.079 {502}	189.042 {478}	208.959 {461}	455.403 { 74}	313.042 {108}	223.061 {451}	317.933 {106}	228.802 {447}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	-.00014	.01537	.00093	.02624	.00063	.00013	.00414	.07036	-.00022
Stddev	.00011	.00065	.00290	.00116	.00007	.00007	.00024	.00289	.00039
%RSD	76.334	4.2451	313.46	4.4351	10.922	51.141	5.8723	4.1106	175.27

#1	-.00007	.01491	.00298	.02706	.00068	.00008	.00397	.07241	-.00050
#2	-.00022	.01583	-.00113	.02541	.00058	.00017	.00431	.06832	.00005

Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Elem	Co2286	Cr2055	Cu3247	Fe2599	K_7664	Li6707	Mg2790	Mn2576	Mo2020
Line	228.616 {447}	205.560 {464}	324.754 {104}	259.940 {130}	766.490 { 44}	670.784 { 50}	279.079 {121}2	257.610 {131}	202.030 {467}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.00008	.00050	.00046	.03477	.03465	-.00086	.02421	.00049	-.00008
Stddev	.00013	.00022	.00007	.00031	.00792	.00062	.00127	.00000	.00001
%RSD	152.45	43.677	16.014	.88640	22.850	71.508	5.2410	.79856	15.466

#1	-.00001	.00034	.00051	.03499	.02905	-.00130	.02511	.00049	-.00009
#2	.00017	.00065	.00041	.03455	.04025	-.00043	.02331	.00050	-.00007

Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Elem	Na5895	Ni2316	P_1782	Pb2203	S_1820	Sb2068	Se1960	Si2881	Sn1899
Line	589.592 { 57}	231.604 {446}	178.284 {489}	220.353 {453}	182.034 {485}	206.833 {463}	196.090 {472}	288.158 {117}	189.989 {477}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.07383	.00093	.00757	.00191	.00326	.00130	.00971	.10581	.00107
Stddev	.00283	.00067	.00499	.00113	.00032	.00222	.00342	.00141	.00120
%RSD	3.8362	72.199	65.873	59.465	9.8748	169.92	35.256	1.3316	112.46

#1	.07183	.00140	.00404	.00110	.00349	.00287	.01213	.10681	.00191
#2	.07584	.00045	.01110	.00271	.00303	-.00026	.00729	.10482	.00022

Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Elem	Sr4077	Th2837	Ti3349	Ti1908	U_3701	V_2924	Zn2062	Zr3391
Line	407.771 { 83}	283.730 {119}	334.904 {101}	190.856 {477}	370.152 { 91}	292.402 {115}	206.200 {163}	339.198 { 99}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.00026	.00118	.00022	.00219	.01652	.00026	.00084	.00044
Stddev	.00004	.00000	.00030	.00094	.00358	.00028	.00067	.00009
%RSD	16.202	.32415	137.54	42.855	21.680	106.73	80.197	20.725

#1	.00023	.00118	.00001	.00285	.01399	.00006	.00132	.00050
#2	.00029	.00118	.00043	.00153	.01905	.00046	.00036	.00037

Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit								
Low Limit								

Int. Std.	Y_2243	Y_3600	Y_3774
Line	224.306 {450}	360.073 { 94}	377.433 { 89}
Units	Cts/S	Cts/S	Cts/S
Avg	1545.4	31432.	6131.5
Stddev	.2	24.	27.8
%RSD	.00985	.07682	.45335

#1	1545.5	31415.	6151.2
#2	1545.3	31449.	6111.9

Sample Name: MB 280-325983/1-A Acquired: 5/23/2016 13:57:55 Type: Unk
Method: 6500_026(v10) Mode: CONC Corr. Factor: 1.000000
User: kellyca Custom ID1: 5/20 Custom ID2: Custom ID3:
Comment: 325983 6010C Q4 soil

Elem	Ag3280	Al1670	As1890	B_2089	Ba4554	Be3130	Bi2230	Ca3179	Cd2288
Line	328.068 {103}	167.079 {502}	189.042 {478}	208.959 {461}	455.403 { 74}	313.042 {108}	223.061 {451}	317.933 {106}	228.802 {447}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	F .05193	F 2.0196	F 1.0350	F 1.1902	F 2.0275	F .05023	F 2.1308	F 49.973	F .10141
Stddev	.00044	.0020	.0029	.0038	.0028	.00008	.0095	.061	.00006
%RSD	.84196	.09864	.27579	.31818	.13614	.16037	.44753	.12160	.06340
#1	.05162	2.0210	1.0370	1.1875	2.0256	.05029	2.1375	49.930	.10136
#2	.05224	2.0182	1.0330	1.1928	2.0295	.05017	2.1240	50.016	.10145
Check ?	Chk Fail	Chk Fail	Chk Fail	Chk Fail	Chk Fail	Chk Fail	Chk Fail	Chk Fail	Chk Fail
High Limit	.01000	.10000	.01000	.01000	.01000	.00500	.01000	.20000	.00500
Low Limit	-.01000	-.10000	-.01000	-.01000	-.01000	-.00400	-.01000	-.20000	-.00500
Elem	Co2286	Cr2055	Cu3247	Fe2599	K_7664	Li6707	Mg2790	Mn2576	Mo2020
Line	228.616 {447}	205.560 {464}	324.754 {104}	259.940 {130}	766.490 { 44}	670.784 { 50}	279.079 {121}2	257.610 {131}	202.030 {467}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	F .49790	F .20264	F .25762	F 1.0167	F 51.532	F 1.0266	F 50.399	F .49478	F 1.0412
Stddev	.00177	.00012	.00171	.0025	.116	.0016	.154	.00142	.0002
%RSD	.35509	.05938	.66550	.24756	.22494	.15538	.30589	.28712	.02145
#1	.49915	.20255	.25641	1.0149	51.450	1.0255	50.290	.49377	1.0414
#2	.49665	.20272	.25883	1.0184	51.614	1.0277	50.508	.49578	1.0410
Check ?	Chk Fail	Chk Fail	Chk Fail	Chk Fail	Chk Fail	Chk Fail	Chk Fail	Chk Fail	Chk Fail
High Limit	.01000	.01000	.01000	.10000	3.0000	.01000	.10000	.01000	.01000
Low Limit	-.01000	-.01000	-.01000	-.10000	-3.0000	-.01000	-.10000	-.01000	-.01000
Elem	Na8183	Ni2316	P_1782	Pb2203	S_1820	Sb2068	Se1960	Si2881	Sn1899
Line	818.326 { 41}	231.604 {446}	178.284 {489}	220.353 {453}	182.034 {485}	206.833 {463}	196.090 {472}	288.158 {117}	189.989 {477}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	52.705	F .50410	F 10.317	F .50871	F 2.0433	F .51799	F 2.0593	F 2.4994	F 2.0035
Stddev	.055	.00090	.006	.00023	.0010	.00177	.0027	.0027	.0009
%RSD	.10514	.17913	.05994	.04546	.05023	.34109	.13209	.10613	.04630
#1	52.666	.50346	10.321	.50887	2.0426	.51924	2.0574	2.5013	2.0029
#2	52.744	.50474	10.313	.50855	2.0440	.51675	2.0613	2.4975	2.0042
Check ?	None	Chk Fail	Chk Fail	Chk Fail	Chk Fail	Chk Fail	Chk Fail	Chk Fail	Chk Fail
High Limit		.01000	.01000	.00300	.10000	.01000	.01000	.10000	.10000
Low Limit		-.01000	-.01000	-.00300	-.10000	-.01000	-.01000	-.10000	-.10000
Elem	Sr4077	Th2837	Ti3349	Ti1908	U_3701	V_2924	Zn2062	Zr3391	
Line	407.771 { 83}	283.730 {119}	334.904 {101}	190.856 {477}	370.152 { 91}	292.402 {115}	206.200 {163}	339.198 { 99}	
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	
Avg	F 1.0016	F 1.0251	F 1.0123	F 2.0048	F 2.1869	F .49679	F .49057	F .50091	
Stddev	.0021	.0037	.0025	.0075	.0357	.00216	.00239	.00213	
%RSD	.20773	.35845	.24868	.37629	1.6349	.43575	.48818	.42472	
#1	1.0002	1.0225	1.0105	2.0101	2.2122	.49526	.48888	.49941	
#2	1.0031	1.0277	1.0141	1.9994	2.1616	.49832	.49227	.50242	
Check ?	Chk Fail	Chk Fail	Chk Fail	Chk Fail	Chk Fail	Chk Fail	Chk Fail	Chk Fail	
High Limit	.01000	.01000	.01000	.01000	.06000	.01000	.01000	.01000	
Low Limit	-.01000	-.01000	-.01000	-.01000	-.06000	-.01000	-.01000	-.01000	
Int. Std.	Y_2243	Y_3600	Y_3774						
Line	224.306 {450}	360.073 { 94}	377.433 { 89}						
Units	Cts/S	Cts/S	Cts/S						
Avg	1463.8	29284.	6005.6						
Stddev	.3	13.	2.2						
%RSD	.01763	.04413	.03654						
#1	1463.6	29275.	6007.2						
#2	1464.0	29293.	6004.1						

Sample Name: LCS 280-325983/2-A Acquired: 5/23/2016 14:00:28 Type: Unk

Method: 6500_026(v10) Mode: CONC Corr. Factor: 1.000000

User: kellyca Custom ID1: Custom ID2: Custom ID3:

Comment: 325983 6010C Q4 soil

Elem	Ag3280	Al1670	As1890	B_2089	Ba4554	Be3130	Bi2230	Ca3179	Cd2288
Line	328.068 {103}	167.079 {502}	189.042 {478}	208.959 {461}	455.403 { 74}	313.042 {108}	223.061 {451}	317.933 {106}	228.802 {447}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.05204	2.0270	1.0370	F 1.2018	2.0535	.05071	2.1533	50.515	.10163
Stddev	.00035	.0080	.0048	.0010	.0129	.00039	.0125	.195	.00076
%RSD	.67982	.39450	.46442	.08229	.62953	.77496	.58058	.38613	.74912

#1	.05179	2.0327	1.0404	1.2011	2.0627	.05099	2.1622	50.653	.10217
#2	.05229	2.0214	1.0336	1.2025	2.0444	.05044	2.1445	50.377	.10109

Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Fail	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit				1.1000					
Low Limit				.81000					

Elem	Co2286	Cr2055	Cu3247	Fe2599	K_7664	Li6707	Mg2790	Mn2576	Mo2020
Line	228.616 {447}	205.560 {464}	324.754 {104}	259.940 {130}	766.490 { 44}	670.784 { 50}	279.079 {121}2	257.610 {131}	202.030 {467}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.50163	F .20336	.25931	1.0244	51.956	1.0368	50.633	.50010	1.0493
Stddev	.00154	.00065	.00091	.0001	.338	.0093	.075	.00258	.0019
%RSD	.30749	.32172	.35075	.01066	.65043	.89346	.14799	.51589	.18588

#1	.50272	.20383	.25867	1.0245	52.195	1.0434	50.580	.49827	1.0507
#2	.50054	.20290	.25996	1.0243	51.718	1.0303	50.686	.50192	1.0479

Check ?	Chk Pass	Chk Fail	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit		.05700							
Low Limit		.04350							

Elem	Na8183	Ni2316	P_1782	Pb2203	S_1820	Sb2068	Se1960	Si2881	Sn1899
Line	818.326 { 41}	231.604 {446}	178.284 {489}	220.353 {453}	182.034 {485}	206.833 {463}	196.090 {472}	288.158 {117}	189.989 {477}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	53.425	.50642	10.369	.51014	2.0442	.51949	2.0624	2.5259	2.0036
Stddev	.186	.00090	.024	.00273	.0086	.00126	.0169	.0023	.0056
%RSD	.34827	.17800	.23164	.53551	.42252	.24333	.81887	.09248	.28183

#1	53.556	.50706	10.386	.50821	2.0381	.52038	2.0504	2.5276	2.0076
#2	53.293	.50579	10.352	.51207	2.0503	.51859	2.0743	2.5243	1.9996

Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	None	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Elem	Sr4077	Th2837	Ti3349	Ti1908	U_3701	V_2924	Zn2062	Zr3391
Line	407.771 { 83}	283.730 {119}	334.904 {101}	190.856 {477}	370.152 { 91}	292.402 {115}	206.200 {163}	339.198 { 99}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	1.0112	1.0387	1.0183	2.0045	F 2.2228	.50266	.49319	.50235
Stddev	.0076	.0004	.0067	.0049	.0129	.00167	.00025	.00075
%RSD	.75501	.03582	.65442	.24202	.57900	.33232	.05094	.14849

#1	1.0166	1.0385	1.0135	2.0011	2.2319	.50148	.49336	.50182
#2	1.0058	1.0390	1.0230	2.0079	2.2137	.50384	.49301	.50287

Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Fail	Chk Pass	Chk Pass	Chk Pass
High Limit					2.2000			
Low Limit					1.7000			

Int. Std.	Y_2243	Y_3600	Y_3774
Line	224.306 {450}	360.073 { 94}	377.433 { 89}
Units	Cts/S	Cts/S	Cts/S
Avg	1454.9	29223.	5921.9
Stddev	.8	87.	43.2
%RSD	.05516	.29670	.72992

#1	1454.4	29285.	5891.3
#2	1455.5	29162.	5952.5

Sample Name: 280-82954-A-14-JSD@5 Acquired: 5/23/2016 14:06:01 Type: Unk
Method: 6500_026(v10) Mode: CONC Corr. Factor: 1.000000
User: kellyca Custom ID1: Custom ID2: Custom ID3:
Comment: 325983 6010C Q4 soil

Elem	Ag3280	Al3092	As1890	B_2089	Ba4554	Be3130	Bi2230	Ca3179	Cd2288
Line	328.068 {103}	309.271 {109}	189.042 {478}	208.959 {461}	455.403 { 74}	313.042 {108}	223.061 {451}	317.933 {106}	228.802 {447}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.00026	54.648	.00807	.00600	.15342	.00038	.00421	.92043	.01078
Stddev	.00058	.141	.00003	.00068	.00015	.00001	.00228	.00474	.00007
%RSD	219.82	.25797	.43056	11.328	.09605	3.0141	54.087	.51488	.66866

#1	.00067	54.747	.00805	.00552	.15353	.00037	.00582	.92378	.01073
#2	-.00015	54.548	.00810	.00648	.15332	.00039	.00260	.91708	.01083

Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Elem	Co2286	Cr2055	Cu3247	Fe2599	K_7664	Li6707	Mg2790	Mn2576	Mo2020
Line	228.616 {447}	205.560 {464}	324.754 {104}	259.940 {130}	766.490 { 44}	670.784 { 50}	279.079 {121}2	257.610 {131}	202.030 {467}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.00187	.06627	1.0503	22.498	.61768	.02228	1.5029	.11088	.00248
Stddev	.00027	.00023	.0095	.079	.00420	.00014	.0154	.00032	.00030
%RSD	14.532	.35357	.90561	.35022	.67953	.61760	1.0259	.28857	12.041

#1	.00168	.06644	1.0570	22.554	.62065	.02218	1.5138	.11110	.00269
#2	.00206	.06611	1.0435	22.442	.61471	.02238	1.4920	.11065	.00227

Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Elem	Na5895	Ni2316	P_1782	Pb2203	S_1820	Sb2068	Se1960	Si2881	Sn1899
Line	589.592 { 57}	231.604 {446}	178.284 {489}	220.353 {453}	182.034 {485}	206.833 {463}	196.090 {472}	288.158 {117}	189.989 {477}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.12878	.05121	.48857	.85561	.49238	.07390	.00778	2.1369	.01261
Stddev	.00018	.00059	.00302	.00145	.00098	.00491	.00063	.0082	.00056
%RSD	.13934	1.1537	.61870	.16980	.19885	6.6411	8.1450	.38439	4.4210

#1	.12866	.05079	.49070	.85458	.49307	.07043	.00823	2.1427	.01301
#2	.12891	.05163	.48643	.85664	.49169	.07738	.00734	2.1311	.01222

Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Elem	Sr4077	Th2837	Ti3349	Ti1908	U_3701	V_2924	Zn2062	Zr3391
Line	407.771 { 83}	283.730 {119}	334.904 {101}	190.856 {477}	370.152 { 91}	292.402 {115}	206.200 {163}	339.198 { 99}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.01339	.00998	.22272	.00197	-.00554	.04759	1.3079	.01797
Stddev	.00008	.00115	.00475	.00279	.01389	.00009	.0115	.00144
%RSD	.59694	11.565	2.1344	141.76	250.58	.18279	.87746	7.9997

#1	.01344	.01079	.22608	-.00000	.00428	.04753	1.2998	.01696
#2	.01333	.00916	.21936	.00394	-.01536	.04765	1.3160	.01899

Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit								
Low Limit								

Int. Std.	Y_2243	Y_3600	Y_3774
Line	224.306 {450}	360.073 { 94}	377.433 { 89}
Units	Cts/S	Cts/S	Cts/S
Avg	1557.8	31363.	6311.8
Stddev	.2	68.	18.7
%RSD	.01503	.21556	.29634

#1	1557.7	31410.	6298.6
#2	1558.0	31315.	6325.1

Sample Name: 280-82954-A-14-K MS Acquired: 5/23/2016 14:09:12 Type: Unk

Method: 6500_026(v10) Mode: CONC Corr. Factor: 1.000000

User: kellyca Custom ID1: Custom ID2: Custom ID3:

Comment: 325983 6010C Q4 soil

Elem	Ag3280	Al3092	As1890	B_2089	Ba4554	Be3130	Bi2230	Ca3179	Cd2288
Line	328.068 {103}	309.271 {109}	189.042 {478}	208.959 {461}	455.403 { 74}	313.042 {108}	223.061 {451}	317.933 {106}	228.802 {447}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.04958	54.761	.98897	.96956	2.1040	.04777	2.0731	48.316	.10748
Stddev	.00133	.011	.00387	.00315	.0036	.00014	.0013	.192	.00036
%RSD	2.6891	.02077	.39131	.32481	.17251	.29568	.06053	.39692	.33590

#1	.05052	54.769	.98623	.96734	2.1065	.04767	2.0722	48.451	.10723
#2	.04864	54.753	.99170	.97179	2.1014	.04787	2.0740	48.180	.10774

Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Elem	Co2286	Cr2055	Cu3247	Fe2599	K_7664	Li6707	Mg2790	Mn2576	Mo2020
Line	228.616 {447}	205.560 {464}	324.754 {104}	259.940 {130}	766.490 { 44}	670.784 { 50}	279.079 {121}2	257.610 {131}	202.030 {467}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.47904	W .23450	.65681	21.439	50.414	1.0064	49.906	.57861	.97946
Stddev	.00070	.00069	.00313	.094	.049	.0011	.216	.00298	.00100
%RSD	.14652	.29231	.47593	.43665	.09746	.11289	.43249	.51515	.10253

#1	.47954	.23499	.65902	21.505	50.380	1.0056	50.058	.58072	.98017
#2	.47854	.23402	.65460	21.373	50.449	1.0072	49.753	.57650	.97875

Check ?	Chk Pass	Chk Warn	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit		.10000							
Low Limit		-.01000							

Elem	Na8183	Ni2316	P_1782	Pb2203	S_1820	Sb2068	Se1960	Si2881	Sn1899
Line	818.326 { 41}	231.604 {446}	178.284 {489}	220.353 {453}	182.034 {485}	206.833 {463}	196.090 {472}	288.158 {117}	189.989 {477}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	49.832	.52506	10.077	.93832	2.3781	.46352	1.9585	6.2721	1.8706
Stddev	.222	.00214	.017	.00506	.0107	.00093	.0139	.0583	.0086
%RSD	.44585	.40814	.17300	.53976	.45102	.20014	.70945	.92884	.46005

#1	49.989	.52657	10.064	.93474	2.3705	.46286	1.9487	6.3133	1.8645
#2	49.674	.52354	10.089	.94190	2.3856	.46417	1.9683	6.2309	1.8767

Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Elem	Sr4077	Th2837	Ti3349	Ti1908	U_3701	V_2924	Zn2062	Zr3391
Line	407.771 { 83}	283.730 {119}	334.904 {101}	190.856 {477}	370.152 { 91}	292.402 {115}	206.200 {163}	339.198 { 99}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.96573	.97826	1.4563	1.8902	2.1079	.53056	1.0428	.49210
Stddev	.00033	.01281	.0050	.0043	.0104	.00069	.0055	.00002
%RSD	.03420	1.3099	.34616	.22933	.49510	.12971	.52634	.00361

#1	.96550	.98732	1.4527	1.8933	2.1153	.53008	1.0467	.49211
#2	.96597	.96920	1.4599	1.8872	2.1005	.53105	1.0389	.49209

Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit								
Low Limit								

Int. Std.	Y_2243	Y_3600	Y_3774
Line	224.306 {450}	360.073 { 94}	377.433 { 89}
Units	Cts/S	Cts/S	Cts/S
Avg	1482.7	29780.	6174.0
Stddev	.0	139.	12.0
%RSD	.00223	.46665	.19404

#1	1482.7	29682.	6165.5
#2	1482.6	29878.	6182.5

Sample Name: 320-18794-C-1-Cpds Acquired: 5/23/2016 14:12:45 Type: Unk
Method: 6500_026(v10) Mode: CONC Corr. Factor: 1.000000
User: kellyca Custom ID1: 5/19 Custom ID2: Custom ID3:
Comment: 325989 6010C Fe

Elem	Ag3280	Al1670	As1890	B_2089	Ba4554	Be3130	Bi2230	Ca3179	Cd2288
Line	328.068 {103}	167.079 {502}	189.042 {478}	208.959 {461}	455.403 {74}	313.042 {108}	223.061 {451}	317.933 {106}	228.802 {447}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.01763	.96176	.19263	.17066	.11813	.04767	-.00034	61.460	.04906
Stddev	.00016	.00329	.00764	.00075	.00036	.00001	.00283	.168	.00011
%RSD	.92573	.34166	3.9674	.44152	.30398	.03068	831.45	.27378	.22129

#1	.01751	.96409	.18722	.17119	.11787	.04766	.00166	61.341	.04898
#2	.01774	.95944	.19803	.17012	.11838	.04768	-.00234	61.579	.04914

Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Elem	Co2286	Cr2055	Cu3247	Fe2599	K_7664	Li6707	Mg2790	Mn2576	Mo2020
Line	228.616 {447}	205.560 {464}	324.754 {104}	259.940 {130}	766.490 {44}	670.784 {50}	279.079 {121}2	257.610 {131}	202.030 {467}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.04737	.04738	.04892	1.1237	24.618	.10793	26.801	.23353	.04833
Stddev	.00020	.00033	.00018	.0010	.026	.00097	.048	.00019	.00027
%RSD	.41208	.70546	.36957	.08621	.10453	.89839	.17750	.08296	.54922

#1	.04723	.04714	.04879	1.1230	24.636	.10725	26.834	.23340	.04852
#2	.04751	.04761	.04905	1.1244	24.600	.10862	26.767	.23367	.04814

Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Elem	Na8183	Ni2316	P_1782	Pb2203	S_1820	Sb2068	Se1960	Si2881	Sn1899
Line	818.326 {41}	231.604 {446}	178.284 {489}	220.353 {453}	182.034 {485}	206.833 {463}	196.090 {472}	288.158 {117}	189.989 {477}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	52.795	.04975	1.9694	.09380	.69039	.09828	.20394	21.160	.09358
Stddev	.146	.00093	.0018	.00276	.00572	.00154	.00512	.046	.00060
%RSD	.27564	1.8707	.08958	2.9431	.82849	1.5691	2.5110	.21738	.63965

#1	52.693	.05040	1.9681	.09575	.69444	.09937	.20756	21.128	.09400
#2	52.898	.04909	1.9706	.09185	.68635	.09719	.20032	21.193	.09316

Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Elem	Sr4077	Th2837	Ti3349	Ti1908	U_3701	V_2924	Zn2062	Zr3391
Line	407.771 {83}	283.730 {119}	334.904 {101}	190.856 {477}	370.152 {91}	292.402 {115}	206.200 {163}	339.198 {99}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.34314	.19504	.04771	.19585	.51258	.04592	.19205	.04807
Stddev	.00126	.00403	.00005	.00103	.00935	.00029	.00001	.00011
%RSD	.36626	2.0650	.09656	.52489	1.8234	.63954	.00291	.22896

#1	.34225	.19219	.04767	.19658	.51918	.04572	.19205	.04815
#2	.34402	.19789	.04774	.19513	.50597	.04613	.19206	.04799

Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit								
Low Limit								

Int. Std.	Y_2243	Y_3600	Y_3774
Line	224.306 {450}	360.073 {94}	377.433 {89}
Units	Cts/S	Cts/S	Cts/S
Avg	1489.0	30119.	6209.4
Stddev	5.5	38.	46.4
%RSD	.36645	.12584	.74645

#1	1492.9	30146.	6242.1
#2	1485.2	30092.	6176.6

Sample Name: ccvh-3900196 Acquired: 5/23/2016 14:15:26 Type: QC
Method: 6500_026(v10) Mode: CONC Corr. Factor: 1.000000
User: kellyca Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	Ag3280	Al3092	As1890	B_2089	Ba4554	Be3130	Bi2230	Ca3179	Cd2288	Co2286	Cr2055	Cu3247	Fe2714
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.00381	49.638	.01009	.00398	.00240	.00188	1.0074	-.03668	.00053	.00500	.00155	.00972	50.196
Stddev	.00048	.205	.00248	.00060	.00002	.00007	.0061	.00127	.00024	.00021	.00017	.00018	.087
%RSD	12.703	.41300	24.618	15.095	.82506	3.7310	.60745	3.4708	44.936	4.1699	11.235	1.8657	.17306

#1	.00415	49.493	.01185	.00441	.00238	.00183	1.0117	-.03758	.00036	.00515	.00142	.00984	50.135
#2	.00347	49.783	.00833	.00356	.00241	.00193	1.0030	-.03578	.00070	.00485	.00167	.00959	50.258

Check ?	None	Chk Pass	None	None	None	None	Chk Pass	None	None	None	None	None	Chk Pass
Value													
Range													

Elem	K_7664	Li6707	Mg2790	Mn2576	Mo2020	Na8183	Ni2316	P_1782	Pb2203	S_1820	Sb2068	Se1960	Si2881
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.25598	.00455	.23427	.00130	-.00016	252.71	.00158	.00501	.00194	4.9341	.00431	.01427	.02566
Stddev	.01820	.00006	.00402	.00009	.00034	.06	.00018	.00059	.00206	.0143	.00063	.00268	.00513
%RSD	7.1120	1.2080	1.7158	6.8019	212.66	.02352	11.485	11.845	105.83	.28951	14.708	18.756	19.988

#1	.26885	.00452	.23712	.00136	-.00041	252.75	.00170	.00459	.00049	4.9442	.00386	.01617	.02204
#2	.24310	.00459	.23143	.00124	.00008	252.67	.00145	.00543	.00340	4.9240	.00476	.01238	.02929

Check ?	None	None	None	None	None	Chk Pass	None	None	None	Chk Pass	None	None	None
Value													
Range													

Elem	Sn1899	Sr4077	Th2837	Ti3349	Ti1908	U_3701	V_2924	Zn2062	Zr3391
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.00480	.00241	5.0185	.02539	.00407	10.324	-.01443	.00018	.00229
Stddev	.00229	.00002	.0210	.00003	.00024	.023	.00134	.00167	.00088
%RSD	47.582	.69215	.41749	.11693	5.7962	.22496	9.2580	924.60	38.561

#1	.00642	.00240	5.0333	.02537	.00423	10.340	-.01538	.00136	.00167
#2	.00319	.00242	5.0037	.02541	.00390	10.308	-.01349	-.00100	.00291

Check ?	None	None	Chk Pass	None	None	Chk Pass	None	None	None
Value									
Range									

Int. Std.	Y_2243	Y_3600	Y_3774
Units	Cts/S	Cts/S	Cts/S
Avg	1482.4	29793.	6017.1
Stddev	1.1	79.	23.0
%RSD	.07441	.26620	.38263

#1	1481.6	29737.	6000.9
#2	1483.2	29849.	6033.4

Sample Name: ccv-3900195 Acquired: 5/23/2016 14:18:15 Type: QC
Method: 6500_026(v10) Mode: CONC Corr. Factor: 1.000000
User: kellyca Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	Ag3280	Al1670	As1890	B_2089	Ba4554	Be3130	Bi2230	Ca3179	Cd2288	Co2286	Cr2055	Cu3247	Fe2599
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.48088	.50956	.98975	.50447	.48872	.48786	.00356	5.0607	.49037	.49466	.49030	.48586	2.4511
Stddev	.00064	.00396	.00709	.00201	.00164	.00377	.00030	.0492	.00280	.00010	.00155	.00092	.0266
%RSD	.13377	.77782	.71609	.39782	.33510	.77365	8.4074	.97206	.57052	.02057	.31672	.18941	1.0861

#1	.48042	.51237	.99476	.50589	.48988	.49053	.00377	5.0955	.49234	.49473	.49140	.48651	2.4700
#2	.48133	.50676	.98473	.50305	.48756	.48519	.00335	5.0259	.48839	.49458	.48920	.48521	2.4323

Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	None	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Value													
Range													

Elem	K_7664	Li6707	Mg2790	Mn2576	Mo2020	Na5895	Ni2316	P_1782	Pb2203	S_1820	Sb2068	Se1960	Si2881
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	48.916	.98676	19.394	.48657	.49240	4.9603	.49378	.97411	1.0086	.00553	.97098	.99548	4.8971
Stddev	.174	.00402	.026	.00018	.00189	.0296	.00236	.00576	.0018	.00830	.00160	.00709	.0112
%RSD	.35582	.40736	.13540	.03640	.38390	.59778	.47750	.59086	.18079	150.03	.16489	.71201	.22888

#1	49.039	.98960	19.375	.48644	.49374	4.9813	.49545	.97818	1.0099	-.00034	.97211	1.0005	4.8892
#2	48.793	.98392	19.412	.48670	.49107	4.9393	.49211	.97004	1.0073	.01141	.96985	.99046	4.9050

Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	None	Chk Pass	Chk Pass	Chk Pass
Value													
Range													

Elem	Sn1899	Sr4077	Th2837	Ti3349	Ti1908	U_3701	V_2924	Zn2062	Zr3391
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.98579	.48349	.00623	.47757	1.0109	-.00416	.47475	.47684	.48871
Stddev	.00201	.00227	.00146	.00037	.0025	.00079	.00050	.00029	.00227
%RSD	.20345	.46949	23.435	.07700	.24778	19.078	.10631	.06018	.46408

#1	.98437	.48509	.00727	.47783	1.0126	-.00360	.47439	.47705	.49031
#2	.98721	.48188	.00520	.47731	1.0091	-.00473	.47511	.47664	.48710

Check ?	Chk Pass	Chk Pass	None	Chk Pass	Chk Pass	None	Chk Pass	Chk Pass	Chk Pass
Value									
Range									

Int. Std.	Y_2243	Y_3600	Y_3774
Units	Cts/S	Cts/S	Cts/S
Avg	1524.3	30937.	6055.6
Stddev	1.7	16.	74.3
%RSD	.11210	.05184	1.2276

#1	1525.5	30949.	6003.0
#2	1523.1	30926.	6108.2

Sample Name: ccb Acquired: 5/23/2016 14:20:51 Type: QC
Method: 6500_026(v10) Mode: CONC Corr. Factor: 1.000000
User: kellyca Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	Ag3280	Al1670	As1890	B_2089	Ba4554	Be3130	Bi2230	Ca3179	Cd2288	Co2286	Cr2055	Cu3247
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.00044	.00000	.00121	W .00208	.00020	.00003	.00558	-.00212	.00020	-.00005	.00013	-.00059
Stddev	.00073	.00212	.00000	.00034	.00011	.00001	.00343	.00064	.00027	.00012	.00024	.00032
%RSD	164.80	49415.	.38987	16.163	56.359	33.268	61.339	30.193	135.50	226.47	190.18	54.596
#1	.00096	.00150	.00121	.00231	.00028	.00002	.00316	-.00167	.00039	-.00014	.00030	-.00036
#2	-.00007	-.00150	.00121	.00184	.00012	.00004	.00801	-.00257	.00001	.00003	-.00004	-.00082
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Warn	Chk Pass	Chk Pass	None	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit				.00156								
Low Limit				-.00156								
Elem	Fe2599	K_7664	Li6707	Mg2790	Mn2576	Mo2020	Na5895	Ni2316	P_1782	Pb2203	S_1820	Sb2068
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.00330	.04215	-.00080	.00104	-.00000	.00061	.00241	.00008	.00275	.00067	.00073	W .00506
Stddev	.00300	.01070	.00022	.00153	.00011	.00024	.00222	.00005	.00199	.00065	.00051	.00215
%RSD	90.922	25.391	27.824	146.59	2752.6	39.081	92.348	61.363	72.403	95.950	69.711	42.587
#1	.00542	.04971	-.00096	-.00004	-.00008	.00077	.00398	.00004	.00416	.00113	.00037	.00353
#2	.00118	.03458	-.00065	.00212	.00007	.00044	.00084	.00011	.00134	.00022	.00108	.00658
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	None	Chk Warn
High Limit												.00314
Low Limit												-.00314
Elem	Se1960	Si2881	Sn1899	Sr4077	Th2837	Ti3349	Ti1908	U_3701	V_2924	Zn2062	Zr3391	
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	
Avg	F .01005	.00865	.00032	-.00003	.00175	.00047	.00055	.01949	.00016	.00018	.00005	
Stddev	.00476	.00950	.00102	.00003	.00031	.00021	.00310	.00506	.00045	.00061	.00102	
%RSD	47.329	109.92	314.30	126.13	17.841	44.006	560.10	25.942	283.73	339.85	2105.4	
#1	.01342	.00193	.00104	-.00000	.00153	.00062	-.00164	.01591	.00048	-.00025	.00077	
#2	.00669	.01536	-.00040	-.00005	.00197	.00033	.00275	.02306	-.00016	.00062	-.00067	
Check ?	Chk Fail	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	
High Limit	.00972											
Low Limit	-.00972											
Int. Std.	Y_2243	Y_3600	Y_3774									
Units	Cts/S	Cts/S	Cts/S									
Avg	1535.3	31731.	6083.5									
Stddev	.9	14.	.7									
%RSD	.05884	.04282	.01141									
#1	1534.6	31721.	6083.1									
#2	1535.9	31740.	6084.0									

Sample Name: ccvl-3907489 Acquired: 5/23/2016 14:23:36 Type: QC
Method: 6500_026(v10) Mode: CONC Corr. Factor: 1.000000
User: kellyca Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	Ag3280	Al1670	As1890	B_2089	Ba4554	Be3130	Bi2230	Ca3179	Cd2288	Co2286	Cr2055	Cu3247
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.00958	.10374	.01756	.09996	.01020	.00109	.11046	.19807	.00494	.01027	.01008	.01467
Stddev	.00047	.00193	.00349	.00126	.00025	.00004	.00506	.00915	.00004	.00023	.00003	.00014
%RSD	4.8802	1.8602	19.846	1.2623	2.4947	3.5280	4.5768	4.6190	.88258	2.2801	.29448	.93236

#1	.00925	.10237	.01510	.10086	.01002	.00106	.11404	.19160	.00497	.01010	.01010	.01458
#2	.00991	.10510	.02003	.09907	.01038	.00112	.10689	.20454	.00491	.01043	.01005	.01477

Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Value												
Range												

Elem	Fe2599	K_7664	Li6707	Mg2790	Mn2576	Mo2020	Na5895	Ni2316	P_1782	Pb2203	S_1820	Sb2068
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.10917	2.9841	.00992	.20349	.00999	.02018	.99880	.04128	2.8278	.00984	-.00224	.02176
Stddev	.00400	.0509	.00013	.00032	.00008	.00012	.00887	.00077	.0075	.00214	.00237	.00090
%RSD	3.6683	1.7063	1.3039	.15582	.75666	.59575	.88841	1.8552	.26497	21.717	105.67	4.1265

#1	.10634	2.9481	.00982	.20371	.00994	.02010	.99252	.04182	2.8331	.01135	-.00057	.02240
#2	.11200	3.0201	.01001	.20326	.01005	.02027	1.0051	.04073	2.8225	.00833	-.00391	.02113

Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	None	Chk Pass
Value												
Range												

Elem	Se1960	Si2881	Sn1899	Sr4077	Th2837	Ti3349	Ti1908	U_3701	V_2924	Zn2062	Zr3391
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	F .02050	.50587	.10113	.00973	.01717	.00983	.01590	.07601	.00947	.01828	.01581
Stddev	.00121	.00350	.00142	.00017	.00025	.00019	.00028	.02453	.00016	.00151	.00113
%RSD	5.9162	.69143	1.4051	1.6990	1.4322	1.9158	1.7850	32.271	1.6730	8.2594	7.1670

#1	.02136	.50339	.10214	.00961	.01700	.00970	.01610	.09336	.00936	.01721	.01500
#2	.01964	.50834	.10013	.00984	.01735	.00997	.01570	.05867	.00959	.01935	.01661

Check ?	Chk Fail	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Value	.01500										
Range	30.000%										

Int. Std.	Y_2243	Y_3600	Y_3774
Units	Cts/S	Cts/S	Cts/S
Avg	1553.9	31762.	6107.7
Stddev	3.4	168.	58.4
%RSD	.22114	.52826	.95637

#1	1551.5	31880.	6149.0
#2	1556.4	31643.	6066.4

Sample Name: MB 280-325983/1-A Acquired: 5/23/2016 14:26:21 Type: Unk
Method: 6500_026(v10) Mode: CONC Corr. Factor: 1.000000
User: kellyca Custom ID1: 5/20 Custom ID2: Custom ID3:
Comment: 325983 6010C Q4 soil

Elem	Ag3280	Al1670	As1890	B_2089	Ba4554	Be3130	Bi2230	Ca3179	Cd2288
Line	328.068 {103}	167.079 {502}	189.042 {478}	208.959 {461}	455.403 { 74}	313.042 {108}	223.061 {451}	317.933 {106}	228.802 {447}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.00060	.01613	.00308	F .02442	.00071	.00002	.00131	.06756	-.00005
Stddev	.00034	.00056	.00273	.00070	.00003	.00003	.00049	.00167	.00015
%RSD	57.459	3.4861	88.646	2.8544	4.0509	134.53	37.846	2.4724	302.47
#1	.00035	.01653	.00115	.02491	.00069	.00000	.00096	.06638	.00006
#2	.00084	.01573	.00502	.02393	.00073	.00004	.00166	.06874	-.00015
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Fail	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit				.01000					
Low Limit				-.01000					
Elem	Co2286	Cr2055	Cu3247	Fe2599	K_7664	Li6707	Mg2790	Mn2576	Mo2020
Line	228.616 {447}	205.560 {464}	324.754 {104}	259.940 {130}	766.490 { 44}	670.784 { 50}	279.079 {121}2	257.610 {131}	202.030 {467}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	-.00009	.00047	-.00013	W .03305	.03711	-.00065	.02432	.00041	-.00003
Stddev	.00001	.00011	.00019	.00202	.01104	.00015	.00280	.00003	.00009
%RSD	8.7139	23.955	148.21	6.1009	29.763	22.951	11.520	8.1587	302.47
#1	-.00008	.00039	-.00027	.03163	.04492	-.00055	.02234	.00043	.00003
#2	-.00009	.00055	.00001	.03448	.02930	-.00076	.02630	.00038	-.00010
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Warn	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit				.03000					
Low Limit				-.05000					
Elem	Na5895	Ni2316	P_1782	Pb2203	S_1820	Sb2068	Se1960	Si2881	Sn1899
Line	589.592 { 57}	231.604 {446}	178.284 {489}	220.353 {453}	182.034 {485}	206.833 {463}	196.090 {472}	288.158 {117}	189.989 {477}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.07441	.00020	.00402	.00257	.00123	.00177	F .01244	F .10185	-.00026
Stddev	.00445	.00034	.00119	.00220	.00200	.00035	.00408	.00454	.00149
%RSD	5.9808	168.81	29.606	85.526	163.00	19.863	32.829	4.4613	576.38
#1	.07127	.00044	.00487	.00102	.00264	.00152	.00955	.10506	.00079
#2	.07756	-.00004	.00318	.00413	-.00019	.00202	.01533	.09863	-.00131
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Fail	Chk Fail	Chk Pass
High Limit							.01000	.10000	
Low Limit							-.01000	-.10000	
Elem	Sr4077	Th2837	Ti3349	Ti1908	U_3701	V_2924	Zn2062	Zr3391	
Line	407.771 { 83}	283.730 {119}	334.904 {101}	190.856 {477}	370.152 { 91}	292.402 {115}	206.200 {163}	339.198 { 99}	
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	
Avg	.00019	.00174	.00064	.00381	.00845	.00040	.00154	.00153	
Stddev	.00001	.00048	.00038	.00189	.00621	.00030	.00004	.00169	
%RSD	7.4954	27.749	59.932	49.731	73.490	75.749	2.2791	110.80	
#1	.00018	.00140	.00091	.00247	.01285	.00061	.00152	.00272	
#2	.00021	.00208	.00037	.00515	.00406	.00019	.00157	.00033	
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	
High Limit									
Low Limit									
Int. Std.	Y_2243	Y_3600	Y_3774						
Line	224.306 {450}	360.073 { 94}	377.433 { 89}						
Units	Cts/S	Cts/S	Cts/S						
Avg	1547.9	32025.	6153.1						
Stddev	5.7	127.	.5						
%RSD	.36578	.39510	.00854						
#1	1543.9	31936.	6153.5						
#2	1551.9	32115.	6152.8						

Sample Name: LCS 280-325983/2-A Acquired: 5/23/2016 14:29:07 Type: Unk

Method: 6500_026(v10) Mode: CONC Corr. Factor: 1.000000

User: kellyca Custom ID1: Custom ID2: Custom ID3:

Comment: 325983 6010C Q4 soil

Elem	Ag3280	Al1670	As1890	B_2089	Ba4554	Be3130	Bi2230	Ca3179	Cd2288
Line	328.068 {103}	167.079 {502}	189.042 {478}	208.959 {461}	455.403 { 74}	313.042 {108}	223.061 {451}	317.933 {106}	228.802 {447}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.04984	1.9783	1.0210	F 1.1792	2.0022	.05000	2.1115	49.614	.10031
Stddev	.00010	.0064	.0073	.0017	.0048	.00035	.0031	.011	.00016
%RSD	.20629	.32213	.71962	.14310	.23847	.69025	.14430	.02283	.15852

#1	.04977	1.9828	1.0262	1.1804	2.0056	.05025	2.1136	49.606	.10042
#2	.04992	1.9738	1.0158	1.1780	1.9989	.04976	2.1093	49.622	.10020

Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Fail	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit				1.1000					
Low Limit				.81000					

Elem	Co2286	Cr2055	Cu3247	Fe2599	K_7664	Li6707	Mg2790	Mn2576	Mo2020
Line	228.616 {447}	205.560 {464}	324.754 {104}	259.940 {130}	766.490 { 44}	670.784 { 50}	279.079 {121}2	257.610 {131}	202.030 {467}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.49442	F .20043	.24724	1.0143	50.713	1.0162	48.520	.48490	1.0335
Stddev	.00029	.00044	.00048	.0012	.051	.0024	.024	.00184	.0008
%RSD	.05798	.22017	.19584	.12262	.10016	.23941	.04872	.37945	.07693

#1	.49421	.20012	.24689	1.0152	50.749	1.0179	48.503	.48620	1.0340
#2	.49462	.20075	.24758	1.0135	50.677	1.0145	48.537	.48360	1.0329

Check ?	Chk Pass	Chk Fail	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit		.05700							
Low Limit		.04350							

Elem	Na8183	Ni2316	P_1782	Pb2203	S_1820	Sb2068	Se1960	Si2881	Sn1899
Line	818.326 { 41}	231.604 {446}	178.284 {489}	220.353 {453}	182.034 {485}	206.833 {463}	196.090 {472}	288.158 {117}	189.989 {477}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	51.949	.49474	10.086	.50117	1.9971	.50789	2.0033	2.4845	1.9580
Stddev	.118	.00000	.003	.00283	.0142	.00040	.0104	.0176	.0074
%RSD	.22712	.00077	.02772	.56485	.71017	.07781	.52131	.70731	.37951

#1	52.032	.49474	10.088	.50318	2.0072	.50761	2.0107	2.4721	1.9527
#2	51.866	.49474	10.084	.49917	1.9871	.50817	1.9959	2.4970	1.9633

Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	None	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Elem	Sr4077	Th2837	Ti3349	Ti1908	U_3701	V_2924	Zn2062	Zr3391
Line	407.771 { 83}	283.730 {119}	334.904 {101}	190.856 {477}	370.152 { 91}	292.402 {115}	206.200 {163}	339.198 { 99}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.97739	1.0076	.97602	1.9523	2.1251	.48134	.48147	.49305
Stddev	.00101	.0065	.00339	.0000	.0362	.00124	.00641	.00500
%RSD	.10366	.64168	.34684	.00173	1.7036	.25708	1.3316	1.0145

#1	.97810	1.0122	.97841	1.9523	2.0995	.48047	.48600	.48951
#2	.97667	1.0031	.97362	1.9522	2.1507	.48222	.47693	.49659

Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit								
Low Limit								

Int. Std.	Y_2243	Y_3600	Y_3774
Line	224.306 {450}	360.073 { 94}	377.433 { 89}
Units	Cts/S	Cts/S	Cts/S
Avg	1470.2	30037.	5970.9
Stddev	.8	35.	17.3
%RSD	.05163	.11665	.29056

#1	1470.8	30012.	5983.2
#2	1469.7	30062.	5958.6

Sample Name: 280-82954-A-14-J Acquired: 5/23/2016 14:31:39 Type: Unk
Method: 6500_026(v10) Mode: CONC Corr. Factor: 1.000000
User: kellyca Custom ID1: Custom ID2: Custom ID3:
Comment: 325983 6010C Q4 soil

Elem	Ag3280	Al3092	As1890	B_2089	Ba4554	Be3130	Bi2230	Ca3179	Cd2288
Line	328.068 {103}	309.271 {109}	189.042 {478}	208.959 {461}	455.403 { 74}	313.042 {108}	223.061 {451}	317.933 {106}	228.802 {447}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.00065	54.140	.00457	.00562	.15418	.00050	.00584	.94484	.01083
Stddev	.00009	.145	.00106	.00020	.00170	.00018	.00079	.03136	.00031
%RSD	13.830	.26823	23.143	3.6235	1.1046	36.087	13.604	3.3187	2.8910

#1	.00059	54.038	.00382	.00547	.15538	.00062	.00640	.96701	.01061
#2	.00071	54.243	.00532	.00576	.15297	.00037	.00528	.92267	.01105

Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Elem	Co2286	Cr2055	Cu3247	Fe2599	K_7664	Li6707	Mg2790	Mn2576	Mo2020
Line	228.616 {447}	205.560 {464}	324.754 {104}	259.940 {130}	766.490 { 44}	670.784 { 50}	279.079 {121}2	257.610 {131}	202.030 {467}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.00207	.06575	1.0333	22.370	.67794	.02255	1.4741	.10968	.00288
Stddev	.00024	.00006	.0032	.096	.06929	.00047	.0053	.00042	.00038
%RSD	11.782	.08956	.31274	.43048	10.221	2.0687	.36223	.38239	13.012

#1	.00224	.06579	1.0311	22.301	.72694	.02288	1.4704	.10938	.00262
#2	.00190	.06571	1.0356	22.438	.62895	.02222	1.4779	.10997	.00315

Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Elem	Na5895	Ni2316	P_1782	Pb2203	S_1820	Sb2068	Se1960	Si2881	Sn1899
Line	589.592 { 57}	231.604 {446}	178.284 {489}	220.353 {453}	182.034 {485}	206.833 {463}	196.090 {472}	288.158 {117}	189.989 {477}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.16077	.05049	.48773	.85637	.49164	.07311	.00673	2.1751	.01443
Stddev	.04271	.00025	.00460	.00347	.00304	.00027	.00006	.0458	.00093
%RSD	26.565	.48702	.94404	.40508	.61772	.37135	.96409	2.1070	6.4668

#1	.19097	.05032	.49099	.85882	.48949	.07292	.00669	2.2075	.01377
#2	.13057	.05066	.48447	.85391	.49378	.07330	.00678	2.1427	.01509

Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Elem	Sr4077	Th2837	Ti3349	Ti1908	U_3701	V_2924	Zn2062	Zr3391
Line	407.771 { 83}	283.730 {119}	334.904 {101}	190.856 {477}	370.152 { 91}	292.402 {115}	206.200 {163}	339.198 { 99}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.01385	.00976	.22494	.00325	.00045	.04664	1.2802	.01765
Stddev	.00069	.00046	.00091	.00096	.01032	.00046	.0014	.00045
%RSD	4.9565	4.7255	.40446	29.525	2312.7	.97839	.10857	2.5512

#1	.01433	.00943	.22429	.00257	-.00685	.04632	1.2793	.01797
#2	.01336	.01008	.22558	.00393	.00774	.04697	1.2812	.01733

Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit								
Low Limit								

Int. Std.	Y_2243	Y_3600	Y_3774
Line	224.306 {450}	360.073 { 94}	377.433 { 89}
Units	Cts/S	Cts/S	Cts/S
Avg	1558.7	31828.	6229.5
Stddev	.4	1.	.2
%RSD	.02801	.00410	.00262

#1	1558.4	31829.	6229.6
#2	1559.0	31827.	6229.4

Sample Name: 280-82954-A-14-JSD@5 Acquired: 5/23/2016 14:34:20 Type: Unk
Method: 6500_026(v10) Mode: CONC Corr. Factor: 1.000000
User: kellyca Custom ID1: Custom ID2: Custom ID3:
Comment: 325983 6010C Q4 soil

Elem	Ag3280	Al3092	As1890	B_2089	Ba4554	Be3130	Bi2230	Ca3179	Cd2288
Line	328.068 {103}	309.271 {109}	189.042 {478}	208.959 {461}	455.403 { 74}	313.042 {108}	223.061 {451}	317.933 {106}	228.802 {447}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.00035	11.065	.00219	.00220	.03147	.00011	.00485	.20527	.00232
Stddev	.00052	.085	.00116	.00009	.00024	.00001	.00053	.00538	.00009
%RSD	146.76	.76619	52.964	4.2605	.75856	7.7874	10.988	2.6209	4.0252

#1	-.00001	11.005	.00137	.00226	.03130	.00011	.00522	.20147	.00226
#2	.00072	11.125	.00300	.00213	.03164	.00012	.00447	.20908	.00239

Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Elem	Co2286	Cr2055	Cu3247	Fe2599	K_7664	Li6707	Mg2790	Mn2576	Mo2020
Line	228.616 {447}	205.560 {464}	324.754 {104}	259.940 {130}	766.490 { 44}	670.784 { 50}	279.079 {121}2	257.610 {131}	202.030 {467}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.00040	.01482	.21515	4.6654	.13194	.00356	.31680	.02319	.00038
Stddev	.00008	.00012	.00351	.0310	.01961	.00083	.00205	.00018	.00005
%RSD	20.013	.80785	1.6327	.66521	14.866	23.475	.64724	.78694	11.854

#1	.00046	.01474	.21267	4.6435	.11807	.00415	.31535	.02306	.00041
#2	.00034	.01491	.21763	4.6874	.14581	.00297	.31825	.02332	.00035

Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Elem	Na5895	Ni2316	P_1782	Pb2203	S_1820	Sb2068	Se1960	Si2881	Sn1899
Line	589.592 { 57}	231.604 {446}	178.284 {489}	220.353 {453}	182.034 {485}	206.833 {463}	196.090 {472}	288.158 {117}	189.989 {477}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.03474	.01179	.11209	.19675	.11427	.01586	.00785	.45162	.00220
Stddev	.00268	.00033	.00254	.00853	.00608	.00003	.00149	.00986	.00053
%RSD	7.7202	2.8294	2.2703	4.3356	5.3171	.20820	18.928	2.1827	23.938

#1	.03664	.01155	.11389	.19072	.10998	.01583	.00890	.44465	.00183
#2	.03285	.01202	.11029	.20278	.11857	.01588	.00680	.45859	.00257

Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Elem	Sr4077	Th2837	Ti3349	Ti1908	U_3701	V_2924	Zn2062	Zr3391
Line	407.771 { 83}	283.730 {119}	334.904 {101}	190.856 {477}	370.152 { 91}	292.402 {115}	206.200 {163}	339.198 { 99}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.00273	.00336	.04610	.00052	.01085	.01004	.27019	.00301
Stddev	.00012	.00053	.00086	.00055	.02773	.00008	.00046	.00044
%RSD	4.4526	15.780	1.8688	106.22	255.57	.76438	.17013	14.586

#1	.00264	.00374	.04549	.00091	.03046	.00998	.26987	.00270
#2	.00282	.00299	.04671	.00013	-.00876	.01009	.27052	.00332

Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit								
Low Limit								

Int. Std.	Y_2243	Y_3600	Y_3774
Line	224.306 {450}	360.073 { 94}	377.433 { 89}
Units	Cts/S	Cts/S	Cts/S
Avg	1559.1	32286.	6239.7
Stddev	1.6	4.	30.2
%RSD	.10073	.01330	.48460

#1	1560.2	32283.	6218.3
#2	1558.0	32289.	6261.1

Sample Name: 280-82954-A-14-K MS Acquired: 5/23/2016 14:37:03 Type: Unk

Method: 6500_026(v10) Mode: CONC Corr. Factor: 1.000000

User: kellyca Custom ID1: Custom ID2: Custom ID3:

Comment: 325983 6010C Q4 soil

Elem	Ag3280	Al3092	As1890	B_2089	Ba4554	Be3130	Bi2230	Ca3179	Cd2288
Line	328.068 {103}	309.271 {109}	189.042 {478}	208.959 {461}	455.403 { 74}	313.042 {108}	223.061 {451}	317.933 {106}	228.802 {447}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.04843	54.246	.98403	.97264	2.0939	.04784	2.0751	48.062	.10869
Stddev	.00018	.393	.00996	.00088	.0131	.00046	.0008	.386	.00021
%RSD	.37979	.72364	1.0121	.09034	.62575	.95923	.03743	.80352	.19665

#1	.04856	53.969	.97699	.97201	2.0846	.04752	2.0757	47.789	.10854
#2	.04830	54.524	.99107	.97326	2.1032	.04817	2.0746	48.335	.10884

Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Elem	Co2286	Cr2055	Cu3247	Fe2599	K_7664	Li6707	Mg2790	Mn2576	Mo2020
Line	228.616 {447}	205.560 {464}	324.754 {104}	259.940 {130}	766.490 { 44}	670.784 { 50}	279.079 {121}2	257.610 {131}	202.030 {467}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.48247	W .23553	.65122	21.330	50.266	1.0129	49.001	.57334	.98968
Stddev	.00037	.00035	.00031	.187	.418	.0097	.065	.00031	.00074
%RSD	.07585	.14765	.04798	.87480	.83196	.95637	.13330	.05458	.07466

#1	.48221	.23528	.65100	21.198	49.970	1.0060	49.047	.57356	.99021
#2	.48273	.23577	.65144	21.462	50.561	1.0197	48.955	.57311	.98916

Check ?	Chk Pass	Chk Warn	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit		.10000							
Low Limit		-.01000							

Elem	Na8183	Ni2316	P_1782	Pb2203	S_1820	Sb2068	Se1960	Si2881	Sn1899
Line	818.326 { 41}	231.604 {446}	178.284 {489}	220.353 {453}	182.034 {485}	206.833 {463}	196.090 {472}	288.158 {117}	189.989 {477}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	49.938	.52322	10.021	.94015	2.3855	.45594	1.9298	6.2784	1.8602
Stddev	.575	.00003	.023	.00226	.0037	.00099	.0058	.0225	.0061
%RSD	1.1509	.00527	.23115	.24064	.15413	.21803	.30132	.35796	.32576

#1	49.531	.52324	10.037	.93855	2.3881	.45524	1.9339	6.2943	1.8645
#2	50.344	.52321	10.004	.94175	2.3829	.45664	1.9257	6.2625	1.8560

Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Elem	Sr4077	Th2837	Ti3349	Ti1908	U_3701	V_2924	Zn2062	Zr3391
Line	407.771 { 83}	283.730 {119}	334.904 {101}	190.856 {477}	370.152 { 91}	292.402 {115}	206.200 {163}	339.198 { 99}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.95386	.96944	1.4282	1.8742	2.0719	.51966	1.0231	.48984
Stddev	.00837	.00125	.0030	.0057	.0158	.00169	.0005	.00140
%RSD	.87780	.12917	.20846	.30661	.76467	.32432	.04964	.28591

#1	.94794	.96855	1.4303	1.8783	2.0831	.51847	1.0228	.48885
#2	.95978	.97032	1.4261	1.8702	2.0607	.52085	1.0235	.49083

Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit								
Low Limit								

Int. Std.	Y_2243	Y_3600	Y_3774
Line	224.306 {450}	360.073 { 94}	377.433 { 89}
Units	Cts/S	Cts/S	Cts/S
Avg	1474.2	30083.	6140.2
Stddev	.9	15.	41.2
%RSD	.06101	.05025	.67159

#1	1473.6	30093.	6169.4
#2	1474.8	30072.	6111.1

Sample Name: 280-82954-A-14-L MSD Acquired: 5/23/2016 14:39:35 Type: Unk
Method: 6500_026(v10) Mode: CONC Corr. Factor: 1.000000
User: kellyca Custom ID1: Custom ID2: Custom ID3:
Comment: 325983 6010C Q4 soil

Elem	Ag3280	Al3092	As1890	B_2089	Ba4554	Be3130	Bi2230	Ca3179	Cd2288
Line	328.068 {103}	309.271 {109}	189.042 {478}	208.959 {461}	455.403 { 74}	313.042 {108}	223.061 {451}	317.933 {106}	228.802 {447}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.05346	67.247	1.0707	1.0629	2.2739	.05174	2.2675	51.962	.11778
Stddev	.00030	.430	.0045	.0053	.0186	.00044	.0112	.415	.00103
%RSD	.55769	.63945	.41753	.50228	.81772	.84631	.49446	.79956	.87725

#1	.05325	66.943	1.0675	1.0591	2.2607	.05143	2.2595	51.669	.11705
#2	.05368	67.551	1.0739	1.0666	2.2870	.05205	2.2754	52.256	.11851

Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Elem	Co2286	Cr2055	Cu3247	Fe2599	K_7664	Li6707	Mg2790	Mn2576	Mo2020
Line	228.616 {447}	205.560 {464}	324.754 {104}	259.940 {130}	766.490 { 44}	670.784 { 50}	279.079 {121}2	257.610 {131}	202.030 {467}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.52668	W .26315	.82805	25.561	54.310	1.0991	53.216	.63892	1.0872
Stddev	.00401	.00162	.00236	.250	.413	.0104	.011	.00160	.0065
%RSD	.76074	.61536	.28555	.97631	.76083	.94436	.02080	.24990	.59451

#1	.52384	.26201	.82638	25.384	54.018	1.0917	53.224	.63779	1.0827
#2	.52951	.26430	.82972	25.737	54.602	1.1064	53.208	.64005	1.0918

Check ?	Chk Pass	Chk Warn	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit		.10000							
Low Limit		-.01000							

Elem	Na8183	Ni2316	P_1782	Pb2203	S_1820	Sb2068	Se1960	Si2881	Sn1899
Line	818.326 { 41}	231.604 {446}	178.284 {489}	220.353 {453}	182.034 {485}	206.833 {463}	196.090 {472}	288.158 {117}	189.989 {477}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	53.890	.57483	10.906	1.0738	2.6129	.48671	2.0849	5.8336	2.0292
Stddev	.311	.00046	.047	.0064	.0133	.00393	.0058	.0052	.0061
%RSD	.57773	.07921	.43362	.59238	.50701	.80754	.27761	.08963	.30255

#1	53.670	.57451	10.872	1.0693	2.6035	.48949	2.0808	5.8373	2.0249
#2	54.111	.57515	10.939	1.0783	2.6222	.48393	2.0890	5.8299	2.0336

Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Elem	Sr4077	Th2837	Ti3349	Ti1908	U_3701	V_2924	Zn2062	Zr3391	
Line	407.771 { 83}	283.730 {119}	334.904 {101}	190.856 {477}	370.152 { 91}	292.402 {115}	206.200 {163}	339.198 { 99}	
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	
Avg	1.0333	1.0581	1.5337	2.0172	2.2570	.57060	1.1659	.53404	
Stddev	.0078	.0071	.0013	.0091	.0091	.00166	.0050	.00719	
%RSD	.75680	.66991	.08183	.45325	.40280	.29166	.42584	1.3471	

#1	1.0277	1.0531	1.5328	2.0108	2.2635	.56943	1.1624	.52895	
#2	1.0388	1.0631	1.5346	2.0237	2.2506	.57178	1.1695	.53912	

Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	
High Limit									
Low Limit									

Int. Std.	Y_2243	Y_3600	Y_3774						
Line	224.306 {450}	360.073 { 94}	377.433 { 89}						
Units	Cts/S	Cts/S	Cts/S						
Avg	1464.4	29930.	6140.5						
Stddev	4.5	39.	1.2						
%RSD	.30954	.12934	.01970						

#1	1467.6	29957.	6139.6						
#2	1461.2	29902.	6141.4						

Sample Name: 280-82954-A-14-J PDS Acquired: 5/23/2016 14:42:06 Type: Unk
Method: 6500_026(v10) Mode: CONC Corr. Factor: 1.000000
User: kellyca Custom ID1: Custom ID2: Custom ID3:
Comment: 325983 6010C Q4 soil

Elem	Ag3280	Al3092	As1890	B_2089	Ba4554	Be3130	Bi2230	Ca3179	Cd2288
Line	328.068 {103}	309.271 {109}	189.042 {478}	208.959 {461}	455.403 { 74}	313.042 {108}	223.061 {451}	317.933 {106}	228.802 {447}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.02010	53.781	.20309	.10556	.24340	.04774	.00291	19.767	.06030
Stddev	.00027	.319	.00233	.00094	.00116	.00006	.00152	.026	.00028
%RSD	1.3214	.59242	1.1494	.89430	.47630	.12549	52.253	.13245	.47073

#1	.01991	53.556	.20474	.10489	.24258	.04770	.00183	19.748	.06050
#2	.02028	54.006	.20144	.10623	.24422	.04778	.00399	19.785	.06009

Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Elem	Co2286	Cr2055	Cu3247	Fe2599	K_7664	Li6707	Mg2790	Mn2576	Mo2020
Line	228.616 {447}	205.560 {464}	324.754 {104}	259.940 {130}	766.490 { 44}	670.784 { 50}	279.079 {121}2	257.610 {131}	202.030 {467}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.05055	W .11294	1.0538	22.695	19.804	.11832	20.352	.15504	.05244
Stddev	.00001	.00063	.0025	.102	.091	.00098	.056	.00029	.00028
%RSD	.01869	.55430	.23715	.45042	.45966	.82526	.27627	.18493	.52912

#1	.05054	.11250	1.0556	22.622	19.740	.11763	20.392	.15524	.05264
#2	.05055	.11338	1.0520	22.767	19.869	.11901	20.312	.15484	.05224

Check ?	Chk Pass	Chk Warn	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit		.10000							
Low Limit		-.01000							

Elem	Na8183	Ni2316	P_1782	Pb2203	S_1820	Sb2068	Se1960	Si2881	Sn1899
Line	818.326 { 41}	231.604 {446}	178.284 {489}	220.353 {453}	182.034 {485}	206.833 {463}	196.090 {472}	288.158 {117}	189.989 {477}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	20.160	.09665	2.3741	.91856	.49285	.17001	.19616	6.7956	.10694
Stddev	.228	.00130	.0001	.00106	.00041	.00061	.00061	.0474	.00145
%RSD	1.1332	1.3408	.00372	.11510	.08243	.35919	.31251	.69726	1.3556

#1	19.998	.09757	2.3741	.91931	.49256	.16957	.19659	6.8291	.10796
#2	20.321	.09573	2.3740	.91781	.49313	.17044	.19572	6.7621	.10591

Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Elem	Sr4077	Th2837	Ti3349	Ti1908	U_3701	V_2924	Zn2062	Zr3391
Line	407.771 { 83}	283.730 {119}	334.904 {101}	190.856 {477}	370.152 { 91}	292.402 {115}	206.200 {163}	339.198 { 99}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.05989	.20455	.26993	.19553	.52676	.09237	1.4430	.06447
Stddev	.00020	.00146	.00325	.00118	.00392	.00057	.0054	.00141
%RSD	.33560	.71225	1.2029	.60387	.74421	.61659	.37281	2.1867

#1	.05975	.20558	.27222	.19469	.52399	.09277	1.4392	.06547
#2	.06003	.20352	.26763	.19636	.52953	.09196	1.4468	.06348

Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit								
Low Limit								

Int. Std.	Y_2243	Y_3600	Y_3774
Line	224.306 {450}	360.073 { 94}	377.433 { 89}
Units	Cts/S	Cts/S	Cts/S
Avg	1521.3	31056.	6223.7
Stddev	.5	38.	14.3
%RSD	.03221	.12203	.22924

#1	1520.9	31029.	6233.8
#2	1521.6	31083.	6213.6

Sample Name: ccvh-3900196 Acquired: 5/23/2016 14:44:45 Type: QC
Method: 6500_026(v10) Mode: CONC Corr. Factor: 1.000000
User: kellyca Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	Ag3280	Al3092	As1890	B_2089	Ba4554	Be3130	Bi2230	Ca3179	Cd2288	Co2286	Cr2055	Cu3247	Fe2714
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.00240	48.282	.00312	.00456	.00201	.00133	1.0232	-.04302	.00054	.00486	.00082	.00769	48.764
Stddev	.00046	.132	.00458	.00028	.00010	.00003	.0061	.00425	.00004	.00033	.00001	.00135	.075
%RSD	19.145	.27276	146.92	6.1803	4.9095	2.5151	.59630	9.8760	6.6438	6.8339	.63046	17.620	.15308

#1	.00273	48.375	.00635	.00436	.00208	.00135	1.0275	-.04602	.00056	.00463	.00082	.00865	48.711
#2	.00208	48.189	-.00012	.00476	.00194	.00130	1.0188	-.04002	.00051	.00510	.00081	.00673	48.817

Check ?	None	Chk Pass	None	None	None	None	Chk Pass	None	None	None	None	None	Chk Pass
Value													
Range													

Elem	K_7664	Li6707	Mg2790	Mn2576	Mo2020	Na8183	Ni2316	P_1782	Pb2203	S_1820	Sb2068	Se1960	Si2881
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.17838	.00293	.22640	.00082	-.00082	247.55	.00070	.00331	.00227	4.9506	.00164	.01037	.01122
Stddev	.04895	.00084	.02431	.00019	.00020	.29	.00051	.00359	.00186	.0216	.00278	.00096	.02497
%RSD	27.443	28.613	10.738	23.604	24.717	.11556	73.021	108.42	81.921	.43533	168.95	9.2545	222.59

#1	.14377	.00234	.24359	.00096	-.00067	247.35	.00034	.00584	.00358	4.9659	.00361	.00969	-.00644
#2	.21300	.00352	.20921	.00069	-.00096	247.75	.00106	.00077	.00095	4.9354	-.00032	.01105	.02888

Check ?	None	None	None	None	None	Chk Pass	None	None	None	Chk Pass	None	None	None
Value													
Range													

Elem	Sn1899	Sr4077	Th2837	Ti3349	Ti1908	U_3701	V_2924	Zn2062	Zr3391
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.00219	.00175	4.9318	.02542	.00161	10.153	-.01465	-.00011	-.00465
Stddev	.00094	.00001	.0021	.00036	.00186	.047	.00025	.00217	.00196
%RSD	42.973	.39287	.04150	1.4064	115.52	.46504	1.7082	1980.4	42.153

#1	.00285	.00175	4.9303	.02567	.00293	10.119	-.01483	.00142	-.00604
#2	.00152	.00174	4.9332	.02517	.00029	10.186	-.01448	-.00164	-.00327

Check ?	None	None	Chk Pass	None	None	Chk Pass	None	None	None
Value									
Range									

Int. Std.	Y_2243	Y_3600	Y_3774
Units	Cts/S	Cts/S	Cts/S
Avg	1481.5	30512.	6053.3
Stddev	3.1	26.	1.2
%RSD	.21053	.08472	.02029

#1	1479.3	30530.	6052.5
#2	1483.7	30494.	6054.2

Sample Name: ccv-3900195 Acquired: 5/23/2016 14:47:33 Type: QC
Method: 6500_026(v10) Mode: CONC Corr. Factor: 1.000000
User: kellyca Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	Ag3280	Al1670	As1890	B_2089	Ba4554	Be3130	Bi2230	Ca3179	Cd2288	Co2286	Cr2055	Cu3247	Fe2599	K_7664
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.47430	.52009	.98531	.51478	.48675	.48770	.00128	5.0410	.50386	.50593	.50165	.48114	2.4464	48.329
Stddev	.00048	.00047	.00151	.00094	.00154	.00221	.00058	.0147	.00105	.00011	.00130	.00082	.0146	.418
%RSD	.10157	.09004	.15375	.18290	.31627	.45281	45.355	.29124	.20805	.02165	.25899	.17004	.59657	.86568

#1	.47464	.51976	.98424	.51411	.48566	.48614	.00087	5.0306	.50460	.50600	.50257	.48056	2.4361	48.033
#2	.47396	.52042	.98638	.51545	.48784	.48926	.00169	5.0514	.50312	.50585	.50074	.48172	2.4567	48.625

Check ? Value Range	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	None	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
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Elem	Li6707	Mg2790	Mn2576	Mo2020	Na5895	Ni2316	P_1782	Pb2203	S_1820	Sb2068	Se1960	Si2881	Sn1899	Sr4077
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.98447	19.069	.48736	.50607	5.0146	.49825	.97264	1.0263	.00846	.97633	.98524	4.8829	.98412	.47159
Stddev	.00748	.021	.00041	.00273	.0102	.00194	.00076	.0046	.00256	.00545	.00126	.0403	.00216	.00245
%RSD	.75952	.10955	.08409	.53851	.20293	.38982	.07842	.44688	30.301	.55796	.12761	.82482	.21962	.51856

#1	.97918	19.084	.48765	.50799	5.0074	.49962	.97210	1.0296	.01028	.98018	.98435	4.8544	.98565	.46986
#2	.98975	19.054	.48707	.50414	5.0218	.49688	.97318	1.0231	.00665	.97248	.98613	4.9113	.98260	.47332

Check ? Value Range	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	None	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
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Elem	Th2837	Ti3349	Ti1908	U_3701	V_2924	Zn2062	Zr3391
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.00657	.46940	1.0082	.01696	.46799	.47913	.48514
Stddev	.00091	.00253	.0007	.00120	.00218	.00314	.00173
%RSD	13.897	.53873	.06505	7.0627	.46542	.65500	.35713

#1	.00593	.46761	1.0078	.01612	.46953	.48134	.48392
#2	.00722	.47119	1.0087	.01781	.46645	.47691	.48637

Check ? Value Range	None	Chk Pass	Chk Pass	None	Chk Pass	Chk Pass	Chk Pass
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Int. Std.	Y_2243	Y_3600	Y_3774
Units	Cts/S	Cts/S	Cts/S
Avg	1508.5	31285.	6085.7
Stddev	1.2	57.	36.1
%RSD	.07815	.18218	.59344

#1	1509.4	31325.	6111.2
#2	1507.7	31245.	6060.2

Sample Name: ccb Acquired: 5/23/2016 14:50:08 Type: QC
Method: 6500_026(v10) Mode: CONC Corr. Factor: 1.000000
User: kellyca Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	Ag3280	Al1670	As1890	B_2089	Ba4554	Be3130	Bi2230	Ca3179	Cd2288	Co2286	Cr2055	Cu3247
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.00057	.00046	-.00196	W .00226	.00016	.00002	.00491	-.00337	.00004	-.00004	.00026	-.00109
Stddev	.00009	.00050	.00239	.00016	.00009	.00005	.00350	.00095	.00000	.00013	.00024	.00073
%RSD	16.146	108.06	122.05	6.9018	57.099	236.21	71.140	28.225	10.071	315.36	91.685	66.708
#1	.00064	.00011	-.00365	.00215	.00009	.00005	.00244	-.00404	.00005	.00005	.00009	-.00058
#2	.00051	.00081	-.00027	.00237	.00022	-.00001	.00739	-.00270	.00004	-.00014	.00043	-.00161

Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Warn	Chk Pass	Chk Pass	None	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit				.00156								
Low Limit				-.00156								

Elem	Fe2599	K_7664	Li6707	Mg2790	Mn2576	Mo2020	Na5895	Ni2316	P_1782	Pb2203	S_1820	Sb2068
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.00362	.03016	-.00065	.00138	-.00003	.00017	.00571	.00021	-.00204	-.00065	-.00560	.00194
Stddev	.00086	.01319	.00036	.00044	.00007	.00002	.00187	.00034	.00312	.00282	.00102	.00063
%RSD	23.675	43.735	55.333	31.869	253.75	10.698	32.790	165.38	152.61	437.22	18.146	32.355
#1	.00423	.03949	-.00040	.00169	.00002	.00016	.00704	-.00004	-.00425	.00135	-.00488	.00239
#2	.00302	.02084	-.00091	.00107	-.00008	.00018	.00439	.00045	.00016	-.00264	-.00632	.00150

Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	None	Chk Pass
High Limit												
Low Limit												

Elem	Se1960	Si2881	Sn1899	Sr4077	Th2837	Ti3349	Ti1908	U_3701	V_2924	Zn2062	Zr3391
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	W .00690	.01162	.00025	.00002	.00170	.00045	.00058	.00764	.00035	-.00119	.00128
Stddev	.00424	.01652	.00122	.00002	.00138	.00008	.00064	.00105	.00051	.00003	.00068
%RSD	61.509	142.20	484.52	94.999	81.112	17.437	109.28	13.759	147.36	2.4095	52.995
#1	.00990	.02331	.00111	.00003	.00073	.00050	.00013	.00838	.00071	-.00121	.00080
#2	.00390	-.00006	-.00061	.00001	.00268	.00039	.00104	.00690	-.00001	-.00117	.00176

Check ?	Chk Warn	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit	.00486										
Low Limit	-.00486										

Int. Std.	Y_2243	Y_3600	Y_3774
Units	Cts/S	Cts/S	Cts/S
Avg	1519.6	31996.	6015.4
Stddev	4.8	49.	38.5
%RSD	.31347	.15408	.64002
#1	1522.9	31961.	6042.6
#2	1516.2	32030.	5988.2

Sample Name: ccvl-3907489 Acquired: 5/23/2016 14:52:54 Type: QC
Method: 6500_026(v10) Mode: CONC Corr. Factor: 1.000000
User: kellyca Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	Ag3280	Al1670	As1890	B_2089	Ba4554	Be3130	Bi2230	Ca3179	Cd2288	Co2286	Cr2055	Cu3247
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.01002	.10848	.01636	.10374	.01025	.00103	.11414	.19529	.00521	.01072	.01052	.01385
Stddev	.00002	.00138	.00120	.00083	.00011	.00005	.00141	.00388	.00019	.00015	.00018	.00015
%RSD	.19022	1.2731	7.3116	.79765	1.0995	5.2341	1.2335	1.9851	3.6144	1.4154	1.7317	1.0488

#1	.01004	.10946	.01551	.10316	.01033	.00106	.11513	.19803	.00507	.01083	.01065	.01396
#2	.01001	.10751	.01720	.10433	.01017	.00099	.11314	.19254	.00534	.01061	.01039	.01375

Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Value												
Range												

Elem	Fe2599	K_7664	Li6707	Mg2790	Mn2576	Mo2020	Na5895	Ni2316	P_1782	Pb2203	S_1820	Sb2068
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.10870	2.9827	.00971	.20177	.01006	.02068	1.0167	.04159	2.8898	F .01228	.00029	.02157
Stddev	.00126	.0061	.00007	.00081	.00004	.00045	.0022	.00072	.0058	.00149	.00302	.00156
%RSD	1.1611	.20352	.69919	.40157	.43226	2.1873	.22117	1.7201	.20011	12.166	1054.9	7.2228

#1	.10959	2.9870	.00976	.20234	.01009	.02100	1.0183	.04108	2.8939	.01122	-.00185	.02267
#2	.10781	2.9784	.00966	.20120	.01003	.02036	1.0151	.04209	2.8857	.01334	.00242	.02047

Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Fail	None	Chk Pass
Value										.00900		
Range										30.000%		

Elem	Se1960	Si2881	Sn1899	Sr4077	Th2837	Ti3349	Ti1908	U_3701	V_2924	Zn2062	Zr3391
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	F .02252	.51195	.10285	.00960	.01763	.01001	.01839	F .08268	.00945	.01790	.01572
Stddev	.00081	.00473	.00034	.00005	.00065	.00020	.00286	.00253	.00034	.00091	.00032
%RSD	3.6070	.92342	.33265	.52584	3.6940	1.9576	15.569	3.0655	3.5478	5.1028	2.0503

#1	.02195	.50861	.10310	.00957	.01810	.00987	.02042	.08089	.00969	.01854	.01595
#2	.02310	.51529	.10261	.00964	.01717	.01015	.01637	.08447	.00922	.01725	.01549

Check ?	Chk Fail	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Fail	Chk Pass	Chk Pass	Chk Pass
Value	.01500							.06000			
Range	30.000%							30.000%			

Int. Std.	Y_2243	Y_3600	Y_3774
Units	Cts/S	Cts/S	Cts/S
Avg	1525.5	32172.	6119.2
Stddev	1.3	69.	9.7
%RSD	.08628	.21528	.15877

#1	1526.4	32221.	6112.3
#2	1524.5	32123.	6126.1

Sample Name: 280-82954-A-13-I Acquired: 5/23/2016 14:55:40 Type: Unk
Method: 6500_026(v10) Mode: CONC Corr. Factor: 1.000000
User: kellyca Custom ID1: Custom ID2: Custom ID3:
Comment: 325983 6010C Q4 soil

Elem	Ag3280	Al3092	As1890	B_2089	Ba4554	Be3130	Bi2230	Ca3179	Cd2288
Line	328.068 {103}	309.271 {109}	189.042 {478}	208.959 {461}	455.403 { 74}	313.042 {108}	223.061 {451}	317.933 {106}	228.802 {447}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.00013	41.991	.01233	.00469	.16809	.00036	.00487	.96402	.01246
Stddev	.00064	.225	.00040	.00062	.00059	.00002	.00165	.00506	.00014
%RSD	491.58	.53541	3.2228	13.212	.35230	5.3025	33.945	.52484	1.1133

#1	.00058	41.832	.01261	.00513	.16767	.00035	.00604	.96045	.01255
#2	-.00032	42.150	.01205	.00425	.16851	.00038	.00370	.96760	.01236

Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Elem	Co2286	Cr2055	Cu3247	Fe2599	K_7664	Li6707	Mg2790	Mn2576	Mo2020
Line	228.616 {447}	205.560 {464}	324.754 {104}	259.940 {130}	766.490 { 44}	670.784 { 50}	279.079 {121}2	257.610 {131}	202.030 {467}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.00255	.04237	.42709	23.247	.64846	.02179	1.1867	.11874	.00308
Stddev	.00071	.00022	.00117	.067	.00420	.00032	.0029	.00025	.00015
%RSD	27.768	.52170	.27360	.28789	.64775	1.4576	.24277	.21235	4.7494

#1	.00205	.04221	.42626	23.200	.65143	.02156	1.1888	.11892	.00318
#2	.00305	.04252	.42791	23.294	.64549	.02201	1.1847	.11856	.00297

Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Elem	Na5895	Ni2316	P_1782	Pb2203	S_1820	Sb2068	Se1960	Si2881	Sn1899
Line	589.592 { 57}	231.604 {446}	178.284 {489}	220.353 {453}	182.034 {485}	206.833 {463}	196.090 {472}	288.158 {117}	189.989 {477}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.23065	.04990	.55947	.62928	.49119	.01151	.00968	3.0137	.01249
Stddev	.00815	.00001	.00576	.00088	.00114	.00034	.00497	.0224	.00014
%RSD	3.5317	.01167	1.0300	.14058	.23216	2.9751	51.395	.74298	1.1404

#1	.23642	.04991	.56354	.62866	.49038	.01175	.01319	2.9978	.01259
#2	.22489	.04990	.55539	.62991	.49200	.01127	.00616	3.0295	.01239

Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Elem	Sr4077	Th2837	Ti3349	Ti1908	U_3701	V_2924	Zn2062	Zr3391
Line	407.771 { 83}	283.730 {119}	334.904 {101}	190.856 {477}	370.152 { 91}	292.402 {115}	206.200 {163}	339.198 { 99}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.01457	.01084	.25933	.00279	.00231	.04533	.62908	.01200
Stddev	.00006	.00189	.00387	.00098	.02565	.00039	.00034	.00132
%RSD	.38154	17.452	1.4940	35.314	1109.3	.85514	.05384	11.000

#1	.01461	.00951	.25659	.00209	.02045	.04560	.62932	.01293
#2	.01453	.01218	.26206	.00348	-.01583	.04505	.62884	.01107

Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit								
Low Limit								

Int. Std.	Y_2243	Y_3600	Y_3774
Line	224.306 {450}	360.073 { 94}	377.433 { 89}
Units	Cts/S	Cts/S	Cts/S
Avg	1541.8	32009.	6239.3
Stddev	2.9	15.	6.0
%RSD	.19108	.04725	.09697

#1	1543.8	32020.	6235.1
#2	1539.7	31998.	6243.6

Sample Name: 280-82954-A-13-J DU Acquired: 5/23/2016 14:58:22 Type: Unk

Method: 6500_026(v10) Mode: CONC Corr. Factor: 1.000000

User: kellyca Custom ID1: Custom ID2: Custom ID3:

Comment: 325983 6010C Q4 soil

Elem	Ag3280	Al3092	As1890	B_2089	Ba4554	Be3130	Bi2230	Ca3179	Cd2288
Line	328.068 {103}	309.271 {109}	189.042 {478}	208.959 {461}	455.403 { 74}	313.042 {108}	223.061 {451}	317.933 {106}	228.802 {447}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.00032	39.582	.00897	.00436	.15232	.00034	.00437	.99617	.01113
Stddev	.00014	.131	.00371	.00073	.00022	.00001	.00176	.01236	.00016
%RSD	42.320	.33148	41.364	16.757	.14179	1.9872	40.318	1.2412	1.4204

#1	.00023	39.675	.00635	.00384	.15217	.00034	.00561	.98743	.01124
#2	.00042	39.490	.01160	.00487	.15247	.00033	.00312	1.0049	.01102

Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Elem	Co2286	Cr2055	Cu3247	Fe2599	K_7664	Li6707	Mg2790	Mn2576	Mo2020
Line	228.616 {447}	205.560 {464}	324.754 {104}	259.940 {130}	766.490 { 44}	670.784 { 50}	279.079 {121}2	257.610 {131}	202.030 {467}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.00217	.03626	.37664	21.193	.58127	.02014	1.1254	.11414	.00175
Stddev	.00019	.00019	.00065	.119	.01724	.00049	.0005	.00012	.00081
%RSD	8.8132	.52308	.17386	.56075	2.9656	2.4546	.04502	.10344	46.212

#1	.00204	.03639	.37618	21.109	.56909	.02049	1.1258	.11422	.00118
#2	.00231	.03612	.37711	21.277	.59346	.01979	1.1251	.11406	.00232

Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Elem	Na5895	Ni2316	P_1782	Pb2203	S_1820	Sb2068	Se1960	Si2881	Sn1899
Line	589.592 { 57}	231.604 {446}	178.284 {489}	220.353 {453}	182.034 {485}	206.833 {463}	196.090 {472}	288.158 {117}	189.989 {477}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.21405	.04833	.47594	.50056	.47244	.00827	.00513	2.2403	.00989
Stddev	.00524	.00047	.00047	.00053	.00074	.00021	.00450	.0354	.00141
%RSD	2.4503	.98239	.09939	.10619	.15625	2.5665	87.801	1.5812	14.209

#1	.21034	.04800	.47627	.50094	.47296	.00812	.00831	2.2153	.01088
#2	.21776	.04867	.47560	.50019	.47191	.00842	.00194	2.2654	.00890

Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Elem	Sr4077	Th2837	Ti3349	Ti1908	U_3701	V_2924	Zn2062	Zr3391
Line	407.771 { 83}	283.730 {119}	334.904 {101}	190.856 {477}	370.152 { 91}	292.402 {115}	206.200 {163}	339.198 { 99}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.01436	.01068	.22460	.00293	-.00363	.04073	.61653	.01286
Stddev	.00004	.00109	.00273	.00065	.02618	.00012	.00089	.00015
%RSD	.25356	10.243	1.2140	22.105	721.21	.29521	.14442	1.1562

#1	.01433	.00991	.22653	.00247	.01488	.04064	.61716	.01296
#2	.01438	.01146	.22267	.00339	-.02214	.04081	.61590	.01275

Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit								
Low Limit								

Int. Std.	Y_2243	Y_3600	Y_3774
Line	224.306 {450}	360.073 { 94}	377.433 { 89}
Units	Cts/S	Cts/S	Cts/S
Avg	1543.5	32203.	6227.3
Stddev	2.0	11.	20.8
%RSD	.13083	.03380	.33396

#1	1544.9	32210.	6242.0
#2	1542.1	32195.	6212.6

Sample Name: 280-82954-A-15-F Acquired: 5/23/2016 15:01:04 Type: Unk
Method: 6500_026(v10) Mode: CONC Corr. Factor: 1.000000
User: kellyca Custom ID1: Custom ID2: Custom ID3:
Comment: 325983 6010C Q4 soil

Elem	Ag3280	Al3092	As1890	B_2089	Ba4554	Be3130	Bi2230	Ca3179	Cd2288
Line	328.068 {103}	309.271 {109}	189.042 {478}	208.959 {461}	455.403 { 74}	313.042 {108}	223.061 {451}	317.933 {106}	228.802 {447}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.00118	42.009	.00582	.00557	.15706	.00039	.00718	.98039	.01169
Stddev	.00052	.155	.00106	.00013	.00029	.00004	.00151	.00139	.00001
%RSD	44.054	.36870	18.177	2.2959	.18414	9.5819	20.953	.14147	.08087

#1	.00155	41.899	.00507	.00548	.15685	.00042	.00825	.97941	.01169
#2	.00081	42.118	.00657	.00566	.15726	.00037	.00612	.98137	.01170

Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Elem	Co2286	Cr2055	Cu3247	Fe2599	K_7664	Li6707	Mg2790	Mn2576	Mo2020
Line	228.616 {447}	205.560 {464}	324.754 {104}	259.940 {130}	766.490 { 44}	670.784 { 50}	279.079 {121}2	257.610 {131}	202.030 {467}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.00271	.03628	.46089	22.313	.64264	.02135	1.4220	.11659	.00325
Stddev	.00001	.00029	.00115	.038	.01459	.00052	.0021	.00015	.00007
%RSD	.28832	.79352	.25058	.17215	2.2704	2.4567	.14701	.12986	2.2758

#1	.00271	.03649	.46170	22.286	.63233	.02172	1.4205	.11669	.00330
#2	.00272	.03608	.46007	22.340	.65296	.02098	1.4234	.11648	.00320

Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Elem	Na5895	Ni2316	P_1782	Pb2203	S_1820	Sb2068	Se1960	Si2881	Sn1899
Line	589.592 { 57}	231.604 {446}	178.284 {489}	220.353 {453}	182.034 {485}	206.833 {463}	196.090 {472}	288.158 {117}	189.989 {477}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.18876	.04986	.52913	4.1576	.48611	.19270	.00726	3.5607	.03420
Stddev	.00251	.00009	.00728	.0017	.00244	.00241	.00289	.1313	.00194
%RSD	1.3301	.17109	1.3768	.04184	.50291	1.2494	39.862	3.6879	5.6633

#1	.18699	.04992	.52398	4.1563	.48784	.19440	.00521	3.6536	.03283
#2	.19054	.04980	.53428	4.1588	.48438	.19100	.00930	3.4679	.03557

Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Elem	Sr4077	Th2837	Ti3349	Ti1908	U_3701	V_2924	Zn2062	Zr3391
Line	407.771 { 83}	283.730 {119}	334.904 {101}	190.856 {477}	370.152 { 91}	292.402 {115}	206.200 {163}	339.198 { 99}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.01321	.01077	.26802	.00391	-.00556	.04437	.62948	.01090
Stddev	.00016	.00027	.00816	.00171	.00679	.00028	.00299	.00118
%RSD	1.1782	2.5040	3.0441	43.909	122.13	.63057	.47539	10.840

#1	.01310	.01096	.27379	.00512	-.01037	.04417	.63160	.01173
#2	.01332	.01058	.26225	.00269	-.00076	.04457	.62736	.01006

Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit								
Low Limit								

Int. Std.	Y_2243	Y_3600	Y_3774
Line	224.306 {450}	360.073 { 94}	377.433 { 89}
Units	Cts/S	Cts/S	Cts/S
Avg	1541.1	32216.	6246.5
Stddev	4.0	38.	7.7
%RSD	.25783	.11917	.12384

#1	1543.9	32243.	6252.0
#2	1538.3	32188.	6241.0

Sample Name: 280-82954-A-18-F Acquired: 5/23/2016 15:03:46 Type: Unk
Method: 6500_026(v10) Mode: CONC Corr. Factor: 1.000000
User: kellyca Custom ID1: Custom ID2: Custom ID3:
Comment: 325983 6010C Q4 soil

Elem	Ag3280	Al3092	As1890	B_2089	Ba4554	Be3130	Bi2230	Ca3179	Cd2288
Line	328.068 {103}	309.271 {109}	189.042 {478}	208.959 {461}	455.403 { 74}	313.042 {108}	223.061 {451}	317.933 {106}	228.802 {447}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.00048	38.640	.00832	.00436	.15681	.00030	.00513	.79451	.01226
Stddev	.00011	.068	.00328	.00009	.00030	.00003	.00171	.00453	.00042
%RSD	22.424	.17642	39.359	1.9943	.19275	8.5889	33.338	.57025	3.4457

#1	.00056	38.592	.01064	.00442	.15660	.00028	.00392	.79131	.01196
#2	.00040	38.688	.00601	.00430	.15703	.00032	.00634	.79772	.01256

Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Elem	Co2286	Cr2055	Cu3247	Fe2599	K_7664	Li6707	Mg2790	Mn2576	Mo2020
Line	228.616 {447}	205.560 {464}	324.754 {104}	259.940 {130}	766.490 { 44}	670.784 { 50}	279.079 {121}2	257.610 {131}	202.030 {467}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.00176	.04366	.78865	23.151	.52430	.02440	.96232	.14555	.00364
Stddev	.00008	.00028	.00283	.174	.01296	.00067	.00057	.00001	.00048
%RSD	4.3353	.65151	.35905	.75082	2.4726	2.7600	.05873	.00813	13.216

#1	.00181	.04386	.79065	23.028	.53346	.02488	.96272	.14554	.00330
#2	.00170	.04346	.78665	23.274	.51513	.02393	.96193	.14556	.00398

Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Elem	Na5895	Ni2316	P_1782	Pb2203	S_1820	Sb2068	Se1960	Si2881	Sn1899
Line	589.592 { 57}	231.604 {446}	178.284 {489}	220.353 {453}	182.034 {485}	206.833 {463}	196.090 {472}	288.158 {117}	189.989 {477}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.12535	.06718	.53186	.67967	.75659	.00516	.01278	3.5541	.01312
Stddev	.00737	.00038	.00274	.00123	.00366	.00090	.00128	.0713	.00249
%RSD	5.8828	.56472	.51518	.18084	.48438	17.523	9.9857	2.0056	18.964

#1	.13056	.06744	.52993	.68054	.75400	.00580	.01187	3.6045	.01136
#2	.12014	.06691	.53380	.67880	.75918	.00452	.01368	3.5037	.01488

Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Elem	Sr4077	Th2837	Ti3349	Ti1908	U_3701	V_2924	Zn2062	Zr3391
Line	407.771 { 83}	283.730 {119}	334.904 {101}	190.856 {477}	370.152 { 91}	292.402 {115}	206.200 {163}	339.198 { 99}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.01563	.00936	.25367	.00255	.00118	.04080	.87029	.01177
Stddev	.00005	.00037	.00667	.00108	.00503	.00001	.00361	.00164
%RSD	.30235	4.0015	2.6297	42.269	426.82	.03124	.41532	13.949

#1	.01559	.00963	.25839	.00331	-.00238	.04079	.86773	.01061
#2	.01566	.00910	.24895	.00179	.00474	.04081	.87284	.01293

Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit								
Low Limit								

Int. Std.	Y_2243	Y_3600	Y_3774
Line	224.306 {450}	360.073 { 94}	377.433 { 89}
Units	Cts/S	Cts/S	Cts/S
Avg	1538.8	32049.	6167.4
Stddev	.1	42.	50.5
%RSD	.00836	.13151	.81809

#1	1538.9	32019.	6203.1
#2	1538.7	32079.	6131.7

Sample Name: 280-82954-A-19-L Acquired: 5/23/2016 15:06:28 Type: Unk
Method: 6500_026(v10) Mode: CONC Corr. Factor: 1.000000
User: kellyca Custom ID1: Custom ID2: Custom ID3:
Comment: 325983 6010C Q4 soil

Elem	Ag3280	Al3092	As1890	B_2089	Ba4554	Be3130	Bi2230	Ca3179	Cd2288
Line	328.068 {103}	309.271 {109}	189.042 {478}	208.959 {461}	455.403 { 74}	313.042 {108}	223.061 {451}	317.933 {106}	228.802 {447}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.00061	32.292	.00601	.00357	.12574	.00031	.00174	.64321	.00806
Stddev	.00000	.134	.00433	.00010	.00032	.00002	.00036	.00986	.00001
%RSD	.32266	.41382	72.096	2.7230	.25651	7.2319	20.900	1.5324	.08391

#1	.00061	32.386	.00295	.00364	.12552	.00032	.00149	.65018	.00806
#2	.00061	32.197	.00907	.00350	.12597	.00029	.00200	.63624	.00807

Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Elem	Co2286	Cr2055	Cu3247	Fe2599	K_7664	Li6707	Mg2790	Mn2576	Mo2020
Line	228.616 {447}	205.560 {464}	324.754 {104}	259.940 {130}	766.490 { 44}	670.784 { 50}	279.079 {121}2	257.610 {131}	202.030 {467}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.00153	.03623	.67428	19.540	.44407	.02322	.85286	.11092	.00317
Stddev	.00019	.00028	.00214	.041	.00173	.00066	.00382	.00062	.00006
%RSD	12.622	.77880	.31698	.21204	.38962	2.8622	.44818	.56285	1.8715

#1	.00167	.03603	.67277	19.510	.44530	.02275	.85016	.11048	.00313
#2	.00139	.03643	.67579	19.569	.44285	.02369	.85556	.11136	.00321

Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Elem	Na5895	Ni2316	P_1782	Pb2203	S_1820	Sb2068	Se1960	Si2881	Sn1899
Line	589.592 { 57}	231.604 {446}	178.284 {489}	220.353 {453}	182.034 {485}	206.833 {463}	196.090 {472}	288.158 {117}	189.989 {477}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.11282	.05914	.44237	.72965	.60903	.00714	.01309	2.8350	.01481
Stddev	.00041	.00001	.00457	.00152	.00782	.00232	.00304	.0264	.00000
%RSD	.35904	.01365	1.0326	.20835	1.2835	32.522	23.251	.93024	.01969

#1	.11253	.05914	.44560	.72858	.61456	.00550	.01525	2.8163	.01481
#2	.11310	.05913	.43914	.73073	.60351	.00878	.01094	2.8536	.01481

Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Elem	Sr4077	Th2837	Ti3349	Ti1908	U_3701	V_2924	Zn2062	Zr3391
Line	407.771 { 83}	283.730 {119}	334.904 {101}	190.856 {477}	370.152 { 91}	292.402 {115}	206.200 {163}	339.198 { 99}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.01167	.00692	.23679	.00296	-.00174	.03632	.69683	.00994
Stddev	.00023	.00137	.00361	.00044	.00011	.00060	.00436	.00196
%RSD	1.9352	19.794	1.5237	14.893	6.5887	1.6515	.62606	19.713

#1	.01183	.00595	.23424	.00328	-.00166	.03590	.69374	.01133
#2	.01151	.00789	.23935	.00265	-.00182	.03675	.69991	.00855

Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit								
Low Limit								

Int. Std.	Y_2243	Y_3600	Y_3774
Line	224.306 {450}	360.073 { 94}	377.433 { 89}
Units	Cts/S	Cts/S	Cts/S
Avg	1552.2	32451.	6268.3
Stddev	6.5	215.	13.0
%RSD	.41694	.66327	.20725

#1	1556.8	32603.	6259.1
#2	1547.6	32299.	6277.5

Sample Name: 280-82954-A-19-M DU Acquired: 5/23/2016 15:09:10 Type: Unk

Method: 6500_026(v10) Mode: CONC Corr. Factor: 1.000000

User: kellyca Custom ID1: Custom ID2: Custom ID3:

Comment: 325983 6010C Q4 soil

Elem	Ag3280	Al3092	As1890	B_2089	Ba4554	Be3130	Bi2230	Ca3179	Cd2288
Line	328.068 {103}	309.271 {109}	189.042 {478}	208.959 {461}	455.403 { 74}	313.042 {108}	223.061 {451}	317.933 {106}	228.802 {447}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.00026	33.489	.00169	.00470	.12018	.00026	.00290	.61036	.00788
Stddev	.00027	.213	.00025	.00031	.00092	.00005	.00335	.00189	.00011
%RSD	104.33	.63512	14.545	6.5277	.76157	18.938	115.75	.30991	1.4059

#1	.00045	33.338	.00152	.00492	.11953	.00023	.00527	.60902	.00796
#2	.00007	33.639	.00186	.00448	.12082	.00030	.00053	.61170	.00780

Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Elem	Co2286	Cr2055	Cu3247	Fe2599	K_7664	Li6707	Mg2790	Mn2576	Mo2020
Line	228.616 {447}	205.560 {464}	324.754 {104}	259.940 {130}	766.490 { 44}	670.784 { 50}	279.079 {121}2	257.610 {131}	202.030 {467}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.00162	.03604	.65177	19.153	.45437	.02279	.87477	.10248	.00367
Stddev	.00026	.00003	.00186	.085	.01291	.00016	.00139	.00015	.00021
%RSD	16.210	.09097	.28477	.44491	2.8403	.68847	.15943	.14773	5.7981

#1	.00143	.03606	.65045	19.092	.44525	.02290	.87378	.10259	.00382
#2	.00180	.03602	.65308	19.213	.46350	.02268	.87575	.10237	.00352

Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Elem	Na5895	Ni2316	P_1782	Pb2203	S_1820	Sb2068	Se1960	Si2881	Sn1899
Line	589.592 { 57}	231.604 {446}	178.284 {489}	220.353 {453}	182.034 {485}	206.833 {463}	196.090 {472}	288.158 {117}	189.989 {477}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.11364	.06133	.44271	.76811	.64860	.01017	.00762	2.8178	.01251
Stddev	.00850	.00068	.00356	.00310	.00478	.00199	.00170	.0309	.00056
%RSD	7.4790	1.1165	.80509	.40415	.73669	19.600	22.284	1.0975	4.5122

#1	.11964	.06181	.44523	.77031	.65198	.00876	.00642	2.8397	.01291
#2	.10763	.06085	.44019	.76592	.64522	.01158	.00882	2.7959	.01211

Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Elem	Sr4077	Th2837	Ti3349	Ti1908	U_3701	V_2924	Zn2062	Zr3391
Line	407.771 { 83}	283.730 {119}	334.904 {101}	190.856 {477}	370.152 { 91}	292.402 {115}	206.200 {163}	339.198 { 99}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.01103	.00886	.25576	.00110	-.00281	.03633	.67624	.01077
Stddev	.00006	.00014	.00161	.00066	.00198	.00028	.00211	.00011
%RSD	.54156	1.5894	.63116	59.831	70.344	.75754	.31240	1.0478

#1	.01108	.00896	.25462	.00063	-.00141	.03653	.67474	.01069
#2	.01099	.00876	.25690	.00157	-.00421	.03614	.67773	.01085

Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit								
Low Limit								

Int. Std.	Y_2243	Y_3600	Y_3774
Line	224.306 {450}	360.073 { 94}	377.433 { 89}
Units	Cts/S	Cts/S	Cts/S
Avg	1538.6	32377.	6177.4
Stddev	2.1	2.	2.2
%RSD	.13786	.00487	.03568

#1	1540.1	32378.	6175.8
#2	1537.1	32376.	6179.0

Sample Name: 280-83021-A-1-F Acquired: 5/23/2016 15:11:53 Type: Unk
Method: 6500_026(v10) Mode: CONC Corr. Factor: 1.000000
User: kellyca Custom ID1: Custom ID2: Custom ID3:
Comment: 325983 6010C Q4 soil

Elem	Ag3280	Al3092	As1890	B_2089	Ba4554	Be3130	Bi2230	Ca3179	Cd2288
Line	328.068 {103}	309.271 {109}	189.042 {478}	208.959 {461}	455.403 { 74}	313.042 {108}	223.061 {451}	317.933 {106}	228.802 {447}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.00004	30.636	.00239	.00317	.05618	.00022	.00204	.73679	.00216
Stddev	.00012	.080	.00119	.00028	.00017	.00002	.00004	.00579	.00007
%RSD	282.08	.26153	50.044	8.7370	.30487	7.1562	1.9635	.78586	3.1333

#1	-.00004	30.580	.00323	.00336	.05630	.00023	.00207	.74088	.00220
#2	.00013	30.693	.00154	.00297	.05606	.00021	.00202	.73269	.00211

Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Elem	Co2286	Cr2055	Cu3247	Fe2599	K_7664	Li6707	Mg2790	Mn2576	Mo2020
Line	228.616 {447}	205.560 {464}	324.754 {104}	259.940 {130}	766.490 { 44}	670.784 { 50}	279.079 {121}2	257.610 {131}	202.030 {467}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.00118	.03340	.17513	17.642	.37607	.01059	.66803	.04535	.00157
Stddev	.00015	.00016	.00099	.008	.00244	.00046	.00711	.00009	.00016
%RSD	12.832	.47551	.56280	.04500	.64838	4.3076	1.0644	.19178	10.101

#1	.00107	.03351	.17443	17.648	.37780	.01027	.67306	.04541	.00146
#2	.00128	.03329	.17582	17.636	.37435	.01091	.66300	.04529	.00169

Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Elem	Na5895	Ni2316	P_1782	Pb2203	S_1820	Sb2068	Se1960	Si2881	Sn1899
Line	589.592 { 57}	231.604 {446}	178.284 {489}	220.353 {453}	182.034 {485}	206.833 {463}	196.090 {472}	288.158 {117}	189.989 {477}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.09489	.04529	.26746	.23821	.55851	.00187	.01554	2.1003	.00441
Stddev	.00005	.00017	.00063	.00125	.01069	.00136	.00196	.0153	.00042
%RSD	.04923	.36836	.23713	.52683	1.9132	72.928	12.618	.72965	9.6160

#1	.09486	.04517	.26791	.23910	.56607	.00284	.01693	2.0895	.00411
#2	.09492	.04541	.26701	.23732	.55096	.00091	.01416	2.1111	.00471

Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Elem	Sr4077	Th2837	Ti3349	Ti1908	U_3701	V_2924	Zn2062	Zr3391
Line	407.771 { 83}	283.730 {119}	334.904 {101}	190.856 {477}	370.152 { 91}	292.402 {115}	206.200 {163}	339.198 { 99}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.01014	.01106	.29573	.00111	.02641	.04137	.18035	.01196
Stddev	.00001	.00103	.00127	.00132	.00017	.00045	.00134	.00047
%RSD	.05575	9.2963	.43045	118.92	.65607	1.0904	.74527	3.9527

#1	.01015	.01179	.29663	.00018	.02653	.04105	.17940	.01230
#2	.01014	.01033	.29483	.00204	.02629	.04169	.18130	.01163

Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit								
Low Limit								

Int. Std.	Y_2243	Y_3600	Y_3774
Line	224.306 {450}	360.073 { 94}	377.433 { 89}
Units	Cts/S	Cts/S	Cts/S
Avg	1531.3	32219.	6245.9
Stddev	2.5	161.	4.1
%RSD	.16207	.50050	.06545

#1	1533.1	32333.	6243.0
#2	1529.6	32105.	6248.7

Sample Name: 280-83021-A-2-F Acquired: 5/23/2016 15:14:34 Type: Unk
Method: 6500_026(v10) Mode: CONC Corr. Factor: 1.000000
User: kellyca Custom ID1: Custom ID2: Custom ID3:
Comment: 325983 6010C Q4 soil

Elem	Ag3280	Al3092	As1890	B_2089	Ba4554	Be3130	Bi2230	Ca3179	Cd2288
Line	328.068 {103}	309.271 {109}	189.042 {478}	208.959 {461}	455.403 { 74}	313.042 {108}	223.061 {451}	317.933 {106}	228.802 {447}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.00054	29.695	.00582	.00403	.05419	.00021	.00475	.62433	.00129
Stddev	.00017	.223	.00202	.00022	.00012	.00008	.00012	.00126	.00016
%RSD	31.109	.74966	34.807	5.4383	.22838	39.907	2.5430	.20150	12.602

#1	.00042	29.538	.00725	.00418	.05410	.00015	.00483	.62522	.00118
#2	.00066	29.853	.00438	.00387	.05428	.00027	.00466	.62344	.00141

Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Elem	Co2286	Cr2055	Cu3247	Fe2599	K_7664	Li6707	Mg2790	Mn2576	Mo2020
Line	228.616 {447}	205.560 {464}	324.754 {104}	259.940 {130}	766.490 { 44}	670.784 { 50}	279.079 {121}2	257.610 {131}	202.030 {467}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.00155	.03470	.15605	18.278	.40412	.00995	.66286	.04885	.00190
Stddev	.00048	.00031	.00048	.042	.02657	.00016	.00411	.00026	.00001
%RSD	30.968	.89247	.31049	.23189	6.5744	1.5773	.62048	.53542	.75121

#1	.00121	.03448	.15639	18.248	.42291	.01006	.66577	.04903	.00189
#2	.00189	.03492	.15570	18.307	.38534	.00983	.65995	.04866	.00191

Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Elem	Na5895	Ni2316	P_1782	Pb2203	S_1820	Sb2068	Se1960	Si2881	Sn1899
Line	589.592 { 57}	231.604 {446}	178.284 {489}	220.353 {453}	182.034 {485}	206.833 {463}	196.090 {472}	288.158 {117}	189.989 {477}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.13208	.04503	.27648	.18615	.65572	.00337	.00947	2.0256	.00419
Stddev	.00322	.00020	.00206	.00034	.00505	.00256	.00619	.0017	.00031
%RSD	2.4376	.44674	.74652	.18072	.77029	75.843	65.396	.08430	7.4724

#1	.12981	.04517	.27502	.18591	.65215	.00518	.01385	2.0244	.00441
#2	.13436	.04489	.27794	.18639	.65930	.00156	.00509	2.0268	.00397

Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Elem	Sr4077	Th2837	Ti3349	Ti1908	U_3701	V_2924	Zn2062	Zr3391
Line	407.771 { 83}	283.730 {119}	334.904 {101}	190.856 {477}	370.152 { 91}	292.402 {115}	206.200 {163}	339.198 { 99}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.00868	.01078	.30363	.00378	.01760	.04098	.21175	.01134
Stddev	.00004	.00070	.00061	.00008	.01448	.00082	.00089	.00060
%RSD	.41246	6.4809	.20224	2.0492	82.248	1.9929	.42032	5.3082

#1	.00866	.01028	.30407	.00384	.00737	.04156	.21238	.01092
#2	.00871	.01127	.30320	.00373	.02784	.04040	.21113	.01177

Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit								
Low Limit								

Int. Std.	Y_2243	Y_3600	Y_3774
Line	224.306 {450}	360.073 { 94}	377.433 { 89}
Units	Cts/S	Cts/S	Cts/S
Avg	1549.3	32440.	6252.8
Stddev	4.5	122.	19.4
%RSD	.29156	.37487	.31090

#1	1552.5	32354.	6239.1
#2	1546.1	32526.	6266.6

Sample Name: ccvh-3900196 Acquired: 5/23/2016 15:17:17 Type: QC
Method: 6500_026(v10) Mode: CONC Corr. Factor: 1.000000
User: kellyca Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	Ag3280	Al3092	As1890	B_2089	Ba4554	Be3130	Bi2230	Ca3179	Cd2288	Co2286	Cr2055	Cu3247	Fe2714
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.00118	48.026	.00314	.00334	.00198	.00148	1.0515	-.04337	.00070	.00516	.00114	.00655	48.489
Stddev	.00022	.121	.00136	.00062	.00008	.00008	.0091	.00306	.00026	.00027	.00041	.00023	.096
%RSD	18.524	.25169	43.255	18.528	3.8157	5.4208	.86268	7.0488	37.185	5.2598	35.681	3.5829	.19765

#1	.00103	47.940	.00218	.00290	.00193	.00142	1.0579	-.04553	.00051	.00535	.00143	.00672	48.421
#2	.00134	48.111	.00410	.00378	.00203	.00154	1.0451	-.04121	.00088	.00497	.00085	.00639	48.556

Check ?	None	Chk Pass	None	None	None	None	Chk Pass	None	None	None	None	None	Chk Pass
Value													
Range													

Elem	K_7664	Li6707	Mg2790	Mn2576	Mo2020	Na8183	Ni2316	P_1782	Pb2203	S_1820	Sb2068	Se1960	Si2881
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.15606	.00383	.21987	.00088	-.00108	249.12	.00113	.00799	.00101	5.0314	.00265	.01959	.01703
Stddev	.00913	.00037	.00470	.00005	.00013	1.21	.00009	.00288	.00201	.0202	.00044	.00440	.02311
%RSD	5.8501	9.7775	2.1365	5.5103	12.013	.48394	7.9483	36.003	199.36	.40134	16.671	22.464	135.69

#1	.16252	.00356	.22319	.00091	-.00117	248.27	.00119	.00595	.00243	5.0457	.00297	.01648	.00069
#2	.14961	.00409	.21655	.00084	-.00099	249.97	.00106	.01002	-.00041	5.0171	.00234	.02270	.03338

Check ?	None	None	None	None	None	Chk Pass	None	None	None	Chk Pass	None	None	None
Value													
Range													

Elem	Sn1899	Sr4077	Th2837	Ti3349	Tl1908	U_3701	V_2924	Zn2062	Zr3391
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.00389	.00190	5.0055	.02672	.00400	10.286	-.01541	-.00136	-.01505
Stddev	.00053	.00003	.0101	.00010	.00204	.005	.00005	.00015	.00227
%RSD	13.744	1.8270	.20096	.37905	51.089	.04964	.30858	10.963	15.091

#1	.00427	.00192	5.0126	.02679	.00255	10.283	-.01545	-.00147	-.01666
#2	.00351	.00187	4.9983	.02665	.00544	10.290	-.01538	-.00126	-.01345

Check ?	None	None	Chk Pass	None	None	Chk Pass	None	None	None
Value									
Range									

Int. Std.	Y_2243	Y_3600	Y_3774
Units	Cts/S	Cts/S	Cts/S
Avg	1470.8	30527.	6036.6
Stddev	1.8	1.	2.3
%RSD	.12325	.00366	.03839

#1	1469.5	30528.	6038.3
#2	1472.1	30527.	6035.0

Sample Name: ccv-3900195 Acquired: 5/23/2016 15:20:05 Type: QC
Method: 6500_026(v10) Mode: CONC Corr. Factor: 1.000000
User: kellyca Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	Ag3280	Al1670	As1890	B_2089	Ba4554	Be3130	Bi2230	Ca3179	Cd2288	Co2286	Cr2055	Cu3247
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.47488	F .58954	1.00000	.52490	.48937	.49364	.00564	5.0806	.51185	.51465	.50770	.48494
Stddev	.00142	.00046	.00113	.00115	.00212	.00236	.00101	.0320	.00075	.00086	.00070	.00118
%RSD	.29884	.07837	.11290	.21864	.43234	.47904	17.963	.62911	.14669	.16628	.13728	.24408

#1	.47388	.58921	.99920	.52571	.48787	.49197	.00492	5.0580	.51238	.51405	.50721	.48410
#2	.47589	.58986	1.0008	.52409	.49086	.49531	.00635	5.1032	.51132	.51526	.50819	.48577

Check ?	Chk Pass	Chk Fail	Chk Pass	Chk Pass	Chk Pass	Chk Pass	None	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Value		.50000										
Range		10.000%										

Elem	Fe2599	K_7664	Li6707	Mg2790	Mn2576	Mo2020	Na5895	Ni2316	P_1782	Pb2203	S_1820	Sb2068
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	2.5541	48.720	1.0024	19.037	.48565	.51251	5.3867	.50001	.98572	1.0366	.01445	.98990
Stddev	.0136	.184	.0045	.036	.00008	.00076	.0265	.00007	.00248	.0035	.00121	.00441
%RSD	.53081	.37745	.44959	.18968	.01729	.14785	.49164	.01350	.25168	.33583	8.3587	.44523

#1	2.5445	48.590	.99919	19.011	.48559	.51304	5.3680	.50006	.98748	1.0391	.01359	.99301
#2	2.5637	48.850	1.0056	19.062	.48571	.51197	5.4055	.49996	.98397	1.0342	.01530	.98678

Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	None	Chk Pass
Value												
Range												

Elem	Se1960	Si2881	Sn1899	Sr4077	Th2837	Ti3349	Ti1908	U_3701	V_2924	Zn2062	Zr3391
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	1.0009	4.9183	.98757	.47028	.01071	.46583	1.0178	.03616	.46406	.47315	.48978
Stddev	.0013	.0620	.00435	.00266	.00093	.00058	.0012	.03205	.00105	.00034	.00473
%RSD	.13107	1.2599	.44085	.56527	8.6936	.12371	.11475	88.621	.22701	.07178	.96638

#1	1.0018	4.8745	.99065	.46840	.01137	.46624	1.0187	.01350	.46332	.47291	.48643
#2	.99997	4.9621	.98449	.47216	.01005	.46542	1.0170	.05882	.46481	.47339	.49313

Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	None	Chk Pass	Chk Pass	None	Chk Pass	Chk Pass	Chk Pass
Value											
Range											

Int. Std.	Y_2243	Y_3600	Y_3774
Units	Cts/S	Cts/S	Cts/S
Avg	1506.1	31660.	6091.2
Stddev	4.9	48.	38.1
%RSD	.32682	.15151	.62609

#1	1509.6	31626.	6118.2
#2	1502.6	31694.	6064.3

Sample Name: ccb Acquired: 5/23/2016 15:22:41 Type: QC
Method: 6500_026(v10) Mode: CONC Corr. Factor: 1.000000
User: kellyca Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	Ag3280	Al1670	As1890	B_2089	Ba4554	Be3130	Bi2230	Ca3179	Cd2288	Co2286	Cr2055
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.00004	.00136	-.00316	.00151	.00023	.00006	.00044	-.00583	.00003	-.00011	.00004
Stddev	.00037	.00015	.00634	.00002	.00006	.00008	.00007	.00014	.00007	.00008	.00003
%RSD	864.16	10.948	200.60	1.4021	27.187	119.17	15.107	2.4402	203.20	68.028	65.022

#1	-.00022	.00146	.00132	.00150	.00019	.00001	.00039	-.00593	.00008	-.00016	.00002
#2	.00031	.00125	-.00764	.00153	.00028	.00012	.00048	-.00573	-.00001	-.00006	.00006

Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	None	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit											
Low Limit											

Elem	Cu3247	Fe2599	K_7664	Li6707	Mg2790	Mn2576	Mo2020	Na5895	Ni2316	P_1782	Pb2203
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	W -.00191	W .02362	.00263	.00026	.00021	.00012	-.00002	.01066	-.00033	-.00001	.00160
Stddev	.00035	.00049	.01922	.00037	.00100	.00007	.00034	.00161	.00010	.00020	.00064
%RSD	18.456	2.0557	731.64	145.63	485.93	59.854	1779.2	15.130	28.950	2311.3	39.795

#1	-.00216	.02397	-.01096	.00052	.00091	.00018	.00022	.00952	-.00040	-.00015	.00205
#2	-.00166	.02328	.01622	-.00001	-.00050	.00007	-.00026	.01180	-.00027	.00013	.00115

Check ?	Chk Warn	Chk Warn	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit	.00136	.02200									
Low Limit	-.00136	-.02200									

Elem	S_1820	Sb2068	Se1960	Si2881	Sn1899	Sr4077	Th2837	Ti3349	Ti1908	U_3701	V_2924
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	-.00232	W .00622	W .00968	.00620	.00015	.00001	.00173	.00014	.00103	.01058	.00021
Stddev	.00515	.00119	.00203	.00223	.00012	.00003	.00227	.00009	.00011	.02146	.00003
%RSD	222.52	19.143	20.947	35.933	80.758	272.62	131.21	67.079	10.449	202.94	15.955

#1	-.00596	.00537	.00824	.00462	.00023	.00003	.00012	.00007	.00096	-.00460	.00019
#2	.00133	.00706	.01111	.00777	.00006	-.00001	.00333	.00020	.00111	.02575	.00023

Check ?	None	Chk Warn	Chk Warn	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit		.00314	.00486								
Low Limit		-.00314	-.00486								

Elem	Zn2062	Zr3391
Units	ppm	ppm
Avg	.00018	.00028
Stddev	.00063	.00010
%RSD	349.29	35.710

#1	-.00027	.00021
#2	.00063	.00035

Check ?	Chk Pass	Chk Pass
High Limit		
Low Limit		

Int. Std.	Y_2243	Y_3600	Y_3774
Units	Cts/S	Cts/S	Cts/S
Avg	1527.7	32325.	6026.8
Stddev	1.2	56.	32.9
%RSD	.07541	.17359	.54573

#1	1526.9	32365.	6050.1
#2	1528.5	32286.	6003.6

Sample Name: ccvl-3907489 Acquired: 5/23/2016 15:25:27 Type: QC
Method: 6500_026(v10) Mode: CONC Corr. Factor: 1.000000
User: kellyca Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	Ag3280	Al1670	As1890	B_2089	Ba4554	Be3130	Bi2230	Ca3179	Cd2288	Co2286	Cr2055	Cu3247
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.01017	.10642	.01378	.10516	.01015	.00105	.11727	.19946	.00496	.01033	.01062	.01335
Stddev	.00046	.00030	.00082	.00030	.00005	.00005	.00107	.00296	.00007	.00028	.00029	.00006
%RSD	4.5375	.28000	5.9749	.28315	.50012	5.0496	.91256	1.4831	1.3610	2.7497	2.7650	.48640

#1	.01050	.10621	.01436	.10495	.01011	.00109	.11651	.20155	.00501	.01053	.01083	.01340
#2	.00985	.10663	.01320	.10537	.01018	.00101	.11802	.19737	.00491	.01012	.01041	.01331

Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Value												
Range												

Elem	Fe2599	K_7664	Li6707	Mg2790	Mn2576	Mo2020	Na5895	Ni2316	P_1782	Pb2203	S_1820	Sb2068
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.11445	3.0013	.00985	.19787	.01000	.02118	1.0193	.04271	2.9109	F .01175	-.00269	.02272
Stddev	.00102	.0047	.00016	.00314	.00003	.00019	.0018	.00021	.0150	.00048	.00275	.00109
%RSD	.89375	.15710	1.6678	1.5850	.33585	.89230	.18019	.48105	.51700	4.0726	102.20	4.7940

#1	.11373	2.9979	.00996	.20009	.01003	.02131	1.0180	.04256	2.9216	.01141	-.00075	.02349
#2	.11518	3.0046	.00973	.19565	.00998	.02104	1.0206	.04285	2.9003	.01208	-.00463	.02195

Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Fail	None	Chk Pass
Value										.00900		
Range										30.000%		

Elem	Se1960	Si2881	Sn1899	Sr4077	Th2837	Ti3349	Ti1908	U_3701	V_2924	Zn2062	Zr3391
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.01934	.50956	.10114	.00962	.01637	.00954	.01786	.06877	.00956	.02064	.01532
Stddev	.00611	.01317	.00145	.00006	.00131	.00036	.00305	.00128	.00001	.00126	.00057
%RSD	31.586	2.5844	1.4331	.60776	7.9814	3.7445	17.081	1.8569	.07088	6.0802	3.6932

#1	.01502	.51888	.10216	.00958	.01730	.00980	.02002	.06787	.00956	.01976	.01572
#2	.02366	.50025	.10011	.00966	.01545	.00929	.01570	.06967	.00957	.02153	.01492

Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Value											
Range											

Int. Std.	Y_2243	Y_3600	Y_3774
Units	Cts/S	Cts/S	Cts/S
Avg	1525.0	32495.	6037.4
Stddev	1.8	74.	9.2
%RSD	.11481	.22838	.15212

#1	1523.7	32443.	6043.9
#2	1526.2	32548.	6030.9

Sample Name: 280-83021-A-3-J Acquired: 5/23/2016 15:28:12 Type: Unk
Method: 6500_026(v10) Mode: CONC Corr. Factor: 1.000000
User: kellyca Custom ID1: Custom ID2: Custom ID3:
Comment: 325983 6010C Q4 soil

Elem	Ag3280	Al3092	As1890	B_2089	Ba4554	Be3130	Bi2230	Ca3179	Cd2288
Line	328.068 {103}	309.271 {109}	189.042 {478}	208.959 {461}	455.403 { 74}	313.042 {108}	223.061 {451}	317.933 {106}	228.802 {447}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.00062	23.564	.00590	.00280	.04649	.00020	.00088	.50813	.00109
Stddev	.00001	.134	.00326	.00041	.00002	.00001	.00254	.00252	.00002
%RSD	2.0972	.56973	55.262	14.512	.05175	5.9711	288.49	.49676	1.4395

#1	.00063	23.659	.00821	.00251	.04651	.00021	.00268	.50991	.00110
#2	.00061	23.469	.00360	.00309	.04647	.00019	-.00092	.50634	.00107

Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Elem	Co2286	Cr2055	Cu3247	Fe2599	K_7664	Li6707	Mg2790	Mn2576	Mo2020
Line	228.616 {447}	205.560 {464}	324.754 {104}	259.940 {130}	766.490 { 44}	670.784 { 50}	279.079 {121}2	257.610 {131}	202.030 {467}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.00080	.02845	.14457	14.864	.33716	.00893	.55698	.03572	.00140
Stddev	.00023	.00004	.00008	.003	.01197	.00019	.00077	.00016	.00012
%RSD	28.338	.15308	.05694	.01814	3.5491	2.1209	.13793	.44514	8.5965

#1	.00064	.02848	.14463	14.866	.34562	.00879	.55643	.03584	.00132
#2	.00096	.02842	.14451	14.862	.32870	.00906	.55752	.03561	.00149

Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Elem	Na5895	Ni2316	P_1782	Pb2203	S_1820	Sb2068	Se1960	Si2881	Sn1899
Line	589.592 { 57}	231.604 {446}	178.284 {489}	220.353 {453}	182.034 {485}	206.833 {463}	196.090 {472}	288.158 {117}	189.989 {477}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.09272	.03770	.23741	.13304	.49493	.00217	.00676	1.9928	.00280
Stddev	.00388	.00047	.00024	.00243	.00298	.00038	.01517	.0154	.00093
%RSD	4.1818	1.2476	.10174	1.8278	.60259	17.337	224.59	.77413	33.315

#1	.08998	.03737	.23724	.13476	.49704	.00243	.01748	2.0037	.00346
#2	.09546	.03803	.23758	.13132	.49282	.00190	-.00397	1.9818	.00214

Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Elem	Sr4077	Th2837	Ti3349	Ti1908	U_3701	V_2924	Zn2062	Zr3391
Line	407.771 { 83}	283.730 {119}	334.904 {101}	190.856 {477}	370.152 { 91}	292.402 {115}	206.200 {163}	339.198 { 99}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.00726	.00738	.22858	.00406	-.00147	.03247	.15717	.00904
Stddev	.00010	.00066	.00731	.00041	.00924	.00055	.00044	.00040
%RSD	1.3999	8.9062	3.1968	10.183	627.74	1.6843	.28027	4.4452

#1	.00719	.00691	.22341	.00377	-.00801	.03286	.15748	.00876
#2	.00733	.00784	.23375	.00435	.00506	.03209	.15686	.00933

Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit								
Low Limit								

Int. Std.	Y_2243	Y_3600	Y_3774
Line	224.306 {450}	360.073 { 94}	377.433 { 89}
Units	Cts/S	Cts/S	Cts/S
Avg	1542.2	32623.	6190.7
Stddev	3.6	81.	4.0
%RSD	.23250	.24733	.06409

#1	1539.6	32566.	6187.9
#2	1544.7	32680.	6193.5

Sample Name: 280-83021-A-3-K DU Acquired: 5/23/2016 15:30:55 Type: Unk

Method: 6500_026(v10) Mode: CONC Corr. Factor: 1.000000

User: kellyca Custom ID1: Custom ID2: Custom ID3:

Comment: 325983 6010C Q4 soil

Elem	Ag3280	Al3092	As1890	B_2089	Ba4554	Be3130	Bi2230	Ca3179	Cd2288
Line	328.068 {103}	309.271 {109}	189.042 {478}	208.959 {461}	455.403 { 74}	313.042 {108}	223.061 {451}	317.933 {106}	228.802 {447}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	-.00003	24.701	.00567	.00261	.05415	.00023	.00352	.53224	.00136
Stddev	.00019	.229	.00052	.00031	.00045	.00004	.00120	.00444	.00042
%RSD	710.67	.92644	9.1677	11.978	.82888	16.048	34.066	.83357	31.175

#1	-.00016	24.539	.00530	.00239	.05383	.00025	.00267	.52910	.00166
#2	.00011	24.863	.00604	.00284	.05446	.00020	.00437	.53537	.00106

Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Elem	Co2286	Cr2055	Cu3247	Fe2599	K_7664	Li6707	Mg2790	Mn2576	Mo2020
Line	228.616 {447}	205.560 {464}	324.754 {104}	259.940 {130}	766.490 { 44}	670.784 { 50}	279.079 {121}2	257.610 {131}	202.030 {467}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.00086	.02849	.16965	16.427	.34099	.00899	.54007	.03803	.00153
Stddev	.00013	.00000	.00034	.141	.01170	.00079	.00532	.00007	.00033
%RSD	15.237	.00497	.20006	.85725	3.4304	8.8204	.98422	.17159	21.752

#1	.00096	.02849	.16989	16.327	.34926	.00843	.53631	.03798	.00130
#2	.00077	.02849	.16941	16.526	.33272	.00955	.54383	.03807	.00177

Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Elem	Na5895	Ni2316	P_1782	Pb2203	S_1820	Sb2068	Se1960	Si2881	Sn1899
Line	589.592 { 57}	231.604 {446}	178.284 {489}	220.353 {453}	182.034 {485}	206.833 {463}	196.090 {472}	288.158 {117}	189.989 {477}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.09951	.04299	.25934	.13977	.54013	.00144	.00957	2.1455	.00382
Stddev	.00854	.00025	.00054	.00050	.00034	.00020	.00489	.0922	.00102
%RSD	8.5788	.58637	.20827	.35927	.06386	13.544	51.137	4.2987	26.773

#1	.10555	.04316	.25896	.14012	.53989	.00158	.01303	2.0803	.00310
#2	.09347	.04281	.25972	.13941	.54037	.00130	.00611	2.2108	.00454

Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Elem	Sr4077	Th2837	Ti3349	Ti1908	U_3701	V_2924	Zn2062	Zr3391
Line	407.771 { 83}	283.730 {119}	334.904 {101}	190.856 {477}	370.152 { 91}	292.402 {115}	206.200 {163}	339.198 { 99}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.00798	.00876	.20457	.00158	.00773	.03615	.16942	.00862
Stddev	.00010	.00032	.00307	.00142	.02322	.00035	.00043	.00233
%RSD	1.2338	3.6552	1.4984	90.100	300.36	.97233	.25503	27.002

#1	.00791	.00853	.20674	.00057	-.00869	.03640	.16912	.01027
#2	.00805	.00899	.20241	.00258	.02415	.03590	.16973	.00697

Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit								
Low Limit								

Int. Std.	Y_2243	Y_3600	Y_3774
Line	224.306 {450}	360.073 { 94}	377.433 { 89}
Units	Cts/S	Cts/S	Cts/S
Avg	1533.8	32411.	6198.4
Stddev	.4	119.	45.6
%RSD	.02924	.36577	.73558

#1	1533.5	32495.	6230.7
#2	1534.1	32328.	6166.2

Sample Name: 280-83021-A-11-J Acquired: 5/23/2016 15:33:38 Type: Unk
Method: 6500_026(v10) Mode: CONC Corr. Factor: 1.000000
User: kellyca Custom ID1: Custom ID2: Custom ID3:
Comment: 325983 6010C Q4 soil

Elem	Ag3280	Al3092	As1890	B_2089	Ba4554	Be3130	Bi2230	Ca3179	Cd2288
Line	328.068 {103}	309.271 {109}	189.042 {478}	208.959 {461}	455.403 { 74}	313.042 {108}	223.061 {451}	317.933 {106}	228.802 {447}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.00053	38.164	.00791	.00404	.09721	.00026	.00191	.73522	.00486
Stddev	.00037	.308	.00114	.00076	.00056	.00008	.00126	.00507	.00003
%RSD	68.778	.80814	14.463	18.743	.57980	31.081	65.708	.68992	.53835

#1	.00079	37.946	.00710	.00350	.09681	.00032	.00102	.73881	.00485
#2	.00027	38.382	.00872	.00457	.09760	.00021	.00280	.73163	.00488

Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Elem	Co2286	Cr2055	Cu3247	Fe2599	K_7664	Li6707	Mg2790	Mn2576	Mo2020
Line	228.616 {447}	205.560 {464}	324.754 {104}	259.940 {130}	766.490 { 44}	670.784 { 50}	279.079 {121}2	257.610 {131}	202.030 {467}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.00167	.03334	.33071	20.456	.62494	.02106	1.1198	.09481	.00215
Stddev	.00007	.00041	.00110	.085	.02168	.00001	.0005	.00001	.00046
%RSD	3.9587	1.2297	.33378	.41563	3.4685	.03385	.04672	.01223	21.520

#1	.00172	.03305	.33149	20.396	.60961	.02107	1.1201	.09481	.00247
#2	.00162	.03363	.32993	20.516	.64026	.02106	1.1194	.09482	.00182

Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Elem	Na5895	Ni2316	P_1782	Pb2203	S_1820	Sb2068	Se1960	Si2881	Sn1899
Line	589.592 { 57}	231.604 {446}	178.284 {489}	220.353 {453}	182.034 {485}	206.833 {463}	196.090 {472}	288.158 {117}	189.989 {477}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.11979	.07187	.42780	.39604	.53513	.00288	.01024	2.3975	.00868
Stddev	.00005	.00099	.00747	.00367	.00278	.00118	.00148	.0137	.00113
%RSD	.04562	1.3842	1.7461	.92584	.51858	40.894	14.445	.57005	13.008

#1	.11982	.07117	.43308	.39864	.53709	.00205	.01128	2.4072	.00948
#2	.11975	.07257	.42252	.39345	.53316	.00372	.00919	2.3878	.00788

Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Elem	Sr4077	Th2837	Ti3349	Ti1908	U_3701	V_2924	Zn2062	Zr3391
Line	407.771 { 83}	283.730 {119}	334.904 {101}	190.856 {477}	370.152 { 91}	292.402 {115}	206.200 {163}	339.198 { 99}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.00804	.01068	.21562	.00162	.00855	.04385	.44787	.01172
Stddev	.00006	.00067	.00004	.00279	.03342	.00025	.00211	.00003
%RSD	.69274	6.2935	.01817	172.14	390.77	.57475	.47116	.25881

#1	.00800	.01020	.21560	.00360	.03218	.04403	.44637	.01170
#2	.00808	.01115	.21565	-.00035	-.01508	.04367	.44936	.01174

Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit								
Low Limit								

Int. Std.	Y_2243	Y_3600	Y_3774
Line	224.306 {450}	360.073 { 94}	377.433 { 89}
Units	Cts/S	Cts/S	Cts/S
Avg	1538.0	32345.	6238.3
Stddev	.8	73.	8.3
%RSD	.05182	.22654	.13327

#1	1537.5	32293.	6232.4
#2	1538.6	32397.	6244.2

Sample Name: 280-83021-A-12-I Acquired: 5/23/2016 15:36:21 Type: Unk
Method: 6500_026(v10) Mode: CONC Corr. Factor: 1.000000
User: kellyca Custom ID1: Custom ID2: Custom ID3:
Comment: 325983 6010C Q4 soil

Elem	Ag3280	Al3092	As1890	B_2089	Ba4554	Be3130	Bi2230	Ca3179	Cd2288
Line	328.068 {103}	309.271 {109}	189.042 {478}	208.959 {461}	455.403 { 74}	313.042 {108}	223.061 {451}	317.933 {106}	228.802 {447}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.00010	40.322	.01235	.00481	.12903	.00028	.00469	.79279	.00689
Stddev	.00034	.278	.00243	.00153	.00124	.00004	.00014	.00531	.00010
%RSD	358.49	.68863	19.709	31.907	.96219	13.853	3.0647	.66964	1.3908

#1	.00034	40.126	.01407	.00372	.12816	.00026	.00479	.78903	.00682
#2	-.00015	40.518	.01063	.00589	.12991	.00031	.00459	.79654	.00696

Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Elem	Co2286	Cr2055	Cu3247	Fe2599	K_7664	Li6707	Mg2790	Mn2576	Mo2020
Line	228.616 {447}	205.560 {464}	324.754 {104}	259.940 {130}	766.490 { 44}	670.784 { 50}	279.079 {121}2	257.610 {131}	202.030 {467}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.00177	.03664	.50279	25.097	.62146	.02045	1.1564	.10755	.00212
Stddev	.00001	.00042	.00029	.162	.03766	.00004	.0087	.00056	.00007
%RSD	.59854	1.1485	.05750	.64544	6.0598	.18666	.75362	.52482	3.1993

#1	.00178	.03693	.50258	24.983	.59483	.02048	1.1502	.10715	.00217
#2	.00176	.03634	.50299	25.212	.64809	.02042	1.1625	.10795	.00207

Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Elem	Na5895	Ni2316	P_1782	Pb2203	S_1820	Sb2068	Se1960	Si2881	Sn1899
Line	589.592 { 57}	231.604 {446}	178.284 {489}	220.353 {453}	182.034 {485}	206.833 {463}	196.090 {472}	288.158 {117}	189.989 {477}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.10580	.06872	.43004	.41734	.53199	.00898	.01399	3.1610	.00848
Stddev	.00362	.00031	.00357	.00100	.00990	.00171	.00251	.0858	.00008
%RSD	3.4243	.44915	.82967	.23889	1.8606	19.042	17.915	2.7129	.92552

#1	.10837	.06894	.42752	.41804	.53899	.01018	.01222	3.1003	.00854
#2	.10324	.06850	.43257	.41663	.52500	.00777	.01577	3.2216	.00843

Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Elem	Sr4077	Th2837	Ti3349	Ti1908	U_3701	V_2924	Zn2062	Zr3391
Line	407.771 { 83}	283.730 {119}	334.904 {101}	190.856 {477}	370.152 { 91}	292.402 {115}	206.200 {163}	339.198 { 99}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.00876	.00958	.24241	.00274	.00437	.04642	.49680	.01764
Stddev	.00000	.00027	.00086	.00080	.00029	.00030	.00309	.00008
%RSD	.00951	2.8530	.35333	29.382	6.7384	.64380	.62108	.44650

#1	.00876	.00939	.24181	.00331	.00417	.04663	.49462	.01758
#2	.00876	.00977	.24302	.00217	.00458	.04621	.49898	.01769

Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit								
Low Limit								

Int. Std.	Y_2243	Y_3600	Y_3774
Line	224.306 {450}	360.073 { 94}	377.433 { 89}
Units	Cts/S	Cts/S	Cts/S
Avg	1539.7	32352.	6150.4
Stddev	4.0	69.	48.4
%RSD	.25863	.21235	.78736

#1	1536.9	32401.	6184.7
#2	1542.5	32304.	6116.2

Sample Name: 280-83021-A-13-I Acquired: 5/23/2016 15:39:04 Type: Unk
Method: 6500_026(v10) Mode: CONC Corr. Factor: 1.000000
User: kellyca Custom ID1: Custom ID2: Custom ID3:
Comment: 325983 6010C Q4 soil

Elem	Ag3280	Al3092	As1890	B_2089	Ba4554	Be3130	Bi2230	Ca3179	Cd2288
Line	328.068 {103}	309.271 {109}	189.042 {478}	208.959 {461}	455.403 { 74}	313.042 {108}	223.061 {451}	317.933 {106}	228.802 {447}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.00055	39.322	.00659	.00281	.10079	.00033	.00590	.73463	.00578
Stddev	.00022	.185	.00011	.00097	.00057	.00005	.00341	.00485	.00006
%RSD	40.140	.47165	1.6045	34.527	.56188	15.202	57.742	.66079	.99496

#1	.00071	39.191	.00651	.00350	.10039	.00030	.00831	.73120	.00574
#2	.00040	39.453	.00666	.00212	.10119	.00037	.00349	.73806	.00582

Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Elem	Co2286	Cr2055	Cu3247	Fe2599	K_7664	Li6707	Mg2790	Mn2576	Mo2020
Line	228.616 {447}	205.560 {464}	324.754 {104}	259.940 {130}	766.490 { 44}	670.784 { 50}	279.079 {121}2	257.610 {131}	202.030 {467}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.00183	.03308	.50863	21.286	.56622	.02035	1.0980	.09072	.00176
Stddev	.00006	.00015	.00298	.093	.01604	.00123	.0158	.00029	.00030
%RSD	3.2935	.45681	.58503	.43788	2.8336	6.0222	1.4353	.32451	17.256

#1	.00187	.03298	.51073	21.220	.57757	.01948	1.1091	.09093	.00198
#2	.00179	.03319	.50652	21.352	.55488	.02121	1.0868	.09051	.00155

Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Elem	Na5895	Ni2316	P_1782	Pb2203	S_1820	Sb2068	Se1960	Si2881	Sn1899
Line	589.592 { 57}	231.604 {446}	178.284 {489}	220.353 {453}	182.034 {485}	206.833 {463}	196.090 {472}	288.158 {117}	189.989 {477}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.10648	.06741	.44047	.45735	.57459	.00658	.00569	2.4210	.00853
Stddev	.00455	.00040	.00225	.00241	.00173	.00111	.00141	.0132	.00063
%RSD	4.2734	.58624	.50984	.52650	.30108	16.829	24.816	.54467	7.4103

#1	.10970	.06713	.43888	.45564	.57581	.00736	.00668	2.4117	.00808
#2	.10326	.06769	.44206	.45905	.57336	.00579	.00469	2.4304	.00897

Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Elem	Sr4077	Th2837	Ti3349	Ti1908	U_3701	V_2924	Zn2062	Zr3391
Line	407.771 { 83}	283.730 {119}	334.904 {101}	190.856 {477}	370.152 { 91}	292.402 {115}	206.200 {163}	339.198 { 99}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.00815	.00811	.20190	.00348	.02390	.04459	.45023	.01052
Stddev	.00002	.00031	.00324	.00132	.00758	.00016	.00221	.00042
%RSD	.25616	3.7814	1.6048	38.028	31.715	.35703	.49019	3.9800

#1	.00813	.00832	.20419	.00441	.02925	.04470	.45179	.01082
#2	.00816	.00789	.19961	.00254	.01854	.04448	.44867	.01023

Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit								
Low Limit								

Int. Std.	Y_2243	Y_3600	Y_3774
Line	224.306 {450}	360.073 { 94}	377.433 { 89}
Units	Cts/S	Cts/S	Cts/S
Avg	1545.1	32307.	6176.7
Stddev	3.6	28.	7.3
%RSD	.23330	.08708	.11821

#1	1547.6	32287.	6181.9
#2	1542.5	32327.	6171.6

Sample Name: 280-82954-A-17-L Acquired: 5/23/2016 15:41:47 Type: Unk
Method: 6500_026(v10) Mode: CONC Corr. Factor: 1.000000
User: kellyca Custom ID1: Custom ID2: Custom ID3:
Comment: 325983 6010C Q4 soil

Elem	Ag3280	Al3092	As1890	B_2089	Ba4554	Be3130	Bi2230	Ca3179	Cd2288
Line	328.068 {103}	309.271 {109}	189.042 {478}	208.959 {461}	455.403 { 74}	313.042 {108}	223.061 {451}	317.933 {106}	228.802 {447}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.00104	34.570	.00766	.00389	.15199	.00031	.00203	.79480	.01127
Stddev	.00049	.064	.00445	.00047	.00011	.00004	.00003	.00201	.00059
%RSD	46.789	.18472	58.105	12.149	.06992	11.768	1.3848	.25269	5.2214

#1	.00139	34.525	.01080	.00356	.15191	.00034	.00201	.79338	.01169
#2	.00070	34.615	.00451	.00423	.15206	.00029	.00205	.79622	.01085

Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Elem	Co2286	Cr2055	Cu3247	Fe2599	K_7664	Li6707	Mg2790	Mn2576	Mo2020
Line	228.616 {447}	205.560 {464}	324.754 {104}	259.940 {130}	766.490 { 44}	670.784 { 50}	279.079 {121}2	257.610 {131}	202.030 {467}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.00184	.04221	.73084	23.420	.44494	.02192	.86277	.11096	.00312
Stddev	.00014	.00012	.00373	.039	.01790	.00001	.00469	.00010	.00011
%RSD	7.7802	.29319	.50982	.16533	4.0226	.06565	.54399	.08860	3.4072

#1	.00174	.04229	.73347	23.448	.45760	.02193	.86609	.11089	.00320
#2	.00194	.04212	.72821	23.393	.43229	.02191	.85945	.11103	.00305

Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Elem	Na5895	Ni2316	P_1782	Pb2203	S_1820	Sb2068	Se1960	Si2881	Sn1899
Line	589.592 { 57}	231.604 {446}	178.284 {489}	220.353 {453}	182.034 {485}	206.833 {463}	196.090 {472}	288.158 {117}	189.989 {477}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.11481	.06912	.50624	.80300	.66633	.02010	.00583	2.5762	.01589
Stddev	.00092	.00031	.00454	.00167	.00267	.00158	.00300	.0274	.00010
%RSD	.80031	.44837	.89753	.20815	.40067	7.8428	51.373	1.0634	.64448

#1	.11416	.06934	.50302	.80418	.66444	.01899	.00795	2.5568	.01582
#2	.11546	.06890	.50945	.80182	.66821	.02122	.00371	2.5955	.01596

Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Elem	Sr4077	Th2837	Ti3349	Ti1908	U_3701	V_2924	Zn2062	Zr3391
Line	407.771 { 83}	283.730 {119}	334.904 {101}	190.856 {477}	370.152 { 91}	292.402 {115}	206.200 {163}	339.198 { 99}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.01334	.00771	.21193	.00315	.02762	.03557	.86563	.00965
Stddev	.00009	.00350	.01250	.00017	.01420	.00064	.00066	.00133
%RSD	.65395	45.367	5.8994	5.4622	51.407	1.7953	.07658	13.764

#1	.01328	.00524	.22077	.00303	.03765	.03602	.86610	.00871
#2	.01340	.01019	.20309	.00328	.01758	.03512	.86516	.01058

Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit								
Low Limit								

Int. Std.	Y_2243	Y_3600	Y_3774
Line	224.306 {450}	360.073 { 94}	377.433 { 89}
Units	Cts/S	Cts/S	Cts/S
Avg	1540.7	32403.	6245.4
Stddev	1.7	68.	21.9
%RSD	.11165	.21125	.35027

#1	1539.5	32355.	6230.0
#2	1541.9	32451.	6260.9

Sample Name: 280-82954-A-17-M MS Acquired: 5/23/2016 15:44:30 Type: Unk

Method: 6500_026(v10) Mode: CONC Corr. Factor: 1.000000

User: kellyca Custom ID1: Custom ID2: Custom ID3:

Comment: 325983 6010C Q4 soil

Elem	Ag3280	Al3092	As1890	B_2089	Ba4554	Be3130	Bi2230	Ca3179	Cd2288
Line	328.068 {103}	309.271 {109}	189.042 {478}	208.959 {461}	455.403 { 74}	313.042 {108}	223.061 {451}	317.933 {106}	228.802 {447}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.04796	48.653	.98486	.99406	2.0832	.04828	2.1224	48.347	.11016
Stddev	.00020	.168	.00108	.00191	.0048	.00039	.0008	.106	.00049
%RSD	.40707	.34495	.11009	.19221	.22871	.80756	.03705	.21848	.44794

#1	.04810	48.772	.98409	.99541	2.0866	.04856	2.1230	48.422	.11051
#2	.04782	48.535	.98562	.99271	2.0798	.04801	2.1219	48.272	.10981

Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Elem	Co2286	Cr2055	Cu3247	Fe2599	K_7664	Li6707	Mg2790	Mn2576	Mo2020
Line	228.616 {447}	205.560 {464}	324.754 {104}	259.940 {130}	766.490 { 44}	670.784 { 50}	279.079 {121}2	257.610 {131}	202.030 {467}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.48844	W .24240	.92854	20.126	50.042	1.0231	47.837	.57558	1.0094
Stddev	.00089	.00019	.00243	.043	.116	.0037	.158	.00009	.0019
%RSD	.18160	.08028	.26146	.21367	.23268	.36018	.32995	.01549	.18787

#1	.48906	.24254	.92683	20.157	50.125	1.0257	47.725	.57564	1.0107
#2	.48781	.24226	.93026	20.096	49.960	1.0205	47.949	.57552	1.0080

Check ?	Chk Pass	Chk Warn	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit		.10000							
Low Limit		-.01000							

Elem	Na8183	Ni2316	P_1782	Pb2203	S_1820	Sb2068	Se1960	Si2881	Sn1899
Line	818.326 { 41}	231.604 {446}	178.284 {489}	220.353 {453}	182.034 {485}	206.833 {463}	196.090 {472}	288.158 {117}	189.989 {477}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	49.296	.54235	10.141	1.1034	2.5925	.47100	1.9312	7.1534	1.8646
Stddev	.042	.00117	.006	.0011	.0226	.00090	.0206	.0963	.0020
%RSD	.08554	.21557	.05761	.10027	.87315	.19129	1.0673	1.3458	.10731

#1	49.326	.54318	10.136	1.1026	2.6085	.47163	1.9458	7.2214	1.8660
#2	49.266	.54152	10.145	1.1042	2.5765	.47036	1.9167	7.0853	1.8632

Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Elem	Sr4077	Th2837	Ti3349	Ti1908	U_3701	V_2924	Zn2062	Zr3391
Line	407.771 { 83}	283.730 {119}	334.904 {101}	190.856 {477}	370.152 { 91}	292.402 {115}	206.200 {163}	339.198 { 99}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.93756	.95509	1.4090	1.8813	2.0926	.49973	1.1768	.48224
Stddev	.00388	.00330	.0054	.0054	.0252	.00187	.0038	.00106
%RSD	.41349	.34565	.38346	.28783	1.2050	.37502	.32068	.22067

#1	.94030	.95276	1.4128	1.8851	2.0748	.50106	1.1795	.48299
#2	.93482	.95743	1.4052	1.8775	2.1105	.49841	1.1742	.48148

Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit								
Low Limit								

Int. Std.	Y_2243	Y_3600	Y_3774
Line	224.306 {450}	360.073 { 94}	377.433 { 89}
Units	Cts/S	Cts/S	Cts/S
Avg	1469.4	30613.	6059.1
Stddev	.7	77.	22.7
%RSD	.04654	.25268	.37512

#1	1469.9	30667.	6043.0
#2	1468.9	30558.	6075.1

Sample Name: 280-82954-A-17-N MSD Acquired: 5/23/2016 15:47:03 Type: Unk
Method: 6500_026(v10) Mode: CONC Corr. Factor: 1.000000
User: kellyca Custom ID1: Custom ID2: Custom ID3:
Comment: 325983 6010C Q4 soil

Elem	Ag3280	Al3092	As1890	B_2089	Ba4554	Be3130	Bi2230	Ca3179	Cd2288
Line	328.068 {103}	309.271 {109}	189.042 {478}	208.959 {461}	455.403 {74}	313.042 {108}	223.061 {451}	317.933 {106}	228.802 {447}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.04888	46.607	1.0202	1.0306	2.4490	.05027	2.1867	49.672	.11314
Stddev	.00073	.061	.0007	.0004	.0053	.00008	.0062	.154	.00038
%RSD	1.4959	.13184	.06984	.03592	.21594	.16904	.28499	.31084	.33393

#1	.04836	46.563	1.0197	1.0303	2.4452	.05021	2.1911	49.781	.11341
#2	.04940	46.650	1.0207	1.0309	2.4527	.05033	2.1823	49.563	.11288

Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Elem	Co2286	Cr2055	Cu3247	Fe2599	K_7664	Li6707	Mg2790	Mn2576	Mo2020
Line	228.616 {447}	205.560 {464}	324.754 {104}	259.940 {130}	766.490 {44}	670.784 {50}	279.079 {121}2	257.610 {131}	202.030 {467}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.50543	W .24951	.84866	19.831	51.609	1.0613	49.019	.58704	1.0404
Stddev	.00086	.00086	.00420	.020	.069	.0016	.168	.00209	.0044
%RSD	.17078	.34644	.49452	.10329	.13365	.15372	.34273	.35662	.42349

#1	.50604	.25012	.84570	19.845	51.560	1.0601	48.901	.58556	1.0435
#2	.50482	.24889	.85163	19.816	51.658	1.0624	49.138	.58852	1.0373

Check ?	Chk Pass	Chk Warn	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit		.10000							
Low Limit		-.01000							

Elem	Na8183	Ni2316	P_1782	Pb2203	S_1820	Sb2068	Se1960	Si2881	Sn1899
Line	818.326 {41}	231.604 {446}	178.284 {489}	220.353 {453}	182.034 {485}	206.833 {463}	196.090 {472}	288.158 {117}	189.989 {477}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	51.103	.55520	10.429	1.1562	2.6494	.48236	1.9962	6.7042	1.9177
Stddev	.286	.00176	.022	.0035	.0127	.00742	.0020	.0038	.0012
%RSD	.55925	.31752	.20736	.30594	.47901	1.5386	.10058	.05636	.06269

#1	50.901	.55645	10.444	1.1587	2.6405	.47711	1.9948	6.7016	1.9186
#2	51.305	.55395	10.413	1.1537	2.6584	.48761	1.9977	6.7069	1.9169

Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Elem	Sr4077	Th2837	Ti3349	Ti1908	U_3701	V_2924	Zn2062	Zr3391
Line	407.771 {83}	283.730 {119}	334.904 {101}	190.856 {477}	370.152 {91}	292.402 {115}	206.200 {163}	339.198 {99}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.97196	.99114	1.4714	1.9324	2.1164	.51202	1.1844	.49983
Stddev	.00135	.00317	.0113	.0040	.0261	.00083	.0026	.00128
%RSD	.13934	.32007	.76993	.20812	1.2347	.16288	.22003	.25535

#1	.97100	.98890	1.4634	1.9295	2.1349	.51143	1.1863	.49893
#2	.97291	.99339	1.4794	1.9352	2.0980	.51261	1.1826	.50073

Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit								
Low Limit								

Int. Std.	Y_2243	Y_3600	Y_3774
Line	224.306 {450}	360.073 {94}	377.433 {89}
Units	Cts/S	Cts/S	Cts/S
Avg	1462.4	30512.	6036.8
Stddev	.6	22.	35.4
%RSD	.04127	.07268	.58626

#1	1462.0	30528.	6011.8
#2	1462.9	30497.	6061.9

Sample Name: ccvh-3900196 Acquired: 5/23/2016 15:49:36 Type: QC
Method: 6500_026(v10) Mode: CONC Corr. Factor: 1.000000
User: kellyca Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	Ag3280	Al3092	As1890	B_2089	Ba4554	Be3130	Bi2230	Ca3179	Cd2288	Co2286	Cr2055	Cu3247	Fe2714
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.00152	48.338	.00131	.00534	.00199	.00138	1.0504	-.04550	.00056	.00523	.00079	.00670	48.753
Stddev	.00020	.060	.00499	.00045	.00023	.00010	.0008	.00416	.00013	.00035	.00003	.00007	.112
%RSD	12.997	.12372	381.19	8.3456	11.518	7.5097	.07371	9.1528	22.376	6.6123	4.1229	1.0562	.22964

#1	.00166	48.296	-.00222	.00503	.00215	.00145	1.0498	-.04845	.00047	.00499	.00077	.00665	48.832
#2	.00138	48.380	.00484	.00566	.00183	.00131	1.0509	-.04256	.00065	.00548	.00081	.00675	48.674

Check ?	None	Chk Pass	None	None	None	None	Chk Pass	None	None	None	None	None	Chk Pass
Value													
Range													

Elem	K_7664	Li6707	Mg2790	Mn2576	Mo2020	Na8183	Ni2316	P_1782	Pb2203	S_1820	Sb2068	Se1960	Si2881
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.22538	.00363	.21760	.00085	-.00025	251.38	.00089	.00705	.00093	5.0692	.00431	.00451	.02472
Stddev	.00195	.00005	.00587	.00010	.00034	1.07	.00004	.00096	.00045	.0006	.00201	.00133	.00373
%RSD	.86303	1.2705	2.6976	12.006	133.60	.42502	4.1173	13.652	48.200	.01282	46.699	29.483	15.102

#1	.22400	.00359	.22175	.00077	-.00049	250.63	.00092	.00637	.00061	5.0696	.00288	.00357	.02208
#2	.22675	.00366	.21345	.00092	-.00001	252.14	.00086	.00773	.00124	5.0687	.00573	.00545	.02736

Check ?	None	None	None	None	None	Chk Pass	None	None	None	Chk Pass	None	None	None
Value													
Range													

Elem	Sn1899	Sr4077	Th2837	Ti3349	Tl1908	U_3701	V_2924	Zn2062	Zr3391
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.00357	.00177	5.0227	.02643	.00190	10.339	-.01476	-.00004	-.01253
Stddev	.00002	.00001	.0012	.00025	.00126	.017	.00004	.00012	.00002
%RSD	.69816	.76145	.02370	.94603	66.523	.16401	.28212	318.75	.19787

#1	.00359	.00176	5.0236	.02660	.00100	10.327	-.01479	-.00012	-.01255
#2	.00355	.00178	5.0219	.02625	.00279	10.351	-.01473	.00005	-.01251

Check ?	None	None	Chk Pass	None	None	Chk Pass	None	None	None
Value									
Range									

Int. Std.	Y_2243	Y_3600	Y_3774
Units	Cts/S	Cts/S	Cts/S
Avg	1465.1	30498.	5987.1
Stddev	.4	104.	6.3
%RSD	.02606	.34212	.10603

#1	1465.4	30572.	5982.6
#2	1464.8	30424.	5991.6

Sample Name: ccv-3900195 Acquired: 5/23/2016 15:52:25 Type: QC
Method: 6500_026(v10) Mode: CONC Corr. Factor: 1.000000
User: kellyca Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	Ag3280	Al1670	As1890	B_2089	Ba4554	Be3130	Bi2230	Ca3179	Cd2288	Co2286	Cr2055	Cu3247	Fe2599
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.47833	.52754	1.0165	.52954	.49274	.49852	-.00081	5.0951	.51517	.51721	.51083	.48973	2.4867
Stddev	.00072	.00299	.0029	.00030	.00243	.00094	.00002	.0142	.00083	.00158	.00066	.00122	.0039
%RSD	.15010	.56611	.28854	.05709	.49335	.18901	2.8819	.27866	.16119	.30527	.12868	.24878	.15850

#1	.47884	.52965	1.0144	.52932	.49102	.49785	-.00083	5.0850	.51458	.51609	.51037	.48886	2.4839
#2	.47782	.52542	1.0185	.52975	.49446	.49918	-.00080	5.1051	.51576	.51833	.51130	.49059	2.4895

Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	None	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Value													
Range													

Elem	K_7664	Li6707	Mg2790	Mn2576	Mo2020	Na5895	Ni2316	P_1782	Pb2203	S_1820	Sb2068	Se1960	Si2881
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	49.517	1.0197	19.228	.48997	.51593	5.0863	.50514	1.0030	1.0479	.01148	1.0013	1.0194	4.9407
Stddev	.132	.0016	.063	.00005	.00051	.0189	.00128	.0025	.0017	.00112	.0002	.0079	.0292
%RSD	.26559	.15632	.32828	.01112	.09927	.37200	.25256	.24579	.16574	9.7339	.02303	.77753	.59037

#1	49.424	1.0186	19.184	.49000	.51557	5.0729	.50424	1.0047	1.0467	.01069	1.0015	1.0138	4.9200
#2	49.610	1.0208	19.273	.48993	.51629	5.0997	.50604	1.0012	1.0492	.01227	1.0011	1.0250	4.9613

Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	None	Chk Pass	Chk Pass	Chk Pass
Value													
Range													

Elem	Sn1899	Sr4077	Th2837	Ti3349	Ti1908	U_3701	V_2924	Zn2062	Zr3391
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.99935	.47750	.00607	.47078	1.0313	.01112	.46897	.47800	.49342
Stddev	.00178	.00185	.00112	.00108	.0052	.00640	.00091	.00048	.00379
%RSD	.17860	.38761	18.388	.22951	.49899	57.540	.19463	.09966	.76827

#1	1.0006	.47619	.00686	.47155	1.0276	.00660	.46962	.47767	.49074
#2	.99809	.47881	.00528	.47002	1.0349	.01564	.46833	.47834	.49610

Check ?	Chk Pass	Chk Pass	None	Chk Pass	Chk Pass	None	Chk Pass	Chk Pass	Chk Pass
Value									
Range									

Int. Std.	Y_2243	Y_3600	Y_3774
Units	Cts/S	Cts/S	Cts/S
Avg	1498.7	31446.	5995.7
Stddev	4.5	4.	7.0
%RSD	.29873	.01192	.11717

#1	1501.9	31443.	6000.6
#2	1495.5	31448.	5990.7

Sample Name: ccb Acquired: 5/23/2016 15:55:02 Type: QC
Method: 6500_026(v10) Mode: CONC Corr. Factor: 1.000000
User: kellyca Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	Ag3280	Al1670	As1890	B_2089	Ba4554	Be3130	Bi2230	Ca3179	Cd2288	Co2286	Cr2055	Cu3247
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.00043	.00073	-.00035	W .00233	.00020	.00001	.00259	-.00598	-.00003	-.00008	.00012	-.00125
Stddev	.00016	.00017	.00045	.00005	.00005	.00007	.00195	.00091	.00004	.00027	.00014	.00011
%RSD	37.598	23.856	126.39	2.0100	25.277	716.05	75.547	15.257	131.89	323.59	116.57	8.8145

#1	.00031	.00060	-.00067	.00230	.00017	-.00004	.00120	-.00534	-.00006	.00011	.00022	-.00117
#2	.00054	.00085	-.00004	.00236	.00024	.00006	.00397	-.00663	-.00000	-.00028	.00002	-.00133

Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Warn	Chk Pass	Chk Pass	None	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit				.00156								
Low Limit				-.00156								

Elem	Fe2599	K_7664	Li6707	Mg2790	Mn2576	Mo2020	Na5895	Ni2316	P_1782	Pb2203	S_1820	Sb2068
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.01428	.02456	.00037	.00111	.00000	.00034	.01239	-.00016	.00274	-.00115	-.00021	W .00520
Stddev	.00276	.03775	.00007	.00299	.00000	.00032	.00456	.00018	.00340	.00221	.00349	.00019
%RSD	19.312	153.73	18.513	270.28	55.358	94.839	36.806	114.74	123.88	192.16	1633.1	3.6763

#1	.01233	.05125	.00042	-.00101	.00000	.00056	.01562	-.00003	.00034	-.00272	.00225	.00506
#2	.01623	-.00214	.00032	.00322	.00000	.00011	.00917	-.00029	.00514	.00041	-.00268	.00533

Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	None	Chk Warn
High Limit												.00314
Low Limit												-.00314

Elem	Se1960	Si2881	Sn1899	Sr4077	Th2837	Ti3349	Ti1908	U_3701	V_2924	Zn2062	Zr3391
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	F .01248	.00470	-.00162	.00002	.00254	.00019	-.00110	-.00015	-.00042	.00048	.00002
Stddev	.00134	.00770	.00010	.00005	.00061	.00030	.00185	.01126	.00033	.00030	.00193
%RSD	10.768	164.10	6.2410	238.10	23.851	160.69	169.13	7695.5	79.236	62.062	12052.

#1	.01153	.01014	-.00169	-.00001	.00297	-.00003	.00021	.00782	-.00018	.00069	.00138
#2	.01343	-.00075	-.00155	.00006	.00211	.00040	-.00241	-.00811	-.00065	.00027	-.00135

Check ?	Chk Fail	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit	.00972										
Low Limit	-.00972										

Int. Std.	Y_2243	Y_3600	Y_3774
Units	Cts/S	Cts/S	Cts/S
Avg	1519.4	32129.	5945.8
Stddev	.1	54.	36.6
%RSD	.00824	.16945	.61596

#1	1519.4	32091.	5971.7
#2	1519.3	32168.	5919.9

Sample Name: ccvl-3907489 Acquired: 5/23/2016 15:57:49 Type: QC
Method: 6500_026(v10) Mode: CONC Corr. Factor: 1.000000
User: kellyca Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	Ag3280	Al1670	As1890	B_2089	Ba4554	Be3130	Bi2230	Ca3179	Cd2288	Co2286	Cr2055	Cu3247
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.01016	.10829	.01515	.10457	.01011	.00110	.11670	.19585	.00528	.01074	.01051	.01414
Stddev	.00012	.00076	.00054	.00077	.00004	.00008	.00145	.00082	.00034	.00030	.00000	.00013
%RSD	1.1790	.70481	3.5375	.73174	.39452	7.0473	1.2450	.42121	6.4124	2.7881	.02116	.95362

#1	.01024	.10775	.01553	.10511	.01014	.00104	.11773	.19644	.00552	.01095	.01051	.01405
#2	.01007	.10883	.01477	.10403	.01008	.00115	.11567	.19527	.00504	.01053	.01051	.01424

Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Value												
Range												

Elem	Fe2599	K_7664	Li6707	Mg2790	Mn2576	Mo2020	Na5895	Ni2316	P_1782	Pb2203	S_1820	Sb2068
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.10910	3.0240	.01018	.20127	.01017	.02056	1.0297	.04185	2.9212	.01059	-.00339	.02384
Stddev	.00029	.0252	.00036	.00331	.00000	.00011	.0112	.00074	.0191	.00063	.00217	.00313
%RSD	.26466	.83354	3.4921	1.6454	.03485	.51467	1.0866	1.7765	.65196	5.9259	64.059	13.135

#1	.10890	3.0062	.00992	.19893	.01017	.02063	1.0218	.04238	2.9347	.01104	-.00492	.02163
#2	.10931	3.0419	.01043	.20361	.01017	.02048	1.0376	.04132	2.9078	.01015	-.00185	.02605

Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	None	Chk Pass
Value												
Range												

Elem	Se1960	Si2881	Sn1899	Sr4077	Th2837	Ti3349	Ti1908	U_3701	V_2924	Zn2062	Zr3391
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	F .02372	.50313	.10278	.00972	.01781	.00930	.01683	.06450	.00971	.01885	.01612
Stddev	.00098	.00212	.00080	.00000	.00088	.00009	.00057	.01265	.00066	.00003	.00067
%RSD	4.1383	.42177	.77926	.02986	4.9151	.94027	3.3611	19.608	6.8210	.16256	4.1601

#1	.02303	.50464	.10334	.00972	.01719	.00924	.01643	.07344	.00924	.01883	.01660
#2	.02442	.50163	.10221	.00972	.01843	.00936	.01723	.05556	.01018	.01887	.01565

Check ?	Chk Fail	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Value	.01500										
Range	30.000%										

Int. Std.	Y_2243	Y_3600	Y_3774
Units	Cts/S	Cts/S	Cts/S
Avg	1525.3	32292.	6008.1
Stddev	4.0	12.	27.4
%RSD	.26123	.03849	.45665

#1	1522.5	32284.	6027.5
#2	1528.2	32301.	5988.7

Sample Name: MB 280-325962/1-A Acquired: 5/23/2016 16:00:35 Type: Unk
Method: 6500_026(v10) Mode: CONC Corr. Factor: 1.000000
User: kellyca Custom ID1: 5/19 Custom ID2: Custom ID3:
Comment: 325962 6010C Q4

Elem	Ag3280	Al1670	As1890	B_2089	Ba4554	Be3130	Bi2230	Ca3179	Cd2288
Line	328.068 {103}	167.079 {502}	189.042 {478}	208.959 {461}	455.403 { 74}	313.042 {108}	223.061 {451}	317.933 {106}	228.802 {447}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.00033	.00768	-.00066	.00175	.00027	.00003	.00210	.00659	-.00010
Stddev	.00010	.00017	.00348	.00011	.00009	.00001	.00056	.00089	.00026
%RSD	29.684	2.1850	528.81	6.0045	32.069	27.168	26.760	13.438	254.94

#1	.00026	.00756	-.00312	.00167	.00034	.00004	.00170	.00597	.00008
#2	.00040	.00780	.00180	.00182	.00021	.00003	.00249	.00722	-.00028

Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Elem	Co2286	Cr2055	Cu3247	Fe2599	K_7664	Li6707	Mg2790	Mn2576	Mo2020
Line	228.616 {447}	205.560 {464}	324.754 {104}	259.940 {130}	766.490 { 44}	670.784 { 50}	279.079 {121}2	257.610 {131}	202.030 {467}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	-.00023	.00194	-.00120	.02815	-.02089	-.00058	-.00008	.00022	-.00021
Stddev	.00027	.00028	.00013	.00040	.01257	.00001	.00058	.00004	.00059
%RSD	116.20	14.434	10.611	1.4329	60.189	1.5055	757.28	19.265	285.77

#1	-.00004	.00174	-.00129	.02786	-.02978	-.00058	-.00049	.00019	.00021
#2	-.00042	.00213	-.00111	.02843	-.01200	-.00059	.00033	.00025	-.00062

Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Elem	Na5895	Ni2316	P_1782	Pb2203	S_1820	Sb2068	Se1960	Si2881	Sn1899
Line	589.592 { 57}	231.604 {446}	178.284 {489}	220.353 {453}	182.034 {485}	206.833 {463}	196.090 {472}	288.158 {117}	189.989 {477}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.00586	-.00002	.00073	.00212	.00316	.00187	W .00646	W .08098	-.00023
Stddev	.00273	.00050	.00188	.00005	.00172	.00058	.00415	.00200	.00038
%RSD	46.637	2156.5	256.66	2.1509	54.600	31.245	64.229	2.4661	166.88

#1	.00393	.00033	-.00060	.00215	.00194	.00145	.00940	.08239	-.00049
#2	.00779	-.00037	.00207	.00209	.00437	.00228	.00353	.07956	.00004

Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Warn	Chk Warn	Chk Pass
High Limit							.00500	.05000	
Low Limit							-.00500	-.05000	

Elem	Sr4077	Th2837	Ti3349	Ti1908	U_3701	V_2924	Zn2062	Zr3391	
Line	407.771 { 83}	283.730 {119}	334.904 {101}	190.856 {477}	370.152 { 91}	292.402 {115}	206.200 {163}	339.198 { 99}	
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	
Avg	.00001	.00175	.00048	-.00068	.00894	.00020	.00074	.00162	
Stddev	.00000	.00017	.00024	.00062	.02386	.00013	.00035	.00049	
%RSD	27.805	9.5801	49.664	91.759	266.82	65.503	47.184	30.319	

#1	.00001	.00163	.00031	-.00024	-.00793	.00011	.00099	.00127	
#2	.00001	.00187	.00065	-.00112	.02582	.00029	.00049	.00197	

Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	
High Limit									
Low Limit									

Int. Std.	Y_2243	Y_3600	Y_3774						
Line	224.306 {450}	360.073 { 94}	377.433 { 89}						
Units	Cts/S	Cts/S	Cts/S						
Avg	1532.3	32375.	6014.6						
Stddev	5.4	56.	25.6						
%RSD	.35241	.17290	.42537						

#1	1536.1	32335.	6032.7						
#2	1528.5	32414.	5996.5						

Sample Name: LCS 280-325962/2-A Acquired: 5/23/2016 16:03:22 Type: Unk

Method: 6500_026(v10) Mode: CONC Corr. Factor: 1.000000

User: kellyca Custom ID1: Custom ID2: Custom ID3:

Comment: 325962 6010C Q4

Elem	Ag3280	Al1670	As1890	B_2089	Ba4554	Be3130	Bi2230	Ca3179	Cd2288
Line	328.068 {103}	167.079 {502}	189.042 {478}	208.959 {461}	455.403 { 74}	313.042 {108}	223.061 {451}	317.933 {106}	228.802 {447}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.05153	1.9753	1.0521	1.0726	2.0076	.05045	F 2.2407	49.067	.10455
Stddev	.00208	.0096	.0031	.0035	.0296	.00067	.0036	.798	.00022
%RSD	4.0396	.48691	.29775	.32822	1.4733	1.3241	.15912	1.6271	.21117

#1	.05006	1.9685	1.0543	1.0702	1.9867	.04998	2.2432	48.502	.10439
#2	.05300	1.9821	1.0499	1.0751	2.0285	.05092	2.2382	49.631	.10470

Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Fail	Chk Pass	Chk Pass
High Limit							2.2000		
Low Limit							1.8000		

Elem	Co2286	Cr2055	Cu3247	Fe2599	K_7664	Li6707	Mg2790	Mn2576	Mo2020
Line	228.616 {447}	205.560 {464}	324.754 {104}	259.940 {130}	766.490 { 44}	670.784 { 50}	279.079 {121}2	257.610 {131}	202.030 {467}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.51146	F .20645	.26096	1.0345	51.141	1.0489	50.421	.50485	1.0738
Stddev	.00049	.00077	.00963	.0141	.690	.0152	2.055	.02168	.0015
%RSD	.09548	.37203	3.6918	1.3579	1.3500	1.4511	4.0764	4.2949	.14212

#1	.51181	.20591	.25415	1.0246	50.653	1.0381	48.968	.48952	1.0728
#2	.51112	.20699	.26777	1.0445	51.630	1.0596	51.875	.52019	1.0749

Check ?	Chk Pass	Chk Fail	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit		.05750							
Low Limit		.04300							

Elem	Na8183	Ni2316	P_1782	Pb2203	S_1820	Sb2068	Se1960	Si2881	Sn1899
Line	818.326 { 41}	231.604 {446}	178.284 {489}	220.353 {453}	182.034 {485}	206.833 {463}	196.090 {472}	288.158 {117}	189.989 {477}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	51.977	.50380	10.403	.51925	2.1044	.53020	2.0673	9.9209	2.0000
Stddev	.573	.00013	.005	.00154	.0017	.00248	.0017	.1592	.0005
%RSD	1.1032	.02581	.05099	.29613	.08146	.46697	.08124	1.6042	.02419

#1	51.572	.50371	10.407	.52034	2.1032	.52845	2.0685	9.8083	2.0004
#2	52.382	.50389	10.400	.51816	2.1056	.53195	2.0661	10.033	1.9997

Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Elem	Sr4077	Th2837	Ti3349	Ti1908	U_3701	V_2924	Zn2062	Zr3391
Line	407.771 { 83}	283.730 {119}	334.904 {101}	190.856 {477}	370.152 { 91}	292.402 {115}	206.200 {163}	339.198 { 99}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.96642	1.0525	1.0022	2.0154	2.2373	.49228	.49900	.49129
Stddev	.01388	.0383	.0418	.0010	.0962	.02181	.02565	.00152
%RSD	1.4357	3.6363	4.1675	.05077	4.2996	4.4303	5.1396	.30913

#1	.95661	1.0254	.97271	2.0161	2.1692	.47685	.48086	.49022
#2	.97623	1.0795	1.0318	2.0147	2.3053	.50770	.51713	.49237

Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit								
Low Limit								

Int. Std.	Y_2243	Y_3600	Y_3774
Line	224.306 {450}	360.073 { 94}	377.433 { 89}
Units	Cts/S	Cts/S	Cts/S
Avg	1447.8	29490.	5992.5
Stddev	4.7	1007.	72.8
%RSD	.32697	3.4147	1.2155

#1	1451.1	30202.	6044.0
#2	1444.4	28778.	5941.0

Sample Name: 280-83263-A-1-A Acquired: 5/23/2016 16:05:56 Type: Unk
Method: 6500_026(v10) Mode: CONC Corr. Factor: 1.000000
User: kellyca Custom ID1: Custom ID2: Custom ID3:
Comment: 325962 6010C Q4

Elem	Ag3280	Al1670	As1890	B_2089	Ba4554	Be3130	Bi2230	Ca3179	Cd2288
Line	328.068 {103}	167.079 {502}	189.042 {478}	208.959 {461}	455.403 { 74}	313.042 {108}	223.061 {451}	317.933 {106}	228.802 {447}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.00006	.34863	-.00403	.15768	.10326	.00000	.00036	307.23	.00035
Stddev	.00057	.00101	.00262	.00036	.00008	.00002	.00160	.36	.00005
%RSD	972.35	.28846	65.004	.22890	.07705	1534.7	449.93	.11856	13.318

#1	.00046	.34934	-.00218	.15743	.10320	-.00002	.00148	307.48	.00038
#2	-.00035	.34792	-.00589	.15794	.10331	.00002	-.00077	306.97	.00031

Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Elem	Co2286	Cr2055	Cu3247	Fe2599	K_7664	Li6707	Mg2790	Mn2576	Mo2020
Line	228.616 {447}	205.560 {464}	324.754 {104}	259.940 {130}	766.490 { 44}	670.784 { 50}	279.079 {121}2	257.610 {131}	202.030 {467}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.00088	W .18879	.00059	.38010	7.5401	.03872	60.952	.14888	.00091
Stddev	.00027	.00028	.00071	.00749	.0388	.00031	.063	.00021	.00007
%RSD	30.862	.14821	120.05	1.9706	.51386	.78816	.10291	.14257	7.9606

#1	.00107	.18899	.00009	.38539	7.5675	.03893	60.996	.14903	.00085
#2	.00069	.18860	.00109	.37480	7.5127	.03850	60.907	.14873	.00096

Check ?	Chk Pass	Chk Warn	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit		.10000							
Low Limit		-.01000							

Elem	Na8183	Ni2316	P_1782	Pb2203	S_1820	Sb2068	Se1960	Si2881	Sn1899
Line	818.326 { 41}	231.604 {446}	178.284 {489}	220.353 {453}	182.034 {485}	206.833 {463}	196.090 {472}	288.158 {117}	189.989 {477}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	115.04	.02055	.01720	-.00291	102.72	.00152	.01577	17.917	.00084
Stddev	.00	.00053	.00507	.00126	.03	.00007	.00720	.010	.00122
%RSD	.00113	2.5997	29.475	43.133	.02721	4.7053	45.648	.05381	143.93

#1	115.04	.02017	.02079	-.00202	102.74	.00157	.01068	17.911	-.00002
#2	115.04	.02093	.01362	-.00380	102.70	.00147	.02086	17.924	.00170

Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Elem	Sr4077	Th2837	Ti3349	Ti1908	U_3701	V_2924	Zn2062	Zr3391	
Line	407.771 { 83}	283.730 {119}	334.904 {101}	190.856 {477}	370.152 { 91}	292.402 {115}	206.200 {163}	339.198 { 99}	
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	
Avg	2.1203	.00370	.01243	.00078	.00287	.00323	.00078	-.00005	
Stddev	.0030	.00164	.00057	.00134	.00180	.00092	.00061	.00159	
%RSD	.14112	44.250	4.5500	172.18	62.696	28.485	77.486	2958.4	

#1	2.1224	.00485	.01203	-.00017	.00414	.00388	.00035	.00107	
#2	2.1181	.00254	.01283	.00173	.00160	.00258	.00121	-.00118	

Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	
High Limit									
Low Limit									

Int. Std.	Y_2243	Y_3600	Y_3774						
Line	224.306 {450}	360.073 { 94}	377.433 { 89}						
Units	Cts/S	Cts/S	Cts/S						
Avg	1372.7	28741.	5787.0						
Stddev	2.7	10.	12.6						
%RSD	.19913	.03467	.21855						

#1	1374.7	28748.	5778.0						
#2	1370.8	28734.	5795.9						

Sample Name: 280-83263-A-1-A SD@5 Acquired: 5/23/2016 16:08:39 Type: Unk
Method: 6500_026(v10) Mode: CONC Corr. Factor: 1.000000
User: kellyca Custom ID1: Custom ID2: Custom ID3:
Comment: 325962 6010C Q4

Elem	Ag3280	Al1670	As1890	B_2089	Ba4554	Be3130	Bi2230	Ca3179	Cd2288
Line	328.068 {103}	167.079 {502}	189.042 {478}	208.959 {461}	455.403 { 74}	313.042 {108}	223.061 {451}	317.933 {106}	228.802 {447}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	-.00018	.08202	-.00019	.03719	.02007	.00003	.00363	60.348	.00014
Stddev	.00041	.00194	.00902	.00095	.00037	.00000	.00204	1.018	.00020
%RSD	222.81	2.3671	4747.2	2.5510	1.8619	5.7087	56.289	1.6868	143.65

#1	.00011	.08064	-.00657	.03652	.01980	.00003	.00218	59.628	.00029
#2	-.00048	.08339	.00619	.03787	.02033	.00003	.00507	61.067	-.00000

Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Elem	Co2286	Cr2055	Cu3247	Fe2599	K_7664	Li6707	Mg2790	Mn2576	Mo2020
Line	228.616 {447}	205.560 {464}	324.754 {104}	259.940 {130}	766.490 { 44}	670.784 { 50}	279.079 {121}2	257.610 {131}	202.030 {467}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.00024	.04270	-.00033	.09046	1.4216	.00715	12.729	.03118	-.00020
Stddev	.00015	.00198	.00029	.00255	.0157	.00058	.235	.00049	.00033
%RSD	62.127	4.6474	87.282	2.8140	1.1020	8.0791	1.8498	1.5714	166.76

#1	.00035	.04130	-.00054	.08866	1.4105	.00674	12.563	.03083	-.00043
#2	.00014	.04410	-.00013	.09226	1.4327	.00755	12.896	.03152	.00004

Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Elem	Na8183	Ni2316	P_1782	Pb2203	S_1820	Sb2068	Se1960	Si2881	Sn1899
Line	818.326 { 41}	231.604 {446}	178.284 {489}	220.353 {453}	182.034 {485}	206.833 {463}	196.090 {472}	288.158 {117}	189.989 {477}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	22.363	.00521	.00456	.00144	22.112	.00072	.00638	3.3819	.00001
Stddev	.476	.00036	.00170	.00016	.850	.00433	.00621	.0656	.00054
%RSD	2.1284	6.9957	37.261	10.972	3.8431	604.12	97.311	1.9388	6512.0

#1	22.026	.00495	.00336	.00155	21.511	.00378	.01077	3.3355	-.00037
#2	22.699	.00546	.00576	.00133	22.713	-.00234	.00199	3.4283	.00039

Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Elem	Sr4077	Th2837	Ti3349	Ti1908	U_3701	V_2924	Zn2062	Zr3391	
Line	407.771 { 83}	283.730 {119}	334.904 {101}	190.856 {477}	370.152 { 91}	292.402 {115}	206.200 {163}	339.198 { 99}	
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	
Avg	.41174	.00111	.00250	.00082	.02328	.00057	-.00034	.00069	
Stddev	.00848	.00080	.00022	.00171	.01139	.00018	.00194	.00022	
%RSD	2.0588	72.153	8.6584	207.66	48.914	31.494	563.47	32.196	

#1	.40575	.00168	.00265	.00203	.01523	.00044	.00103	.00053	
#2	.41774	.00054	.00235	-.00039	.03134	.00070	-.00172	.00085	

Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	
High Limit									
Low Limit									

Int. Std.	Y_2243	Y_3600	Y_3774						
Line	224.306 {450}	360.073 { 94}	377.433 { 89}						
Units	Cts/S	Cts/S	Cts/S						
Avg	1465.2	30771.	5862.2						
Stddev	.1	26.	1.2						
%RSD	.00793	.08446	.02004						

#1	1465.1	30789.	5861.4						
#2	1465.3	30752.	5863.1						

Sample Name: 280-83263-A-1-B MS Acquired: 5/23/2016 16:11:22 Type: Unk
Method: 6500_026(v10) Mode: CONC Corr. Factor: 1.000000
User: kellyca Custom ID1: Custom ID2: Custom ID3:
Comment: 325962 6010C Q4

Elem	Ag3280	Al1670	Al3092	As1890	B_2089	Ba4554	Be3130	Bi2230	Ca3179
Line	328.068 {103}	167.079 {502}	309.271 {109}	189.042 {478}	208.959 {461}	455.403 { 74}	313.042 {108}	223.061 {451}	317.933 {106}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.05284	2.6034	F 2.8179	1.1027	1.2441	2.1425	.05091	2.3011	352.76
Stddev	.00025	.0027	.0118	.0028	.0028	.0138	.00014	.0037	.16
%RSD	.46969	.10273	.41972	.25464	.22555	.64623	.26634	.15973	.04417
#1	.05266	2.6053	2.8095	1.1007	1.2421	2.1327	.05082	2.3037	352.65
#2	.05301	2.6016	2.8263	1.1046	1.2461	2.1522	.05101	2.2985	352.87

Check ?	Chk Pass	Chk Pass	Chk Fail	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit			1000.0						
Low Limit			3.0000						

Elem	Cd2288	Co2286	Cr2055	Cu3247	Fe2599	K_7664	Li6707	Mg2790	Mn2576
Line	228.802 {447}	228.616 {447}	205.560 {464}	324.754 {104}	259.940 {130}	766.490 { 44}	670.784 { 50}	279.079 {121}2	257.610 {131}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.10841	.50195	W .39711	.26569	1.6025	61.782	1.1446	109.10	.66782
Stddev	.00041	.00003	.00142	.00176	.0145	.403	.0106	.02	.00082
%RSD	.37368	.00590	.35728	.66417	.90222	.65282	.92964	.02015	.12347
#1	.10869	.50193	.39812	.26444	1.5923	61.497	1.1371	109.11	.66840
#2	.10812	.50197	.39611	.26694	1.6127	62.068	1.1521	109.08	.66723

Check ?	Chk Pass	Chk Pass	Chk Warn	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit			10000						
Low Limit			-.01000						

Elem	Mo2020	Na8183	Ni2316	P_1782	Pb2203	S_1820	Sb2068	Se1960	Si2881
Line	202.030 {467}	818.326 { 41}	231.604 {446}	178.284 {489}	220.353 {453}	182.034 {485}	206.833 {463}	196.090 {472}	288.158 {117}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	1.0724	168.62	.50859	11.081	.50120	105.46	.54759	2.1904	29.177
Stddev	.0001	1.08	.00062	.008	.00202	.02	.00319	.0039	.209
%RSD	.00543	.63985	.12217	.07357	.40258	.01773	.58194	.17963	.71573
#1	1.0724	167.86	.50815	11.087	.50262	105.47	.54533	2.1932	29.029
#2	1.0725	169.39	.50903	11.075	.49977	105.44	.54984	2.1876	29.325

Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Elem	Sn1899	Sr4077	Th2837	Ti3349	Ti1908	U_3701	V_2924	Zn2062	Zr3391
Line	189.989 {477}	407.771 { 83}	283.730 {119}	334.904 {101}	190.856 {477}	370.152 { 91}	292.402 {115}	206.200 {163}	339.198 { 99}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	1.9780	3.0959	1.0257	.99681	1.8879	2.1648	.48083	.46313	.49634
Stddev	.0100	.0189	.0044	.00532	.0072	.0202	.00063	.00468	.00251
%RSD	.50578	.61182	.42690	.53380	.38366	.93420	.13105	1.0114	.50600
#1	1.9851	3.0825	1.0288	1.0006	1.8828	2.1791	.48039	.46644	.49456
#2	1.9709	3.1093	1.0226	.99305	1.8931	2.1505	.48128	.45981	.49812

Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Int. Std.	Y_2243	Y_3600	Y_3774
Line	224.306 {450}	360.073 { 94}	377.433 { 89}
Units	Cts/S	Cts/S	Cts/S
Avg	1345.1	28280.	5696.9
Stddev	5.0	40.	1.5
%RSD	.36987	.14232	.02677
#1	1348.6	28252.	5695.9
#2	1341.6	28309.	5698.0

Sample Name: 280-83263-A-1-C MSD Acquired: 5/23/2016 16:13:53 Type: Unk
Method: 6500_026(v10) Mode: CONC Corr. Factor: 1.000000
User: kellyca Custom ID1: Custom ID2: Custom ID3:
Comment: 325962 6010C Q4

Elem	Ag3280	Al1670	Al3092	As1890	B_2089	Ba4554	Be3130	Bi2230	Ca3179
Line	328.068 {103}	167.079 {502}	309.271 {109}	189.042 {478}	208.959 {461}	455.403 { 74}	313.042 {108}	223.061 {451}	317.933 {106}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.05255	2.6486	F 2.8811	1.0947	1.2260	2.1331	.05084	2.2690	353.58
Stddev	.00022	.0023	.0083	.0025	.0002	.0033	.00032	.0079	.78
%RSD	.41336	.08764	.28639	.22949	.01864	.15630	.62027	.34700	.21999

#1	.05240	2.6469	2.8869	1.0965	1.2262	2.1307	.05061	2.2745	353.03
#2	.05270	2.6502	2.8752	1.0929	1.2259	2.1354	.05106	2.2634	354.13

Check ?	Chk Pass	Chk Pass	Chk Fail	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit			1000.0						
Low Limit			3.0000						

Elem	Cd2288	Co2286	Cr2055	Cu3247	Fe2599	K_7664	Li6707	Mg2790	Mn2576
Line	228.802 {447}	228.616 {447}	205.560 {464}	324.754 {104}	259.940 {130}	766.490 { 44}	670.784 { 50}	279.079 {121}2	257.610 {131}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.10737	.50137	W .38937	.26383	1.7042	61.428	1.1337	109.03	.68061
Stddev	.00040	.00083	.00128	.00035	.0071	.052	.0026	.22	.00122
%RSD	.37619	.16490	.32945	.13081	.41882	.08511	.23023	.19828	.17927

#1	.10766	.50195	.38846	.26358	1.6991	61.391	1.1318	108.88	.67975
#2	.10709	.50078	.39028	.26407	1.7092	61.465	1.1355	109.18	.68147

Check ?	Chk Pass	Chk Pass	Chk Warn	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit			10000						
Low Limit			-.01000						

Elem	Mo2020	Na8183	Ni2316	P_1782	Pb2203	S_1820	Sb2068	Se1960	Si2881
Line	202.030 {467}	818.326 { 41}	231.604 {446}	178.284 {489}	220.353 {453}	182.034 {485}	206.833 {463}	196.090 {472}	288.158 {117}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	1.0701	167.54	.50709	10.945	.49979	103.86	.53336	2.1446	29.384
Stddev	.0021	.59	.00190	.037	.00155	.11	.00334	.0102	.011
%RSD	.19948	.35018	.37540	.34006	.30995	.10666	.62583	.47402	.03790

#1	1.0686	167.12	.50575	10.919	.50088	103.79	.53100	2.1518	29.392
#2	1.0716	167.95	.50844	10.972	.49869	103.94	.53572	2.1374	29.376

Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Elem	Sn1899	Sr4077	Th2837	Ti3349	Ti1908	U_3701	V_2924	Zn2062	Zr3391
Line	189.989 {477}	407.771 { 83}	283.730 {119}	334.904 {101}	190.856 {477}	370.152 { 91}	292.402 {115}	206.200 {163}	339.198 { 99}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	1.9648	3.0769	1.0303	.99398	1.8762	2.1807	.48449	.47202	.49533
Stddev	.0024	.0042	.0013	.00180	.0040	.0106	.00138	.00170	.00107
%RSD	.12157	.13764	.12495	.18138	.21477	.48529	.28539	.35910	.21670

#1	1.9664	3.0739	1.0312	.99270	1.8790	2.1882	.48351	.47082	.49457
#2	1.9631	3.0799	1.0294	.99525	1.8733	2.1733	.48547	.47322	.49608

Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Int. Std.	Y_2243	Y_3600	Y_3774
Line	224.306 {450}	360.073 { 94}	377.433 { 89}
Units	Cts/S	Cts/S	Cts/S
Avg	1352.3	28176.	5659.5
Stddev	1.4	56.	26.5
%RSD	.10121	.19897	.46854

#1	1351.3	28216.	5678.3
#2	1353.3	28137.	5640.8

Sample Name: 280-83263-A-1-A PDS Acquired: 5/23/2016 16:16:26 Type: Unk

Method: 6500_026(v10) Mode: CONC Corr. Factor: 1.000000

User: kellyca Custom ID1: Custom ID2: Custom ID3:

Comment: 325962 6010C Q4

Elem	Ag3280	Al1670	As1890	B_2089	Ba4554	Be3130	Bi2230	Ca3179	Cd2288
Line	328.068 {103}	167.079 {502}	189.042 {478}	208.959 {461}	455.403 { 74}	313.042 {108}	223.061 {451}	317.933 {106}	228.802 {447}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.01651	1.2979	.21378	.26310	.20076	.04925	.00364	321.08	.05382
Stddev	.00039	.0012	.00528	.00023	.00001	.00009	.00019	.16	.00002
%RSD	2.3407	.08874	2.4705	.08775	.00652	.19033	5.2505	.04915	.02804

#1	.01678	1.2970	.21751	.26326	.20076	.04931	.00378	321.19	.05381
#2	.01624	1.2987	.21004	.26294	.20077	.04918	.00351	320.97	.05383

Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Elem	Co2286	Cr2055	Cu3247	Fe2599	K_7664	Li6707	Mg2790	Mn2576	Mo2020
Line	228.616 {447}	205.560 {464}	324.754 {104}	259.940 {130}	766.490 { 44}	670.784 { 50}	279.079 {121}2	257.610 {131}	202.030 {467}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.05041	W .23460	.05252	1.3525	28.470	.14662	78.897	.19372	.05263
Stddev	.00033	.00068	.00009	.0055	.072	.00122	.247	.00004	.00012
%RSD	.66094	.29039	.16876	.40311	.25200	.82871	.31343	.02189	.22008

#1	.05065	.23508	.05246	1.3564	28.419	.14576	78.722	.19375	.05271
#2	.05018	.23412	.05258	1.3487	28.521	.14748	79.072	.19369	.05255

Check ?	Chk Pass	Chk Warn	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit		.10000							
Low Limit		-.01000							

Elem	Na8183	Ni2316	P_1782	Pb2203	S_1820	Sb2068	Se1960	Si2881	Sn1899
Line	818.326 { 41}	231.604 {446}	178.284 {489}	220.353 {453}	182.034 {485}	206.833 {463}	196.090 {472}	288.158 {117}	189.989 {477}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	134.58	.06785	2.1702	.09757	101.27	.10461	.22337	22.596	.09649
Stddev	.70	.00010	.0038	.00058	.14	.00083	.00031	.030	.00214
%RSD	.51935	.14785	.17589	.59648	.14110	.79150	.13718	.13335	2.2130

#1	134.09	.06792	2.1675	.09798	101.37	.10519	.22359	22.574	.09800
#2	135.08	.06777	2.1729	.09716	101.17	.10402	.22316	22.617	.09498

Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Elem	Sr4077	Th2837	Ti3349	Ti1908	U_3701	V_2924	Zn2062	Zr3391
Line	407.771 { 83}	283.730 {119}	334.904 {101}	190.856 {477}	370.152 { 91}	292.402 {115}	206.200 {163}	339.198 { 99}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	2.1327	.20359	.05972	.19373	.51610	.05043	.19057	.04829
Stddev	.0059	.00459	.00040	.00139	.00465	.00055	.00025	.00203
%RSD	.27551	2.2521	.66171	.71543	.90067	1.0934	.13299	4.1966

#1	2.1286	.20035	.06000	.19471	.51281	.05004	.19075	.04686
#2	2.1369	.20684	.05944	.19275	.51939	.05082	.19039	.04973

Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit								
Low Limit								

Int. Std.	Y_2243	Y_3600	Y_3774
Line	224.306 {450}	360.073 { 94}	377.433 { 89}
Units	Cts/S	Cts/S	Cts/S
Avg	1359.9	28476.	5691.5
Stddev	.9	5.	26.1
%RSD	.06981	.01581	.45884

#1	1359.2	28472.	5673.0
#2	1360.5	28479.	5709.9

Sample Name: ccvh-3900196 Acquired: 5/23/2016 16:19:07 Type: QC

Method: 6500_026(v10) Mode: CONC Corr. Factor: 1.000000

User: kellyca Custom ID1: Custom ID2: Custom ID3:

Comment:

Elem	Ag3280	Al3092	As1890	B_2089	Ba4554	Be3130	Bi2230	Ca3179	Cd2288	Co2286	Cr2055	Cu3247	Fe2714
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.00121	48.881	.00333	.00573	.00203	.00141	1.0623	.00330	.00067	.00512	.00116	.00689	49.300
Stddev	.00071	.362	.00087	.00007	.00002	.00007	.0101	.01422	.00006	.00001	.00060	.00020	.018
%RSD	58.854	.73971	26.022	1.2550	1.0482	4.9811	.95219	431.05	9.4587	.14044	51.510	2.8991	.03735

#1	.00071	48.626	.00395	.00578	.00205	.00146	1.0695	.01336	.00063	.00512	.00159	.00703	49.287
#2	.00171	49.137	.00272	.00568	.00202	.00136	1.0552	-.00676	.00072	.00511	.00074	.00675	49.313

Check ?	None	Chk Pass	None	None	None	None	Chk Pass	None	None	None	None	None	Chk Pass
Value													
Range													

Elem	K_7664	Li6707	Mg2790	Mn2576	Mo2020	Na8183	Ni2316	P_1782	Pb2203	S_1820	Sb2068	Se1960	Si2881
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.18601	.00346	.22693	.00068	-.00047	254.57	.00162	.00779	.00120	5.1044	.00269	.01296	.03004
Stddev	.01849	.00094	.00892	.00015	.00045	1.05	.00040	.00060	.00020	.0441	.00088	.00075	.01016
%RSD	9.9400	27.277	3.9290	22.006	95.285	.41159	24.551	7.6672	16.841	.86407	32.579	5.8025	33.826

#1	.17294	.00413	.23323	.00057	-.00079	253.83	.00190	.00737	.00135	5.1356	.00207	.01349	.02286
#2	.19909	.00279	.22062	.00078	-.00015	255.31	.00134	.00822	.00106	5.0732	.00330	.01242	.03723

Check ?	None	None	None	None	None	Chk Pass	None	None	None	Chk Pass	None	None	None
Value													
Range													

Elem	Sn1899	Sr4077	Th2837	Ti3349	Tl1908	U_3701	V_2924	Zn2062	Zr3391
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.00499	.00219	5.0522	.02624	.00222	10.409	-.01529	.00025	-.01208
Stddev	.00153	.00004	.0079	.00046	.00067	.022	.00060	.00027	.00166
%RSD	30.607	1.8884	.15673	1.7488	30.379	.21031	3.8983	110.26	13.712

#1	.00391	.00222	5.0578	.02592	.00174	10.393	-.01487	.00005	-.01326
#2	.00607	.00216	5.0466	.02657	.00270	10.424	-.01572	.00044	-.01091

Check ?	None	None	Chk Pass	None	None	Chk Pass	None	None	None
Value									
Range									

Int. Std.	Y_2243	Y_3600	Y_3774
Units	Cts/S	Cts/S	Cts/S
Avg	1451.3	30070.	5855.4
Stddev	6.5	16.	13.3
%RSD	.44738	.05241	.22681

#1	1446.7	30081.	5864.8
#2	1455.9	30059.	5846.1

Sample Name: ccv-3900195 Acquired: 5/23/2016 16:21:57 Type: QC
Method: 6500_026(v10) Mode: CONC Corr. Factor: 1.000000
User: kellyca Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	Ag3280	Al1670	As1890	B_2089	Ba4554	Be3130	Bi2230	Ca3179	Cd2288	Co2286	Cr2055	Cu3247	Fe2599	K_7664
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.47827	.52002	1.0099	.52946	.49182	.49659	.00296	5.0753	.51346	.51467	.50960	.48694	2.4992	49.546
Stddev	.00064	.00163	.0007	.00068	.00216	.00073	.00218	.0065	.00224	.00111	.00143	.00130	.0001	.112
%RSD	.13433	.31400	.06693	.12752	.43884	.14639	73.431	.12757	.43581	.21646	.28040	.26599	.00408	.22553

#1	.47872	.52117	1.0094	.52994	.49029	.49608	.00450	5.0707	.51505	.51546	.51061	.48602	2.4993	49.467
#2	.47782	.51886	1.0104	.52898	.49335	.49711	.00143	5.0799	.51188	.51389	.50859	.48785	2.4991	49.625

Check ? Value Range	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	None	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
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Elem	Li6707	Mg2790	Mn2576	Mo2020	Na5895	Ni2316	P_1782	Pb2203	S_1820	Sb2068	Se1960	Si2881	Sn1899	Sr4077
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	1.0188	19.175	.48970	.51521	5.0978	.50608	.99857	1.0501	.00589	1.0016	1.0063	4.9514	.99968	.47762
Stddev	.0027	.018	.00046	.00056	.0061	.00116	.00181	.0016	.00393	.0001	.0015	.0071	.00092	.00143
%RSD	.26493	.09211	.09429	.10862	.11887	.22825	.18110	.14854	66.670	.01384	.14773	.14346	.09161	.29910

#1	1.0169	19.188	.49003	.51481	5.0936	.50690	.99729	1.0512	.00311	1.0015	1.0074	4.9464	.99903	.47661
#2	1.0207	19.163	.48938	.51560	5.1021	.50527	.99985	1.0490	.00867	1.0017	1.0053	4.9564	1.0003	.47863

Check ? Value Range	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	None	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
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Elem	Th2837	Ti3349	Ti1908	U_3701	V_2924	Zn2062	Zr3391
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.00565	.47139	1.0289	.02748	.46910	.47974	.49391
Stddev	.00087	.00025	.0009	.00469	.00107	.00396	.00008
%RSD	15.341	.05281	.08377	17.066	.22758	.82442	.01547

#1	.00626	.47121	1.0283	.02416	.46985	.48254	.49386
#2	.00503	.47157	1.0295	.03080	.46834	.47694	.49397

Check ? Value Range	None	Chk Pass	Chk Pass	None	Chk Pass	Chk Pass	Chk Pass
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Int. Std.	Y_2243	Y_3600	Y_3774
Units	Cts/S	Cts/S	Cts/S
Avg	1493.8	31273.	5948.9
Stddev	1.9	116.	13.1
%RSD	.12448	.37205	.21995

#1	1495.2	31191.	5939.7
#2	1492.5	31355.	5958.2

Sample Name: ccb Acquired: 5/23/2016 16:24:35 Type: QC
Method: 6500_026(v10) Mode: CONC Corr. Factor: 1.000000
User: kellyca Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	Ag3280	Al1670	As1890	B_2089	Ba4554	Be3130	Bi2230	Ca3179	Cd2288	Co2286	Cr2055	Cu3247
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.00056	.00116	-.00097	W .00271	.00024	.00004	.00198	-.00002	.00017	-.00004	-.00004	-.00124
Stddev	.00014	.00046	.00203	.00069	.00001	.00004	.00122	.00072	.00025	.00017	.00008	.00019
%RSD	25.169	39.940	209.44	25.583	3.9098	93.147	61.714	3735.4	146.47	433.60	191.31	15.429
#1	.00066	.00083	-.00241	.00320	.00024	.00007	.00285	-.00053	.00034	-.00016	-.00010	-.00138
#2	.00046	.00148	.00047	.00222	.00023	.00001	.00112	.00049	-.00001	.00008	.00002	-.00111
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Warn	Chk Pass	Chk Pass	None	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit				.00156								
Low Limit				-.00156								
Elem	Fe2599	K_7664	Li6707	Mg2790	Mn2576	Mo2020	Na5895	Ni2316	P_1782	Pb2203	S_1820	Sb2068
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.00444	.04330	-.00037	.00320	-.00001	.00049	.02651	-.00011	-.00201	.00218	.00565	W .00462
Stddev	.00159	.00122	.00082	.00107	.00000	.00003	.00372	.00007	.00217	.00167	.00231	.00063
%RSD	35.890	2.8277	221.69	33.399	47.261	6.7359	14.034	62.140	108.03	76.656	40.882	13.625
#1	.00556	.04417	.00021	.00396	-.00001	.00047	.02388	-.00006	-.00354	.00335	.00402	.00418
#2	.00331	.04243	-.00095	.00245	-.00000	.00052	.02914	-.00016	-.00047	.00100	.00728	.00507
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	None	Chk Warn
High Limit												.00314
Low Limit												-.00314
Elem	Se1960	Si2881	Sn1899	Sr4077	Th2837	Ti3349	Ti1908	U_3701	V_2924	Zn2062	Zr3391	
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	
Avg	W .00574	.00475	.00008	.00007	.00083	.00022	.00136	.00600	.00023	-.00014	.00013	
Stddev	.00412	.00387	.00018	.00003	.00178	.00024	.00037	.00977	.00076	.00043	.00283	
%RSD	71.823	81.457	214.65	39.529	214.49	111.34	27.138	162.78	335.27	302.22	2098.2	
#1	.00283	.00749	.00021	.00009	.00209	.00005	.00162	.01291	.00076	.00016	-.00187	
#2	.00866	.00201	-.00004	.00005	-.00043	.00039	.00110	-.00091	-.00031	-.00044	.00214	
Check ?	Chk Warn	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	
High Limit	.00486											
Low Limit	-.00486											
Int. Std.	Y_2243	Y_3600	Y_3774									
Units	Cts/S	Cts/S	Cts/S									
Avg	1506.3	31982.	6014.6									
Stddev	.3	151.	28.3									
%RSD	.02050	.47294	.47062									
#1	1506.6	32089.	6034.6									
#2	1506.1	31875.	5994.6									

Sample Name: ccvl-3907489 Acquired: 5/23/2016 16:27:23 Type: QC
Method: 6500_026(v10) Mode: CONC Corr. Factor: 1.000000
User: kellyca Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	Ag3280	Al1670	As1890	B_2089	Ba4554	Be3130	Bi2230	Ca3179	Cd2288	Co2286	Cr2055	Cu3247
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.01003	.10902	.01394	.10651	.01035	.00098	.11634	.20138	.00547	.01069	.01056	.01387
Stddev	.00031	.00261	.00140	.00011	.00016	.00009	.00359	.00546	.00006	.00032	.00023	.00002
%RSD	3.0443	2.3899	10.015	.10119	1.5294	8.7983	3.0895	2.7106	1.0985	3.0357	2.1315	.12564

#1	.00981	.11086	.01493	.10643	.01047	.00092	.11888	.20524	.00551	.01092	.01072	.01388
#2	.01024	.10717	.01296	.10659	.01024	.00104	.11379	.19752	.00543	.01046	.01040	.01386

Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Value												
Range												

Elem	Fe2599	K_7664	Li6707	Mg2790	Mn2576	Mo2020	Na5895	Ni2316	P_1782	Pb2203	S_1820	Sb2068
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.10956	3.0180	.01039	.19852	.01004	.02086	1.0456	.04122	2.9326	.01084	.00088	.02212
Stddev	.00121	.0055	.00110	.00097	.00008	.00035	.0021	.00029	.0081	.00148	.00019	.00127
%RSD	1.1017	.18146	10.579	.49005	.79329	1.6889	.20004	.71546	.27475	13.613	21.101	5.7564

#1	.10871	3.0141	.00962	.19783	.00998	.02111	1.0441	.04143	2.9383	.01189	.00075	.02122
#2	.11042	3.0219	.01117	.19921	.01009	.02061	1.0471	.04101	2.9269	.00980	.00101	.02302

Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	None	Chk Pass
Value												
Range												

Elem	Se1960	Si2881	Sn1899	Sr4077	Th2837	Ti3349	Ti1908	U_3701	V_2924	Zn2062	Zr3391
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	F .02111	.51077	.10263	.00975	.01667	.00934	.01660	.06261	.00949	.01921	.01524
Stddev	.00120	.01216	.00054	.00008	.00119	.00027	.00319	.01274	.00022	.00055	.00012
%RSD	5.6971	2.3802	.52506	.85334	7.1497	2.8673	19.221	20.342	2.3685	2.8570	.77463

#1	.02196	.50217	.10301	.00969	.01582	.00915	.01885	.05361	.00933	.01883	.01532
#2	.02026	.51937	.10225	.00981	.01751	.00953	.01434	.07162	.00965	.01960	.01515

Check ?	Chk Fail	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Value	.01500										
Range	30.000%										

Int. Std.	Y_2243	Y_3600	Y_3774
Units	Cts/S	Cts/S	Cts/S
Avg	1515.3	32196.	5992.0
Stddev	3.7	61.	25.1
%RSD	.24599	.18938	.41844

#1	1512.6	32153.	6009.7
#2	1517.9	32240.	5974.2

Sample Name: 280-83263-A-2-A Acquired: 5/23/2016 16:30:10 Type: Unk
Method: 6500_026(v10) Mode: CONC Corr. Factor: 1.000000
User: kellyca Custom ID1: Custom ID2: Custom ID3:
Comment: 325962 6010C Q4

Elem	Ag3280	Al1670	As1890	B_2089	Ba4554	Be3130	Bi2230	Ca3179	Cd2288
Line	328.068 {103}	167.079 {502}	189.042 {478}	208.959 {461}	455.403 { 74}	313.042 {108}	223.061 {451}	317.933 {106}	228.802 {447}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.00034	.50409	-.00744	.15413	.10485	.00011	.00069	303.63	.00024
Stddev	.00022	.00565	.00388	.00093	.00011	.00005	.00069	.40	.00017
%RSD	64.628	1.1212	52.221	.60563	.10528	50.454	100.03	.13325	71.097

#1	.00050	.50808	-.00469	.15479	.10478	.00007	.00020	303.92	.00012
#2	.00019	.50009	-.01019	.15347	.10493	.00015	.00118	303.35	.00036

Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Elem	Co2286	Cr2055	Cu3247	Fe2599	K_7664	Li6707	Mg2790	Mn2576	Mo2020
Line	228.616 {447}	205.560 {464}	324.754 {104}	259.940 {130}	766.490 { 44}	670.784 { 50}	279.079 {121}2	257.610 {131}	202.030 {467}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.00038	W .18501	.00063	.51905	7.5437	.03980	60.365	.20923	.00070
Stddev	.00050	.00024	.00008	.00048	.0037	.00110	.080	.00088	.00040
%RSD	131.12	.13176	12.049	.09194	.04876	2.7526	.13176	.42135	57.729

#1	.00073	.18518	.00068	.51871	7.5411	.03902	60.309	.20860	.00041
#2	.00003	.18484	.00057	.51938	7.5463	.04057	60.421	.20985	.00099

Check ?	Chk Pass	Chk Warn	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit		.10000							
Low Limit		-.01000							

Elem	Na8183	Ni2316	P_1782	Pb2203	S_1820	Sb2068	Se1960	Si2881	Sn1899
Line	818.326 { 41}	231.604 {446}	178.284 {489}	220.353 {453}	182.034 {485}	206.833 {463}	196.090 {472}	288.158 {117}	189.989 {477}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	114.18	.02083	.01697	W -.00313	101.21	.00052	.01126	18.316	-.00046
Stddev	.25	.00034	.00018	.00178	.11	.00017	.00507	.029	.00056
%RSD	.22323	1.6223	1.0413	56.937	.11130	32.573	45.024	.15619	122.40

#1	114.00	.02107	.01685	-.00187	101.29	.00064	.00768	18.336	-.00085
#2	114.36	.02059	.01710	-.00440	101.13	.00040	.01485	18.296	-.00006

Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Warn	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit				10.000					
Low Limit				-.00300					

Elem	Sr4077	Th2837	Ti3349	Ti1908	U_3701	V_2924	Zn2062	Zr3391	
Line	407.771 { 83}	283.730 {119}	334.904 {101}	190.856 {477}	370.152 { 91}	292.402 {115}	206.200 {163}	339.198 { 99}	
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	
Avg	2.1081	-.00056	.01681	.00055	.01790	.00344	.00143	-.00008	
Stddev	.0022	.00135	.00085	.00028	.00563	.00042	.00050	.00004	
%RSD	.10232	241.46	5.0636	51.724	31.430	12.096	34.892	48.615	

#1	2.1096	-.00151	.01741	.00035	.02188	.00373	.00108	-.00005	
#2	2.1065	.00039	.01621	.00074	.01392	.00315	.00179	-.00011	

Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	
High Limit									
Low Limit									

Int. Std.	Y_2243	Y_3600	Y_3774						
Line	224.306 {450}	360.073 { 94}	377.433 { 89}						
Units	Cts/S	Cts/S	Cts/S						
Avg	1373.2	28642.	5767.1						
Stddev	1.1	11.	2.7						
%RSD	.07962	.03725	.04631						

#1	1374.0	28650.	5765.2						
#2	1372.4	28635.	5769.0						

Sample Name: 280-83263-A-3-A Acquired: 5/23/2016 16:32:53 Type: Unk
Method: 6500_026(v10) Mode: CONC Corr. Factor: 1.000000
User: kellyca Custom ID1: Custom ID2: Custom ID3:
Comment: 325962 6010C Q4

Elem	Ag3280	Al1670	As1890	B_2089	Ba4554	Be3130	Bi2230	Ca3179	Cd2288
Line	328.068 {103}	167.079 {502}	189.042 {478}	208.959 {461}	455.403 { 74}	313.042 {108}	223.061 {451}	317.933 {106}	228.802 {447}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.00042	.12764	.00076	.09677	.10951	.00003	.00094	250.94	.00037
Stddev	.00042	.00353	.00091	.00037	.00071	.00006	.00007	3.27	.00038
%RSD	100.15	2.7650	118.55	.38186	.65102	181.13	6.9084	1.3018	102.56

#1	.00012	.12515	.00141	.09703	.10900	-.00001	.00099	248.63	.00010
#2	.00072	.13014	.00012	.09651	.11001	.00007	.00090	253.25	.00065

Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Elem	Co2286	Cr2055	Cu3247	Fe2599	K_7664	Li6707	Mg2790	Mn2576	Mo2020
Line	228.616 {447}	205.560 {464}	324.754 {104}	259.940 {130}	766.490 { 44}	670.784 { 50}	279.079 {121}2	257.610 {131}	202.030 {467}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.00036	.07058	.00108	.15550	8.1841	.09256	53.393	.16494	-.00003
Stddev	.00022	.00030	.00008	.00107	.0430	.00067	.105	.00025	.00065
%RSD	61.810	.43072	7.6695	.68858	.52550	.72405	.19573	.15316	1990.6

#1	.00020	.07080	.00102	.15474	8.1537	.09209	53.319	.16476	.00043
#2	.00052	.07037	.00114	.15626	8.2145	.09304	53.467	.16512	-.00050

Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Elem	Na8183	Ni2316	P_1782	Pb2203	S_1820	Sb2068	Se1960	Si2881	Sn1899
Line	818.326 { 41}	231.604 {446}	178.284 {489}	220.353 {453}	182.034 {485}	206.833 {463}	196.090 {472}	288.158 {117}	189.989 {477}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	80.877	.01829	.01081	-.00277	57.974	.00011	.01105	28.580	-.00042
Stddev	.626	.00048	.00089	.00143	.039	.00160	.00162	.312	.00072
%RSD	.77461	2.5968	8.2213	51.617	.06653	1394.1	14.699	1.0929	173.54

#1	80.434	.01863	.01144	-.00378	57.947	-.00101	.00990	28.359	.00009
#2	81.320	.01796	.01018	-.00176	58.001	.00124	.01220	28.801	-.00093

Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Elem	Sr4077	Th2837	Ti3349	Ti1908	U_3701	V_2924	Zn2062	Zr3391
Line	407.771 { 83}	283.730 {119}	334.904 {101}	190.856 {477}	370.152 { 91}	292.402 {115}	206.200 {163}	339.198 { 99}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	2.8653	.00223	.00482	.00067	.01671	.00488	.00333	.00037
Stddev	.0195	.00068	.00035	.00153	.00701	.00043	.00018	.00008
%RSD	.68140	30.647	7.1709	230.33	41.940	8.7828	5.2740	22.550

#1	2.8515	.00175	.00507	-.00042	.02167	.00519	.00346	.00042
#2	2.8791	.00271	.00458	.00175	.01176	.00458	.00321	.00031

Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit								
Low Limit								

Int. Std.	Y_2243	Y_3600	Y_3774
Line	224.306 {450}	360.073 { 94}	377.433 { 89}
Units	Cts/S	Cts/S	Cts/S
Avg	1398.0	29165.	5798.5
Stddev	2.2	33.	75.4
%RSD	.15516	.11192	1.3002

#1	1399.5	29142.	5851.8
#2	1396.5	29188.	5745.2

Sample Name: 280-83263-A-4-A Acquired: 5/23/2016 16:35:36 Type: Unk
Method: 6500_026(v10) Mode: CONC Corr. Factor: 1.000000
User: kellyca Custom ID1: Custom ID2: Custom ID3:
Comment: 325962 6010C Q4

Elem	Ag3280	Al1670	As1890	B_2089	Ba4554	Be3130	Bi2230	Ca3179	Cd2288
Line	328.068 {103}	167.079 {502}	189.042 {478}	208.959 {461}	455.403 { 74}	313.042 {108}	223.061 {451}	317.933 {106}	228.802 {447}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.00051	.03497	-.00500	.07870	.09922	-.00003	-.00223	217.16	.00044
Stddev	.00056	.00094	.00252	.00226	.00063	.00008	.00131	.72	.00023
%RSD	109.85	2.6814	50.393	2.8704	.63068	278.07	58.613	.33248	52.694

#1	.00011	.03431	-.00322	.07710	.09878	-.00008	-.00131	216.65	.00028
#2	.00091	.03564	-.00678	.08030	.09967	.00003	-.00316	217.67	.00061

Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Elem	Co2286	Cr2055	Cu3247	Fe2599	K_7664	Li6707	Mg2790	Mn2576	Mo2020
Line	228.616 {447}	205.560 {464}	324.754 {104}	259.940 {130}	766.490 { 44}	670.784 { 50}	279.079 {121}2	257.610 {131}	202.030 {467}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	-.00014	.01574	.00027	.07914	7.9084	.07316	42.267	.11514	.00030
Stddev	.00017	.00035	.00047	.00166	.0264	.00085	.052	.00033	.00013
%RSD	115.47	2.2072	170.60	2.0936	.33424	1.1595	.12234	.28658	41.588

#1	-.00003	.01550	.00060	.07796	7.8897	.07376	42.304	.11537	.00021
#2	-.00026	.01599	-.00006	.08031	7.9270	.07256	42.231	.11490	.00039

Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Elem	Na8183	Ni2316	P_1782	Pb2203	S_1820	Sb2068	Se1960	Si2881	Sn1899
Line	818.326 { 41}	231.604 {446}	178.284 {489}	220.353 {453}	182.034 {485}	206.833 {463}	196.090 {472}	288.158 {117}	189.989 {477}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	73.624	.01397	.00308	W -.00472	37.705	.00155	.00991	33.646	-.00074
Stddev	.296	.00005	.00853	.00488	.065	.00159	.00567	.042	.00206
%RSD	.40219	.35232	276.49	103.47	.17332	103.14	57.204	.12533	277.38

#1	73.415	.01394	-.00295	-.00817	37.659	.00042	.00590	33.616	-.00219
#2	73.833	.01401	.00912	-.00127	37.751	.00267	.01392	33.676	.00071

Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Warn	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit				10.000					
Low Limit				-.00300					

Elem	Sr4077	Th2837	Ti3349	Ti1908	U_3701	V_2924	Zn2062	Zr3391	
Line	407.771 { 83}	283.730 {119}	334.904 {101}	190.856 {477}	370.152 { 91}	292.402 {115}	206.200 {163}	339.198 { 99}	
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	
Avg	2.4064	.00225	.00199	-.00031	.00279	.00663	.00402	.00149	
Stddev	.0050	.00044	.00047	.00165	.01446	.00010	.00122	.00118	
%RSD	.20630	19.729	23.507	530.39	518.31	1.5503	30.488	79.264	

#1	2.4029	.00256	.00166	-.00147	-.00744	.00670	.00488	.00065	
#2	2.4099	.00194	.00232	.00085	.01302	.00655	.00315	.00232	

Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	
High Limit									
Low Limit									

Int. Std.	Y_2243	Y_3600	Y_3774						
Line	224.306 {450}	360.073 { 94}	377.433 { 89}						
Units	Cts/S	Cts/S	Cts/S						
Avg	1407.7	29651.	5813.4						
Stddev	1.9	39.	15.0						
%RSD	.13521	.13167	.25774						

#1	1409.0	29623.	5802.8						
#2	1406.3	29678.	5823.9						

Sample Name: 280-83263-A-5-A Acquired: 5/23/2016 16:38:20 Type: Unk
Method: 6500_026(v10) Mode: CONC Corr. Factor: 1.000000
User: kellyca Custom ID1: Custom ID2: Custom ID3:
Comment: 325962 6010C Q4

Elem	Ag3280	Al1670	As1890	B_2089	Ba4554	Be3130	Bi2230	Ca3179	Cd2288
Line	328.068 {103}	167.079 {502}	189.042 {478}	208.959 {461}	455.403 { 74}	313.042 {108}	223.061 {451}	317.933 {106}	228.802 {447}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.00006	.16674	.00059	.09514	.14286	.00001	-.00121	248.62	.00017
Stddev	.00004	.00297	.00139	.00053	.00002	.00004	.00121	.91	.00016
%RSD	70.127	1.7819	235.65	.55877	.01125	383.19	100.31	.36526	90.064

#1	.00009	.16464	-.00039	.09476	.14287	.00004	-.00207	247.97	.00006
#2	.00003	.16885	.00158	.09552	.14285	-.00002	-.00035	249.26	.00029

Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Elem	Co2286	Cr2055	Cu3247	Fe2599	K_7664	Li6707	Mg2790	Mn2576	Mo2020
Line	228.616 {447}	205.560 {464}	324.754 {104}	259.940 {130}	766.490 { 44}	670.784 { 50}	279.079 {121}2	257.610 {131}	202.030 {467}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.00090	.00420	.00062	.19625	6.6949	.04042	49.420	.05619	-.00030
Stddev	.00050	.00006	.00004	.00003	.0402	.00043	.062	.00035	.00080
%RSD	56.052	1.3275	6.5190	.01683	.60070	1.0679	.12631	.62322	265.96

#1	.00125	.00416	.00059	.19627	6.6665	.04011	49.376	.05594	-.00087
#2	.00054	.00424	.00064	.19622	6.7234	.04072	49.465	.05643	.00027

Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Elem	Na8183	Ni2316	P_1782	Pb2203	S_1820	Sb2068	Se1960	Si2881	Sn1899
Line	818.326 { 41}	231.604 {446}	178.284 {489}	220.353 {453}	182.034 {485}	206.833 {463}	196.090 {472}	288.158 {117}	189.989 {477}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	106.73	.00564	.01930	-.00123	41.095	.00089	.01142	19.514	-.00124
Stddev	.03	.00008	.00398	.00037	.184	.00022	.00101	.081	.00154
%RSD	.02388	1.4320	20.612	30.055	.44691	24.093	8.8747	.41462	124.31

#1	106.72	.00569	.01649	-.00097	40.965	.00105	.01070	19.457	-.00015
#2	106.75	.00558	.02211	-.00149	41.224	.00074	.01214	19.572	-.00232

Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Elem	Sr4077	Th2837	Ti3349	Ti1908	U_3701	V_2924	Zn2062	Zr3391
Line	407.771 { 83}	283.730 {119}	334.904 {101}	190.856 {477}	370.152 { 91}	292.402 {115}	206.200 {163}	339.198 { 99}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	1.7252	.00322	.00688	.00126	-.00647	.00468	.00111	.00014
Stddev	.0071	.00277	.00048	.00134	.01325	.00096	.00165	.00089
%RSD	.41033	86.069	6.9638	106.48	204.74	20.593	148.65	635.56

#1	1.7202	.00518	.00722	.00031	-.01584	.00536	.00228	.00077
#2	1.7302	.00126	.00654	.00221	.00290	.00399	-.00006	-.00049

Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit								
Low Limit								

Int. Std.	Y_2243	Y_3600	Y_3774
Line	224.306 {450}	360.073 { 94}	377.433 { 89}
Units	Cts/S	Cts/S	Cts/S
Avg	1393.4	29384.	5827.6
Stddev	4.9	8.	32.7
%RSD	.35287	.02834	.56051

#1	1396.8	29390.	5850.7
#2	1389.9	29378.	5804.5

Sample Name: 280-83263-A-6-A Acquired: 5/23/2016 16:41:03 Type: Unk
Method: 6500_026(v10) Mode: CONC Corr. Factor: 1.000000
User: kellyca Custom ID1: Custom ID2: Custom ID3:
Comment: 325962 6010C Q4

Elem	Ag3280	Al1670	As1890	B_2089	Ba4554	Be3130	Bi2230	Ca3179	Cd2288
Line	328.068 {103}	167.079 {502}	189.042 {478}	208.959 {461}	455.403 { 74}	313.042 {108}	223.061 {451}	317.933 {106}	228.802 {447}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.00063	.08468	-.00173	.07299	.12845	-.00000	.00009	244.11	.00016
Stddev	.00001	.00176	.00090	.00196	.00070	.00004	.00453	1.64	.00011
%RSD	2.0441	2.0800	51.812	2.6857	.54656	1118.8	5284.5	.67359	69.691

#1	.00062	.08592	-.00237	.07437	.12795	.00003	.00329	242.95	.00024
#2	.00064	.08343	-.00110	.07160	.12894	-.00003	-.00312	245.28	.00008

Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Elem	Co2286	Cr2055	Cu3247	Fe2599	K_7664	Li6707	Mg2790	Mn2576	Mo2020
Line	228.616 {447}	205.560 {464}	324.754 {104}	259.940 {130}	766.490 { 44}	670.784 { 50}	279.079 {121}2	257.610 {131}	202.030 {467}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.00008	.00584	.00028	.09185	6.3922	.05474	49.056	.00890	-.00050
Stddev	.00040	.00031	.00017	.00012	.0102	.00011	.058	.00008	.00013
%RSD	487.15	5.2665	61.113	.12779	.16018	.19350	.11784	.87218	25.536

#1	-.00020	.00562	.00016	.09193	6.3850	.05467	49.097	.00884	-.00059
#2	.00036	.00605	.00040	.09176	6.3995	.05482	49.015	.00895	-.00041

Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Elem	Na8183	Ni2316	P_1782	Pb2203	S_1820	Sb2068	Se1960	Si2881	Sn1899
Line	818.326 { 41}	231.604 {446}	178.284 {489}	220.353 {453}	182.034 {485}	206.833 {463}	196.090 {472}	288.158 {117}	189.989 {477}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	80.930	.00278	.01933	-.00047	39.297	-.00013	.01381	22.345	-.00213
Stddev	.501	.00043	.00254	.00080	.203	.00329	.00057	.063	.00172
%RSD	.61953	15.496	13.118	168.55	.51595	2558.5	4.1479	.28374	80.818

#1	80.575	.00308	.02112	-.00104	39.440	-.00245	.01340	22.300	-.00334
#2	81.284	.00247	.01753	.00009	39.153	.00220	.01421	22.390	-.00091

Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Elem	Sr4077	Th2837	Ti3349	Ti1908	U_3701	V_2924	Zn2062	Zr3391
Line	407.771 { 83}	283.730 {119}	334.904 {101}	190.856 {477}	370.152 { 91}	292.402 {115}	206.200 {163}	339.198 { 99}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	1.8330	.00100	.00387	.00060	-.01008	.00434	-.00102	.00163
Stddev	.0092	.00161	.00006	.00421	.00928	.00100	.00065	.00018
%RSD	.50453	160.53	1.5309	702.79	92.083	23.090	63.749	10.976

#1	1.8265	.00214	.00391	-.00238	-.01664	.00505	-.00148	.00150
#2	1.8396	-.00014	.00383	.00358	-.00352	.00363	-.00056	.00176

Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit								
Low Limit								

Int. Std.	Y_2243	Y_3600	Y_3774
Line	224.306 {450}	360.073 { 94}	377.433 { 89}
Units	Cts/S	Cts/S	Cts/S
Avg	1391.3	29536.	5845.8
Stddev	5.3	60.	41.4
%RSD	.37998	.20203	.70762

#1	1387.6	29494.	5875.1
#2	1395.1	29579.	5816.6

Sample Name: ccvh-3900196 Acquired: 5/23/2016 16:43:47 Type: QC
Method: 6500_026(v10) Mode: CONC Corr. Factor: 1.000000
User: kellyca Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	Ag3280	Al3092	As1890	B_2089	Ba4554	Be3130	Bi2230	Ca3179	Cd2288	Co2286	Cr2055	Cu3247	Fe2714
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.00177	48.510	.00838	.00309	.00195	.00140	1.0622	-.00740	.00034	.00477	.00087	.00697	48.649
Stddev	.00043	.122	.00226	.00016	.00012	.00002	.0089	.00398	.00020	.00033	.00018	.00035	.011
%RSD	24.265	.25157	26.956	5.0685	6.3784	1.3852	.84098	53.876	60.344	6.8345	20.319	5.0171	.02226

#1	.00147	48.424	.00678	.00298	.00186	.00141	1.0685	-.00458	.00048	.00500	.00099	.00722	48.642
#2	.00208	48.596	.00998	.00320	.00204	.00139	1.0558	-.01021	.00019	.00454	.00074	.00673	48.657

Check ?	None	Chk Pass	None	None	None	None	Chk Pass	None	None	None	None	None	Chk Pass
Value													
Range													

Elem	K_7664	Li6707	Mg2790	Mn2576	Mo2020	Na8183	Ni2316	P_1782	Pb2203	S_1820	Sb2068	Se1960	Si2881
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.17407	.00317	.25071	.00081	-.00102	253.14	.00074	.00598	.00327	5.0980	.00391	.01593	.02614
Stddev	.02813	.00083	.03603	.00001	.00045	.82	.00004	.00255	.00446	.0334	.00070	.00385	.01170
%RSD	16.158	26.212	14.369	1.6877	44.314	.32196	5.0876	42.571	136.21	.65494	17.961	24.175	44.760

#1	.19396	.00375	.22523	.00080	-.00134	252.57	.00077	.00418	.00012	5.1216	.00441	.01865	.03441
#2	.15418	.00258	.27618	.00082	-.00070	253.72	.00072	.00778	.00643	5.0743	.00342	.01321	.01786

Check ?	None	None	None	None	None	Chk Pass	None	None	None	Chk Pass	None	None	None
Value													
Range													

Elem	Sn1899	Sr4077	Th2837	Ti3349	Tl1908	U_3701	V_2924	Zn2062	Zr3391
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.00435	.00204	5.0234	.02652	.00018	10.378	-.01549	-.00082	-.01023
Stddev	.00110	.00000	.0003	.00026	.00013	.041	.00043	.00100	.00246
%RSD	25.306	.19099	.00636	.96953	70.456	.39504	2.7868	122.19	24.011

#1	.00513	.00204	5.0236	.02634	.00027	10.349	-.01518	-.00011	-.01197
#2	.00357	.00204	5.0232	.02670	.00009	10.407	-.01579	-.00153	-.00849

Check ?	None	None	Chk Pass	None	None	Chk Pass	None	None	None
Value									
Range									

Int. Std.	Y_2243	Y_3600	Y_3774
Units	Cts/S	Cts/S	Cts/S
Avg	1456.6	30385.	5921.9
Stddev	1.1	73.	4.2
%RSD	.07725	.23904	.07153

#1	1455.8	30437.	5918.9
#2	1457.4	30334.	5924.8

Sample Name: ccv-3900195 Acquired: 5/23/2016 16:46:37 Type: QC
Method: 6500_026(v10) Mode: CONC Corr. Factor: 1.000000
User: kellyca Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	Ag3280	Al1670	As1890	B_2089	Ba4554	Be3130	Bi2230	Ca3179	Cd2288	Co2286	Cr2055	Cu3247	Fe2599
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.48228	.52003	1.0137	.53040	.49688	.49890	.00155	5.0601	.51516	.51746	.50980	.49573	2.4684
Stddev	.00075	.00085	.0071	.00147	.00334	.00342	.00207	.0345	.00026	.00218	.00051	.00054	.0075
%RSD	.15555	.16414	.70298	.27668	.67211	.68551	133.40	.68167	.05123	.42090	.09965	.10825	.30381

#1	.48281	.52064	1.0187	.52936	.49452	.49649	.00301	5.0357	.51535	.51900	.51016	.49611	2.4631
#2	.48175	.51943	1.0087	.53144	.49924	.50132	.00009	5.0844	.51498	.51592	.50944	.49535	2.4737

Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	None	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Value													
Range													

Elem	K_7664	Li6707	Mg2790	Mn2576	Mo2020	Na5895	Ni2316	P_1782	Pb2203	S_1820	Sb2068	Se1960	Si2881
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	49.898	1.0340	19.334	.49233	.51507	5.1707	.50745	.99792	1.0440	.00774	1.0068	1.0127	4.9400
Stddev	.409	.0065	.003	.00148	.00053	.0103	.00034	.00116	.0063	.00160	.0000	.0001	.0138
%RSD	.81958	.63186	.01667	.30049	.10287	.19978	.06775	.11661	.60642	20.717	.00239	.01356	.27869

#1	49.609	1.0293	19.332	.49128	.51545	5.1634	.50721	.99709	1.0485	.00661	1.0068	1.0128	4.9303
#2	50.187	1.0386	19.336	.49337	.51470	5.1780	.50769	.99874	1.0395	.00887	1.0068	1.0126	4.9498

Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	None	Chk Pass	Chk Pass	Chk Pass
Value													
Range													

Elem	Sn1899	Sr4077	Th2837	Ti3349	Ti1908	U_3701	V_2924	Zn2062	Zr3391
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.99882	.47890	.00666	.47236	1.0289	-.00447	.47345	.47895	.49373
Stddev	.00226	.00314	.00117	.00009	.0052	.01278	.00112	.00416	.00537
%RSD	.22662	.65510	17.563	.01924	.50043	285.92	.23587	.86876	1.0878

#1	1.0004	.47669	.00748	.47243	1.0252	-.01351	.47266	.47600	.48993
#2	.99722	.48112	.00583	.47230	1.0325	.00457	.47424	.48189	.49753

Check ?	Chk Pass	Chk Pass	None	Chk Pass	Chk Pass	None	Chk Pass	Chk Pass	Chk Pass
Value									
Range									

Int. Std.	Y_2243	Y_3600	Y_3774
Units	Cts/S	Cts/S	Cts/S
Avg	1490.7	31227.	5960.0
Stddev	.2	13.	19.5
%RSD	.01022	.04277	.32658

#1	1490.9	31217.	5973.8
#2	1490.6	31236.	5946.3

Sample Name: ccb Acquired: 5/23/2016 16:49:14 Type: QC
Method: 6500_026(v10) Mode: CONC Corr. Factor: 1.000000
User: kellyca Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	Ag3280	Al1670	As1890	B_2089	Ba4554	Be3130	Bi2230	Ca3179	Cd2288	Co2286	Cr2055	Cu3247
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.00044	.00181	.00024	W .00204	.00016	.00005	.00002	.00138	.00007	.00005	-.00004	-.00109
Stddev	.00025	.00010	.00030	.00035	.00000	.00000	.00085	.00298	.00013	.00024	.00023	.00026
%RSD	57.792	5.6662	123.16	17.024	1.4157	6.6508	3667.7	216.10	182.59	484.63	643.84	23.375
#1	.00026	.00189	.00003	.00228	.00016	.00005	-.00058	-.00073	.00017	-.00012	.00013	-.00091
#2	.00061	.00174	.00046	.00179	.00016	.00004	.00063	.00349	-.00002	.00022	-.00020	-.00127
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Warn	Chk Pass	Chk Pass	None	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit				.00156								
Low Limit				-.00156								
Elem	Fe2599	K_7664	Li6707	Mg2790	Mn2576	Mo2020	Na5895	Ni2316	P_1782	Pb2203	S_1820	Sb2068
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.00347	.04812	-.00162	-.00144	-.00004	.00040	.02190	.00010	-.00065	-.00072	-.00227	W .00320
Stddev	.00048	.00463	.00027	.00173	.00001	.00018	.00882	.00059	.00416	.00376	.00311	.00265
%RSD	13.818	9.6227	16.400	120.33	19.392	44.494	40.265	613.34	638.18	524.14	136.88	83.055
#1	.00381	.04485	-.00180	-.00267	-.00003	.00028	.01566	.00051	-.00359	-.00338	-.00007	.00132
#2	.00313	.05140	-.00143	-.00021	-.00004	.00053	.02813	-.00032	.00229	.00194	-.00447	.00507
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	None	Chk Warn
High Limit												.00314
Low Limit												-.00314
Elem	Se1960	Si2881	Sn1899	Sr4077	Th2837	Ti3349	Ti1908	U_3701	V_2924	Zn2062	Zr3391	
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	
Avg	W .00749	.00924	.00030	.00006	.00160	.00021	.00046	.01143	.00041	-.00000	-.00036	
Stddev	.00043	.00903	.00020	.00000	.00115	.00013	.00354	.00851	.00003	.00166	.00104	
%RSD	5.6937	97.765	66.015	6.4723	72.139	61.332	766.92	74.481	7.4757	40592.	287.38	
#1	.00719	.01563	.00016	.00006	.00241	.00030	.00296	.01745	.00039	.00117	.00037	
#2	.00779	.00285	.00044	.00006	.00078	.00012	-.00204	.00541	.00043	-.00118	-.00110	
Check ?	Chk Warn	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	
High Limit	.00486											
Low Limit	-.00486											
Int. Std.	Y_2243	Y_3600	Y_3774									
Units	Cts/S	Cts/S	Cts/S									
Avg	1504.5	32107.	5895.0									
Stddev	.2	27.	17.8									
%RSD	.01265	.08363	.30229									
#1	1504.7	32126.	5907.6									
#2	1504.4	32088.	5882.4									

Sample Name: ccvl-3907489 Acquired: 5/23/2016 16:52:02 Type: QC
Method: 6500_026(v10) Mode: CONC Corr. Factor: 1.000000
User: kellyca Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	Ag3280	Al1670	As1890	B_2089	Ba4554	Be3130	Bi2230	Ca3179	Cd2288	Co2286	Cr2055	Cu3247
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.00990	.10738	.01635	.10523	.01044	.00100	.11782	.21110	.00518	.01025	.01049	.01388
Stddev	.00014	.00274	.00457	.00134	.00018	.00002	.00013	.00254	.00010	.00045	.00009	.00020
%RSD	1.4609	2.5493	27.976	1.2700	1.7093	2.1790	.10617	1.2038	1.9609	4.3896	.81097	1.4140

#1	.00980	.10931	.01958	.10618	.01032	.00102	.11773	.20930	.00526	.01057	.01043	.01402
#2	.01001	.10544	.01311	.10429	.01057	.00098	.11791	.21290	.00511	.00994	.01055	.01374

Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Value												
Range												

Elem	Fe2599	K_7664	Li6707	Mg2790	Mn2576	Mo2020	Na5895	Ni2316	P_1782	Pb2203	S_1820	Sb2068
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.11281	3.0592	.00976	.20281	.01019	.02074	1.0512	.04240	2.9191	.01064	-.00115	.02282
Stddev	.00237	.0151	.00001	.00666	.00003	.00008	.0040	.00026	.0144	.00127	.00185	.00088
%RSD	2.1027	.49256	.13537	3.2857	.24636	.38362	.38323	.60316	.49298	11.936	160.63	3.8781

#1	.11113	3.0485	.00975	.19810	.01021	.02079	1.0483	.04258	2.9292	.01153	-.00245	.02219
#2	.11448	3.0698	.00977	.20752	.01018	.02068	1.0540	.04222	2.9089	.00974	.00016	.02344

Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	None	Chk Pass
Value												
Range												

Elem	Se1960	Si2881	Sn1899	Sr4077	Th2837	Ti3349	Ti1908	U_3701	V_2924	Zn2062	Zr3391
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	F .02170	.51847	.10259	.00975	.01678	.00981	.01560	F .08140	.00979	.01925	.01544
Stddev	.00606	.01807	.00001	.00004	.00060	.00011	.00471	.00587	.00007	.00003	.00025
%RSD	27.914	3.4860	.01381	.39590	3.5468	1.1349	30.198	7.2095	.73361	.16964	1.5943

#1	.01741	.50569	.10258	.00972	.01720	.00989	.01227	.07725	.00984	.01923	.01561
#2	.02598	.53125	.10260	.00978	.01636	.00973	.01894	.08555	.00974	.01927	.01526

Check ?	Chk Fail	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Fail	Chk Pass	Chk Pass	Chk Pass
Value	.01500							.06000			
Range	30.000%							30.000%			

Int. Std.	Y_2243	Y_3600	Y_3774
Units	Cts/S	Cts/S	Cts/S
Avg	1516.8	32108.	5887.1
Stddev	2.4	40.	26.0
%RSD	.15672	.12342	.44196

#1	1515.1	32136.	5905.5
#2	1518.5	32080.	5868.7

Sample Name: MB 280-325958/1-A Acquired: 5/23/2016 16:54:48 Type: Unk
Method: 6500_026(v10) Mode: CONC Corr. Factor: 1.000000
User: kellyca Custom ID1: 5/19 Custom ID2: Custom ID3:
Comment: 325958 6010C

Elem	Ag3280	Al1670	As1890	B_2089	Ba4554	Be3130	Bi2230	Ca3179	Cd2288
Line	328.068 {103}	167.079 {502}	189.042 {478}	208.959 {461}	455.403 { 74}	313.042 {108}	223.061 {451}	317.933 {106}	228.802 {447}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.00046	.00299	-.00167	.00131	.00034	-.00002	.00256	.00808	-.00018
Stddev	.00005	.00169	.00217	.00041	.00006	.00000	.00494	.00327	.00020
%RSD	10.538	56.617	129.75	31.125	16.522	19.061	193.16	40.549	109.69

#1	.00042	.00419	-.00321	.00160	.00038	-.00002	.00605	.00576	-.00032
#2	.00049	.00179	-.00014	.00102	.00030	-.00002	-.00094	.01039	-.00004

Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Elem	Co2286	Cr2055	Cu3247	Fe2599	K_7664	Li6707	Mg2790	Mn2576	Mo2020
Line	228.616 {447}	205.560 {464}	324.754 {104}	259.940 {130}	766.490 { 44}	670.784 { 50}	279.079 {121}2	257.610 {131}	202.030 {467}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	-.00014	.00389	-.00140	.00930	-.01654	-.00044	.00379	.00008	-.00058
Stddev	.00010	.00005	.00028	.00167	.00034	.00025	.00286	.00001	.00010
%RSD	73.205	1.3378	20.285	17.964	2.0340	56.137	75.409	9.9211	17.034

#1	-.00007	.00393	-.00120	.01048	-.01678	-.00061	.00581	.00008	-.00065
#2	-.00022	.00385	-.00160	.00812	-.01630	-.00027	.00177	.00009	-.00051

Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Elem	Na5895	Ni2316	P_1782	Pb2203	S_1820	Sb2068	Se1960	Si2881	Sn1899
Line	589.592 { 57}	231.604 {446}	178.284 {489}	220.353 {453}	182.034 {485}	206.833 {463}	196.090 {472}	288.158 {117}	189.989 {477}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.01912	-.00028	.00069	.00117	.00094	.00015	.00483	.00202	.00059
Stddev	.00157	.00009	.00113	.00055	.00608	.00087	.00290	.00639	.00141
%RSD	8.1973	32.916	163.25	46.691	643.56	586.52	60.007	316.27	238.93

#1	.01801	-.00035	-.00011	.00156	-.00335	.00076	.00278	-.00250	.00158
#2	.02023	-.00022	.00149	.00078	.00524	-.00047	.00688	.00654	-.00041

Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Elem	Sr4077	Th2837	Ti3349	Ti1908	U_3701	V_2924	Zn2062	Zr3391
Line	407.771 { 83}	283.730 {119}	334.904 {101}	190.856 {477}	370.152 { 91}	292.402 {115}	206.200 {163}	339.198 { 99}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.00008	.00178	.00018	-.00028	-.00956	.00007	.00105	.00032
Stddev	.00001	.00082	.00016	.00036	.02654	.00040	.00110	.00064
%RSD	15.243	46.020	86.008	127.55	277.49	619.91	104.07	200.09

#1	.00009	.00120	.00029	-.00054	.00920	-.00022	.00183	.00077
#2	.00007	.00236	.00007	-.00003	-.02833	.00035	.00028	-.00013

Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit								
Low Limit								

Int. Std.	Y_2243	Y_3600	Y_3774
Line	224.306 {450}	360.073 { 94}	377.433 { 89}
Units	Cts/S	Cts/S	Cts/S
Avg	1519.4	32428.	5949.5
Stddev	1.0	6.	.3
%RSD	.06659	.01732	.00512

#1	1518.7	32432.	5949.7
#2	1520.1	32424.	5949.3

Sample Name: LCS 280-325958/2-A Acquired: 5/23/2016 16:57:36 Type: Unk
Method: 6500_026(v10) Mode: CONC Corr. Factor: 1.000000
User: kellyca Custom ID1: Custom ID2: Custom ID3:
Comment: 325958 6010C

Elem	Ag3280	Al1670	As1890	B_2089	Ba4554	Be3130	Bi2230	Ca3179	Cd2288
Line	328.068 {103}	167.079 {502}	189.042 {478}	208.959 {461}	455.403 { 74}	313.042 {108}	223.061 {451}	317.933 {106}	228.802 {447}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.04999	1.9822	1.0607	1.0758	2.0254	.05060	F 2.2709	49.824	.10564
Stddev	.00021	.0001	.0007	.0007	.0043	.00021	.0059	.161	.00039
%RSD	.42128	.00521	.06776	.06535	.21151	.41395	.25744	.32287	.36805
#1	.05014	1.9821	1.0612	1.0763	2.0224	.05045	2.2751	49.711	.10592
#2	.04985	1.9823	1.0602	1.0753	2.0285	.05075	2.2668	49.938	.10537

Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Fail	Chk Pass	Chk Pass
High Limit							2.2000		
Low Limit							1.8000		

Elem	Co2286	Cr2055	Cu3247	Fe2599	K_7664	Li6707	Mg2790	Mn2576	Mo2020
Line	228.616 {447}	205.560 {464}	324.754 {104}	259.940 {130}	766.490 { 44}	670.784 { 50}	279.079 {121}2	257.610 {131}	202.030 {467}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.51885	F .20858	.25239	1.0181	51.799	1.0597	48.676	.48838	1.0824
Stddev	.00023	.00022	.00056	.0020	.040	.0023	.026	.00058	.0020
%RSD	.04385	.10666	.22104	.19836	.07632	.21673	.05306	.11844	.18106
#1	.51868	.20873	.25200	1.0167	51.771	1.0581	48.658	.48878	1.0838
#2	.51901	.20842	.25279	1.0196	51.827	1.0613	48.695	.48797	1.0811

Check ?	Chk Pass	Chk Fail	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit		.05750							
Low Limit		.04300							

Elem	Na8183	Ni2316	P_1782	Pb2203	S_1820	Sb2068	Se1960	Si2881	Sn1899
Line	818.326 { 41}	231.604 {446}	178.284 {489}	220.353 {453}	182.034 {485}	206.833 {463}	196.090 {472}	288.158 {117}	189.989 {477}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	52.863	.50628	10.442	.52213	2.1432	.52917	2.0607	9.9965	1.9988
Stddev	.491	.00312	.032	.00031	.0066	.00302	.0047	.0760	.0077
%RSD	.92811	.61539	.30388	.05927	.30617	.57153	.23017	.75985	.38611
#1	52.516	.50849	10.465	.52235	2.1478	.53131	2.0641	9.9428	2.0043
#2	53.210	.50408	10.420	.52191	2.1385	.52703	2.0574	10.050	1.9934

Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Elem	Sr4077	Th2837	Ti3349	Ti1908	U_3701	V_2924	Zn2062	Zr3391	
Line	407.771 { 83}	283.730 {119}	334.904 {101}	190.856 {477}	370.152 { 91}	292.402 {115}	206.200 {163}	339.198 { 99}	
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	
Avg	.96606	1.0174	.95864	2.0187	2.1623	.47477	.48006	.49618	
Stddev	.00170	.0032	.00123	.0092	.0065	.00215	.00192	.00006	
%RSD	.17578	.31239	.12871	.45492	.30037	.45372	.39926	.01179	
#1	.96486	1.0196	.95776	2.0252	2.1577	.47629	.47870	.49613	
#2	.96726	1.0151	.95951	2.0122	2.1669	.47325	.48141	.49622	

Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	
High Limit									
Low Limit									

Int. Std.	Y_2243	Y_3600	Y_3774						
Line	224.306 {450}	360.073 { 94}	377.433 { 89}						
Units	Cts/S	Cts/S	Cts/S						
Avg	1437.8	30443.	5864.5						
Stddev	1.3	23.	3.3						
%RSD	.09087	.07392	.05615						
#1	1436.9	30459.	5866.9						
#2	1438.7	30427.	5862.2						

Sample Name: 280-83295-B-1-A Acquired: 5/23/2016 17:00:11 Type: Unk
Method: 6500_026(v10) Mode: CONC Corr. Factor: 1.000000
User: kellyca Custom ID1: Custom ID2: Custom ID3:
Comment: 325958 6010C

Elem	Ag3280	Al3092	As1890	B_2089	Ba4554	Be3130	Bi2230	Ca3179	Cd2288
Line	328.068 {103}	309.271 {109}	189.042 {478}	208.959 {461}	455.403 { 74}	313.042 {108}	223.061 {451}	317.933 {106}	228.802 {447}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.00137	9.7746	.00311	.43384	.22542	.00054	.00166	51.909	.00307
Stddev	.00033	.0194	.00072	.00155	.00099	.00003	.00046	.222	.00022
%RSD	24.386	.19873	23.236	.35842	.43739	5.2344	27.776	.42805	7.0096

#1	.00113	9.7609	.00363	.43494	.22472	.00052	.00133	51.752	.00292
#2	.00160	9.7883	.00260	.43274	.22612	.00056	.00198	52.066	.00322

Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Elem	Co2286	Cr2055	Cu3247	Fe2599	K_7664	Li6707	Mg2790	Mn2576	Mo2020
Line	228.616 {447}	205.560 {464}	324.754 {104}	259.940 {130}	766.490 { 44}	670.784 { 50}	279.079 {121}2	257.610 {131}	202.030 {467}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.00493	.02283	.15271	11.906	15.552	.03208	4.1911	.27136	.10889
Stddev	.00028	.00021	.00126	.099	.146	.00090	.0509	.00005	.00020
%RSD	5.7554	.94114	.82288	.83540	.94159	2.8015	1.2141	.01802	.18626

#1	.00513	.02298	.15182	11.836	15.448	.03272	4.1551	.27140	.10875
#2	.00473	.02268	.15359	11.976	15.656	.03145	4.2271	.27133	.10903

Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Elem	Na8183	Ni2316	P_1782	Pb2203	S_1820	Sb2068	Se1960	Si2881	Sn1899
Line	818.326 { 41}	231.604 {446}	178.284 {489}	220.353 {453}	182.034 {485}	206.833 {463}	196.090 {472}	288.158 {117}	189.989 {477}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	31.971	.02318	1.0233	.22405	14.270	.01793	.01579	24.732	.00740
Stddev	.281	.00054	.0017	.00055	.044	.00181	.00103	.152	.00053
%RSD	.87851	2.3181	.16165	.24579	.31074	10.091	6.5486	.61366	7.1620

#1	31.773	.02356	1.0221	.22366	14.301	.01921	.01506	24.624	.00778
#2	32.170	.02280	1.0245	.22444	14.238	.01665	.01652	24.839	.00703

Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Elem	Sr4077	Th2837	Ti3349	Ti1908	U_3701	V_2924	Zn2062	Zr3391
Line	407.771 { 83}	283.730 {119}	334.904 {101}	190.856 {477}	370.152 { 91}	292.402 {115}	206.200 {163}	339.198 { 99}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.26423	.00729	.36979	-.00009	.02027	.03809	.48213	.01093
Stddev	.00127	.00058	.00674	.00086	.00116	.00034	.00104	.00202
%RSD	.48219	8.0214	1.8226	931.59	5.7453	.89848	.21486	18.446

#1	.26333	.00688	.36502	-.00070	.02109	.03785	.48287	.00951
#2	.26513	.00770	.37455	.00052	.01945	.03833	.48140	.01236

Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit								
Low Limit								

Int. Std.	Y_2243	Y_3600	Y_3774
Line	224.306 {450}	360.073 { 94}	377.433 { 89}
Units	Cts/S	Cts/S	Cts/S
Avg	1473.1	31490.	6114.7
Stddev	1.4	23.	42.9
%RSD	.09683	.07348	.70178

#1	1472.0	31473.	6145.0
#2	1474.1	31506.	6084.4

Sample Name: 280-83309-A-2-A Acquired: 5/23/2016 17:02:52 Type: Unk
Method: 6500_026(v10) Mode: CONC Corr. Factor: 1.000000
User: kellyca Custom ID1: Custom ID2: Custom ID3:
Comment: 325958 6010C

Elem	Ag3280	Al3092	As1890	B_2089	Ba4554	Be3130	Bi2230	Ca3179	Cd2288
Line	328.068 {103}	309.271 {109}	189.042 {478}	208.959 {461}	455.403 { 74}	313.042 {108}	223.061 {451}	317.933 {106}	228.802 {447}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	-.00016	8.4609	.00052	.30804	.24451	.00075	-.00073	143.13	.00066
Stddev	.00083	.0544	.00254	.00063	.00087	.00008	.00013	.43	.00012
%RSD	513.44	.64331	488.34	.20572	.35508	11.047	17.579	.29772	18.633

#1	.00042	8.4225	-.00127	.30760	.24390	.00069	-.00083	142.83	.00057
#2	-.00075	8.4994	.00231	.30849	.24513	.00081	-.00064	143.43	.00074

Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Elem	Co2286	Cr2055	Cu3247	Fe2599	K_7664	Li6707	Mg2790	Mn2576	Mo2020
Line	228.616 {447}	205.560 {464}	324.754 {104}	259.940 {130}	766.490 { 44}	670.784 { 50}	279.079 {121}2	257.610 {131}	202.030 {467}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.00935	.00804	.00733	7.2128	23.018	1.2571	58.829	.68820	.07954
Stddev	.00003	.00017	.00001	.0127	.150	.0052	.026	.00045	.00006
%RSD	.37093	2.0535	.14008	.17638	.64984	.41520	.04499	.06605	.07348

#1	.00933	.00793	.00733	7.2038	22.912	1.2534	58.848	.68852	.07958
#2	.00938	.00816	.00734	7.2218	23.124	1.2608	58.810	.68788	.07949

Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Elem	Na8183	Ni2316	P_1782	Pb2203	S_1820	Sb2068	Se1960	Si2881	Sn1899
Line	818.326 { 41}	231.604 {446}	178.284 {489}	220.353 {453}	182.034 {485}	206.833 {463}	196.090 {472}	288.158 {117}	189.989 {477}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	W 1045.0	.01028	.15458	.00523	F 681.06	.00198	.00907	23.364	-.00030
Stddev	4.1	.00014	.00072	.00315	.29	.00247	.00145	.122	.00080
%RSD	.39246	1.3948	.46800	60.201	.04271	124.87	15.951	.52110	265.12

#1	1042.1	.01018	.15509	.00746	681.26	.00023	.01009	23.278	.00026
#2	1047.9	.01038	.15407	.00301	680.85	.00372	.00805	23.450	-.00086

Check ?	Chk Warn	Chk Pass	Chk Pass	Chk Pass	Chk Fail	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit	500.00				200.00				
Low Limit	10.000				-.02000				

Elem	Sr4077	Th2837	Ti3349	Ti1908	U_3701	V_2924	Zn2062	Zr3391
Line	407.771 { 83}	283.730 {119}	334.904 {101}	190.856 {477}	370.152 { 91}	292.402 {115}	206.200 {163}	339.198 { 99}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	6.6353	.00610	.10403	.00090	.01187	.00717	.08151	.00816
Stddev	.0283	.00011	.00190	.00091	.00779	.00033	.00045	.00071
%RSD	.42704	1.7363	1.8242	101.39	65.659	4.6629	.54610	8.7156

#1	6.6554	.00618	.10538	.00026	.01738	.00741	.08182	.00766
#2	6.6153	.00603	.10269	.00155	.00636	.00693	.08119	.00867

Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit								
Low Limit								

Int. Std.	Y_2243	Y_3600	Y_3774
Line	224.306 {450}	360.073 { 94}	377.433 { 89}
Units	Cts/S	Cts/S	Cts/S
Avg	1363.2	28104.	5780.4
Stddev	.0	11.	17.2
%RSD	.00132	.03909	.29696

#1	1363.2	28096.	5792.5
#2	1363.2	28111.	5768.2

Sample Name: 280-83309-A-2-A SD@5 Acquired: 5/23/2016 17:06:09 Type: Unk
Method: 6500_026(v10) Mode: CONC Corr. Factor: 1.000000
User: kellyca Custom ID1: Custom ID2: Custom ID3:
Comment: 325958 6010C

Elem	Ag3280	Al3092	As1890	B_2089	Ba4554	Be3130	Bi2230	Ca3179	Cd2288
Line	328.068 {103}	309.271 {109}	189.042 {478}	208.959 {461}	455.403 { 74}	313.042 {108}	223.061 {451}	317.933 {106}	228.802 {447}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.00009	F 2.8055	-.00001	.06810	.04755	.00017	.00341	27.243	.00013
Stddev	.00004	.0365	.00081	.00221	.00052	.00008	.00254	.336	.00007
%RSD	41.941	1.2992	15058.	3.2508	1.0893	45.009	74.398	1.2351	56.367
#1	.00006	2.7797	.00056	.06654	.04718	.00023	.00161	27.005	.00018
#2	.00011	2.8313	-.00058	.06967	.04792	.00012	.00520	27.481	.00008
Check ?	Chk Pass	Chk Fail	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit		1000.0							
Low Limit		3.0000							

Elem	Co2286	Cr2055	Cu3247	Fe2599	K_7664	Li6707	Mg2790	Mn2576	Mo2020
Line	228.616 {447}	205.560 {464}	324.754 {104}	259.940 {130}	766.490 { 44}	670.784 { 50}	279.079 {121}2	257.610 {131}	202.030 {467}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.00264	.00224	.00056	1.7261	4.3341	.22751	12.154	.13902	.01676
Stddev	.00003	.00020	.00004	.0168	.0513	.00433	.215	.00208	.00036
%RSD	1.0159	8.8335	6.5598	.97481	1.1844	1.9045	1.7697	1.4951	2.1506
#1	.00262	.00238	.00054	1.7142	4.2978	.22444	12.002	.13755	.01650
#2	.00266	.00210	.00059	1.7380	4.3704	.23057	12.306	.14049	.01701
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Elem	Na8183	Ni2316	P_1782	Pb2203	S_1820	Sb2068	Se1960	Si2881	Sn1899
Line	818.326 { 41}	231.604 {446}	178.284 {489}	220.353 {453}	182.034 {485}	206.833 {463}	196.090 {472}	288.158 {117}	189.989 {477}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	192.02	.00248	.03163	k .00176	140.59	.00235	.00907	7.9750	-.00150
Stddev	2.75	.00004	.00025	.00231	4.14	.00157	.00011	.0710	.00094
%RSD	1.4314	1.4319	.79664	131.38	2.9459	66.664	1.2552	.88994	62.413
#1	190.07	.00246	.03146	k .00013	137.66	.00124	.00899	7.9248	-.00084
#2	193.96	.00251	.03181	.00340	143.52	.00346	.00915	8.0252	-.00216
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Elem	Sr4077	Th2837	Ti3349	Ti1908	U_3701	V_2924	Zn2062	Zr3391
Line	407.771 { 83}	283.730 {119}	334.904 {101}	190.856 {477}	370.152 { 91}	292.402 {115}	206.200 {163}	339.198 { 99}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	1.2643	.00412	.05685	.00127	.01166	.00197	.01641	.00393
Stddev	.0190	.00093	.00447	.00038	.00892	.00022	.00063	.00044
%RSD	1.5013	22.508	7.8622	29.862	76.448	11.411	3.8362	11.295
#1	1.2508	.00478	.05369	.00154	.01797	.00181	.01686	.00362
#2	1.2777	.00347	.06001	.00100	.00536	.00213	.01597	.00424
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit								
Low Limit								

Int. Std.	Y_2243	Y_3600	Y_3774
Line	224.306 {450}	360.073 { 94}	377.433 { 89}
Units	Cts/S	Cts/S	Cts/S
Avg	1463.5	30585.	5944.4
Stddev	.9	125.	25.6
%RSD	.06484	.40826	.43120
#1	1462.8	30673.	5962.5
#2	1464.1	30497.	5926.3

Sample Name: 280-83309-A-2-B MS Acquired: 5/23/2016 17:08:52 Type: Unk
Method: 6500_026(v10) Mode: CONC Corr. Factor: 1.000000
User: kellyca Custom ID1: Custom ID2: Custom ID3:
Comment: 325958 6010C

Elem	Ag3280	Al3092	As1890	B_2089	Ba4554	Be3130	Bi2230	Ca3179	Cd2288
Line	328.068 {103}	309.271 {109}	189.042 {478}	208.959 {461}	455.403 { 74}	313.042 {108}	223.061 {451}	317.933 {106}	228.802 {447}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.05194	22.553	1.0765	1.3035	2.1933	.04986	2.1955	189.46	.10618
Stddev	.00006	.084	.0045	.0023	.0028	.00006	.0000	.28	.00020
%RSD	.12476	.37027	.41650	.17967	.12948	.12042	.00052	.14937	.18703

#1	.05190	22.494	1.0734	1.3051	2.1913	.04982	2.1955	189.26	.10632
#2	.05199	22.612	1.0797	1.3018	2.1953	.04991	2.1955	189.66	.10604

Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Elem	Co2286	Cr2055	Cu3247	Fe2599	K_7664	Li6707	Mg2790	Mn2576	Mo2020
Line	228.616 {447}	205.560 {464}	324.754 {104}	259.940 {130}	766.490 { 44}	670.784 { 50}	279.079 {121}2	257.610 {131}	202.030 {467}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.47909	W .20201	.26612	10.546	78.835	2.3671	104.41	1.1385	1.0808
Stddev	.00023	.00030	.00149	.013	.514	.0083	.10	.0010	.0001
%RSD	.04728	.14625	.55939	.11986	.65257	.34935	.09610	.08939	.01066

#1	.47893	.20222	.26507	10.537	78.471	2.3613	104.48	1.1378	1.0807
#2	.47925	.20180	.26718	10.555	79.199	2.3730	104.34	1.1392	1.0809

Check ?	Chk Pass	Chk Warn	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit		.10000							
Low Limit		-.01000							

Elem	Na8183	Ni2316	P_1782	Pb2203	S_1820	Sb2068	Se1960	Si2881	Sn1899
Line	818.326 { 41}	231.604 {446}	178.284 {489}	220.353 {453}	182.034 {485}	206.833 {463}	196.090 {472}	288.158 {117}	189.989 {477}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	W 1103.3	.46408	10.855	.46090	F 685.43	.50098	2.2183	W 51.086	1.7034
Stddev	3.2	.00119	.009	.00097	.67	.00147	.0139	.049	.0102
%RSD	.28654	.25557	.08429	.21064	.09751	.29275	.62832	.09689	.59786

#1	1101.1	.46491	10.862	.46159	685.90	.50202	2.2282	51.051	1.7106
#2	1105.6	.46324	10.849	.46022	684.96	.49994	2.2085	51.121	1.6962

Check ?	Chk Warn	Chk Pass	Chk Pass	Chk Pass	Chk Fail	Chk Pass	Chk Pass	Chk Warn	Chk Pass
High Limit	500.00				200.00			50.000	
Low Limit	10.000				-.02000			-.10000	

Elem	Sr4077	Th2837	Ti3349	Ti1908	U_3701	V_2924	Zn2062	Zr3391
Line	407.771 { 83}	283.730 {119}	334.904 {101}	190.856 {477}	370.152 { 91}	292.402 {115}	206.200 {163}	339.198 { 99}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	7.5017	1.0002	.96828	1.5989	2.0262	.46550	.52872	.49154
Stddev	.0706	.0055	.00369	.0047	.0072	.00119	.00024	.00356
%RSD	.94162	.55252	.38126	.29674	.35493	.25530	.04465	.72419

#1	7.4518	.99632	.97089	1.6022	2.0313	.46634	.52855	.48903
#2	7.5517	1.0041	.96567	1.5955	2.0211	.46466	.52888	.49406

Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit								
Low Limit								

Int. Std.	Y_2243	Y_3600	Y_3774
Line	224.306 {450}	360.073 { 94}	377.433 { 89}
Units	Cts/S	Cts/S	Cts/S
Avg	1327.4	27548.	5715.8
Stddev	.3	1.	6.1
%RSD	.02479	.00341	.10626

#1	1327.2	27548.	5720.1
#2	1327.7	27547.	5711.5

Sample Name: 280-83309-A-2-C MSD Acquired: 5/23/2016 17:12:00 Type: Unk
Method: 6500_026(v10) Mode: CONC Corr. Factor: 1.000000
User: kellyca Custom ID1: Custom ID2: Custom ID3:
Comment: 325958 6010C

Elem	Ag3280	Al3092	As1890	B_2089	Ba4554	Be3130	Bi2230	Ca3179	Cd2288
Line	328.068 {103}	309.271 {109}	189.042 {478}	208.959 {461}	455.403 { 74}	313.042 {108}	223.061 {451}	317.933 {106}	228.802 {447}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.05568	24.283	1.1446	1.4145	2.3005	.05190	2.3682	198.70	.11334
Stddev	.00027	.050	.0040	.0081	.0039	.00025	.0166	.23	.00104
%RSD	.47603	.20491	.34857	.57523	.17012	.48920	.70241	.11745	.91328

#1	.05549	24.318	1.1475	1.4203	2.2977	.05208	2.3800	198.87	.11408
#2	.05586	24.248	1.1418	1.4088	2.3032	.05172	2.3565	198.54	.11261

Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Elem	Co2286	Cr2055	Cu3247	Fe2599	K_7664	Li6707	Mg2790	Mn2576	Mo2020
Line	228.616 {447}	205.560 {464}	324.754 {104}	259.940 {130}	766.490 { 44}	670.784 { 50}	279.079 {121}2	257.610 {131}	202.030 {467}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.50356	W .21452	.28030	11.192	83.194	2.5270	109.52	1.1928	1.1550
Stddev	.00127	.00114	.00008	.016	.125	.0062	.10	.0012	.0025
%RSD	.25247	.53304	.02855	.14484	.15002	.24597	.09390	.10320	.21437

#1	.50266	.21371	.28025	11.204	83.106	2.5226	109.59	1.1937	1.1567
#2	.50446	.21533	.28036	11.181	83.283	2.5314	109.44	1.1920	1.1532

Check ?	Chk Pass	Chk Warn	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit		.10000							
Low Limit		-.01000							

Elem	Na8183	Ni2316	P_1782	Pb2203	S_1820	Sb2068	Se1960	Si2881	Sn1899
Line	818.326 { 41}	231.604 {446}	178.284 {489}	220.353 {453}	182.034 {485}	206.833 {463}	196.090 {472}	288.158 {117}	189.989 {477}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	W 1179.5	.48754	11.644	.48483	F 743.52	.54373	2.3945	W 56.102	1.8035
Stddev	.5	.00188	.020	.00219	1.36	.00379	.0239	.094	.0001
%RSD	.04080	.38623	.17266	.45130	.18236	.69620	.99839	.16691	.00640

#1	1179.2	.48621	11.658	.48328	744.48	.54640	2.4114	56.168	1.8034
#2	1179.9	.48887	11.630	.48637	742.56	.54105	2.3776	56.036	1.8036

Check ?	Chk Warn	Chk Pass	Chk Pass	Chk Pass	Chk Fail	Chk Pass	Chk Pass	Chk Warn	Chk Pass
High Limit	500.00				200.00			50.000	
Low Limit	10.000				-.02000			-.10000	

Elem	Sr4077	Th2837	Ti3349	Ti1908	U_3701	V_2924	Zn2062	Zr3391	
Line	407.771 { 83}	283.730 {119}	334.904 {101}	190.856 {477}	370.152 { 91}	292.402 {115}	206.200 {163}	339.198 { 99}	
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	
Avg	7.9892	1.0440	1.0714	1.6894	2.1212	.48257	.54115	.51980	
Stddev	.0414	.0032	.0053	.0094	.0219	.00256	.00221	.00183	
%RSD	.51778	.30320	.49556	.55862	1.0311	.53033	.40757	.35160	

#1	8.0185	1.0462	1.0752	1.6961	2.1367	.48438	.54271	.51850	
#2	7.9600	1.0418	1.0677	1.6827	2.1057	.48076	.53959	.52109	

Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	
High Limit									
Low Limit									

Int. Std.	Y_2243	Y_3600	Y_3774						
Line	224.306 {450}	360.073 { 94}	377.433 { 89}						
Units	Cts/S	Cts/S	Cts/S						
Avg	1305.0	27686.	5822.5						
Stddev	3.9	59.	2.7						
%RSD	.30172	.21158	.04642						

#1	1302.2	27645.	5820.6						
#2	1307.8	27728.	5824.4						

Sample Name: 280-83309-A-2-A PDS Acquired: 5/23/2016 17:15:07 Type: Unk

Method: 6500_026(v10) Mode: CONC Corr. Factor: 1.000000

User: kellyca Custom ID1: Custom ID2: Custom ID3:

Comment: 325958 6010C

Elem	Ag3280	Al3092	As1890	B_2089	Ba4554	Be3130	Bi2230	Ca3179	Cd2288
Line	328.068 {103}	309.271 {109}	189.042 {478}	208.959 {461}	455.403 { 74}	313.042 {108}	223.061 {451}	317.933 {106}	228.802 {447}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.01759	9.7156	.22021	.30885	.34451	.04979	-.00095	159.76	.05431
Stddev	.00033	.0138	.00280	.00014	.00155	.00030	.00450	.74	.00027
%RSD	1.9041	.14244	1.2702	.04560	.45064	.59423	474.60	.46321	.49531

#1	.01782	9.7058	.21823	.30875	.34341	.04958	-.00413	159.24	.05412
#2	.01735	9.7254	.22219	.30895	.34561	.05000	.00223	160.28	.05450

Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Elem	Co2286	Cr2055	Cu3247	Fe2599	K_7664	Li6707	Mg2790	Mn2576	Mo2020
Line	228.616 {447}	205.560 {464}	324.754 {104}	259.940 {130}	766.490 { 44}	670.784 { 50}	279.079 {121}2	257.610 {131}	202.030 {467}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.05678	.05609	.06031	8.1966	44.947	1.3901	77.194	.73160	.07963
Stddev	.00020	.00002	.00060	.0431	.213	.0083	.423	.00396	.00021
%RSD	.34386	.03652	.99520	.52579	.47339	.59499	.54813	.54120	.26235

#1	.05692	.05607	.05989	8.1661	44.796	1.3843	76.894	.72880	.07948
#2	.05664	.05610	.06074	8.2271	45.097	1.3960	77.493	.73440	.07978

Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Elem	Na8183	Ni2316	P_1782	Pb2203	S_1820	Sb2068	Se1960	Si2881	Sn1899
Line	818.326 { 41}	231.604 {446}	178.284 {489}	220.353 {453}	182.034 {485}	206.833 {463}	196.090 {472}	288.158 {117}	189.989 {477}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	W 1068.6	.05527	2.3605	.09672	F 684.35	.00135	.23008	24.022	.00112
Stddev	5.1	.00109	.0037	.00057	1.93	.00122	.00586	.079	.00125
%RSD	.48035	1.9775	.15551	.58877	.28213	90.425	2.5472	.32735	110.78

#1	1065.0	.05604	2.3631	.09712	685.72	.00049	.23422	23.966	.00201
#2	1072.2	.05450	2.3579	.09631	682.99	.00222	.22593	24.078	.00024

Check ?	Chk Warn	Chk Pass	Chk Pass	Chk Pass	Chk Fail	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit	500.00				200.00				
Low Limit	10.000				-.02000				

Elem	Sr4077	Th2837	Ti3349	Ti1908	U_3701	V_2924	Zn2062	Zr3391
Line	407.771 { 83}	283.730 {119}	334.904 {101}	190.856 {477}	370.152 { 91}	292.402 {115}	206.200 {163}	339.198 { 99}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	6.6588	.20837	.11099	.16517	.52301	.05243	.26198	.00719
Stddev	.0797	.00222	.00183	.00240	.02163	.00014	.00177	.00026
%RSD	1.1964	1.0640	1.6462	1.4546	4.1366	.26227	.67600	3.6821

#1	6.6025	.20680	.11228	.16687	.50771	.05233	.26323	.00700
#2	6.7151	.20994	.10970	.16347	.53831	.05253	.26073	.00737

Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit								
Low Limit								

Int. Std.	Y_2243	Y_3600	Y_3774
Line	224.306 {450}	360.073 { 94}	377.433 { 89}
Units	Cts/S	Cts/S	Cts/S
Avg	1340.1	27792.	5806.9
Stddev	2.2	127.	22.3
%RSD	.16508	.45746	.38316

#1	1338.6	27881.	5822.6
#2	1341.7	27702.	5791.1

Sample Name: ccvh-3900196 Acquired: 5/23/2016 17:18:24 Type: QC
Method: 6500_026(v10) Mode: CONC Corr. Factor: 1.000000
User: kellyca Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	Ag3280	Al3092	As1890	B_2089	Ba4554	Be3130	Bi2230	Ca3179	Cd2288	Co2286	Cr2055	Cu3247	Fe2714
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.00053	47.599	.00631	.00593	.00184	.00130	1.0738	-.03770	.00054	.00466	.00114	.00616	47.805
Stddev	.00016	.145	.00075	.00031	.00004	.00006	.0178	.00566	.00001	.00022	.00003	.00054	.290
%RSD	30.657	.30422	11.869	5.2134	2.1808	4.8539	1.6555	15.005	1.6796	4.7413	2.4391	8.6945	.60607

#1	.00065	47.497	.00684	.00571	.00187	.00135	1.0612	-.03370	.00055	.00482	.00116	.00654	47.601
#2	.00042	47.702	.00578	.00615	.00182	.00126	1.0864	-.04170	.00054	.00451	.00112	.00578	48.010

Check ?	None	Chk Pass	None	None	None	None	Chk Pass	None	None	None	None	None	Chk Pass
Value													
Range													

Elem	K_7664	Li6707	Mg2790	Mn2576	Mo2020	Na8183	Ni2316	P_1782	Pb2203	S_1820	Sb2068	Se1960	Si2881
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.20600	.00358	.22333	.00068	-.00097	251.04	.00099	.00497	.00329	5.1550	.00439	.01472	.02912
Stddev	.00974	.00015	.00083	.00007	.00003	1.48	.00014	.00232	.00260	.0874	.00241	.00468	.00092
%RSD	4.7274	4.1610	.37212	10.709	3.5153	.58798	14.529	46.658	79.162	1.6954	54.921	31.770	3.1551

#1	.21289	.00369	.22274	.00063	-.00094	249.99	.00089	.00333	.00145	5.0932	.00269	.01802	.02847
#2	.19912	.00347	.22392	.00074	-.00099	252.08	.00109	.00660	.00513	5.2168	.00610	.01141	.02977

Check ?	None	None	None	None	None	Chk Pass	None	None	None	Chk Pass	None	None	None
Value													
Range													

Elem	Sn1899	Sr4077	Th2837	Ti3349	Ti1908	U_3701	V_2924	Zn2062	Zr3391
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.00348	.00208	4.9611	.02612	.00109	10.256	-.01523	-.00126	-.01401
Stddev	.00077	.00008	.0009	.00067	.00034	.012	.00035	.00086	.00335
%RSD	22.010	3.8424	.01831	2.5773	31.052	.12097	2.2981	68.437	23.903

#1	.00403	.00214	4.9617	.02565	.00133	10.265	-.01548	-.00187	-.01637
#2	.00294	.00202	4.9604	.02660	.00085	10.248	-.01499	-.00065	-.01164

Check ?	None	None	Chk Pass	None	None	Chk Pass	None	None	None
Value									
Range									

Int. Std.	Y_2243	Y_3600	Y_3774
Units	Cts/S	Cts/S	Cts/S
Avg	1450.1	30739.	5932.3
Stddev	18.6	25.	9.2
%RSD	1.2859	.08000	.15444

#1	1463.3	30722.	5925.8
#2	1436.9	30757.	5938.7

Sample Name: ccv-3900195 Acquired: 5/23/2016 17:21:15 Type: QC
Method: 6500_026(v10) Mode: CONC Corr. Factor: 1.000000
User: kellyca Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	Ag3280	Al1670	As1890	B_2089	Ba4554	Be3130	Bi2230	Ca3179	Cd2288	Co2286	Cr2055	Cu3247	Fe2599	K_7664
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.47767	.52164	1.0042	.53594	.49273	.49615	.00266	5.0519	.51678	.51701	.51001	.49278	2.4917	49.860
Stddev	.00009	.00264	.0069	.00064	.00023	.00062	.00106	.0268	.00122	.00183	.00029	.00187	.0013	.160
%RSD	.01908	.50692	.69219	.11949	.04684	.12585	39.954	.53017	.23637	.35445	.05664	.37936	.05271	.32079

#1	.47761	.52351	1.0091	.53549	.49256	.49571	.00191	5.0708	.51592	.51572	.51021	.49146	2.4926	49.746
#2	.47774	.51977	.99928	.53639	.49289	.49659	.00341	5.0329	.51765	.51831	.50980	.49410	2.4908	49.973

Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	None	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Value														
Range														

Elem	Li6707	Mg2790	Mn2576	Mo2020	Na5895	Ni2316	P_1782	Pb2203	S_1820	Sb2068	Se1960	Si2881	Sn1899	Sr4077
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	1.0308	19.210	.48762	.51599	5.2377	.50418	1.0037	1.0492	.02422	1.0090	1.0064	4.9226	.99650	.47424
Stddev	.0041	.061	.00272	.00068	.0064	.00009	.0082	.0042	.00346	.0040	.0050	.0040	.00105	.00091
%RSD	.39456	.31676	.55851	.13173	.12150	.01855	.81306	.39956	14.302	.40050	.49931	.08051	.10579	.19092

#1	1.0279	19.167	.48569	.51647	5.2422	.50425	.99798	1.0522	.02667	1.0119	1.0029	4.9254	.99725	.47360
#2	1.0337	19.253	.48955	.51551	5.2332	.50411	1.0095	1.0462	.02178	1.0062	1.0100	4.9198	.99576	.47488

Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	None	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Value														
Range														

Elem	Th2837	Ti3349	Ti1908	U_3701	V_2924	Zn2062	Zr3391
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.00779	.46602	1.0260	.00217	.46776	.47274	.48892
Stddev	.00115	.00208	.0009	.00553	.00024	.00107	.00153
%RSD	14.732	.44591	.08646	255.30	.05207	.22638	.31330

#1	.00698	.46455	1.0266	-.00174	.46759	.47350	.49000
#2	.00861	.46749	1.0254	.00607	.46793	.47198	.48784

Check ?	None	Chk Pass	Chk Pass	None	Chk Pass	Chk Pass	Chk Pass
Value							
Range							

Int. Std.	Y_2243	Y_3600	Y_3774
Units	Cts/S	Cts/S	Cts/S
Avg	1491.2	31433.	5897.1
Stddev	1.5	168.	45.6
%RSD	.10035	.53416	.77369

#1	1492.3	31551.	5864.9
#2	1490.2	31314.	5929.4

Sample Name: ccb Acquired: 5/23/2016 17:23:53 Type: QC
Method: 6500_026(v10) Mode: CONC Corr. Factor: 1.000000
User: kellyca Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	Ag3280	Al1670	As1890	B_2089	Ba4554	Be3130	Bi2230	Ca3179	Cd2288	Co2286	Cr2055	Cu3247
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.00054	.00010	.00096	W .00271	.00019	.00004	.00385	-.00197	.00005	-.00081	.00015	-.00111
Stddev	.00030	.00055	.00526	.00096	.00020	.00005	.00125	.00016	.00008	.00012	.00013	.00024
%RSD	56.798	565.31	545.58	35.599	104.37	112.72	32.360	8.1295	142.91	15.339	88.325	21.622
#1	.00032	.00049	.00469	.00202	.00033	.00001	.00297	-.00208	-.00000	-.00090	.00024	-.00094
#2	.00075	-.00029	-.00276	.00339	.00005	.00007	.00473	-.00186	.00011	-.00072	.00006	-.00128
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Warn	Chk Pass	Chk Pass	None	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit				.00156								
Low Limit				-.00156								
Elem	Fe2599	K_7664	Li6707	Mg2790	Mn2576	Mo2020	Na5895	Ni2316	P_1782	Pb2203	S_1820	Sb2068
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.00919	.04928	-.00033	.00518	.00003	.00017	.07149	-.00048	-.00003	.00099	.00903	W .00560
Stddev	.00194	.00484	.00085	.00446	.00002	.00025	.00794	.00008	.00196	.00047	.00218	.00026
%RSD	21.127	9.8139	256.61	86.088	53.582	142.68	11.113	16.131	6876.0	47.244	24.121	4.5595
#1	.00782	.05270	.00027	.00203	.00004	-.00000	.06587	-.00043	-.00142	.00133	.00749	.00542
#2	.01056	.04586	-.00094	.00833	.00002	.00035	.07711	-.00054	.00136	.00066	.01057	.00578
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	None	Chk Warn
High Limit												.00314
Low Limit												-.00314
Elem	Se1960	Si2881	Sn1899	Sr4077	Th2837	Ti3349	Ti1908	U_3701	V_2924	Zn2062	Zr3391	
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	
Avg	F .01150	.00325	-.00079	.00018	.00170	.00002	.00067	.00811	-.00012	.00006	.00099	
Stddev	.00585	.00802	.00100	.00002	.00069	.00029	.00002	.01140	.00003	.00039	.00013	
%RSD	50.824	246.79	126.78	11.962	40.756	1729.9	3.5557	140.49	26.841	639.83	13.099	
#1	.00737	.00893	-.00150	.00016	.00121	.00022	.00068	.01617	-.00009	-.00022	.00109	
#2	.01564	-.00242	-.00008	.00019	.00218	-.00019	.00065	.00005	-.00014	.00034	.00090	
Check ?	Chk Fail	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	
High Limit	.00972											
Low Limit	-.00972											
Int. Std.	Y_2243	Y_3600	Y_3774									
Units	Cts/S	Cts/S	Cts/S									
Avg	1509.6	32564.	6081.8									
Stddev	.4	49.	27.0									
%RSD	.02849	.15009	.44368									
#1	1509.9	32599.	6062.7									
#2	1509.3	32529.	6100.9									

Sample Name: ccvl-3907489 Acquired: 5/23/2016 17:26:41 Type: QC
Method: 6500_026(v10) Mode: CONC Corr. Factor: 1.000000
User: kellyca Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	Ag3280	Al1670	As1890	B_2089	Ba4554	Be3130	Bi2230	Ca3179	Cd2288	Co2286	Cr2055	Cu3247
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.00979	.10533	.01266	.10680	.01026	.00099	.12158	.19603	.00520	.01057	.01103	.01345
Stddev	.00033	.00046	.00167	.00098	.00018	.00000	.00248	.00165	.00011	.00038	.00012	.00038
%RSD	3.3719	.44146	13.195	.91372	1.7463	.22575	2.0391	.84281	2.1279	3.6157	1.1137	2.8541

#1	.00956	.10565	.01148	.10749	.01039	.00099	.11983	.19487	.00512	.01084	.01094	.01318
#2	.01003	.10500	.01384	.10611	.01013	.00099	.12333	.19720	.00528	.01030	.01111	.01372

Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Value												
Range												

Elem	Fe2599	K_7664	Li6707	Mg2790	Mn2576	Mo2020	Na5895	Ni2316	P_1782	Pb2203	S_1820	Sb2068
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.11141	3.0396	.00973	.19850	.01006	.02090	1.0672	.04190	2.9124	.01111	.01050	.02418
Stddev	.00107	.0429	.00063	.00036	.00003	.00009	.0052	.00015	.0197	.00007	.00012	.00080
%RSD	.95698	1.4120	6.4222	.17923	.34424	.42764	.48669	.36003	.67741	.60608	1.1170	3.3260

#1	.11066	3.0092	.00929	.19825	.01008	.02084	1.0636	.04179	2.9264	.01116	.01042	.02475
#2	.11217	3.0699	.01017	.19876	.01003	.02097	1.0709	.04201	2.8985	.01106	.01059	.02361

Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	None	Chk Pass
Value												
Range												

Elem	Se1960	Si2881	Sn1899	Sr4077	Th2837	Ti3349	Ti1908	U_3701	V_2924	Zn2062	Zr3391
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	F .02379	.50277	.10200	.00956	.01729	.00919	.01625	F .08709	.00891	.01856	.01458
Stddev	.00215	.01716	.00011	.00011	.00122	.00026	.00031	.00374	.00075	.00060	.00044
%RSD	9.0364	3.4136	.10525	1.1886	7.0771	2.8003	1.9274	4.2991	8.4688	3.2435	3.0314

#1	.02227	.51490	.10192	.00948	.01642	.00937	.01603	.08974	.00944	.01899	.01426
#2	.02531	.49063	.10207	.00964	.01815	.00901	.01647	.08444	.00837	.01814	.01489

Check ?	Chk Fail	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Fail	Chk Pass	Chk Pass	Chk Pass
Value	.01500							.06000			
Range	30.000%							30.000%			

Int. Std.	Y_2243	Y_3600	Y_3774
Units	Cts/S	Cts/S	Cts/S
Avg	1518.6	32731.	5976.8
Stddev	4.6	27.	12.9
%RSD	.30611	.08358	.21620

#1	1515.3	32750.	5967.6
#2	1521.9	32711.	5985.9

Sample Name: MB 280-326260/1-A Acquired: 5/23/2016 17:29:28 Type: Unk
Method: 6500_026(v10) Mode: CONC Corr. Factor: 1.000000
User: kellyca Custom ID1: 5/20 Custom ID2: Custom ID3:
Comment: 326260 6010B

Elem	Ag3280	Al1670	As1890	B_2089	Ba4554	Be3130	Bi2230	Ca3179	Cd2288
Line	328.068 {103}	167.079 {502}	189.042 {478}	208.959 {461}	455.403 { 74}	313.042 {108}	223.061 {451}	317.933 {106}	228.802 {447}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.00025	.00344	.00208	.00226	.00026	.00000	.00363	.01696	-.00013
Stddev	.00055	.00000	.00124	.00036	.00005	.00001	.00150	.00022	.00001
%RSD	217.67	.05861	59.753	15.893	18.965	256.25	41.276	1.3219	11.027

#1	.00064	.00343	.00296	.00252	.00029	-.00000	.00469	.01681	-.00012
#2	-.00014	.00344	.00120	.00201	.00022	.00001	.00257	.01712	-.00014

Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Elem	Co2286	Cr2055	Cu3247	Fe2599	K_7664	Li6707	Mg2790	Mn2576	Mo2020
Line	228.616 {447}	205.560 {464}	324.754 {104}	259.940 {130}	766.490 { 44}	670.784 { 50}	279.079 {121}2	257.610 {131}	202.030 {467}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	-.00004	.00018	-.00104	.01068	.03134	-.00093	.00368	.00032	-.00037
Stddev	.00047	.00002	.00011	.00188	.03470	.00001	.00322	.00009	.00019
%RSD	1087.6	12.502	10.755	17.577	110.72	1.1932	87.280	29.049	50.708

#1	.00029	.00017	-.00097	.01201	.05587	-.00092	.00596	.00039	-.00051
#2	-.00038	.00020	-.00112	.00935	.00680	-.00094	.00141	.00026	-.00024

Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Elem	Na5895	Ni2316	P_1782	Pb2203	S_1820	Sb2068	Se1960	Si2881	Sn1899
Line	589.592 { 57}	231.604 {446}	178.284 {489}	220.353 {453}	182.034 {485}	206.833 {463}	196.090 {472}	288.158 {117}	189.989 {477}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.04823	-.00005	.00183	-.00062	.01530	.00024	W .00886	.01909	-.00014
Stddev	.00354	.00000	.00183	.00077	.00230	.00034	.00551	.00194	.00062
%RSD	7.3436	8.3932	100.11	123.95	15.014	144.70	62.221	10.154	454.98

#1	.05073	-.00006	.00312	-.00008	.01368	-.00001	.01276	.01772	-.00057
#2	.04573	-.00005	.00053	-.00117	.01693	.00048	.00496	.02046	.00030

Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Warn	Chk Pass	Chk Pass
High Limit							.00500		
Low Limit							-.00500		

Elem	Sr4077	Th2837	Ti3349	Ti1908	U_3701	V_2924	Zn2062	Zr3391
Line	407.771 { 83}	283.730 {119}	334.904 {101}	190.856 {477}	370.152 { 91}	292.402 {115}	206.200 {163}	339.198 { 99}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.00012	.00066	.00013	.00082	-.00307	.00013	.00233	-.00028
Stddev	.00000	.00203	.00002	.00155	.00997	.00005	.00014	.00132
%RSD	.37760	305.18	11.702	188.48	325.02	36.213	5.8965	465.54

#1	.00012	.00210	.00012	.00192	-.01012	.00017	.00242	-.00121
#2	.00012	-.00077	.00014	-.00027	.00398	.00010	.00223	.00065

Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit								
Low Limit								

Int. Std.	Y_2243	Y_3600	Y_3774
Line	224.306 {450}	360.073 { 94}	377.433 { 89}
Units	Cts/S	Cts/S	Cts/S
Avg	1526.4	32945.	6039.3
Stddev	3.5	9.	3.7
%RSD	.23194	.02705	.06069

#1	1528.9	32938.	6036.7
#2	1523.9	32951.	6041.9

Sample Name: LCS 280-326260/2-A Acquired: 5/23/2016 17:32:15 Type: Unk
Method: 6500_026(v10) Mode: CONC Corr. Factor: 1.000000
User: kellyca Custom ID1: p Custom ID2: Custom ID3:
Comment: 326260 6010B

Elem	Ag3280	Al1670	As1890	B_2089	Ba4554	Be3130	Bi2230	Ca3179	Cd2288
Line	328.068 {103}	167.079 {502}	189.042 {478}	208.959 {461}	455.403 {74}	313.042 {108}	223.061 {451}	317.933 {106}	228.802 {447}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.04884	1.9513	1.0483	1.0719	1.9820	.04991	F 2.2316	48.639	.10368
Stddev	.00101	.0020	.0020	.0016	.0096	.00028	.0056	.095	.00060
%RSD	2.0765	.10128	.19226	.14986	.48321	.56688	.25200	.19515	.58131

#1	.04812	1.9527	1.0469	1.0707	1.9752	.04971	2.2276	48.572	.10410
#2	.04955	1.9499	1.0498	1.0730	1.9888	.05011	2.2355	48.706	.10325

Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Fail	Chk Pass	Chk Pass
High Limit							2.2000		
Low Limit							1.8000		

Elem	Co2286	Cr2055	Cu3247	Fe2599	K_7664	Li6707	Mg2790	Mn2576	Mo2020
Line	228.616 {447}	205.560 {464}	324.754 {104}	259.940 {130}	766.490 {44}	670.784 {50}	279.079 {121}2	257.610 {131}	202.030 {467}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.50722	F .20371	.24639	.98617	51.036	1.0444	47.768	.47820	1.0621
Stddev	.00015	.00122	.00029	.00167	.208	.0076	.059	.00006	.0017
%RSD	.02991	.59876	.11594	.16972	.40837	.72280	.12263	.01342	.16060

#1	.50733	.20457	.24659	.98498	50.889	1.0390	47.809	.47824	1.0633
#2	.50711	.20285	.24619	.98735	51.183	1.0497	47.727	.47815	1.0609

Check ?	Chk Pass	Chk Fail	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit		.05750							
Low Limit		.04300							

Elem	Na8183	Ni2316	P_1782	Pb2203	S_1820	Sb2068	Se1960	Si2881	Sn1899
Line	818.326 {41}	231.604 {446}	178.284 {489}	220.353 {453}	182.034 {485}	206.833 {463}	196.090 {472}	288.158 {117}	189.989 {477}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	51.722	.49607	10.368	.51545	2.0964	.51901	2.0570	9.8262	1.9684
Stddev	.319	.00024	.004	.00221	.0186	.00175	.0107	.0089	.0013
%RSD	.61619	.04747	.03419	.42929	.88793	.33627	.52085	.09066	.06795

#1	51.497	.49624	10.365	.51701	2.0832	.51777	2.0495	9.8199	1.9694
#2	51.947	.49591	10.370	.51388	2.1096	.52024	2.0646	9.8325	1.9675

Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Elem	Sr4077	Th2837	Ti3349	Ti1908	U_3701	V_2924	Zn2062	Zr3391
Line	407.771 {83}	283.730 {119}	334.904 {101}	190.856 {477}	370.152 {91}	292.402 {115}	206.200 {163}	339.198 {99}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.94367	.99715	.93669	1.9883	2.1144	.46283	.46954	.48475
Stddev	.00317	.00100	.00090	.0005	.0101	.00415	.00186	.00034
%RSD	.33556	.10073	.09634	.02654	.47878	.89662	.39629	.06940

#1	.94143	.99644	.93732	1.9879	2.1073	.46576	.47086	.48499
#2	.94590	.99786	.93605	1.9887	2.1216	.45989	.46823	.48451

Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit								
Low Limit								

Int. Std.	Y_2243	Y_3600	Y_3774
Line	224.306 {450}	360.073 {94}	377.433 {89}
Units	Cts/S	Cts/S	Cts/S
Avg	1451.1	30687.	5902.9
Stddev	4.2	40.	2.9
%RSD	.29179	.13074	.04917

#1	1454.1	30716.	5905.0
#2	1448.1	30659.	5900.9

Sample Name: 280-83016-D-7-B Acquired: 5/23/2016 17:34:50 Type: Unk
Method: 6500_026(v10) Mode: CONC Corr. Factor: 1.000000
User: kellyca Custom ID1: Custom ID2: Custom ID3:
Comment: 326260 6010B

Elem	Ag3280	Al1670	As1890	B_2089	Ba4554	Be3130	Bi2230	Ca3179	Cd2288
Line	328.068 {103}	167.079 {502}	189.042 {478}	208.959 {461}	455.403 { 74}	313.042 {108}	223.061 {451}	317.933 {106}	228.802 {447}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.00017	.07323	.00090	.01101	.03975	.00020	.00286	2.2802	.00021
Stddev	.00044	.00153	.00625	.00006	.00025	.00003	.00008	.0037	.00032
%RSD	257.43	2.0959	691.02	.57298	.61763	13.455	2.7654	.16444	152.83

#1	-.00014	.07215	-.00351	.01097	.03957	.00022	.00291	2.2829	.00044
#2	.00048	.07432	.00532	.01106	.03992	.00018	.00280	2.2776	-.00002

Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Elem	Co2286	Cr2055	Cu3247	Fe2599	K_7664	Li6707	Mg2790	Mn2576	Mo2020
Line	228.616 {447}	205.560 {464}	324.754 {104}	259.940 {130}	766.490 { 44}	670.784 { 50}	279.079 {121}2	257.610 {131}	202.030 {467}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	-.00027	.00016	-.00098	.13540	.99795	.00327	1.1398	.03528	.00078
Stddev	.00062	.00027	.00008	.00065	.01261	.00058	.0098	.00025	.00001
%RSD	227.15	168.43	7.9339	.48173	1.2632	17.867	.86249	.71517	1.5239

#1	-.00071	.00035	-.00093	.13586	.98903	.00285	1.1468	.03546	.00077
#2	.00016	-.00003	-.00104	.13493	1.0069	.00368	1.1328	.03511	.00078

Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Elem	Na5895	Ni2316	P_1782	Pb2203	S_1820	Sb2068	Se1960	Si2881	Sn1899
Line	589.592 { 57}	231.604 {446}	178.284 {489}	220.353 {453}	182.034 {485}	206.833 {463}	196.090 {472}	288.158 {117}	189.989 {477}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	7.0866	.00112	.01423	.00023	.20563	.00107	.00846	16.369	-.00014
Stddev	.0066	.00016	.00144	.00123	.00689	.00259	.00179	.055	.00093
%RSD	.09327	14.013	10.095	546.30	3.3486	242.82	21.200	.33647	651.18

#1	7.0819	.00123	.01321	.00109	.21050	-.00077	.00720	16.330	.00051
#2	7.0913	.00101	.01525	-.00064	.20077	.00290	.00973	16.408	-.00080

Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Elem	Sr4077	Th2837	Ti3349	Ti1908	U_3701	V_2924	Zn2062	Zr3391
Line	407.771 { 83}	283.730 {119}	334.904 {101}	190.856 {477}	370.152 { 91}	292.402 {115}	206.200 {163}	339.198 { 99}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.05139	.00173	.00219	.00041	.01201	.00063	.00481	.00039
Stddev	.00020	.00056	.00011	.00062	.02127	.00013	.00023	.00079
%RSD	.39426	32.388	5.1342	150.39	177.08	20.015	4.7456	203.87

#1	.05125	.00213	.00211	.00085	.02705	.00072	.00497	-.00017
#2	.05153	.00134	.00226	-.00003	-.00303	.00054	.00465	.00095

Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit								
Low Limit								

Int. Std.	Y_2243	Y_3600	Y_3774
Line	224.306 {450}	360.073 { 94}	377.433 { 89}
Units	Cts/S	Cts/S	Cts/S
Avg	1527.4	32131.	5939.6
Stddev	1.5	95.	9.2
%RSD	.09736	.29505	.15466

#1	1526.4	32064.	5933.1
#2	1528.5	32198.	5946.1

Sample Name: 280-83016-D-7-B SD@5 Acquired: 5/23/2016 17:37:36 Type: Unk
Method: 6500_026(v10) Mode: CONC Corr. Factor: 1.000000
User: kellyca Custom ID1: Custom ID2: Custom ID3:
Comment: 326260 6010B

Elem	Ag3280	Al1670	As1890	B_2089	Ba4554	Be3130	Bi2230	Ca3179	Cd2288
Line	328.068 {103}	167.079 {502}	189.042 {478}	208.959 {461}	455.403 { 74}	313.042 {108}	223.061 {451}	317.933 {106}	228.802 {447}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.00076	.01399	.00250	.00390	.00808	.00002	.00169	.45921	-.00023
Stddev	.00032	.00108	.00785	.00008	.00004	.00006	.00018	.00302	.00005
%RSD	41.809	7.7301	314.42	2.1562	.45527	264.78	10.495	.65790	23.265

#1	.00098	.01323	-.00305	.00396	.00805	-.00002	.00181	.45708	-.00027
#2	.00053	.01475	.00805	.00384	.00810	.00006	.00156	.46135	-.00020

Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Elem	Co2286	Cr2055	Cu3247	Fe2599	K_7664	Li6707	Mg2790	Mn2576	Mo2020
Line	228.616 {447}	205.560 {464}	324.754 {104}	259.940 {130}	766.490 { 44}	670.784 { 50}	279.079 {121}2	257.610 {131}	202.030 {467}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.00015	-.00023	-.00145	.06489	.20499	-.00046	.23334	.00716	.00023
Stddev	.00053	.00004	.00020	.00157	.03510	.00063	.00186	.00005	.00001
%RSD	361.82	17.183	13.881	2.4241	17.121	134.92	.79749	.75573	6.4464

#1	-.00023	-.00020	-.00131	.06378	.18017	-.00002	.23202	.00719	.00022
#2	.00052	-.00026	-.00159	.06600	.22980	-.00091	.23465	.00712	.00024

Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Elem	Na5895	Ni2316	P_1782	Pb2203	S_1820	Sb2068	Se1960	Si2881	Sn1899
Line	589.592 { 57}	231.604 {446}	178.284 {489}	220.353 {453}	182.034 {485}	206.833 {463}	196.090 {472}	288.158 {117}	189.989 {477}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	1.4327	.00076	.00198	.00228	.04508	.00049	.00959	3.2797	-.00013
Stddev	.0026	.00047	.00071	.00074	.00166	.00178	.00060	.0350	.00048
%RSD	.17879	61.487	36.053	32.500	3.6839	362.12	6.2851	1.0656	367.91

#1	1.4309	.00043	.00147	.00176	.04625	-.00077	.01002	3.2550	-.00046
#2	1.4345	.00109	.00248	.00281	.04390	.00175	.00916	3.3044	.00021

Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Elem	Sr4077	Th2837	Ti3349	Ti1908	U_3701	V_2924	Zn2062	Zr3391
Line	407.771 { 83}	283.730 {119}	334.904 {101}	190.856 {477}	370.152 { 91}	292.402 {115}	206.200 {163}	339.198 { 99}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.01029	.00080	.00071	.00120	.00218	-.00026	.00173	.00062
Stddev	.00009	.00161	.00049	.00074	.02110	.00053	.00065	.00026
%RSD	.83068	201.82	68.985	61.806	966.31	201.47	37.429	41.433

#1	.01023	.00193	.00036	.00068	-.01274	.00011	.00127	.00044
#2	.01035	-.00034	.00105	.00173	.01711	-.00063	.00218	.00080

Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit								
Low Limit								

Int. Std.	Y_2243	Y_3600	Y_3774
Line	224.306 {450}	360.073 { 94}	377.433 { 89}
Units	Cts/S	Cts/S	Cts/S
Avg	1529.2	32604.	5965.8
Stddev	2.9	53.	27.9
%RSD	.18811	.16163	.46693

#1	1531.3	32641.	5985.5
#2	1527.2	32567.	5946.1

Sample Name: 280-83016-D-7-C MS Acquired: 5/23/2016 17:40:22 Type: Unk

Method: 6500_026(v10) Mode: CONC Corr. Factor: 1.000000

User: kellyca Custom ID1: Custom ID2: Custom ID3:

Comment: 326260 6010B

Elem	Ag3280	Al1670	As1890	B_2089	Ba4554	Be3130	Bi2230	Ca3179	Cd2288
Line	328.068 {103}	167.079 {502}	189.042 {478}	208.959 {461}	455.403 { 74}	313.042 {108}	223.061 {451}	317.933 {106}	228.802 {447}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.04925	2.0642	1.0583	1.1058	2.0566	.05082	2.2889	51.577	.10573
Stddev	.00060	.0045	.0110	.0087	.0070	.00027	.0097	.166	.00023
%RSD	1.2100	.21688	1.0388	.78488	.34259	.52802	.42409	.32264	.22105

#1	.04883	2.0610	1.0505	1.0997	2.0516	.05063	2.2821	51.459	.10556
#2	.04968	2.0674	1.0660	1.1119	2.0616	.05101	2.2958	51.694	.10589

Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Elem	Co2286	Cr2055	Cu3247	Fe2599	K_7664	Li6707	Mg2790	Mn2576	Mo2020
Line	228.616 {447}	205.560 {464}	324.754 {104}	259.940 {130}	766.490 { 44}	670.784 { 50}	279.079 {121}2	257.610 {131}	202.030 {467}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.51549	W .20673	.25180	1.1205	52.782	1.0687	49.516	.51657	1.0710
Stddev	.00104	.00124	.00099	.0114	.224	.0048	.015	.00081	.0012
%RSD	.20200	.60083	.39374	1.0175	.42506	.44881	.03008	.15601	.11295

#1	.51475	.20585	.25110	1.1124	52.624	1.0653	49.527	.51600	1.0701
#2	.51622	.20761	.25250	1.1286	52.941	1.0721	49.506	.51714	1.0718

Check ?	Chk Pass	Chk Warn	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit		.10000							
Low Limit		-.01000							

Elem	Na8183	Ni2316	P_1782	Pb2203	S_1820	Sb2068	Se1960	Si2881	Sn1899
Line	818.326 { 41}	231.604 {446}	178.284 {489}	220.353 {453}	182.034 {485}	206.833 {463}	196.090 {472}	288.158 {117}	189.989 {477}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	59.401	.50399	10.511	.51979	2.3414	.53311	2.1110	25.752	1.9946
Stddev	.446	.00081	.050	.00054	.0058	.00413	.0229	.046	.0014
%RSD	.75000	.16041	.48007	.10312	.24702	.77477	1.0857	.18018	.06916

#1	59.716	.50342	10.475	.52017	2.3373	.53018	2.0948	25.719	1.9955
#2	59.086	.50456	10.546	.51941	2.3455	.53603	2.1272	25.785	1.9936

Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Elem	Sr4077	Th2837	Ti3349	Ti1908	U_3701	V_2924	Zn2062	Zr3391
Line	407.771 { 83}	283.730 {119}	334.904 {101}	190.856 {477}	370.152 { 91}	292.402 {115}	206.200 {163}	339.198 { 99}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	1.0094	1.0132	.95066	2.0184	2.1564	.46842	.48279	.48901
Stddev	.0021	.0092	.00231	.0100	.0046	.00349	.00007	.00047
%RSD	.21062	.91334	.24262	.49563	.21264	.74499	.01383	.09580

#1	1.0079	1.0066	.94902	2.0113	2.1597	.46595	.48284	.48868
#2	1.0109	1.0197	.95229	2.0254	2.1532	.47089	.48274	.48935

Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit								
Low Limit								

Int. Std.	Y_2243	Y_3600	Y_3774
Line	224.306 {450}	360.073 { 94}	377.433 { 89}
Units	Cts/S	Cts/S	Cts/S
Avg	1438.7	30490.	5863.4
Stddev	7.1	85.	2.2
%RSD	.49177	.27722	.03761

#1	1443.7	30550.	5864.9
#2	1433.7	30430.	5861.8

Sample Name: 280-83016-D-7-D MSD Acquired: 5/23/2016 17:42:58 Type: Unk
Method: 6500_026(v10) Mode: CONC Corr. Factor: 1.000000
User: kellyca Custom ID1: Custom ID2: Custom ID3:
Comment: 326260 6010B

Elem	Ag3280	Al1670	As1890	B_2089	Ba4554	Be3130	Bi2230	Ca3179	Cd2288
Line	328.068 {103}	167.079 {502}	189.042 {478}	208.959 {461}	455.403 { 74}	313.042 {108}	223.061 {451}	317.933 {106}	228.802 {447}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.04909	2.0556	1.0590	1.0992	2.0522	.05070	2.2716	51.324	.10530
Stddev	.00017	.0012	.0048	.0005	.0012	.00019	.0052	.026	.00004
%RSD	.33886	.05825	.45288	.04294	.05843	.36996	.22972	.05056	.04091
#1	.04898	2.0547	1.0624	1.0988	2.0530	.05083	2.2753	51.342	.10533
#2	.04921	2.0564	1.0556	1.0995	2.0513	.05057	2.2679	51.306	.10527

Check ? Chk Pass Chk Pass Chk Pass Chk Pass Chk Pass Chk Pass Chk Pass Chk Pass Chk Pass
High Limit
Low Limit

Elem	Co2286	Cr2055	Cu3247	Fe2599	K_7664	Li6707	Mg2790	Mn2576	Mo2020
Line	228.616 {447}	205.560 {464}	324.754 {104}	259.940 {130}	766.490 { 44}	670.784 { 50}	279.079 {121}2	257.610 {131}	202.030 {467}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.51309	W .20598	.25399	1.2904	52.860	1.0701	49.707	.51717	1.0659
Stddev	.00164	.00015	.00024	.0042	.023	.0007	.041	.00063	.0015
%RSD	.31970	.07239	.09373	.32843	.04389	.06287	.08170	.12220	.13903
#1	.51425	.20608	.25382	1.2934	52.876	1.0706	49.736	.51761	1.0669
#2	.51193	.20587	.25416	1.2874	52.844	1.0697	49.679	.51672	1.0649

Check ? Chk Pass Chk Warn Chk Pass Chk Pass Chk Pass Chk Pass Chk Pass Chk Pass Chk Pass
High Limit .10000
Low Limit -.01000

Elem	Na8183	Ni2316	P_1782	Pb2203	S_1820	Sb2068	Se1960	Si2881	Sn1899
Line	818.326 { 41}	231.604 {446}	178.284 {489}	220.353 {453}	182.034 {485}	206.833 {463}	196.090 {472}	288.158 {117}	189.989 {477}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	59.651	.50247	10.446	.51857	2.3221	.52605	2.0931	26.119	1.9795
Stddev	.614	.00008	.010	.00064	.0045	.00061	.0072	.015	.0039
%RSD	1.0296	.01632	.09846	.12353	.19481	.11583	.34528	.05711	.19725
#1	60.085	.50253	10.439	.51812	2.3189	.52648	2.0982	26.130	1.9768
#2	59.217	.50241	10.454	.51903	2.3253	.52562	2.0880	26.109	1.9823

Check ? Chk Pass Chk Pass Chk Pass Chk Pass Chk Pass Chk Pass Chk Pass Chk Pass Chk Pass
High Limit
Low Limit

Elem	Sr4077	Th2837	Ti3349	Ti1908	U_3701	V_2924	Zn2062	Zr3391
Line	407.771 { 83}	283.730 {119}	334.904 {101}	190.856 {477}	370.152 { 91}	292.402 {115}	206.200 {163}	339.198 { 99}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	1.0109	1.0087	.94924	2.0132	2.1687	.47019	.47985	.48818
Stddev	.0014	.0050	.00105	.0049	.0250	.00047	.00240	.00090
%RSD	.13374	.49450	.11052	.24248	1.1526	.09972	.50029	.18412
#1	1.0119	1.0052	.94849	2.0097	2.1864	.46986	.47816	.48881
#2	1.0100	1.0122	.94998	2.0166	2.1511	.47052	.48155	.48754

Check ? Chk Pass Chk Pass Chk Pass Chk Pass Chk Pass Chk Pass Chk Pass Chk Pass
High Limit
Low Limit

Int. Std.	Y_2243	Y_3600	Y_3774
Line	224.306 {450}	360.073 { 94}	377.433 { 89}
Units	Cts/S	Cts/S	Cts/S
Avg	1446.3	30520.	5919.3
Stddev	1.0	74.	1.3
%RSD	.06614	.24324	.02219
#1	1447.0	30468.	5920.3
#2	1445.6	30573.	5918.4

Sample Name: 280-83087-F-8-E Acquired: 5/23/2016 17:45:33 Type: Unk
Method: 6500_026(v10) Mode: CONC Corr. Factor: 1.000000
User: kellyca Custom ID1: Custom ID2: Custom ID3:
Comment: 326260 6010B

Elem	Ag3280	Al3092	As1890	B_2089	Ba4554	Be3130	Bi2230	Ca3179	Cd2288
Line	328.068 {103}	309.271 {109}	189.042 {478}	208.959 {461}	455.403 { 74}	313.042 {108}	223.061 {451}	317.933 {106}	228.802 {447}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.00025	11.152	.01265	.45292	.12026	.00057	.00286	387.13	.00051
Stddev	.00032	.095	.00378	.00264	.00043	.00003	.00214	.19	.00004
%RSD	125.38	.85586	29.898	.58315	.35867	6.0525	75.048	.04953	7.1937

#1	.00003	11.084	.00998	.45479	.11995	.00055	.00437	386.99	.00054
#2	.00048	11.219	.01533	.45105	.12056	.00060	.00134	387.26	.00049

Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Elem	Co2286	Cr2055	Cu3247	Fe2599	K_7664	Li6707	Mg2790	Mn2576	Mo2020
Line	228.616 {447}	205.560 {464}	324.754 {104}	259.940 {130}	766.490 { 44}	670.784 { 50}	279.079 {121}2	257.610 {131}	202.030 {467}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.02472	.01932	.01273	15.068	7.5074	.06138	168.64	2.6734	.00348
Stddev	.00010	.00020	.00046	.011	.0243	.00014	.03	.0004	.00088
%RSD	.41338	1.0132	3.5883	.07020	.32424	.22571	.01660	.01361	25.284

#1	.02479	.01918	.01240	15.060	7.4902	.06128	168.62	2.6732	.00410
#2	.02464	.01945	.01305	15.075	7.5246	.06148	168.66	2.6737	.00285

Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Elem	Na8183	Ni2316	P_1782	Pb2203	S_1820	Sb2068	Se1960	Si2881	Sn1899
Line	818.326 { 41}	231.604 {446}	178.284 {489}	220.353 {453}	182.034 {485}	206.833 {463}	196.090 {472}	288.158 {117}	189.989 {477}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	51.896	.03370	.44696	.00390	F 308.36	.00237	.01250	27.679	-.00109
Stddev	.347	.00065	.00321	.00259	.05	.00040	.00149	.141	.00044
%RSD	.66952	1.9264	.71903	66.343	.01559	17.005	11.901	.50842	40.448

#1	51.651	.03324	.44468	.00573	308.40	.00209	.01145	27.579	-.00140
#2	52.142	.03416	.44923	.00207	308.33	.00266	.01355	27.778	-.00078

Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Fail	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit					200.00				
Low Limit					-.02000				

Elem	Sr4077	Th2837	Ti3349	Ti1908	U_3701	V_2924	Zn2062	Zr3391
Line	407.771 { 83}	283.730 {119}	334.904 {101}	190.856 {477}	370.152 { 91}	292.402 {115}	206.200 {163}	339.198 { 99}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.99245	.00211	.32220	.00314	-.00419	.01932	.05323	.00724
Stddev	.00024	.00031	.00227	.00203	.00462	.00076	.00035	.00090
%RSD	.02462	14.614	.70425	64.693	110.15	3.9498	.65192	12.431

#1	.99227	.00233	.32380	.00457	-.00746	.01986	.05298	.00660
#2	.99262	.00189	.32059	.00170	-.00093	.01878	.05347	.00788

Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit								
Low Limit								

Int. Std.	Y_2243	Y_3600	Y_3774
Line	224.306 {450}	360.073 { 94}	377.433 { 89}
Units	Cts/S	Cts/S	Cts/S
Avg	1364.1	29079.	5730.0
Stddev	.1	42.	5.1
%RSD	.00754	.14410	.08935

#1	1364.0	29050.	5726.3
#2	1364.1	29109.	5733.6

Sample Name: ccvh-3900196 Acquired: 5/23/2016 17:48:14 Type: QC
Method: 6500_026(v10) Mode: CONC Corr. Factor: 1.000000
User: kellyca Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	Ag3280	Al3092	As1890	B_2089	Ba4554	Be3130	Bi2230	Ca3179	Cd2288	Co2286	Cr2055	Cu3247	Fe2714
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.00167	48.091	-.00123	.00552	.00187	.00123	1.0769	-.00040	.00052	.00473	.00118	.00721	48.258
Stddev	.00020	.259	.00573	.00147	.00004	.00003	.0028	.00967	.00036	.00031	.00032	.00045	.132
%RSD	11.734	.53938	466.89	26.571	2.0560	2.4290	.25867	2446.3	69.829	6.5961	27.028	6.2474	.27296

#1	.00154	47.908	.00282	.00656	.00190	.00121	1.0749	.00644	.00026	.00495	.00141	.00689	48.165
#2	.00181	48.274	-.00528	.00448	.00184	.00125	1.0788	-.00723	.00078	.00451	.00096	.00753	48.351

Check ?	None	Chk Pass	None	None	None	None	Chk Pass	None	None	None	None	None	Chk Pass
Value													
Range													

Elem	K_7664	Li6707	Mg2790	Mn2576	Mo2020	Na8183	Ni2316	P_1782	Pb2203	S_1820	Sb2068	Se1960	Si2881
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.20322	.00317	.23624	.00083	-.00067	253.72	.00134	.00932	.00106	5.1305	.00490	.01095	.01689
Stddev	.01093	.00138	.00637	.00010	.00038	1.64	.00075	.00561	.00168	.0069	.00323	.00377	.01039
%RSD	5.3803	43.648	2.6961	11.936	56.518	.64732	55.959	60.165	158.75	.13497	65.920	34.405	61.531

#1	.21096	.00219	.24075	.00090	-.00040	252.56	.00188	.00535	-.00013	5.1256	.00261	.00829	.02424
#2	.19549	.00415	.23174	.00076	-.00094	254.88	.00081	.01328	.00225	5.1354	.00718	.01361	.00954

Check ?	None	None	None	None	None	Chk Pass	None	None	None	Chk Pass	None	None	None
Value													
Range													

Elem	Sn1899	Sr4077	Th2837	Ti3349	Tl1908	U_3701	V_2924	Zn2062	Zr3391
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.00412	.00184	5.0052	.02599	.00202	10.318	-.01490	-.00008	-.01337
Stddev	.00161	.00002	.0030	.00010	.00076	.016	.00085	.00025	.00349
%RSD	39.138	.90152	.05924	.38368	37.502	.15189	5.7185	325.20	26.093

#1	.00526	.00183	5.0031	.02606	.00148	10.329	-.01550	-.00025	-.01584
#2	.00298	.00185	5.0073	.02592	.00255	10.307	-.01430	.00010	-.01090

Check ?	None	None	Chk Pass	None	None	Chk Pass	None	None	None
Value									
Range									

Int. Std.	Y_2243	Y_3600	Y_3774
Units	Cts/S	Cts/S	Cts/S
Avg	1454.1	30550.	5873.0
Stddev	5.5	15.	16.9
%RSD	.37497	.04921	.28804

#1	1457.9	30539.	5885.0
#2	1450.2	30560.	5861.0

Sample Name: ccv-3900195 Acquired: 5/23/2016 17:51:05 Type: QC
Method: 6500_026(v10) Mode: CONC Corr. Factor: 1.000000
User: kellyca Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	Ag3280	Al1670	As1890	B_2089	Ba4554	Be3130	Bi2230	Ca3179	Cd2288	Co2286	Cr2055	Cu3247	Fe2599	K_7664
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.48147	.51679	1.0101	.53304	.49373	.49530	.00206	4.9934	.51155	.51320	.50502	.49528	2.4411	50.183
Stddev	.00130	.00124	.0056	.00050	.00253	.00313	.00211	.0437	.00040	.00085	.00158	.00125	.0179	.250
%RSD	.26942	.24032	.55938	.09417	.51220	.63130	102.43	.87592	.07741	.16596	.31274	.25259	.73355	.49869
#1	.48238	.51592	1.0141	.53268	.49194	.49309	.00057	4.9624	.51127	.51259	.50614	.49616	2.4284	50.006
#2	.48055	.51767	1.0061	.53339	.49551	.49751	.00356	5.0243	.51183	.51380	.50390	.49439	2.4537	50.360

Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	None	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Value														
Range														

Elem	Li6707	Mg2790	Mn2576	Mo2020	Na5895	Ni2316	P_1782	Pb2203	S_1820	Sb2068	Se1960	Si2881	Sn1899	Sr4077
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	1.0474	19.272	.48498	.51011	5.1789	.50540	1.0012	1.0476	.00881	1.0103	1.0269	4.9068	.99699	.47819
Stddev	.0063	.120	.00133	.00037	.0210	.00186	.0103	.0014	.00406	.0048	.0097	.0418	.00595	.00131
%RSD	.60223	.62103	.27328	.07246	.40640	.36797	1.0298	.12977	46.087	.47480	.94060	.85150	.59714	.27471
#1	1.0430	19.356	.48592	.50985	5.1640	.50408	.99387	1.0485	.00594	1.0069	1.0200	4.8773	1.0012	.47726
#2	1.0519	19.187	.48404	.51038	5.1938	.50671	1.0084	1.0466	.01168	1.0136	1.0337	4.9364	.99278	.47912

Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	None	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Value														
Range														

Elem	Th2837	Ti3349	Ti1908	U_3701	V_2924	Zn2062	Zr3391
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.00689	.46806	1.0368	.00926	.46699	.46746	.48606
Stddev	.00027	.00186	.0060	.00106	.00077	.00200	.00240
%RSD	3.9231	.39674	.57345	11.397	.16435	.42783	.49414
#1	.00670	.46937	1.0326	.00852	.46754	.46887	.48776
#2	.00708	.46675	1.0410	.01001	.46645	.46604	.48437

Check ?	None	Chk Pass	Chk Pass	None	Chk Pass	Chk Pass	Chk Pass
Value							
Range							

Int. Std.	Y_2243	Y_3600	Y_3774
Units	Cts/S	Cts/S	Cts/S
Avg	1495.7	31481.	5958.3
Stddev	.8	33.	40.3
%RSD	.05299	.10344	.67622
#1	1496.2	31458.	5986.8
#2	1495.1	31504.	5929.8

Sample Name: ccb Acquired: 5/23/2016 17:53:43 Type: QC
Method: 6500_026(v10) Mode: CONC Corr. Factor: 1.000000
User: kellyca Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	Ag3280	Al1670	As1890	B_2089	Ba4554	Be3130	Bi2230	Ca3179	Cd2288	Co2286	Cr2055	Cu3247
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.00057	.00037	.00049	W .00192	.00024	.00003	.00203	-.00105	.00015	-.00044	.00001	-.00097
Stddev	.00030	.00026	.00373	.00054	.00006	.00007	.00138	.00076	.00002	.00010	.00021	.00026
%RSD	52.889	71.455	759.87	27.927	26.174	193.73	68.173	72.156	14.009	22.530	2093.4	26.974
#1	.00035	.00018	.00313	.00154	.00020	-.00001	.00105	-.00159	.00017	-.00037	.00016	-.00115
#2	.00078	.00056	-.00215	.00230	.00029	.00008	.00301	-.00051	.00014	-.00051	-.00014	-.00078
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Warn	Chk Pass	Chk Pass	None	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit				.00156								
Low Limit				-.00156								
Elem	Fe2599	K_7664	Li6707	Mg2790	Mn2576	Mo2020	Na5895	Ni2316	P_1782	Pb2203	S_1820	Sb2068
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.00578	.06165	-.00069	.00404	.00001	-.00006	.02526	.00004	-.00074	-.00038	.00209	W .00433
Stddev	.00167	.01945	.00013	.00173	.00005	.00003	.00196	.00045	.00037	.00207	.00206	.00236
%RSD	28.869	31.549	18.286	42.698	572.26	51.499	7.7646	1127.8	50.454	541.32	98.403	54.601
#1	.00460	.07540	-.00060	.00282	.00004	-.00004	.02664	-.00028	-.00048	-.00185	.00064	.00266
#2	.00695	.04790	-.00078	.00527	-.00002	-.00009	.02387	.00035	-.00101	.00108	.00355	.00600
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	None	Chk Warn
High Limit												.00314
Low Limit												-.00314
Elem	Se1960	Si2881	Sn1899	Sr4077	Th2837	Ti3349	Ti1908	U_3701	V_2924	Zn2062	Zr3391	
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	
Avg	W .00912	.01851	.00061	.00011	.00179	.00013	.00030	.02182	.00039	.00043	.00032	
Stddev	.00080	.00978	.00105	.00002	.00025	.00021	.00188	.01587	.00047	.00045	.00144	
%RSD	8.7274	52.852	171.82	19.211	13.892	166.05	630.00	72.735	118.04	103.71	447.39	
#1	.00968	.02543	.00135	.00013	.00196	.00027	-.00103	.03304	.00072	.00011	.00134	
#2	.00856	.01159	-.00013	.00010	.00161	-.00002	.00163	.01060	.00007	.00074	-.00070	
Check ?	Chk Warn	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	
High Limit	.00486											
Low Limit	-.00486											
Int. Std.	Y_2243	Y_3600	Y_3774									
Units	Cts/S	Cts/S	Cts/S									
Avg	1505.7	32236.	5917.9									
Stddev	.1	1.	68.2									
%RSD	.00381	.00377	1.1522									
#1	1505.7	32235.	5966.1									
#2	1505.7	32236.	5869.7									

Sample Name: ccvl-3907489 Acquired: 5/23/2016 17:56:31 Type: QC
Method: 6500_026(v10) Mode: CONC Corr. Factor: 1.000000
User: kellyca Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	Ag3280	Al1670	As1890	B_2089	Ba4554	Be3130	Bi2230	Ca3179	Cd2288	Co2286	Cr2055	Cu3247
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.00987	.10749	.01197	.10589	.01012	.00097	.11976	.19258	.00545	.01038	.01067	.01396
Stddev	.00032	.00177	.00079	.00023	.00027	.00005	.00087	.00070	.00007	.00056	.00016	.00001
%RSD	3.2121	1.6497	6.5600	.21860	2.6298	5.0556	.72904	.36432	1.2607	5.4047	1.5312	.06028

#1	.00965	.10875	.01142	.10573	.00993	.00094	.11914	.19307	.00540	.01077	.01078	.01397
#2	.01010	.10624	.01253	.10605	.01031	.00101	.12038	.19208	.00550	.00998	.01055	.01396

Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Value												
Range												

Elem	Fe2599	K_7664	Li6707	Mg2790	Mn2576	Mo2020	Na5895	Ni2316	P_1782	Pb2203	S_1820	Sb2068
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.10673	3.0453	.01022	.19936	.01001	.02091	1.0502	.04207	2.9254	.01116	-.00124	.02311
Stddev	.00285	.0394	.00024	.00324	.00018	.00039	.0021	.00029	.0074	.00217	.00334	.00173
%RSD	2.6705	1.2955	2.3820	1.6250	1.7756	1.8832	.19815	.68499	.25202	19.419	269.55	7.4663

#1	.10875	3.0174	.01039	.19707	.00989	.02063	1.0487	.04228	2.9306	.01269	.00112	.02433
#2	.10472	3.0732	.01004	.20165	.01014	.02119	1.0516	.04187	2.9201	.00963	-.00360	.02189

Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	None	Chk Pass
Value												
Range												

Elem	Se1960	Si2881	Sn1899	Sr4077	Th2837	Ti3349	Ti1908	U_3701	V_2924	Zn2062	Zr3391
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	F .02454	.49635	.10315	.00976	.01738	.00956	.01781	.07469	.00940	.01872	.01491
Stddev	.00216	.00172	.00000	.00005	.00219	.00007	.00029	.02422	.00016	.00175	.00033
%RSD	8.7997	.34642	.00267	.53087	12.618	.74654	1.6019	32.428	1.7386	9.3591	2.2297

#1	.02607	.49514	.10315	.00972	.01583	.00961	.01761	.09181	.00929	.01996	.01468
#2	.02302	.49757	.10315	.00980	.01893	.00951	.01801	.05756	.00952	.01748	.01515

Check ?	Chk Fail	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Value	.01500										
Range	30.000%										

Int. Std.	Y_2243	Y_3600	Y_3774
Units	Cts/S	Cts/S	Cts/S
Avg	1521.3	32335.	5896.3
Stddev	1.4	56.	26.4
%RSD	.09280	.17231	.44788

#1	1522.3	32375.	5915.0
#2	1520.3	32296.	5877.6

Sample Name: MB 280-325227/1-A Acquired: 5/23/2016 17:59:19 Type: Unk
Method: 6500_026(v10) Mode: CONC Corr. Factor: 1.000000
User: kellyca Custom ID1: 5/17 Custom ID2: Custom ID3:
Comment: 325227 6010B

Elem	Ag3280	Al1670	As1890	B_2089	Ba4554	Be3130	Bi2230	Ca3179	Cd2288
Line	328.068 {103}	167.079 {502}	189.042 {478}	208.959 {461}	455.403 { 74}	313.042 {108}	223.061 {451}	317.933 {106}	228.802 {447}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.00032	.00316	-.00211	.00216	.00021	.00003	.00361	.01086	-.00011
Stddev	.00020	.00034	.00828	.00007	.00002	.00004	.00105	.00398	.00018
%RSD	61.045	10.793	392.34	3.2346	9.5236	141.33	29.202	36.617	156.70

#1	.00018	.00340	-.00797	.00221	.00019	.00005	.00436	.01367	-.00024
#2	.00046	.00292	.00375	.00211	.00022	.00000	.00287	.00805	.00001

Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Elem	Co2286	Cr2055	Cu3247	Fe2599	K_7664	Li6707	Mg2790	Mn2576	Mo2020
Line	228.616 {447}	205.560 {464}	324.754 {104}	259.940 {130}	766.490 { 44}	670.784 { 50}	279.079 {121}2	257.610 {131}	202.030 {467}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	-.00003	-.00011	-.00091	W .03046	.01870	-.00064	.00074	.00015	-.00051
Stddev	.00023	.00002	.00004	.00103	.00258	.00024	.00285	.00008	.00028
%RSD	676.77	21.114	4.5906	3.3696	13.781	37.015	385.55	52.632	54.267

#1	-.00020	-.00010	-.00088	.02973	.02052	-.00081	-.00127	.00009	-.00071
#2	.00013	-.00013	-.00094	.03119	.01688	-.00047	.00275	.00021	-.00032

Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Warn	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit				.03000					
Low Limit				-.05000					

Elem	Na5895	Ni2316	P_1782	Pb2203	S_1820	Sb2068	Se1960	Si2881	Sn1899
Line	589.592 { 57}	231.604 {446}	178.284 {489}	220.353 {453}	182.034 {485}	206.833 {463}	196.090 {472}	288.158 {117}	189.989 {477}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.01620	.00037	.00074	.00124	.00876	.00163	.00358	.01270	-.00063
Stddev	.00019	.00039	.00064	.00137	.00172	.00132	.00191	.00405	.00160
%RSD	1.1973	105.87	87.156	110.42	19.581	80.955	53.532	31.899	253.98

#1	.01607	.00009	.00028	.00221	.00997	.00257	.00493	.00983	.00050
#2	.01634	.00064	.00119	.00027	.00755	.00070	.00222	.01556	-.00176

Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Elem	Sr4077	Th2837	Ti3349	Ti1908	U_3701	V_2924	Zn2062	Zr3391
Line	407.771 { 83}	283.730 {119}	334.904 {101}	190.856 {477}	370.152 { 91}	292.402 {115}	206.200 {163}	339.198 { 99}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.00000	.00268	.00066	.00117	-.00626	.00009	.00085	.00056
Stddev	.00001	.00045	.00041	.00131	.00763	.00018	.00124	.00051
%RSD	332.88	16.749	62.203	111.63	121.79	197.69	145.86	89.941

#1	-.00000	.00236	.00095	.00025	-.01166	-.00004	.00173	.00021
#2	.00001	.00300	.00037	.00210	-.00087	.00022	-.00003	.00092

Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit								
Low Limit								

Int. Std.	Y_2243	Y_3600	Y_3774
Line	224.306 {450}	360.073 { 94}	377.433 { 89}
Units	Cts/S	Cts/S	Cts/S
Avg	1528.1	32629.	5961.6
Stddev	.9	49.	16.3
%RSD	.06017	.14930	.27415

#1	1527.5	32663.	5950.1
#2	1528.8	32595.	5973.2

Sample Name: LCS 280-325227/2-A Acquired: 5/23/2016 18:02:06 Type: Unk
Method: 6500_026(v10) Mode: CONC Corr. Factor: 1.000000
User: kellyca Custom ID1: Custom ID2: Custom ID3:
Comment: 325227 6010B

Elem	Ag3280	Al1670	As1890	B_2089	Ba4554	Be3130	Bi2230	Ca3179	Cd2288
Line	328.068 {103}	167.079 {502}	189.042 {478}	208.959 {461}	455.403 { 74}	313.042 {108}	223.061 {451}	317.933 {106}	228.802 {447}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.05211	2.0569	F 1.1053	F 1.1338	2.0847	.05260	F 2.3407	51.755	.10902
Stddev	.00047	.0040	.0009	.0000	.0025	.00016	.0111	.195	.00024
%RSD	.90426	.19692	.07814	.00230	.12143	.30932	.47194	.37718	.21598
#1	.05245	2.0541	1.1059	1.1338	2.0829	.05248	2.3485	51.617	.10885
#2	.05178	2.0598	1.1047	1.1338	2.0865	.05271	2.3329	51.893	.10919
Check ?	Chk Pass	Chk Pass	Chk Fail	Chk Fail	Chk Pass	Chk Pass	Chk Fail	Chk Pass	Chk Pass
High Limit			1.0900	1.1000			2.2000		
Low Limit			.86000	.89000			1.8000		
Elem	Co2286	Cr2055	Cu3247	Fe2599	K_7664	Li6707	Mg2790	Mn2576	Mo2020
Line	228.616 {447}	205.560 {464}	324.754 {104}	259.940 {130}	766.490 { 44}	670.784 { 50}	279.079 {121}2	257.610 {131}	202.030 {467}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.53283	F .21308	.26536	1.0561	54.040	1.1025	51.296	.50666	F 1.1026
Stddev	.00017	.00035	.00005	.0028	.024	.0015	.015	.00104	.0002
%RSD	.03254	.16298	.01816	.26249	.04375	.13935	.02941	.20622	.01545
#1	.53271	.21332	.26539	1.0542	54.023	1.1036	51.285	.50592	1.1027
#2	.53296	.21283	.26532	1.0581	54.056	1.1014	51.306	.50740	1.1024
Check ?	Chk Pass	Chk Fail	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Fail
High Limit		.05750							1.1000
Low Limit		.04300							.90000
Elem	Na8183	Ni2316	P_1782	Pb2203	S_1820	Sb2068	Se1960	Si2881	Sn1899
Line	818.326 { 41}	231.604 {446}	178.284 {489}	220.353 {453}	182.034 {485}	206.833 {463}	196.090 {472}	288.158 {117}	189.989 {477}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	54.805	.52315	10.980	.54212	F 2.2208	F .54500	2.1926	10.374	2.0664
Stddev	.005	.00117	.030	.00229	.0025	.00172	.0072	.085	.0025
%RSD	.00919	.22272	.27670	.42201	.11318	.31586	.32910	.82029	.12013
#1	54.808	.52398	11.001	.54373	2.2191	.54621	2.1977	10.314	2.0646
#2	54.801	.52233	10.958	.54050	2.2226	.54378	2.1875	10.434	2.0682
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Fail	Chk Fail	Chk Pass	Chk Pass	Chk Pass
High Limit					2.2000	.54000			
Low Limit					1.8000	.44000			
Elem	Sr4077	Th2837	Ti3349	Ti1908	U_3701	V_2924	Zn2062	Zr3391	
Line	407.771 { 83}	283.730 {119}	334.904 {101}	190.856 {477}	370.152 { 91}	292.402 {115}	206.200 {163}	339.198 { 99}	
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	
Avg	1.0022	1.0570	.99483	2.0989	2.2444	.49368	.50239	.50926	
Stddev	.0005	.0045	.00064	.0103	.0239	.00028	.00215	.00266	
%RSD	.05053	.42308	.06416	.48915	1.0643	.05660	.42870	.52152	
#1	1.0026	1.0539	.99438	2.1062	2.2275	.49388	.50086	.51114	
#2	1.0019	1.0602	.99528	2.0916	2.2613	.49348	.50391	.50738	
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	
High Limit									
Low Limit									
Int. Std.	Y_2243	Y_3600	Y_3774						
Line	224.306 {450}	360.073 { 94}	377.433 { 89}						
Units	Cts/S	Cts/S	Cts/S						
Avg	1446.1	30224.	5738.7						
Stddev	1.7	83.	21.7						
%RSD	.11802	.27487	.37836						
#1	1447.3	30283.	5754.0						
#2	1444.9	30165.	5723.3						

Sample Name: 280-83019-E-1-B Acquired: 5/23/2016 18:04:41 Type: Unk
Method: 6500_026(v10) Mode: CONC Corr. Factor: 1.000000
User: kellyca Custom ID1: Custom ID2: Custom ID3:
Comment: 325227 6010B

Elem	Ag3280	Al1670	As1890	B_2089	Ba4554	Be3130	Bi2230	Ca3179	Cd2288
Line	328.068 {103}	167.079 {502}	189.042 {478}	208.959 {461}	455.403 { 74}	313.042 {108}	223.061 {451}	317.933 {106}	228.802 {447}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.00049	.00178	.00274	.27871	.06170	.00007	.00413	168.82	-.00001
Stddev	.00006	.00017	.00601	.00009	.00009	.00000	.00099	1.29	.00006
%RSD	11.996	9.5850	219.40	.03338	.15269	4.7865	23.981	.76662	502.69

#1	.00053	.00190	.00699	.27877	.06164	.00007	.00483	167.90	.00003
#2	.00045	.00166	-.00151	.27864	.06177	.00007	.00343	169.73	-.00006

Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Elem	Co2286	Cr2055	Cu3247	Fe2599	K_7664	Li6707	Mg2790	Mn2576	Mo2020
Line	228.616 {447}	205.560 {464}	324.754 {104}	259.940 {130}	766.490 { 44}	670.784 { 50}	279.079 {121}2	257.610 {131}	202.030 {467}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.00070	.00020	.00109	.02842	3.2737	.01145	92.054	.00996	.00391
Stddev	.00014	.00009	.00022	.00014	.00073	.00034	.117	.00004	.00010
%RSD	20.181	43.417	20.263	.49771	.22401	2.9962	.12723	.41323	2.4950

#1	.00060	.00026	.00094	.02852	3.2789	.01169	92.137	.00999	.00385
#2	.00080	.00014	.00125	.02832	3.2685	.01121	91.971	.00993	.00398

Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Elem	Na8183	Ni2316	P_1782	Pb2203	S_1820	Sb2068	Se1960	Si2881	Sn1899
Line	818.326 { 41}	231.604 {446}	178.284 {489}	220.353 {453}	182.034 {485}	206.833 {463}	196.090 {472}	288.158 {117}	189.989 {477}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	41.190	.00211	.07137	-.00071	135.96	.00054	.00731	6.4874	-.00026
Stddev	.206	.00041	.00313	.00021	.51	.00253	.00562	.0480	.00088
%RSD	.50101	19.577	4.3885	29.117	.37473	464.49	76.872	.73974	333.71

#1	41.044	.00241	.07358	-.00056	135.60	.00233	.00334	6.4535	-.00089
#2	41.336	.00182	.06915	-.00085	136.32	-.00124	.01129	6.5214	.00036

Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Elem	Sr4077	Th2837	Ti3349	Ti1908	U_3701	V_2924	Zn2062	Zr3391	
Line	407.771 { 83}	283.730 {119}	334.904 {101}	190.856 {477}	370.152 { 91}	292.402 {115}	206.200 {163}	339.198 { 99}	
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	
Avg	2.4431	.00242	.00049	.00405	.00624	.00134	.00064	.00078	
Stddev	.0136	.00048	.00007	.00209	.00845	.00060	.00122	.00179	
%RSD	.55749	19.980	14.178	51.702	135.36	45.275	191.95	229.62	

#1	2.4334	.00208	.00044	.00257	.01222	.00176	-.00023	-.00048	
#2	2.4527	.00276	.00054	.00553	.00027	.00091	.00150	.00204	

Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	
High Limit									
Low Limit									

Int. Std.	Y_2243	Y_3600	Y_3774						
Line	224.306 {450}	360.073 { 94}	377.433 { 89}						
Units	Cts/S	Cts/S	Cts/S						
Avg	1415.6	29793.	5695.1						
Stddev	1.0	106.	62.1						
%RSD	.06918	.35610	1.0906						

#1	1416.3	29868.	5739.0						
#2	1414.9	29718.	5651.2						

Sample Name: 280-83019-E-1-Bsd@5 Acquired: 5/23/2016 18:07:25 Type: Unk
Method: 6500_026(v10) Mode: CONC Corr. Factor: 1.000000
User: kellyca Custom ID1: Custom ID2: Custom ID3:
Comment: 325227 6010B

Elem	Ag3280	Al1670	As1890	B_2089	Ba4554	Be3130	Bi2230	Ca3179	Cd2288
Line	328.068 {103}	167.079 {502}	189.042 {478}	208.959 {461}	455.403 { 74}	313.042 {108}	223.061 {451}	317.933 {106}	228.802 {447}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.00028	.00095	.00345	.05784	.01244	-.00004	.00575	34.011	.00000
Stddev	.00004	.00005	.00184	.00041	.00013	.00003	.00082	.025	.00009
%RSD	13.569	5.5238	53.363	.71472	1.0401	78.948	14.191	.07477	4655.3

#1	.00031	.00099	.00475	.05754	.01253	-.00007	.00633	34.029	-.00006
#2	.00025	.00092	.00215	.05813	.01235	-.00002	.00517	33.993	.00006

Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Elem	Co2286	Cr2055	Cu3247	Fe2599	K_7664	Li6707	Mg2790	Mn2576	Mo2020
Line	228.616 {447}	205.560 {464}	324.754 {104}	259.940 {130}	766.490 { 44}	670.784 { 50}	279.079 {121}2	257.610 {131}	202.030 {467}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	-.00018	.00015	-.00055	.02008	.62876	.00185	18.471	.00207	.00050
Stddev	.00022	.00009	.00044	.00240	.03960	.00041	.048	.00003	.00006
%RSD	119.23	61.754	80.655	11.969	6.2978	22.165	.25751	1.6666	11.601

#1	-.00003	.00009	-.00024	.01838	.65676	.00214	18.438	.00210	.00054
#2	-.00034	.00022	-.00086	.02178	.60076	.00156	18.505	.00205	.00045

Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Elem	Na5895	Ni2316	P_1782	Pb2203	S_1820	Sb2068	Se1960	Si2881	Sn1899
Line	589.592 { 57}	231.604 {446}	178.284 {489}	220.353 {453}	182.034 {485}	206.833 {463}	196.090 {472}	288.158 {117}	189.989 {477}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	7.9531	.00046	.01680	.00073	26.211	-.00035	.00842	1.2852	-.00098
Stddev	.0249	.00008	.00006	.00262	.041	.00107	.00478	.0051	.00079
%RSD	.31270	16.728	.32940	359.10	.15610	301.79	56.814	.39583	81.255

#1	7.9355	.00040	.01684	-.00112	26.183	-.00111	.00504	1.2888	-.00042
#2	7.9707	.00051	.01676	.00258	26.240	.00040	.01180	1.2816	-.00154

Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Elem	Sr4077	Th2837	Ti3349	Ti1908	U_3701	V_2924	Zn2062	Zr3391
Line	407.771 { 83}	283.730 {119}	334.904 {101}	190.856 {477}	370.152 { 91}	292.402 {115}	206.200 {163}	339.198 { 99}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.49002	.00075	-.00015	.00050	-.00565	.00030	-.00076	.00107
Stddev	.00123	.00148	.00003	.00096	.00298	.00019	.00088	.00127
%RSD	.25080	197.43	23.429	193.18	52.697	62.935	115.33	118.62

#1	.49089	.00180	-.00012	.00118	-.00775	.00016	-.00139	.00017
#2	.48915	-.00030	-.00017	-.00018	-.00354	.00043	-.00014	.00197

Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit								
Low Limit								

Int. Std.	Y_2243	Y_3600	Y_3774
Line	224.306 {450}	360.073 { 94}	377.433 { 89}
Units	Cts/S	Cts/S	Cts/S
Avg	1492.5	31423.	5799.8
Stddev	3.9	95.	3.9
%RSD	.26056	.30227	.06783

#1	1495.2	31490.	5802.6
#2	1489.7	31356.	5797.0

Sample Name: 280-83019-E-1-C MS Acquired: 5/23/2016 18:10:10 Type: Unk

Method: 6500_026(v10) Mode: CONC Corr. Factor: 1.000000

User: kellyca Custom ID1: Custom ID2: Custom ID3:

Comment: 325227 6010B

Elem	Ag3280	Al1670	As1890	B_2089	Ba4554	Be3130	Bi2230	Ca3179	Cd2288
Line	328.068 {103}	167.079 {502}	189.042 {478}	208.959 {461}	455.403 { 74}	313.042 {108}	223.061 {451}	317.933 {106}	228.802 {447}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.05281	1.9821	1.1201	1.4140	2.1243	.05136	2.3401	221.49	.10935
Stddev	.00069	.0052	.0052	.0072	.0061	.00020	.0133	.26	.00009
%RSD	1.3045	.26029	.46021	.51134	.28849	.38031	.56738	.11672	.08357

#1	.05232	1.9857	1.1238	1.4192	2.1200	.05150	2.3495	221.67	.10941
#2	.05329	1.9784	1.1165	1.4089	2.1286	.05122	2.3307	221.31	.10929

Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Elem	Co2286	Cr2055	Cu3247	Fe2599	K_7664	Li6707	Mg2790	Mn2576	Mo2020
Line	228.616 {447}	205.560 {464}	324.754 {104}	259.940 {130}	766.490 { 44}	670.784 { 50}	279.079 {121}2	257.610 {131}	202.030 {467}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.51330	W .20869	.26843	1.0322	58.260	1.1355	144.07	.49912	1.0886
Stddev	.00150	.00057	.00059	.0096	.163	.0042	.31	.00180	.0029
%RSD	.29203	.27329	.21971	.93143	.27909	.36719	.21445	.36159	.26665

#1	.51436	.20910	.26801	1.0390	58.145	1.1325	143.85	.49784	1.0907
#2	.51224	.20829	.26885	1.0254	58.375	1.1384	144.29	.50040	1.0866

Check ?	Chk Pass	Chk Warn	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit		.10000							
Low Limit		-.01000							

Elem	Na8183	Ni2316	P_1782	Pb2203	S_1820	Sb2068	Se1960	Si2881	Sn1899
Line	818.326 { 41}	231.604 {446}	178.284 {489}	220.353 {453}	182.034 {485}	206.833 {463}	196.090 {472}	288.158 {117}	189.989 {477}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	96.972	.50407	11.347	.52415	144.83	.55709	2.2323	16.898	2.0243
Stddev	.055	.00124	.028	.00367	.56	.00347	.0065	.035	.0029
%RSD	.05687	.24522	.24653	.69944	.38567	.62239	.28978	.20466	.14056

#1	97.011	.50494	11.366	.52674	145.23	.55955	2.2369	16.874	2.0223
#2	96.933	.50320	11.327	.52156	144.44	.55464	2.2278	16.923	2.0263

Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Elem	Sr4077	Th2837	Ti3349	Ti1908	U_3701	V_2924	Zn2062	Zr3391	
Line	407.771 { 83}	283.730 {119}	334.904 {101}	190.856 {477}	370.152 { 91}	292.402 {115}	206.200 {163}	339.198 { 99}	
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	
Avg	3.4752	1.0395	.97194	1.9779	2.1762	.48227	.47642	.49886	
Stddev	.0055	.0074	.00030	.0094	.0047	.00292	.00092	.00115	
%RSD	.15928	.71424	.03087	.47390	.21446	.60621	.19338	.23059	

#1	3.4713	1.0343	.97215	1.9845	2.1729	.48020	.47708	.49805	
#2	3.4791	1.0448	.97172	1.9712	2.1795	.48434	.47577	.49968	

Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	
High Limit									
Low Limit									

Int. Std.	Y_2243	Y_3600	Y_3774						
Line	224.306 {450}	360.073 { 94}	377.433 { 89}						
Units	Cts/S	Cts/S	Cts/S						
Avg	1372.4	29028.	5641.9						
Stddev	.9	38.	.6						
%RSD	.06771	.13005	.01068						

#1	1371.7	29054.	5642.3						
#2	1373.0	29001.	5641.4						

Sample Name: 280-83019-E-1-D MSD Acquired: 5/23/2016 18:12:45 Type: Unk
Method: 6500_026(v10) Mode: CONC Corr. Factor: 1.000000
User: kellyca Custom ID1: Custom ID2: Custom ID3:
Comment: 325227 6010B

Elem	Ag3280	Al1670	As1890	B_2089	Ba4554	Be3130	Bi2230	Ca3179	Cd2288
Line	328.068 {103}	167.079 {502}	189.042 {478}	208.959 {461}	455.403 { 74}	313.042 {108}	223.061 {451}	317.933 {106}	228.802 {447}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.05236	1.9780	1.1244	1.4149	2.1266	.05092	2.3450	218.58	.10900
Stddev	.00059	.0008	.0016	.0013	.0081	.00008	.0130	.19	.00036
%RSD	1.1280	.04178	.14474	.08988	.38107	.15543	.55601	.08687	.33079

#1	.05195	1.9786	1.1256	1.4158	2.1209	.05098	2.3543	218.45	.10925
#2	.05278	1.9774	1.1233	1.4140	2.1324	.05087	2.3358	218.71	.10874

Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Elem	Co2286	Cr2055	Cu3247	Fe2599	K_7664	Li6707	Mg2790	Mn2576	Mo2020
Line	228.616 {447}	205.560 {464}	324.754 {104}	259.940 {130}	766.490 { 44}	670.784 { 50}	279.079 {121}2	257.610 {131}	202.030 {467}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.51437	W .20859	.26758	1.0557	58.161	1.1376	143.57	.49800	1.0891
Stddev	.00041	.00022	.00013	.0021	.233	.0049	.06	.00031	.0011
%RSD	.07983	.10601	.04738	.19384	.40071	.43216	.03842	.06278	.10265

#1	.51466	.20875	.26749	1.0542	57.996	1.1341	143.61	.49822	1.0899
#2	.51408	.20844	.26767	1.0571	58.326	1.1411	143.53	.49778	1.0883

Check ?	Chk Pass	Chk Warn	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit		.10000							
Low Limit		-.01000							

Elem	Na8183	Ni2316	P_1782	Pb2203	S_1820	Sb2068	Se1960	Si2881	Sn1899
Line	818.326 { 41}	231.604 {446}	178.284 {489}	220.353 {453}	182.034 {485}	206.833 {463}	196.090 {472}	288.158 {117}	189.989 {477}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	96.953	.50632	11.374	.52282	144.58	.55166	2.2441	16.683	2.0188
Stddev	.728	.00089	.047	.00757	.47	.00240	.0102	.005	.0029
%RSD	.75081	.17512	.41520	1.4479	.32175	.43551	.45519	.03179	.14329

#1	96.438	.50569	11.407	.51747	144.91	.55335	2.2369	16.687	2.0168
#2	97.467	.50695	11.341	.52817	144.26	.54996	2.2514	16.679	2.0209

Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Elem	Sr4077	Th2837	Ti3349	Ti1908	U_3701	V_2924	Zn2062	Zr3391	
Line	407.771 { 83}	283.730 {119}	334.904 {101}	190.856 {477}	370.152 { 91}	292.402 {115}	206.200 {163}	339.198 { 99}	
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	
Avg	3.4566	1.0405	.96678	1.9830	2.1836	.48255	.47515	.49759	
Stddev	.0150	.0058	.00144	.0052	.0307	.00030	.00047	.00192	
%RSD	.43322	.55871	.14930	.26036	1.4045	.06225	.09811	.38658	

#1	3.4460	1.0364	.96576	1.9866	2.2052	.48276	.47482	.49895	
#2	3.4672	1.0447	.96781	1.9793	2.1619	.48233	.47548	.49623	

Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	
High Limit									
Low Limit									

Int. Std.	Y_2243	Y_3600	Y_3774						
Line	224.306 {450}	360.073 { 94}	377.433 { 89}						
Units	Cts/S	Cts/S	Cts/S						
Avg	1374.0	29126.	5744.0						
Stddev	.5	6.	5.0						
%RSD	.03979	.01956	.08763						

#1	1373.6	29130.	5740.4						
#2	1374.3	29122.	5747.5						

Sample Name: 280-83087-F-8-A Acquired: 5/23/2016 18:15:18 Type: Unk
Method: 6500_026(v10) Mode: CONC Corr. Factor: 1.000000
User: kellyca Custom ID1: Custom ID2: Custom ID3:
Comment: 325227 6010B

Elem	Ag3280	Al3092	As1890	B_2089	Ba4554	Be3130	Bi2230	Ca3179	Cd2288
Line	328.068 {103}	309.271 {109}	189.042 {478}	208.959 {461}	455.403 { 74}	313.042 {108}	223.061 {451}	317.933 {106}	228.802 {447}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.00049	9.3340	.00885	.45679	.09460	.00045	-.00147	390.61	.00067
Stddev	.00062	.0253	.00146	.00352	.00027	.00001	.00095	.33	.00026
%RSD	125.13	.27085	16.518	.77113	.28915	1.7470	64.674	.08486	38.360

#1	.00093	9.3519	.00988	.45928	.09441	.00046	-.00080	390.84	.00049
#2	.00006	9.3161	.00781	.45430	.09480	.00044	-.00214	390.37	.00086

Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Elem	Co2286	Cr2055	Cu3247	Fe2599	K_7664	Li6707	Mg2790	Mn2576	Mo2020
Line	228.616 {447}	205.560 {464}	324.754 {104}	259.940 {130}	766.490 { 44}	670.784 { 50}	279.079 {121}2	257.610 {131}	202.030 {467}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.02332	.01545	.01083	12.633	7.0296	.06046	171.00	2.6993	.00296
Stddev	.00006	.00057	.00017	.023	.00229	.00076	.12	.0046	.00031
%RSD	.24658	3.6953	1.5750	.18410	.32610	1.2549	.06931	.16948	10.351

#1	.02328	.01585	.01095	12.616	7.0134	.05993	170.91	2.7025	.00275
#2	.02336	.01504	.01071	12.649	7.0458	.06100	171.08	2.6961	.00318

Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Elem	Na8183	Ni2316	P_1782	Pb2203	S_1820	Sb2068	Se1960	Si2881	Sn1899
Line	818.326 { 41}	231.604 {446}	178.284 {489}	220.353 {453}	182.034 {485}	206.833 {463}	196.090 {472}	288.158 {117}	189.989 {477}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	52.571	.02939	.43391	.00642	F 311.60	.00272	.01080	24.719	-.00091
Stddev	.476	.00041	.00708	.00280	.50	.00182	.00023	.119	.00220
%RSD	.90464	1.4019	1.6311	43.630	.16157	66.737	2.1180	.48211	241.04

#1	52.235	.02910	.43891	.00840	311.96	.00401	.01064	24.635	-.00247
#2	52.908	.02968	.42890	.00444	311.25	.00144	.01096	24.804	.00064

Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Fail	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit					200.00				
Low Limit					-.02000				

Elem	Sr4077	Th2837	Ti3349	Ti1908	U_3701	V_2924	Zn2062	Zr3391	
Line	407.771 { 83}	283.730 {119}	334.904 {101}	190.856 {477}	370.152 { 91}	292.402 {115}	206.200 {163}	339.198 { 99}	
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	
Avg	1.0131	.00254	.28514	.00223	.00853	.01640	.04609	.00902	
Stddev	.0001	.00170	.00174	.00208	.01255	.00137	.00080	.00111	
%RSD	.01016	66.785	.60899	93.201	147.13	8.3410	1.7414	12.260	

#1	1.0131	.00134	.28636	.00076	-.00034	.01543	.04666	.00824	
#2	1.0130	.00374	.28391	.00370	.01740	.01736	.04553	.00981	

Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	
High Limit									
Low Limit									

Int. Std.	Y_2243	Y_3600	Y_3774						
Line	224.306 {450}	360.073 { 94}	377.433 { 89}						
Units	Cts/S	Cts/S	Cts/S						
Avg	1358.2	28881.	5703.7						
Stddev	.4	12.	33.4						
%RSD	.03007	.04134	.58497						

#1	1358.5	28890.	5680.1						
#2	1357.9	28873.	5727.3						

Sample Name: 280-83087-F-9-A Acquired: 5/23/2016 18:18:00 Type: Unk
Method: 6500_026(v10) Mode: CONC Corr. Factor: 1.000000
User: kellyca Custom ID1: Custom ID2: Custom ID3:
Comment: 325227 6010B

Elem	Ag3280	Al1670	As1890	B_2089	Ba4554	Be3130	Bi2230	Ca3179	Cd2288
Line	328.068 {103}	167.079 {502}	189.042 {478}	208.959 {461}	455.403 { 74}	313.042 {108}	223.061 {451}	317.933 {106}	228.802 {447}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.00056	.19547	.00265	.10382	.10761	.00003	.00240	143.70	.00010
Stddev	.00029	.00000	.00244	.00127	.00007	.00005	.00109	.09	.00015
%RSD	52.289	.00188	92.283	1.2248	.06669	187.04	45.505	.06426	144.19

#1	.00077	.19548	.00438	.10292	.10756	.00007	.00318	143.64	.00021
#2	.00035	.19547	.00092	.10472	.10766	-.00001	.00163	143.77	-.00000

Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Elem	Co2286	Cr2055	Cu3247	Fe2599	K_7664	Li6707	Mg2790	Mn2576	Mo2020
Line	228.616 {447}	205.560 {464}	324.754 {104}	259.940 {130}	766.490 { 44}	670.784 { 50}	279.079 {121}2	257.610 {131}	202.030 {467}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.00103	.00063	.00362	.87070	14.696	.01143	55.650	.07457	.00081
Stddev	.00014	.00039	.00042	.00016	.011	.00075	.061	.00007	.00014
%RSD	13.942	61.740	11.589	.01826	.07151	6.5524	.10880	.08963	16.782

#1	.00114	.00091	.00333	.87082	14.704	.01196	55.607	.07452	.00072
#2	.00093	.00036	.00392	.87059	14.689	.01090	55.693	.07462	.00091

Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Elem	Na8183	Ni2316	P_1782	Pb2203	S_1820	Sb2068	Se1960	Si2881	Sn1899
Line	818.326 { 41}	231.604 {446}	178.284 {489}	220.353 {453}	182.034 {485}	206.833 {463}	196.090 {472}	288.158 {117}	189.989 {477}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	28.529	.00433	.02701	-.00112	103.05	.00009	.00867	5.5905	.00027
Stddev	.062	.00033	.00203	.00020	.34	.00119	.00202	.0088	.00125
%RSD	.21637	7.5867	7.5054	18.124	.33200	1314.3	23.258	.15767	455.53

#1	28.573	.00410	.02845	-.00126	102.81	.00093	.01009	5.5843	-.00061
#2	28.485	.00456	.02558	-.00098	103.29	-.00075	.00724	5.5968	.00116

Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Elem	Sr4077	Th2837	Ti3349	Ti1908	U_3701	V_2924	Zn2062	Zr3391
Line	407.771 { 83}	283.730 {119}	334.904 {101}	190.856 {477}	370.152 { 91}	292.402 {115}	206.200 {163}	339.198 { 99}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.42420	.00136	.00508	.00160	-.00015	.00213	.00022	.00065
Stddev	.00061	.00036	.00030	.00046	.00222	.00026	.00006	.00121
%RSD	.14312	26.200	5.9487	28.996	1459.3	12.278	26.067	187.14

#1	.42377	.00111	.00487	.00127	-.00172	.00231	.00026	.00150
#2	.42463	.00161	.00530	.00193	.00142	.00194	.00018	-.00021

Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit								
Low Limit								

Int. Std.	Y_2243	Y_3600	Y_3774
Line	224.306 {450}	360.073 { 94}	377.433 { 89}
Units	Cts/S	Cts/S	Cts/S
Avg	1424.0	30156.	5797.7
Stddev	4.1	8.	1.1
%RSD	.28702	.02672	.01907

#1	1426.9	30151.	5798.4
#2	1421.1	30162.	5796.9

Sample Name: 280-83087-F-10-A Acquired: 5/23/2016 18:20:44 Type: Unk
Method: 6500_026(v10) Mode: CONC Corr. Factor: 1.000000
User: kellyca Custom ID1: Custom ID2: Custom ID3:
Comment: 325227 6010B

Elem	Ag3280	Al1670	As1890	B_2089	Ba4554	Be3130	Bi2230	Ca3179	Cd2288
Line	328.068 {103}	167.079 {502}	189.042 {478}	208.959 {461}	455.403 { 74}	313.042 {108}	223.061 {451}	317.933 {106}	228.802 {447}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.00020	.12974	-.00119	.23162	.01448	.00005	.00607	404.19	.00018
Stddev	.00046	.00069	.00158	.00016	.00011	.00001	.00528	2.24	.00026
%RSD	224.03	.53048	132.14	.06866	.79281	17.066	86.969	.55511	144.23

#1	.00053	.12926	-.00231	.23151	.01440	.00006	.00234	402.60	-.00000
#2	-.00012	.13023	-.00008	.23173	.01456	.00004	.00981	405.78	.00036

Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Elem	Co2286	Cr2055	Cu3247	Fe2599	K_7664	Li6707	Mg2790	Mn2576	Mo2020
Line	228.616 {447}	205.560 {464}	324.754 {104}	259.940 {130}	766.490 { 44}	670.784 { 50}	279.079 {121}2	257.610 {131}	202.030 {467}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.00108	.00053	.00075	4.7242	6.3608	.03033	363.02	.62627	-.00055
Stddev	.00048	.00008	.00039	.0002	.0049	.00015	1.20	.00281	.00045
%RSD	44.496	14.585	52.489	.00448	.07658	.48993	.33062	.44810	81.518

#1	.00074	.00058	.00102	4.7243	6.3643	.03022	362.17	.62429	-.00087
#2	.00142	.00047	.00047	4.7240	6.3574	.03043	363.87	.62825	-.00023

Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Elem	Na8183	Ni2316	P_1782	Pb2203	S_1820	Sb2068	Se1960	Si2881	Sn1899
Line	818.326 { 41}	231.604 {446}	178.284 {489}	220.353 {453}	182.034 {485}	206.833 {463}	196.090 {472}	288.158 {117}	189.989 {477}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	31.908	.00398	.03325	.00246	F 657.87	.00060	.00471	6.0466	-.00187
Stddev	.202	.00005	.00142	.00234	.23	.00261	.00587	.0165	.00217
%RSD	.63367	1.3519	4.2683	94.953	.03445	438.04	124.62	.27370	116.24

#1	31.765	.00394	.03225	.00411	658.03	.00244	.00886	6.0583	-.00341
#2	32.051	.00402	.03426	.00081	657.71	-.00125	.00056	6.0349	-.00033

Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Fail	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit					200.00				
Low Limit					-.02000				

Elem	Sr4077	Th2837	Ti3349	Ti1908	U_3701	V_2924	Zn2062	Zr3391	
Line	407.771 { 83}	283.730 {119}	334.904 {101}	190.856 {477}	370.152 { 91}	292.402 {115}	206.200 {163}	339.198 { 99}	
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	
Avg	.83716	-.00190	.00474	.00038	-.00099	.00165	.00305	.00147	
Stddev	.00210	.00128	.00003	.00282	.00558	.00036	.00027	.00139	
%RSD	.25046	67.248	.68711	743.43	565.55	22.029	9.0035	94.548	

#1	.83567	-.00281	.00471	-.00161	.00296	.00139	.00285	.00246	
#2	.83864	-.00100	.00476	.00237	-.00493	.00190	.00324	.00049	

Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	
High Limit									
Low Limit									

Int. Std.	Y_2243	Y_3600	Y_3774						
Line	224.306 {450}	360.073 { 94}	377.433 { 89}						
Units	Cts/S	Cts/S	Cts/S						
Avg	1329.2	28419.	5646.9						
Stddev	.2	145.	12.8						
%RSD	.01391	.51094	.22610						

#1	1329.3	28521.	5655.9						
#2	1329.1	28316.	5637.9						

Sample Name: ccvh-3900196 Acquired: 5/23/2016 18:23:34 Type: QC
Method: 6500_026(v10) Mode: CONC Corr. Factor: 1.000000
User: kellyca Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	Ag3280	Al3092	As1890	B_2089	Ba4554	Be3130	Bi2230	Ca3179	Cd2288	Co2286	Cr2055	Cu3247	Fe2714
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.00125	48.167	-.00036	.00457	.00193	.00131	1.0660	-.00338	.00062	.00476	.00092	.00649	48.172
Stddev	.00062	.074	.00417	.00003	.00026	.00002	.0064	.00585	.00007	.00006	.00013	.00053	.116
%RSD	49.426	.15380	1164.5	.66836	13.437	1.2435	.60371	173.29	11.190	1.1593	13.816	8.1448	.24100

#1	.00169	48.114	-.00330	.00459	.00175	.00132	1.0705	.00076	.00057	.00472	.00101	.00612	48.089
#2	.00081	48.219	.00259	.00455	.00211	.00130	1.0614	-.00751	.00066	.00480	.00083	.00686	48.254

Check ?	None	Chk Pass	None	None	None	None	Chk Pass	None	None	None	None	None	Chk Pass
Value													
Range													

Elem	K_7664	Li6707	Mg2790	Mn2576	Mo2020	Na8183	Ni2316	P_1782	Pb2203	S_1820	Sb2068	Se1960	Si2881
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.15125	.00348	.23877	.00079	-.00138	255.16	.00058	.01078	.00125	5.1055	.00204	.01481	.02631
Stddev	.00655	.00023	.00102	.00003	.00045	1.26	.00046	.00391	.00014	.0101	.00376	.00385	.02712
%RSD	4.3275	6.6665	.42834	3.4907	32.525	.49406	80.185	36.224	11.066	.19890	184.49	26.020	103.05

#1	.15588	.00332	.23949	.00078	-.00169	254.27	.00025	.00802	.00134	5.1126	-.00062	.01754	.00714
#2	.14662	.00364	.23804	.00081	-.00106	256.05	.00091	.01354	.00115	5.0983	.00469	.01209	.04549

Check ?	None	None	None	None	None	Chk Pass	None	None	None	Chk Pass	None	None	None
Value													
Range													

Elem	Sn1899	Sr4077	Th2837	Ti3349	Tl1908	U_3701	V_2924	Zn2062	Zr3391
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.00336	.00189	5.0156	.02582	.00010	10.360	-.01524	-.00081	-.01128
Stddev	.00248	.00005	.0054	.00006	.00266	.036	.00002	.00005	.00249
%RSD	73.606	2.6306	.10752	.21678	2691.2	.35069	.15420	5.6223	22.113

#1	.00511	.00185	5.0195	.02586	-.00178	10.334	-.01522	-.00077	-.01305
#2	.00161	.00192	5.0118	.02578	.00198	10.386	-.01525	-.00084	-.00952

Check ?	None	None	Chk Pass	None	None	Chk Pass	None	None	None
Value									
Range									

Int. Std.	Y_2243	Y_3600	Y_3774
Units	Cts/S	Cts/S	Cts/S
Avg	1452.2	30372.	5821.5
Stddev	4.2	37.	5.5
%RSD	.28607	.12184	.09454

#1	1449.3	30398.	5825.4
#2	1455.1	30345.	5817.6

Sample Name: ccv-3900195 Acquired: 5/23/2016 18:26:26 Type: QC
Method: 6500_026(v10) Mode: CONC Corr. Factor: 1.000000
User: kellyca Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	Ag3280	Al1670	As1890	B_2089	Ba4554	Be3130	Bi2230	Ca3179	Cd2288	Co2286	Cr2055	Cu3247	Fe2599	K_7664
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.48667	.53128	1.0126	.53944	.49551	.49875	.00296	4.9398	.52020	.51752	.50914	.49612	2.4599	50.572
Stddev	.00297	.00622	.0011	.00148	.00073	.00116	.00457	.0059	.00051	.00068	.00097	.00170	.0227	.002
%RSD	.60928	1.1712	.11143	.27365	.14643	.23186	154.30	.11917	.09866	.13129	.19148	.34262	.92473	.00433

#1	.48457	.53568	1.0118	.53840	.49500	.49957	-.00027	4.9357	.51983	.51704	.50983	.49492	2.4760	50.571
#2	.48877	.52688	1.0134	.54048	.49602	.49793	.00620	4.9440	.52056	.51800	.50845	.49732	2.4438	50.574

Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	None	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Value														
Range														

Elem	Li6707	Mg2790	Mn2576	Mo2020	Na5895	Ni2316	P_1782	Pb2203	S_1820	Sb2068	Se1960	Si2881	Sn1899	Sr4077
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	1.0525	19.476	.49011	.51556	5.2606	.50620	1.0116	1.0535	.01857	1.0094	1.0219	4.9648	1.0022	.47839
Stddev	.0036	.093	.00285	.00092	.0181	.00107	.0033	.0006	.00078	.0058	.0004	.0052	.0007	.00063
%RSD	.33914	.47901	.58087	.17833	.34364	.21190	.32711	.06030	4.2129	.57124	.03733	.10498	.07416	.13093

#1	1.0500	19.411	.48810	.51491	5.2734	.50696	1.0139	1.0530	.01912	1.0135	1.0216	4.9611	1.0027	.47795
#2	1.0550	19.542	.49212	.51621	5.2478	.50544	1.0092	1.0539	.01801	1.0053	1.0221	4.9684	1.0017	.47884

Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	None	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Value														
Range														

Elem	Th2837	Ti3349	Ti1908	U_3701	V_2924	Zn2062	Zr3391
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.00629	.46908	1.0395	.02792	.46909	.48123	.49461
Stddev	.00107	.00118	.0006	.01405	.00274	.00581	.00222
%RSD	17.013	.25115	.05708	50.333	.58316	1.2070	.44850

#1	.00553	.46825	1.0400	.03785	.46716	.47713	.49304
#2	.00704	.46991	1.0391	.01798	.47102	.48534	.49618

Check ?	None	Chk Pass	Chk Pass	None	Chk Pass	Chk Pass	Chk Pass
Value							
Range							

Int. Std.	Y_2243	Y_3600	Y_3774
Units	Cts/S	Cts/S	Cts/S
Avg	1496.2	31525.	5935.1
Stddev	3.7	147.	5.5
%RSD	.24853	.46601	.09286

#1	1498.9	31629.	5939.0
#2	1493.6	31421.	5931.2

Sample Name: ccb Acquired: 5/23/2016 18:29:04 Type: QC
Method: 6500_026(v10) Mode: CONC Corr. Factor: 1.000000
User: kellyca Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	Ag3280	Al1670	As1890	B_2089	Ba4554	Be3130	Bi2230	Ca3179	Cd2288	Co2286	Cr2055
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.00052	.00068	-.00075	W .00290	.00026	.00005	.00093	-.00221	-.00001	-.00014	-.00000
Stddev	.00028	.00042	.00386	.00059	.00003	.00006	.00050	.00119	.00022	.00005	.00003
%RSD	53.253	61.793	517.47	20.283	10.853	113.75	54.269	53.854	1832.7	36.617	1053.4

#1	.00072	.00098	-.00348	.00332	.00024	.00001	.00128	-.00137	.00015	-.00017	-.00002
#2	.00033	.00038	.00198	.00249	.00028	.00009	.00057	-.00305	-.00017	-.00010	.00002

Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Warn	Chk Pass	Chk Pass	None	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit				.00156							
Low Limit				-.00156							

Elem	Cu3247	Fe2599	K_7664	Li6707	Mg2790	Mn2576	Mo2020	Na5895	Ni2316	P_1782	Pb2203
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	W -.00148	.00276	.03093	-.00033	.00494	.00006	.00075	.01839	-.00012	.00208	.00086
Stddev	.00010	.00141	.02942	.00130	.00502	.00006	.00024	.00335	.00064	.00201	.00042
%RSD	6.6509	51.069	95.087	390.68	101.59	97.216	31.560	18.232	523.87	96.405	49.250

#1	-.00155	.00376	.05173	-.00125	.00849	.00002	.00058	.01602	-.00058	.00066	.00116
#2	-.00141	.00177	.01014	.00059	.00139	.00010	.00092	.02077	.00033	.00351	.00056

Check ?	Chk Warn	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit	.00136										
Low Limit	-.00136										

Elem	S_1820	Sb2068	Se1960	Si2881	Sn1899	Sr4077	Th2837	Ti3349	Ti1908	U_3701	V_2924
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.00460	W .00569	.00307	.01607	.00034	.00007	.00125	-.00010	.00060	.00725	.00027
Stddev	.00206	.00163	.00090	.00028	.00055	.00002	.00056	.00001	.00015	.00085	.00012
%RSD	44.787	28.661	29.225	1.7194	163.02	27.595	44.843	10.486	25.824	11.745	45.661

#1	.00314	.00453	.00243	.01626	.00073	.00008	.00165	-.00009	.00049	.00785	.00019
#2	.00606	.00684	.00370	.01587	-.00005	.00006	.00085	-.00011	.00071	.00665	.00036

Check ?	None	Chk Warn	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit		.00314									
Low Limit		-.00314									

Elem	Zn2062	Zr3391
Units	ppm	ppm
Avg	-.00026	.00011
Stddev	.00113	.00150
%RSD	441.12	1380.3

#1	.00054	-.00095
#2	-.00106	.00117

Check ?	Chk Pass	Chk Pass
High Limit		
Low Limit		

Int. Std.	Y_2243	Y_3600	Y_3774
Units	Cts/S	Cts/S	Cts/S
Avg	1508.7	31931.	5777.8
Stddev	3.8	62.	26.8
%RSD	.25128	.19565	.46348

#1	1506.1	31975.	5796.7
#2	1511.4	31887.	5758.8

Sample Name: ccvl-3907489 Acquired: 5/23/2016 18:31:53 Type: QC
Method: 6500_026(v10) Mode: CONC Corr. Factor: 1.000000
User: kellyca Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	Ag3280	Al1670	As1890	B_2089	Ba4554	Be3130	Bi2230	Ca3179	Cd2288	Co2286	Cr2055	Cu3247
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.01017	.10735	.01792	.10684	.01027	.00106	.11528	.19546	.00516	.01053	.01071	.01376
Stddev	.00015	.00196	.00387	.00011	.00009	.00007	.00095	.00422	.00011	.00045	.00042	.00001
%RSD	1.5049	1.8237	21.598	.09981	.86418	6.6264	.82047	2.1611	2.1706	4.3055	3.9286	.10549

#1	.01006	.10597	.02066	.10692	.01033	.00111	.11595	.19247	.00524	.01021	.01100	.01377
#2	.01028	.10874	.01519	.10677	.01020	.00101	.11461	.19845	.00508	.01085	.01041	.01375

Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Value												
Range												

Elem	Fe2599	K_7664	Li6707	Mg2790	Mn2576	Mo2020	Na5895	Ni2316	P_1782	Pb2203	S_1820	Sb2068
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	F .16166	3.0586	.00981	.19856	.01036	.02085	1.0344	.04168	2.9067	F .01251	.00615	.02379
Stddev	.00303	.0027	.00064	.00469	.00001	.00037	.0007	.00020	.0021	.00065	.00440	.00069
%RSD	1.8772	.08927	6.4840	2.3617	.12554	1.7793	.07008	.47341	.07372	5.2277	71.511	2.8826

#1	.15952	3.0605	.00936	.19524	.01037	.02059	1.0339	.04154	2.9082	.01297	.00927	.02427
#2	.16381	3.0567	.01026	.20187	.01035	.02112	1.0349	.04181	2.9052	.01205	.00304	.02330

Check ?	Chk Fail	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Fail	None	Chk Pass
Value	.10000									.00900		
Range	30.000%									30.000%		

Elem	Se1960	Si2881	Sn1899	Sr4077	Th2837	Ti3349	Ti1908	U_3701	V_2924	Zn2062	Zr3391
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	F .02398	.50035	.10230	.00969	.01696	.00931	.01640	.07492	.00932	.01935	.01438
Stddev	.00222	.00335	.00308	.00005	.00130	.00003	.00060	.02811	.00033	.00067	.00035
%RSD	9.2589	.66974	3.0085	.50255	7.6578	.35237	3.6734	37.525	3.5015	3.4483	2.4292

#1	.02555	.49798	.10012	.00965	.01788	.00928	.01682	.05504	.00955	.01982	.01413
#2	.02241	.50272	.10447	.00972	.01604	.00933	.01597	.09480	.00909	.01888	.01462

Check ?	Chk Fail	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Value	.01500										
Range	30.000%										

Int. Std.	Y_2243	Y_3600	Y_3774
Units	Cts/S	Cts/S	Cts/S
Avg	1513.6	32258.	5841.9
Stddev	2.0	2.	4.3
%RSD	.13474	.00547	.07419

#1	1512.2	32256.	5838.8
#2	1515.0	32259.	5845.0

Sample Name: MB 280-326347/1-A Acquired: 5/23/2016 18:34:41 Type: Unk
Method: 6500_026(v10) Mode: CONC Corr. Factor: 1.000000
User: kellyca Custom ID1: 5/23 Custom ID2: Custom ID3:
Comment: 326347 6010C Q5

Elem	Ag3280	Al1670	As1890	B_2089	Ba4554	Be3130	Bi2230	Ca3179	Cd2288
Line	328.068 {103}	167.079 {502}	189.042 {478}	208.959 {461}	455.403 { 74}	313.042 {108}	223.061 {451}	317.933 {106}	228.802 {447}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.00072	.00343	.00132	.00204	.00039	-.00004	.00060	.01269	-.00001
Stddev	.00018	.00012	.00122	.00006	.00010	.00004	.00107	.00001	.00015
%RSD	25.719	3.5391	92.279	3.0638	24.674	87.407	178.64	.07888	1057.3

#1	.00085	.00335	.00046	.00208	.00046	-.00002	-.00016	.01269	-.00012
#2	.00059	.00352	.00218	.00199	.00032	-.00007	.00136	.01270	.00009

Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Elem	Co2286	Cr2055	Cu3247	Fe2599	K_7664	Li6707	Mg2790	Mn2576	Mo2020
Line	228.616 {447}	205.560 {464}	324.754 {104}	259.940 {130}	766.490 { 44}	670.784 { 50}	279.079 {121}2	257.610 {131}	202.030 {467}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	-.00024	-.00004	-.00124	.01615	.01118	-.00075	.00394	.00020	-.00039
Stddev	.00003	.00009	.00016	.00057	.01908	.00110	.00203	.00001	.00009
%RSD	14.131	240.13	12.558	3.5438	170.70	146.07	51.562	5.4523	23.924

#1	-.00022	.00003	-.00113	.01655	.02467	-.00153	.00250	.00020	-.00032
#2	-.00026	-.00010	-.00135	.01574	-.00231	.00002	.00538	.00021	-.00045

Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Elem	Na5895	Ni2316	P_1782	Pb2203	S_1820	Sb2068	Se1960	Si2881	Sn1899
Line	589.592 { 57}	231.604 {446}	178.284 {489}	220.353 {453}	182.034 {485}	206.833 {463}	196.090 {472}	288.158 {117}	189.989 {477}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.01252	-.00001	.00094	.00111	.00405	.00300	.00480	.01749	-.00031
Stddev	.00209	.00050	.00231	.00145	.00474	.00064	.01240	.00475	.00201
%RSD	16.677	3443.3	244.50	130.98	117.10	21.193	258.10	27.144	652.79

#1	.01104	-.00037	-.00069	.00214	.00070	.00255	.01357	.01414	.00111
#2	.01399	.00034	.00257	.00008	.00740	.00346	-.00396	.02085	-.00173

Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Elem	Sr4077	Th2837	Ti3349	Ti1908	U_3701	V_2924	Zn2062	Zr3391
Line	407.771 { 83}	283.730 {119}	334.904 {101}	190.856 {477}	370.152 { 91}	292.402 {115}	206.200 {163}	339.198 { 99}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.00003	.00146	.00040	.00015	.01505	-.00015	.00142	.00089
Stddev	.00001	.00006	.00019	.00116	.00423	.00093	.00134	.00148
%RSD	40.409	4.3242	47.611	794.30	28.085	604.33	94.091	166.62

#1	.00004	.00150	.00054	-.00068	.01206	.00050	.00237	-.00016
#2	.00002	.00141	.00027	.00097	.01804	-.00081	.00048	.00193

Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit								
Low Limit								

Int. Std.	Y_2243	Y_3600	Y_3774
Line	224.306 {450}	360.073 { 94}	377.433 { 89}
Units	Cts/S	Cts/S	Cts/S
Avg	1510.8	32593.	5930.7
Stddev	4.2	58.	39.2
%RSD	.27693	.17645	.66064

#1	1513.7	32634.	5903.0
#2	1507.8	32552.	5958.4

Sample Name: LCS 280-326347/2-A Acquired: 5/23/2016 18:37:29 Type: Unk
Method: 6500_026(v10) Mode: CONC Corr. Factor: 1.000000
User: kellyca Custom ID1: Custom ID2: Custom ID3:
Comment: 326347 6010C Q5

Elem	Ag3280	Al1670	As1890	B_2089	Ba4554	Be3130	Bi2230	Ca3179	Cd2288
Line	328.068 {103}	167.079 {502}	189.042 {478}	208.959 {461}	455.403 {74}	313.042 {108}	223.061 {451}	317.933 {106}	228.802 {447}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.04951	1.9775	1.0570	1.0796	2.0446	.05130	F 2.2537	49.793	.10511
Stddev	.00007	.0010	.0088	.0040	.0098	.00018	.0038	.265	.00016
%RSD	.13749	.04992	.83372	.36988	.47946	.35476	.16756	.53193	.14799
#1	.04947	1.9768	1.0507	1.0767	2.0377	.05118	2.2511	49.606	.10522
#2	.04956	1.9782	1.0632	1.0824	2.0515	.05143	2.2564	49.980	.10500
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Fail	Chk Pass	Chk Pass
High Limit							2.2000		
Low Limit							1.8000		

Elem	Co2286	Cr2055	Cu3247	Fe2599	K_7664	Li6707	Mg2790	Mn2576	Mo2020
Line	228.616 {447}	205.560 {464}	324.754 {104}	259.940 {130}	766.490 {44}	670.784 {50}	279.079 {121}2	257.610 {131}	202.030 {467}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.51581	F .20707	.25389	1.1256	52.787	1.0921	48.761	.48796	1.0768
Stddev	.00196	.00001	.00088	.0116	.122	.0026	.061	.00182	.0014
%RSD	.37981	.00636	.34471	1.0330	.23082	.23877	.12576	.37319	.12539
#1	.51442	.20706	.25451	1.1174	52.701	1.0902	48.804	.48925	1.0759
#2	.51719	.20708	.25327	1.1339	52.873	1.0939	48.718	.48667	1.0778
Check ?	Chk Pass	Chk Fail	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit		.05750							
Low Limit		.04300							

Elem	Na8183	Ni2316	P_1782	Pb2203	S_1820	Sb2068	Se1960	Si2881	Sn1899
Line	818.326 {41}	231.604 {446}	178.284 {489}	220.353 {453}	182.034 {485}	206.833 {463}	196.090 {472}	288.158 {117}	189.989 {477}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	53.398	.50435	10.433	.52437	2.1071	.52528	2.0685	10.057	1.9925
Stddev	.153	.00007	.010	.00374	.0056	.00057	.0002	.067	.0019
%RSD	.28722	.01473	.09170	.71240	.26617	.10859	.01104	.66211	.09380
#1	53.289	.50430	10.426	.52701	2.1031	.52568	2.0683	10.010	1.9912
#2	53.506	.50441	10.440	.52173	2.1111	.52488	2.0687	10.104	1.9939
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Elem	Sr4077	Th2837	Ti3349	Ti1908	U_3701	V_2924	Zn2062	Zr3391
Line	407.771 {83}	283.730 {119}	334.904 {101}	190.856 {477}	370.152 {91}	292.402 {115}	206.200 {163}	339.198 {99}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.97432	1.0130	.95665	2.0090	2.1887	.47511	.48029	.49937
Stddev	.00454	.0036	.00121	.0013	.0013	.00469	.00443	.00558
%RSD	.46551	.35775	.12617	.06311	.05905	.98796	.92333	1.1179
#1	.97111	1.0156	.95750	2.0099	2.1896	.47843	.48343	.49542
#2	.97753	1.0104	.95580	2.0082	2.1878	.47179	.47716	.50332
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit								
Low Limit								

Int. Std.	Y_2243	Y_3600	Y_3774
Line	224.306 {450}	360.073 {94}	377.433 {89}
Units	Cts/S	Cts/S	Cts/S
Avg	1446.2	30496.	5797.5
Stddev	1.0	7.	12.8
%RSD	.06997	.02350	.22076
#1	1446.9	30491.	5806.5
#2	1445.5	30501.	5788.4

Sample Name: LCSD 280-326347/3-A Acquired: 5/23/2016 18:40:04 Type: Unk

Method: 6500_026(v10) Mode: CONC Corr. Factor: 1.000000

User: kellyca Custom ID1: Custom ID2: Custom ID3:

Comment: 326347 6010C Q5

Elem	Ag3280	Al1670	As1890	B_2089	Ba4554	Be3130	Bi2230	Ca3179	Cd2288
Line	328.068 {103}	167.079 {502}	189.042 {478}	208.959 {461}	455.403 {74}	313.042 {108}	223.061 {451}	317.933 {106}	228.802 {447}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.04953	1.9590	1.0599	1.0925	2.0130	.05034	F 2.2841	48.901	.10532
Stddev	.00063	.0036	.0030	.0013	.0067	.00001	.0022	.164	.00009
%RSD	1.2673	.18306	.28677	.12251	.33224	.01385	.09490	.33559	.08145

#1	.04908	1.9615	1.0577	1.0935	2.0083	.05033	2.2825	48.785	.10538
#2	.04997	1.9564	1.0620	1.0916	2.0177	.05034	2.2856	49.017	.10526

Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Fail	Chk Pass	Chk Pass
High Limit							2.2000		
Low Limit							1.8000		

Elem	Co2286	Cr2055	Cu3247	Fe2599	K_7664	Li6707	Mg2790	Mn2576	Mo2020
Line	228.616 {447}	205.560 {464}	324.754 {104}	259.940 {130}	766.490 {44}	670.784 {50}	279.079 {121}2	257.610 {131}	202.030 {467}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.51439	F .20590	.25437	.98677	52.066	1.0779	48.256	.48124	1.0805
Stddev	.00108	.00011	.00131	.00657	.179	.0028	.056	.00073	.0034
%RSD	.21054	.05274	.51417	.66554	.34404	.25642	.11627	.15169	.31755

#1	.51515	.20598	.25530	.98213	51.939	1.0759	48.295	.48176	1.0829
#2	.51362	.20582	.25345	.99141	52.193	1.0798	48.216	.48072	1.0780

Check ?	Chk Pass	Chk Fail	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit		.05750							
Low Limit		.04300							

Elem	Na8183	Ni2316	P_1782	Pb2203	S_1820	Sb2068	Se1960	Si2881	Sn1899
Line	818.326 {41}	231.604 {446}	178.284 {489}	220.353 {453}	182.034 {485}	206.833 {463}	196.090 {472}	288.158 {117}	189.989 {477}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	52.698	.50357	10.475	.51975	2.1179	.52973	2.0763	9.9052	1.9893
Stddev	.079	.00078	.005	.00328	.0008	.00461	.0017	.0298	.0046
%RSD	.15083	.15491	.05123	.63045	.03540	.86959	.08335	.30110	.23278

#1	52.642	.50412	10.479	.52207	2.1184	.52647	2.0751	9.8841	1.9926
#2	52.754	.50302	10.471	.51743	2.1174	.53299	2.0775	9.9263	1.9861

Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Elem	Sr4077	Th2837	Ti3349	Ti1908	U_3701	V_2924	Zn2062	Zr3391
Line	407.771 {83}	283.730 {119}	334.904 {101}	190.856 {477}	370.152 {91}	292.402 {115}	206.200 {163}	339.198 {99}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.95759	1.0108	.94475	2.0176	2.1777	.46623	.46488	.49159
Stddev	.00107	.0029	.00065	.0026	.0227	.00051	.00068	.00204
%RSD	.11157	.28757	.06925	.12615	1.0434	.11033	.14643	.41511

#1	.95683	1.0088	.94521	2.0194	2.1938	.46587	.46536	.49014
#2	.95834	1.0129	.94428	2.0158	2.1616	.46659	.46440	.49303

Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit								
Low Limit								

Int. Std.	Y_2243	Y_3600	Y_3774
Line	224.306 {450}	360.073 {94}	377.433 {89}
Units	Cts/S	Cts/S	Cts/S
Avg	1435.9	30650.	5856.0
Stddev	1.9	14.	11.9
%RSD	.13557	.04584	.20361

#1	1434.5	30640.	5864.4
#2	1437.3	30659.	5847.6

Sample Name: 280-82764-A-1-A Acquired: 5/23/2016 18:42:40 Type: Unk
Method: 6500_026(v10) Mode: CONC Corr. Factor: 1.000000
User: kellyca Custom ID1: Custom ID2: Custom ID3:
Comment: 326347 6010C Q5

Elem	Ag3280	Al1670	As1890	B_2089	Ba4554	Be3130	Bi2230	Ca3179	Cd2288
Line	328.068 {103}	167.079 {502}	189.042 {478}	208.959 {461}	455.403 { 74}	313.042 {108}	223.061 {451}	317.933 {106}	228.802 {447}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.00033	.02040	.00865	.53466	.11845	.00004	.00225	79.281	.00026
Stddev	.00015	.00177	.00574	.00226	.00044	.00005	.00240	.359	.00014
%RSD	46.723	8.6813	66.367	.42346	.36783	124.01	106.69	.45259	52.065

#1	.00043	.01915	.01271	.53305	.11814	.00001	.00395	79.027	.00016
#2	.00022	.02165	.00459	.53626	.11876	.00008	.00055	79.535	.00036

Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Elem	Co2286	Cr2055	Cu3247	Fe2599	K_7664	Li6707	Mg2790	Mn2576	Mo2020
Line	228.616 {447}	205.560 {464}	324.754 {104}	259.940 {130}	766.490 { 44}	670.784 { 50}	279.079 {121}2	257.610 {131}	202.030 {467}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.01737	.00145	.00010	16.414	18.605	.00032	14.394	.19542	.00089
Stddev	.00026	.00007	.00022	.079	.070	.00000	.029	.00027	.00024
%RSD	1.5202	4.9585	225.55	.48012	.37815	.36440	.19971	.13888	26.298

#1	.01756	.00151	-.00006	16.358	18.555	.00032	14.374	.19523	.00073
#2	.01718	.00140	.00025	16.470	18.655	.00032	14.414	.19561	.00106

Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Elem	Na8183	Ni2316	P_1782	Pb2203	S_1820	Sb2068	Se1960	Si2881	Sn1899
Line	818.326 { 41}	231.604 {446}	178.284 {489}	220.353 {453}	182.034 {485}	206.833 {463}	196.090 {472}	288.158 {117}	189.989 {477}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	24.417	.00797	.14469	-.00053	13.897	.00486	.01341	2.2348	.00211
Stddev	.045	.00049	.00649	.00219	.000	.00087	.00627	.0224	.00128
%RSD	.18518	6.1214	4.4824	413.59	.00148	17.856	46.737	1.0033	60.664

#1	24.385	.00831	.14927	.00102	13.897	.00548	.01785	2.2190	.00302
#2	24.449	.00762	.14010	-.00208	13.897	.00425	.00898	2.2507	.00121

Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Elem	Sr4077	Th2837	Ti3349	Ti1908	U_3701	V_2924	Zn2062	Zr3391
Line	407.771 { 83}	283.730 {119}	334.904 {101}	190.856 {477}	370.152 { 91}	292.402 {115}	206.200 {163}	339.198 { 99}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.36700	.00203	.00074	.00044	.01449	.00308	.01299	.00091
Stddev	.00150	.00104	.00003	.00141	.00651	.00005	.00020	.00094
%RSD	.40744	51.082	3.7421	321.28	44.924	1.5721	1.5744	102.57

#1	.36595	.00130	.00072	.00143	.01910	.00311	.01313	.00025
#2	.36806	.00277	.00076	-.00056	.00989	.00304	.01284	.00158

Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit								
Low Limit								

Int. Std.	Y_2243	Y_3600	Y_3774
Line	224.306 {450}	360.073 { 94}	377.433 { 89}
Units	Cts/S	Cts/S	Cts/S
Avg	1442.1	31047.	5942.7
Stddev	2.1	113.	9.1
%RSD	.14354	.36320	.15382

#1	1440.6	31126.	5936.2
#2	1443.5	30967.	5949.2

Sample Name: 280-82764-A-2-A Acquired: 5/23/2016 18:45:24 Type: Unk
Method: 6500_026(v10) Mode: CONC Corr. Factor: 1.000000
User: kellyca Custom ID1: Custom ID2: Custom ID3:
Comment: 326347 6010C Q5

Elem	Ag3280	Al1670	As1890	B_2089	Ba4554	Be3130	Bi2230	Ca3179	Cd2288
Line	328.068 {103}	167.079 {502}	189.042 {478}	208.959 {461}	455.403 { 74}	313.042 {108}	223.061 {451}	317.933 {106}	228.802 {447}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.00047	.02620	.01493	.16435	.16841	.00001	.00109	12.979	.00033
Stddev	.00008	.00089	.00360	.00098	.00014	.00007	.00076	.142	.00004
%RSD	17.211	3.3995	24.085	.59551	.08084	456.53	69.410	1.0975	13.311

#1	.00042	.02683	.01747	.16504	.16851	.00006	.00056	12.879	.00030
#2	.00053	.02557	.01239	.16365	.16831	-.00003	.00163	13.080	.00036

Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Elem	Co2286	Cr2055	Cu3247	Fe2599	K_7664	Li6707	Mg2790	Mn2576	Mo2020
Line	228.616 {447}	205.560 {464}	324.754 {104}	259.940 {130}	766.490 { 44}	670.784 { 50}	279.079 {121}2	257.610 {131}	202.030 {467}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.00206	.00031	-.00059	14.546	7.0930	-.00045	6.2867	.08240	.00006
Stddev	.00020	.00007	.00011	.107	.0126	.00130	.0177	.00028	.00055
%RSD	9.6376	21.982	18.821	.73394	.17800	288.28	.28164	.34471	922.86

#1	.00192	.00026	-.00051	14.470	7.0841	.00047	6.2742	.08220	-.00033
#2	.00220	.00036	-.00067	14.621	7.1020	-.00137	6.2992	.08260	.00045

Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Elem	Na8183	Ni2316	P_1782	Pb2203	S_1820	Sb2068	Se1960	Si2881	Sn1899
Line	818.326 { 41}	231.604 {446}	178.284 {489}	220.353 {453}	182.034 {485}	206.833 {463}	196.090 {472}	288.158 {117}	189.989 {477}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	22.922	.00914	.04519	.00171	2.2907	.00194	.00577	2.8204	-.00109
Stddev	.058	.00001	.00068	.00200	.0156	.00083	.00285	.0290	.00040
%RSD	.25384	.07413	1.5133	116.96	.67920	42.578	49.348	1.0285	36.859

#1	22.881	.00914	.04568	.00030	2.3017	.00253	.00376	2.8409	-.00137
#2	22.963	.00913	.04471	.00312	2.2797	.00136	.00779	2.7999	-.00081

Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Elem	Sr4077	Th2837	Ti3349	Ti1908	U_3701	V_2924	Zn2062	Zr3391
Line	407.771 { 83}	283.730 {119}	334.904 {101}	190.856 {477}	370.152 { 91}	292.402 {115}	206.200 {163}	339.198 { 99}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.08519	.00061	.00050	.00081	-.00558	.00074	.00123	.00106
Stddev	.00005	.00083	.00005	.00160	.01427	.00055	.00043	.00156
%RSD	.05840	136.59	9.5736	197.77	255.94	75.128	34.884	147.55

#1	.08516	.00120	.00053	.00194	-.01567	.00113	.00153	-.00005
#2	.08523	.00002	.00047	-.00032	.00452	.00034	.00093	.00216

Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit								
Low Limit								

Int. Std.	Y_2243	Y_3600	Y_3774
Line	224.306 {450}	360.073 { 94}	377.433 { 89}
Units	Cts/S	Cts/S	Cts/S
Avg	1477.6	31745.	5969.6
Stddev	3.0	44.	70.1
%RSD	.20151	.13721	1.1748

#1	1479.7	31776.	6019.2
#2	1475.5	31714.	5920.0

Sample Name: 280-82764-D-9-A Acquired: 5/23/2016 18:48:09 Type: Unk
Method: 6500_026(v10) Mode: CONC Corr. Factor: 1.000000
User: kellyca Custom ID1: Custom ID2: Custom ID3:
Comment: 326347 6010C Q5

Elem	Ag3280	Al1670	As1890	B_2089	Ba4554	Be3130	Bi2230	Ca3179	Cd2288
Line	328.068 {103}	167.079 {502}	189.042 {478}	208.959 {461}	455.403 { 74}	313.042 {108}	223.061 {451}	317.933 {106}	228.802 {447}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.00046	.04871	.00002	.29138	.09902	-.00008	-.00199	37.345	-.00001
Stddev	.00086	.00070	.00580	.00104	.00011	.00004	.00034	.087	.00010
%RSD	187.01	1.4429	23451.	.35797	.11233	58.454	16.974	.23390	684.02

#1	.00107	.04821	-.00408	.29212	.09894	-.00004	-.00175	37.284	.00006
#2	-.00015	.04920	.00413	.29064	.09910	-.00011	-.00223	37.407	-.00009

Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Elem	Co2286	Cr2055	Cu3247	Fe2599	K_7664	Li6707	Mg2790	Mn2576	Mo2020
Line	228.616 {447}	205.560 {464}	324.754 {104}	259.940 {130}	766.490 { 44}	670.784 { 50}	279.079 {121}2	257.610 {131}	202.030 {467}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.00350	.00091	.00036	.15689	11.381	-.00010	9.1308	.03237	.00025
Stddev	.00007	.00018	.00031	.00297	.034	.00058	.0011	.00000	.00007
%RSD	1.9923	20.159	85.140	1.8957	.29487	552.99	.01182	.00127	26.722

#1	.00355	.00104	.00058	.15899	11.357	-.00051	9.1315	.03237	.00030
#2	.00345	.00078	.00015	.15479	11.404	.00030	9.1300	.03237	.00020

Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Elem	Na8183	Ni2316	P_1782	Pb2203	S_1820	Sb2068	Se1960	Si2881	Sn1899
Line	818.326 { 41}	231.604 {446}	178.284 {489}	220.353 {453}	182.034 {485}	206.833 {463}	196.090 {472}	288.158 {117}	189.989 {477}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	80.621	.00768	.29058	.00341	6.6657	.00167	.00974	2.2010	.00043
Stddev	.032	.00012	.00671	.00077	.0006	.00031	.00129	.0107	.00263
%RSD	.04015	1.5125	2.3085	22.688	.00967	18.760	13.220	.48461	608.35

#1	80.598	.00759	.29533	.00286	6.6653	.00190	.01065	2.1934	.00229
#2	80.644	.00776	.28584	.00396	6.6662	.00145	.00883	2.2085	-.00142

Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Elem	Sr4077	Th2837	Ti3349	Ti1908	U_3701	V_2924	Zn2062	Zr3391
Line	407.771 { 83}	283.730 {119}	334.904 {101}	190.856 {477}	370.152 { 91}	292.402 {115}	206.200 {163}	339.198 { 99}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.18454	.00186	.00096	-.00032	-.01841	.00163	-.00005	.00006
Stddev	.00023	.00031	.00022	.00250	.00176	.00032	.00038	.00020
%RSD	.12494	16.824	22.828	774.43	9.5592	19.399	840.21	323.82

#1	.18438	.00209	.00112	-.00209	-.01965	.00186	-.00031	-.00008
#2	.18471	.00164	.00081	.00144	-.01716	.00141	.00022	.00020

Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit								
Low Limit								

Int. Std.	Y_2243	Y_3600	Y_3774
Line	224.306 {450}	360.073 { 94}	377.433 { 89}
Units	Cts/S	Cts/S	Cts/S
Avg	1455.6	30871.	5850.1
Stddev	.3	4.	5.8
%RSD	.01743	.01432	.09907

#1	1455.7	30874.	5846.0
#2	1455.4	30868.	5854.2

Sample Name: 280-82764-D-9-Asd@5 Acquired: 5/23/2016 18:50:54 Type: Unk
Method: 6500_026(v10) Mode: CONC Corr. Factor: 1.000000
User: kellyca Custom ID1: Custom ID2: Custom ID3:
Comment: 326347 6010C Q5

Elem	Ag3280	Al1670	As1890	B_2089	Ba4554	Be3130	Bi2230	Ca3179	Cd2288
Line	328.068 {103}	167.079 {502}	189.042 {478}	208.959 {461}	455.403 { 74}	313.042 {108}	223.061 {451}	317.933 {106}	228.802 {447}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.00037	.00998	.00209	.06012	.01871	-.00002	-.00069	7.0956	.00006
Stddev	.00039	.00021	.00180	.00245	.00027	.00003	.00085	.0747	.00002
%RSD	104.66	2.0961	86.042	4.0825	1.4624	120.39	123.87	1.0535	27.614

#1	.00010	.00983	.00336	.05839	.01852	-.00000	-.00009	7.0427	.00007
#2	.00065	.01012	.00082	.06186	.01891	-.00004	-.00129	7.1484	.00005

Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Elem	Co2286	Cr2055	Cu3247	Fe2599	K_7664	Li6707	Mg2790	Mn2576	Mo2020
Line	228.616 {447}	205.560 {464}	324.754 {104}	259.940 {130}	766.490 { 44}	670.784 { 50}	279.079 {121}2	257.610 {131}	202.030 {467}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.00040	.00012	-.00124	.05330	2.1257	-.00071	1.7849	.00631	-.00038
Stddev	.00001	.00011	.00002	.00071	.0336	.00003	.0180	.00001	.00009
%RSD	2.5536	88.429	1.3703	1.3278	1.5782	4.7164	1.0087	.20563	23.070

#1	.00039	.00019	-.00123	.05380	2.1020	-.00069	1.7722	.00632	-.00032
#2	.00041	.00004	-.00125	.05280	2.1495	-.00074	1.7977	.00630	-.00044

Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Elem	Na8183	Ni2316	P_1782	Pb2203	S_1820	Sb2068	Se1960	Si2881	Sn1899
Line	818.326 { 41}	231.604 {446}	178.284 {489}	220.353 {453}	182.034 {485}	206.833 {463}	196.090 {472}	288.158 {117}	189.989 {477}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	15.327	.00170	.05555	-.00224	1.3179	.00103	.00350	.42416	.00038
Stddev	.067	.00002	.00006	.00075	.0321	.00228	.00301	.00054	.00058
%RSD	.43593	.88531	.10321	33.354	2.4382	222.52	85.950	.12687	151.28

#1	15.280	.00171	.05559	-.00172	1.2952	.00264	.00563	.42454	-.00003
#2	15.374	.00169	.05550	-.00277	1.3407	-.00059	.00137	.42378	.00080

Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Elem	Sr4077	Th2837	Ti3349	Ti1908	U_3701	V_2924	Zn2062	Zr3391	
Line	407.771 { 83}	283.730 {119}	334.904 {101}	190.856 {477}	370.152 { 91}	292.402 {115}	206.200 {163}	339.198 { 99}	
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	
Avg	.03460	.00166	.00016	.00214	.00918	.00037	-.00065	.00091	
Stddev	.00045	.00103	.00032	.00102	.01386	.00041	.00012	.00221	
%RSD	1.3036	62.376	200.23	47.738	151.08	112.21	18.157	243.36	

#1	.03429	.00093	.00038	.00286	-.00063	.00066	-.00057	-.00066	
#2	.03492	.00239	-.00007	.00141	.01898	.00008	-.00073	.00247	

Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	
High Limit									
Low Limit									

Int. Std.	Y_2243	Y_3600	Y_3774						
Line	224.306 {450}	360.073 { 94}	377.433 { 89}						
Units	Cts/S	Cts/S	Cts/S						
Avg	1505.8	32073.	5912.8						
Stddev	5.3	86.	35.6						
%RSD	.35152	.26702	.60274						

#1	1509.6	32133.	5938.0						
#2	1502.1	32012.	5887.6						

Sample Name: 280-82764-D-9-Apds Acquired: 5/23/2016 18:53:42 Type: Unk
Method: 6500_026(v10) Mode: CONC Corr. Factor: 1.000000
User: kellyca Custom ID1: Custom ID2: Custom ID3:
Comment: 326347 6010C Q5

Elem	Ag3280	Al1670	As1890	B_2089	Ba4554	Be3130	Bi2230	Ca3179	Cd2288
Line	328.068 {103}	167.079 {502}	189.042 {478}	208.959 {461}	455.403 { 74}	313.042 {108}	223.061 {451}	317.933 {106}	228.802 {447}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.01216	1.0261	.20991	.39898	.19486	.04948	-.00094	55.068	.05248
Stddev	.00062	.0038	.00624	.00067	.00105	.00004	.00222	.274	.00013
%RSD	5.1080	.36677	2.9719	.16762	.53661	.08873	236.54	.49725	.24198

#1	.01260	1.0288	.21432	.39946	.19412	.04945	-.00251	54.875	.05239
#2	.01172	1.0235	.20550	.39851	.19560	.04951	.00063	55.262	.05257

Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Elem	Co2286	Cr2055	Cu3247	Fe2599	K_7664	Li6707	Mg2790	Mn2576	Mo2020
Line	228.616 {447}	205.560 {464}	324.754 {104}	259.940 {130}	766.490 { 44}	670.784 { 50}	279.079 {121}2	257.610 {131}	202.030 {467}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.05423	.05113	.05047	1.1333	31.541	.10676	27.148	.07871	.05346
Stddev	.00036	.00061	.00018	.0046	.144	.00104	.087	.00005	.00052
%RSD	.66612	1.2009	.36000	.40483	.45561	.97883	.32033	.06446	.96905

#1	.05449	.05157	.05034	1.1301	31.439	.10602	27.087	.07867	.05382
#2	.05398	.05070	.05060	1.1366	31.642	.10750	27.210	.07874	.05309

Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Elem	Na8183	Ni2316	P_1782	Pb2203	S_1820	Sb2068	Se1960	Si2881	Sn1899
Line	818.326 { 41}	231.604 {446}	178.284 {489}	220.353 {453}	182.034 {485}	206.833 {463}	196.090 {472}	288.158 {117}	189.989 {477}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	99.375	.05631	2.3746	.10268	6.6923	.10366	.21218	7.0076	.09596
Stddev	.320	.00118	.0114	.00310	.0092	.00043	.00536	.0638	.00018
%RSD	.32217	2.0883	.47802	3.0202	.13709	.41389	2.5264	.90991	.18733

#1	99.148	.05548	2.3826	.10488	6.6988	.10397	.21597	6.9625	.09609
#2	99.601	.05715	2.3665	.10049	6.6859	.10336	.20839	7.0526	.09583

Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Elem	Sr4077	Th2837	Ti3349	Ti1908	U_3701	V_2924	Zn2062	Zr3391
Line	407.771 { 83}	283.730 {119}	334.904 {101}	190.856 {477}	370.152 { 91}	292.402 {115}	206.200 {163}	339.198 { 99}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.22712	.19812	.04779	.19860	.54043	.04586	.18555	.04943
Stddev	.00059	.00139	.00026	.00378	.01040	.00066	.00319	.00031
%RSD	.25942	.70224	.54436	1.9009	1.9247	1.4410	1.7167	.63038

#1	.22670	.19714	.04761	.19593	.54779	.04539	.18330	.04921
#2	.22753	.19910	.04798	.20126	.53308	.04633	.18780	.04965

Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit								
Low Limit								

Int. Std.	Y_2243	Y_3600	Y_3774
Line	224.306 {450}	360.073 { 94}	377.433 { 89}
Units	Cts/S	Cts/S	Cts/S
Avg	1422.5	30626.	5853.1
Stddev	3.0	69.	.1
%RSD	.20784	.22487	.00168

#1	1420.4	30675.	5853.0
#2	1424.5	30577.	5853.2

Sample Name: ccvh-3900196 Acquired: 5/23/2016 18:56:26 Type: QC
Method: 6500_026(v10) Mode: CONC Corr. Factor: 1.000000
User: kellyca Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	Ag3280	Al3092	As1890	B_2089	Ba4554	Be3130	Bi2230	Ca3179	Cd2288	Co2286	Cr2055	Cu3247	Fe2714
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.00007	47.404	.00038	.00484	.00187	.00134	1.0764	-.03968	.00082	.00517	.00090	.00573	47.433
Stddev	.00031	.336	.00229	.00036	.00014	.00005	.0049	.00110	.00028	.00007	.00002	.00002	.412
%RSD	420.88	.70915	599.76	7.5193	7.4954	3.7550	.45313	2.7652	34.655	1.4281	2.2246	.26527	.86896

#1	.00029	47.166	.00200	.00510	.00177	.00138	1.0799	-.03891	.00102	.00522	.00091	.00574	47.142
#2	-.00014	47.641	-.00124	.00459	.00197	.00131	1.0730	-.04046	.00062	.00512	.00089	.00572	47.725

Check ?	None	Chk Pass	None	None	None	None	Chk Pass	None	None	None	None	None	Chk Pass
Value													
Range													

Elem	K_7664	Li6707	Mg2790	Mn2576	Mo2020	Na8183	Ni2316	P_1782	Pb2203	S_1820	Sb2068	Se1960	Si2881
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.18523	.00299	.21725	.00072	-.00120	252.06	.00127	.00703	.00139	5.0991	.00070	.01654	.02885
Stddev	.00759	.00111	.00311	.00002	.00023	1.49	.00056	.00231	.00129	.0132	.00264	.00140	.00173
%RSD	4.0997	37.236	1.4304	3.3681	18.843	.59293	44.229	32.896	93.334	.25932	378.33	8.4376	5.9840

#1	.17986	.00377	.21945	.00071	-.00136	251.00	.00087	.00540	.00047	5.1085	-.00117	.01752	.02763
#2	.19060	.00220	.21505	.00074	-.00104	253.11	.00167	.00867	.00230	5.0898	.00257	.01555	.03007

Check ?	None	None	None	None	None	Chk Pass	None	None	None	Chk Pass	None	None	None
Value													
Range													

Elem	Sn1899	Sr4077	Th2837	Ti3349	Tl1908	U_3701	V_2924	Zn2062	Zr3391
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.00344	.00177	4.9657	.02653	.00270	10.213	-.01515	-.00003	-.01727
Stddev	.00182	.00002	.0017	.00045	.00119	.016	.00033	.00019	.00130
%RSD	53.008	1.2495	.03331	1.7119	43.867	.16127	2.1765	739.67	7.5252

#1	.00215	.00175	4.9645	.02685	.00186	10.201	-.01492	.00011	-.01819
#2	.00473	.00178	4.9669	.02621	.00354	10.224	-.01539	-.00016	-.01635

Check ?	None	None	Chk Pass	None	None	Chk Pass	None	None	None
Value									
Range									

Int. Std.	Y_2243	Y_3600	Y_3774
Units	Cts/S	Cts/S	Cts/S
Avg	1452.7	30783.	5862.5
Stddev	.9	6.	28.2
%RSD	.06194	.01933	.48124

#1	1452.1	30779.	5882.5
#2	1453.3	30788.	5842.6

Sample Name: ccv-3900195 Acquired: 5/23/2016 18:59:16 Type: QC
Method: 6500_026(v10) Mode: CONC Corr. Factor: 1.000000
User: kellyca Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	Ag3280	Al1670	As1890	B_2089	Ba4554	Be3130	Bi2230	Ca3179	Cd2288	Co2286	Cr2055	Cu3247
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.48414	F .55395	1.0462	F .56230	.49523	.50579	.00329	4.9338	.53310	.52898	.51674	.49155
Stddev	.00116	.00059	.0006	.00100	.00211	.00328	.00061	.0365	.00046	.00038	.00070	.00025
%RSD	.23985	.10658	.05796	.17871	.42581	.64809	18.610	.73904	.08718	.07156	.13604	.05012

#1	.48496	.55353	1.0458	.56159	.49374	.50347	.00286	4.9080	.53277	.52924	.51625	.49137
#2	.48332	.55437	1.0467	.56301	.49672	.50811	.00373	4.9596	.53343	.52871	.51724	.49172

Check ?	Chk Pass	Chk Fail	Chk Pass	Chk Fail	Chk Pass	Chk Pass	None	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Value		.50000		.50000								
Range		10.000%		10.000%								

Elem	Fe2599	K_7664	Li6707	Mg2790	Mn2576	Mo2020	Na5895	Ni2316	P_1782	Pb2203	S_1820	Sb2068
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	2.5442	50.679	1.0518	19.442	.49051	.52336	5.3217	.51107	1.0425	1.0798	.00477	1.0240
Stddev	.0286	.326	.0059	.018	.00075	.00143	.0214	.00031	.0025	.0046	.00258	.0010
%RSD	1.1256	.64330	.56453	.09358	.15264	.27385	.40281	.06100	.24076	.42702	54.088	.10026

#1	2.5239	50.449	1.0476	19.454	.49104	.52235	5.3066	.51129	1.0407	1.0766	.00295	1.0247
#2	2.5644	50.910	1.0560	19.429	.48998	.52437	5.3369	.51085	1.0442	1.0831	.00660	1.0233

Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	None	Chk Pass
Value												
Range												

Elem	Se1960	Si2881	Sn1899	Sr4077	Th2837	Ti3349	Ti1908	U_3701	V_2924	Zn2062	Zr3391
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	1.0611	4.9531	1.0115	.47375	.00802	.46367	1.0539	.03691	.46306	.48514	.49450
Stddev	.0052	.0047	.0006	.00476	.00086	.00045	.0028	.00946	.00033	.00361	.00487
%RSD	.48929	.09417	.06173	1.0038	10.777	.09665	.26961	25.620	.07124	.74363	.98445

#1	1.0574	4.9498	1.0111	.47039	.00863	.46399	1.0559	.04360	.46283	.48769	.49106
#2	1.0647	4.9564	1.0120	.47711	.00741	.46336	1.0519	.03023	.46329	.48259	.49794

Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	None	Chk Pass	Chk Pass	None	Chk Pass	Chk Pass	Chk Pass
Value											
Range											

Int. Std.	Y_2243	Y_3600	Y_3774
Units	Cts/S	Cts/S	Cts/S
Avg	1497.9	31937.	5892.7
Stddev	4.5	17.	86.9
%RSD	.30311	.05191	1.4753

#1	1501.1	31949.	5954.1
#2	1494.7	31926.	5831.2

Sample Name: ccb Acquired: 5/23/2016 19:01:55 Type: QC
Method: 6500_026(v10) Mode: CONC Corr. Factor: 1.000000
User: kellyca Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	Ag3280	Al1670	As1890	B_2089	Ba4554	Be3130	Bi2230	Ca3179	Cd2288	Co2286	Cr2055
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.00037	.00071	.00108	F .00320	.00026	.00007	.00077	-.00556	.00003	-.00039	.00004
Stddev	.00031	.00109	.00060	.00072	.00017	.00007	.00080	.00049	.00021	.00006	.00016
%RSD	85.949	154.20	55.202	22.511	65.259	98.289	104.83	8.8313	629.25	15.825	442.61

#1	.00059	-.00006	.00066	.00371	.00038	.00002	.00020	-.00522	-.00012	-.00034	.00015
#2	.00014	.00148	.00151	.00269	.00014	.00013	.00134	-.00591	.00018	-.00043	-.00008

Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Fail	Chk Pass	Chk Pass	None	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit				.00312							
Low Limit				-.00312							

Elem	Cu3247	Fe2599	K_7664	Li6707	Mg2790	Mn2576	Mo2020	Na5895	Ni2316	P_1782	Pb2203
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	W -.00157	.00443	.03026	-.00036	.00568	-.00000	.00073	.02475	-.00024	.00045	.00212
Stddev	.00030	.00109	.02053	.00059	.00268	.00004	.00013	.00257	.00025	.00094	.00135
%RSD	19.212	24.539	67.860	163.77	47.229	1718.5	17.914	10.403	104.84	208.67	63.568

#1	-.00179	.00519	.01574	-.00078	.00758	-.00003	.00064	.02657	-.00006	.00111	.00307
#2	-.00136	.00366	.04478	.00006	.00378	.00003	.00082	.02293	-.00042	-.00021	.00116

Check ?	Chk Warn	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit	.00136										
Low Limit	-.00136										

Elem	S_1820	Sb2068	Se1960	Si2881	Sn1899	Sr4077	Th2837	Ti3349	Ti1908	U_3701	V_2924
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.00152	F .00826	F .01453	.00278	-.00025	.00011	.00182	.00037	.00079	.00826	.00001
Stddev	.00116	.00116	.00298	.00155	.00041	.00002	.00174	.00009	.00097	.00618	.00107
%RSD	76.112	14.027	20.473	55.906	163.57	22.565	95.686	24.924	123.51	74.889	13077.

#1	.00234	.00744	.01664	.00388	.00004	.00012	.00059	.00043	.00148	.00388	.00077
#2	.00070	.00908	.01243	.00168	-.00055	.00009	.00305	.00030	.00010	.01263	-.00075

Check ?	None	Chk Fail	Chk Fail	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit		.00628	.00972								
Low Limit		-.00628	-.00972								

Elem	Zn2062	Zr3391
Units	ppm	ppm
Avg	-.00003	-.00003
Stddev	.00077	.00094
%RSD	2962.9	3293.0

#1	.00052	-.00069
#2	-.00057	.00063

Check ?	Chk Pass	Chk Pass
High Limit		
Low Limit		

Int. Std.	Y_2243	Y_3600	Y_3774
Units	Cts/S	Cts/S	Cts/S
Avg	1502.1	32530.	5876.0
Stddev	1.1	62.	41.8
%RSD	.07038	.18964	.71185

#1	1502.9	32573.	5846.4
#2	1501.4	32486.	5905.6

Sample Name: ccvl-3907489 Acquired: 5/23/2016 19:04:45 Type: QC
Method: 6500_026(v10) Mode: CONC Corr. Factor: 1.000000
User: kellyca Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	Ag3280	Al1670	As1890	B_2089	Ba4554	Be3130	Bi2230	Ca3179	Cd2288	Co2286	Cr2055	Cu3247
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.00966	.10822	.01604	.10912	.01023	.00097	.11902	.19027	.00530	.01057	.01094	.01358
Stddev	.00006	.00066	.00171	.00002	.00007	.00006	.00345	.00029	.00010	.00001	.00025	.00007
%RSD	.63200	.60675	10.676	.01412	.70502	6.3898	2.8980	.15197	1.8851	.09989	2.2940	.48854

#1	.00961	.10868	.01725	.10911	.01018	.00093	.12146	.19007	.00523	.01058	.01112	.01363
#2	.00970	.10775	.01483	.10913	.01028	.00101	.11658	.19048	.00537	.01056	.01076	.01354

Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Value												
Range												

Elem	Fe2599	K_7664	Li6707	Mg2790	Mn2576	Mo2020	Na5895	Ni2316	P_1782	Pb2203	S_1820	Sb2068
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	F .23885	3.0787	.01042	.19667	.01056	.02143	1.0467	.04179	2.9451	.01155	-.00289	.02232
Stddev	.00013	.0155	.00034	.00177	.00001	.00013	.0079	.00035	.0001	.00313	.00024	.00009
%RSD	.05484	.50451	3.2421	.89876	.05771	.62021	.75217	.84346	.00381	27.070	8.2242	.39264

#1	.23895	3.0897	.01065	.19542	.01057	.02153	1.0411	.04204	2.9450	.00934	-.00306	.02226
#2	.23876	3.0677	.01018	.19792	.01056	.02134	1.0523	.04154	2.9452	.01376	-.00272	.02238

Check ?	Chk Fail	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	None	Chk Pass
Value	.10000											
Range	30.000%											

Elem	Se1960	Si2881	Sn1899	Sr4077	Th2837	Ti3349	Ti1908	U_3701	V_2924	Zn2062	Zr3391
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	F .02130	.50020	.10144	.00964	.01728	.00935	.01433	.07298	.00895	.02332	.01608
Stddev	.00832	.00484	.00097	.00004	.00085	.00013	.00278	.01733	.00084	.00013	.00021
%RSD	39.044	.96675	.96044	.42220	4.9366	1.3920	19.413	23.743	9.4126	.56130	1.3054

#1	.01542	.49678	.10075	.00966	.01668	.00944	.01236	.06073	.00836	.02323	.01593
#2	.02718	.50362	.10213	.00961	.01788	.00926	.01629	.08523	.00955	.02342	.01623

Check ?	Chk Fail	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Value	.01500										
Range	30.000%										

Int. Std.	Y_2243	Y_3600	Y_3774
Units	Cts/S	Cts/S	Cts/S
Avg	1509.2	32595.	5907.2
Stddev	4.7	68.	9.8
%RSD	.31089	.20766	.16659

#1	1505.9	32643.	5914.2
#2	1512.6	32547.	5900.3

Sample Name: MB 280-326196/1-A Acquired: 5/23/2016 19:07:34 Type: Unk
Method: 6500_026(v10) Mode: CONC Corr. Factor: 1.000000
User: kellyca Custom ID1: 5/21 Custom ID2: Custom ID3:
Comment: 325196 6010B Q4

Elem	Ag3280	Al1670	As1890	B_2089	Ba4554	Be3130	Bi2230	Ca3179	Cd2288
Line	328.068 {103}	167.079 {502}	189.042 {478}	208.959 {461}	455.403 { 74}	313.042 {108}	223.061 {451}	317.933 {106}	228.802 {447}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.00029	.00184	-.00121	.00159	.00016	.00003	.00305	-.00307	-.00010
Stddev	.00055	.00151	.00306	.00023	.00000	.00000	.00146	.00174	.00014
%RSD	193.41	82.375	253.66	14.677	.66153	8.0114	47.835	56.625	145.58

#1	-.00010	.00291	.00096	.00176	.00016	.00003	.00202	-.00184	-.00020
#2	.00067	.00077	-.00337	.00143	.00016	.00003	.00409	-.00430	.00000

Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Elem	Co2286	Cr2055	Cu3247	Fe2599	K_7664	Li6707	Mg2790	Mn2576	Mo2020
Line	228.616 {447}	205.560 {464}	324.754 {104}	259.940 {130}	766.490 { 44}	670.784 { 50}	279.079 {121}2	257.610 {131}	202.030 {467}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	-.00016	.00018	-.00123	W .07505	.01132	-.00099	.00496	.00056	-.00039
Stddev	.00003	.00005	.00012	.00145	.00464	.00076	.00313	.00001	.00035
%RSD	15.589	27.094	9.6754	1.9328	41.023	76.584	63.058	1.6356	89.086

#1	-.00014	.00015	-.00132	.07608	.00803	-.00153	.00275	.00057	-.00014
#2	-.00018	.00021	-.00115	.07403	.01460	-.00046	.00718	.00055	-.00064

Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Warn	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit				.03000					
Low Limit				-.05000					

Elem	Na5895	Ni2316	P_1782	Pb2203	S_1820	Sb2068	Se1960	Si2881	Sn1899
Line	589.592 { 57}	231.604 {446}	178.284 {489}	220.353 {453}	182.034 {485}	206.833 {463}	196.090 {472}	288.158 {117}	189.989 {477}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.00473	.00000	.00050	.00157	.00623	.00210	F .01114	.01698	-.00015
Stddev	.00213	.00004	.00391	.00108	.00029	.00080	.00469	.00101	.00012
%RSD	45.052	1041.5	781.30	68.676	4.5913	38.207	42.087	5.9493	82.739

#1	.00323	-.00003	-.00226	.00233	.00644	.00267	.01445	.01770	-.00024
#2	.00624	.00003	.00326	.00081	.00603	.00153	.00782	.01627	-.00006

Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Fail	Chk Pass	Chk Pass
High Limit							.01000		
Low Limit							-.01000		

Elem	Sr4077	Th2837	Ti3349	Ti1908	U_3701	V_2924	Zn2062	Zr3391	
Line	407.771 { 83}	283.730 {119}	334.904 {101}	190.856 {477}	370.152 { 91}	292.402 {115}	206.200 {163}	339.198 { 99}	
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	
Avg	.00002	.00113	.00009	.00204	.01060	-.00014	.00129	.00197	
Stddev	.00005	.00013	.00045	.00197	.01715	.00022	.00029	.00025	
%RSD	359.32	11.690	474.48	96.629	161.77	153.83	22.642	12.926	

#1	.00005	.00123	-.00022	.00344	.02272	-.00030	.00109	.00179	
#2	-.00002	.00104	.00041	.00065	-.00153	.00001	.00150	.00215	

Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	
High Limit									
Low Limit									

Int. Std.	Y_2243	Y_3600	Y_3774						
Line	224.306 {450}	360.073 { 94}	377.433 { 89}						
Units	Cts/S	Cts/S	Cts/S						
Avg	1517.8	32761.	5914.1						
Stddev	.0	148.	6.0						
%RSD	.00164	.45285	.10139						

#1	1517.8	32866.	5918.3						
#2	1517.9	32656.	5909.9						

Sample Name: LCS 280-326196/2-A Acquired: 5/23/2016 19:10:22 Type: Unk

Method: 6500_026(v10) Mode: CONC Corr. Factor: 1.000000

User: kellyca Custom ID1: Custom ID2: Custom ID3:

Comment: 325196 6010B Q4

Elem	Ag3280	Al1670	As1890	B_2089	Ba4554	Be3130	Bi2230	Ca3179	Cd2288
Line	328.068 {103}	167.079 {502}	189.042 {478}	208.959 {461}	455.403 { 74}	313.042 {108}	223.061 {451}	317.933 {106}	228.802 {447}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.05117	2.0996	F 1.1237	F 1.1586	2.0685	.05212	F 2.4072	50.709	F .11225
Stddev	.00001	.1233	.0530	.0568	.0182	.00052	.1024	.531	.00474
%RSD	.02003	5.8706	4.7139	4.8979	.88182	.99598	4.2526	1.0481	4.2220

#1	.05118	2.0124	1.0862	1.1185	2.0814	.05249	2.3348	51.084	.10890
#2	.05116	2.1868	1.1612	1.1987	2.0556	.05175	2.4796	50.333	.11560

Check ?	Chk Pass	Chk Pass	Chk Fail	Chk Fail	Chk Pass	Chk Pass	Chk Fail	Chk Pass	Chk Fail
High Limit			1.0900	1.1000			2.2000		.11000
Low Limit			.86000	.89000			1.8000		.08700

Elem	Co2286	Cr2055	Cu3247	Fe2599	K_7664	Li6707	Mg2790	Mn2576	Mo2020
Line	228.616 {447}	205.560 {464}	324.754 {104}	259.940 {130}	766.490 { 44}	670.784 { 50}	279.079 {121}2	257.610 {131}	202.030 {467}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.54656	F .21871	.25813	1.0263	53.832	1.1117	49.694	.49444	F 1.1394
Stddev	.02702	.01080	.00046	.0080	.322	.0103	.081	.00092	.0583
%RSD	4.9444	4.9398	.17976	.77629	.59860	.92758	.16359	.18668	5.1169

#1	.52745	.21107	.25846	1.0319	54.059	1.1190	49.637	.49378	1.0982
#2	.56567	.22635	.25780	1.0207	53.604	1.1044	49.752	.49509	1.1806

Check ?	Chk Pass	Chk Fail	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Fail
High Limit		.05750							1.1000
Low Limit		.04300							.90000

Elem	Na8183	Ni2316	P_1782	Pb2203	S_1820	Sb2068	Se1960	Si2881	Sn1899
Line	818.326 { 41}	231.604 {446}	178.284 {489}	220.353 {453}	182.034 {485}	206.833 {463}	196.090 {472}	288.158 {117}	189.989 {477}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	54.517	.53353	F 11.163	F .55473	F 2.2390	F .55889	F 2.2130	10.193	2.1152
Stddev	.255	.02717	.508	.02974	.1101	.02824	.0899	.041	.1070
%RSD	.46830	5.0919	4.5476	5.3616	4.9185	5.0528	4.0634	.40583	5.0607

#1	54.697	.51432	10.804	.53370	2.1611	.53892	2.1494	10.223	2.0395
#2	54.336	.55274	11.521	.57576	2.3169	.57886	2.2766	10.164	2.1909

Check ?	Chk Pass	Chk Pass	Chk Fail	Chk Fail	Chk Fail	Chk Fail	Chk Fail	Chk Pass	Chk Pass
High Limit			11.100	.54500	2.2000	.54000	2.2000		
Low Limit			9.1000	.44500	1.8000	.44000	1.8000		

Elem	Sr4077	Th2837	Ti3349	Ti1908	U_3701	V_2924	Zn2062	Zr3391
Line	407.771 { 83}	283.730 {119}	334.904 {101}	190.856 {477}	370.152 { 91}	292.402 {115}	206.200 {163}	339.198 { 99}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.98860	1.0372	.96899	2.1335	2.2094	.47849	.48405	.50453
Stddev	.00791	.0056	.00293	.1031	.0194	.00017	.00121	.00480
%RSD	.79989	.53728	.30226	4.8314	.87730	.03480	.25083	.95184

#1	.99419	1.0332	.96691	2.0606	2.2231	.47861	.48320	.50792
#2	.98301	1.0411	.97106	2.2064	2.1957	.47837	.48491	.50113

Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit								
Low Limit								

Int. Std.	Y_2243	Y_3600	Y_3774
Line	224.306 {450}	360.073 { 94}	377.433 { 89}
Units	Cts/S	Cts/S	Cts/S
Avg	1411.5	30709.	5760.4
Stddev	54.4	42.	39.1
%RSD	3.8555	.13738	.67795

#1	1450.0	30739.	5732.8
#2	1373.0	30679.	5788.1

Sample Name: 280-83160-A-3-A Acquired: 5/23/2016 19:12:58 Type: Unk
Method: 6500_026(v10) Mode: CONC Corr. Factor: 1.000000
User: kellyca Custom ID1: Custom ID2: Custom ID3:
Comment: 325196 6010B Q4

Elem	Ag3280	Al1670	As1890	B_2089	Ba4554	Be3130	Bi2230	Ca3179	Cd2288
Line	328.068 {103}	167.079 {502}	189.042 {478}	208.959 {461}	455.403 { 74}	313.042 {108}	223.061 {451}	317.933 {106}	228.802 {447}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.00035	.00396	-.00192	.01489	.00633	.00009	.00314	10.556	.00022
Stddev	.00007	.00056	.00510	.00020	.00019	.00004	.00454	.022	.00035
%RSD	20.292	14.039	266.18	1.3517	3.0256	39.080	144.32	.20627	156.58

#1	.00040	.00436	-.00552	.01475	.00647	.00012	.00635	10.571	.00047
#2	.00030	.00357	.00169	.01503	.00619	.00007	-.00006	10.540	-.00002

Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Elem	Co2286	Cr2055	Cu3247	Fe2599	K_7664	Li6707	Mg2790	Mn2576	Mo2020
Line	228.616 {447}	205.560 {464}	324.754 {104}	259.940 {130}	766.490 { 44}	670.784 { 50}	279.079 {121}2	257.610 {131}	202.030 {467}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.00273	.00034	.00030	11.840	3.0008	-.00063	3.9176	.03698	.00132
Stddev	.00011	.00005	.00037	.007	.0022	.00037	.0089	.00017	.00003
%RSD	4.1925	15.856	120.91	.05506	.07272	58.484	.22670	.44876	1.9285

#1	.00265	.00038	.00004	11.835	2.9993	-.00037	3.9113	.03686	.00130
#2	.00281	.00030	.00056	11.845	3.0024	-.00089	3.9239	.03710	.00134

Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Elem	Na8183	Ni2316	P_1782	Pb2203	S_1820	Sb2068	Se1960	Si2881	Sn1899
Line	818.326 { 41}	231.604 {446}	178.284 {489}	220.353 {453}	182.034 {485}	206.833 {463}	196.090 {472}	288.158 {117}	189.989 {477}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	124.17	.00052	.04320	.00139	.21485	.00181	.00620	2.9934	-.00037
Stddev	.27	.00021	.00194	.00188	.00092	.00041	.00352	.0123	.00079
%RSD	.21971	40.072	4.4893	135.80	.42996	22.360	56.861	.41059	214.68

#1	124.37	.00066	.04457	.00006	.21420	.00210	.00371	3.0021	-.00092
#2	123.98	.00037	.04183	.00272	.21551	.00153	.00869	2.9847	.00019

Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Elem	Sr4077	Th2837	Ti3349	Ti1908	U_3701	V_2924	Zn2062	Zr3391
Line	407.771 { 83}	283.730 {119}	334.904 {101}	190.856 {477}	370.152 { 91}	292.402 {115}	206.200 {163}	339.198 { 99}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.06604	.00149	.00023	.00250	-.00237	.00025	.00275	.00025
Stddev	.00011	.00006	.00029	.00145	.02808	.00014	.00015	.00081
%RSD	.17057	3.9813	128.65	58.052	1185.0	56.641	5.3606	321.70

#1	.06612	.00153	.00044	.00353	-.02222	.00015	.00265	-.00032
#2	.06596	.00145	.00002	.00147	.01748	.00035	.00286	.00082

Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit								
Low Limit								

Int. Std.	Y_2243	Y_3600	Y_3774
Line	224.306 {450}	360.073 { 94}	377.433 { 89}
Units	Cts/S	Cts/S	Cts/S
Avg	1456.5	30997.	5947.2
Stddev	.2	45.	3.6
%RSD	.01505	.14568	.06018

#1	1456.7	30965.	5944.7
#2	1456.3	31029.	5949.7

Sample Name: 280-83160-A-3-Asd@5 Acquired: 5/23/2016 19:15:44 Type: Unk
Method: 6500_026(v10) Mode: CONC Corr. Factor: 1.000000
User: kellyca Custom ID1: Custom ID2: Custom ID3:
Comment: 325196 6010B Q4

Elem	Ag3280	Al1670	As1890	B_2089	Ba4554	Be3130	Bi2230	Ca3179	Cd2288
Line	328.068 {103}	167.079 {502}	189.042 {478}	208.959 {461}	455.403 { 74}	313.042 {108}	223.061 {451}	317.933 {106}	228.802 {447}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.00048	.00113	.00316	.00461	.00128	-.00001	.00126	2.1614	-.00019
Stddev	.00041	.00042	.00031	.00011	.00019	.00003	.00155	.0031	.00017
%RSD	85.349	37.523	9.7887	2.4151	14.761	684.34	123.13	.14508	90.917

#1	.00076	.00083	.00294	.00453	.00114	.00002	.00016	2.1592	-.00030
#2	.00019	.00143	.00338	.00468	.00141	-.00003	.00236	2.1637	-.00007

Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Elem	Co2286	Cr2055	Cu3247	Fe2599	K_7664	Li6707	Mg2790	Mn2576	Mo2020
Line	228.616 {447}	205.560 {464}	324.754 {104}	259.940 {130}	766.490 { 44}	670.784 { 50}	279.079 {121}2	257.610 {131}	202.030 {467}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.00071	.00003	-.00065	2.4182	.58828	-.00121	.81105	.00757	.00019
Stddev	.00028	.00006	.00013	.0050	.00112	.00042	.01157	.00007	.00013
%RSD	39.867	183.70	20.048	.20725	.19015	34.349	1.4262	.90619	65.155

#1	.00091	.00008	-.00074	2.4147	.58749	-.00092	.81923	.00752	.00010
#2	.00051	-.00001	-.00056	2.4218	.58907	-.00150	.80287	.00762	.00028

Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Elem	Na8183	Ni2316	P_1782	Pb2203	S_1820	Sb2068	Se1960	Si2881	Sn1899
Line	818.326 { 41}	231.604 {446}	178.284 {489}	220.353 {453}	182.034 {485}	206.833 {463}	196.090 {472}	288.158 {117}	189.989 {477}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	25.304	.00021	.00986	-.00054	.03988	.00256	.00906	.61634	-.00113
Stddev	.099	.00002	.00109	.00130	.00094	.00111	.00130	.01459	.00071
%RSD	.38965	9.4508	11.096	242.41	2.3479	43.522	14.380	2.3665	62.688

#1	25.234	.00022	.01063	-.00145	.03921	.00177	.00998	.62665	-.00063
#2	25.374	.00019	.00908	.00038	.04054	.00335	.00814	.60602	-.00163

Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Elem	Sr4077	Th2837	Ti3349	Ti1908	U_3701	V_2924	Zn2062	Zr3391
Line	407.771 { 83}	283.730 {119}	334.904 {101}	190.856 {477}	370.152 { 91}	292.402 {115}	206.200 {163}	339.198 { 99}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.01328	.00178	.00009	.00298	.00285	-.00012	-.00095	.00021
Stddev	.00003	.00034	.00015	.00066	.00604	.00009	.00006	.00023
%RSD	.25303	19.355	171.40	22.249	211.83	74.538	6.1641	110.84

#1	.01325	.00154	-.00002	.00251	.00712	-.00019	-.00091	.00004
#2	.01330	.00202	.00019	.00345	-.00142	-.00006	-.00099	.00037

Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit								
Low Limit								

Int. Std.	Y_2243	Y_3600	Y_3774
Line	224.306 {450}	360.073 { 94}	377.433 { 89}
Units	Cts/S	Cts/S	Cts/S
Avg	1516.9	32229.	5930.2
Stddev	2.5	24.	28.6
%RSD	.16614	.07341	.48288

#1	1515.1	32212.	5950.5
#2	1518.7	32245.	5910.0

Sample Name: 280-83160-A-3-B MS Acquired: 5/23/2016 19:18:31 Type: Unk
Method: 6500_026(v10) Mode: CONC Corr. Factor: 1.000000
User: kellyca Custom ID1: Custom ID2: Custom ID3:
Comment: 325196 6010B Q4

Elem	Ag3280	Al1670	As1890	B_2089	Ba4554	Be3130	Bi2230	Ca3179	Cd2288
Line	328.068 {103}	167.079 {502}	189.042 {478}	208.959 {461}	455.403 { 74}	313.042 {108}	223.061 {451}	317.933 {106}	228.802 {447}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.05189	1.9841	1.1031	1.1381	2.0692	.05195	2.3517	60.421	.10951
Stddev	.00018	.0003	.0104	.0016	.0019	.00006	.0063	.057	.00000
%RSD	.35480	.01331	.93894	.14198	.09292	.11073	.26736	.09354	.00256

#1	.05202	1.9839	1.0957	1.1370	2.0678	.05191	2.3561	60.461	.10951
#2	.05176	1.9843	1.1104	1.1393	2.0705	.05199	2.3472	60.381	.10951

Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Elem	Co2286	Cr2055	Cu3247	Fe2599	K_7664	Li6707	Mg2790	Mn2576	Mo2020
Line	228.616 {447}	205.560 {464}	324.754 {104}	259.940 {130}	766.490 { 44}	670.784 { 50}	279.079 {121}2	257.610 {131}	202.030 {467}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.52431	W .20968	.26768	13.172	57.493	1.1246	53.464	.52722	1.0986
Stddev	.00085	.00023	.00135	.035	.028	.0005	.135	.00108	.0016
%RSD	.16179	.11181	.50344	.26684	.04946	.04129	.25269	.20528	.14828

#1	.52371	.20985	.26863	13.196	57.473	1.1243	53.559	.52799	1.0998
#2	.52491	.20952	.26673	13.147	57.513	1.1249	53.368	.52646	1.0975

Check ?	Chk Pass	Chk Warn	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit		.10000							
Low Limit		-.01000							

Elem	Na8183	Ni2316	P_1782	Pb2203	S_1820	Sb2068	Se1960	Si2881	Sn1899
Line	818.326 { 41}	231.604 {446}	178.284 {489}	220.353 {453}	182.034 {485}	206.833 {463}	196.090 {472}	288.158 {117}	189.989 {477}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	184.66	.50772	11.115	.52458	2.4547	.55164	2.1746	13.177	2.0111
Stddev	.04	.00031	.014	.00240	.0013	.00198	.0095	.001	.0037
%RSD	.02164	.06137	.12891	.45738	.05136	.35867	.43646	.01112	.18314

#1	184.68	.50794	11.125	.52627	2.4556	.55304	2.1814	13.176	2.0085
#2	184.63	.50750	11.105	.52288	2.4538	.55024	2.1679	13.178	2.0137

Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Elem	Sr4077	Th2837	Ti3349	Ti1908	U_3701	V_2924	Zn2062	Zr3391	
Line	407.771 { 83}	283.730 {119}	334.904 {101}	190.856 {477}	370.152 { 91}	292.402 {115}	206.200 {163}	339.198 { 99}	
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	
Avg	1.0523	1.0499	.97951	2.0002	2.2003	.48377	.47884	.50421	
Stddev	.0003	.0025	.00207	.0030	.0302	.00110	.00302	.00072	
%RSD	.03229	.23900	.21150	.14825	1.3727	.22716	.63115	.14276	

#1	1.0521	1.0481	.98097	2.0023	2.1790	.48455	.48098	.50472	
#2	1.0525	1.0517	.97804	1.9981	2.2217	.48300	.47670	.50370	

Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	
High Limit									
Low Limit									

Int. Std.	Y_2243	Y_3600	Y_3774						
Line	224.306 {450}	360.073 { 94}	377.433 { 89}						
Units	Cts/S	Cts/S	Cts/S						
Avg	1416.5	30034.	5864.3						
Stddev	2.2	4.	4.5						
%RSD	.15497	.01443	.07743						

#1	1415.0	30037.	5861.1						
#2	1418.1	30031.	5867.5						

Sample Name: 280-83160-A-3-C MSD Acquired: 5/23/2016 19:21:07 Type: Unk
Method: 6500_026(v10) Mode: CONC Corr. Factor: 1.000000
User: kellyca Custom ID1: Custom ID2: Custom ID3:
Comment: 325196 6010B Q4

Elem	Ag3280	Al1670	As1890	B_2089	Ba4554	Be3130	Bi2230	Ca3179	Cd2288
Line	328.068 {103}	167.079 {502}	189.042 {478}	208.959 {461}	455.403 { 74}	313.042 {108}	223.061 {451}	317.933 {106}	228.802 {447}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.05070	1.9507	1.0849	1.1187	2.0270	.05068	2.2987	59.262	.10763
Stddev	.00001	.0007	.0054	.0014	.0002	.00007	.0011	.010	.00003
%RSD	.02037	.03460	.49481	.12964	.00894	.12854	.04781	.01698	.02459
#1	.05069	1.9503	1.0811	1.1177	2.0271	.05073	2.2995	59.255	.10765
#2	.05071	1.9512	1.0887	1.1197	2.0269	.05063	2.2979	59.269	.10761

Check ? Chk Pass Chk Pass Chk Pass Chk Pass Chk Pass Chk Pass Chk Pass Chk Pass Chk Pass
High Limit
Low Limit

Elem	Co2286	Cr2055	Cu3247	Fe2599	K_7664	Li6707	Mg2790	Mn2576	Mo2020
Line	228.616 {447}	205.560 {464}	324.754 {104}	259.940 {130}	766.490 { 44}	670.784 { 50}	279.079 {121}2	257.610 {131}	202.030 {467}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.51560	W .20554	.26283	12.746	56.357	1.1001	52.560	.51738	1.0822
Stddev	.00114	.00130	.00044	.001	.116	.0027	.048	.00000	.0015
%RSD	.22149	.63318	.16821	.00782	.20577	.24570	.09177	.00035	.13639
#1	.51641	.20646	.26252	12.746	56.439	1.1020	52.526	.51738	1.0832
#2	.51480	.20462	.26315	12.747	56.275	1.0982	52.594	.51738	1.0811

Check ? Chk Pass Chk Warn Chk Pass Chk Pass Chk Pass Chk Pass Chk Pass Chk Pass Chk Pass
High Limit .10000
Low Limit -.01000

Elem	Na8183	Ni2316	P_1782	Pb2203	S_1820	Sb2068	Se1960	Si2881	Sn1899
Line	818.326 { 41}	231.604 {446}	178.284 {489}	220.353 {453}	182.034 {485}	206.833 {463}	196.090 {472}	288.158 {117}	189.989 {477}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	178.82	.50067	10.896	.51545	2.4111	.53983	2.1479	12.904	1.9795
Stddev	.27	.00065	.011	.00489	.0047	.00221	.0034	.053	.0031
%RSD	.14879	.12929	.10214	.94837	.19662	.41003	.15675	.41394	.15419
#1	179.01	.50021	10.904	.51199	2.4145	.54139	2.1503	12.867	1.9817
#2	178.63	.50113	10.888	.51891	2.4077	.53826	2.1455	12.942	1.9774

Check ? Chk Pass Chk Pass Chk Pass Chk Pass Chk Pass Chk Pass Chk Pass Chk Pass Chk Pass
High Limit
Low Limit

Elem	Sr4077	Th2837	Ti3349	Ti1908	U_3701	V_2924	Zn2062	Zr3391
Line	407.771 { 83}	283.730 {119}	334.904 {101}	190.856 {477}	370.152 { 91}	292.402 {115}	206.200 {163}	339.198 { 99}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	1.0319	1.0268	.96311	1.9651	2.1468	.47560	.46579	.49472
Stddev	.0004	.0002	.00011	.0103	.0014	.00145	.00142	.00019
%RSD	.03784	.02362	.01116	.52411	.06468	.30471	.30465	.03928
#1	1.0316	1.0266	.96303	1.9724	2.1458	.47457	.46479	.49486
#2	1.0322	1.0269	.96319	1.9578	2.1478	.47662	.46680	.49459

Check ? Chk Pass Chk Pass Chk Pass Chk Pass Chk Pass Chk Pass Chk Pass Chk Pass
High Limit
Low Limit

Int. Std.	Y_2243	Y_3600	Y_3774
Line	224.306 {450}	360.073 { 94}	377.433 { 89}
Units	Cts/S	Cts/S	Cts/S
Avg	1419.1	30010.	5861.6
Stddev	.4	14.	4.7
%RSD	.02482	.04578	.08035
#1	1418.9	30019.	5865.0
#2	1419.4	30000.	5858.3

Sample Name: 280-83160-A-3-Apds Acquired: 5/23/2016 19:23:43 Type: Unk
Method: 6500_026(v10) Mode: CONC Corr. Factor: 1.000000
User: kellyca Custom ID1: Custom ID2: Custom ID3:
Comment: 325196 6010B Q4

Elem	Ag3280	Al1670	As1890	B_2089	Ba4554	Be3130	Bi2230	Ca3179	Cd2288
Line	328.068 {103}	167.079 {502}	189.042 {478}	208.959 {461}	455.403 { 74}	313.042 {108}	223.061 {451}	317.933 {106}	228.802 {447}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.01388	.99177	.20803	.12133	.10405	.04940	-.00101	29.318	.05270
Stddev	.00021	.00142	.00255	.00043	.00050	.00025	.00009	.043	.00015
%RSD	1.5222	.14300	1.2260	.35532	.48044	.50389	8.7976	.14833	.27794

#1	.01403	.99277	.20623	.12164	.10369	.04922	-.00107	29.287	.05260
#2	.01373	.99077	.20983	.12103	.10440	.04958	-.00094	29.349	.05280

Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Elem	Co2286	Cr2055	Cu3247	Fe2599	K_7664	Li6707	Mg2790	Mn2576	Mo2020
Line	228.616 {447}	205.560 {464}	324.754 {104}	259.940 {130}	766.490 { 44}	670.784 { 50}	279.079 {121}2	257.610 {131}	202.030 {467}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.05350	.05012	.05156	12.468	23.496	.10646	22.799	.08387	.05332
Stddev	.00022	.00031	.00012	.016	.053	.00157	.077	.00046	.00003
%RSD	.41408	.60906	.23464	.12488	.22398	1.4728	.33629	.54537	.05236

#1	.05365	.05034	.05147	12.479	23.459	.10535	22.744	.08355	.05334
#2	.05334	.04990	.05165	12.457	23.534	.10757	22.853	.08419	.05330

Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Elem	Na8183	Ni2316	P_1782	Pb2203	S_1820	Sb2068	Se1960	Si2881	Sn1899
Line	818.326 { 41}	231.604 {446}	178.284 {489}	220.353 {453}	182.034 {485}	206.833 {463}	196.090 {472}	288.158 {117}	189.989 {477}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	142.29	.05009	2.1359	.10175	.21134	.10386	.20903	7.6807	.09550
Stddev	.37	.00005	.0006	.00247	.00333	.00142	.00807	.0196	.00071
%RSD	.25786	.09170	.03033	2.4319	1.5769	1.3672	3.8600	.25452	.73965

#1	142.03	.05006	2.1355	.10000	.21369	.10285	.21474	7.6668	.09600
#2	142.55	.05012	2.1364	.10350	.20898	.10486	.20333	7.6945	.09500

Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Elem	Sr4077	Th2837	Ti3349	Ti1908	U_3701	V_2924	Zn2062	Zr3391
Line	407.771 { 83}	283.730 {119}	334.904 {101}	190.856 {477}	370.152 { 91}	292.402 {115}	206.200 {163}	339.198 { 99}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.11187	.20188	.04688	.19941	.52331	.04729	.18884	.04729
Stddev	.00039	.00235	.00027	.00211	.00919	.00071	.00018	.00113
%RSD	.35095	1.1640	.56536	1.0574	1.7566	1.5115	.09578	2.3958

#1	.11159	.20021	.04669	.19792	.51681	.04679	.18871	.04809
#2	.11215	.20354	.04707	.20090	.52981	.04780	.18897	.04649

Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit								
Low Limit								

Int. Std.	Y_2243	Y_3600	Y_3774
Line	224.306 {450}	360.073 { 94}	377.433 { 89}
Units	Cts/S	Cts/S	Cts/S
Avg	1451.8	30577.	5876.8
Stddev	.4	78.	1.4
%RSD	.02540	.25601	.02359

#1	1452.1	30633.	5875.8
#2	1451.6	30522.	5877.8

Sample Name: 280-83160-A-8-A Acquired: 5/23/2016 19:26:29 Type: Unk
Method: 6500_026(v10) Mode: CONC Corr. Factor: 1.000000
User: kellyca Custom ID1: Custom ID2: Custom ID3:
Comment: 325196 6010B Q4

Elem	Ag3280	Al1670	As1890	B_2089	Ba4554	Be3130	Bi2230	Ca3179	Cd2288
Line	328.068 {103}	167.079 {502}	189.042 {478}	208.959 {461}	455.403 { 74}	313.042 {108}	223.061 {451}	317.933 {106}	228.802 {447}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.00043	.00240	.00281	.00892	.03866	-.00001	-.00054	12.190	-.00005
Stddev	.00050	.00003	.00001	.00078	.00023	.00007	.00190	.000	.00007
%RSD	115.54	1.2364	.21627	8.7143	.60618	879.11	354.26	.00315	140.27

#1	.00008	.00242	.00281	.00947	.03883	-.00006	.00081	12.190	-.00000
#2	.00079	.00238	.00280	.00837	.03850	.00004	-.00188	12.190	-.00009

Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Elem	Co2286	Cr2055	Cu3247	Fe2599	K_7664	Li6707	Mg2790	Mn2576	Mo2020
Line	228.616 {447}	205.560 {464}	324.754 {104}	259.940 {130}	766.490 { 44}	670.784 { 50}	279.079 {121}2	257.610 {131}	202.030 {467}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.00260	.00023	.00027	.58553	1.0167	-.00046	4.4453	.01662	.00141
Stddev	.00059	.00005	.00003	.00369	.0138	.00138	.0013	.00014	.00008
%RSD	22.632	21.256	10.281	.63070	1.3594	296.16	.02929	.82388	5.7191

#1	.00218	.00020	.00029	.58292	1.0069	.00051	4.4443	.01672	.00136
#2	.00302	.00026	.00025	.58814	1.0265	-.00144	4.4462	.01652	.00147

Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Elem	Na8183	Ni2316	P_1782	Pb2203	S_1820	Sb2068	Se1960	Si2881	Sn1899
Line	818.326 { 41}	231.604 {446}	178.284 {489}	220.353 {453}	182.034 {485}	206.833 {463}	196.090 {472}	288.158 {117}	189.989 {477}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	281.10	.00139	.04570	.00027	.13362	.00134	.01329	5.5059	.00090
Stddev	.17	.00089	.00054	.00001	.00159	.00032	.00911	.0285	.00189
%RSD	.06103	63.982	1.1861	4.0736	1.1889	23.572	68.581	.51690	210.89

#1	280.97	.00076	.04608	.00026	.13474	.00156	.01973	5.4858	.00224
#2	281.22	.00202	.04532	.00027	.13249	.00111	.00684	5.5261	-.00044

Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Elem	Sr4077	Th2837	Ti3349	Ti1908	U_3701	V_2924	Zn2062	Zr3391
Line	407.771 { 83}	283.730 {119}	334.904 {101}	190.856 {477}	370.152 { 91}	292.402 {115}	206.200 {163}	339.198 { 99}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.10052	.00180	.00033	.00216	-.00082	.00013	.00274	.00156
Stddev	.00042	.00175	.00039	.00196	.00440	.00043	.00129	.00051
%RSD	.42028	97.615	117.80	90.710	538.11	338.65	47.165	32.553

#1	.10022	.00304	.00061	.00354	-.00393	.00043	.00365	.00192
#2	.10082	.00056	.00006	.00077	.00229	-.00018	.00182	.00120

Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit								
Low Limit								

Int. Std.	Y_2243	Y_3600	Y_3774
Line	224.306 {450}	360.073 { 94}	377.433 { 89}
Units	Cts/S	Cts/S	Cts/S
Avg	1441.8	29802.	5732.3
Stddev	1.4	33.	11.0
%RSD	.09428	.11002	.19126

#1	1442.8	29779.	5724.5
#2	1440.9	29825.	5740.0

Sample Name: ccvh-3900196 Acquired: 5/23/2016 19:29:21 Type: QC
Method: 6500_026(v10) Mode: CONC Corr. Factor: 1.000000
User: kellyca Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	Ag3280	Al3092	As1890	B_2089	Ba4554	Be3130	Bi2230	Ca3179	Cd2288	Co2286	Cr2055	Cu3247	Fe2714
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.00156	47.813	.00344	.00506	.00189	.00132	1.0552	-.04604	.00049	.00455	.00110	.00681	48.291
Stddev	.00038	.038	.00232	.00089	.00003	.00004	.0017	.00277	.00007	.00023	.00003	.00009	.169
%RSD	24.184	.08035	67.414	17.568	1.7901	2.6560	.15736	6.0077	14.408	5.0021	2.4941	1.2902	.34938

#1	.00182	47.840	.00180	.00444	.00187	.00130	1.0564	-.04409	.00044	.00471	.00108	.00675	48.410
#2	.00129	47.786	.00508	.00569	.00192	.00135	1.0540	-.04800	.00054	.00439	.00112	.00688	48.172

Check ?	None	Chk Pass	None	None	None	None	Chk Pass	None	None	None	None	None	Chk Pass
Value													
Range													

Elem	K_7664	Li6707	Mg2790	Mn2576	Mo2020	Na8183	Ni2316	P_1782	Pb2203	S_1820	Sb2068	Se1960	Si2881
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.21428	.00276	.20964	.00075	-.00105	254.19	.00091	.00905	.00009	5.0486	.00363	.01322	.02234
Stddev	.00880	.00084	.00645	.00001	.00075	.24	.00088	.00424	.00124	.0038	.00096	.00012	.01183
%RSD	4.1089	30.606	3.0763	1.3095	71.203	.09258	96.857	46.860	1427.8	.07594	26.485	.87358	52.958

#1	.22051	.00336	.20508	.00076	-.00158	254.02	.00029	.00605	-.00079	5.0513	.00295	.01331	.03070
#2	.20806	.00216	.21420	.00075	-.00052	254.36	.00154	.01205	.00096	5.0458	.00431	.01314	.01397

Check ?	None	None	None	None	None	Chk Pass	None	None	None	Chk Pass	None	None	None
Value													
Range													

Elem	Sn1899	Sr4077	Th2837	Ti3349	Tl1908	U_3701	V_2924	Zn2062	Zr3391
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.00471	.00180	4.9873	.02602	.00086	10.288	-.01540	.00084	-.01108
Stddev	.00019	.00005	.0049	.00022	.00084	.007	.00030	.00031	.00158
%RSD	3.9985	2.5835	.09749	.83371	97.627	.06429	1.9418	37.272	14.263

#1	.00485	.00183	4.9907	.02617	.00026	10.293	-.01519	.00062	-.01220
#2	.00458	.00177	4.9839	.02587	.00145	10.283	-.01562	.00106	-.00996

Check ?	None	None	Chk Pass	None	None	Chk Pass	None	None	None
Value									
Range									

Int. Std.	Y_2243	Y_3600	Y_3774
Units	Cts/S	Cts/S	Cts/S
Avg	1460.2	30468.	5742.7
Stddev	1.1	30.	37.4
%RSD	.07698	.09756	.65073

#1	1461.0	30447.	5716.3
#2	1459.4	30489.	5769.2

Sample Name: ccv-3900195 Acquired: 5/23/2016 19:32:13 Type: QC
Method: 6500_026(v10) Mode: CONC Corr. Factor: 1.000000
User: kellyca Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	Ag3280	Al1670	As1890	B_2089	Ba4554	Be3130	Bi2230	Ca3179	Cd2288	Co2286	Cr2055	Cu3247
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.48382	F .56814	1.0077	.54158	.48684	.49489	.00361	4.8676	.51641	.51138	.50058	.49279
Stddev	.00103	.00244	.0023	.00036	.00103	.00103	.00053	.0157	.00075	.00102	.00068	.00334
%RSD	.21205	.42859	.23258	.06695	.21211	.20833	14.574	.32195	.14596	.19871	.13637	.67760

#1	.48455	.56986	1.0061	.54132	.48611	.49416	.00398	4.8565	.51588	.51210	.50106	.49515
#2	.48310	.56642	1.0094	.54184	.48757	.49562	.00323	4.8787	.51694	.51066	.50009	.49043

Check ?	Chk Pass	Chk Fail	Chk Pass	Chk Pass	Chk Pass	Chk Pass	None	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Value		.50000										
Range		10.000%										

Elem	Fe2599	K_7664	Li6707	Mg2790	Mn2576	Mo2020	Na5895	Ni2316	P_1782	Pb2203	S_1820	Sb2068
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	2.6854	50.065	1.0366	19.485	.48767	.50468	5.3970	.50140	1.0083	1.0461	.01405	.99373
Stddev	.0155	.051	.0010	.044	.00113	.00115	.0008	.00131	.0082	.0036	.00047	.00241
%RSD	.57856	.10153	.09946	.22553	.23223	.22735	.01506	.26157	.81020	.34223	3.3662	.24285

#1	2.6744	50.029	1.0359	19.516	.48687	.50549	5.3964	.50233	1.0025	1.0436	.01372	.99544
#2	2.6964	50.101	1.0373	19.454	.48847	.50387	5.3976	.50047	1.0141	1.0486	.01438	.99203

Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	None	Chk Pass
Value												
Range												

Elem	Se1960	Si2881	Sn1899	Sr4077	Th2837	Ti3349	Ti1908	U_3701	V_2924	Zn2062	Zr3391
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	1.0248	4.8849	.98746	.47153	.01121	.46513	1.0320	.01991	.46660	.49184	.48320
Stddev	.0046	.0257	.00150	.00022	.00142	.00017	.0012	.01004	.00024	.00103	.00001
%RSD	.45111	.52636	.15153	.04603	12.675	.03551	.11143	50.446	.05133	.20943	.00199

#1	1.0215	4.8668	.98852	.47138	.01021	.46502	1.0312	.02701	.46677	.49111	.48321
#2	1.0280	4.9031	.98640	.47168	.01222	.46525	1.0329	.01281	.46644	.49257	.48319

Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	None	Chk Pass	Chk Pass	None	Chk Pass	Chk Pass	Chk Pass
Value											
Range											

Int. Std.	Y_2243	Y_3600	Y_3774
Units	Cts/S	Cts/S	Cts/S
Avg	1531.4	31983.	5933.9
Stddev	3.8	47.	18.1
%RSD	.24957	.14631	.30488

#1	1534.1	31950.	5946.7
#2	1528.7	32016.	5921.1

Sample Name: ccb Acquired: 5/23/2016 19:34:52 Type: QC
Method: 6500_026(v10) Mode: CONC Corr. Factor: 1.000000
User: kellyca Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	Ag3280	Al1670	As1890	B_2089	Ba4554	Be3130	Bi2230	Ca3179	Cd2288	Co2286	Cr2055	Cu3247
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.00055	-.00014	-.00199	F .00319	.00025	.00011	-.00026	-.00632	.00003	-.00032	.00002	-.00111
Stddev	.00016	.00111	.00263	.00050	.00009	.00000	.00331	.00494	.00006	.00020	.00015	.00019
%RSD	29.364	815.91	131.87	15.512	38.041	1.5384	1272.7	78.107	223.34	62.800	854.20	16.873

#1	.00066	-.00092	-.00385	.00284	.00031	.00011	.00208	-.00283	-.00002	-.00018	.00013	-.00097
#2	.00044	.00065	-.00013	.00354	.00018	.00011	-.00260	-.00982	.00007	-.00046	-.00009	-.00124

Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Fail	Chk Pass	Chk Pass	None	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit				.00312								
Low Limit				-.00312								

Elem	Fe2599	K_7664	Li6707	Mg2790	Mn2576	Mo2020	Na5895	Ni2316	P_1782	Pb2203	S_1820	Sb2068
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.00578	.04598	-.00084	.00225	.00001	.00030	.04564	-.00052	.00051	-.00015	-.00023	F .00730
Stddev	.00125	.00112	.00088	.00100	.00002	.00017	.00097	.00001	.00016	.00180	.00105	.00083
%RSD	21.638	2.4267	104.27	44.564	220.26	56.824	2.1207	2.8303	30.790	1207.4	452.02	11.303

#1	.00490	.04676	-.00022	.00296	.00003	.00018	.04633	-.00050	.00040	-.00143	.00051	.00672
#2	.00666	.04519	-.00146	.00154	-.00001	.00042	.04496	-.00053	.00062	.00113	-.00098	.00789

Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	None	Chk Fail
High Limit												.00628
Low Limit												-.00628

Elem	Se1960	Si2881	Sn1899	Sr4077	Th2837	Ti3349	Ti1908	U_3701	V_2924	Zn2062	Zr3391
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.00275	.01099	.00074	.00009	.00063	.00027	.00182	.00763	.00031	.00043	.00112
Stddev	.00277	.01586	.00028	.00001	.00058	.00022	.00216	.00792	.00010	.00053	.00184
%RSD	100.93	144.37	38.540	6.3446	91.626	81.750	119.05	103.73	30.918	123.20	163.84

#1	.00079	-.00023	.00094	.00008	.00022	.00042	.00334	.01323	.00037	.00081	-.00018
#2	.00471	.02220	.00054	.00009	.00104	.00011	.00029	.00203	.00024	.00006	.00242

Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit											
Low Limit											

Int. Std.	Y_2243	Y_3600	Y_3774
Units	Cts/S	Cts/S	Cts/S
Avg	1519.1	32622.	5888.4
Stddev	2.2	25.	5.2
%RSD	.14526	.07708	.08756

#1	1517.5	32639.	5892.1
#2	1520.7	32604.	5884.8

Sample Name: ccvl-3907489 Acquired: 5/23/2016 19:37:41 Type: QC
Method: 6500_026(v10) Mode: CONC Corr. Factor: 1.000000
User: kellyca Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	Ag3280	Al1670	As1890	B_2089	Ba4554	Be3130	Bi2230	Ca3179	Cd2288	Co2286	Cr2055	Cu3247	Fe2599
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.01022	.10578	.01693	.10512	.01022	.00105	.11738	.18868	.00511	.00990	.01033	.01411	.10737
Stddev	.00006	.00001	.00626	.00020	.00018	.00000	.00053	.00230	.00030	.00050	.00007	.00008	.00104
%RSD	.59832	.00964	36.976	.19460	1.7540	.15188	.45184	1.2182	5.7861	5.0924	.68238	.57620	.96833

#1	.01026	.10579	.01250	.10526	.01009	.00105	.11776	.18705	.00532	.01026	.01028	.01405	.10664
#2	.01018	.10578	.02135	.10497	.01034	.00105	.11701	.19030	.00490	.00954	.01038	.01416	.10811

Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Value													
Range													

Elem	K_7664	Li6707	Mg2790	Mn2576	Mo2020	Na5895	Ni2316	P_1782	Pb2203	S_1820	Sb2068	Se1960	Si2881
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	3.0852	.00998	.20131	.00986	.02036	1.0492	.04108	2.9006	.00977	-.00037	.02194	.01865	.50108
Stddev	.0546	.00053	.00018	.00009	.00001	.0078	.00008	.0047	.00026	.00466	.00118	.00231	.00556
%RSD	1.7702	5.3242	.08801	.88874	.06205	.74665	.19196	.16220	2.6286	1265.8	5.3972	12.410	1.1096

#1	3.0465	.00960	.20144	.00980	.02037	1.0548	.04113	2.9039	.00959	.00293	.02110	.02029	.49715
#2	3.1238	.01036	.20118	.00992	.02035	1.0437	.04102	2.8973	.00995	-.00367	.02278	.01701	.50501

Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	None	Chk Pass	Chk Pass	Chk Pass
Value													
Range													

Elem	Sn1899	Sr4077	Th2837	Ti3349	Tl1908	U_3701	V_2924	Zn2062	Zr3391
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.10199	.00957	.01496	.00947	.01548	.07370	.00932	.01716	.01464
Stddev	.00141	.00006	.00051	.00003	.00164	.01627	.00012	.00042	.00180
%RSD	1.3866	.59218	3.4306	.32988	10.620	22.079	1.2923	2.4739	12.325

#1	.10299	.00953	.01532	.00949	.01664	.08520	.00923	.01686	.01592
#2	.10099	.00961	.01459	.00945	.01432	.06219	.00940	.01746	.01337

Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Value									
Range									

Int. Std.	Y_2243	Y_3600	Y_3774
Units	Cts/S	Cts/S	Cts/S
Avg	1532.0	32624.	5947.5
Stddev	.5	13.	26.6
%RSD	.03193	.03860	.44788

#1	1532.4	32615.	5966.3
#2	1531.7	32633.	5928.7

Sample Name: 280-83160-A-10-A Acquired: 5/23/2016 19:40:29 Type: Unk
Method: 6500_026(v10) Mode: CONC Corr. Factor: 1.000000
User: kellyca Custom ID1: Custom ID2: Custom ID3:
Comment: 325196 6010B Q4

Elem	Ag3280	Al1670	As1890	B_2089	Ba4554	Be3130	Bi2230	Ca3179	Cd2288
Line	328.068 {103}	167.079 {502}	189.042 {478}	208.959 {461}	455.403 { 74}	313.042 {108}	223.061 {451}	317.933 {106}	228.802 {447}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.00020	.01988	.00544	.01223	.02530	.00004	.00220	219.30	-.00010
Stddev	.00007	.00070	.00473	.00051	.00004	.00001	.00135	.55	.00016
%RSD	34.277	3.5322	86.999	4.1946	.14840	25.678	61.479	.25069	162.96

#1	.00015	.02038	.00878	.01259	.02532	.00003	.00124	218.91	-.00022
#2	.00025	.01939	.00209	.01187	.02527	.00005	.00315	219.69	.00002

Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Elem	Co2286	Cr2055	Cu3247	Fe2599	K_7664	Li6707	Mg2790	Mn2576	Mo2020
Line	228.616 {447}	205.560 {464}	324.754 {104}	259.940 {130}	766.490 { 44}	670.784 { 50}	279.079 {121}2	257.610 {131}	202.030 {467}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.00178	.01915	.00234	2.1252	2.7096	.00221	.08247	.02036	.00036
Stddev	.00034	.00041	.00002	.0059	.0113	.00058	.00396	.00007	.00010
%RSD	19.010	2.1480	.97298	.27862	.41619	26.325	4.7994	.32928	28.181

#1	.00201	.01886	.00235	2.1210	2.7176	.00262	.08527	.02041	.00043
#2	.00154	.01944	.00232	2.1294	2.7016	.00180	.07967	.02031	.00029

Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Elem	Na8183	Ni2316	P_1782	Pb2203	S_1820	Sb2068	Se1960	Si2881	Sn1899
Line	818.326 { 41}	231.604 {446}	178.284 {489}	220.353 {453}	182.034 {485}	206.833 {463}	196.090 {472}	288.158 {117}	189.989 {477}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	137.54	.00128	.03251	.00553	.89945	-.00024	.00712	2.1459	-.00011
Stddev	.59	.00003	.00111	.00287	.00139	.00010	.00525	.0187	.00073
%RSD	.43012	2.3472	3.4085	51.910	.15452	40.174	73.695	.87381	637.34

#1	137.12	.00126	.03173	.00756	.89847	-.00017	.00341	2.1592	.00040
#2	137.96	.00131	.03329	.00350	.90044	-.00030	.01083	2.1327	-.00063

Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Elem	Sr4077	Th2837	Ti3349	Ti1908	U_3701	V_2924	Zn2062	Zr3391
Line	407.771 { 83}	283.730 {119}	334.904 {101}	190.856 {477}	370.152 { 91}	292.402 {115}	206.200 {163}	339.198 { 99}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.28145	.00139	.00087	.00416	.00454	.00232	.04964	.00040
Stddev	.00213	.00184	.00002	.00199	.02802	.00052	.00122	.00080
%RSD	.75650	132.63	2.8136	47.825	616.70	22.570	2.4623	198.38

#1	.27994	.00269	.00088	.00276	.02436	.00269	.05051	-.00016
#2	.28296	.00009	.00085	.00557	-.01527	.00195	.04878	.00097

Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit								
Low Limit								

Int. Std.	Y_2243	Y_3600	Y_3774
Line	224.306 {450}	360.073 { 94}	377.433 { 89}
Units	Cts/S	Cts/S	Cts/S
Avg	1428.5	30178.	5794.3
Stddev	2.2	2.	19.8
%RSD	.15573	.00712	.34103

#1	1430.1	30176.	5808.2
#2	1427.0	30180.	5780.3

Sample Name: 280-83160-A-11-A Acquired: 5/23/2016 19:43:16 Type: Unk
Method: 6500_026(v10) Mode: CONC Corr. Factor: 1.000000
User: kellyca Custom ID1: Custom ID2: Custom ID3:
Comment: 325196 6010B Q4

Elem	Ag3280	Al1670	As1890	B_2089	Ba4554	Be3130	Bi2230	Ca3179	Cd2288
Line	328.068 {103}	167.079 {502}	189.042 {478}	208.959 {461}	455.403 { 74}	313.042 {108}	223.061 {451}	317.933 {106}	228.802 {447}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	-.00061	.05230	.00932	.00782	1.2125	.00067	.00637	158.19	.00031
Stddev	.00013	.00088	.00039	.00020	.0027	.00012	.00427	.51	.00004
%RSD	21.229	1.6912	4.2299	2.5274	.22501	17.649	67.056	.31977	11.780

#1	-.00070	.05292	.00959	.00796	1.2106	.00058	.00335	157.83	.00028
#2	-.00052	.05167	.00904	.00768	1.2145	.00075	.00940	158.55	.00033

Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Elem	Co2286	Cr2055	Cu3247	Fe2599	K_7664	Li6707	Mg2790	Mn2576	Mo2020
Line	228.616 {447}	205.560 {464}	324.754 {104}	259.940 {130}	766.490 { 44}	670.784 { 50}	279.079 {121}2	257.610 {131}	202.030 {467}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.05027	.00035	.00112	36.335	3.7548	.00315	39.854	.41167	-.00067
Stddev	.00031	.00021	.00005	.152	.0066	.00030	.265	.00280	.00051
%RSD	.61093	59.434	4.2307	.41776	.17537	9.4080	.66593	.67932	76.231

#1	.05048	.00020	.00109	36.228	3.7502	.00336	39.666	.40969	-.00102
#2	.05005	.00049	.00116	36.443	3.7595	.00294	40.041	.41364	-.00031

Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Elem	Na8183	Ni2316	P_1782	Pb2203	S_1820	Sb2068	Se1960	Si2881	Sn1899
Line	818.326 { 41}	231.604 {446}	178.284 {489}	220.353 {453}	182.034 {485}	206.833 {463}	196.090 {472}	288.158 {117}	189.989 {477}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	W 744.37	.02817	.01593	.02743	1.3390	.00129	.00795	3.4004	-.00284
Stddev	2.16	.00017	.00090	.00082	.0098	.00230	.00507	.0314	.00162
%RSD	.29020	.61058	5.6411	2.9835	.73063	178.49	63.826	.92455	56.898

#1	742.84	.02829	.01530	.02801	1.3459	-.00034	.01154	3.3782	-.00398
#2	745.90	.02805	.01657	.02685	1.3321	.00292	.00436	3.4226	-.00170

Check ?	Chk Warn	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit	500.00								
Low Limit	10.000								

Elem	Sr4077	Th2837	Ti3349	Ti1908	U_3701	V_2924	Zn2062	Zr3391
Line	407.771 { 83}	283.730 {119}	334.904 {101}	190.856 {477}	370.152 { 91}	292.402 {115}	206.200 {163}	339.198 { 99}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	1.2808	.00097	.00055	.00260	-.02449	.00074	.00381	.00130
Stddev	.0050	.00285	.00019	.00071	.02055	.00039	.00128	.00099
%RSD	.38782	292.51	34.424	27.236	83.888	52.703	33.582	76.369

#1	1.2773	-.00104	.00042	.00210	-.00996	.00101	.00290	.00060
#2	1.2843	.00299	.00069	.00309	-.03902	.00046	.00471	.00200

Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit								
Low Limit								

Int. Std.	Y_2243	Y_3600	Y_3774
Line	224.306 {450}	360.073 { 94}	377.433 { 89}
Units	Cts/S	Cts/S	Cts/S
Avg	1430.6	29674.	5994.5
Stddev	.5	252.	29.8
%RSD	.03827	.84772	.49786

#1	1431.0	29852.	6015.6
#2	1430.3	29496.	5973.4

Sample Name: 280-83160-A-19-A Acquired: 5/23/2016 19:46:31 Type: Unk
Method: 6500_026(v10) Mode: CONC Corr. Factor: 1.000000
User: kellyca Custom ID1: Custom ID2: Custom ID3:
Comment: 325196 6010B Q4

Elem	Ag3280	Al1670	As1890	B_2089	Ba4554	Be3130	Bi2230	Ca3179	Cd2288
Line	328.068 {103}	167.079 {502}	189.042 {478}	208.959 {461}	455.403 { 74}	313.042 {108}	223.061 {451}	317.933 {106}	228.802 {447}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.00002	.19260	.00212	.01185	.09057	-.00001	.00217	27.427	.00207
Stddev	.00068	.00181	.00382	.00070	.00010	.00007	.00216	.028	.00023
%RSD	4236.3	.94076	180.08	5.9092	.10979	1003.9	99.632	.10334	11.213

#1	.00050	.19388	-.00058	.01135	.09064	-.00006	.00370	27.447	.00223
#2	-.00047	.19132	.00482	.01234	.09050	.00004	.00064	27.407	.00190

Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Elem	Co2286	Cr2055	Cu3247	Fe2599	K_7664	Li6707	Mg2790	Mn2576	Mo2020
Line	228.616 {447}	205.560 {464}	324.754 {104}	259.940 {130}	766.490 { 44}	670.784 { 50}	279.079 {121}2	257.610 {131}	202.030 {467}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.00387	.00059	.00587	2.7861	3.5002	.00033	7.0973	.04150	-.00054
Stddev	.00032	.00021	.00005	.0114	.0068	.00054	.0119	.00006	.00018
%RSD	8.1712	35.449	.81261	.40922	.19449	161.21	.16755	.14119	32.379

#1	.00365	.00073	.00583	2.7942	3.5050	.00072	7.0889	.04146	-.00067
#2	.00409	.00044	.00590	2.7780	3.4954	-.00005	7.1057	.04154	-.00042

Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Elem	Na8183	Ni2316	P_1782	Pb2203	S_1820	Sb2068	Se1960	Si2881	Sn1899
Line	818.326 { 41}	231.604 {446}	178.284 {489}	220.353 {453}	182.034 {485}	206.833 {463}	196.090 {472}	288.158 {117}	189.989 {477}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	82.905	.01022	.05916	.00255	5.8542	.00035	.00477	5.6541	-.00083
Stddev	.350	.00044	.00115	.00200	.0316	.00098	.00588	.0348	.00208
%RSD	.42175	4.2991	1.9445	78.704	.53959	279.12	123.23	.61527	250.90

#1	82.658	.01053	.05997	.00396	5.8765	-.00034	.00893	5.6787	-.00230
#2	83.152	.00991	.05835	.00113	5.8318	.00105	.00061	5.6295	.00064

Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Elem	Sr4077	Th2837	Ti3349	Ti1908	U_3701	V_2924	Zn2062	Zr3391
Line	407.771 { 83}	283.730 {119}	334.904 {101}	190.856 {477}	370.152 { 91}	292.402 {115}	206.200 {163}	339.198 { 99}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.09970	.00172	.00400	.00073	.00742	.00117	.02577	.00159
Stddev	.00003	.00149	.00023	.00039	.02152	.00016	.00071	.00096
%RSD	.02784	86.946	5.7388	52.514	290.17	13.561	2.7655	60.388

#1	.09968	.00066	.00416	.00046	.02263	.00128	.02627	.00227
#2	.09972	.00278	.00383	.00101	-.00780	.00106	.02526	.00091

Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit								
Low Limit								

Int. Std.	Y_2243	Y_3600	Y_3774
Line	224.306 {450}	360.073 { 94}	377.433 { 89}
Units	Cts/S	Cts/S	Cts/S
Avg	1485.6	31265.	5872.3
Stddev	.0	82.	4.9
%RSD	.00298	.26156	.08304

#1	1485.6	31207.	5875.7
#2	1485.6	31322.	5868.8

Sample Name: 280-83187-A-4-A Acquired: 5/23/2016 19:49:17 Type: Unk
Method: 6500_026(v10) Mode: CONC Corr. Factor: 1.000000
User: kellyca Custom ID1: Custom ID2: Custom ID3:
Comment: 325196 6010B Q4

Elem	Ag3280	Al1670	As1890	B_2089	Ba4554	Be3130	Bi2230	Ca3179	Cd2288
Line	328.068 {103}	167.079 {502}	189.042 {478}	208.959 {461}	455.403 { 74}	313.042 {108}	223.061 {451}	317.933 {106}	228.802 {447}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.00019	.02805	.00173	.02102	.07307	.00001	.01337	22.887	.00064
Stddev	.00040	.00056	.00371	.00006	.00004	.00003	.00198	.045	.00032
%RSD	212.22	1.9861	214.53	.29182	.06060	415.80	14.825	.19673	50.622

#1	-.00009	.02765	.00435	.02098	.07310	.00003	.01197	22.855	.00041
#2	.00047	.02844	-.00089	.02106	.07304	-.00001	.01478	22.919	.00086

Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Elem	Co2286	Cr2055	Cu3247	Fe2714	K_7664	Li6707	Mg2790	Mn2576	Mo2020
Line	228.616 {447}	205.560 {464}	324.754 {104}	271.441 {124}	766.490 { 44}	670.784 { 50}	279.079 {121}2	257.610 {131}	202.030 {467}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.01126	-.00120	.00187	180.50	7.1557	.00521	12.493	.98857	-.00098
Stddev	.00063	.00062	.00031	.18	.0033	.00034	.022	.00102	.00007
%RSD	5.6117	51.422	16.601	.09972	.04593	6.5152	.17830	.10350	7.3802

#1	.01170	-.00163	.00165	180.38	7.1580	.00545	12.509	.98929	-.00103
#2	.01081	-.00076	.00208	180.63	7.1534	.00497	12.478	.98785	-.00093

Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Elem	Na8183	Ni2316	P_1782	Pb2203	S_1820	Sb2068	Se1960	Si2881	Sn1899
Line	818.326 { 41}	231.604 {446}	178.284 {489}	220.353 {453}	182.034 {485}	206.833 {463}	196.090 {472}	288.158 {117}	189.989 {477}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	183.20	.01356	.04462	-.00155	.41262	.00148	.00316	2.7302	.00210
Stddev	.20	.00088	.00306	.00187	.00031	.00106	.00067	.0092	.00144
%RSD	.10929	6.4719	6.8477	120.81	.07477	71.293	21.301	.33735	68.341

#1	183.06	.01294	.04246	-.00023	.41240	.00073	.00363	2.7367	.00109
#2	183.34	.01418	.04678	-.00287	.41283	.00223	.00268	2.7237	.00312

Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Elem	Sr4077	Th2837	Ti3349	Ti1908	U_3701	V_2924	Zn2062	Zr3391
Line	407.771 { 83}	283.730 {119}	334.904 {101}	190.856 {477}	370.152 { 91}	292.402 {115}	206.200 {163}	339.198 { 99}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.10698	-.00306	-.00015	.00366	.03771	.00315	.16745	.00149
Stddev	.00012	.00125	.00014	.00133	.00178	.00019	.00086	.00038
%RSD	.11290	40.952	91.919	36.240	4.7214	5.9436	.51061	25.651

#1	.10707	-.00217	-.00025	.00460	.03897	.00328	.16806	.00176
#2	.10690	-.00395	-.00005	.00272	.03645	.00301	.16685	.00122

Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit								
Low Limit								

Int. Std.	Y_2243	Y_3600	Y_3774
Line	224.306 {450}	360.073 { 94}	377.433 { 89}
Units	Cts/S	Cts/S	Cts/S
Avg	1411.5	29911.	5847.5
Stddev	2.4	94.	40.1
%RSD	.16869	.31379	.68648

#1	1413.1	29844.	5875.9
#2	1409.8	29977.	5819.1

Sample Name: MB 280-326174/1-A Acquired: 5/23/2016 19:52:03 Type: Unk
Method: 6500_026(v10) Mode: CONC Corr. Factor: 1.000000
User: kellyca Custom ID1: 5/21 Custom ID2: Custom ID3:
Comment: 326174 200.7 Fe

Elem	Ag3280	Al1670	As1890	B_2089	Ba4554	Be3130	Bi2230	Ca3179	Cd2288
Line	328.068 {103}	167.079 {502}	189.042 {478}	208.959 {461}	455.403 { 74}	313.042 {108}	223.061 {451}	317.933 {106}	228.802 {447}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.00025	.00046	-.00249	.00179	.00023	.00001	W .00502	.01840	.00014
Stddev	.00007	.00031	.00547	.00035	.00007	.00004	.00093	.00101	.00011
%RSD	28.388	66.915	219.47	19.567	30.743	456.87	18.595	5.4923	79.528

#1	.00020	.00068	-.00636	.00204	.00028	.00004	.00568	.01768	.00006
#2	.00030	.00024	.00138	.00154	.00018	-.00002	.00436	.01911	.00022

Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Warn	Chk Pass	Chk Pass
High Limit							.00500		
Low Limit							-.00500		

Elem	Co2286	Cr2055	Cu3247	Fe2599	K_7664	Li6707	Mg2790	Mn2576	Mo2020
Line	228.616 {447}	205.560 {464}	324.754 {104}	259.940 {130}	766.490 { 44}	670.784 { 50}	279.079 {121}2	257.610 {131}	202.030 {467}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.00002	.00008	-.00125	.02762	.01039	-.00178	.00997	.00043	-.00010
Stddev	.00010	.00009	.00009	.00393	.01018	.00133	.01382	.00043	.00007
%RSD	597.96	120.15	7.4785	14.214	97.964	74.463	138.58	98.661	70.844

#1	.00009	.00014	-.00131	.03040	.01758	-.00084	.00020	.00013	-.00015
#2	-.00005	.00001	-.00118	.02485	.00319	-.00272	.01975	.00074	-.00005

Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Elem	Na5895	Ni2316	P_1782	Pb2203	S_1820	Sb2068	Se1960	Si2881	Sn1899
Line	589.592 { 57}	231.604 {446}	178.284 {489}	220.353 {453}	182.034 {485}	206.833 {463}	196.090 {472}	288.158 {117}	189.989 {477}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.07065	-.00001	W .00613	.00126	.00249	.00164	W .00678	.01241	.00006
Stddev	.00524	.00004	.00389	.00103	.00366	.00188	.00110	.00125	.00016
%RSD	7.4238	523.77	63.427	81.931	146.83	114.64	16.144	10.038	255.79

#1	.07436	-.00004	.00338	.00053	.00509	.00031	.00756	.01329	.00017
#2	.06694	.00002	.00888	.00199	-.00010	.00297	.00601	.01153	-.00005

Check ?	Chk Pass	Chk Pass	Chk Warn	Chk Pass	Chk Pass	Chk Pass	Chk Warn	Chk Pass	Chk Pass
High Limit			.00500				.00500		
Low Limit			-.00500				-.00500		

Elem	Sr4077	Th2837	Ti3349	Ti1908	U_3701	V_2924	Zn2062	Zr3391	
Line	407.771 { 83}	283.730 {119}	334.904 {101}	190.856 {477}	370.152 { 91}	292.402 {115}	206.200 {163}	339.198 { 99}	
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	
Avg	.00007	.00186	.00040	.00262	.01207	-.00058	.00062	.00017	
Stddev	.00004	.00150	.00009	.00046	.01624	.00033	.00100	.00007	
%RSD	55.139	80.590	23.364	17.569	134.56	57.107	162.17	41.812	

#1	.00010	.00292	.00033	.00229	.00059	-.00081	-.00009	.00023	
#2	.00004	.00080	.00046	.00294	.02355	-.00035	.00133	.00012	

Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	
High Limit									
Low Limit									

Int. Std.	Y_2243	Y_3600	Y_3774						
Line	224.306 {450}	360.073 { 94}	377.433 { 89}						
Units	Cts/S	Cts/S	Cts/S						
Avg	1539.1	32842.	5903.1						
Stddev	2.8	116.	3.7						
%RSD	.18333	.35466	.06235						

#1	1541.0	32924.	5905.7						
#2	1537.1	32759.	5900.5						

Sample Name: LCS 280-326174/2-A Acquired: 5/23/2016 19:54:53 Type: Unk

Method: 6500_026(v10) Mode: CONC Corr. Factor: 1.000000

User: kellyca Custom ID1: Custom ID2: Custom ID3:

Comment: 326174 200.7 Fe

Elem	Ag3280	Al1670	As1890	B_2089	Ba4554	Be3130	Bi2230	Ca3179	Cd2288
Line	328.068 {103}	167.079 {502}	189.042 {478}	208.959 {461}	455.403 {74}	313.042 {108}	223.061 {451}	317.933 {106}	228.802 {447}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.04993	1.9727	1.0569	1.0984	2.0108	.05087	F 2.2665	49.618	.10577
Stddev	.00002	.0018	.0045	.0063	.0095	.00009	.0038	.126	.00007
%RSD	.03208	.09207	.42249	.56938	.47514	.17012	.16574	.25474	.06759
#1	.04994	1.9714	1.0537	1.0940	2.0040	.05093	2.2638	49.528	.10582
#2	.04991	1.9740	1.0601	1.1028	2.0175	.05080	2.2691	49.707	.10572

Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Fail	Chk Pass	Chk Pass
High Limit							2.2000		
Low Limit							1.8000		

Elem	Co2286	Cr2055	Cu3247	Fe2599	K_7664	Li6707	Mg2790	Mn2576	Mo2020
Line	228.616 {447}	205.560 {464}	324.754 {104}	259.940 {130}	766.490 {44}	670.784 {50}	279.079 {121}2	257.610 {131}	202.030 {467}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.51384	F .20552	.25495	.99737	52.364	1.0763	49.333	.48966	1.0756
Stddev	.00014	.00082	.00241	.00229	.160	.0060	.466	.00583	.0040
%RSD	.02792	.39700	.94369	.22965	.30575	.56213	.94482	1.1904	.36883
#1	.51394	.20494	.25665	.99575	52.251	1.0720	49.662	.49378	1.0728
#2	.51373	.20610	.25325	.99899	52.477	1.0806	49.003	.48553	1.0784

Check ?	Chk Pass	Chk Fail	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit		.05750							
Low Limit		.04300							

Elem	Na8183	Ni2316	P_1782	Pb2203	S_1820	Sb2068	Se1960	Si2881	Sn1899
Line	818.326 {41}	231.604 {446}	178.284 {489}	220.353 {453}	182.034 {485}	206.833 {463}	196.090 {472}	288.158 {117}	189.989 {477}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	53.068	.50341	10.566	.52483	2.1428	.52983	2.1013	9.9017	1.9973
Stddev	.214	.00011	.010	.00023	.0050	.00070	.0132	.0582	.0011
%RSD	.40342	.02273	.09751	.04449	.23572	.13118	.62908	.58799	.05401
#1	52.917	.50333	10.559	.52466	2.1393	.53032	2.0919	9.8605	1.9980
#2	53.220	.50349	10.573	.52499	2.1464	.52934	2.1106	9.9429	1.9965

Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Elem	Sr4077	Th2837	Ti3349	Ti1908	U_3701	V_2924	Zn2062	Zr3391
Line	407.771 {83}	283.730 {119}	334.904 {101}	190.856 {477}	370.152 {91}	292.402 {115}	206.200 {163}	339.198 {99}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.96285	1.0242	.96485	2.0225	2.1410	.47672	.48536	.49289
Stddev	.00389	.0097	.01046	.0049	.0095	.00488	.00452	.00494
%RSD	.40382	.94370	1.0840	.24116	.44251	1.0242	.93065	1.0026
#1	.96010	1.0311	.97225	2.0190	2.1343	.48017	.48856	.48940
#2	.96560	1.0174	.95746	2.0259	2.1477	.47327	.48217	.49639

Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit								
Low Limit								

Int. Std.	Y_2243	Y_3600	Y_3774
Line	224.306 {450}	360.073 {94}	377.433 {89}
Units	Cts/S	Cts/S	Cts/S
Avg	1455.3	30496.	5749.3
Stddev	3.0	156.	1.6
%RSD	.20303	.51259	.02861
#1	1457.4	30386.	5750.4
#2	1453.2	30607.	5748.1

Sample Name: 280-83251-B-1-A Acquired: 5/23/2016 19:57:29 Type: Unk
Method: 6500_026(v10) Mode: CONC Corr. Factor: 1.000000
User: kellyca Custom ID1: Custom ID2: Custom ID3:
Comment: 326174 200.7 Fe

Elem	Ag3280	Al1670	As1890	B_2089	Ba4554	Be3130	Bi2230	Ca3179	Cd2288
Line	328.068 {103}	167.079 {502}	189.042 {478}	208.959 {461}	455.403 { 74}	313.042 {108}	223.061 {451}	317.933 {106}	228.802 {447}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.00039	1.7896	-.00064	.16750	.04510	.00007	.00063	42.622	.00031
Stddev	.00012	.0045	.00246	.00140	.00042	.00006	.00321	.027	.00015
%RSD	30.306	.25266	385.76	.83864	.92820	75.868	509.50	.06405	46.748

#1	.00047	1.7928	.00110	.16650	.04480	.00003	.00290	42.641	.00041
#2	.00031	1.7864	-.00238	.16849	.04540	.00011	-.00164	42.603	.00021

Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Elem	Co2286	Cr2055	Cu3247	Fe2599	K_7664	Li6707	Mg2790	Mn2576	Mo2020
Line	228.616 {447}	205.560 {464}	324.754 {104}	259.940 {130}	766.490 { 44}	670.784 { 50}	279.079 {121}2	257.610 {131}	202.030 {467}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.00094	.00204	.00322	1.1338	6.7015	.02422	7.4596	.10200	.00541
Stddev	.00005	.00024	.00023	.0064	.0349	.00071	.0125	.00015	.00002
%RSD	4.7979	11.698	6.9986	.56566	.52083	2.9367	.16801	.14599	.32101

#1	.00097	.00221	.00306	1.1383	6.6768	.02472	7.4684	.10211	.00539
#2	.00091	.00187	.00338	1.1293	6.7262	.02371	7.4507	.10190	.00542

Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Elem	Na8183	Ni2316	P_1782	Pb2203	S_1820	Sb2068	Se1960	Si2881	Sn1899
Line	818.326 { 41}	231.604 {446}	178.284 {489}	220.353 {453}	182.034 {485}	206.833 {463}	196.090 {472}	288.158 {117}	189.989 {477}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	38.678	.00310	.11688	.00229	44.486	.00058	.01406	7.7104	-.00210
Stddev	.151	.00024	.00101	.00166	.022	.00160	.00910	.0263	.00029
%RSD	.38980	7.7153	.86628	72.460	.05024	275.62	64.704	.34078	13.651

#1	38.572	.00293	.11759	.00346	44.471	-.00055	.00763	7.6919	-.00189
#2	38.785	.00327	.11616	.00111	44.502	.00172	.02050	7.7290	-.00230

Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Elem	Sr4077	Th2837	Ti3349	Ti1908	U_3701	V_2924	Zn2062	Zr3391
Line	407.771 { 83}	283.730 {119}	334.904 {101}	190.856 {477}	370.152 { 91}	292.402 {115}	206.200 {163}	339.198 { 99}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.34183	.00136	.06202	.00045	.00064	.00642	.06562	.00278
Stddev	.00125	.00113	.00633	.00038	.00981	.00032	.00100	.00013
%RSD	.36602	83.072	10.202	84.234	1542.0	4.9942	1.5197	4.5235

#1	.34095	.00056	.05755	.00018	-.00630	.00619	.06632	.00269
#2	.34272	.00215	.06650	.00072	.00758	.00665	.06491	.00287

Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit								
Low Limit								

Int. Std.	Y_2243	Y_3600	Y_3774
Line	224.306 {450}	360.073 { 94}	377.433 { 89}
Units	Cts/S	Cts/S	Cts/S
Avg	1481.0	31335.	5803.1
Stddev	2.0	33.	19.9
%RSD	.13401	.10690	.34364

#1	1482.4	31311.	5789.0
#2	1479.6	31359.	5817.2

Sample Name: 280-83251-B-1-Asd@5 Acquired: 5/23/2016 20:00:14 Type: Unk
Method: 6500_026(v10) Mode: CONC Corr. Factor: 1.000000
User: kellyca Custom ID1: Custom ID2: Custom ID3:
Comment: 326174 200.7 Fe

Elem	Ag3280	Al1670	As1890	B_2089	Ba4554	Be3130	Bi2230	Ca3179	Cd2288
Line	328.068 {103}	167.079 {502}	189.042 {478}	208.959 {461}	455.403 { 74}	313.042 {108}	223.061 {451}	317.933 {106}	228.802 {447}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.00018	.38333	-.00149	.03486	.00936	.00006	.00229	8.6383	-.00017
Stddev	.00018	.00258	.00533	.00101	.00004	.00001	.00107	.0093	.00011
%RSD	98.697	.67190	357.88	2.9021	.47437	19.997	46.769	.10763	67.500

#1	.00031	.38515	-.00526	.03558	.00933	.00005	.00153	8.6317	-.00024
#2	.00006	.38151	.00228	.03415	.00939	.00007	.00305	8.6449	-.00009

Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Elem	Co2286	Cr2055	Cu3247	Fe2599	K_7664	Li6707	Mg2790	Mn2576	Mo2020
Line	228.616 {447}	205.560 {464}	324.754 {104}	259.940 {130}	766.490 { 44}	670.784 { 50}	279.079 {121}2	257.610 {131}	202.030 {467}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.00018	.00037	-.00027	.26195	1.3609	.00424	1.5279	.02103	.00111
Stddev	.00009	.00015	.00063	.00080	.0160	.00065	.0022	.00009	.00019
%RSD	50.075	42.182	233.46	.30671	1.1782	15.243	.14611	.40828	17.445

#1	.00011	.00048	-.00071	.26138	1.3495	.00378	1.5263	.02097	.00097
#2	.00024	.00026	.00018	.26251	1.3722	.00470	1.5295	.02109	.00125

Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Elem	Na5895	Ni2316	P_1782	Pb2203	S_1820	Sb2068	Se1960	Si2881	Sn1899
Line	589.592 { 57}	231.604 {446}	178.284 {489}	220.353 {453}	182.034 {485}	206.833 {463}	196.090 {472}	288.158 {117}	189.989 {477}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	7.6203	.00019	.02428	.00243	8.7559	.00093	.00445	1.5515	-.00073
Stddev	.0155	.00032	.00293	.00047	.0024	.00009	.00530	.0068	.00067
%RSD	.20339	166.03	12.048	19.184	.02747	10.105	119.13	.44098	91.395

#1	7.6094	.00042	.02221	.00276	8.7542	.00087	.00819	1.5563	-.00121
#2	7.6313	-.00003	.02635	.00210	8.7576	.00100	.00070	1.5466	-.00026

Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Elem	Sr4077	Th2837	Ti3349	Ti1908	U_3701	V_2924	Zn2062	Zr3391
Line	407.771 { 83}	283.730 {119}	334.904 {101}	190.856 {477}	370.152 { 91}	292.402 {115}	206.200 {163}	339.198 { 99}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.06931	.00204	.01141	.00083	.00310	.00112	.01271	.00081
Stddev	.00011	.00179	.00073	.00164	.00524	.00030	.00038	.00028
%RSD	.15781	87.862	6.4304	197.94	169.08	26.965	3.0086	34.402

#1	.06939	.00077	.01089	-.00033	-.00061	.00091	.01244	.00062
#2	.06924	.00330	.01193	.00199	.00680	.00134	.01298	.00101

Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit								
Low Limit								

Int. Std.	Y_2243	Y_3600	Y_3774
Line	224.306 {450}	360.073 { 94}	377.433 { 89}
Units	Cts/S	Cts/S	Cts/S
Avg	1518.3	32536.	5877.0
Stddev	1.4	30.	4.3
%RSD	.09501	.09243	.07343

#1	1519.3	32557.	5880.1
#2	1517.2	32515.	5874.0

Sample Name: 280-83251-B-1-B MS Acquired: 5/23/2016 20:03:02 Type: Unk
Method: 6500_026(v10) Mode: CONC Corr. Factor: 1.000000
User: kellyca Custom ID1: Custom ID2: Custom ID3:
Comment: 326174 200.7 Fe

Elem	Ag3280	Al3092	As1890	B_2089	Ba4554	Be3130	Bi2230	Ca3179	Cd2288
Line	328.068 {103}	309.271 {109}	189.042 {478}	208.959 {461}	455.403 { 74}	313.042 {108}	223.061 {451}	317.933 {106}	228.802 {447}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.05076	4.1764	1.0877	1.2776	2.0965	.05174	2.3033	92.938	.10777
Stddev	.00001	.0515	.0035	.0024	.0287	.00044	.0083	1.036	.00094
%RSD	.01993	1.2332	.32274	.18432	1.3686	.85310	.35911	1.1144	.87195

#1	.05077	4.1400	1.0902	1.2760	2.0762	.05143	2.2974	92.206	.10711
#2	.05076	4.2128	1.0853	1.2793	2.1168	.05206	2.3091	93.670	.10844

Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Elem	Co2286	Cr2055	Cu3247	Fe2599	K_7664	Li6707	Mg2790	Mn2576	Mo2020
Line	228.616 {447}	205.560 {464}	324.754 {104}	259.940 {130}	766.490 { 44}	670.784 { 50}	279.079 {121}2	257.610 {131}	202.030 {467}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.51529	W .20987	.26400	2.2124	60.537	1.1363	56.504	.58564	1.0907
Stddev	.00116	.00034	.00109	.0323	.763	.0158	.108	.00046	.0012
%RSD	.22536	.16081	.41360	1.4616	1.2606	1.3861	.19041	.07786	.10859

#1	.51611	.20963	.26323	2.1895	59.997	1.1252	56.428	.58532	1.0899
#2	.51447	.21010	.26477	2.2352	61.077	1.1475	56.580	.58596	1.0916

Check ?	Chk Pass	Chk Warn	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit		.10000							
Low Limit		-.01000							

Elem	Na8183	Ni2316	P_1782	Pb2203	S_1820	Sb2068	Se1960	Si2881	Sn1899
Line	818.326 { 41}	231.604 {446}	178.284 {489}	220.353 {453}	182.034 {485}	206.833 {463}	196.090 {472}	288.158 {117}	189.989 {477}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	92.853	.50614	10.927	.52265	47.855	.53911	2.1463	18.574	2.0046
Stddev	1.319	.00044	.025	.00300	.024	.00026	.0089	.208	.0016
%RSD	1.4200	.08684	.22775	.57458	.05066	.04757	.41522	1.1217	.08185

#1	91.921	.50645	10.944	.52478	47.873	.53893	2.1526	18.426	2.0058
#2	93.786	.50583	10.909	.52053	47.838	.53929	2.1400	18.721	2.0035

Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Elem	Sr4077	Th2837	Ti3349	Ti1908	U_3701	V_2924	Zn2062	Zr3391	
Line	407.771 { 83}	283.730 {119}	334.904 {101}	190.856 {477}	370.152 { 91}	292.402 {115}	206.200 {163}	339.198 { 99}	
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	
Avg	1.3217	1.0306	1.0234	1.9913	2.1810	.48386	.53844	.50163	
Stddev	.0184	.0022	.0010	.0040	.0037	.00126	.00146	.00797	
%RSD	1.3936	.20946	.09291	.20113	.16989	.26053	.27033	1.5891	

#1	1.3086	1.0290	1.0240	1.9941	2.1836	.48297	.53741	.49600	
#2	1.3347	1.0321	1.0227	1.9885	2.1784	.48475	.53947	.50727	

Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	
High Limit									
Low Limit									

Int. Std.	Y_2243	Y_3600	Y_3774						
Line	224.306 {450}	360.073 { 94}	377.433 { 89}						
Units	Cts/S	Cts/S	Cts/S						
Avg	1436.1	30293.	5733.6						
Stddev	1.1	78.	62.4						
%RSD	.07722	.25853	1.0881						

#1	1436.9	30348.	5777.8						
#2	1435.3	30238.	5689.5						

Sample Name: 280-83251-B-1-C MSD Acquired: 5/23/2016 20:05:37 Type: Unk
Method: 6500_026(v10) Mode: CONC Corr. Factor: 1.000000
User: kellyca Custom ID1: Custom ID2: Custom ID3:
Comment: 326174 200.7 Fe

Elem	Ag3280	Al3092	As1890	B_2089	Ba4554	Be3130	Bi2230	Ca3179	Cd2288
Line	328.068 {103}	309.271 {109}	189.042 {478}	208.959 {461}	455.403 { 74}	313.042 {108}	223.061 {451}	317.933 {106}	228.802 {447}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.04928	4.0813	1.0676	1.2499	2.0412	.05055	2.2514	90.652	.10539
Stddev	.00007	.0170	.0075	.0035	.0058	.00008	.0057	.244	.00024
%RSD	.14456	.41747	.70267	.27854	.28329	.16590	.25429	.26898	.22344

#1	.04933	4.0692	1.0623	1.2524	2.0453	.05049	2.2555	90.825	.10522
#2	.04923	4.0933	1.0729	1.2474	2.0371	.05061	2.2474	90.480	.10555

Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Elem	Co2286	Cr2055	Cu3247	Fe2599	K_7664	Li6707	Mg2790	Mn2576	Mo2020
Line	228.616 {447}	205.560 {464}	324.754 {104}	259.940 {130}	766.490 { 44}	670.784 { 50}	279.079 {121}2	257.610 {131}	202.030 {467}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.50678	W .20617	.25745	2.0909	59.114	1.1054	55.416	.57693	1.0718
Stddev	.00246	.00043	.00114	.0018	.219	.0020	.044	.00027	.0021
%RSD	.48520	.20695	.44254	.08651	.36989	.18273	.08023	.04605	.19639

#1	.50852	.20587	.25825	2.0922	59.268	1.1068	55.448	.57675	1.0703
#2	.50504	.20647	.25664	2.0896	58.959	1.1039	55.385	.57712	1.0733

Check ?	Chk Pass	Chk Warn	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit		.10000							
Low Limit		-.01000							

Elem	Na8183	Ni2316	P_1782	Pb2203	S_1820	Sb2068	Se1960	Si2881	Sn1899
Line	818.326 { 41}	231.604 {446}	178.284 {489}	220.353 {453}	182.034 {485}	206.833 {463}	196.090 {472}	288.158 {117}	189.989 {477}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	90.572	.49736	10.663	.51346	46.902	.52869	2.0912	18.080	1.9668
Stddev	.132	.00013	.028	.00391	.002	.00005	.0016	.043	.0060
%RSD	.14565	.02706	.26368	.76126	.00496	.00885	.07566	.23776	.30576

#1	90.665	.49727	10.643	.51622	46.904	.52872	2.0923	18.111	1.9625
#2	90.479	.49746	10.683	.51069	46.900	.52866	2.0900	18.050	1.9711

Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Elem	Sr4077	Th2837	Ti3349	Ti1908	U_3701	V_2924	Zn2062	Zr3391
Line	407.771 { 83}	283.730 {119}	334.904 {101}	190.856 {477}	370.152 { 91}	292.402 {115}	206.200 {163}	339.198 { 99}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	1.2889	1.0087	1.0063	1.9524	2.1344	.47156	.53382	.48759
Stddev	.0017	.0052	.0031	.0013	.0078	.00125	.00481	.00083
%RSD	.12840	.51888	.31116	.06783	.36395	.26427	.90157	.16977

#1	1.2901	1.0050	1.0041	1.9515	2.1398	.47244	.53042	.48818
#2	1.2877	1.0124	1.0085	1.9534	2.1289	.47067	.53722	.48701

Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit								
Low Limit								

Int. Std.	Y_2243	Y_3600	Y_3774
Line	224.306 {450}	360.073 { 94}	377.433 { 89}
Units	Cts/S	Cts/S	Cts/S
Avg	1435.9	30352.	5784.3
Stddev	.5	52.	10.7
%RSD	.03722	.17081	.18515

#1	1436.3	30388.	5776.8
#2	1435.6	30315.	5791.9

Sample Name: ccvh-3900196 Acquired: 5/23/2016 20:08:13 Type: QC
Method: 6500_026(v10) Mode: CONC Corr. Factor: 1.000000
User: kellyca Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	Ag3280	Al3092	As1890	B_2089	Ba4554	Be3130	Bi2230	Ca3179	Cd2288	Co2286	Cr2055	Cu3247	Fe2714
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.00040	47.815	.00273	.00564	.00217	.00139	1.0643	-.03296	.00071	.00537	.00134	.00643	48.084
Stddev	.00085	.286	.00088	.00143	.00004	.00001	.0012	.00098	.00028	.00036	.00039	.00012	.193
%RSD	212.00	.59885	32.207	25.306	1.8997	.59350	.11436	2.9783	39.031	6.6446	29.119	1.8215	.40229

#1	.00100	47.612	.00210	.00665	.00214	.00138	1.0634	-.03365	.00052	.00562	.00106	.00652	47.947
#2	-.00020	48.017	.00335	.00463	.00220	.00140	1.0651	-.03226	.00091	.00512	.00162	.00635	48.220

Check ?	None	Chk Pass	None	None	None	None	Chk Pass	None	None	None	None	None	Chk Pass
Value													
Range													

Elem	K_7664	Li6707	Mg2790	Mn2576	Mo2020	Na8183	Ni2316	P_1782	Pb2203	S_1820	Sb2068	Se1960	Si2881
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.23897	.00316	.22142	.00069	-.00018	255.09	.00121	.00942	.00151	5.0608	.00641	.02393	.02488
Stddev	.00716	.00021	.00047	.00003	.00048	1.07	.00051	.00429	.00087	.0106	.00296	.00182	.01815
%RSD	2.9961	6.5429	.21052	4.0879	264.06	.41908	41.804	45.545	57.495	.20928	46.169	7.6039	72.941

#1	.24403	.00301	.22175	.00067	-.00052	254.33	.00085	.00639	.00213	5.0533	.00851	.02264	.01205
#2	.23390	.00330	.22109	.00071	.00016	255.84	.00157	.01246	.00090	5.0683	.00432	.02521	.03772

Check ?	None	None	None	None	None	Chk Pass	None	None	None	Chk Pass	None	None	None
Value													
Range													

Elem	Sn1899	Sr4077	Th2837	Ti3349	Tl1908	U_3701	V_2924	Zn2062	Zr3391
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.00512	.00187	4.9891	.02654	.00101	10.317	-.01549	-.00016	-.01251
Stddev	.00082	.00003	.0222	.00058	.00164	.032	.00100	.00031	.00004
%RSD	16.026	1.4337	.44395	2.1803	162.75	.31098	6.4800	200.45	.35317

#1	.00570	.00189	5.0048	.02695	.00216	10.340	-.01478	.00006	-.01248
#2	.00454	.00185	4.9735	.02614	-.00015	10.295	-.01620	-.00037	-.01254

Check ?	None	None	Chk Pass	None	None	Chk Pass	None	None	None
Value									
Range									

Int. Std.	Y_2243	Y_3600	Y_3774
Units	Cts/S	Cts/S	Cts/S
Avg	1460.4	30611.	5727.3
Stddev	4.0	111.	9.0
%RSD	.27408	.36176	.15660

#1	1457.6	30533.	5733.6
#2	1463.3	30689.	5720.9

Sample Name: ccv-3900195 Acquired: 5/23/2016 20:11:05 Type: QC
Method: 6500_026(v10) Mode: CONC Corr. Factor: 1.000000
User: kellyca Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	Ag3280	Al1670	As1890	B_2089	Ba4554	Be3130	Bi2230	Ca3179	Cd2288	Co2286	Cr2055	Cu3247
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.48497	.52957	1.0244	F .55494	.49224	.50004	-.00051	4.8883	.52777	.52146	.51206	.49289
Stddev	.00117	.00175	.0005	.00144	.00109	.00137	.00309	.0029	.00059	.00040	.00051	.00071
%RSD	.24177	.33082	.04920	.26039	.22188	.27348	606.93	.05869	.11152	.07672	.09956	.14316

#1	.48414	.53081	1.0248	.55392	.49147	.49907	.00168	4.8862	.52819	.52117	.51242	.49239
#2	.48579	.52833	1.0241	.55597	.49301	.50100	-.00269	4.8903	.52736	.52174	.51170	.49339

Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Fail	Chk Pass	Chk Pass	None	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Value				.50000								
Range				10.000%								

Elem	Fe2599	K_7664	Li6707	Mg2790	Mn2576	Mo2020	Na5895	Ni2316	P_1782	Pb2203	S_1820	Sb2068
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	2.4690	50.382	1.0460	19.461	.48920	.51731	5.2085	.50822	1.0216	1.0667	-.00098	1.0166
Stddev	.0018	.156	.0038	.035	.00031	.00073	.0102	.00082	.0074	.0094	.00471	.0066
%RSD	.07467	.30992	.35938	.18088	.06262	.14135	.19651	.16128	.72682	.88437	482.21	.64456

#1	2.4703	50.272	1.0433	19.436	.48899	.51679	5.2157	.50880	1.0164	1.0600	-.00430	1.0212
#2	2.4677	50.493	1.0486	19.485	.48942	.51783	5.2013	.50764	1.0269	1.0733	.00235	1.0119

Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	None	Chk Pass
Value												
Range												

Elem	Se1960	Si2881	Sn1899	Sr4077	Th2837	Ti3349	Ti1908	U_3701	V_2924	Zn2062	Zr3391
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	1.0465	4.9300	1.0065	.47224	.00562	.46484	1.0450	.01732	.46499	.48033	.48990
Stddev	.0124	.0150	.0005	.00023	.00035	.00049	.0031	.00185	.00299	.00086	.00054
%RSD	1.1814	.30353	.05197	.04861	6.1918	.10630	.29639	10.707	.64216	.17963	.10943

#1	1.0552	4.9194	1.0061	.47208	.00537	.46519	1.0428	.01601	.46287	.48094	.48952
#2	1.0377	4.9406	1.0069	.47240	.00587	.46450	1.0472	.01864	.46710	.47972	.49028

Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	None	Chk Pass	Chk Pass	None	Chk Pass	Chk Pass	Chk Pass
Value											
Range											

Int. Std.	Y_2243	Y_3600	Y_3774
Units	Cts/S	Cts/S	Cts/S
Avg	1510.2	32034.	5932.0
Stddev	2.8	96.	7.8
%RSD	.18344	.30077	.13103

#1	1512.1	32102.	5926.5
#2	1508.2	31966.	5937.5

Sample Name: ccb Acquired: 5/23/2016 20:13:46 Type: QC
Method: 6500_026(v10) Mode: CONC Corr. Factor: 1.000000
User: kellyca Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	Ag3280	Al1670	As1890	B_2089	Ba4554	Be3130	Bi2230	Ca3179	Cd2288	Co2286	Cr2055
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.00021	-.00005	-.00417	F .00361	.00013	.00006	.00049	-.00099	.00009	.00004	.00012
Stddev	.00028	.00049	.00097	.00078	.00000	.00006	.00050	.00163	.00016	.00038	.00013
%RSD	132.65	901.42	23.373	21.601	3.1769	104.94	101.81	164.34	182.12	972.27	113.28

#1	.00042	-.00040	-.00486	.00416	.00013	.00010	.00084	-.00214	.00020	-.00023	.00021
#2	.00001	.00029	-.00348	.00306	.00013	.00002	.00014	.00016	-.00002	.00031	.00002

Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Fail	Chk Pass	Chk Pass	None	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit				.00312							
Low Limit				-.00312							

Elem	Cu3247	Fe2599	K_7664	Li6707	Mg2790	Mn2576	Mo2020	Na5895	Ni2316	P_1782	Pb2203
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	W -.00162	.01009	.04797	-.00166	.00120	.00011	.00042	.03423	.00005	.00304	.00183
Stddev	.00002	.00034	.01456	.00042	.00023	.00002	.00010	.00549	.00048	.00504	.00077
%RSD	1.5099	3.3208	30.362	25.654	18.768	22.668	23.151	16.028	973.90	165.82	41.874

#1	-.00160	.00985	.05827	-.00196	.00136	.00009	.00035	.03035	-.00029	-.00052	.00238
#2	-.00164	.01033	.03767	-.00136	.00104	.00012	.00049	.03810	.00039	.00660	.00129

Check ?	Chk Warn	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit	.00136										
Low Limit	-.00136										

Elem	S_1820	Sb2068	Se1960	Si2881	Sn1899	Sr4077	Th2837	Ti3349	Ti1908	U_3701	V_2924
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.00324	W .00607	W .00886	.01040	.00083	.00007	.00290	.00042	.00207	-.00385	.00010
Stddev	.00152	.00260	.00332	.00231	.00033	.00001	.00167	.00047	.00158	.00607	.00022
%RSD	46.767	42.825	37.442	22.228	39.486	11.620	57.619	113.12	76.509	157.95	211.68

#1	.00217	.00791	.01121	.00877	.00060	.00007	.00172	.00075	.00095	-.00814	.00026
#2	.00431	.00423	.00651	.01204	.00106	.00006	.00408	.00008	.00318	.00045	-.00005

Check ?	None	Chk Warn	Chk Warn	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit		.00314	.00486								
Low Limit		-.00314	-.00486								

Elem	Zn2062	Zr3391
Units	ppm	ppm
Avg	-.00091	.00004
Stddev	.00079	.00035
%RSD	86.417	920.39

#1	-.00147	.00028
#2	-.00035	-.00021

Check ?	Chk Pass	Chk Pass
High Limit		
Low Limit		

Int. Std.	Y_2243	Y_3600	Y_3774
Units	Cts/S	Cts/S	Cts/S
Avg	1511.7	32497.	5902.2
Stddev	.1	56.	4.8
%RSD	.00583	.17148	.08210

#1	1511.7	32536.	5905.6
#2	1511.6	32458.	5898.8

Sample Name: ccvl-3907489 Acquired: 5/23/2016 20:16:36 Type: QC
Method: 6500_026(v10) Mode: CONC Corr. Factor: 1.000000
User: kellyca Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	Ag3280	Al1670	As1890	B_2089	Ba4554	Be3130	Bi2230	Ca3179	Cd2288	Co2286	Cr2055	Cu3247
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.01025	.10647	.01344	.10577	F .01920	.00098	.11572	.25419	.00520	.01058	.01066	.01655
Stddev	.00039	.00095	.00589	.00025	.00009	.00009	.00042	.00404	.00015	.00034	.00020	.00001
%RSD	3.8139	.88829	43.849	.23930	.48519	9.3149	.36017	1.5901	2.8204	3.1962	1.8468	.05042

#1	.00997	.10714	.00927	.10595	.01913	.00105	.11602	.25133	.00530	.01034	.01052	.01656
#2	.01053	.10581	.01761	.10560	.01927	.00092	.11543	.25705	.00510	.01082	.01080	.01654

Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Fail	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Value					.01000							
Range					30.000%							

Elem	Fe2599	K_7664	Li6707	Mg2790	Mn2576	Mo2020	Na5895	Ni2316	P_1782	Pb2203	S_1820	Sb2068
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	F 1.1065	3.0873	.00980	.19920	F .01569	.02172	1.0519	.04221	2.9136	.01000	.00673	.02284
Stddev	.0067	.0088	.00017	.00445	.00008	.00018	.0019	.00108	.0096	.00137	.00447	.00050
%RSD	.60215	.28403	1.7255	2.2351	.48317	.85154	.18210	2.5585	.32911	13.694	66.464	2.1923

#1	1.1018	3.0811	.00968	.20235	.01574	.02185	1.0533	.04298	2.9204	.01097	.00357	.02319
#2	1.1112	3.0935	.00992	.19605	.01563	.02159	1.0506	.04145	2.9068	.00903	.00990	.02248

Check ?	Chk Fail	Chk Pass	Chk Pass	Chk Pass	Chk Fail	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	None	Chk Pass
Value	.10000				.01000							
Range	30.000%				30.000%							

Elem	Se1960	Si2881	Sn1899	Sr4077	Th2837	Ti3349	Ti1908	U_3701	V_2924	Zn2062	Zr3391
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	F .02177	.49033	.10216	.00990	.01560	.00974	.01543	F .07960	.00934	.01957	.01541
Stddev	.00136	.00126	.00161	.00003	.00010	.00022	.00052	.00284	.00035	.00101	.00038
%RSD	6.2692	.25625	1.5766	.27274	.67131	2.2642	3.3461	3.5686	3.7659	5.1738	2.4709

#1	.02080	.49122	.10103	.00988	.01567	.00989	.01507	.07759	.00909	.02029	.01514
#2	.02273	.48944	.10330	.00992	.01552	.00958	.01580	.08161	.00959	.01886	.01567

Check ?	Chk Fail	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Fail	Chk Pass	Chk Pass	Chk Pass
Value	.01500							.06000			
Range	30.000%							30.000%			

Int. Std.	Y_2243	Y_3600	Y_3774
Units	Cts/S	Cts/S	Cts/S
Avg	1519.7	32499.	5859.3
Stddev	1.2	23.	12.8
%RSD	.07775	.07139	.21829

#1	1518.9	32482.	5850.3
#2	1520.6	32515.	5868.4

Sample Name: MB 280-325985/1-A Acquired: 5/23/2016 20:19:24 Type: Unk
Method: 6500_026(v10) Mode: CONC Corr. Factor: 1.000000
User: kellyca Custom ID1: 5/19 Custom ID2: Custom ID3:
Comment: 325985 200.7

Elem	Ag3280	Al1670	As1890	B_2089	Ba4554	Be3130	Bi2230	Ca3179	Cd2288
Line	328.068 {103}	167.079 {502}	189.042 {478}	208.959 {461}	455.403 { 74}	313.042 {108}	223.061 {451}	317.933 {106}	228.802 {447}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.00031	.00505	.00163	.00228	.00030	.00004	.00245	.00430	-.00035
Stddev	.00041	.00055	.00191	.00005	.00004	.00002	.00204	.00263	.00024
%RSD	135.11	10.979	117.16	1.9778	12.260	48.004	83.310	61.100	66.980

#1	.00001	.00544	.00298	.00231	.00033	.00006	.00100	.00616	-.00052
#2	.00060	.00466	.00028	.00225	.00027	.00003	.00389	.00244	-.00019

Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Elem	Co2286	Cr2055	Cu3247	Fe2599	K_7664	Li6707	Mg2790	Mn2576	Mo2020
Line	228.616 {447}	205.560 {464}	324.754 {104}	259.940 {130}	766.490 { 44}	670.784 { 50}	279.079 {121}2	257.610 {131}	202.030 {467}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	-.00036	.00025	-.00084	W .08408	.00510	-.00197	.00108	.00112	-.00025
Stddev	.00006	.00012	.00004	.00253	.01858	.00069	.00308	.00007	.00028
%RSD	18.220	49.031	4.2933	3.0100	364.56	35.162	284.16	6.0221	112.41

#1	-.00031	.00033	-.00086	.08229	-.00804	-.00246	.00326	.00116	-.00045
#2	-.00040	.00016	-.00081	.08587	.01823	-.00148	-.00109	.00107	-.00005

Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Warn	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit				.03000					
Low Limit				-.05000					

Elem	Na5895	Ni2316	P_1782	Pb2203	S_1820	Sb2068	Se1960	Si2881	Sn1899
Line	589.592 { 57}	231.604 {446}	178.284 {489}	220.353 {453}	182.034 {485}	206.833 {463}	196.090 {472}	288.158 {117}	189.989 {477}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.01482	.00009	.00459	.00154	.00297	.00114	F .01092	.00840	-.00116
Stddev	.00525	.00028	.00187	.00061	.00408	.00225	.00011	.00333	.00047
%RSD	35.448	308.70	40.870	39.310	137.30	197.40	1.0303	39.697	40.093

#1	.01111	-.00011	.00326	.00111	.00009	.00273	.01084	.00604	-.00149
#2	.01853	.00029	.00591	.00197	.00586	-.00045	.01100	.01076	-.00083

Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Fail	Chk Pass	Chk Pass
High Limit							.01000		
Low Limit							-.01000		

Elem	Sr4077	Th2837	Ti3349	Ti1908	U_3701	V_2924	Zn2062	Zr3391
Line	407.771 { 83}	283.730 {119}	334.904 {101}	190.856 {477}	370.152 { 91}	292.402 {115}	206.200 {163}	339.198 { 99}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.00002	.00023	.00126	.00176	.01610	.00036	.00091	.00042
Stddev	.00006	.00050	.00072	.00113	.01232	.00016	.00029	.00230
%RSD	311.68	216.46	57.230	64.189	76.565	44.911	31.852	549.88

#1	-.00002	-.00012	.00177	.00096	.02481	.00024	.00071	.00204
#2	.00006	.00059	.00075	.00255	.00738	.00047	.00111	-.00121

Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit								
Low Limit								

Int. Std.	Y_2243	Y_3600	Y_3774
Line	224.306 {450}	360.073 { 94}	377.433 { 89}
Units	Cts/S	Cts/S	Cts/S
Avg	1530.4	32170.	5931.3
Stddev	3.4	1030.	12.4
%RSD	.22237	3.2027	.20895

#1	1532.8	31441.	5940.0
#2	1528.0	32898.	5922.5

Sample Name: LCS 280-325985/2-A Acquired: 5/23/2016 20:22:06 Type: Unk

Method: 6500_026(v10) Mode: CONC Corr. Factor: 1.000000

User: kellyca Custom ID1: Custom ID2: Custom ID3:

Comment: 325985 200.7

Elem	Ag3280	Al1670	As1890	B_2089	Ba4554	Be3130	Bi2230	Ca3179	Cd2288
Line	328.068 {103}	167.079 {502}	189.042 {478}	208.959 {461}	455.403 { 74}	313.042 {108}	223.061 {451}	317.933 {106}	228.802 {447}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.04903	1.9346	1.0338	1.0679	1.9764	.04967	F 2.2112	48.472	.10270
Stddev	.00019	.0036	.0040	.0080	.0082	.00023	.0062	.222	.00044
%RSD	.38668	.18386	.38471	.75196	.41310	.46178	.28067	.45830	.42477

#1	.04889	1.9320	1.0310	1.0623	1.9706	.04950	2.2068	48.315	.10239
#2	.04916	1.9371	1.0366	1.0736	1.9822	.04983	2.2156	48.629	.10301

Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Fail	Chk Pass	Chk Pass
High Limit							2.2000		
Low Limit							1.8000		

Elem	Co2286	Cr2055	Cu3247	Fe2599	K_7664	Li6707	Mg2790	Mn2576	Mo2020
Line	228.616 {447}	205.560 {464}	324.754 {104}	259.940 {130}	766.490 { 44}	670.784 { 50}	279.079 {121}2	257.610 {131}	202.030 {467}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.50254	F .20015	.24890	.97267	50.879	1.0480	47.921	.47751	1.0444
Stddev	.00266	.00114	.00285	.00844	.262	.0042	.371	.00393	.0014
%RSD	.52843	.57186	1.1438	.86753	.51440	.39943	.77398	.82233	.13146

#1	.50067	.19934	.24688	.96670	50.694	1.0451	47.658	.47473	1.0434
#2	.50442	.20096	.25091	.97864	51.064	1.0510	48.183	.48029	1.0454

Check ?	Chk Pass	Chk Fail	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit		.05750							
Low Limit		.04300							

Elem	Na8183	Ni2316	P_1782	Pb2203	S_1820	Sb2068	Se1960	Si2881	Sn1899
Line	818.326 { 41}	231.604 {446}	178.284 {489}	220.353 {453}	182.034 {485}	206.833 {463}	196.090 {472}	288.158 {117}	189.989 {477}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	51.902	.48985	10.281	.51104	2.0700	.51413	2.0299	9.7571	1.9418
Stddev	.112	.00185	.078	.00001	.0002	.00450	.0140	.0737	.0030
%RSD	.21634	.37706	.75734	.00236	.01050	.87472	.69152	.75517	.15472

#1	51.981	.48854	10.226	.51105	2.0699	.51095	2.0199	9.7050	1.9397
#2	51.822	.49116	10.336	.51104	2.0702	.51731	2.0398	9.8092	1.9439

Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Elem	Sr4077	Th2837	Ti3349	Ti1908	U_3701	V_2924	Zn2062	Zr3391
Line	407.771 { 83}	283.730 {119}	334.904 {101}	190.856 {477}	370.152 { 91}	292.402 {115}	206.200 {163}	339.198 { 99}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.93654	.99769	.93098	1.9654	2.1161	.46436	.46734	.48025
Stddev	.00334	.00760	.00691	.0126	.0410	.00701	.00399	.00181
%RSD	.35628	.76198	.74270	.64190	1.9365	1.5093	.85463	.37686

#1	.93418	.99231	.92609	1.9564	2.0871	.45941	.46452	.47897
#2	.93890	1.0031	.93587	1.9743	2.1450	.46932	.47017	.48153

Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit								
Low Limit								

Int. Std.	Y_2243	Y_3600	Y_3774
Line	224.306 {450}	360.073 { 94}	377.433 { 89}
Units	Cts/S	Cts/S	Cts/S
Avg	1463.0	30829.	5893.9
Stddev	6.3	172.	24.1
%RSD	.43360	.55935	.40864

#1	1467.5	30951.	5910.9
#2	1458.6	30707.	5876.9

Sample Name: 280-83229-F-1-G Acquired: 5/23/2016 20:24:36 Type: Unk
Method: 6500_026(v10) Mode: CONC Corr. Factor: 1.000000
User: kellyca Custom ID1: Custom ID2: Custom ID3:
Comment: 325985 200.7

Elem	Ag3280	Al1670	As1890	B_2089	Ba4554	Be3130	Bi2230	Ca3179	Cd2288
Line	328.068 {103}	167.079 {502}	189.042 {478}	208.959 {461}	455.403 { 74}	313.042 {108}	223.061 {451}	317.933 {106}	228.802 {447}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.00034	.88064	.00107	.12003	.14966	.00001	.00057	43.357	.00021
Stddev	.00024	.00102	.00246	.00064	.00031	.00003	.00052	.027	.00004
%RSD	69.133	.11625	230.67	.53508	.20920	374.30	91.022	.06290	18.629

#1	.00018	.88136	.00280	.12048	.14988	.00003	.00094	43.337	.00023
#2	.00051	.87991	-.00067	.11958	.14943	-.00001	.00020	43.376	.00018

Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Elem	Co2286	Cr2055	Cu3247	Fe2599	K_7664	Li6707	Mg2790	Mn2576	Mo2020
Line	228.616 {447}	205.560 {464}	324.754 {104}	259.940 {130}	766.490 { 44}	670.784 { 50}	279.079 {121}2	257.610 {131}	202.030 {467}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.00117	.00120	.00399	.93875	4.3020	.00914	5.6200	.54755	.01534
Stddev	.00005	.00004	.00011	.00092	.0071	.00005	.0249	.00091	.00001
%RSD	4.2263	3.3824	2.8608	.09817	.16580	.58729	.44327	.16692	.06634

#1	.00114	.00122	.00407	.93940	4.3070	.00918	5.6376	.54820	.01535
#2	.00121	.00117	.00391	.93810	4.2969	.00911	5.6024	.54690	.01534

Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Elem	Na8183	Ni2316	P_1782	Pb2203	S_1820	Sb2068	Se1960	Si2881	Sn1899
Line	818.326 { 41}	231.604 {446}	178.284 {489}	220.353 {453}	182.034 {485}	206.833 {463}	196.090 {472}	288.158 {117}	189.989 {477}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	43.031	.00294	.13883	.00562	19.567	.00313	.01123	6.8409	-.00073
Stddev	.151	.00008	.00104	.00084	.059	.00021	.00361	.0139	.00029
%RSD	.34979	2.6174	.74942	14.972	.30152	6.8685	32.137	.20287	39.915

#1	42.925	.00289	.13957	.00502	19.608	.00328	.00867	6.8507	-.00094
#2	43.138	.00300	.13810	.00621	19.525	.00298	.01378	6.8311	-.00052

Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Elem	Sr4077	Th2837	Ti3349	Ti1908	U_3701	V_2924	Zn2062	Zr3391
Line	407.771 { 83}	283.730 {119}	334.904 {101}	190.856 {477}	370.152 { 91}	292.402 {115}	206.200 {163}	339.198 { 99}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.19934	.00153	.02645	.00201	.00745	.00594	.01534	.00189
Stddev	.00012	.00149	.00037	.00002	.00762	.00034	.00055	.00012
%RSD	.06171	97.830	1.3944	1.0470	102.33	5.7061	3.5773	6.3021

#1	.19925	.00258	.02619	.00200	.01284	.00618	.01495	.00197
#2	.19943	.00047	.02671	.00203	.00206	.00570	.01573	.00180

Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit								
Low Limit								

Int. Std.	Y_2243	Y_3600	Y_3774
Line	224.306 {450}	360.073 { 94}	377.433 { 89}
Units	Cts/S	Cts/S	Cts/S
Avg	1500.8	31979.	6000.7
Stddev	.2	24.	17.7
%RSD	.01537	.07434	.29465

#1	1500.9	31962.	5988.2
#2	1500.6	31996.	6013.2

Sample Name: 280-83254-A-1-A Acquired: 5/23/2016 20:27:16 Type: Unk
Method: 6500_026(v10) Mode: CONC Corr. Factor: 1.000000
User: kellyca Custom ID1: Custom ID2: Custom ID3:
Comment: 325985 200.7

Elem	Ag3280	Al1670	As1890	B_2089	Ba4554	Be3130	Bi2230	Ca3179	Cd2288
Line	328.068 {103}	167.079 {502}	189.042 {478}	208.959 {461}	455.403 { 74}	313.042 {108}	223.061 {451}	317.933 {106}	228.802 {447}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.00047	.02830	-.00102	.12174	.22042	.00003	-.00000	24.206	.00025
Stddev	.00008	.00130	.00058	.00075	.00030	.00001	.00087	.091	.00011
%RSD	16.379	4.6111	56.493	.61339	.13402	46.777	69906.	.37436	44.183

#1	.00042	.02738	-.00143	.12227	.22021	.00003	.00061	24.270	.00017
#2	.00053	.02922	-.00061	.12121	.22062	.00002	-.00061	24.142	.00033

Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Elem	Co2286	Cr2055	Cu3247	Fe2599	K_7664	Li6707	Mg2790	Mn2576	Mo2020
Line	228.616 {447}	205.560 {464}	324.754 {104}	259.940 {130}	766.490 { 44}	670.784 { 50}	279.079 {121}2	257.610 {131}	202.030 {467}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.00106	.00026	-.00049	.21083	4.1160	.02200	11.352	.24010	.00174
Stddev	.00010	.00005	.00027	.00026	.0225	.00082	.047	.00092	.00077
%RSD	9.1143	18.550	55.898	.12498	.54590	3.7437	.41687	.38504	44.356

#1	.00099	.00023	-.00068	.21102	4.1001	.02258	11.318	.23945	.00229
#2	.00113	.00030	-.00030	.21065	4.1319	.02142	11.385	.24075	.00119

Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Elem	Na8183	Ni2316	P_1782	Pb2203	S_1820	Sb2068	Se1960	Si2881	Sn1899
Line	818.326 { 41}	231.604 {446}	178.284 {489}	220.353 {453}	182.034 {485}	206.833 {463}	196.090 {472}	288.158 {117}	189.989 {477}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	122.09	.00113	.20164	.00044	8.0207	.00224	.01300	11.464	-.00089
Stddev	.30	.00062	.00167	.00339	.0274	.00011	.00335	.003	.00104
%RSD	.24276	55.332	.82651	767.94	.34178	4.7349	25.769	.02244	116.85

#1	121.88	.00069	.20282	-.00196	8.0400	.00217	.01063	11.466	-.00162
#2	122.30	.00157	.20047	.00284	8.0013	.00232	.01537	11.462	-.00015

Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Elem	Sr4077	Th2837	Ti3349	Ti1908	U_3701	V_2924	Zn2062	Zr3391
Line	407.771 { 83}	283.730 {119}	334.904 {101}	190.856 {477}	370.152 { 91}	292.402 {115}	206.200 {163}	339.198 { 99}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.19578	.00156	.00074	.00081	.00617	-.00001	-.00128	.00002
Stddev	.00014	.00143	.00002	.00062	.00616	.00048	.00116	.00027
%RSD	.06926	91.871	2.2033	75.975	99.747	4569.8	90.539	1323.6

#1	.19568	.00055	.00075	.00038	.01053	.00033	-.00210	.00021
#2	.19587	.00257	.00073	.00125	.00182	-.00035	-.00046	-.00017

Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit								
Low Limit								

Int. Std.	Y_2243	Y_3600	Y_3774
Line	224.306 {450}	360.073 { 94}	377.433 { 89}
Units	Cts/S	Cts/S	Cts/S
Avg	1467.2	31109.	5902.8
Stddev	5.2	83.	.9
%RSD	.35373	.26583	.01473

#1	1463.6	31168.	5903.4
#2	1470.9	31051.	5902.2

Sample Name: 280-83254-A-1-Asd@5 Acquired: 5/23/2016 20:29:56 Type: Unk
Method: 6500_026(v10) Mode: CONC Corr. Factor: 1.000000
User: kellyca Custom ID1: Custom ID2: Custom ID3:
Comment: 325985 200.7

Elem	Ag3280	Al1670	As1890	B_2089	Ba4554	Be3130	Bi2230	Ca3179	Cd2288
Line	328.068 {103}	167.079 {502}	189.042 {478}	208.959 {461}	455.403 { 74}	313.042 {108}	223.061 {451}	317.933 {106}	228.802 {447}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.00059	.00607	.00081	.02552	.04465	-.00001	.00165	4.9193	-.00015
Stddev	.00037	.00013	.00032	.00015	.00026	.00007	.00171	.0047	.00006
%RSD	63.335	2.1108	39.729	.58682	.58892	534.02	103.35	.09655	41.244
#1	.00085	.00616	.00058	.02541	.04483	-.00007	.00286	4.9159	-.00019
#2	.00032	.00598	.00104	.02562	.04446	.00004	.00045	4.9226	-.00010

Check ? Chk Pass Chk Pass Chk Pass Chk Pass Chk Pass Chk Pass Chk Pass Chk Pass Chk Pass
High Limit
Low Limit

Elem	Co2286	Cr2055	Cu3247	Fe2599	K_7664	Li6707	Mg2790	Mn2576	Mo2020
Line	228.616 {447}	205.560 {464}	324.754 {104}	259.940 {130}	766.490 { 44}	670.784 { 50}	279.079 {121}2	257.610 {131}	202.030 {467}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.00008	-.00018	-.00138	.05378	.83419	.00357	2.3135	.04877	-.00014
Stddev	.00001	.00011	.00032	.00043	.01541	.00026	.0074	.00034	.00067
%RSD	18.496	60.386	23.478	.80703	1.8474	7.2774	.31960	.68900	472.99
#1	.00009	-.00010	-.00115	.05347	.84509	.00375	2.3083	.04854	-.00062
#2	.00007	-.00025	-.00161	.05408	.82329	.00339	2.3187	.04901	.00033

Check ? Chk Pass Chk Pass Chk Pass Chk Pass Chk Pass Chk Pass Chk Pass Chk Pass Chk Pass
High Limit
Low Limit

Elem	Na8183	Ni2316	P_1782	Pb2203	S_1820	Sb2068	Se1960	Si2881	Sn1899
Line	818.326 { 41}	231.604 {446}	178.284 {489}	220.353 {453}	182.034 {485}	206.833 {463}	196.090 {472}	288.158 {117}	189.989 {477}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	24.798	.00005	.04221	.00230	1.5526	.00140	.00717	2.3144	-.00031
Stddev	.002	.00006	.00316	.00204	.0020	.00300	.00367	.0116	.00169
%RSD	.00997	114.09	7.4817	88.787	.12953	214.63	51.191	.50121	544.82
#1	24.796	.00001	.04445	.00086	1.5540	-.00072	.00977	2.3062	-.00150
#2	24.799	.00009	.03998	.00375	1.5512	.00352	.00458	2.3226	.00088

Check ? Chk Pass Chk Pass Chk Pass Chk Pass Chk Pass Chk Pass Chk Pass Chk Pass Chk Pass
High Limit
Low Limit

Elem	Sr4077	Th2837	Ti3349	Ti1908	U_3701	V_2924	Zn2062	Zr3391
Line	407.771 { 83}	283.730 {119}	334.904 {101}	190.856 {477}	370.152 { 91}	292.402 {115}	206.200 {163}	339.198 { 99}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.03940	.00116	-.00010	.00322	.01328	.00061	-.00041	.00054
Stddev	.00007	.00004	.00002	.00094	.01777	.00017	.00060	.00190
%RSD	.18707	3.2051	23.829	29.248	133.81	28.596	144.64	354.09
#1	.03945	.00113	-.00008	.00389	.00071	.00049	.00001	.00188
#2	.03935	.00119	-.00012	.00255	.02585	.00073	-.00083	-.00081

Check ? Chk Pass Chk Pass Chk Pass Chk Pass Chk Pass Chk Pass Chk Pass Chk Pass
High Limit
Low Limit

Int. Std.	Y_2243	Y_3600	Y_3774
Line	224.306 {450}	360.073 { 94}	377.433 { 89}
Units	Cts/S	Cts/S	Cts/S
Avg	1519.9	32439.	5915.1
Stddev	4.2	80.	7.9
%RSD	.27793	.24580	.13366
#1	1516.9	32495.	5909.5
#2	1522.9	32382.	5920.7

Sample Name: 280-83254-A-1-B MS Acquired: 5/23/2016 20:32:37 Type: Unk
Method: 6500_026(v10) Mode: CONC Corr. Factor: 1.000000
User: kellyca Custom ID1: Custom ID2: Custom ID3:
Comment: 325985 200.7

Elem	Ag3280	Al1670	As1890	B_2089	Ba4554	Be3130	Bi2230	Ca3179	Cd2288
Line	328.068 {103}	167.079 {502}	189.042 {478}	208.959 {461}	455.403 { 74}	313.042 {108}	223.061 {451}	317.933 {106}	228.802 {447}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.04853	1.9219	1.0411	1.1230	2.1642	.04926	2.1917	71.417	.10320
Stddev	.00011	.0006	.0054	.0012	.0029	.00008	.0103	.121	.00038
%RSD	.23053	.03068	.51797	.11062	.13543	.15884	.47147	.16892	.36464

#1	.04845	1.9215	1.0449	1.1239	2.1662	.04931	2.1844	71.503	.10346
#2	.04861	1.9224	1.0372	1.1221	2.1621	.04920	2.1990	71.332	.10293

Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Elem	Co2286	Cr2055	Cu3247	Fe2599	K_7664	Li6707	Mg2790	Mn2576	Mo2020
Line	228.616 {447}	205.560 {464}	324.754 {104}	259.940 {130}	766.490 { 44}	670.784 { 50}	279.079 {121}2	257.610 {131}	202.030 {467}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.49634	W .19948	.24825	1.1255	55.210	1.0683	58.093	.69968	.98707
Stddev	.00125	.00009	.00048	.0066	.106	.0024	.035	.00147	.00119
%RSD	.25282	.04297	.19272	.58477	.19224	.22817	.06020	.21075	.12063

#1	.49723	.19942	.24791	1.1301	55.285	1.0700	58.068	.70072	.98792
#2	.49545	.19954	.24858	1.1208	55.135	1.0666	58.117	.69864	.98623

Check ?	Chk Pass	Chk Warn	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit		.10000							
Low Limit		-.01000							

Elem	Na8183	Ni2316	P_1782	Pb2203	S_1820	Sb2068	Se1960	Si2881	Sn1899
Line	818.326 { 41}	231.604 {446}	178.284 {489}	220.353 {453}	182.034 {485}	206.833 {463}	196.090 {472}	288.158 {117}	189.989 {477}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	170.67	.48248	10.587	.49493	9.8701	.48958	2.0350	20.462	1.8191
Stddev	.22	.00051	.011	.00143	.0075	.00557	.0095	.143	.0017
%RSD	.12807	.10534	.10602	.28831	.07603	1.1386	.46606	.69903	.09421

#1	170.52	.48283	10.579	.49594	9.8648	.48563	2.0283	20.563	1.8203
#2	170.83	.48212	10.595	.49392	9.8754	.49352	2.0417	20.361	1.8179

Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Elem	Sr4077	Th2837	Ti3349	Ti1908	U_3701	V_2924	Zn2062	Zr3391
Line	407.771 { 83}	283.730 {119}	334.904 {101}	190.856 {477}	370.152 { 91}	292.402 {115}	206.200 {163}	339.198 { 99}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	1.1176	.99148	.87996	1.8738	2.0894	.46264	.46415	.45504
Stddev	.0018	.00510	.00183	.0076	.0020	.00069	.00014	.00003
%RSD	.15661	.51403	.20818	.40484	.09465	.14857	.03060	.00765

#1	1.1188	.98787	.87866	1.8684	2.0880	.46313	.46405	.45502
#2	1.1164	.99508	.88125	1.8791	2.0908	.46215	.46425	.45507

Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit								
Low Limit								

Int. Std.	Y_2243	Y_3600	Y_3774
Line	224.306 {450}	360.073 { 94}	377.433 { 89}
Units	Cts/S	Cts/S	Cts/S
Avg	1434.7	30084.	5792.4
Stddev	2.7	42.	.1
%RSD	.18621	.14116	.00231

#1	1436.6	30054.	5792.5
#2	1432.8	30114.	5792.3

Sample Name: 280-83254-A-1-C MSD Acquired: 5/23/2016 20:35:08 Type: Unk
Method: 6500_026(v10) Mode: CONC Corr. Factor: 1.000000
User: kellyca Custom ID1: Custom ID2: Custom ID3:
Comment: 325985 200.7

Elem	Ag3280	Al1670	As1890	B_2089	Ba4554	Be3130	Bi2230	Ca3179	Cd2288
Line	328.068 {103}	167.079 {502}	189.042 {478}	208.959 {461}	455.403 { 74}	313.042 {108}	223.061 {451}	317.933 {106}	228.802 {447}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.04868	1.9326	1.0487	1.1908	2.1894	.04966	2.2177	72.141	.10412
Stddev	.00030	.0011	.0056	.0059	.0090	.00004	.0075	.053	.00011
%RSD	.62376	.05665	.53027	.49375	.41055	.08862	.33943	.07354	.10668

#1	.04890	1.9333	1.0448	1.1949	2.1830	.04963	2.2230	72.103	.10404
#2	.04847	1.9318	1.0527	1.1866	2.1957	.04969	2.2124	72.178	.10420

Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Elem	Co2286	Cr2055	Cu3247	Fe2599	K_7664	Li6707	Mg2790	Mn2576	Mo2020
Line	228.616 {447}	205.560 {464}	324.754 {104}	259.940 {130}	766.490 { 44}	670.784 { 50}	279.079 {121}2	257.610 {131}	202.030 {467}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.49705	W .19973	.25255	1.1177	55.802	1.0879	58.712	.70658	1.0447
Stddev	.00087	.00010	.00064	.0043	.209	.0019	.110	.00037	.0004
%RSD	.17577	.04833	.25494	.38525	.37516	.17645	.18781	.05251	.03838

#1	.49643	.19967	.25210	1.1147	55.654	1.0865	58.634	.70631	1.0444
#2	.49766	.19980	.25301	1.1208	55.950	1.0893	58.790	.70684	1.0450

Check ?	Chk Pass	Chk Warn	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit		.10000							
Low Limit		-.01000							

Elem	Na8183	Ni2316	P_1782	Pb2203	S_1820	Sb2068	Se1960	Si2881	Sn1899
Line	818.326 { 41}	231.604 {446}	178.284 {489}	220.353 {453}	182.034 {485}	206.833 {463}	196.090 {472}	288.158 {117}	189.989 {477}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	173.57	.48519	10.669	.49953	10.163	.51566	2.0556	21.314	1.9235
Stddev	.23	.00099	.020	.00651	.009	.00174	.0105	.059	.0068
%RSD	.12992	.20411	.18948	1.3025	.08466	.33838	.51000	.27767	.35350

#1	173.41	.48449	10.683	.50413	10.157	.51690	2.0482	21.272	1.9283
#2	173.73	.48589	10.654	.49493	10.169	.51443	2.0630	21.356	1.9187

Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Elem	Sr4077	Th2837	Ti3349	Ti1908	U_3701	V_2924	Zn2062	Zr3391
Line	407.771 { 83}	283.730 {119}	334.904 {101}	190.856 {477}	370.152 { 91}	292.402 {115}	206.200 {163}	339.198 { 99}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	1.1296	.99947	.93233	1.8868	2.1080	.46346	.46560	.48215
Stddev	.0029	.00013	.00010	.0042	.0469	.00006	.00049	.00194
%RSD	.25813	.01286	.01095	.22461	2.2230	.01270	.10575	.40171

#1	1.1276	.99938	.93240	1.8898	2.0748	.46350	.46595	.48078
#2	1.1317	.99956	.93226	1.8838	2.1411	.46342	.46525	.48352

Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit								
Low Limit								

Int. Std.	Y_2243	Y_3600	Y_3774
Line	224.306 {450}	360.073 { 94}	377.433 { 89}
Units	Cts/S	Cts/S	Cts/S
Avg	1421.2	29839.	5773.1
Stddev	.8	29.	.5
%RSD	.05894	.09849	.00782

#1	1421.8	29860.	5773.4
#2	1420.6	29819.	5772.8

Sample Name: 280-83254-A-2-A Acquired: 5/23/2016 20:37:38 Type: Unk
Method: 6500_026(v10) Mode: CONC Corr. Factor: 1.000000
User: kellyca Custom ID1: Custom ID2: Custom ID3:
Comment: 325985 200.7

Elem	Ag3280	Al1670	As1890	B_2089	Ba4554	Be3130	Bi2230	Ca3179	Cd2288
Line	328.068 {103}	167.079 {502}	189.042 {478}	208.959 {461}	455.403 { 74}	313.042 {108}	223.061 {451}	317.933 {106}	228.802 {447}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.00047	.00610	.00231	.16964	.12098	-.00002	.00128	38.725	.00011
Stddev	.00001	.00110	.00233	.00047	.00068	.00003	.00012	.025	.00009
%RSD	2.1101	17.971	100.76	.27944	.56316	136.25	9.5468	.06332	87.843

#1	.00046	.00688	.00067	.16931	.12050	-.00004	.00137	38.708	.00004
#2	.00047	.00533	.00396	.16998	.12146	-.00000	.00119	38.743	.00017

Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Elem	Co2286	Cr2055	Cu3247	Fe2599	K_7664	Li6707	Mg2790	Mn2576	Mo2020
Line	228.616 {447}	205.560 {464}	324.754 {104}	259.940 {130}	766.490 { 44}	670.784 { 50}	279.079 {121}2	257.610 {131}	202.030 {467}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.00184	.00035	-.00029	.69866	5.8033	.03233	20.882	.55585	.00843
Stddev	.00049	.00009	.00016	.00153	.0198	.00029	.040	.00160	.00052
%RSD	26.588	25.305	54.128	.21908	.34190	.90433	.19032	.28726	6.1548

#1	.00218	.00028	-.00040	.69758	5.7893	.03212	20.910	.55698	.00807
#2	.00149	.00041	-.00018	.69975	5.8173	.03254	20.854	.55472	.00880

Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Elem	Na8183	Ni2316	P_1782	Pb2203	S_1820	Sb2068	Se1960	Si2881	Sn1899
Line	818.326 { 41}	231.604 {446}	178.284 {489}	220.353 {453}	182.034 {485}	206.833 {463}	196.090 {472}	288.158 {117}	189.989 {477}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	181.74	.00035	.16286	.00110	46.723	-.00024	.01476	13.119	.00005
Stddev	.54	.00073	.00045	.00039	.243	.00113	.00568	.064	.00008
%RSD	.29526	207.07	.27886	35.399	.51962	472.56	38.463	.48791	179.12

#1	181.36	-.00016	.16254	.00083	46.894	-.00103	.01877	13.073	.00011
#2	182.12	.00086	.16318	.00138	46.551	.00056	.01074	13.164	-.00001

Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Elem	Sr4077	Th2837	Ti3349	Ti1908	U_3701	V_2924	Zn2062	Zr3391
Line	407.771 { 83}	283.730 {119}	334.904 {101}	190.856 {477}	370.152 { 91}	292.402 {115}	206.200 {163}	339.198 { 99}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.29100	.00132	.00061	.00210	-.00502	.00006	-.00077	.00058
Stddev	.00068	.00124	.00059	.00151	.01203	.00029	.00026	.00027
%RSD	.23306	93.766	98.039	71.873	239.45	487.93	33.178	46.237

#1	.29052	.00045	.00019	.00103	.00348	-.00015	-.00095	.00039
#2	.29148	.00220	.00103	.00317	-.01353	.00027	-.00059	.00076

Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit								
Low Limit								

Int. Std.	Y_2243	Y_3600	Y_3774
Line	224.306 {450}	360.073 { 94}	377.433 { 89}
Units	Cts/S	Cts/S	Cts/S
Avg	1465.1	31108.	5900.4
Stddev	2.3	66.	10.8
%RSD	.15762	.21125	.18375

#1	1463.5	31062.	5908.1
#2	1466.7	31155.	5892.8

Sample Name: 280-83254-A-3-A Acquired: 5/23/2016 20:40:18 Type: Unk
Method: 6500_026(v10) Mode: CONC Corr. Factor: 1.000000
User: kellyca Custom ID1: Custom ID2: Custom ID3:
Comment: 325985 200.7

Elem	Ag3280	Al1670	As1890	B_2089	Ba4554	Be3130	Bi2230	Ca3179	Cd2288
Line	328.068 {103}	167.079 {502}	189.042 {478}	208.959 {461}	455.403 { 74}	313.042 {108}	223.061 {451}	317.933 {106}	228.802 {447}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.00043	.01322	.00169	.14558	.05813	.00003	-.00081	33.740	.00007
Stddev	.00011	.00000	.00006	.00080	.00050	.00002	.00082	.084	.00010
%RSD	26.259	.00143	3.4254	.54673	.85831	77.933	101.02	.24881	134.85

#1	.00035	.01322	.00173	.14614	.05778	.00001	-.00138	33.681	.00014
#2	.00051	.01322	.00165	.14501	.05848	.00005	-.00023	33.799	.00000

Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Elem	Co2286	Cr2055	Cu3247	Fe2599	K_7664	Li6707	Mg2790	Mn2576	Mo2020
Line	228.616 {447}	205.560 {464}	324.754 {104}	259.940 {130}	766.490 { 44}	670.784 { 50}	279.079 {121}2	257.610 {131}	202.030 {467}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.00145	.00006	-.00012	.05325	5.5014	.03567	19.604	.40697	.00490
Stddev	.00026	.00017	.00015	.00060	.0639	.00098	.066	.00035	.00015
%RSD	18.272	285.50	127.68	1.1217	1.1611	2.7366	.33869	.08696	3.0319

#1	.00126	-.00006	-.00022	.05367	5.4562	.03498	19.557	.40672	.00479
#2	.00163	.00018	-.00001	.05283	5.5465	.03636	19.651	.40722	.00500

Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Elem	Na8183	Ni2316	P_1782	Pb2203	S_1820	Sb2068	Se1960	Si2881	Sn1899
Line	818.326 { 41}	231.604 {446}	178.284 {489}	220.353 {453}	182.034 {485}	206.833 {463}	196.090 {472}	288.158 {117}	189.989 {477}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	158.29	.00083	.07487	.00197	44.516	-.00166	.00972	14.339	-.00058
Stddev	1.25	.00010	.00372	.00030	.444	.00191	.00020	.130	.00101
%RSD	.78748	11.994	4.9662	15.401	.99755	115.49	2.0596	.90594	174.67

#1	157.41	.00076	.07224	.00219	44.830	-.00301	.00986	14.247	.00014
#2	159.18	.00090	.07750	.00176	44.202	-.00030	.00958	14.430	-.00129

Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Elem	Sr4077	Th2837	Ti3349	Ti1908	U_3701	V_2924	Zn2062	Zr3391
Line	407.771 { 83}	283.730 {119}	334.904 {101}	190.856 {477}	370.152 { 91}	292.402 {115}	206.200 {163}	339.198 { 99}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.24932	.00190	.00038	.00164	.01289	.00064	-.00085	.00097
Stddev	.00206	.00109	.00007	.00151	.00354	.00044	.00174	.00030
%RSD	.82735	57.437	17.280	91.925	27.423	69.091	205.51	30.933

#1	.24786	.00113	.00033	.00057	.01039	.00033	.00038	.00119
#2	.25078	.00267	.00043	.00271	.01539	.00095	-.00208	.00076

Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit								
Low Limit								

Int. Std.	Y_2243	Y_3600	Y_3774
Line	224.306 {450}	360.073 { 94}	377.433 { 89}
Units	Cts/S	Cts/S	Cts/S
Avg	1468.4	31118.	5904.0
Stddev	11.4	36.	27.2
%RSD	.77579	.11456	.46041

#1	1460.3	31143.	5923.2
#2	1476.4	31093.	5884.7

Sample Name: ccvh-3900196 Acquired: 5/23/2016 20:42:57 Type: QC
Method: 6500_026(v10) Mode: CONC Corr. Factor: 1.000000
User: kellyca Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	Ag3280	Al3092	As1890	B_2089	Ba4554	Be3130	Bi2230	Ca3179	Cd2288	Co2286	Cr2055	Cu3247	Fe2714
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.00077	47.873	.00056	.00505	.00205	.00133	1.0616	-.04440	.00052	.00516	.00095	.00601	47.914
Stddev	.00044	.002	.00168	.00082	.00012	.00008	.0068	.00005	.00024	.00011	.00011	.00008	.065
%RSD	56.839	.00422	299.75	16.178	5.9582	5.7516	.64032	.11496	46.240	2.2065	11.556	1.3624	.13578

#1	.00046	47.872	.00175	.00563	.00214	.00138	1.0664	-.04443	.00035	.00508	.00103	.00607	47.960
#2	.00108	47.875	-.00063	.00447	.00197	.00128	1.0567	-.04436	.00069	.00524	.00087	.00595	47.868

Check ?	None	Chk Pass	None	None	None	None	Chk Pass	None	None	None	None	None	Chk Pass
Value													
Range													

Elem	K_7664	Li6707	Mg2790	Mn2576	Mo2020	Na8183	Ni2316	P_1782	Pb2203	S_1820	Sb2068	Se1960	Si2881
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.22986	.00274	.21872	.00060	-.00100	255.37	.00086	.00564	.00094	5.0834	.00339	.01565	.02482
Stddev	.03011	.00100	.00326	.00011	.00050	.14	.00016	.00253	.00237	.0196	.00212	.00643	.02553
%RSD	13.101	36.409	1.4900	19.058	49.854	.05650	18.953	44.742	251.41	.38484	62.638	41.089	102.85

#1	.25115	.00204	.21642	.00068	-.00135	255.27	.00074	.00743	.00262	5.0973	.00489	.01110	.04287
#2	.20856	.00345	.22103	.00052	-.00064	255.47	.00097	.00386	-.00073	5.0696	.00189	.02020	.00677

Check ?	None	None	None	None	None	Chk Pass	None	None	None	Chk Pass	None	None	None
Value													
Range													

Elem	Sn1899	Sr4077	Th2837	Ti3349	Tl1908	U_3701	V_2924	Zn2062	Zr3391
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.00419	.00176	4.9786	.02634	.00429	10.223	-.01520	-.00061	-.01347
Stddev	.00105	.00002	.0116	.00005	.00100	.068	.00081	.00004	.00028
%RSD	25.017	.98820	.23366	.19793	23.381	.66476	5.3397	6.7867	2.0563

#1	.00493	.00175	4.9703	.02631	.00500	10.175	-.01578	-.00058	-.01328
#2	.00345	.00177	4.9868	.02638	.00358	10.272	-.01463	-.00064	-.01367

Check ?	None	None	Chk Pass	None	None	Chk Pass	None	None	None
Value									
Range									

Int. Std.	Y_2243	Y_3600	Y_3774
Units	Cts/S	Cts/S	Cts/S
Avg	1464.9	30856.	5766.1
Stddev	4.0	50.	4.1
%RSD	.27073	.16299	.07142

#1	1462.1	30821.	5763.2
#2	1467.7	30892.	5769.0

Sample Name: ccv-3900195 Acquired: 5/23/2016 20:45:43 Type: QC
Method: 6500_026(v10) Mode: CONC Corr. Factor: 1.000000
User: kellyca Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	Ag3280	Al1670	As1890	B_2089	Ba4554	Be3130	Bi2230	Ca3179	Cd2288	Co2286	Cr2055	Cu3247
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.48503	.52789	1.0372	F .55551	.49360	.50305	.00334	4.9361	.52737	.52299	.51010	.49353
Stddev	.00143	.00027	.0000	.00003	.00053	.00124	.00055	.0289	.00180	.00069	.00081	.00234
%RSD	.29501	.05166	.00201	.00570	.10793	.24598	16.576	.58630	.34132	.13281	.15966	.47501

#1	.48401	.52808	1.0372	.55553	.49322	.50217	.00373	4.9157	.52864	.52349	.51067	.49187
#2	.48604	.52769	1.0372	.55548	.49397	.50392	.00295	4.9566	.52610	.52250	.50952	.49518

Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Fail	Chk Pass	Chk Pass	None	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Value				.50000								
Range				10.000%								

Elem	Fe2599	K_7664	Li6707	Mg2790	Mn2576	Mo2020	Na5895	Ni2316	P_1782	Pb2203	S_1820	Sb2068
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	2.4714	50.679	1.0530	19.563	.49065	.51535	5.2519	.50836	1.0250	1.0576	.00392	1.0122
Stddev	.0140	.025	.0000	.028	.00070	.00044	.0025	.00003	.0067	.0087	.00065	.0070
%RSD	.56541	.04949	.00226	.14328	.14248	.08581	.04775	.00566	.64945	.82296	16.635	.69264

#1	2.4813	50.696	1.0531	19.544	.49114	.51566	5.2537	.50834	1.0297	1.0637	.00346	1.0172
#2	2.4615	50.661	1.0530	19.583	.49015	.51504	5.2501	.50838	1.0203	1.0514	.00438	1.0073

Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	None	Chk Pass
Value												
Range												

Elem	Se1960	Si2881	Sn1899	Sr4077	Th2837	Ti3349	Ti1908	U_3701	V_2924	Zn2062	Zr3391
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	1.0507	4.9824	1.0077	.47488	.00599	.46517	1.0455	.01100	.46592	.48421	.48994
Stddev	.0052	.0293	.0015	.00005	.00023	.00015	.0030	.00771	.00004	.00279	.00077
%RSD	.49301	.58867	.14506	.01041	3.8459	.03253	.29052	70.060	.00914	.57610	.15664

#1	1.0543	4.9617	1.0087	.47485	.00582	.46506	1.0476	.01645	.46595	.48224	.49048
#2	1.0470	5.0032	1.0066	.47492	.00615	.46528	1.0434	.00555	.46589	.48618	.48940

Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	None	Chk Pass	Chk Pass	None	Chk Pass	Chk Pass	Chk Pass
Value											
Range											

Int. Std.	Y_2243	Y_3600	Y_3774
Units	Cts/S	Cts/S	Cts/S
Avg	1511.9	32025.	5852.0
Stddev	2.2	13.	2.0
%RSD	.14804	.04172	.03490

#1	1513.4	32034.	5853.5
#2	1510.3	32015.	5850.6

Sample Name: ccb Acquired: 5/23/2016 20:48:17 Type: QC
Method: 6500_026(v10) Mode: CONC Corr. Factor: 1.000000
User: kellyca Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	Ag3280	Al1670	As1890	B_2089	Ba4554	Be3130	Bi2230	Ca3179	Cd2288	Co2286	Cr2055	Cu3247
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.00027	-.00012	.00021	W .00298	.00027	.00010	.00187	-.00498	.00020	-.00039	-.00011	-.00113
Stddev	.00016	.00083	.00078	.00068	.00001	.00001	.00118	.00352	.00002	.00009	.00008	.00023
%RSD	58.758	688.11	372.65	22.933	4.1246	9.9658	63.044	70.767	8.6412	22.559	77.092	20.731
#1	.00038	-.00071	-.00034	.00250	.00027	.00011	.00104	-.00249	.00021	-.00032	-.00016	-.00097
#2	.00016	.00047	.00076	.00347	.00028	.00010	.00271	-.00747	.00019	-.00045	-.00005	-.00130
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Warn	Chk Pass	Chk Pass	None	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit				.00156								
Low Limit				-.00156								
Elem	Fe2599	K_7664	Li6707	Mg2790	Mn2576	Mo2020	Na5895	Ni2316	P_1782	Pb2203	S_1820	Sb2068
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.00377	.06757	-.00121	.00360	.00001	.00032	.03569	-.00001	.00079	.00013	-.00149	W .00598
Stddev	.00111	.02849	.00066	.00394	.00005	.00040	.00234	.00069	.00251	.00031	.00407	.00008
%RSD	29.525	42.157	54.590	109.28	325.79	125.46	6.5463	6917.2	318.64	238.04	273.17	1.3134
#1	.00299	.08771	-.00075	.00082	-.00002	.00004	.03734	.00048	.00256	-.00009	.00139	.00604
#2	.00456	.04743	-.00168	.00638	.00005	.00060	.03404	-.00050	-.00099	.00034	-.00437	.00593
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	None	Chk Warn
High Limit												.00314
Low Limit												-.00314
Elem	Se1960	Si2881	Sn1899	Sr4077	Th2837	Ti3349	Ti1908	U_3701	V_2924	Zn2062	Zr3391	
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	
Avg	W .00808	.00779	.00025	.00009	.00265	.00013	-.00035	.01049	.00011	-.00001	.00049	
Stddev	.00162	.00191	.00011	.00008	.00095	.00001	.00038	.01046	.00031	.00071	.00036	
%RSD	20.024	24.592	45.855	90.380	36.081	8.6365	109.88	99.699	269.77	6237.1	72.529	
#1	.00922	.00643	.00033	.00014	.00332	.00012	-.00008	.00310	.00033	-.00051	.00024	
#2	.00693	.00914	.00017	.00003	.00197	.00014	-.00062	.01789	-.00010	.00049	.00075	
Check ?	Chk Warn	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	
High Limit	.00486											
Low Limit	-.00486											
Int. Std.	Y_2243	Y_3600	Y_3774									
Units	Cts/S	Cts/S	Cts/S									
Avg	1512.0	32578.	5766.4									
Stddev	1.2	19.	16.2									
%RSD	.07918	.05886	.28139									
#1	1512.9	32565.	5777.9									
#2	1511.2	32592.	5754.9									

Sample Name: ccvl-3907489 Acquired: 5/23/2016 20:51:01 Type: QC
Method: 6500_026(v10) Mode: CONC Corr. Factor: 1.000000
User: kellyca Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	Ag3280	Al1670	As1890	B_2089	Ba4554	Be3130	Bi2230	Ca3179	Cd2288	Co2286	Cr2055	Cu3247
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.00983	.10644	.01458	.10820	.01022	.00102	.11652	.18781	.00544	.01076	.01090	.01378
Stddev	.00011	.00003	.00142	.00003	.00009	.00011	.00142	.00087	.00011	.00025	.00005	.00019
%RSD	1.0822	.02903	9.7703	.02659	.85915	10.548	1.2228	.46506	2.0346	2.2880	.49550	1.3802

#1	.00991	.10646	.01357	.10822	.01015	.00110	.11551	.18842	.00552	.01093	.01087	.01392
#2	.00976	.10642	.01559	.10818	.01028	.00095	.11753	.18719	.00536	.01058	.01094	.01365

Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Value												
Range												

Elem	Fe2599	K_7664	Li6707	Mg2790	Mn2576	Mo2020	Na5895	Ni2316	P_1782	Pb2203	S_1820	Sb2068
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.12637	3.0608	.00980	.19699	.01003	.02111	1.0580	.04141	2.9141	F .01299	-.00351	F .02645
Stddev	.00413	.0014	.00031	.00007	.00013	.00030	.0042	.00012	.0042	.00020	.00403	.00286
%RSD	3.2660	.04622	3.1381	.03356	1.2827	1.4185	.39473	.30035	.14253	1.5531	114.96	10.823

#1	.12345	3.0598	.01002	.19694	.01012	.02090	1.0550	.04132	2.9170	.01314	-.00636	.02443
#2	.12929	3.0618	.00958	.19704	.00994	.02132	1.0610	.04149	2.9111	.01285	-.00066	.02848

Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Fail	None	Chk Fail
Value										.00900		.02000
Range										30.000%		30.000%

Elem	Se1960	Si2881	Sn1899	Sr4077	Th2837	Ti3349	Ti1908	U_3701	V_2924	Zn2062	Zr3391
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	F .02037	.50825	.10180	.00957	.01635	.00896	.01557	F .09326	.00948	.01835	.01507
Stddev	.00313	.00785	.00071	.00003	.00057	.00015	.00075	.02837	.00046	.00211	.00084
%RSD	15.388	1.5442	.70061	.30716	3.4794	1.6706	4.8143	30.422	4.8623	11.499	5.5464

#1	.01815	.51380	.10129	.00955	.01594	.00906	.01504	.07320	.00915	.01686	.01566
#2	.02258	.50270	.10230	.00959	.01675	.00885	.01610	.11333	.00981	.01984	.01448

Check ?	Chk Fail	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Fail	Chk Pass	Chk Pass	Chk Pass
Value	.01500							.06000			
Range	30.000%							30.000%			

Int. Std.	Y_2243	Y_3600	Y_3774
Units	Cts/S	Cts/S	Cts/S
Avg	1522.4	32734.	5836.7
Stddev	2.5	18.	66.3
%RSD	.16376	.05556	1.1358

#1	1524.2	32747.	5883.6
#2	1520.6	32722.	5789.8

Sample Name: MB 280-325951/1-A Acquired: 5/23/2016 20:53:44 Type: Unk
Method: 6500_026(v10) Mode: CONC Corr. Factor: 1.000000
User: kellyca Custom ID1: 5/19 Custom ID2: Custom ID3:
Comment: 325951 200.7

Elem	Ag3280	Al1670	As1890	B_2089	Ba4554	Be3130	Bi2230	Ca3179	Cd2288
Line	328.068 {103}	167.079 {502}	189.042 {478}	208.959 {461}	455.403 { 74}	313.042 {108}	223.061 {451}	317.933 {106}	228.802 {447}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.00055	.00499	W .00632	.00213	.00024	-.00001	.00203	.00139	-.00013
Stddev	.00061	.00042	.00104	.00013	.00000	.00004	.00210	.00070	.00011
%RSD	110.85	8.4970	16.472	6.0899	1.2833	757.71	103.29	50.199	89.113

#1	.00098	.00529	.00558	.00204	.00024	.00003	.00352	.00188	-.00020
#2	.00012	.00469	.00705	.00223	.00025	-.00004	.00055	.00090	-.00005

Check ?	Chk Pass	Chk Pass	Chk Warn	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit			.00500						
Low Limit			-.00500						

Elem	Co2286	Cr2055	Cu3247	Fe2599	K_7664	Li6707	Mg2790	Mn2576	Mo2020
Line	228.616 {447}	205.560 {464}	324.754 {104}	259.940 {130}	766.490 { 44}	670.784 { 50}	279.079 {121}2	257.610 {131}	202.030 {467}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	-.00029	-.00015	-.00112	W .03366	.01739	-.00096	-.00187	.00026	-.00022
Stddev	.00004	.00013	.00004	.00252	.02436	.00073	.00577	.00011	.00004
%RSD	13.104	87.656	3.5283	7.4893	140.10	75.478	308.18	42.534	18.164

#1	-.00031	-.00006	-.00110	.03544	.00016	-.00045	-.00595	.00033	-.00024
#2	-.00026	-.00024	-.00115	.03188	.03462	-.00148	.00221	.00018	-.00019

Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Warn	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit				.03000					
Low Limit				-.05000					

Elem	Na5895	Ni2316	P_1782	Pb2203	S_1820	Sb2068	Se1960	Si2881	Sn1899
Line	589.592 { 57}	231.604 {446}	178.284 {489}	220.353 {453}	182.034 {485}	206.833 {463}	196.090 {472}	288.158 {117}	189.989 {477}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.02175	.00016	.00238	.00137	.00042	.00293	W .00979	.01717	.00090
Stddev	.00525	.00018	.00153	.00015	.00364	.00192	.00633	.01462	.00171
%RSD	24.149	117.51	64.351	11.119	873.64	65.559	64.651	85.149	190.06

#1	.02547	.00003	.00346	.00148	.00299	.00157	.01427	.00683	.00211
#2	.01804	.00029	.00130	.00127	-.00216	.00429	.00532	.02751	-.00031

Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Warn	Chk Pass	Chk Pass
High Limit							.00500		
Low Limit							-.00500		

Elem	Sr4077	Th2837	Ti3349	Ti1908	U_3701	V_2924	Zn2062	Zr3391
Line	407.771 { 83}	283.730 {119}	334.904 {101}	190.856 {477}	370.152 { 91}	292.402 {115}	206.200 {163}	339.198 { 99}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.00002	.00164	.00000	.00007	.02024	-.00054	.00137	.00057
Stddev	.00000	.00028	.00035	.00183	.00047	.00050	.00149	.00028
%RSD	19.641	17.122	13866.	2712.1	2.2983	93.196	108.60	48.031

#1	.00003	.00144	-.00025	.00136	.02057	-.00018	.00032	.00077
#2	.00002	.00184	.00025	-.00122	.01991	-.00089	.00243	.00038

Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit								
Low Limit								

Int. Std.	Y_2243	Y_3600	Y_3774
Line	224.306 {450}	360.073 { 94}	377.433 { 89}
Units	Cts/S	Cts/S	Cts/S
Avg	1528.3	32970.	5842.4
Stddev	.7	3.	32.8
%RSD	.04324	.00905	.56089

#1	1527.8	32968.	5865.6
#2	1528.8	32972.	5819.2

Sample Name: LCS 280-325951/2-A Acquired: 5/23/2016 20:56:27 Type: Unk

Method: 6500_026(v10) Mode: CONC Corr. Factor: 1.000000

User: kellyca Custom ID1: Custom ID2: Custom ID3:

Comment: 325951 200.7

Elem	Ag3280	Al1670	As1890	B_2089	Ba4554	Be3130	Bi2230	Ca3179	Cd2288
Line	328.068 {103}	167.079 {502}	189.042 {478}	208.959 {461}	455.403 { 74}	313.042 {108}	223.061 {451}	317.933 {106}	228.802 {447}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.04824	1.9442	1.0443	1.0754	1.9892	.05035	F 2.2430	49.030	.10418
Stddev	.00046	.0002	.0004	.0032	.0008	.00019	.0084	.026	.00000
%RSD	.95943	.01037	.03919	.29555	.04023	.38423	.37649	.05273	.00364

#1	.04791	1.9443	1.0440	1.0732	1.9897	.05021	2.2370	49.048	.10418
#2	.04857	1.9441	1.0446	1.0777	1.9886	.05048	2.2489	49.011	.10418

Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Fail	Chk Pass	Chk Pass
High Limit							2.2000		
Low Limit							1.8000		

Elem	Co2286	Cr2055	Cu3247	Fe2599	K_7664	Li6707	Mg2790	Mn2576	Mo2020
Line	228.616 {447}	205.560 {464}	324.754 {104}	259.940 {130}	766.490 { 44}	670.784 { 50}	279.079 {121}2	257.610 {131}	202.030 {467}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.51045	F .20350	.24813	.99042	51.790	1.0725	47.497	.47570	1.0611
Stddev	.00037	.00105	.00025	.00436	.046	.0007	.109	.00230	.0017
%RSD	.07290	.51425	.09935	.43986	.08961	.06620	.23044	.48450	.16346

#1	.51072	.20424	.24830	.99350	51.757	1.0730	47.575	.47733	1.0623
#2	.51019	.20276	.24796	.98734	51.822	1.0720	47.420	.47407	1.0598

Check ?	Chk Pass	Chk Fail	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit		.05750							
Low Limit		.04300							

Elem	Na8183	Ni2316	P_1782	Pb2203	S_1820	Sb2068	Se1960	Si2881	Sn1899
Line	818.326 { 41}	231.604 {446}	178.284 {489}	220.353 {453}	182.034 {485}	206.833 {463}	196.090 {472}	288.158 {117}	189.989 {477}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	52.494	.49604	10.357	.51709	2.1460	.51796	2.0450	9.8387	1.9496
Stddev	.073	.00087	.015	.00173	.0064	.00243	.0023	.0266	.0009
%RSD	.13819	.17550	.14424	.33452	.29703	.46843	.11242	.27020	.04678

#1	52.443	.49666	10.367	.51831	2.1505	.51624	2.0434	9.8574	1.9502
#2	52.545	.49543	10.346	.51587	2.1415	.51967	2.0467	9.8199	1.9489

Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Elem	Sr4077	Th2837	Ti3349	Ti1908	U_3701	V_2924	Zn2062	Zr3391
Line	407.771 { 83}	283.730 {119}	334.904 {101}	190.856 {477}	370.152 { 91}	292.402 {115}	206.200 {163}	339.198 { 99}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.94688	.99400	.92616	1.9826	2.1183	.46038	.46439	.48235
Stddev	.00159	.00567	.00236	.0125	.0339	.00098	.00307	.00407
%RSD	.16782	.57033	.25454	.63149	1.5992	.21277	.66121	.84456

#1	.94575	.99801	.92783	1.9737	2.0944	.46107	.46656	.48523
#2	.94800	.98999	.92449	1.9914	2.1423	.45969	.46222	.47947

Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit								
Low Limit								

Int. Std.	Y_2243	Y_3600	Y_3774
Line	224.306 {450}	360.073 { 94}	377.433 { 89}
Units	Cts/S	Cts/S	Cts/S
Avg	1452.2	30973.	5744.5
Stddev	1.3	67.	27.4
%RSD	.08875	.21633	.47718

#1	1451.3	30925.	5725.1
#2	1453.2	31020.	5763.8

Sample Name: 280-83284-B-1-A Acquired: 5/23/2016 20:58:59 Type: Unk
Method: 6500_026(v10) Mode: CONC Corr. Factor: 1.000000
User: kellyca Custom ID1: Custom ID2: Custom ID3:
Comment: 325951 200.7

Elem	Ag3280	Al1670	As1890	B_2089	Ba4554	Be3130	Bi2230	Ca3179	Cd2288
Line	328.068 {103}	167.079 {502}	189.042 {478}	208.959 {461}	455.403 { 74}	313.042 {108}	223.061 {451}	317.933 {106}	228.802 {447}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.00036	1.4729	.00090	.01092	.01855	.00007	.00568	385.46	.00066
Stddev	.00030	.0003	.00062	.00059	.00019	.00000	.00190	.79	.00002
%RSD	83.433	.01921	68.170	5.4356	1.0330	4.8956	33.410	.20557	3.7364

#1	.00015	1.4731	.00047	.01134	.01842	.00007	.00703	384.90	.00064
#2	.00058	1.4727	.00134	.01050	.01869	.00006	.00434	386.02	.00068

Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Elem	Co2286	Cr2055	Cu3247	Fe2599	K_7664	Li6707	Mg2790	Mn2576	Mo2020
Line	228.616 {447}	205.560 {464}	324.754 {104}	259.940 {130}	766.490 { 44}	670.784 { 50}	279.079 {121}2	257.610 {131}	202.030 {467}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.00228	.00128	.03895	.17777	3.4803	.01700	25.738	1.9788	.00139
Stddev	.00049	.00024	.00048	.00136	.0543	.00042	.002	.0012	.00030
%RSD	21.300	19.065	1.2319	.76579	1.5607	2.4743	.00871	.06212	21.937

#1	.00194	.00145	.03862	.17873	3.4419	.01729	25.737	1.9797	.00161
#2	.00262	.00110	.03929	.17681	3.5187	.01670	25.740	1.9780	.00117

Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Elem	Na8183	Ni2316	P_1782	Pb2203	S_1820	Sb2068	Se1960	Si2881	Sn1899
Line	818.326 { 41}	231.604 {446}	178.284 {489}	220.353 {453}	182.034 {485}	206.833 {463}	196.090 {472}	288.158 {117}	189.989 {477}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	22.633	.00377	.00541	W -.00310	F 385.96	.00272	.00398	.33065	-.00030
Stddev	.125	.00029	.00238	.00201	.98	.00164	.00176	.00107	.00138
%RSD	.55261	7.7868	43.947	64.703	.25294	60.272	44.246	.32496	464.57

#1	22.722	.00398	.00373	-.00168	386.65	.00156	.00274	.33141	.00068
#2	22.545	.00357	.00709	-.00452	385.27	.00388	.00523	.32989	-.00127

Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Warn	Chk Fail	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit				10.000	200.00				
Low Limit				-.00300	-.02000				

Elem	Sr4077	Th2837	Ti3349	Ti1908	U_3701	V_2924	Zn2062	Zr3391	
Line	407.771 { 83}	283.730 {119}	334.904 {101}	190.856 {477}	370.152 { 91}	292.402 {115}	206.200 {163}	339.198 { 99}	
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	
Avg	1.1290	.00333	.00153	.00039	-.01833	-.00024	.01651	-.00046	
Stddev	.0054	.00106	.00042	.00017	.01720	.00004	.00009	.00077	
%RSD	.47764	31.844	27.089	44.517	93.838	18.061	.53483	167.34	

#1	1.1252	.00409	.00124	.00051	-.03049	-.00021	.01657	-.00101	
#2	1.1328	.00258	.00183	.00027	-.00617	-.00027	.01645	.00008	

Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	
High Limit									
Low Limit									

Int. Std.	Y_2243	Y_3600	Y_3774						
Line	224.306 {450}	360.073 { 94}	377.433 { 89}						
Units	Cts/S	Cts/S	Cts/S						
Avg	1406.5	30079.	5643.9						
Stddev	1.1	40.	7.7						
%RSD	.07594	.13216	.13591						

#1	1405.7	30107.	5649.3						
#2	1407.2	30051.	5638.5						

Sample Name: 280-83284-B-2-A Acquired: 5/23/2016 21:01:39 Type: Unk
Method: 6500_026(v10) Mode: CONC Corr. Factor: 1.000000
User: kellyca Custom ID1: Custom ID2: Custom ID3:
Comment: 325951 200.7

Elem	Ag3280	Al3092	As1890	B_2089	Ba4554	Be3130	Bi2230	Ca3179	Cd2288
Line	328.068 {103}	309.271 {109}	189.042 {478}	208.959 {461}	455.403 { 74}	313.042 {108}	223.061 {451}	317.933 {106}	228.802 {447}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.00114	23.315	.00682	.00596	.01370	.00413	.00285	210.26	.02841
Stddev	.00052	.018	.00027	.00063	.00022	.00001	.00139	.45	.00015
%RSD	45.360	.07714	4.0140	10.516	1.5777	.21277	48.744	.21278	.52530

#1	.00077	23.328	.00662	.00640	.01355	.00414	.00187	209.95	.02830
#2	.00151	23.302	.00701	.00552	.01386	.00413	.00384	210.58	.02851

Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Elem	Co2286	Cr2055	Cu3247	Fe2599	K_7664	Li6707	Mg2790	Mn2576	Mo2020
Line	228.616 {447}	205.560 {464}	324.754 {104}	259.940 {130}	766.490 { 44}	670.784 { 50}	279.079 {121}2	257.610 {131}	202.030 {467}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.12123	.00149	4.5205	20.819	2.7604	.01365	28.490	7.8399	-.00082
Stddev	.00109	.00005	.0045	.070	.0138	.00018	.098	.0267	.00006
%RSD	.90069	3.2968	.09853	.33812	.50154	1.3022	.34231	.34051	7.6343

#1	.12200	.00146	4.5237	20.769	2.7702	.01352	28.559	7.8588	-.00087
#2	.12046	.00153	4.5174	20.869	2.7506	.01378	28.421	7.8210	-.00078

Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Elem	Na8183	Ni2316	P_1782	Pb2203	S_1820	Sb2068	Se1960	Si2881	Sn1899
Line	818.326 { 41}	231.604 {446}	178.284 {489}	220.353 {453}	182.034 {485}	206.833 {463}	196.090 {472}	288.158 {117}	189.989 {477}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	12.329	.13167	.00925	.01338	F 298.70	.00030	.00590	10.541	-.00002
Stddev	.171	.00046	.00081	.00255	1.22	.00335	.00403	.003	.00074
%RSD	1.3887	.35153	8.7266	19.056	.40872	1115.1	68.258	.02626	4127.0

#1	12.450	.13200	.00983	.01519	299.57	-.00207	.00875	10.539	.00050
#2	12.208	.13134	.00868	.01158	297.84	.00267	.00305	10.543	-.00054

Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Fail	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit					200.00				
Low Limit					-.02000				

Elem	Sr4077	Th2837	Ti3349	Ti1908	U_3701	V_2924	Zn2062	Zr3391	
Line	407.771 { 83}	283.730 {119}	334.904 {101}	190.856 {477}	370.152 { 91}	292.402 {115}	206.200 {163}	339.198 { 99}	
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	
Avg	.79538	.00305	.00087	.00062	-.03647	-.00004	2.8710	.00088	
Stddev	.00007	.00066	.00000	.00141	.03061	.00015	.0095	.00032	
%RSD	.00872	21.751	.27685	229.30	83.935	363.81	.33068	36.645	

#1	.79543	.00258	.00088	-.00038	-.01483	.00007	2.8777	.00065	
#2	.79533	.00352	.00087	.00161	-.05812	-.00015	2.8643	.00111	

Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	
High Limit									
Low Limit									

Int. Std.	Y_2243	Y_3600	Y_3774						
Line	224.306 {450}	360.073 { 94}	377.433 { 89}						
Units	Cts/S	Cts/S	Cts/S						
Avg	1476.3	31639.	5872.6						
Stddev	1.9	35.	4.2						
%RSD	.13185	.11152	.07144						

#1	1474.9	31614.	5875.5						
#2	1477.7	31664.	5869.6						

Sample Name: 280-83291-B-1-A Acquired: 5/23/2016 21:04:17 Type: Unk
Method: 6500_026(v10) Mode: CONC Corr. Factor: 1.000000
User: kellyca Custom ID1: Custom ID2: Custom ID3:
Comment: 325951 200.7

Elem	Ag3280	Al1670	As1890	B_2089	Ba4554	Be3130	Bi2230	Ca3179	Cd2288
Line	328.068 {103}	167.079 {502}	189.042 {478}	208.959 {461}	455.403 { 74}	313.042 {108}	223.061 {451}	317.933 {106}	228.802 {447}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.00059	.78653	.00343	.11668	.91157	-.00002	-.00044	84.464	-.00006
Stddev	.00041	.00412	.00584	.00002	.00267	.00005	.00042	.234	.00010
%RSD	68.643	.52382	170.30	.01791	.29315	200.14	96.916	.27655	161.61

#1	.00030	.78944	.00755	.11670	.90968	-.00006	-.00073	84.299	.00001
#2	.00088	.78361	-.00070	.11667	.91346	.00001	-.00014	84.629	-.00014

Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Elem	Co2286	Cr2055	Cu3247	Fe2599	K_7664	Li6707	Mg2790	Mn2576	Mo2020
Line	228.616 {447}	205.560 {464}	324.754 {104}	259.940 {130}	766.490 { 44}	670.784 { 50}	279.079 {121}2	257.610 {131}	202.030 {467}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.00370	.08426	.00652	.30998	80.996	.09412	.41007	.01007	.03384
Stddev	.00006	.00001	.00019	.00352	.155	.00013	.00019	.00011	.00002
%RSD	1.6252	.00902	2.8696	1.1363	.19104	.14026	.04674	1.1408	.07222

#1	.00365	.08426	.00665	.31248	80.887	.09421	.40993	.01015	.03382
#2	.00374	.08425	.00638	.30749	81.106	.09402	.41020	.00999	.03386

Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Elem	Na8183	Ni2316	P_1782	Pb2203	S_1820	Sb2068	Se1960	Si2881	Sn1899
Line	818.326 { 41}	231.604 {446}	178.284 {489}	220.353 {453}	182.034 {485}	206.833 {463}	196.090 {472}	288.158 {117}	189.989 {477}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	72.870	.00225	.02390	.00086	34.671	.00175	.01501	8.4715	-.00007
Stddev	.304	.00027	.00129	.00150	.126	.00068	.01035	.0140	.00057
%RSD	.41667	11.784	5.4049	173.13	.36210	39.237	68.992	.16530	805.11

#1	72.656	.00207	.02299	.00192	34.760	.00126	.02233	8.4616	-.00048
#2	73.085	.00244	.02481	-.00019	34.583	.00223	.00769	8.4814	.00034

Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Elem	Sr4077	Th2837	Ti3349	Ti1908	U_3701	V_2924	Zn2062	Zr3391	
Line	407.771 { 83}	283.730 {119}	334.904 {101}	190.856 {477}	370.152 { 91}	292.402 {115}	206.200 {163}	339.198 { 99}	
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	
Avg	4.5290	.00322	.01033	.00142	-.01534	.02259	.00044	.00112	
Stddev	.0013	.00017	.00028	.00089	.02171	.00040	.00020	.00051	
%RSD	.02969	5.2745	2.7429	62.768	141.54	1.7642	44.199	45.523	

#1	4.5300	.00334	.01053	.00205	-.03069	.02231	.00030	.00148	
#2	4.5281	.00310	.01013	.00079	.00001	.02287	.00058	.00076	

Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	
High Limit									
Low Limit									

Int. Std.	Y_2243	Y_3600	Y_3774						
Line	224.306 {450}	360.073 { 94}	377.433 { 89}						
Units	Cts/S	Cts/S	Cts/S						
Avg	1458.4	30973.	5803.2						
Stddev	.4	19.	32.6						
%RSD	.02849	.06242	.56215						

#1	1458.7	30987.	5826.2						
#2	1458.1	30959.	5780.1						

Sample Name: 280-83291-B-2-A Acquired: 5/23/2016 21:07:04 Type: Unk
Method: 6500_026(v10) Mode: CONC Corr. Factor: 1.000000
User: kellyca Custom ID1: Custom ID2: Custom ID3:
Comment: 325951 200.7

Elem	Ag3280	Al1670	As1890	B_2089	Ba4554	Be3130	Bi2230	Ca3179	Cd2288
Line	328.068 {103}	167.079 {502}	189.042 {478}	208.959 {461}	455.403 { 74}	313.042 {108}	223.061 {451}	317.933 {106}	228.802 {447}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.00060	.72363	.00242	.11600	.84644	.00004	-.00052	78.354	.00008
Stddev	.00000	.00296	.00253	.00105	.00001	.00007	.00118	.296	.00022
%RSD	.60849	.40930	104.40	.90135	.00087	194.47	224.05	.37809	278.42

#1	.00061	.72572	.00421	.11674	.84645	.00009	-.00136	78.144	-.00008
#2	.00060	.72154	.00063	.11526	.84644	-.00001	.00031	78.563	.00023

Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Elem	Co2286	Cr2055	Cu3247	Fe2599	K_7664	Li6707	Mg2790	Mn2576	Mo2020
Line	228.616 {447}	205.560 {464}	324.754 {104}	259.940 {130}	766.490 { 44}	670.784 { 50}	279.079 {121}2	257.610 {131}	202.030 {467}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.00366	.08491	.00563	.24669	80.728	.09247	.37045	.00798	.03457
Stddev	.00033	.00027	.00006	.00168	.093	.00049	.00018	.00008	.00035
%RSD	9.0105	.31700	1.0396	.68225	.11555	.53300	.04916	1.0402	1.0147

#1	.00389	.08510	.00567	.24550	80.794	.09212	.37058	.00804	.03432
#2	.00342	.08472	.00559	.24788	80.662	.09282	.37032	.00792	.03482

Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Elem	Na8183	Ni2316	P_1782	Pb2203	S_1820	Sb2068	Se1960	Si2881	Sn1899
Line	818.326 { 41}	231.604 {446}	178.284 {489}	220.353 {453}	182.034 {485}	206.833 {463}	196.090 {472}	288.158 {117}	189.989 {477}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	72.637	.00210	.02198	.00034	34.423	.00151	.01191	8.1643	-.00178
Stddev	.034	.00016	.00067	.00055	.159	.00117	.00480	.0061	.00183
%RSD	.04635	7.3929	3.0443	159.70	.46044	77.770	40.307	.07504	102.55

#1	72.613	.00199	.02246	-.00004	34.535	.00234	.00851	8.1686	-.00308
#2	72.661	.00221	.02151	.00073	34.311	.00068	.01530	8.1599	-.00049

Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Elem	Sr4077	Th2837	Ti3349	Ti1908	U_3701	V_2924	Zn2062	Zr3391
Line	407.771 { 83}	283.730 {119}	334.904 {101}	190.856 {477}	370.152 { 91}	292.402 {115}	206.200 {163}	339.198 { 99}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	4.2948	.00248	.00757	.00236	-.01908	.02223	.00164	-.00057
Stddev	.0560	.00108	.00002	.00139	.00354	.00008	.00111	.00164
%RSD	1.3035	43.529	.29482	58.926	18.573	.37335	67.742	288.64

#1	4.2552	.00324	.00756	.00334	-.01657	.02228	.00242	.00059
#2	4.3344	.00172	.00759	.00138	-.02158	.02217	.00085	-.00172

Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit								
Low Limit								

Int. Std.	Y_2243	Y_3600	Y_3774
Line	224.306 {450}	360.073 { 94}	377.433 { 89}
Units	Cts/S	Cts/S	Cts/S
Avg	1448.8	30882.	5784.5
Stddev	3.5	30.	14.4
%RSD	.24185	.09806	.24821

#1	1446.3	30861.	5794.7
#2	1451.2	30904.	5774.4

Sample Name: 280-83311-B-1-A Acquired: 5/23/2016 21:09:49 Type: Unk
Method: 6500_026(v10) Mode: CONC Corr. Factor: 1.000000
User: kellyca Custom ID1: Custom ID2: Custom ID3:
Comment: 325951 200.7

Elem	Ag3280	Al1670	As1890	B_2089	Ba4554	Be3130	Bi2230	Ca3179	Cd2288
Line	328.068 {103}	167.079 {502}	189.042 {478}	208.959 {461}	455.403 { 74}	313.042 {108}	223.061 {451}	317.933 {106}	228.802 {447}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.00033	.46449	.00089	.03575	.07998	-.00000	.00080	125.51	-.00001
Stddev	.00051	.00093	.00208	.00083	.00003	.00002	.00100	.07	.00013
%RSD	153.74	.19956	234.87	2.3320	.03885	2129.3	124.59	.05899	937.62

#1	-.00003	.46384	-.00059	.03516	.08001	-.00001	.00010	125.57	-.00011
#2	.00070	.46515	.00236	.03634	.07996	.00001	.00151	125.46	.00008

Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Elem	Co2286	Cr2055	Cu3247	Fe2599	K_7664	Li6707	Mg2790	Mn2576	Mo2020
Line	228.616 {447}	205.560 {464}	324.754 {104}	259.940 {130}	766.490 { 44}	670.784 { 50}	279.079 {121}2	257.610 {131}	202.030 {467}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.00145	.00094	-.00028	.45413	2.6095	.02290	46.545	.01391	.00010
Stddev	.00003	.00018	.00017	.00027	.0388	.00042	.336	.00013	.00009
%RSD	1.9283	19.288	60.297	.05898	1.4859	1.8337	.72187	.93282	97.351

#1	.00147	.00106	-.00016	.45394	2.6369	.02320	46.308	.01382	.00003
#2	.00143	.00081	-.00040	.45432	2.5820	.02260	46.783	.01400	.00016

Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Elem	Na8183	Ni2316	P_1782	Pb2203	S_1820	Sb2068	Se1960	Si2881	Sn1899
Line	818.326 { 41}	231.604 {446}	178.284 {489}	220.353 {453}	182.034 {485}	206.833 {463}	196.090 {472}	288.158 {117}	189.989 {477}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	180.23	.00134	.02053	-.00003	94.701	.00162	.00613	7.7855	-.00084
Stddev	.66	.00001	.00482	.00049	.381	.00046	.00695	.0546	.00042
%RSD	.36597	.65627	23.500	1614.3	.40272	28.250	113.42	.70142	50.628

#1	180.69	.00134	.02394	-.00037	94.970	.00130	.01104	7.8241	-.00114
#2	179.76	.00133	.01712	.00031	94.431	.00194	.00121	7.7468	-.00054

Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Elem	Sr4077	Th2837	Ti3349	Ti1908	U_3701	V_2924	Zn2062	Zr3391
Line	407.771 { 83}	283.730 {119}	334.904 {101}	190.856 {477}	370.152 { 91}	292.402 {115}	206.200 {163}	339.198 { 99}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	1.8731	.00029	.01462	.00150	.02008	.00142	.00073	.00091
Stddev	.0031	.00053	.00041	.00030	.00498	.00049	.00162	.00008
%RSD	.16718	185.36	2.7792	20.055	24.820	34.809	223.83	9.1708

#1	1.8709	-.00009	.01491	.00129	.01656	.00107	.00187	.00085
#2	1.8753	.00066	.01433	.00172	.02360	.00177	-.00042	.00097

Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit								
Low Limit								

Int. Std.	Y_2243	Y_3600	Y_3774
Line	224.306 {450}	360.073 { 94}	377.433 { 89}
Units	Cts/S	Cts/S	Cts/S
Avg	1417.2	30009.	5726.4
Stddev	.4	136.	17.0
%RSD	.03155	.45385	.29771

#1	1416.8	30105.	5714.3
#2	1417.5	29913.	5738.4

Sample Name: ccvh-3900196 Acquired: 5/23/2016 21:12:30 Type: QC
Method: 6500_026(v10) Mode: CONC Corr. Factor: 1.000000
User: kellyca Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	Ag3280	Al3092	As1890	B_2089	Ba4554	Be3130	Bi2230	Ca3179	Cd2288	Co2286	Cr2055	Cu3247	Fe2714
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.00087	47.985	.00072	.00393	.00193	.00130	1.0498	-.00965	.00069	.00497	.00071	.00590	48.134
Stddev	.00011	.090	.00283	.00064	.00002	.00003	.0000	.00784	.00000	.00003	.00012	.00040	.129
%RSD	12.169	.18828	393.20	16.229	1.0623	2.2100	.00232	81.276	.30236	.50702	16.669	6.7404	.26879

#1	.00094	48.049	-.00128	.00438	.00191	.00128	1.0497	-.00410	.00069	.00499	.00080	.00619	48.043
#2	.00080	47.921	.00272	.00348	.00194	.00132	1.0498	-.01520	.00069	.00495	.00063	.00562	48.225

Check ?	None	Chk Pass	None	None	None	None	Chk Pass	None	None	None	None	None	Chk Pass
Value													
Range													

Elem	K_7664	Li6707	Mg2790	Mn2576	Mo2020	Na8183	Ni2316	P_1782	Pb2203	S_1820	Sb2068	Se1960	Si2881
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.21652	.00301	.22042	.00111	-.00126	253.78	.00158	.00582	.00065	4.9882	.00116	.01642	.01308
Stddev	.02397	.00089	.00638	.00002	.00041	.53	.00028	.00269	.00000	.0047	.00004	.01073	.01576
%RSD	11.069	29.750	2.8925	1.3649	32.322	.20733	17.523	46.282	.35877	.09509	3.3795	65.353	120.52

#1	.23347	.00237	.22493	.00112	-.00155	254.16	.00178	.00772	.00065	4.9849	.00119	.00883	.00193
#2	.19958	.00364	.21591	.00110	-.00097	253.41	.00139	.00391	.00065	4.9916	.00114	.02401	.02422

Check ?	None	None	None	None	None	Chk Pass	None	None	None	Chk Pass	None	None	None
Value													
Range													

Elem	Sn1899	Sr4077	Th2837	Ti3349	Tl1908	U_3701	V_2924	Zn2062	Zr3391
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.00309	.00219	4.9840	.02636	.00152	10.326	-.01496	-.00085	-.01302
Stddev	.00175	.00007	.0040	.00008	.00289	.029	.00037	.00051	.00127
%RSD	56.613	3.2111	.07967	.30791	190.40	.27878	2.4627	59.828	9.7609

#1	.00433	.00224	4.9812	.02642	-.00053	10.347	-.01522	-.00121	-.01212
#2	.00185	.00214	4.9868	.02631	.00356	10.306	-.01470	-.00049	-.01392

Check ?	None	None	Chk Pass	None	None	Chk Pass	None	None	None
Value									
Range									

Int. Std.	Y_2243	Y_3600	Y_3774
Units	Cts/S	Cts/S	Cts/S
Avg	1485.0	30934.	5908.2
Stddev	5.9	14.	26.0
%RSD	.39748	.04369	.44073

#1	1489.1	30924.	5889.8
#2	1480.8	30944.	5926.6

Sample Name: ccv-3900195 Acquired: 5/23/2016 21:15:17 Type: QC
Method: 6500_026(v10) Mode: CONC Corr. Factor: 1.000000
User: kellyca Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	Ag3280	Al1670	As1890	B_2089	Ba4554	Be3130	Bi2230	Ca3179	Cd2288	Co2286	Cr2055	Cu3247	Fe2599	K_7664
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.48380	.52665	1.0296	.54903	.49688	.50278	.00323	4.9727	.52550	.52175	.51117	.48975	2.5064	50.173
Stddev	.00071	.00104	.0034	.00208	.00075	.00069	.00024	.0259	.00091	.00220	.00235	.00016	.0043	.045
%RSD	.14695	.19678	.32620	.37913	.15066	.13771	7.3782	.52066	.17249	.42140	.46042	.03218	.17073	.08984

#1	.48330	.52738	1.0320	.55050	.49741	.50327	.00340	4.9910	.52615	.52331	.51283	.48963	2.5095	50.205
#2	.48431	.52591	1.0273	.54756	.49635	.50229	.00307	4.9544	.52486	.52020	.50951	.48986	2.5034	50.141

Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	None	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Value														
Range														

Elem	Li6707	Mg2790	Mn2576	Mo2020	Na5895	Ni2316	P_1782	Pb2203	S_1820	Sb2068	Se1960	Si2881	Sn1899	Sr4077
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	1.0334	19.416	.49359	.51675	5.2278	.50800	1.0199	1.0583	.00556	1.0063	1.0351	4.9856	1.0053	.47429
Stddev	.0040	.026	.00020	.00214	.0036	.00109	.0078	.0049	.00140	.0074	.0117	.0104	.0044	.00052
%RSD	.39194	.13366	.04117	.41476	.06877	.21489	.76552	.46678	25.189	.73895	1.1263	.20906	.43438	.10969

#1	1.0363	19.435	.49373	.51827	5.2303	.50878	1.0254	1.0618	.00457	1.0116	1.0433	4.9783	1.0084	.47466
#2	1.0305	19.398	.49344	.51523	5.2252	.50723	1.0144	1.0548	.00655	1.0010	1.0269	4.9930	1.0023	.47392

Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	None	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Value														
Range														

Elem	Th2837	Ti3349	Ti1908	U_3701	V_2924	Zn2062	Zr3391
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.00594	.46747	1.0416	.02405	.46754	.48805	.49607
Stddev	.00079	.00067	.0024	.01612	.00043	.00253	.00066
%RSD	13.241	.14416	.22689	67.034	.09270	.51857	.13221

#1	.00538	.46795	1.0399	.01265	.46784	.48984	.49560
#2	.00649	.46699	1.0433	.03545	.46723	.48626	.49653

Check ?	None	Chk Pass	Chk Pass	None	Chk Pass	Chk Pass	Chk Pass
Value							
Range							

Int. Std.	Y_2243	Y_3600	Y_3774
Units	Cts/S	Cts/S	Cts/S
Avg	1520.9	32040.	6003.6
Stddev	1.1	118.	18.0
%RSD	.06921	.36829	.29986

#1	1521.7	32123.	5990.9
#2	1520.2	31956.	6016.3

Sample Name: ccb Acquired: 5/23/2016 21:17:52 Type: QC
Method: 6500_026(v10) Mode: CONC Corr. Factor: 1.000000
User: kellyca Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	Ag3280	Al1670	As1890	B_2089	Ba4554	Be3130	Bi2230	Ca3179	Cd2288	Co2286	Cr2055
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.00056	-.00078	.00234	W .00229	.00019	.00008	-.00008	-.00563	-.00007	.00006	.00012
Stddev	.00000	.00057	.00540	.00097	.00002	.00006	.00013	.00067	.00019	.00008	.00031
%RSD	.17370	72.432	231.11	42.199	9.7011	77.491	156.89	11.907	283.75	119.67	256.42

#1	.00055	-.00038	.00615	.00297	.00021	.00012	-.00017	-.00515	-.00020	.00012	.00034
#2	.00056	-.00118	-.00148	.00160	.00018	.00003	.00001	-.00610	.00007	.00001	-.00010

Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Warn	Chk Pass	Chk Pass	None	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit				.00156							
Low Limit				-.00156							

Elem	Cu3247	Fe2599	K_7664	Li6707	Mg2790	Mn2576	Mo2020	Na5895	Ni2316	P_1782	Pb2203
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	W -.00180	.01191	.05455	-.00077	.00381	.00010	.00011	.03783	-.00002	.00260	.00088
Stddev	.00009	.00105	.00180	.00043	.00219	.00003	.00018	.00244	.00028	.00157	.00417
%RSD	4.9970	8.7789	3.2934	56.318	57.367	26.601	163.82	6.4403	1769.2	60.210	476.33

#1	-.00174	.01117	.05328	-.00107	.00536	.00012	.00024	.03955	.00018	.00149	-.00207
#2	-.00187	.01265	.05582	-.00046	.00227	.00008	-.00002	.03610	-.00021	.00371	.00383

Check ?	Chk Warn	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit	.00136										
Low Limit	-.00136										

Elem	S_1820	Sb2068	Se1960	Si2881	Sn1899	Sr4077	Th2837	Ti3349	Ti1908	U_3701	V_2924
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.00080	W .00500	F .01348	.00466	-.00035	.00011	.00218	.00010	.00325	.01900	.00027
Stddev	.00526	.00013	.00415	.00090	.00003	.00001	.00069	.00010	.00035	.01116	.00002
%RSD	657.02	2.6357	30.767	19.254	9.2638	5.7346	31.692	101.60	10.791	58.765	7.1691

#1	.00452	.00490	.01641	.00403	-.00037	.00012	.00267	.00016	.00349	.02689	.00026
#2	-.00292	.00509	.01055	.00530	-.00032	.00011	.00169	.00003	.00300	.01110	.00028

Check ?	None	Chk Warn	Chk Fail	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit		.00314	.00972								
Low Limit		-.00314	-.00972								

Elem	Zn2062	Zr3391
Units	ppm	ppm
Avg	-.00014	.00050
Stddev	.00065	.00002
%RSD	477.50	4.1265

#1	-.00059	.00051
#2	.00032	.00048

Check ?	Chk Pass	Chk Pass
High Limit		
Low Limit		

Int. Std.	Y_2243	Y_3600	Y_3774
Units	Cts/S	Cts/S	Cts/S
Avg	1521.2	31957.	6054.1
Stddev	6.3	1056.	10.6
%RSD	.41302	3.3058	.17431

#1	1525.6	31210.	6061.6
#2	1516.7	32704.	6046.7

Sample Name: ccvl-3907489 Acquired: 5/23/2016 21:20:37 Type: QC
Method: 6500_026(v10) Mode: CONC Corr. Factor: 1.000000
User: kellyca Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	Ag3280	Al1670	As1890	B_2089	Ba4554	Be3130	Bi2230	Ca3179	Cd2288	Co2286	Cr2055	Cu3247
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.01014	.10715	.01709	.10500	.01027	.00102	.11526	.19064	.00500	.01050	.01064	.01323
Stddev	.00004	.00153	.00197	.00064	.00014	.00001	.00152	.00415	.00017	.00004	.00023	.00026
%RSD	.40528	1.4314	11.541	.61072	1.3784	1.1057	1.3164	2.1761	3.3481	.40242	2.1614	1.9327

#1	.01017	.10823	.01848	.10455	.01017	.00102	.11634	.18770	.00488	.01047	.01080	.01341
#2	.01011	.10606	.01569	.10546	.01037	.00101	.11419	.19357	.00511	.01053	.01048	.01305

Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Value												
Range												

Elem	Fe2599	K_7664	Li6707	Mg2790	Mn2576	Mo2020	Na5895	Ni2316	P_1782	Pb2203	S_1820	Sb2068
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	F .14872	2.9708	.00999	.19684	.01020	.02100	1.0446	.04197	2.8867	.00966	.00163	.02180
Stddev	.00115	.0154	.00017	.00089	.00005	.00008	.0042	.00070	.0195	.00239	.00212	.00170
%RSD	.77346	.51763	1.7004	.44972	.48492	.39547	.40057	1.6690	.67521	24.748	129.97	7.7891

#1	.14954	2.9817	.01011	.19622	.01017	.02105	1.0475	.04147	2.9005	.01135	.00314	.02300
#2	.14791	2.9599	.00987	.19747	.01024	.02094	1.0416	.04247	2.8729	.00797	.00013	.02060

Check ?	Chk Fail	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	None	Chk Pass
Value	.10000											
Range	30.000%											

Elem	Se1960	Si2881	Sn1899	Sr4077	Th2837	Ti3349	Ti1908	U_3701	V_2924	Zn2062	Zr3391
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.01901	.49260	.10047	.00946	.01651	.00970	.01626	F .09452	.00920	.01878	.01583
Stddev	.00598	.00025	.00130	.00001	.00105	.00026	.00100	.01540	.00073	.00109	.00191
%RSD	31.487	.05160	1.2910	.15171	6.3675	2.6752	6.1431	16.289	7.9392	5.7781	12.076

#1	.01477	.49278	.10139	.00947	.01725	.00988	.01697	.08363	.00868	.01801	.01447
#2	.02324	.49242	.09956	.00945	.01577	.00952	.01555	.10541	.00972	.01955	.01718

Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Fail	Chk Pass	Chk Pass	Chk Pass
Value								.06000			
Range								30.000%			

Int. Std.	Y_2243	Y_3600	Y_3774
Units	Cts/S	Cts/S	Cts/S
Avg	1531.7	32687.	6108.2
Stddev	1.9	52.	17.4
%RSD	.12291	.15956	.28415

#1	1530.4	32724.	6120.4
#2	1533.1	32650.	6095.9

Sample Name: 280-83311-B-2-A Acquired: 5/23/2016 21:23:21 Type: Unk
Method: 6500_026(v10) Mode: CONC Corr. Factor: 1.000000
User: kellyca Custom ID1: Custom ID2: Custom ID3:
Comment: 325951 200.7

Elem	Ag3280	Al1670	As1890	B_2089	Ba4554	Be3130	Bi2230	Ca3179	Cd2288
Line	328.068 {103}	167.079 {502}	189.042 {478}	208.959 {461}	455.403 { 74}	313.042 {108}	223.061 {451}	317.933 {106}	228.802 {447}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.00006	.48953	.00545	.03548	.07914	-.00001	.00227	124.19	.00007
Stddev	.00010	.00528	.00380	.00005	.00007	.00007	.00181	.05	.00010
%RSD	176.35	1.0782	69.731	.13413	.08258	1152.2	79.555	.03933	147.00

#1	-.00001	.48580	.00814	.03545	.07910	-.00006	.00355	124.16	-.00000
#2	.00013	.49326	.00276	.03552	.07919	.00004	.00099	124.22	.00014

Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Elem	Co2286	Cr2055	Cu3247	Fe2599	K_7664	Li6707	Mg2790	Mn2576	Mo2020
Line	228.616 {447}	205.560 {464}	324.754 {104}	259.940 {130}	766.490 { 44}	670.784 { 50}	279.079 {121}2	257.610 {131}	202.030 {467}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.00125	.00090	-.00032	.46403	2.4125	.02153	46.179	.01384	.00027
Stddev	.00006	.00010	.00006	.00426	.0050	.00024	.006	.00001	.00035
%RSD	4.4093	10.733	19.812	.91786	.20716	1.1231	.01268	.08568	130.26

#1	.00129	.00097	-.00028	.46102	2.4090	.02136	46.183	.01383	.00002
#2	.00121	.00083	-.00037	.46704	2.4161	.02170	46.174	.01385	.00051

Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Elem	Na8183	Ni2316	P_1782	Pb2203	S_1820	Sb2068	Se1960	Si2881	Sn1899
Line	818.326 { 41}	231.604 {446}	178.284 {489}	220.353 {453}	182.034 {485}	206.833 {463}	196.090 {472}	288.158 {117}	189.989 {477}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	175.21	.00213	.02229	.00163	93.957	.00086	.00955	7.7496	-.00061
Stddev	.49	.00044	.00072	.00065	.154	.00093	.01055	.0013	.00053
%RSD	.27902	20.530	3.2407	39.619	.16408	108.82	110.47	.01613	86.935

#1	174.86	.00183	.02280	.00209	93.848	.00152	.01700	7.7487	-.00024
#2	175.55	.00244	.02178	.00117	94.066	.00020	.00209	7.7505	-.00099

Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Elem	Sr4077	Th2837	Ti3349	Ti1908	U_3701	V_2924	Zn2062	Zr3391	
Line	407.771 { 83}	283.730 {119}	334.904 {101}	190.856 {477}	370.152 { 91}	292.402 {115}	206.200 {163}	339.198 { 99}	
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	
Avg	1.8396	.00216	.01510	.00240	-.00686	.00133	.00009	-.00032	
Stddev	.0041	.00070	.00024	.00292	.00341	.00022	.00155	.00091	
%RSD	.22113	32.343	1.5828	121.74	49.676	16.285	1819.8	280.72	

#1	1.8367	.00266	.01493	.00033	-.00927	.00118	-.00101	.00032	
#2	1.8425	.00167	.01527	.00446	-.00445	.00149	.00118	-.00096	

Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	
High Limit									
Low Limit									

Int. Std.	Y_2243	Y_3600	Y_3774						
Line	224.306 {450}	360.073 { 94}	377.433 { 89}						
Units	Cts/S	Cts/S	Cts/S						
Avg	1423.0	30140.	5969.9						
Stddev	5.3	83.	8.4						
%RSD	.37002	.27662	.14005						

#1	1426.7	30199.	5975.8						
#2	1419.2	30081.	5964.0						

Sample Name: 280-83311-B-3-A Acquired: 5/23/2016 21:26:01 Type: Unk
Method: 6500_026(v10) Mode: CONC Corr. Factor: 1.000000
User: kellyca Custom ID1: Custom ID2: Custom ID3:
Comment: 325951 200.7

Elem	Ag3280	Al1670	As1890	B_2089	Ba4554	Be3130	Bi2230	Ca3179	Cd2288
Line	328.068 {103}	167.079 {502}	189.042 {478}	208.959 {461}	455.403 { 74}	313.042 {108}	223.061 {451}	317.933 {106}	228.802 {447}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.00005	.04951	.00329	.03305	.07059	-.00003	.00270	33.929	.00005
Stddev	.00047	.00001	.00302	.00137	.00020	.00003	.00067	.075	.00012
%RSD	859.90	.02880	91.850	4.1405	.28809	121.01	24.938	.21960	242.60

#1	.00039	.04950	.00115	.03401	.07073	-.00005	.00223	33.982	.00014
#2	-.00028	.04952	.00543	.03208	.07044	-.00000	.00318	33.877	-.00004

Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Elem	Co2286	Cr2055	Cu3247	Fe2599	K_7664	Li6707	Mg2790	Mn2576	Mo2020
Line	228.616 {447}	205.560 {464}	324.754 {104}	259.940 {130}	766.490 { 44}	670.784 { 50}	279.079 {121}2	257.610 {131}	202.030 {467}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.00592	.00038	.00018	.17757	7.5763	.14224	17.352	.11887	.00309
Stddev	.00003	.00015	.00006	.00001	.0240	.00087	.029	.00046	.00031
%RSD	.44383	38.652	34.822	.00624	.31646	.61418	.16960	.38352	10.012

#1	.00594	.00048	.00014	.17757	7.5594	.14286	17.372	.11919	.00287
#2	.00590	.00028	.00022	.17758	7.5933	.14163	17.331	.11855	.00330

Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Elem	Na8183	Ni2316	P_1782	Pb2203	S_1820	Sb2068	Se1960	Si2881	Sn1899
Line	818.326 { 41}	231.604 {446}	178.284 {489}	220.353 {453}	182.034 {485}	206.833 {463}	196.090 {472}	288.158 {117}	189.989 {477}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	W 623.07	.00323	.05306	.00007	59.815	-.00031	.01602	3.3896	-.00115
Stddev	2.13	.00023	.00301	.00056	.363	.00033	.00178	.0374	.00078
%RSD	.34170	7.1031	5.6661	834.97	.60632	107.96	11.120	1.1028	67.868

#1	624.58	.00339	.05518	.00046	60.071	-.00054	.01728	3.4161	-.00060
#2	621.57	.00307	.05093	-.00033	59.559	-.00007	.01476	3.3632	-.00171

Check ?	Chk Warn	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit	500.00								
Low Limit	10.000								

Elem	Sr4077	Th2837	Ti3349	Ti1908	U_3701	V_2924	Zn2062	Zr3391	
Line	407.771 { 83}	283.730 {119}	334.904 {101}	190.856 {477}	370.152 { 91}	292.402 {115}	206.200 {163}	339.198 { 99}	
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	
Avg	3.1756	.00195	.00068	.00031	.02490	.00028	-.00012	-.00024	
Stddev	.0082	.00091	.00008	.00090	.00276	.00007	.00086	.00052	
%RSD	.25823	46.361	12.021	288.13	11.092	25.571	746.62	218.44	

#1	3.1814	.00259	.00062	.00095	.02295	.00023	.00049	-.00060	
#2	3.1698	.00131	.00074	-.00032	.02685	.00033	-.00072	.00013	

Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	
High Limit									
Low Limit									

Int. Std.	Y_2243	Y_3600	Y_3774						
Line	224.306 {450}	360.073 { 94}	377.433 { 89}						
Units	Cts/S	Cts/S	Cts/S						
Avg	1379.6	28780.	5969.8						
Stddev	4.4	18.	3.6						
%RSD	.32029	.06403	.06021						

#1	1376.4	28793.	5967.3						
#2	1382.7	28767.	5972.4						

Sample Name: 280-83313-E-1-A Acquired: 5/23/2016 21:29:10 Type: Unk
Method: 6500_026(v10) Mode: CONC Corr. Factor: 1.000000
User: kellyca Custom ID1: Custom ID2: Custom ID3:
Comment: 325951 200.7

Elem	Ag3280	Al1670	As1890	B_2089	Ba4554	Be3130	Bi2230	Ca3179	Cd2288
Line	328.068 {103}	167.079 {502}	189.042 {478}	208.959 {461}	455.403 { 74}	313.042 {108}	223.061 {451}	317.933 {106}	228.802 {447}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.00084	.00663	.00113	.00462	.00043	-.00005	.00219	.02721	.00013
Stddev	.00011	.00123	.00869	.00001	.00015	.00003	.00220	.00241	.00006
%RSD	13.341	18.570	769.09	.22632	33.941	54.026	100.28	8.8420	45.902

#1	.00076	.00750	.00727	.00462	.00054	-.00003	.00064	.02891	.00017
#2	.00092	.00576	-.00501	.00463	.00033	-.00007	.00374	.02551	.00008

Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Elem	Co2286	Cr2055	Cu3247	Fe2599	K_7664	Li6707	Mg2790	Mn2576	Mo2020
Line	228.616 {447}	205.560 {464}	324.754 {104}	259.940 {130}	766.490 { 44}	670.784 { 50}	279.079 {121}2	257.610 {131}	202.030 {467}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	-.00021	.00044	-.00143	.01028	.04584	-.00118	.00534	.00009	-.00023
Stddev	.00019	.00020	.00043	.00027	.00323	.00150	.00304	.00005	.00030
%RSD	89.335	45.934	30.039	2.6539	7.0528	126.56	56.880	51.698	130.34

#1	-.00008	.00058	-.00112	.01008	.04355	-.00012	.00748	.00013	-.00044
#2	-.00034	.00030	-.00173	.01047	.04812	-.00224	.00319	.00006	-.00002

Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Elem	Na5895	Ni2316	P_1782	Pb2203	S_1820	Sb2068	Se1960	Si2881	Sn1899
Line	589.592 { 57}	231.604 {446}	178.284 {489}	220.353 {453}	182.034 {485}	206.833 {463}	196.090 {472}	288.158 {117}	189.989 {477}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.15632	.00030	-.00181	.00241	.00738	.00097	.00469	.02139	-.00126
Stddev	.00217	.00013	.00139	.00005	.00564	.00097	.00398	.00324	.00135
%RSD	1.3872	43.368	76.851	2.2180	76.476	100.08	84.843	15.137	107.50

#1	.15479	.00039	-.00083	.00244	.01137	.00028	.00188	.01910	-.00221
#2	.15785	.00021	-.00279	.00237	.00339	.00166	.00750	.02368	-.00030

Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Elem	Sr4077	Th2837	Ti3349	Ti1908	U_3701	V_2924	Zn2062	Zr3391
Line	407.771 { 83}	283.730 {119}	334.904 {101}	190.856 {477}	370.152 { 91}	292.402 {115}	206.200 {163}	339.198 { 99}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.00061	.00190	-.00003	.00022	.00997	.00025	.00156	.00112
Stddev	.00000	.00021	.00015	.00097	.01734	.00017	.00006	.00020
%RSD	.05500	10.929	542.89	444.06	173.86	66.863	4.1153	17.559

#1	.00061	.00176	.00008	-.00047	-.00229	.00013	.00160	.00098
#2	.00061	.00205	-.00013	.00090	.02224	.00037	.00151	.00126

Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit								
Low Limit								

Int. Std.	Y_2243	Y_3600	Y_3774
Line	224.306 {450}	360.073 { 94}	377.433 { 89}
Units	Cts/S	Cts/S	Cts/S
Avg	1531.1	32962.	6210.3
Stddev	10.9	4.	9.3
%RSD	.70957	.01356	.15048

#1	1538.7	32959.	6216.9
#2	1523.4	32965.	6203.6

Sample Name: 280-83313-E-1-Asd@5 Acquired: 5/23/2016 21:31:55 Type: Unk
Method: 6500_026(v10) Mode: CONC Corr. Factor: 1.000000
User: kellyca Custom ID1: Custom ID2: Custom ID3:
Comment: 325951 200.7

Elem	Ag3280	Al1670	As1890	B_2089	Ba4554	Be3130	Bi2230	Ca3179	Cd2288
Line	328.068 {103}	167.079 {502}	189.042 {478}	208.959 {461}	455.403 { 74}	313.042 {108}	223.061 {451}	317.933 {106}	228.802 {447}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.00079	.01379	.00280	.00556	.00972	.00003	.00201	15.746	.00003
Stddev	.00019	.00057	.00044	.00028	.00010	.00001	.00241	.079	.00024
%RSD	23.511	4.1348	15.846	4.9902	1.0404	34.271	119.54	.50428	824.83

#1	.00066	.01339	.00311	.00536	.00979	.00002	.00031	15.690	.00020
#2	.00093	.01420	.00248	.00575	.00964	.00004	.00371	15.802	-.00014

Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Elem	Co2286	Cr2055	Cu3247	Fe2599	K_7664	Li6707	Mg2790	Mn2576	Mo2020
Line	228.616 {447}	205.560 {464}	324.754 {104}	259.940 {130}	766.490 { 44}	670.784 { 50}	279.079 {121}2	257.610 {131}	202.030 {467}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.00050	-.00026	-.00122	.03859	.98542	.01239	12.439	.00347	-.00029
Stddev	.00007	.00012	.00009	.00379	.01120	.00014	.048	.00003	.00002
%RSD	13.371	47.292	7.5403	9.8109	1.1367	1.1053	.38359	.72616	8.1166

#1	.00055	-.00035	-.00116	.03592	.97750	.01229	12.405	.00346	-.00031
#2	.00045	-.00017	-.00129	.04127	.99334	.01248	12.473	.00349	-.00027

Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Elem	Na8183	Ni2316	P_1782	Pb2203	S_1820	Sb2068	Se1960	Si2881	Sn1899
Line	818.326 { 41}	231.604 {446}	178.284 {489}	220.353 {453}	182.034 {485}	206.833 {463}	196.090 {472}	288.158 {117}	189.989 {477}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	71.321	.00013	.00072	-.00097	37.643	.00205	.01212	.87390	-.00083
Stddev	.060	.00008	.00016	.00118	.299	.00029	.00488	.00924	.00089
%RSD	.08408	61.706	21.958	120.76	.79503	14.282	40.279	1.0571	107.31

#1	71.279	.00007	.00061	-.00014	37.432	.00226	.00867	.88044	-.00146
#2	71.364	.00019	.00083	-.00181	37.855	.00185	.01557	.86737	-.00020

Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Elem	Sr4077	Th2837	Ti3349	Ti1908	U_3701	V_2924	Zn2062	Zr3391
Line	407.771 { 83}	283.730 {119}	334.904 {101}	190.856 {477}	370.152 { 91}	292.402 {115}	206.200 {163}	339.198 { 99}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.50923	.00167	-.00010	.00124	-.00808	.00043	-.00121	.00179
Stddev	.00263	.00102	.00072	.00151	.01339	.00018	.00208	.00040
%RSD	.51590	61.231	734.08	122.50	165.66	42.082	172.73	22.186

#1	.50738	.00239	-.00061	.00230	.00139	.00055	.00027	.00207
#2	.51109	.00095	.00041	.00017	-.01755	.00030	-.00268	.00151

Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit								
Low Limit								

Int. Std.	Y_2243	Y_3600	Y_3774
Line	224.306 {450}	360.073 { 94}	377.433 { 89}
Units	Cts/S	Cts/S	Cts/S
Avg	1496.9	32025.	6393.2
Stddev	6.1	24.	22.8
%RSD	.40465	.07386	.35620

#1	1501.2	32009.	6409.3
#2	1492.6	32042.	6377.1

Sample Name: 280-83313-E-1-B MS Acquired: 5/23/2016 21:34:36 Type: Unk
Method: 6500_026(v10) Mode: CONC Corr. Factor: 1.000000
User: kellyca Custom ID1: Custom ID2: Custom ID3:
Comment: 325951 200.7

Elem	Ag3280	Al1670	As1890	B_2089	Ba4554	Be3130	Bi2230	Ca3179	Cd2288
Line	328.068 {103}	167.079 {502}	189.042 {478}	208.959 {461}	455.403 { 74}	313.042 {108}	223.061 {451}	317.933 {106}	228.802 {447}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.05244	2.0475	1.1389	1.1315	2.1392	.05099	2.3746	128.98	.11132
Stddev	.00010	.0086	.0083	.0028	.0076	.00005	.0042	.64	.00082
%RSD	.19900	.42271	.72538	.24595	.35580	.10729	.17806	.49295	.73484

#1	.05237	2.0536	1.1331	1.1295	2.1338	.05095	2.3776	128.53	.11190
#2	.05252	2.0414	1.1448	1.1335	2.1446	.05103	2.3716	129.43	.11074

Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Elem	Co2286	Cr2055	Cu3247	Fe2599	K_7664	Li6707	Mg2790	Mn2576	Mo2020
Line	228.616 {447}	205.560 {464}	324.754 {104}	259.940 {130}	766.490 { 44}	670.784 { 50}	279.079 {121}2	257.610 {131}	202.030 {467}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.51621	W .20889	.26893	1.1182	59.479	1.1763	109.25	.49869	1.1027
Stddev	.00069	.00049	.00020	.0004	.190	.0026	.04	.00071	.0004
%RSD	.13402	.23333	.07534	.03780	.32021	.21787	.03779	.14261	.03441

#1	.51670	.20923	.26878	1.1185	59.345	1.1744	109.22	.49818	1.1024
#2	.51572	.20854	.26907	1.1179	59.614	1.1781	109.28	.49919	1.1030

Check ?	Chk Pass	Chk Warn	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit		.10000							
Low Limit		-.01000							

Elem	Na8183	Ni2316	P_1782	Pb2203	S_1820	Sb2068	Se1960	Si2881	Sn1899
Line	818.326 { 41}	231.604 {446}	178.284 {489}	220.353 {453}	182.034 {485}	206.833 {463}	196.090 {472}	288.158 {117}	189.989 {477}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	425.58	.49826	11.422	.51336	F 201.53	.56104	2.2427	14.877	1.9879
Stddev	1.93	.00267	.034	.00186	.43	.00637	.0002	.042	.0110
%RSD	.45341	.53506	.29915	.36255	.21418	1.1356	.00705	.28269	.55435

#1	424.22	.50015	11.446	.51467	201.84	.55653	2.2426	14.848	1.9957
#2	426.95	.49638	11.398	.51204	201.23	.56554	2.2429	14.907	1.9801

Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Fail	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit					200.00				
Low Limit					-.02000				

Elem	Sr4077	Th2837	Ti3349	Ti1908	U_3701	V_2924	Zn2062	Zr3391	
Line	407.771 { 83}	283.730 {119}	334.904 {101}	190.856 {477}	370.152 { 91}	292.402 {115}	206.200 {163}	339.198 { 99}	
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	
Avg	3.6151	1.0386	.96438	1.8685	2.1443	.47545	.45938	.50352	
Stddev	.0164	.0081	.00249	.0034	.0040	.00180	.00029	.00325	
%RSD	.45313	.77642	.25789	.18215	.18547	.37948	.06277	.64495	

#1	3.6035	1.0443	.96262	1.8709	2.1472	.47417	.45918	.50122	
#2	3.6267	1.0329	.96614	1.8661	2.1415	.47673	.45958	.50581	

Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	
High Limit									
Low Limit									

Int. Std.	Y_2243	Y_3600	Y_3774						
Line	224.306 {450}	360.073 { 94}	377.433 { 89}						
Units	Cts/S	Cts/S	Cts/S						
Avg	1362.4	29307.	6161.1						
Stddev	1.8	27.	19.4						
%RSD	.13475	.09273	.31458						

#1	1361.1	29326.	6174.8						
#2	1363.7	29287.	6147.4						

Sample Name: 280-83313-E-1-C MSD Acquired: 5/23/2016 21:37:13 Type: Unk
Method: 6500_026(v10) Mode: CONC Corr. Factor: 1.000000
User: kellyca Custom ID1: Custom ID2: Custom ID3:
Comment: 325951 200.7

Elem	Ag3280	Al1670	As1890	B_2089	Ba4554	Be3130	Bi2230	Ca3179	Cd2288
Line	328.068 {103}	167.079 {502}	189.042 {478}	208.959 {461}	455.403 { 74}	313.042 {108}	223.061 {451}	317.933 {106}	228.802 {447}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.05215	2.0245	1.1146	1.1181	2.1103	.05062	2.3402	128.60	.10934
Stddev	.00028	.0091	.0112	.0046	.0194	.00023	.0182	.53	.00012
%RSD	.53923	.44753	1.0011	.41206	.91904	.45776	.77732	.41154	.10679

#1	.05195	2.0309	1.1225	1.1214	2.0966	.05045	2.3530	128.23	.10942
#2	.05235	2.0181	1.1067	1.1148	2.1240	.05078	2.3273	128.98	.10925

Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Elem	Co2286	Cr2055	Cu3247	Fe2599	K_7664	Li6707	Mg2790	Mn2576	Mo2020
Line	228.616 {447}	205.560 {464}	324.754 {104}	259.940 {130}	766.490 { 44}	670.784 { 50}	279.079 {121}2	257.610 {131}	202.030 {467}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.51044	W .20593	.26522	1.1142	58.951	1.1530	108.41	.49477	1.0902
Stddev	.00336	.00153	.00115	.0037	.461	.0105	.54	.00123	.0046
%RSD	.65762	.74456	.43543	.33111	.78282	.91239	.49669	.24960	.42534

#1	.51281	.20702	.26604	1.1116	58.625	1.1456	108.79	.49564	1.0935
#2	.50807	.20485	.26441	1.1168	59.278	1.1605	108.03	.49390	1.0870

Check ?	Chk Pass	Chk Warn	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit		.10000							
Low Limit		-.01000							

Elem	Na8183	Ni2316	P_1782	Pb2203	S_1820	Sb2068	Se1960	Si2881	Sn1899
Line	818.326 { 41}	231.604 {446}	178.284 {489}	220.353 {453}	182.034 {485}	206.833 {463}	196.090 {472}	288.158 {117}	189.989 {477}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	421.31	.49174	11.267	.50448	W 198.56	.55493	2.2086	14.760	1.9627
Stddev	3.41	.00152	.064	.00257	.47	.00237	.0118	.044	.0081
%RSD	.80976	.30952	.56838	.50960	.23759	.42731	.53591	.29498	.41449

#1	418.90	.49282	11.312	.50629	198.89	.55660	2.2169	14.730	1.9684
#2	423.72	.49066	11.222	.50266	198.23	.55325	2.2002	14.791	1.9569

Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Warn	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit					190.00				
Low Limit					-.01000				

Elem	Sr4077	Th2837	Ti3349	Ti1908	U_3701	V_2924	Zn2062	Zr3391	
Line	407.771 { 83}	283.730 {119}	334.904 {101}	190.856 {477}	370.152 { 91}	292.402 {115}	206.200 {163}	339.198 { 99}	
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	
Avg	3.5739	1.0274	.95848	1.8435	2.1611	.47317	.45960	.49973	
Stddev	.0290	.0012	.00686	.0103	.0103	.00191	.00165	.00431	
%RSD	.81055	.11881	.71564	.55893	.47618	.40388	.35948	.86176	

#1	3.5534	1.0283	.96333	1.8508	2.1683	.47453	.46077	.49668	
#2	3.5943	1.0266	.95363	1.8363	2.1538	.47182	.45843	.50277	

Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	
High Limit									
Low Limit									

Int. Std.	Y_2243	Y_3600	Y_3774						
Line	224.306 {450}	360.073 { 94}	377.433 { 89}						
Units	Cts/S	Cts/S	Cts/S						
Avg	1375.6	29531.	6144.5						
Stddev	4.3	108.	14.4						
%RSD	.31596	.36562	.23504						

#1	1372.5	29455.	6154.7						
#2	1378.7	29607.	6134.3						

Sample Name: 280-83314-C-1-A Acquired: 5/23/2016 21:39:50 Type: Unk
Method: 6500_026(v10) Mode: CONC Corr. Factor: 1.000000
User: kellyca Custom ID1: Custom ID2: Custom ID3:
Comment: 325951 200.7

Elem	Ag3280	Al1670	As1890	B_2089	Ba4554	Be3130	Bi2230	Ca3179	Cd2288
Line	328.068 {103}	167.079 {502}	189.042 {478}	208.959 {461}	455.403 { 74}	313.042 {108}	223.061 {451}	317.933 {106}	228.802 {447}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.00069	.41659	-.00333	.03833	.08041	.00002	-.00061	121.98	.00020
Stddev	.00060	.00289	.00245	.00111	.00009	.00001	.00076	.22	.00013
%RSD	87.814	.69282	73.397	2.8846	.11211	79.391	126.04	.18198	67.277

#1	.00026	.41863	-.00160	.03754	.08047	.00003	-.00114	121.83	.00029
#2	.00111	.41455	-.00506	.03911	.08034	.00001	-.00007	122.14	.00010

Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Elem	Co2286	Cr2055	Cu3247	Fe2599	K_7664	Li6707	Mg2790	Mn2576	Mo2020
Line	228.616 {447}	205.560 {464}	324.754 {104}	259.940 {130}	766.490 { 44}	670.784 { 50}	279.079 {121}2	257.610 {131}	202.030 {467}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.00125	.00087	.00043	.46889	2.5213	.02294	46.529	.01625	.00127
Stddev	.00064	.00012	.00012	.00362	.0006	.00016	.144	.00004	.00001
%RSD	51.431	14.082	27.922	.77107	.02305	.68794	.30875	.26820	.98414

#1	.00171	.00078	.00051	.46633	2.5209	.02305	46.631	.01629	.00126
#2	.00080	.00095	.00034	.47144	2.5217	.02282	46.428	.01622	.00128

Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Elem	Na8183	Ni2316	P_1782	Pb2203	S_1820	Sb2068	Se1960	Si2881	Sn1899
Line	818.326 { 41}	231.604 {446}	178.284 {489}	220.353 {453}	182.034 {485}	206.833 {463}	196.090 {472}	288.158 {117}	189.989 {477}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	176.50	.00099	.02106	-.00174	95.483	.00167	.00851	7.5072	.00077
Stddev	.19	.00082	.00030	.00062	.155	.00301	.00190	.0047	.00015
%RSD	.10807	82.790	1.4313	35.449	.16236	180.95	22.276	.06264	20.014

#1	176.36	.00041	.02128	-.00218	95.373	-.00047	.00985	7.5039	.00066
#2	176.63	.00157	.02085	-.00131	95.593	.00380	.00717	7.5105	.00088

Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Elem	Sr4077	Th2837	Ti3349	Ti1908	U_3701	V_2924	Zn2062	Zr3391
Line	407.771 { 83}	283.730 {119}	334.904 {101}	190.856 {477}	370.152 { 91}	292.402 {115}	206.200 {163}	339.198 { 99}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	1.8673	.00014	.01179	.00196	.01106	.00128	-.00064	.00100
Stddev	.0082	.00145	.00078	.00051	.01524	.00046	.00103	.00025
%RSD	.43683	1004.7	6.5760	26.032	137.79	36.259	159.80	24.715

#1	1.8615	.00117	.01234	.00233	.00028	.00161	.00008	.00117
#2	1.8731	-.00088	.01124	.00160	.02183	.00095	-.00137	.00082

Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit								
Low Limit								

Int. Std.	Y_2243	Y_3600	Y_3774
Line	224.306 {450}	360.073 { 94}	377.433 { 89}
Units	Cts/S	Cts/S	Cts/S
Avg	1423.1	30552.	6213.8
Stddev	1.6	5.	34.4
%RSD	.11395	.01758	.55329

#1	1424.2	30548.	6238.1
#2	1421.9	30555.	6189.5

Sample Name: ccvh-3900196 Acquired: 5/23/2016 21:42:31 Type: QC
Method: 6500_026(v10) Mode: CONC Corr. Factor: 1.000000
User: kellyca Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	Ag3280	Al3092	As1890	B_2089	Ba4554	Be3130	Bi2230	Ca3179	Cd2288	Co2286	Cr2055	Cu3247	Fe2714
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.00117	47.726	.00347	.00410	.00192	.00130	1.0759	-.02838	.00054	.00468	.00104	.00613	47.756
Stddev	.00009	.047	.00293	.00121	.00007	.00004	.0058	.00222	.00024	.00059	.00016	.00024	.264
%RSD	7.9577	.09758	84.496	29.438	3.6883	3.1073	.54278	7.8236	44.994	12.581	15.734	3.9409	.55283

#1	.00124	47.759	.00140	.00324	.00197	.00133	1.0800	-.02681	.00071	.00427	.00116	.00630	47.943
#2	.00111	47.693	.00555	.00495	.00187	.00127	1.0718	-.02995	.00037	.00510	.00093	.00596	47.569

Check ?	None	Chk Pass	None	None	None	None	Chk Pass	None	None	None	None	None	Chk Pass
Value													
Range													

Elem	K_7664	Li6707	Mg2790	Mn2576	Mo2020	Na8183	Ni2316	P_1782	Pb2203	S_1820	Sb2068	Se1960	Si2881
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.19821	.00269	.21821	.00077	-.00129	250.83	.00141	.00873	.00154	5.0866	.00224	.00766	.01118
Stddev	.00590	.00061	.00113	.00002	.00045	.82	.00086	.00458	.00025	.0103	.00027	.00038	.00582
%RSD	2.9753	22.692	.51606	2.5313	34.904	.32658	61.052	52.471	16.040	.20328	11.924	4.9062	52.090

#1	.20238	.00313	.21900	.00078	-.00160	251.41	.00203	.00549	.00171	5.0940	.00205	.00792	.01530
#2	.19404	.00226	.21741	.00075	-.00097	250.25	.00080	.01197	.00136	5.0793	.00243	.00739	.00706

Check ?	None	None	None	None	None	Chk Pass	None	None	None	Chk Pass	None	None	None
Value													
Range													

Elem	Sn1899	Sr4077	Th2837	Ti3349	Tl1908	U_3701	V_2924	Zn2062	Zr3391
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.00342	.00198	4.9920	.02650	.00275	10.318	-.01511	-.00068	-.01587
Stddev	.00173	.00009	.0083	.00016	.00156	.054	.00065	.00079	.00006
%RSD	50.516	4.7088	.16588	.60553	56.776	.52158	4.3266	116.31	.35774

#1	.00220	.00205	4.9978	.02639	.00385	10.356	-.01557	-.00012	-.01591
#2	.00464	.00192	4.9861	.02661	.00164	10.279	-.01464	-.00123	-.01583

Check ?	None	None	Chk Pass	None	None	Chk Pass	None	None	None
Value									
Range									

Int. Std.	Y_2243	Y_3600	Y_3774
Units	Cts/S	Cts/S	Cts/S
Avg	1469.7	31044.	6158.1
Stddev	1.3	77.	10.3
%RSD	.08608	.24708	.16651

#1	1468.9	30990.	6150.9
#2	1470.6	31098.	6165.4

Sample Name: ccv-3900195 Acquired: 5/23/2016 21:45:18 Type: QC
Method: 6500_026(v10) Mode: CONC Corr. Factor: 1.000000
User: kellyca Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	Ag3280	Al1670	As1890	B_2089	Ba4554	Be3130	Bi2230	Ca3179	Cd2288	Co2286	Cr2055	Cu3247	Fe2599	K_7664
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.48039	.52039	1.0131	.54608	.49076	.49117	.00330	4.8893	.52164	.51843	.50675	.48895	2.4736	48.889
Stddev	.00073	.00029	.0025	.00167	.00411	.00193	.00138	.0082	.00056	.00005	.00155	.00077	.0056	.317
%RSD	.15134	.05493	.24428	.30632	.83773	.39329	41.665	.16715	.10743	.01006	.30625	.15701	.22683	.64842

#1	.47988	.52059	1.0148	.54726	.48786	.48980	.00233	4.8835	.52125	.51840	.50785	.48841	2.4696	48.665
#2	.48091	.52018	1.0113	.54489	.49367	.49253	.00428	4.8951	.52204	.51847	.50565	.48949	2.4775	49.113

Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	None	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Value														
Range														

Elem	Li6707	Mg2790	Mn2576	Mo2020	Na5895	Ni2316	P_1782	Pb2203	S_1820	Sb2068	Se1960	Si2881	Sn1899	Sr4077
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.99921	19.328	.48850	.51266	5.1125	.50410	1.0145	1.0554	.00382	1.0069	1.0326	4.9171	.99776	.46655
Stddev	.00678	.061	.00025	.00005	.0569	.00032	.0025	.0030	.00057	.0004	.0071	.0085	.00358	.00325
%RSD	.67839	.31773	.05027	.01008	1.1135	.06412	.24421	.28033	15.002	.03930	.69107	.17206	.35831	.69569

#1	.99442	19.284	.48832	.51262	5.0723	.50433	1.0127	1.0575	.00422	1.0067	1.0276	4.9111	.99523	.46425
#2	1.0040	19.371	.48867	.51270	5.1528	.50387	1.0163	1.0533	.00341	1.0072	1.0377	4.9231	1.0003	.46884

Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	None	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Value														
Range														

Elem	Th2837	Ti3349	Ti1908	U_3701	V_2924	Zn2062	Zr3391
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.00610	.46194	1.0370	.02407	.46579	.48524	.48872
Stddev	.00133	.00008	.0038	.01201	.00150	.00029	.00643
%RSD	21.769	.01631	.36324	49.921	.32128	.06040	1.3156

#1	.00704	.46199	1.0397	.01557	.46473	.48503	.48417
#2	.00516	.46189	1.0343	.03256	.46685	.48545	.49326

Check ?	None	Chk Pass	Chk Pass	None	Chk Pass	Chk Pass	Chk Pass
Value							
Range							

Int. Std.	Y_2243	Y_3600	Y_3774
Units	Cts/S	Cts/S	Cts/S
Avg	1535.7	32358.	6243.6
Stddev	4.7	113.	10.6
%RSD	.30904	.34998	.16989

#1	1539.1	32438.	6251.1
#2	1532.3	32278.	6236.1

Sample Name: ccb Acquired: 5/23/2016 21:47:54 Type: QC
Method: 6500_026(v10) Mode: CONC Corr. Factor: 1.000000
User: kellyca Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	Ag3280	Al1670	As1890	B_2089	Ba4554	Be3130	Bi2230	Ca3179	Cd2288	Co2286	Cr2055
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.00017	.00059	.00158	W .00276	.00027	.00006	-.00048	-.00473	.00020	-.00007	.00012
Stddev	.00016	.00075	.00103	.00032	.00016	.00002	.00127	.00357	.00013	.00001	.00025
%RSD	92.878	127.76	65.324	11.759	58.692	34.092	264.57	75.510	65.874	9.9294	211.79

#1	.00028	.00006	.00231	.00299	.00038	.00007	.00042	-.00725	.00011	-.00007	.00030
#2	.00006	.00112	.00085	.00253	.00016	.00005	-.00138	-.00220	.00030	-.00008	-.00006

Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Warn	Chk Pass	Chk Pass	None	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit				.00156							
Low Limit				-.00156							

Elem	Cu3247	Fe2599	K_7664	Li6707	Mg2790	Mn2576	Mo2020	Na5895	Ni2316	P_1782	Pb2203
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	W -.00185	W .02825	.04376	-.00018	-.00024	.00015	.00032	.04380	.00024	.00268	.00195
Stddev	.00046	.00213	.04406	.00051	.00046	.00001	.00015	.00325	.00043	.00226	.00231
%RSD	24.626	7.5494	100.67	288.60	194.45	9.3118	45.739	7.4186	179.52	84.140	118.58

#1	-.00217	.02674	.07492	.00018	-.00057	.00014	.00042	.04609	.00054	.00109	.00031
#2	-.00153	.02976	.01261	-.00054	.00009	.00016	.00022	.04150	-.00006	.00428	.00358

Check ?	Chk Warn	Chk Warn	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit	.00136	.02200									
Low Limit	-.00136	-.02200									

Elem	S_1820	Sb2068	Se1960	Si2881	Sn1899	Sr4077	Th2837	Ti3349	Ti1908	U_3701	V_2924
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	-.00119	F .00629	F .01073	.01248	.00116	.00012	.00136	.00014	.00193	.00509	.00019
Stddev	.00126	.00290	.00240	.02092	.00103	.00004	.00052	.00029	.00260	.01561	.00018
%RSD	105.83	46.042	22.353	167.68	88.944	33.472	38.504	212.68	134.68	306.96	95.066

#1	-.00030	.00834	.01242	-.00232	.00043	.00015	.00173	-.00007	.00377	.01613	.00032
#2	-.00208	.00424	.00903	.02727	.00188	.00009	.00099	.00034	.00009	-.00595	.00006

Check ?	None	Chk Fail	Chk Fail	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit		.00628	.00972								
Low Limit		-.00628	-.00972								

Elem	Zn2062	Zr3391
Units	ppm	ppm
Avg	.00036	.00129
Stddev	.00028	.00019
%RSD	76.676	14.377

#1	.00017	.00142
#2	.00056	.00116

Check ?	Chk Pass	Chk Pass
High Limit		
Low Limit		

Int. Std.	Y_2243	Y_3600	Y_3774
Units	Cts/S	Cts/S	Cts/S
Avg	1536.6	32919.	6209.6
Stddev	.0	9.	15.3
%RSD	.00306	.02734	.24596

#1	1536.5	32925.	6220.4
#2	1536.6	32912.	6198.8

Sample Name: ccvl-3907489 Acquired: 5/23/2016 21:50:39 Type: QC
Method: 6500_026(v10) Mode: CONC Corr. Factor: 1.000000
User: kellyca Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	Ag3280	Al1670	As1890	B_2089	Ba4554	Be3130	Bi2230	Ca3179	Cd2288	Co2286	Cr2055	Cu3247
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.01011	.10499	.01395	.10484	.01036	.00098	.11644	.19149	.00525	.01022	.01041	.01317
Stddev	.00026	.00053	.00716	.00022	.00010	.00006	.00096	.00157	.00024	.00012	.00005	.00007
%RSD	2.5545	.50749	51.285	.21182	.93312	5.9288	.82426	.81867	4.5446	1.2006	.46558	.50613

#1	.00993	.10536	.00889	.10499	.01030	.00094	.11576	.19260	.00508	.01031	.01038	.01321
#2	.01030	.10461	.01901	.10468	.01043	.00102	.11712	.19038	.00542	.01013	.01044	.01312

Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Value												
Range												

Elem	Fe2599	K_7664	Li6707	Mg2790	Mn2576	Mo2020	Na5895	Ni2316	P_1782	Pb2203	S_1820	Sb2068
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.12235	2.9785	.00946	.19606	.01003	.02078	1.0475	.04179	2.8880	.01027	.00223	.02336
Stddev	.00247	.0174	.00059	.00301	.00010	.00003	.0011	.00035	.0060	.00207	.00024	.00111
%RSD	2.0160	.58386	6.2298	1.5360	1.0068	.14936	.10466	.83813	.20840	20.173	10.895	4.7675

#1	.12409	2.9662	.00987	.19393	.00996	.02076	1.0468	.04204	2.8922	.00881	.00206	.02415
#2	.12060	2.9908	.00904	.19819	.01010	.02080	1.0483	.04154	2.8837	.01174	.00240	.02257

Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	None	Chk Pass
Value												
Range												

Elem	Se1960	Si2881	Sn1899	Sr4077	Th2837	Ti3349	Ti1908	U_3701	V_2924	Zn2062	Zr3391
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	F .02027	.50040	.09983	.00958	.01654	.00958	.01605	.07546	.00942	.01827	.01520
Stddev	.00398	.01072	.00097	.00003	.00011	.00047	.00188	.00818	.00005	.00115	.00111
%RSD	19.639	2.1422	.96850	.27169	.65987	4.9024	11.737	10.838	.56274	6.3222	7.2781

#1	.01745	.50798	.09915	.00957	.01662	.00925	.01738	.08124	.00945	.01745	.01599
#2	.02308	.49282	.10051	.00960	.01647	.00991	.01472	.06967	.00938	.01908	.01442

Check ?	Chk Fail	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Value	.01500										
Range	30.000%										

Int. Std.	Y_2243	Y_3600	Y_3774
Units	Cts/S	Cts/S	Cts/S
Avg	1545.5	33215.	6211.5
Stddev	.2	61.	14.6
%RSD	.01250	.18467	.23564

#1	1545.7	33258.	6201.2
#2	1545.4	33171.	6221.9

Sample Name: MB 280-326167/1-A Acquired: 5/23/2016 21:53:24 Type: Unk
Method: 6500_026(v10) Mode: CONC Corr. Factor: 1.000000
User: kellyca Custom ID1: 5/20 Custom ID2: Custom ID3:
Comment: 326167 6010B SOIL

Elem	Ag3280	Al1670	As1890	B_2089	Ba4554	Be3130	Bi2230	Ca3179	Cd2288
Line	328.068 {103}	167.079 {502}	189.042 {478}	208.959 {461}	455.403 { 74}	313.042 {108}	223.061 {451}	317.933 {106}	228.802 {447}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.00050	.01298	.00040	.00286	.00161	-.00001	-.00011	W .19651	-.00001
Stddev	.00025	.00138	.00178	.00067	.00003	.00007	.00143	.00651	.00008
%RSD	50.121	10.646	444.74	23.423	1.7492	614.89	1324.8	3.3148	1101.6
#1	.00068	.01396	-.00086	.00334	.00163	-.00006	-.00112	.19190	-.00006
#2	.00032	.01201	.00166	.00239	.00159	.00004	.00090	.20111	.00005
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Warn	Chk Pass
High Limit								.10000	
Low Limit								-.10000	
Elem	Co2286	Cr2055	Cu3247	Fe2599	K_7664	Li6707	Mg2790	Mn2576	Mo2020
Line	228.616 {447}	205.560 {464}	324.754 {104}	259.940 {130}	766.490 { 44}	670.784 { 50}	279.079 {121}2	257.610 {131}	202.030 {467}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	-.00010	.00060	-.00051	W .05017	.00937	-.00013	.04943	.00070	.00002
Stddev	.00007	.00024	.00023	.00074	.00836	.00003	.00264	.00001	.00019
%RSD	73.015	39.049	45.254	1.4786	89.214	23.057	5.3486	.93093	1190.5
#1	-.00015	.00077	-.00067	.05069	.01529	-.00011	.05130	.00071	.00015
#2	-.00005	.00044	-.00035	.04964	.00346	-.00015	.04756	.00070	-.00012
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Warn	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit				.03000					
Low Limit				-.05000					
Elem	Na5895	Ni2316	P_1782	Pb2203	S_1820	Sb2068	Se1960	Si2881	Sn1899
Line	589.592 { 57}	231.604 {446}	178.284 {489}	220.353 {453}	182.034 {485}	206.833 {463}	196.090 {472}	288.158 {117}	189.989 {477}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.10721	-.00037	W .00564	.00214	.00957	.00082	W .00733	.01650	-.00001
Stddev	.00307	.00020	.00257	.00275	.00017	.00073	.00276	.00241	.00052
%RSD	2.8636	54.284	45.594	128.86	1.7409	88.446	37.679	14.619	4594.7
#1	.10503	-.00023	.00382	.00409	.00946	.00134	.00928	.01479	-.00038
#2	.10938	-.00051	.00746	.00019	.00969	.00031	.00538	.01820	.00035
Check ?	Chk Pass	Chk Pass	Chk Warn	Chk Pass	Chk Pass	Chk Pass	Chk Warn	Chk Pass	Chk Pass
High Limit			.00500				.00500		
Low Limit			-.00500				-.00500		
Elem	Sr4077	Th2837	Ti3349	Ti1908	U_3701	V_2924	Zn2062	Zr3391	
Line	407.771 { 83}	283.730 {119}	334.904 {101}	190.856 {477}	370.152 { 91}	292.402 {115}	206.200 {163}	339.198 { 99}	
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	
Avg	.00058	.00401	.00077	.00055	-.00230	-.00025	.00076	.00043	
Stddev	.00003	.00074	.00003	.00112	.01012	.00043	.00033	.00063	
%RSD	5.1396	18.575	4.5701	202.16	439.95	173.05	43.335	146.59	
#1	.00056	.00454	.00079	-.00024	.00485	.00005	.00053	-.00002	
#2	.00060	.00348	.00074	.00134	-.00945	-.00055	.00100	.00087	
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	
High Limit									
Low Limit									
Int. Std.	Y_2243	Y_3600	Y_3774						
Line	224.306 {450}	360.073 { 94}	377.433 { 89}						
Units	Cts/S	Cts/S	Cts/S						
Avg	1544.0	33358.	6292.2						
Stddev	3.4	57.	10.2						
%RSD	.21706	.17024	.16227						
#1	1546.4	33318.	6285.0						
#2	1541.6	33398.	6299.5						

Sample Name: LCS 280-326167/2-A Acquired: 5/23/2016 21:56:09 Type: Unk

Method: 6500_026(v10) Mode: CONC Corr. Factor: 1.000000

User: kellyca Custom ID1: Custom ID2: Custom ID3:

Comment: 326167 6010B SOIL

Elem	Ag3280	Al1670	As1890	B_2089	Ba4554	Be3130	Bi2230	Ca3179	Cd2288
Line	328.068 {103}	167.079 {502}	189.042 {478}	208.959 {461}	455.403 { 74}	313.042 {108}	223.061 {451}	317.933 {106}	228.802 {447}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.04748	1.9225	1.0097	F .00251	1.9292	.04752	2.1821	47.016	.10077
Stddev	.00043	.0023	.0030	.00012	.0082	.00008	.0026	.065	.00015
%RSD	.90832	.11756	.29859	4.8092	.42516	.17224	.11905	.13921	.14705

#1	.04779	1.9241	1.0075	.00260	1.9234	.04746	2.1839	47.063	.10066
#2	.04718	1.9209	1.0118	.00243	1.9350	.04758	2.1802	46.970	.10087

Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Fail	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit				1.1000					
Low Limit				.81000					

Elem	Co2286	Cr2055	Cu3247	Fe2599	K_7664	Li6707	Mg2790	Mn2576	Mo2020
Line	228.616 {447}	205.560 {464}	324.754 {104}	259.940 {130}	766.490 { 44}	670.784 { 50}	279.079 {121}2	257.610 {131}	202.030 {467}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.49453	F .19783	.24400	F 1.3470	48.595	.99356	46.033	.46650	F -.00047
Stddev	.00111	.00058	.00110	.0053	.158	.00364	.121	.00058	.00073
%RSD	.22471	.29350	.44936	.39158	.32440	.36638	.26379	.12432	153.53

#1	.49531	.19824	.24478	1.3433	48.484	.99098	46.119	.46691	-.00099
#2	.49374	.19742	.24323	1.3507	48.707	.99613	45.948	.46609	.00004

Check ?	Chk Pass	Chk Fail	Chk Pass	Chk Fail	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Fail
High Limit		.05700		1.2000					1.1000
Low Limit		.04350		.87000					.86000

Elem	Na8183	Ni2316	P_1782	Pb2203	S_1820	Sb2068	Se1960	Si2881	Sn1899
Line	818.326 { 41}	231.604 {446}	178.284 {489}	220.353 {453}	182.034 {485}	206.833 {463}	196.090 {472}	288.158 {117}	189.989 {477}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	49.866	.48479	10.102	.50241	.01642	F .00111	1.9687	F .00527	F .00052
Stddev	.119	.00069	.009	.00377	.00242	.00027	.0025	.00325	.00087
%RSD	.23797	.14233	.09371	.75002	14.724	24.484	.12498	61.635	167.57

#1	49.782	.48527	10.109	.49975	.01471	.00092	1.9670	.00757	-.00010
#2	49.950	.48430	10.095	.50508	.01812	.00130	1.9705	.00298	.00114

Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	None	Chk Fail	Chk Pass	Chk Fail	Chk Fail
High Limit						.55000		7.0000	2.2000
Low Limit						.41000		1.0000	1.6800

Elem	Sr4077	Th2837	Ti3349	Ti1908	U_3701	V_2924	Zn2062	Zr3391
Line	407.771 { 83}	283.730 {119}	334.904 {101}	190.856 {477}	370.152 { 91}	292.402 {115}	206.200 {163}	339.198 { 99}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.90765	.96535	F .00547	1.9387	2.0845	.44946	.45004	F -.00406
Stddev	.00391	.00618	.00024	.0040	.0107	.00061	.00319	.00201
%RSD	.43123	.64063	4.4271	.20825	.51194	.13576	.70981	49.411

#1	.90489	.96972	.00530	1.9358	2.0770	.44990	.44778	-.00548
#2	.91042	.96097	.00564	1.9415	2.0920	.44903	.45230	-.00264

Check ?	Chk Pass	Chk Pass	Chk Fail	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Fail
High Limit			1.1000					.60000
Low Limit			.90000					.40000

Int. Std.	Y_2243	Y_3600	Y_3774
Line	224.306 {450}	360.073 { 94}	377.433 { 89}
Units	Cts/S	Cts/S	Cts/S
Avg	1456.5	31128.	6103.4
Stddev	.5	17.	3.4
%RSD	.03342	.05604	.05618

#1	1456.1	31115.	6100.9
#2	1456.8	31140.	6105.8

Sample Name: 280-83354-B-1-D Acquired: 5/23/2016 21:58:45 Type: Unk
Method: 6500_026(v10) Mode: CONC Corr. Factor: 1.000000
User: kellyca Custom ID1: Custom ID2: Custom ID3:
Comment: 326167 6010B SOIL

Elem	Ag3280	Al3092	As1890	B_2089	Ba4554	Be3130	Bi2230	Ca3179	Cd2288
Line	328.068 {103}	309.271 {109}	189.042 {478}	208.959 {461}	455.403 { 74}	313.042 {108}	223.061 {451}	317.933 {106}	228.802 {447}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.00179	130.00	.08962	.22035	7.6657	.00532	.02070	295.06	.00640
Stddev	.00002	.04	.00964	.00122	.0425	.00001	.00094	.66	.00034
%RSD	1.3465	.02746	10.754	.55214	.55403	.23440	4.5360	.22226	5.2512

#1	.00181	129.97	.08281	.22121	7.6958	.00531	.02137	294.59	.00664
#2	.00178	130.02	.09644	.21949	7.6357	.00533	.02004	295.52	.00616

Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Elem	Co2286	Cr2055	Cu3247	Fe2714	K_7664	Li6707	Mg2790	Mn2576	Mo2020
Line	228.616 {447}	205.560 {464}	324.754 {104}	271.441 {124}	766.490 { 44}	670.784 { 50}	279.079 {121}2	257.610 {131}	202.030 {467}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.07843	W .18774	.55378	171.49	32.875	.16648	61.319	5.5490	.03207
Stddev	.00041	.00047	.00090	.66	.029	.00004	.224	.0070	.00014
%RSD	.52117	.25235	.16228	.38316	.08823	.02596	.36567	.12550	.44304

#1	.07872	.18808	.55442	171.03	32.854	.16651	61.478	5.5540	.03217
#2	.07815	.18741	.55315	171.96	32.895	.16645	61.161	5.5441	.03196

Check ?	Chk Pass	Chk Warn	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit		.10000							
Low Limit		-.01000							

Elem	Na8183	Ni2316	P_1782	Pb2203	S_1820	Sb2068	Se1960	Si2881	Sn1899
Line	818.326 { 41}	231.604 {446}	178.284 {489}	220.353 {453}	182.034 {485}	206.833 {463}	196.090 {472}	288.158 {117}	189.989 {477}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	22.183	.23116	23.621	.12561	78.416	.00332	.03055	5.5773	.01802
Stddev	.244	.00076	.042	.00207	.119	.00256	.00576	.0288	.00076
%RSD	1.0992	.33029	.17775	1.6474	.15120	77.160	18.850	.51686	4.2060

#1	22.355	.23170	23.651	.12707	78.500	.00513	.03462	5.5569	.01749
#2	22.011	.23062	23.591	.12415	78.332	.00151	.02647	5.5976	.01856

Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Elem	Sr4077	Th2837	Ti3349	Ti1908	U_3701	V_2924	Zn2062	Zr3391
Line	407.771 { 83}	283.730 {119}	334.904 {101}	190.856 {477}	370.152 { 91}	292.402 {115}	206.200 {163}	339.198 { 99}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	1.6875	.03558	.74416	.00531	.03469	.34451	1.1288	.05260
Stddev	.0030	.00436	.00074	.00373	.01976	.00066	.0016	.00022
%RSD	.17862	12.265	.09890	70.174	56.972	.19182	.14490	.40964

#1	1.6854	.03867	.74468	.00794	.02071	.34404	1.1300	.05245
#2	1.6896	.03250	.74364	.00268	.04866	.34497	1.1277	.05275

Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit								
Low Limit								

Int. Std.	Y_2243	Y_3600	Y_3774
Line	224.306 {450}	360.073 { 94}	377.433 { 89}
Units	Cts/S	Cts/S	Cts/S
Avg	1505.7	31653.	6517.7
Stddev	.6	53.	10.2
%RSD	.03696	.16605	.15601

#1	1506.1	31616.	6524.9
#2	1505.3	31690.	6510.5

Sample Name: 280-83354-B-1-Dsd@5 Acquired: 5/23/2016 22:01:28 Type: Unk
Method: 6500_026(v10) Mode: CONC Corr. Factor: 1.000000
User: kellyca Custom ID1: Custom ID2: Custom ID3:
Comment: 326167 6010B SOIL

Elem	Ag3280	Al3092	As1890	B_2089	Ba4554	Be3130	Bi2230	Ca3179	Cd2288
Line	328.068 {103}	309.271 {109}	189.042 {478}	208.959 {461}	455.403 { 74}	313.042 {108}	223.061 {451}	317.933 {106}	228.802 {447}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.00046	26.555	.02135	.04899	1.6182	.00112	.00575	62.848	.00138
Stddev	.00039	.000	.00305	.00130	.0027	.00006	.00020	.271	.00017
%RSD	85.225	.00179	14.265	2.6488	.16614	5.3029	3.5159	.43196	12.355

#1	.00074	26.555	.02350	.04807	1.6163	.00107	.00589	62.656	.00150
#2	.00018	26.555	.01920	.04991	1.6201	.00116	.00561	63.040	.00126

Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Elem	Co2286	Cr2055	Cu3247	Fe2599	K_7664	Li6707	Mg2790	Mn2576	Mo2020
Line	228.616 {447}	205.560 {464}	324.754 {104}	259.940 {130}	766.490 { 44}	670.784 { 50}	279.079 {121}2	257.610 {131}	202.030 {467}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.01718	.04022	.11171	37.348	6.7442	.03361	13.420	1.2198	.00645
Stddev	.00030	.00002	.00051	.135	.0083	.00068	.020	.0009	.00024
%RSD	1.7362	.04219	.45694	.36231	.12265	2.0310	.15039	.07320	3.6694

#1	.01739	.04020	.11207	37.253	6.7500	.03313	13.434	1.2204	.00629
#2	.01697	.04023	.11135	37.444	6.7383	.03410	13.405	1.2192	.00662

Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Elem	Na5895	Ni2316	P_1782	Pb2203	S_1820	Sb2068	Se1960	Si2881	Sn1899
Line	589.592 { 57}	231.604 {446}	178.284 {489}	220.353 {453}	182.034 {485}	206.833 {463}	196.090 {472}	288.158 {117}	189.989 {477}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	4.5145	.05208	4.9215	.02841	16.000	.00336	.01625	1.1751	.00290
Stddev	.0007	.00068	.0129	.00085	.002	.00406	.00196	.0250	.00090
%RSD	.01483	1.3106	.26223	2.9932	.01216	120.85	12.043	2.1305	31.202

#1	4.5150	.05160	4.9124	.02781	16.001	.00623	.01763	1.1574	.00354
#2	4.5140	.05256	4.9306	.02902	15.998	.00049	.01486	1.1928	.00226

Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Elem	Sr4077	Th2837	Ti3349	Ti1908	U_3701	V_2924	Zn2062	Zr3391
Line	407.771 { 83}	283.730 {119}	334.904 {101}	190.856 {477}	370.152 { 91}	292.402 {115}	206.200 {163}	339.198 { 99}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.35682	.01005	.15768	.00247	-.00199	.07304	.25072	.01182
Stddev	.00166	.00068	.00097	.00101	.03033	.00109	.00104	.00050
%RSD	.46506	6.7754	.61239	40.999	1527.5	1.4868	.41647	4.1930

#1	.35565	.01053	.15699	.00319	-.02343	.07381	.24998	.01217
#2	.35800	.00956	.15836	.00175	.01946	.07228	.25146	.01147

Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit								
Low Limit								

Int. Std.	Y_2243	Y_3600	Y_3774
Line	224.306 {450}	360.073 { 94}	377.433 { 89}
Units	Cts/S	Cts/S	Cts/S
Avg	1526.1	32109.	6308.4
Stddev	.2	25.	22.4
%RSD	.01241	.07716	.35458

#1	1525.9	32091.	6324.2
#2	1526.2	32126.	6292.6

Sample Name: 280-83354-B-1-E MS Acquired: 5/23/2016 22:04:07 Type: Unk
Method: 6500_026(v10) Mode: CONC Corr. Factor: 1.000000
User: kellyca Custom ID1: Custom ID2: Custom ID3:
Comment: 326167 6010B SOIL

Elem	Ag3280	Al3092	As1890	B_2089	Ba4554	Be3130	Bi2230	Ca3179	Cd2288
Line	328.068 {103}	309.271 {109}	189.042 {478}	208.959 {461}	455.403 { 74}	313.042 {108}	223.061 {451}	317.933 {106}	228.802 {447}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.04538	123.10	.98077	.20058	8.4042	.04677	1.9422	370.15	.09417
Stddev	.00036	.03	.00055	.00106	.0245	.00008	.0016	3.15	.00034
%RSD	.78936	.02333	.05648	.52602	.29181	.16490	.08225	.85120	.36110

#1	.04513	123.08	.98116	.19983	8.4215	.04672	1.9411	367.92	.09441
#2	.04564	123.12	.98038	.20132	8.3868	.04683	1.9433	372.38	.09393

Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Elem	Co2286	Cr2055	Cu3247	Fe2714	K_7664	Li6707	Mg2790	Mn2576	Mo2020
Line	228.616 {447}	205.560 {464}	324.754 {104}	271.441 {124}	766.490 { 44}	670.784 { 50}	279.079 {121}2	257.610 {131}	202.030 {467}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.47176	W .34088	.70742	149.78	73.820	1.0626	95.549	5.1290	.02381
Stddev	.00111	.00216	.00022	.57	.002	.0005	.159	.0032	.00017
%RSD	.23605	.63466	.03164	.38261	.00298	.04389	.16612	.06139	.70223

#1	.47255	.34241	.70757	150.18	73.819	1.0623	95.437	5.1268	.02393
#2	.47097	.33935	.70726	149.37	73.822	1.0629	95.661	5.1312	.02369

Check ?	Chk Pass	Chk Warn	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit		.10000							
Low Limit		-.01000							

Elem	Na8183	Ni2316	P_1782	Pb2203	S_1820	Sb2068	Se1960	Si2881	Sn1899
Line	818.326 { 41}	231.604 {446}	178.284 {489}	220.353 {453}	182.034 {485}	206.833 {463}	196.090 {472}	288.158 {117}	189.989 {477}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	63.585	.59473	34.753	.52251	79.954	.00681	1.8056	3.4652	.01610
Stddev	.118	.00001	.054	.00166	.160	.00172	.0034	.0039	.00025
%RSD	.18540	.00204	.15406	.31778	.19963	25.235	.19004	.11348	1.5621

#1	63.501	.59474	34.791	.52134	80.067	.00803	1.8080	3.4679	.01592
#2	63.668	.59473	34.716	.52368	79.841	.00560	1.8031	3.4624	.01628

Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Elem	Sr4077	Th2837	Ti3349	Ti1908	U_3701	V_2924	Zn2062	Zr3391
Line	407.771 { 83}	283.730 {119}	334.904 {101}	190.856 {477}	370.152 { 91}	292.402 {115}	206.200 {163}	339.198 { 99}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	2.5310	.76143	.58212	1.5199	1.7934	.69034	1.3125	.03366
Stddev	.0006	.00338	.00105	.0047	.0093	.00219	.0004	.00016
%RSD	.02228	.44411	.18018	.30829	.51958	.31763	.03390	.46604

#1	2.5306	.75904	.58137	1.5232	1.8000	.68878	1.3128	.03355
#2	2.5314	.76382	.58286	1.5166	1.7869	.69189	1.3122	.03377

Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit								
Low Limit								

Int. Std.	Y_2243	Y_3600	Y_3774
Line	224.306 {450}	360.073 { 94}	377.433 { 89}
Units	Cts/S	Cts/S	Cts/S
Avg	1496.3	31170.	6565.0
Stddev	2.2	48.	19.6
%RSD	.14812	.15369	.29919

#1	1494.7	31203.	6578.9
#2	1497.9	31136.	6551.1

Sample Name: 280-83354-B-1-F MSD Acquired: 5/23/2016 22:06:51 Type: Unk
Method: 6500_026(v10) Mode: CONC Corr. Factor: 1.000000
User: kellyca Custom ID1: Custom ID2: Custom ID3:
Comment: 326167 6010B SOIL

Elem	Ag3280	Al3092	As1890	B_2089	Ba4554	Be3130	Bi2230	Ca3179	Cd2288
Line	328.068 {103}	309.271 {109}	189.042 {478}	208.959 {461}	455.403 { 74}	313.042 {108}	223.061 {451}	317.933 {106}	228.802 {447}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.04859	104.68	1.0452	.17773	9.1259	.04993	2.0943	283.79	.10033
Stddev	.00017	.08	.0046	.00058	.0589	.00004	.0040	.76	.00042
%RSD	.34069	.07597	.43870	.32534	.64484	.07142	.19010	.26880	.41540

#1	.04870	104.74	1.0420	.17814	9.0843	.04996	2.0915	284.33	.10003
#2	.04847	104.62	1.0485	.17732	9.1675	.04990	2.0971	283.25	.10062

Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Elem	Co2286	Cr2055	Cu3247	Fe2714	K_7664	Li6707	Mg2790	Mn2576	Mo2020
Line	228.616 {447}	205.560 {464}	324.754 {104}	271.441 {124}	766.490 { 44}	670.784 { 50}	279.079 {121}2	257.610 {131}	202.030 {467}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.50224	W .32690	.64316	127.98	72.756	1.1113	94.921	4.5232	.02039
Stddev	.00517	.00172	.00045	.22	.010	.0014	.197	.0159	.00003
%RSD	1.0296	.52721	.07014	.17557	.01347	.12708	.20710	.35129	.15350

#1	.49859	.32568	.64348	128.14	72.763	1.1123	94.782	4.5120	.02037
#2	.50590	.32812	.64285	127.82	72.749	1.1103	95.060	4.5344	.02041

Check ?	Chk Pass	Chk Warn	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit		.10000							
Low Limit		-.01000							

Elem	Na8183	Ni2316	P_1782	Pb2203	S_1820	Sb2068	Se1960	Si2881	Sn1899
Line	818.326 { 41}	231.604 {446}	178.284 {489}	220.353 {453}	182.034 {485}	206.833 {463}	196.090 {472}	288.158 {117}	189.989 {477}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	64.422	.60551	27.214	.54485	63.707	.00305	1.9279	3.9022	.01400
Stddev	.095	.00240	.065	.00106	.243	.00206	.0042	.0192	.00233
%RSD	.14761	.39636	.23981	.19484	.38176	67.478	.21628	.49076	16.657

#1	64.355	.60381	27.168	.54410	63.535	.00159	1.9250	3.8886	.01235
#2	64.490	.60721	27.260	.54560	63.879	.00450	1.9309	3.9157	.01565

Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Elem	Sr4077	Th2837	Ti3349	Ti1908	U_3701	V_2924	Zn2062	Zr3391
Line	407.771 { 83}	283.730 {119}	334.904 {101}	190.856 {477}	370.152 { 91}	292.402 {115}	206.200 {163}	339.198 { 99}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	2.1052	.85818	.55818	1.6747	1.9577	.67231	1.2443	.02858
Stddev	.0026	.00134	.00157	.0073	.0193	.00150	.0036	.00013
%RSD	.12495	.15663	.28167	.43772	.98675	.22305	.29240	.44134

#1	2.1071	.85913	.55707	1.6695	1.9441	.67125	1.2417	.02867
#2	2.1033	.85723	.55930	1.6798	1.9714	.67337	1.2468	.02850

Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit								
Low Limit								

Int. Std.	Y_2243	Y_3600	Y_3774
Line	224.306 {450}	360.073 { 94}	377.433 { 89}
Units	Cts/S	Cts/S	Cts/S
Avg	1473.8	30526.	6397.6
Stddev	7.5	104.	9.1
%RSD	.51185	.33955	.14254

#1	1479.1	30599.	6391.2
#2	1468.4	30452.	6404.1

Sample Name: 280-83354-B-2-B Acquired: 5/23/2016 22:09:30 Type: Unk
Method: 6500_026(v10) Mode: CONC Corr. Factor: 1.000000
User: kellyca Custom ID1: Custom ID2: Custom ID3:
Comment: 326167 6010B SOIL

Elem	Ag3280	Al3092	As1890	B_2089	Ba4554	Be3130	Bi2230	Ca3179	Cd2288
Line	328.068 {103}	309.271 {109}	189.042 {478}	208.959 {461}	455.403 { 74}	313.042 {108}	223.061 {451}	317.933 {106}	228.802 {447}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.00425	134.74	.05406	.18665	W 20.754	.00646	.04670	300.81	.00620
Stddev	.00033	.25	.00236	.00001	.143	.00003	.00101	.36	.00009
%RSD	7.6520	.18568	4.3590	.00406	.68927	.47393	2.1713	.12126	1.3818

#1	.00402	134.56	.05239	.18665	20.855	.00643	.04741	301.07	.00626
#2	.00449	134.91	.05572	.18666	20.653	.00648	.04598	300.56	.00614

Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Warn	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit					12.000				
Low Limit					-.01000				

Elem	Co2286	Cr2055	Cu3247	Fe2714	K_7664	Li6707	Mg2790	Mn2576	Mo2020
Line	228.616 {447}	205.560 {464}	324.754 {104}	271.441 {124}	766.490 { 44}	670.784 { 50}	279.079 {121}2	257.610 {131}	202.030 {467}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.04778	W .16098	.68258	125.94	38.111	.13284	61.374	2.4525	.02121
Stddev	.00039	.00061	.00604	.04	.286	.00065	.619	.0212	.00008
%RSD	.81408	.37640	.88523	.03447	.75132	.48662	1.0088	.86433	.39049

#1	.04806	.16141	.67831	125.90	37.908	.13238	60.936	2.4375	.02115
#2	.04751	.16055	.68685	125.97	38.313	.13329	61.811	2.4675	.02127

Check ?	Chk Pass	Chk Warn	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit		.10000							
Low Limit		-.01000							

Elem	Na5895	Ni2316	P_1782	Pb2203	S_1820	Sb2068	Se1960	Si2881	Sn1899
Line	589.592 { 57}	231.604 {446}	178.284 {489}	220.353 {453}	182.034 {485}	206.833 {463}	196.090 {472}	288.158 {117}	189.989 {477}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	6.8654	.13286	32.367	.09819	43.185	.00466	.02853	4.0053	.03461
Stddev	.0327	.00042	.029	.00051	.039	.00104	.00746	.0104	.00219
%RSD	.47653	.31573	.09038	.52009	.09042	22.214	26.159	.26000	6.3406

#1	6.8423	.13316	32.346	.09855	43.213	.00539	.03381	3.9980	.03616
#2	6.8885	.13256	32.388	.09783	43.158	.00393	.02326	4.0127	.03305

Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Elem	Sr4077	Th2837	Ti3349	Ti1908	U_3701	V_2924	Zn2062	Zr3391
Line	407.771 { 83}	283.730 {119}	334.904 {101}	190.856 {477}	370.152 { 91}	292.402 {115}	206.200 {163}	339.198 { 99}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	1.5638	.03727	1.5386	.00494	.01200	.28329	1.1403	.09197
Stddev	.0087	.00197	.0172	.00067	.00924	.00388	.0096	.00069
%RSD	.55692	5.2977	1.1193	13.618	76.978	1.3697	.83854	.75141

#1	1.5576	.03587	1.5264	.00542	.01853	.28054	1.1335	.09246
#2	1.5699	.03867	1.5508	.00446	.00547	.28603	1.1470	.09148

Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit								
Low Limit								

Int. Std.	Y_2243	Y_3600	Y_3774
Line	224.306 {450}	360.073 { 94}	377.433 { 89}
Units	Cts/S	Cts/S	Cts/S
Avg	1534.1	31905.	6627.9
Stddev	2.1	284.	14.5
%RSD	.13903	.89110	.21804

#1	1535.6	32107.	6638.1
#2	1532.6	31704.	6617.7

Sample Name: ccvh-3900196 Acquired: 5/23/2016 22:12:13 Type: QC
Method: 6500_026(v10) Mode: CONC Corr. Factor: 1.000000
User: kellyca Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	Ag3280	Al3092	As1890	B_2089	Ba4554	Be3130	Bi2230	Ca3179	Cd2288	Co2286	Cr2055	Cu3247	Fe2714
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.00146	47.530	.00147	.00349	.00551	.00136	1.0597	.01829	.00044	.00498	.00096	.00711	47.446
Stddev	.00062	.150	.00389	.00041	.00073	.00003	.0064	.00992	.00001	.00052	.00004	.00008	.079
%RSD	42.516	.31534	264.59	11.722	13.300	2.3637	.60799	54.239	2.5221	10.516	3.8796	1.0636	.16596

#1	.00190	47.424	-.00128	.00378	.00602	.00138	1.0643	.02531	.00044	.00535	.00094	.00706	47.390
#2	.00102	47.636	.00422	.00320	.00499	.00134	1.0551	.01128	.00045	.00461	.00099	.00716	47.501

Check ?	None	Chk Pass	None	None	None	None	Chk Pass	None	None	None	None	None	Chk Pass
Value													
Range													

Elem	K_7664	Li6707	Mg2790	Mn2576	Mo2020	Na8183	Ni2316	P_1782	Pb2203	S_1820	Sb2068	Se1960	Si2881
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.22975	.00363	.22514	.00120	-.00128	249.75	.00115	.01542	-.00124	5.0263	.00321	.01496	.01377
Stddev	.00725	.00043	.00603	.00006	.00036	.27	.00040	.00023	.00195	.0108	.00322	.00127	.00372
%RSD	3.1536	11.858	2.6801	5.0814	28.071	.10828	35.190	1.5150	157.51	.21409	100.58	8.4602	26.995

#1	.22463	.00333	.22087	.00124	-.00103	249.94	.00086	.01558	-.00262	5.0339	.00549	.01406	.01640
#2	.23488	.00394	.22940	.00116	-.00154	249.56	.00143	.01525	.00014	5.0187	.00093	.01585	.01114

Check ?	None	None	None	None	None	Chk Pass	None	None	None	Chk Pass	None	None	None
Value													
Range													

Elem	Sn1899	Sr4077	Th2837	Ti3349	Tl1908	U_3701	V_2924	Zn2062	Zr3391
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.00359	.00211	4.9286	.02637	.00057	10.293	-.01494	-.00025	-.01174
Stddev	.00086	.00004	.0031	.00033	.00211	.009	.00001	.00084	.00101
%RSD	24.047	1.7567	.06272	1.2392	371.48	.08362	.07717	336.42	8.6170

#1	.00419	.00214	4.9264	.02614	-.00093	10.286	-.01493	.00035	-.01102
#2	.00298	.00209	4.9307	.02660	.00206	10.299	-.01495	-.00085	-.01245

Check ?	None	None	Chk Pass	None	None	Chk Pass	None	None	None
Value									
Range									

Int. Std.	Y_2243	Y_3600	Y_3774
Units	Cts/S	Cts/S	Cts/S
Avg	1477.9	31041.	6086.0
Stddev	1.5	78.	15.7
%RSD	.10090	.25184	.25751

#1	1476.9	31096.	6074.9
#2	1479.0	30986.	6097.1

Sample Name: ccv-3900195 Acquired: 5/23/2016 22:15:01 Type: QC
Method: 6500_026(v10) Mode: CONC Corr. Factor: 1.000000
User: kellyca Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	Ag3280	Al1670	As1890	B_2089	Ba4554	Be3130	Bi2230	Ca3179	Cd2288	Co2286	Cr2055	Cu3247	Fe2599	K_7664
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.48031	.52579	1.0168	.54023	.49125	.49259	.00361	4.8645	.51607	.51281	.50246	.48932	2.4503	49.379
Stddev	.00239	.00122	.0015	.00054	.00208	.00201	.00114	.0052	.00142	.00038	.00111	.00173	.0018	.190
%RSD	.49783	.23150	.14519	.09922	.42388	.40711	31.593	.10626	.27510	.07377	.22166	.35350	.07456	.38531

#1	.48200	.52665	1.0178	.54061	.48978	.49117	.00442	4.8681	.51507	.51308	.50167	.49054	2.4516	49.244
#2	.47862	.52492	1.0157	.53985	.49272	.49400	.00280	4.8608	.51707	.51254	.50325	.48810	2.4490	49.513

Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	None	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Value														
Range														

Elem	Li6707	Mg2790	Mn2576	Mo2020	Na5895	Ni2316	P_1782	Pb2203	S_1820	Sb2068	Se1960	Si2881	Sn1899	Sr4077
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	1.0139	19.363	.48594	.50712	5.1143	.50394	1.0101	1.0472	.00340	.99910	1.0433	4.8853	.99353	.47082
Stddev	.0038	.077	.00059	.00084	.0080	.00037	.0040	.0018	.00110	.00450	.0082	.0225	.00003	.00150
%RSD	.37281	.39541	.12172	.16661	.15662	.07418	.39057	.17230	32.383	.45020	.78299	.45949	.00347	.31925

#1	1.0112	19.417	.48635	.50771	5.1199	.50421	1.0073	1.0485	.00262	1.0023	1.0491	4.8695	.99356	.46976
#2	1.0166	19.309	.48552	.50652	5.1086	.50368	1.0129	1.0459	.00418	.99592	1.0375	4.9012	.99351	.47188

Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	None	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Value														
Range														

Elem	Th2837	Ti3349	Ti1908	U_3701	V_2924	Zn2062	Zr3391
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.00418	.46387	1.0353	.03037	.46620	.47533	.48919
Stddev	.00032	.00111	.0033	.01815	.00151	.00295	.00411
%RSD	7.7423	.23845	.31592	59.772	.32388	.62055	.84024

#1	.00396	.46465	1.0330	.01753	.46727	.47742	.48629
#2	.00441	.46309	1.0376	.04320	.46513	.47324	.49210

Check ?	None	Chk Pass	Chk Pass	None	Chk Pass	Chk Pass	Chk Pass
Value							
Range							

Int. Std.	Y_2243	Y_3600	Y_3774
Units	Cts/S	Cts/S	Cts/S
Avg	1538.8	32267.	6160.9
Stddev	3.5	50.	5.8
%RSD	.22665	.15348	.09485

#1	1541.3	32232.	6156.8
#2	1536.4	32302.	6165.0

Sample Name: ccb Acquired: 5/23/2016 22:17:36 Type: QC
Method: 6500_026(v10) Mode: CONC Corr. Factor: 1.000000
User: kellyca Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	Ag3280	Al1670	As1890	B_2089	Ba4554	Be3130	Bi2230	Ca3179	Cd2288	Co2286	Cr2055	Cu3247
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.00049	.00529	-.00035	W .00170	F .00226	.00005	.00654	.00979	-.00037	-.00026	-.00004	-.00041
Stddev	.00002	.00188	.00383	.00039	.00004	.00004	.00135	.00238	.00007	.00004	.00005	.00013
%RSD	4.8149	35.598	1081.2	22.923	1.7375	80.936	20.616	24.364	19.648	16.682	116.01	31.461
#1	.00050	.00662	-.00306	.00197	.00223	.00002	.00750	.01148	-.00042	-.00023	-.00008	-.00032
#2	.00047	.00396	.00235	.00142	.00229	.00008	.00559	.00810	-.00032	-.00029	-.00001	-.00050
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Warn	Chk Fail	Chk Pass	None	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit				.00156	.00115							
Low Limit				-.00156	-.00115							
Elem	Fe2599	K_7664	Li6707	Mg2790	Mn2576	Mo2020	Na5895	Ni2316	P_1782	Pb2203	S_1820	Sb2068
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	F .13491	.04691	-.00073	.00464	F .00074	.00017	.02487	.00018	-.00048	W .00303	.00446	.00307
Stddev	.00062	.01619	.00069	.00610	.00006	.00038	.00153	.00029	.00210	.00349	.00340	.00104
%RSD	.45765	34.508	94.646	131.34	7.7158	227.00	6.1516	159.54	438.11	115.35	76.143	33.831
#1	.13447	.03546	-.00024	.00895	.00078	-.00010	.02595	-.00002	.00101	.00056	.00206	.00380
#2	.13534	.05835	-.00122	.00033	.00070	.00043	.02379	.00038	-.00197	.00550	.00687	.00233
Check ?	Chk Fail	Chk Pass	Chk Pass	Chk Pass	Chk Fail	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Warn	None	Chk Pass
High Limit	.04400				.00051					.00261		
Low Limit	-.04400				-.00051					-.00261		
Elem	Se1960	Si2881	Sn1899	Sr4077	Th2837	Ti3349	Ti1908	U_3701	V_2924	Zn2062	Zr3391	
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	
Avg	F .01105	.00419	-.00030	.00014	.00272	.00050	.00223	.01858	-.00002	.00044	.00088	
Stddev	.00436	.00421	.00021	.00007	.00085	.00011	.00096	.00731	.00038	.00048	.00022	
%RSD	39.475	100.36	69.975	51.323	31.073	23.052	43.167	39.326	2386.4	110.04	24.835	
#1	.01413	.00717	-.00015	.00009	.00213	.00041	.00291	.01341	-.00029	.00078	.00072	
#2	.00797	.00122	-.00046	.00020	.00332	.00058	.00155	.02375	.00025	.00010	.00103	
Check ?	Chk Fail	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	
High Limit	.00972											
Low Limit	-.00972											
Int. Std.	Y_2243	Y_3600	Y_3774									
Units	Cts/S	Cts/S	Cts/S									
Avg	1559.6	32856.	6091.8									
Stddev	4.5	5.	25.4									
%RSD	.28587	.01386	.41736									
#1	1562.8	32852.	6109.8									
#2	1556.5	32859.	6073.9									

Sample Name: ccvl-3907489 Acquired: 5/23/2016 22:20:22 Type: QC
Method: 6500_026(v10) Mode: CONC Corr. Factor: 1.000000
User: kellyca Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	Ag3280	Al1670	As1890	B_2089	Ba4554	Be3130	Bi2230	Ca3179	Cd2288	Co2286	Cr2055	Cu3247
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.00953	.10531	.01194	.10168	.01019	.00097	.11455	.19182	.00499	.01036	.01013	.01313
Stddev	.00012	.00148	.00496	.00001	.00007	.00006	.00269	.00152	.00016	.00015	.00001	.00014
%RSD	1.2348	1.4023	41.572	.00556	.73444	5.6791	2.3463	.79427	3.2096	1.4394	.12181	1.0875

#1	.00961	.10427	.01545	.10168	.01024	.00093	.11265	.19074	.00488	.01025	.01012	.01303
#2	.00945	.10636	.00843	.10167	.01014	.00101	.11645	.19289	.00511	.01046	.01013	.01323

Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Value												
Range												

Elem	Fe2599	K_7664	Li6707	Mg2790	Mn2576	Mo2020	Na5895	Ni2316	P_1782	Pb2203	S_1820	Sb2068
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	F .13735	2.9380	.00962	.19675	.01007	.02027	F 1.3065	.04143	2.8277	.01167	.00450	.02400
Stddev	.00315	.0235	.00034	.00178	.00015	.00005	.0006	.00017	.0042	.00014	.00072	.00006
%RSD	2.2956	.79919	3.5841	.90428	1.4830	.23726	.04780	.41597	.14675	1.2058	15.977	.24382

#1	.13513	2.9214	.00986	.19549	.01018	.02023	1.3069	.04131	2.8247	.01157	.00501	.02396
#2	.13958	2.9546	.00938	.19801	.00996	.02030	1.3060	.04155	2.8306	.01177	.00399	.02404

Check ?	Chk Fail	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Fail	Chk Pass	Chk Pass	Chk Pass	None	Chk Pass
Value	.10000						1.0000					
Range	30.000%						30.000%					

Elem	Se1960	Si2881	Sn1899	Sr4077	Th2837	Ti3349	Ti1908	U_3701	V_2924	Zn2062	Zr3391
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	F .02536	.47744	.09837	.00943	.01531	.00924	.01494	.07267	.00938	.01958	.01485
Stddev	.00103	.00708	.00010	.00000	.00098	.00019	.00078	.01761	.00114	.00043	.00106
%RSD	4.0468	1.4837	.10627	.03546	6.3875	2.0035	5.2310	24.234	12.154	2.2125	7.1332

#1	.02464	.47243	.09829	.00942	.01601	.00937	.01439	.08512	.00858	.01988	.01410
#2	.02609	.48245	.09844	.00943	.01462	.00911	.01550	.06022	.01019	.01927	.01560

Check ?	Chk Fail	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Value	.01500										
Range	30.000%										

Int. Std.	Y_2243	Y_3600	Y_3774
Units	Cts/S	Cts/S	Cts/S
Avg	1545.4	32813.	6087.7
Stddev	5.1	53.	15.4
%RSD	.32769	.16147	.25253

#1	1541.9	32850.	6076.8
#2	1549.0	32775.	6098.5

Sample Name: MB 280-325811/1-A Acquired: 5/23/2016 22:23:06 Type: Unk
Method: 6500_026(v10) Mode: CONC Corr. Factor: 1.000000
User: kellyca Custom ID1: 5/19 Custom ID2: Custom ID3:
Comment: 325811 6010B

Elem	Ag3280	Al1670	As1890	B_2089	Ba4554	Be3130	Bi2230	Ca3179	Cd2288
Line	328.068 {103}	167.079 {502}	189.042 {478}	208.959 {461}	455.403 { 74}	313.042 {108}	223.061 {451}	317.933 {106}	228.802 {447}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	-.00013	.00865	-.00337	.00130	.00036	-.00004	.00082	.01080	-.00010
Stddev	.00050	.00090	.00490	.00012	.00011	.00004	.00469	.00087	.00031
%RSD	377.90	10.376	145.54	9.3538	29.776	105.84	574.89	8.0431	315.70

#1	.00022	.00802	-.00683	.00121	.00028	-.00007	-.00250	.01019	.00012
#2	-.00049	.00929	.00010	.00138	.00043	-.00001	.00413	.01141	-.00032

Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Elem	Co2286	Cr2055	Cu3247	Fe2599	K_7664	Li6707	Mg2790	Mn2576	Mo2020
Line	228.616 {447}	205.560 {464}	324.754 {104}	259.940 {130}	766.490 { 44}	670.784 { 50}	279.079 {121}2	257.610 {131}	202.030 {467}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	-.00008	.00015	-.00101	F .11078	.03021	-.00066	.00602	.00088	-.00006
Stddev	.00038	.00023	.00023	.00236	.00662	.00121	.00218	.00007	.00017
%RSD	495.75	156.29	22.855	2.1294	21.919	184.43	36.293	8.3683	300.71

#1	-.00034	-.00002	-.00085	.10911	.02553	-.00151	.00447	.00094	.00007
#2	.00019	.00031	-.00118	.11244	.03489	.00020	.00756	.00083	-.00018

Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Fail	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit				.10000					
Low Limit				-.10000					

Elem	Na5895	Ni2316	P_1782	Pb2203	S_1820	Sb2068	Se1960	Si2881	Sn1899
Line	589.592 { 57}	231.604 {446}	178.284 {489}	220.353 {453}	182.034 {485}	206.833 {463}	196.090 {472}	288.158 {117}	189.989 {477}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.03106	-.00020	.00014	.00138	.01184	.00115	W .00952	.00355	.00053
Stddev	.00175	.00015	.00316	.00101	.00024	.00013	.00062	.00449	.00090
%RSD	5.6380	75.061	2310.0	72.881	2.0526	11.237	6.5426	126.42	168.58

#1	.03230	-.00009	.00237	.00209	.01201	.00124	.00996	.00672	.00117
#2	.02983	-.00031	-.00210	.00067	.01166	.00106	.00907	.00038	-.00010

Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Warn	Chk Pass	Chk Pass
High Limit							.00500		
Low Limit							-.00500		

Elem	Sr4077	Th2837	Ti3349	Ti1908	U_3701	V_2924	Zn2062	Zr3391	
Line	407.771 { 83}	283.730 {119}	334.904 {101}	190.856 {477}	370.152 { 91}	292.402 {115}	206.200 {163}	339.198 { 99}	
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	
Avg	.00005	.00230	.00068	.00141	.01328	.00043	.00246	.00207	
Stddev	.00002	.00055	.00024	.00043	.02201	.00043	.00045	.00073	
%RSD	39.968	24.074	35.739	30.823	165.73	101.65	18.313	35.517	

#1	.00003	.00269	.00051	.00110	.02885	.00012	.00278	.00155	
#2	.00006	.00191	.00085	.00171	-.00228	.00073	.00214	.00259	

Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	
High Limit									
Low Limit									

Int. Std.	Y_2243	Y_3600	Y_3774						
Line	224.306 {450}	360.073 { 94}	377.433 { 89}						
Units	Cts/S	Cts/S	Cts/S						
Avg	1547.9	33089.	6153.3						
Stddev	3.1	120.	1.2						
%RSD	.19812	.36379	.01876						

#1	1545.7	33174.	6152.5						
#2	1550.1	33004.	6154.1						

Sample Name: LCS 280-325811/2-A Acquired: 5/23/2016 22:25:52 Type: Unk

Method: 6500_026(v10) Mode: CONC Corr. Factor: 1.000000

User: kellyca Custom ID1: Custom ID2: Custom ID3:

Comment: 325811 6010B

Elem	Ag3280	Al1670	As1890	B_2089	Ba4554	Be3130	Bi2230	Ca3179	Cd2288
Line	328.068 {103}	167.079 {502}	189.042 {478}	208.959 {461}	455.403 { 74}	313.042 {108}	223.061 {451}	317.933 {106}	228.802 {447}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.05006	1.9918	1.0680	1.0673	2.0472	.05048	F 2.2717	49.568	.10563
Stddev	.00058	.0033	.0020	.0067	.0002	.00022	.0097	.080	.00054
%RSD	1.1625	.16521	.18947	.62380	.00943	.43551	.42472	.16150	.50995

#1	.05047	1.9895	1.0694	1.0721	2.0473	.05033	2.2785	49.625	.10601
#2	.04965	1.9942	1.0666	1.0626	2.0470	.05064	2.2649	49.511	.10525

Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Fail	Chk Pass	Chk Pass
High Limit							2.2000		
Low Limit							1.8000		

Elem	Co2286	Cr2055	Cu3247	Fe2599	K_7664	Li6707	Mg2790	Mn2576	Mo2020
Line	228.616 {447}	205.560 {464}	324.754 {104}	259.940 {130}	766.490 { 44}	670.784 { 50}	279.079 {121}2	257.610 {131}	202.030 {467}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.51706	F .20708	.25859	1.0294	52.090	1.0656	49.756	.49270	1.0552
Stddev	.00062	.00153	.00125	.0006	.026	.0005	.122	.00206	.0040
%RSD	.11915	.73959	.48278	.06170	.05038	.04433	.24576	.41743	.37871

#1	.51749	.20816	.25947	1.0289	52.071	1.0652	49.842	.49416	1.0580
#2	.51662	.20599	.25770	1.0298	52.108	1.0659	49.669	.49125	1.0523

Check ?	Chk Pass	Chk Fail	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit		.05750							
Low Limit		.04300							

Elem	Na8183	Ni2316	P_1782	Pb2203	S_1820	Sb2068	Se1960	Si2881	Sn1899
Line	818.326 { 41}	231.604 {446}	178.284 {489}	220.353 {453}	182.034 {485}	206.833 {463}	196.090 {472}	288.158 {117}	189.989 {477}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	53.362	.50725	10.600	.52468	2.0794	.52184	2.1137	9.7790	1.9657
Stddev	.061	.00134	.034	.00041	.0073	.00124	.0012	.0086	.0014
%RSD	.11399	.26429	.32250	.07786	.35111	.23764	.05437	.08818	.07208

#1	53.405	.50820	10.624	.52439	2.0846	.52272	2.1129	9.7851	1.9667
#2	53.319	.50630	10.575	.52497	2.0742	.52096	2.1145	9.7729	1.9647

Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Elem	Sr4077	Th2837	Ti3349	Ti1908	U_3701	V_2924	Zn2062	Zr3391
Line	407.771 { 83}	283.730 {119}	334.904 {101}	190.856 {477}	370.152 { 91}	292.402 {115}	206.200 {163}	339.198 { 99}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.97257	1.0270	.94602	2.0348	2.1954	.48152	.48353	.48507
Stddev	.00157	.0037	.00336	.0072	.0078	.00302	.00342	.00000
%RSD	.16128	.36284	.35527	.35562	.35650	.62696	.70791	.00078

#1	.97368	1.0296	.94840	2.0399	2.2009	.48365	.48595	.48507
#2	.97146	1.0244	.94365	2.0297	2.1899	.47938	.48111	.48508

Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit								
Low Limit								

Int. Std.	Y_2243	Y_3600	Y_3774
Line	224.306 {450}	360.073 { 94}	377.433 { 89}
Units	Cts/S	Cts/S	Cts/S
Avg	1483.3	31063.	6126.7
Stddev	3.6	39.	24.1
%RSD	.24170	.12653	.39283

#1	1480.7	31091.	6109.7
#2	1485.8	31035.	6143.7

Sample Name: 280-83083-C-1-A Acquired: 5/23/2016 22:28:25 Type: Unk
Method: 6500_026(v10) Mode: CONC Corr. Factor: 1.000000
User: kellyca Custom ID1: Custom ID2: Custom ID3:
Comment: 325811 6010B

Elem	Ag3280	Al1670	As1890	B_2089	Ba4554	Be3130	Bi2230	Ca3179	Cd2288
Line	328.068 {103}	167.079 {502}	189.042 {478}	208.959 {461}	455.403 { 74}	313.042 {108}	223.061 {451}	317.933 {106}	228.802 {447}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.00062	.14365	.01393	.05738	.08304	.00003	.00158	66.502	.00016
Stddev	.00047	.00125	.00230	.00055	.00029	.00002	.00068	.384	.00005
%RSD	76.291	.86953	16.489	.96211	.35255	61.392	43.014	.57671	31.891

#1	.00095	.14454	.01556	.05778	.08284	.00001	.00110	66.231	.00019
#2	.00028	.14277	.01231	.05699	.08325	.00004	.00205	66.773	.00012

Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Elem	Co2286	Cr2055	Cu3247	Fe2599	K_7664	Li6707	Mg2790	Mn2576	Mo2020
Line	228.616 {447}	205.560 {464}	324.754 {104}	259.940 {130}	766.490 { 44}	670.784 { 50}	279.079 {121}2	257.610 {131}	202.030 {467}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.00049	.00103	.00101	1.0707	2.8843	.00184	10.182	1.0852	.00495
Stddev	.00016	.00014	.00012	.0090	.0259	.00087	.033	.0019	.00018
%RSD	32.402	13.353	11.924	.84067	.89710	47.404	.32749	.17707	3.6129

#1	.00038	.00094	.00110	1.0643	2.8660	.00245	10.206	1.0865	.00508
#2	.00061	.00113	.00093	1.0770	2.9026	.00122	10.159	1.0838	.00482

Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Elem	Na8183	Ni2316	P_1782	Pb2203	S_1820	Sb2068	Se1960	Si2881	Sn1899
Line	818.326 { 41}	231.604 {446}	178.284 {489}	220.353 {453}	182.034 {485}	206.833 {463}	196.090 {472}	288.158 {117}	189.989 {477}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	31.564	.00746	.56101	-.00027	5.7637	.00027	.00800	16.006	.00058
Stddev	.163	.00021	.00286	.00099	.0061	.00018	.00051	.037	.00130
%RSD	.51655	2.8249	.50892	365.77	.10561	66.537	6.4121	.23218	225.37

#1	31.679	.00761	.56303	.00043	5.7680	.00040	.00764	15.980	.00150
#2	31.449	.00731	.55900	-.00097	5.7594	.00014	.00836	16.033	-.00034

Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Elem	Sr4077	Th2837	Ti3349	Ti1908	U_3701	V_2924	Zn2062	Zr3391
Line	407.771 { 83}	283.730 {119}	334.904 {101}	190.856 {477}	370.152 { 91}	292.402 {115}	206.200 {163}	339.198 { 99}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.88242	.00143	.00890	.00282	-.00030	.00249	.00870	.00116
Stddev	.00372	.00061	.00032	.00007	.00917	.00001	.00015	.00133
%RSD	.42134	42.500	3.5913	2.5062	3016.4	.35737	1.6846	114.58

#1	.87979	.00186	.00913	.00287	.00618	.00248	.00881	.00022
#2	.88504	.00100	.00867	.00277	-.00679	.00249	.00860	.00210

Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit								
Low Limit								

Int. Std.	Y_2243	Y_3600	Y_3774
Line	224.306 {450}	360.073 { 94}	377.433 { 89}
Units	Cts/S	Cts/S	Cts/S
Avg	1506.1	31551.	6144.1
Stddev	.1	30.	43.0
%RSD	.00556	.09634	.69988

#1	1506.1	31530.	6174.5
#2	1506.2	31573.	6113.6

Sample Name: 280-83083-C-2-A Acquired: 5/23/2016 22:31:09 Type: Unk
Method: 6500_026(v10) Mode: CONC Corr. Factor: 1.000000
User: kellyca Custom ID1: Custom ID2: Custom ID3:
Comment: 325811 6010B

Elem	Ag3280	Al1670	As1890	B_2089	Ba4554	Be3130	Bi2230	Ca3179	Cd2288
Line	328.068 {103}	167.079 {502}	189.042 {478}	208.959 {461}	455.403 { 74}	313.042 {108}	223.061 {451}	317.933 {106}	228.802 {447}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.00024	2.4413	.01950	.20263	.13434	.00004	.00236	72.142	.00021
Stddev	.00027	.0072	.00280	.00014	.00074	.00003	.00265	.249	.00033
%RSD	114.68	.29342	14.381	.06935	.55230	76.864	112.35	.34480	157.14

#1	.00004	2.4363	.01752	.20273	.13381	.00007	.00048	71.966	.00044
#2	.00043	2.4464	.02148	.20253	.13486	.00002	.00423	72.318	-.00002

Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Elem	Co2286	Cr2055	Cu3247	Fe2599	K_7664	Li6707	Mg2790	Mn2576	Mo2020
Line	228.616 {447}	205.560 {464}	324.754 {104}	259.940 {130}	766.490 { 44}	670.784 { 50}	279.079 {121}2	257.610 {131}	202.030 {467}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.00200	.00424	.00414	4.0779	6.9281	.00466	12.416	1.1755	.00533
Stddev	.00024	.00003	.00012	.0249	.0328	.00045	.028	.0026	.00022
%RSD	12.081	.75289	2.8188	.61049	.47314	9.6793	.22482	.22342	4.0547

#1	.00217	.00427	.00406	4.0603	6.9050	.00434	12.396	1.1737	.00518
#2	.00183	.00422	.00422	4.0955	6.9513	.00498	12.435	1.1774	.00548

Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Elem	Na8183	Ni2316	P_1782	Pb2203	S_1820	Sb2068	Se1960	Si2881	Sn1899
Line	818.326 { 41}	231.604 {446}	178.284 {489}	220.353 {453}	182.034 {485}	206.833 {463}	196.090 {472}	288.158 {117}	189.989 {477}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	44.442	.00597	1.5713	-.00025	12.595	.00184	.00934	18.452	-.00127
Stddev	.425	.00006	.0052	.00008	.041	.00227	.00621	.067	.00059
%RSD	.95617	.94332	.32771	31.464	.32268	122.95	66.470	.36579	46.170

#1	44.141	.00593	1.5750	-.00019	12.624	.00345	.00495	18.404	-.00085
#2	44.742	.00601	1.5677	-.00031	12.567	.00024	.01373	18.499	-.00168

Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Elem	Sr4077	Th2837	Ti3349	Ti1908	U_3701	V_2924	Zn2062	Zr3391
Line	407.771 { 83}	283.730 {119}	334.904 {101}	190.856 {477}	370.152 { 91}	292.402 {115}	206.200 {163}	339.198 { 99}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.85476	.00258	.15281	-.00060	.00732	.01272	.01322	.00047
Stddev	.00573	.00052	.00181	.00077	.01649	.00091	.00007	.00071
%RSD	.66987	20.067	1.1857	127.69	225.29	7.1840	.55379	153.16

#1	.85072	.00295	.15409	-.00006	.01898	.01207	.01327	.00097
#2	.85881	.00221	.15153	-.00114	-.00434	.01336	.01317	-.00004

Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit								
Low Limit								

Int. Std.	Y_2243	Y_3600	Y_3774
Line	224.306 {450}	360.073 { 94}	377.433 { 89}
Units	Cts/S	Cts/S	Cts/S
Avg	1506.1	31552.	6169.8
Stddev	2.5	23.	17.0
%RSD	.16774	.07153	.27473

#1	1507.9	31568.	6181.8
#2	1504.4	31536.	6157.8

Sample Name: 280-83083-C-3-A Acquired: 5/23/2016 22:33:49 Type: Unk
Method: 6500_026(v10) Mode: CONC Corr. Factor: 1.000000
User: kellyca Custom ID1: Custom ID2: Custom ID3:
Comment: 325811 6010B

Elem	Ag3280	Al1670	As1890	B_2089	Ba4554	Be3130	Bi2230	Ca3179	Cd2288
Line	328.068 {103}	167.079 {502}	189.042 {478}	208.959 {461}	455.403 { 74}	313.042 {108}	223.061 {451}	317.933 {106}	228.802 {447}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.00057	.02577	.00458	.05017	.04647	-.00002	.00114	26.281	-.00007
Stddev	.00027	.00016	.00244	.00037	.00026	.00002	.00184	.158	.00007
%RSD	48.038	.62027	53.196	.74354	.55424	62.341	160.73	.60182	100.40

#1	.00076	.02566	.00630	.05044	.04628	-.00003	.00245	26.169	-.00002
#2	.00038	.02589	.00286	.04991	.04665	-.00001	-.00016	26.393	-.00011

Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Elem	Co2286	Cr2055	Cu3247	Fe2599	K_7664	Li6707	Mg2790	Mn2576	Mo2020
Line	228.616 {447}	205.560 {464}	324.754 {104}	259.940 {130}	766.490 { 44}	670.784 { 50}	279.079 {121}2	257.610 {131}	202.030 {467}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	-.00039	.01294	-.00007	.03341	1.3947	.00145	3.1367	.00082	.00160
Stddev	.00050	.00032	.00011	.00026	.0087	.00026	.0006	.00000	.00019
%RSD	127.12	2.4816	158.51	.76735	.62315	18.172	.02083	.44435	11.804

#1	-.00075	.01272	-.00015	.03360	1.3885	.00164	3.1363	.00082	.00147
#2	-.00004	.01317	.00001	.03323	1.4008	.00126	3.1372	.00082	.00173

Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Elem	Na8183	Ni2316	P_1782	Pb2203	S_1820	Sb2068	Se1960	Si2881	Sn1899
Line	818.326 { 41}	231.604 {446}	178.284 {489}	220.353 {453}	182.034 {485}	206.833 {463}	196.090 {472}	288.158 {117}	189.989 {477}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	27.044	.00047	.04559	-.00258	3.8347	-.00068	.01427	15.933	.00060
Stddev	.063	.00061	.00199	.00148	.0043	.00360	.00056	.025	.00061
%RSD	.23314	128.92	4.3620	57.138	.11222	532.80	3.9075	.15802	102.33

#1	26.999	.00004	.04700	-.00154	3.8377	.00187	.01387	15.915	.00016
#2	27.088	.00091	.04419	-.00363	3.8316	-.00322	.01466	15.951	.00103

Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Elem	Sr4077	Th2837	Ti3349	Ti1908	U_3701	V_2924	Zn2062	Zr3391
Line	407.771 { 83}	283.730 {119}	334.904 {101}	190.856 {477}	370.152 { 91}	292.402 {115}	206.200 {163}	339.198 { 99}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.38135	.00184	.00102	.00025	.01159	.02402	.00088	-.00027
Stddev	.00158	.00084	.00043	.00017	.01233	.00075	.00173	.00040
%RSD	.41312	45.623	41.864	69.788	106.39	3.1408	197.77	150.82

#1	.38024	.00125	.00132	.00012	.02030	.02348	.00210	.00002
#2	.38246	.00243	.00072	.00037	.00287	.02455	-.00035	-.00055

Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit								
Low Limit								

Int. Std.	Y_2243	Y_3600	Y_3774
Line	224.306 {450}	360.073 { 94}	377.433 { 89}
Units	Cts/S	Cts/S	Cts/S
Avg	1518.3	31886.	6117.2
Stddev	2.2	75.	31.3
%RSD	.14641	.23540	.51210

#1	1519.9	31833.	6139.4
#2	1516.7	31939.	6095.0

Sample Name: 280-83083-C-4-A Acquired: 5/23/2016 22:36:33 Type: Unk
Method: 6500_026(v10) Mode: CONC Corr. Factor: 1.000000
User: kellyca Custom ID1: Custom ID2: Custom ID3:
Comment: 325811 6010B

Elem	Ag3280	Al1670	As1890	B_2089	Ba4554	Be3130	Bi2230	Ca3179	Cd2288
Line	328.068 {103}	167.079 {502}	189.042 {478}	208.959 {461}	455.403 { 74}	313.042 {108}	223.061 {451}	317.933 {106}	228.802 {447}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.00014	.78283	.00498	.04096	.05483	.00002	.00091	28.239	.00010
Stddev	.00015	.00017	.00436	.00016	.00002	.00002	.00031	.030	.00008
%RSD	108.75	.02140	87.528	.38199	.03526	88.520	33.894	.10572	81.899

#1	.00024	.78271	.00190	.04107	.05484	.00004	.00069	28.217	.00015
#2	.00003	.78295	.00806	.04085	.05481	.00001	.00113	28.260	.00004

Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Elem	Co2286	Cr2055	Cu3247	Fe2599	K_7664	Li6707	Mg2790	Mn2576	Mo2020
Line	228.616 {447}	205.560 {464}	324.754 {104}	259.940 {130}	766.490 { 44}	670.784 { 50}	279.079 {121}2	257.610 {131}	202.030 {467}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	-.00007	.00980	.00192	.94201	1.1019	.00214	3.3089	.02020	.00120
Stddev	.00023	.00020	.00035	.00493	.0070	.00042	.0120	.00005	.00016
%RSD	341.51	2.0712	18.214	.52353	.63526	19.771	.36305	.26521	13.031

#1	.00009	.00994	.00167	.93852	1.0970	.00244	3.3004	.02024	.00131
#2	-.00023	.00965	.00216	.94550	1.1069	.00184	3.3174	.02016	.00109

Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Elem	Na8183	Ni2316	P_1782	Pb2203	S_1820	Sb2068	Se1960	Si2881	Sn1899
Line	818.326 { 41}	231.604 {446}	178.284 {489}	220.353 {453}	182.034 {485}	206.833 {463}	196.090 {472}	288.158 {117}	189.989 {477}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	23.792	.00194	.06266	-.00009	4.9310	.00088	.01211	15.805	-.00002
Stddev	.240	.00038	.00333	.00153	.0035	.00076	.00356	.065	.00132
%RSD	1.0097	19.394	5.3109	1757.9	.07179	86.281	29.418	.41106	5565.6

#1	23.962	.00220	.06031	.00100	4.9335	.00035	.01463	15.759	-.00096
#2	23.622	.00167	.06502	-.00117	4.9285	.00142	.00959	15.851	.00091

Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Elem	Sr4077	Th2837	Ti3349	Ti1908	U_3701	V_2924	Zn2062	Zr3391
Line	407.771 { 83}	283.730 {119}	334.904 {101}	190.856 {477}	370.152 { 91}	292.402 {115}	206.200 {163}	339.198 { 99}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.41549	.00233	.05692	.00234	.00284	.02388	.01321	.00035
Stddev	.00022	.00024	.00054	.00192	.01642	.00037	.00068	.00024
%RSD	.05197	10.167	.94439	82.083	578.73	1.5417	5.1419	66.942

#1	.41533	.00250	.05730	.00370	.01445	.02362	.01273	.00019
#2	.41564	.00216	.05654	.00098	-.00878	.02414	.01369	.00052

Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit								
Low Limit								

Int. Std.	Y_2243	Y_3600	Y_3774
Line	224.306 {450}	360.073 { 94}	377.433 { 89}
Units	Cts/S	Cts/S	Cts/S
Avg	1521.6	32215.	6222.8
Stddev	1.8	48.	27.0
%RSD	.11715	.14759	.43370

#1	1522.9	32248.	6241.9
#2	1520.4	32181.	6203.8

Sample Name: 280-83083-C-7-A Acquired: 5/23/2016 22:39:17 Type: Unk
Method: 6500_026(v10) Mode: CONC Corr. Factor: 1.000000
User: kellyca Custom ID1: Custom ID2: Custom ID3:
Comment: 325811 6010B

Elem	Ag3280	Al1670	As1890	B_2089	Ba4554	Be3130	Bi2230	Ca3179	Cd2288
Line	328.068 {103}	167.079 {502}	189.042 {478}	208.959 {461}	455.403 { 74}	313.042 {108}	223.061 {451}	317.933 {106}	228.802 {447}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.00050	.76695	.01762	.20959	.11803	-.00001	-.00304	71.346	.00038
Stddev	.00016	.00441	.00137	.00208	.00032	.00000	.00085	.239	.00006
%RSD	33.090	.57459	7.7717	.99444	.26830	28.947	27.766	.33512	16.646

#1	.00061	.77007	.01859	.21107	.11781	-.00001	-.00245	71.177	.00042
#2	.00038	.76384	.01665	.20812	.11826	-.00001	-.00364	71.515	.00033

Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Elem	Co2286	Cr2055	Cu3247	Fe2599	K_7664	Li6707	Mg2790	Mn2576	Mo2020
Line	228.616 {447}	205.560 {464}	324.754 {104}	259.940 {130}	766.490 { 44}	670.784 { 50}	279.079 {121}2	257.610 {131}	202.030 {467}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.00118	.00139	.00150	2.0320	6.5961	.00260	11.853	1.1618	.00487
Stddev	.00076	.00004	.00007	.0084	.0612	.00088	.033	.0006	.00029
%RSD	64.147	3.1313	4.7484	.41426	.92734	33.815	.27881	.05315	5.9421

#1	.00172	.00136	.00155	2.0260	6.5529	.00198	11.877	1.1622	.00466
#2	.00064	.00142	.00145	2.0379	6.6394	.00322	11.830	1.1613	.00507

Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Elem	Na8183	Ni2316	P_1782	Pb2203	S_1820	Sb2068	Se1960	Si2881	Sn1899
Line	818.326 { 41}	231.604 {446}	178.284 {489}	220.353 {453}	182.034 {485}	206.833 {463}	196.090 {472}	288.158 {117}	189.989 {477}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	45.450	.00469	1.5837	-.00090	13.015	.00025	.00778	14.723	-.00095
Stddev	.300	.00008	.0062	.00255	.014	.00014	.00277	.021	.00003
%RSD	.65924	1.6741	.38915	283.94	.10715	56.443	35.657	.13953	3.3143

#1	45.238	.00475	1.5880	.00090	13.025	.00035	.00974	14.708	-.00097
#2	45.662	.00464	1.5793	-.00270	13.005	.00015	.00582	14.738	-.00093

Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Elem	Sr4077	Th2837	Ti3349	Ti1908	U_3701	V_2924	Zn2062	Zr3391
Line	407.771 { 83}	283.730 {119}	334.904 {101}	190.856 {477}	370.152 { 91}	292.402 {115}	206.200 {163}	339.198 { 99}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.85557	.00163	.04736	.00286	-.01011	.00809	.00692	.00131
Stddev	.00270	.00058	.00006	.00106	.00716	.00002	.00195	.00143
%RSD	.31587	35.606	.11654	37.180	70.765	.21776	28.177	109.47

#1	.85366	.00204	.04732	.00361	-.01517	.00807	.00830	.00232
#2	.85748	.00122	.04740	.00210	-.00505	.00810	.00554	.00030

Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit								
Low Limit								

Int. Std.	Y_2243	Y_3600	Y_3774
Line	224.306 {450}	360.073 { 94}	377.433 { 89}
Units	Cts/S	Cts/S	Cts/S
Avg	1492.0	31396.	6210.0
Stddev	.2	48.	39.3
%RSD	.01313	.15332	.63242

#1	1491.8	31430.	6237.8
#2	1492.1	31362.	6182.3

Sample Name: 280-83084-E-1-A Acquired: 5/23/2016 22:41:59 Type: Unk
Method: 6500_026(v10) Mode: CONC Corr. Factor: 1.000000
User: kellyca Custom ID1: Custom ID2: Custom ID3:
Comment: 325811 6010B

Elem	Ag3280	Al1670	As1890	B_2089	Ba4554	Be3130	Bi2230	Ca3179	Cd2288
Line	328.068 {103}	167.079 {502}	189.042 {478}	208.959 {461}	455.403 { 74}	313.042 {108}	223.061 {451}	317.933 {106}	228.802 {447}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.00022	.10591	.00207	.03073	.04760	.00000	.00387	28.692	.00027
Stddev	.00003	.00060	.00231	.00081	.00011	.00001	.00173	.026	.00006
%RSD	12.424	.56904	111.87	2.6379	.23761	296.55	44.846	.09074	23.427

#1	.00024	.10548	.00370	.03131	.04752	-.00000	.00509	28.710	.00032
#2	.00020	.10634	.00043	.03016	.04768	.00001	.00264	28.673	.00023

Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Elem	Co2286	Cr2055	Cu3247	Fe2599	K_7664	Li6707	Mg2790	Mn2576	Mo2020
Line	228.616 {447}	205.560 {464}	324.754 {104}	259.940 {130}	766.490 { 44}	670.784 { 50}	279.079 {121}2	257.610 {131}	202.030 {467}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	-.00046	.01164	-.00012	.12647	.98599	.00084	4.1562	.00331	.00119
Stddev	.00004	.00017	.00011	.00069	.01261	.00073	.0087	.00004	.00027
%RSD	8.8769	1.4831	85.384	.54793	1.2787	85.915	.21029	1.0995	22.469

#1	-.00043	.01152	-.00005	.12598	.99491	.00033	4.1624	.00334	.00137
#2	-.00048	.01176	-.00020	.12696	.97708	.00136	4.1500	.00328	.00100

Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Elem	Na8183	Ni2316	P_1782	Pb2203	S_1820	Sb2068	Se1960	Si2881	Sn1899
Line	818.326 { 41}	231.604 {446}	178.284 {489}	220.353 {453}	182.034 {485}	206.833 {463}	196.090 {472}	288.158 {117}	189.989 {477}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	20.932	.00094	.05007	-.00035	4.5043	.00171	.00610	13.858	.00079
Stddev	.021	.00021	.00466	.00239	.0146	.00044	.00382	.031	.00004
%RSD	.09803	22.157	9.3078	691.87	.32407	25.576	62.732	.22427	4.6927

#1	20.918	.00080	.04677	.00134	4.5146	.00140	.00339	13.880	.00076
#2	20.947	.00109	.05336	-.00203	4.4939	.00202	.00880	13.836	.00082

Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Elem	Sr4077	Th2837	Ti3349	Ti1908	U_3701	V_2924	Zn2062	Zr3391
Line	407.771 { 83}	283.730 {119}	334.904 {101}	190.856 {477}	370.152 { 91}	292.402 {115}	206.200 {163}	339.198 { 99}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.37173	.00167	.00621	.00244	-.00218	.01706	.00013	-.00000
Stddev	.00035	.00006	.00041	.00075	.01095	.00063	.00166	.00062
%RSD	.09532	3.8957	6.6191	30.721	501.38	3.6892	1319.8	41658.

#1	.37148	.00171	.00592	.00191	.00556	.01661	.00130	.00044
#2	.37198	.00162	.00650	.00297	-.00992	.01750	-.00105	-.00044

Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit								
Low Limit								

Int. Std.	Y_2243	Y_3600	Y_3774
Line	224.306 {450}	360.073 { 94}	377.433 { 89}
Units	Cts/S	Cts/S	Cts/S
Avg	1517.4	31980.	6157.7
Stddev	.8	42.	18.4
%RSD	.05404	.13050	.29897
#1	1516.8	32010.	6144.7
#2	1518.0	31951.	6170.7

Sample Name: ccvh-3900196 Acquired: 5/23/2016 22:44:42 Type: QC

Method: 6500_026(v10) Mode: CONC Corr. Factor: 1.000000

User: kellyca Custom ID1: Custom ID2: Custom ID3:

Comment:

Elem	Ag3280	Al3092	As1890	B_2089	Ba4554	Be3130	Bi2230	Ca3179	Cd2288	Co2286	Cr2055	Cu3247	Fe2714
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.00196	47.717	.00331	.00311	.00174	.00138	1.0674	-.04287	.00026	.00487	.00094	.00685	47.510
Stddev	.00010	.344	.00548	.00088	.00007	.00008	.0021	.00375	.00012	.00065	.00018	.00013	.325
%RSD	4.9562	.72103	165.34	28.276	4.0413	5.9906	.19521	8.7523	47.623	13.448	18.841	1.8446	.68383

#1	.00189	47.474	-.00056	.00373	.00169	.00132	1.0659	-.04021	.00035	.00440	.00082	.00694	47.280
#2	.00203	47.960	.00719	.00249	.00179	.00143	1.0688	-.04552	.00017	.00533	.00107	.00676	47.739

Check ?	None	Chk Pass	None	None	None	None	Chk Pass	None	None	None	None	None	Chk Pass
Value													
Range													

Elem	K_7664	Li6707	Mg2790	Mn2576	Mo2020	Na8183	Ni2316	P_1782	Pb2203	S_1820	Sb2068	Se1960	Si2881
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.16437	.00325	.21700	.00061	-.00109	251.31	.00125	.00768	-.00057	5.0353	.00436	.01875	.01012
Stddev	.01825	.00090	.00019	.00018	.00064	1.25	.00030	.00060	.00137	.0083	.00303	.00187	.00483
%RSD	11.105	27.764	.08790	28.804	58.920	.49839	23.606	7.8279	239.46	.16391	69.544	9.9820	47.745

#1	.17727	.00389	.21687	.00073	-.00155	250.42	.00104	.00726	.00040	5.0295	.00650	.02007	.00671
#2	.15146	.00261	.21714	.00049	-.00064	252.19	.00146	.00811	-.00154	5.0412	.00222	.01742	.01354

Check ?	None	None	None	None	None	Chk Pass	None	None	None	Chk Pass	None	None	None
Value													
Range													

Elem	Sn1899	Sr4077	Th2837	Ti3349	Tl1908	U_3701	V_2924	Zn2062	Zr3391
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.00367	.00179	4.9577	.02555	.00217	10.315	-.01508	-.00031	-.01019
Stddev	.00065	.00000	.0002	.00008	.00003	.006	.00015	.00058	.00046
%RSD	17.651	.16478	.00367	.29613	1.5592	.05446	.98088	189.07	4.5299

#1	.00322	.00180	4.9578	.02549	.00219	10.319	-.01518	-.00072	-.01052
#2	.00413	.00179	4.9575	.02560	.00214	10.311	-.01497	.00010	-.00987

Check ?	None	None	Chk Pass	None	None	Chk Pass	None	None	None
Value									
Range									

Int. Std.	Y_2243	Y_3600	Y_3774
Units	Cts/S	Cts/S	Cts/S
Avg	1475.6	30912.	6122.2
Stddev	4.7	59.	42.9
%RSD	.31859	.19103	.70089

#1	1478.9	30870.	6152.5
#2	1472.3	30953.	6091.8

Sample Name: ccv-3900195 Acquired: 5/23/2016 22:47:32 Type: QC
Method: 6500_026(v10) Mode: CONC Corr. Factor: 1.000000
User: kellyca Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	Ag3280	Al1670	As1890	B_2089	Ba4554	Be3130	Bi2230	Ca3179	Cd2288	Co2286	Cr2055	Cu3247
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.48944	.53201	1.0385	F .55104	.49937	.49610	.00192	4.8820	.52375	.51980	.50787	.50017
Stddev	.00031	.00030	.0020	.00291	.00160	.00087	.00089	.0017	.00155	.00113	.00050	.00231
%RSD	.06340	.05673	.18935	.52729	.32023	.17610	46.177	.03552	.29510	.21797	.09840	.46214

#1	.48966	.53222	1.0371	.54899	.49824	.49548	.00129	4.8808	.52265	.51900	.50752	.50180
#2	.48922	.53180	1.0399	.55310	.50050	.49672	.00255	4.8832	.52484	.52061	.50823	.49853

Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Fail	Chk Pass	Chk Pass	None	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Value				.50000								
Range				10.000%								

Elem	Fe2599	K_7664	Li6707	Mg2790	Mn2576	Mo2020	Na5895	Ni2316	P_1782	Pb2203	S_1820	Sb2068
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	2.4730	50.186	1.0338	19.726	.49203	.51353	5.2687	.51128	1.0334	1.0675	.00391	1.0201
Stddev	.0068	.131	.0074	.061	.00022	.00216	.0089	.00250	.0055	.0005	.00243	.0026
%RSD	.27359	.26046	.71910	.31067	.04516	.41972	.16906	.48811	.53472	.04634	62.225	.25354

#1	2.4778	50.093	1.0286	19.769	.49218	.51200	5.2624	.50951	1.0295	1.0672	.00563	1.0219
#2	2.4682	50.278	1.0391	19.682	.49187	.51505	5.2750	.51304	1.0373	1.0679	.00219	1.0182

Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	None	Chk Pass
Value												
Range												

Elem	Se1960	Si2881	Sn1899	Sr4077	Th2837	Ti3349	Ti1908	U_3701	V_2924	Zn2062	Zr3391
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	1.0608	4.9265	1.0130	.47794	.00804	.47177	1.0540	-.00041	.47512	.48180	.49687
Stddev	.0005	.0240	.0010	.00200	.00241	.00085	.0063	.03108	.00059	.00166	.00007
%RSD	.04359	.48732	.09676	.41884	30.004	.17949	.59344	7527.4	.12507	.34364	.01405

#1	1.0611	4.9095	1.0137	.47653	.00634	.47237	1.0496	.02156	.47554	.48297	.49682
#2	1.0605	4.9434	1.0123	.47936	.00975	.47117	1.0584	-.02239	.47470	.48063	.49692

Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	None	Chk Pass	Chk Pass	None	Chk Pass	Chk Pass	Chk Pass
Value											
Range											

Int. Std.	Y_2243	Y_3600	Y_3774
Units	Cts/S	Cts/S	Cts/S
Avg	1528.2	32048.	6156.2
Stddev	6.9	26.	29.7
%RSD	.45073	.08038	.48181

#1	1533.1	32030.	6177.2
#2	1523.4	32067.	6135.2

Sample Name: ccb Acquired: 5/23/2016 22:50:07 Type: QC
Method: 6500_026(v10) Mode: CONC Corr. Factor: 1.000000
User: kellyca Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	Ag3280	Al1670	As1890	B_2089	Ba4554	Be3130	Bi2230	Ca3179	Cd2288	Co2286	Cr2055	Cu3247
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.00032	.00050	.00041	.00130	.00021	.00008	.00489	-.00391	-.00021	-.00008	-.00037	-.00131
Stddev	.00016	.00027	.00582	.00011	.00015	.00002	.00163	.00169	.00026	.00037	.00000	.00013
%RSD	50.659	54.583	1421.3	8.6747	72.196	22.162	33.422	43.126	123.53	450.01	.63473	9.7029

#1	.00043	.00031	-.00370	.00122	.00032	.00009	.00373	-.00272	-.00003	.00018	-.00037	-.00122
#2	.00020	.00069	.00452	.00137	.00010	.00007	.00604	-.00510	-.00039	-.00034	-.00037	-.00140

Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	None	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit												
Low Limit												

Elem	Fe2599	K_7664	Li6707	Mg2790	Mn2576	Mo2020	Na5895	Ni2316	P_1782	Pb2203	S_1820	Sb2068
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.00100	.04143	.00006	-.00047	.00010	.00006	.01878	.00043	-.00054	.00065	-.00311	W .00431
Stddev	.00023	.03787	.00048	.00224	.00008	.00025	.00320	.00050	.00222	.00088	.00323	.00152
%RSD	22.882	91.397	813.33	479.86	78.757	404.40	17.051	115.89	409.73	136.56	103.74	35.406

#1	.00084	.06821	-.00028	-.00205	.00005	-.00011	.02104	.00079	-.00211	.00002	-.00083	.00323
#2	.00117	.01466	.00039	.00111	.00016	.00024	.01651	.00008	.00103	.00127	-.00540	.00539

Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	None	Chk Warn
High Limit												.00314
Low Limit												-.00314

Elem	Se1960	Si2881	Sn1899	Sr4077	Th2837	Ti3349	Ti1908	U_3701	V_2924	Zn2062	Zr3391
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	F .01042	.00394	-.00051	.00005	.00184	.00028	.00270	-.00590	.00010	.00061	.00093
Stddev	.00145	.00110	.00073	.00001	.00170	.00047	.00041	.02348	.00032	.00066	.00034
%RSD	13.921	27.836	144.77	18.551	92.585	167.68	15.033	397.77	327.64	107.00	36.942

#1	.01145	.00316	-.00103	.00005	.00304	.00061	.00299	-.02250	-.00013	.00015	.00117
#2	.00940	.00471	.00001	.00004	.00063	-.00005	.00241	.01070	.00032	.00108	.00069

Check ?	Chk Fail	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit	.00972										
Low Limit	-.00972										

Int. Std.	Y_2243	Y_3600	Y_3774
Units	Cts/S	Cts/S	Cts/S
Avg	1559.5	32780.	6095.8
Stddev	.3	4.	51.8
%RSD	.02031	.01083	.84953

#1	1559.7	32783.	6132.4
#2	1559.2	32778.	6059.2

Sample Name: ccvl-3907489 Acquired: 5/23/2016 22:52:54 Type: QC
Method: 6500_026(v10) Mode: CONC Corr. Factor: 1.000000
User: kellyca Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	Ag3280	Al1670	As1890	B_2089	Ba4554	Be3130	Bi2230	Ca3179	Cd2288	Co2286	Cr2055	Cu3247
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.00970	.10491	.01278	.10299	.01026	.00098	.11283	.19345	.00518	.01009	.01019	.01370
Stddev	.00056	.00061	.00217	.00034	.00003	.00004	.00421	.00032	.00003	.00015	.00022	.00026
%RSD	5.8251	.58194	16.994	.33087	.30982	4.4527	3.7325	.16612	.51168	1.4481	2.1766	1.9199

#1	.01010	.10534	.01432	.10323	.01024	.00095	.11581	.19368	.00516	.00998	.01003	.01352
#2	.00930	.10448	.01124	.10275	.01028	.00102	.10986	.19323	.00520	.01019	.01034	.01389

Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Value												
Range												

Elem	Fe2599	K_7664	Li6707	Mg2790	Mn2576	Mo2020	Na5895	Ni2316	P_1782	Pb2203	S_1820	Sb2068
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.10667	2.9944	.00921	.19279	.00976	.01949	F 1.3147	.04046	2.8407	.00952	-.00028	.02132
Stddev	.00080	.0273	.00005	.00067	.00001	.00016	.0156	.00078	.0013	.00017	.00062	.00067
%RSD	.74953	.91027	.50492	.34923	.13794	.83698	1.1889	1.9358	.04706	1.7485	224.76	3.1579

#1	.10724	2.9751	.00918	.19231	.00975	.01960	1.3037	.03990	2.8398	.00964	.00016	.02084
#2	.10611	3.0137	.00925	.19326	.00977	.01937	1.3258	.04101	2.8417	.00941	-.00072	.02179

Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Fail	Chk Pass	Chk Pass	Chk Pass	None	Chk Pass
Value							1.0000					
Range							30.000%					

Elem	Se1960	Si2881	Sn1899	Sr4077	Th2837	Ti3349	Ti1908	U_3701	V_2924	Zn2062	Zr3391
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	F .02090	.48351	.09924	.00948	.01687	.00959	.01759	.07495	.00918	.01890	.01518
Stddev	.00803	.00709	.00113	.00008	.00077	.00045	.00103	.00670	.00005	.00113	.00102
%RSD	38.432	1.4665	1.1353	.84651	4.5744	4.7080	5.8426	8.9438	.55739	5.9629	6.7136

#1	.02658	.47850	.09844	.00942	.01742	.00927	.01687	.07969	.00914	.01969	.01590
#2	.01522	.48853	.10004	.00954	.01633	.00991	.01832	.07021	.00922	.01810	.01446

Check ?	Chk Fail	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Value	.01500										
Range	30.000%										

Int. Std.	Y_2243	Y_3600	Y_3774
Units	Cts/S	Cts/S	Cts/S
Avg	1535.9	32657.	6066.5
Stddev	3.1	75.	38.6
%RSD	.20156	.23079	.63696

#1	1538.1	32604.	6093.8
#2	1533.7	32710.	6039.2

Sample Name: 280-83084-E-2-A Acquired: 5/23/2016 22:55:38 Type: Unk
Method: 6500_026(v10) Mode: CONC Corr. Factor: 1.000000
User: kellyca Custom ID1: Custom ID2: Custom ID3:
Comment: 325811 6010B

Elem	Ag3280	Al1670	As1890	B_2089	Ba4554	Be3130	Bi2230	Ca3179	Cd2288
Line	328.068 {103}	167.079 {502}	189.042 {478}	208.959 {461}	455.403 { 74}	313.042 {108}	223.061 {451}	317.933 {106}	228.802 {447}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.00050	.01003	-.00021	.03036	.04184	-.00001	.00044	29.277	.00031
Stddev	.00032	.00119	.00319	.00067	.00031	.00004	.00067	.082	.00018
%RSD	62.852	11.914	1521.1	2.2015	.74581	507.69	152.63	.28126	58.960

#1	.00073	.00918	.00205	.02988	.04162	.00002	-.00003	29.219	.00018
#2	.00028	.01087	-.00247	.03083	.04206	-.00003	.00091	29.335	.00044

Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Elem	Co2286	Cr2055	Cu3247	Fe2599	K_7664	Li6707	Mg2790	Mn2576	Mo2020
Line	228.616 {447}	205.560 {464}	324.754 {104}	259.940 {130}	766.490 { 44}	670.784 { 50}	279.079 {121}2	257.610 {131}	202.030 {467}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	-.00008	.01440	-.00017	.01758	.92291	.00090	3.7038	.00078	.00118
Stddev	.00002	.00006	.00003	.00092	.00808	.00018	.0001	.00001	.00027
%RSD	28.673	.41126	18.770	5.2167	.87586	20.533	.00138	1.3753	22.880

#1	-.00006	.01436	-.00019	.01823	.91720	.00077	3.7038	.00077	.00137
#2	-.00010	.01444	-.00015	.01693	.92863	.00103	3.7039	.00078	.00099

Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Elem	Na8183	Ni2316	P_1782	Pb2203	S_1820	Sb2068	Se1960	Si2881	Sn1899
Line	818.326 { 41}	231.604 {446}	178.284 {489}	220.353 {453}	182.034 {485}	206.833 {463}	196.090 {472}	288.158 {117}	189.989 {477}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	20.800	.00131	.04255	-.00029	4.5446	.00149	.00764	13.459	-.00012
Stddev	.060	.00040	.00175	.00064	.0053	.00016	.00821	.033	.00018
%RSD	.28746	30.686	4.1195	217.37	.11641	10.406	107.48	.24859	156.53

#1	20.758	.00102	.04379	.00016	4.5409	.00160	.00183	13.436	-.00025
#2	20.842	.00159	.04131	-.00074	4.5484	.00138	.01345	13.483	.00001

Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Elem	Sr4077	Th2837	Ti3349	Ti1908	U_3701	V_2924	Zn2062	Zr3391	
Line	407.771 { 83}	283.730 {119}	334.904 {101}	190.856 {477}	370.152 { 91}	292.402 {115}	206.200 {163}	339.198 { 99}	
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	
Avg	.35753	.00080	.00037	-.00026	.01058	.02056	.01309	.00086	
Stddev	.00148	.00163	.00024	.00153	.01834	.00059	.00054	.00003	
%RSD	.41288	202.32	64.468	593.52	173.34	2.8586	4.0906	3.3725	

#1	.35648	-.00035	.00020	-.00134	.02355	.02015	.01271	.00088	
#2	.35857	.00196	.00053	.00083	-.00239	.02098	.01347	.00084	

Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	
High Limit									
Low Limit									

Int. Std.	Y_2243	Y_3600	Y_3774						
Line	224.306 {450}	360.073 { 94}	377.433 { 89}						
Units	Cts/S	Cts/S	Cts/S						
Avg	1521.9	32004.	6066.6						
Stddev	4.1	81.	18.7						
%RSD	.26666	.25300	.30798						

#1	1524.8	32061.	6079.8						
#2	1519.1	31947.	6053.4						

Sample Name: 280-83087-F-1-D Acquired: 5/23/2016 22:58:22 Type: Unk
Method: 6500_026(v10) Mode: CONC Corr. Factor: 1.000000
User: kellyca Custom ID1: Custom ID2: Custom ID3:
Comment: 325811 6010B

Elem	Ag3280	Al1670	As1890	B_2089	Ba4554	Be3130	Bi2230	Ca3179	Cd2288
Line	328.068 {103}	167.079 {502}	189.042 {478}	208.959 {461}	455.403 { 74}	313.042 {108}	223.061 {451}	317.933 {106}	228.802 {447}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.00083	.35995	-.00377	.21460	.02087	.00002	.00163	W 552.60	.00010
Stddev	.00076	.00061	.00111	.00178	.00005	.00009	.00360	2.01	.00003
%RSD	90.797	.16906	29.402	.83126	.22695	444.99	221.56	.36413	29.181

#1	.00030	.35952	-.00455	.21334	.02083	-.00004	-.00092	551.18	.00008
#2	.00137	.36038	-.00298	.21586	.02090	.00008	.00417	554.02	.00012

Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Warn	Chk Pass
High Limit								500.00	
Low Limit								-.05000	

Elem	Co2286	Cr2055	Cu3247	Fe2599	K_7664	Li6707	Mg2790	Mn2576	Mo2020
Line	228.616 {447}	205.560 {464}	324.754 {104}	259.940 {130}	766.490 { 44}	670.784 { 50}	279.079 {121}2	257.610 {131}	202.030 {467}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.01085	.00061	.00120	3.7345	2.0976	.01813	234.99	6.7816	-.00027
Stddev	.00055	.00032	.00096	.0060	.0029	.00140	.06	.0075	.00004
%RSD	5.0859	52.892	80.001	.16094	.13601	7.7234	.02593	.11118	15.633

#1	.01046	.00083	.00052	3.7302	2.0956	.01912	234.94	6.7869	-.00024
#2	.01124	.00038	.00188	3.7387	2.0996	.01714	235.03	6.7763	-.00030

Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Elem	Na8183	Ni2316	P_1782	Pb2203	S_1820	Sb2068	Se1960	Si2881	Sn1899
Line	818.326 { 41}	231.604 {446}	178.284 {489}	220.353 {453}	182.034 {485}	206.833 {463}	196.090 {472}	288.158 {117}	189.989 {477}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	26.898	.01128	.03531	.00192	F 587.33	.00025	.01254	9.0552	.00060
Stddev	.196	.00039	.00011	.00205	2.65	.00047	.00301	.0284	.00086
%RSD	.72926	3.4845	.31411	106.82	.45144	188.96	23.993	.31409	142.80

#1	27.036	.01100	.03539	.00337	585.45	.00058	.01466	9.0754	.00121
#2	26.759	.01156	.03523	.00047	589.20	-.00008	.01041	9.0351	-.00001

Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Fail	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit					200.00				
Low Limit					-.02000				

Elem	Sr4077	Th2837	Ti3349	Ti1908	U_3701	V_2924	Zn2062	Zr3391	
Line	407.771 { 83}	283.730 {119}	334.904 {101}	190.856 {477}	370.152 { 91}	292.402 {115}	206.200 {163}	339.198 { 99}	
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	
Avg	.84507	.00021	.00885	.00060	-.02965	.00083	.00274	.00088	
Stddev	.00022	.00007	.00025	.00101	.00925	.00064	.00041	.00001	
%RSD	.02589	34.682	2.8322	168.73	31.182	76.857	14.910	1.1059	

#1	.84492	.00016	.00868	-.00012	-.03619	.00129	.00303	.00088	
#2	.84523	.00026	.00903	.00132	-.02311	.00038	.00245	.00089	

Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	
High Limit									
Low Limit									

Int. Std.	Y_2243	Y_3600	Y_3774						
Line	224.306 {450}	360.073 { 94}	377.433 { 89}						
Units	Cts/S	Cts/S	Cts/S						
Avg	1381.8	28601.	5786.7						
Stddev	17.5	29.	29.7						
%RSD	1.2693	.10207	.51334						

#1	1394.2	28621.	5807.7						
#2	1369.4	28580.	5765.7						

Sample Name: 280-83087-F-1-Dsd@5 Acquired: 5/23/2016 23:01:32 Type: Unk
Method: 6500_026(v10) Mode: CONC Corr. Factor: 1.000000
User: kellyca Custom ID1: Custom ID2: Custom ID3:
Comment: 325811 6010B

Elem	Ag3280	Al1670	As1890	B_2089	Ba4554	Be3130	Bi2230	Ca3179	Cd2288
Line	328.068 {103}	167.079 {502}	189.042 {478}	208.959 {461}	455.403 { 74}	313.042 {108}	223.061 {451}	317.933 {106}	228.802 {447}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	-.00002	.08464	.00407	.04426	.00430	.00002	.00482	114.66	.00017
Stddev	.00016	.00148	.00226	.00005	.00006	.00001	.00038	.69	.00015
%RSD	764.57	1.7445	55.467	.11177	1.3786	43.054	7.8687	.60108	92.217

#1	.00009	.08360	.00248	.04429	.00434	.00003	.00455	114.17	.00006
#2	-.00014	.08569	.00567	.04422	.00426	.00002	.00508	115.15	.00028

Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Elem	Co2286	Cr2055	Cu3247	Fe2599	K_7664	Li6707	Mg2790	Mn2576	Mo2020
Line	228.616 {447}	205.560 {464}	324.754 {104}	259.940 {130}	766.490 { 44}	670.784 { 50}	279.079 {121}2	257.610 {131}	202.030 {467}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.00200	.00003	-.00073	.80232	.41883	.00262	47.289	1.4171	-.00070
Stddev	.00010	.00036	.00007	.00759	.02199	.00024	.087	.0034	.00052
%RSD	5.2264	1055.0	9.9979	.94557	5.2512	9.3119	.18337	.24228	74.317

#1	.00207	-.00022	-.00068	.79696	.40328	.00245	47.350	1.4195	-.00107
#2	.00193	.00029	-.00078	.80769	.43438	.00280	47.228	1.4147	-.00033

Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Elem	Na5895	Ni2316	P_1782	Pb2203	S_1820	Sb2068	Se1960	Si2881	Sn1899
Line	589.592 { 57}	231.604 {446}	178.284 {489}	220.353 {453}	182.034 {485}	206.833 {463}	196.090 {472}	288.158 {117}	189.989 {477}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	5.2768	.00238	.00932	-.00092	114.52	.00314	.00327	1.7887	-.00029
Stddev	.0042	.00014	.00230	.00116	.29	.00001	.00464	.0134	.00023
%RSD	.07906	5.9521	24.706	125.52	.25595	.40827	141.85	.74966	78.359

#1	5.2738	.00228	.01095	-.00174	114.32	.00314	.00656	1.7982	-.00013
#2	5.2797	.00248	.00770	-.00010	114.73	.00315	-.00001	1.7792	-.00045

Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Elem	Sr4077	Th2837	Ti3349	Ti1908	U_3701	V_2924	Zn2062	Zr3391
Line	407.771 { 83}	283.730 {119}	334.904 {101}	190.856 {477}	370.152 { 91}	292.402 {115}	206.200 {163}	339.198 { 99}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.17087	.00185	.00200	.00050	-.00047	.00028	.00245	.00005
Stddev	.00052	.00037	.00005	.00068	.00362	.00113	.00214	.00011
%RSD	.30529	20.183	2.4635	136.16	772.40	407.21	87.254	216.69

#1	.17051	.00159	.00204	.00098	-.00303	.00108	.00396	.00013
#2	.17124	.00212	.00197	.00002	.00209	-.00052	.00094	-.00003

Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit								
Low Limit								

Int. Std.	Y_2243	Y_3600	Y_3774
Line	224.306 {450}	360.073 { 94}	377.433 { 89}
Units	Cts/S	Cts/S	Cts/S
Avg	1473.7	31136.	5929.2
Stddev	2.5	7.	17.9
%RSD	.17196	.02208	.30218

#1	1475.5	31131.	5941.9
#2	1471.9	31141.	5916.5

Sample Name: 280-83087-F-1-E MS Acquired: 5/23/2016 23:04:15 Type: Unk
Method: 6500_026(v10) Mode: CONC Corr. Factor: 1.000000
User: kellyca Custom ID1: Custom ID2: Custom ID3:
Comment: 325811 6010B

Elem	Ag3280	Al1670	As1890	B_2089	Ba4554	Be3130	Bi2230	Ca3179	Cd2288
Line	328.068 {103}	167.079 {502}	189.042 {478}	208.959 {461}	455.403 { 74}	313.042 {108}	223.061 {451}	317.933 {106}	228.802 {447}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.05367	2.5266	1.1324	1.3141	2.0834	.04945	2.3805	W 594.04	.11077
Stddev	.00019	.0053	.0069	.0012	.0059	.00038	.0115	.79	.00072
%RSD	.35698	.21024	.61093	.09097	.28489	.77017	.48218	.13263	.64927

#1	.05380	2.5304	1.1275	1.3150	2.0792	.04919	2.3886	593.48	.11128
#2	.05353	2.5228	1.1373	1.3133	2.0876	.04972	2.3724	594.59	.11026

Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Warn	Chk Pass
High Limit								500.00	
Low Limit								-.05000	

Elem	Co2286	Cr2055	Cu3247	Fe2599	K_7664	Li6707	Mg2790	Mn2576	Mo2020
Line	228.616 {447}	205.560 {464}	324.754 {104}	259.940 {130}	766.490 { 44}	670.784 { 50}	279.079 {121}2	257.610 {131}	202.030 {467}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.50883	W .20593	.27390	4.6861	57.805	1.1621	281.04	7.1206	1.0707
Stddev	.00078	.00006	.00024	.0082	.152	.0045	.37	.0048	.0040
%RSD	.15387	.03055	.08788	.17558	.26368	.38962	.13233	.06779	.37554

#1	.50938	.20598	.27373	4.6919	57.697	1.1589	280.78	7.1240	1.0736
#2	.50828	.20589	.27408	4.6802	57.913	1.1653	281.31	7.1172	1.0679

Check ?	Chk Pass	Chk Warn	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit		.10000							
Low Limit		-.01000							

Elem	Na8183	Ni2316	P_1782	Pb2203	S_1820	Sb2068	Se1960	Si2881	Sn1899
Line	818.326 { 41}	231.604 {446}	178.284 {489}	220.353 {453}	182.034 {485}	206.833 {463}	196.090 {472}	288.158 {117}	189.989 {477}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	82.046	.49515	11.532	.50288	F 595.22	.55819	2.3624	19.648	1.9610
Stddev	.382	.00053	.041	.00702	1.64	.00419	.0034	.130	.0032
%RSD	.46505	.10690	.35489	1.3959	.27528	.75076	.14425	.66266	.16492

#1	81.777	.49478	11.561	.50784	596.38	.55522	2.3600	19.556	1.9587
#2	82.316	.49553	11.503	.49792	594.06	.56115	2.3648	19.740	1.9633

Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Fail	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit					200.00				
Low Limit					-.02000				

Elem	Sr4077	Th2837	Ti3349	Ti1908	U_3701	V_2924	Zn2062	Zr3391
Line	407.771 { 83}	283.730 {119}	334.904 {101}	190.856 {477}	370.152 { 91}	292.402 {115}	206.200 {163}	339.198 { 99}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	1.8156	1.0277	.96570	1.8526	2.1496	.47988	.45270	.49063
Stddev	.0079	.0022	.00063	.0011	.0041	.00028	.00012	.00125
%RSD	.43297	.21233	.06518	.06055	.18905	.05932	.02560	.25443

#1	1.8101	1.0262	.96525	1.8534	2.1467	.48008	.45261	.48975
#2	1.8212	1.0293	.96614	1.8519	2.1525	.47968	.45278	.49151

Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit								
Low Limit								

Int. Std.	Y_2243	Y_3600	Y_3774
Line	224.306 {450}	360.073 { 94}	377.433 { 89}
Units	Cts/S	Cts/S	Cts/S
Avg	1328.0	28290.	5772.8
Stddev	.0	99.	13.1
%RSD	.00229	.35015	.22680

#1	1328.1	28360.	5782.1
#2	1328.0	28220.	5763.6

Sample Name: 280-83087-F-1-F MSD Acquired: 5/23/2016 23:07:15 Type: Unk

Method: 6500_026(v10) Mode: CONC Corr. Factor: 1.000000

User: kellyca Custom ID1: Custom ID2: Custom ID3:

Comment: 325811 6010B

Elem	Ag3280	Al1670	As1890	B_2089	Ba4554	Be3130	Bi2230	Ca3179	Cd2288
Line	328.068 {103}	167.079 {502}	189.042 {478}	208.959 {461}	455.403 { 74}	313.042 {108}	223.061 {451}	317.933 {106}	228.802 {447}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.05278	2.5057	1.1278	1.3058	2.0691	.04916	2.3544	W 595.93	.11027
Stddev	.00082	.0110	.0096	.0023	.0117	.00035	.0004	.21	.00034
%RSD	1.5477	.43757	.85148	.17854	.56459	.71229	.01479	.03519	.31228

#1	.05221	2.5135	1.1210	1.3041	2.0609	.04891	2.3547	596.08	.11052
#2	.05336	2.4980	1.1346	1.3074	2.0774	.04940	2.3542	595.78	.11003

Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Warn	Chk Pass
High Limit								500.00	
Low Limit								-.05000	

Elem	Co2286	Cr2055	Cu3247	Fe2599	K_7664	Li6707	Mg2790	Mn2576	Mo2020
Line	228.616 {447}	205.560 {464}	324.754 {104}	259.940 {130}	766.490 { 44}	670.784 { 50}	279.079 {121}2	257.610 {131}	202.030 {467}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.50899	W .20580	.27006	4.6734	57.610	1.1523	279.28	7.1001	1.0707
Stddev	.00034	.00043	.00123	.0100	.283	.0098	.75	.0141	.0038
%RSD	.06686	.20735	.45663	.21478	.49054	.84698	.26692	.19915	.35384

#1	.50923	.20611	.27093	4.6663	57.410	1.1454	279.80	7.1101	1.0734
#2	.50875	.20550	.26918	4.6805	57.810	1.1592	278.75	7.0901	1.0681

Check ?	Chk Pass	Chk Warn	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit		.10000							
Low Limit		-.01000							

Elem	Na8183	Ni2316	P_1782	Pb2203	S_1820	Sb2068	Se1960	Si2881	Sn1899
Line	818.326 { 41}	231.604 {446}	178.284 {489}	220.353 {453}	182.034 {485}	206.833 {463}	196.090 {472}	288.158 {117}	189.989 {477}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	82.156	.49477	11.481	.50286	F 588.60	.54742	2.3354	19.617	1.9566
Stddev	.613	.00143	.002	.00102	.38	.00486	.0038	.106	.0001
%RSD	.74619	.28965	.01587	.20258	.06431	.88820	.16164	.53911	.00295

#1	81.722	.49579	11.482	.50358	588.86	.54398	2.3327	19.542	1.9566
#2	82.589	.49376	11.479	.50214	588.33	.55086	2.3380	19.692	1.9565

Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Fail	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit					200.00				
Low Limit					-.02000				

Elem	Sr4077	Th2837	Ti3349	Ti1908	U_3701	V_2924	Zn2062	Zr3391
Line	407.771 { 83}	283.730 {119}	334.904 {101}	190.856 {477}	370.152 { 91}	292.402 {115}	206.200 {163}	339.198 { 99}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	1.8070	1.0244	.96262	1.8383	2.1537	.47882	.45564	.49255
Stddev	.0077	.0004	.00401	.0016	.0187	.00252	.00433	.00224
%RSD	.42420	.04369	.41618	.08750	.86759	.52709	.94946	.45526

#1	1.8015	1.0241	.96545	1.8372	2.1404	.48061	.45870	.49096
#2	1.8124	1.0248	.95978	1.8394	2.1669	.47704	.45258	.49413

Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit								
Low Limit								

Int. Std.	Y_2243	Y_3600	Y_3774
Line	224.306 {450}	360.073 { 94}	377.433 { 89}
Units	Cts/S	Cts/S	Cts/S
Avg	1328.8	28209.	5684.4
Stddev	.8	50.	26.7
%RSD	.05684	.17548	.46918

#1	1328.2	28174.	5703.3
#2	1329.3	28244.	5665.6

Sample Name: 280-83087-F-2-B Acquired: 5/23/2016 23:10:16 Type: Unk
Method: 6500_026(v10) Mode: CONC Corr. Factor: 1.000000
User: kellyca Custom ID1: Custom ID2: Custom ID3:
Comment: 325811 6010B

Elem	Ag3280	Al3092	As1890	B_2089	Ba4554	Be3130	Bi2230	Ca3179	Cd2288
Line	328.068 {103}	309.271 {109}	189.042 {478}	208.959 {461}	455.403 { 74}	313.042 {108}	223.061 {451}	317.933 {106}	228.802 {447}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.00045	5.1729	.01086	1.4848	.05511	.00048	.00418	238.49	.00039
Stddev	.00061	.0153	.00145	.0063	.00049	.00001	.00064	.89	.00010
%RSD	134.62	.29608	13.328	.42321	.89617	1.7008	15.269	.37450	24.576

#1	.00088	5.1620	.01188	1.4803	.05476	.00047	.00373	237.86	.00032
#2	.00002	5.1837	.00983	1.4892	.05546	.00048	.00463	239.12	.00046

Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Elem	Co2286	Cr2055	Cu3247	Fe2599	K_7664	Li6707	Mg2790	Mn2576	Mo2020
Line	228.616 {447}	205.560 {464}	324.754 {104}	259.940 {130}	766.490 { 44}	670.784 { 50}	279.079 {121}2	257.610 {131}	202.030 {467}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.00874	.00925	.00762	10.620	7.8367	.06770	122.90	2.2567	.00094
Stddev	.00012	.00021	.00050	.036	.0147	.00047	.24	.0048	.00004
%RSD	1.3916	2.3147	6.5485	.33617	.18708	.69297	.19535	.21342	4.0465

#1	.00882	.00910	.00797	10.595	7.8264	.06737	122.73	2.2533	.00097
#2	.00865	.00940	.00726	10.645	7.8471	.06803	123.07	2.2601	.00091

Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Elem	Na8183	Ni2316	P_1782	Pb2203	S_1820	Sb2068	Se1960	Si2881	Sn1899
Line	818.326 { 41}	231.604 {446}	178.284 {489}	220.353 {453}	182.034 {485}	206.833 {463}	196.090 {472}	288.158 {117}	189.989 {477}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	139.51	.01588	.47996	.00822	F 263.05	.00057	.00589	14.577	-.00132
Stddev	.71	.00002	.00578	.00081	.66	.00206	.00477	.040	.00017
%RSD	.50585	.13760	1.2043	9.7971	.25237	360.00	80.990	.27706	12.606

#1	139.01	.01587	.47587	.00879	262.58	-.00089	.00252	14.548	-.00120
#2	140.01	.01590	.48404	.00765	263.52	.00203	.00926	14.606	-.00144

Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Fail	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit					200.00				
Low Limit					-.02000				

Elem	Sr4077	Th2837	Ti3349	Ti1908	U_3701	V_2924	Zn2062	Zr3391	
Line	407.771 { 83}	283.730 {119}	334.904 {101}	190.856 {477}	370.152 { 91}	292.402 {115}	206.200 {163}	339.198 { 99}	
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	
Avg	1.6810	.00527	.07281	.00358	-.00588	.01149	.02253	.00261	
Stddev	.0062	.00034	.00054	.00278	.01747	.00009	.00078	.00008	
%RSD	.36744	6.4905	.74002	77.676	296.82	.74717	3.4613	3.0833	

#1	1.6766	.00503	.07319	.00555	.00647	.01143	.02308	.00255	
#2	1.6853	.00552	.07242	.00161	-.01824	.01155	.02197	.00267	

Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	
High Limit									
Low Limit									

Int. Std.	Y_2243	Y_3600	Y_3774						
Line	224.306 {450}	360.073 { 94}	377.433 { 89}						
Units	Cts/S	Cts/S	Cts/S						
Avg	1408.6	29834.	5880.3						
Stddev	2.3	104.	14.4						
%RSD	.16301	.34762	.24417						

#1	1410.3	29907.	5890.4						
#2	1407.0	29761.	5870.1						

Sample Name: 280-83087-F-3-B Acquired: 5/23/2016 23:12:57 Type: Unk
Method: 6500_026(v10) Mode: CONC Corr. Factor: 1.000000
User: kellyca Custom ID1: Custom ID2: Custom ID3:
Comment: 325811 6010B

Elem	Ag3280	Al1670	As1890	B_2089	Ba4554	Be3130	Bi2230	Ca3179	Cd2288
Line	328.068 {103}	167.079 {502}	189.042 {478}	208.959 {461}	455.403 { 74}	313.042 {108}	223.061 {451}	317.933 {106}	228.802 {447}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.00043	.42130	.00415	.09030	.05927	.00003	.00169	142.00	.00014
Stddev	.00021	.00117	.00504	.00085	.00030	.00007	.00063	.36	.00029
%RSD	48.337	.27724	121.62	.94322	.50894	207.58	37.437	.25362	205.08

#1	.00029	.42213	.00771	.09090	.05906	-.00001	.00124	141.75	-.00006
#2	.00058	.42047	.00058	.08970	.05949	.00008	.00214	142.26	.00034

Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Elem	Co2286	Cr2055	Cu3247	Fe2599	K_7664	Li6707	Mg2790	Mn2576	Mo2020
Line	228.616 {447}	205.560 {464}	324.754 {104}	259.940 {130}	766.490 { 44}	670.784 { 50}	279.079 {121}2	257.610 {131}	202.030 {467}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.00017	.00237	.01475	.68422	9.4716	.00985	66.431	.04313	.00488
Stddev	.00013	.00037	.00026	.01280	.0493	.00022	.285	.00013	.00067
%RSD	80.051	15.457	1.7800	1.8706	.52001	2.1962	.42923	.30395	13.790

#1	.00007	.00211	.01456	.67517	9.4367	.00970	66.229	.04304	.00441
#2	.00026	.00262	.01493	.69327	9.5064	.01000	66.633	.04323	.00536

Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Elem	Na5895	Na8183	Ni2316	P_1782	Pb2203	S_1820	Sb2068	Se1960	Si2881
Line	589.592 { 57}	818.326 { 41}	231.604 {446}	178.284 {489}	220.353 {453}	182.034 {485}	206.833 {463}	196.090 {472}	288.158 {117}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	F 10.356	10.498	.00558	.26341	.00099	154.97	-.00053	.00653	4.8979
Stddev	.056	.176	.00081	.00530	.00139	.44	.00205	.00161	.0070
%RSD	.54295	1.6811	14.524	2.0107	140.59	.28703	386.50	24.699	.14221

#1	10.316	10.373	.00615	.26715	.00001	155.29	-.00198	.00768	4.9029
#2	10.396	10.622	.00500	.25966	.00198	154.66	.00092	.00539	4.8930

Check ?	Chk Fail	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit	10.000								
Low Limit	-1.0000								

Elem	Sn1899	Sr4077	Th2837	Ti3349	Ti1908	U_3701	V_2924	Zn2062	Zr3391
Line	189.989 {477}	407.771 { 83}	283.730 {119}	334.904 {101}	190.856 {477}	370.152 { 91}	292.402 {115}	206.200 {163}	339.198 { 99}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.00002	.30372	.00170	.00701	.00298	.01139	.00232	.00298	.00047
Stddev	.00056	.00163	.00109	.00046	.00083	.01531	.00052	.00042	.00007
%RSD	2813.1	.53668	63.956	6.5726	27.874	134.39	22.501	14.048	15.346

#1	-.00038	.30257	.00093	.00734	.00240	.02221	.00269	.00328	.00052
#2	.00042	.30488	.00247	.00669	.00357	.00057	.00195	.00268	.00042

Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Int. Std.	Y_2243	Y_3600	Y_3774
Line	224.306 {450}	360.073 { 94}	377.433 { 89}
Units	Cts/S	Cts/S	Cts/S
Avg	1447.6	30763.	5998.3
Stddev	2.9	115.	6.8
%RSD	.19928	.37377	.11406

#1	1445.6	30844.	6003.1
#2	1449.7	30682.	5993.4

Sample Name: 280-83087-F-4-B Acquired: 5/23/2016 23:15:40 Type: Unk
Method: 6500_026(v10) Mode: CONC Corr. Factor: 1.000000
User: kellyca Custom ID1: Custom ID2: Custom ID3:
Comment: 325811 6010B

Elem	Ag3280	Al1670	As1890	B_2089	Ba4554	Be3130	Bi2230	Ca3179	Cd2288
Line	328.068 {103}	167.079 {502}	189.042 {478}	208.959 {461}	455.403 { 74}	313.042 {108}	223.061 {451}	317.933 {106}	228.802 {447}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.00087	1.2552	.00009	.22531	.16455	.00007	.00304	256.05	.00036
Stddev	.00012	.0072	.00460	.00122	.00033	.00000	.00120	.89	.00008
%RSD	14.128	.57439	5222.3	.54053	.20054	6.8986	39.387	.34784	22.391

#1	.00095	1.2603	.00334	.22617	.16432	.00007	.00389	255.42	.00042
#2	.00078	1.2501	-.00316	.22445	.16478	.00007	.00219	256.68	.00030

Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Elem	Co2286	Cr2055	Cu3247	Fe2599	K_7664	Li6707	Mg2790	Mn2576	Mo2020
Line	228.616 {447}	205.560 {464}	324.754 {104}	259.940 {130}	766.490 { 44}	670.784 { 50}	279.079 {121}2	257.610 {131}	202.030 {467}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.00104	.00422	.00217	3.2435	4.3642	.02247	178.72	2.3806	-.00020
Stddev	.00003	.00023	.00007	.0107	.0104	.00009	.11	.0054	.00049
%RSD	2.7172	5.4926	3.4587	.33084	.23714	.39984	.06067	.22547	247.05

#1	.00106	.00405	.00222	3.2359	4.3715	.02240	178.79	2.3844	.00015
#2	.00102	.00438	.00211	3.2511	4.3569	.02253	178.64	2.3768	-.00055

Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Elem	Na8183	Ni2316	P_1782	Pb2203	S_1820	Sb2068	Se1960	Si2881	Sn1899
Line	818.326 { 41}	231.604 {446}	178.284 {489}	220.353 {453}	182.034 {485}	206.833 {463}	196.090 {472}	288.158 {117}	189.989 {477}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	36.444	.00497	.31529	.00248	100.41	.00176	.01309	13.395	.00058
Stddev	.051	.00045	.00579	.00249	.32	.00093	.00203	.040	.00162
%RSD	.13926	8.9831	1.8349	100.45	.31483	52.840	15.491	.29700	278.72

#1	36.408	.00465	.31938	.00072	100.63	.00241	.01166	13.366	-.00056
#2	36.480	.00529	.31120	.00424	100.19	.00110	.01452	13.423	.00172

Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Elem	Sr4077	Th2837	Ti3349	Ti1908	U_3701	V_2924	Zn2062	Zr3391
Line	407.771 { 83}	283.730 {119}	334.904 {101}	190.856 {477}	370.152 { 91}	292.402 {115}	206.200 {163}	339.198 { 99}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.56210	.00043	.02023	.00129	.01367	.00292	.00362	.00301
Stddev	.00039	.00233	.00012	.00142	.01669	.00059	.00087	.00068
%RSD	.06922	545.63	.60582	110.44	122.09	20.035	24.110	22.753

#1	.56183	-.00122	.02032	.00028	.02548	.00333	.00424	.00349
#2	.56238	.00208	.02014	.00229	.00187	.00251	.00300	.00253

Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit								
Low Limit								

Int. Std.	Y_2243	Y_3600	Y_3774
Line	224.306 {450}	360.073 { 94}	377.433 { 89}
Units	Cts/S	Cts/S	Cts/S
Avg	1386.2	29500.	5886.8
Stddev	2.6	39.	18.9
%RSD	.18921	.13154	.32029

#1	1384.3	29528.	5900.1
#2	1388.0	29473.	5873.4

Sample Name: ccvh-3900196 Acquired: 5/23/2016 23:18:23 Type: QC
Method: 6500_026(v10) Mode: CONC Corr. Factor: 1.000000
User: kellyca Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	Ag3280	Al3092	As1890	B_2089	Ba4554	Be3130	Bi2230	Ca3179	Cd2288	Co2286	Cr2055	Cu3247	Fe2714
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.00086	47.536	.00047	.00458	.00178	.00136	1.0577	-.01055	.00056	.00493	.00113	.00661	47.636
Stddev	.00097	.232	.00028	.00110	.00003	.00003	.0002	.00286	.00016	.00003	.00005	.00057	.274
%RSD	112.67	.48909	58.794	23.943	1.8361	2.2787	.01847	27.095	29.133	.68960	4.5853	8.6036	.57583

#1	.00155	47.371	.00027	.00380	.00180	.00134	1.0578	-.00852	.00044	.00490	.00110	.00621	47.442
#2	.00018	47.700	.00066	.00535	.00176	.00138	1.0575	-.01257	.00067	.00495	.00117	.00701	47.830

Check ?	None	Chk Pass	None	None	None	None	Chk Pass	None	None	None	None	None	Chk Pass
Value													
Range													

Elem	K_7664	Li6707	Mg2790	Mn2576	Mo2020	Na8183	Ni2316	P_1782	Pb2203	S_1820	Sb2068	Se1960	Si2881
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.15469	.00363	.23055	.00083	-.00132	251.76	.00116	.00971	.00258	5.0189	.00588	.01815	.00287
Stddev	.00913	.00048	.00136	.00002	.00023	.77	.00044	.00089	.00062	.0020	.00046	.00065	.00332
%RSD	5.8992	13.287	.58830	2.9602	17.813	.30470	37.905	9.1228	24.059	.04063	7.7918	3.5980	115.73

#1	.14824	.00397	.23151	.00081	-.00115	251.22	.00147	.00909	.00214	5.0174	.00555	.01769	.00521
#2	.16115	.00329	.22959	.00085	-.00148	252.30	.00085	.01034	.00301	5.0203	.00620	.01861	.00052

Check ?	None	None	None	None	None	Chk Pass	None	None	None	Chk Pass	None	None	None
Value													
Range													

Elem	Sn1899	Sr4077	Th2837	Ti3349	Tl1908	U_3701	V_2924	Zn2062	Zr3391
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.00522	.00185	4.9795	.02589	.00050	10.261	-.01476	.00010	-.01630
Stddev	.00108	.00003	.0033	.00002	.00077	.029	.00014	.00055	.00045
%RSD	20.778	1.5080	.06569	.09114	153.16	.28108	.93412	537.46	2.7399

#1	.00599	.00187	4.9772	.02591	.00105	10.282	-.01486	.00049	-.01599
#2	.00445	.00183	4.9819	.02588	-.00004	10.241	-.01466	-.00029	-.01662

Check ?	None	None	Chk Pass	None	None	Chk Pass	None	None	None
Value									
Range									

Int. Std.	Y_2243	Y_3600	Y_3774
Units	Cts/S	Cts/S	Cts/S
Avg	1481.5	30788.	5921.5
Stddev	.2	56.	30.2
%RSD	.01305	.18185	.50949

#1	1481.6	30748.	5942.9
#2	1481.3	30827.	5900.2

Sample Name: ccv-3900195 Acquired: 5/23/2016 23:21:12 Type: QC
Method: 6500_026(v10) Mode: CONC Corr. Factor: 1.000000
User: kellyca Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	Ag3280	Al1670	As1890	B_2089	Ba4554	Be3130	Bi2230	Ca3179	Cd2288	Co2286	Cr2055	Cu3247
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.48459	.53091	1.0224	F .55046	.49325	.49523	-.00045	4.8989	.52657	.51901	.50696	.49316
Stddev	.00216	.00862	.0083	.00180	.00370	.00160	.00134	.0120	.00284	.00161	.00189	.00168
%RSD	.44508	1.6243	.81112	.32701	.75002	.32387	299.35	.24388	.54013	.30982	.37274	.34120

#1	.48611	.53701	1.0165	.54918	.49063	.49409	.00050	4.8905	.52455	.51788	.50562	.49435
#2	.48306	.52481	1.0282	.55173	.49586	.49636	-.00140	4.9074	.52858	.52015	.50830	.49197

Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Fail	Chk Pass	Chk Pass	None	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Value				.50000								
Range				10.000%								

Elem	Fe2599	K_7664	Li6707	Mg2790	Mn2576	Mo2020	Na5895	Ni2316	P_1782	Pb2203	S_1820	Sb2068
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	2.4384	49.968	1.0331	19.511	.48827	.51278	5.1620	.50680	1.0309	1.0613	.03927	1.0116
Stddev	.0117	.381	.0099	.073	.00174	.00242	.0354	.00280	.0061	.0091	.03488	.0009
%RSD	.47880	.76314	.96185	.37363	.35552	.47142	.68659	.55259	.59271	.86050	88.824	.08602

#1	2.4301	49.698	1.0261	19.562	.48950	.51107	5.1370	.50482	1.0352	1.0549	.06394	1.0122
#2	2.4467	50.237	1.0401	19.459	.48704	.51449	5.1871	.50878	1.0266	1.0678	.01461	1.0110

Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	None	Chk Pass
Value												
Range												

Elem	Se1960	Si2881	Sn1899	Sr4077	Th2837	Ti3349	Ti1908	U_3701	V_2924	Zn2062	Zr3391
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	1.0478	4.9181	1.0063	.47175	.00664	.46477	1.0500	.01925	.46675	.48101	.49053
Stddev	.0065	.0232	.0060	.00328	.00013	.00100	.0004	.01523	.00080	.00112	.00255
%RSD	.62376	.47094	.59209	.69504	2.0044	.21585	.04001	79.116	.17195	.23254	.51893

#1	1.0431	4.9018	1.0021	.46943	.00674	.46548	1.0503	.00848	.46732	.48180	.48873
#2	1.0524	4.9345	1.0105	.47407	.00655	.46406	1.0497	.03002	.46618	.48022	.49233

Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	None	Chk Pass	Chk Pass	None	Chk Pass	Chk Pass	Chk Pass
Value											
Range											

Int. Std.	Y_2243	Y_3600	Y_3774
Units	Cts/S	Cts/S	Cts/S
Avg	1526.2	32183.	6028.1
Stddev	6.6	12.	30.2
%RSD	.42973	.03875	.50091

#1	1530.9	32174.	6049.5
#2	1521.6	32192.	6006.7

Sample Name: ccb Acquired: 5/23/2016 23:23:49 Type: QC
Method: 6500_026(v10) Mode: CONC Corr. Factor: 1.000000
User: kellyca Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	Ag3280	Al1670	As1890	B_2089	Ba4554	Be3130	Bi2230	Ca3179	Cd2288	Co2286	Cr2055
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.00085	.00025	.00301	W .00244	F .00253	.00005	.00671	.00782	W -.00052	.00021	-.00017
Stddev	.00084	.00008	.00066	.00072	.00003	.00002	.00152	.00375	.00028	.00008	.00048
%RSD	99.131	34.314	21.987	29.654	1.0689	38.451	22.735	47.968	53.884	38.943	279.46
#1	.00145	.00019	.00255	.00295	.00251	.00007	.00779	.00516	-.00032	.00015	.00017
#2	.00025	.00031	.00348	.00193	.00255	.00004	.00563	.01047	-.00071	.00027	-.00052
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Warn	Chk Fail	Chk Pass	None	Chk Pass	Chk Warn	Chk Pass	Chk Pass
High Limit				.00156	.00115				.00045		
Low Limit				-.00156	-.00115				-.00045		
Elem	Cu3247	Fe2599	K_7664	Li6707	Mg2790	Mn2576	Mo2020	Na5895	Ni2316	P_1782	Pb2203
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	W -.00137	W .02600	.05663	-.00046	W .01081	W .00030	.00020	.01319	.00063	.00028	.00142
Stddev	.00006	.00080	.00523	.00029	.00059	.00004	.00052	.00423	.00028	.00257	.00274
%RSD	4.2118	3.0907	9.2341	63.380	5.4828	14.906	261.36	32.084	43.447	920.38	192.61
#1	-.00133	.02544	.05293	-.00025	.01123	.00027	.00056	.01020	.00044	-.00154	-.00051
#2	-.00141	.02657	.06033	-.00066	.01039	.00033	-.00017	.01618	.00083	.00209	.00336
Check ?	Chk Warn	Chk Warn	Chk Pass	Chk Pass	Chk Warn	Chk Warn	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit	.00136	.02200			.01070	.00025					
Low Limit	-.00136	-.02200			-.01070	-.00025					
Elem	S_1820	Sb2068	Se1960	Si2881	Sn1899	Sr4077	Th2837	Ti3349	Ti1908	U_3701	V_2924
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.01317	W .00365	F .01397	.01402	-.00071	.00018	.00270	.00029	.00319	.00597	.00066
Stddev	.00008	.00155	.00317	.01365	.00029	.00007	.00076	.00029	.00206	.00965	.00031
%RSD	.61386	42.577	22.698	97.377	40.247	41.336	28.184	102.35	64.513	161.55	46.232
#1	.01312	.00475	.01621	.00437	-.00051	.00023	.00324	.00008	.00465	-.00085	.00088
#2	.01323	.00255	.01173	.02367	-.00092	.00012	.00216	.00050	.00174	.01279	.00045
Check ?	None	Chk Warn	Chk Fail	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit		.00314	.00972								
Low Limit		-.00314	-.00972								
Elem	Zn2062	Zr3391									
Units	ppm	ppm									
Avg	-.00008	-.00002									
Stddev	.00081	.00082									
%RSD	1007.7	5353.4									
#1	.00049	.00056									
#2	-.00065	-.00059									
Check ?	Chk Pass	Chk Pass									
High Limit											
Low Limit											
Int. Std.	Y_2243	Y_3600	Y_3774								
Units	Cts/S	Cts/S	Cts/S								
Avg	1560.9	32882.	5997.3								
Stddev	6.9	131.	9.4								
%RSD	.44104	.39818	.15725								
#1	1565.7	32975.	6004.0								
#2	1556.0	32790.	5990.6								

Sample Name: ccvl-3907489 Acquired: 5/23/2016 23:26:36 Type: QC
Method: 6500_026(v10) Mode: CONC Corr. Factor: 1.000000
User: kellyca Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	Ag3280	Al1670	As1890	B_2089	Ba4554	Be3130	Bi2230	Ca3179	Cd2288	Co2286	Cr2055	Cu3247
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.00989	.10377	.01306	.10348	.01023	.00100	.11303	.19125	.00517	.00997	.00996	.01378
Stddev	.00032	.00121	.00266	.00009	.00007	.00004	.00372	.00336	.00002	.00009	.00001	.00038
%RSD	3.2862	1.1648	20.350	.09038	.66865	3.8121	3.2922	1.7570	.35874	.93020	.12144	2.7410

#1	.01012	.10291	.01494	.10341	.01019	.00097	.11566	.19362	.00519	.00990	.00995	.01351
#2	.00966	.10462	.01118	.10354	.01028	.00102	.11039	.18887	.00516	.01003	.00997	.01405

Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Value												
Range												

Elem	Fe2599	K_7664	Li6707	Mg2790	Mn2576	Mo2020	Na5895	Ni2316	P_1782	Pb2203	S_1820	Sb2068
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.10318	2.9875	.01099	.20345	.00972	.01929	F 1.3085	.04048	2.8334	.01059	.00296	.02497
Stddev	.00028	.0010	.00115	.00407	.00021	.00063	.0144	.00038	.0107	.00324	.00435	.00051
%RSD	.27529	.03322	10.481	2.0019	2.1843	3.2858	1.1001	.92667	.37616	30.642	146.95	2.0619

#1	.10338	2.9882	.01180	.20057	.00987	.01973	1.2983	.04021	2.8410	.00829	.00604	.02533
#2	.10298	2.9868	.01017	.20633	.00957	.01884	1.3186	.04075	2.8259	.01288	-.00012	.02461

Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Fail	Chk Pass	Chk Pass	Chk Pass	None	Chk Pass
Value							1.0000					
Range							30.000%					

Elem	Se1960	Si2881	Sn1899	Sr4077	Th2837	Ti3349	Ti1908	U_3701	V_2924	Zn2062	Zr3391
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	F .02635	.49312	.09779	.00938	.01585	.00917	.01706	F .07855	.00888	.01918	.01580
Stddev	.00381	.02490	.00172	.00005	.00200	.00033	.00033	.00707	.00031	.00022	.00044
%RSD	14.443	5.0488	1.7580	.53114	12.632	3.6520	1.9080	9.0065	3.5161	1.1256	2.7990

#1	.02904	.51072	.09900	.00935	.01726	.00940	.01729	.07355	.00866	.01903	.01548
#2	.02366	.47552	.09657	.00942	.01443	.00893	.01683	.08356	.00910	.01933	.01611

Check ?	Chk Fail	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Fail	Chk Pass	Chk Pass	Chk Pass
Value	.01500							.06000			
Range	30.000%							30.000%			

Int. Std.	Y_2243	Y_3600	Y_3774
Units	Cts/S	Cts/S	Cts/S
Avg	1539.1	32733.	6000.7
Stddev	2.0	49.	10.6
%RSD	.13220	.14824	.17592

#1	1537.6	32767.	5993.2
#2	1540.5	32698.	6008.2

Sample Name: 280-83087-F-5-B Acquired: 5/23/2016 23:29:22 Type: Unk
Method: 6500_026(v10) Mode: CONC Corr. Factor: 1.000000
User: kellyca Custom ID1: Custom ID2: Custom ID3:
Comment: 325811 6010B

Elem	Ag3280	Al1670	As1890	B_2089	Ba4554	Be3130	Bi2230	Ca3179	Cd2288
Line	328.068 {103}	167.079 {502}	189.042 {478}	208.959 {461}	455.403 { 74}	313.042 {108}	223.061 {451}	317.933 {106}	228.802 {447}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.00085	.66007	.00154	1.1423	.01569	.00004	.00712	372.04	.00016
Stddev	.00031	.00291	.00355	.0058	.00008	.00016	.00312	.24	.00031
%RSD	36.027	.44045	231.04	.50844	.52166	396.72	43.809	.06347	188.23

#1	.00107	.66213	.00405	1.1465	.01563	-.00007	.00492	372.20	.00038
#2	.00063	.65802	-.00097	1.1382	.01575	.00015	.00933	371.87	-.00005

Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Elem	Co2286	Cr2055	Cu3247	Fe2599	K_7664	Li6707	Mg2790	Mn2576	Mo2020
Line	228.616 {447}	205.560 {464}	324.754 {104}	259.940 {130}	766.490 { 44}	670.784 { 50}	279.079 {121}2	257.610 {131}	202.030 {467}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.00243	.00215	.00161	2.2658	9.5583	.08072	286.63	1.7185	.00139
Stddev	.00046	.00008	.00044	.0084	.0619	.00005	.44	.0031	.00022
%RSD	19.102	3.8638	27.267	.37120	.64810	.06152	.15411	.18100	15.698

#1	.00210	.00221	.00130	2.2718	9.5145	.08075	286.95	1.7207	.00123
#2	.00276	.00209	.00192	2.2599	9.6021	.08068	286.32	1.7163	.00154

Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Elem	Na8183	Ni2316	P_1782	Pb2203	S_1820	Sb2068	Se1960	Si2881	Sn1899
Line	818.326 { 41}	231.604 {446}	178.284 {489}	220.353 {453}	182.034 {485}	206.833 {463}	196.090 {472}	288.158 {117}	189.989 {477}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	107.20	.00532	.06824	-.00198	F 532.03	.00031	.00769	10.615	-.00021
Stddev	.11	.00050	.00118	.00104	.95	.00165	.00339	.018	.00103
%RSD	.09925	9.4799	1.7309	52.355	.17793	533.07	44.021	.17373	500.67

#1	107.13	.00496	.06908	-.00272	532.70	-.00086	.00530	10.601	.00052
#2	107.28	.00567	.06741	-.00125	531.36	.00148	.01009	10.628	-.00093

Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Fail	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit					200.00				
Low Limit					-.02000				

Elem	Sr4077	Th2837	Ti3349	Ti1908	U_3701	V_2924	Zn2062	Zr3391	
Line	407.771 { 83}	283.730 {119}	334.904 {101}	190.856 {477}	370.152 { 91}	292.402 {115}	206.200 {163}	339.198 { 99}	
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	
Avg	2.1451	.00064	.01338	.00200	-.00370	.00252	.00368	.00116	
Stddev	.0072	.00325	.00015	.00005	.00790	.00023	.00141	.00132	
%RSD	.33491	509.09	1.0936	2.5390	213.71	9.2977	38.352	113.65	

#1	2.1401	.00293	.01327	.00196	.00189	.00269	.00468	.00023	
#2	2.1502	-.00166	.01348	.00203	-.00929	.00236	.00268	.00210	

Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	
High Limit									
Low Limit									

Int. Std.	Y_2243	Y_3600	Y_3774						
Line	224.306 {450}	360.073 { 94}	377.433 { 89}						
Units	Cts/S	Cts/S	Cts/S						
Avg	1360.7	28899.	5768.2						
Stddev	1.3	13.	5.8						
%RSD	.09684	.04337	.10108						

#1	1361.6	28890.	5772.4						
#2	1359.8	28908.	5764.1						

Sample Name: 280-83087-F-6-B Acquired: 5/23/2016 23:32:03 Type: Unk
Method: 6500_026(v10) Mode: CONC Corr. Factor: 1.000000
User: kellyca Custom ID1: Custom ID2: Custom ID3:
Comment: 325811 6010B

Elem	Ag3280	Al1670	As1890	B_2089	Ba4554	Be3130	Bi2230	Ca3179	Cd2288
Line	328.068 {103}	167.079 {502}	189.042 {478}	208.959 {461}	455.403 { 74}	313.042 {108}	223.061 {451}	317.933 {106}	228.802 {447}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.00033	1.0198	.00111	1.2519	.02483	.00001	-.00073	278.03	.00040
Stddev	.00030	.0027	.00232	.0075	.00013	.00004	.00347	.25	.00024
%RSD	91.212	.26399	208.44	.59889	.50618	289.91	479.13	.08881	58.814

#1	.00054	1.0179	-.00053	1.2466	.02474	-.00001	-.00318	277.85	.00024
#2	.00012	1.0217	.00276	1.2572	.02492	.00004	.00173	278.20	.00057

Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Elem	Co2286	Cr2055	Cu3247	Fe2599	K_7664	Li6707	Mg2790	Mn2576	Mo2020
Line	228.616 {447}	205.560 {464}	324.754 {104}	259.940 {130}	766.490 { 44}	670.784 { 50}	279.079 {121}2	257.610 {131}	202.030 {467}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.00568	.00218	.00225	4.1835	9.5687	.09005	218.82	1.8962	.00208
Stddev	.00043	.00038	.00032	.0013	.0108	.00050	.46	.0054	.00032
%RSD	7.6000	17.269	14.204	.03190	.11311	.55022	.21027	.28627	15.190

#1	.00599	.00191	.00203	4.1845	9.5610	.08970	218.49	1.8924	.00230
#2	.00537	.00244	.00248	4.1826	9.5763	.09040	219.14	1.9000	.00186

Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Elem	Na8183	Ni2316	P_1782	Pb2203	S_1820	Sb2068	Se1960	Si2881	Sn1899
Line	818.326 { 41}	231.604 {446}	178.284 {489}	220.353 {453}	182.034 {485}	206.833 {463}	196.090 {472}	288.158 {117}	189.989 {477}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	131.82	.00778	.08930	-.00194	F 368.95	.00343	.00619	10.776	-.00092
Stddev	.47	.00053	.00052	.00534	.32	.00221	.00681	.046	.00045
%RSD	.35750	6.7860	.57932	276.18	.08599	64.327	110.07	.42913	48.432

#1	131.49	.00741	.08893	.00184	368.72	.00187	.00137	10.744	-.00124
#2	132.16	.00816	.08967	-.00571	369.17	.00499	.01100	10.809	-.00061

Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Fail	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit					200.00				
Low Limit					-.02000				

Elem	Sr4077	Th2837	Ti3349	Ti1908	U_3701	V_2924	Zn2062	Zr3391
Line	407.771 { 83}	283.730 {119}	334.904 {101}	190.856 {477}	370.152 { 91}	292.402 {115}	206.200 {163}	339.198 { 99}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	1.9161	.00203	.01928	.00066	-.01799	.00344	.00403	.00232
Stddev	.0039	.00056	.00000	.00254	.00481	.00089	.00059	.00006
%RSD	.20493	27.369	.02050	385.95	26.732	25.859	14.566	2.5150

#1	1.9133	.00243	.01929	.00246	-.02139	.00406	.00445	.00228
#2	1.9189	.00164	.01928	-.00114	-.01459	.00281	.00362	.00236

Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit								
Low Limit								

Int. Std.	Y_2243	Y_3600	Y_3774
Line	224.306 {450}	360.073 { 94}	377.433 { 89}
Units	Cts/S	Cts/S	Cts/S
Avg	1382.0	29359.	5847.0
Stddev	3.2	81.	15.4
%RSD	.23276	.27486	.26356

#1	1384.3	29416.	5857.8
#2	1379.7	29302.	5836.1

Sample Name: 280-83087-F-7-C Acquired: 5/23/2016 23:34:45 Type: Unk
Method: 6500_026(v10) Mode: CONC Corr. Factor: 1.000000
User: kellyca Custom ID1: Custom ID2: Custom ID3:
Comment: 325811 6010B

Elem	Ag3280	Al1670	As1890	B_2089	Ba4554	Be3130	Bi2230	Ca3179	Cd2288
Line	328.068 {103}	167.079 {502}	189.042 {478}	208.959 {461}	455.403 { 74}	313.042 {108}	223.061 {451}	317.933 {106}	228.802 {447}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.00067	.48175	.00153	.70762	.02133	.00003	.00305	344.01	.00004
Stddev	.00082	.00276	.00450	.00337	.00008	.00002	.00342	.33	.00008
%RSD	123.14	.57344	294.29	.47568	.39111	50.779	111.90	.09616	185.34

#1	.00009	.47979	-.00165	.70524	.02127	.00004	.00547	344.24	-.00001
#2	.00125	.48370	.00471	.71000	.02139	.00002	.00064	343.77	.00010

Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Elem	Co2286	Cr2055	Cu3247	Fe2599	K_7664	Li6707	Mg2790	Mn2576	Mo2020
Line	228.616 {447}	205.560 {464}	324.754 {104}	259.940 {130}	766.490 { 44}	670.784 { 50}	279.079 {121}2	257.610 {131}	202.030 {467}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.00894	.00124	.00072	2.8018	3.8390	.04550	239.57	4.4646	.00366
Stddev	.00057	.00027	.00050	.0009	.0083	.00093	.43	.0083	.00057
%RSD	6.4210	21.439	69.181	.03264	.21735	2.0397	.17828	.18648	15.637

#1	.00853	.00143	.00107	2.8011	3.8449	.04484	239.27	4.4587	.00406
#2	.00934	.00105	.00037	2.8024	3.8331	.04616	239.87	4.4705	.00325

Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Elem	Na8183	Ni2316	P_1782	Pb2203	S_1820	Sb2068	Se1960	Si2881	Sn1899
Line	818.326 { 41}	231.604 {446}	178.284 {489}	220.353 {453}	182.034 {485}	206.833 {463}	196.090 {472}	288.158 {117}	189.989 {477}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	57.926	.01379	.04971	-.00244	F 419.24	-.00079	.01048	10.551	-.00058
Stddev	.232	.00013	.00312	.00053	.85	.00195	.00207	.018	.00064
%RSD	.39977	.90927	6.2818	21.867	.20302	246.35	19.712	.16999	108.99

#1	57.762	.01370	.05192	-.00206	418.64	.00059	.00902	10.564	-.00103
#2	58.090	.01388	.04750	-.00281	419.84	-.00218	.01194	10.538	-.00013

Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Fail	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit					200.00				
Low Limit					-.02000				

Elem	Sr4077	Th2837	Ti3349	Ti1908	U_3701	V_2924	Zn2062	Zr3391	
Line	407.771 { 83}	283.730 {119}	334.904 {101}	190.856 {477}	370.152 { 91}	292.402 {115}	206.200 {163}	339.198 { 99}	
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	
Avg	1.2417	.00030	.00953	-.00025	-.00260	.00135	.01961	.00171	
Stddev	.0030	.00139	.00026	.00396	.01358	.00016	.00138	.00042	
%RSD	.24129	466.83	2.7107	1558.3	521.37	12.023	7.0629	24.772	

#1	1.2396	.00128	.00971	.00255	.00700	.00123	.02058	.00201	
#2	1.2438	-.00068	.00934	-.00305	-.01221	.00146	.01863	.00141	

Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	
High Limit									
Low Limit									

Int. Std.	Y_2243	Y_3600	Y_3774						
Line	224.306 {450}	360.073 { 94}	377.433 { 89}						
Units	Cts/S	Cts/S	Cts/S						
Avg	1382.2	29379.	5822.9						
Stddev	3.0	14.	10.5						
%RSD	.21578	.04680	.18030						

#1	1384.3	29388.	5815.5						
#2	1380.1	29369.	5830.4						

Sample Name: 280-83159-B-1-A Acquired: 5/23/2016 23:37:26 Type: Unk
Method: 6500_026(v10) Mode: CONC Corr. Factor: 1.000000
User: kellyca Custom ID1: Custom ID2: Custom ID3:
Comment: 325811 6010B

Elem	Ag3280	Al1670	As1890	B_2089	Ba4554	Be3130	Bi2230	Ca3179	Cd2288
Line	328.068 {103}	167.079 {502}	189.042 {478}	208.959 {461}	455.403 { 74}	313.042 {108}	223.061 {451}	317.933 {106}	228.802 {447}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.00043	.41725	.00367	.03363	.05689	.00001	.00037	38.790	.00014
Stddev	.00018	.00289	.00558	.00031	.00016	.00002	.00031	.004	.00002
%RSD	42.477	.69152	152.08	.92364	.28051	438.68	83.948	.01149	16.678

#1	.00030	.41929	-.00028	.03385	.05678	-.00001	.00015	38.793	.00012
#2	.00056	.41521	.00762	.03341	.05700	.00002	.00059	38.786	.00015

Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Elem	Co2286	Cr2055	Cu3247	Fe2599	K_7664	Li6707	Mg2790	Mn2576	Mo2020
Line	228.616 {447}	205.560 {464}	324.754 {104}	259.940 {130}	766.490 { 44}	670.784 { 50}	279.079 {121}2	257.610 {131}	202.030 {467}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.00008	.00940	.00064	.48805	1.1849	.00182	5.2771	.01203	.00071
Stddev	.00023	.00022	.00027	.00390	.0191	.00030	.0135	.00009	.00030
%RSD	299.78	2.3822	42.159	.79941	1.6133	16.407	.25665	.74872	42.076

#1	.00024	.00925	.00083	.48529	1.1714	.00161	5.2867	.01197	.00050
#2	-.00009	.00956	.00045	.49081	1.1984	.00203	5.2675	.01210	.00092

Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Elem	Na8183	Ni2316	P_1782	Pb2203	S_1820	Sb2068	Se1960	Si2881	Sn1899
Line	818.326 { 41}	231.604 {446}	178.284 {489}	220.353 {453}	182.034 {485}	206.833 {463}	196.090 {472}	288.158 {117}	189.989 {477}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	23.358	.00167	.06992	.00010	4.1664	.00021	.01027	14.028	-.00030
Stddev	.061	.00034	.00009	.00247	.0299	.00370	.00322	.039	.00010
%RSD	.25946	20.122	.12904	2538.1	.71671	1722.7	31.387	.27596	32.212

#1	23.315	.00191	.06998	.00184	4.1875	.00283	.00799	14.001	-.00036
#2	23.401	.00143	.06986	-.00165	4.1453	-.00240	.01254	14.056	-.00023

Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Elem	Sr4077	Th2837	Ti3349	Ti1908	U_3701	V_2924	Zn2062	Zr3391
Line	407.771 { 83}	283.730 {119}	334.904 {101}	190.856 {477}	370.152 { 91}	292.402 {115}	206.200 {163}	339.198 { 99}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.54473	.00241	.03169	.00085	.01070	.01930	.00307	.00151
Stddev	.00108	.00020	.00051	.00043	.00957	.00076	.00071	.00043
%RSD	.19864	8.1279	1.5954	50.589	89.397	3.9422	22.988	28.567

#1	.54396	.00254	.03205	.00115	.01747	.01877	.00257	.00181
#2	.54549	.00227	.03134	.00054	.00394	.01984	.00357	.00120

Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit								
Low Limit								

Int. Std.	Y_2243	Y_3600	Y_3774
Line	224.306 {450}	360.073 { 94}	377.433 { 89}
Units	Cts/S	Cts/S	Cts/S
Avg	1512.6	32092.	6226.6
Stddev	1.3	51.	4.4
%RSD	.08728	.15949	.07106

#1	1513.6	32128.	6229.7
#2	1511.7	32056.	6223.4

Sample Name: 280-83159-B-2-A Acquired: 5/23/2016 23:40:10 Type: Unk
Method: 6500_026(v10) Mode: CONC Corr. Factor: 1.000000
User: kellyca Custom ID1: Custom ID2: Custom ID3:
Comment: 325811 6010B

Elem	Ag3280	Al1670	As1890	B_2089	Ba4554	Be3130	Bi2230	Ca3179	Cd2288
Line	328.068 {103}	167.079 {502}	189.042 {478}	208.959 {461}	455.403 { 74}	313.042 {108}	223.061 {451}	317.933 {106}	228.802 {447}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.00057	.01777	.00047	.03025	.04853	.00003	.00168	27.530	.00008
Stddev	.00022	.00064	.00068	.00065	.00003	.00005	.00044	.097	.00004
%RSD	39.164	3.5738	146.84	2.1430	.06898	155.88	26.084	.35134	44.821

#1	.00072	.01822	-.00002	.03071	.04855	.00007	.00137	27.461	.00005
#2	.00041	.01732	.00095	.02980	.04851	-.00000	.00199	27.598	.00011

Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Elem	Co2286	Cr2055	Cu3247	Fe2599	K_7664	Li6707	Mg2790	Mn2576	Mo2020
Line	228.616 {447}	205.560 {464}	324.754 {104}	259.940 {130}	766.490 { 44}	670.784 { 50}	279.079 {121}2	257.610 {131}	202.030 {467}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	-.00027	.01431	.00001	.02371	.79153	.00138	3.3157	.00097	.00094
Stddev	.00010	.00020	.00015	.00057	.00562	.00026	.0001	.00000	.00004
%RSD	38.918	1.3904	1849.5	2.4230	.70976	18.485	.00251	.40193	4.2634

#1	-.00019	.01417	-.00010	.02412	.78756	.00156	3.3158	.00098	.00091
#2	-.00034	.01445	.00012	.02330	.79550	.00120	3.3157	.00097	.00097

Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Elem	Na8183	Ni2316	P_1782	Pb2203	S_1820	Sb2068	Se1960	Si2881	Sn1899
Line	818.326 { 41}	231.604 {446}	178.284 {489}	220.353 {453}	182.034 {485}	206.833 {463}	196.090 {472}	288.158 {117}	189.989 {477}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	20.652	.00067	.03622	-.00064	4.7272	.00192	.01354	13.623	-.00041
Stddev	.013	.00017	.00021	.00006	.0017	.00105	.00181	.052	.00038
%RSD	.06359	25.687	.56658	9.7453	.03550	54.910	13.348	.38016	92.353

#1	20.661	.00054	.03637	-.00060	4.7260	.00118	.01226	13.586	-.00067
#2	20.642	.00079	.03608	-.00069	4.7284	.00267	.01482	13.659	-.00014

Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Elem	Sr4077	Th2837	Ti3349	Ti1908	U_3701	V_2924	Zn2062	Zr3391	
Line	407.771 { 83}	283.730 {119}	334.904 {101}	190.856 {477}	370.152 { 91}	292.402 {115}	206.200 {163}	339.198 { 99}	
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	
Avg	.34809	.00089	.00101	.00198	-.00509	.02256	.00244	-.00078	
Stddev	.00113	.00067	.00011	.00183	.01310	.00045	.00025	.00004	
%RSD	.32359	75.068	11.321	92.533	257.43	2.0155	10.357	5.5846	

#1	.34730	.00042	.00093	.00327	.00417	.02288	.00226	-.00081	
#2	.34889	.00136	.00109	.00068	-.01435	.02224	.00261	-.00075	

Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	
High Limit									
Low Limit									

Int. Std.	Y_2243	Y_3600	Y_3774						
Line	224.306 {450}	360.073 { 94}	377.433 { 89}						
Units	Cts/S	Cts/S	Cts/S						
Avg	1524.3	32300.	6080.5						
Stddev	2.6	44.	7.8						
%RSD	.16970	.13546	.12828						

#1	1522.5	32331.	6086.0						
#2	1526.1	32269.	6075.0						

Sample Name: 280-83159-B-3-A Acquired: 5/23/2016 23:42:54 Type: Unk
Method: 6500_026(v10) Mode: CONC Corr. Factor: 1.000000
User: kellyca Custom ID1: Custom ID2: Custom ID3:
Comment: 325811 6010B

Elem	Ag3280	Al1670	As1890	B_2089	Ba4554	Be3130	Bi2230	Ca3179	Cd2288
Line	328.068 {103}	167.079 {502}	189.042 {478}	208.959 {461}	455.403 { 74}	313.042 {108}	223.061 {451}	317.933 {106}	228.802 {447}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.00060	.00439	.00649	.03200	.06105	.00001	.00227	26.419	.00002
Stddev	.00000	.00015	.00123	.00057	.00008	.00006	.00174	.026	.00011
%RSD	.76256	3.5170	18.939	1.7810	.13795	668.23	76.862	.09658	453.44

#1	.00060	.00428	.00562	.03160	.06099	-.00003	.00350	26.401	-.00005
#2	.00060	.00450	.00735	.03241	.06111	.00005	.00104	26.437	.00010

Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Elem	Co2286	Cr2055	Cu3247	Fe2599	K_7664	Li6707	Mg2790	Mn2576	Mo2020
Line	228.616 {447}	205.560 {464}	324.754 {104}	259.940 {130}	766.490 { 44}	670.784 { 50}	279.079 {121}2	257.610 {131}	202.030 {467}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	-.00071	.01267	-.00069	.04251	.93706	.00202	3.6243	.00043	.00126
Stddev	.00011	.00010	.00026	.00027	.01666	.00058	.0067	.00005	.00008
%RSD	14.965	.77163	38.292	.64457	1.7774	28.725	.18483	12.315	6.1065

#1	-.00063	.01274	-.00087	.04231	.94883	.00161	3.6290	.00047	.00131
#2	-.00078	.01260	-.00050	.04270	.92528	.00243	3.6195	.00039	.00120

Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Elem	Na8183	Ni2316	P_1782	Pb2203	S_1820	Sb2068	Se1960	Si2881	Sn1899
Line	818.326 { 41}	231.604 {446}	178.284 {489}	220.353 {453}	182.034 {485}	206.833 {463}	196.090 {472}	288.158 {117}	189.989 {477}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	20.702	.00037	.02636	-.00217	4.7780	.00080	.01280	14.008	-.00083
Stddev	.013	.00019	.00094	.00123	.0005	.00013	.00266	.031	.00091
%RSD	.06336	50.128	3.5586	56.735	.00975	15.784	20.777	.22084	109.29

#1	20.712	.00050	.02702	-.00130	4.7784	.00071	.01092	13.986	-.00019
#2	20.693	.00024	.02570	-.00304	4.7777	.00089	.01467	14.030	-.00147

Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Elem	Sr4077	Th2837	Ti3349	Ti1908	U_3701	V_2924	Zn2062	Zr3391	
Line	407.771 { 83}	283.730 {119}	334.904 {101}	190.856 {477}	370.152 { 91}	292.402 {115}	206.200 {163}	339.198 { 99}	
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	
Avg	.36657	-.00034	.00049	.00340	.00073	.01749	-.00128	.00210	
Stddev	.00113	.00083	.00004	.00235	.01849	.00079	.00124	.00113	
%RSD	.30861	244.58	7.6180	69.141	2539.6	4.5102	96.473	53.739	

#1	.36577	-.00092	.00046	.00174	.01380	.01805	-.00216	.00130	
#2	.36737	.00025	.00052	.00506	-.01235	.01693	-.00041	.00289	

Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	
High Limit									
Low Limit									

Int. Std.	Y_2243	Y_3600	Y_3774						
Line	224.306 {450}	360.073 { 94}	377.433 { 89}						
Units	Cts/S	Cts/S	Cts/S						
Avg	1520.1	32234.	6026.1						
Stddev	1.6	50.	4.3						
%RSD	.10853	.15414	.07212						

#1	1521.2	32199.	6029.2						
#2	1518.9	32269.	6023.0						

Sample Name: 280-83159-B-4-A Acquired: 5/23/2016 23:45:38 Type: Unk
Method: 6500_026(v10) Mode: CONC Corr. Factor: 1.000000
User: kellyca Custom ID1: Custom ID2: Custom ID3:
Comment: 325811 6010B

Elem	Ag3280	Al1670	As1890	B_2089	Ba4554	Be3130	Bi2230	Ca3179	Cd2288
Line	328.068 {103}	167.079 {502}	189.042 {478}	208.959 {461}	455.403 { 74}	313.042 {108}	223.061 {451}	317.933 {106}	228.802 {447}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.00059	.00922	.00490	.04565	.03882	-.00003	-.00116	23.055	.00021
Stddev	.00026	.00009	.00240	.00031	.00035	.00008	.00156	.070	.00001
%RSD	43.362	.98462	48.997	.67935	.91128	261.59	134.35	.30417	2.7127

#1	.00041	.00915	.00320	.04543	.03857	.00003	-.00006	23.005	.00021
#2	.00077	.00928	.00659	.04587	.03907	-.00009	-.00227	23.104	.00021

Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Elem	Co2286	Cr2055	Cu3247	Fe2599	K_7664	Li6707	Mg2790	Mn2576	Mo2020
Line	228.616 {447}	205.560 {464}	324.754 {104}	259.940 {130}	766.490 { 44}	670.784 { 50}	279.079 {121}2	257.610 {131}	202.030 {467}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	-.00068	.00885	.00005	.01683	1.3256	.00482	3.4138	.00033	.00123
Stddev	.00035	.00021	.00008	.00118	.0120	.00087	.0077	.00007	.00005
%RSD	51.106	2.3571	174.00	7.0002	.90827	17.953	.22642	21.327	4.3714

#1	-.00043	.00900	.00010	.01599	1.3341	.00421	3.4192	.00038	.00119
#2	-.00092	.00870	-.00001	.01766	1.3171	.00543	3.4083	.00028	.00127

Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Elem	Na8183	Ni2316	P_1782	Pb2203	S_1820	Sb2068	Se1960	Si2881	Sn1899
Line	818.326 { 41}	231.604 {446}	178.284 {489}	220.353 {453}	182.034 {485}	206.833 {463}	196.090 {472}	288.158 {117}	189.989 {477}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	25.744	.00047	.03014	.00057	4.6501	.00287	.00589	14.351	.00078
Stddev	.007	.00059	.00550	.00125	.0055	.00065	.00159	.117	.00137
%RSD	.02805	124.62	18.240	219.79	.11841	22.628	27.000	.81357	175.67

#1	25.749	.00088	.02625	-.00032	4.6462	.00241	.00701	14.269	.00175
#2	25.739	.00006	.03403	.00145	4.6540	.00333	.00477	14.434	-.00019

Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Elem	Sr4077	Th2837	Ti3349	Ti1908	U_3701	V_2924	Zn2062	Zr3391
Line	407.771 { 83}	283.730 {119}	334.904 {101}	190.856 {477}	370.152 { 91}	292.402 {115}	206.200 {163}	339.198 { 99}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.33704	.00236	.00042	.00073	.01600	.01558	.00012	.00010
Stddev	.00213	.00009	.00014	.00113	.01330	.00026	.00120	.00161
%RSD	.63158	3.7609	32.224	154.82	83.117	1.6663	1035.1	1597.2

#1	.33554	.00229	.00033	.00153	.02541	.01576	-.00073	.00124
#2	.33855	.00242	.00052	-.00007	.00660	.01539	.00097	-.00103

Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit								
Low Limit								

Int. Std.	Y_2243	Y_3600	Y_3774
Line	224.306 {450}	360.073 { 94}	377.433 { 89}
Units	Cts/S	Cts/S	Cts/S
Avg	1508.8	32144.	6087.7
Stddev	2.3	82.	14.7
%RSD	.15005	.25602	.24216

#1	1510.4	32086.	6098.1
#2	1507.2	32202.	6077.3

Sample Name: ccvh-3900196 Acquired: 5/23/2016 23:48:21 Type: QC
Method: 6500_026(v10) Mode: CONC Corr. Factor: 1.000000
User: kellyca Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	Ag3280	Al3092	As1890	B_2089	Ba4554	Be3130	Bi2230	Ca3179	Cd2288	Co2286	Cr2055	Cu3247	Fe2714
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.00112	47.120	.00082	.00360	.00184	.00144	1.0640	-.03684	.00053	.00485	.00082	.00656	47.092
Stddev	.00007	.110	.00713	.00065	.00013	.00005	.0009	.00597	.00004	.00021	.00022	.00019	.031
%RSD	6.0634	.23412	869.39	18.010	7.3224	3.8091	.08148	16.210	8.2601	4.3712	26.850	2.8615	.06662

#1	.00108	47.198	.00586	.00314	.00175	.00140	1.0634	-.03261	.00056	.00500	.00098	.00669	47.114
#2	.00117	47.042	-.00422	.00406	.00194	.00148	1.0647	-.04106	.00050	.00470	.00066	.00642	47.070

Check ?	None	Chk Pass	None	None	None	None	Chk Pass	None	None	None	None	None	Chk Pass
Value													
Range													

Elem	K_7664	Li6707	Mg2790	Mn2576	Mo2020	Na8183	Ni2316	P_1782	Pb2203	S_1820	Sb2068	Se1960	Si2881
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.17646	.00347	.22195	.00087	-.00110	251.34	.00147	.01278	.00188	5.0355	.00377	.01347	.01535
Stddev	.00560	.00101	.00385	.00009	.00016	.07	.00018	.00330	.00511	.0026	.00179	.00465	.01154
%RSD	3.1755	29.118	1.7364	10.429	14.651	.02692	12.049	25.828	271.97	.05174	47.541	34.533	75.160

#1	.17249	.00276	.21923	.00080	-.00122	251.29	.00160	.01511	.00549	5.0374	.00504	.01676	.00719
#2	.18042	.00419	.22468	.00093	-.00099	251.38	.00135	.01045	-.00173	5.0337	.00250	.01018	.02350

Check ?	None	None	None	None	None	Chk Pass	None	None	None	Chk Pass	None	None	None
Value													
Range													

Elem	Sn1899	Sr4077	Th2837	Ti3349	Tl1908	U_3701	V_2924	Zn2062	Zr3391
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.00401	.00197	4.9341	.02619	.00282	10.250	-.01509	-.00041	-.01536
Stddev	.00092	.00006	.0103	.00016	.00204	.036	.00059	.00028	.00151
%RSD	22.877	2.8495	.20774	.59185	72.237	.34844	3.8830	69.787	9.8471

#1	.00466	.00201	4.9269	.02608	.00426	10.225	-.01550	-.00021	-.01429
#2	.00336	.00193	4.9414	.02630	.00138	10.275	-.01467	-.00061	-.01643

Check ?	None	None	Chk Pass	None	None	Chk Pass	None	None	None
Value									
Range									

Int. Std.	Y_2243	Y_3600	Y_3774
Units	Cts/S	Cts/S	Cts/S
Avg	1472.3	30881.	5936.2
Stddev	4.6	92.	.1
%RSD	.31279	.29759	.00156

#1	1469.0	30946.	5936.2
#2	1475.5	30816.	5936.3

Sample Name: ccv-3900195 Acquired: 5/23/2016 23:51:11 Type: QC
Method: 6500_026(v10) Mode: CONC Corr. Factor: 1.000000
User: kellyca Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	Ag3280	Al1670	As1890	B_2089	Ba4554	Be3130	Bi2230	Ca3179	Cd2288	Co2286	Cr2055	Cu3247
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.49038	.52503	1.0315	F .55024	.49764	.49754	.00052	4.8927	.52714	.52246	.51041	.50349
Stddev	.00091	.00034	.0080	.00039	.00124	.00011	.00368	.0119	.00076	.00020	.00076	.00055
%RSD	.18555	.06388	.77629	.07162	.24931	.02309	707.73	.24232	.14364	.03795	.14962	.10928

#1	.48974	.52479	1.0258	.55052	.49676	.49762	-.00208	4.8843	.52660	.52232	.51095	.50311
#2	.49102	.52527	1.0371	.54996	.49851	.49746	.00312	4.9010	.52767	.52260	.50987	.50388

Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Fail	Chk Pass	Chk Pass	None	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Value				.50000								
Range				10.000%								

Elem	Fe2599	K_7664	Li6707	Mg2790	Mn2576	Mo2020	Na5895	Ni2316	P_1782	Pb2203	S_1820	Sb2068
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	2.4498	50.486	1.0465	19.808	.49507	.51527	5.2205	.50994	1.0260	1.0651	.00961	1.0152
Stddev	.0110	.030	.0023	.019	.00073	.00052	.0107	.00125	.0019	.0023	.00333	.0055
%RSD	.45046	.06024	.21863	.09620	.14737	.10064	.20485	.24438	.18146	.21533	34.657	.54361

#1	2.4576	50.465	1.0449	19.822	.49559	.51490	5.2129	.51082	1.0273	1.0635	.00726	1.0191
#2	2.4420	50.508	1.0482	19.795	.49456	.51563	5.2280	.50906	1.0247	1.0668	.01197	1.0113

Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	None	Chk Pass
Value												
Range												

Elem	Se1960	Si2881	Sn1899	Sr4077	Th2837	Ti3349	Ti1908	U_3701	V_2924	Zn2062	Zr3391
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	1.0468	4.9400	1.0106	.47670	.00741	.47047	1.0462	.01243	.47440	.48572	.49416
Stddev	.0060	.0182	.0022	.00002	.00014	.00101	.0032	.00246	.00185	.00015	.00109
%RSD	.56940	.36876	.22247	.00370	1.9340	.21552	.30969	19.821	.39078	.02985	.22117

#1	1.0426	4.9529	1.0122	.47669	.00731	.47119	1.0485	.01068	.47309	.48562	.49493
#2	1.0511	4.9272	1.0090	.47671	.00751	.46975	1.0439	.01417	.47571	.48582	.49338

Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	None	Chk Pass	Chk Pass	None	Chk Pass	Chk Pass	Chk Pass
Value											
Range											

Int. Std.	Y_2243	Y_3600	Y_3774
Units	Cts/S	Cts/S	Cts/S
Avg	1528.8	31968.	5985.0
Stddev	2.5	54.	4.8
%RSD	.16271	.17033	.08083

#1	1530.5	31930.	5988.4
#2	1527.0	32007.	5981.6

Sample Name: ccb Acquired: 5/23/2016 23:53:51 Type: QC
Method: 6500_026(v10) Mode: CONC Corr. Factor: 1.000000
User: kellyca Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	Ag3280	Al1670	As1890	B_2089	Ba4554	Be3130	Bi2230	Ca3179	Cd2288	Co2286	Cr2055	Cu3247
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.00031	-.00092	-.00383	W .00161	.00011	.00006	.00593	.00131	-.00017	.00010	-.00040	-.00117
Stddev	.00012	.00095	.00123	.00013	.00003	.00005	.00167	.00052	.00007	.00002	.00027	.00004
%RSD	37.756	103.30	32.071	8.3663	25.412	87.663	28.118	39.336	41.783	19.337	69.074	3.3054
#1	.00039	-.00025	-.00470	.00152	.00009	.00010	.00475	.00095	-.00022	.00012	-.00020	-.00119
#2	.00023	-.00159	-.00296	.00171	.00013	.00002	.00710	.00167	-.00012	.00009	-.00059	-.00114
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Warn	Chk Pass	Chk Pass	None	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit				.00156								
Low Limit				-.00156								
Elem	Fe2599	K_7664	Li6707	Mg2790	Mn2576	Mo2020	Na5895	Ni2316	P_1782	Pb2203	S_1820	Sb2068
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.00068	.05065	-.00043	.00629	.00007	.00006	.01241	.00094	.00165	.00181	.00801	W .00424
Stddev	.00062	.00216	.00008	.00323	.00013	.00015	.00131	.00034	.00193	.00016	.00621	.00217
%RSD	91.278	4.2597	19.085	51.304	202.52	255.84	10.546	36.081	117.01	8.5936	77.551	51.065
#1	.00024	.05218	-.00037	.00401	.00016	-.00005	.01333	.00070	.00301	.00192	.00362	.00271
#2	.00112	.04913	-.00049	.00857	-.00003	.00017	.01148	.00118	.00028	.00170	.01240	.00577
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	None	Chk Warn
High Limit												.00314
Low Limit												-.00314
Elem	Se1960	Si2881	Sn1899	Sr4077	Th2837	Ti3349	Ti1908	U_3701	V_2924	Zn2062	Zr3391	
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	
Avg	F .01145	.00988	.00033	.00012	.00095	.00032	.00351	.00515	-.00010	.00042	.00017	
Stddev	.00416	.00288	.00100	.00004	.00063	.00022	.00115	.01795	.00022	.00031	.00061	
%RSD	36.341	29.145	300.64	33.202	66.169	67.392	32.827	348.23	233.38	72.211	365.30	
#1	.00851	.00785	-.00037	.00015	.00140	.00017	.00270	-.00754	-.00025	.00064	-.00027	
#2	.01440	.01192	.00104	.00009	.00051	.00048	.00433	.01785	.00006	.00021	.00060	
Check ?	Chk Fail	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	
High Limit	.00972											
Low Limit	-.00972											
Int. Std.	Y_2243	Y_3600	Y_3774									
Units	Cts/S	Cts/S	Cts/S									
Avg	1551.0	32873.	5974.6									
Stddev	1.8	13.	45.6									
%RSD	.11878	.04071	.76305									
#1	1552.3	32864.	6006.8									
#2	1549.7	32882.	5942.3									

Sample Name: ccvl-3907489 Acquired: 5/23/2016 23:56:39 Type: QC
Method: 6500_026(v10) Mode: CONC Corr. Factor: 1.000000
User: kellyca Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	Ag3280	Al1670	As1890	B_2089	Ba4554	Be3130	Bi2230	Ca3179	Cd2288	Co2286	Cr2055	Cu3247
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.01071	.10659	.01252	.10371	.01014	.00102	.11563	.18965	.00517	.00982	.01025	.01316
Stddev	.00041	.00026	.00181	.00021	.00014	.00001	.00006	.00441	.00016	.00019	.00002	.00016
%RSD	3.8283	.24239	14.423	.20467	1.4049	1.0395	.05083	2.3256	3.1663	1.9189	.23422	1.2204

#1	.01042	.10677	.01379	.10356	.01004	.00102	.11567	.18653	.00505	.00995	.01027	.01327
#2	.01100	.10640	.01124	.10386	.01024	.00103	.11558	.19277	.00528	.00969	.01023	.01305

Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Value												
Range												

Elem	Fe2599	K_7664	Li6707	Mg2790	Mn2576	Mo2020	Na5895	Ni2316	P_1782	Pb2203	S_1820	Sb2068
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.11360	2.9794	.01033	.20390	.00981	.02002	F 1.3125	.04117	2.8324	.01113	.00119	.02359
Stddev	.00114	.0044	.00031	.00600	.00020	.00007	.0141	.00001	.0071	.00035	.00427	.00288
%RSD	1.0065	.14631	3.0196	2.9416	2.0644	.34186	1.0761	.02603	.25002	3.1027	358.56	12.197

#1	.11441	2.9764	.01055	.19966	.00995	.02007	1.3025	.04117	2.8374	.01137	.00421	.02562
#2	.11279	2.9825	.01011	.20814	.00967	.01997	1.3225	.04118	2.8273	.01088	-.00183	.02155

Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Fail	Chk Pass	Chk Pass	Chk Pass	None	Chk Pass
Value							1.0000					
Range							30.000%					

Elem	Se1960	Si2881	Sn1899	Sr4077	Th2837	Ti3349	Ti1908	U_3701	V_2924	Zn2062	Zr3391
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	F .02089	.48283	.09935	.00937	.01641	.00868	.01619	.07531	.00893	.01969	.01483
Stddev	.00012	.00399	.00005	.00001	.00115	.00014	.00175	.00780	.00041	.00037	.00101
%RSD	.55342	.82673	.05392	.15748	6.9802	1.6463	10.832	10.352	4.5893	1.8939	6.7898

#1	.02081	.48001	.09939	.00935	.01560	.00878	.01743	.06980	.00922	.01995	.01554
#2	.02098	.48565	.09931	.00938	.01722	.00858	.01495	.08083	.00864	.01942	.01411

Check ?	Chk Fail	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Value	.01500										
Range	30.000%										

Int. Std.	Y_2243	Y_3600	Y_3774
Units	Cts/S	Cts/S	Cts/S
Avg	1537.7	32812.	5973.4
Stddev	1.0	45.	9.7
%RSD	.06792	.13732	.16320

#1	1538.4	32844.	5980.3
#2	1536.9	32780.	5966.5

Sample Name: MB 280-325550/1-A Acquired: 5/23/2016 23:59:25 Type: Unk
Method: 6500_026(v10) Mode: CONC Corr. Factor: 1.000000
User: kellyca Custom ID1: 5/21 Custom ID2: Custom ID3:
Comment: 325550 200.7

Elem	Ag3280	Al1670	As1890	B_2089	Ba4554	Be3130	Bi2230	Ca3179	Cd2288
Line	328.068 {103}	167.079 {502}	189.042 {478}	208.959 {461}	455.403 { 74}	313.042 {108}	223.061 {451}	317.933 {106}	228.802 {447}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.00013	.00641	-.00119	.00371	.00039	.00001	.00165	.03884	-.00000
Stddev	.00014	.00085	.00428	.00075	.00019	.00003	.00042	.00287	.00012
%RSD	112.75	13.326	360.02	20.093	48.216	306.69	25.538	7.3920	7820.7

#1	.00023	.00581	-.00422	.00424	.00026	-.00001	.00135	.03681	.00009
#2	.00003	.00702	.00184	.00318	.00052	.00003	.00194	.04087	-.00009

Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Elem	Co2286	Cr2055	Cu3247	Fe2599	K_7664	Li6707	Mg2790	Mn2576	Mo2020
Line	228.616 {447}	205.560 {464}	324.754 {104}	259.940 {130}	766.490 { 44}	670.784 { 50}	279.079 {121}2	257.610 {131}	202.030 {467}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	-.00032	.00008	-.00150	.02220	.02460	.00023	.00834	.00024	-.00042
Stddev	.00013	.00010	.00034	.00148	.03933	.00067	.00265	.00011	.00013
%RSD	41.575	126.70	22.396	6.6537	159.88	287.93	31.802	46.252	30.420

#1	-.00042	.00014	-.00174	.02325	-.00321	-.00024	.00646	.00016	-.00051
#2	-.00023	.00001	-.00126	.02116	.05241	.00071	.01021	.00032	-.00033

Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Elem	Na5895	Ni2316	P_1782	Pb2203	S_1820	Sb2068	Se1960	Si2881	Sn1899
Line	589.592 { 57}	231.604 {446}	178.284 {489}	220.353 {453}	182.034 {485}	206.833 {463}	196.090 {472}	288.158 {117}	189.989 {477}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.02917	-.00056	.00175	F .00322	.01392	.00166	.00406	.01694	-.00063
Stddev	.00175	.00001	.00126	.00176	.00202	.00083	.00068	.01576	.00061
%RSD	6.0092	2.0300	72.286	54.700	14.495	50.104	16.802	93.024	96.884

#1	.02793	-.00055	.00085	.00447	.01249	.00107	.00358	.02808	-.00020
#2	.03040	-.00057	.00264	.00198	.01534	.00225	.00454	.00580	-.00106

Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Fail	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit				.00300					
Low Limit				-.00300					

Elem	Sr4077	Th2837	Ti3349	Ti1908	U_3701	V_2924	Zn2062	Zr3391	
Line	407.771 { 83}	283.730 {119}	334.904 {101}	190.856 {477}	370.152 { 91}	292.402 {115}	206.200 {163}	339.198 { 99}	
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	
Avg	.00026	.00126	.00018	.00055	.00782	-.00015	.00216	.00094	
Stddev	.00001	.00117	.00031	.00079	.00413	.00054	.00067	.00105	
%RSD	3.3200	92.812	168.15	144.46	52.838	350.00	30.814	111.37	

#1	.00025	.00043	-.00003	.00111	.01075	.00023	.00169	.00168	
#2	.00026	.00209	.00040	-.00001	.00490	-.00054	.00263	.00020	

Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	
High Limit									
Low Limit									

Int. Std.	Y_2243	Y_3600	Y_3774						
Line	224.306 {450}	360.073 { 94}	377.433 { 89}						
Units	Cts/S	Cts/S	Cts/S						
Avg	1538.8	32970.	6003.3						
Stddev	4.2	62.	18.2						
%RSD	.27508	.18828	.30382						

#1	1541.8	33014.	6016.2						
#2	1535.8	32927.	5990.4						

Sample Name: LCS 280-325550/2-A Acquired: 5/24/2016 0:02:12 Type: Unk

Method: 6500_026(v10) Mode: CONC Corr. Factor: 1.000000

User: kellyca Custom ID1: Custom ID2: Custom ID3:

Comment: 325550 200.7

Elem	Ag3280	Al1670	As1890	B_2089	Ba4554	Be3130	Bi2230	Ca3179	Cd2288
Line	328.068 {103}	167.079 {502}	189.042 {478}	208.959 {461}	455.403 {74}	313.042 {108}	223.061 {451}	317.933 {106}	228.802 {447}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.04962	1.9520	1.0497	1.0808	2.0273	.05000	F 2.2789	48.941	.10525
Stddev	.00012	.0010	.0075	.0007	.0104	.00035	.0013	.327	.00025
%RSD	.23281	.05152	.70968	.06188	.51069	.69124	.05875	.66908	.23520

#1	.04970	1.9528	1.0550	1.0813	2.0200	.04976	2.2798	48.710	.10542
#2	.04954	1.9513	1.0444	1.0803	2.0347	.05024	2.2779	49.173	.10507

Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Fail	Chk Pass	Chk Pass
High Limit							2.2000		
Low Limit							1.8000		

Elem	Co2286	Cr2055	Cu3247	Fe2599	K_7664	Li6707	Mg2790	Mn2576	Mo2020
Line	228.616 {447}	205.560 {464}	324.754 {104}	259.940 {130}	766.490 {44}	670.784 {50}	279.079 {121}2	257.610 {131}	202.030 {467}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.51511	F .20602	.25631	.98206	52.075	1.0737	48.734	.48537	1.0735
Stddev	.00016	.00115	.00052	.00335	.299	.0070	.020	.00094	.0010
%RSD	.03183	.55653	.20428	.34110	.57500	.65658	.04181	.19306	.08952

#1	.51499	.20521	.25594	.97970	51.863	1.0687	48.748	.48603	1.0742
#2	.51523	.20683	.25668	.98443	52.287	1.0787	48.719	.48471	1.0728

Check ?	Chk Pass	Chk Fail	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit		.05750							
Low Limit		.04300							

Elem	Na8183	Ni2316	P_1782	Pb2203	S_1820	Sb2068	Se1960	Si2881	Sn1899
Line	818.326 {41}	231.604 {446}	178.284 {489}	220.353 {453}	182.034 {485}	206.833 {463}	196.090 {472}	288.158 {117}	189.989 {477}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	52.922	.50388	10.423	.51966	2.0885	.52973	2.0588	9.8177	1.9855
Stddev	.216	.00160	.000	.00138	.0045	.00028	.0079	.0485	.0001
%RSD	.40880	.31824	.00206	.26613	.21338	.05371	.38326	.49403	.00266

#1	52.769	.50274	10.423	.51868	2.0853	.52993	2.0644	9.7834	1.9855
#2	53.075	.50501	10.423	.52064	2.0916	.52952	2.0533	9.8520	1.9854

Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Elem	Sr4077	Th2837	Ti3349	Ti1908	U_3701	V_2924	Zn2062	Zr3391
Line	407.771 {83}	283.730 {119}	334.904 {101}	190.856 {477}	370.152 {91}	292.402 {115}	206.200 {163}	339.198 {99}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.95890	1.0209	.95020	2.0086	2.1767	.47464	.46742	.49153
Stddev	.00575	.0017	.00124	.0032	.0022	.00211	.00251	.00175
%RSD	.60009	.16962	.13053	.15701	.10348	.44410	.53697	.35621

#1	.95483	1.0221	.95108	2.0064	2.1783	.47613	.46564	.49029
#2	.96297	1.0196	.94932	2.0108	2.1751	.47315	.46919	.49277

Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit								
Low Limit								

Int. Std.	Y_2243	Y_3600	Y_3774
Line	224.306 {450}	360.073 {94}	377.433 {89}
Units	Cts/S	Cts/S	Cts/S
Avg	1478.3	31230.	6015.6
Stddev	.6	3.	14.3
%RSD	.04119	.01007	.23762

#1	1477.9	31227.	6025.7
#2	1478.8	31232.	6005.5

Sample Name: 280-83157-E-1-A Acquired: 5/24/2016 0:04:46 Type: Unk
Method: 6500_026(v10) Mode: CONC Corr. Factor: 1.000000
User: kellyca Custom ID1: Custom ID2: Custom ID3:
Comment: 325550 200.7

Elem	Ag3280	Al3092	As1890	B_2089	Ba4554	Be3130	Bi2230	Ca3179	Cd2288
Line	328.068 {103}	309.271 {109}	189.042 {478}	208.959 {461}	455.403 { 74}	313.042 {108}	223.061 {451}	317.933 {106}	228.802 {447}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.00054	W 3.5873	-.00176	.01671	.10765	.00027	-.00032	31.261	.00025
Stddev	.00035	.0319	.00281	.00023	.00090	.00004	.00056	.105	.00010
%RSD	65.697	.89025	159.51	1.3927	.83727	15.598	178.07	.33665	39.794

#1	.00079	3.5647	-.00375	.01688	.10701	.00030	-.00071	31.186	.00032
#2	.00029	3.6099	.00023	.01655	.10828	.00024	.00008	31.335	.00018

Check ?	Chk Pass	Chk Warn	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit		500.00							
Low Limit		4.0000							

Elem	Co2286	Cr2055	Cu3247	Fe2599	K_7664	Li6707	Mg2790	Mn2576	Mo2020
Line	228.616 {447}	205.560 {464}	324.754 {104}	259.940 {130}	766.490 { 44}	670.784 { 50}	279.079 {121}2	257.610 {131}	202.030 {467}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.00154	.00372	.00375	3.5800	1.8401	.00718	6.0156	.10554	.00124
Stddev	.00025	.00004	.00018	.0015	.0044	.00057	.0253	.00008	.00024
%RSD	15.996	1.0662	4.6793	.04237	.23916	7.8852	.42099	.07469	19.108

#1	.00171	.00369	.00363	3.5789	1.8432	.00678	6.0336	.10549	.00107
#2	.00136	.00375	.00388	3.5811	1.8370	.00758	5.9977	.10560	.00141

Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Elem	Na5895	Ni2316	P_1782	Pb2203	S_1820	Sb2068	Se1960	Si2881	Sn1899
Line	589.592 { 57}	231.604 {446}	178.284 {489}	220.353 {453}	182.034 {485}	206.833 {463}	196.090 {472}	288.158 {117}	189.989 {477}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	6.8971	.00413	.11240	.00160	7.3673	.00180	.01060	12.318	.00065
Stddev	.0336	.00061	.00447	.00047	.0251	.00038	.00406	.007	.00170
%RSD	.48755	14.794	3.9810	29.585	.34141	21.074	38.288	.05734	261.59

#1	6.8733	.00456	.10923	.00127	7.3851	.00153	.01347	12.323	-.00055
#2	6.9209	.00369	.11556	.00194	7.3495	.00206	.00773	12.313	.00186

Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Elem	Sr4077	Th2837	Ti3349	Ti1908	U_3701	V_2924	Zn2062	Zr3391
Line	407.771 { 83}	283.730 {119}	334.904 {101}	190.856 {477}	370.152 { 91}	292.402 {115}	206.200 {163}	339.198 { 99}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.19905	.00420	.07228	.00018	.00353	.00771	.01402	.00147
Stddev	.00019	.00229	.00034	.00017	.03406	.00052	.00060	.00005
%RSD	.09659	54.508	.46379	94.791	964.56	6.7189	4.2833	3.6065

#1	.19919	.00582	.07205	.00030	-.02055	.00808	.01359	.00144
#2	.19891	.00258	.07252	.00006	.02761	.00735	.01444	.00151

Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit								
Low Limit								

Int. Std.	Y_2243	Y_3600	Y_3774
Line	224.306 {450}	360.073 { 94}	377.433 { 89}
Units	Cts/S	Cts/S	Cts/S
Avg	1537.9	32771.	6175.8
Stddev	3.8	42.	9.1
%RSD	.24639	.12899	.14752

#1	1540.6	32741.	6182.3
#2	1535.2	32801.	6169.4

Sample Name: 280-83157-E-1-Asd@5 Acquired: 5/24/2016 0:07:27 Type: Unk
Method: 6500_026(v10) Mode: CONC Corr. Factor: 1.000000
User: kellyca Custom ID1: Custom ID2: Custom ID3:
Comment: 325550 200.7

Elem	Ag3280	Al1670	As1890	B_2089	Ba4554	Be3130	Bi2230	Ca3179	Cd2288
Line	328.068 {103}	167.079 {502}	189.042 {478}	208.959 {461}	455.403 { 74}	313.042 {108}	223.061 {451}	317.933 {106}	228.802 {447}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	-.00004	1.0705	.00178	.00457	.02271	.00006	.00009	6.4501	-.00003
Stddev	.00047	.0036	.00410	.00057	.00019	.00002	.00252	.0146	.00015
%RSD	1062.1	.33788	229.99	12.466	.83976	26.217	2855.9	.22666	554.24

#1	-.00038	1.0731	-.00112	.00497	.02258	.00007	-.00169	6.4604	-.00013
#2	.00029	1.0680	.00469	.00417	.02285	.00005	.00187	6.4397	.00008

Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Elem	Co2286	Cr2055	Cu3247	Fe2599	K_7664	Li6707	Mg2790	Mn2576	Mo2020
Line	228.616 {447}	205.560 {464}	324.754 {104}	259.940 {130}	766.490 { 44}	670.784 { 50}	279.079 {121}2	257.610 {131}	202.030 {467}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.00028	.00104	-.00031	.85593	.45918	.00078	1.2524	.02226	-.00008
Stddev	.00022	.00008	.00028	.00488	.01408	.00075	.0036	.00012	.00029
%RSD	78.105	7.7451	89.574	.57010	3.0662	96.173	.28892	.55366	340.49

#1	.00044	.00110	-.00050	.85248	.44923	.00131	1.2549	.02217	.00012
#2	.00013	.00099	-.00011	.85938	.46914	.00025	1.2498	.02235	-.00029

Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Elem	Na5895	Ni2316	P_1782	Pb2203	S_1820	Sb2068	Se1960	Si2881	Sn1899
Line	589.592 { 57}	231.604 {446}	178.284 {489}	220.353 {453}	182.034 {485}	206.833 {463}	196.090 {472}	288.158 {117}	189.989 {477}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	1.3922	.00086	.02481	.00274	1.4724	-.00013	.00893	3.1806	-.00149
Stddev	.0008	.00003	.00126	.00077	.0004	.00374	.00284	.0268	.00012
%RSD	.05702	3.7724	5.0769	28.096	.02800	2884.8	31.754	.84319	8.2194

#1	1.3916	.00088	.02392	.00220	1.4721	.00251	.00692	3.1995	-.00157
#2	1.3928	.00084	.02570	.00329	1.4726	-.00277	.01093	3.1616	-.00140

Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Elem	Sr4077	Th2837	Ti3349	Ti1908	U_3701	V_2924	Zn2062	Zr3391	
Line	407.771 { 83}	283.730 {119}	334.904 {101}	190.856 {477}	370.152 { 91}	292.402 {115}	206.200 {163}	339.198 { 99}	
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	
Avg	.04069	.00094	.02968	.00277	.00104	.00208	.00397	.00302	
Stddev	.00004	.00221	.00092	.00048	.00467	.00014	.00002	.00022	
%RSD	.10934	234.55	3.1064	17.400	448.65	6.9663	.56840	7.2714	

#1	.04065	.00251	.02903	.00311	.00434	.00198	.00395	.00286	
#2	.04072	-.00062	.03033	.00243	-.00226	.00218	.00398	.00317	

Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	
High Limit									
Low Limit									

Int. Std.	Y_2243	Y_3600	Y_3774						
Line	224.306 {450}	360.073 { 94}	377.433 { 89}						
Units	Cts/S	Cts/S	Cts/S						
Avg	1558.7	33217.	6076.8						
Stddev	1.5	40.	6.9						
%RSD	.09860	.12024	.11296						

#1	1559.7	33246.	6072.0						
#2	1557.6	33189.	6081.7						

Sample Name: 280-83157-E-1-B MS Acquired: 5/24/2016 0:10:13 Type: Unk
Method: 6500_026(v10) Mode: CONC Corr. Factor: 1.000000
User: kellyca Custom ID1: Custom ID2: Custom ID3:
Comment: 325550 200.7

Elem	Ag3280	Al3092	As1890	B_2089	Ba4554	Be3130	Bi2230	Ca3179	Cd2288
Line	328.068 {103}	309.271 {109}	189.042 {478}	208.959 {461}	455.403 {74}	313.042 {108}	223.061 {451}	317.933 {106}	228.802 {447}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.05046	8.6340	1.0719	1.1084	2.1566	.05118	2.3146	80.596	.10723
Stddev	.00051	.0054	.0042	.0064	.0036	.00009	.0091	.033	.00045
%RSD	1.0096	.06282	.39389	.57928	.16558	.17200	.39258	.04153	.41561

#1	.05010	8.6379	1.0749	1.1129	2.1541	.05124	2.3210	80.573	.10754
#2	.05082	8.6302	1.0689	1.1039	2.1591	.05111	2.3082	80.620	.10691

Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Elem	Co2286	Cr2055	Cu3247	Fe2599	K_7664	Li6707	Mg2790	Mn2576	Mo2020
Line	228.616 {447}	205.560 {464}	324.754 {104}	259.940 {130}	766.490 {44}	670.784 {50}	279.079 {121}2	257.610 {131}	202.030 {467}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.52061	W .21367	.26756	4.8178	55.169	1.1014	55.559	.59428	1.0878
Stddev	.00194	.00044	.00069	.0068	.070	.0002	.070	.00220	.0006
%RSD	.37305	.20740	.25745	.14074	.12653	.02216	.12646	.37026	.05813

#1	.52199	.21336	.26707	4.8130	55.120	1.1012	55.509	.59272	1.0882
#2	.51924	.21399	.26805	4.8226	55.218	1.1016	55.609	.59583	1.0873

Check ?	Chk Pass	Chk Warn	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit		.10000							
Low Limit		-.01000							

Elem	Na8183	Ni2316	P_1782	Pb2203	S_1820	Sb2068	Se1960	Si2881	Sn1899
Line	818.326 {41}	231.604 {446}	178.284 {489}	220.353 {453}	182.034 {485}	206.833 {463}	196.090 {472}	288.158 {117}	189.989 {477}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	60.653	.50863	10.710	.52165	9.6542	.53586	2.0964	26.835	2.0006
Stddev	.210	.00067	.053	.00386	.0084	.00280	.0041	.006	.0009
%RSD	.34688	.13104	.49195	.74058	.08748	.52237	.19693	.02079	.04457

#1	60.505	.50910	10.747	.52439	9.6602	.53784	2.0993	26.839	2.0012
#2	60.802	.50816	10.673	.51892	9.6482	.53388	2.0935	26.831	1.9999

Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Elem	Sr4077	Th2837	Ti3349	Ti1908	U_3701	V_2924	Zn2062	Zr3391
Line	407.771 {83}	283.730 {119}	334.904 {101}	190.856 {477}	370.152 {91}	292.402 {115}	206.200 {163}	339.198 {99}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	1.1639	1.0425	1.0451	2.0004	2.2175	.49079	.48520	.49733
Stddev	.0003	.0019	.0004	.0002	.0016	.00085	.00353	.00093
%RSD	.02612	.18368	.04256	.00912	.07071	.17246	.72786	.18626

#1	1.1641	1.0411	1.0454	2.0005	2.2186	.49019	.48770	.49667
#2	1.1637	1.0438	1.0448	2.0003	2.2164	.49139	.48271	.49798

Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit								
Low Limit								

Int. Std.	Y_2243	Y_3600	Y_3774
Line	224.306 {450}	360.073 {94}	377.433 {89}
Units	Cts/S	Cts/S	Cts/S
Avg	1468.1	30885.	5998.8
Stddev	3.6	71.	11.8
%RSD	.24830	.23119	.19640

#1	1465.5	30935.	5990.5
#2	1470.7	30834.	6007.1

Sample Name: 280-83157-E-1-C MSD Acquired: 5/24/2016 0:12:45 Type: Unk
Method: 6500_026(v10) Mode: CONC Corr. Factor: 1.000000
User: kellyca Custom ID1: Custom ID2: Custom ID3:
Comment: 325550 200.7

Elem	Ag3280	Al3092	As1890	B_2089	Ba4554	Be3130	Bi2230	Ca3179	Cd2288
Line	328.068 {103}	309.271 {109}	189.042 {478}	208.959 {461}	455.403 { 74}	313.042 {108}	223.061 {451}	317.933 {106}	228.802 {447}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.05007	8.4429	1.0592	1.1016	2.1462	.05086	2.2886	80.424	.10638
Stddev	.00076	.0156	.0052	.0002	.0003	.00020	.0180	.102	.00038
%RSD	1.5179	.18485	.48707	.01835	.01601	.39502	.78524	.12714	.36131

#1	.04953	8.4540	1.0555	1.1014	2.1465	.05100	2.3013	80.496	.10611
#2	.05061	8.4319	1.0628	1.1017	2.1460	.05072	2.2759	80.352	.10665

Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Elem	Co2286	Cr2055	Cu3247	Fe2599	K_7664	Li6707	Mg2790	Mn2576	Mo2020
Line	228.616 {447}	205.560 {464}	324.754 {104}	259.940 {130}	766.490 { 44}	670.784 { 50}	279.079 {121}2	257.610 {131}	202.030 {467}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.51495	W .21051	.26396	4.7306	54.991	1.0977	54.991	.59005	1.0788
Stddev	.00082	.00030	.00013	.0114	.079	.0008	.087	.00076	.0004
%RSD	.16006	.14428	.04863	.24127	.14422	.07377	.15762	.12807	.03201

#1	.51437	.21073	.26387	4.7387	55.048	1.0982	55.053	.59058	1.0790
#2	.51554	.21030	.26405	4.7225	54.935	1.0971	54.930	.58952	1.0785

Check ?	Chk Pass	Chk Warn	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit		.10000							
Low Limit		-.01000							

Elem	Na8183	Ni2316	P_1782	Pb2203	S_1820	Sb2068	Se1960	Si2881	Sn1899
Line	818.326 { 41}	231.604 {446}	178.284 {489}	220.353 {453}	182.034 {485}	206.833 {463}	196.090 {472}	288.158 {117}	189.989 {477}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	60.343	.50275	10.589	.51847	9.7391	.52983	2.0822	27.143	1.9807
Stddev	.111	.00053	.007	.00029	.0166	.00279	.0017	.013	.0043
%RSD	.18319	.10599	.06974	.05535	.17018	.52616	.08013	.04671	.21620

#1	60.265	.50313	10.594	.51827	9.7508	.53180	2.0811	27.152	1.9838
#2	60.421	.50238	10.584	.51867	9.7273	.52785	2.0834	27.134	1.9777

Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Elem	Sr4077	Th2837	Ti3349	Ti1908	U_3701	V_2924	Zn2062	Zr3391
Line	407.771 { 83}	283.730 {119}	334.904 {101}	190.856 {477}	370.152 { 91}	292.402 {115}	206.200 {163}	339.198 { 99}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	1.1596	1.0281	1.0298	1.9842	2.1977	.48402	.47659	.49557
Stddev	.0015	.0047	.0003	.0053	.0026	.00042	.00393	.00247
%RSD	.12923	.45487	.02676	.26966	.11972	.08628	.82469	.49772

#1	1.1607	1.0314	1.0300	1.9880	2.1995	.48431	.47937	.49382
#2	1.1586	1.0248	1.0296	1.9804	2.1958	.48372	.47381	.49731

Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit								
Low Limit								

Int. Std.	Y_2243	Y_3600	Y_3774
Line	224.306 {450}	360.073 { 94}	377.433 { 89}
Units	Cts/S	Cts/S	Cts/S
Avg	1468.2	30994.	5996.9
Stddev	1.9	26.	14.5
%RSD	.12680	.08290	.24223

#1	1466.9	30976.	5986.6
#2	1469.5	31012.	6007.2

Sample Name: 280-83157-E-2-A Acquired: 5/24/2016 0:15:18 Type: Unk
Method: 6500_026(v10) Mode: CONC Corr. Factor: 1.000000
User: kellyca Custom ID1: Custom ID2: Custom ID3:
Comment: 325550 200.7

Elem	Ag3280	Al3092	As1890	B_2089	Ba4554	Be3130	Bi2230	Ca3179	Cd2288
Line	328.068 {103}	309.271 {109}	189.042 {478}	208.959 {461}	455.403 {74}	313.042 {108}	223.061 {451}	317.933 {106}	228.802 {447}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.00013	W 3.4552	-.00138	.01591	.10573	.00029	-.00040	30.925	.00020
Stddev	.00015	.0234	.00200	.00007	.00046	.00006	.00131	.169	.00017
%RSD	115.11	.67818	144.80	.41846	.43403	19.764	329.92	.54704	84.655

#1	.00002	3.4386	.00003	.01587	.10540	.00025	.00053	30.806	.00008
#2	.00024	3.4717	-.00280	.01596	.10605	.00033	-.00132	31.045	.00032

Check ?	Chk Pass	Chk Warn	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit		500.00							
Low Limit		4.0000							

Elem	Co2286	Cr2055	Cu3247	Fe2599	K_7664	Li6707	Mg2790	Mn2576	Mo2020
Line	228.616 {447}	205.560 {464}	324.754 {104}	259.940 {130}	766.490 {44}	670.784 {50}	279.079 {121}2	257.610 {131}	202.030 {467}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.00133	.00349	.00308	3.6780	1.7923	.00758	5.8871	.10620	.00110
Stddev	.00009	.00004	.00014	.0120	.0169	.00127	.0019	.00008	.00023
%RSD	7.1108	1.0397	4.6099	.32746	.94409	16.806	.03301	.07783	20.990

#1	.00140	.00352	.00318	3.6695	1.7803	.00848	5.8885	.10626	.00093
#2	.00127	.00347	.00298	3.6865	1.8042	.00668	5.8857	.10614	.00126

Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Elem	Na5895	Ni2316	P_1782	Pb2203	S_1820	Sb2068	Se1960	Si2881	Sn1899
Line	589.592 {57}	231.604 {446}	178.284 {489}	220.353 {453}	182.034 {485}	206.833 {463}	196.090 {472}	288.158 {117}	189.989 {477}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	6.7333	.00314	.11128	.00404	7.2354	.00184	.01443	11.808	.00052
Stddev	.0149	.00009	.00071	.00076	.0020	.00116	.00406	.073	.00101
%RSD	.22139	2.9882	.63777	18.797	.02757	62.934	28.155	.61980	192.95

#1	6.7228	.00307	.11178	.00350	7.2369	.00102	.01730	11.756	.00124
#2	6.7439	.00321	.11078	.00458	7.2340	.00267	.01156	11.859	-.00019

Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Elem	Sr4077	Th2837	Ti3349	Ti1908	U_3701	V_2924	Zn2062	Zr3391
Line	407.771 {83}	283.730 {119}	334.904 {101}	190.856 {477}	370.152 {91}	292.402 {115}	206.200 {163}	339.198 {99}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.19582	.00131	.06510	.00201	.03200	.00712	.00952	.00198
Stddev	.00070	.00020	.00044	.00013	.00326	.00057	.00014	.00130
%RSD	.35541	15.358	.68051	6.3713	10.194	7.9463	1.4883	65.788

#1	.19533	.00145	.06541	.00210	.02970	.00672	.00942	.00106
#2	.19632	.00117	.06479	.00192	.03431	.00752	.00962	.00291

Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit								
Low Limit								

Int. Std.	Y_2243	Y_3600	Y_3774
Line	224.306 {450}	360.073 {94}	377.433 {89}
Units	Cts/S	Cts/S	Cts/S
Avg	1526.0	32659.	6083.4
Stddev	4.3	6.	24.1
%RSD	.28267	.01951	.39555

#1	1529.1	32654.	6100.4
#2	1523.0	32663.	6066.4

Sample Name: 280-83158-D-1-A Acquired: 5/24/2016 0:18:00 Type: Unk
Method: 6500_026(v10) Mode: CONC Corr. Factor: 1.000000
User: kellyca Custom ID1: Custom ID2: Custom ID3:
Comment: 325550 200.7

Elem	Ag3280	Al1670	As1890	B_2089	Ba4554	Be3130	Bi2230	Ca3179	Cd2288
Line	328.068 {103}	167.079 {502}	189.042 {478}	208.959 {461}	455.403 { 74}	313.042 {108}	223.061 {451}	317.933 {106}	228.802 {447}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.00034	.43551	-.00057	.03447	.02752	.00001	.00103	172.08	.00021
Stddev	.00012	.01913	.00071	.00024	.00010	.00000	.00513	.17	.00018
%RSD	34.175	4.3924	125.68	.68554	.35191	19.210	497.95	.10033	81.626

#1	.00026	.44903	-.00107	.03463	.02759	.00001	.00466	171.96	.00009
#2	.00042	.42198	-.00006	.03430	.02745	.00001	-.00260	172.21	.00034

Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Elem	Co2286	Cr2055	Cu3247	Fe2599	K_7664	Li6707	Mg2790	Mn2576	Mo2020
Line	228.616 {447}	205.560 {464}	324.754 {104}	259.940 {130}	766.490 { 44}	670.784 { 50}	279.079 {121}2	257.610 {131}	202.030 {467}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.00268	.00075	.00085	.36758	5.4167	.06892	117.69	.00508	.00043
Stddev	.00044	.00014	.00008	.00214	.0032	.00027	.03	.00006	.00019
%RSD	16.228	18.719	9.2104	.58115	.05905	.39471	.02336	1.1653	43.824

#1	.00299	.00085	.00080	.36909	5.4145	.06911	117.71	.00504	.00030
#2	.00238	.00065	.00091	.36607	5.4190	.06873	117.68	.00512	.00057

Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Elem	Na8183	Ni2316	P_1782	Pb2203	S_1820	Sb2068	Se1960	Si2881	Sn1899
Line	818.326 { 41}	231.604 {446}	178.284 {489}	220.353 {453}	182.034 {485}	206.833 {463}	196.090 {472}	288.158 {117}	189.989 {477}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	346.13	.00153	.03473	.00008	F 404.69	-.00018	.00901	5.5945	-.00107
Stddev	1.29	.00058	.00483	.00173	11.46	.00010	.00327	.0167	.00101
%RSD	.37125	38.320	13.906	2070.2	2.8325	57.091	36.307	.29884	94.256

#1	345.22	.00194	.03814	-.00114	412.80	-.00010	.01132	5.6063	-.00179
#2	347.03	.00111	.03131	.00131	396.59	-.00025	.00670	5.5827	-.00036

Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Fail	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit					200.00				
Low Limit					-.02000				

Elem	Sr4077	Th2837	Ti3349	Ti1908	U_3701	V_2924	Zn2062	Zr3391
Line	407.771 { 83}	283.730 {119}	334.904 {101}	190.856 {477}	370.152 { 91}	292.402 {115}	206.200 {163}	339.198 { 99}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	4.2395	-.00079	.00773	.00131	.02859	.00195	.00049	.00010
Stddev	.0238	.00077	.00015	.00052	.01999	.00060	.00028	.00036
%RSD	.56079	97.186	1.9453	39.670	69.923	30.912	56.255	343.46

#1	4.2227	-.00025	.00783	.00168	.04273	.00153	.00069	-.00015
#2	4.2563	-.00134	.00762	.00095	.01445	.00238	.00030	.00036

Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit								
Low Limit								

Int. Std.	Y_2243	Y_3600	Y_3774
Line	224.306 {450}	360.073 { 94}	377.433 { 89}
Units	Cts/S	Cts/S	Cts/S
Avg	1356.2	29164.	5814.2
Stddev	29.0	38.	11.1
%RSD	2.1388	.13145	.19030

#1	1335.7	29191.	5822.1
#2	1376.7	29137.	5806.4

Sample Name: 280-83158-D-2-A Acquired: 5/24/2016 0:20:52 Type: Unk
Method: 6500_026(v10) Mode: CONC Corr. Factor: 1.000000
User: kellyca Custom ID1: Custom ID2: Custom ID3:
Comment: 325550 200.7

Elem	Ag3280	Al1670	As1890	B_2089	Ba4554	Be3130	Bi2230	Ca3179	Cd2288
Line	328.068 {103}	167.079 {502}	189.042 {478}	208.959 {461}	455.403 { 74}	313.042 {108}	223.061 {451}	317.933 {106}	228.802 {447}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.00050	.16762	.00011	.01964	.10484	-.00011	.00194	57.429	.00025
Stddev	.00041	.00105	.00132	.00001	.00047	.00001	.00029	.266	.00005
%RSD	82.167	.62449	1176.2	.03902	.45261	9.9833	14.974	.46363	18.189

#1	.00079	.16836	.00104	.01964	.10518	-.00010	.00173	57.617	.00028
#2	.00021	.16688	-.00082	.01965	.10451	-.00012	.00214	57.241	.00022

Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Elem	Co2286	Cr2055	Cu3247	Fe2599	K_7664	Li6707	Mg2790	Mn2576	Mo2020
Line	228.616 {447}	205.560 {464}	324.754 {104}	259.940 {130}	766.490 { 44}	670.784 { 50}	279.079 {121}2	257.610 {131}	202.030 {467}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.00001	.00018	-.00048	.25742	1.5364	.00614	13.697	.23180	.00013
Stddev	.00025	.00027	.00020	.00149	.0036	.00101	.006	.00006	.00003
%RSD	4245.7	148.95	41.652	.57775	.23554	16.505	.04129	.02728	24.822

#1	.00019	-.00001	-.00062	.25847	1.5389	.00685	13.693	.23176	.00015
#2	-.00017	.00037	-.00034	.25636	1.5338	.00542	13.701	.23185	.00010

Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Elem	Na8183	Ni2316	P_1782	Pb2203	S_1820	Sb2068	Se1960	Si2881	Sn1899
Line	818.326 { 41}	231.604 {446}	178.284 {489}	220.353 {453}	182.034 {485}	206.833 {463}	196.090 {472}	288.158 {117}	189.989 {477}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	34.353	.00055	.00902	.00042	23.154	-.00191	.00891	6.1123	-.00073
Stddev	.204	.00043	.00074	.00118	.020	.00042	.00100	.0203	.00217
%RSD	.59518	79.603	8.1750	283.23	.08510	21.959	11.253	.33209	297.67

#1	34.497	.00024	.00954	-.00042	23.168	-.00220	.00820	6.1266	-.00226
#2	34.208	.00085	.00850	.00125	23.140	-.00161	.00962	6.0979	.00081

Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Elem	Sr4077	Th2837	Ti3349	Ti1908	U_3701	V_2924	Zn2062	Zr3391
Line	407.771 { 83}	283.730 {119}	334.904 {101}	190.856 {477}	370.152 { 91}	292.402 {115}	206.200 {163}	339.198 { 99}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.81788	.00090	.00259	.00269	.02024	.00097	-.00074	.00042
Stddev	.00020	.00179	.00002	.00040	.01817	.00014	.00054	.00080
%RSD	.02467	198.69	.61662	14.802	89.757	14.515	72.997	192.40

#1	.81802	.00216	.00258	.00241	.00739	.00087	-.00036	-.00015
#2	.81774	-.00036	.00260	.00297	.03309	.00107	-.00113	.00099

Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit								
Low Limit								

Int. Std.	Y_2243	Y_3600	Y_3774
Line	224.306 {450}	360.073 { 94}	377.433 { 89}
Units	Cts/S	Cts/S	Cts/S
Avg	1473.7	31540.	5880.8
Stddev	1.7	13.	8.7
%RSD	.11375	.04002	.14737

#1	1474.9	31549.	5874.7
#2	1472.5	31531.	5887.0

Sample Name: 280-83158-D-3-A Acquired: 5/24/2016 0:23:37 Type: Unk
Method: 6500_026(v10) Mode: CONC Corr. Factor: 1.000000
User: kellyca Custom ID1: Custom ID2: Custom ID3:
Comment: 325550 200.7

Elem	Ag3280	Al1670	As1890	B_2089	Ba4554	Be3130	Bi2230	Ca3179	Cd2288
Line	328.068 {103}	167.079 {502}	189.042 {478}	208.959 {461}	455.403 { 74}	313.042 {108}	223.061 {451}	317.933 {106}	228.802 {447}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.00071	.00551	-.00250	.00578	.00042	.00002	-.00014	.02780	.00008
Stddev	.00054	.00175	.00183	.00126	.00009	.00008	.00373	.00259	.00007
%RSD	75.923	31.768	73.298	21.835	20.373	465.16	2753.8	9.3082	85.136

#1	.00109	.00427	-.00121	.00489	.00048	.00007	-.00277	.02963	.00003
#2	.00033	.00674	-.00380	.00668	.00036	-.00004	.00250	.02597	.00013

Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Elem	Co2286	Cr2055	Cu3247	Fe2599	K_7664	Li6707	Mg2790	Mn2576	Mo2020
Line	228.616 {447}	205.560 {464}	324.754 {104}	259.940 {130}	766.490 { 44}	670.784 { 50}	279.079 {121}2	257.610 {131}	202.030 {467}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	-.00009	.00029	-.00101	.03962	3.8914	-.00027	.00729	.00020	.00019
Stddev	.00031	.00013	.00013	.00001	.0085	.00073	.00360	.00001	.00035
%RSD	343.04	44.616	13.275	.02299	.21753	267.34	49.427	7.1718	182.21

#1	.00013	.00038	-.00111	.03963	3.8854	.00024	.00984	.00019	-.00005
#2	-.00031	.00020	-.00092	.03962	3.8974	-.00079	.00474	.00022	.00043

Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Elem	Na5895	Ni2316	P_1782	Pb2203	S_1820	Sb2068	Se1960	Si2881	Sn1899
Line	589.592 { 57}	231.604 {446}	178.284 {489}	220.353 {453}	182.034 {485}	206.833 {463}	196.090 {472}	288.158 {117}	189.989 {477}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.15321	-.00027	.00131	.00253	.01891	.00085	.00712	.07491	.00078
Stddev	.00084	.00046	.00192	.00160	.00480	.00061	.00251	.00460	.00026
%RSD	.55092	167.31	146.57	63.096	25.371	71.893	35.209	6.1355	33.017

#1	.15261	-.00060	.00267	.00140	.01552	.00042	.00535	.07816	.00096
#2	.15380	.00005	-.00005	.00366	.02230	.00128	.00890	.07166	.00059

Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Elem	Sr4077	Th2837	Ti3349	Ti1908	U_3701	V_2924	Zn2062	Zr3391	
Line	407.771 { 83}	283.730 {119}	334.904 {101}	190.856 {477}	370.152 { 91}	292.402 {115}	206.200 {163}	339.198 { 99}	
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	
Avg	.00032	.00221	.00050	.00073	.00905	.00005	.00316	-.00050	
Stddev	.00002	.00109	.00021	.00018	.03396	.00059	.00071	.00202	
%RSD	6.0278	49.112	41.564	25.033	375.42	1093.3	22.598	404.39	

#1	.00031	.00144	.00036	.00060	.03306	-.00036	.00266	-.00193	
#2	.00033	.00298	.00065	.00086	-.01497	.00047	.00367	.00093	

Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	
High Limit									
Low Limit									

Int. Std.	Y_2243	Y_3600	Y_3774
Line	224.306 {450}	360.073 { 94}	377.433 { 89}
Units	Cts/S	Cts/S	Cts/S
Avg	1531.6	32951.	5983.6
Stddev	2.6	25.	5.5
%RSD	.17246	.07664	.09233

#1	1533.5	32969.	5979.7
#2	1529.8	32933.	5987.5

Sample Name: ccvh-3900196 Acquired: 5/24/2016 0:26:24 Type: QC
Method: 6500_026(v10) Mode: CONC Corr. Factor: 1.000000
User: kellyca Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	Ag3280	Al3092	As1890	B_2089	Ba4554	Be3130	Bi2230	Ca3179	Cd2288	Co2286	Cr2055	Cu3247	Fe2714
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.00083	47.062	.00090	.00353	.00196	.00131	1.0703	-.04488	.00069	.00489	.00122	.00541	47.081
Stddev	.00032	.271	.00171	.00031	.00005	.00005	.0042	.00115	.00021	.00054	.00035	.00051	.302
%RSD	38.709	.57670	190.30	8.8065	2.4302	3.5885	.39322	2.5610	29.846	10.971	28.298	9.3453	.64220

#1	.00061	46.870	-.00031	.00375	.00192	.00127	1.0673	-.04407	.00084	.00451	.00098	.00506	46.867
#2	.00106	47.254	.00211	.00331	.00199	.00134	1.0733	-.04569	.00055	.00527	.00147	.00577	47.295

Check ?	None	Chk Pass	None	None	None	None	Chk Pass	None	None	None	None	None	Chk Pass
Value													
Range													

Elem	K_7664	Li6707	Mg2790	Mn2576	Mo2020	Na8183	Ni2316	P_1782	Pb2203	S_1820	Sb2068	Se1960	Si2881
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.16625	.00189	.22366	.00061	-.00174	253.40	.00122	.00438	.00059	5.0335	.00482	.01544	.01411
Stddev	.00287	.00133	.00047	.00004	.00025	.64	.00008	.00157	.00047	.0079	.00060	.01086	.01686
%RSD	1.7252	70.264	.21085	6.0489	14.254	.25142	6.6263	35.777	79.896	.15760	12.502	70.367	119.49

#1	.16422	.00095	.22399	.00063	-.00191	252.95	.00128	.00328	.00025	5.0279	.00525	.00776	.02602
#2	.16828	.00283	.22332	.00058	-.00156	253.86	.00116	.00549	.00092	5.0391	.00439	.02312	.00219

Check ?	None	None	None	None	None	Chk Pass	None	None	None	Chk Pass	None	None	None
Value													
Range													

Elem	Sn1899	Sr4077	Th2837	Ti3349	Tl1908	U_3701	V_2924	Zn2062	Zr3391
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.00424	.00182	4.9355	.02584	.00134	10.214	-.01511	.00060	-.01648
Stddev	.00098	.00001	.0022	.00017	.00030	.006	.00018	.00012	.00030
%RSD	23.039	.32642	.04500	.66807	22.322	.05473	1.1731	19.627	1.8477

#1	.00493	.00183	4.9371	.02597	.00155	10.218	-.01523	.00051	-.01669
#2	.00355	.00182	4.9340	.02572	.00113	10.210	-.01498	.00068	-.01626

Check ?	None	None	Chk Pass	None	None	Chk Pass	None	None	None
Value									
Range									

Int. Std.	Y_2243	Y_3600	Y_3774
Units	Cts/S	Cts/S	Cts/S
Avg	1470.2	31098.	5866.5
Stddev	1.4	58.	21.6
%RSD	.09723	.18692	.36904

#1	1469.2	31057.	5881.8
#2	1471.2	31139.	5851.2

Sample Name: ccv-3900195 Acquired: 5/24/2016 0:29:14 Type: QC
Method: 6500_026(v10) Mode: CONC Corr. Factor: 1.000000
User: kellyca Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	Ag3280	Al1670	As1890	B_2089	Ba4554	Be3130	Bi2230	Ca3179	Cd2288	Co2286	Cr2055	Cu3247
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.48316	.52036	1.0176	F .55095	.49048	.49200	.00239	4.8346	.52712	.51865	.50581	.49599
Stddev	.00344	.00096	.0000	.00184	.00108	.00085	.00010	.0101	.00003	.00174	.00170	.00191
%RSD	.71276	.18513	.00266	.33385	.21996	.17371	3.9791	.20876	.00555	.33469	.33619	.38510

#1	.48560	.51968	1.0176	.55225	.49124	.49260	.00233	4.8417	.52714	.51743	.50461	.49734
#2	.48073	.52104	1.0177	.54965	.48972	.49140	.00246	4.8274	.52710	.51988	.50701	.49464

Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Fail	Chk Pass	Chk Pass	None	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Value				.50000								
Range				10.000%								

Elem	Fe2599	K_7664	Li6707	Mg2790	Mn2576	Mo2020	Na5895	Ni2316	P_1782	Pb2203	S_1820	Sb2068
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	2.7106	49.950	1.0380	19.479	.48934	.51272	5.2151	.50456	1.0131	1.0622	.00270	1.0069
Stddev	.0080	.089	.0027	.085	.00215	.00092	.0190	.00161	.0010	.0027	.00259	.0044
%RSD	.29698	.17757	.25549	.43606	.44025	.17979	.36471	.31892	.10342	.25636	95.681	.43881

#1	2.7163	50.013	1.0362	19.539	.49087	.51206	5.2285	.50570	1.0138	1.0602	.00453	1.0100
#2	2.7049	49.888	1.0399	19.419	.48782	.51337	5.2016	.50342	1.0124	1.0641	.00087	1.0037

Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	None	Chk Pass
Value												
Range												

Elem	Se1960	Si2881	Sn1899	Sr4077	Th2837	Ti3349	Ti1908	U_3701	V_2924	Zn2062	Zr3391
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	1.0320	4.8448	.99408	.46534	.00632	.46016	1.0394	.03764	.46489	.47987	.48357
Stddev	.0079	.0074	.00139	.00057	.00019	.00177	.0009	.00134	.00306	.00042	.00084
%RSD	.76789	.15198	.14023	.12207	2.9458	.38442	.09027	3.5545	.65835	.08809	.17276

#1	1.0264	4.8500	.99506	.46574	.00619	.46141	1.0388	.03669	.46705	.47957	.48298
#2	1.0376	4.8396	.99309	.46494	.00645	.45891	1.0401	.03858	.46272	.48016	.48416

Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	None	Chk Pass	Chk Pass	None	Chk Pass	Chk Pass	Chk Pass
Value											
Range											

Int. Std.	Y_2243	Y_3600	Y_3774
Units	Cts/S	Cts/S	Cts/S
Avg	1532.5	32242.	5982.5
Stddev	3.6	92.	14.2
%RSD	.23394	.28440	.23761

#1	1535.1	32177.	5972.4
#2	1530.0	32306.	5992.5

Sample Name: ccb Acquired: 5/24/2016 0:31:52 Type: QC
Method: 6500_026(v10) Mode: CONC Corr. Factor: 1.000000
User: kellyca Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	Ag3280	Al1670	As1890	B_2089	Ba4554	Be3130	Bi2230	Ca3179	Cd2288	Co2286	Cr2055
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.00000	-.00012	-.00082	.00145	.00027	.00005	.00283	-.00208	-.00027	-.00008	-.00019
Stddev	.00039	.00005	.00251	.00033	.00010	.00003	.00034	.00052	.00002	.00008	.00002
%RSD	64343.	40.151	307.73	22.698	37.497	55.564	12.081	24.801	6.3667	107.50	11.356

#1	-.00028	-.00009	-.00259	.00121	.00034	.00007	.00307	-.00244	-.00026	-.00002	-.00017
#2	.00028	-.00015	.00096	.00168	.00020	.00003	.00259	-.00171	-.00028	-.00013	-.00020

Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	None	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit											
Low Limit											

Elem	Cu3247	Fe2599	K_7664	Li6707	Mg2790	Mn2576	Mo2020	Na5895	Ni2316	P_1782	Pb2203
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	W -.00151	.00145	.05543	-.00108	.00408	.00006	-.00011	.02165	.00031	.00325	.00144
Stddev	.00018	.00068	.03087	.00037	.00233	.00005	.00026	.00100	.00061	.00100	.00276
%RSD	11.913	47.047	55.684	34.627	57.099	83.912	244.21	4.6053	196.62	30.870	191.17

#1	-.00164	.00097	.03361	-.00134	.00573	.00010	-.00029	.02235	.00074	.00254	.00339
#2	-.00139	.00193	.07726	-.00082	.00243	.00003	.00008	.02094	-.00012	.00396	-.00051

Check ?	Chk Warn	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit	.00136										
Low Limit	-.00136										

Elem	S_1820	Sb2068	Se1960	Si2881	Sn1899	Sr4077	Th2837	Ti3349	Ti1908	U_3701	V_2924
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.00615	.00291	W .00961	.01999	-.00035	.00010	-.00026	.00043	.00306	.01521	-.00051
Stddev	.00131	.00302	.00973	.00857	.00067	.00001	.00020	.00008	.00035	.00521	.00048
%RSD	21.310	103.81	101.27	42.888	190.48	11.757	74.994	18.996	11.564	34.283	94.209

#1	.00707	.00077	.00273	.01393	.00012	.00009	-.00012	.00037	.00281	.01889	-.00085
#2	.00522	.00505	.01648	.02605	-.00082	.00010	-.00040	.00049	.00331	.01152	-.00017

Check ?	None	Chk Pass	Chk Warn	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit			.00486								
Low Limit			-.00486								

Elem	Zn2062	Zr3391
Units	ppm	ppm
Avg	.00134	.00077
Stddev	.00136	.00039
%RSD	101.02	50.582

#1	.00230	.00049
#2	.00038	.00104

Check ?	Chk Pass	Chk Pass
High Limit		
Low Limit		

Int. Std.	Y_2243	Y_3600	Y_3774
Units	Cts/S	Cts/S	Cts/S
Avg	1560.4	33122.	5892.2
Stddev	5.5	63.	25.6
%RSD	.35513	.18957	.43487

#1	1564.3	33166.	5910.3
#2	1556.5	33077.	5874.1

Sample Name: ccvl-3907489 Acquired: 5/24/2016 0:34:40 Type: QC
Method: 6500_026(v10) Mode: CONC Corr. Factor: 1.000000
User: kellyca Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	Ag3280	Al1670	As1890	B_2089	Ba4554	Be3130	Bi2230	Ca3179	Cd2288	Co2286	Cr2055	Cu3247
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.01016	.10488	.01672	.10470	.00998	.00100	.11833	.18629	.00517	.01025	.01027	.01324
Stddev	.00042	.00099	.00515	.00049	.00004	.00002	.00146	.00591	.00003	.00049	.00003	.00031
%RSD	4.1114	.94259	30.810	.46879	.36067	2.1985	1.2301	3.1740	.62280	4.8302	.26676	2.3542

#1	.01045	.10558	.01308	.10435	.00995	.00102	.11935	.18211	.00515	.00990	.01026	.01346
#2	.00986	.10419	.02037	.10505	.01000	.00098	.11730	.19047	.00520	.01060	.01029	.01302

Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Value												
Range												

Elem	Fe2599	K_7664	Li6707	Mg2790	Mn2576	Mo2020	Na5895	Ni2316	P_1782	Pb2203	S_1820	Sb2068
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.11009	2.9541	.00930	.19897	.00975	.02035	F 1.3098	.04127	2.8575	F .01301	.00087	.02180
Stddev	.00317	.0258	.00090	.00007	.00008	.00024	.0174	.00064	.0076	.00030	.00113	.00022
%RSD	2.8750	.87307	9.6533	.03664	.79373	1.1746	1.3291	1.5446	.26422	2.2743	128.79	.98818

#1	.10785	2.9359	.00993	.19892	.00981	.02052	1.2975	.04082	2.8629	.01322	.00008	.02165
#2	.11233	2.9724	.00866	.19902	.00970	.02019	1.3221	.04172	2.8522	.01280	.00167	.02195

Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Fail	Chk Pass	Chk Pass	Chk Fail	None	Chk Pass
Value							1.0000			.00900		
Range							30.000%			30.000%		

Elem	Se1960	Si2881	Sn1899	Sr4077	Th2837	Ti3349	Ti1908	U_3701	V_2924	Zn2062	Zr3391
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	F .02455	.47221	.09795	.00925	.01602	.00894	.01647	F .08622	.00870	.01990	.01520
Stddev	.00269	.01672	.00026	.00003	.00003	.00023	.00066	.00990	.00057	.00119	.00051
%RSD	10.972	3.5418	.26255	.32874	.17291	2.5382	4.0162	11.483	6.5423	5.9965	3.3846

#1	.02646	.46038	.09777	.00922	.01600	.00877	.01600	.09322	.00910	.02074	.01556
#2	.02265	.48404	.09813	.00927	.01604	.00910	.01694	.07922	.00829	.01905	.01484

Check ?	Chk Fail	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Fail	Chk Pass	Chk Pass	Chk Pass
Value	.01500							.06000			
Range	30.000%							30.000%			

Int. Std.	Y_2243	Y_3600	Y_3774
Units	Cts/S	Cts/S	Cts/S
Avg	1530.8	32862.	5944.4
Stddev	.5	135.	55.0
%RSD	.03354	.41126	.92498

#1	1531.2	32766.	5983.3
#2	1530.4	32958.	5905.5

Sample Name: MB 280-325213/1-A Acquired: 5/24/2016 0:37:27 Type: Unk
Method: 6500_026(v10) Mode: CONC Corr. Factor: 1.000000
User: kellyca Custom ID1: 5/17 Custom ID2: Custom ID3:
Comment: 325213 6010B

Elem	Ag3280	Al1670	As1890	B_2089	Ba4554	Be3130	Bi2230	Ca3179	Cd2288
Line	328.068 {103}	167.079 {502}	189.042 {478}	208.959 {461}	455.403 { 74}	313.042 {108}	223.061 {451}	317.933 {106}	228.802 {447}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.00074	.00189	.00364	.00169	.00019	.00005	.00187	.00342	-.00008
Stddev	.00034	.00039	.00367	.00070	.00023	.00005	.00133	.00092	.00005
%RSD	46.120	20.387	100.78	41.612	120.47	96.997	70.811	27.012	65.224

#1	.00050	.00162	.00624	.00219	.00035	.00001	.00281	.00407	-.00011
#2	.00098	.00216	.00105	.00119	.00003	.00008	.00094	.00277	-.00004

Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Elem	Co2286	Cr2055	Cu3247	Fe2599	K_7664	Li6707	Mg2790	Mn2576	Mo2020
Line	228.616 {447}	205.560 {464}	324.754 {104}	259.940 {130}	766.490 { 44}	670.784 { 50}	279.079 {121}2	257.610 {131}	202.030 {467}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	-.00020	.00017	-.00144	W .03354	.00354	-.00028	.00284	.00010	-.00018
Stddev	.00017	.00003	.00004	.00056	.01711	.00047	.00087	.00002	.00033
%RSD	87.846	21.023	3.0806	1.6682	482.64	170.36	30.492	23.385	187.71

#1	-.00032	.00014	-.00148	.03315	-.00855	.00006	.00345	.00009	.00006
#2	-.00007	.00019	-.00141	.03394	.01564	-.00061	.00223	.00012	-.00041

Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Warn	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit				.03000					
Low Limit				-.05000					

Elem	Na5895	Ni2316	P_1782	Pb2203	S_1820	Sb2068	Se1960	Si2881	Sn1899
Line	589.592 { 57}	231.604 {446}	178.284 {489}	220.353 {453}	182.034 {485}	206.833 {463}	196.090 {472}	288.158 {117}	189.989 {477}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.01238	-.00032	-.00011	.00027	.00480	.00106	W .00929	.00316	-.00070
Stddev	.00413	.00009	.00192	.00141	.00024	.00282	.00427	.00094	.00029
%RSD	33.374	27.505	1781.9	516.59	5.0887	264.95	45.942	29.801	41.446

#1	.00946	-.00038	-.00146	-.00072	.00497	.00306	.00627	.00383	-.00090
#2	.01530	-.00026	.00125	.00127	.00462	-.00093	.01231	.00249	-.00049

Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Warn	Chk Pass	Chk Pass
High Limit							.00500		
Low Limit							-.00500		

Elem	Sr4077	Th2837	Ti3349	Ti1908	U_3701	V_2924	Zn2062	Zr3391	
Line	407.771 { 83}	283.730 {119}	334.904 {101}	190.856 {477}	370.152 { 91}	292.402 {115}	206.200 {163}	339.198 { 99}	
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	
Avg	.00008	.00088	.00011	.00171	.00429	-.00010	.00124	.00130	
Stddev	.00004	.00053	.00037	.00312	.00156	.00018	.00081	.00015	
%RSD	46.167	60.888	342.71	182.87	36.330	171.72	65.864	11.906	

#1	.00010	.00126	-.00015	-.00050	.00319	.00002	.00066	.00141	
#2	.00005	.00050	.00037	.00391	.00540	-.00023	.00181	.00119	

Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	
High Limit									
Low Limit									

Int. Std.	Y_2243	Y_3600	Y_3774						
Line	224.306 {450}	360.073 { 94}	377.433 { 89}						
Units	Cts/S	Cts/S	Cts/S						
Avg	1542.7	33105.	5962.4						
Stddev	1.6	33.	39.8						
%RSD	.10270	.09865	.66716						

#1	1541.6	33082.	5990.5						
#2	1543.9	33129.	5934.3						

Sample Name: LCS 280-325213/2-A Acquired: 5/24/2016 0:40:18 Type: Unk
Method: 6500_026(v10) Mode: CONC Corr. Factor: 1.000000
User: kellyca Custom ID1: Custom ID2: Custom ID3:
Comment: 325213 6010B

Elem	Ag3280	Al1670	As1890	B_2089	Ba4554	Be3130	Bi2230	Ca3179	Cd2288
Line	328.068 {103}	167.079 {502}	189.042 {478}	208.959 {461}	455.403 { 74}	313.042 {108}	223.061 {451}	317.933 {106}	228.802 {447}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.04875	1.9071	1.0281	1.0449	1.9529	.04843	F 2.2236	47.660	.10290
Stddev	.00022	.0059	.0052	.0006	.0106	.00051	.0063	.256	.00008
%RSD	.45899	.30714	.50289	.05474	.54415	1.0475	.28354	.53783	.07376

#1	.04859	1.9112	1.0245	1.0445	1.9454	.04807	2.2280	47.479	.10285
#2	.04891	1.9030	1.0318	1.0453	1.9604	.04879	2.2191	47.841	.10295

Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Fail	Chk Pass	Chk Pass
High Limit							2.2000		
Low Limit							1.8000		

Elem	Co2286	Cr2055	Cu3247	Fe2599	K_7664	Li6707	Mg2790	Mn2576	Mo2020
Line	228.616 {447}	205.560 {464}	324.754 {104}	259.940 {130}	766.490 { 44}	670.784 { 50}	279.079 {121}2	257.610 {131}	202.030 {467}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.50188	F .20023	.24785	.97273	50.385	1.0375	47.349	.47231	1.0381
Stddev	.00122	.00061	.00009	.01198	.302	.0046	.161	.00217	.0005
%RSD	.24307	.30231	.03486	1.2314	.60038	.44788	.33974	.45889	.05058

#1	.50102	.20066	.24792	.96426	50.171	1.0342	47.235	.47078	1.0385
#2	.50274	.19980	.24779	.98120	50.599	1.0408	47.463	.47384	1.0377

Check ?	Chk Pass	Chk Fail	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit		.05750							
Low Limit		.04300							

Elem	Na8183	Ni2316	P_1782	Pb2203	S_1820	Sb2068	Se1960	Si2881	Sn1899
Line	818.326 { 41}	231.604 {446}	178.284 {489}	220.353 {453}	182.034 {485}	206.833 {463}	196.090 {472}	288.158 {117}	189.989 {477}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	51.564	.49021	10.155	.51041	2.0389	.50993	2.0116	F 9.3992	1.9126
Stddev	.101	.00071	.002	.00340	.0038	.00170	.0161	.0686	.0039
%RSD	.19633	.14578	.01493	.66667	.18771	.33250	.80169	.72927	.20193

#1	51.493	.49071	10.154	.51281	2.0416	.51113	2.0230	9.3507	1.9154
#2	51.636	.48970	10.156	.50800	2.0362	.50873	2.0002	9.4477	1.9099

Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Fail	Chk Pass
High Limit								11.500	
Low Limit								9.4000	

Elem	Sr4077	Th2837	Ti3349	Ti1908	U_3701	V_2924	Zn2062	Zr3391	
Line	407.771 { 83}	283.730 {119}	334.904 {101}	190.856 {477}	370.152 { 91}	292.402 {115}	206.200 {163}	339.198 { 99}	
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	
Avg	.91751	.98538	.90678	1.9585	2.0906	.45737	.46367	.46769	
Stddev	.00487	.00396	.00341	.0050	.0030	.00331	.00181	.00300	
%RSD	.53094	.40182	.37653	.25380	.14189	.72305	.39022	.64193	

#1	.91407	.98258	.90436	1.9549	2.0885	.45503	.46239	.46557	
#2	.92096	.98818	.90919	1.9620	2.0927	.45971	.46495	.46981	

Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	
High Limit									
Low Limit									

Int. Std.	Y_2243	Y_3600	Y_3774						
Line	224.306 {450}	360.073 { 94}	377.433 { 89}						
Units	Cts/S	Cts/S	Cts/S						
Avg	1488.8	31439.	5935.3						
Stddev	3.1	110.	36.0						
%RSD	.20833	.34884	.60708						

#1	1491.0	31517.	5960.8						
#2	1486.6	31362.	5909.8						

Sample Name: LCSD 280-325213/3-A Acquired: 5/24/2016 0:42:53 Type: Unk

Method: 6500_026(v10) Mode: CONC Corr. Factor: 1.000000

User: kellyca Custom ID1: Custom ID2: Custom ID3:

Comment: 325213 6010B

Elem	Ag3280	Al1670	As1890	B_2089	Ba4554	Be3130	Bi2230	Ca3179	Cd2288
Line	328.068 {103}	167.079 {502}	189.042 {478}	208.959 {461}	455.403 { 74}	313.042 {108}	223.061 {451}	317.933 {106}	228.802 {447}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.05489	2.1562	F 1.1774	F 1.2122	2.2517	.05564	F 2.5621	54.018	F .11834
Stddev	.00074	.0035	.0090	.0050	.0149	.00041	.0070	.322	.00060
%RSD	1.3417	.16417	.76176	.41643	.66320	.74297	.27196	.59644	.50443

#1	.05437	2.1537	1.1838	1.2158	2.2411	.05535	2.5670	53.790	.11876
#2	.05541	2.1587	1.1711	1.2086	2.2622	.05593	2.5572	54.246	.11792

Check ?	Chk Pass	Chk Pass	Chk Fail	Chk Fail	Chk Pass	Chk Pass	Chk Fail	Chk Pass	Chk Fail
High Limit			1.0900	1.1000			2.2000		.11000
Low Limit			.86000	.89000			1.8000		.08700

Elem	Co2286	Cr2055	Cu3247	Fe2599	K_7664	Li6707	Mg2790	Mn2576	Mo2020
Line	228.616 {447}	205.560 {464}	324.754 {104}	259.940 {130}	766.490 { 44}	670.784 { 50}	279.079 {121}2	257.610 {131}	202.030 {467}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	F .57625	F .23065	F .28462	1.0937	F 58.112	F 1.2073	53.746	.53919	F 1.2041
Stddev	.00045	.00085	.00065	.0041	.500	.0079	.163	.00188	.0016
%RSD	.07789	.36781	.22848	.37420	.86074	.65132	.30362	.34888	.13597

#1	.57657	.23005	.28416	1.0908	57.758	1.2017	53.631	.53786	1.2053
#2	.57593	.23125	.28508	1.0966	58.466	1.2128	53.862	.54052	1.2029

Check ?	Chk Fail	Chk Fail	Chk Fail	Chk Pass	Chk Fail	Chk Fail	Chk Pass	Chk Pass	Chk Fail
High Limit	.55000	.05750	.28000		57.000	1.1400			1.1000
Low Limit	.44500	.04300	.21500		44.500	.89000			.90000

Elem	Na8183	Ni2316	P_1782	Pb2203	S_1820	Sb2068	Se1960	Si2881	Sn1899
Line	818.326 { 41}	231.604 {446}	178.284 {489}	220.353 {453}	182.034 {485}	206.833 {463}	196.090 {472}	288.158 {117}	189.989 {477}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	F 59.138	F .55956	F 11.649	F .58414	F 2.3455	F .58804	F 2.3027	10.769	2.1937
Stddev	.495	.00154	.005	.00300	.0029	.00094	.0048	.091	.0011
%RSD	.83629	.27481	.04346	.51360	.12413	.16016	.20725	.84807	.04931

#1	58.788	.55847	11.646	.58626	2.3475	.58870	2.2993	10.705	2.1930
#2	59.488	.56065	11.653	.58202	2.3434	.58737	2.3060	10.834	2.1945

Check ?	Chk Fail	Chk Fail	Chk Fail	Chk Fail	Chk Fail	Chk Fail	Chk Fail	Chk Pass	Chk Pass
High Limit	56.000	.55500	11.100	.54500	2.2000	.54000	2.2000		
Low Limit	45.500	.44500	9.1000	.44500	1.8000	.44000	1.8000		

Elem	Sr4077	Th2837	Ti3349	Ti1908	U_3701	V_2924	Zn2062	Zr3391	
Line	407.771 { 83}	283.730 {119}	334.904 {101}	190.856 {477}	370.152 { 91}	292.402 {115}	206.200 {163}	339.198 { 99}	
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	
Avg	1.0598	1.1282	1.0442	F 2.2115	F 2.4232	.52390	.52047	.53969	
Stddev	.0076	.0007	.0024	.0002	.0138	.00141	.00099	.00592	
%RSD	.71916	.06030	.23145	.01031	.57097	.26962	.18946	1.0973	

#1	1.0544	1.1287	1.0425	2.2117	2.4134	.52490	.51978	.53550	
#2	1.0652	1.1277	1.0459	2.2113	2.4330	.52291	.52117	.54388	

Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Fail	Chk Fail	Chk Pass	Chk Pass	Chk Pass	
High Limit				2.1600	2.3200				
Low Limit				1.7600	1.7000				

Int. Std.	Y_2243	Y_3600	Y_3774						
Line	224.306 {450}	360.073 { 94}	377.433 { 89}						
Units	Cts/S	Cts/S	Cts/S						
Avg	1458.5	31038.	5901.2						
Stddev	3.0	87.	6.4						
%RSD	.20522	.27902	.10788						

#1	1456.3	31100.	5896.7						
#2	1460.6	30977.	5905.7						

Sample Name: 280-83008-I-3-E Acquired: 5/24/2016 0:45:27 Type: Unk
Method: 6500_026(v10) Mode: CONC Corr. Factor: 1.000000
User: kellyca Custom ID1: Custom ID2: Custom ID3:
Comment: 325213 6010B

Elem	Ag3280	Al1670	As1890	B_2089	Ba4554	Be3130	Bi2230	Ca3179	Cd2288
Line	328.068 {103}	167.079 {502}	189.042 {478}	208.959 {461}	455.403 { 74}	313.042 {108}	223.061 {451}	317.933 {106}	228.802 {447}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.00007	.00865	.04811	12.778	.35620	.00004	.00190	400.12	.00023
Stddev	.00022	.00060	.00284	.034	.00165	.00005	.00454	1.06	.00005
%RSD	304.55	6.9760	5.9097	.26508	.46401	129.39	238.10	.26579	20.339

#1	.00023	.00907	.05012	12.802	.35503	.00000	.00511	399.37	.00020
#2	-.00008	.00822	.04610	12.754	.35737	.00008	-.00130	400.87	.00026

Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Elem	Co2286	Cr2055	Cu3247	Fe2599	K_7664	Li6707	Mg2790	Mn2576	Mo2020
Line	228.616 {447}	205.560 {464}	324.754 {104}	259.940 {130}	766.490 { 44}	670.784 { 50}	279.079 {121}2	257.610 {131}	202.030 {467}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.01114	.01345	.00152	.32149	W 155.94	.13217	127.43	.28634	.04187
Stddev	.00012	.00022	.00025	.00100	.82	.00190	.53	.00021	.00038
%RSD	1.1054	1.6338	16.187	.30997	.52324	1.4377	.41238	.07323	.91745

#1	.01106	.01360	.00169	.32079	155.36	.13083	127.80	.28649	.04160
#2	.01123	.01329	.00134	.32220	156.51	.13352	127.06	.28619	.04214

Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Warn	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit					100.00				
Low Limit					-.50000				

Elem	Na8183	Ni2316	P_1782	Pb2203	S_1820	Sb2068	Se1960	Si2881	Sn1899
Line	818.326 { 41}	231.604 {446}	178.284 {489}	220.353 {453}	182.034 {485}	206.833 {463}	196.090 {472}	288.158 {117}	189.989 {477}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	W 1246.5	.04253	4.2886	-.00291	F 273.37	.03414	.01259	23.649	-.00160
Stddev	5.6	.00079	.0143	.00452	.68	.00082	.01439	.075	.00150
%RSD	.44922	1.8497	.33241	155.27	.24880	2.4067	114.27	.31911	93.898

#1	1242.5	.04309	4.2987	.00028	273.85	.03472	.00242	23.596	-.00054
#2	1250.5	.04198	4.2785	-.00610	272.89	.03356	.02277	23.702	-.00266

Check ?	Chk Warn	Chk Pass	Chk Pass	Chk Pass	Chk Fail	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit	500.00				200.00				
Low Limit	10.000				-.02000				

Elem	Sr4077	Th2837	Ti3349	Ti1908	U_3701	V_2924	Zn2062	Zr3391	
Line	407.771 { 83}	283.730 {119}	334.904 {101}	190.856 {477}	370.152 { 91}	292.402 {115}	206.200 {163}	339.198 { 99}	
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	
Avg	3.8372	-.00176	.00140	-.00053	.04075	.00851	.01714	.00149	
Stddev	.0151	.00083	.00019	.00368	.00363	.00019	.00091	.00132	
%RSD	.39237	47.063	13.669	688.90	8.9154	2.2804	5.2894	88.719	

#1	3.8266	-.00117	.00153	.00207	.04332	.00865	.01649	.00056	
#2	3.8478	-.00234	.00126	-.00314	.03818	.00838	.01778	.00243	

Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	
High Limit									
Low Limit									

Int. Std.	Y_2243	Y_3600	Y_3774						
Line	224.306 {450}	360.073 { 94}	377.433 { 89}						
Units	Cts/S	Cts/S	Cts/S						
Avg	1284.2	27211.	5600.4						
Stddev	4.5	30.	1.8						
%RSD	.34669	.10847	.03264						

#1	1281.1	27190.	5599.1						
#2	1287.4	27232.	5601.7						

Sample Name: 280-83008-I-4-C Acquired: 5/24/2016 0:48:40 Type: Unk
Method: 6500_026(v10) Mode: CONC Corr. Factor: 1.000000
User: kellyca Custom ID1: Custom ID2: Custom ID3:
Comment: 325213 6010B

Elem	Ag3280	Al1670	As1890	B_2089	Ba4554	Be3130	Bi2230	Ca3179	Cd2288
Line	328.068 {103}	167.079 {502}	189.042 {478}	208.959 {461}	455.403 { 74}	313.042 {108}	223.061 {451}	317.933 {106}	228.802 {447}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.00062	.15852	.07068	12.864	.79464	.00000	.00500	408.04	.00073
Stddev	.00042	.00219	.01010	.025	.00376	.00004	.00155	1.73	.00037
%RSD	68.697	1.3825	14.292	.19679	.47363	1298.4	31.066	.42429	50.858

#1	.00032	.16007	.06353	12.846	.79198	.00003	.00390	406.81	.00099
#2	.00092	.15697	.07782	12.882	.79730	-.00003	.00609	409.26	.00047

Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Elem	Co2286	Cr2055	Cu3247	Fe2599	K_7664	Li6707	Mg2790	Mn2576	Mo2020
Line	228.616 {447}	205.560 {464}	324.754 {104}	259.940 {130}	766.490 { 44}	670.784 { 50}	279.079 {121}2	257.610 {131}	202.030 {467}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.01041	.03567	.00599	9.4331	W 150.12	.13270	129.58	.84079	.04472
Stddev	.00006	.00000	.00004	.0135	.36	.00044	.03	.00084	.00047
%RSD	.53492	.00130	.61023	.14300	.24264	.33501	.02102	.10042	1.0496

#1	.01045	.03567	.00601	9.4236	149.86	.13238	129.60	.84019	.04505
#2	.01037	.03567	.00596	9.4427	150.37	.13301	129.56	.84139	.04438

Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Warn	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit					100.00				
Low Limit					-.50000				

Elem	Na8183	Ni2316	P_1782	Pb2203	S_1820	Sb2068	Se1960	Si2881	Sn1899
Line	818.326 { 41}	231.604 {446}	178.284 {489}	220.353 {453}	182.034 {485}	206.833 {463}	196.090 {472}	288.158 {117}	189.989 {477}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	W 931.42	.04905	1.6023	-.00091	F 286.30	.03337	.01503	22.902	-.00058
Stddev	3.63	.00101	.0062	.00393	.21	.00198	.01606	.048	.00021
%RSD	.38945	2.0659	.38955	431.30	.07349	5.9483	106.86	.21145	36.949

#1	928.86	.04977	1.5979	-.00369	286.15	.03477	.00367	22.936	-.00043
#2	933.99	.04833	1.6067	.00187	286.45	.03197	.02639	22.868	-.00073

Check ?	Chk Warn	Chk Pass	Chk Pass	Chk Pass	Chk Fail	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit	500.00				200.00				
Low Limit	10.000				-.02000				

Elem	Sr4077	Th2837	Ti3349	Ti1908	U_3701	V_2924	Zn2062	Zr3391
Line	407.771 { 83}	283.730 {119}	334.904 {101}	190.856 {477}	370.152 { 91}	292.402 {115}	206.200 {163}	339.198 { 99}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	4.0400	.00087	.01444	.00044	.03406	.01051	.03767	-.00096
Stddev	.0148	.00007	.00027	.00027	.00109	.00034	.00205	.00057
%RSD	.36609	8.2388	1.8468	61.515	3.2065	3.2211	5.4487	59.112

#1	4.0295	.00082	.01426	.00063	.03484	.01075	.03912	-.00136
#2	4.0505	.00092	.01463	.00025	.03329	.01027	.03621	-.00056

Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit								
Low Limit								

Int. Std.	Y_2243	Y_3600	Y_3774
Line	224.306 {450}	360.073 { 94}	377.433 { 89}
Units	Cts/S	Cts/S	Cts/S
Avg	1284.0	27626.	5683.7
Stddev	3.7	14.	10.9
%RSD	.28738	.04917	.19169

#1	1286.7	27636.	5691.4
#2	1281.4	27616.	5676.0

Sample Name: 280-83008-I-5-C Acquired: 5/24/2016 0:51:55 Type: Unk
Method: 6500_026(v10) Mode: CONC Corr. Factor: 1.000000
User: kellyca Custom ID1: Custom ID2: Custom ID3:
Comment: 325213 6010B

Elem	Ag3280	Al1670	As1890	B_2089	Ba4554	Be3130	Bi2230	Ca3179	Cd2288
Line	328.068 {103}	167.079 {502}	189.042 {478}	208.959 {461}	455.403 {74}	313.042 {108}	223.061 {451}	317.933 {106}	228.802 {447}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.00004	.04883	.06281	13.290	.47419	-.00003	-.00105	405.73	.00040
Stddev	.00008	.00077	.00341	.013	.00170	.00015	.00301	2.24	.00003
%RSD	207.36	1.5755	5.4274	.09596	.35752	531.64	285.78	.55090	7.5186

#1	-.00002	.04937	.06040	13.281	.47300	.00008	-.00318	407.31	.00043
#2	.00010	.04828	.06522	13.299	.47539	-.00013	.00108	404.15	.00038

Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Elem	Co2286	Cr2055	Cu3247	Fe2599	K_7664	Li6707	Mg2790	Mn2576	Mo2020
Line	228.616 {447}	205.560 {464}	324.754 {104}	259.940 {130}	766.490 {44}	670.784 {50}	279.079 {121}2	257.610 {131}	202.030 {467}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.01090	.02245	.00309	3.8643	W 158.55	.13526	131.54	.61140	.04557
Stddev	.00030	.00040	.00018	.0006	.51	.00077	.19	.00050	.00048
%RSD	2.7289	1.7696	5.7558	.01457	.32336	.56646	.14727	.08175	1.0621

#1	.01111	.02274	.00297	3.8647	158.18	.13472	131.40	.61105	.04591
#2	.01069	.02217	.00322	3.8639	158.91	.13580	131.68	.61176	.04523

Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Warn	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit					100.00				
Low Limit					-.50000				

Elem	Na8183	Ni2316	P_1782	Pb2203	S_1820	Sb2068	Se1960	Si2881	Sn1899
Line	818.326 {41}	231.604 {446}	178.284 {489}	220.353 {453}	182.034 {485}	206.833 {463}	196.090 {472}	288.158 {117}	189.989 {477}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	W 1084.5	.04729	27.488	W -.00639	F 283.48	.03200	.01532	24.728	-.00121
Stddev	3.4	.00108	.049	.00009	.17	.00046	.00190	.027	.00114
%RSD	.31038	2.2931	.17859	1.4617	.05941	1.4283	12.435	.11026	93.719

#1	1082.1	.04805	27.453	-.00632	283.36	.03232	.01397	24.709	-.00202
#2	1086.9	.04652	27.523	-.00645	283.60	.03167	.01666	24.747	-.00041

Check ?	Chk Warn	Chk Pass	Chk Pass	Chk Warn	Chk Fail	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit	500.00			10.000	200.00				
Low Limit	10.000			-.00300	-.02000				

Elem	Sr4077	Th2837	Ti3349	Ti1908	U_3701	V_2924	Zn2062	Zr3391	
Line	407.771 {83}	283.730 {119}	334.904 {101}	190.856 {477}	370.152 {91}	292.402 {115}	206.200 {163}	339.198 {99}	
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	
Avg	3.9496	.00259	.00575	-.00084	.02983	.00836	.02718	.00186	
Stddev	.0065	.00077	.00001	.00239	.00465	.00014	.00056	.00105	
%RSD	.16545	29.878	.19805	285.02	15.575	1.6420	2.0650	56.432	

#1	3.9449	.00313	.00576	-.00252	.02655	.00826	.02679	.00112	
#2	3.9542	.00204	.00574	.00085	.03312	.00845	.02758	.00260	

Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	
High Limit									
Low Limit									

Int. Std.	Y_2243	Y_3600	Y_3774						
Line	224.306 {450}	360.073 {94}	377.433 {89}						
Units	Cts/S	Cts/S	Cts/S						
Avg	1273.9	27113.	5607.8						
Stddev	.5	69.	7.8						
%RSD	.03699	.25292	.13969						

#1	1273.6	27162.	5602.2						
#2	1274.2	27065.	5613.3						

Sample Name: 280-83008-I-5-Csd@5 Acquired: 5/24/2016 0:55:09 Type: Unk

Method: 6500_026(v10) Mode: CONC Corr. Factor: 1.000000

User: kellyca Custom ID1: Custom ID2: Custom ID3:

Comment: 325213 6010B

Elem	Ag3280	Al1670	As1890	B_2089	Ba4554	Be3130	Bi2230	Ca3179	Cd2288
Line	328.068 {103}	167.079 {502}	189.042 {478}	208.959 {461}	455.403 { 74}	313.042 {108}	223.061 {451}	317.933 {106}	228.802 {447}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.00062	.01251	.01372	2.6827	.09305	.00003	.00252	82.325	.00027
Stddev	.00010	.00150	.00265	.0113	.00065	.00003	.00041	.224	.00024
%RSD	16.141	11.999	19.322	.42011	.70247	91.584	16.379	.27186	90.152

#1	.00054	.01357	.01185	2.6906	.09259	.00001	.00223	82.166	.00010
#2	.00069	.01144	.01560	2.6747	.09352	.00005	.00281	82.483	.00044

Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Elem	Co2286	Cr2055	Cu3247	Fe2599	K_7664	Li6707	Mg2790	Mn2576	Mo2020
Line	228.616 {447}	205.560 {464}	324.754 {104}	259.940 {130}	766.490 { 44}	670.784 { 50}	279.079 {121}2	257.610 {131}	202.030 {467}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.00263	.00439	-.00020	.83147	29.692	.02446	26.525	.12357	.00840
Stddev	.00017	.00003	.00026	.00040	.253	.00053	.070	.00017	.00001
%RSD	6.4472	.57519	128.77	.04790	.85127	2.1695	.26520	.14051	.13915

#1	.00251	.00438	-.00038	.83175	29.513	.02409	26.575	.12344	.00841
#2	.00275	.00441	-.00002	.83118	29.870	.02484	26.476	.12369	.00839

Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Elem	Na8183	Ni2316	P_1782	Pb2203	S_1820	Sb2068	Se1960	Si2881	Sn1899
Line	818.326 { 41}	231.604 {446}	178.284 {489}	220.353 {453}	182.034 {485}	206.833 {463}	196.090 {472}	288.158 {117}	189.989 {477}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	205.13	.01026	5.1521	-.00033	51.915	.00673	.00821	4.7625	.00008
Stddev	.92	.00102	.0003	.00501	.083	.00037	.00514	.0036	.00182
%RSD	.45032	9.9393	.00586	1540.8	.16071	5.4708	62.600	.07526	2292.9

#1	204.47	.01098	5.1519	-.00387	51.974	.00647	.01185	4.7650	-.00121
#2	205.78	.00954	5.1523	.00322	51.856	.00699	.00458	4.7600	.00137

Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Elem	Sr4077	Th2837	Ti3349	Ti1908	U_3701	V_2924	Zn2062	Zr3391
Line	407.771 { 83}	283.730 {119}	334.904 {101}	190.856 {477}	370.152 { 91}	292.402 {115}	206.200 {163}	339.198 { 99}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.77283	.00061	.00092	.00233	.00610	.00190	.00578	.00144
Stddev	.00419	.00047	.00010	.00061	.01003	.00004	.00170	.00068
%RSD	.54176	77.617	10.530	26.175	164.55	2.2711	29.481	47.402

#1	.76987	.00094	.00099	.00276	.01319	.00187	.00699	.00096
#2	.77579	.00027	.00085	.00190	-.00100	.00193	.00458	.00192

Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit								
Low Limit								

Int. Std.	Y_2243	Y_3600	Y_3774
Line	224.306 {450}	360.073 { 94}	377.433 { 89}
Units	Cts/S	Cts/S	Cts/S
Avg	1429.6	30358.	5756.2
Stddev	1.5	35.	17.4
%RSD	.10773	.11519	.30257

#1	1428.5	30383.	5768.5
#2	1430.7	30333.	5743.9

Sample Name: 280-83008-I-5-D MS Acquired: 5/24/2016 0:57:56 Type: Unk
Method: 6500_026(v10) Mode: CONC Corr. Factor: 1.000000
User: kellyca Custom ID1: Custom ID2: Custom ID3:
Comment: 325213 6010B

Elem	Ag3280	Al1670	As1890	B_2089	Ba4554	Be3130	Bi2230	Ca3179	Cd2288
Line	328.068 {103}	167.079 {502}	189.042 {478}	208.959 {461}	455.403 { 74}	313.042 {108}	223.061 {451}	317.933 {106}	228.802 {447}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.05573	1.8895	1.2222	13.986	2.5146	.05029	2.4186	439.47	.11493
Stddev	.00027	.0031	.0010	.016	.0084	.00010	.0077	.28	.00023
%RSD	.47589	.16204	.08302	.11097	.33268	.20139	.31993	.06402	.19988

#1	.05592	1.8917	1.2229	13.997	2.5087	.05036	2.4241	439.27	.11509
#2	.05554	1.8873	1.2215	13.975	2.5205	.05022	2.4132	439.67	.11477

Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Elem	Co2286	Cr2055	Cu3247	Fe2599	K_7664	Li6707	Mg2790	Mn2576	Mo2020
Line	228.616 {447}	205.560 {464}	324.754 {104}	259.940 {130}	766.490 { 44}	670.784 { 50}	279.079 {121}2	257.610 {131}	202.030 {467}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.50510	W .22746	.28243	4.7200	W 210.44	1.3250	174.15	1.0572	1.1136
Stddev	.00004	.00006	.00101	.0081	.80	.0105	.09	.0035	.0027
%RSD	.00865	.02437	.35906	.17190	.38187	.79302	.04892	.32837	.23907

#1	.50507	.22750	.28314	4.7257	209.87	1.3176	174.21	1.0596	1.1155
#2	.50513	.22742	.28171	4.7143	211.01	1.3325	174.09	1.0547	1.1117

Check ?	Chk Pass	Chk Warn	Chk Pass	Chk Pass	Chk Warn	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit		.10000			100.00				
Low Limit		-.01000			-.50000				

Elem	Na8183	Ni2316	P_1782	Pb2203	S_1820	Sb2068	Se1960	Si2881	Sn1899
Line	818.326 { 41}	231.604 {446}	178.284 {489}	220.353 {453}	182.034 {485}	206.833 {463}	196.090 {472}	288.158 {117}	189.989 {477}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	W 1120.0	.51732	38.038	.48201	F 278.82	.59171	2.2899	32.837	1.8689
Stddev	3.8	.00044	.084	.00619	.83	.00418	.0129	.032	.0053
%RSD	.33532	.08490	.22187	1.2845	.29764	.70620	.56302	.09651	.28172

#1	1117.3	.51701	38.098	.48639	279.40	.59467	2.2808	32.814	1.8726
#2	1122.6	.51763	37.978	.47763	278.23	.58876	2.2991	32.859	1.8652

Check ?	Chk Warn	Chk Pass	Chk Pass	Chk Pass	Chk Fail	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit	500.00				200.00				
Low Limit	10.000				-.02000				

Elem	Sr4077	Th2837	Ti3349	Ti1908	U_3701	V_2924	Zn2062	Zr3391
Line	407.771 { 83}	283.730 {119}	334.904 {101}	190.856 {477}	370.152 { 91}	292.402 {115}	206.200 {163}	339.198 { 99}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	4.7968	1.0169	.93711	1.6689	2.1537	.47777	.47383	.48241
Stddev	.0261	.0014	.00162	.0070	.0084	.00112	.00559	.00218
%RSD	.54338	.14065	.17274	.42237	.38997	.23475	1.1802	.45270

#1	4.7784	1.0159	.93826	1.6738	2.1596	.47856	.47779	.48087
#2	4.8153	1.0179	.93597	1.6639	2.1478	.47698	.46988	.48396

Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit								
Low Limit								

Int. Std.	Y_2243	Y_3600	Y_3774
Line	224.306 {450}	360.073 { 94}	377.433 { 89}
Units	Cts/S	Cts/S	Cts/S
Avg	1258.5	27060.	5558.9
Stddev	1.1	43.	4.5
%RSD	.08618	.15716	.08017

#1	1257.8	27030.	5555.8
#2	1259.3	27090.	5562.1

Sample Name: 280-83008-I-5-E MSD Acquired: 5/24/2016 1:01:11 Type: Unk
Method: 6500_026(v10) Mode: CONC Corr. Factor: 1.000000
User: kellyca Custom ID1: Custom ID2: Custom ID3:
Comment: 325213 6010B

Elem	Ag3280	Al1670	As1890	B_2089	Ba4554	Be3130	Bi2230	Ca3179	Cd2288
Line	328.068 {103}	167.079 {502}	189.042 {478}	208.959 {461}	455.403 {74}	313.042 {108}	223.061 {451}	317.933 {106}	228.802 {447}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.05448	1.8745	1.2153	14.304	2.5051	.05014	2.4127	446.77	.11572
Stddev	.00009	.0028	.0104	.031	.0002	.00001	.0069	1.01	.00012
%RSD	.16322	.14972	.85985	.21504	.00896	.02054	.28702	.22503	.10447
#1	.05442	1.8765	1.2080	14.283	2.5050	.05013	2.4078	447.48	.11563
#2	.05454	1.8725	1.2227	14.326	2.5053	.05015	2.4176	446.05	.11580

Check ? Chk Pass Chk Pass Chk Pass Chk Pass Chk Pass Chk Pass Chk Pass Chk Pass Chk Pass
High Limit
Low Limit

Elem	Co2286	Cr2055	Cu3247	Fe2599	K_7664	Li6707	Mg2790	Mn2576	Mo2020
Line	228.616 {447}	205.560 {464}	324.754 {104}	259.940 {130}	766.490 {44}	670.784 {50}	279.079 {121}2	257.610 {131}	202.030 {467}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.50288	W .22470	.27868	4.7806	W 212.56	1.3172	175.34	1.0622	1.1121
Stddev	.00217	.00127	.00156	.0045	.15	.0014	.22	.0028	.0025
%RSD	.43162	.56723	.56020	.09421	.06853	.10522	.12814	.26773	.22220
#1	.50441	.22560	.27758	4.7774	212.45	1.3162	175.18	1.0602	1.1139
#2	.50134	.22380	.27979	4.7838	212.66	1.3181	175.50	1.0642	1.1104

Check ? Chk Pass Chk Warn Chk Pass Chk Pass Chk Warn Chk Pass Chk Pass Chk Pass Chk Pass
High Limit .10000 100.00
Low Limit -.01000 -.50000

Elem	Na8183	Ni2316	P_1782	Pb2203	S_1820	Sb2068	Se1960	Si2881	Sn1899
Line	818.326 {41}	231.604 {446}	178.284 {489}	220.353 {453}	182.034 {485}	206.833 {463}	196.090 {472}	288.158 {117}	189.989 {477}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	W 1132.3	.51544	38.616	.48359	F 284.72	.59597	2.3024	33.368	1.8689
Stddev	2.1	.00025	.052	.00097	.36	.00393	.0043	.033	.0026
%RSD	.18914	.04931	.13450	.20117	.12733	.65962	.18714	.09947	.13680
#1	1130.8	.51562	38.579	.48290	284.47	.59319	2.3055	33.391	1.8707
#2	1133.9	.51526	38.652	.48428	284.98	.59875	2.2994	33.344	1.8671

Check ? Chk Warn Chk Pass Chk Pass Chk Pass Chk Fail Chk Pass Chk Pass Chk Pass Chk Pass
High Limit 500.00 200.00
Low Limit 10.000 -.02000

Elem	Sr4077	Th2837	Ti3349	Ti1908	U_3701	V_2924	Zn2062	Zr3391
Line	407.771 {83}	283.730 {119}	334.904 {101}	190.856 {477}	370.152 {91}	292.402 {115}	206.200 {163}	339.198 {99}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	4.7782	1.0043	.93387	1.6643	2.1103	.47493	.47066	.47763
Stddev	.0023	.0090	.00302	.0102	.0278	.00146	.00235	.00280
%RSD	.04752	.89591	.32320	.61146	1.3189	.30762	.49920	.58593
#1	4.7766	.99797	.93174	1.6571	2.0907	.47390	.46900	.47565
#2	4.7798	1.0107	.93600	1.6715	2.1300	.47597	.47232	.47961

Check ? Chk Pass Chk Pass Chk Pass Chk Pass Chk Pass Chk Pass Chk Pass Chk Pass
High Limit
Low Limit

Int. Std.	Y_2243	Y_3600	Y_3774
Line	224.306 {450}	360.073 {94}	377.433 {89}
Units	Cts/S	Cts/S	Cts/S
Avg	1255.9	27034.	5534.4
Stddev	.3	117.	4.7
%RSD	.02431	.43132	.08544
#1	1256.1	27116.	5537.7
#2	1255.6	26951.	5531.1

Sample Name: ccvh-3900196 Acquired: 5/24/2016 1:04:25 Type: QC
Method: 6500_026(v10) Mode: CONC Corr. Factor: 1.000000
User: kellyca Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	Ag3280	Al3092	As1890	B_2089	Ba4554	Be3130	Bi2230	Ca3179	Cd2288	Co2286	Cr2055	Cu3247	Fe2714
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	-.00002	46.718	.00132	.04368	.00209	.00135	1.0797	.00146	.00085	.00501	.00093	.00578	46.793
Stddev	.00043	.053	.00077	.00262	.00005	.00004	.0066	.01203	.00028	.00008	.00008	.00024	.028
%RSD	2239.4	.11372	58.455	6.0081	2.3079	2.8970	.60848	826.21	32.953	1.6075	8.6539	4.1069	.06015

#1	-.00032	46.755	.00077	.04553	.00206	.00133	1.0751	.00996	.00065	.00506	.00099	.00595	46.813
#2	.00028	46.680	.00186	.04182	.00213	.00138	1.0843	-.00705	.00104	.00495	.00087	.00562	46.774

Check ?	None	Chk Pass	None	None	None	None	Chk Pass	None	None	None	None	None	Chk Pass
Value													
Range													

Elem	K_7664	Li6707	Mg2790	Mn2576	Mo2020	Na8183	Ni2316	P_1782	Pb2203	S_1820	Sb2068	Se1960	Si2881
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.34552	.00288	.22715	.00077	-.00005	254.55	.00077	.01575	.00065	5.1023	.00410	.00967	.02203
Stddev	.01848	.00039	.00017	.00002	.00004	.10	.00052	.00184	.00056	.0113	.00064	.00806	.00080
%RSD	5.3498	13.604	.07387	2.3629	72.643	.03787	67.651	11.688	85.905	.22166	15.573	83.326	3.6206

#1	.35859	.00260	.22703	.00078	-.00008	254.48	.00040	.01706	.00104	5.1103	.00455	.01536	.02259
#2	.33245	.00315	.22727	.00076	-.00003	254.62	.00113	.01445	.00025	5.0943	.00365	.00397	.02147

Check ?	None	None	None	None	None	Chk Pass	None	None	None	Chk Pass	None	None	None
Value													
Range													

Elem	Sn1899	Sr4077	Th2837	Ti3349	Tl1908	U_3701	V_2924	Zn2062	Zr3391
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.00369	.00226	4.9272	.02653	-.00009	10.201	-.01505	.00033	-.01901
Stddev	.00101	.00001	.0042	.00033	.00297	.059	.00004	.00058	.00079
%RSD	27.306	.33660	.08608	1.2279	3468.0	.57509	.24989	176.67	4.1689

#1	.00297	.00226	4.9242	.02676	-.00219	10.160	-.01507	-.00008	-.01957
#2	.00440	.00225	4.9302	.02630	.00202	10.243	-.01502	.00073	-.01845

Check ?	None	None	Chk Pass	None	None	Chk Pass	None	None	None
Value									
Range									

Int. Std.	Y_2243	Y_3600	Y_3774
Units	Cts/S	Cts/S	Cts/S
Avg	1467.3	31227.	5778.0
Stddev	.0	52.	11.6
%RSD	.00061	.16752	.20111

#1	1467.3	31264.	5769.8
#2	1467.3	31190.	5786.2

Sample Name: ccv-3900195 Acquired: 5/24/2016 1:07:16 Type: QC
Method: 6500_026(v10) Mode: CONC Corr. Factor: 1.000000
User: kellyca Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	Ag3280	Al1670	As1890	B_2089	Ba4554	Be3130	Bi2230	Ca3179	Cd2288	Co2286	Cr2055	Cu3247
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.48265	.51958	1.0321	F .59004	.49346	.49761	-.00015	4.8769	.53444	.52602	.51226	.49275
Stddev	.00151	.00023	.0104	.00327	.00285	.00235	.00002	.0175	.00393	.00343	.00288	.00095
%RSD	.31200	.04397	1.0076	.55474	.57719	.47325	13.534	.35887	.73474	.65285	.56144	.19262

#1	.48371	.51942	1.0247	.58773	.49144	.49594	-.00016	4.8645	.53167	.52359	.51023	.49208
#2	.48158	.51974	1.0394	.59235	.49547	.49927	-.00014	4.8893	.53722	.52845	.51429	.49342

Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Fail	Chk Pass	Chk Pass	None	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Value				.50000								
Range				10.000%								

Elem	Fe2599	K_7664	Li6707	Mg2790	Mn2576	Mo2020	Na5895	Ni2316	P_1782	Pb2203	S_1820	Sb2068
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	2.4212	50.623	1.0567	19.356	.48859	.52023	5.2935	.50913	1.0351	1.0705	.00624	1.0151
Stddev	.0049	.235	.0068	.005	.00055	.00407	.0317	.00058	.0167	.0050	.00364	.0014
%RSD	.20088	.46482	.64534	.02334	.11172	.78185	.59852	.11319	1.6167	.46923	58.273	.13788

#1	2.4178	50.457	1.0519	19.353	.48898	.51735	5.2711	.50872	1.0233	1.0670	.00367	1.0141
#2	2.4247	50.789	1.0615	19.359	.48821	.52310	5.3159	.50954	1.0470	1.0741	.00881	1.0161

Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	None	Chk Pass
Value												
Range												

Elem	Se1960	Si2881	Sn1899	Sr4077	Th2837	Ti3349	Ti1908	U_3701	V_2924	Zn2062	Zr3391
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	1.0369	4.9156	.99916	.46677	.00717	.45683	1.0416	.00217	.45886	.47801	.48798
Stddev	.0153	.0340	.00283	.00214	.00272	.00191	.0066	.01710	.00023	.00408	.00423
%RSD	1.4774	.69118	.28317	.45861	37.995	.41846	.63759	789.21	.04981	.85455	.86760

#1	1.0260	4.8915	.99716	.46525	.00910	.45818	1.0369	-.00992	.45902	.48090	.48499
#2	1.0477	4.9396	1.0012	.46828	.00524	.45547	1.0463	.01426	.45870	.47512	.49098

Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	None	Chk Pass	Chk Pass	None	Chk Pass	Chk Pass	Chk Pass
Value											
Range											

Int. Std.	Y_2243	Y_3600	Y_3774
Units	Cts/S	Cts/S	Cts/S
Avg	1516.2	32375.	5846.0
Stddev	7.1	28.	26.4
%RSD	.46810	.08506	.45132

#1	1521.2	32356.	5864.6
#2	1511.1	32394.	5827.3

Sample Name: ccb Acquired: 5/24/2016 1:09:53 Type: QC
Method: 6500_026(v10) Mode: CONC Corr. Factor: 1.000000
User: kellyca Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	Ag3280	Al1670	As1890	B_2089	Ba4554	Be3130	Bi2230	Ca3179	Cd2288	Co2286	Cr2055
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.00062	.00027	.00127	F .02367	.00013	.00003	.00380	.00732	-.00025	-.00008	-.00027
Stddev	.00041	.00195	.00321	.00084	.00012	.00002	.00403	.00102	.00014	.00023	.00029
%RSD	65.332	728.16	251.84	3.5522	96.721	66.037	106.10	13.872	56.676	282.27	107.38

#1	.00091	.00165	-.00099	.02427	.00004	.00004	.00095	.00804	-.00015	-.00025	-.00007
#2	.00033	-.00111	.00354	.02308	.00021	.00001	.00664	.00660	-.00034	.00008	-.00048

Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Fail	Chk Pass	Chk Pass	None	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit				.00312							
Low Limit				-.00312							

Elem	Cu3247	Fe2599	K_7664	Li6707	Mg2790	Mn2576	Mo2020	Na5895	Ni2316	P_1782	Pb2203
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	W -.00200	-.00062	.06499	-.00052	.00921	-.00002	.00046	.08418	.00023	.00704	.00067
Stddev	.00026	.00117	.01629	.00037	.00434	.00001	.00023	.00963	.00005	.00075	.00162
%RSD	13.057	188.64	25.070	71.385	47.102	60.341	48.499	11.440	23.191	10.720	240.81

#1	-.00182	-.00145	.07651	-.00026	.01228	-.00001	.00031	.09099	.00019	.00757	-.00047
#2	-.00219	.00021	.05347	-.00079	.00614	-.00003	.00062	.07737	.00026	.00650	.00182

Check ?	Chk Warn	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit	.00136										
Low Limit	-.00136										

Elem	S_1820	Sb2068	Se1960	Si2881	Sn1899	Sr4077	Th2837	Ti3349	Ti1908	U_3701	V_2924
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.01094	W .00447	W .00543	.00399	-.00059	.00020	.00071	.00045	.00222	.00362	.00034
Stddev	.00265	.00241	.00037	.00240	.00057	.00003	.00023	.00008	.00168	.00356	.00050
%RSD	24.204	54.020	6.7478	60.112	96.179	13.125	32.205	17.909	75.735	98.263	146.40

#1	.01281	.00276	.00569	.00230	-.00100	.00018	.00055	.00051	.00340	.00110	.00069
#2	.00907	.00617	.00517	.00569	-.00019	.00022	.00087	.00039	.00103	.00613	-.00001

Check ?	None	Chk Warn	Chk Warn	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit		.00314	.00486								
Low Limit		-.00314	-.00486								

Elem	Zn2062	Zr3391
Units	ppm	ppm
Avg	.00036	.00039
Stddev	.00011	.00147
%RSD	29.854	381.10

#1	.00028	-.00065
#2	.00043	.00142

Check ?	Chk Pass	Chk Pass
High Limit		
Low Limit		

Int. Std.	Y_2243	Y_3600	Y_3774
Units	Cts/S	Cts/S	Cts/S
Avg	1515.7	33430.	5896.8
Stddev	40.2	66.	16.2
%RSD	2.6535	.19774	.27546

#1	1487.2	33477.	5908.3
#2	1544.1	33383.	5885.3

Sample Name: ccvl-3907489 Acquired: 5/24/2016 1:12:41 Type: QC
Method: 6500_026(v10) Mode: CONC Corr. Factor: 1.000000
User: kellyca Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	Ag3280	Al1670	As1890	B_2089	Ba4554	Be3130	Bi2230	Ca3179	Cd2288	Co2286	Cr2055	Cu3247
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.00990	.10332	.01614	.12209	.01002	.00097	.11683	.19418	.00512	.01045	.01034	.01284
Stddev	.00056	.00108	.00603	.00032	.00002	.00008	.00138	.00452	.00021	.00010	.00000	.00024
%RSD	5.6691	1.0423	37.374	.26553	.20385	7.9047	1.1779	2.3260	4.1277	.93461	.00305	1.8631

#1	.00951	.10256	.01187	.12232	.01003	.00092	.11780	.19737	.00527	.01039	.01034	.01267
#2	.01030	.10408	.02040	.12186	.01000	.00103	.11586	.19098	.00497	.01052	.01034	.01301

Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Value												
Range												

Elem	Fe2599	K_7664	Li6707	Mg2790	Mn2576	Mo2020	Na5895	Ni2316	P_1782	Pb2203	S_1820	Sb2068
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.10407	3.0060	.00949	.19633	.00970	.02027	F 1.3600	.04021	2.8330	.01111	.00012	.02392
Stddev	.00042	.0128	.00046	.00202	.00001	.00020	.0009	.00007	.0061	.00237	.00018	.00089
%RSD	.39935	.42717	4.8776	1.0264	.15381	1.0060	.06737	.17866	.21428	21.359	140.81	3.7395

#1	.10436	2.9969	.00916	.19490	.00971	.02013	1.3607	.04016	2.8372	.01279	.00000	.02329
#2	.10377	3.0150	.00982	.19775	.00969	.02042	1.3594	.04026	2.8287	.00943	.00025	.02456

Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Fail	Chk Pass	Chk Pass	Chk Pass	None	Chk Pass
Value							1.0000					
Range							30.000%					

Elem	Se1960	Si2881	Sn1899	Sr4077	Th2837	Ti3349	Ti1908	U_3701	V_2924	Zn2062	Zr3391
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	F .02385	.47727	.09691	.00924	.01677	.00890	.01774	.05845	.00842	.01881	.01506
Stddev	.00237	.00299	.00199	.00001	.00138	.00049	.00226	.02005	.00002	.00041	.00128
%RSD	9.9284	.62671	2.0494	.12116	8.2292	5.4704	12.751	34.298	.21112	2.1661	8.4694

#1	.02217	.47516	.09831	.00923	.01580	.00855	.01934	.04428	.00841	.01910	.01597
#2	.02552	.47939	.09550	.00925	.01775	.00924	.01614	.07263	.00844	.01852	.01416

Check ?	Chk Fail	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Value	.01500										
Range	30.000%										

Int. Std.	Y_2243	Y_3600	Y_3774
Units	Cts/S	Cts/S	Cts/S
Avg	1532.5	33140.	5817.7
Stddev	.2	38.	41.6
%RSD	.01558	.11326	.71467

#1	1532.3	33113.	5847.0
#2	1532.6	33166.	5788.3

Sample Name: MB 280-326001/1-A Acquired: 5/24/2016 1:15:29 Type: Unk
Method: 6500_026(v10) Mode: CONC Corr. Factor: 1.000000
User: kellyca Custom ID1: 5/20 Custom ID2: Custom ID3:
Comment: 326001 6010B

Elem	Ag3280	Al1670	As1890	B_2089	Ba4554	Be3130	Bi2230	Ca3179	Cd2288
Line	328.068 {103}	167.079 {502}	189.042 {478}	208.959 {461}	455.403 { 74}	313.042 {108}	223.061 {451}	317.933 {106}	228.802 {447}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.00071	.00446	-.00462	F .01660	.00045	-.00003	-.00058	.01881	.00020
Stddev	.00074	.00054	.00160	.00055	.00020	.00002	.00040	.00852	.00001
%RSD	104.56	12.116	34.548	3.3259	45.103	63.325	69.193	45.273	4.8549

#1	.00018	.00408	-.00349	.01699	.00059	-.00002	-.00086	.02484	.00021
#2	.00123	.00484	-.00575	.01621	.00031	-.00004	-.00029	.01279	.00020

Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Fail	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit				.01000					
Low Limit				-.01000					

Elem	Co2286	Cr2055	Cu3247	Fe2599	K_7664	Li6707	Mg2790	Mn2576	Mo2020
Line	228.616 {447}	205.560 {464}	324.754 {104}	259.940 {130}	766.490 { 44}	670.784 { 50}	279.079 {121}2	257.610 {131}	202.030 {467}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	-.00020	.00003	-.00185	.02026	.00852	-.00087	.00626	.00037	-.00019
Stddev	.00019	.00005	.00010	.00158	.02769	.00058	.00024	.00005	.00001
%RSD	94.401	144.48	5.4387	7.7914	325.10	66.463	3.8934	14.278	6.1810

#1	-.00033	.00007	-.00192	.01914	.02810	-.00128	.00644	.00040	-.00020
#2	-.00007	-.00000	-.00178	.02137	-.01106	-.00046	.00609	.00033	-.00018

Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Elem	Na5895	Ni2316	P_1782	Pb2203	S_1820	Sb2068	Se1960	Si2881	Sn1899
Line	589.592 { 57}	231.604 {446}	178.284 {489}	220.353 {453}	182.034 {485}	206.833 {463}	196.090 {472}	288.158 {117}	189.989 {477}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.05923	.00047	.00200	.00136	.00239	.00011	W .00880	.01122	.00039
Stddev	.00076	.00009	.00258	.00084	.00402	.00069	.00179	.00823	.00106
%RSD	1.2830	18.440	129.20	61.789	168.40	641.69	20.368	73.380	272.79

#1	.05870	.00041	.00017	.00076	.00523	-.00038	.00753	.00540	-.00036
#2	.05977	.00053	.00382	.00195	-.00046	.00059	.01006	.01704	.00114

Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Warn	Chk Pass	Chk Pass
High Limit							.00500		
Low Limit							-.00500		

Elem	Sr4077	Th2837	Ti3349	Ti1908	U_3701	V_2924	Zn2062	Zr3391	
Line	407.771 { 83}	283.730 {119}	334.904 {101}	190.856 {477}	370.152 { 91}	292.402 {115}	206.200 {163}	339.198 { 99}	
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	
Avg	.00017	.00124	.00032	.00034	.01081	.00074	.00216	.00038	
Stddev	.00001	.00128	.00016	.00170	.00171	.00069	.00016	.00030	
%RSD	4.8632	103.15	50.493	494.42	15.796	93.160	7.3903	78.619	

#1	.00018	.00215	.00044	-.00086	.01202	.00025	.00227	.00017	
#2	.00017	.00034	.00021	.00155	.00961	.00122	.00205	.00059	

Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	
High Limit									
Low Limit									

Int. Std.	Y_2243	Y_3600	Y_3774						
Line	224.306 {450}	360.073 { 94}	377.433 { 89}						
Units	Cts/S	Cts/S	Cts/S						
Avg	1534.7	33455.	5901.1						
Stddev	.8	99.	.5						
%RSD	.05419	.29672	.00790						

#1	1535.3	33526.	5901.5						
#2	1534.1	33385.	5900.8						

Sample Name: LCS 280-326001/2-A Acquired: 5/24/2016 1:18:17 Type: Unk

Method: 6500_026(v10) Mode: CONC Corr. Factor: 1.000000

User: kellyca Custom ID1: Custom ID2: Custom ID3:

Comment: 326001 6010B

Elem	Ag3280	Al1670	As1890	B_2089	Ba4554	Be3130	Bi2230	Ca3179	Cd2288
Line	328.068 {103}	167.079 {502}	189.042 {478}	208.959 {461}	455.403 { 74}	313.042 {108}	223.061 {451}	317.933 {106}	228.802 {447}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.04731	1.9060	1.0221	1.0910	1.9537	.04872	F 2.2472	47.320	.10394
Stddev	.00114	.0033	.0016	.0024	.0044	.00012	.0079	.061	.00006
%RSD	2.4190	.17340	.15979	.21650	.22503	.23891	.34955	.12917	.06073

#1	.04650	1.9037	1.0233	1.0893	1.9506	.04864	2.2417	47.363	.10389
#2	.04812	1.9084	1.0210	1.0926	1.9568	.04880	2.2528	47.277	.10398

Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Fail	Chk Pass	Chk Pass
High Limit							2.2000		
Low Limit							1.8000		

Elem	Co2286	Cr2055	Cu3247	Fe2599	K_7664	Li6707	Mg2790	Mn2576	Mo2020
Line	228.616 {447}	205.560 {464}	324.754 {104}	259.940 {130}	766.490 { 44}	670.784 { 50}	279.079 {121}2	257.610 {131}	202.030 {467}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.50660	F .20174	.24597	.94833	50.512	1.0504	46.665	.47021	1.0574
Stddev	.00035	.00081	.00092	.00132	.140	.0039	.172	.00048	.0005
%RSD	.06859	.40191	.37461	.13890	.27738	.37091	.36897	.10126	.04410

#1	.50636	.20117	.24532	.94926	50.413	1.0476	46.543	.46987	1.0571
#2	.50685	.20231	.24662	.94740	50.611	1.0531	46.787	.47054	1.0577

Check ?	Chk Pass	Chk Fail	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit		.05750							
Low Limit		.04300							

Elem	Na8183	Ni2316	P_1782	Pb2203	S_1820	Sb2068	Se1960	Si2881	Sn1899
Line	818.326 { 41}	231.604 {446}	178.284 {489}	220.353 {453}	182.034 {485}	206.833 {463}	196.090 {472}	288.158 {117}	189.989 {477}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	51.595	.48961	10.210	.51341	2.0724	.51327	2.0208	9.5207	1.9222
Stddev	.366	.00181	.003	.00167	.0027	.00065	.0056	.0306	.0004
%RSD	.70992	.36898	.02563	.32451	.13250	.12720	.27637	.32148	.01847

#1	51.336	.48834	10.208	.51223	2.0743	.51373	2.0168	9.5424	1.9220
#2	51.854	.49089	10.212	.51459	2.0705	.51281	2.0247	9.4991	1.9225

Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Elem	Sr4077	Th2837	Ti3349	Ti1908	U_3701	V_2924	Zn2062	Zr3391
Line	407.771 { 83}	283.730 {119}	334.904 {101}	190.856 {477}	370.152 { 91}	292.402 {115}	206.200 {163}	339.198 { 99}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.91147	.97736	.90161	1.9501	2.1106	.45185	.45824	.47275
Stddev	.00198	.00298	.00131	.0058	.0174	.00478	.00065	.00462
%RSD	.21678	.30477	.14509	.29882	.82399	1.0584	.14180	.97649

#1	.91007	.97525	.90069	1.9459	2.0983	.44847	.45778	.46948
#2	.91287	.97946	.90254	1.9542	2.1229	.45523	.45870	.47601

Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit								
Low Limit								

Int. Std.	Y_2243	Y_3600	Y_3774
Line	224.306 {450}	360.073 { 94}	377.433 { 89}
Units	Cts/S	Cts/S	Cts/S
Avg	1460.3	31325.	5817.3
Stddev	1.8	9.	17.5
%RSD	.12252	.02864	.30113

#1	1461.6	31331.	5805.0
#2	1459.1	31319.	5829.7

Sample Name: LCSD 280-326001/3-A Acquired: 5/24/2016 1:20:53 Type: Unk

Method: 6500_026(v10) Mode: CONC Corr. Factor: 1.000000

User: kellyca Custom ID1: Custom ID2: Custom ID3:

Comment: 326001 6010B

Elem	Ag3280	Al1670	As1890	B_2089	Ba4554	Be3130	Bi2230	Ca3179	Cd2288
Line	328.068 {103}	167.079 {502}	189.042 {478}	208.959 {461}	455.403 { 74}	313.042 {108}	223.061 {451}	317.933 {106}	228.802 {447}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.04773	1.9347	1.0462	1.0969	1.9843	.04930	F 2.2715	47.911	.10499
Stddev	.00002	.0011	.0043	.0022	.0016	.00005	.0074	.313	.00043
%RSD	.05219	.05524	.41405	.19596	.07872	.09627	.32473	.65240	.40481

#1	.04775	1.9339	1.0493	1.0984	1.9832	.04927	2.2767	47.690	.10469
#2	.04771	1.9354	1.0431	1.0954	1.9854	.04934	2.2663	48.132	.10529

Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Fail	Chk Pass	Chk Pass
High Limit							2.2000		
Low Limit							1.8000		

Elem	Co2286	Cr2055	Cu3247	Fe2599	K_7664	Li6707	Mg2790	Mn2576	Mo2020
Line	228.616 {447}	205.560 {464}	324.754 {104}	259.940 {130}	766.490 { 44}	670.784 { 50}	279.079 {121}2	257.610 {131}	202.030 {467}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.51394	F .20450	.24759	.96408	51.446	1.0685	47.099	.47587	1.0709
Stddev	.00105	.00100	.00112	.00334	.083	.0017	.173	.00248	.0041
%RSD	.20518	.48758	.45148	.34644	.16148	.15538	.36719	.52028	.38629

#1	.51319	.20520	.24838	.96172	51.387	1.0697	47.222	.47763	1.0738
#2	.51468	.20379	.24680	.96644	51.504	1.0673	46.977	.47412	1.0679

Check ?	Chk Pass	Chk Fail	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit		.05750							
Low Limit		.04300							

Elem	Na8183	Ni2316	P_1782	Pb2203	S_1820	Sb2068	Se1960	Si2881	Sn1899
Line	818.326 { 41}	231.604 {446}	178.284 {489}	220.353 {453}	182.034 {485}	206.833 {463}	196.090 {472}	288.158 {117}	189.989 {477}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	52.316	.49695	10.317	.51605	2.0720	.51754	2.0391	9.6294	1.9345
Stddev	.021	.00245	.009	.00328	.0063	.00117	.0024	.0322	.0090
%RSD	.04109	.49382	.08261	.63598	.30394	.22564	.11574	.33433	.46322

#1	52.331	.49869	10.323	.51837	2.0765	.51837	2.0408	9.6066	1.9408
#2	52.301	.49522	10.310	.51373	2.0676	.51671	2.0374	9.6521	1.9282

Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Elem	Sr4077	Th2837	Ti3349	Ti1908	U_3701	V_2924	Zn2062	Zr3391
Line	407.771 { 83}	283.730 {119}	334.904 {101}	190.856 {477}	370.152 { 91}	292.402 {115}	206.200 {163}	339.198 { 99}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.92501	.99991	.91069	1.9646	2.1222	.45588	.46922	.47888
Stddev	.00089	.00476	.00116	.0022	.0043	.00190	.00127	.00134
%RSD	.09642	.47644	.12744	.11350	.20446	.41668	.27093	.27916

#1	.92438	1.0033	.90987	1.9662	2.1253	.45722	.47012	.47793
#2	.92564	.99655	.91151	1.9631	2.1192	.45453	.46832	.47982

Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit								
Low Limit								

Int. Std.	Y_2243	Y_3600	Y_3774
Line	224.306 {450}	360.073 { 94}	377.433 { 89}
Units	Cts/S	Cts/S	Cts/S
Avg	1458.6	31393.	5856.3
Stddev	1.3	53.	41.7
%RSD	.08849	.16749	.71221

#1	1459.5	31356.	5885.8
#2	1457.7	31431.	5826.9

Sample Name: 280-83357-A-1-B Acquired: 5/24/2016 1:23:30 Type: Unk
Method: 6500_026(v10) Mode: CONC Corr. Factor: 1.000000
User: kellyca Custom ID1: Custom ID2: Custom ID3:
Comment: 326001 6010B

Elem	Ag3280	Al3092	As1890	B_2089	Ba4554	Be3130	Bi2230	Ca3179	Cd2288
Line	328.068 {103}	309.271 {109}	189.042 {478}	208.959 {461}	455.403 { 74}	313.042 {108}	223.061 {451}	317.933 {106}	228.802 {447}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.00310	4.5508	.88132	12.234	W 14.742	.00069	.01470	W 619.97	.00419
Stddev	.00006	.0271	.00498	.056	.230	.00002	.00063	13.03	.00042
%RSD	2.0984	.59561	.56547	.45422	1.5623	2.9789	4.2559	2.1017	10.006
#1	.00305	4.5316	.88485	12.273	14.579	.00070	.01515	610.76	.00448
#2	.00314	4.5699	.87780	12.195	14.904	.00067	.01426	629.18	.00389
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Warn	Chk Pass	Chk Pass	Chk Warn	Chk Pass
High Limit					12.000			500.00	
Low Limit					-.01000			-.05000	
Elem	Co2286	Cr2055	Cu3247	Fe2714	K_7664	Li6707	Mg2790	Mn2576	Mo2020
Line	228.616 {447}	205.560 {464}	324.754 {104}	271.441 {124}	766.490 { 44}	670.784 { 50}	279.079 {121}2	257.610 {131}	202.030 {467}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.03255	W .77129	.20242	327.78	W 166.41	.13088	136.53	F 21.159	.12632
Stddev	.00046	.00335	.00031	4.65	2.07	.00178	.52	.024	.00123
%RSD	1.4045	.43390	.15071	1.4174	1.2424	1.3598	.37830	.11275	.97639
#1	.03288	.77366	.20264	324.50	164.95	.12963	136.16	21.142	.12545
#2	.03223	.76893	.20221	331.07	167.87	.13214	136.89	21.176	.12719
Check ?	Chk Pass	Chk Warn	Chk Pass	Chk Pass	Chk Warn	Chk Pass	Chk Pass	Chk Fail	Chk Pass
High Limit		.10000			100.00			20.000	
Low Limit		-.01000			-.50000			-.02000	
Elem	Na8183	Ni2316	P_1782	Pb2203	S_1820	Sb2068	Se1960	Si2881	Sn1899
Line	818.326 { 41}	231.604 {446}	178.284 {489}	220.353 {453}	182.034 {485}	206.833 {463}	196.090 {472}	288.158 {117}	189.989 {477}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	W 1158.5	.22642	F 216.27	.02013	F 312.47	.07607	.04788	31.247	.04044
Stddev	12.6	.00232	1.01	.00048	1.35	.00396	.01102	.470	.00103
%RSD	1.0854	1.0243	.46618	2.4075	.43224	5.2073	23.023	1.5044	2.5369
#1	1149.6	.22806	216.99	.01979	313.42	.07327	.04009	30.915	.03972
#2	1167.4	.22478	215.56	.02047	311.51	.07887	.05567	31.579	.04117
Check ?	Chk Warn	Chk Pass	Chk Fail	Chk Pass	Chk Fail	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit	500.00		50.000		200.00				
Low Limit	10.000		-2.0000		-.02000				
Elem	Sr4077	Th2837	Ti3349	Ti1908	U_3701	V_2924	Zn2062	Zr3391	
Line	407.771 { 83}	283.730 {119}	334.904 {101}	190.856 {477}	370.152 { 91}	292.402 {115}	206.200 {163}	339.198 { 99}	
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	
Avg	9.5484	-.00582	.31207	W -.01130	.07523	.15359	1.2902	.00694	
Stddev	.2216	.00247	.00024	.00217	.01572	.00029	.0144	.00042	
%RSD	2.3211	42.498	.07752	19.251	20.891	.18609	1.1150	6.1043	
#1	9.3917	-.00407	.31190	-.01284	.06412	.15338	1.2801	.00724	
#2	9.7051	-.00756	.31224	-.00976	.08635	.15379	1.3004	.00664	
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Warn	Chk Pass	Chk Pass	Chk Pass	Chk Pass	
High Limit				5.0000					
Low Limit				-.01000					
Int. Std.	Y_2243	Y_3600	Y_3774						
Line	224.306 {450}	360.073 { 94}	377.433 { 89}						
Units	Cts/S	Cts/S	Cts/S						
Avg	1227.8	26856.	5768.1						
Stddev	3.8	51.	71.6						
%RSD	.30748	.18930	1.2421						
#1	1225.1	26892.	5818.8						
#2	1230.4	26821.	5717.5						

Sample Name: 280-83357-A-1-Bsd@5 Acquired: 5/24/2016 1:27:01 Type: Unk
Method: 6500_026(v10) Mode: CONC Corr. Factor: 1.000000
User: kellyca Custom ID1: Custom ID2: Custom ID3:
Comment: 326001 6010B

Elem	Ag3280	Al1670	As1890	B_2089	Ba4554	Be3130	Bi2230	Ca3179	Cd2288
Line	328.068 {103}	167.079 {502}	189.042 {478}	208.959 {461}	455.403 { 74}	313.042 {108}	223.061 {451}	317.933 {106}	228.802 {447}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.00087	.92625	.16053	2.5979	2.9661	.00014	.00590	131.28	.00087
Stddev	.00000	.00405	.00209	.0164	.0151	.00009	.00173	.17	.00021
%RSD	.10178	.43677	1.3014	.63320	.51019	67.965	29.261	.12949	24.063
#1	.00087	.92912	.16201	2.6096	2.9554	.00021	.00712	131.16	.00072
#2	.00087	.92339	.15905	2.5863	2.9768	.00007	.00468	131.40	.00102

Check ? Chk Pass Chk Pass Chk Pass Chk Pass Chk Pass Chk Pass Chk Pass Chk Pass Chk Pass
High Limit
Low Limit

Elem	Co2286	Cr2055	Cu3247	Fe2714	K_7664	Li6707	Mg2790	Mn2576	Mo2020
Line	228.616 {447}	205.560 {464}	324.754 {104}	271.441 {124}	766.490 { 44}	670.784 { 50}	279.079 {121}2	257.610 {131}	202.030 {467}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.00776	W .15535	.03715	68.284	31.551	.02480	28.880	4.6328	.02579
Stddev	.00003	.00212	.00018	.077	.148	.00122	.006	.0021	.00079
%RSD	.42999	1.3663	.47437	.11290	.47045	4.9031	.02143	.04533	3.0746
#1	.00779	.15685	.03727	68.230	31.446	.02394	28.876	4.6343	.02523
#2	.00774	.15385	.03702	68.339	31.656	.02566	28.885	4.6313	.02635

Check ? Chk Pass Chk Warn Chk Pass Chk Pass Chk Pass Chk Pass Chk Pass Chk Pass Chk Pass
High Limit .10000
Low Limit -.01000

Elem	Na8183	Ni2316	P_1782	Pb2203	S_1820	Sb2068	Se1960	Si2881	Sn1899
Line	818.326 { 41}	231.604 {446}	178.284 {489}	220.353 {453}	182.034 {485}	206.833 {463}	196.090 {472}	288.158 {117}	189.989 {477}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	222.28	.04852	W 46.434	.00360	60.635	.01472	.01527	6.1370	.00730
Stddev	1.18	.00025	.384	.00159	.407	.00232	.00412	.0142	.00122
%RSD	.53307	.51598	.82766	44.129	.67079	15.728	26.961	.23199	16.770
#1	221.44	.04870	46.706	.00472	60.922	.01309	.01236	6.1471	.00816
#2	223.12	.04835	46.162	.00248	60.347	.01636	.01818	6.1270	.00643

Check ? Chk Pass Chk Pass Chk Warn Chk Pass Chk Pass Chk Pass Chk Pass Chk Pass Chk Pass
High Limit 45.000
Low Limit -1.0000

Elem	Sr4077	Th2837	Ti3349	Ti1908	U_3701	V_2924	Zn2062	Zr3391	
Line	407.771 { 83}	283.730 {119}	334.904 {101}	190.856 {477}	370.152 { 91}	292.402 {115}	206.200 {163}	339.198 { 99}	
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	
Avg	1.9622	.00071	.06136	-.00045	.02064	.03138	.27901	.00173	
Stddev	.0077	.00046	.00005	.00151	.00076	.00114	.00084	.00185	
%RSD	.39249	65.369	.08774	333.41	3.6951	3.6329	.30149	106.97	
#1	1.9568	.00038	.06139	-.00152	.02118	.03057	.27961	.00042	
#2	1.9677	.00104	.06132	.00061	.02010	.03218	.27842	.00303	

Check ? Chk Pass Chk Pass Chk Pass Chk Pass Chk Pass Chk Pass Chk Pass Chk Pass
High Limit
Low Limit

Int. Std.	Y_2243	Y_3600	Y_3774
Line	224.306 {450}	360.073 { 94}	377.433 { 89}
Units	Cts/S	Cts/S	Cts/S
Avg	1412.4	30658.	5972.1
Stddev	8.0	54.	2.6
%RSD	.56791	.17639	.04319
#1	1406.7	30696.	5970.3
#2	1418.0	30620.	5973.9

Sample Name: 280-83357-A-1-C MS Acquired: 5/24/2016 1:29:49 Type: Unk
Method: 6500_026(v10) Mode: CONC Corr. Factor: 1.000000
User: kellyca Custom ID1: Custom ID2: Custom ID3:
Comment: 326001 6010B

Elem	Ag3280	Al3092	As1890	B_2089	Ba4554	Be3130	Bi2230	Ca3179	Cd2288
Line	328.068 {103}	309.271 {109}	189.042 {478}	208.959 {461}	455.403 { 74}	313.042 {108}	223.061 {451}	317.933 {106}	228.802 {447}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.05736	8.0216	2.0423	13.538	W 16.561	.04695	2.3945	W 667.21	.11669
Stddev	.00045	.1834	.0236	.049	.331	.00086	.0169	14.20	.00003
%RSD	.78779	2.2862	1.1576	.36420	1.9983	1.8245	.70686	2.1276	.02223
#1	.05704	7.8919	2.0590	13.573	16.327	.04634	2.4065	657.17	.11667
#2	.05768	8.1512	2.0256	13.504	16.795	.04755	2.3825	677.25	.11670
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Warn	Chk Pass	Chk Pass	Chk Warn	Chk Pass
High Limit					12.000			500.00	
Low Limit					-.01000			-.05000	
Elem	Co2286	Cr2055	Cu3247	Fe2714	K_7664	Li6707	Mg2790	Mn2576	Mo2020
Line	228.616 {447}	205.560 {464}	324.754 {104}	271.441 {124}	766.490 { 44}	670.784 { 50}	279.079 {121}2	257.610 {131}	202.030 {467}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.50425	W .98820	.48520	331.83	W 221.72	1.2814	185.43	F 22.164	1.1405
Stddev	.00393	.00496	.00383	7.69	3.47	.0181	2.21	.171	.0026
%RSD	.77936	.50143	.78990	2.3184	1.5653	1.4137	1.1943	.77071	.22417
#1	.50703	.99171	.48249	326.39	219.26	1.2686	183.87	22.043	1.1423
#2	.50148	.98470	.48791	337.27	224.17	1.2943	187.00	22.285	1.1387
Check ?	Chk Pass	Chk Warn	Chk Pass	Chk Pass	Chk Warn	Chk Pass	Chk Pass	Chk Fail	Chk Pass
High Limit		.10000			100.00			20.000	
Low Limit		-.01000			-.50000			-.02000	
Elem	Na8183	Ni2316	P_1782	Pb2203	S_1820	Sb2068	Se1960	Si2881	Sn1899
Line	818.326 { 41}	231.604 {446}	178.284 {489}	220.353 {453}	182.034 {485}	206.833 {463}	196.090 {472}	288.158 {117}	189.989 {477}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	W 1228.7	.67525	F 228.85	.46986	F 323.14	.60694	2.4039	44.238	1.7281
Stddev	23.4	.00287	1.05	.00589	1.40	.01247	.0222	.925	.0115
%RSD	1.9008	.42476	.46021	1.2536	.43447	2.0544	.92158	2.0907	.66233
#1	1212.2	.67728	229.59	.47402	324.13	.61576	2.4196	43.584	1.7362
#2	1245.2	.67322	228.10	.46569	322.14	.59813	2.3883	44.892	1.7200
Check ?	Chk Warn	Chk Pass	Chk Fail	Chk Pass	Chk Fail	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit	500.00		50.000		200.00				
Low Limit	10.000		-2.0000		-.02000				
Elem	Sr4077	Th2837	Ti3349	Ti1908	U_3701	V_2924	Zn2062	Zr3391	
Line	407.771 { 83}	283.730 {119}	334.904 {101}	190.856 {477}	370.152 { 91}	292.402 {115}	206.200 {163}	339.198 { 99}	
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	
Avg	W 10.584	.46044	.97474	1.4527	2.1053	.61822	1.7410	.12366	
Stddev	.230	.00152	.00807	.0063	.0129	.00628	.0168	.00302	
%RSD	2.1761	.33112	.82788	.43647	.61119	1.0158	.96263	2.4399	
#1	10.421	.45936	.96903	1.4572	2.1144	.61378	1.7292	.12153	
#2	10.746	.46152	.98044	1.4482	2.0962	.62266	1.7529	.12579	
Check ?	Chk Warn	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	
High Limit	10.000								
Low Limit	-.01000								
Int. Std.	Y_2243	Y_3600	Y_3774						
Line	224.306 {450}	360.073 { 94}	377.433 { 89}						
Units	Cts/S	Cts/S	Cts/S						
Avg	1210.4	26394.	5770.1						
Stddev	3.8	211.	85.4						
%RSD	.31133	.79946	1.4792						
#1	1207.7	26543.	5830.5						
#2	1213.0	26245.	5709.8						

Sample Name: 280-83357-A-1-D MSD Acquired: 5/24/2016 1:33:15 Type: Unk

Method: 6500_026(v10) Mode: CONC Corr. Factor: 1.000000

User: kellyca Custom ID1: Custom ID2: Custom ID3:

Comment: 326001 6010B

Elem	Ag3280	Al3092	As1890	B_2089	Ba4554	Be3130	Bi2230	Ca3179	Cd2288
Line	328.068 {103}	309.271 {109}	189.042 {478}	208.959 {461}	455.403 {74}	313.042 {108}	223.061 {451}	317.933 {106}	228.802 {447}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.05509	7.8264	2.0195	13.405	W 16.397	.04639	2.3424	W 666.62	.11416
Stddev	.00009	.0990	.0004	.006	.418	.00081	.0028	10.77	.00050
%RSD	.16629	1.2650	.01924	.04850	2.5485	1.7384	.11994	1.6158	.43447

#1	.05502	7.7564	2.0198	13.400	16.102	.04582	2.3444	659.00	.11381
#2	.05515	7.8964	2.0193	13.410	16.693	.04696	2.3404	674.23	.11451

Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Warn	Chk Pass	Chk Pass	Chk Warn	Chk Pass
High Limit					12.000			500.00	
Low Limit					-.01000			-.05000	

Elem	Co2286	Cr2055	Cu3247	Fe2714	K_7664	Li6707	Mg2790	Mn2576	Mo2020
Line	228.616 {447}	205.560 {464}	324.754 {104}	271.441 {124}	766.490 {44}	670.784 {50}	279.079 {121}2	257.610 {131}	202.030 {467}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.49415	W .97216	.46796	328.72	W 218.53	1.2573	180.66	F 21.811	1.1164
Stddev	.00116	.00030	.00088	4.62	2.90	.0192	.03	.032	.0005
%RSD	.23484	.03128	.18871	1.4049	1.3292	1.5250	.01499	.14552	.04877

#1	.49497	.97195	.46734	325.45	216.47	1.2437	180.65	21.833	1.1168
#2	.49333	.97238	.46858	331.98	220.58	1.2708	180.68	21.788	1.1161

Check ?	Chk Pass	Chk Warn	Chk Pass	Chk Pass	Chk Warn	Chk Pass	Chk Pass	Chk Fail	Chk Pass
High Limit		.10000			100.00			20.000	
Low Limit		-.01000			-.50000			-.02000	

Elem	Na8183	Ni2316	P_1782	Pb2203	S_1820	Sb2068	Se1960	Si2881	Sn1899
Line	818.326 {41}	231.604 {446}	178.284 {489}	220.353 {453}	182.034 {485}	206.833 {463}	196.090 {472}	288.158 {117}	189.989 {477}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	W 1213.7	.66645	F 225.57	.46063	F 317.75	.59631	2.3578	47.032	1.6726
Stddev	18.6	.00188	.03	.00534	.27	.00324	.0076	.578	.0013
%RSD	1.5316	.28232	.01511	1.1589	.08603	.54379	.32369	1.2294	.07746

#1	1200.6	.66778	225.60	.46441	317.95	.59860	2.3524	46.623	1.6717
#2	1226.8	.66512	225.55	.45686	317.56	.59402	2.3632	47.441	1.6735

Check ?	Chk Warn	Chk Pass	Chk Fail	Chk Pass	Chk Fail	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit	500.00		50.000		200.00				
Low Limit	10.000		-2.0000		-.02000				

Elem	Sr4077	Th2837	Ti3349	Ti1908	U_3701	V_2924	Zn2062	Zr3391
Line	407.771 {83}	283.730 {119}	334.904 {101}	190.856 {477}	370.152 {91}	292.402 {115}	206.200 {163}	339.198 {99}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	W 10.440	.41630	.94217	1.4191	2.0175	.60053	1.7118	.11190
Stddev	.170	.00758	.00059	.0084	.0043	.00234	.0006	.00265
%RSD	1.6293	1.8200	.06305	.59564	.21583	.38938	.03814	2.3696

#1	10.320	.42166	.94259	1.4132	2.0144	.60218	1.7113	.11002
#2	10.560	.41094	.94175	1.4251	2.0206	.59888	1.7123	.11377

Check ?	Chk Warn	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit	10.000							
Low Limit	-.01000							

Int. Std.	Y_2243	Y_3600	Y_3774
Line	224.306 {450}	360.073 {94}	377.433 {89}
Units	Cts/S	Cts/S	Cts/S
Avg	1212.8	26711.	5746.1
Stddev	2.0	39.	46.3
%RSD	.16507	.14526	.80549

#1	1211.4	26738.	5778.9
#2	1214.3	26683.	5713.4

Sample Name: 280-83357-D-2-B Acquired: 5/24/2016 1:36:42 Type: Unk
Method: 6500_026(v10) Mode: CONC Corr. Factor: 1.000000
User: kellyca Custom ID1: Custom ID2: Custom ID3:
Comment: 326001 6010B

Elem	Ag3280	Al1670	As1890	B_2089	Ba4554	Be3130	Bi2230	Ca3179	Cd2288
Line	328.068 {103}	167.079 {502}	189.042 {478}	208.959 {461}	455.403 { 74}	313.042 {108}	223.061 {451}	317.933 {106}	228.802 {447}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.00012	.01928	.03533	12.341	.41335	-.00008	.00132	401.46	.00016
Stddev	.00019	.00003	.00137	.028	.00167	.00002	.00104	1.94	.00018
%RSD	154.85	.13809	3.8918	.22639	.40433	20.864	78.783	.48295	111.20

#1	-.00001	.01926	.03630	12.321	.41217	-.00009	.00205	400.09	.00029
#2	.00025	.01930	.03435	12.361	.41453	-.00006	.00058	402.83	.00003

Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Elem	Co2286	Cr2055	Cu3247	Fe2599	K_7664	Li6707	Mg2790	Mn2576	Mo2020
Line	228.616 {447}	205.560 {464}	324.754 {104}	259.940 {130}	766.490 { 44}	670.784 { 50}	279.079 {121}2	257.610 {131}	202.030 {467}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.01044	.01306	.00094	.44476	W 153.90	.13307	126.91	.01343	.04777
Stddev	.00007	.00032	.00064	.00359	.74	.00155	.27	.00103	.00085
%RSD	.70412	2.4850	67.942	.80651	.48023	1.1660	.21213	7.6757	1.7761

#1	.01049	.01283	.00139	.44730	153.38	.13197	127.10	.01416	.04717
#2	.01039	.01329	.00049	.44223	154.43	.13416	126.72	.01270	.04837

Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Warn	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit					100.00				
Low Limit					-.50000				

Elem	Na8183	Ni2316	P_1782	Pb2203	S_1820	Sb2068	Se1960	Si2881	Sn1899
Line	818.326 { 41}	231.604 {446}	178.284 {489}	220.353 {453}	182.034 {485}	206.833 {463}	196.090 {472}	288.158 {117}	189.989 {477}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	W 1234.6	.04078	2.3333	W -.00410	F 278.17	.03497	.01090	23.096	-.00168
Stddev	5.0	.00026	.0031	.00069	.54	.00171	.01033	.173	.00161
%RSD	.40436	.64310	.13285	16.816	.19466	4.8775	94.780	.75099	95.857

#1	1231.1	.04096	2.3355	-.00361	277.79	.03377	.01820	22.974	-.00054
#2	1238.1	.04059	2.3311	-.00458	278.55	.03618	.00359	23.219	-.00282

Check ?	Chk Warn	Chk Pass	Chk Pass	Chk Warn	Chk Fail	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit	500.00			10.000	200.00				
Low Limit	10.000			-.00300	-.02000				

Elem	Sr4077	Th2837	Ti3349	Ti1908	U_3701	V_2924	Zn2062	Zr3391
Line	407.771 { 83}	283.730 {119}	334.904 {101}	190.856 {477}	370.152 { 91}	292.402 {115}	206.200 {163}	339.198 { 99}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	3.8997	-.00016	.00180	.00186	.03163	.00600	.01410	.00161
Stddev	.0155	.00110	.00004	.00140	.01625	.00054	.00068	.00059
%RSD	.39698	685.24	2.3751	75.364	51.363	8.9740	4.8238	36.729

#1	3.8887	.00061	.00183	.00285	.02014	.00639	.01458	.00119
#2	3.9106	-.00093	.00177	.00087	.04312	.00562	.01362	.00203

Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit								
Low Limit								

Int. Std.	Y_2243	Y_3600	Y_3774
Line	224.306 {450}	360.073 { 94}	377.433 { 89}
Units	Cts/S	Cts/S	Cts/S
Avg	1279.9	27391.	5613.7
Stddev	4.3	16.	8.2
%RSD	.33836	.05934	.14693

#1	1283.0	27403.	5619.5
#2	1276.9	27380.	5607.8

Sample Name: 280-83357-D-3-B Acquired: 5/24/2016 1:39:55 Type: Unk
Method: 6500_026(v10) Mode: CONC Corr. Factor: 1.000000
User: kellyca Custom ID1: Custom ID2: Custom ID3:
Comment: 326001 6010B

Elem	Ag3280	Al1670	As1890	B_2089	Ba4554	Be3130	Bi2230	Ca3179	Cd2288
Line	328.068 {103}	167.079 {502}	189.042 {478}	208.959 {461}	455.403 { 74}	313.042 {108}	223.061 {451}	317.933 {106}	228.802 {447}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.00012	.06945	.05905	12.969	.73289	-.00001	.00132	408.66	.00057
Stddev	.00032	.00214	.00122	.023	.00243	.00007	.00159	.40	.00026
%RSD	276.11	3.0793	2.0596	.17609	.33187	481.32	120.80	.09846	46.029

#1	-.00011	.06794	.05819	12.953	.73117	-.00006	.00019	408.95	.00038
#2	.00035	.07097	.05991	12.985	.73461	.00003	.00244	408.38	.00075

Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Elem	Co2286	Cr2055	Cu3247	Fe2599	K_7664	Li6707	Mg2790	Mn2576	Mo2020
Line	228.616 {447}	205.560 {464}	324.754 {104}	259.940 {130}	766.490 { 44}	670.784 { 50}	279.079 {121}2	257.610 {131}	202.030 {467}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.01066	.02503	.00532	8.3881	W 154.93	.13593	129.84	.77761	.05216
Stddev	.00008	.00003	.00018	.0076	.29	.00020	.07	.00230	.00048
%RSD	.72854	.11293	3.3561	.09018	.18837	.14540	.05525	.29566	.92938

#1	.01071	.02505	.00519	8.3828	154.72	.13607	129.79	.77599	.05181
#2	.01061	.02501	.00544	8.3935	155.14	.13579	129.89	.77924	.05250

Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Warn	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit					100.00				
Low Limit					-.50000				

Elem	Na8183	Ni2316	P_1782	Pb2203	S_1820	Sb2068	Se1960	Si2881	Sn1899
Line	818.326 { 41}	231.604 {446}	178.284 {489}	220.353 {453}	182.034 {485}	206.833 {463}	196.090 {472}	288.158 {117}	189.989 {477}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	W 978.65	.04536	1.4396	W -.00482	F 287.68	.03426	.02380	24.261	-.00124
Stddev	4.69	.00054	.0115	.00461	.25	.00374	.00017	.089	.00112
%RSD	.47872	1.1911	.79919	95.584	.08742	10.909	.69777	.36713	90.558

#1	975.33	.04574	1.4478	-.00156	287.50	.03691	.02392	24.198	-.00203
#2	981.96	.04498	1.4315	-.00808	287.85	.03162	.02369	24.324	-.00045

Check ?	Chk Warn	Chk Pass	Chk Pass	Chk Warn	Chk Fail	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit	500.00			10.000	200.00				
Low Limit	10.000			-.00300	-.02000				

Elem	Sr4077	Th2837	Ti3349	Ti1908	U_3701	V_2924	Zn2062	Zr3391	
Line	407.771 { 83}	283.730 {119}	334.904 {101}	190.856 {477}	370.152 { 91}	292.402 {115}	206.200 {163}	339.198 { 99}	
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	
Avg	4.0594	-.00013	.00870	-.00013	.02210	.01134	.01596	.00078	
Stddev	.0142	.00104	.00004	.00186	.01213	.00075	.00043	.00010	
%RSD	.35013	821.87	.43996	1403.3	54.866	6.6404	2.6882	13.115	

#1	4.0494	-.00086	.00873	-.00144	.03068	.01081	.01627	.00071	
#2	4.0695	.00061	.00868	.00118	.01353	.01188	.01566	.00086	

Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	
High Limit									
Low Limit									

Int. Std.	Y_2243	Y_3600	Y_3774						
Line	224.306 {450}	360.073 { 94}	377.433 { 89}						
Units	Cts/S	Cts/S	Cts/S						
Avg	1273.3	27533.	5637.6						
Stddev	1.4	75.	18.6						
%RSD	.11166	.27184	.33048						

#1	1274.4	27586.	5650.8						
#2	1272.3	27480.	5624.5						

Sample Name: ccvh-3900196 Acquired: 5/24/2016 1:43:10 Type: QC
Method: 6500_026(v10) Mode: CONC Corr. Factor: 1.000000
User: kellyca Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	Ag3280	Al3092	As1890	B_2089	Ba4554	Be3130	Bi2230	Ca3179	Cd2288	Co2286	Cr2055	Cu3247	Fe2714
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	-.00058	45.634	-.00229	.04709	.00213	.00125	1.0767	-.01891	.00047	.00526	.00104	.00525	45.844
Stddev	.00044	.064	.00197	.00180	.00004	.00000	.0024	.00207	.00026	.00011	.00007	.00018	.239
%RSD	74.645	.13930	86.325	3.8288	1.9498	.13383	.22556	10.935	56.393	2.1050	6.4719	3.3973	.52060

#1	-.00089	45.589	-.00368	.04837	.00210	.00125	1.0784	-.01745	.00028	.00534	.00109	.00512	45.675
#2	-.00028	45.679	-.00089	.04582	.00215	.00125	1.0750	-.02037	.00066	.00519	.00100	.00537	46.013

Check ?	None	Chk Pass	None	None	None	None	Chk Pass	None	None	None	None	None	Chk Pass
Value													
Range													

Elem	K_7664	Li6707	Mg2790	Mn2576	Mo2020	Na8183	Ni2316	P_1782	Pb2203	S_1820	Sb2068	Se1960	Si2881
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.71020	.00303	.23024	.00119	-.00072	251.30	.00090	.03036	.00066	5.0553	.00417	.02011	.04161
Stddev	.05961	.00095	.00483	.00001	.00016	1.13	.00039	.00344	.00029	.0373	.00196	.00394	.01306
%RSD	8.3928	31.346	2.0959	.55498	22.669	.45054	43.298	11.339	44.323	.73716	46.864	19.612	31.389

#1	.75235	.00236	.22682	.00119	-.00083	250.50	.00063	.02792	.00046	5.0817	.00279	.01732	.03237
#2	.66806	.00370	.23365	.00120	-.00060	252.11	.00118	.03279	.00087	5.0290	.00556	.02289	.05085

Check ?	None	None	None	None	None	Chk Pass	None	None	None	Chk Pass	None	None	None
Value													
Range													

Elem	Sn1899	Sr4077	Th2837	Ti3349	Tl1908	U_3701	V_2924	Zn2062	Zr3391
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.00242	.00198	4.8758	.02649	.00192	10.111	-.01492	-.00139	-.02118
Stddev	.00238	.00005	.0006	.00032	.00071	.001	.00027	.00139	.00126
%RSD	98.144	2.6984	.01184	1.2101	37.015	.00997	1.8104	100.40	5.9677

#1	.00410	.00202	4.8762	.02626	.00141	10.110	-.01473	-.00040	-.02207
#2	.00074	.00195	4.8754	.02672	.00242	10.112	-.01511	-.00237	-.02028

Check ?	None	None	Chk Pass	None	None	Chk Pass	None	None	None
Value									
Range									

Int. Std.	Y_2243	Y_3600	Y_3774
Units	Cts/S	Cts/S	Cts/S
Avg	1477.0	31536.	5795.8
Stddev	5.9	2.	18.7
%RSD	.40040	.00476	.32246

#1	1472.8	31537.	5782.6
#2	1481.2	31535.	5809.0

Sample Name: ccv-3900195 Acquired: 5/24/2016 1:46:02 Type: QC
Method: 6500_026(v10) Mode: CONC Corr. Factor: 1.000000
User: kellyca Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	Ag3280	Al1670	As1890	B_2089	Ba4554	Be3130	Bi2230	Ca3179	Cd2288	Co2286	Cr2055	Cu3247
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.48387	.52361	1.0400	F .59247	.49397	.49723	.00089	4.8994	.53609	.52841	.51463	.49467
Stddev	.00552	.00106	.0012	.00264	.00094	.00091	.00091	.0255	.00225	.00058	.00011	.00534
%RSD	1.1411	.20294	.11830	.44481	.18937	.18322	102.34	.52108	.41986	.11005	.02065	1.0800

#1	.47996	.52285	1.0409	.59433	.49330	.49658	.00154	4.8814	.53768	.52882	.51471	.49089
#2	.48777	.52436	1.0391	.59061	.49463	.49787	.00025	4.9175	.53450	.52800	.51456	.49845

Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Fail	Chk Pass	Chk Pass	None	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Value				.50000								
Range				10.000%								

Elem	Fe2599	K_7664	Li6707	Mg2790	Mn2576	Mo2020	Na5895	Ni2316	P_1782	Pb2203	S_1820	Sb2068
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	2.4630	50.717	1.0546	19.539	.49470	.52287	5.3406	.50982	1.0391	1.0724	.00387	1.0181
Stddev	.0010	.094	.0019	.200	.00534	.00148	.0087	.00111	.0077	.0000	.00585	.0069
%RSD	.03960	.18544	.18095	1.0239	1.0800	.28303	.16353	.21703	.74398	.00349	151.17	.67775

#1	2.4637	50.651	1.0533	19.398	.49092	.52392	5.3344	.51060	1.0445	1.0724	-.00027	1.0230
#2	2.4623	50.784	1.0560	19.681	.49848	.52182	5.3467	.50904	1.0336	1.0724	.00800	1.0132

Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	None	Chk Pass
Value												
Range												

Elem	Se1960	Si2881	Sn1899	Sr4077	Th2837	Ti3349	Ti1908	U_3701	V_2924	Zn2062	Zr3391
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	1.0466	4.9502	1.0003	.46595	.00527	.46052	1.0373	.01598	.46616	.48989	.48854
Stddev	.0041	.0106	.0036	.00062	.00024	.00488	.0048	.02794	.00471	.00747	.00216
%RSD	.39127	.21305	.35858	.13339	4.5410	1.0604	.46281	174.79	1.0098	1.5253	.44315

#1	1.0495	4.9427	.99779	.46551	.00510	.45707	1.0407	-.00377	.46283	.48460	.48701
#2	1.0437	4.9576	1.0029	.46639	.00544	.46398	1.0339	.03574	.46949	.49517	.49007

Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	None	Chk Pass	Chk Pass	None	Chk Pass	Chk Pass	Chk Pass
Value											
Range											

Int. Std.	Y_2243	Y_3600	Y_3774
Units	Cts/S	Cts/S	Cts/S
Avg	1531.1	32410.	5862.5
Stddev	2.0	274.	18.3
%RSD	.13015	.84480	.31268

#1	1529.7	32604.	5875.5
#2	1532.5	32216.	5849.5

Sample Name: ccb Acquired: 5/24/2016 1:48:40 Type: QC
Method: 6500_026(v10) Mode: CONC Corr. Factor: 1.000000
User: kellyca Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	Ag3280	Al1670	As1890	B_2089	Ba4554	Be3130	Bi2230	Ca3179	Cd2288	Co2286	Cr2055
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.00048	-.00059	.00268	F .02695	.00052	.00007	.00385	.00766	-.00030	-.00013	-.00011
Stddev	.00022	.00083	.00155	.00005	.00009	.00004	.00201	.00144	.00003	.00016	.00006
%RSD	46.927	140.58	58.043	.20360	16.346	53.634	52.233	18.796	10.232	127.15	51.630
#1	.00032	-.00000	.00158	.02698	.00058	.00004	.00243	.00665	-.00028	-.00024	-.00007
#2	.00064	-.00118	.00377	.02691	.00046	.00009	.00527	.00868	-.00032	-.00001	-.00015
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Fail	Chk Pass	Chk Pass	None	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit				.00312							
Low Limit				-.00312							
Elem	Cu3247	Fe2599	K_7664	Li6707	Mg2790	Mn2576	Mo2020	Na5895	Ni2316	P_1782	Pb2203
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	W -.00162	.01347	W .26092	-.00120	.00420	W .00034	.00109	W .11213	.00021	F .01507	.00212
Stddev	.00013	.00106	.02484	.00002	.00624	.00005	.00018	.01015	.00041	.00085	.00043
%RSD	8.2150	7.8509	9.5219	1.7066	148.61	15.448	16.775	9.0530	198.65	5.6258	20.355
#1	-.00152	.01272	.27849	-.00122	.00861	.00030	.00096	.10495	-.00008	.01447	.00182
#2	-.00171	.01422	.24335	-.00119	-.00021	.00038	.00122	.11931	.00050	.01567	.00243
Check ?	Chk Warn	Chk Pass	Chk Warn	Chk Pass	Chk Pass	Chk Warn	Chk Pass	Chk Warn	Chk Pass	Chk Fail	Chk Pass
High Limit	.00136		.23700			.00025		.09160		.01000	
Low Limit	-.00136		-.23700			-.00025		-.09160		-.01000	
Elem	S_1820	Sb2068	Se1960	Si2881	Sn1899	Sr4077	Th2837	Ti3349	Ti1908	U_3701	V_2924
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.01145	W .00480	W .00853	.01524	-.00108	.00027	.00220	.00042	.00217	.01121	-.00004
Stddev	.00419	.00041	.00384	.00140	.00146	.00004	.00051	.00017	.00071	.02535	.00004
%RSD	36.570	8.5287	44.957	9.1705	134.43	14.357	23.038	39.983	32.478	226.17	87.049
#1	.00849	.00451	.01124	.01623	-.00005	.00029	.00256	.00054	.00168	.02913	-.00002
#2	.01441	.00509	.00582	.01425	-.00212	.00024	.00184	.00030	.00267	-.00672	-.00007
Check ?	None	Chk Warn	Chk Warn	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit		.00314	.00486								
Low Limit		-.00314	-.00486								
Elem	Zn2062	Zr3391									
Units	ppm	ppm									
Avg	.00058	.00014									
Stddev	.00051	.00038									
%RSD	86.630	271.02									
#1	.00094	.00041									
#2	.00023	-.00013									
Check ?	Chk Pass	Chk Pass									
High Limit											
Low Limit											
Int. Std.	Y_2243	Y_3600	Y_3774								
Units	Cts/S	Cts/S	Cts/S								
Avg	1559.0	33573.	5852.6								
Stddev	11.2	43.	23.1								
%RSD	.71804	.12662	.39479								
#1	1566.9	33603.	5868.9								
#2	1551.1	33543.	5836.2								

Sample Name: ccvl-3907489 Acquired: 5/24/2016 1:51:28 Type: QC
Method: 6500_026(v10) Mode: CONC Corr. Factor: 1.000000
User: kellyca Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	Ag3280	Al1670	As1890	B_2089	Ba4554	Be3130	Bi2230	Ca3179	Cd2288	Co2286	Cr2055	Cu3247
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.01027	.10682	.01614	.12833	.01009	.00092	.11815	.19293	.00513	.01046	.01048	.01295
Stddev	.00054	.00088	.00259	.00035	.00000	.00001	.00283	.00139	.00002	.00036	.00004	.00021
%RSD	5.3017	.81983	16.024	.27505	.04499	1.4790	2.3948	.71962	.44234	3.4879	.34691	1.6465

#1	.01065	.10620	.01797	.12808	.01009	.00093	.11615	.19194	.00511	.01072	.01045	.01280
#2	.00988	.10744	.01431	.12858	.01010	.00091	.12015	.19391	.00514	.01020	.01050	.01310

Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Value												
Range												

Elem	Fe2599	K_7664	Li6707	Mg2790	Mn2576	Mo2020	Na5895	Ni2316	P_1782	Pb2203	S_1820	Sb2068
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.10362	3.1419	.00966	.20128	.01014	.02102	F 1.3850	.04088	2.8763	.01137	.00366	.02418
Stddev	.00262	.0300	.00042	.00268	.00011	.00003	.0110	.00027	.0006	.00019	.00066	.00132
%RSD	2.5259	.95310	4.3124	1.3328	1.1235	.14215	.79286	.65090	.02068	1.6388	17.928	5.4419

#1	.10177	3.1631	.00996	.19938	.01022	.02100	1.3773	.04107	2.8767	.01124	.00412	.02325
#2	.10547	3.1207	.00937	.20318	.01006	.02104	1.3928	.04069	2.8758	.01151	.00319	.02511

Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Fail	Chk Pass	Chk Pass	Chk Pass	None	Chk Pass
Value							1.0000					
Range							30.000%					

Elem	Se1960	Si2881	Sn1899	Sr4077	Th2837	Ti3349	Ti1908	U_3701	V_2924	Zn2062	Zr3391
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	F .02269	.47412	.09748	.00926	.01544	.00897	.01536	F .08082	.00857	.01964	.01463
Stddev	.00037	.01113	.00035	.00010	.00098	.00005	.00216	.03131	.00013	.00063	.00189
%RSD	1.6302	2.3467	.36160	1.0522	6.3281	.57924	14.085	38.741	1.5745	3.2011	12.915

#1	.02296	.48199	.09773	.00919	.01475	.00900	.01383	.10296	.00867	.01919	.01597
#2	.02243	.46625	.09723	.00933	.01613	.00893	.01689	.05868	.00848	.02008	.01330

Check ?	Chk Fail	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Fail	Chk Pass	Chk Pass	Chk Pass
Value	.01500							.06000			
Range	30.000%							30.000%			

Int. Std.	Y_2243	Y_3600	Y_3774
Units	Cts/S	Cts/S	Cts/S
Avg	1520.6	32767.	5876.1
Stddev	2.9	188.	6.7
%RSD	.18962	.57455	.11345

#1	1518.5	32634.	5880.8
#2	1522.6	32901.	5871.4

Sample Name: MB 280-326188/1-A Acquired: 5/24/2016 1:54:16 Type: Unk
Method: 6500_026(v10) Mode: CONC Corr. Factor: 1.000000
User: kellyca Custom ID1: 5/20 Custom ID2: Custom ID3:
Comment: 326188 6010B

Elem	Ag3280	Al1670	As1890	B_2089	Ba4554	Be3130	Bi2230	Ca3179	Cd2288
Line	328.068 {103}	167.079 {502}	189.042 {478}	208.959 {461}	455.403 { 74}	313.042 {108}	223.061 {451}	317.933 {106}	228.802 {447}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.00021	.00362	.00291	F .01930	.00055	.00011	.00050	.01940	-.00006
Stddev	.00046	.00056	.00209	.00045	.00002	.00004	.00073	.00253	.00006
%RSD	219.10	15.393	71.923	2.3416	2.8966	38.210	146.31	13.051	89.896
#1	.00053	.00323	.00439	.01962	.00054	.00008	.00101	.02120	-.00010
#2	-.00011	.00402	.00143	.01898	.00056	.00014	-.00002	.01761	-.00002
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Fail	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit				.01000					
Low Limit				-.01000					

Elem	Co2286	Cr2055	Cu3247	Fe2599	K_7664	Li6707	Mg2790	Mn2576	Mo2020
Line	228.616 {447}	205.560 {464}	324.754 {104}	259.940 {130}	766.490 { 44}	670.784 { 50}	279.079 {121}2	257.610 {131}	202.030 {467}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	-.00020	.00004	-.00075	F .14289	.17261	-.00173	.00474	.00075	-.00020
Stddev	.00026	.00018	.00023	.00242	.02095	.00060	.00132	.00005	.00037
%RSD	130.79	489.68	29.990	1.6933	12.138	34.572	27.796	6.4287	178.75
#1	-.00038	.00017	-.00059	.14118	.18742	-.00216	.00567	.00079	-.00046
#2	-.00001	-.00009	-.00091	.14460	.15779	-.00131	.00381	.00072	.00005
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Fail	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit				.10000					
Low Limit				-.10000					

Elem	Na5895	Ni2316	P_1782	Pb2203	S_1820	Sb2068	Se1960	Si2881	Sn1899
Line	589.592 { 57}	231.604 {446}	178.284 {489}	220.353 {453}	182.034 {485}	206.833 {463}	196.090 {472}	288.158 {117}	189.989 {477}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.08377	.00075	W .00811	.00124	.00850	.00093	W .00832	.00917	-.00107
Stddev	.00041	.00073	.00332	.00011	.00281	.00138	.00169	.00384	.00000
%RSD	.48783	97.681	40.896	8.7520	33.069	148.78	20.258	41.868	.30928
#1	.08406	.00023	.01045	.00132	.01048	.00190	.00713	.00645	-.00107
#2	.08348	.00127	.00576	.00116	.00651	-.00005	.00951	.01188	-.00107
Check ?	Chk Pass	Chk Pass	Chk Warn	Chk Pass	Chk Pass	Chk Pass	Chk Warn	Chk Pass	Chk Pass
High Limit			.00500				.00500		
Low Limit			-.00500				-.00500		

Elem	Sr4077	Th2837	Ti3349	Ti1908	U_3701	V_2924	Zn2062	Zr3391	
Line	407.771 { 83}	283.730 {119}	334.904 {101}	190.856 {477}	370.152 { 91}	292.402 {115}	206.200 {163}	339.198 { 99}	
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	
Avg	.00019	.00078	.00009	.00171	.00371	.00019	.00231	.00114	
Stddev	.00004	.00158	.00004	.00076	.00497	.00034	.00075	.00021	
%RSD	22.209	203.25	46.897	44.146	134.04	181.13	32.464	18.135	
#1	.00016	.00190	.00012	.00225	.00019	-.00005	.00178	.00100	
#2	.00022	-.00034	.00006	.00118	.00722	.00042	.00284	.00129	
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	
High Limit									
Low Limit									

Int. Std.	Y_2243	Y_3600	Y_3774						
Line	224.306 {450}	360.073 { 94}	377.433 { 89}						
Units	Cts/S	Cts/S	Cts/S						
Avg	1530.5	32984.	5789.2						
Stddev	4.7	80.	8.7						
%RSD	.30706	.24182	.15052						
#1	1533.9	32928.	5795.4						
#2	1527.2	33041.	5783.1						

Sample Name: LCS 280-326188/2-A Acquired: 5/24/2016 1:57:03 Type: Unk

Method: 6500_026(v10) Mode: CONC Corr. Factor: 1.000000

User: kellyca Custom ID1: Custom ID2: Custom ID3:

Comment: 326188 6010B

Elem	Ag3280	Al1670	As1890	B_2089	Ba4554	Be3130	Bi2230	Ca3179	Cd2288
Line	328.068 {103}	167.079 {502}	189.042 {478}	208.959 {461}	455.403 { 74}	313.042 {108}	223.061 {451}	317.933 {106}	228.802 {447}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.04845	1.9574	1.0603	F 1.1181	2.0086	.04993	F 2.3026	48.553	.10669
Stddev	.00019	.0040	.0085	.0050	.0038	.00021	.0108	.097	.00010
%RSD	.39980	.20456	.79866	.44278	.18788	.41319	.47038	.19986	.09535

#1	.04831	1.9545	1.0544	1.1146	2.0059	.04979	2.2949	48.485	.10662
#2	.04858	1.9602	1.0663	1.1216	2.0112	.05008	2.3102	48.622	.10676

Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Fail	Chk Pass	Chk Pass	Chk Fail	Chk Pass	Chk Pass
High Limit				1.1000			2.2000		
Low Limit				.89000			1.8000		

Elem	Co2286	Cr2055	Cu3247	Fe2599	K_7664	Li6707	Mg2790	Mn2576	Mo2020
Line	228.616 {447}	205.560 {464}	324.754 {104}	259.940 {130}	766.490 { 44}	670.784 { 50}	279.079 {121}2	257.610 {131}	202.030 {467}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.51877	F .20609	.25205	1.0078	52.074	1.0809	48.214	.48262	1.0711
Stddev	.00164	.00016	.00027	.0071	.257	.0065	.166	.00122	.0017
%RSD	.31654	.07977	.10784	.70779	.49392	.59818	.34508	.25195	.15913

#1	.51761	.20598	.25186	1.0028	51.892	1.0764	48.332	.48348	1.0699
#2	.51993	.20621	.25225	1.0129	52.256	1.0855	48.097	.48176	1.0723

Check ?	Chk Pass	Chk Fail	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit		.05750							
Low Limit		.04300							

Elem	Na8183	Ni2316	P_1782	Pb2203	S_1820	Sb2068	Se1960	Si2881	Sn1899
Line	818.326 { 41}	231.604 {446}	178.284 {489}	220.353 {453}	182.034 {485}	206.833 {463}	196.090 {472}	288.158 {117}	189.989 {477}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	53.109	.50314	10.517	.52671	2.1082	.52443	2.0826	9.7978	1.9566
Stddev	.684	.00054	.051	.00229	.0200	.00277	.0101	.0546	.0048
%RSD	1.2873	.10683	.48345	.43497	.94943	.52856	.48572	.55758	.24305

#1	52.626	.50276	10.481	.52509	2.0941	.52247	2.0755	9.7591	1.9532
#2	53.593	.50352	10.553	.52833	2.1224	.52639	2.0898	9.8364	1.9599

Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Elem	Sr4077	Th2837	Ti3349	Ti1908	U_3701	V_2924	Zn2062	Zr3391
Line	407.771 { 83}	283.730 {119}	334.904 {101}	190.856 {477}	370.152 { 91}	292.402 {115}	206.200 {163}	339.198 { 99}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.93719	1.0028	.91856	2.0069	2.1343	.46375	.47476	.48153
Stddev	.00418	.0051	.00125	.0090	.0225	.00130	.00471	.00177
%RSD	.44618	.51053	.13625	.44739	1.0541	.28005	.99119	.36751

#1	.93423	1.0065	.91945	2.0005	2.1502	.46467	.47809	.48028
#2	.94014	.99922	.91768	2.0132	2.1184	.46283	.47143	.48278

Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit								
Low Limit								

Int. Std.	Y_2243	Y_3600	Y_3774
Line	224.306 {450}	360.073 { 94}	377.433 { 89}
Units	Cts/S	Cts/S	Cts/S
Avg	1456.8	31114.	5763.1
Stddev	6.2	22.	28.8
%RSD	.42419	.07035	.49908

#1	1461.2	31098.	5783.4
#2	1452.4	31129.	5742.8

Sample Name: 280-83185-E-1-A Acquired: 5/24/2016 1:59:39 Type: Unk
Method: 6500_026(v10) Mode: CONC Corr. Factor: 1.000000
User: kellyca Custom ID1: Custom ID2: Custom ID3:
Comment: 326188 6010B

Elem	Ag3280	Al1670	As1890	B_2089	Ba4554	Be3130	Bi2230	Ca3179	Cd2288
Line	328.068 {103}	167.079 {502}	189.042 {478}	208.959 {461}	455.403 { 74}	313.042 {108}	223.061 {451}	317.933 {106}	228.802 {447}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.00054	.00359	.00148	.02260	.04309	.00000	-.00078	49.760	.00021
Stddev	.00015	.00123	.00301	.00013	.00006	.00001	.00180	.280	.00005
%RSD	27.317	34.428	202.96	.56692	.14054	760.64	229.40	.56268	23.205
#1	.00064	.00271	.00362	.02251	.04305	.00001	-.00205	49.562	.00024
#2	.00043	.00446	-.00065	.02269	.04313	-.00001	.00049	49.958	.00017

Check ? Chk Pass Chk Pass Chk Pass Chk Pass Chk Pass Chk Pass Chk Pass Chk Pass Chk Pass
High Limit
Low Limit

Elem	Co2286	Cr2055	Cu3247	Fe2599	K_7664	Li6707	Mg2790	Mn2576	Mo2020
Line	228.616 {447}	205.560 {464}	324.754 {104}	259.940 {130}	766.490 { 44}	670.784 { 50}	279.079 {121}2	257.610 {131}	202.030 {467}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	-.00024	-.00001	-.00096	.10832	4.5257	-.00025	23.397	.76105	.00131
Stddev	.00015	.00009	.00011	.00081	.0164	.00008	.112	.00141	.00030
%RSD	62.922	1077.8	11.764	.74889	.36150	33.048	.47812	.18472	22.864
#1	-.00013	-.00007	-.00088	.10775	4.5141	-.00019	23.318	.76006	.00110
#2	-.00034	.00005	-.00104	.10889	4.5372	-.00031	23.476	.76204	.00152

Check ? Chk Pass Chk Pass Chk Pass Chk Pass Chk Pass Chk Pass Chk Pass Chk Pass Chk Pass
High Limit
Low Limit

Elem	Na8183	Ni2316	P_1782	Pb2203	S_1820	Sb2068	Se1960	Si2881	Sn1899
Line	818.326 { 41}	231.604 {446}	178.284 {489}	220.353 {453}	182.034 {485}	206.833 {463}	196.090 {472}	288.158 {117}	189.989 {477}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	11.694	.00162	.31895	-.00006	.44308	.00112	.00667	19.503	.00094
Stddev	.170	.00017	.00235	.00073	.00939	.00147	.00182	.069	.00120
%RSD	1.4497	10.270	.73661	1222.2	2.1202	131.50	27.337	.35195	127.27
#1	11.574	.00174	.31729	.00046	.43644	.00216	.00796	19.455	.00179
#2	11.814	.00150	.32061	-.00058	.44972	.00008	.00538	19.552	.00009

Check ? Chk Pass Chk Pass Chk Pass Chk Pass Chk Pass Chk Pass Chk Pass Chk Pass Chk Pass
High Limit
Low Limit

Elem	Sr4077	Th2837	Ti3349	Ti1908	U_3701	V_2924	Zn2062	Zr3391
Line	407.771 { 83}	283.730 {119}	334.904 {101}	190.856 {477}	370.152 { 91}	292.402 {115}	206.200 {163}	339.198 { 99}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.10474	.00197	.00073	.00125	-.00102	.00072	-.00124	.00082
Stddev	.00028	.00050	.00009	.00185	.00928	.00017	.00027	.00133
%RSD	.26846	25.449	12.847	147.79	908.90	24.346	22.036	161.84
#1	.10454	.00161	.00066	.00256	-.00758	.00059	-.00144	-.00012
#2	.10494	.00232	.00080	-.00006	.00554	.00084	-.00105	.00176

Check ? Chk Pass Chk Pass Chk Pass Chk Pass Chk Pass Chk Pass Chk Pass Chk Pass
High Limit
Low Limit

Int. Std.	Y_2243	Y_3600	Y_3774
Line	224.306 {450}	360.073 { 94}	377.433 { 89}
Units	Cts/S	Cts/S	Cts/S
Avg	1492.0	32139.	5840.8
Stddev	1.9	26.	30.2
%RSD	.12943	.08136	.51779
#1	1493.4	32158.	5862.1
#2	1490.6	32121.	5819.4

Sample Name: 280-83185-E-2-A Acquired: 5/24/2016 2:02:25 Type: Unk
Method: 6500_026(v10) Mode: CONC Corr. Factor: 1.000000
User: kellyca Custom ID1: Custom ID2: Custom ID3:
Comment: 326188 6010B

Elem	Ag3280	Al1670	As1890	B_2089	Ba4554	Be3130	Bi2230	Ca3179	Cd2288
Line	328.068 {103}	167.079 {502}	189.042 {478}	208.959 {461}	455.403 { 74}	313.042 {108}	223.061 {451}	317.933 {106}	228.802 {447}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.00076	.01906	.00079	.02829	.04974	-.00005	-.00028	27.581	.00023
Stddev	.00018	.00096	.00032	.00019	.00020	.00002	.00007	.147	.00031
%RSD	23.278	5.0487	39.960	.65622	.39707	40.707	23.540	.53269	135.35

#1	.00064	.01838	.00101	.02843	.04960	-.00003	-.00033	27.477	.00001
#2	.00089	.01974	.00057	.02816	.04988	-.00006	-.00023	27.685	.00044

Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Elem	Co2286	Cr2055	Cu3247	Fe2599	K_7664	Li6707	Mg2790	Mn2576	Mo2020
Line	228.616 {447}	205.560 {464}	324.754 {104}	259.940 {130}	766.490 { 44}	670.784 { 50}	279.079 {121}2	257.610 {131}	202.030 {467}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.00125	-.00008	-.00028	.81774	3.6550	.00021	8.2774	.53872	.00136
Stddev	.00011	.00001	.00019	.00930	.0129	.00019	.0093	.00045	.00032
%RSD	8.8146	7.6245	68.977	1.1379	.35351	90.889	.11232	.08352	23.603

#1	.00133	-.00008	-.00014	.81116	3.6459	.00008	8.2840	.53841	.00159
#2	.00117	-.00008	-.00041	.82432	3.6641	.00035	8.2708	.53904	.00114

Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Elem	Na5895	Ni2316	P_1782	Pb2203	S_1820	Sb2068	Se1960	Si2881	Sn1899
Line	589.592 { 57}	231.604 {446}	178.284 {489}	220.353 {453}	182.034 {485}	206.833 {463}	196.090 {472}	288.158 {117}	189.989 {477}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	8.7266	.00207	.12101	-.00013	.50240	.00132	.00820	18.308	-.00088
Stddev	.0261	.00004	.00043	.00195	.00023	.00060	.00248	.079	.00220
%RSD	.29925	1.7359	.35506	1485.3	.04541	45.943	30.197	.43171	250.55

#1	8.7082	.00209	.12071	-.00151	.50256	.00089	.00645	18.252	.00068
#2	8.7451	.00204	.12131	.00125	.50224	.00174	.00995	18.364	-.00244

Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Elem	Sr4077	Th2837	Ti3349	Ti1908	U_3701	V_2924	Zn2062	Zr3391
Line	407.771 { 83}	283.730 {119}	334.904 {101}	190.856 {477}	370.152 { 91}	292.402 {115}	206.200 {163}	339.198 { 99}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.09833	.00180	.00133	.00322	-.00794	.00093	.00344	.00064
Stddev	.00007	.00098	.00010	.00100	.02329	.00002	.00129	.00155
%RSD	.07165	54.375	7.3414	31.057	293.43	2.2617	37.474	240.00

#1	.09838	.00249	.00140	.00251	.00853	.00095	.00435	.00174
#2	.09828	.00111	.00127	.00393	-.02440	.00092	.00253	-.00045

Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit								
Low Limit								

Int. Std.	Y_2243	Y_3600	Y_3774
Line	224.306 {450}	360.073 { 94}	377.433 { 89}
Units	Cts/S	Cts/S	Cts/S
Avg	1513.8	32563.	5884.8
Stddev	2.9	43.	21.5
%RSD	.18972	.13215	.36527

#1	1515.9	32532.	5900.0
#2	1511.8	32593.	5869.6

Sample Name: 280-83185-E-3-A Acquired: 5/24/2016 2:05:10 Type: Unk
Method: 6500_026(v10) Mode: CONC Corr. Factor: 1.000000
User: kellyca Custom ID1: Custom ID2: Custom ID3:
Comment: 326188 6010B

Elem	Ag3280	Al1670	As1890	B_2089	Ba4554	Be3130	Bi2230	Ca3179	Cd2288
Line	328.068 {103}	167.079 {502}	189.042 {478}	208.959 {461}	455.403 { 74}	313.042 {108}	223.061 {451}	317.933 {106}	228.802 {447}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.00108	.00372	.06790	.02698	.03115	.00001	-.00090	35.698	.00012
Stddev	.00028	.00096	.00204	.00029	.00019	.00003	.00583	.078	.00013
%RSD	26.047	25.725	3.0043	1.0602	.62400	267.47	650.26	.21941	111.56

#1	.00128	.00440	.06646	.02719	.03129	-.00001	-.00502	35.754	.00021
#2	.00088	.00304	.06935	.02678	.03101	.00003	.00322	35.643	.00002

Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Elem	Co2286	Cr2055	Cu3247	Fe2599	K_7664	Li6707	Mg2790	Mn2576	Mo2020
Line	228.616 {447}	205.560 {464}	324.754 {104}	259.940 {130}	766.490 { 44}	670.784 { 50}	279.079 {121}2	257.610 {131}	202.030 {467}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.00056	.00030	-.00117	6.2144	2.2965	-.00100	14.010	3.3395	.00264
Stddev	.00002	.00006	.00013	.00084	.0211	.00032	.041	.0188	.00034
%RSD	2.8878	18.888	11.296	.13589	.91822	32.304	.29524	.56434	12.724

#1	.00057	.00034	-.00127	6.2204	2.2816	-.00123	13.981	3.3262	.00288
#2	.00054	.00026	-.00108	6.2085	2.3115	-.00078	14.040	3.3528	.00240

Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Elem	Na5895	Na8183	Ni2316	P_1782	Pb2203	S_1820	Sb2068	Se1960	Si2881
Line	589.592 { 57}	818.326 { 41}	231.604 {446}	178.284 {489}	220.353 {453}	182.034 {485}	206.833 {463}	196.090 {472}	288.158 {117}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	F 10.013	10.235	.00166	1.4491	-.00054	.26355	.00134	.00946	22.259
Stddev	.011	.010	.00007	.0008	.00155	.00048	.00057	.00179	.023
%RSD	.10724	.09891	4.2079	.05640	288.51	.18069	42.792	18.970	.10483

#1	10.020	10.243	.00161	1.4497	.00056	.26322	.00174	.00819	22.276
#2	10.005	10.228	.00170	1.4485	-.00163	.26389	.00093	.01073	22.243

Check ?	Chk Fail	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit	10.000								
Low Limit	-1.0000								

Elem	Sn1899	Sr4077	Th2837	Ti3349	Ti1908	U_3701	V_2924	Zn2062	Zr3391
Line	189.989 {477}	407.771 { 83}	283.730 {119}	334.904 {101}	190.856 {477}	370.152 { 91}	292.402 {115}	206.200 {163}	339.198 { 99}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	-.00084	.14001	.00227	.00018	.00020	.00351	.00080	.00252	-.00013
Stddev	.00091	.00000	.00034	.00041	.00185	.00432	.00072	.00048	.00026
%RSD	107.48	.00262	15.148	231.80	912.73	123.26	89.281	19.058	198.75

#1	-.00020	.14002	.00202	-.00011	.00151	.00045	.00131	.00286	-.00032
#2	-.00148	.14001	.00251	.00046	-.00110	.00657	.00030	.00218	.00005

Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Int. Std.	Y_2243	Y_3600	Y_3774
Line	224.306 {450}	360.073 { 94}	377.433 { 89}
Units	Cts/S	Cts/S	Cts/S
Avg	1507.9	32465.	5854.1
Stddev	1.2	159.	2.0
%RSD	.07962	.48851	.03455

#1	1508.7	32577.	5855.5
#2	1507.0	32353.	5852.7

Sample Name: 280-83185-E-4-A Acquired: 5/24/2016 2:07:54 Type: Unk
Method: 6500_026(v10) Mode: CONC Corr. Factor: 1.000000
User: kellyca Custom ID1: Custom ID2: Custom ID3:
Comment: 326188 6010B

Elem	Ag3280	Al1670	As1890	B_2089	Ba4554	Be3130	Bi2230	Ca3179	Cd2288
Line	328.068 {103}	167.079 {502}	189.042 {478}	208.959 {461}	455.403 { 74}	313.042 {108}	223.061 {451}	317.933 {106}	228.802 {447}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.00072	.00374	.06997	.02641	.03269	-.00001	-.00007	37.262	.00036
Stddev	.00072	.00070	.00234	.00040	.00001	.00009	.00482	.273	.00038
%RSD	100.75	18.804	3.3446	1.5185	.02840	837.30	6722.2	.73225	106.54

#1	.00021	.00324	.06831	.02669	.03268	.00005	-.00348	37.069	.00009
#2	.00122	.00424	.07162	.02613	.03269	-.00008	.00334	37.455	.00062

Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Elem	Co2286	Cr2055	Cu3247	Fe2599	K_7664	Li6707	Mg2790	Mn2576	Mo2020
Line	228.616 {447}	205.560 {464}	324.754 {104}	259.940 {130}	766.490 { 44}	670.784 { 50}	279.079 {121}2	257.610 {131}	202.030 {467}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.00073	.00031	-.00113	6.5066	2.3924	-.00022	14.648	3.5153	.00219
Stddev	.00040	.00006	.00005	.0326	.0166	.00056	.027	.0036	.00040
%RSD	55.151	17.961	4.3730	.50060	.69405	255.35	.18645	.10174	18.415

#1	.00101	.00035	-.00116	6.4835	2.4041	.00018	14.628	3.5178	.00190
#2	.00044	.00027	-.00109	6.5296	2.3807	-.00062	14.667	3.5128	.00247

Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Elem	Na8183	Ni2316	P_1782	Pb2203	S_1820	Sb2068	Se1960	Si2881	Sn1899
Line	818.326 { 41}	231.604 {446}	178.284 {489}	220.353 {453}	182.034 {485}	206.833 {463}	196.090 {472}	288.158 {117}	189.989 {477}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	10.883	.00184	1.5144	-.00130	.27396	.00167	.00937	23.184	-.00042
Stddev	.121	.00015	.0053	.00112	.01030	.00073	.00229	.116	.00078
%RSD	1.1085	8.0160	.35184	85.679	3.7579	44.064	24.454	.49933	186.22

#1	10.968	.00194	1.5182	-.00209	.28124	.00115	.01099	23.102	.00013
#2	10.797	.00173	1.5107	-.00051	.26668	.00219	.00775	23.266	-.00098

Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Elem	Sr4077	Th2837	Ti3349	Ti1908	U_3701	V_2924	Zn2062	Zr3391	
Line	407.771 { 83}	283.730 {119}	334.904 {101}	190.856 {477}	370.152 { 91}	292.402 {115}	206.200 {163}	339.198 { 99}	
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	
Avg	.14691	.00100	.00037	-.00020	-.00493	.00075	.00133	.00004	
Stddev	.00102	.00092	.00003	.00139	.01233	.00008	.00141	.00064	
%RSD	.69657	91.841	9.5177	690.99	249.95	10.603	105.86	1703.6	

#1	.14619	.00035	.00034	.00078	-.01365	.00069	.00033	-.00042	
#2	.14764	.00165	.00039	-.00118	.00379	.00080	.00232	.00049	

Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	
High Limit									
Low Limit									

Int. Std.	Y_2243	Y_3600	Y_3774
Line	224.306 {450}	360.073 { 94}	377.433 { 89}
Units	Cts/S	Cts/S	Cts/S
Avg	1507.5	32324.	5869.5
Stddev	1.7	98.	27.7
%RSD	.11278	.30201	.47149

#1	1506.3	32393.	5889.1
#2	1508.8	32255.	5849.9

Sample Name: 280-83185-E-5-A Acquired: 5/24/2016 2:10:39 Type: Unk
Method: 6500_026(v10) Mode: CONC Corr. Factor: 1.000000
User: kellyca Custom ID1: Custom ID2: Custom ID3:
Comment: 326188 6010B

Elem	Ag3280	Al1670	As1890	B_2089	Ba4554	Be3130	Bi2230	Ca3179	Cd2288
Line	328.068 {103}	167.079 {502}	189.042 {478}	208.959 {461}	455.403 { 74}	313.042 {108}	223.061 {451}	317.933 {106}	228.802 {447}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.00061	.00116	.00217	.01035	.00021	-.00004	.00228	.02305	-.00010
Stddev	.00034	.00004	.00395	.00079	.00000	.00000	.00074	.00719	.00005
%RSD	55.074	3.8120	181.74	7.6021	.75538	8.3248	32.417	31.204	56.334

#1	.00085	.00119	.00497	.01091	.00021	-.00004	.00175	.02814	-.00013
#2	.00037	.00112	-.00062	.00979	.00021	-.00004	.00280	.01796	-.00006

Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Elem	Co2286	Cr2055	Cu3247	Fe2599	K_7664	Li6707	Mg2790	Mn2576	Mo2020
Line	228.616 {447}	205.560 {464}	324.754 {104}	259.940 {130}	766.490 { 44}	670.784 { 50}	279.079 {121}2	257.610 {131}	202.030 {467}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	-.00034	.00009	-.00163	.01326	.03900	-.00056	.00053	.00042	-.00033
Stddev	.00005	.00028	.00042	.00015	.00328	.00040	.00033	.00001	.00023
%RSD	13.713	297.85	25.679	1.1163	8.4026	70.997	63.210	2.5888	70.547

#1	-.00037	-.00010	-.00192	.01336	.03669	-.00084	.00077	.00043	-.00050
#2	-.00030	.00029	-.00133	.01315	.04132	-.00028	.00029	.00041	-.00017

Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Elem	Na5895	Ni2316	P_1782	Pb2203	S_1820	Sb2068	Se1960	Si2881	Sn1899
Line	589.592 { 57}	231.604 {446}	178.284 {489}	220.353 {453}	182.034 {485}	206.833 {463}	196.090 {472}	288.158 {117}	189.989 {477}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.04856	.00002	.00470	.00091	.00355	.00228	.00688	.02115	-.00068
Stddev	.00923	.00088	.00057	.00144	.00293	.00042	.00530	.01147	.00028
%RSD	19.008	3570.4	12.179	158.34	82.745	18.475	77.109	54.253	40.856

#1	.04203	-.00060	.00510	-.00011	.00562	.00258	.01062	.02926	-.00087
#2	.05508	.00065	.00429	.00193	.00147	.00198	.00313	.01304	-.00048

Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Elem	Sr4077	Th2837	Ti3349	Ti1908	U_3701	V_2924	Zn2062	Zr3391
Line	407.771 { 83}	283.730 {119}	334.904 {101}	190.856 {477}	370.152 { 91}	292.402 {115}	206.200 {163}	339.198 { 99}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.00006	.00299	.00037	.00094	-.00285	.00006	.00175	.00043
Stddev	.00002	.00121	.00030	.00164	.02163	.00070	.00063	.00052
%RSD	40.257	40.255	79.603	173.18	758.70	1085.5	35.739	120.24

#1	.00008	.00214	.00058	-.00021	.01245	-.00043	.00219	.00080
#2	.00004	.00385	.00016	.00210	-.01815	.00056	.00131	.00006

Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit								
Low Limit								

Int. Std.	Y_2243	Y_3600	Y_3774
Line	224.306 {450}	360.073 { 94}	377.433 { 89}
Units	Cts/S	Cts/S	Cts/S
Avg	1535.0	33343.	5852.0
Stddev	.2	38.	18.8
%RSD	.01412	.11457	.32205

#1	1534.9	33370.	5865.4
#2	1535.2	33316.	5838.7

Sample Name: 280-83185-E-6-A Acquired: 5/24/2016 2:13:28 Type: Unk
Method: 6500_026(v10) Mode: CONC Corr. Factor: 1.000000
User: kellyca Custom ID1: Custom ID2: Custom ID3:
Comment: 326188 6010B

Elem	Ag3280	Al1670	As1890	B_2089	Ba4554	Be3130	Bi2230	Ca3179	Cd2288
Line	328.068 {103}	167.079 {502}	189.042 {478}	208.959 {461}	455.403 { 74}	313.042 {108}	223.061 {451}	317.933 {106}	228.802 {447}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.00021	.00154	.01649	.01820	.05254	.00003	.00064	32.077	.00026
Stddev	.00022	.00114	.00422	.00180	.00002	.00008	.00074	.010	.00020
%RSD	105.66	74.013	25.598	9.9008	.04156	250.99	116.27	.03070	74.787

#1	.00005	.00234	.01947	.01692	.05256	.00009	.00117	32.084	.00012
#2	.00037	.00073	.01350	.01947	.05253	-.00002	.00011	32.070	.00040

Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Elem	Co2286	Cr2055	Cu3247	Fe2599	K_7664	Li6707	Mg2790	Mn2576	Mo2020
Line	228.616 {447}	205.560 {464}	324.754 {104}	259.940 {130}	766.490 { 44}	670.784 { 50}	279.079 {121}2	257.610 {131}	202.030 {467}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	-.00070	.00011	-.00100	1.7875	2.8228	-.00047	12.346	.50915	.00099
Stddev	.00008	.00002	.00040	.0000	.0098	.00109	.017	.00088	.00023
%RSD	11.969	13.553	39.965	.00101	.34852	233.92	.13851	.17224	23.742

#1	-.00076	.00010	-.00072	1.7875	2.8298	-.00124	12.358	.50977	.00082
#2	-.00064	.00012	-.00128	1.7875	2.8159	.00031	12.334	.50853	.00115

Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Elem	Na8183	Ni2316	P_1782	Pb2203	S_1820	Sb2068	Se1960	Si2881	Sn1899
Line	818.326 { 41}	231.604 {446}	178.284 {489}	220.353 {453}	182.034 {485}	206.833 {463}	196.090 {472}	288.158 {117}	189.989 {477}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	19.731	.00205	1.3518	-.00029	.06560	.00227	.00623	21.001	-.00146
Stddev	.039	.00027	.0012	.00199	.00431	.00199	.00009	.030	.00148
%RSD	.19835	13.226	.08813	683.02	6.5630	87.403	1.4805	.14336	101.32

#1	19.704	.00224	1.3509	.00111	.06865	.00368	.00630	21.023	-.00251
#2	19.759	.00186	1.3526	-.00170	.06256	.00087	.00617	20.980	-.00042

Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Elem	Sr4077	Th2837	Ti3349	Ti1908	U_3701	V_2924	Zn2062	Zr3391	
Line	407.771 { 83}	283.730 {119}	334.904 {101}	190.856 {477}	370.152 { 91}	292.402 {115}	206.200 {163}	339.198 { 99}	
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	
Avg	.09809	.00169	.00050	.00044	.00625	.00071	-.00119	-.00052	
Stddev	.00031	.00092	.00018	.00345	.00123	.00039	.00058	.00115	
%RSD	.31231	54.573	35.944	780.16	19.644	54.666	48.622	221.25	

#1	.09787	.00104	.00037	-.00200	.00712	.00098	-.00160	.00029	
#2	.09831	.00234	.00062	.00288	.00538	.00043	-.00078	-.00133	

Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	
High Limit									
Low Limit									

Int. Std.	Y_2243	Y_3600	Y_3774						
Line	224.306 {450}	360.073 { 94}	377.433 { 89}						
Units	Cts/S	Cts/S	Cts/S						
Avg	1503.5	32295.	5851.9						
Stddev	1.1	35.	8.2						
%RSD	.07397	.10888	.13992						

#1	1504.3	32271.	5857.7						
#2	1502.7	32320.	5846.1						

Sample Name: ccvh-3900196 Acquired: 5/24/2016 2:16:13 Type: QC
Method: 6500_026(v10) Mode: CONC Corr. Factor: 1.000000
User: kellyca Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	Ag3280	Al3092	As1890	B_2089	Ba4554	Be3130	Bi2230	Ca3179	Cd2288	Co2286	Cr2055	Cu3247	Fe2714
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	-.00157	46.585	.00059	.00905	.00043	-.00014	1.0763	-.05608	-.00082	.00327	-.00061	.00344	46.210
Stddev	.00005	.590	.00741	.00120	.00007	.00006	.0049	.00257	.00019	.00033	.00025	.00041	.381
%RSD	3.4133	1.2671	1265.9	13.318	16.675	43.788	.45437	4.5883	22.713	10.205	40.671	11.968	.82432

#1	-.00153	46.168	.00582	.00990	.00048	-.00018	1.0798	-.05426	-.00096	.00350	-.00043	.00373	45.941
#2	-.00161	47.002	-.00465	.00819	.00038	-.00009	1.0729	-.05790	-.00069	.00303	-.00079	.00314	46.480

Check ?	None	Chk Pass	None	None	None	None	Chk Pass	None	None	None	None	None	Chk Pass
Value													
Range													

Elem	K_7664	Li6707	Mg2790	Mn2576	Mo2020	Na8183	Ni2316	P_1782	Pb2203	S_1820	Sb2068	Se1960	Si2881
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.04887	-.00110	.16770	-.00069	-.00255	255.72	-.00040	.00921	.00058	5.0527	-.00021	.01604	.00296
Stddev	.00218	.00119	.00323	.00006	.00017	2.63	.00000	.00000	.00153	.0061	.00356	.00311	.00057
%RSD	4.4582	108.12	1.9285	8.5009	6.6252	1.0298	.60487	.03049	265.01	.12111	1710.0	19.397	19.201

#1	.05041	-.00026	.16542	-.00065	-.00267	253.86	-.00040	.00921	-.00050	5.0570	.00231	.01824	.00337
#2	.04733	-.00195	.16999	-.00073	-.00243	257.59	-.00041	.00920	.00166	5.0484	-.00273	.01384	.00256

Check ?	None	None	None	None	None	Chk Pass	None	None	None	Chk Pass	None	None	None
Value													
Range													

Elem	Sn1899	Sr4077	Th2837	Ti3349	Tl1908	U_3701	V_2924	Zn2062	Zr3391
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.00134	.00035	4.9026	.02518	-.00158	10.176	-.01654	-.00142	-.01959
Stddev	.00247	.00005	.0128	.00031	.00375	.031	.00016	.00054	.00363
%RSD	183.86	12.988	.26139	1.2490	237.06	.30354	.98367	38.211	18.531

#1	.00309	.00032	4.8936	.02540	-.00423	10.154	-.01665	-.00104	-.02216
#2	-.00040	.00038	4.9117	.02495	.00107	10.198	-.01642	-.00180	-.01702

Check ?	None	None	Chk Pass	None	None	Chk Pass	None	None	None
Value									
Range									

Int. Std.	Y_2243	Y_3600	Y_3774
Units	Cts/S	Cts/S	Cts/S
Avg	1461.7	31234.	5698.1
Stddev	.2	80.	25.0
%RSD	.01710	.25674	.43854

#1	1461.9	31291.	5715.8
#2	1461.5	31178.	5680.4

Sample Name: ccv-3900195 Acquired: 5/24/2016 2:19:03 Type: QC
Method: 6500_026(v10) Mode: CONC Corr. Factor: 1.000000
User: kellyca Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	Ag3280	Al1670	As1890	B_2089	Ba4554	Be3130	Bi2230	Ca3179	Cd2288	Co2286	Cr2055	Cu3247
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.48241	.52563	1.0348	F .57114	.49432	.49619	.00142	4.8587	.53739	.52944	.51546	.49530
Stddev	.00023	.00506	.0088	.00279	.00103	.00009	.00390	.0114	.00279	.00007	.00351	.00119
%RSD	.04668	.96226	.85057	.48799	.20844	.01902	274.88	.23534	.51841	.01302	.68037	.24038

#1	.48225	.52205	1.0286	.56917	.49505	.49626	.00417	4.8668	.53542	.52949	.51298	.49614
#2	.48257	.52921	1.0410	.57311	.49359	.49613	-.00134	4.8506	.53936	.52939	.51794	.49446

Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Fail	Chk Pass	Chk Pass	None	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Value				.50000								
Range				10.000%								

Elem	Fe2599	K_7664	Li6707	Mg2790	Mn2576	Mo2020	Na5895	Ni2316	P_1782	Pb2203	S_1820	Sb2068
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	2.4160	50.539	1.0618	19.468	.49098	.52176	5.2867	.51170	1.0324	1.0773	.00289	1.0209
Stddev	.0041	.040	.0021	.003	.00061	.00183	.0047	.00194	.0083	.0061	.00164	.0021
%RSD	.16928	.08000	.19517	.01578	.12436	.35160	.08934	.37987	.80042	.56524	56.547	.20472

#1	2.4189	50.567	1.0603	19.470	.49055	.52047	5.2901	.51032	1.0266	1.0730	.00174	1.0224
#2	2.4131	50.510	1.0632	19.466	.49142	.52306	5.2834	.51307	1.0383	1.0816	.00405	1.0194

Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	None	Chk Pass
Value												
Range												

Elem	Se1960	Si2881	Sn1899	Sr4077	Th2837	Ti3349	Ti1908	U_3701	V_2924	Zn2062	Zr3391
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	1.0498	4.8971	1.0000	.46533	.00620	.45761	1.0448	.01817	.46307	.48432	.48826
Stddev	.0031	.0129	.0050	.00083	.00120	.00102	.0102	.01189	.00237	.00117	.00045
%RSD	.29416	.26286	.49764	.17790	19.322	.22282	.97887	65.410	.51086	.24104	.09253

#1	1.0476	4.8880	.99650	.46475	.00705	.45689	1.0376	.00977	.46140	.48349	.48794
#2	1.0520	4.9063	1.0035	.46592	.00535	.45833	1.0520	.02658	.46475	.48514	.48858

Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	None	Chk Pass	Chk Pass	None	Chk Pass	Chk Pass	Chk Pass
Value											
Range											

Int. Std.	Y_2243	Y_3600	Y_3774
Units	Cts/S	Cts/S	Cts/S
Avg	1516.0	32307.	5817.0
Stddev	10.3	68.	4.3
%RSD	.67957	.21171	.07316

#1	1523.3	32356.	5814.0
#2	1508.8	32259.	5820.0

Sample Name: ccb Acquired: 5/24/2016 2:21:42 Type: QC
Method: 6500_026(v10) Mode: CONC Corr. Factor: 1.000000
User: kellyca Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	Ag3280	Al1670	As1890	B_2089	Ba4554	Be3130	Bi2230	Ca3179	Cd2288	Co2286	Cr2055
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.00064	.00143	-.00169	F .00838	.00013	.00012	.00065	-.00646	.00009	.00011	.00004
Stddev	.00022	.00075	.00016	.00036	.00008	.00001	.00083	.00482	.00000	.00071	.00035
%RSD	34.590	52.792	9.7597	4.3535	63.290	4.4413	127.34	74.618	2.6009	660.36	977.92

#1	.00079	.00196	-.00157	.00864	.00019	.00011	.00006	-.00305	.00008	.00061	.00028
#2	.00048	.00090	-.00181	.00812	.00007	.00012	.00123	-.00987	.00009	-.00039	-.00021

Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Fail	Chk Pass	Chk Pass	None	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit				.00312							
Low Limit				-.00312							

Elem	Cu3247	Fe2599	K_7664	Li6707	Mg2790	Mn2576	Mo2020	Na5895	Ni2316	P_1782	Pb2203
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	W -.00209	.00821	.05533	-.00086	.00289	.00013	.00027	.04355	.00002	.00432	.00077
Stddev	.00005	.00055	.04627	.00009	.00025	.00008	.00040	.00794	.00051	.00368	.00140
%RSD	2.6226	6.7229	83.630	9.9904	8.7872	56.639	148.70	18.223	2838.6	85.200	181.56

#1	-.00213	.00860	.08805	-.00092	.00271	.00008	-.00001	.04916	.00038	.00692	-.00022
#2	-.00205	.00782	.02261	-.00080	.00307	.00019	.00055	.03794	-.00035	.00172	.00176

Check ?	Chk Warn	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit	.00136										
Low Limit	-.00136										

Elem	S_1820	Sb2068	Se1960	Si2881	Sn1899	Sr4077	Th2837	Ti3349	Ti1908	U_3701	V_2924
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	-.00239	F .00636	W .00562	.00782	-.00049	.00006	.00309	.00002	.00160	.00989	.00037
Stddev	.00129	.00060	.00626	.00743	.00097	.00005	.00010	.00022	.00107	.01702	.00034
%RSD	53.786	9.4730	111.55	94.911	200.11	79.640	3.1575	1398.6	67.070	172.14	89.977

#1	-.00330	.00593	.00119	.01307	-.00117	.00010	.00316	-.00014	.00235	.02193	.00014
#2	-.00148	.00679	.01004	.00257	.00020	.00003	.00302	.00017	.00084	-.00215	.00061

Check ?	None	Chk Fail	Chk Warn	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit		.00628	.00486								
Low Limit		-.00628	-.00486								

Elem	Zn2062	Zr3391
Units	ppm	ppm
Avg	-.00142	.00166
Stddev	.00042	.00021
%RSD	29.430	12.787

#1	-.00113	.00151
#2	-.00172	.00181

Check ?	Chk Pass	Chk Pass
High Limit		
Low Limit		

Int. Std.	Y_2243	Y_3600	Y_3774
Units	Cts/S	Cts/S	Cts/S
Avg	1524.4	33072.	5767.8
Stddev	8.1	25.	13.8
%RSD	.53054	.07437	.23990

#1	1518.7	33089.	5777.6
#2	1530.1	33054.	5758.0

Sample Name: ccvl-3907489 Acquired: 5/24/2016 2:24:31 Type: QC
Method: 6500_026(v10) Mode: CONC Corr. Factor: 1.000000
User: kellyca Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	Ag3280	Al1670	As1890	B_2089	Ba4554	Be3130	Bi2230	Ca3179	Cd2288	Co2286	Cr2055	Cu3247
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.00956	.10373	.01395	.11044	.00989	.00098	.11741	.21522	.00515	.01020	.01017	.01295
Stddev	.00052	.00037	.00104	.00128	.00029	.00004	.00047	.00458	.00008	.00010	.00048	.00036
%RSD	5.4169	.35352	7.4786	1.1546	2.8913	4.4061	.40265	2.1293	1.6016	.97489	4.7321	2.7575

#1	.00992	.10399	.01469	.11134	.00968	.00101	.11708	.21198	.00509	.01027	.00983	.01270
#2	.00919	.10347	.01321	.10954	.01009	.00095	.11774	.21846	.00521	.01012	.01051	.01321

Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Value												
Range												

Elem	Fe2599	K_7664	Li6707	Mg2790	Mn2576	Mo2020	Na5895	Ni2316	P_1782	Pb2203	S_1820	Sb2068
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.12371	2.9531	.00935	.19393	.00982	.02062	F 1.3236	.04028	2.8205	.00990	-.00581	.02189
Stddev	.00149	.0021	.00042	.00258	.00004	.00008	.0095	.00013	.0023	.00105	.00079	.00016
%RSD	1.2042	.07228	4.5337	1.3321	.39303	.39344	.71881	.33334	.08157	10.555	13.616	.74139

#1	.12266	2.9516	.00905	.19575	.00980	.02068	1.3169	.04038	2.8189	.01064	-.00525	.02201
#2	.12476	2.9546	.00965	.19210	.00985	.02056	1.3303	.04019	2.8221	.00916	-.00637	.02178

Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Fail	Chk Pass	Chk Pass	Chk Pass	None	Chk Pass
Value							1.0000					
Range							30.000%					

Elem	Se1960	Si2881	Sn1899	Sr4077	Th2837	Ti3349	Ti1908	U_3701	V_2924	Zn2062	Zr3391
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	F .02337	.47281	.09636	.00901	.01579	.00901	.01599	.06520	.00919	.02102	.01452
Stddev	.00029	.00168	.00074	.00004	.00042	.00007	.00039	.01060	.00036	.00018	.00009
%RSD	1.2469	.35522	.76468	.47274	2.6824	.78691	2.4092	16.263	3.9068	.83788	.62521

#1	.02316	.47162	.09688	.00898	.01609	.00896	.01626	.05770	.00944	.02114	.01458
#2	.02357	.47399	.09584	.00904	.01549	.00906	.01572	.07270	.00893	.02090	.01445

Check ?	Chk Fail	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Value	.01500										
Range	30.000%										

Int. Std.	Y_2243	Y_3600	Y_3774
Units	Cts/S	Cts/S	Cts/S
Avg	1537.9	33402.	5898.4
Stddev	3.6	68.	12.5
%RSD	.23327	.20496	.21225

#1	1535.4	33354.	5907.3
#2	1540.5	33451.	5889.6

Sample Name: 280-83185-E-7-A Acquired: 5/24/2016 2:27:18 Type: Unk
Method: 6500_026(v10) Mode: CONC Corr. Factor: 1.000000
User: kellyca Custom ID1: Custom ID2: Custom ID3:
Comment: 326188 6010B

Elem	Ag3280	Al1670	As1890	B_2089	Ba4554	Be3130	Bi2230	Ca3179	Cd2288
Line	328.068 {103}	167.079 {502}	189.042 {478}	208.959 {461}	455.403 { 74}	313.042 {108}	223.061 {451}	317.933 {106}	228.802 {447}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.00047	.01397	-.00168	.01642	.05503	-.00003	-.00003	32.568	.00018
Stddev	.00015	.00174	.00035	.00047	.00035	.00010	.00129	.003	.00013
%RSD	30.918	12.449	20.487	2.8915	.63513	332.51	5035.6	.00783	71.897

#1	.00057	.01274	-.00193	.01676	.05479	.00004	.00089	32.566	.00027
#2	.00037	.01520	-.00144	.01609	.05528	-.00010	-.00094	32.570	.00009

Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Elem	Co2286	Cr2055	Cu3247	Fe2599	K_7664	Li6707	Mg2790	Mn2576	Mo2020
Line	228.616 {447}	205.560 {464}	324.754 {104}	259.940 {130}	766.490 { 44}	670.784 { 50}	279.079 {121}2	257.610 {131}	202.030 {467}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.00038	.00001	-.00087	.12575	2.1981	-.00005	11.297	.22565	.00079
Stddev	.00024	.00020	.00010	.00104	.0029	.00029	.008	.00048	.00002
%RSD	62.753	1455.8	11.879	.82613	.13376	630.57	.06806	.21202	2.1075

#1	.00021	.00016	-.00094	.12501	2.2002	.00016	11.303	.22531	.00081
#2	.00055	-.00013	-.00080	.12648	2.1960	-.00025	11.292	.22599	.00078

Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Elem	Na5895	Ni2316	P_1782	Pb2203	S_1820	Sb2068	Se1960	Si2881	Sn1899
Line	589.592 { 57}	231.604 {446}	178.284 {489}	220.353 {453}	182.034 {485}	206.833 {463}	196.090 {472}	288.158 {117}	189.989 {477}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	8.5114	.00153	.06539	-.00055	.83969	.00148	.00816	8.6463	.00029
Stddev	.0246	.00012	.00454	.00006	.00207	.00292	.00217	.0893	.00055
%RSD	.28854	7.6068	6.9420	11.667	.24628	197.95	26.588	1.0325	191.82

#1	8.4941	.00161	.06860	-.00059	.84115	-.00059	.00969	8.5831	.00068
#2	8.5288	.00145	.06218	-.00050	.83823	.00355	.00662	8.7094	-.00010

Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Elem	Sr4077	Th2837	Ti3349	Ti1908	U_3701	V_2924	Zn2062	Zr3391
Line	407.771 { 83}	283.730 {119}	334.904 {101}	190.856 {477}	370.152 { 91}	292.402 {115}	206.200 {163}	339.198 { 99}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.13555	.00103	.00117	.00150	-.00066	.00104	.00062	-.00077
Stddev	.00042	.00011	.00026	.00250	.00621	.00026	.00018	.00031
%RSD	.30718	10.485	22.462	166.52	935.08	24.876	29.661	39.619

#1	.13526	.00095	.00135	-.00027	.00373	.00123	.00074	-.00099
#2	.13585	.00110	.00098	.00326	-.00505	.00086	.00049	-.00056

Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit								
Low Limit								

Int. Std.	Y_2243	Y_3600	Y_3774
Line	224.306 {450}	360.073 { 94}	377.433 { 89}
Units	Cts/S	Cts/S	Cts/S
Avg	1524.9	32819.	5880.7
Stddev	3.7	52.	2.0
%RSD	.24483	.15770	.03345

#1	1527.5	32856.	5882.1
#2	1522.2	32782.	5879.3

Sample Name: 280-83185-E-8-A Acquired: 5/24/2016 2:30:04 Type: Unk
Method: 6500_026(v10) Mode: CONC Corr. Factor: 1.000000
User: kellyca Custom ID1: Custom ID2: Custom ID3:
Comment: 326188 6010B

Elem	Ag3280	Al1670	As1890	B_2089	Ba4554	Be3130	Bi2230	Ca3179	Cd2288
Line	328.068 {103}	167.079 {502}	189.042 {478}	208.959 {461}	455.403 { 74}	313.042 {108}	223.061 {451}	317.933 {106}	228.802 {447}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.00029	.02702	-.00178	.01782	.05763	-.00003	.00286	33.954	.00010
Stddev	.00013	.00121	.00116	.00080	.00004	.00010	.00135	.167	.00005
%RSD	43.443	4.4825	65.306	4.5023	.06310	307.44	47.136	.49053	50.606

#1	.00020	.02616	-.00096	.01725	.05765	.00004	.00381	34.071	.00014
#2	.00038	.02787	-.00260	.01838	.05760	-.00011	.00190	33.836	.00007

Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Elem	Co2286	Cr2055	Cu3247	Fe2599	K_7664	Li6707	Mg2790	Mn2576	Mo2020
Line	228.616 {447}	205.560 {464}	324.754 {104}	259.940 {130}	766.490 { 44}	670.784 { 50}	279.079 {121}2	257.610 {131}	202.030 {467}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.00026	-.00003	-.00066	.15605	2.2609	-.00054	11.978	.23951	.00057
Stddev	.00018	.00005	.00017	.00101	.0120	.00037	.049	.00024	.00003
%RSD	67.769	172.14	25.199	.64639	.53174	68.663	.40924	.09839	5.6065

#1	.00039	.00001	-.00054	.15676	2.2694	-.00080	11.944	.23935	.00059
#2	.00014	-.00006	-.00078	.15534	2.2524	-.00028	12.013	.23968	.00055

Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Elem	Na5895	Ni2316	P_1782	Pb2203	S_1820	Sb2068	Se1960	Si2881	Sn1899
Line	589.592 { 57}	231.604 {446}	178.284 {489}	220.353 {453}	182.034 {485}	206.833 {463}	196.090 {472}	288.158 {117}	189.989 {477}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	8.9082	.00193	.06729	.00144	.87940	.00135	.01099	8.9855	.00008
Stddev	.0289	.00069	.00319	.00005	.00324	.00071	.00416	.0186	.00080
%RSD	.32472	35.912	4.7467	3.2480	.36879	52.722	37.890	.20645	1017.9

#1	8.9287	.00144	.06503	.00141	.87711	.00185	.01393	8.9986	.00065
#2	8.8878	.00242	.06955	.00147	.88170	.00085	.00804	8.9724	-.00049

Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Elem	Sr4077	Th2837	Ti3349	Ti1908	U_3701	V_2924	Zn2062	Zr3391	
Line	407.771 { 83}	283.730 {119}	334.904 {101}	190.856 {477}	370.152 { 91}	292.402 {115}	206.200 {163}	339.198 { 99}	
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	
Avg	.14184	.00249	.00188	.00279	.01230	.00104	-.00056	.00057	
Stddev	.00018	.00082	.00015	.00368	.00071	.00064	.00104	.00043	
%RSD	.12721	32.828	7.7753	131.99	5.7962	60.932	183.60	75.675	

#1	.14197	.00191	.00177	.00019	.01180	.00059	-.00130	.00087	
#2	.14171	.00307	.00198	.00539	.01281	.00149	.00017	.00026	

Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	
High Limit									
Low Limit									

Int. Std.	Y_2243	Y_3600	Y_3774						
Line	224.306 {450}	360.073 { 94}	377.433 { 89}						
Units	Cts/S	Cts/S	Cts/S						
Avg	1515.7	32547.	5932.2						
Stddev	.1	167.	27.5						
%RSD	.00579	.51250	.46347						

#1	1515.7	32665.	5912.7						
#2	1515.6	32430.	5951.6						

Sample Name: 280-83185-E-9-A Acquired: 5/24/2016 2:32:50 Type: Unk
Method: 6500_026(v10) Mode: CONC Corr. Factor: 1.000000
User: kellyca Custom ID1: Custom ID2: Custom ID3:
Comment: 326188 6010B

Elem	Ag3280	Al1670	As1890	B_2089	Ba4554	Be3130	Bi2230	Ca3179	Cd2288
Line	328.068 {103}	167.079 {502}	189.042 {478}	208.959 {461}	455.403 { 74}	313.042 {108}	223.061 {451}	317.933 {106}	228.802 {447}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.00090	.00105	-.00039	.00552	.00031	.00006	.00308	.02316	-.00013
Stddev	.00050	.00056	.00112	.00036	.00006	.00003	.00054	.00463	.00010
%RSD	55.701	53.031	288.70	6.4497	18.807	51.713	17.386	19.992	81.900

#1	.00055	.00144	-.00118	.00578	.00027	.00004	.00346	.02643	-.00020
#2	.00126	.00066	.00040	.00527	.00036	.00008	.00270	.01988	-.00005

Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Elem	Co2286	Cr2055	Cu3247	Fe2599	K_7664	Li6707	Mg2790	Mn2576	Mo2020
Line	228.616 {447}	205.560 {464}	324.754 {104}	259.940 {130}	766.490 { 44}	670.784 { 50}	279.079 {121}2	257.610 {131}	202.030 {467}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	-.00018	-.00004	-.00177	.01567	-.01760	-.00046	.00431	.00020	-.00013
Stddev	.00041	.00007	.00035	.00103	.01577	.00104	.00236	.00002	.00006
%RSD	233.97	173.58	19.551	6.5786	89.616	226.57	54.800	8.3727	43.038

#1	.00012	.00001	-.00201	.01494	-.02875	.00028	.00264	.00021	-.00009
#2	-.00047	-.00009	-.00152	.01640	-.00645	-.00119	.00599	.00019	-.00018

Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Elem	Na5895	Ni2316	P_1782	Pb2203	S_1820	Sb2068	Se1960	Si2881	Sn1899
Line	589.592 { 57}	231.604 {446}	178.284 {489}	220.353 {453}	182.034 {485}	206.833 {463}	196.090 {472}	288.158 {117}	189.989 {477}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.05885	-.00034	.00316	.00108	.00695	.00236	-.00015	.01513	-.00039
Stddev	.00181	.00031	.00152	.00299	.00588	.00139	.00614	.00890	.00067
%RSD	3.0740	90.326	47.955	276.85	84.699	58.876	3988.0	58.850	169.22

#1	.05757	-.00056	.00424	-.00103	.00279	.00334	.00418	.00883	.00008
#2	.06013	-.00012	.00209	.00320	.01111	.00138	-.00449	.02142	-.00087

Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Elem	Sr4077	Th2837	Ti3349	Ti1908	U_3701	V_2924	Zn2062	Zr3391	
Line	407.771 { 83}	283.730 {119}	334.904 {101}	190.856 {477}	370.152 { 91}	292.402 {115}	206.200 {163}	339.198 { 99}	
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	
Avg	.00007	.00141	.00020	.00158	.00962	-.00023	.00204	-.00008	
Stddev	.00001	.00040	.00000	.00078	.00751	.00057	.00019	.00070	
%RSD	14.753	28.005	2.0729	49.345	78.120	242.93	9.2856	893.51	

#1	.00007	.00169	.00021	.00103	.00431	-.00064	.00217	-.00057	
#2	.00006	.00113	.00020	.00213	.01493	.00017	.00191	.00042	

Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	
High Limit									
Low Limit									

Int. Std.	Y_2243	Y_3600	Y_3774
Line	224.306 {450}	360.073 { 94}	377.433 { 89}
Units	Cts/S	Cts/S	Cts/S
Avg	1542.9	33622.	5913.1
Stddev	3.6	3.	30.1
%RSD	.23251	.00863	.50857

#1	1545.5	33620.	5934.4
#2	1540.4	33624.	5891.9

Sample Name: 280-83308-E-1-A Acquired: 5/24/2016 2:35:38 Type: Unk
Method: 6500_026(v10) Mode: CONC Corr. Factor: 1.000000
User: kellyca Custom ID1: Custom ID2: Custom ID3:
Comment: 326188 6010B

Elem	Ag3280	Al1670	As1890	B_2089	Ba4554	Be3130	Bi2230	Ca3179	Cd2288
Line	328.068 {103}	167.079 {502}	189.042 {478}	208.959 {461}	455.403 { 74}	313.042 {108}	223.061 {451}	317.933 {106}	228.802 {447}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.00062	.00290	.00005	.07321	.01183	.00002	.00128	16.972	.00013
Stddev	.00006	.00034	.00555	.00074	.00010	.00003	.00166	.050	.00011
%RSD	9.5967	11.732	10432.	1.0051	.85145	119.68	130.01	.29289	86.850

#1	.00066	.00314	-.00387	.07373	.01176	.00005	.00010	16.937	.00021
#2	.00058	.00266	.00397	.07269	.01191	.00000	.00245	17.007	.00005

Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Elem	Co2286	Cr2055	Cu3247	Fe2599	K_7664	Li6707	Mg2790	Mn2576	Mo2020
Line	228.616 {447}	205.560 {464}	324.754 {104}	259.940 {130}	766.490 { 44}	670.784 { 50}	279.079 {121}2	257.610 {131}	202.030 {467}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.00188	.00017	-.00084	1.8921	3.0248	-.00046	5.1100	2.3511	.00013
Stddev	.00013	.00008	.00020	.0073	.0009	.00058	.0080	.0001	.00022
%RSD	6.7268	44.804	23.990	.38593	.03054	126.78	.15677	.00535	176.66

#1	.00179	.00023	-.00070	1.8870	3.0241	-.00087	5.1043	2.3510	-.00003
#2	.00197	.00012	-.00098	1.8973	3.0254	-.00005	5.1156	2.3511	.00028

Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Elem	Na8183	Ni2316	P_1782	Pb2203	S_1820	Sb2068	Se1960	Si2881	Sn1899
Line	818.326 { 41}	231.604 {446}	178.284 {489}	220.353 {453}	182.034 {485}	206.833 {463}	196.090 {472}	288.158 {117}	189.989 {477}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	13.035	.00153	.14995	-.00074	2.4304	.00222	.01003	16.695	.00002
Stddev	.233	.00012	.00043	.00089	.0154	.00254	.00367	.048	.00005
%RSD	1.7893	7.6707	.28525	121.13	.63177	114.53	36.538	.28621	278.12

#1	13.200	.00144	.15025	-.00011	2.4412	.00402	.00744	16.661	.00006
#2	12.871	.00161	.14964	-.00137	2.4195	.00042	.01262	16.728	-.00002

Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Elem	Sr4077	Th2837	Ti3349	Ti1908	U_3701	V_2924	Zn2062	Zr3391
Line	407.771 { 83}	283.730 {119}	334.904 {101}	190.856 {477}	370.152 { 91}	292.402 {115}	206.200 {163}	339.198 { 99}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.19981	-.00000	-.00025	.00163	.00516	-.00016	.00252	-.00045
Stddev	.00023	.00115	.00026	.00163	.01295	.00003	.00041	.00043
%RSD	.11508	33251.	102.90	100.05	250.97	18.582	16.152	95.944

#1	.19964	-.00081	-.00044	.00048	.01432	-.00019	.00281	-.00076
#2	.19997	.00081	-.00007	.00279	-.00400	-.00014	.00223	-.00014

Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit								
Low Limit								

Int. Std.	Y_2243	Y_3600	Y_3774
Line	224.306 {450}	360.073 { 94}	377.433 { 89}
Units	Cts/S	Cts/S	Cts/S
Avg	1521.6	32857.	5896.2
Stddev	4.6	24.	.1
%RSD	.30533	.07325	.00215

#1	1518.3	32874.	5896.3
#2	1524.9	32840.	5896.1

Sample Name: 280-83308-E-2-A Acquired: 5/24/2016 2:38:23 Type: Unk
Method: 6500_026(v10) Mode: CONC Corr. Factor: 1.000000
User: kellyca Custom ID1: Custom ID2: Custom ID3:
Comment: 326188 6010B

Elem	Ag3280	Al1670	As1890	B_2089	Ba4554	Be3130	Bi2230	Ca3179	Cd2288
Line	328.068 {103}	167.079 {502}	189.042 {478}	208.959 {461}	455.403 { 74}	313.042 {108}	223.061 {451}	317.933 {106}	228.802 {447}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.00049	.00210	-.00453	.01515	.00409	-.00002	.00118	13.012	-.00006
Stddev	.00024	.00027	.00249	.00009	.00006	.00001	.00122	.019	.00016
%RSD	49.702	12.705	55.063	.59178	1.4370	35.332	104.07	.14328	245.32

#1	.00032	.00191	-.00277	.01509	.00413	-.00002	.00204	12.999	-.00018
#2	.00066	.00228	-.00629	.01521	.00405	-.00003	.00031	13.025	.00005

Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Elem	Co2286	Cr2055	Cu3247	Fe2599	K_7664	Li6707	Mg2790	Mn2576	Mo2020
Line	228.616 {447}	205.560 {464}	324.754 {104}	259.940 {130}	766.490 { 44}	670.784 { 50}	279.079 {121}2	257.610 {131}	202.030 {467}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	-.00059	.00007	-.00176	.01298	.71841	-.00004	8.5275	.00184	.00005
Stddev	.00013	.00003	.00041	.00071	.01228	.00021	.0024	.00008	.00000
%RSD	21.371	38.381	23.041	5.4515	1.7092	497.94	.02798	4.4920	10.482

#1	-.00050	.00005	-.00148	.01348	.70973	-.00019	8.5258	.00190	.00004
#2	-.00068	.00009	-.00205	.01248	.72709	.00011	8.5292	.00178	.00005

Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Elem	Na5895	Ni2316	P_1782	Pb2203	S_1820	Sb2068	Se1960	Si2881	Sn1899
Line	589.592 { 57}	231.604 {446}	178.284 {489}	220.353 {453}	182.034 {485}	206.833 {463}	196.090 {472}	288.158 {117}	189.989 {477}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	5.2567	.00151	.03336	.00064	1.9418	-.00114	.00533	11.217	-.00055
Stddev	.0032	.00059	.00020	.00025	.0051	.00071	.00491	.045	.00083
%RSD	.06137	39.377	.61095	39.102	.26367	61.820	92.128	.39932	152.12

#1	5.2544	.00109	.03351	.00082	1.9382	-.00164	.00881	11.186	.00004
#2	5.2589	.00193	.03322	.00046	1.9454	-.00064	.00186	11.249	-.00114

Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Elem	Sr4077	Th2837	Ti3349	Ti1908	U_3701	V_2924	Zn2062	Zr3391	
Line	407.771 { 83}	283.730 {119}	334.904 {101}	190.856 {477}	370.152 { 91}	292.402 {115}	206.200 {163}	339.198 { 99}	
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	
Avg	.06433	.00146	.00014	.00263	.00202	.00356	-.00015	.00095	
Stddev	.00019	.00178	.00033	.00048	.00444	.00032	.00140	.00115	
%RSD	.30297	122.19	234.76	18.385	219.70	9.1187	918.54	120.30	

#1	.06420	.00271	.00037	.00229	-.00112	.00379	-.00114	.00014	
#2	.06447	.00020	-.00009	.00297	.00516	.00333	.00084	.00176	

Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	
High Limit									
Low Limit									

Int. Std.	Y_2243	Y_3600	Y_3774						
Line	224.306 {450}	360.073 { 94}	377.433 { 89}						
Units	Cts/S	Cts/S	Cts/S						
Avg	1527.6	32874.	5907.3						
Stddev	.7	92.	9.4						
%RSD	.04540	.27876	.15965						

#1	1528.1	32809.	5914.0						
#2	1527.1	32939.	5900.6						

Sample Name: 280-83308-E-2-Asd@5 Acquired: 5/24/2016 2:41:10 Type: Unk
Method: 6500_026(v10) Mode: CONC Corr. Factor: 1.000000
User: kellyca Custom ID1: Custom ID2: Custom ID3:
Comment: 326188 6010B

Elem	Ag3280	Al1670	As1890	B_2089	Ba4554	Be3130	Bi2230	Ca3179	Cd2288
Line	328.068 {103}	167.079 {502}	189.042 {478}	208.959 {461}	455.403 { 74}	313.042 {108}	223.061 {451}	317.933 {106}	228.802 {447}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.00042	.00188	.00404	.00725	.00096	-.00002	.00320	2.6269	-.00006
Stddev	.00062	.00011	.00063	.00174	.00004	.00005	.00062	.0176	.00001
%RSD	148.23	5.9213	15.555	23.944	4.6524	240.75	19.524	.67140	22.170

#1	.00086	.00180	.00360	.00848	.00093	-.00006	.00364	2.6394	-.00005
#2	-.00002	.00196	.00448	.00602	.00099	.00002	.00276	2.6145	-.00007

Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Elem	Co2286	Cr2055	Cu3247	Fe2599	K_7664	Li6707	Mg2790	Mn2576	Mo2020
Line	228.616 {447}	205.560 {464}	324.754 {104}	259.940 {130}	766.490 { 44}	670.784 { 50}	279.079 {121}2	257.610 {131}	202.030 {467}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	-.00054	-.00008	-.00186	.02768	.15151	-.00126	1.7103	.00049	-.00022
Stddev	.00024	.00001	.00022	.00035	.00788	.00080	.0065	.00002	.00012
%RSD	43.826	15.627	11.664	1.2593	5.1979	63.389	.38135	3.7960	56.754

#1	-.00071	-.00008	-.00171	.02743	.14594	-.00182	1.7057	.00051	-.00030
#2	-.00038	-.00007	-.00202	.02793	.15708	-.00069	1.7149	.00048	-.00013

Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Elem	Na5895	Ni2316	P_1782	Pb2203	S_1820	Sb2068	Se1960	Si2881	Sn1899
Line	589.592 { 57}	231.604 {446}	178.284 {489}	220.353 {453}	182.034 {485}	206.833 {463}	196.090 {472}	288.158 {117}	189.989 {477}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	1.0678	.00020	.00908	.00065	.38265	.00188	.00676	2.2435	-.00049
Stddev	.0023	.00042	.00099	.00163	.00023	.00185	.00136	.0192	.00129
%RSD	.21565	213.86	10.880	250.44	.05960	98.028	20.099	.85389	264.34

#1	1.0662	-.00010	.00838	-.00050	.38281	.00058	.00773	2.2570	.00042
#2	1.0694	.00049	.00978	.00180	.38249	.00319	.00580	2.2299	-.00140

Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Elem	Sr4077	Th2837	Ti3349	Ti1908	U_3701	V_2924	Zn2062	Zr3391	
Line	407.771 { 83}	283.730 {119}	334.904 {101}	190.856 {477}	370.152 { 91}	292.402 {115}	206.200 {163}	339.198 { 99}	
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	
Avg	.01291	.00115	.00007	.00291	.01658	.00043	.00108	.00036	
Stddev	.00004	.00144	.00062	.00170	.00507	.00021	.00015	.00056	
%RSD	.34308	125.35	847.16	58.387	30.601	47.343	13.857	155.81	

#1	.01294	.00013	-.00037	.00171	.02017	.00058	.00119	.00076	
#2	.01288	.00216	.00051	.00412	.01299	.00029	.00097	-.00004	

Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	
High Limit									
Low Limit									

Int. Std.	Y_2243	Y_3600	Y_3774						
Line	224.306 {450}	360.073 { 94}	377.433 { 89}						
Units	Cts/S	Cts/S	Cts/S						
Avg	1545.5	33384.	5829.6						
Stddev	1.3	49.	43.6						
%RSD	.08446	.14825	.74829						

#1	1544.6	33419.	5798.7						
#2	1546.4	33349.	5860.4						

Sample Name: 280-83308-E-2-B MS Acquired: 5/24/2016 2:43:59 Type: Unk
Method: 6500_026(v10) Mode: CONC Corr. Factor: 1.000000
User: kellyca Custom ID1: Custom ID2: Custom ID3:
Comment: 326188 6010B

Elem	Ag3280	Al1670	As1890	B_2089	Ba4554	Be3130	Bi2230	Ca3179	Cd2288
Line	328.068 {103}	167.079 {502}	189.042 {478}	208.959 {461}	455.403 { 74}	313.042 {108}	223.061 {451}	317.933 {106}	228.802 {447}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.04836	1.9378	1.0478	1.1160	1.9937	.04975	2.2959	61.250	.10665
Stddev	.00019	.0025	.0066	.0036	.0003	.00015	.0000	.082	.00052
%RSD	.38305	.13067	.62605	.31891	.01311	.29353	.00135	.13405	.48824

#1	.04823	1.9396	1.0431	1.1185	1.9939	.04964	2.2958	61.308	.10702
#2	.04849	1.9360	1.0524	1.1135	1.9935	.04985	2.2959	61.192	.10628

Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Elem	Co2286	Cr2055	Cu3247	Fe2599	K_7664	Li6707	Mg2790	Mn2576	Mo2020
Line	228.616 {447}	205.560 {464}	324.754 {104}	259.940 {130}	766.490 { 44}	670.784 { 50}	279.079 {121}2	257.610 {131}	202.030 {467}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.51343	W .20458	.25052	.96819	52.595	1.0864	56.121	.47797	1.0669
Stddev	.00093	.00005	.00014	.00270	.064	.0021	.059	.00145	.0019
%RSD	.18081	.02678	.05659	.27876	.12192	.19028	.10501	.30335	.17588

#1	.51277	.20462	.25062	.97010	52.550	1.0849	56.080	.47695	1.0682
#2	.51408	.20454	.25042	.96628	52.641	1.0879	56.163	.47900	1.0656

Check ?	Chk Pass	Chk Warn	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit		.10000							
Low Limit		-.01000							

Elem	Na8183	Ni2316	P_1782	Pb2203	S_1820	Sb2068	Se1960	Si2881	Sn1899
Line	818.326 { 41}	231.604 {446}	178.284 {489}	220.353 {453}	182.034 {485}	206.833 {463}	196.090 {472}	288.158 {117}	189.989 {477}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	58.009	.49824	10.459	.51884	4.1598	.52094	2.0692	21.079	1.9487
Stddev	.022	.00086	.005	.00047	.0095	.00135	.0048	.051	.0002
%RSD	.03845	.17244	.04535	.09007	.22932	.25946	.23412	.24338	.01243

#1	58.024	.49763	10.462	.51917	4.1666	.51999	2.0727	21.042	1.9489
#2	57.993	.49885	10.455	.51851	4.1531	.52190	2.0658	21.115	1.9486

Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Elem	Sr4077	Th2837	Ti3349	Ti1908	U_3701	V_2924	Zn2062	Zr3391
Line	407.771 { 83}	283.730 {119}	334.904 {101}	190.856 {477}	370.152 { 91}	292.402 {115}	206.200 {163}	339.198 { 99}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.99588	1.0030	.91384	1.9400	2.1341	.46138	.46295	.47966
Stddev	.00173	.0005	.00007	.0009	.0144	.00124	.00106	.00327
%RSD	.17377	.05344	.00741	.04449	.67270	.26867	.22940	.68244

#1	.99466	1.0034	.91379	1.9406	2.1239	.46051	.46370	.47735
#2	.99711	1.0026	.91389	1.9394	2.1442	.46226	.46219	.48198

Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit								
Low Limit								

Int. Std.	Y_2243	Y_3600	Y_3774
Line	224.306 {450}	360.073 { 94}	377.433 { 89}
Units	Cts/S	Cts/S	Cts/S
Avg	1459.9	31295.	5787.1
Stddev	.9	82.	4.9
%RSD	.06045	.26173	.08515

#1	1459.3	31353.	5790.6
#2	1460.5	31237.	5783.7

Sample Name: 280-83308-E-2-C MSD Acquired: 5/24/2016 2:46:35 Type: Unk
Method: 6500_026(v10) Mode: CONC Corr. Factor: 1.000000
User: kellyca Custom ID1: Custom ID2: Custom ID3:
Comment: 326188 6010B

Elem	Ag3280	Al1670	As1890	B_2089	Ba4554	Be3130	Bi2230	Ca3179	Cd2288
Line	328.068 {103}	167.079 {502}	189.042 {478}	208.959 {461}	455.403 { 74}	313.042 {108}	223.061 {451}	317.933 {106}	228.802 {447}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.04909	1.9560	1.0640	1.1296	2.0176	.05014	2.3144	61.790	.10707
Stddev	.00006	.0024	.0043	.0008	.0010	.00030	.0028	.218	.00033
%RSD	.12376	.11991	.40799	.07018	.04944	.60762	.11906	.35266	.30576

#1	.04905	1.9577	1.0670	1.1290	2.0169	.04992	2.3163	61.636	.10730
#2	.04914	1.9543	1.0609	1.1301	2.0183	.05035	2.3124	61.944	.10684

Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Elem	Co2286	Cr2055	Cu3247	Fe2599	K_7664	Li6707	Mg2790	Mn2576	Mo2020
Line	228.616 {447}	205.560 {464}	324.754 {104}	259.940 {130}	766.490 { 44}	670.784 { 50}	279.079 {121}2	257.610 {131}	202.030 {467}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.51964	W .20707	.25466	.96674	53.310	1.0994	56.652	.48251	1.0798
Stddev	.00222	.00057	.00008	.00483	.049	.0014	.172	.00104	.0031
%RSD	.42649	.27356	.02964	.49958	.09194	.12975	.30324	.21632	.28584

#1	.52121	.20747	.25461	.96333	53.275	1.0984	56.773	.48325	1.0820
#2	.51808	.20667	.25472	.97016	53.344	1.1004	56.530	.48177	1.0777

Check ?	Chk Pass	Chk Warn	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit		.10000							
Low Limit		-.01000							

Elem	Na8183	Ni2316	P_1782	Pb2203	S_1820	Sb2068	Se1960	Si2881	Sn1899
Line	818.326 { 41}	231.604 {446}	178.284 {489}	220.353 {453}	182.034 {485}	206.833 {463}	196.090 {472}	288.158 {117}	189.989 {477}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	58.671	.50238	10.583	.52334	4.2114	.53090	2.0865	21.385	1.9696
Stddev	.251	.00052	.011	.00036	.0044	.00136	.0093	.056	.0087
%RSD	.42730	.10442	.10537	.06938	.10501	.25561	.44609	.26021	.44289

#1	58.494	.50201	10.591	.52308	4.2145	.52994	2.0799	21.345	1.9757
#2	58.849	.50276	10.576	.52359	4.2083	.53186	2.0931	21.424	1.9634

Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Elem	Sr4077	Th2837	Ti3349	Ti1908	U_3701	V_2924	Zn2062	Zr3391	
Line	407.771 { 83}	283.730 {119}	334.904 {101}	190.856 {477}	370.152 { 91}	292.402 {115}	206.200 {163}	339.198 { 99}	
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	
Avg	1.0054	1.0130	.92245	1.9565	2.1466	.46831	.46876	.48531	
Stddev	.0017	.0010	.00269	.0059	.0194	.00134	.00121	.00175	
%RSD	.16902	.10261	.29160	.29915	.90199	.28661	.25906	.36138	

#1	1.0042	1.0122	.92435	1.9606	2.1329	.46736	.46962	.48655	
#2	1.0066	1.0137	.92055	1.9523	2.1603	.46926	.46790	.48407	

Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	
High Limit									
Low Limit									

Int. Std.	Y_2243	Y_3600	Y_3774						
Line	224.306 {450}	360.073 { 94}	377.433 { 89}						
Units	Cts/S	Cts/S	Cts/S						
Avg	1451.3	31183.	5774.4						
Stddev	2.7	30.	21.0						
%RSD	.18927	.09469	.36298						

#1	1449.4	31204.	5789.2						
#2	1453.2	31162.	5759.6						

Sample Name: 280-83308-E-3-A Acquired: 5/24/2016 2:49:12 Type: Unk
Method: 6500_026(v10) Mode: CONC Corr. Factor: 1.000000
User: kellyca Custom ID1: Custom ID2: Custom ID3:
Comment: 326188 6010B

Elem	Ag3280	Al1670	As1890	B_2089	Ba4554	Be3130	Bi2230	Ca3179	Cd2288
Line	328.068 {103}	167.079 {502}	189.042 {478}	208.959 {461}	455.403 { 74}	313.042 {108}	223.061 {451}	317.933 {106}	228.802 {447}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.00057	.00153	.00122	.03092	.00323	-.00000	-.00074	10.953	.00018
Stddev	.00058	.00134	.00067	.00032	.00009	.00011	.00264	.025	.00000
%RSD	102.14	87.488	55.241	1.0489	2.8505	2853.9	356.81	.23221	.97130

#1	.00016	.00058	.00074	.03115	.00317	-.00008	.00113	10.935	.00018
#2	.00098	.00248	.00170	.03069	.00330	.00007	-.00260	10.971	.00018

Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Elem	Co2286	Cr2055	Cu3247	Fe2599	K_7664	Li6707	Mg2790	Mn2576	Mo2020
Line	228.616 {447}	205.560 {464}	324.754 {104}	259.940 {130}	766.490 { 44}	670.784 { 50}	279.079 {121}2	257.610 {131}	202.030 {467}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	-.00054	-.00000	-.00145	.18417	1.1818	-.00050	5.8541	.86081	.00108
Stddev	.00036	.00003	.00006	.00316	.0010	.00099	.0167	.00193	.00049
%RSD	66.412	650.15	3.9191	1.7145	.08305	198.11	.28500	.22439	45.268

#1	-.00028	.00002	-.00149	.18194	1.1825	.00020	5.8659	.86218	.00074
#2	-.00079	-.00002	-.00141	.18641	1.1811	-.00119	5.8423	.85944	.00143

Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Elem	Na5895	Ni2316	P_1782	Pb2203	S_1820	Sb2068	Se1960	Si2881	Sn1899
Line	589.592 { 57}	231.604 {446}	178.284 {489}	220.353 {453}	182.034 {485}	206.833 {463}	196.090 {472}	288.158 {117}	189.989 {477}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	5.3588	.00069	.14451	-.00107	1.3694	.00278	.01418	14.808	-.00018
Stddev	.0323	.00023	.00493	.00118	.0088	.00039	.00445	.027	.00115
%RSD	.60352	34.125	3.4082	110.50	.63979	14.058	31.353	.18049	640.41

#1	5.3359	.00085	.14103	-.00190	1.3756	.00251	.01733	14.789	.00064
#2	5.3817	.00052	.14799	-.00023	1.3632	.00306	.01104	14.827	-.00099

Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Elem	Sr4077	Th2837	Ti3349	Ti1908	U_3701	V_2924	Zn2062	Zr3391
Line	407.771 { 83}	283.730 {119}	334.904 {101}	190.856 {477}	370.152 { 91}	292.402 {115}	206.200 {163}	339.198 { 99}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.07517	.00194	.00002	.00067	.00907	.00055	-.00050	.00096
Stddev	.00004	.00085	.00062	.00202	.01903	.00019	.00114	.00090
%RSD	.05933	43.565	3677.5	300.95	209.89	33.856	226.50	93.723

#1	.07514	.00254	.00045	.00210	-.00439	.00068	-.00131	.00160
#2	.07520	.00134	-.00042	-.00076	.02252	.00042	.00030	.00032

Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit								
Low Limit								

Int. Std.	Y_2243	Y_3600	Y_3774
Line	224.306 {450}	360.073 { 94}	377.433 { 89}
Units	Cts/S	Cts/S	Cts/S
Avg	1526.7	32910.	5856.4
Stddev	.9	94.	22.7
%RSD	.05805	.28599	.38744

#1	1526.1	32844.	5872.4
#2	1527.3	32977.	5840.4

Sample Name: ccvh-3900196 Acquired: 5/24/2016 2:51:59 Type: QC
Method: 6500_026(v10) Mode: CONC Corr. Factor: 1.000000
User: kellyca Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	Ag3280	Al3092	As1890	B_2089	Ba4554	Be3130	Bi2230	Ca3179	Cd2288	Co2286	Cr2055	Cu3247	Fe2714
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	-.00126	46.263	.00457	.00651	.00044	-.00012	1.0764	-.05262	-.00092	.00365	-.00035	.00403	46.368
Stddev	.00007	.005	.00077	.00021	.00000	.00002	.0034	.00004	.00020	.00047	.00017	.00013	.151
%RSD	5.2111	.01107	16.751	3.2900	.68875	16.789	.31508	.06943	21.432	12.851	49.703	3.2600	.32669

#1	-.00121	46.259	.00511	.00636	.00044	-.00014	1.0788	-.05260	-.00078	.00399	-.00022	.00413	46.475
#2	-.00130	46.267	.00403	.00666	.00044	-.00011	1.0740	-.05265	-.00106	.00332	-.00047	.00394	46.261

Check ?	None	Chk Pass	None	None	None	None	Chk Pass	None	None	None	None	None	Chk Pass
Value													
Range													

Elem	K_7664	Li6707	Mg2790	Mn2576	Mo2020	Na8183	Ni2316	P_1782	Pb2203	S_1820	Sb2068	Se1960	Si2881
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.01030	.00065	.16708	-.00042	-.00157	255.08	-.00016	.00614	-.00073	5.0299	.00125	.01810	.00940
Stddev	.01327	.00106	.00521	.00008	.00028	.11	.00027	.00261	.00060	.0135	.00104	.00384	.00189
%RSD	128.84	164.17	3.1163	19.739	17.942	.04123	163.31	42.589	81.091	.26793	83.272	21.216	20.078

#1	.01968	.00140	.16340	-.00048	-.00137	255.16	-.00035	.00798	-.00115	5.0394	.00051	.02081	.01073
#2	.00092	-.00010	.17076	-.00036	-.00177	255.01	.00003	.00429	-.00031	5.0204	.00199	.01538	.00806

Check ?	None	None	None	None	None	Chk Pass	None	None	None	Chk Pass	None	None	None
Value													
Range													

Elem	Sn1899	Sr4077	Th2837	Ti3349	Tl1908	U_3701	V_2924	Zn2062	Zr3391
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	-.00015	.00041	4.9253	.02502	.00058	10.202	-.01648	-.00288	-.01970
Stddev	.00180	.00011	.0058	.00030	.00041	.005	.00080	.00010	.00058
%RSD	1239.0	27.146	.11737	1.1863	70.403	.05254	4.8661	3.4459	2.9667

#1	-.00142	.00049	4.9294	.02523	.00029	10.206	-.01704	-.00295	-.01929
#2	.00113	.00033	4.9212	.02481	.00087	10.198	-.01591	-.00281	-.02011

Check ?	None	None	Chk Pass	None	None	Chk Pass	None	None	None
Value									
Range									

Int. Std.	Y_2243	Y_3600	Y_3774
Units	Cts/S	Cts/S	Cts/S
Avg	1463.2	31158.	5688.3
Stddev	3.5	52.	1.9
%RSD	.23931	.16713	.03315

#1	1460.8	31121.	5689.6
#2	1465.7	31195.	5686.9

Sample Name: ccv-3900195 Acquired: 5/24/2016 2:54:50 Type: QC
Method: 6500_026(v10) Mode: CONC Corr. Factor: 1.000000
User: kellyca Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	Ag3280	Al1670	As1890	B_2089	Ba4554	Be3130	Bi2230	Ca3179	Cd2288	Co2286	Cr2055	Cu3247
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.48068	.52470	1.0298	F .56543	.49098	.49347	.00213	4.8137	.53361	.52374	.51188	.49389
Stddev	.00091	.00354	.0115	.00337	.00266	.00193	.00271	.0217	.00162	.00090	.00125	.00160
%RSD	.18869	.67424	1.1128	.59684	.54179	.39103	127.22	.45086	.30393	.17260	.24483	.32429

#1	.48132	.52219	1.0217	.56304	.48910	.49210	.00405	4.7984	.53247	.52310	.51100	.49502
#2	.48004	.52720	1.0379	.56782	.49286	.49483	.00021	4.8291	.53476	.52438	.51277	.49275

Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Fail	Chk Pass	Chk Pass	None	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Value				.50000								
Range				10.000%								

Elem	Fe2599	K_7664	Li6707	Mg2790	Mn2576	Mo2020	Na5895	Ni2316	P_1782	Pb2203	S_1820	Sb2068
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	2.3926	50.485	1.0557	19.388	.48827	.51798	5.2457	.50809	1.0232	1.0729	.00482	1.0132
Stddev	.0143	.313	.0069	.071	.00241	.00095	.0005	.00185	.0084	.0059	.00051	.0014
%RSD	.59949	.62054	.65565	.36848	.49333	.18253	.00930	.36484	.82017	.55187	10.534	.13528

#1	2.3825	50.263	1.0508	19.439	.48997	.51731	5.2454	.50678	1.0173	1.0687	.00446	1.0123
#2	2.4028	50.706	1.0606	19.338	.48656	.51865	5.2460	.50940	1.0292	1.0771	.00518	1.0142

Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	None	Chk Pass
Value												
Range												

Elem	Se1960	Si2881	Sn1899	Sr4077	Th2837	Ti3349	Ti1908	U_3701	V_2924	Zn2062	Zr3391
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	1.0507	4.8688	.99821	.46483	.00603	.45681	1.0356	.01988	.45953	.48390	.48801
Stddev	.0001	.0528	.00654	.00204	.00027	.00171	.0132	.00130	.00245	.00394	.00124
%RSD	.01442	1.0853	.65470	.43872	4.3991	.37333	1.2786	6.5603	.53263	.81455	.25468

#1	1.0506	4.8314	.99359	.46339	.00622	.45802	1.0262	.02080	.46126	.48668	.48889
#2	1.0508	4.9062	1.0028	.46627	.00584	.45560	1.0449	.01895	.45780	.48111	.48713

Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	None	Chk Pass	Chk Pass	None	Chk Pass	Chk Pass	Chk Pass
Value											
Range											

Int. Std.	Y_2243	Y_3600	Y_3774
Units	Cts/S	Cts/S	Cts/S
Avg	1520.2	32348.	5814.4
Stddev	5.2	3.	22.6
%RSD	.34057	.00868	.38825

#1	1523.8	32350.	5830.4
#2	1516.5	32346.	5798.5

Sample Name: ccb Acquired: 5/24/2016 2:57:30 Type: QC
Method: 6500_026(v10) Mode: CONC Corr. Factor: 1.000000
User: kellyca Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	Ag3280	Al1670	As1890	B_2089	Ba4554	Be3130	Bi2230	Ca3179	Cd2288	Co2286	Cr2055
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.00065	-.00067	.00103	F .00539	.00019	.00002	.00045	-.00948	-.00001	.00000	.00006
Stddev	.00072	.00032	.00243	.00043	.00003	.00009	.00125	.00063	.00017	.00011	.00011
%RSD	110.31	46.824	235.66	8.0508	17.222	373.74	276.18	6.6620	1762.6	5646.7	181.97

#1	.00014	-.00045	-.00069	.00508	.00017	-.00004	.00133	-.00992	.00011	-.00008	-.00002
#2	.00116	-.00090	.00275	.00570	.00021	.00009	-.00043	-.00903	-.00013	.00008	.00014

Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Fail	Chk Pass	Chk Pass	None	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit				.00312							
Low Limit				-.00312							

Elem	Cu3247	Fe2599	K_7664	Li6707	Mg2790	Mn2576	Mo2020	Na5895	Ni2316	P_1782	Pb2203
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	W -.00174	.00757	.04091	-.00075	.00483	.00014	.00012	.02861	.00013	-.00265	.00027
Stddev	.00011	.00163	.02255	.00067	.00270	.00008	.00003	.00253	.00018	.00147	.00081
%RSD	6.0836	21.466	55.122	89.432	55.918	55.485	22.797	8.8551	141.17	55.368	298.58

#1	-.00182	.00872	.05686	-.00027	.00292	.00008	.00010	.02682	.00025	-.00369	-.00030
#2	-.00167	.00642	.02497	-.00122	.00674	.00019	.00014	.03040	.00000	-.00162	.00084

Check ?	Chk Warn	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit	.00136										
Low Limit	-.00136										

Elem	S_1820	Sb2068	Se1960	Si2881	Sn1899	Sr4077	Th2837	Ti3349	Ti1908	U_3701	V_2924
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	-.00177	W .00625	W .00856	.00656	-.00160	.00010	.00241	.00047	.00162	.02653	.00034
Stddev	.00050	.00075	.00018	.00857	.00073	.00003	.00045	.00013	.00066	.00124	.00037
%RSD	28.080	12.004	2.0531	130.68	45.414	29.346	18.552	28.345	40.904	4.6665	111.55

#1	-.00142	.00572	.00844	.01261	-.00211	.00012	.00272	.00056	.00209	.02741	.00060
#2	-.00212	.00678	.00868	.00050	-.00108	.00008	.00209	.00037	.00115	.02565	.00007

Check ?	None	Chk Warn	Chk Warn	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit		.00314	.00486								
Low Limit		-.00314	-.00486								

Elem	Zn2062	Zr3391
Units	ppm	ppm
Avg	.00049	.00039
Stddev	.00019	.00025
%RSD	39.163	64.717

#1	.00036	.00021
#2	.00063	.00056

Check ?	Chk Pass	Chk Pass
High Limit		
Low Limit		

Int. Std.	Y_2243	Y_3600	Y_3774
Units	Cts/S	Cts/S	Cts/S
Avg	1531.2	33002.	5770.6
Stddev	2.2	100.	16.2
%RSD	.14625	.30201	.28068

#1	1532.8	33072.	5782.0
#2	1529.6	32931.	5759.1

Sample Name: ccvl-3907489 Acquired: 5/24/2016 3:00:19 Type: QC
Method: 6500_026(v10) Mode: CONC Corr. Factor: 1.000000
User: kellyca Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	Ag3280	Al1670	As1890	B_2089	Ba4554	Be3130	Bi2230	Ca3179	Cd2288	Co2286	Cr2055	Cu3247
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.00997	.10468	.01480	.10920	.01014	.00091	.11595	.21954	.00520	.01016	.01029	.01320
Stddev	.00018	.00018	.00151	.00040	.00003	.00005	.00319	.00087	.00007	.00032	.00023	.00011
%RSD	1.8397	.17012	10.233	.36548	.26977	5.0404	2.7522	.39851	1.3205	3.1703	2.2819	.80883

#1	.00984	.10480	.01372	.10949	.01012	.00088	.11369	.21893	.00525	.00993	.01046	.01328
#2	.01010	.10455	.01587	.10892	.01016	.00094	.11821	.22016	.00515	.01039	.01012	.01313

Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Value												
Range												

Elem	Fe2599	K_7664	Li6707	Mg2790	Mn2576	Mo2020	Na5895	Ni2316	P_1782	Pb2203	S_1820	Sb2068
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.10655	3.0013	.00902	.19575	.00985	.02050	F 1.3513	.04071	2.8666	F .01174	-.00248	.02264
Stddev	.00176	.0273	.00032	.00085	.00002	.00008	.0029	.00066	.0163	.00031	.00381	.00051
%RSD	1.6540	.91054	3.5999	.43284	.22849	.40807	.21174	1.6144	.56955	2.6712	153.74	2.2641

#1	.10779	3.0206	.00925	.19635	.00986	.02056	1.3533	.04118	2.8782	.01196	-.00518	.02300
#2	.10530	2.9820	.00879	.19515	.00983	.02044	1.3493	.04025	2.8551	.01152	.00022	.02227

Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Fail	Chk Pass	Chk Pass	Chk Fail	None	Chk Pass
Value							1.0000			.00900		
Range							30.000%			30.000%		

Elem	Se1960	Si2881	Sn1899	Sr4077	Th2837	Ti3349	Ti1908	U_3701	V_2924	Zn2062	Zr3391
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	F .02412	.48551	.00916	.00927	.01850	.00901	.01744	.05479	.00849	.02169	.01513
Stddev	.00784	.00158	.00074	.00007	.00082	.00038	.00034	.00601	.00059	.00065	.00033
%RSD	32.504	.32509	.74174	.70849	4.4350	4.1877	1.9480	10.977	6.9530	3.0022	2.1910

#1	.02966	.48663	.09968	.00922	.01908	.00875	.01720	.05053	.00890	.02215	.01490
#2	.01858	.48439	.09864	.00932	.01792	.00928	.01768	.05904	.00807	.02123	.01537

Check ?	Chk Fail	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Value	.01500										
Range	30.000%										

Int. Std.	Y_2243	Y_3600	Y_3774
Units	Cts/S	Cts/S	Cts/S
Avg	1527.5	32962.	5749.2
Stddev	2.3	47.	4.0
%RSD	.15376	.14252	.06913

#1	1525.8	32928.	5752.0
#2	1529.1	32995.	5746.4

Sample Name: 280-83308-E-4-A Acquired: 5/24/2016 3:03:08 Type: Unk
 Method: 6500_026(v10) Mode: CONC Corr. Factor: 1.000000
 User: kellyca Custom ID1: Custom ID2: Custom ID3:
 Comment: 326188 6010B

Elem	Ag3280	Al1670	As1890	B_2089	Ba4554	Be3130	Bi2230	Ca3179	Cd2288
Line	328.068 {103}	167.079 {502}	189.042 {478}	208.959 {461}	455.403 { 74}	313.042 {108}	223.061 {451}	317.933 {106}	228.802 {447}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.00050	.00287	-.00331	.06214	.01456	.00003	-.00036	33.358	.00030
Stddev	.00061	.00118	.00353	.00047	.00018	.00002	.00033	.036	.00006
%RSD	121.36	41.249	106.61	.75732	1.2322	73.515	90.202	.10837	19.802
#1	.00093	.00371	-.00082	.06180	.01443	.00001	-.00013	33.332	.00034
#2	.00007	.00203	-.00581	.06247	.01468	.00005	-.00059	33.383	.00026

Check ? Chk Pass Chk Pass Chk Pass Chk Pass Chk Pass Chk Pass Chk Pass Chk Pass Chk Pass
 High Limit
 Low Limit

Elem	Co2286	Cr2055	Cu3247	Fe2599	K_7664	Li6707	Mg2790	Mn2576	Mo2020
Line	228.616 {447}	205.560 {464}	324.754 {104}	259.940 {130}	766.490 { 44}	670.784 { 50}	279.079 {121}2	257.610 {131}	202.030 {467}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	-.00047	.00054	-.00047	.66433	3.4480	-.00031	18.022	.00518	.00009
Stddev	.00025	.00008	.00017	.00266	.0297	.00046	.049	.00003	.00001
%RSD	52.195	15.520	35.947	.40012	.86289	147.43	.27220	.51199	5.9012
#1	-.00065	.00060	-.00059	.66245	3.4269	.00001	17.987	.00516	.00009
#2	-.00030	.00048	-.00035	.66621	3.4690	-.00064	18.057	.00520	.00008

Check ? Chk Pass Chk Pass Chk Pass Chk Pass Chk Pass Chk Pass Chk Pass Chk Pass Chk Pass
 High Limit
 Low Limit

Elem	Na5895	Na8183	Ni2316	P_1782	Pb2203	S_1820	Sb2068	Se1960	Si2881
Line	589.592 { 57}	818.326 { 41}	231.604 {446}	178.284 {489}	220.353 {453}	182.034 {485}	206.833 {463}	196.090 {472}	288.158 {117}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	F 10.110	10.563	.00248	.02180	.00082	3.2840	.00193	.00445	16.790
Stddev	.004	.220	.00056	.00126	.00118	.0131	.00153	.00435	.021
%RSD	.04380	2.0846	22.631	5.7733	144.80	.39782	79.077	97.823	.12528
#1	10.113	10.408	.00208	.02091	-.00002	3.2747	.00085	.00753	16.805
#2	10.107	10.719	.00287	.02269	.00165	3.2932	.00301	.00137	16.775

Check ? Chk Fail Chk Pass Chk Pass Chk Pass Chk Pass Chk Pass Chk Pass Chk Pass Chk Pass
 High Limit 10.000
 Low Limit -1.0000

Elem	Sn1899	Sr4077	Th2837	Ti3349	Ti1908	U_3701	V_2924	Zn2062	Zr3391
Line	189.989 {477}	407.771 { 83}	283.730 {119}	334.904 {101}	190.856 {477}	370.152 { 91}	292.402 {115}	206.200 {163}	339.198 { 99}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	-.00031	.23329	.00134	-.00028	.00214	.00161	.00143	.00853	.00071
Stddev	.00149	.00013	.00414	.00056	.00016	.02455	.00022	.00134	.00048
%RSD	479.24	.05388	308.68	197.83	7.3310	1525.9	15.533	15.693	67.439
#1	-.00137	.23320	.00427	-.00068	.00225	-.01575	.00159	.00758	.00037
#2	.00074	.23338	-.00159	.00011	.00203	.01897	.00127	.00948	.00105

Check ? Chk Pass Chk Pass Chk Pass Chk Pass Chk Pass Chk Pass Chk Pass Chk Pass Chk Pass
 High Limit
 Low Limit

Int. Std.	Y_2243	Y_3600	Y_3774
Line	224.306 {450}	360.073 { 94}	377.433 { 89}
Units	Cts/S	Cts/S	Cts/S
Avg	1508.9	32358.	5884.1
Stddev	4.1	87.	9.3
%RSD	.27314	.26985	.15808
#1	1511.8	32420.	5877.6
#2	1506.0	32297.	5890.7

Sample Name: 280-83308-E-5-A Acquired: 5/24/2016 3:05:54 Type: Unk
Method: 6500_026(v10) Mode: CONC Corr. Factor: 1.000000
User: kellyca Custom ID1: Custom ID2: Custom ID3:
Comment: 326188 6010B

Elem	Ag3280	Al1670	As1890	B_2089	Ba4554	Be3130	Bi2230	Ca3179	Cd2288
Line	328.068 {103}	167.079 {502}	189.042 {478}	208.959 {461}	455.403 { 74}	313.042 {108}	223.061 {451}	317.933 {106}	228.802 {447}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.00065	.00208	-.00095	.01560	.00324	.00007	.00211	13.018	.00013
Stddev	.00024	.00155	.00578	.00037	.00007	.00004	.00154	.015	.00002
%RSD	37.862	74.559	610.73	2.3487	2.2701	52.591	72.943	.11608	18.831

#1	.00047	.00318	.00314	.01534	.00329	.00009	.00102	13.028	.00011
#2	.00082	.00099	-.00503	.01586	.00319	.00004	.00319	13.007	.00015

Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Elem	Co2286	Cr2055	Cu3247	Fe2599	K_7664	Li6707	Mg2790	Mn2576	Mo2020
Line	228.616 {447}	205.560 {464}	324.754 {104}	259.940 {130}	766.490 { 44}	670.784 { 50}	279.079 {121}2	257.610 {131}	202.030 {467}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	-.00047	.00030	-.00148	.01391	.76877	-.00068	6.1218	1.0722	.00021
Stddev	.00009	.00000	.00001	.00112	.01142	.00012	.0179	.0010	.00001
%RSD	19.457	.91217	1.0122	8.0673	1.4855	18.224	.29281	.08962	5.3802

#1	-.00040	.00030	-.00147	.01311	.77684	-.00077	6.1091	1.0715	.00022
#2	-.00053	.00030	-.00149	.01470	.76069	-.00059	6.1345	1.0728	.00020

Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Elem	Na5895	Ni2316	P_1782	Pb2203	S_1820	Sb2068	Se1960	Si2881	Sn1899
Line	589.592 { 57}	231.604 {446}	178.284 {489}	220.353 {453}	182.034 {485}	206.833 {463}	196.090 {472}	288.158 {117}	189.989 {477}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	5.0058	.00164	.02588	-.00025	1.2838	.00152	.00724	15.203	.00017
Stddev	.0264	.00027	.00259	.00081	.0050	.00038	.00488	.030	.00099
%RSD	.52791	16.223	10.002	317.75	.38541	25.312	67.352	.19692	567.47

#1	4.9871	.00183	.02771	.00032	1.2803	.00179	.00379	15.224	-.00052
#2	5.0245	.00145	.02405	-.00083	1.2873	.00124	.01069	15.182	.00087

Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Elem	Sr4077	Th2837	Ti3349	Ti1908	U_3701	V_2924	Zn2062	Zr3391
Line	407.771 { 83}	283.730 {119}	334.904 {101}	190.856 {477}	370.152 { 91}	292.402 {115}	206.200 {163}	339.198 { 99}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.10301	.00141	.00022	-.00017	.00776	.00119	.00101	.00043
Stddev	.00008	.00096	.00022	.00001	.00736	.00050	.00019	.00014
%RSD	.07674	67.955	97.742	8.1377	94.834	42.605	18.691	31.515

#1	.10296	.00073	.00038	-.00016	.00256	.00083	.00115	.00053
#2	.10307	.00208	.00007	-.00018	.01297	.00154	.00088	.00034

Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit								
Low Limit								

Int. Std.	Y_2243	Y_3600	Y_3774
Line	224.306 {450}	360.073 { 94}	377.433 { 89}
Units	Cts/S	Cts/S	Cts/S
Avg	1533.7	32710.	5879.7
Stddev	1.8	60.	1.1
%RSD	.11662	.18253	.01815

#1	1535.0	32752.	5879.0
#2	1532.5	32668.	5880.5

Sample Name: 280-83308-E-6-A Acquired: 5/24/2016 3:08:43 Type: Unk
Method: 6500_026(v10) Mode: CONC Corr. Factor: 1.000000
User: kellyca Custom ID1: Custom ID2: Custom ID3:
Comment: 326188 6010B

Elem	Ag3280	Al1670	As1890	B_2089	Ba4554	Be3130	Bi2230	Ca3179	Cd2288
Line	328.068 {103}	167.079 {502}	189.042 {478}	208.959 {461}	455.403 { 74}	313.042 {108}	223.061 {451}	317.933 {106}	228.802 {447}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.00086	.00197	-.00139	.01137	.00193	-.00002	.00400	9.2949	.00007
Stddev	.00034	.00109	.00168	.00013	.00013	.00006	.00265	.0345	.00039
%RSD	39.972	55.241	120.70	1.1383	6.8832	304.60	66.170	.37142	529.90

#1	.00062	.00274	-.00258	.01128	.00184	.00002	.00588	9.2705	-.00020
#2	.00110	.00120	-.00020	.01147	.00203	-.00006	.00213	9.3194	.00035

Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Elem	Co2286	Cr2055	Cu3247	Fe2599	K_7664	Li6707	Mg2790	Mn2576	Mo2020
Line	228.616 {447}	205.560 {464}	324.754 {104}	259.940 {130}	766.490 { 44}	670.784 { 50}	279.079 {121}2	257.610 {131}	202.030 {467}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.00001	-.00001	-.00107	.01747	.65094	.00016	5.4445	.65371	.00025
Stddev	.00002	.00030	.00053	.00213	.00679	.00037	.0261	.00218	.00039
%RSD	193.04	2237.4	49.863	12.181	1.0426	225.02	.47917	.33304	154.70

#1	-.00000	.00020	-.00069	.01898	.65574	-.00010	5.4261	.65217	.00052
#2	.00003	-.00023	-.00144	.01597	.64614	.00042	5.4629	.65525	-.00002

Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Elem	Na5895	Ni2316	P_1782	Pb2203	S_1820	Sb2068	Se1960	Si2881	Sn1899
Line	589.592 { 57}	231.604 {446}	178.284 {489}	220.353 {453}	182.034 {485}	206.833 {463}	196.090 {472}	288.158 {117}	189.989 {477}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	4.5591	.00190	.02143	.00049	1.2140	.00082	.01311	12.472	-.00123
Stddev	.0075	.00013	.00048	.00002	.0077	.00159	.00336	.015	.00108
%RSD	.16511	6.6871	2.2501	4.6170	.63144	194.39	25.593	.11871	87.434

#1	4.5538	.00181	.02177	.00047	1.2086	-.00031	.01549	12.462	-.00047
#2	4.5645	.00199	.02109	.00050	1.2195	.00194	.01074	12.483	-.00199

Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Elem	Sr4077	Th2837	Ti3349	Ti1908	U_3701	V_2924	Zn2062	Zr3391
Line	407.771 { 83}	283.730 {119}	334.904 {101}	190.856 {477}	370.152 { 91}	292.402 {115}	206.200 {163}	339.198 { 99}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.06594	.00120	.00031	.00169	.00593	.00059	-.00070	.00044
Stddev	.00016	.00043	.00006	.00044	.01932	.00028	.00177	.00058
%RSD	.24186	35.606	21.269	25.889	325.77	47.033	253.09	132.03

#1	.06582	.00090	.00035	.00200	-.00773	.00079	.00055	.00003
#2	.06605	.00150	.00026	.00138	.01959	.00039	-.00195	.00085

Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit								
Low Limit								

Int. Std.	Y_2243	Y_3600	Y_3774
Line	224.306 {450}	360.073 { 94}	377.433 { 89}
Units	Cts/S	Cts/S	Cts/S
Avg	1547.5	33068.	5892.8
Stddev	6.0	32.	24.2
%RSD	.38831	.09820	.41142

#1	1551.8	33091.	5909.9
#2	1543.3	33045.	5875.6

Sample Name: 280-83308-E-7-A Acquired: 5/24/2016 3:11:29 Type: Unk
Method: 6500_026(v10) Mode: CONC Corr. Factor: 1.000000
User: kellyca Custom ID1: Custom ID2: Custom ID3:
Comment: 326188 6010B

Elem	Ag3280	Al1670	As1890	B_2089	Ba4554	Be3130	Bi2230	Ca3179	Cd2288
Line	328.068 {103}	167.079 {502}	189.042 {478}	208.959 {461}	455.403 { 74}	313.042 {108}	223.061 {451}	317.933 {106}	228.802 {447}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.00065	.00187	-.00263	.01161	.00317	-.00003	.00011	9.5601	.00022
Stddev	.00021	.00135	.00054	.00048	.00005	.00001	.00173	.0675	.00017
%RSD	31.934	71.870	20.396	4.1493	1.6658	47.951	1521.1	.70632	74.547

#1	.00050	.00282	-.00301	.01196	.00313	-.00002	.00134	9.5123	.00034
#2	.00080	.00092	-.00225	.01127	.00320	-.00004	-.00111	9.6078	.00010

Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Elem	Co2286	Cr2055	Cu3247	Fe2599	K_7664	Li6707	Mg2790	Mn2576	Mo2020
Line	228.616 {447}	205.560 {464}	324.754 {104}	259.940 {130}	766.490 { 44}	670.784 { 50}	279.079 {121}2	257.610 {131}	202.030 {467}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	-.00082	.00587	-.00115	.00638	.49807	.00147	4.4714	.00056	.00002
Stddev	.00018	.00007	.00015	.00035	.00911	.00056	.0121	.00001	.00007
%RSD	22.153	1.2506	13.310	5.4450	1.8287	38.245	.27050	1.0036	384.15

#1	-.00069	.00581	-.00126	.00663	.49163	.00108	4.4799	.00056	.00007
#2	-.00095	.00592	-.00104	.00614	.50452	.00187	4.4628	.00055	-.00003

Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Elem	Na5895	Ni2316	P_1782	Pb2203	S_1820	Sb2068	Se1960	Si2881	Sn1899
Line	589.592 { 57}	231.604 {446}	178.284 {489}	220.353 {453}	182.034 {485}	206.833 {463}	196.090 {472}	288.158 {117}	189.989 {477}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	6.9808	.00424	.06115	-.00014	1.1724	.00149	.01202	20.877	-.00164
Stddev	.0195	.00027	.00179	.00261	.0058	.00173	.00165	.156	.00101
%RSD	.27941	6.2838	2.9223	1806.9	.49842	115.86	13.746	.74815	61.480

#1	6.9670	.00405	.06241	-.00199	1.1683	.00272	.01085	20.766	-.00093
#2	6.9946	.00443	.05989	.00170	1.1766	.00027	.01319	20.987	-.00235

Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Elem	Sr4077	Th2837	Ti3349	Ti1908	U_3701	V_2924	Zn2062	Zr3391
Line	407.771 { 83}	283.730 {119}	334.904 {101}	190.856 {477}	370.152 { 91}	292.402 {115}	206.200 {163}	339.198 { 99}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.07584	.00309	.00010	-.00079	.00702	.00443	.00292	.00019
Stddev	.00043	.00044	.00029	.00009	.00284	.00031	.00025	.00020
%RSD	.57031	14.390	302.44	11.219	40.443	6.9914	8.7253	109.97

#1	.07553	.00340	-.00011	-.00073	.00501	.00465	.00274	.00033
#2	.07614	.00277	.00030	-.00086	.00903	.00421	.00310	.00004

Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit								
Low Limit								

Int. Std.	Y_2243	Y_3600	Y_3774
Line	224.306 {450}	360.073 { 94}	377.433 { 89}
Units	Cts/S	Cts/S	Cts/S
Avg	1555.5	33094.	5899.5
Stddev	1.4	87.	26.8
%RSD	.08754	.26170	.45509

#1	1556.4	33033.	5918.5
#2	1554.5	33156.	5880.5

Sample Name: 280-83308-E-8-A Acquired: 5/24/2016 3:14:17 Type: Unk
Method: 6500_026(v10) Mode: CONC Corr. Factor: 1.000000
User: kellyca Custom ID1: Custom ID2: Custom ID3:
Comment: 326188 6010B

Elem	Ag3280	Al1670	As1890	B_2089	Ba4554	Be3130	Bi2230	Ca3179	Cd2288
Line	328.068 {103}	167.079 {502}	189.042 {478}	208.959 {461}	455.403 { 74}	313.042 {108}	223.061 {451}	317.933 {106}	228.802 {447}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.00046	.00194	-.00411	.07912	.00814	.00002	-.00114	21.852	.00046
Stddev	.00006	.00071	.00028	.00035	.00003	.00001	.00272	.044	.00012
%RSD	13.657	36.469	6.7466	.44113	.36021	60.081	238.61	.20132	26.738
#1	.00042	.00244	-.00431	.07887	.00812	.00001	.00078	21.821	.00055
#2	.00051	.00144	-.00392	.07937	.00816	.00002	-.00306	21.884	.00037

Check ? Chk Pass Chk Pass Chk Pass Chk Pass Chk Pass Chk Pass Chk Pass Chk Pass Chk Pass
High Limit
Low Limit

Elem	Co2286	Cr2055	Cu3247	Fe2599	K_7664	Li6707	Mg2790	Mn2576	Mo2020
Line	228.616 {447}	205.560 {464}	324.754 {104}	259.940 {130}	766.490 { 44}	670.784 { 50}	279.079 {121}2	257.610 {131}	202.030 {467}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	-.00028	.00045	-.00100	.57565	.95307	.00045	9.8645	.53117	.00145
Stddev	.00009	.00031	.00023	.00188	.00537	.00033	.0276	.00034	.00031
%RSD	31.192	69.696	22.783	.32623	.56299	72.703	.28006	.06406	21.222
#1	-.00035	.00067	-.00116	.57432	.95686	.00022	9.8449	.53093	.00167
#2	-.00022	.00023	-.00084	.57698	.94927	.00068	9.8840	.53141	.00123

Check ? Chk Pass Chk Pass Chk Pass Chk Pass Chk Pass Chk Pass Chk Pass Chk Pass Chk Pass
High Limit
Low Limit

Elem	Na8183	Ni2316	P_1782	Pb2203	S_1820	Sb2068	Se1960	Si2881	Sn1899
Line	818.326 { 41}	231.604 {446}	178.284 {489}	220.353 {453}	182.034 {485}	206.833 {463}	196.090 {472}	288.158 {117}	189.989 {477}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	11.613	.00177	.26953	-.00255	1.8601	.00347	.01456	26.343	-.00054
Stddev	.173	.00038	.00159	.00046	.0089	.00109	.00228	.198	.00080
%RSD	1.4863	21.251	.58973	18.074	.48059	31.515	15.660	.75250	147.28
#1	11.735	.00150	.26840	-.00287	1.8538	.00270	.01618	26.202	-.00111
#2	11.491	.00204	.27065	-.00222	1.8664	.00425	.01295	26.483	.00002

Check ? Chk Pass Chk Pass Chk Pass Chk Pass Chk Pass Chk Pass Chk Pass Chk Pass Chk Pass
High Limit
Low Limit

Elem	Sr4077	Th2837	Ti3349	Ti1908	U_3701	V_2924	Zn2062	Zr3391	
Line	407.771 { 83}	283.730 {119}	334.904 {101}	190.856 {477}	370.152 { 91}	292.402 {115}	206.200 {163}	339.198 { 99}	
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	
Avg	.10974	.00082	.00018	-.00115	.01546	.00050	-.00129	.00069	
Stddev	.00066	.00098	.00005	.00048	.00089	.00052	.00218	.00011	
%RSD	.59744	119.03	28.072	41.478	5.7366	105.02	169.21	16.410	
#1	.10927	.00013	.00014	-.00081	.01483	.00013	-.00282	.00077	
#2	.11020	.00151	.00021	-.00149	.01608	.00086	.00025	.00061	

Check ? Chk Pass Chk Pass Chk Pass Chk Pass Chk Pass Chk Pass Chk Pass Chk Pass Chk Pass
High Limit
Low Limit

Int. Std.	Y_2243	Y_3600	Y_3774						
Line	224.306 {450}	360.073 { 94}	377.433 { 89}						
Units	Cts/S	Cts/S	Cts/S						
Avg	1537.9	32847.	5939.2						
Stddev	2.2	122.	11.9						
%RSD	.14388	.37117	.20085						
#1	1536.4	32934.	5947.7						
#2	1539.5	32761.	5930.8						

Sample Name: 280-83308-E-9-A Acquired: 5/24/2016 3:17:03 Type: Unk
Method: 6500_026(v10) Mode: CONC Corr. Factor: 1.000000
User: kellyca Custom ID1: Custom ID2: Custom ID3:
Comment: 326188 6010B

Elem	Ag3280	Al1670	As1890	B_2089	Ba4554	Be3130	Bi2230	Ca3179	Cd2288
Line	328.068 {103}	167.079 {502}	189.042 {478}	208.959 {461}	455.403 { 74}	313.042 {108}	223.061 {451}	317.933 {106}	228.802 {447}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.00035	.00127	-.00468	.00863	.00261	-.00002	.00093	10.380	.00024
Stddev	.00025	.00119	.00151	.00082	.00016	.00005	.00176	.005	.00029
%RSD	71.090	94.023	32.170	9.4709	6.3038	203.03	189.27	.04702	119.16

#1	.00053	.00211	-.00362	.00921	.00249	.00001	-.00031	10.376	.00045
#2	.00017	.00042	-.00575	.00806	.00273	-.00006	.00217	10.383	.00004

Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Elem	Co2286	Cr2055	Cu3247	Fe2599	K_7664	Li6707	Mg2790	Mn2576	Mo2020
Line	228.616 {447}	205.560 {464}	324.754 {104}	259.940 {130}	766.490 { 44}	670.784 { 50}	279.079 {121}2	257.610 {131}	202.030 {467}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	-.00097	.01093	-.00089	.00414	.85669	.00422	7.3158	.00041	.00025
Stddev	.00024	.00001	.00017	.00107	.02724	.00080	.0272	.00001	.00007
%RSD	24.433	.07802	19.183	25.846	3.1798	18.916	.37142	3.3080	26.285

#1	-.00080	.01093	-.00101	.00489	.87595	.00365	7.3350	.00042	.00030
#2	-.00113	.01092	-.00077	.00338	.83743	.00478	7.2966	.00040	.00020

Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Elem	Na5895	Ni2316	P_1782	Pb2203	S_1820	Sb2068	Se1960	Si2881	Sn1899
Line	589.592 { 57}	231.604 {446}	178.284 {489}	220.353 {453}	182.034 {485}	206.833 {463}	196.090 {472}	288.158 {117}	189.989 {477}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	6.9517	.00256	.04317	.00145	1.2447	.00122	.01287	18.513	-.00045
Stddev	.0078	.00090	.00295	.00192	.0037	.00119	.00566	.039	.00065
%RSD	.11223	35.303	6.8426	132.28	.29947	97.641	44.005	.20911	143.03

#1	6.9462	.00320	.04526	.00281	1.2421	.00206	.01687	18.541	-.00092
#2	6.9572	.00192	.04108	.00009	1.2474	.00038	.00886	18.486	.00001

Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Elem	Sr4077	Th2837	Ti3349	Ti1908	U_3701	V_2924	Zn2062	Zr3391	
Line	407.771 { 83}	283.730 {119}	334.904 {101}	190.856 {477}	370.152 { 91}	292.402 {115}	206.200 {163}	339.198 { 99}	
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	
Avg	.04765	.00164	.00004	.00092	.01320	.00269	.00186	.00145	
Stddev	.00014	.00164	.00002	.00012	.00267	.00082	.00064	.00073	
%RSD	.29708	100.05	50.039	13.329	20.203	30.451	34.404	50.362	

#1	.04755	.00048	.00006	.00101	.01509	.00327	.00231	.00094	
#2	.04775	.00280	.00003	.00083	.01132	.00211	.00141	.00197	

Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	
High Limit									
Low Limit									

Int. Std.	Y_2243	Y_3600	Y_3774
Line	224.306 {450}	360.073 { 94}	377.433 { 89}
Units	Cts/S	Cts/S	Cts/S
Avg	1547.6	32914.	5920.4
Stddev	3.6	15.	.6
%RSD	.22983	.04485	.01025

#1	1545.1	32904.	5920.0
#2	1550.2	32925.	5920.8

Sample Name: 280-83308-E-10-A Acquired: 5/24/2016 3:19:49 Type: Unk
Method: 6500_026(v10) Mode: CONC Corr. Factor: 1.000000
User: kellyca Custom ID1: Custom ID2: Custom ID3:
Comment: 326188 6010B

Elem	Ag3280	Al1670	As1890	B_2089	Ba4554	Be3130	Bi2230	Ca3179	Cd2288
Line	328.068 {103}	167.079 {502}	189.042 {478}	208.959 {461}	455.403 { 74}	313.042 {108}	223.061 {451}	317.933 {106}	228.802 {447}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.00042	.00183	.00489	.02728	.00278	-.00005	-.00073	10.729	-.00001
Stddev	.00010	.00020	.00449	.00020	.00025	.00004	.00181	.063	.00008
%RSD	24.694	10.817	91.763	.74125	9.0198	81.905	249.08	.59129	564.34

#1	.00049	.00197	.00807	.02714	.00261	-.00008	-.00201	10.774	.00004
#2	.00034	.00169	.00172	.02742	.00296	-.00002	.00055	10.684	-.00007

Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Elem	Co2286	Cr2055	Cu3247	Fe2599	K_7664	Li6707	Mg2790	Mn2576	Mo2020
Line	228.616 {447}	205.560 {464}	324.754 {104}	259.940 {130}	766.490 { 44}	670.784 { 50}	279.079 {121}2	257.610 {131}	202.030 {467}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	-.00045	-.00010	-.00081	.10363	1.0850	.00001	5.7920	.84380	.00027
Stddev	.00018	.00006	.00010	.00076	.0032	.00022	.0295	.00209	.00043
%RSD	39.102	59.399	12.946	.73163	.29897	2815.9	.50974	.24761	161.04

#1	-.00033	-.00006	-.00073	.10309	1.0873	.00016	5.7711	.84232	.00057
#2	-.00058	-.00015	-.00088	.10417	1.0827	-.00015	5.8128	.84527	-.00004

Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Elem	Na5895	Ni2316	P_1782	Pb2203	S_1820	Sb2068	Se1960	Si2881	Sn1899
Line	589.592 { 57}	231.604 {446}	178.284 {489}	220.353 {453}	182.034 {485}	206.833 {463}	196.090 {472}	288.158 {117}	189.989 {477}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	5.2331	.00032	.13683	.00198	1.3408	.00169	.01042	14.461	.00029
Stddev	.0052	.00016	.00103	.00120	.0033	.00066	.00571	.039	.00156
%RSD	.09926	49.329	.75613	60.918	.24880	38.707	54.778	.26701	533.60

#1	5.2367	.00043	.13756	.00112	1.3384	.00216	.00638	14.488	-.00081
#2	5.2294	.00021	.13610	.00283	1.3431	.00123	.01445	14.434	.00140

Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Elem	Sr4077	Th2837	Ti3349	Ti1908	U_3701	V_2924	Zn2062	Zr3391	
Line	407.771 { 83}	283.730 {119}	334.904 {101}	190.856 {477}	370.152 { 91}	292.402 {115}	206.200 {163}	339.198 { 99}	
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	
Avg	.07469	.00242	.00006	.00244	-.00072	.00044	-.00054	-.00016	
Stddev	.00010	.00081	.00037	.00094	.00019	.00005	.00077	.00167	
%RSD	.13940	33.334	593.71	38.432	26.304	10.874	143.23	1026.9	

#1	.07476	.00185	.00033	.00310	-.00059	.00041	-.00108	.00102	
#2	.07462	.00299	-.00020	.00178	-.00085	.00048	.00001	-.00135	

Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	
High Limit									
Low Limit									

Int. Std.	Y_2243	Y_3600	Y_3774						
Line	224.306 {450}	360.073 { 94}	377.433 { 89}						
Units	Cts/S	Cts/S	Cts/S						
Avg	1551.1	32919.	5870.8						
Stddev	3.1	98.	5.0						
%RSD	.20022	.29647	.08551						

#1	1548.9	32988.	5867.2						
#2	1553.3	32850.	5874.3						

Sample Name: 280-83308-E-11-A Acquired: 5/24/2016 3:22:36 Type: Unk
Method: 6500_026(v10) Mode: CONC Corr. Factor: 1.000000
User: kellyca Custom ID1: Custom ID2: Custom ID3:
Comment: 326188 6010B

Elem	Ag3280	Al1670	As1890	B_2089	Ba4554	Be3130	Bi2230	Ca3179	Cd2288
Line	328.068 {103}	167.079 {502}	189.042 {478}	208.959 {461}	455.403 { 74}	313.042 {108}	223.061 {451}	317.933 {106}	228.802 {447}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.00056	.00723	-.00756	.01543	.00372	.00000	.00100	12.937	.00039
Stddev	.00007	.00026	.00228	.00023	.00000	.00001	.00159	.063	.00029
%RSD	13.350	3.5486	30.183	1.5173	.01650	461.51	159.58	.48358	74.491

#1	.00050	.00741	-.00595	.01560	.00372	.00000	-.00013	12.893	.00018
#2	.00061	.00705	-.00918	.01527	.00372	-.00000	.00212	12.981	.00059

Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Elem	Co2286	Cr2055	Cu3247	Fe2599	K_7664	Li6707	Mg2790	Mn2576	Mo2020
Line	228.616 {447}	205.560 {464}	324.754 {104}	259.940 {130}	766.490 { 44}	670.784 { 50}	279.079 {121}2	257.610 {131}	202.030 {467}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	-.00033	.00036	-.00049	.02965	.78522	.00037	6.0583	1.0778	.00033
Stddev	.00043	.00019	.00006	.00071	.00155	.00056	.0116	.0019	.00016
%RSD	132.39	52.497	13.126	2.4078	.19734	152.98	.19141	.17644	48.997

#1	-.00064	.00023	-.00054	.02915	.78413	.00077	6.0501	1.0791	.00022
#2	-.00002	.00050	-.00045	.03016	.78632	-.00003	6.0665	1.0764	.00045

Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Elem	Na5895	Ni2316	P_1782	Pb2203	S_1820	Sb2068	Se1960	Si2881	Sn1899
Line	589.592 { 57}	231.604 {446}	178.284 {489}	220.353 {453}	182.034 {485}	206.833 {463}	196.090 {472}	288.158 {117}	189.989 {477}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	4.9996	.00206	.02843	.00090	1.3465	.00113	.00732	14.816	-.00014
Stddev	.0122	.00031	.00465	.00058	.0128	.00129	.00192	.019	.00202
%RSD	.24483	14.883	16.353	64.709	.94830	114.93	26.189	.12681	1467.4

#1	4.9910	.00184	.02514	.00049	1.3555	.00021	.00596	14.803	-.00156
#2	5.0083	.00227	.03171	.00131	1.3374	.00204	.00868	14.829	.00129

Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Elem	Sr4077	Th2837	Ti3349	Ti1908	U_3701	V_2924	Zn2062	Zr3391
Line	407.771 { 83}	283.730 {119}	334.904 {101}	190.856 {477}	370.152 { 91}	292.402 {115}	206.200 {163}	339.198 { 99}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.10279	.00081	.00025	.00179	.00458	.00098	.02158	.00084
Stddev	.00024	.00101	.00004	.00000	.03501	.00016	.00025	.00155
%RSD	.22978	124.34	17.941	.05498	764.59	16.749	1.1460	185.27

#1	.10262	.00010	.00022	.00179	.02934	.00110	.02140	-.00026
#2	.10296	.00153	.00028	.00179	-.02018	.00087	.02175	.00194

Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit								
Low Limit								

Int. Std.	Y_2243	Y_3600	Y_3774
Line	224.306 {450}	360.073 { 94}	377.433 { 89}
Units	Cts/S	Cts/S	Cts/S
Avg	1545.2	32684.	5852.7
Stddev	.7	59.	30.4
%RSD	.04285	.18134	.51967

#1	1545.6	32642.	5874.3
#2	1544.7	32725.	5831.2

Sample Name: ccvh-3900196 Acquired: 5/24/2016 3:25:22 Type: QC
Method: 6500_026(v10) Mode: CONC Corr. Factor: 1.000000
User: kellyca Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	Ag3280	Al3092	As1890	B_2089	Ba4554	Be3130	Bi2230	Ca3179	Cd2288	Co2286	Cr2055	Cu3247
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	k -.00993	45.016	k -.00423	.00512	.00044	-.00019	1.0537	-.05765	k -.00084	.00321	-.00044	k .01175
Stddev	.01346	.505	.00021	.00028	.00006	.00001	.0012	.00242	.00002	.00023	.00002	.00898
%RSD	135.49	1.1210	5.0482	5.4084	12.979	3.3373	.10992	4.1974	2.7582	7.0798	4.5620	76.398

#1	k -.01945	44.659	k -.00408	.00492	.00048	-.00020	1.0529	-.05593	k -.00086	.00305	-.00042	k .01810
#2	-.00042	45.372	-.00438	.00531	.00040	-.00019	1.0546	-.05936	-.00083	.00337	-.00045	.00540

Check ?	None	Chk Pass	None	None	None	None	Chk Pass	None	None	None	None	None
Value												
Range												

Elem	Fe2714	K_7664	Li6707	Mg2790	Mn2576	Mo2020	Na8183	Ni2316	P_1782	Pb2203	S_1820	Sb2068
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	F 44.825	-.01088	-.00036	.16228	k -.00017	-.00175	247.36	-.00053	.00707	k .00211	4.9663	k .00148
Stddev	.657	.00473	.00085	.00086	.00039	.00025	3.62	.00039	.00013	.00397	.0053	.00077
%RSD	1.4665	43.428	236.74	.53234	222.73	14.342	1.4618	73.844	1.8848	188.66	.10669	52.489

#1	44.361	-.01422	.00024	.16167	k .00010	-.00157	244.80	-.00080	.00697	k .00492	4.9626	k .00202
#2	45.290	-.00754	-.00096	.16289	-.00045	-.00193	249.92	-.00025	.00716	-.00070	4.9700	.00093

Check ?	Chk Fail	None	None	None	None	None	Chk Pass	None	None	None	Chk Pass	None
Value	50.000											
Range	-10.000%											

Elem	Se1960	Si2881	Sn1899	Sr4077	Th2837	Ti3349	Ti1908	U_3701	V_2924	Zn2062	Zr3391
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	k .01232	.00061	.00064	.00030	k 4.8620	.02403	k -.00177	10.072	k -.00904	-.00252	k .14803
Stddev	.00031	.01613	.00029	.00004	.0059	.00021	.00008	.036	.01033	.00156	.23863
%RSD	2.5111	2645.8	46.274	13.270	.12146	.86827	4.6492	.36026	114.35	61.857	161.20

#1	k .01210	-.01080	.00043	.00033	k 4.8662	.02417	k -.00171	10.046	k -.00173	-.00363	k .31676
#2	.01254	.01202	.00084	.00027	4.8578	.02388	-.00183	10.097	-.01634	-.00142	-.02071

Check ?	None	None	None	None	Chk Pass	None	None	Chk Pass	None	None	None
Value											
Range											

Int. Std.	Y_2243	Y_3600	Y_3774
Units	Cts/S	Cts/S	Cts/S
Avg	1485.6	31245.	5870.1
Stddev	.3	160.	41.7
%RSD	.01733	.51172	.70966

#1	1485.8	31358.	5899.6
#2	1485.4	31132.	5840.7

Sample Name: ccv-3900195 Acquired: 5/24/2016 3:28:15 Type: QC
Method: 6500_026(v10) Mode: CONC Corr. Factor: 1.000000
User: kellyca Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	Ag3280	Al1670	As1890	B_2089	Ba4554	Be3130	Bi2230	Ca3179	Cd2288	Co2286	Cr2055	Cu3247	Fe2599	K_7664
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.48212	.52143	1.0160	.54687	.48544	.48773	.00373	4.7572	.51722	.51212	.49901	.49151	2.3735	50.310
Stddev	.00052	.00800	.0017	.00219	.00057	.00146	.00387	.0011	.00108	.00005	.00077	.00113	.0103	.117
%RSD	.10687	1.5337	.16826	.40007	.11640	.29923	103.90	.02296	.20967	.00935	.15530	.22937	.43525	.23296

#1	.48248	.52709	1.0173	.54532	.48504	.48670	.00647	4.7564	.51646	.51208	.49846	.49231	2.3662	50.228
#2	.48175	.51578	1.0148	.54841	.48584	.48876	.00099	4.7579	.51799	.51215	.49956	.49071	2.3808	50.393

Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	None	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Value														
Range														

Elem	Li6707	Mg2790	Mn2576	Mo2020	Na5895	Ni2316	P_1782	Pb2203	S_1820	Sb2068	Se1960	Si2881	Sn1899	Sr4077
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	1.0470	19.467	.48302	.50441	5.2819	.50113	1.0148	1.0494	.00416	.99996	1.0310	4.7703	.98992	.46768
Stddev	.0011	.017	.00099	.00032	.0005	.00038	.0090	.0031	.00671	.00022	.0022	.0032	.00215	.00121
%RSD	.10614	.08709	.20580	.06364	.00952	.07518	.88860	.29224	161.41	.02197	.21180	.06692	.21723	.25966

#1	1.0462	19.479	.48231	.50464	5.2822	.50086	1.0084	1.0515	.00890	.99981	1.0294	4.7726	.98840	.46682
#2	1.0478	19.455	.48372	.50418	5.2815	.50140	1.0212	1.0472	-.00059	1.0001	1.0325	4.7680	.99144	.46853

Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	None	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Value														
Range														

Elem	Th2837	Ti3349	Ti1908	U_3701	V_2924	Zn2062	Zr3391
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.00656	.46003	1.0319	.00839	.46286	.48041	.48156
Stddev	.00056	.00044	.0025	.01614	.00081	.00247	.00398
%RSD	8.5825	.09663	.23822	192.25	.17600	.51332	.82606

#1	.00616	.45971	1.0302	.01980	.46344	.47867	.47875
#2	.00696	.46034	1.0337	-.00302	.46229	.48216	.48437

Check ?	None	Chk Pass	Chk Pass	None	Chk Pass	Chk Pass	Chk Pass
Value							
Range							

Int. Std.	Y_2243	Y_3600	Y_3774
Units	Cts/S	Cts/S	Cts/S
Avg	1542.9	32279.	5813.7
Stddev	4.6	10.	16.4
%RSD	.29757	.03212	.28259

#1	1546.1	32271.	5825.3
#2	1539.6	32286.	5802.0

Sample Name: ccb Acquired: 5/24/2016 3:30:55 Type: QC
Method: 6500_026(v10) Mode: CONC Corr. Factor: 1.000000
User: kellyca Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	Ag3280	Al1670	As1890	B_2089	Ba4554	Be3130	Bi2230	Ca3179	Cd2288	Co2286	Cr2055	Cu3247
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.00035	-.00008	.00127	F .00393	.00021	.00004	.00523	-.00576	.00016	-.00011	-.00006	-.00098
Stddev	.00014	.00005	.00180	.00084	.00005	.00005	.00140	.00082	.00014	.00024	.00025	.00002
%RSD	39.790	65.978	141.86	21.397	24.062	110.64	26.846	14.182	85.095	211.36	425.01	1.6117
#1	.00045	-.00004	-.00000	.00452	.00017	.00008	.00424	-.00634	.00007	.00006	-.00024	-.00099
#2	.00025	-.00011	.00254	.00333	.00024	.00001	.00622	-.00519	.00026	-.00028	.00012	-.00097
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Fail	Chk Pass	Chk Pass	None	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit				.00312								
Low Limit				-.00312								
Elem	Fe2599	K_7664	Li6707	Mg2790	Mn2576	Mo2020	Na5895	Ni2316	P_1782	Pb2203	S_1820	Sb2068
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.01229	.04534	-.00047	-.00164	.00005	.00037	.02798	-.00001	.00287	-.00063	-.00252	W .00531
Stddev	.00312	.01395	.00083	.00020	.00005	.00023	.00557	.00016	.00227	.00165	.00330	.00185
%RSD	25.407	30.774	178.65	12.505	106.98	63.880	19.912	2397.2	78.972	264.61	130.52	34.736
#1	.01450	.05521	.00012	-.00149	.00008	.00020	.03191	.00010	.00447	-.00180	-.00486	.00662
#2	.01008	.03548	-.00106	-.00178	.00001	.00053	.02404	-.00012	.00127	.00054	-.00019	.00401
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	None	Chk Warn
High Limit												.00314
Low Limit												-.00314
Elem	Se1960	Si2881	Sn1899	Sr4077	Th2837	Ti3349	Ti1908	U_3701	V_2924	Zn2062	Zr3391	
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	
Avg	W .00845	.00887	-.00183	.00005	.00073	.00008	-.00032	.01147	.00040	.00101	-.00085	
Stddev	.00166	.00512	.00045	.00001	.00012	.00004	.00042	.00253	.00089	.00165	.00001	
%RSD	19.653	57.788	24.780	21.844	15.867	56.826	129.72	22.023	225.13	162.87	1.1105	
#1	.00962	.01249	-.00215	.00004	.00081	.00005	-.00062	.01326	-.00023	.00218	-.00086	
#2	.00727	.00524	-.00151	.00005	.00064	.00011	-.00003	.00968	.00102	-.00015	-.00084	
Check ?	Chk Warn	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	
High Limit	.00486											
Low Limit	-.00486											
Int. Std.	Y_2243	Y_3600	Y_3774									
Units	Cts/S	Cts/S	Cts/S									
Avg	1540.9	32585.	5701.2									
Stddev	1.5	18.	6.7									
%RSD	.09868	.05647	.11757									
#1	1542.0	32572.	5706.0									
#2	1539.8	32598.	5696.5									

Sample Name: ccvl-3907489 Acquired: 5/24/2016 3:33:45 Type: QC
Method: 6500_026(v10) Mode: CONC Corr. Factor: 1.000000
User: kellyca Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	Ag3280	Al1670	As1890	B_2089	Ba4554	Be3130	Bi2230	Ca3179	Cd2288	Co2286	Cr2055	Cu3247
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.00984	.10505	.01683	.10567	.01004	.00102	.11255	.22171	.00500	.01015	.00987	.01433
Stddev	.00001	.00127	.00048	.00030	.00001	.00005	.00155	.00482	.00014	.00039	.00018	.00014
%RSD	.13008	1.2045	2.8356	.28569	.06520	4.6923	1.3788	2.1722	2.7747	3.8684	1.7939	.97517

#1	.00985	.10416	.01716	.10588	.01004	.00105	.11365	.22512	.00509	.00987	.00975	.01423
#2	.00983	.10595	.01649	.10545	.01005	.00099	.11145	.21831	.00490	.01043	.01000	.01443

Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Value												
Range												

Elem	Fe2599	K_7664	Li6707	Mg2790	Mn2576	Mo2020	Na5895	Ni2316	P_1782	Pb2203	S_1820	Sb2068
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.10604	3.0495	.01064	.19889	.00979	.02032	F 1.3371	.04091	2.8586	F .01178	.00335	.02165
Stddev	.00318	.0058	.00004	.00378	.00005	.00011	.0050	.00032	.0120	.00171	.00131	.00099
%RSD	2.9991	.19021	.41693	1.9017	.54008	.55948	.37003	.78706	.42132	14.532	39.078	4.5936

#1	.10829	3.0454	.01061	.19621	.00976	.02040	1.3336	.04069	2.8501	.01299	.00242	.02235
#2	.10379	3.0536	.01067	.20156	.00983	.02024	1.3406	.04114	2.8671	.01057	.00427	.02094

Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Fail	Chk Pass	Chk Pass	Chk Fail	None	Chk Pass
Value							1.0000			.00900		
Range							30.000%			30.000%		

Elem	Se1960	Si2881	Sn1899	Sr4077	Th2837	Ti3349	Ti1908	U_3701	V_2924	Zn2062	Zr3391
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.01908	.46962	.09903	.00942	.01760	.00934	.01756	.06932	.00932	.01983	.01378
Stddev	.00213	.00120	.00094	.00006	.00191	.00003	.00178	.00433	.00008	.00100	.00106
%RSD	11.140	.25597	.95032	.59211	10.871	.37259	10.147	6.2513	.82609	5.0631	7.6944

#1	.01758	.46877	.09969	.00938	.01895	.00937	.01630	.07238	.00937	.02054	.01303
#2	.02059	.47047	.09836	.00946	.01625	.00932	.01882	.06625	.00926	.01912	.01453

Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Value											
Range											

Int. Std.	Y_2243	Y_3600	Y_3774
Units	Cts/S	Cts/S	Cts/S
Avg	1541.9	32742.	5730.8
Stddev	.2	85.	19.3
%RSD	.01496	.26056	.33663

#1	1542.1	32682.	5717.2
#2	1541.8	32803.	5744.5

Sample Name: MB 280-326191/1-A Acquired: 5/24/2016 3:36:34 Type: Unk
Method: 6500_026(v10) Mode: CONC Corr. Factor: 1.000000
User: kellyca Custom ID1: 5/20 Custom ID2: Custom ID3:
Comment: 326191 6010B

Elem	Ag3280	Al1670	As1890	B_2089	Ba4554	Be3130	Bi2230	Ca3179	Cd2288
Line	328.068 {103}	167.079 {502}	189.042 {478}	208.959 {461}	455.403 { 74}	313.042 {108}	223.061 {451}	317.933 {106}	228.802 {447}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.00064	.00298	.00088	.00319	.00013	.00002	.00126	.00760	-.00011
Stddev	.00006	.00007	.00540	.00067	.00010	.00000	.00106	.00036	.00021
%RSD	9.5758	2.2441	612.66	20.904	78.088	21.777	84.295	4.7722	185.10

#1	.00069	.00293	-.00294	.00366	.00006	.00002	.00051	.00785	.00003
#2	.00060	.00303	.00470	.00272	.00020	.00001	.00201	.00734	-.00026

Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Elem	Co2286	Cr2055	Cu3247	Fe2599	K_7664	Li6707	Mg2790	Mn2576	Mo2020
Line	228.616 {447}	205.560 {464}	324.754 {104}	259.940 {130}	766.490 { 44}	670.784 { 50}	279.079 {121}2	257.610 {131}	202.030 {467}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	-.00002	-.00026	-.00061	.01100	-.00035	-.00030	.00612	.00013	-.00011
Stddev	.00013	.00024	.00013	.00172	.02075	.00170	.00496	.00006	.00000
%RSD	779.95	91.142	20.792	15.640	5898.4	563.97	80.982	43.122	2.0189

#1	.00008	-.00009	-.00052	.01222	.01432	.00090	.00962	.00017	-.00011
#2	-.00011	-.00043	-.00070	.00978	-.01502	-.00150	.00262	.00009	-.00011

Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Elem	Na5895	Ni2316	P_1782	Pb2203	S_1820	Sb2068	Se1960	Si2881	Sn1899
Line	589.592 { 57}	231.604 {446}	178.284 {489}	220.353 {453}	182.034 {485}	206.833 {463}	196.090 {472}	288.158 {117}	189.989 {477}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.01793	.00048	.00312	.00004	.00065	.00197	W .00891	.01969	.00001
Stddev	.00113	.00024	.00157	.00076	.00011	.00104	.00457	.01228	.00176
%RSD	6.3111	49.439	50.353	2130.7	16.476	52.469	51.334	62.357	17362.

#1	.01873	.00065	.00423	-.00050	.00073	.00271	.00567	.01101	-.00123
#2	.01713	.00032	.00201	.00057	.00057	.00124	.01214	.02838	.00125

Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Warn	Chk Pass	Chk Pass
High Limit							.00500		
Low Limit							-.00500		

Elem	Sr4077	Th2837	Ti3349	Ti1908	U_3701	V_2924	Zn2062	Zr3391	
Line	407.771 { 83}	283.730 {119}	334.904 {101}	190.856 {477}	370.152 { 91}	292.402 {115}	206.200 {163}	339.198 { 99}	
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	
Avg	.00004	.00268	.00020	.00128	.01557	-.00018	.00321	-.00005	
Stddev	.00001	.00039	.00013	.00031	.00938	.00016	.00091	.00233	
%RSD	20.564	14.717	64.011	24.122	60.260	89.713	28.205	4550.3	

#1	.00005	.00296	.00011	.00107	.00893	-.00030	.00257	-.00170	
#2	.00003	.00240	.00029	.00150	.02220	-.00007	.00385	.00160	

Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	
High Limit									
Low Limit									

Int. Std.	Y_2243	Y_3600	Y_3774						
Line	224.306 {450}	360.073 { 94}	377.433 { 89}						
Units	Cts/S	Cts/S	Cts/S						
Avg	1551.1	32916.	5779.0						
Stddev	2.0	76.	9.1						
%RSD	.12626	.22941	.15791						

#1	1552.5	32969.	5785.4						
#2	1549.7	32862.	5772.5						

Sample Name: LCS 280-326191/2-A Acquired: 5/24/2016 3:39:24 Type: Unk

Method: 6500_026(v10) Mode: CONC Corr. Factor: 1.000000

User: kellyca Custom ID1: Custom ID2: Custom ID3:

Comment: 326191 6010B

Elem	Ag3280	Al1670	As1890	B_2089	Ba4554	Be3130	Bi2230	Ca3179	Cd2288
Line	328.068 {103}	167.079 {502}	189.042 {478}	208.959 {461}	455.403 { 74}	313.042 {108}	223.061 {451}	317.933 {106}	228.802 {447}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.05062	1.9586	1.0578	1.0854	2.0032	.04984	F 2.2594	48.233	.10419
Stddev	.00023	.0029	.0087	.0026	.0035	.00018	.0134	.142	.00012
%RSD	.46014	.14785	.82411	.23950	.17443	.35367	.59276	.29437	.11877
#1	.05079	1.9607	1.0639	1.0872	2.0007	.04996	2.2689	48.133	.10410
#2	.05046	1.9566	1.0516	1.0836	2.0057	.04972	2.2500	48.334	.10427

Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Fail	Chk Pass	Chk Pass
High Limit							2.2000		
Low Limit							1.8000		

Elem	Co2286	Cr2055	Cu3247	Fe2599	K_7664	Li6707	Mg2790	Mn2576	Mo2020
Line	228.616 {447}	205.560 {464}	324.754 {104}	259.940 {130}	766.490 { 44}	670.784 { 50}	279.079 {121}2	257.610 {131}	202.030 {467}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.50832	F .20227	.25751	.95689	52.971	1.0986	49.380	.48280	1.0428
Stddev	.00083	.00018	.00091	.00611	.099	.0017	.288	.00095	.0025
%RSD	.16243	.08897	.35357	.63813	.18725	.15778	.58383	.19594	.24364
#1	.50890	.20239	.25815	.95258	52.901	1.0974	49.583	.48347	1.0446
#2	.50773	.20214	.25687	.96121	53.041	1.0998	49.176	.48213	1.0410

Check ?	Chk Pass	Chk Fail	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit		.05750							
Low Limit		.04300							

Elem	Na8183	Ni2316	P_1782	Pb2203	S_1820	Sb2068	Se1960	Si2881	Sn1899
Line	818.326 { 41}	231.604 {446}	178.284 {489}	220.353 {453}	182.034 {485}	206.833 {463}	196.090 {472}	288.158 {117}	189.989 {477}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	53.545	.50328	10.562	.52045	2.0991	.52365	2.0995	9.4937	1.9563
Stddev	.040	.00180	.008	.00169	.0126	.00113	.0022	.0492	.0088
%RSD	.07476	.35850	.07903	.32393	.59852	.21606	.10429	.51800	.44959
#1	53.573	.50456	10.568	.52164	2.1080	.52445	2.0979	9.4589	1.9625
#2	53.517	.50201	10.556	.51926	2.0902	.52285	2.1010	9.5284	1.9501

Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Elem	Sr4077	Th2837	Ti3349	Ti1908	U_3701	V_2924	Zn2062	Zr3391
Line	407.771 { 83}	283.730 {119}	334.904 {101}	190.856 {477}	370.152 { 91}	292.402 {115}	206.200 {163}	339.198 { 99}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.96422	1.0029	.94582	2.0182	2.1686	.47315	.47792	.48069
Stddev	.00107	.0050	.00443	.0006	.0094	.00370	.00282	.00041
%RSD	.11108	.49850	.46825	.03193	.43261	.78298	.59066	.08461
#1	.96346	1.0064	.94896	2.0177	2.1619	.47577	.47992	.48041
#2	.96497	.99934	.94269	2.0187	2.1752	.47053	.47593	.48098

Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit								
Low Limit								

Int. Std.	Y_2243	Y_3600	Y_3774
Line	224.306 {450}	360.073 { 94}	377.433 { 89}
Units	Cts/S	Cts/S	Cts/S
Avg	1471.9	30785.	5708.1
Stddev	1.7	109.	19.1
%RSD	.11474	.35288	.33526
#1	1470.7	30708.	5721.6
#2	1473.1	30862.	5694.6

Sample Name: 280-83155-F-1-E Acquired: 5/24/2016 3:42:00 Type: Unk
Method: 6500_026(v10) Mode: CONC Corr. Factor: 1.000000
User: kellyca Custom ID1: Custom ID2: Custom ID3:
Comment: 326191 6010B

Elem	Ag3280	Al1670	As1890	B_2089	Ba4554	Be3130	Bi2230	Ca3179	Cd2288
Line	328.068 {103}	167.079 {502}	189.042 {478}	208.959 {461}	455.403 { 74}	313.042 {108}	223.061 {451}	317.933 {106}	228.802 {447}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.00035	.00808	-.00109	.07803	.08250	-.00005	.00204	89.721	.00010
Stddev	.00037	.00028	.00366	.00055	.00001	.00002	.00091	.032	.00004
%RSD	104.45	3.4955	336.05	.71036	.00857	48.631	44.776	.03560	40.473

#1	.00009	.00788	-.00367	.07764	.08250	-.00003	.00269	89.743	.00013
#2	.00061	.00828	.00150	.07842	.08251	-.00006	.00139	89.698	.00007

Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Elem	Co2286	Cr2055	Cu3247	Fe2599	K_7664	Li6707	Mg2790	Mn2576	Mo2020
Line	228.616 {447}	205.560 {464}	324.754 {104}	259.940 {130}	766.490 { 44}	670.784 { 50}	279.079 {121}2	257.610 {131}	202.030 {467}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	-.00014	.00036	.00168	.03875	1.9964	.00855	39.130	.00276	.00115
Stddev	.00046	.00008	.00004	.00155	.0027	.00026	.088	.00005	.00075
%RSD	332.43	20.923	2.1639	4.0084	.13635	2.9954	.22433	1.8263	65.340

#1	-.00047	.00031	.00170	.03765	1.9983	.00873	39.192	.00280	.00062
#2	.00019	.00041	.00165	.03985	1.9944	.00837	39.068	.00273	.00168

Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Elem	Na8183	Ni2316	P_1782	Pb2203	S_1820	Sb2068	Se1960	Si2881	Sn1899
Line	818.326 { 41}	231.604 {446}	178.284 {489}	220.353 {453}	182.034 {485}	206.833 {463}	196.090 {472}	288.158 {117}	189.989 {477}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	16.111	.00394	.22037	-.00030	12.020	.00302	.01042	6.4040	.00007
Stddev	.040	.00021	.00053	.00088	.001	.00024	.00269	.0249	.00023
%RSD	.24682	5.3011	.23938	291.01	.00525	8.0131	25.861	.38909	334.97

#1	16.139	.00379	.22000	-.00093	12.020	.00319	.00851	6.3864	.00023
#2	16.083	.00408	.22075	.00032	12.021	.00285	.01232	6.4217	-.00009

Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Elem	Sr4077	Th2837	Ti3349	Ti1908	U_3701	V_2924	Zn2062	Zr3391	
Line	407.771 { 83}	283.730 {119}	334.904 {101}	190.856 {477}	370.152 { 91}	292.402 {115}	206.200 {163}	339.198 { 99}	
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	
Avg	.17315	.00143	.00032	.00183	.00920	.00108	.00148	-.00063	
Stddev	.00038	.00055	.00046	.00152	.02173	.00034	.00042	.00174	
%RSD	.21808	38.535	144.30	82.911	236.19	31.670	28.579	276.29	

#1	.17288	.00104	.00065	.00290	.02457	.00132	.00178	-.00186	
#2	.17341	.00182	-.00001	.00076	-.00617	.00084	.00118	.00060	

Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	
High Limit									
Low Limit									

Int. Std.	Y_2243	Y_3600	Y_3774						
Line	224.306 {450}	360.073 { 94}	377.433 { 89}						
Units	Cts/S	Cts/S	Cts/S						
Avg	1469.6	30691.	5688.7						
Stddev	1.5	33.	12.0						
%RSD	.09881	.10858	.21032						

#1	1470.6	30667.	5697.1						
#2	1468.6	30714.	5680.2						

Sample Name: 280-83155-F-2-C Acquired: 5/24/2016 3:44:46 Type: Unk
Method: 6500_026(v10) Mode: CONC Corr. Factor: 1.000000
User: kellyca Custom ID1: Custom ID2: Custom ID3:
Comment: 326191 6010B

Elem	Ag3280	Al1670	As1890	B_2089	Ba4554	Be3130	Bi2230	Ca3179	Cd2288
Line	328.068 {103}	167.079 {502}	189.042 {478}	208.959 {461}	455.403 { 74}	313.042 {108}	223.061 {451}	317.933 {106}	228.802 {447}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.00009	.00396	.00110	1.1332	.03373	.00006	.00067	415.55	.00051
Stddev	.00035	.00099	.00298	.0007	.00035	.00007	.00147	.25	.00009
%RSD	374.87	25.046	271.31	.06320	1.0234	123.91	220.17	.06057	17.239

#1	-.00015	.00326	.00320	1.1337	.03349	.00001	.00171	415.37	.00045
#2	.00034	.00466	-.00101	1.1327	.03397	.00011	-.00037	415.73	.00057

Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Elem	Co2286	Cr2055	Cu3247	Fe2599	K_7664	Li6707	Mg2790	Mn2576	Mo2020
Line	228.616 {447}	205.560 {464}	324.754 {104}	259.940 {130}	766.490 { 44}	670.784 { 50}	279.079 {121}2	257.610 {131}	202.030 {467}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.00390	.00015	.00203	14.283	33.861	.28412	137.32	2.5141	.00609
Stddev	.00015	.00025	.00025	.010	.072	.00096	.44	.0063	.00007
%RSD	3.7993	165.74	12.229	.06754	.21202	.33720	.32391	.24902	1.0733

#1	.00380	.00033	.00221	14.276	33.810	.28480	137.64	2.5186	.00604
#2	.00401	-.00003	.00186	14.290	33.912	.28344	137.01	2.5097	.00613

Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Elem	Na8183	Ni2316	P_1782	Pb2203	S_1820	Sb2068	Se1960	Si2881	Sn1899
Line	818.326 { 41}	231.604 {446}	178.284 {489}	220.353 {453}	182.034 {485}	206.833 {463}	196.090 {472}	288.158 {117}	189.989 {477}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	277.50	.03452	.00396	-.00138	F 624.66	.00142	.00741	4.9006	-.00140
Stddev	.07	.00053	.00399	.00178	1.44	.00163	.00004	.0061	.00065
%RSD	.02475	1.5229	100.80	128.71	.23003	115.26	.47721	.12489	46.811

#1	277.55	.03415	.00678	-.00264	625.68	.00257	.00739	4.8963	-.00186
#2	277.45	.03490	.00114	-.00012	623.64	.00026	.00744	4.9049	-.00094

Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Fail	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit					200.00				
Low Limit					-.02000				

Elem	Sr4077	Th2837	Ti3349	Ti1908	U_3701	V_2924	Zn2062	Zr3391	
Line	407.771 { 83}	283.730 {119}	334.904 {101}	190.856 {477}	370.152 { 91}	292.402 {115}	206.200 {163}	339.198 { 99}	
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	
Avg	2.4142	.00049	.00165	-.00074	-.00527	.00055	.01789	.00100	
Stddev	.0033	.00063	.00048	.00019	.00583	.00045	.00088	.00010	
%RSD	.13745	128.30	28.964	25.363	110.71	81.310	4.9444	9.6247	

#1	2.4118	.00094	.00131	-.00061	-.00114	.00023	.01851	.00093	
#2	2.4165	.00005	.00199	-.00088	-.00939	.00087	.01726	.00107	

Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	
High Limit									
Low Limit									

Int. Std.	Y_2243	Y_3600	Y_3774						
Line	224.306 {450}	360.073 { 94}	377.433 { 89}						
Units	Cts/S	Cts/S	Cts/S						
Avg	1351.3	28159.2	5459.2						
Stddev	.2	42.	13.9						
%RSD	.01553	.14949	.25547						

#1	1351.2	28130.	5469.0						
#2	1351.5	28189.	5449.3						

Sample Name: 280-83155-F-3-C Acquired: 5/24/2016 3:47:42 Type: Unk
Method: 6500_026(v10) Mode: CONC Corr. Factor: 1.000000
User: kellyca Custom ID1: Custom ID2: Custom ID3:
Comment: 326191 6010B

Elem	Ag3280	Al1670	As1890	B_2089	Ba4554	Be3130	Bi2230	Ca3179	Cd2288
Line	328.068 {103}	167.079 {502}	189.042 {478}	208.959 {461}	455.403 { 74}	313.042 {108}	223.061 {451}	317.933 {106}	228.802 {447}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.00040	1.0434	-.00408	.09189	.21152	.00015	.00225	116.65	.00008
Stddev	.00017	.0026	.00471	.00016	.00046	.00006	.00200	.36	.00010
%RSD	43.301	.24450	115.37	.17757	.21876	41.236	88.700	.30704	131.86

#1	.00028	1.0452	-.00075	.09177	.21119	.00011	.00366	116.40	.00001
#2	.00052	1.0416	-.00741	.09200	.21185	.00019	.00084	116.91	.00015

Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Elem	Co2286	Cr2055	Cu3247	Fe2599	K_7664	Li6707	Mg2790	Mn2576	Mo2020
Line	228.616 {447}	205.560 {464}	324.754 {104}	259.940 {130}	766.490 { 44}	670.784 { 50}	279.079 {121}2	257.610 {131}	202.030 {467}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.00057	.00831	.00707	8.9017	7.4989	.01182	54.085	.61723	.00125
Stddev	.00026	.00020	.00044	.0162	.0071	.00077	.238	.00155	.00041
%RSD	45.266	2.4025	6.1813	.18248	.09520	6.5288	.44050	.25056	32.630

#1	.00039	.00845	.00738	8.8902	7.4939	.01237	53.917	.61613	.00096
#2	.00075	.00817	.00676	8.9132	7.5040	.01128	54.254	.61832	.00154

Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Elem	Na5895	Na8183	Ni2316	P_1782	Pb2203	S_1820	Sb2068	Se1960	Si2881
Line	589.592 { 57}	818.326 { 41}	231.604 {446}	178.284 {489}	220.353 {453}	182.034 {485}	206.833 {463}	196.090 {472}	288.158 {117}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	W 9.6360	W 9.6630	.00563	.23589	-.00205	51.832	.00161	.01446	10.652
Stddev	.0149	.2252	.00020	.00740	.00238	.011	.00119	.00653	.005
%RSD	.15413	2.3302	3.6247	3.1377	115.90	.02209	73.835	45.155	.04513

#1	9.6255	9.5037	.00548	.24112	-.00373	51.824	.00246	.01908	10.648
#2	9.6465	9.8222	.00577	.23066	-.00037	51.840	.00077	.00984	10.655

Check ?	Chk Warn	Chk Warn	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit	9.0000	500.00							
Low Limit	-.50000	10.000							

Elem	Sn1899	Sr4077	Th2837	Ti3349	Ti1908	U_3701	V_2924	Zn2062	Zr3391
Line	189.989 {477}	407.771 { 83}	283.730 {119}	334.904 {101}	190.856 {477}	370.152 { 91}	292.402 {115}	206.200 {163}	339.198 { 99}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	-.00078	.34647	.00260	.01515	.00003	-.00275	.00285	.01140	.00086
Stddev	.00059	.00048	.00093	.00024	.00165	.02141	.00007	.00138	.00025
%RSD	75.152	.13918	35.602	1.5950	6486.9	778.30	2.5135	12.084	29.437

#1	-.00037	.34613	.00195	.01498	-.00114	.01239	.00280	.01237	.00068
#2	-.00120	.34682	.00326	.01532	.00119	-.01789	.00290	.01042	.00104

Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Int. Std.	Y_2243	Y_3600	Y_3774
Line	224.306 {450}	360.073 { 94}	377.433 { 89}
Units	Cts/S	Cts/S	Cts/S
Avg	1459.3	30581.	5605.7
Stddev	1.9	.	6.8
%RSD	.13179	.00097	.12186

#1	1460.6	30581.	5600.8
#2	1457.9	30581.	5610.5

Sample Name: 280-83155-F-4-C Acquired: 5/24/2016 3:50:27 Type: Unk
Method: 6500_026(v10) Mode: CONC Corr. Factor: 1.000000
User: kellyca Custom ID1: Custom ID2: Custom ID3:
Comment: 326191 6010B

Elem	Ag3280	Al1670	As1890	B_2089	Ba4554	Be3130	Bi2230	Ca3179	Cd2288
Line	328.068 {103}	167.079 {502}	189.042 {478}	208.959 {461}	455.403 { 74}	313.042 {108}	223.061 {451}	317.933 {106}	228.802 {447}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.00055	.01285	-.00540	.10826	.04934	-.00000	-.00065	112.66	.00033
Stddev	.00034	.00004	.00466	.00021	.00015	.00003	.00251	.90	.00017
%RSD	61.996	.32432	86.404	.19049	.31050	14596.	388.94	.79527	51.689

#1	.00031	.01282	-.00869	.10811	.04945	.00002	-.00242	113.29	.00045
#2	.00079	.01288	-.00210	.10841	.04923	-.00002	.00113	112.03	.00021

Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Elem	Co2286	Cr2055	Cu3247	Fe2599	K_7664	Li6707	Mg2790	Mn2576	Mo2020
Line	228.616 {447}	205.560 {464}	324.754 {104}	259.940 {130}	766.490 { 44}	670.784 { 50}	279.079 {121}2	257.610 {131}	202.030 {467}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	-.00009	.00025	.00306	.03150	1.9488	.01290	81.101	.17482	.00198
Stddev	.00018	.00012	.00001	.00181	.0134	.00014	.005	.00008	.00008
%RSD	198.04	48.694	.43640	5.7391	.68827	1.1115	.00610	.04333	3.9885

#1	-.00021	.00017	.00307	.03278	1.9393	.01300	81.097	.17476	.00192
#2	.00004	.00034	.00305	.03023	1.9583	.01280	81.104	.17487	.00204

Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Elem	Na8183	Ni2316	P_1782	Pb2203	S_1820	Sb2068	Se1960	Si2881	Sn1899
Line	818.326 { 41}	231.604 {446}	178.284 {489}	220.353 {453}	182.034 {485}	206.833 {463}	196.090 {472}	288.158 {117}	189.989 {477}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	21.937	.00919	.01374	.00146	34.966	.00197	.01172	8.2836	-.00075
Stddev	.107	.00036	.00194	.00211	.117	.00085	.00293	.0489	.00040
%RSD	.48560	3.8727	14.125	144.51	.33448	43.086	24.973	.58994	52.389

#1	21.861	.00944	.01511	.00296	35.049	.00137	.01379	8.3181	-.00103
#2	22.012	.00894	.01237	-.00003	34.883	.00257	.00965	8.2490	-.00048

Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Elem	Sr4077	Th2837	Ti3349	Ti1908	U_3701	V_2924	Zn2062	Zr3391
Line	407.771 { 83}	283.730 {119}	334.904 {101}	190.856 {477}	370.152 { 91}	292.402 {115}	206.200 {163}	339.198 { 99}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.32599	-.00026	.00044	.00304	.00147	.00037	.00043	.00071
Stddev	.00142	.00349	.00054	.00138	.01425	.00026	.00023	.00058
%RSD	.43607	1323.0	122.56	45.299	966.06	71.227	54.061	80.763

#1	.32700	-.00273	.00082	.00207	.01155	.00055	.00060	.00112
#2	.32499	.00221	.00006	.00401	-.00860	.00018	.00027	.00031

Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit								
Low Limit								

Int. Std.	Y_2243	Y_3600	Y_3774
Line	224.306 {450}	360.073 { 94}	377.433 { 89}
Units	Cts/S	Cts/S	Cts/S
Avg	1446.1	30131.	5615.1
Stddev	3.5	42.	33.7
%RSD	.23964	.14049	.60078

#1	1443.6	30161.	5591.3
#2	1448.5	30101.	5639.0

Sample Name: 280-83155-F-5-C Acquired: 5/24/2016 3:53:13 Type: Unk
Method: 6500_026(v10) Mode: CONC Corr. Factor: 1.000000
User: kellyca Custom ID1: Custom ID2: Custom ID3:
Comment: 326191 6010B

Elem	Ag3280	Al1670	As1890	B_2089	Ba4554	Be3130	Bi2230	Ca3179	Cd2288
Line	328.068 {103}	167.079 {502}	189.042 {478}	208.959 {461}	455.403 { 74}	313.042 {108}	223.061 {451}	317.933 {106}	228.802 {447}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.00028	.69449	-.00059	.15097	.01805	.00006	-.00011	198.02	.00017
Stddev	.00068	.00174	.00083	.00029	.00003	.00003	.00114	.99	.00019
%RSD	248.70	.25072	140.93	.19341	.17939	43.338	1059.8	.49764	111.29
#1	.00076	.69326	-.00000	.15076	.01807	.00008	-.00091	197.33	.00004
#2	-.00021	.69573	-.00117	.15117	.01802	.00004	.00070	198.72	.00030

Check ? Chk Pass Chk Pass Chk Pass Chk Pass Chk Pass Chk Pass Chk Pass Chk Pass Chk Pass
High Limit
Low Limit

Elem	Co2286	Cr2055	Cu3247	Fe2599	K_7664	Li6707	Mg2790	Mn2576	Mo2020
Line	228.616 {447}	205.560 {464}	324.754 {104}	259.940 {130}	766.490 { 44}	670.784 { 50}	279.079 {121}2	257.610 {131}	202.030 {467}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.00057	.00246	.00196	2.1819	3.3715	.02925	149.31	.08901	.00231
Stddev	.00036	.00014	.00018	.0049	.0280	.00025	.16	.00045	.00048
%RSD	62.405	5.5488	9.2045	.22399	.82969	.85520	.10865	.51084	20.757
#1	.00032	.00236	.00183	2.1784	3.3913	.02908	149.43	.08933	.00265
#2	.00082	.00255	.00208	2.1853	3.3517	.02943	149.20	.08868	.00197

Check ? Chk Pass Chk Pass Chk Pass Chk Pass Chk Pass Chk Pass Chk Pass Chk Pass Chk Pass
High Limit
Low Limit

Elem	Na8183	Ni2316	P_1782	Pb2203	S_1820	Sb2068	Se1960	Si2881	Sn1899
Line	818.326 { 41}	231.604 {446}	178.284 {489}	220.353 {453}	182.034 {485}	206.833 {463}	196.090 {472}	288.158 {117}	189.989 {477}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	32.238	.00540	.07996	.00350	F 244.62	.00125	.00508	11.394	-.00002
Stddev	.062	.00003	.00254	.00425	.74	.00243	.00018	.124	.00159
%RSD	.19294	.63451	3.1738	121.31	.30215	193.99	3.6312	1.0916	6744.3
#1	32.194	.00538	.07817	.00050	245.14	.00297	.00521	11.306	.00110
#2	32.282	.00543	.08176	.00651	244.09	-.00046	.00495	11.482	-.00115

Check ? Chk Pass Chk Pass Chk Pass Chk Pass Chk Fail
High Limit 200.00
Low Limit -.02000

Elem	Sr4077	Th2837	Ti3349	Ti1908	U_3701	V_2924	Zn2062	Zr3391
Line	407.771 { 83}	283.730 {119}	334.904 {101}	190.856 {477}	370.152 { 91}	292.402 {115}	206.200 {163}	339.198 { 99}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.41120	-.00185	.01212	.00201	-.00904	.00207	-.00026	.00052
Stddev	.00214	.00134	.00014	.00041	.01847	.00001	.00029	.00031
%RSD	.52081	72.529	1.1615	20.534	204.37	.27662	112.85	59.926
#1	.40969	-.00280	.01222	.00172	.00402	.00207	-.00005	.00074
#2	.41272	-.00090	.01202	.00230	-.02209	.00208	-.00046	.00030

Check ? Chk Pass Chk Pass Chk Pass Chk Pass Chk Pass Chk Pass Chk Pass Chk Pass
High Limit
Low Limit

Int. Std.	Y_2243	Y_3600	Y_3774
Line	224.306 {450}	360.073 { 94}	377.433 { 89}
Units	Cts/S	Cts/S	Cts/S
Avg	1416.2	29838.	5563.1
Stddev	1.7	.	29.1
%RSD	.11774	.00133	.52367
#1	1415.0	29838.	5583.7
#2	1417.4	29838.	5542.5

Sample Name: 280-83155-F-6-C Acquired: 5/24/2016 3:55:58 Type: Unk
Method: 6500_026(v10) Mode: CONC Corr. Factor: 1.000000
User: kellyca Custom ID1: Custom ID2: Custom ID3:
Comment: 326191 6010B

Elem	Ag3280	Al1670	As1890	B_2089	Ba4554	Be3130	Bi2230	Ca3179	Cd2288
Line	328.068 {103}	167.079 {502}	189.042 {478}	208.959 {461}	455.403 { 74}	313.042 {108}	223.061 {451}	317.933 {106}	228.802 {447}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	-.00008	.05129	-.00019	.50296	.01530	.00002	.00381	277.88	.00019
Stddev	.00043	.00022	.00685	.00132	.00004	.00007	.00404	.22	.00029
%RSD	522.11	.42778	3667.1	.26285	.23855	327.41	106.04	.08010	149.50

#1	-.00039	.05144	-.00503	.50203	.01527	-.00003	.00667	277.72	.00040
#2	.00022	.05113	.00466	.50390	.01532	.00007	.00095	278.03	-.00001

Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Elem	Co2286	Cr2055	Cu3247	Fe2599	K_7664	Li6707	Mg2790	Mn2576	Mo2020
Line	228.616 {447}	205.560 {464}	324.754 {104}	259.940 {130}	766.490 { 44}	670.784 { 50}	279.079 {121}2	257.610 {131}	202.030 {467}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.00226	.00051	.00474	.41136	5.4827	.04245	134.41	.57458	.00452
Stddev	.00018	.00007	.00028	.00660	.0167	.00016	.59	.00316	.00035
%RSD	8.1784	13.054	5.8432	1.6046	.30524	.36864	.43554	.54930	7.6779

#1	.00213	.00047	.00455	.41603	5.4709	.04256	134.00	.57235	.00427
#2	.00239	.00056	.00494	.40669	5.4946	.04234	134.82	.57682	.00476

Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Elem	Na8183	Ni2316	P_1782	Pb2203	S_1820	Sb2068	Se1960	Si2881	Sn1899
Line	818.326 { 41}	231.604 {446}	178.284 {489}	220.353 {453}	182.034 {485}	206.833 {463}	196.090 {472}	288.158 {117}	189.989 {477}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	42.244	.01338	.02364	-.00202	F 228.02	.00115	.00883	6.9940	-.00031
Stddev	.155	.00086	.00186	.00051	.12	.00127	.00224	.0087	.00077
%RSD	.36800	6.4259	7.8535	25.155	.05441	110.21	25.367	.12464	246.43

#1	42.134	.01277	.02495	-.00237	228.11	.00205	.00724	6.9878	.00023
#2	42.354	.01399	.02233	-.00166	227.93	.00025	.01041	7.0001	-.00085

Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Fail	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit					200.00				
Low Limit					-.02000				

Elem	Sr4077	Th2837	Ti3349	Ti1908	U_3701	V_2924	Zn2062	Zr3391
Line	407.771 { 83}	283.730 {119}	334.904 {101}	190.856 {477}	370.152 { 91}	292.402 {115}	206.200 {163}	339.198 { 99}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.77843	-.00211	.00196	-.00007	.01145	.00118	.00164	.00114
Stddev	.00108	.00251	.00052	.00175	.01019	.00007	.00072	.00121
%RSD	.13915	118.93	26.452	2377.5	88.937	5.9551	43.937	106.34

#1	.77766	-.00389	.00232	.00116	.01866	.00123	.00113	.00200
#2	.77920	-.00034	.00159	-.00131	.00425	.00114	.00215	.00028

Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit								
Low Limit								

Int. Std.	Y_2243	Y_3600	Y_3774
Line	224.306 {450}	360.073 { 94}	377.433 { 89}
Units	Cts/S	Cts/S	Cts/S
Avg	1395.5	29190.	5534.6
Stddev	1.8	110.	10.7
%RSD	.12935	.37791	.19285

#1	1396.8	29268.	5542.1
#2	1394.2	29112.	5527.0

Sample Name: ccvh-3900196 Acquired: 5/24/2016 3:58:45 Type: QC
Method: 6500_026(v10) Mode: CONC Corr. Factor: 1.000000
User: kellyca Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	Ag3280	Al3092	As1890	B_2089	Ba4554	Be3130	Bi2230	Ca3179	Cd2288	Co2286	Cr2055	Cu3247	Fe2714
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.00077	47.296	-.00062	.00513	.00040	-.00013	1.0500	-.01577	-.00086	.00343	-.00021	.00669	47.138
Stddev	.00052	.049	.00353	.00048	.00003	.00002	.0049	.00786	.00021	.00049	.00013	.00019	.024
%RSD	67.734	.10269	568.88	9.3903	6.3462	17.390	.47030	49.827	24.769	14.152	62.640	2.9089	.05193

#1	.00040	47.331	.00188	.00547	.00042	-.00011	1.0535	-.01021	-.00101	.00377	-.00012	.00683	47.121
#2	.00114	47.262	-.00312	.00479	.00039	-.00015	1.0465	-.02133	-.00071	.00309	-.00030	.00655	47.156

Check ?	None	Chk Pass	None	None	None	None	Chk Pass	None	None	None	None	None	Chk Pass
Value													
Range													

Elem	K_7664	Li6707	Mg2790	Mn2576	Mo2020	Na8183	Ni2316	P_1782	Pb2203	S_1820	Sb2068	Se1960	Si2881
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.00100	-.00036	.18449	-.00079	-.00207	258.83	-.00067	.00658	-.00191	5.0110	.00352	.00760	.00575
Stddev	.00105	.00094	.00331	.00005	.00004	.56	.00057	.00304	.00052	.0378	.00117	.00174	.00150
%RSD	105.98	261.80	1.7920	6.1859	1.8296	.21563	85.646	46.205	26.972	.75434	33.166	22.926	26.142

#1	.00025	-.00102	.18683	-.00083	-.00209	259.23	-.00107	.00873	-.00228	5.0377	.00434	.00637	.00469
#2	.00174	.00030	.18216	-.00076	-.00204	258.44	-.00026	.00443	-.00155	4.9842	.00269	.00883	.00682

Check ?	None	None	None	None	None	Chk Pass	None	None	None	Chk Pass	None	None	None
Value													
Range													

Elem	Sn1899	Sr4077	Th2837	Ti3349	Tl1908	U_3701	V_2924	Zn2062	Zr3391
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.00112	.00049	4.9617	.02413	.00089	10.268	-.01696	-.00176	-.00671
Stddev	.00025	.00004	.0188	.00039	.00203	.007	.00028	.00033	.00338
%RSD	22.482	8.2756	.37879	1.6239	228.69	.07062	1.6486	18.989	50.398

#1	.00094	.00046	4.9484	.02385	.00232	10.263	-.01716	-.00153	-.00432
#2	.00129	.00052	4.9750	.02441	-.00055	10.273	-.01676	-.00200	-.00910

Check ?	None	None	Chk Pass	None	None	Chk Pass	None	None	None
Value									
Range									

Int. Std.	Y_2243	Y_3600	Y_3774
Units	Cts/S	Cts/S	Cts/S
Avg	1470.2	30381.	5598.1
Stddev	1.8	33.	2.7
%RSD	.12313	.10895	.04900

#1	1469.0	30405.	5596.1
#2	1471.5	30358.	5600.0

Sample Name: ccv-3900195 Acquired: 5/24/2016 4:01:37 Type: QC
Method: 6500_026(v10) Mode: CONC Corr. Factor: 1.000000
User: kellyca Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	Ag3280	Al1670	As1890	B_2089	Ba4554	Be3130	Bi2230	Ca3179	Cd2288	Co2286	Cr2055	Cu3247	Fe2599	K_7664
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.49446	.52298	1.0194	.54853	.49328	.49719	.00180	4.8593	.51775	.51269	.50056	.50306	2.3820	52.219
Stddev	.00389	.00054	.0050	.00027	.00018	.00098	.00355	.0162	.00089	.00098	.00031	.00488	.0066	.143
%RSD	.78728	.10415	.49323	.04866	.03624	.19711	197.45	.33408	.17272	.19042	.06113	.96936	.27805	.27406

#1	.49171	.52337	1.0158	.54834	.49315	.49650	.00430	4.8478	.51838	.51338	.50078	.49961	2.3773	52.118
#2	.49722	.52260	1.0229	.54872	.49340	.49788	-.00071	4.8708	.51712	.51200	.50034	.50651	2.3867	52.321

Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	None	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Value														
Range														

Elem	Li6707	Mg2790	Mn2576	Mo2020	Na5895	Ni2316	P_1782	Pb2203	S_1820	Sb2068	Se1960	Si2881	Sn1899	Sr4077
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	1.0784	20.006	.48998	.50181	5.2793	.50783	1.0319	1.0492	.01248	1.0144	1.0563	4.8257	1.0009	.48655
Stddev	.0013	.203	.00429	.00065	.0233	.00086	.0018	.0028	.00072	.0070	.0044	.0131	.0003	.00153
%RSD	.11929	1.0166	.87608	.12950	.44057	.17031	.17539	.26744	5.7806	.69463	.41925	.27148	.03103	.31544

#1	1.0775	19.863	.48694	.50227	5.2957	.50722	1.0307	1.0511	.01197	1.0194	1.0531	4.8164	1.0006	.48547
#2	1.0793	20.150	.49302	.50135	5.2628	.50844	1.0332	1.0472	.01299	1.0095	1.0594	4.8350	1.0011	.48764

Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	None	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Value														
Range														

Elem	Th2837	Ti3349	Ti1908	U_3701	V_2924	Zn2062	Zr3391
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.00670	.47381	1.0424	.00407	.47539	.48611	.48652
Stddev	.00008	.00508	.0032	.00302	.00322	.00357	.00481
%RSD	1.2487	1.0723	.31026	74.185	.67639	.73501	.98955

#1	.00664	.47021	1.0401	.00193	.47312	.48358	.48311
#2	.00675	.47740	1.0447	.00620	.47767	.48864	.48992

Check ?	None	Chk Pass	Chk Pass	None	Chk Pass	Chk Pass	Chk Pass
Value							
Range							

Int. Std.	Y_2243	Y_3600	Y_3774
Units	Cts/S	Cts/S	Cts/S
Avg	1528.6	31576.	5644.1
Stddev	1.3	246.	46.2
%RSD	.08633	.77849	.81817

#1	1529.5	31749.	5676.7
#2	1527.7	31402.	5611.4

Sample Name: ccb Acquired: 5/24/2016 4:04:17 Type: QC
Method: 6500_026(v10) Mode: CONC Corr. Factor: 1.000000
User: kellyca Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	Ag3280	Al1670	As1890	B_2089	Ba4554	Be3130	Bi2230	Ca3179	Cd2288	Co2286	Cr2055	Cu3247
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.00036	-.00081	-.00174	F .00415	.00014	.00003	.00426	.00586	-.00009	.00003	-.00014	-.00040
Stddev	.00027	.00025	.00015	.00036	.00011	.00003	.00289	.00278	.00003	.00016	.00017	.00032
%RSD	76.832	30.618	8.9015	8.7171	77.972	97.189	67.831	47.372	37.623	476.74	127.71	79.989
#1	.00016	-.00099	-.00185	.00440	.00006	.00001	.00630	.00782	-.00011	.00014	-.00001	-.00018
#2	.00055	-.00064	-.00163	.00389	.00022	.00005	.00222	.00390	-.00006	-.00008	-.00026	-.00063
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Fail	Chk Pass	Chk Pass	None	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit				.00312								
Low Limit				-.00312								
Elem	Fe2599	K_7664	Li6707	Mg2790	Mn2576	Mo2020	Na5895	Ni2316	P_1782	Pb2203	S_1820	Sb2068
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.00200	.03082	-.00081	.00203	.00004	.00023	.01837	.00023	.00306	.00112	.00540	W .00387
Stddev	.00341	.02118	.00022	.00101	.00003	.00026	.00021	.00001	.00211	.00022	.00115	.00383
%RSD	170.63	68.716	26.800	49.860	71.519	111.12	1.1518	3.3379	68.903	19.206	21.384	98.968
#1	.00440	.04579	-.00066	.00275	.00002	.00005	.01822	.00022	.00157	.00128	.00621	.00658
#2	-.00041	.01584	-.00097	.00132	.00006	.00042	.01852	.00023	.00455	.00097	.00458	.00116
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	None	Chk Warn
High Limit												.00314
Low Limit												-.00314
Elem	Se1960	Si2881	Sn1899	Sr4077	Th2837	Ti3349	Ti1908	U_3701	V_2924	Zn2062	Zr3391	
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	
Avg	F .01527	.01724	-.00017	.00004	.00207	.00017	.00174	.00239	-.00015	-.00067	-.00006	
Stddev	.00574	.00420	.00012	.00007	.00116	.00009	.00125	.00352	.00059	.00004	.00049	
%RSD	37.603	24.350	69.921	194.39	56.096	56.247	71.788	147.09	391.61	6.4999	763.53	
#1	.01121	.02021	-.00026	.00009	.00289	.00023	.00086	.00488	.00026	-.00070	-.00041	
#2	.01933	.01428	-.00009	-.00001	.00125	.00010	.00263	-.00010	-.00056	-.00064	.00028	
Check ?	Chk Fail	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	
High Limit	.00972											
Low Limit	-.00972											
Int. Std.	Y_2243	Y_3600	Y_3774									
Units	Cts/S	Cts/S	Cts/S									
Avg	1539.9	31976.	5604.1									
Stddev	1.0	37.	11.2									
%RSD	.06567	.11548	.19999									
#1	1539.2	32002.	5612.1									
#2	1540.6	31950.	5596.2									

Sample Name: ccvl-3907489 Acquired: 5/24/2016 4:07:07 Type: QC
Method: 6500_026(v10) Mode: CONC Corr. Factor: 1.000000
User: kellyca Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	Ag3280	Al1670	As1890	B_2089	Ba4554	Be3130	Bi2230	Ca3179	Cd2288	Co2286	Cr2055	Cu3247
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.00985	.10552	.01431	.10526	.01013	.00096	.11477	.22564	.00522	.01037	.01033	.01489
Stddev	.00044	.00018	.00300	.00029	.00004	.00003	.00178	.00490	.00011	.00037	.00016	.00033
%RSD	4.4887	.17228	20.997	.27451	.35246	2.8932	1.5488	2.1737	2.0508	3.5306	1.5236	2.2286

#1	.01016	.10565	.01218	.10506	.01016	.00098	.11352	.22217	.00515	.01063	.01022	.01512
#2	.00954	.10539	.01643	.10546	.01011	.00094	.11603	.22911	.00530	.01011	.01044	.01465

Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Value												
Range												

Elem	Fe2599	K_7664	Li6707	Mg2790	Mn2576	Mo2020	Na5895	Ni2316	P_1782	Pb2203	S_1820	Sb2068
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.10667	3.0873	.00960	.20511	.00986	.02008	F 1.3455	.04081	2.8620	.01105	.00074	.02112
Stddev	.00079	.0037	.00063	.00541	.00013	.00001	.0032	.00054	.0119	.00045	.00636	.00234
%RSD	.74266	.11856	6.5197	2.6391	1.3228	.04923	.24156	1.3231	.41647	4.1115	854.34	11.069

#1	.10723	3.0847	.00916	.20128	.00995	.02007	1.3478	.04043	2.8535	.01073	-.00375	.02277
#2	.10611	3.0899	.01005	.20894	.00977	.02009	1.3432	.04119	2.8704	.01137	.00524	.01946

Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Fail	Chk Pass	Chk Pass	Chk Pass	None	Chk Pass
Value							1.0000					
Range							30.000%					

Elem	Se1960	Si2881	Sn1899	Sr4077	Th2837	Ti3349	Ti1908	U_3701	V_2924	Zn2062	Zr3391
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	F .02235	.47843	.09838	.00964	.01532	.00942	.01627	.07143	.00908	.02072	.01433
Stddev	.00251	.00724	.00002	.00000	.00114	.00002	.00104	.01470	.00014	.00132	.00165
%RSD	11.248	1.5124	.02399	.00592	7.4290	.20611	6.3969	20.581	1.5733	6.3930	11.510

#1	.02057	.47331	.09840	.00964	.01452	.00944	.01554	.06104	.00898	.02165	.01550
#2	.02413	.48355	.09836	.00964	.01613	.00941	.01701	.08183	.00919	.01978	.01317

Check ?	Chk Fail	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Value	.01500										
Range	30.000%										

Int. Std.	Y_2243	Y_3600	Y_3774
Units	Cts/S	Cts/S	Cts/S
Avg	1533.7	32101.	5618.9
Stddev	2.6	179.	18.0
%RSD	.16721	.55770	.31964

#1	1535.5	31975.	5631.6
#2	1531.9	32228.	5606.2

Sample Name: 280-83155-F-7-C Acquired: 5/24/2016 4:09:57 Type: Unk
Method: 6500_026(v10) Mode: CONC Corr. Factor: 1.000000
User: kellyca Custom ID1: Custom ID2: Custom ID3:
Comment: 326191 6010B

Elem	Ag3280	Al1670	As1890	B_2089	Ba4554	Be3130	Bi2230	Ca3179	Cd2288
Line	328.068 {103}	167.079 {502}	189.042 {478}	208.959 {461}	455.403 { 74}	313.042 {108}	223.061 {451}	317.933 {106}	228.802 {447}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.00018	.19204	-.00065	1.1837	.01048	-.00001	.00289	425.43	.00038
Stddev	.00046	.00128	.00339	.0001	.00008	.00010	.00493	17.26	.00018
%RSD	250.18	.66413	521.38	.00854	.80886	1210.4	170.57	4.0575	48.220

#1	.00050	.19114	.00175	1.1836	.01054	-.00008	-.00060	437.64	.00051
#2	-.00014	.19294	-.00305	1.1838	.01042	.00006	.00638	413.23	.00025

Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Elem	Co2286	Cr2055	Cu3247	Fe2599	K_7664	Li6707	Mg2790	Mn2576	Mo2020
Line	228.616 {447}	205.560 {464}	324.754 {104}	259.940 {130}	766.490 { 44}	670.784 { 50}	279.079 {121}2	257.610 {131}	202.030 {467}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.00187	.00038	.00332	1.7451	11.769	.12964	266.38	.71312	.00109
Stddev	.00000	.00001	.00013	.0322	.206	.00303	.58	.00052	.00003
%RSD	.24759	2.0593	4.0218	1.8447	1.7503	2.3357	.21654	.07224	2.5998

#1	.00187	.00037	.00322	1.7223	11.623	.12750	266.79	.71348	.00107
#2	.00186	.00039	.00341	1.7679	11.914	.13178	265.97	.71275	.00111

Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Elem	Na8183	Ni2316	P_1782	Pb2203	S_1820	Sb2068	Se1960	Si2881	Sn1899
Line	818.326 { 41}	231.604 {446}	178.284 {489}	220.353 {453}	182.034 {485}	206.833 {463}	196.090 {472}	288.158 {117}	189.989 {477}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	152.59	.01028	.02896	W -.00399	F 610.12	.00071	.01048	9.6183	-.00012
Stddev	1.74	.00025	.00164	.00461	.82	.00180	.00710	.1265	.00082
%RSD	1.1422	2.4065	5.6772	115.50	.13457	255.01	67.702	1.3154	687.30

#1	151.35	.01011	.03012	-.00073	609.54	-.00057	.00547	9.5288	-.00070
#2	153.82	.01046	.02780	-.00726	610.70	.00198	.01550	9.7077	.00046

Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Warn	Chk Fail	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit				10.000	200.00				
Low Limit				-.00300	-.02000				

Elem	Sr4077	Th2837	Ti3349	Ti1908	U_3701	V_2924	Zn2062	Zr3391	
Line	407.771 { 83}	283.730 {119}	334.904 {101}	190.856 {477}	370.152 { 91}	292.402 {115}	206.200 {163}	339.198 { 99}	
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	
Avg	1.9076	.00092	.00520	-.00162	.01403	.00102	.00091	.00189	
Stddev	.0240	.00121	.00003	.00137	.00188	.00064	.00220	.00034	
%RSD	1.2568	132.21	.61723	84.304	13.372	62.283	243.01	18.202	

#1	1.8907	.00006	.00523	-.00259	.01270	.00147	-.00065	.00164	
#2	1.9246	.00178	.00518	-.00066	.01536	.00057	.00247	.00213	

Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	
High Limit									
Low Limit									

Int. Std.	Y_2243	Y_3600	Y_3774						
Line	224.306 {450}	360.073 { 94}	377.433 { 89}						
Units	Cts/S	Cts/S	Cts/S						
Avg	1338.0	27927.	5352.6						
Stddev	5.6	29.	52.3						
%RSD	.42062	.10326	.97780						

#1	1342.0	27948.	5389.6						
#2	1334.1	27907.	5315.6						

Sample Name: 280-83155-F-8-C Acquired: 5/24/2016 4:12:48 Type: Unk
Method: 6500_026(v10) Mode: CONC Corr. Factor: 1.000000
User: kellyca Custom ID1: Custom ID2: Custom ID3:
Comment: 326191 6010B

Elem	Ag3280	Al1670	As1890	B_2089	Ba4554	Be3130	Bi2230	Ca3179	Cd2288
Line	328.068 {103}	167.079 {502}	189.042 {478}	208.959 {461}	455.403 {74}	313.042 {108}	223.061 {451}	317.933 {106}	228.802 {447}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	-.00003	.67961	-.00087	.83019	.01593	.00006	.00277	242.21	.00030
Stddev	.00024	.00082	.00315	.00345	.00020	.00001	.00209	.92	.00031
%RSD	791.89	.12079	363.49	.41548	1.2727	11.509	75.394	.38018	100.56

#1	.00014	.67903	-.00309	.83263	.01579	.00006	.00424	241.56	.00052
#2	-.00020	.68019	.00136	.82775	.01607	.00006	.00129	242.86	.00009

Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Elem	Co2286	Cr2055	Cu3247	Fe2599	K_7664	Li6707	Mg2790	Mn2576	Mo2020
Line	228.616 {447}	205.560 {464}	324.754 {104}	259.940 {130}	766.490 {44}	670.784 {50}	279.079 {121}2	257.610 {131}	202.030 {467}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.00150	.00221	.00281	1.1752	6.3319	.05458	262.21	.23662	.00459
Stddev	.00074	.00007	.00017	.00089	.0192	.00121	.58	.00023	.00040
%RSD	49.322	3.2291	6.1539	.75553	.30330	2.2182	.22110	.09860	8.6866

#1	.00098	.00216	.00269	1.1689	6.3183	.05544	261.80	.23646	.00487
#2	.00203	.00226	.00293	1.1815	6.3455	.05373	262.62	.23679	.00431

Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Elem	Na8183	Ni2316	P_1782	Pb2203	S_1820	Sb2068	Se1960	Si2881	Sn1899
Line	818.326 {41}	231.604 {446}	178.284 {489}	220.353 {453}	182.034 {485}	206.833 {463}	196.090 {472}	288.158 {117}	189.989 {477}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	109.82	.00591	.05737	.00031	F 402.04	.00222	.01208	8.7564	-.00182
Stddev	.07	.00061	.00247	.00105	1.19	.00092	.00500	.0627	.00086
%RSD	.06527	10.266	4.3059	333.62	.29722	41.455	41.357	.71568	47.064

#1	109.77	.00548	.05912	.00105	402.88	.00287	.00855	8.7120	-.00122
#2	109.87	.00634	.05563	-.00043	401.19	.00157	.01561	8.8007	-.00243

Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Fail	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit					200.00				
Low Limit					-.02000				

Elem	Sr4077	Th2837	Ti3349	Ti1908	U_3701	V_2924	Zn2062	Zr3391	
Line	407.771 {83}	283.730 {119}	334.904 {101}	190.856 {477}	370.152 {91}	292.402 {115}	206.200 {163}	339.198 {99}	
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	
Avg	1.1267	-.00011	.01346	-.00055	.03057	.00254	.00141	.00176	
Stddev	.0010	.00251	.00047	.00057	.00761	.00070	.00004	.00084	
%RSD	.09361	2379.9	3.5137	102.51	24.905	27.600	2.8225	47.842	

#1	1.1259	.00167	.01313	-.00095	.02519	.00204	.00138	.00116	
#2	1.1274	-.00188	.01380	-.00015	.03595	.00303	.00144	.00235	

Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	
High Limit									
Low Limit									

Int. Std.	Y_2243	Y_3600	Y_3774						
Line	224.306 {450}	360.073 {94}	377.433 {89}						
Units	Cts/S	Cts/S	Cts/S						
Avg	1388.7	28815.	5456.4						
Stddev	1.0	12.	7.0						
%RSD	.07252	.04122	.12830						

#1	1388.0	28824.	5451.5						
#2	1389.5	28807.	5461.4						

Sample Name: 280-83155-F-9-C Acquired: 5/24/2016 4:15:32 Type: Unk
Method: 6500_026(v10) Mode: CONC Corr. Factor: 1.000000
User: kellyca Custom ID1: Custom ID2: Custom ID3:
Comment: 326191 6010B

Elem	Ag3280	Al1670	As1890	B_2089	Ba4554	Be3130	Bi2230	Ca3179	Cd2288
Line	328.068 {103}	167.079 {502}	189.042 {478}	208.959 {461}	455.403 { 74}	313.042 {108}	223.061 {451}	317.933 {106}	228.802 {447}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.00010	.02545	.00697	.69699	.01990	-.00000	.00325	353.70	.00010
Stddev	.00014	.00090	.00551	.00051	.00017	.00009	.00381	2.16	.00016
%RSD	146.05	3.5476	79.091	.07388	.87793	6076.1	117.40	.61155	164.73

#1	.00020	.02481	.01086	.69663	.01978	-.00006	.00055	352.17	-.00002
#2	-.00000	.02609	.00307	.69735	.02002	.00006	.00594	355.23	.00021

Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Elem	Co2286	Cr2055	Cu3247	Fe2599	K_7664	Li6707	Mg2790	Mn2576	Mo2020
Line	228.616 {447}	205.560 {464}	324.754 {104}	259.940 {130}	766.490 { 44}	670.784 { 50}	279.079 {121}2	257.610 {131}	202.030 {467}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.01063	.00054	.00141	6.2310	4.8281	.04241	152.70	4.2005	.00130
Stddev	.00011	.00008	.00021	.0561	.0313	.00060	.26	.0204	.00019
%RSD	1.0416	15.428	14.998	.90057	.64889	1.4149	.17290	.48490	14.352

#1	.01055	.00060	.00156	6.1914	4.8060	.04199	152.89	4.2149	.00144
#2	.01071	.00048	.00126	6.2707	4.8503	.04284	152.52	4.1861	.00117

Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Elem	Na8183	Ni2316	P_1782	Pb2203	S_1820	Sb2068	Se1960	Si2881	Sn1899
Line	818.326 { 41}	231.604 {446}	178.284 {489}	220.353 {453}	182.034 {485}	206.833 {463}	196.090 {472}	288.158 {117}	189.989 {477}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	87.001	.00920	.04477	-.00108	F 372.50	.00139	.00922	8.4380	-.00024
Stddev	.453	.00030	.00313	.00010	.97	.00159	.00165	.0719	.00033
%RSD	.52042	3.3127	6.9901	9.6018	.26169	115.08	17.956	.85168	137.19

#1	86.680	.00941	.04698	-.00100	371.81	.00251	.01039	8.3871	-.00001
#2	87.321	.00898	.04256	-.00115	373.19	.00026	.00805	8.4888	-.00048

Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Fail	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit					200.00				
Low Limit					-.02000				

Elem	Sr4077	Th2837	Ti3349	Ti1908	U_3701	V_2924	Zn2062	Zr3391	
Line	407.771 { 83}	283.730 {119}	334.904 {101}	190.856 {477}	370.152 { 91}	292.402 {115}	206.200 {163}	339.198 { 99}	
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	
Avg	.89647	-.00004	.00160	-.00029	-.02246	.00047	.00184	-.00023	
Stddev	.00542	.00131	.00001	.00063	.00399	.00054	.00049	.00074	
%RSD	.60511	3519.2	.35549	216.44	17.775	114.43	26.812	323.74	

#1	.89264	.00089	.00160	-.00074	-.01964	.00009	.00149	-.00075	
#2	.90031	-.00097	.00159	.00016	-.02528	.00085	.00219	.00029	

Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	
High Limit									
Low Limit									

Int. Std.	Y_2243	Y_3600	Y_3774						
Line	224.306 {450}	360.073 { 94}	377.433 { 89}						
Units	Cts/S	Cts/S	Cts/S						
Avg	1380.0	28836.	5456.7						
Stddev	4.3	23.	30.6						
%RSD	.31343	.07946	.56142						

#1	1383.0	28820.	5478.4						
#2	1376.9	28852.	5435.1						

Sample Name: 280-83155-F-10-C Acquired: 5/24/2016 4:18:10 Type: Unk
Method: 6500_026(v10) Mode: CONC Corr. Factor: 1.000000
User: kellyca Custom ID1: Custom ID2: Custom ID3:
Comment: 326191 6010B

Elem	Ag3280	Al1670	As1890	B_2089	Ba4554	Be3130	Bi2230	Ca3179	Cd2288
Line	328.068 {103}	167.079 {502}	189.042 {478}	208.959 {461}	455.403 { 74}	313.042 {108}	223.061 {451}	317.933 {106}	228.802 {447}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.00059	.00096	-.00001	.16727	.01924	.00007	.00414	198.75	.00012
Stddev	.00034	.00198	.00277	.00349	.00024	.00006	.00218	.15	.00010
%RSD	57.265	206.12	35890.	2.0862	1.2550	79.762	52.709	.07609	90.370

#1	.00083	-.00044	.00195	.16974	.01941	.00011	.00569	198.64	.00004
#2	.00035	.00237	-.00197	.16480	.01907	.00003	.00260	198.86	.00019

Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Elem	Co2286	Cr2055	Cu3247	Fe2599	K_7664	Li6707	Mg2790	Mn2576	Mo2020
Line	228.616 {447}	205.560 {464}	324.754 {104}	259.940 {130}	766.490 { 44}	670.784 { 50}	279.079 {121}2	257.610 {131}	202.030 {467}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	-.00002	-.00002	.02292	.01349	6.5838	.02372	70.001	.00651	.00849
Stddev	.00023	.00008	.00006	.00159	.0354	.00006	.197	.00016	.00002
%RSD	1186.4	380.11	.28324	11.807	.53802	.26837	.28205	2.3904	.23357

#1	-.00018	.00004	.02297	.01462	6.5588	.02367	69.861	.00640	.00851
#2	.00014	-.00008	.02288	.01236	6.6089	.02376	70.141	.00662	.00848

Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Elem	Na5895	Na8183	Ni2316	P_1782	Pb2203	S_1820	Sb2068	Se1960	Si2881
Line	589.592 { 57}	818.326 { 41}	231.604 {446}	178.284 {489}	220.353 {453}	182.034 {485}	206.833 {463}	196.090 {472}	288.158 {117}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	F 10.214	10.014	.00450	.06946	-.00168	134.93	.00213	.01086	4.8083
Stddev	.012	.080	.00012	.00075	.00007	.06	.00002	.00520	.0510
%RSD	.11929	.80033	2.6622	1.0730	4.2322	.04573	.93449	47.876	1.0618

#1	10.223	10.071	.00442	.06999	-.00163	134.89	.00215	.01454	4.7722
#2	10.206	9.9575	.00459	.06893	-.00173	134.97	.00212	.00718	4.8444

Check ?	Chk Fail	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit	10.000								
Low Limit	-1.0000								

Elem	Sn1899	Sr4077	Th2837	Ti3349	Ti1908	U_3701	V_2924	Zn2062	Zr3391
Line	189.989 {477}	407.771 { 83}	283.730 {119}	334.904 {101}	190.856 {477}	370.152 { 91}	292.402 {115}	206.200 {163}	339.198 { 99}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	-.00128	.43894	.00263	.00062	.00188	-.00685	.00072	.00007	.00073
Stddev	.00150	.00112	.00100	.00013	.00161	.00720	.00011	.00139	.00012
%RSD	117.70	.25421	38.004	20.965	85.356	105.07	15.735	2126.4	15.977

#1	-.00021	.43973	.00192	.00071	.00075	-.01194	.00064	.00105	.00081
#2	-.00234	.43815	.00334	.00053	.00302	-.00176	.00081	-.00092	.00065

Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Int. Std.	Y_2243	Y_3600	Y_3774
Line	224.306 {450}	360.073 { 94}	377.433 { 89}
Units	Cts/S	Cts/S	Cts/S
Avg	1428.5	29830.	5534.8
Stddev	.2	135.	23.8
%RSD	.01727	.45200	.43088

#1	1428.7	29926.	5551.7
#2	1428.4	29735.	5517.9

Sample Name: 280-83230-E-1-B Acquired: 5/24/2016 4:20:51 Type: Unk
Method: 6500_026(v10) Mode: CONC Corr. Factor: 1.000000
User: kellyca Custom ID1: Custom ID2: Custom ID3:
Comment: 326191 6010B

Elem	Ag3280	Al1670	As1890	B_2089	Ba4554	Be3130	Bi2230	Ca3179	Cd2288
Line	328.068 {103}	167.079 {502}	189.042 {478}	208.959 {461}	455.403 { 74}	313.042 {108}	223.061 {451}	317.933 {106}	228.802 {447}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.00026	.00601	-.00460	.01495	.00373	-.00005	.00095	3.3210	.00005
Stddev	.00009	.00058	.00182	.00035	.00020	.00005	.00278	.0015	.00004
%RSD	35.328	9.5647	39.649	2.3518	5.3765	106.52	292.00	.04658	77.054

#1	.00033	.00561	-.00331	.01470	.00387	-.00009	.00292	3.3221	.00007
#2	.00020	.00642	-.00589	.01520	.00359	-.00001	-.00101	3.3199	.00002

Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Elem	Co2286	Cr2055	Cu3247	Fe2599	K_7664	Li6707	Mg2790	Mn2576	Mo2020
Line	228.616 {447}	205.560 {464}	324.754 {104}	259.940 {130}	766.490 { 44}	670.784 { 50}	279.079 {121}2	257.610 {131}	202.030 {467}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	-.00007	.00011	.00037	.26161	.44392	-.00036	1.5029	.08702	-.00006
Stddev	.00016	.00037	.00038	.00230	.03024	.00024	.0097	.00004	.00012
%RSD	243.51	347.24	103.91	.87984	6.8121	67.080	.64704	.04232	186.37

#1	.00005	-.00016	.00010	.26324	.46531	-.00019	1.4960	.08699	-.00014
#2	-.00018	.00037	.00063	.25999	.42254	-.00053	1.5098	.08704	.00002

Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Elem	Na5895	Ni2316	P_1782	Pb2203	S_1820	Sb2068	Se1960	Si2881	Sn1899
Line	589.592 { 57}	231.604 {446}	178.284 {489}	220.353 {453}	182.034 {485}	206.833 {463}	196.090 {472}	288.158 {117}	189.989 {477}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	2.2438	.00071	.00389	.00086	.61749	.00179	.00670	4.9855	-.00076
Stddev	.0021	.00016	.00308	.00174	.00222	.00007	.00455	.0113	.00091
%RSD	.09344	22.458	79.220	202.00	.35907	3.9547	67.949	.22668	119.99

#1	2.2423	.00060	.00606	-.00037	.61592	.00184	.00992	4.9775	-.00140
#2	2.2452	.00082	.00171	.00210	.61906	.00174	.00348	4.9935	-.00012

Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Elem	Sr4077	Th2837	Ti3349	Ti1908	U_3701	V_2924	Zn2062	Zr3391	
Line	407.771 { 83}	283.730 {119}	334.904 {101}	190.856 {477}	370.152 { 91}	292.402 {115}	206.200 {163}	339.198 { 99}	
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	
Avg	.02772	.00035	.00008	.00167	.00503	.00040	-.00001	.00075	
Stddev	.00002	.00024	.00024	.00076	.01596	.00000	.00063	.00007	
%RSD	.08837	67.688	288.54	45.722	317.27	.04282	7154.6	9.4970	

#1	.02774	.00018	-.00009	.00220	-.00625	.00040	-.00046	.00070	
#2	.02771	.00052	.00025	.00113	.01631	.00040	.00044	.00080	

Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	
High Limit									
Low Limit									

Int. Std.	Y_2243	Y_3600	Y_3774						
Line	224.306 {450}	360.073 { 94}	377.433 { 89}						
Units	Cts/S	Cts/S	Cts/S						
Avg	1551.1	32068.	5660.0						
Stddev	.6	46.	8.5						
%RSD	.03551	.14489	.14945						

#1	1550.7	32101.	5654.0						
#2	1551.5	32035.	5666.0						

Sample Name: 280-83230-E-2-B Acquired: 5/24/2016 4:23:33 Type: Unk
Method: 6500_026(v10) Mode: CONC Corr. Factor: 1.000000
User: kellyca Custom ID1: Custom ID2: Custom ID3:
Comment: 326191 6010B

Elem	Ag3280	Al1670	As1890	B_2089	Ba4554	Be3130	Bi2230	Ca3179	Cd2288
Line	328.068 {103}	167.079 {502}	189.042 {478}	208.959 {461}	455.403 { 74}	313.042 {108}	223.061 {451}	317.933 {106}	228.802 {447}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.00021	.00211	-.00069	.03107	.00201	.00007	.00353	11.454	-.00007
Stddev	.00025	.00004	.00217	.00067	.00001	.00007	.00136	.004	.00019
%RSD	123.68	1.9395	315.57	2.1560	.38063	98.776	38.568	.03865	268.82

#1	.00003	.00208	.00085	.03154	.00200	.00002	.00449	11.457	-.00020
#2	.00039	.00214	-.00222	.03059	.00202	.00012	.00257	11.451	.00006

Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Elem	Co2286	Cr2055	Cu3247	Fe2599	K_7664	Li6707	Mg2790	Mn2576	Mo2020
Line	228.616 {447}	205.560 {464}	324.754 {104}	259.940 {130}	766.490 { 44}	670.784 { 50}	279.079 {121}2	257.610 {131}	202.030 {467}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	-.00035	-.00006	.00083	.01997	.58618	-.00021	6.2499	.43229	.00029
Stddev	.00044	.00010	.00022	.00246	.05569	.00039	.0155	.00082	.00013
%RSD	127.96	151.73	27.046	12.298	9.5003	188.70	.24769	.18999	45.943

#1	-.00066	.00000	.00099	.02171	.54680	.00007	6.2609	.43287	.00039
#2	-.00003	-.00013	.00067	.01823	.62556	-.00048	6.2390	.43171	.00020

Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Elem	Na5895	Ni2316	P_1782	Pb2203	S_1820	Sb2068	Se1960	Si2881	Sn1899
Line	589.592 { 57}	231.604 {446}	178.284 {489}	220.353 {453}	182.034 {485}	206.833 {463}	196.090 {472}	288.158 {117}	189.989 {477}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	6.6814	.00183	.03218	.00015	1.5923	.00100	.00803	14.315	-.00156
Stddev	.0110	.00038	.00613	.00055	.0040	.00002	.00476	.067	.00121
%RSD	.16482	20.446	19.035	366.68	.25060	2.0304	59.299	.46631	77.949

#1	6.6736	.00210	.02785	.00054	1.5952	.00102	.00466	14.268	-.00070
#2	6.6892	.00157	.03652	-.00024	1.5895	.00099	.01140	14.363	-.00242

Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Elem	Sr4077	Th2837	Ti3349	Ti1908	U_3701	V_2924	Zn2062	Zr3391
Line	407.771 { 83}	283.730 {119}	334.904 {101}	190.856 {477}	370.152 { 91}	292.402 {115}	206.200 {163}	339.198 { 99}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.07236	.00188	.00014	.00319	.00342	.00103	-.00032	.00072
Stddev	.00004	.00003	.00010	.00150	.00000	.00012	.00126	.00107
%RSD	.06005	1.8386	70.288	47.036	.08598	11.631	394.92	148.92

#1	.07233	.00186	.00021	.00425	.00342	.00095	.00057	-.00004
#2	.07239	.00191	.00007	.00213	.00343	.00112	-.00121	.00147

Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit								
Low Limit								

Int. Std.	Y_2243	Y_3600	Y_3774
Line	224.306 {450}	360.073 { 94}	377.433 { 89}
Units	Cts/S	Cts/S	Cts/S
Avg	1536.8	31727.	5674.9
Stddev	1.7	61.	.4
%RSD	.11077	.19368	.00701

#1	1535.6	31771.	5674.6
#2	1538.0	31684.	5675.1

Sample Name: 280-83230-E-3-B Acquired: 5/24/2016 4:26:13 Type: Unk
Method: 6500_026(v10) Mode: CONC Corr. Factor: 1.000000
User: kellyca Custom ID1: Custom ID2: Custom ID3:
Comment: 326191 6010B

Elem	Ag3280	Al1670	As1890	B_2089	Ba4554	Be3130	Bi2230	Ca3179	Cd2288
Line	328.068 {103}	167.079 {502}	189.042 {478}	208.959 {461}	455.403 { 74}	313.042 {108}	223.061 {451}	317.933 {106}	228.802 {447}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.00059	.00258	.00568	.08712	.00382	-.00004	-.00244	20.483	.00030
Stddev	.00006	.00012	.00149	.00045	.00001	.00007	.00172	.019	.00007
%RSD	9.5469	4.5092	26.216	.51536	.27268	168.78	70.541	.09256	22.099

#1	.00063	.00266	.00673	.08744	.00382	-.00009	-.00366	20.497	.00035
#2	.00055	.00249	.00463	.08680	.00381	.00001	-.00122	20.470	.00026

Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Elem	Co2286	Cr2055	Cu3247	Fe2599	K_7664	Li6707	Mg2790	Mn2576	Mo2020
Line	228.616 {447}	205.560 {464}	324.754 {104}	259.940 {130}	766.490 { 44}	670.784 { 50}	279.079 {121}2	257.610 {131}	202.030 {467}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	-.00024	.00016	.00069	.49994	.92902	-.00055	11.148	1.6851	.00063
Stddev	.00023	.00013	.00003	.00241	.02288	.00007	.006	.0007	.00016
%RSD	94.075	85.532	3.9154	.48282	2.4627	13.538	.05115	.04215	25.195

#1	-.00040	.00025	.00071	.50165	.91285	-.00060	11.144	1.6856	.00052
#2	-.00008	.00006	.00067	.49823	.94520	-.00049	11.152	1.6846	.00075

Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Elem	Na8183	Ni2316	P_1782	Pb2203	S_1820	Sb2068	Se1960	Si2881	Sn1899
Line	818.326 { 41}	231.604 {446}	178.284 {489}	220.353 {453}	182.034 {485}	206.833 {463}	196.090 {472}	288.158 {117}	189.989 {477}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	11.386	.00146	.41008	-.00045	2.9508	.00056	.01236	25.215	-.00051
Stddev	.204	.00058	.00749	.00228	.0131	.00143	.00604	.021	.00084
%RSD	1.7946	39.966	1.8264	512.32	.44315	253.90	48.896	.08512	164.57

#1	11.242	.00104	.40478	.00117	2.9601	.00157	.00809	25.230	-.00110
#2	11.531	.00187	.41538	-.00206	2.9416	-.00045	.01663	25.199	.00008

Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Elem	Sr4077	Th2837	Ti3349	Ti1908	U_3701	V_2924	Zn2062	Zr3391
Line	407.771 { 83}	283.730 {119}	334.904 {101}	190.856 {477}	370.152 { 91}	292.402 {115}	206.200 {163}	339.198 { 99}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.12351	.00176	.00005	.00011	-.00251	.00005	-.00011	.00074
Stddev	.00019	.00107	.00005	.00066	.01838	.00032	.00110	.00234
%RSD	.15011	60.985	88.386	600.85	731.72	652.81	959.37	316.71

#1	.12338	.00100	.00002	.00058	.01049	.00027	.00066	-.00092
#2	.12364	.00252	.00009	-.00036	-.01551	-.00017	-.00089	.00239

Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit								
Low Limit								

Int. Std.	Y_2243	Y_3600	Y_3774
Line	224.306 {450}	360.073 { 94}	377.433 { 89}
Units	Cts/S	Cts/S	Cts/S
Avg	1522.5	31301.	5639.2
Stddev	.4	7.	5.8
%RSD	.02616	.02319	.10363

#1	1522.2	31296.	5635.0
#2	1522.8	31306.	5643.3

Sample Name: 280-83230-E-4-B Acquired: 5/24/2016 4:28:55 Type: Unk
Method: 6500_026(v10) Mode: CONC Corr. Factor: 1.000000
User: kellyca Custom ID1: Custom ID2: Custom ID3:
Comment: 326191 6010B

Elem	Ag3280	Al1670	As1890	B_2089	Ba4554	Be3130	Bi2230	Ca3179	Cd2288
Line	328.068 {103}	167.079 {502}	189.042 {478}	208.959 {461}	455.403 { 74}	313.042 {108}	223.061 {451}	317.933 {106}	228.802 {447}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.00055	.01444	.00322	.25973	.10548	.00002	.00408	38.357	.00004
Stddev	.00050	.00173	.00316	.00244	.00139	.00010	.00207	.410	.00002
%RSD	89.995	11.966	98.336	.93764	1.3199	620.56	50.766	1.0689	47.118

#1	.00090	.01566	.00098	.26146	.10450	-.00005	.00262	38.068	.00005
#2	.00020	.01321	.00545	.25801	.10647	.00008	.00555	38.647	.00003

Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Elem	Co2286	Cr2055	Cu3247	Fe2599	K_7664	Li6707	Mg2790	Mn2576	Mo2020
Line	228.616 {447}	205.560 {464}	324.754 {104}	259.940 {130}	766.490 { 44}	670.784 { 50}	279.079 {121}2	257.610 {131}	202.030 {467}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.00179	.00040	.00097	22.608	8.0005	-.00083	14.460	4.1264	-.00046
Stddev	.00023	.00008	.00019	.350	.0896	.00041	.005	.0049	.00007
%RSD	13.099	21.266	19.814	1.5500	1.1200	49.600	.03345	.11801	15.405

#1	.00195	.00046	.00083	22.360	7.9371	-.00112	14.464	4.1230	-.00041
#2	.00162	.00034	.00111	22.856	8.0638	-.00054	14.457	4.1298	-.00051

Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Elem	Na8183	Ni2316	P_1782	Pb2203	S_1820	Sb2068	Se1960	Si2881	Sn1899
Line	818.326 { 41}	231.604 {446}	178.284 {489}	220.353 {453}	182.034 {485}	206.833 {463}	196.090 {472}	288.158 {117}	189.989 {477}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	20.693	.00164	.02577	-.00122	2.6479	.00213	.00822	9.1582	.00026
Stddev	.005	.00040	.00005	.00198	.0021	.00072	.00340	.1267	.00073
%RSD	.02307	24.064	.20942	162.61	.07744	33.696	41.407	1.3829	274.55

#1	20.696	.00192	.02573	.00018	2.6494	.00163	.01063	9.0687	.00078
#2	20.689	.00136	.02581	-.00261	2.6465	.00264	.00581	9.2478	-.00025

Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Elem	Sr4077	Th2837	Ti3349	Ti1908	U_3701	V_2924	Zn2062	Zr3391
Line	407.771 { 83}	283.730 {119}	334.904 {101}	190.856 {477}	370.152 { 91}	292.402 {115}	206.200 {163}	339.198 { 99}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.40456	.00123	.00003	.00014	.00634	.00148	.00006	.00124
Stddev	.00474	.00070	.00033	.00284	.01265	.00054	.00073	.00103
%RSD	1.1704	56.497	1140.4	2048.1	199.64	36.590	1237.6	83.481

#1	.40121	.00172	.00026	-.00187	-.00261	.00110	-.00046	.00051
#2	.40791	.00074	-.00020	.00215	.01529	.00186	.00058	.00197

Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit								
Low Limit								

Int. Std.	Y_2243	Y_3600	Y_3774
Line	224.306 {450}	360.073 { 94}	377.433 { 89}
Units	Cts/S	Cts/S	Cts/S
Avg	1510.2	31055.	5618.5
Stddev	.5	96.	74.0
%RSD	.03323	.30799	1.3172

#1	1509.9	31123.	5670.9
#2	1510.6	30987.	5566.2

Sample Name: 280-83230-E-5-B Acquired: 5/24/2016 4:31:34 Type: Unk
Method: 6500_026(v10) Mode: CONC Corr. Factor: 1.000000
User: kellyca Custom ID1: Custom ID2: Custom ID3:
Comment: 326191 6010B

Elem	Ag3280	Al1670	As1890	B_2089	Ba4554	Be3130	Bi2230	Ca3179	Cd2288
Line	328.068 {103}	167.079 {502}	189.042 {478}	208.959 {461}	455.403 { 74}	313.042 {108}	223.061 {451}	317.933 {106}	228.802 {447}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.00030	.00143	-.00144	.00700	.00317	-.00000	.00268	13.651	.00007
Stddev	.00038	.00001	.00596	.00102	.00000	.00007	.00022	.019	.00040
%RSD	128.29	1.0162	413.91	14.622	.15539	1977.4	8.1755	.14127	590.80

#1	.00003	.00144	-.00565	.00772	.00317	.00005	.00252	13.664	.00035
#2	.00057	.00142	.00277	.00628	.00317	-.00005	.00283	13.637	-.00021

Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Elem	Co2286	Cr2055	Cu3247	Fe2599	K_7664	Li6707	Mg2790	Mn2576	Mo2020
Line	228.616 {447}	205.560 {464}	324.754 {104}	259.940 {130}	766.490 { 44}	670.784 { 50}	279.079 {121}2	257.610 {131}	202.030 {467}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	-.00042	.00239	.00067	.00682	.54123	.00151	9.0423	.00058	.00031
Stddev	.00008	.00008	.00037	.00099	.00759	.00036	.0007	.00008	.00036
%RSD	19.721	3.2483	55.786	14.583	1.4016	23.638	.00759	14.552	115.38

#1	-.00037	.00245	.00094	.00752	.53586	.00126	9.0418	.00064	.00057
#2	-.00048	.00234	.00041	.00612	.54659	.00176	9.0428	.00052	.00006

Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Elem	Na5895	Ni2316	P_1782	Pb2203	S_1820	Sb2068	Se1960	Si2881	Sn1899
Line	589.592 { 57}	231.604 {446}	178.284 {489}	220.353 {453}	182.034 {485}	206.833 {463}	196.090 {472}	288.158 {117}	189.989 {477}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	5.2240	-.00002	.02032	.00109	.80411	.00151	.00833	11.433	-.00002
Stddev	.0007	.00022	.00261	.00215	.00083	.00193	.00139	.031	.00126
%RSD	.01267	1170.8	12.865	196.30	.10284	128.04	16.654	.26812	5486.5

#1	5.2244	.00014	.02217	-.00042	.80353	.00014	.00931	11.455	-.00091
#2	5.2235	-.00017	.01847	.00261	.80470	.00287	.00735	11.412	.00087

Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Elem	Sr4077	Th2837	Ti3349	Ti1908	U_3701	V_2924	Zn2062	Zr3391	
Line	407.771 { 83}	283.730 {119}	334.904 {101}	190.856 {477}	370.152 { 91}	292.402 {115}	206.200 {163}	339.198 { 99}	
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	
Avg	.07025	.00155	.00029	.00150	-.00358	.00488	-.00010	.00030	
Stddev	.00000	.00115	.00009	.00012	.01243	.00006	.00028	.00051	
%RSD	.00621	73.953	30.039	8.2799	347.38	1.2752	289.64	171.49	

#1	.07026	.00074	.00036	.00159	.00521	.00484	-.00030	-.00006	
#2	.07025	.00236	.00023	.00141	-.01237	.00492	.00010	.00065	

Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	
High Limit									
Low Limit									

Int. Std.	Y_2243	Y_3600	Y_3774						
Line	224.306 {450}	360.073 { 94}	377.433 { 89}						
Units	Cts/S	Cts/S	Cts/S						
Avg	1534.0	31551.	5680.0						
Stddev	.4	45.	11.5						
%RSD	.02657	.14356	.20231						

#1	1533.7	31519.	5688.1						
#2	1534.3	31583.	5671.9						

Sample Name: ccvh-3900196 Acquired: 5/24/2016 4:34:15 Type: QC
Method: 6500_026(v10) Mode: CONC Corr. Factor: 1.000000
User: kellyca Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	Ag3280	Al3092	As1890	B_2089	Ba4554	Be3130	Bi2230	Ca3179	Cd2288	Co2286	Cr2055	Cu3247	Fe2714
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.00201	48.079	.00079	.00472	.00047	-.00012	1.0300	-.04861	-.00067	.00372	-.00055	.00802	47.867
Stddev	.00062	.050	.00389	.00024	.00007	.00003	.0074	.01210	.00005	.00023	.00006	.00012	.171
%RSD	30.908	.10406	490.04	5.0891	15.219	24.188	.71615	24.890	7.2982	6.2771	10.789	1.4676	.35708

#1	.00157	48.044	-.00196	.00455	.00042	-.00010	1.0352	-.05717	-.00070	.00356	-.00050	.00810	47.988
#2	.00245	48.115	.00355	.00489	.00052	-.00014	1.0247	-.04006	-.00063	.00389	-.00059	.00793	47.746

Check ?	None	Chk Pass	None	None	None	None	Chk Pass	None	None	None	None	None	Chk Pass
Value													
Range													

Elem	K_7664	Li6707	Mg2790	Mn2576	Mo2020	Na8183	Ni2316	P_1782	Pb2203	S_1820	Sb2068	Se1960	Si2881
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.00642	-.00039	.16166	-.00063	-.00145	261.38	-.00067	.00474	-.00029	4.9370	.00140	.01194	-.00575
Stddev	.01938	.00048	.00048	.00001	.00015	.21	.00010	.00495	.00136	.0191	.00115	.00385	.01745
%RSD	302.09	122.36	.29971	.86973	10.463	.08047	15.602	104.40	471.93	.38665	82.132	32.251	303.43

#1	.02012	-.00073	.16132	-.00063	-.00156	261.53	-.00059	.00124	-.00125	4.9505	.00221	.01467	-.01809
#2	-.00729	-.00005	.16200	-.00063	-.00135	261.23	-.00074	.00825	.00067	4.9235	.00059	.00922	.00659

Check ?	None	None	None	None	None	Chk Pass	None	None	None	Chk Pass	None	None	None
Value													
Range													

Elem	Sn1899	Sr4077	Th2837	Ti3349	Tl1908	U_3701	V_2924	Zn2062	Zr3391
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	-.00101	.00039	4.9905	.02285	-.00031	10.337	-.01551	-.00256	-.00322
Stddev	.00145	.00010	.0080	.00061	.00152	.020	.00099	.00094	.00055
%RSD	143.21	24.941	.16069	2.6684	494.04	.18870	6.3921	36.596	17.021

#1	.00001	.00033	4.9961	.02328	.00077	10.351	-.01621	-.00190	-.00283
#2	-.00204	.00046	4.9848	.02241	-.00139	10.323	-.01480	-.00322	-.00361

Check ?	None	None	Chk Pass	None	None	Chk Pass	None	None	None
Value									
Range									

Int. Std.	Y_2243	Y_3600	Y_3774
Units	Cts/S	Cts/S	Cts/S
Avg	1472.9	29842.	5582.3
Stddev	2.0	6.	3.2
%RSD	.13861	.01991	.05708

#1	1471.5	29838.	5584.5
#2	1474.4	29846.	5580.0

Sample Name: ccv-3900195 Acquired: 5/24/2016 4:37:02 Type: QC
Method: 6500_026(v10) Mode: CONC Corr. Factor: 1.000000
User: kellyca Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	Ag3280	Al1670	As1890	B_2089	Ba4554	Be3130	Bi2230	Ca3179	Cd2288	Co2286	Cr2055	Cu3247	Fe2599	K_7664
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.50485	.51755	1.0118	.53389	.49398	.49314	.00403	4.8561	.50488	.50258	.49101	.50795	2.3888	52.106
Stddev	.00731	.00452	.0018	.00076	.00023	.00049	.00017	.0263	.00014	.00069	.00103	.00815	.0009	.009
%RSD	1.4487	.87298	.17325	.14188	.04609	.09937	4.3184	.54225	.02782	.13755	.21073	1.6048	.03946	.01668

#1	.49968	.52074	1.0130	.53336	.49414	.49279	.00391	4.8747	.50498	.50307	.49174	.50219	2.3882	52.100
#2	.51002	.51435	1.0105	.53443	.49382	.49348	.00416	4.8375	.50478	.50209	.49027	.51371	2.3895	52.112

Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	None	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Value														
Range														

Elem	Li6707	Mg2790	Mn2576	Mo2020	Na5895	Ni2316	P_1782	Pb2203	S_1820	Sb2068	Se1960	Si2881	Sn1899	Sr4077
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	1.0692	20.379	.49806	.49061	5.2716	.50007	1.0131	1.0345	.00539	.99428	1.0381	4.8007	.99011	.49122
Stddev	.0018	.339	.00699	.00113	.0062	.00025	.0007	.0029	.00406	.00089	.0010	.0244	.00297	.00017
%RSD	.17177	1.6647	1.4042	.22932	.11705	.04961	.07328	.28178	75.265	.08955	.09698	.50913	.30028	.03399

#1	1.0679	20.139	.49311	.49141	5.2760	.49990	1.0126	1.0365	.00252	.99491	1.0374	4.8179	.99222	.49134
#2	1.0705	20.618	.50300	.48982	5.2673	.50025	1.0137	1.0324	.00826	.99365	1.0388	4.7834	.98801	.49111

Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	None	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Value														
Range														

Elem	Th2837	Ti3349	Ti1908	U_3701	V_2924	Zn2062	Zr3391
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.00619	.48733	1.0366	.02521	.48727	.49734	.48648
Stddev	.00125	.00570	.0058	.00045	.00752	.00219	.00278
%RSD	20.213	1.1697	.55602	1.7832	1.5430	.43974	.57156

#1	.00531	.48330	1.0325	.02552	.48196	.49580	.48451
#2	.00708	.49136	1.0406	.02489	.49259	.49889	.48844

Check ?	None	Chk Pass	Chk Pass	None	Chk Pass	Chk Pass	Chk Pass
Value							
Range							

Int. Std.	Y_2243	Y_3600	Y_3774
Units	Cts/S	Cts/S	Cts/S
Avg	1537.6	30846.	5631.6
Stddev	.3	333.	20.7
%RSD	.01664	1.0798	.36687

#1	1537.4	31081.	5617.0
#2	1537.7	30610.	5646.2

Sample Name: ccb Acquired: 5/24/2016 4:39:35 Type: QC
Method: 6500_026(v10) Mode: CONC Corr. Factor: 1.000000
User: kellyca Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	Ag3280	Al1670	As1890	B_2089	Ba4554	Be3130	Bi2230	Ca3179	Cd2288	Co2286	Cr2055	Cu3247
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.00054	.00223	.00124	F .00363	.00036	.00013	.00441	.00008	.00006	-.00018	-.00004	.00055
Stddev	.00021	.00022	.00100	.00006	.00014	.00004	.00168	.00004	.00009	.00035	.00013	.00001
%RSD	39.534	10.048	80.803	1.6551	39.105	29.849	38.203	50.168	153.86	192.16	356.28	1.7922
#1	.00039	.00238	.00053	.00359	.00026	.00010	.00560	.00005	-.00001	.00007	.00006	.00056
#2	.00069	.00207	.00195	.00367	.00046	.00016	.00322	.00011	.00012	-.00044	-.00013	.00054
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Fail	Chk Pass	Chk Pass	None	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit				.00312								
Low Limit				-.00312								
Elem	Fe2599	K_7664	Li6707	Mg2790	Mn2576	Mo2020	Na5895	Ni2316	P_1782	Pb2203	S_1820	Sb2068
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.00770	.07332	-.00138	.00968	.00022	.00036	.02596	.00017	.00085	.00221	.00112	W .00533
Stddev	.00109	.02363	.00091	.00061	.00008	.00029	.00060	.00001	.00057	.00358	.00257	.00172
%RSD	14.194	32.223	66.258	6.3319	38.754	81.421	2.3274	5.1004	67.019	161.83	230.06	32.295
#1	.00693	.05661	-.00202	.00924	.00028	.00056	.02553	.00016	.00044	.00474	-.00070	.00411
#2	.00848	.09003	-.00073	.01011	.00016	.00015	.02639	.00017	.00125	-.00032	.00294	.00654
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	None	Chk Warn
High Limit												.00314
Low Limit												-.00314
Elem	Se1960	Si2881	Sn1899	Sr4077	Th2837	Ti3349	Ti1908	U_3701	V_2924	Zn2062	Zr3391	
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	
Avg	F .00998	.00845	-.00065	.00006	.00193	.00036	-.00070	.00405	.00023	-.00020	.00061	
Stddev	.00521	.02076	.00003	.00001	.00050	.00024	.00002	.01391	.00053	.00061	.00063	
%RSD	52.185	245.72	4.9428	22.139	26.042	66.876	3.3428	343.24	236.29	299.81	103.13	
#1	.00630	.02313	-.00062	.00006	.00158	.00019	-.00069	.01388	-.00015	.00023	.00105	
#2	.01366	-.00623	-.00067	.00005	.00229	.00053	-.00072	-.00578	.00060	-.00063	.00016	
Check ?	Chk Fail	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	
High Limit	.00972											
Low Limit	-.00972											
Int. Std.	Y_2243	Y_3600	Y_3774									
Units	Cts/S	Cts/S	Cts/S									
Avg	1545.9	31744.	5594.4									
Stddev	11.5	54.	40.1									
%RSD	.74579	.17125	.71767									
#1	1554.0	31705.	5566.0									
#2	1537.7	31782.	5622.8									

Sample Name: ccvl-3907489 Acquired: 5/24/2016 4:42:18 Type: QC
Method: 6500_026(v10) Mode: CONC Corr. Factor: 1.000000
User: kellyca Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	Ag3280	Al1670	As1890	B_2089	Ba4554	Be3130	Bi2230	Ca3179	Cd2288	Co2286	Cr2055	Cu3247
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.00927	.10386	.01361	.10201	.01048	.00106	.11340	.23737	.00489	.00960	.00987	.01539
Stddev	.00014	.00027	.00143	.00050	.00032	.00005	.00030	.01191	.00021	.00007	.00004	.00018
%RSD	1.4606	.25635	10.536	.49484	3.0144	4.3530	.26603	5.0185	4.1924	.76788	.41802	1.2015

#1	.00937	.10367	.01260	.10166	.01070	.00102	.11319	.24580	.00504	.00955	.00989	.01552
#2	.00918	.10405	.01463	.10237	.01026	.00109	.11361	.22895	.00475	.00966	.00984	.01526

Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Value												
Range												

Elem	Fe2599	K_7664	Li6707	Mg2790	Mn2576	Mo2020	Na5895	Ni2316	P_1782	Pb2203	S_1820	Sb2068
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	F .13785	3.2325	.00985	.20436	.00997	.01981	F 1.3696	.04153	2.8540	.00998	.00365	.02335
Stddev	.00853	.1242	.00010	.00107	.00013	.00031	.0622	.00014	.0040	.00200	.00245	.00148
%RSD	6.1862	3.8431	1.0048	.52574	1.2593	1.5577	4.5402	.33836	.14054	20.028	66.936	6.3370

#1	.14388	3.3204	.00992	.20512	.01006	.02003	1.4136	.04143	2.8568	.00857	.00192	.02231
#2	.13182	3.1447	.00978	.20360	.00988	.01959	1.3256	.04163	2.8511	.01139	.00538	.02440

Check ?	Chk Fail	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Fail	Chk Pass	Chk Pass	Chk Pass	None	Chk Pass
Value	.10000						1.0000					
Range	30.000%						30.000%					

Elem	Se1960	Si2881	Sn1899	Sr4077	Th2837	Ti3349	Ti1908	U_3701	V_2924	Zn2062	Zr3391
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	F .02427	.49500	.09885	.01014	.01704	.00959	.01660	.06630	.00988	.02302	.01556
Stddev	.00305	.02802	.00012	.00041	.00043	.00021	.00155	.01119	.00011	.00063	.00002
%RSD	12.561	5.6602	.11778	4.0077	2.5133	2.1720	9.3125	16.878	1.0674	2.7368	.11213

#1	.02643	.51482	.09893	.01043	.01734	.00974	.01551	.05839	.00980	.02257	.01555
#2	.02212	.47519	.09877	.00985	.01674	.00944	.01769	.07421	.00995	.02347	.01558

Check ?	Chk Fail	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Value	.01500										
Range	30.000%										

Int. Std.	Y_2243	Y_3600	Y_3774
Units	Cts/S	Cts/S	Cts/S
Avg	1537.5	31798.	5419.2
Stddev	1.5	368.	230.8
%RSD	.09973	1.1562	4.2596

#1	1536.4	31538.	5256.0
#2	1538.6	32058.	5582.4

Sample Name: 280-83230-E-6-B Acquired: 5/24/2016 4:45:02 Type: Unk
Method: 6500_026(v10) Mode: CONC Corr. Factor: 1.000000
User: kellyca Custom ID1: Custom ID2: Custom ID3:
Comment: 326191 6010B

Elem	Ag3280	Al1670	As1890	B_2089	Ba4554	Be3130	Bi2230	Ca3179	Cd2288
Line	328.068 {103}	167.079 {502}	189.042 {478}	208.959 {461}	455.403 { 74}	313.042 {108}	223.061 {451}	317.933 {106}	228.802 {447}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.00010	.00191	-.00421	.01171	.00277	-.00001	.00032	15.034	.00024
Stddev	.00056	.00094	.00271	.00020	.00015	.00003	.00018	.029	.00017
%RSD	562.62	49.399	64.359	1.6822	5.5296	253.20	55.128	.19435	73.588

#1	.00050	.00258	-.00229	.01157	.00267	-.00003	.00044	15.055	.00011
#2	-.00030	.00124	-.00612	.01185	.00288	.00001	.00019	15.014	.00036

Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Elem	Co2286	Cr2055	Cu3247	Fe2599	K_7664	Li6707	Mg2790	Mn2576	Mo2020
Line	228.616 {447}	205.560 {464}	324.754 {104}	259.940 {130}	766.490 { 44}	670.784 { 50}	279.079 {121}2	257.610 {131}	202.030 {467}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	-.00063	.00180	.00081	.00352	.57866	.00010	9.4896	.00011	-.00010
Stddev	.00031	.00006	.00027	.00168	.01132	.00132	.0334	.00003	.00019
%RSD	48.855	3.1036	32.693	47.615	1.9564	1341.4	.35232	26.831	198.97

#1	-.00084	.00184	.00062	.00471	.58666	.00104	9.5133	.00009	-.00023
#2	-.00041	.00177	.00100	.00234	.57065	-.00084	9.4660	.00013	.00004

Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Elem	Na5895	Ni2316	P_1782	Pb2203	S_1820	Sb2068	Se1960	Si2881	Sn1899
Line	589.592 { 57}	231.604 {446}	178.284 {489}	220.353 {453}	182.034 {485}	206.833 {463}	196.090 {472}	288.158 {117}	189.989 {477}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	5.4583	.00060	.02093	-.00170	.70892	.00314	.01237	11.759	.00007
Stddev	.0107	.00015	.00105	.00034	.00592	.00054	.00167	.026	.00197
%RSD	.19629	25.509	5.0153	19.912	.83477	17.097	13.516	.22092	2945.9

#1	5.4507	.00049	.02167	-.00146	.71311	.00276	.01119	11.777	-.00132
#2	5.4658	.00071	.02019	-.00194	.70474	.00352	.01355	11.740	.00146

Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Elem	Sr4077	Th2837	Ti3349	Ti1908	U_3701	V_2924	Zn2062	Zr3391	
Line	407.771 { 83}	283.730 {119}	334.904 {101}	190.856 {477}	370.152 { 91}	292.402 {115}	206.200 {163}	339.198 { 99}	
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	
Avg	.08386	.00146	-.00004	.00163	.01137	.00409	-.00021	.00073	
Stddev	.00028	.00091	.00020	.00144	.04543	.00049	.00053	.00018	
%RSD	.32852	62.473	474.47	88.434	399.56	12.080	256.94	24.358	

#1	.08367	.00210	.00010	.00264	-.02075	.00374	.00017	.00086	
#2	.08406	.00081	-.00018	.00061	.04350	.00444	-.00059	.00060	

Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	
High Limit									
Low Limit									

Int. Std.	Y_2243	Y_3600	Y_3774						
Line	224.306 {450}	360.073 { 94}	377.433 { 89}						
Units	Cts/S	Cts/S	Cts/S						
Avg	1531.0	31286.	5644.4						
Stddev	3.9	53.	6.8						
%RSD	.25393	.16842	.12004						

#1	1528.3	31249.	5639.6						
#2	1533.8	31324.	5649.2						

Sample Name: 280-83230-E-7-B Acquired: 5/24/2016 4:47:43 Type: Unk
Method: 6500_026(v10) Mode: CONC Corr. Factor: 1.000000
User: kellyca Custom ID1: Custom ID2: Custom ID3:
Comment: 326191 6010B

Elem	Ag3280	Al1670	As1890	B_2089	Ba4554	Be3130	Bi2230	Ca3179	Cd2288
Line	328.068 {103}	167.079 {502}	189.042 {478}	208.959 {461}	455.403 { 74}	313.042 {108}	223.061 {451}	317.933 {106}	228.802 {447}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.00011	.00134	.00013	.00762	.00344	.00004	.00306	15.826	-.00008
Stddev	.00021	.00091	.00120	.00046	.00007	.00006	.00244	.145	.00025
%RSD	196.69	67.591	890.04	6.0716	2.1091	135.83	79.627	.91899	328.39

#1	.00025	.00198	.00098	.00729	.00339	.00009	.00478	15.723	-.00026
#2	-.00004	.00070	-.00071	.00795	.00349	.00000	.00134	15.929	.00010

Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Elem	Co2286	Cr2055	Cu3247	Fe2599	K_7664	Li6707	Mg2790	Mn2576	Mo2020
Line	228.616 {447}	205.560 {464}	324.754 {104}	259.940 {130}	766.490 { 44}	670.784 { 50}	279.079 {121}2	257.610 {131}	202.030 {467}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	-.00032	.00277	.00048	.03895	.57855	-.00009	8.6391	.00017	-.00011
Stddev	.00018	.00028	.00023	.00089	.01463	.00080	.0004	.00000	.00034
%RSD	55.069	9.9990	47.578	2.2739	2.5296	894.78	.00454	.33809	298.91

#1	-.00045	.00257	.00064	.03832	.56820	.00048	8.6389	.00017	.00012
#2	-.00020	.00296	.00032	.03958	.58890	-.00066	8.6394	.00018	-.00035

Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Elem	Na5895	Ni2316	P_1782	Pb2203	S_1820	Sb2068	Se1960	Si2881	Sn1899
Line	589.592 { 57}	231.604 {446}	178.284 {489}	220.353 {453}	182.034 {485}	206.833 {463}	196.090 {472}	288.158 {117}	189.989 {477}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	5.2211	.00077	.02609	-.00029	1.1343	-.00061	.00750	10.875	-.00061
Stddev	.0603	.00000	.00062	.00103	.0025	.00104	.00175	.096	.00253
%RSD	1.1543	.23854	2.3639	358.57	.22308	171.36	23.396	.88139	412.83

#1	5.1785	.00076	.02565	.00044	1.1326	.00013	.00626	10.807	-.00240
#2	5.2637	.00077	.02652	-.00101	1.1361	-.00134	.00874	10.942	.00118

Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Elem	Sr4077	Th2837	Ti3349	Ti1908	U_3701	V_2924	Zn2062	Zr3391	
Line	407.771 { 83}	283.730 {119}	334.904 {101}	190.856 {477}	370.152 { 91}	292.402 {115}	206.200 {163}	339.198 { 99}	
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	
Avg	.08111	.00105	-.00013	.00051	.00023	.00569	.00075	-.00003	
Stddev	.00089	.00039	.00047	.00090	.00279	.00042	.00092	.00049	
%RSD	1.1001	37.005	362.91	176.50	1192.7	7.4429	121.99	1805.6	

#1	.08048	.00133	-.00046	-.00013	-.00174	.00539	.00010	.00032	
#2	.08174	.00078	.00020	.00115	.00221	.00599	.00140	-.00038	

Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	
High Limit									
Low Limit									

Int. Std.	Y_2243	Y_3600	Y_3774						
Line	224.306 {450}	360.073 { 94}	377.433 { 89}						
Units	Cts/S	Cts/S	Cts/S						
Avg	1539.2	31610.	5695.4						
Stddev	3.4	44.	39.8						
%RSD	.22266	.14049	.69864						

#1	1541.7	31579.	5723.5						
#2	1536.8	31642.	5667.3						

Sample Name: 280-83230-E-8-B Acquired: 5/24/2016 4:50:25 Type: Unk
Method: 6500_026(v10) Mode: CONC Corr. Factor: 1.000000
User: kellyca Custom ID1: Custom ID2: Custom ID3:
Comment: 326191 6010B

Elem	Ag3280	Al1670	As1890	B_2089	Ba4554	Be3130	Bi2230	Ca3179	Cd2288
Line	328.068 {103}	167.079 {502}	189.042 {478}	208.959 {461}	455.403 { 74}	313.042 {108}	223.061 {451}	317.933 {106}	228.802 {447}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	-.00011	.00193	-.00380	.00660	.00315	-.00003	-.00149	8.4394	.00019
Stddev	.00014	.00025	.00031	.00132	.00016	.00001	.00025	.0240	.00026
%RSD	133.99	13.029	8.2251	19.995	5.0784	22.351	16.587	.28468	134.46

#1	-.00021	.00211	-.00402	.00567	.00303	-.00002	-.00167	8.4225	.00037
#2	-.00001	.00176	-.00357	.00754	.00326	-.00003	-.00132	8.4564	.00001

Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Elem	Co2286	Cr2055	Cu3247	Fe2599	K_7664	Li6707	Mg2790	Mn2576	Mo2020
Line	228.616 {447}	205.560 {464}	324.754 {104}	259.940 {130}	766.490 { 44}	670.784 { 50}	279.079 {121}2	257.610 {131}	202.030 {467}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	-.00070	.00736	.00158	.04900	.63360	.00198	4.9598	.00063	-.00011
Stddev	.00039	.00015	.00005	.00057	.02551	.00027	.0019	.00002	.00016
%RSD	55.274	2.1012	3.2240	1.1539	4.0269	13.583	.03938	3.8515	148.69

#1	-.00098	.00747	.00161	.04940	.61556	.00217	4.9611	.00064	-.00022
#2	-.00043	.00725	.00154	.04860	.65164	.00179	4.9584	.00061	.00001

Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Elem	Na5895	Ni2316	P_1782	Pb2203	S_1820	Sb2068	Se1960	Si2881	Sn1899
Line	589.592 { 57}	231.604 {446}	178.284 {489}	220.353 {453}	182.034 {485}	206.833 {463}	196.090 {472}	288.158 {117}	189.989 {477}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	4.8072	.00212	.03140	.00083	.84400	.00205	.00732	15.699	-.00033
Stddev	.0260	.00024	.00254	.00025	.00346	.00168	.00281	.065	.00186
%RSD	.54141	11.252	8.0858	29.777	.41008	81.666	38.466	.41583	559.22

#1	4.7888	.00195	.02960	.00066	.84155	.00087	.00533	15.653	.00098
#2	4.8256	.00229	.03319	.00101	.84645	.00324	.00931	15.745	-.00165

Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Elem	Sr4077	Th2837	Ti3349	Ti1908	U_3701	V_2924	Zn2062	Zr3391	
Line	407.771 { 83}	283.730 {119}	334.904 {101}	190.856 {477}	370.152 { 91}	292.402 {115}	206.200 {163}	339.198 { 99}	
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	
Avg	.07436	.00108	-.00020	.00067	.01638	.00364	.00052	.00216	
Stddev	.00029	.00005	.00029	.00100	.00615	.00035	.00020	.00128	
%RSD	.38701	4.4054	148.95	149.18	37.531	9.6916	38.130	59.300	

#1	.07416	.00104	.00001	-.00004	.02073	.00339	.00066	.00125	
#2	.07457	.00111	-.00040	.00138	.01203	.00389	.00038	.00306	

Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	
High Limit									
Low Limit									

Int. Std.	Y_2243	Y_3600	Y_3774						
Line	224.306 {450}	360.073 { 94}	377.433 { 89}						
Units	Cts/S	Cts/S	Cts/S						
Avg	1542.7	31575.	5718.9						
Stddev	2.1	69.	21.4						
%RSD	.13762	.21763	.37430						

#1	1541.2	31624.	5734.1						
#2	1544.2	31527.	5703.8						

Sample Name: 280-83230-E-9-B Acquired: 5/24/2016 4:53:06 Type: Unk
Method: 6500_026(v10) Mode: CONC Corr. Factor: 1.000000
User: kellyca Custom ID1: Custom ID2: Custom ID3:
Comment: 326191 6010B

Elem	Ag3280	Al1670	As1890	B_2089	Ba4554	Be3130	Bi2230	Ca3179	Cd2288
Line	328.068 {103}	167.079 {502}	189.042 {478}	208.959 {461}	455.403 { 74}	313.042 {108}	223.061 {451}	317.933 {106}	228.802 {447}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.00015	.01843	-.00314	.00444	.01298	.00007	.00322	11.656	.00038
Stddev	.00013	.00047	.00486	.00046	.00013	.00006	.00038	.005	.00027
%RSD	91.014	2.5555	154.70	10.456	1.0159	78.023	11.940	.04049	70.977

#1	.00005	.01810	.00029	.00411	.01289	.00003	.00349	11.653	.00019
#2	.00024	.01877	-.00658	.00477	.01308	.00011	.00295	11.659	.00057

Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Elem	Co2286	Cr2055	Cu3247	Fe2599	K_7664	Li6707	Mg2790	Mn2576	Mo2020
Line	228.616 {447}	205.560 {464}	324.754 {104}	259.940 {130}	766.490 { 44}	670.784 { 50}	279.079 {121}2	257.610 {131}	202.030 {467}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.00705	.00058	.00147	34.650	.23044	-.00045	7.6777	.44365	-.00058
Stddev	.00025	.00015	.00048	.084	.01700	.00009	.0350	.00121	.00029
%RSD	3.5273	25.744	32.747	.24237	7.3783	20.921	.45583	.27283	49.862

#1	.00687	.00068	.00113	34.709	.21841	-.00051	7.6530	.44280	-.00079
#2	.00722	.00047	.00181	34.591	.24246	-.00038	7.7025	.44451	-.00038

Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Elem	Na5895	Ni2316	P_1782	Pb2203	S_1820	Sb2068	Se1960	Si2881	Sn1899
Line	589.592 { 57}	231.604 {446}	178.284 {489}	220.353 {453}	182.034 {485}	206.833 {463}	196.090 {472}	288.158 {117}	189.989 {477}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	8.5533	.00318	.04190	-.00146	.10835	.00160	.00699	11.942	-.00001
Stddev	.0456	.00051	.00536	.00012	.00114	.00235	.00131	.001	.00076
%RSD	.53364	15.890	12.787	8.2761	1.0536	147.10	18.754	.01113	6164.9

#1	8.5856	.00282	.03811	-.00155	.10755	-.00006	.00792	11.943	-.00055
#2	8.5210	.00354	.04569	-.00138	.10916	.00326	.00607	11.941	.00052

Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Elem	Sr4077	Th2837	Ti3349	Ti1908	U_3701	V_2924	Zn2062	Zr3391
Line	407.771 { 83}	283.730 {119}	334.904 {101}	190.856 {477}	370.152 { 91}	292.402 {115}	206.200 {163}	339.198 { 99}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.09462	.00154	.00041	-.00023	.00571	.00193	-.00098	-.00002
Stddev	.00026	.00177	.00026	.00107	.00085	.00105	.00048	.00106
%RSD	.27951	114.61	61.929	468.23	14.898	54.405	48.677	6677.8

#1	.09481	.00029	.00059	.00053	.00631	.00267	-.00132	.00073
#2	.09443	.00280	.00023	-.00099	.00511	.00119	-.00064	-.00077

Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit								
Low Limit								

Int. Std.	Y_2243	Y_3600	Y_3774
Line	224.306 {450}	360.073 { 94}	377.433 { 89}
Units	Cts/S	Cts/S	Cts/S
Avg	1534.5	31397.	5649.1
Stddev	1.8	141.	34.5
%RSD	.11615	.44912	.61049

#1	1535.8	31497.	5673.5
#2	1533.2	31298.	5624.7

Sample Name: 280-83230-E-9-Bsd@5 Acquired: 5/24/2016 4:55:46 Type: Unk

Method: 6500_026(v10) Mode: CONC Corr. Factor: 1.000000

User: kellyca Custom ID1: Custom ID2: Custom ID3:

Comment: 326191 6010B

Elem	Ag3280	Al1670	As1890	B_2089	Ba4554	Be3130	Bi2230	Ca3179	Cd2288
Line	328.068 {103}	167.079 {502}	189.042 {478}	208.959 {461}	455.403 { 74}	313.042 {108}	223.061 {451}	317.933 {106}	228.802 {447}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	-.00009	.00527	-.00099	.00221	.00279	-.00000	.00119	2.3409	-.00001
Stddev	.00020	.00035	.00031	.00017	.00004	.00006	.00138	.0018	.00008
%RSD	212.43	6.6843	31.036	7.6261	1.3091	16546.	115.36	.07568	1538.8

#1	-.00023	.00551	-.00078	.00233	.00281	.00004	.00217	2.3396	-.00006
#2	.00005	.00502	-.00121	.00210	.00276	-.00004	.00022	2.3421	.00005

Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Elem	Co2286	Cr2055	Cu3247	Fe2599	K_7664	Li6707	Mg2790	Mn2576	Mo2020
Line	228.616 {447}	205.560 {464}	324.754 {104}	259.940 {130}	766.490 { 44}	670.784 { 50}	279.079 {121}2	257.610 {131}	202.030 {467}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.00113	-.00014	.00080	7.0652	.03943	-.00105	1.5753	.09052	-.00015
Stddev	.00015	.00018	.00002	.0194	.00215	.00022	.0010	.00010	.00017
%RSD	13.287	131.21	2.9005	.27499	5.4537	20.607	.06410	.10519	116.77

#1	.00124	-.00026	.00078	7.0514	.03791	-.00120	1.5760	.09059	-.00003
#2	.00103	-.00001	.00082	7.0789	.04095	-.00090	1.5746	.09045	-.00027

Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Elem	Na5895	Ni2316	P_1782	Pb2203	S_1820	Sb2068	Se1960	Si2881	Sn1899
Line	589.592 { 57}	231.604 {446}	178.284 {489}	220.353 {453}	182.034 {485}	206.833 {463}	196.090 {472}	288.158 {117}	189.989 {477}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	1.7234	.00030	.00646	.00135	.01917	-.00011	.00464	2.3668	-.00100
Stddev	.0089	.00017	.00065	.00130	.00008	.00087	.00169	.0206	.00093
%RSD	.51488	56.906	9.9953	96.642	.41936	813.33	36.373	.87101	92.362

#1	1.7171	.00018	.00601	.00227	.01923	.00051	.00345	2.3522	-.00035
#2	1.7296	.00042	.00692	.00043	.01911	-.00072	.00583	2.3814	-.00166

Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Elem	Sr4077	Th2837	Ti3349	Ti1908	U_3701	V_2924	Zn2062	Zr3391
Line	407.771 { 83}	283.730 {119}	334.904 {101}	190.856 {477}	370.152 { 91}	292.402 {115}	206.200 {163}	339.198 { 99}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.01896	.00159	.00001	.00274	.01681	.00047	.00063	.00070
Stddev	.00005	.00016	.00024	.00198	.00195	.00021	.00022	.00169
%RSD	.26407	9.9899	1636.4	72.418	11.575	45.684	35.207	242.13

#1	.01893	.00170	.00018	.00414	.01543	.00032	.00078	.00190
#2	.01900	.00148	-.00015	.00134	.01818	.00062	.00047	-.00050

Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit								
Low Limit								

Int. Std.	Y_2243	Y_3600	Y_3774
Line	224.306 {450}	360.073 { 94}	377.433 { 89}
Units	Cts/S	Cts/S	Cts/S
Avg	1558.4	31849.	5690.1
Stddev	2.8	57.	21.2
%RSD	.18062	.18005	.37329

#1	1556.4	31889.	5705.1
#2	1560.4	31808.	5675.1

Sample Name: 280-83230-E-9-C MS Acquired: 5/24/2016 4:58:29 Type: Unk
Method: 6500_026(v10) Mode: CONC Corr. Factor: 1.000000
User: kellyca Custom ID1: Custom ID2: Custom ID3:
Comment: 326191 6010B

Elem	Ag3280	Al1670	As1890	B_2089	Ba4554	Be3130	Bi2230	Ca3179	Cd2288
Line	328.068 {103}	167.079 {502}	189.042 {478}	208.959 {461}	455.403 { 74}	313.042 {108}	223.061 {451}	317.933 {106}	228.802 {447}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.05121	1.9193	1.0302	1.0444	2.0094	.04909	2.1917	58.851	.10189
Stddev	.00044	.0014	.0005	.0003	.0018	.00010	.0119	.028	.00014
%RSD	.85890	.07240	.05133	.02709	.09047	.20376	.54460	.04829	.13398

#1	.05090	1.9203	1.0298	1.0442	2.0081	.04902	2.2001	58.830	.10198
#2	.05152	1.9184	1.0306	1.0446	2.0106	.04916	2.1832	58.871	.10179

Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Elem	Co2286	Cr2055	Cu3247	Fe2599	K_7664	Li6707	Mg2790	Mn2576	Mo2020
Line	228.616 {447}	205.560 {464}	324.754 {104}	259.940 {130}	766.490 { 44}	670.784 { 50}	279.079 {121}2	257.610 {131}	202.030 {467}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.49541	W .19615	.26210	35.222	54.113	1.1042	57.397	.91087	1.0055
Stddev	.00210	.00113	.00021	.088	.019	.0006	.217	.00447	.0045
%RSD	.42314	.57645	.08016	.24876	.03442	.05250	.37809	.49038	.44221

#1	.49689	.19695	.26225	35.160	54.100	1.1038	57.244	.90771	1.0086
#2	.49393	.19535	.26195	35.284	54.126	1.1046	57.551	.91402	1.0023

Check ?	Chk Pass	Chk Warn	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit		.10000							
Low Limit		-.01000							

Elem	Na8183	Ni2316	P_1782	Pb2203	S_1820	Sb2068	Se1960	Si2881	Sn1899
Line	818.326 { 41}	231.604 {446}	178.284 {489}	220.353 {453}	182.034 {485}	206.833 {463}	196.090 {472}	288.158 {117}	189.989 {477}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	62.894	.49235	10.355	.49743	2.1700	.51952	2.0786	21.407	1.9350
Stddev	.137	.00046	.012	.00056	.0115	.00028	.0136	.028	.0052
%RSD	.21798	.09330	.11644	.11209	.53197	.05310	.65538	.13146	.26806

#1	62.991	.49202	10.364	.49704	2.1618	.51932	2.0883	21.387	1.9387
#2	62.797	.49267	10.347	.49783	2.1782	.51971	2.0690	21.426	1.9314

Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Elem	Sr4077	Th2837	Ti3349	Ti1908	U_3701	V_2924	Zn2062	Zr3391
Line	407.771 { 83}	283.730 {119}	334.904 {101}	190.856 {477}	370.152 { 91}	292.402 {115}	206.200 {163}	339.198 { 99}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	1.0836	1.0123	.97205	1.9375	2.1502	.48228	.46234	.47792
Stddev	.0003	.0053	.00473	.0052	.0294	.00063	.00660	.00218
%RSD	.03086	.52025	.48708	.27003	1.3658	.13090	1.4275	.45589

#1	1.0833	1.0086	.96871	1.9412	2.1709	.48183	.45767	.47946
#2	1.0838	1.0160	.97540	1.9338	2.1294	.48272	.46701	.47638

Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit								
Low Limit								

Int. Std.	Y_2243	Y_3600	Y_3774
Line	224.306 {450}	360.073 { 94}	377.433 { 89}
Units	Cts/S	Cts/S	Cts/S
Avg	1464.0	29905.	5618.7
Stddev	.3	70.	3.3
%RSD	.02131	.23337	.05797

#1	1464.3	29954.	5616.4
#2	1463.8	29856.	5621.0

Sample Name: 280-83230-E-9-D MSD Acquired: 5/24/2016 5:00:59 Type: Unk

Method: 6500_026(v10) Mode: CONC Corr. Factor: 1.000000

User: kellyca Custom ID1: Custom ID2: Custom ID3:

Comment: 326191 6010B

Elem	Ag3280	Al1670	As1890	B_2089	Ba4554	Be3130	Bi2230	Ca3179	Cd2288
Line	328.068 {103}	167.079 {502}	189.042 {478}	208.959 {461}	455.403 { 74}	313.042 {108}	223.061 {451}	317.933 {106}	228.802 {447}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.05114	1.8970	1.0183	1.0342	1.9992	.04902	2.1578	58.499	.09971
Stddev	.00032	.0003	.0031	.0022	.0049	.00024	.0063	.173	.00018
%RSD	.62223	.01567	.30033	.21202	.24329	.48870	.29004	.29647	.18103

#1	.05137	1.8972	1.0204	1.0358	1.9958	.04919	2.1622	58.376	.09984
#2	.05092	1.8968	1.0161	1.0327	2.0027	.04885	2.1534	58.621	.09958

Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Elem	Co2286	Cr2055	Cu3247	Fe2599	K_7664	Li6707	Mg2790	Mn2576	Mo2020
Line	228.616 {447}	205.560 {464}	324.754 {104}	259.940 {130}	766.490 { 44}	670.784 { 50}	279.079 {121}2	257.610 {131}	202.030 {467}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.48880	W .19389	.25744	34.546	54.094	1.1011	56.624	.89473	.99657
Stddev	.00089	.00009	.00011	.056	.007	.0012	.041	.00104	.00266
%RSD	.18158	.04490	.04138	.16090	.01205	.10827	.07243	.11589	.26682

#1	.48943	.19382	.25736	34.507	54.090	1.1019	56.653	.89400	.99845
#2	.48818	.19395	.25751	34.585	54.099	1.1002	56.595	.89547	.99469

Check ?	Chk Pass	Chk Warn	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit		.10000							
Low Limit		-.01000							

Elem	Na8183	Ni2316	P_1782	Pb2203	S_1820	Sb2068	Se1960	Si2881	Sn1899
Line	818.326 { 41}	231.604 {446}	178.284 {489}	220.353 {453}	182.034 {485}	206.833 {463}	196.090 {472}	288.158 {117}	189.989 {477}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	62.663	.48794	10.247	.49223	2.1444	.51426	2.0592	21.180	1.9105
Stddev	.020	.00496	.016	.00309	.0086	.00547	.0046	.005	.0068
%RSD	.03248	1.0158	.16073	.62703	.39914	1.0646	.22598	.02498	.35776

#1	62.677	.49144	10.258	.49004	2.1504	.51814	2.0625	21.177	1.9153
#2	62.649	.48443	10.235	.49441	2.1383	.51039	2.0560	21.184	1.9056

Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Elem	Sr4077	Th2837	Ti3349	Ti1908	U_3701	V_2924	Zn2062	Zr3391
Line	407.771 { 83}	283.730 {119}	334.904 {101}	190.856 {477}	370.152 { 91}	292.402 {115}	206.200 {163}	339.198 { 99}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	1.0806	.99919	.96341	1.9144	2.1414	.47561	.46347	.48016
Stddev	.0012	.00118	.00088	.0090	.0163	.00170	.00077	.00128
%RSD	.11171	.11777	.09102	.47002	.75909	.35685	.16706	.26661

#1	1.0798	1.0000	.96403	1.9208	2.1299	.47441	.46292	.47926
#2	1.0815	.99836	.96279	1.9081	2.1529	.47681	.46402	.48107

Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit								
Low Limit								

Int. Std.	Y_2243	Y_3600	Y_3774
Line	224.306 {450}	360.073 { 94}	377.433 { 89}
Units	Cts/S	Cts/S	Cts/S
Avg	1470.8	29941.	5585.6
Stddev	.6	4.	5.5
%RSD	.03949	.01170	.09896

#1	1470.3	29943.	5581.7
#2	1471.2	29938.	5589.5

Sample Name: 280-83230-E-11-D Acquired: 5/24/2016 5:03:29 Type: Unk
Method: 6500_026(v10) Mode: CONC Corr. Factor: 1.000000
User: kellyca Custom ID1: Custom ID2: Custom ID3:
Comment: 326191 6010B

Elem	Ag3280	Al1670	As1890	B_2089	Ba4554	Be3130	Bi2230	Ca3179	Cd2288
Line	328.068 {103}	167.079 {502}	189.042 {478}	208.959 {461}	455.403 { 74}	313.042 {108}	223.061 {451}	317.933 {106}	228.802 {447}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.00011	.00752	-.00073	.01151	.00631	.00005	.00083	5.6275	.00007
Stddev	.00031	.00054	.00199	.00098	.00004	.00002	.00025	.0395	.00000
%RSD	291.45	7.2172	272.13	8.5299	.66806	43.415	29.591	.70124	1.1531

#1	.00032	.00714	.00068	.01221	.00628	.00003	.00100	5.5996	.00007
#2	-.00011	.00791	-.00214	.01082	.00634	.00006	.00066	5.6554	.00007

Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Elem	Co2286	Cr2055	Cu3247	Fe2599	K_7664	Li6707	Mg2790	Mn2576	Mo2020
Line	228.616 {447}	205.560 {464}	324.754 {104}	259.940 {130}	766.490 { 44}	670.784 { 50}	279.079 {121}2	257.610 {131}	202.030 {467}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.00207	.00023	.00176	3.3933	.33769	-.00037	3.4059	1.1833	.00097
Stddev	.00011	.00025	.00034	.0114	.00681	.00023	.0028	.0031	.00024
%RSD	5.3379	106.78	19.363	.33469	2.0162	61.310	.08248	.26091	24.743

#1	.00199	.00006	.00200	3.3853	.33287	-.00053	3.4039	1.1811	.00080
#2	.00215	.00041	.00152	3.4013	.34250	-.00021	3.4078	1.1855	.00114

Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Elem	Na5895	Ni2316	P_1782	Pb2203	S_1820	Sb2068	Se1960	Si2881	Sn1899
Line	589.592 { 57}	231.604 {446}	178.284 {489}	220.353 {453}	182.034 {485}	206.833 {463}	196.090 {472}	288.158 {117}	189.989 {477}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	2.8700	.00251	.02377	-.00088	.15683	-.00031	.01164	7.2928	-.00000
Stddev	.0224	.00056	.00030	.00112	.00165	.00125	.00404	.0144	.00003
%RSD	.78197	22.320	1.2478	126.57	1.0513	399.24	34.718	.19758	651.94

#1	2.8541	.00290	.02356	-.00168	.15799	.00057	.00878	7.2826	.00001
#2	2.8859	.00211	.02398	-.00009	.15566	-.00120	.01449	7.3030	-.00002

Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Elem	Sr4077	Th2837	Ti3349	Ti1908	U_3701	V_2924	Zn2062	Zr3391	
Line	407.771 { 83}	283.730 {119}	334.904 {101}	190.856 {477}	370.152 { 91}	292.402 {115}	206.200 {163}	339.198 { 99}	
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	
Avg	.05452	.00222	.00014	.00243	.02354	.00082	.00131	-.00010	
Stddev	.00050	.00170	.00009	.00161	.01824	.00014	.00175	.00025	
%RSD	.91412	76.503	62.754	66.512	77.465	17.318	133.29	263.79	

#1	.05417	.00102	.00021	.00128	.03644	.00092	.00008	.00008	
#2	.05487	.00343	.00008	.00357	.01065	.00072	.00255	-.00028	

Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	
High Limit									
Low Limit									

Int. Std.	Y_2243	Y_3600	Y_3774						
Line	224.306 {450}	360.073 { 94}	377.433 { 89}						
Units	Cts/S	Cts/S	Cts/S						
Avg	1549.2	31727.	5726.8						
Stddev	2.5	100.	28.1						
%RSD	.15873	.31622	.49044						

#1	1551.0	31798.	5746.6						
#2	1547.5	31656.	5706.9						

Sample Name: ccvh-3900196 Acquired: 5/24/2016 5:06:12 Type: QC
Method: 6500_026(v10) Mode: CONC Corr. Factor: 1.000000
User: kellyca Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	Ag3280	Al3092	As1890	B_2089	Ba4554	Be3130	Bi2230	Ca3179	Cd2288	Co2286	Cr2055	Cu3247	Fe2714
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.00215	48.117	.00331	.00471	.00042	-.00006	1.0336	-.06291	-.00120	.00334	-.00030	.00869	47.699
Stddev	.00074	.480	.00340	.00028	.00013	.00002	.0081	.00538	.00007	.00026	.00008	.00021	.499
%RSD	34.437	.99811	102.60	5.9312	30.811	27.917	.78391	8.5577	5.6052	7.8624	28.219	2.3689	1.0456

#1	.00162	48.457	.00571	.00490	.00051	-.00005	1.0393	-.05910	-.00115	.00353	-.00024	.00884	48.051
#2	.00267	47.777	.00091	.00451	.00033	-.00008	1.0278	-.06672	-.00125	.00316	-.00036	.00855	47.346

Check ?	None	Chk Pass	None	None	None	None	Chk Pass	None	None	None	None	None	Chk Pass
Value													
Range													

Elem	K_7664	Li6707	Mg2790	Mn2576	Mo2020	Na8183	Ni2316	P_1782	Pb2203	S_1820	Sb2068	Se1960	Si2881
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.04220	.00013	.15732	-.00064	-.00113	261.99	-.00035	.00452	-.00160	4.9415	.00241	.01081	.00326
Stddev	.01600	.00088	.00032	.00008	.00013	3.04	.00024	.00169	.00256	.0031	.00122	.00767	.00738
%RSD	37.906	701.26	.20217	12.494	11.162	1.1592	68.197	37.457	159.74	.06178	50.711	70.890	226.03

#1	.03089	-.00050	.15755	-.00058	-.00121	264.14	-.00051	.00332	-.00341	4.9394	.00327	.00539	.00848
#2	.05351	.00075	.15710	-.00069	-.00104	259.85	-.00018	.00571	.00021	4.9437	.00154	.01624	-.00195

Check ?	None	None	None	None	None	Chk Pass	None	None	None	Chk Pass	None	None	None
Value													
Range													

Elem	Sn1899	Sr4077	Th2837	Ti3349	Ti1908	U_3701	V_2924	Zn2062	Zr3391
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	-.00004	.00038	4.9873	.02251	.00043	10.318	-.01579	-.00122	-.00131
Stddev	.00125	.00003	.0053	.00016	.00258	.020	.00082	.00063	.00395
%RSD	3115.4	7.1853	.10681	.72027	595.25	.19436	5.1842	51.911	301.88

#1	-.00092	.00036	4.9835	.02263	-.00139	10.332	-.01636	-.00167	.00148
#2	.00084	.00040	4.9911	.02240	.00226	10.304	-.01521	-.00077	-.00410

Check ?	None	None	Chk Pass	None	None	Chk Pass	None	None	None
Value									
Range									

Int. Std.	Y_2243	Y_3600	Y_3774
Units	Cts/S	Cts/S	Cts/S
Avg	1469.1	29732.	5567.8
Stddev	2.4	19.	27.9
%RSD	.16338	.06504	.50057

#1	1467.4	29719.	5548.1
#2	1470.8	29746.	5587.5

Sample Name: ccv-3900195 Acquired: 5/24/2016 5:08:58 Type: QC
Method: 6500_026(v10) Mode: CONC Corr. Factor: 1.000000
User: kellyca Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	Ag3280	Al1670	As1890	B_2089	Ba4554	Be3130	Bi2230	Ca3179	Cd2288	Co2286	Cr2055	Cu3247	Fe2599	K_7664
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.50625	.52351	1.0085	.53831	.49874	.49755	.00440	4.8375	.51021	.50666	.49370	.50794	2.4888	53.334
Stddev	.00226	.00001	.0031	.00085	.00164	.00064	.00276	.0240	.00169	.00149	.00194	.00167	.0078	.070
%RSD	.44649	.00111	.30250	.15772	.32873	.12836	62.656	.49699	.33146	.29329	.39396	.32831	.31352	.13210

#1	.50466	.52351	1.0106	.53771	.49990	.49800	.00245	4.8545	.51141	.50771	.49507	.50676	2.4833	53.284
#2	.50785	.52352	1.0063	.53891	.49758	.49710	.00635	4.8205	.50902	.50561	.49232	.50912	2.4943	53.383

Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	None	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Value														
Range														

Elem	Li6707	Mg2790	Mn2576	Mo2020	Na5895	Ni2316	P_1782	Pb2203	S_1820	Sb2068	Se1960	Si2881	Sn1899	Sr4077
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	1.0953	20.327	.49237	.49386	5.3209	.50807	1.0280	1.0455	.00038	1.0134	1.0657	4.8343	1.0052	.50174
Stddev	.0036	.015	.00003	.00230	.0400	.00038	.0028	.0021	.00353	.0057	.0084	.0014	.0012	.00038
%RSD	.33011	.07301	.00561	.46514	.75095	.07425	.27167	.19728	940.68	.56135	.79086	.03006	.12261	.07673

#1	1.0927	20.317	.49239	.49548	5.3492	.50834	1.0260	1.0469	-.00212	1.0175	1.0716	4.8332	1.0044	.50147
#2	1.0979	20.338	.49235	.49223	5.2927	.50780	1.0299	1.0440	.00287	1.0094	1.0597	4.8353	1.0061	.50202

Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	None	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Value														
Range														

Elem	Th2837	Ti3349	Ti1908	U_3701	V_2924	Zn2062	Zr3391
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.00581	.48623	1.0531	.02500	.48151	.48721	.49091
Stddev	.00110	.00241	.0124	.00450	.00094	.00078	.00160
%RSD	18.954	.49545	1.1795	18.010	.19614	.15976	.32576

#1	.00503	.48453	1.0619	.02818	.48084	.48776	.48978
#2	.00658	.48794	1.0443	.02182	.48218	.48666	.49204

Check ?	None	Chk Pass	Chk Pass	None	Chk Pass	Chk Pass	Chk Pass
Value							
Range							

Int. Std.	Y_2243	Y_3600	Y_3774
Units	Cts/S	Cts/S	Cts/S
Avg	1526.2	31098.	5613.0
Stddev	2.6	100.	4.1
%RSD	.17145	.32260	.07324

#1	1524.4	31169.	5610.1
#2	1528.1	31027.	5615.9

Sample Name: ccb Acquired: 5/24/2016 5:11:32 Type: QC
Method: 6500_026(v10) Mode: CONC Corr. Factor: 1.000000
User: kellyca Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	Ag3280	Al1670	As1890	B_2089	Ba4554	Be3130	Bi2230	Ca3179	Cd2288	Co2286	Cr2055	Cu3247
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.00043	-.00003	.00202	F .00386	.00026	.00017	.00312	-.00177	.00008	-.00012	-.00007	.00057
Stddev	.00019	.00085	.00158	.00006	.00009	.00002	.00222	.00029	.00020	.00022	.00003	.00002
%RSD	42.868	2469.0	78.017	1.4379	36.284	14.193	71.373	16.452	251.93	175.14	49.015	3.3488
#1	.00030	-.00063	.00091	.00390	.00032	.00016	.00154	-.00198	.00022	.00003	-.00005	.00056
#2	.00057	.00057	.00313	.00382	.00019	.00019	.00469	-.00156	-.00006	-.00028	-.00009	.00058
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Fail	Chk Pass	Chk Pass	None	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit				.00312								
Low Limit				-.00312								
Elem	Fe2599	K_7664	Li6707	Mg2790	Mn2576	Mo2020	Na5895	Ni2316	P_1782	Pb2203	S_1820	Sb2068
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.00122	.05093	-.00020	.00275	.00005	.00085	.02820	-.00005	.00068	.00238	-.00128	F .00681
Stddev	.00023	.01165	.00001	.00088	.00009	.00003	.00149	.00023	.00158	.00056	.00357	.00247
%RSD	18.985	22.867	5.3046	31.912	181.40	3.0205	5.2679	500.51	232.60	23.684	279.49	36.292
#1	.00138	.04270	-.00019	.00213	.00012	.00083	.02715	.00012	.00180	.00277	-.00380	.00506
#2	.00106	.05917	-.00021	.00338	-.00001	.00087	.02925	-.00021	-.00044	.00198	.00125	.00856
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	None	Chk Fail
High Limit												.00628
Low Limit												-.00628
Elem	Se1960	Si2881	Sn1899	Sr4077	Th2837	Ti3349	Ti1908	U_3701	V_2924	Zn2062	Zr3391	
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	
Avg	W .00903	.00622	-.00049	.00010	.00119	.00037	.00179	.00398	-.00012	-.00022	-.00070	
Stddev	.00641	.00780	.00015	.00004	.00026	.00000	.00193	.00966	.00076	.00030	.00012	
%RSD	71.001	125.29	30.518	43.270	21.957	.41639	108.17	242.86	622.04	132.44	17.045	
#1	.00450	.01173	-.00039	.00013	.00100	.00037	.00042	.01081	-.00066	-.00043	-.00079	
#2	.01357	.00071	-.00060	.00007	.00137	.00037	.00315	-.00285	.00041	-.00001	-.00062	
Check ?	Chk Warn	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	
High Limit	.00486											
Low Limit	-.00486											
Int. Std.	Y_2243	Y_3600	Y_3774									
Units	Cts/S	Cts/S	Cts/S									
Avg	1535.3	31485.	5556.2									
Stddev	2.7	101.	15.3									
%RSD	.17289	.32088	.27623									
#1	1537.1	31556.	5567.0									
#2	1533.4	31413.	5545.3									

Sample Name: ccvl-3907489 Acquired: 5/24/2016 5:14:16 Type: QC
Method: 6500_026(v10) Mode: CONC Corr. Factor: 1.000000
User: kellyca Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	Ag3280	Al1670	As1890	B_2089	Ba4554	Be3130	Bi2230	Ca3179	Cd2288	Co2286	Cr2055	Cu3247
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.01044	.10592	F .00988	.10331	.01021	.00104	.11402	.22187	.00506	.01005	.00980	.01606
Stddev	.00002	.00079	.00590	.00001	.00002	.00003	.00182	.00162	.00019	.00021	.00027	.00001
%RSD	.20886	.74116	59.744	.00507	.21697	3.2358	1.5966	.72925	3.7825	2.0866	2.7974	.05128

#1	.01042	.10536	.01405	.10331	.01023	.00107	.11274	.22073	.00492	.00990	.00999	.01607
#2	.01045	.10647	.00571	.10331	.01020	.00102	.11531	.22302	.00520	.01020	.00960	.01606

Check ?	Chk Pass	Chk Pass	Chk Fail	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Value			.01500									
Range			-30.000%									

Elem	Fe2599	K_7664	Li6707	Mg2790	Mn2576	Mo2020	Na5895	Ni2316	P_1782	Pb2203	S_1820	Sb2068
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.12343	3.1859	.01054	.21164	.01008	.01981	F 1.3101	.04086	2.8700	.01106	-.00076	.02131
Stddev	.00342	.0385	.00061	.00036	.00003	.00015	.0045	.00052	.0086	.00005	.00369	.00240
%RSD	2.7700	1.2098	5.7867	.17182	.31505	.74660	.34226	1.2715	.30029	.40794	481.96	11.249

#1	.12585	3.1586	.01098	.21139	.01010	.01991	1.3069	.04050	2.8639	.01103	.00184	.01962
#2	.12101	3.2131	.01011	.21190	.01005	.01970	1.3133	.04123	2.8761	.01110	-.00337	.02301

Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Fail	Chk Pass	Chk Pass	Chk Pass	None	Chk Pass
Value							1.0000					
Range							30.000%					

Elem	Se1960	Si2881	Sn1899	Sr4077	Th2837	Ti3349	Ti1908	U_3701	V_2924	Zn2062	Zr3391
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	F .02023	.48642	.09967	.01005	.01735	.00949	.01633	.06865	.00995	.02108	.01451
Stddev	.00101	.00097	.00074	.00010	.00002	.00033	.00142	.01103	.00036	.00000	.00173
%RSD	4.9976	.20020	.74017	.95116	.14078	3.5226	8.7142	16.066	3.6536	.00243	11.926

#1	.02095	.48574	.09914	.01012	.01734	.00972	.01532	.07645	.00969	.02108	.01573
#2	.01952	.48711	.10019	.00998	.01737	.00925	.01733	.06085	.01021	.02108	.01329

Check ?	Chk Fail	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Value	.01500										
Range	30.000%										

Int. Std.	Y_2243	Y_3600	Y_3774
Units	Cts/S	Cts/S	Cts/S
Avg	1537.4	31589.	5572.6
Stddev	2.2	28.	7.8
%RSD	.14377	.08835	.13972

#1	1539.0	31608.	5567.1
#2	1535.8	31569.	5578.1

Sample Name: MB 280-325562/1-A Acquired: 5/24/2016 5:16:59 Type: Unk
Method: 6500_026(v10) Mode: CONC Corr. Factor: 1.000000
User: kellyca Custom ID1: 5/19 Custom ID2: Custom ID3:
Comment: 325562 6010B DenWaste

Elem	Ag3280	Al1670	As1890	B_2089	Ba4554	Be3130	Bi2230	Ca3179	Cd2288
Line	328.068 {103}	167.079 {502}	189.042 {478}	208.959 {461}	455.403 { 74}	313.042 {108}	223.061 {451}	317.933 {106}	228.802 {447}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.00010	.00565	-.00130	.00269	.00021	.00006	.00208	.01853	.00016
Stddev	.00022	.00003	.00335	.00037	.00007	.00002	.00104	.00157	.00015
%RSD	214.92	.58513	257.91	13.597	33.991	33.103	50.075	8.4615	96.491
#1	-.00005	.00567	-.00367	.00243	.00016	.00008	.00135	.01742	.00026
#2	.00025	.00562	.00107	.00295	.00027	.00005	.00282	.01964	.00005

Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Elem	Co2286	Cr2055	Cu3247	Fe2599	K_7664	Li6707	Mg2790	Mn2576	Mo2020
Line	228.616 {447}	205.560 {464}	324.754 {104}	259.940 {130}	766.490 { 44}	670.784 { 50}	279.079 {121}2	257.610 {131}	202.030 {467}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	-.00004	.00011	.00129	.01383	.06032	-.00099	.00929	F .03204	-.00011
Stddev	.00017	.00031	.00011	.00039	.00881	.00041	.00195	.00006	.00038
%RSD	412.02	290.62	8.2247	2.8406	14.597	41.949	20.978	.20030	355.85
#1	-.00016	-.00011	.00121	.01355	.05409	-.00128	.01067	.03209	-.00037
#2	.00008	.00033	.00136	.01411	.06655	-.00070	.00791	.03200	.00016

Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Fail	Chk Pass
High Limit								.01000	
Low Limit								-.01000	

Elem	Na5895	Ni2316	P_1782	Pb2203	S_1820	Sb2068	Se1960	Si2881	Sn1899
Line	589.592 { 57}	231.604 {446}	178.284 {489}	220.353 {453}	182.034 {485}	206.833 {463}	196.090 {472}	288.158 {117}	189.989 {477}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.09567	.00009	.00440	.00224	F .16111	.00115	W .00661	.02020	W .07768
Stddev	.00299	.00002	.00007	.00043	.00215	.00110	.00303	.00780	.00033
%RSD	3.1248	23.868	1.5965	19.088	1.3346	96.010	45.849	38.593	.42006
#1	.09356	.00007	.00435	.00254	.15959	.00193	.00447	.01469	.07745
#2	.09779	.00010	.00445	.00194	.16263	.00037	.00875	.02571	.07791

Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Fail	Chk Pass	Chk Warn	Chk Pass	Chk Warn
High Limit					.10000		.00500		.05000
Low Limit					-.10000		-.00500		-.05000

Elem	Sr4077	Th2837	Ti3349	Ti1908	U_3701	V_2924	Zn2062	Zr3391
Line	407.771 { 83}	283.730 {119}	334.904 {101}	190.856 {477}	370.152 { 91}	292.402 {115}	206.200 {163}	339.198 { 99}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.00002	.00116	.00023	.00194	.00529	-.00002	.00030	-.00093
Stddev	.00003	.00080	.00001	.00037	.01257	.00004	.00081	.00131
%RSD	124.26	68.779	5.5324	18.918	237.81	163.10	267.05	140.39
#1	.00004	.00060	.00022	.00220	.01418	.00000	-.00027	-.00185
#2	.00000	.00172	.00024	.00168	-.00360	-.00005	.00088	-.00001

Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit								
Low Limit								

Int. Std.	Y_2243	Y_3600	Y_3774
Line	224.306 {450}	360.073 { 94}	377.433 { 89}
Units	Cts/S	Cts/S	Cts/S
Avg	1557.8	31935.	5607.3
Stddev	.7	54.	24.2
%RSD	.04639	.16835	.43132
#1	1557.3	31973.	5624.4
#2	1558.3	31897.	5590.2

Sample Name: LCS 280-325562/2-A Acquired: 5/24/2016 5:19:43 Type: Unk
Method: 6500_026(v10) Mode: CONC Corr. Factor: 1.000000
User: kellyca Custom ID1: Custom ID2: Custom ID3:
Comment: 325562 6010B DenWaste

Elem	Ag3280	Al1670	As1890	B_2089	Ba4554	Be3130	Bi2230	Ca3179	Cd2288
Line	328.068 {103}	167.079 {502}	189.042 {478}	208.959 {461}	455.403 { 74}	313.042 {108}	223.061 {451}	317.933 {106}	228.802 {447}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.05246	1.9317	1.0337	1.0393	2.0248	.04974	2.1913	48.441	.10225
Stddev	.00041	.0010	.0068	.0019	.0073	.00010	.0107	.190	.00004
%RSD	.78607	.05023	.65646	.18480	.35977	.19877	.48810	.39139	.03584
#1	.05217	1.9310	1.0289	1.0379	2.0299	.04981	2.1838	48.576	.10222
#2	.05275	1.9324	1.0385	1.0406	2.0196	.04967	2.1989	48.307	.10227

Check ? Chk Pass Chk Pass Chk Pass Chk Pass Chk Pass Chk Pass Chk Pass Chk Pass Chk Pass
High Limit
Low Limit

Elem	Co2286	Cr2055	Cu3247	Fe2599	K_7664	Li6707	Mg2790	Mn2576	Mo2020
Line	228.616 {447}	205.560 {464}	324.754 {104}	259.940 {130}	766.490 { 44}	670.784 { 50}	279.079 {121}2	257.610 {131}	202.030 {467}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.49358	F .19790	.26355	.96540	54.810	1.1200	50.877	.49703	1.0150
Stddev	.00054	.00072	.00018	.00008	.270	.0058	.164	.00181	.0014
%RSD	.11020	.36148	.06763	.00870	.49180	.51779	.32194	.36466	.14305
#1	.49396	.19740	.26368	.96534	55.000	1.1241	50.761	.49574	1.0161
#2	.49319	.19841	.26343	.96546	54.619	1.1159	50.992	.49831	1.0140

Check ? Chk Pass Chk Fail Chk Pass Chk Pass Chk Pass Chk Pass Chk Pass Chk Pass Chk Pass
High Limit .05750
Low Limit .04300

Elem	Na8183	Ni2316	P_1782	Pb2203	S_1820	Sb2068	Se1960	Si2881	Sn1899
Line	818.326 { 41}	231.604 {446}	178.284 {489}	220.353 {453}	182.034 {485}	206.833 {463}	196.090 {472}	288.158 {117}	189.989 {477}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	55.272	.49971	10.454	.50748	2.1243	.52695	2.0992	9.4678	1.9937
Stddev	.123	.00049	.002	.00352	.0104	.00040	.0026	.0193	.0041
%RSD	.22250	.09892	.02159	.69441	.48987	.07579	.12354	.20398	.20582
#1	55.185	.50006	10.455	.50499	2.1316	.52667	2.1010	9.4814	1.9908
#2	55.359	.49936	10.452	.50997	2.1169	.52724	2.0974	9.4541	1.9966

Check ? Chk Pass Chk Pass Chk Pass Chk Pass Chk Pass Chk Pass Chk Pass Chk Pass Chk Pass
High Limit
Low Limit

Elem	Sr4077	Th2837	Ti3349	Ti1908	U_3701	V_2924	Zn2062	Zr3391
Line	407.771 { 83}	283.730 {119}	334.904 {101}	190.856 {477}	370.152 { 91}	292.402 {115}	206.200 {163}	339.198 { 99}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	1.0148	1.0186	.99137	2.0138	2.1677	.49174	.48297	.48575
Stddev	.0040	.0006	.00072	.0008	.0374	.00082	.00701	.00388
%RSD	.39060	.06218	.07228	.03933	1.7271	.16652	1.4513	.79954
#1	1.0176	1.0190	.99087	2.0144	2.1412	.49116	.47802	.48849
#2	1.0120	1.0181	.99188	2.0133	2.1942	.49232	.48793	.48300

Check ? Chk Pass Chk Pass Chk Pass Chk Pass Chk Pass Chk Pass Chk Pass Chk Pass
High Limit
Low Limit

Int. Std.	Y_2243	Y_3600	Y_3774
Line	224.306 {450}	360.073 { 94}	377.433 { 89}
Units	Cts/S	Cts/S	Cts/S
Avg	1479.5	29880.	5549.4
Stddev	.2	49.	29.9
%RSD	.01504	.16239	.53857
#1	1479.7	29915.	5528.2
#2	1479.4	29846.	5570.5

Sample Name: LCSD 280-325562/3-A Acquired: 5/24/2016 5:22:14 Type: Unk

Method: 6500_026(v10) Mode: CONC Corr. Factor: 1.000000

User: kellyca Custom ID1: Custom ID2: Custom ID3:

Comment: 325562 6010B DenWaste

Elem	Ag3280	Al1670	As1890	B_2089	Ba4554	Be3130	Bi2230	Ca3179	Cd2288
Line	328.068 {103}	167.079 {502}	189.042 {478}	208.959 {461}	455.403 { 74}	313.042 {108}	223.061 {451}	317.933 {106}	228.802 {447}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.05131	1.8815	1.0135	1.0051	2.0034	.04865	2.1486	47.103	.09931
Stddev	.00023	.0174	.0148	.0052	.0073	.00001	.0113	.021	.00015
%RSD	.45705	.92383	1.4588	.52044	.36176	.01200	.52348	.04397	.15497

#1	.05147	1.8938	1.0239	1.0088	2.0086	.04865	2.1566	47.118	.09920
#2	.05114	1.8692	1.0030	1.0014	1.9983	.04866	2.1406	47.088	.09942

Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Elem	Co2286	Cr2055	Cu3247	Fe2599	K_7664	Li6707	Mg2790	Mn2576	Mo2020
Line	228.616 {447}	205.560 {464}	324.754 {104}	259.940 {130}	766.490 { 44}	670.784 { 50}	279.079 {121}2	257.610 {131}	202.030 {467}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.48601	W .19623	.26244	.96939	53.864	1.1084	49.460	.48205	1.0127
Stddev	.00092	.00183	.00083	.00080	.166	.0049	.063	.00154	.0042
%RSD	.18881	.93194	.31724	.08254	.30725	.43857	.12799	.31906	.41673

#1	.48666	.19752	.26303	.96996	53.981	1.1118	49.505	.48314	1.0157
#2	.48536	.19494	.26185	.96883	53.747	1.1049	49.415	.48096	1.0097

Check ?	Chk Pass	Chk Warn	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit		.10000							
Low Limit		-.01000							

Elem	Na8183	Ni2316	P_1782	Pb2203	S_1820	Sb2068	Se1960	Si2881	Sn1899
Line	818.326 { 41}	231.604 {446}	178.284 {489}	220.353 {453}	182.034 {485}	206.833 {463}	196.090 {472}	288.158 {117}	189.989 {477}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	53.786	.49096	10.096	.49823	2.0183	.51237	2.0171	9.1857	1.9383
Stddev	.006	.00317	.072	.00213	.0039	.00374	.0185	.0583	.0133
%RSD	.01140	.64518	.70830	.42663	.19341	.73071	.91697	.63516	.68620

#1	53.790	.49320	10.147	.49973	2.0211	.51502	2.0301	9.2269	1.9477
#2	53.782	.48872	10.046	.49672	2.0155	.50972	2.0040	9.1444	1.9289

Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Elem	Sr4077	Th2837	Ti3349	Ti1908	U_3701	V_2924	Zn2062	Zr3391
Line	407.771 { 83}	283.730 {119}	334.904 {101}	190.856 {477}	370.152 { 91}	292.402 {115}	206.200 {163}	339.198 { 99}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	1.0004	1.0148	.98492	1.9604	2.1791	.48658	.46506	.47804
Stddev	.0038	.0022	.00146	.0129	.0194	.00027	.00280	.00353
%RSD	.38006	.21221	.14856	.65737	.89040	.05510	.60265	.73816

#1	1.0031	1.0163	.98595	1.9696	2.1654	.48640	.46308	.48054
#2	.99768	1.0133	.98388	1.9513	2.1928	.48677	.46704	.47554

Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit								
Low Limit								

Int. Std.	Y_2243	Y_3600	Y_3774
Line	224.306 {450}	360.073 { 94}	377.433 { 89}
Units	Cts/S	Cts/S	Cts/S
Avg	1464.0	29687.	5594.6
Stddev	7.9	65.	28.4
%RSD	.54250	.21893	.50741

#1	1458.4	29641.	5574.5
#2	1469.6	29733.	5614.7

Sample Name: 280-82899-A-1-B Acquired: 5/24/2016 5:24:46 Type: Unk
Method: 6500_026(v10) Mode: CONC Corr. Factor: 1.000000
User: kellyca Custom ID1: Custom ID2: Custom ID3:
Comment: 325562 6010B DenWaste

Elem	Ag3280	Al3092	As1890	B_2089	Ba4554	Be3130	Bi2230	Ca3179	Cd2288
Line	328.068 {103}	309.271 {109}	189.042 {478}	208.959 {461}	455.403 { 74}	313.042 {108}	223.061 {451}	317.933 {106}	228.802 {447}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.01645	36.470	.02357	2.9657	.23826	.00163	.00987	63.951	1.9716
Stddev	.00026	.142	.00568	.0091	.00079	.00003	.00058	.054	.0028
%RSD	1.6066	.38912	24.106	.30529	.33175	1.5636	5.8394	.08376	.14229

#1	.01626	36.370	.02759	2.9593	.23770	.00161	.01028	63.989	1.9696
#2	.01664	36.570	.01955	2.9721	.23882	.00165	.00946	63.913	1.9736

Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Elem	Co2286	Cr2055	Cu3247	Fe2599	K_7664	Li6707	Mg2790	Mn2576	Mo2020
Line	228.616 {447}	205.560 {464}	324.754 {104}	259.940 {130}	766.490 { 44}	670.784 { 50}	279.079 {121}2	257.610 {131}	202.030 {467}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.01511	.06048	5.5908	26.157	W 208.36	.25604	64.725	1.1448	.37118
Stddev	.00003	.00055	.0153	.029	.67	.00049	.232	.0020	.00016
%RSD	.17181	.90843	.27445	.11088	.32095	.19319	.35822	.17483	.04299

#1	.01513	.06009	5.5799	26.137	207.89	.25569	64.561	1.1434	.37106
#2	.01509	.06087	5.6016	26.178	208.83	.25639	64.889	1.1462	.37129

Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Warn	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit					100.00				
Low Limit					-.50000				

Elem	Na8183	Ni2316	P_1782	Pb2203	S_1820	Sb2068	Se1960	Si2881	Sn1899
Line	818.326 { 41}	231.604 {446}	178.284 {489}	220.353 {453}	182.034 {485}	206.833 {463}	196.090 {472}	288.158 {117}	189.989 {477}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	W 1077.2	.06226	F 130.91	.04974	F 1005.8	.01548	.02405	31.744	.61542
Stddev	4.1	.00073	.32	.00182	2.0	.00001	.00407	.216	.00326
%RSD	.37639	1.1718	.24092	3.6543	.20359	.08283	16.929	.68055	.53033

#1	1074.3	.06277	130.69	.05103	1004.4	.01549	.02117	31.897	.61311
#2	1080.0	.06174	131.13	.04846	1007.3	.01547	.02693	31.591	.61773

Check ?	Chk Warn	Chk Pass	Chk Fail	Chk Pass	Chk Fail	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit	500.00		50.000		200.00				
Low Limit	10.000		-2.0000		-.02000				

Elem	Sr4077	Th2837	Ti3349	Ti1908	U_3701	V_2924	Zn2062	Zr3391
Line	407.771 { 83}	283.730 {119}	334.904 {101}	190.856 {477}	370.152 { 91}	292.402 {115}	206.200 {163}	339.198 { 99}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.79971	.00569	.38163	.00310	.00124	.05236	.32628	.01082
Stddev	.00173	.00076	.00052	.00052	.00562	.00036	.00216	.00002
%RSD	.21639	13.314	.13601	16.835	453.41	.69188	.66274	.18260

#1	.79848	.00515	.38127	.00273	-.00273	.05210	.32475	.01083
#2	.80093	.00622	.38200	.00346	.00521	.05261	.32781	.01080

Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit								
Low Limit								

Int. Std.	Y_2243	Y_3600	Y_3774
Line	224.306 {450}	360.073 { 94}	377.433 { 89}
Units	Cts/S	Cts/S	Cts/S
Avg	1394.8	27653.	5625.5
Stddev	4.9	19.	3.0
%RSD	.35386	.06783	.05277

#1	1398.3	27666.	5623.4
#2	1391.3	27640.	5627.5

Sample Name: 280-82899-A-2-B Acquired: 5/24/2016 5:27:49 Type: Unk
Method: 6500_026(v10) Mode: CONC Corr. Factor: 1.000000
User: kellyca Custom ID1: Custom ID2: Custom ID3:
Comment: 325562 6010B DenWaste

Elem	Ag3280	Al1670	As1890	B_2089	Ba4554	Be3130	Bi2230	Ca3179	Cd2288
Line	328.068 {103}	167.079 {502}	189.042 {478}	208.959 {461}	455.403 { 74}	313.042 {108}	223.061 {451}	317.933 {106}	228.802 {447}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.05601	1.6945	1.3695	4.8497	.13686	-.00007	.01882	109.62	1.7309
Stddev	.00041	.0000	.0041	.0010	.00791	.00008	.00468	.22	.0015
%RSD	.73247	.00245	.29919	.02145	5.7774	106.50	24.884	.19897	.08529

#1	.05572	1.6945	1.3666	4.8490	.13127	-.00002	.01551	109.77	1.7319
#2	.05630	1.6946	1.3724	4.8504	.14245	-.00013	.02214	109.46	1.7299

Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Elem	Co2286	Cr2055	Cu3247	Fe2599	K_7664	Li6707	Mg2790	Mn2576	Mo2020
Line	228.616 {447}	205.560 {464}	324.754 {104}	259.940 {130}	766.490 { 44}	670.784 { 50}	279.079 {121}2	257.610 {131}	202.030 {467}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.00856	W .35307	3.2178	6.6803	W 144.63	.18643	471.07	.79394	W 17.491
Stddev	.00048	.00023	.0105	.0070	.50	.00034	2.69	.00491	.003
%RSD	5.6174	.06621	.32710	.10536	.34597	.18244	.57076	.61819	.01583

#1	.00891	.35323	3.2253	6.6853	144.99	.18667	472.97	.79741	17.493
#2	.00822	.35290	3.2104	6.6753	144.28	.18619	469.17	.79046	17.489

Check ?	Chk Pass	Chk Warn	Chk Pass	Chk Pass	Chk Warn	Chk Pass	Chk Pass	Chk Pass	Chk Warn
High Limit		.10000			100.00				2.0000
Low Limit		-.01000			-.50000				-.01000

Elem	Na8183	Ni2316	P_1782	Pb2203	S_1820	Sb2068	Se1960	Si2881	Sn1899
Line	818.326 { 41}	231.604 {446}	178.284 {489}	220.353 {453}	182.034 {485}	206.833 {463}	196.090 {472}	288.158 {117}	189.989 {477}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	W 1590.9	.04321	F 86.376	.37083	F 3421.3	W 2.5780	.04410	11.928	.16651
Stddev	8.1	.00040	.122	.00279	3.5	.0085	.00447	.007	.00260
%RSD	.50829	.92474	.14124	.75363	.10140	.32973	10.133	.05706	1.5606

#1	1596.6	.04293	86.290	.37281	3423.7	2.5840	.04094	11.932	.16835
#2	1585.2	.04349	86.462	.36885	3418.8	2.5720	.04726	11.923	.16467

Check ?	Chk Warn	Chk Pass	Chk Fail	Chk Pass	Chk Fail	Chk Warn	Chk Pass	Chk Pass	Chk Pass
High Limit	500.00		50.000		200.00	2.0000			
Low Limit	10.000		-2.0000		-.02000	-.01000			

Elem	Sr4077	Th2837	Ti3349	Ti1908	U_3701	V_2924	Zn2062	Zr3391
Line	407.771 { 83}	283.730 {119}	334.904 {101}	190.856 {477}	370.152 { 91}	292.402 {115}	206.200 {163}	339.198 { 99}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	1.1922	.00741	.05027	.00019	.06968	.00595	7.2900	.00874
Stddev	.0049	.00237	.00016	.00067	.01896	.00042	.0568	.00008
%RSD	.40750	31.961	.31097	355.58	27.208	7.0052	.77900	.92518

#1	1.1956	.00909	.05015	.00066	.05628	.00566	7.3302	.00880
#2	1.1887	.00574	.05038	-.00028	.08309	.00625	7.2499	.00869

Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit								
Low Limit								

Int. Std.	Y_2243	Y_3600	Y_3774
Line	224.306 {450}	360.073 { 94}	377.433 { 89}
Units	Cts/S	Cts/S	Cts/S
Avg	1221.8	24714.	5140.1
Stddev	1.0	164.	22.7
%RSD	.08329	.66172	.44126

#1	1222.5	24599.	5124.1
#2	1221.1	24830.	5156.2

Sample Name: 280-82899-B-3-A Acquired: 5/24/2016 5:30:51 Type: Unk
Method: 6500_026(v10) Mode: CONC Corr. Factor: 1.000000
User: kellyca Custom ID1: Custom ID2: Custom ID3:
Comment: 325562 6010B DenWaste

Elem	Ag3280	Al3092	As1890	B_2089	Ba4554	Be3130	Bi2230	Ca3179	Cd2288
Line	328.068 {103}	309.271 {109}	189.042 {478}	208.959 {461}	455.403 { 74}	313.042 {108}	223.061 {451}	317.933 {106}	228.802 {447}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	W .14078	20.664	.05293	.77236	.48157	.00449	.12398	104.03	.02117
Stddev	.00000	.075	.00745	.00197	.00032	.00002	.00151	.52	.00016
%RSD	.00124	.36199	14.067	.25551	.06705	.55114	1.2148	.50109	.77601

#1	.14079	20.611	.05820	.77376	.48134	.00447	.12291	103.66	.02105
#2	.14078	20.717	.04766	.77097	.48180	.00451	.12504	104.40	.02128

Check ?	Chk Warn	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit	.10000								
Low Limit	-.01000								

Elem	Co2286	Cr2055	Cu3247	Fe2599	K_7664	Li6707	Mg2790	Mn2576	Mo2020
Line	228.616 {447}	205.560 {464}	324.754 {104}	259.940 {130}	766.490 { 44}	670.784 { 50}	279.079 {121}2	257.610 {131}	202.030 {467}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.00458	W .11139	.07432	31.081	F 1420.2	.15136	18.638	F 118.44	.11154
Stddev	.00050	.00046	.00016	.126	7.5	.00080	.001	.26	.00141
%RSD	10.836	.41182	.21685	.40390	.52939	.52838	.00753	.21973	1.2670

#1	.00423	.11172	.07420	30.992	1414.9	.15193	18.637	118.62	.11054
#2	.00493	.11107	.07443	31.169	1425.5	.15080	18.639	118.25	.11254

Check ?	Chk Pass	Chk Warn	Chk Pass	Chk Pass	Chk Fail	Chk Pass	Chk Pass	Chk Fail	Chk Pass
High Limit		.10000			500.00			20.000	
Low Limit		-.01000			-2.0000			-.02000	

Elem	Na8183	Ni2316	P_1782	Pb2203	S_1820	Sb2068	Se1960	Si2881	Sn1899
Line	818.326 { 41}	231.604 {446}	178.284 {489}	220.353 {453}	182.034 {485}	206.833 {463}	196.090 {472}	288.158 {117}	189.989 {477}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	W 1911.5	.04507	5.0906	.32010	F 3042.4	.38034	.38167	21.500	F 902.40
Stddev	7.8	.00020	.0021	.00055	1.0	.00567	.00711	.152	.07
%RSD	.40715	.43774	.04092	.17307	.03200	1.4903	1.8634	.70757	.00768

#1	1906.0	.04493	5.0921	.32049	3041.7	.37633	.38670	21.608	902.35
#2	1917.0	.04521	5.0891	.31971	3043.1	.38435	.37664	21.393	902.45

Check ?	Chk Warn	Chk Pass	Chk Pass	Chk Pass	Chk Fail	Chk Pass	Chk Pass	Chk Pass	Chk Fail
High Limit	500.00				200.00				20.000
Low Limit	10.000				-.02000				-.10000

Elem	Sr4077	Th2837	Ti3349	Ti1908	U_3701	V_2924	Zn2062	Zr3391
Line	407.771 { 83}	283.730 {119}	334.904 {101}	190.856 {477}	370.152 { 91}	292.402 {115}	206.200 {163}	339.198 { 99}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.42403	.06158	.90994	.75440	F -4.5065	F -.16556	.34132	.02686
Stddev	.00109	.00375	.00191	.00459	.0198	.00125	.00298	.00027
%RSD	.25743	6.0952	.21027	.60880	.43850	.75383	.87343	1.0168

#1	.42325	.06423	.90859	.75116	-4.5205	-.16645	.33921	.02666
#2	.42480	.05892	.91130	.75765	-4.4926	-.16468	.34343	.02705

Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Fail	Chk Fail	Chk Pass	Chk Pass
High Limit					50.000	50.000		
Low Limit					-.10000	-.02000		

Int. Std.	Y_2243	Y_3600	Y_3774
Line	224.306 {450}	360.073 { 94}	377.433 { 89}
Units	Cts/S	Cts/S	Cts/S
Avg	1247.3	24365.	4994.0
Stddev	1.5	21.	2.8
%RSD	.12210	.08536	.05623

#1	1246.2	24380.	4996.0
#2	1248.3	24350.	4992.0

Sample Name: 280-82899-A-4-B Acquired: 5/24/2016 5:34:05 Type: Unk
Method: 6500_026(v10) Mode: CONC Corr. Factor: 1.000000
User: kellyca Custom ID1: Custom ID2: Custom ID3:
Comment: 325562 6010B DenWaste

Elem	Ag3280	Al3092	As1890	B_2089	Ba4554	Be3130	Bi2230	Ca3179	Cd2288
Line	328.068 {103}	309.271 {109}	189.042 {478}	208.959 {461}	455.403 { 74}	313.042 {108}	223.061 {451}	317.933 {106}	228.802 {447}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.03628	29.225	.42999	6.0336	.69517	.02412	.16657	241.39	.03612
Stddev	.00022	.110	.00243	.0074	.00211	.00005	.00262	1.24	.00041
%RSD	.59388	.37563	.56539	.12258	.30336	.19658	1.5707	.51486	1.1389

#1	.03613	29.148	.43171	6.0283	.69368	.02409	.16842	240.51	.03583
#2	.03644	29.303	.42827	6.0388	.69666	.02416	.16472	242.27	.03641

Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Elem	Co2286	Cr2055	Cu3247	Fe2714	K_7664	Li6707	Mg2790	Mn2576	Mo2020
Line	228.616 {447}	205.560 {464}	324.754 {104}	271.441 {124}	766.490 { 44}	670.784 { 50}	279.079 {121}2	257.610 {131}	202.030 {467}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.07510	.09131	.19797	53.258	32.424	.29515	99.216	2.7735	.24865
Stddev	.00006	.00095	.00073	.143	.074	.00109	.511	.0184	.00016
%RSD	.07536	1.0384	.37082	.26773	.22766	.37092	.51516	.66431	.06326

#1	.07514	.09198	.19849	53.157	32.371	.29438	99.578	2.7865	.24876
#2	.07506	.09064	.19745	53.359	32.476	.29593	98.855	2.7604	.24854

Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Elem	Na8183	Ni2316	P_1782	Pb2203	S_1820	Sb2068	Se1960	Si2881	Sn1899
Line	818.326 { 41}	231.604 {446}	178.284 {489}	220.353 {453}	182.034 {485}	206.833 {463}	196.090 {472}	288.158 {117}	189.989 {477}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	305.32	.11478	3.9822	.48774	F 228.00	.07159	.19647	10.648	.56368
Stddev	1.09	.00033	.0032	.00590	.05	.00166	.00538	.037	.01321
%RSD	.35782	.28367	.08075	1.2090	.02354	2.3178	2.7374	.35113	2.3430

#1	304.55	.11455	3.9800	.49191	228.04	.07041	.19267	10.622	.57302
#2	306.09	.11501	3.9845	.48357	227.96	.07276	.20028	10.675	.55434

Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Fail	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit					200.00				
Low Limit					-.02000				

Elem	Sr4077	Th2837	Ti3349	Ti1908	U_3701	V_2924	Zn2062	Zr3391
Line	407.771 { 83}	283.730 {119}	334.904 {101}	190.856 {477}	370.152 { 91}	292.402 {115}	206.200 {163}	339.198 { 99}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	1.6710	.12689	1.2554	.15243	.27231	.12542	.68239	.07143
Stddev	.0055	.00116	.0037	.00179	.00987	.00079	.00300	.00089
%RSD	.33076	.91145	.29173	1.1775	3.6244	.63319	.43976	1.2515

#1	1.6670	.12771	1.2580	.15116	.26533	.12485	.68451	.07206
#2	1.6749	.12607	1.2528	.15370	.27928	.12598	.68027	.07080

Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit								
Low Limit								

Int. Std.	Y_2243	Y_3600	Y_3774
Line	224.306 {450}	360.073 { 94}	377.433 { 89}
Units	Cts/S	Cts/S	Cts/S
Avg	1419.9	29058.	5635.6
Stddev	4.7	117.	8.3
%RSD	.32978	.40297	.14811

#1	1423.2	28975.	5641.5
#2	1416.6	29141.	5629.7

Sample Name: 280-82899-B-5-B Acquired: 5/24/2016 5:36:47 Type: Unk
Method: 6500_026(v10) Mode: CONC Corr. Factor: 1.000000
User: kellyca Custom ID1: Custom ID2: Custom ID3:
Comment: 325562 6010B DenWaste

Elem	Ag3280	Al3092	As1890	B_2089	Ba4554	Be3130	Bi2230	Ca3179	Cd2288
Line	328.068 {103}	309.271 {109}	189.042 {478}	208.959 {461}	455.403 { 74}	313.042 {108}	223.061 {451}	317.933 {106}	228.802 {447}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.00032	4.9124	.02850	.70549	.25196	.00018	-.00161	199.73	.01724
Stddev	.00105	.0302	.00792	.00499	.00003	.00008	.00324	1.25	.00001
%RSD	327.05	.61559	27.805	.70742	.01346	44.219	201.40	.62457	.07294

#1	-.00042	4.9338	.02289	.70196	.25194	.00012	-.00390	200.61	.01723
#2	.00106	4.8910	.03410	.70902	.25199	.00024	.00068	198.85	.01725

Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Elem	Co2286	Cr2055	Cu3247	Fe2599	K_7664	Li6707	Mg2790	Mn2576	Mo2020
Line	228.616 {447}	205.560 {464}	324.754 {104}	259.940 {130}	766.490 { 44}	670.784 { 50}	279.079 {121}2	257.610 {131}	202.030 {467}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.01312	.05007	.26118	21.333	85.005	.06818	64.074	.52256	1.4163
Stddev	.00009	.00038	.00052	.088	.124	.00003	.097	.01054	.0050
%RSD	.65708	.75947	.19751	.41381	.14588	.04709	.15067	2.0176	.34971

#1	.01305	.04980	.26082	21.396	85.093	.06815	64.142	.51511	1.4128
#2	.01318	.05034	.26155	21.271	84.918	.06820	64.006	.53002	1.4198

Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Elem	Na8183	Ni2316	P_1782	Pb2203	S_1820	Sb2068	Se1960	Si2881	Sn1899
Line	818.326 { 41}	231.604 {446}	178.284 {489}	220.353 {453}	182.034 {485}	206.833 {463}	196.090 {472}	288.158 {117}	189.989 {477}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	W 1594.1	.02758	5.8737	.01256	F 575.24	.01334	.01630	14.412	.23027
Stddev	2.8	.00099	.0311	.00023	3.29	.00200	.00937	.045	.01390
%RSD	.17467	3.5867	.53020	1.8084	.57277	14.969	57.482	.31419	6.0348

#1	1596.0	.02688	5.8517	.01240	572.91	.01193	.00968	14.444	.24010
#2	1592.1	.02828	5.8958	.01272	577.57	.01475	.02293	14.380	.22044

Check ?	Chk Warn	Chk Pass	Chk Pass	Chk Pass	Chk Fail	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit	500.00				200.00				
Low Limit	10.000				-.02000				

Elem	Sr4077	Th2837	Ti3349	Ti1908	U_3701	V_2924	Zn2062	Zr3391
Line	407.771 { 83}	283.730 {119}	334.904 {101}	190.856 {477}	370.152 { 91}	292.402 {115}	206.200 {163}	339.198 { 99}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	1.3075	.00055	.21122	.00022	.02573	.03585	3.3923	.00283
Stddev	.0025	.00151	.00043	.00234	.01871	.00024	.0128	.00050
%RSD	.19242	273.34	.20401	1080.4	72.719	.66112	.37673	17.531

#1	1.3093	.00162	.21152	.00187	.03897	.03602	3.4013	.00318
#2	1.3057	-.00051	.21091	-.00144	.01250	.03568	3.3833	.00248

Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit								
Low Limit								

Int. Std.	Y_2243	Y_3600	Y_3774
Line	224.306 {450}	360.073 { 94}	377.433 { 89}
Units	Cts/S	Cts/S	Cts/S
Avg	1328.7	26559.	5418.7
Stddev	8.8	26.	18.0
%RSD	.66418	.09741	.33158

#1	1334.9	26541.	5406.0
#2	1322.5	26577.	5431.4

Sample Name: ccvh-3900196 Acquired: 5/24/2016 5:39:50 Type: QC
Method: 6500_026(v10) Mode: CONC Corr. Factor: 1.000000
User: kellyca Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	Ag3280	Al3092	As1890	B_2089	Ba4554	Be3130	Bi2230	Ca3179	Cd2288	Co2286	Cr2055	Cu3247	Fe2714
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.00219	48.600	-.00078	.01223	.00040	-.00018	1.0243	-.04698	-.00099	.00352	-.00050	.00918	48.218
Stddev	.00002	.029	.00015	.00083	.00012	.00005	.0073	.00156	.00002	.00004	.00037	.00022	.075
%RSD	.79642	.06058	18.771	6.7723	29.807	27.117	.71602	3.3129	2.4419	1.1991	73.770	2.3736	.15532

#1	.00221	48.621	-.00068	.01281	.00032	-.00015	1.0295	-.04588	-.00101	.00355	-.00077	.00902	48.271
#2	.00218	48.579	-.00088	.01164	.00049	-.00022	1.0191	-.04808	-.00097	.00349	-.00024	.00933	48.165

Check ?	None	Chk Pass	None	None	None	None	Chk Pass	None	None	None	None	None	Chk Pass
Value													
Range													

Elem	K_7664	Li6707	Mg2790	Mn2576	Mo2020	Na8183	Ni2316	P_1782	Pb2203	S_1820	Sb2068	Se1960	Si2881
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.71934	.00074	.15594	.01100	-.00092	264.61	-.00059	.00882	.00035	5.0254	.00326	.00912	.01560
Stddev	.02344	.00098	.00169	.00096	.00044	.38	.00047	.00339	.00139	.0403	.00215	.00741	.00656
%RSD	3.2592	131.67	1.0819	8.7502	48.370	.14402	80.126	38.402	393.21	.80290	65.979	81.224	42.068

#1	.73592	.00005	.15475	.01168	-.00123	264.34	-.00026	.00643	.00134	5.0539	.00478	.01436	.02024
#2	.70276	.00143	.15714	.01031	-.00060	264.88	-.00093	.01122	-.00063	4.9969	.00174	.00388	.01096

Check ?	None	None	None	None	None	Chk Pass	None	None	None	Chk Pass	None	None	None
Value													
Range													

Elem	Sn1899	Sr4077	Th2837	Ti3349	Tl1908	U_3701	V_2924	Zn2062	Zr3391
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.02699	.00037	5.0040	.02289	-.00309	10.329	-.01580	-.00206	.00021
Stddev	.00310	.00008	.0013	.00065	.00015	.015	.00085	.00122	.00202
%RSD	11.475	22.125	.02620	2.8433	4.8805	.14107	5.4105	59.401	950.07

#1	.02918	.00042	5.0049	.02243	-.00320	10.319	-.01641	-.00292	.00164
#2	.02480	.00031	5.0030	.02335	-.00298	10.340	-.01520	-.00119	-.00122

Check ?	None	None	Chk Pass	None	None	Chk Pass	None	None	None
Value									
Range									

Int. Std.	Y_2243	Y_3600	Y_3774
Units	Cts/S	Cts/S	Cts/S
Avg	1479.1	29679.	5470.7
Stddev	6.2	88.	10.6
%RSD	.42029	.29735	.19461

#1	1474.7	29616.	5478.2
#2	1483.5	29741.	5463.1

Sample Name: ccv-3900195 Acquired: 5/24/2016 5:42:39 Type: QC
Method: 6500_026(v10) Mode: CONC Corr. Factor: 1.000000
User: kellyca Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	Ag3280	Al1670	As1890	B_2089	Ba4554	Be3130	Bi2230	Ca3179	Cd2288	Co2286	Cr2055	Cu3247
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.51011	.51951	1.0152	.54217	.49357	.49046	.00284	4.8032	.50839	.50292	.49136	.51186
Stddev	.00028	.00278	.0118	.00180	.00020	.00006	.00046	.0041	.00040	.00103	.00030	.00147
%RSD	.05413	.53457	1.1639	.33281	.03954	.01226	16.082	.08616	.07879	.20541	.06088	.28809

#1	.50992	.51754	1.0068	.54089	.49343	.49051	.00252	4.8003	.50810	.50219	.49115	.51291
#2	.51031	.52147	1.0235	.54345	.49370	.49042	.00316	4.8061	.50867	.50365	.49157	.51082

Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	None	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Value												
Range												

Elem	Fe2599	K_7664	Li6707	Mg2790	Mn2576	Mo2020	Na5895	Ni2316	P_1782	Pb2203	S_1820	Sb2068
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	2.3225	53.193	1.0939	20.579	.50265	.49235	F 5.6105	.50755	1.0342	1.0401	.13336	1.0150
Stddev	.0002	.026	.0020	.091	.00169	.00117	.0109	.00148	.0053	.0016	.00427	.0028
%RSD	.00829	.04901	.18294	.44116	.33582	.23685	.19410	.29166	.51625	.15766	3.2003	.27421

#1	2.3224	53.212	1.0953	20.644	.50384	.49153	5.6182	.50650	1.0380	1.0390	.13638	1.0170
#2	2.3227	53.175	1.0925	20.515	.50145	.49318	5.6028	.50860	1.0305	1.0413	.13035	1.0130

Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Fail	Chk Pass	Chk Pass	Chk Pass	None	Chk Pass
Value							5.0000					
Range							10.000%					

Elem	Se1960	Si2881	Sn1899	Sr4077	Th2837	Ti3349	Ti1908	U_3701	V_2924	Zn2062	Zr3391
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	1.0667	4.7779	1.0339	.50136	.00567	.49076	1.0552	.00926	.48753	.48844	.48502
Stddev	.0039	.0100	.0002	.00013	.00027	.00115	.0112	.00205	.00037	.00285	.00039
%RSD	.36537	.20995	.02243	.02583	4.6977	.23405	1.0592	22.135	.07546	.58280	.08004

#1	1.0639	4.7850	1.0338	.50127	.00549	.48995	1.0473	.00781	.48779	.49045	.48529
#2	1.0694	4.7708	1.0341	.50145	.00586	.49157	1.0631	.01071	.48727	.48643	.48474

Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	None	Chk Pass	Chk Pass	None	Chk Pass	Chk Pass	Chk Pass
Value											
Range											

Int. Std.	Y_2243	Y_3600	Y_3774
Units	Cts/S	Cts/S	Cts/S
Avg	1533.6	30949.	5594.9
Stddev	9.1	30.	10.8
%RSD	.59010	.09809	.19257

#1	1540.0	30928.	5602.5
#2	1527.3	30970.	5587.3

Sample Name: ccb Acquired: 5/24/2016 5:45:13 Type: QC
Method: 6500_026(v10) Mode: CONC Corr. Factor: 1.000000
User: kellyca Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	Ag3280	Al1670	As1890	B_2089	Ba4554	Be3130	Bi2230	Ca3179	Cd2288	Co2286	Cr2055	Cu3247
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	-.00006	.00019	-.00005	F .00816	.00028	.00014	.00094	.00479	-.00029	-.00002	.00021	.00117
Stddev	.00072	.00012	.00412	.00059	.00004	.00008	.00208	.00205	.00030	.00006	.00005	.00044
%RSD	1258.4	62.010	8226.2	7.1933	12.640	60.609	221.17	42.714	103.26	335.34	22.468	37.277
#1	.00045	.00028	.00286	.00774	.00026	.00008	-.00053	.00624	-.00050	.00002	.00018	.00086
#2	-.00057	.00011	-.00296	.00857	.00031	.00019	.00242	.00334	-.00008	-.00006	.00024	.00148
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Fail	Chk Pass	Chk Pass	None	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit				.00312								
Low Limit				-.00312								
Elem	Fe2599	K_7664	Li6707	Mg2790	Mn2576	Mo2020	Na5895	Ni2316	P_1782	Pb2203	S_1820	Sb2068
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.00004	F .72626	-.00035	.00436	F .00664	.00067	F .28771	.00017	.00188	.00232	.07801	W .00483
Stddev	.00084	.00117	.00020	.00123	.00006	.00016	.00138	.00084	.00413	.00169	.00600	.00307
%RSD	2094.5	.16136	57.393	28.303	.94455	24.007	.47810	496.10	220.12	72.907	7.6958	63.420
#1	.00063	.72543	-.00021	.00349	.00669	.00056	.28868	.00076	.00479	.00352	.08226	.00267
#2	-.00055	.72709	-.00049	.00523	.00660	.00079	.28673	-.00042	-.00104	.00113	.07377	.00700
Check ?	Chk Pass	Chk Fail	Chk Pass	Chk Pass	Chk Fail	Chk Pass	Chk Fail	Chk Pass	Chk Pass	Chk Pass	None	Chk Warn
High Limit		.47400			.00051		.18320					.00314
Low Limit		-.47400			-.00051		-.18320					-.00314
Elem	Se1960	Si2881	Sn1899	Sr4077	Th2837	Ti3349	Ti1908	U_3701	V_2924	Zn2062	Zr3391	
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	
Avg	W .00967	.02672	F .01450	.00005	.00166	.00013	.00114	.00825	.00004	-.00032	.00056	
Stddev	.00191	.00515	.00263	.00001	.00022	.00008	.00226	.00032	.00008	.00120	.00210	
%RSD	19.724	19.279	18.119	18.771	13.434	60.024	197.57	3.8940	196.82	375.34	378.21	
#1	.01102	.02308	.01636	.00006	.00150	.00019	-.00045	.00803	-.00002	.00053	.00204	
#2	.00832	.03037	.01265	.00004	.00181	.00008	.00274	.00848	.00010	-.00117	-.00093	
Check ?	Chk Warn	Chk Pass	Chk Fail	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	
High Limit	.00486		.01166									
Low Limit	-.00486		-.01166									
Int. Std.	Y_2243	Y_3600	Y_3774									
Units	Cts/S	Cts/S	Cts/S									
Avg	1539.8	31384.	5566.6									
Stddev	4.8	515.	43.4									
%RSD	.31429	1.6422	.77890									
#1	1543.2	31748.	5597.2									
#2	1536.4	31020.	5535.9									

Sample Name: ccvl-3907489 Acquired: 5/24/2016 5:48:00 Type: QC
Method: 6500_026(v10) Mode: CONC Corr. Factor: 1.000000
User: kellyca Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	Ag3280	Al1670	As1890	B_2089	Ba4554	Be3130	Bi2230	Ca3179	Cd2288	Co2286	Cr2055	Cu3247
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.01030	.10427	.01212	.10793	.01027	.00100	.11249	.20379	.00521	.00990	.01033	.01648
Stddev	.00054	.00053	.00566	.00077	.00002	.00007	.00248	.00076	.00016	.00017	.00010	.00044
%RSD	5.2872	.50924	46.721	.71596	.16837	7.3889	2.2028	.37226	3.0237	1.7486	.99745	2.6787

#1	.00992	.10465	.01612	.10847	.01026	.00105	.11074	.20325	.00510	.00978	.01026	.01679
#2	.01069	.10390	.00811	.10738	.01028	.00095	.11424	.20432	.00532	.01002	.01040	.01617

Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Value												
Range												

Elem	Fe2599	K_7664	Li6707	Mg2790	Mn2576	Mo2020	Na5895	Ni2316	P_1782	Pb2203	S_1820	Sb2068
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.10868	F 3.9854	.01038	.20802	.01215	.01990	1.1654	.04164	2.8942	.01083	.03426	.02302
Stddev	.00047	.0353	.00084	.00871	.00001	.00001	.0086	.00056	.0013	.00020	.00164	.00110
%RSD	.43565	.88674	8.0842	4.1850	.04310	.04554	.73972	1.3377	.04325	1.8348	4.7956	4.8002

#1	.10834	4.0103	.00979	.21418	.01215	.01990	1.1715	.04124	2.8950	.01097	.03309	.02223
#2	.10901	3.9604	.01098	.20187	.01216	.01991	1.1593	.04203	2.8933	.01069	.03542	.02380

Check ?	Chk Pass	Chk Fail	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	None	Chk Pass
Value		3.0000										
Range		30.000%										

Elem	Se1960	Si2881	Sn1899	Sr4077	Th2837	Ti3349	Ti1908	U_3701	V_2924	Zn2062	Zr3391
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	F .02708	.49383	.10431	.01004	.01688	.00944	.01692	.06970	.01015	.02204	.01590
Stddev	.00217	.01088	.00174	.00012	.00343	.00000	.00070	.00995	.00025	.00211	.00087
%RSD	8.0005	2.2040	1.6699	1.1694	20.338	.01013	4.1490	14.272	2.4237	9.5569	5.5002

#1	.02861	.50153	.10555	.01012	.01445	.00944	.01741	.07673	.00998	.02055	.01652
#2	.02554	.48614	.10308	.00996	.01931	.00944	.01642	.06267	.01032	.02353	.01528

Check ?	Chk Fail	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Value	.01500										
Range	30.000%										

Int. Std.	Y_2243	Y_3600	Y_3774
Units	Cts/S	Cts/S	Cts/S
Avg	1543.3	31715.	5560.5
Stddev	.8	56.	17.2
%RSD	.04936	.17645	.30877

#1	1542.7	31676.	5548.4
#2	1543.8	31755.	5572.7

Sample Name: 280-82899-A-6-B Acquired: 5/24/2016 5:50:44 Type: Unk
Method: 6500_026(v10) Mode: CONC Corr. Factor: 1.000000
User: kellyca Custom ID1: Custom ID2: Custom ID3:
Comment: 325562 6010B DenWaste

Elem	Ag3280	Al3092	As1890	B_2089	Ba4554	Be3130	Bi2230	Ca3179	Cd2288
Line	328.068 {103}	309.271 {109}	189.042 {478}	208.959 {461}	455.403 { 74}	313.042 {108}	223.061 {451}	317.933 {106}	228.802 {447}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.00121	8.4250	.02233	2.0321	.73057	.00065	.00281	173.96	.10246
Stddev	.00008	.0074	.00580	.0089	.00032	.00001	.00510	.17	.00037
%RSD	6.2492	.08798	25.971	.43880	.04348	.88745	181.53	.09803	.36544
#1	.00127	8.4198	.02643	2.0258	.73034	.00064	.00642	173.84	.10219
#2	.00116	8.4303	.01823	2.0384	.73079	.00065	-.00080	174.08	.10272

Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Elem	Co2286	Cr2055	Cu3247	Fe2599	K_7664	Li6707	Mg2790	Mn2576	Mo2020
Line	228.616 {447}	205.560 {464}	324.754 {104}	259.940 {130}	766.490 { 44}	670.784 { 50}	279.079 {121}2	257.610 {131}	202.030 {467}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.01905	W .20601	.39265	34.394	95.934	.36668	107.38	1.4656	.04910
Stddev	.00048	.00036	.00055	.066	.186	.00041	.16	.0037	.00014
%RSD	2.5029	.17426	.14099	.19060	.19358	.11074	.14838	.25137	.28699
#1	.01939	.20627	.39225	34.440	95.803	.36697	107.26	1.4630	.04920
#2	.01872	.20576	.39304	34.347	96.065	.36639	107.49	1.4682	.04900

Check ?	Chk Pass	Chk Warn	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit		.10000							
Low Limit		-.01000							

Elem	Na8183	Ni2316	P_1782	Pb2203	S_1820	Sb2068	Se1960	Si2881	Sn1899
Line	818.326 { 41}	231.604 {446}	178.284 {489}	220.353 {453}	182.034 {485}	206.833 {463}	196.090 {472}	288.158 {117}	189.989 {477}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	W 1535.8	.05821	1.6976	.06652	F 633.30	.01051	.01376	17.475	.16798
Stddev	3.0	.00013	.0090	.00016	1.30	.00169	.00106	.011	.00222
%RSD	.19474	.22635	.52766	.24605	.20605	16.089	7.6725	.06435	1.3219
#1	1537.9	.05812	1.7040	.06663	632.37	.00931	.01301	17.467	.16641
#2	1533.7	.05830	1.6913	.06640	634.22	.01170	.01451	17.483	.16955

Check ?	Chk Warn	Chk Pass	Chk Pass	Chk Pass	Chk Fail	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit	500.00				200.00				
Low Limit	10.000				-.02000				

Elem	Sr4077	Th2837	Ti3349	Ti1908	U_3701	V_2924	Zn2062	Zr3391
Line	407.771 { 83}	283.730 {119}	334.904 {101}	190.856 {477}	370.152 { 91}	292.402 {115}	206.200 {163}	339.198 { 99}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	2.0818	.00314	.05008	.00233	.00253	.02845	1.7156	.00303
Stddev	.0002	.00168	.00008	.00292	.00970	.00035	.0027	.00141
%RSD	.01098	53.523	.15263	125.03	384.15	1.2199	.15825	46.660
#1	2.0820	.00433	.05002	.00439	.00939	.02821	1.7137	.00403
#2	2.0817	.00195	.05013	.00027	-.00434	.02870	1.7176	.00203

Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit								
Low Limit								

Int. Std.	Y_2243	Y_3600	Y_3774
Line	224.306 {450}	360.073 { 94}	377.433 { 89}
Units	Cts/S	Cts/S	Cts/S
Avg	1340.3	26651.	5371.7
Stddev	3.7	64.	16.7
%RSD	.27480	.23935	.31078
#1	1342.9	26696.	5383.5
#2	1337.6	26606.	5359.9

Sample Name: 280-82899-A-7-B Acquired: 5/24/2016 5:54:28 Type: Unk
Method: 6500_026(v10) Mode: CONC Corr. Factor: 1.000000
User: kellyca Custom ID1: Custom ID2: Custom ID3:
Comment: 325562 6010B DenWaste

Elem	Ag3280	Al3092	As1890	B_2089	Ba4554	Be3130	Bi2230	Ca3179	Cd2288
Line	328.068 {103}	309.271 {109}	189.042 {478}	208.959 {461}	455.403 { 74}	313.042 {108}	223.061 {451}	317.933 {106}	228.802 {447}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.00296	13.916	.04018	1.7130	.50494	.00337	.00547	115.43	.13747
Stddev	.00024	.001	.00007	.0055	.00012	.00001	.00091	.59	.00028
%RSD	8.0473	.00975	.17972	.32239	.02369	.29332	16.624	.51230	.20250

#1	.00313	13.917	.04023	1.7091	.50486	.00337	.00612	115.85	.13767
#2	.00279	13.915	.04013	1.7169	.50503	.00336	.00483	115.01	.13728

Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Elem	Co2286	Cr2055	Cu3247	Fe2714	K_7664	Li6707	Mg2790	Mn2576	Mo2020
Line	228.616 {447}	205.560 {464}	324.754 {104}	271.441 {124}	766.490 { 44}	670.784 { 50}	279.079 {121}2	257.610 {131}	202.030 {467}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.01549	W .76883	.29423	91.309	W 155.14	.19195	38.384	1.3095	.07370
Stddev	.00049	.00076	.00154	.678	.13	.00015	.148	.0050	.00060
%RSD	3.1636	.09855	.52191	.74290	.08335	.07842	.38534	.37869	.82002

#1	.01515	.76829	.29314	91.789	155.05	.19184	38.280	1.3060	.07413
#2	.01584	.76936	.29531	90.829	155.23	.19206	38.489	1.3130	.07328

Check ?	Chk Pass	Chk Warn	Chk Pass	Chk Pass	Chk Warn	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit		.10000			100.00				
Low Limit		-.01000			-.50000				

Elem	Na8183	Ni2316	P_1782	Pb2203	S_1820	Sb2068	Se1960	Si2881	Sn1899
Line	818.326 { 41}	231.604 {446}	178.284 {489}	220.353 {453}	182.034 {485}	206.833 {463}	196.090 {472}	288.158 {117}	189.989 {477}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	W 3313.3	.06368	F 227.00	.03345	F 588.55	.01678	.01305	14.146	.46913
Stddev	.2	.00111	.28	.00026	.55	.00057	.00705	.002	.00125
%RSD	.00568	1.7448	.12244	.78864	.09344	3.4095	54.003	.01655	.26616

#1	3313.1	.06289	226.80	.03327	588.16	.01719	.01803	14.145	.46824
#2	3313.4	.06447	227.20	.03364	588.94	.01638	.00807	14.148	.47001

Check ?	Chk Warn	Chk Pass	Chk Fail	Chk Pass	Chk Fail	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit	500.00		50.000		200.00				
Low Limit	10.000		-2.0000		-.02000				

Elem	Sr4077	Th2837	Ti3349	Ti1908	U_3701	V_2924	Zn2062	Zr3391	
Line	407.771 { 83}	283.730 {119}	334.904 {101}	190.856 {477}	370.152 { 91}	292.402 {115}	206.200 {163}	339.198 { 99}	
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	
Avg	1.1490	.01661	.25293	.01033	.29372	.89835	1.8423	.05387	
Stddev	.0017	.00230	.00050	.00227	.01263	.00420	.0028	.00045	
%RSD	.14871	13.867	.19964	21.996	4.3009	.46744	.15406	.82908	

#1	1.1503	.01823	.25329	.01194	.28478	.89538	1.8403	.05356	
#2	1.1478	.01498	.25258	.00872	.30265	.90132	1.8443	.05419	

Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	
High Limit									
Low Limit									

Int. Std.	Y_2243	Y_3600	Y_3774						
Line	224.306 {450}	360.073 { 94}	377.433 { 89}						
Units	Cts/S	Cts/S	Cts/S						
Avg	1454.5	28843.	6215.2						
Stddev	2.5	77.	20.3						
%RSD	.17135	.26703	.32589						

#1	1456.2	28898.	6200.9						
#2	1452.7	28789.	6229.5						

Sample Name: 280-82899-A-8-B Acquired: 5/24/2016 5:57:29 Type: Unk
Method: 6500_026(v10) Mode: CONC Corr. Factor: 1.000000
User: kellyca Custom ID1: Custom ID2: Custom ID3:
Comment: 325562 6010B DenWaste

Elem	Ag3280	Al3092	As1890	B_2089	Ba4554	Be3130	Bi2230	Ca3179	Cd2288
Line	328.068 {103}	309.271 {109}	189.042 {478}	208.959 {461}	455.403 { 74}	313.042 {108}	223.061 {451}	317.933 {106}	228.802 {447}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.00277	14.054	.03408	3.8799	.84076	.00085	.00231	329.85	.02499
Stddev	.00024	.029	.00038	.0017	.00230	.00000	.00049	1.22	.00016
%RSD	8.4969	.20600	1.1156	.04305	.27343	.57960	21.378	.36950	.64482
#1	.00261	14.033	.03435	3.8787	.83914	.00085	.00266	330.71	.02488
#2	.00294	14.074	.03381	3.8811	.84239	.00084	.00196	328.99	.02511

Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Elem	Co2286	Cr2055	Cu3247	Fe2714	K_7664	Li6707	Mg2790	Mn2576	Mo2020
Line	228.616 {447}	205.560 {464}	324.754 {104}	271.441 {124}	766.490 { 44}	670.784 { 50}	279.079 {121}2	257.610 {131}	202.030 {467}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.01985	W .10633	.38396	54.121	52.378	.14718	78.081	1.8363	.05266
Stddev	.00004	.00045	.00102	.142	.031	.00011	.369	.0080	.00010
%RSD	.21708	.41941	.26524	.26218	.05841	.07632	.47317	.43733	.18638
#1	.01988	.10665	.38324	54.221	52.399	.14726	78.343	1.8420	.05259
#2	.01982	.10601	.38468	54.020	52.356	.14710	77.820	1.8307	.05272

Check ?	Chk Pass	Chk Warn	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit		.10000							
Low Limit		-.01000							

Elem	Na8183	Ni2316	P_1782	Pb2203	S_1820	Sb2068	Se1960	Si2881	Sn1899
Line	818.326 { 41}	231.604 {446}	178.284 {489}	220.353 {453}	182.034 {485}	206.833 {463}	196.090 {472}	288.158 {117}	189.989 {477}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	W 618.84	.07612	3.8777	.08695	F 942.37	.04261	.03692	26.438	.60319
Stddev	.80	.00007	.0040	.00220	.53	.00370	.00512	.122	.00288
%RSD	.12851	.09035	.10268	2.5329	.05615	8.6878	13.876	.45982	.47806
#1	618.28	.07617	3.8749	.08850	941.99	.04523	.03329	26.523	.60115
#2	619.40	.07607	3.8805	.08539	942.74	.03999	.04054	26.352	.60523

Check ?	Chk Warn	Chk Pass	Chk Pass	Chk Pass	Chk Fail	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit	500.00				200.00				
Low Limit	10.000				-.02000				

Elem	Sr4077	Th2837	Ti3349	Ti1908	U_3701	V_2924	Zn2062	Zr3391
Line	407.771 { 83}	283.730 {119}	334.904 {101}	190.856 {477}	370.152 { 91}	292.402 {115}	206.200 {163}	339.198 { 99}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	1.7956	.00059	.19461	.00154	.02911	.03777	.68183	.01414
Stddev	.0020	.00079	.00000	.00126	.00072	.00008	.00903	.00023
%RSD	.11009	135.37	.00216	81.783	2.4843	.21658	1.3242	1.6211
#1	1.7942	.00115	.19462	.00244	.02962	.03783	.68821	.01398
#2	1.7970	.00003	.19461	.00065	.02860	.03771	.67544	.01430

Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit								
Low Limit								

Int. Std.	Y_2243	Y_3600	Y_3774
Line	224.306 {450}	360.073 { 94}	377.433 { 89}
Units	Cts/S	Cts/S	Cts/S
Avg	1377.2	27586.	5446.5
Stddev	3.6	42.	19.5
%RSD	.25843	.15302	.35852
#1	1379.8	27556.	5432.7
#2	1374.7	27616.	5460.3

Sample Name: 280-82899-A-9-B Acquired: 5/24/2016 6:00:33 Type: Unk
Method: 6500_026(v10) Mode: CONC Corr. Factor: 1.000000
User: kellyca Custom ID1: Custom ID2: Custom ID3:
Comment: 325562 6010B DenWaste

Elem	Ag3280	Al3092	As1890	B_2089	Ba4554	Be3130	Bi2230	Ca3179	Cd2288
Line	328.068 {103}	309.271 {109}	189.042 {478}	208.959 {461}	455.403 { 74}	313.042 {108}	223.061 {451}	317.933 {106}	228.802 {447}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.05323	16.305	.03989	2.1241	.99987	.00074	.03333	295.96	.00544
Stddev	.00065	.092	.00026	.0033	.00232	.00005	.00415	1.55	.00025
%RSD	1.2136	.56372	.65784	.15621	.23189	7.3800	12.447	.52469	4.6858

#1	.05369	16.370	.04007	2.1217	1.0015	.00070	.03039	297.06	.00526
#2	.05278	16.240	.03970	2.1264	.99823	.00078	.03626	294.86	.00562

Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Elem	Co2286	Cr2055	Cu3247	Fe2714	K_7664	Li6707	Mg2790	Mn2576	Mo2020
Line	228.616 {447}	205.560 {464}	324.754 {104}	271.441 {124}	766.490 { 44}	670.784 { 50}	279.079 {121}2	257.610 {131}	202.030 {467}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.02681	.09596	.35027	61.136	W 173.47	.14391	67.954	2.5938	.08039
Stddev	.00072	.00070	.00025	.533	.37	.00071	.037	.0006	.00032
%RSD	2.6987	.72616	.07260	.87159	.21424	.49557	.05475	.02524	.39310

#1	.02732	.09546	.35045	61.513	173.73	.14441	67.928	2.5942	.08017
#2	.02630	.09645	.35009	60.760	173.20	.14340	67.981	2.5933	.08062

Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Warn	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit					100.00				
Low Limit					-.50000				

Elem	Na8183	Ni2316	P_1782	Pb2203	S_1820	Sb2068	Se1960	Si2881	Sn1899
Line	818.326 { 41}	231.604 {446}	178.284 {489}	220.353 {453}	182.034 {485}	206.833 {463}	196.090 {472}	288.158 {117}	189.989 {477}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	W 3811.4	.06997	6.4147	.08254	F 484.97	.01299	.02121	29.725	F 20.239
Stddev	6.3	.00017	.0232	.00327	1.77	.00012	.00277	.077	.063
%RSD	.16479	.24142	.36097	3.9566	.36512	.93788	13.074	.25866	.31345

#1	3815.8	.07009	6.3984	.08023	483.72	.01290	.02317	29.780	20.194
#2	3806.9	.06985	6.4311	.08485	486.22	.01308	.01925	29.671	20.284

Check ?	Chk Warn	Chk Pass	Chk Pass	Chk Pass	Chk Fail	Chk Pass	Chk Pass	Chk Pass	Chk Fail
High Limit	500.00				200.00				20.000
Low Limit	10.000				-.02000				-.10000

Elem	Sr4077	Th2837	Ti3349	Ti1908	U_3701	V_2924	Zn2062	Zr3391
Line	407.771 { 83}	283.730 {119}	334.904 {101}	190.856 {477}	370.152 { 91}	292.402 {115}	206.200 {163}	339.198 { 99}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	2.7234	.00480	.33117	-.00128	.01042	.04561	.99398	.02214
Stddev	.0086	.00135	.00076	.00006	.00628	.00055	.00125	.00176
%RSD	.31462	28.059	.22885	4.3524	60.305	1.2060	.12626	7.9547

#1	2.7295	.00385	.33170	-.00132	.01486	.04522	.99486	.02338
#2	2.7173	.00575	.33063	-.00124	.00598	.04600	.99309	.02089

Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit								
Low Limit								

Int. Std.	Y_2243	Y_3600	Y_3774
Line	224.306 {450}	360.073 { 94}	377.433 { 89}
Units	Cts/S	Cts/S	Cts/S
Avg	1217.8	24288.	5207.0
Stddev	3.6	38.	29.1
%RSD	.29200	.15467	.55895

#1	1220.3	24261.	5186.4
#2	1215.2	24315.	5227.6

Sample Name: 280-82899-A-10-B Acquired: 5/24/2016 6:03:36 Type: Unk
Method: 6500_026(v10) Mode: CONC Corr. Factor: 1.000000
User: kellyca Custom ID1: Custom ID2: Custom ID3:
Comment: 325562 6010B DenWaste

Elem	Ag3280	Al3092	As1890	B_2089	Ba4554	Be3130	Bi2230	Ca3179	Cd2288
Line	328.068 {103}	309.271 {109}	189.042 {478}	208.959 {461}	455.403 {74}	313.042 {108}	223.061 {451}	317.933 {106}	228.802 {447}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.00205	7.3067	.02748	2.3579	.30750	.00053	.01971	142.74	.00334
Stddev	.00035	.0625	.00013	.0043	.00014	.00007	.00116	.14	.00023
%RSD	16.950	.85526	.48959	.18211	.04550	13.322	5.9003	.10045	6.9715

#1	.00181	7.2625	.02738	2.3609	.30760	.00048	.02053	142.64	.00350
#2	.00230	7.3509	.02757	2.3549	.30741	.00058	.01888	142.85	.00317

Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Elem	Co2286	Cr2055	Cu3247	Fe2714	K_7664	Li6707	Mg2790	Mn2576	Mo2020
Line	228.616 {447}	205.560 {464}	324.754 {104}	271.441 {124}	766.490 {44}	670.784 {50}	279.079 {121}2	257.610 {131}	202.030 {467}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.03843	.06872	.50900	49.439	W 274.65	.09188	47.838	1.4510	.21453
Stddev	.00017	.00013	.00005	.119	.03	.00065	.017	.0019	.00092
%RSD	.43148	.18227	.01067	.24135	.01197	.71139	.03533	.12731	.42671

#1	.03855	.06881	.50896	49.524	274.63	.09142	47.826	1.4497	.21518
#2	.03831	.06863	.50904	49.355	274.68	.09234	47.850	1.4523	.21389

Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Warn	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit					100.00				
Low Limit					-.50000				

Elem	Na8183	Ni2316	P_1782	Pb2203	S_1820	Sb2068	Se1960	Si2881	Sn1899
Line	818.326 {41}	231.604 {446}	178.284 {489}	220.353 {453}	182.034 {485}	206.833 {463}	196.090 {472}	288.158 {117}	189.989 {477}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	W 820.62	.07343	1.9867	.02954	F 659.81	.01039	.02065	13.015	.37367
Stddev	.08	.00000	.0011	.00115	1.17	.00133	.00325	.032	.00439
%RSD	.00970	.00047	.05665	3.8910	.17682	12.794	15.728	.24261	1.1755

#1	820.56	.07343	1.9875	.02873	660.64	.00945	.01836	13.037	.37678
#2	820.67	.07343	1.9859	.03035	658.99	.01133	.02295	12.993	.37057

Check ?	Chk Warn	Chk Pass	Chk Pass	Chk Pass	Chk Fail	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit	500.00				200.00				
Low Limit	10.000				-.02000				

Elem	Sr4077	Th2837	Ti3349	Ti1908	U_3701	V_2924	Zn2062	Zr3391
Line	407.771 {83}	283.730 {119}	334.904 {101}	190.856 {477}	370.152 {91}	292.402 {115}	206.200 {163}	339.198 {99}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	1.0680	.00341	.11274	-.00031	.01406	.03169	.97727	.01055
Stddev	.0019	.00033	.00007	.00312	.01936	.00029	.00137	.00088
%RSD	.17653	9.5916	.06635	1009.6	137.69	.90542	.13984	8.3512

#1	1.0667	.00364	.11269	-.00251	.00037	.03190	.97631	.00993
#2	1.0694	.00318	.11280	.00190	.02775	.03149	.97824	.01118

Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit								
Low Limit								

Int. Std.	Y_2243	Y_3600	Y_3774
Line	224.306 {450}	360.073 {94}	377.433 {89}
Units	Cts/S	Cts/S	Cts/S
Avg	1351.8	27094.	5432.0
Stddev	1.9	41.	6.1
%RSD	.13757	.15166	.11185

#1	1350.5	27123.	5436.3
#2	1353.2	27065.	5427.7

Comment: 325562 6010B DenWaste

Check ?									
High Limit	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Low Limit									

Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Fail	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit					500.00				
Low Limit					-2.0000				

Check ?	Chk Warn	Chk Pass	Chk Pass	Chk Pass	Chk Fail	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit	500.00				200.00				
Low Limit	10.000				-.02000				

Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit								
Low Limit								

Int. Std.	Y_2243	Y_3600	Y_3774
Line	224.306 {450}	360.073 { 94}	377.433 { 89}
Units	Cts/S	Cts/S	Cts/S
Avg	1107.5	22184.	5012.9
Stddev	.8	10.	7.2
%RSD	.07649	.04605	.14412
#1	1108.1	22177.	5018.0
#2	1106.9	22191.	5007.8

Sample Name: 280-82899-A-11-Bsd@5 Acquired: 5/24/2016 6:09:52 Type: Unk
Method: 6500_026(v10) Mode: CONC Corr. Factor: 1.000000
User: kellyca Custom ID1: Custom ID2: Custom ID3:
Comment: 325562 6010B DenWaste

Elem	Ag3280	Al1670	As1890	B_2089	Ba4554	Be3130	Bi2230	Ca3179	Cd2288
Line	328.068 {103}	167.079 {502}	189.042 {478}	208.959 {461}	455.403 { 74}	313.042 {108}	223.061 {451}	317.933 {106}	228.802 {447}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.00049	1.5288	.01722	1.1865	.31199	.00003	.00563	47.656	.00067
Stddev	.00035	.0006	.00340	.0012	.00107	.00002	.00201	.354	.00044
%RSD	70.340	.04134	19.723	.10139	.34309	49.646	35.814	.74371	65.599

#1	.00074	1.5293	.01962	1.1856	.31275	.00002	.00420	47.906	.00036
#2	.00025	1.5284	.01482	1.1873	.31123	.00005	.00705	47.405	.00097

Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Elem	Co2286	Cr2055	Cu3247	Fe2599	K_7664	Li6707	Mg2790	Mn2576	Mo2020
Line	228.616 {447}	205.560 {464}	324.754 {104}	259.940 {130}	766.490 { 44}	670.784 { 50}	279.079 {121}2	257.610 {131}	202.030 {467}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.00880	.01970	.03918	6.5226	W 218.84	.05728	24.776	.49348	.01060
Stddev	.00034	.00025	.00007	.0455	.09	.00085	.044	.00110	.00036
%RSD	3.8117	1.2546	.18945	.69785	.04232	1.4885	.17608	.22327	3.4394

#1	.00856	.01952	.03912	6.5548	218.77	.05788	24.745	.49270	.01034
#2	.00904	.01987	.03923	6.4904	218.90	.05668	24.807	.49426	.01085

Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Warn	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit					100.00				
Low Limit					-.50000				

Elem	Na8183	Ni2316	P_1782	Pb2203	S_1820	Sb2068	Se1960	Si2881	Sn1899
Line	818.326 { 41}	231.604 {446}	178.284 {489}	220.353 {453}	182.034 {485}	206.833 {463}	196.090 {472}	288.158 {117}	189.989 {477}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	W 1267.5	.01599	1.6916	.00534	87.432	.00397	.01580	3.8384	.26016
Stddev	3.3	.00033	.0083	.00287	.164	.00092	.00432	.0053	.00425
%RSD	.25896	2.0687	.49244	53.701	.18809	23.249	27.363	.13807	1.6322

#1	1269.8	.01622	1.6857	.00737	87.549	.00332	.01274	3.8421	.26316
#2	1265.2	.01575	1.6975	.00331	87.316	.00462	.01886	3.8346	.25715

Check ?	Chk Warn	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit	500.00								
Low Limit	10.000								

Elem	Sr4077	Th2837	Ti3349	Ti1908	U_3701	V_2924	Zn2062	Zr3391
Line	407.771 { 83}	283.730 {119}	334.904 {101}	190.856 {477}	370.152 { 91}	292.402 {115}	206.200 {163}	339.198 { 99}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.64125	.00075	.09046	-.00011	.01890	.01803	.21383	.00211
Stddev	.00101	.00040	.00031	.00099	.00032	.00097	.00065	.00065
%RSD	.15692	54.017	.34169	888.46	1.7189	5.3776	.30553	30.878

#1	.64196	.00103	.09068	.00059	.01867	.01734	.21336	.00165
#2	.64054	.00046	.09024	-.00081	.01912	.01871	.21429	.00257

Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit								
Low Limit								

Int. Std.	Y_2243	Y_3600	Y_3774
Line	224.306 {450}	360.073 { 94}	377.433 { 89}
Units	Cts/S	Cts/S	Cts/S
Avg	1352.1	26600.	5317.0
Stddev	.8	1.	31.0
%RSD	.05913	.00297	.58298

#1	1352.7	26600.	5295.1
#2	1351.5	26599.	5338.9

Sample Name: ccvh-3900196 Acquired: 5/24/2016 6:13:02 Type: QC
Method: 6500_026(v10) Mode: CONC Corr. Factor: 1.000000
User: kellyca Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	Ag3280	Al3092	As1890	B_2089	Ba4554	Be3130	Bi2230	Ca3179	Cd2288	Co2286	Cr2055	Cu3247	Fe2714
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.00225	48.064	-.00076	.01311	.00047	-.00013	1.0092	-.05238	-.00096	.00309	-.00048	.00905	47.790
Stddev	.00085	.058	.00034	.00079	.00016	.00007	.0020	.00239	.00001	.00043	.00012	.00024	.042
%RSD	37.819	.12033	44.315	5.9918	34.848	49.801	.20023	4.5560	.73589	13.944	24.268	2.6246	.08846

#1	.00165	48.023	-.00100	.01366	.00059	-.00018	1.0106	-.05406	-.00096	.00339	-.00040	.00889	47.760
#2	.00285	48.105	-.00052	.01255	.00035	-.00009	1.0078	-.05069	-.00097	.00278	-.00057	.00922	47.820

Check ?	None	Chk Pass	None	None	None	None	Chk Pass	None	None	None	None	None	Chk Pass
Value													
Range													

Elem	K_7664	Li6707	Mg2790	Mn2576	Mo2020	Na8183	Ni2316	P_1782	Pb2203	S_1820	Sb2068	Se1960	Si2881
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.80909	-.00042	.15466	-.00049	-.00244	264.29	-.00105	.00795	-.00043	4.8885	.00016	.00993	.01277
Stddev	.03838	.00006	.00681	.00001	.00056	.66	.00010	.00408	.00117	.0001	.00044	.00825	.00533
%RSD	4.7439	13.489	4.4022	1.8810	23.118	.24977	9.0815	51.304	273.43	.00112	281.90	83.075	41.742

#1	.83623	-.00038	.15947	-.00049	-.00204	263.82	-.00098	.00507	-.00126	4.8885	.00047	.00409	.01654
#2	.78195	-.00046	.14984	-.00048	-.00284	264.75	-.00112	.01083	.00040	4.8886	-.00015	.01576	.00900

Check ?	None	None	None	None	None	Chk Pass	None	None	None	Chk Pass	None	None	None
Value													
Range													

Elem	Sn1899	Sr4077	Th2837	Ti3349	Tl1908	U_3701	V_2924	Zn2062	Zr3391
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.00146	.00044	4.9297	.02232	-.00132	10.201	-.01517	-.00219	.00617
Stddev	.00087	.00001	.0197	.00001	.00062	.012	.00066	.00178	.00016
%RSD	59.555	2.4791	.39912	.06504	47.193	.11313	4.3573	81.306	2.6659

#1	.00207	.00045	4.9158	.02231	-.00088	10.209	-.01563	-.00345	.00629
#2	.00084	.00044	4.9436	.02233	-.00177	10.192	-.01470	-.00093	.00606

Check ?	None	None	Chk Pass	None	None	Chk Pass	None	None	None
Value									
Range									

Int. Std.	Y_2243	Y_3600	Y_3774
Units	Cts/S	Cts/S	Cts/S
Avg	1490.8	29947.	5427.7
Stddev	.4	117.	2.2
%RSD	.02781	.39185	.04009

#1	1491.1	30030.	5426.1
#2	1490.6	29864.	5429.2

Sample Name: ccv-3900195 Acquired: 5/24/2016 6:15:51 Type: QC
Method: 6500_026(v10) Mode: CONC Corr. Factor: 1.000000
User: kellyca Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	Ag3280	Al1670	As1890	B_2089	Ba4554	Be3130	Bi2230	Ca3179	Cd2288	Co2286	Cr2055	Cu3247
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.51774	.52215	1.0254	.54522	.50175	.49797	.00434	4.8806	.51078	.50513	.49334	.52017
Stddev	.00182	.00100	.0059	.00337	.00079	.00181	.00058	.0080	.00057	.00108	.00008	.00091
%RSD	.35148	.19106	.57375	.61766	.15806	.36290	13.383	.16448	.11173	.21310	.01535	.17519

#1	.51645	.52145	1.0212	.54284	.50119	.49669	.00475	4.8749	.51038	.50589	.49340	.52082
#2	.51902	.52286	1.0296	.54760	.50232	.49924	.00393	4.8862	.51119	.50437	.49329	.51953

Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	None	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Value												
Range												

Elem	Fe2599	K_7664	Li6707	Mg2790	Mn2576	Mo2020	Na5895	Ni2316	P_1782	Pb2203	S_1820	Sb2068
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	2.3842	54.096	F 1.1120	20.904	.49990	.49264	F 5.5953	.51075	1.0393	1.0473	.02954	1.0276
Stddev	.0096	.087	.0036	.005	.00048	.00030	.0107	.00031	.0024	.0007	.00724	.0029
%RSD	.40134	.16134	.32053	.02605	.09531	.06178	.19082	.05997	.23346	.06624	24.497	.28622

#1	2.3775	54.034	1.1095	20.908	.49956	.49285	5.5878	.51097	1.0376	1.0478	.02442	1.0297
#2	2.3910	54.157	1.1145	20.900	.50024	.49242	5.6029	.51054	1.0410	1.0468	.03466	1.0255

Check ?	Chk Pass	Chk Pass	Chk Fail	Chk Pass	Chk Pass	Chk Pass	Chk Fail	Chk Pass	Chk Pass	Chk Pass	None	Chk Pass
Value			1.0000				5.0000					
Range			10.000%				10.000%					

Elem	Se1960	Si2881	Sn1899	Sr4077	Th2837	Ti3349	Ti1908	U_3701	V_2924	Zn2062	Zr3391
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	1.0711	4.8142	1.0129	.50921	.00485	.49705	1.0627	.01189	.49608	.49392	.49005
Stddev	.0020	.0181	.0006	.00086	.00131	.00091	.0010	.00261	.00107	.00099	.00025
%RSD	.18939	.37678	.05913	.16810	27.079	.18407	.09050	21.936	.21623	.19978	.05096

#1	1.0725	4.8013	1.0125	.50860	.00392	.49640	1.0633	.01005	.49684	.49322	.48988
#2	1.0697	4.8270	1.0134	.50981	.00578	.49770	1.0620	.01374	.49532	.49461	.49023

Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	None	Chk Pass	Chk Pass	None	Chk Pass	Chk Pass	Chk Pass
Value											
Range											

Int. Std.	Y_2243	Y_3600	Y_3774
Units	Cts/S	Cts/S	Cts/S
Avg	1538.1	30805.	5511.9
Stddev	1.0	140.	.3
%RSD	.06729	.45404	.00571

#1	1538.8	30904.	5512.2
#2	1537.4	30706.	5511.7

Sample Name: ccb Acquired: 5/24/2016 6:18:28 Type: QC
 Method: 6500_026(v10) Mode: CONC Corr. Factor: 1.000000
 User: kellyca Custom ID1: Custom ID2: Custom ID3:
 Comment:

Elem	Ag3280	Al1670	As1890	B_2089	Ba4554	Be3130	Bi2230	Ca3179	Cd2288	Co2286	Cr2055	Cu3247
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.00030	.00183	-.00069	F .00926	.00009	.00007	.00230	.00422	.00003	-.00037	.00001	.00100
Stddev	.00044	.00021	.00346	.00022	.00003	.00002	.00483	.00376	.00004	.00006	.00008	.00019
%RSD	147.43	11.525	500.39	2.3364	30.360	31.630	210.27	89.080	131.06	15.216	1002.3	18.679
#1	-.00001	.00168	-.00313	.00941	.00011	.00005	-.00112	.00156	.00006	-.00033	.00007	.00087
#2	.00061	.00198	.00175	.00911	.00007	.00008	.00571	.00688	.00000	-.00041	-.00005	.00114
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Fail	Chk Pass	Chk Pass	None	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit				.00312								
Low Limit				-.00312								
Elem	Fe2599	K_7664	Li6707	Mg2790	Mn2576	Mo2020	Na5895	Ni2316	P_1782	Pb2203	S_1820	Sb2068
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.00219	W .30568	.00021	.00662	W .00032	.00129	F .23122	-.00044	.00694	.00205	.03883	F .01114
Stddev	.00133	.02801	.00047	.00171	.00007	.00011	.00778	.00047	.00395	.00148	.00728	.00226
%RSD	60.495	9.1630	219.93	25.804	22.493	8.5577	3.3647	107.46	56.985	72.234	18.752	20.315
#1	.00313	.28588	.00055	.00541	.00027	.00122	.23673	-.00077	.00414	.00100	.03368	.00954
#2	.00126	.32549	-.00012	.00782	.00037	.00137	.22572	-.00011	.00974	.00310	.04398	.01274
Check ?	Chk Pass	Chk Warn	Chk Pass	Chk Pass	Chk Warn	Chk Pass	Chk Fail	Chk Pass	Chk Pass	Chk Pass	None	Chk Fail
High Limit		.23700			.00025		.18320					.00628
Low Limit		-.23700			-.00025		-.18320					-.00628
Elem	Se1960	Si2881	Sn1899	Sr4077	Th2837	Ti3349	Ti1908	U_3701	V_2924	Zn2062	Zr3391	
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	
Avg	W .00759	.01793	.00119	.00006	.00062	.00026	.00158	.01526	.00088	-.00005	.00006	
Stddev	.00244	.00795	.00129	.00002	.00002	.00023	.00095	.00489	.00041	.00051	.00071	
%RSD	32.118	44.346	108.36	27.809	3.6251	89.341	59.973	32.067	46.493	1085.0	1099.1	
#1	.00586	.02355	.00028	.00005	.00064	.00043	.00091	.01180	.00117	.00031	-.00044	
#2	.00931	.01231	.00210	.00007	.00060	.00010	.00225	.01872	.00059	-.00041	.00056	
Check ?	Chk Warn	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	
High Limit	.00486											
Low Limit	-.00486											
Int. Std.	Y_2243	Y_3600	Y_3774									
Units	Cts/S	Cts/S	Cts/S									
Avg	1552.0	31776.	5521.6									
Stddev	2.5	33.	10.0									
%RSD	.16251	.10484	.18048									
#1	1553.8	31800.	5528.6									
#2	1550.2	31753.	5514.5									

Sample Name: ccvl-3907489 Acquired: 5/24/2016 6:21:16 Type: QC
Method: 6500_026(v10) Mode: CONC Corr. Factor: 1.000000
User: kellyca Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	Ag3280	Al1670	As1890	B_2089	Ba4554	Be3130	Bi2230	Ca3179	Cd2288	Co2286	Cr2055	Cu3247
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.01039	.10624	.01373	.10804	.01043	.00106	.11293	.20435	.00523	.01022	.01011	.01655
Stddev	.00022	.00155	.00066	.00025	.00013	.00004	.00057	.00544	.00003	.00049	.00011	.00008
%RSD	2.1172	1.4547	4.8219	.22842	1.2065	3.7999	.50499	2.6641	.64014	4.8101	1.0449	.49038

#1	.01054	.10514	.01420	.10821	.01034	.00103	.11253	.20820	.00521	.00987	.01018	.01661
#2	.01023	.10733	.01326	.10786	.01052	.00109	.11334	.20050	.00526	.01057	.01003	.01650

Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Value												
Range												

Elem	Fe2599	K_7664	Li6707	Mg2790	Mn2576	Mo2020	Na5895	Ni2316	P_1782	Pb2203	S_1820	Sb2068
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.12166	3.4287	.01058	.21251	.01040	.02026	1.2875	.04116	2.9094	F .01287	.01072	.02488
Stddev	.00114	.0076	.00053	.00476	.00020	.00012	.0238	.00011	.0122	.00247	.00427	.00231
%RSD	.93396	.22101	5.0444	2.2384	1.9185	.58676	1.8454	.26757	.41957	19.184	39.776	9.2754

#1	.12246	3.4234	.01096	.20915	.01054	.02018	1.3043	.04108	2.9007	.01461	.00771	.02325
#2	.12085	3.4341	.01021	.21588	.01026	.02035	1.2707	.04124	2.9180	.01112	.01374	.02651

Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Fail	None	Chk Pass
Value										.00900		
Range										30.000%		

Elem	Se1960	Si2881	Sn1899	Sr4077	Th2837	Ti3349	Ti1908	U_3701	V_2924	Zn2062	Zr3391
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	F .02320	.49276	.10243	.01026	.01720	.00989	.01802	F .08049	.01002	.02130	.01645
Stddev	.00573	.01348	.00048	.00002	.00058	.00029	.00043	.00564	.00011	.00012	.00115
%RSD	24.711	2.7357	.46583	.23265	3.3712	2.8873	2.3664	7.0061	1.1203	.54745	7.0069

#1	.01914	.48323	.10209	.01027	.01679	.01009	.01772	.08447	.01010	.02138	.01564
#2	.02725	.50229	.10276	.01024	.01761	.00969	.01832	.07650	.00994	.02122	.01727

Check ?	Chk Fail	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Fail	Chk Pass	Chk Pass	Chk Pass
Value	.01500							.06000			
Range	30.000%							30.000%			

Int. Std.	Y_2243	Y_3600	Y_3774
Units	Cts/S	Cts/S	Cts/S
Avg	1542.7	31404.	5502.6
Stddev	.1	197.	16.4
%RSD	.00437	.62847	.29837

#1	1542.7	31264.	5491.0
#2	1542.8	31543.	5514.2

Sample Name: MB 280-326405/1-A Acquired: 5/24/2016 6:24:02 Type: Unk
Method: 6500_026(v10) Mode: CONC Corr. Factor: 1.000000
User: kellyca Custom ID1: 5/23 Custom ID2: Custom ID3:
Comment: 325087 6010B

Elem	Ag3280	Al1670	As1890	B_2089	Ba4554	Be3130	Bi2230	Ca3179	Cd2288
Line	328.068 {103}	167.079 {502}	189.042 {478}	208.959 {461}	455.403 { 74}	313.042 {108}	223.061 {451}	317.933 {106}	228.802 {447}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.00007	.00309	.00376	W .00687	.00031	.00008	.00099	.02092	-.00016
Stddev	.00090	.00080	.00473	.00051	.00008	.00002	.00219	.00188	.00024
%RSD	1355.7	25.787	125.72	7.4152	27.123	25.390	219.93	9.0031	146.77

#1	.00070	.00252	.00042	.00723	.00036	.00007	-.00055	.01959	.00001
#2	-.00057	.00365	.00710	.00651	.00025	.00009	.00254	.02226	-.00033

Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Warn	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit				.00500					
Low Limit				-.00500					

Elem	Co2286	Cr2055	Cu3247	Fe2599	K_7664	Li6707	Mg2790	Mn2576	Mo2020
Line	228.616 {447}	205.560 {464}	324.754 {104}	259.940 {130}	766.490 { 44}	670.784 { 50}	279.079 {121}2	257.610 {131}	202.030 {467}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	-.00031	-.00010	.00097	.01378	.16741	.00010	.00362	.00040	-.00002
Stddev	.00007	.00003	.00003	.00172	.00582	.00101	.00043	.00001	.00011
%RSD	23.184	28.509	3.1868	12.494	3.4782	971.46	11.783	2.8704	505.18

#1	-.00036	-.00012	.00095	.01500	.16329	-.00061	.00392	.00039	-.00010
#2	-.00026	-.00008	.00099	.01256	.17152	.00082	.00331	.00041	.00006

Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Elem	Na5895	Ni2316	P_1782	Pb2203	S_1820	Sb2068	Se1960	Si2881	Sn1899
Line	589.592 { 57}	231.604 {446}	178.284 {489}	220.353 {453}	182.034 {485}	206.833 {463}	196.090 {472}	288.158 {117}	189.989 {477}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.14356	.00019	.00048	.00131	.01175	.00159	F .01161	.01550	.00119
Stddev	.01046	.00047	.00246	.00213	.00212	.00184	.00220	.00542	.00061
%RSD	7.2837	241.71	510.36	162.32	18.070	116.08	18.937	34.984	51.337

#1	.13617	.00052	.00222	.00282	.01025	.00028	.01317	.01167	.00162
#2	.15096	-.00014	-.00126	-.00019	.01326	.00289	.01006	.01934	.00076

Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Fail	Chk Pass	Chk Pass
High Limit							.01000		
Low Limit							-.01000		

Elem	Sr4077	Th2837	Ti3349	Ti1908	U_3701	V_2924	Zn2062	Zr3391	
Line	407.771 { 83}	283.730 {119}	334.904 {101}	190.856 {477}	370.152 { 91}	292.402 {115}	206.200 {163}	339.198 { 99}	
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	
Avg	.00002	.00090	.00017	-.00088	-.00390	.00020	.00235	.00071	
Stddev	.00000	.00168	.00004	.00017	.01029	.00002	.00009	.00242	
%RSD	2.3375	185.63	24.822	19.272	263.73	10.175	3.9746	341.84	

#1	.00002	-.00028	.00014	-.00076	.00337	.00019	.00242	.00242	
#2	.00002	.00209	.00019	-.00100	-.01118	.00022	.00228	-.00100	

Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	
High Limit									
Low Limit									

Int. Std.	Y_2243	Y_3600	Y_3774						
Line	224.306 {450}	360.073 { 94}	377.433 { 89}						
Units	Cts/S	Cts/S	Cts/S						
Avg	1568.0	32254.	5572.3						
Stddev	2.8	107.	4.1						
%RSD	.17661	.33158	.07409						

#1	1570.0	32329.	5569.4						
#2	1566.1	32178.	5575.2						

Sample Name: LCS 280-326405/2-A Acquired: 5/24/2016 6:26:48 Type: Unk

Method: 6500_026(v10) Mode: CONC Corr. Factor: 1.000000

User: kellyca Custom ID1: Custom ID2: Custom ID3:

Comment: 325087 6010B

Elem	Ag3280	Al1670	As1890	B_2089	Ba4554	Be3130	Bi2230	Ca3179	Cd2288
Line	328.068 {103}	167.079 {502}	189.042 {478}	208.959 {461}	455.403 { 74}	313.042 {108}	223.061 {451}	317.933 {106}	228.802 {447}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.05379	1.9868	1.0679	1.0967	2.0519	.05047	F 2.2462	49.129	.10517
Stddev	.00099	.0018	.0069	.0018	.0016	.00016	.0039	.109	.00029
%RSD	1.8366	.09254	.64380	.16433	.07845	.31998	.17271	.22119	.27698

#1	.05309	1.9855	1.0727	1.0954	2.0507	.05059	2.2434	49.206	.10538
#2	.05449	1.9881	1.0630	1.0980	2.0530	.05036	2.2489	49.052	.10497

Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Fail	Chk Pass	Chk Pass
High Limit							2.2000		
Low Limit							1.8000		

Elem	Co2286	Cr2055	Cu3247	Fe2599	K_7664	Li6707	Mg2790	Mn2576	Mo2020
Line	228.616 {447}	205.560 {464}	324.754 {104}	259.940 {130}	766.490 { 44}	670.784 { 50}	279.079 {121}2	257.610 {131}	202.030 {467}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.50291	F .20004	.26906	.94449	56.259	F 1.1487	52.295	.49337	1.0300
Stddev	.00167	.00021	.00120	.00425	.136	.0008	.307	.00194	.0007
%RSD	.33295	.10400	.44519	.45027	.24132	.07001	.58787	.39324	.07181

#1	.50409	.20019	.26821	.94750	56.355	1.1493	52.078	.49200	1.0305
#2	.50173	.19989	.26991	.94148	56.163	1.1482	52.513	.49475	1.0295

Check ?	Chk Pass	Chk Fail	Chk Pass	Chk Pass	Chk Pass	Chk Fail	Chk Pass	Chk Pass	Chk Pass
High Limit		.05750				1.1400			
Low Limit		.04300				.89000			

Elem	Na8183	Ni2316	P_1782	Pb2203	S_1820	Sb2068	Se1960	Si2881	Sn1899
Line	818.326 { 41}	231.604 {446}	178.284 {489}	220.353 {453}	182.034 {485}	206.833 {463}	196.090 {472}	288.158 {117}	189.989 {477}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	55.793	.50804	10.804	.52554	2.1589	.53618	2.1887	9.6780	2.0172
Stddev	.057	.00219	.010	.00558	.0043	.00097	.0085	.0133	.0071
%RSD	.10263	.43150	.08843	1.0610	.19791	.18018	.38686	.13698	.35360

#1	55.833	.50959	10.798	.52160	2.1619	.53549	2.1828	9.6873	2.0122
#2	55.752	.50649	10.811	.52948	2.1559	.53686	2.1947	9.6686	2.0223

Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Elem	Sr4077	Th2837	Ti3349	Ti1908	U_3701	V_2924	Zn2062	Zr3391
Line	407.771 { 83}	283.730 {119}	334.904 {101}	190.856 {477}	370.152 { 91}	292.402 {115}	206.200 {163}	339.198 { 99}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	1.0272	1.0405	1.0061	2.0703	2.1922	.49471	.49016	.49225
Stddev	.0018	.0050	.0028	.0033	.0338	.00242	.00257	.00010
%RSD	.17449	.48388	.27695	.15853	1.5412	.48999	.52392	.01945

#1	1.0285	1.0369	1.0041	2.0726	2.1683	.49299	.49198	.49232
#2	1.0259	1.0440	1.0080	2.0679	2.2161	.49642	.48834	.49219

Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit								
Low Limit								

Int. Std.	Y_2243	Y_3600	Y_3774
Line	224.306 {450}	360.073 { 94}	377.433 { 89}
Units	Cts/S	Cts/S	Cts/S
Avg	1480.1	29880.	5457.8
Stddev	.1	167.	13.1
%RSD	.00870	.55904	.24030

#1	1480.0	29998.	5448.5
#2	1480.2	29762.	5467.1

Sample Name: 280-82998-I-2-F Acquired: 5/24/2016 6:29:21 Type: Unk
Method: 6500_026(v10) Mode: CONC Corr. Factor: 1.000000
User: kellyca Custom ID1: Custom ID2: Custom ID3:
Comment: 325087 6010B

Elem	Ag3280	Al1670	As1890	B_2089	Ba4554	Be3130	Bi2230	Ca3179	Cd2288
Line	328.068 {103}	167.079 {502}	189.042 {478}	208.959 {461}	455.403 { 74}	313.042 {108}	223.061 {451}	317.933 {106}	228.802 {447}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.00029	.21372	.01448	5.4373	1.3669	.00004	.00300	489.43	.00101
Stddev	.00054	.00135	.00125	.0251	.0019	.00000	.00284	1.51	.00017
%RSD	187.98	.62976	8.6139	.46184	.13894	7.9105	94.744	.30770	17.061

#1	.00067	.21277	.01536	5.4196	1.3655	.00004	.00099	490.49	.00089
#2	-.00009	.21467	.01360	5.4551	1.3682	.00004	.00501	488.36	.00113

Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Elem	Co2286	Cr2055	Cu3247	Fe2599	K_7664	Li6707	Mg2790	Mn2576	Mo2020
Line	228.616 {447}	205.560 {464}	324.754 {104}	259.940 {130}	766.490 { 44}	670.784 { 50}	279.079 {121}2	257.610 {131}	202.030 {467}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.01316	.01914	.01012	22.585	W 271.01	.39086	358.73	1.8490	.00470
Stddev	.00087	.00024	.00007	.006	.41	.00075	1.01	.0059	.00035
%RSD	6.6118	1.2358	.71765	.02880	.15247	.19227	.28062	.31654	7.4984

#1	.01378	.01898	.01007	22.580	270.71	.39033	358.02	1.8448	.00445
#2	.01255	.01931	.01017	22.590	271.30	.39139	359.44	1.8531	.00495

Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Warn	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit					100.00				
Low Limit					-.50000				

Elem	Na8183	Ni2316	P_1782	Pb2203	S_1820	Sb2068	Se1960	Si2881	Sn1899
Line	818.326 { 41}	231.604 {446}	178.284 {489}	220.353 {453}	182.034 {485}	206.833 {463}	196.090 {472}	288.158 {117}	189.989 {477}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	W 1412.6	.11178	5.6841	-.00117	14.793	.00608	.02616	21.408	.00942
Stddev	1.1	.00026	.0074	.00086	.055	.00419	.00713	.020	.00109
%RSD	.08000	.23041	.12956	73.445	.37299	68.831	27.263	.09127	11.625

#1	1411.8	.11197	5.6893	-.00177	14.754	.00905	.02112	21.422	.01019
#2	1413.4	.11160	5.6789	-.00056	14.832	.00312	.03121	21.394	.00864

Check ?	Chk Warn	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit	500.00								
Low Limit	10.000								

Elem	Sr4077	Th2837	Ti3349	Ti1908	U_3701	V_2924	Zn2062	Zr3391
Line	407.771 { 83}	283.730 {119}	334.904 {101}	190.856 {477}	370.152 { 91}	292.402 {115}	206.200 {163}	339.198 { 99}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	9.3300	.00009	.02008	-.00383	-.00728	.01679	.15131	.00691
Stddev	.1195	.00112	.00015	.00332	.00463	.00001	.00291	.00046
%RSD	1.2810	1213.0	.76518	86.791	63.593	.08489	1.9224	6.6588

#1	9.4145	-.00070	.02019	-.00618	-.01055	.01678	.15336	.00724
#2	9.2455	.00088	.01997	-.00148	-.00400	.01680	.14925	.00659

Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit								
Low Limit								

Int. Std.	Y_2243	Y_3600	Y_3774
Line	224.306 {450}	360.073 { 94}	377.433 { 89}
Units	Cts/S	Cts/S	Cts/S
Avg	1216.0	24908.	5192.3
Stddev	3.1	67.	2.1
%RSD	.25553	.26926	.04119
#1	1218.2	24956.	5193.8
#2	1213.8	24861.	5190.8

Sample Name: 280-82998-I-2-F SD@5 Acquired: 5/24/2016 6:33:20 Type: Unk

Method: 6500_026(v10) Mode: CONC Corr. Factor: 1.000000

User: kellyca Custom ID1: Custom ID2: Custom ID3:

Comment: 325087 6010B

Elem	Ag3280	Al1670	As1890	B_2089	Ba4554	Be3130	Bi2230	Ca3179	Cd2288
Line	328.068 {103}	167.079 {502}	189.042 {478}	208.959 {461}	455.403 { 74}	313.042 {108}	223.061 {451}	317.933 {106}	228.802 {447}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.00026	.04812	.00910	1.1049	.27012	-.00001	-.00092	102.13	.00025
Stddev	.00009	.00156	.00593	.0015	.00050	.00000	.00131	.15	.00014
%RSD	34.771	3.2407	65.188	.13589	.18476	51.488	143.52	.14955	58.572

#1	.00032	.04922	.01329	1.1038	.26977	-.00001	-.00184	102.02	.00014
#2	.00019	.04702	.00490	1.1060	.27048	-.00001	.00001	102.24	.00035

Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Elem	Co2286	Cr2055	Cu3247	Fe2599	K_7664	Li6707	Mg2790	Mn2576	Mo2020
Line	228.616 {447}	205.560 {464}	324.754 {104}	259.940 {130}	766.490 { 44}	670.784 { 50}	279.079 {121}2	257.610 {131}	202.030 {467}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.00334	.00378	.00367	4.7043	51.494	.07130	73.329	.38127	.00047
Stddev	.00068	.00027	.00010	.0088	.134	.00022	.052	.00033	.00010
%RSD	20.378	7.2583	2.6437	.18654	.26112	.30827	.07049	.08566	22.025

#1	.00382	.00398	.00360	4.6981	51.399	.07145	73.366	.38150	.00040
#2	.00286	.00359	.00374	4.7105	51.589	.07114	73.293	.38104	.00055

Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Elem	Na8183	Ni2316	P_1782	Pb2203	S_1820	Sb2068	Se1960	Si2881	Sn1899
Line	818.326 { 41}	231.604 {446}	178.284 {489}	220.353 {453}	182.034 {485}	206.833 {463}	196.090 {472}	288.158 {117}	189.989 {477}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	267.86	.02411	1.0770	.00051	2.7216	.00314	.01287	4.1712	.00202
Stddev	.80	.00007	.0013	.00229	.0063	.00101	.00964	.0214	.00112
%RSD	.30034	.30879	.12219	445.87	.23318	32.195	74.942	.51205	55.522

#1	267.30	.02406	1.0779	-.00110	2.7171	.00386	.00605	4.1863	.00123
#2	268.43	.02416	1.0761	.00213	2.7261	.00243	.01969	4.1561	.00281

Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Elem	Sr4077	Th2837	Ti3349	Ti1908	U_3701	V_2924	Zn2062	Zr3391
Line	407.771 { 83}	283.730 {119}	334.904 {101}	190.856 {477}	370.152 { 91}	292.402 {115}	206.200 {163}	339.198 { 99}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	1.8991	.00104	.00398	.00191	-.02821	.00371	.03310	.00117
Stddev	.0055	.00008	.00029	.00064	.02211	.00015	.00075	.00075
%RSD	.29062	7.9975	7.2107	33.711	78.382	3.9394	2.2679	64.676

#1	1.8952	.00110	.00418	.00145	-.01258	.00361	.03257	.00063
#2	1.9030	.00098	.00378	.00237	-.04385	.00382	.03363	.00170

Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit								
Low Limit								

Int. Std.	Y_2243	Y_3600	Y_3774
Line	224.306 {450}	360.073 { 94}	377.433 { 89}
Units	Cts/S	Cts/S	Cts/S
Avg	1415.7	28835.	5477.8
Stddev	3.9	26.	17.3
%RSD	.27408	.09028	.31598

#1	1418.5	28854.	5490.0
#2	1413.0	28817.	5465.5

Sample Name: 280-82998-I-2-G MS Acquired: 5/24/2016 6:36:08 Type: Unk
Method: 6500_026(v10) Mode: CONC Corr. Factor: 1.000000
User: kellyca Custom ID1: Custom ID2: Custom ID3:
Comment: 325087 6010B

Elem	Ag3280	Al1670	As1890	B_2089	Ba4554	Be3130	Bi2230	Ca3179	Cd2288
Line	328.068 {103}	167.079 {502}	189.042 {478}	208.959 {461}	455.403 { 74}	313.042 {108}	223.061 {451}	317.933 {106}	228.802 {447}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.06140	2.0339	1.1699	6.3713	3.4628	.04943	2.4066	W 530.97	.11526
Stddev	.00120	.0004	.0088	.0099	.0008	.00010	.0052	.84	.00017
%RSD	1.9528	.02212	.75196	.15604	.02252	.20032	.21457	.15767	.15128

#1	.06055	2.0342	1.1637	6.3643	3.4622	.04950	2.4029	531.56	.11538
#2	.06224	2.0336	1.1761	6.3783	3.4633	.04936	2.4102	530.38	.11513

Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Warn	Chk Pass
High Limit								500.00	
Low Limit								-.05000	

Elem	Co2286	Cr2055	Cu3247	Fe2599	K_7664	Li6707	Mg2790	Mn2576	Mo2020
Line	228.616 {447}	205.560 {464}	324.754 {104}	259.940 {130}	766.490 { 44}	670.784 { 50}	279.079 {121}2	257.610 {131}	202.030 {467}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.48351	W .21690	.30700	23.248	W 328.46	1.6984	399.34	2.2820	1.0270
Stddev	.00092	.00002	.00157	.033	1.61	.0072	1.61	.0064	.0014
%RSD	.19027	.00760	.51273	.14196	.49158	.42443	.40418	.28123	.13211

#1	.48286	.21689	.30812	23.225	329.60	1.7035	400.48	2.2865	1.0260
#2	.48416	.21692	.30589	23.272	327.32	1.6933	398.20	2.2775	1.0280

Check ?	Chk Pass	Chk Warn	Chk Pass	Chk Pass	Chk Warn	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit		.10000			100.00				
Low Limit		-.01000			-.50000				

Elem	Na8183	Ni2316	P_1782	Pb2203	S_1820	Sb2068	Se1960	Si2881	Sn1899
Line	818.326 { 41}	231.604 {446}	178.284 {489}	220.353 {453}	182.034 {485}	206.833 {463}	196.090 {472}	288.158 {117}	189.989 {477}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	W 1469.3	.57771	17.400	.47431	16.872	.58144	2.3685	30.707	1.8965
Stddev	.2	.00213	.008	.00403	.010	.00171	.0033	.033	.0006
%RSD	.01474	.36872	.04821	.85015	.06202	.29353	.13751	.10605	.03234

#1	1469.1	.57621	17.406	.47716	16.880	.58023	2.3662	30.684	1.8969
#2	1469.4	.57922	17.394	.47145	16.865	.58264	2.3708	30.730	1.8961

Check ?	Chk Warn	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit	500.00								
Low Limit	10.000								

Elem	Sr4077	Th2837	Ti3349	Ti1908	U_3701	V_2924	Zn2062	Zr3391
Line	407.771 { 83}	283.730 {119}	334.904 {101}	190.856 {477}	370.152 { 91}	292.402 {115}	206.200 {163}	339.198 { 99}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	W 10.302	1.0102	1.0154	1.6685	2.1733	.51150	.58941	.46463
Stddev	.075	.0028	.0007	.0052	.0026	.00297	.00269	.00101
%RSD	.73268	.28127	.07205	.31429	.12058	.57995	.45587	.21675

#1	10.355	1.0082	1.0149	1.6722	2.1714	.51360	.59131	.46392
#2	10.249	1.0122	1.0160	1.6648	2.1751	.50941	.58751	.46534

Check ?	Chk Warn	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit	10.000							
Low Limit	-.01000							

Int. Std.	Y_2243	Y_3600	Y_3774
Line	224.306 {450}	360.073 { 94}	377.433 { 89}
Units	Cts/S	Cts/S	Cts/S
Avg	1207.7	24942.	5144.1
Stddev	1.9	84.	1.7
%RSD	.15915	.33850	.03352

#1	1206.4	24883.	5145.4
#2	1209.1	25002.	5142.9

Sample Name: 280-82998-I-2-H MSD Acquired: 5/24/2016 6:40:00 Type: Unk
Method: 6500_026(v10) Mode: CONC Corr. Factor: 1.000000
User: kellyca Custom ID1: Custom ID2: Custom ID3:
Comment: 325087 6010B

Elem	Ag3280	Al1670	As1890	B_2089	Ba4554	Be3130	Bi2230	Ca3179	Cd2288
Line	328.068 {103}	167.079 {502}	189.042 {478}	208.959 {461}	455.403 { 74}	313.042 {108}	223.061 {451}	317.933 {106}	228.802 {447}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.06258	2.0442	1.1706	6.6219	3.5638	.04999	2.4169	W 560.62	.11688
Stddev	.00107	.0002	.0102	.0282	.0137	.00013	.0007	4.24	.00046
%RSD	1.7146	.00992	.86960	.42508	.38544	.25707	.02904	.75585	.38983
#1	.06334	2.0443	1.1778	6.6418	3.5736	.04990	2.4174	563.61	.11720
#2	.06183	2.0440	1.1634	6.6020	3.5541	.05008	2.4164	557.62	.11656
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Warn	Chk Pass
High Limit								500.00	
Low Limit								-.05000	
Elem	Co2286	Cr2055	Cu3247	Fe2599	K_7664	Li6707	Mg2790	Mn2576	Mo2020
Line	228.616 {447}	205.560 {464}	324.754 {104}	259.940 {130}	766.490 { 44}	670.784 { 50}	279.079 {121}2	257.610 {131}	202.030 {467}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.48398	W .21789	.30882	24.645	W 344.27	1.7299	419.23	2.3917	1.0302
Stddev	.00153	.00129	.00102	.062	1.34	.0055	1.48	.0049	.0036
%RSD	.31594	.59232	.33054	.25138	.38824	.31859	.35328	.20340	.34457
#1	.48506	.21880	.30954	24.689	345.21	1.7338	420.28	2.3951	1.0327
#2	.48290	.21697	.30810	24.602	343.32	1.7260	418.18	2.3882	1.0277
Check ?	Chk Pass	Chk Warn	Chk Pass	Chk Pass	Chk Warn	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit		.10000			100.00				
Low Limit		-.01000			-.50000				
Elem	Na8183	Ni2316	P_1782	Pb2203	S_1820	Sb2068	Se1960	Si2881	Sn1899
Line	818.326 { 41}	231.604 {446}	178.284 {489}	220.353 {453}	182.034 {485}	206.833 {463}	196.090 {472}	288.158 {117}	189.989 {477}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	W 1557.2	.58115	17.685	.47594	17.617	.58118	2.3677	32.225	1.8894
Stddev	8.1	.00229	.082	.00526	.063	.00146	.0129	.112	.0082
%RSD	.51699	.39435	.46536	1.1045	.35868	.25169	.54330	.34670	.43618
#1	1562.9	.58277	17.743	.47965	17.662	.58015	2.3767	32.304	1.8953
#2	1551.5	.57953	17.627	.47222	17.572	.58222	2.3586	32.146	1.8836
Check ?	Chk Warn	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit	500.00								
Low Limit	10.000								
Elem	Sr4077	Th2837	Ti3349	Ti1908	U_3701	V_2924	Zn2062	Zr3391	
Line	407.771 { 83}	283.730 {119}	334.904 {101}	190.856 {477}	370.152 { 91}	292.402 {115}	206.200 {163}	339.198 { 99}	
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	
Avg	W 10.891	1.0161	1.0236	1.6584	2.2123	.51662	.60250	.46640	
Stddev	.004	.0006	.0032	.0023	.0168	.00000	.00541	.00247	
%RSD	.03289	.05727	.31771	.14089	.75817	.00018	.89838	.52978	
#1	10.893	1.0157	1.0259	1.6600	2.2005	.51662	.59868	.46815	
#2	10.888	1.0165	1.0213	1.6567	2.2242	.51662	.60633	.46465	
Check ?	Chk Warn	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	
High Limit	10.000								
Low Limit	-.01000								
Int. Std.	Y_2243	Y_3600	Y_3774						
Line	224.306 {450}	360.073 { 94}	377.433 { 89}						
Units	Cts/S	Cts/S	Cts/S						
Avg	1205.4	24753.	5105.1						
Stddev	6.3	43.	7.9						
%RSD	.51920	.17531	.15484						
#1	1200.9	24722.	5099.5						
#2	1209.8	24783.	5110.7						

Sample Name: ccvh-3900196 Acquired: 5/24/2016 6:43:11 Type: QC
Method: 6500_026(v10) Mode: CONC Corr. Factor: 1.000000
User: kellyca Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	Ag3280	Al3092	As1890	B_2089	Ba4554	Be3130	Bi2230	Ca3179	Cd2288	Co2286	Cr2055	Cu3247	Fe2714
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.00163	48.099	.00106	.01970	.00080	-.00006	1.0245	.02343	-.00106	.00306	-.00066	.00795	47.633
Stddev	.00025	.202	.00088	.00148	.00004	.00001	.0006	.02036	.00028	.00040	.00042	.00018	.189
%RSD	15.613	.41958	83.547	7.5365	5.2628	15.157	.05767	86.875	26.365	12.922	62.817	2.2357	.39694

#1	.00181	47.956	.00168	.02075	.00083	-.00007	1.0249	.03783	-.00126	.00334	-.00037	.00808	47.499
#2	.00145	48.241	.00043	.01865	.00077	-.00005	1.0241	.00904	-.00086	.00278	-.00096	.00783	47.766

Check ?	None	Chk Pass	None	None	None	None	Chk Pass	None	None	None	None	None	Chk Pass
Value													
Range													

Elem	K_7664	Li6707	Mg2790	Mn2576	Mo2020	Na8183	Ni2316	P_1782	Pb2203	S_1820	Sb2068	Se1960	Si2881
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.55792	-.00001	.19454	-.00025	-.00016	266.61	-.00018	.01235	.00055	4.9297	.00093	.01535	.01102
Stddev	.08094	.00017	.00277	.00003	.00019	.79	.00052	.00236	.00090	.0176	.00083	.00599	.00020
%RSD	14.507	2877.6	1.4240	10.752	115.73	.29604	295.40	19.078	164.72	.35800	89.465	39.040	1.7980

#1	.61516	.00012	.19650	-.00023	-.00030	266.06	.00019	.01401	-.00009	4.9422	.00152	.01111	.01116
#2	.50069	-.00013	.19259	-.00026	-.00003	267.17	-.00054	.01068	.00118	4.9172	.00034	.01959	.01088

Check ?	None	None	None	None	None	Chk Pass	None	None	None	Chk Pass	None	None	None
Value													
Range													

Elem	Sn1899	Sr4077	Th2837	Ti3349	Tl1908	U_3701	V_2924	Zn2062	Zr3391
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.00146	.00185	4.9914	.02368	-.00302	10.263	-.01659	-.00125	-.00272
Stddev	.00037	.00025	.0334	.00079	.00178	.030	.00029	.00025	.00007
%RSD	25.438	13.645	.66889	3.3402	58.931	.29505	1.7769	20.206	2.4342

#1	.00172	.00203	4.9678	.02312	-.00428	10.241	-.01638	-.00143	-.00268
#2	.00120	.00167	5.0150	.02424	-.00176	10.284	-.01680	-.00107	-.00277

Check ?	None	None	Chk Pass	None	None	Chk Pass	None	None	None
Value									
Range									

Int. Std.	Y_2243	Y_3600	Y_3774
Units	Cts/S	Cts/S	Cts/S
Avg	1484.5	29867.	5387.2
Stddev	4.4	6.	8.7
%RSD	.29927	.01961	.16203

#1	1481.4	29872.	5381.0
#2	1487.7	29863.	5393.4

Sample Name: ccv-3900195 Acquired: 5/24/2016 6:46:00 Type: QC
Method: 6500_026(v10) Mode: CONC Corr. Factor: 1.000000
User: kellyca Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	Ag3280	Al1670	As1890	B_2089	Ba4554	Be3130	Bi2230	Ca3179	Cd2288	Co2286	Cr2055	Cu3247
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.50975	.51520	1.0125	.54712	.49831	.49276	.00227	4.8121	.50889	.50270	.49144	.51131
Stddev	.00097	.00137	.0034	.00199	.00079	.00071	.00146	.0051	.00110	.00071	.00132	.00041
%RSD	.19049	.26679	.33691	.36383	.15919	.14448	64.118	.10510	.21518	.14147	.26931	.08028

#1	.50906	.51422	1.0100	.54853	.49887	.49326	.00124	4.8156	.50967	.50320	.49238	.51102
#2	.51044	.51617	1.0149	.54571	.49775	.49225	.00330	4.8085	.50812	.50220	.49050	.51160

Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	None	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Value												
Range												

Elem	Fe2599	K_7664	Li6707	Mg2790	Mn2576	Mo2020	Na5895	Ni2316	P_1782	Pb2203	S_1820	Sb2068
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	2.3923	53.809	F 1.1066	20.561	.49544	.49248	F 5.5168	.50649	1.0270	1.0377	.01353	1.0129
Stddev	.0071	.152	.0015	.011	.00116	.00132	.0060	.00111	.0032	.0026	.00053	.0004
%RSD	.29629	.28314	.13770	.05342	.23493	.26792	.10901	.22008	.30684	.24984	3.9098	.04232

#1	2.3873	53.917	1.1076	20.569	.49462	.49342	5.5125	.50727	1.0292	1.0395	.01315	1.0126
#2	2.3973	53.701	1.1055	20.554	.49626	.49155	5.5210	.50570	1.0248	1.0358	.01390	1.0132

Check ?	Chk Pass	Chk Pass	Chk Fail	Chk Pass	Chk Pass	Chk Pass	Chk Fail	Chk Pass	Chk Pass	Chk Pass	None	Chk Pass
Value			1.0000				5.0000					
Range			10.000%				10.000%					

Elem	Se1960	Si2881	Sn1899	Sr4077	Th2837	Ti3349	Ti1908	U_3701	V_2924	Zn2062	Zr3391
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	1.0522	4.7877	.99986	.50184	.00741	.48824	1.0493	-.00192	.48749	.48997	.48382
Stddev	.0042	.0086	.00485	.00171	.00144	.00153	.0026	.00469	.00047	.00104	.00008
%RSD	.40204	.18004	.48555	.34066	19.377	.31399	.25202	244.56	.09555	.21215	.01564

#1	1.0552	4.7816	1.0033	.50305	.00640	.48715	1.0474	.00140	.48782	.49071	.48377
#2	1.0492	4.7938	.99643	.50063	.00843	.48932	1.0512	-.00524	.48716	.48924	.48387

Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	None	Chk Pass	Chk Pass	None	Chk Pass	Chk Pass	Chk Pass
Value											
Range											

Int. Std.	Y_2243	Y_3600	Y_3774
Units	Cts/S	Cts/S	Cts/S
Avg	1546.5	31170.	5533.9
Stddev	1.0	79.	10.3
%RSD	.06583	.25434	.18624

#1	1547.2	31226.	5541.2
#2	1545.8	31114.	5526.6

Sample Name: ccb Acquired: 5/24/2016 6:48:36 Type: QC
Method: 6500_026(v10) Mode: CONC Corr. Factor: 1.000000
User: kellyca Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	Ag3280	Al1670	As1890	B_2089	Ba4554	Be3130	Bi2230	Ca3179	Cd2288	Co2286	Cr2055	Cu3247
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.00041	-.00044	.00170	F .01253	.00019	.00000	.00064	.00867	-.00005	.00006	-.00001	.00039
Stddev	.00015	.00054	.00300	.00008	.00018	.00008	.00048	.00366	.00005	.00035	.00012	.00007
%RSD	37.964	121.95	176.60	.61891	97.612	1656.8	75.604	42.244	104.72	627.56	1685.3	17.474
#1	.00030	-.00006	.00382	.01248	.00031	-.00005	.00030	.01125	-.00009	.00030	.00008	.00043
#2	.00052	-.00082	-.00042	.01259	.00006	.00006	.00098	.00608	-.00001	-.00019	-.00009	.00034
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Fail	Chk Pass	Chk Pass	None	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit				.00312								
Low Limit				-.00312								
Elem	Fe2599	K_7664	Li6707	Mg2790	Mn2576	Mo2020	Na5895	Ni2316	P_1782	Pb2203	S_1820	Sb2068
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.00380	.22933	.00010	.01044	.00021	.00121	W .15351	.00004	.00383	.00184	.00275	F .01203
Stddev	.00087	.00429	.00027	.00483	.00001	.00015	.00466	.00038	.00412	.00090	.00088	.00004
%RSD	22.856	1.8698	280.30	46.254	2.4488	12.826	3.0360	872.73	107.59	48.803	31.874	.35993
#1	.00319	.23237	-.00009	.01385	.00021	.00110	.15681	-.00023	.00092	.00120	.00337	.01206
#2	.00442	.22630	.00028	.00702	.00022	.00131	.15021	.00031	.00674	.00247	.00213	.01200
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Warn	Chk Pass	Chk Pass	Chk Pass	None	Chk Fail
High Limit							.09160					.00628
Low Limit							-.09160					-.00628
Elem	Se1960	Si2881	Sn1899	Sr4077	Th2837	Ti3349	Ti1908	U_3701	V_2924	Zn2062	Zr3391	
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	
Avg	W .00950	.02139	.00003	.00023	.00116	.00016	.00128	.00872	.00015	.00045	.00009	
Stddev	.00158	.00643	.00133	.00003	.00132	.00050	.00076	.01018	.00028	.00010	.00038	
%RSD	16.651	30.086	3989.9	12.151	113.96	308.53	59.510	116.67	192.49	22.500	401.41	
#1	.01062	.02594	-.00091	.00021	.00022	.00052	.00074	.00153	-.00005	.00052	.00036	
#2	.00839	.01684	.00097	.00025	.00209	-.00019	.00182	.01592	.00035	.00037	-.00017	
Check ?	Chk Warn	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	
High Limit	.00486											
Low Limit	-.00486											
Int. Std.	Y_2243	Y_3600	Y_3774									
Units	Cts/S	Cts/S	Cts/S									
Avg	1549.1	31673.	5445.2									
Stddev	1.2	46.	12.8									
%RSD	.07998	.14495	.23516									
#1	1548.2	31641.	5454.2									
#2	1549.9	31706.	5436.1									

Sample Name: ccvl-3907489 Acquired: 5/24/2016 6:51:22 Type: QC
Method: 6500_026(v10) Mode: CONC Corr. Factor: 1.000000
User: kellyca Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	Ag3280	Al1670	As1890	B_2089	Ba4554	Be3130	Bi2230	Ca3179	Cd2288	Co2286	Cr2055	Cu3247
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.01187	.11965	.01453	.11251	.01261	F .00273	.11147	F .30181	F .00689	.01207	.01203	.01767
Stddev	.00011	.00065	.00168	.00108	.00003	.00004	.00115	.00289	.00022	.00005	.00002	.00011
%RSD	.96728	.54411	11.545	.96081	.25123	1.2931	1.0284	.95688	3.1431	.45423	.15047	.63947

#1	.01195	.11919	.01571	.11327	.01259	.00276	.11066	.29977	.00704	.01203	.01202	.01759
#2	.01179	.12011	.01334	.11174	.01263	.00271	.11228	.30385	.00674	.01210	.01204	.01775

Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Fail	Chk Pass	Chk Fail	Chk Fail	Chk Pass	Chk Pass	Chk Pass
Value						.00100		.20000	.00500			
Range						30.000%		30.000%	30.000%			

Elem	Fe2599	K_7664	Li6707	Mg2790	Mn2576	Mo2020	Na5895	Ni2316	P_1782	Pb2203	S_1820	Sb2068
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	F .18573	3.5982	F .01432	F .28816	.01262	.02208	1.2505	.04292	2.8943	F .01265	.00611	F .02744
Stddev	.00059	.0168	.00076	.00544	.00012	.00003	.0085	.00018	.0053	.00066	.00434	.00156
%RSD	.32030	.46556	5.3104	1.8863	.91582	.14585	.68088	.42184	.18181	5.2233	71.001	5.6970

#1	.18615	3.5863	.01485	.28432	.01271	.02205	1.2445	.04304	2.8906	.01312	.00917	.02633
#2	.18531	3.6100	.01378	.29200	.01254	.02210	1.2566	.04279	2.8981	.01218	.00304	.02854

Check ?	Chk Fail	Chk Pass	Chk Fail	Chk Fail	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Fail	None	Chk Fail
Value	.10000		.01000	.20000						.00900		.02000
Range	30.000%		30.000%	30.000%						30.000%		30.000%

Elem	Se1960	Si2881	Sn1899	Sr4077	Th2837	Ti3349	Ti1908	U_3701	V_2924	Zn2062	Zr3391
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	F .02295	.50906	.10402	.01211	.01672	.01158	F .02149	F .09722	.01162	F .04015	.01643
Stddev	.00049	.00628	.00019	.00001	.00083	.00022	.00189	.00816	.00005	.00077	.00069
%RSD	2.1342	1.2343	.18681	.06891	4.9791	1.8772	8.7937	8.3890	.40161	1.9145	4.2252

#1	.02329	.50462	.10388	.01212	.01613	.01173	.02015	.09145	.01166	.04069	.01594
#2	.02260	.51351	.10416	.01211	.01731	.01142	.02282	.10299	.01159	.03961	.01692

Check ?	Chk Fail	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Fail	Chk Fail	Chk Pass	Chk Fail	Chk Pass
Value	.01500						.01500	.06000		.02000	
Range	30.000%						30.000%	30.000%		30.000%	

Int. Std.	Y_2243	Y_3600	Y_3774
Units	Cts/S	Cts/S	Cts/S
Avg	1552.7	31924.	5484.1
Stddev	.9	23.	9.0
%RSD	.06118	.07152	.16485

#1	1553.4	31940.	5490.5
#2	1552.1	31908.	5477.8

LIMS Batch Number(s): 614081.83-84		Filename(s): 200052314	
Analyst: J. B. [Signature]		Method (include): 200052314	
QC Type (include): 200052314		QC Type (include): 200052314	
Matrix (include): 200052314		Matrix (include): 200052314	
Review Items		If No, why is data reportable?	
1. Instrument calibrated per lab SOP?	Yes	No	NA
2. Reanalysis of Calibration Standards before samples:	Yes	No	NA
3. ICP/CCB: run before samples, 10% frequency, & closing	Yes	No	NA
4. ICP/CCV: Result < 10% (routine) frequency initial, 10% & closing 90-110% recovery, 5% RSD (6010)	Yes	No	NA
5. ICPV/CCV: 70-130% recovery (6010)	Yes	No	NA
6. ICSA/CSAB: run before samples ICSA detections for non-spiked < 2x RL (< LOD/2x MDL for DoD or special project) ICSAB for spiked elements 80-120%	Yes	No	NA
7. RI-level check standard (CRI): 80-150% (routine) 80-120% recovery (DoD or special project)	Yes	No	NA
8. Client Sample and QC Sample Results: range diluted and reanalyzed? (200.7)	Yes	No	NA
9. Internal standard (IS) response $\pm 30\%$ of ICB IS?	Yes	No	NA
10. Method Blank: one per preparation batch result < 1/4 RL (routine)	Yes	No	NA
11. ICS: one per preparation batch 80-120% recovery or historical (routine)	Yes	No	NA
12. MS/MSD or MS/Dup frequency: a pair per batch (routine) a pair per 10 samples (200.7)	Yes	No	NA
13. Preparation Matrix QC (include):	Yes	No	NA
14. MS/MSD recovery & RPD: 75-125% recovery or historical (routine)	Yes	No	NA
15. 70-130% recovery or historical (200.7)	Yes	No	NA
16. 20% RPD	Yes	No	NA
17. project limits (other)	Yes	No	NA

Review Items	Yes	No	NA	2nd Rev	If No, why is data reportable?
5. If TCDL MS < 50% and sample result 80-100% of toxicity characteristic limit, was MSA run?					
6. Serial dilution: present for each prep batch (routine) Required if MS/MSD fail (DoD/IS) run at 5x dilution of parent sample < 10% difference					
7. Post digestion spike: Required if MS/MSD fail (DoD and 6010) or by client request					
8. Raw Data & TALIS Data Entry:					
1. TALIS Sample List Tab					
a. LIMS Sample IDs / Containers are correct					
b. Method and matrix are correct					
c. Date and time are correct					
d. Dilutions are correct					
e. Correct units designated, e.g., DU, (where applicable)					
2. TALIS Sample Results Tab					
a. All reported analytes are marked Primary or Secondary					
b. All unused data are marked Rejected or Accepted					
c. Unused data are clearly identified with reason not used					
d. Out of control QC is clearly identified					
e. Any data that has a qualifier is reviewed with appropriate action taken (NCLM if needed)					
f. The attached data file includes the filename, instrument, and analyst initials					
3. TALIS Worksheet Tab is complete and correct					
4. TALIS Reagent Tab is complete and correct					
5. TALIS QC Link Tab is correct					
6. TALIS Batch Information screen documentation is complete					
7. TALIS Status set to appropriate review level					
8. Final Report and NCLM (if applicable) are correct					
9. Results for samples and QC correct on final report?					
10. Are all necessary scanned documents in TALIS?					
11. NCLM reviewed for applicability, correct references to batches, grammar/typographical errors?					
12. Raw Data PDF attached as document					
Comments:					

2nd Reviewer:

[Signature]

Review Date:

5/24/16

METALS BATCH WORKSHEET

Lab Name: TestAmerica Denver Job No.: 320-18796-1

SDG No.: _____

Batch Number: 325380 Batch Start Date: 05/17/16 08:05 Batch Analyst: Baca, Tessa EBatch Method: 3010A Batch End Date: 05/17/16 13:05

Lab Sample ID	Client Sample ID	Method Chain	Basis	Initial pH	InitialAmount	FinalAmount	ICP SPK 2B 00039	ICP SPK 3A 00113	
MB 280-325380/1		3010A, 6010C			50 mL	50 mL			
LCS 280-325380/2		3010A, 6010C			50 mL	50 mL	0.5 mL	0.5 mL	
320-18796-D-1	OF-STORLAG-0516	3010A, 6010C	T	<2	50 mL	50 mL			
320-18796-D-2	OF-TRMTLAG-0516	3010A, 6010C	T	<2	50 mL	50 mL			
320-18796-D-3	OF-POLLLAG-0516	3010A, 6010C	T	<2	50 mL	50 mL			
320-18796-D-4	OF-CLTANK-0516	3010A, 6010C	T	<2	50 mL	50 mL			
320-18796-D-5	OF-BACKWASH-0516	3010A, 6010C	T	<2	50 mL	50 mL			
320-18796-D-6	OF-FILTER-0516	3010A, 6010C	T	<2	50 mL	50 mL			

Batch Notes	
Lot # of hydrochloric acid	0000132880-09/20
Lot # of Nitric Acid	0000138698-03/10
Hot Block ID	03
Oven, Bath or Block Temperature 1	90 Degrees C
Oven, Bath or Block Temperature 2	95 Degrees C
Pipette ID	MET-89
Thermometer ID	3184
Digestion Tube/Cup ID	1509104
Uncorrected Temperature	90 Degrees C
Uncorrected Temperature 2	95 Degrees C

Basis	Basis Description
T	Total/NA

The pound sign (#) in the amount added field denotes that the reagent was used undiluted. All calculations are performed using the stated concentration for this reagent.

METALS BATCH WORKSHEET

Lab Name: TestAmerica Denver Job No.: 320-18796-1

SDG No.: _____

Batch Number: 325382 Batch Start Date: 05/17/16 08:05 Batch Analyst: Baca, Tessa EBatch Method: 3005A Batch End Date: 05/17/16 13:05

Lab Sample ID	Client Sample ID	Method Chain	Basis	Initial pH	InitialAmount	FinalAmount	ICP SPK 2B 00039	ICP SPK 3A 00113	
MB 280-325382/1		3005A, 6010C			50 mL	50 mL			
LCS 280-325382/2		3005A, 6010C			50 mL	50 mL	0.5 mL	0.5 mL	
320-18796-C-1	OF-STORLAG-0516	3005A, 6010C	D	<2	50 mL	50 mL			
320-18796-C-2	OF-TRMTLAG-0516	3005A, 6010C	D	<2	50 mL	50 mL			
320-18796-C-3	OF-POLLLAG-0516	3005A, 6010C	D	<2	50 mL	50 mL			
320-18796-C-4	OF-CLTANK-0516	3005A, 6010C	D	<2	50 mL	50 mL			
320-18796-C-4 MS	OF-CLTANK-0516	3005A, 6010C	D	<2	50 mL	50 mL	0.5 mL	0.5 mL	
320-18796-C-4 MSD	OF-CLTANK-0516	3005A, 6010C	D	<2	50 mL	50 mL	0.5 mL	0.5 mL	

Batch Notes	
Lot # of hydrochloric acid	0000132880-09/20
Lot # of Nitric Acid	000138698-03/10
Hot Block ID	05
Oven, Bath or Block Temperature 1	90
Oven, Bath or Block Temperature 2	93
Thermometer ID	MT2050
Digestion Tube/Cup ID	1509104
Uncorrected Temperature	90 Celsius
Uncorrected Temperature 2	93 Celsius

Basis	Basis Description
D	Dissolved

The pound sign (#) in the amount added field denotes that the reagent was used undiluted. All calculations are performed using the stated concentration for this reagent.

METALS BATCH WORKSHEET

Lab Name: TestAmerica Denver Job No.: 320-18796-1

SDG No.: _____

Batch Number: 325709 Batch Start Date: 05/17/16 11:00 Batch Analyst: Baca, Tessa EBatch Method: FILTRATION Batch End Date: 05/18/16 14:54

Lab Sample ID	Client Sample ID	Method Chain	Basis	InitialAmount	FinalAmount				
MB 280-325709/1		FILTRATION, 3005A, 6010C		240 mL	240 mL				
LCS 280-325709/2		FILTRATION, 3005A, 6010C		240 mL	240 mL				
320-18796-C-5	OF-BACKWASH-0516	FILTRATION, 3005A, 6010C	D	100 mL	100 mL				
320-18796-E-6	OF-FILTER-0516	FILTRATION, 3005A, 6010C	D	240 mL	240 mL				

Batch Notes	
Filter ID	9687803
Lot # of Nitric Acid	133393

Basis	Basis Description
D	Dissolved

The pound sign (#) in the amount added field denotes that the reagent was used undiluted. All calculations are performed using the stated concentration for this reagent.

METALS BATCH WORKSHEET

Lab Name: TestAmerica Denver Job No.: 320-18796-1

SDG No.: _____

Batch Number: 325989 Batch Start Date: 05/19/16 14:45 Batch Analyst: Johnson, Sarah EBatch Method: 3005A Batch End Date: 05/19/16 19:45

Lab Sample ID	Client Sample ID	Method Chain	Basis	Initial pH	InitialAmount	FinalAmount	ICP SPK 2B 00040	ICP SPK 3A 00113	
MB 280-325709/1-A		3005A, 6010C			50 mL	50 mL			
LCS 280-325709/2-A		3005A, 6010C			50 mL	50 mL	0.5 mL	0.5 mL	
320-18796-C-5-A	OF-BACKWASH-0516	3005A, 6010C	D	<2	50 mL	50 mL			
320-18796-E-6-A	OF-FILTER-0516	3005A, 6010C	D	<2	50 mL	50 mL			

Batch Notes	
Lot # of hydrochloric acid	0000132880-09/20
Lot # of Nitric Acid	0000138698-03/10
Hot Block ID	03
Oven, Bath or Block Temperature 1	90
Oven, Bath or Block Temperature 2	95
Pipette ID	MET-89
Thermometer ID	3184
Digestion Tube/Cup ID	1501179
Uncorrected Temperature	90 Celsius
Uncorrected Temperature 2	95 Celsius

Basis	Basis Description
D	Dissolved

The pound sign (#) in the amount added field denotes that the reagent was used undiluted. All calculations are performed using the stated concentration for this reagent.

GENERAL CHEMISTRY

COVER PAGE
GENERAL CHEMISTRY

Lab Name: TestAmerica Denver Job Number: 320-18796-1

SDG No.: _____

Project: NAS Oceana, VA - 9000 CTO-WE01

Client Sample ID
OF-BACKWASH-0516

Lab Sample ID
320-18796-5

Comments:

1B-IN
INORGANIC ANALYSIS DATA SHEET
GENERAL CHEMISTRY

Client Sample ID: OF-BACKWASH-0516 Lab Sample ID: 320-18796-5
Lab Name: TestAmerica Denver Job No.: 320-18796-1
SDG ID.: _____
Matrix: Water Date Sampled: 05/10/2016 10:30
Reporting Basis: WET Date Received: 05/11/2016 09:30

Analyte	Result	LOQ	LOD	DL	Units	C	Q	DIL	Method
Total Suspended Solids	4700	500	350	140	mg/L			1	SM 2540D

3-IN
METHOD BLANK
GENERAL CHEMISTRY

Lab Name: TestAmerica Denver Job No.: 320-18796-1

SDG No.: _____

Method	Lab Sample ID	Analyte	Result	Qual	Units	LOQ	Dil
Batch ID: 325537 Date: 05/16/2016 16:19							
SM 2540D	MB 280-325537/2	Total Suspended Solids	2.8	U	mg/L	4.0	1

7A-IN
LAB CONTROL SAMPLE
GENERAL CHEMISTRY

Lab Name: TestAmerica Denver Job No.: 320-18796-1
SDG No.: _____
Matrix: Water

Method	Lab Sample ID	Analyte	Result	C	Unit	Spike Amount	Pct. Rec.	Limits	RPD	RPD Limit	Q
Batch ID: 325537 Date: 05/16/2016 16:19											
						LCS Source: TSS Daily STD_00456					
SM	LCS	Total Suspended Solids	90.0		mg/L	100	90	86-114			
2540D	280-325537/1										

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

9-IN
DETECTION LIMITS
GENERAL CHEMISTRY

Lab Name: TestAmerica Denver

Job Number: 320-18796-1

SDG Number: _____

Matrix: Water

Instrument ID: NOEQUIP

Method: SM 2540D

DL Date: 04/01/2011 10:35

Analyte	Wavelength/ Mass	LOQ (mg/L)	DL (mg/L)
Total Suspended Solids		4	1.1

9-IN
CALIBRATION BLANK DETECTION LIMITS
GENERAL CHEMISTRY

Lab Name: TestAmerica Denver Job Number: 320-18796-1
SDG Number: _____
Matrix: Water Instrument ID: NOEQUIP
Method: SM 2540D XMDL Date: 04/01/2011 10:35

Analyte	Wavelength/ Mass	XRL (mg/L)	XMDL (mg/L)
Total Suspended Solids		4	1.1

Lab Name: <u>TestAmerica Denver</u>	Job No.: <u>320-18796-1</u>
SDG No.: _____	
Instrument ID: <u>NOEQUIP</u>	Analysis Method: <u>SM 2540D</u>
Start Date: <u>05/16/2016 16:19</u>	End Date: <u>05/16/2016 16:19</u>

[illegible]

05/27/2016

Gravimetric-Solids Data Review Checklist

LIMS Batch Number: <u>325537</u>	Instrument ID: <u>Bal</u>	
Analyst/1 st Reviewer/Date: <u>SVC/Scott Chem 5/17/16</u>	Method: <u>TSS</u>	QC Type (circle): <u>Standard</u> LCSD DOD Q4 DoD Q5 QAPP Other
Method (circle): 2540B 2540C <u>2540D</u> 160.4 1664A 1664B 9071 D5057 D1429 D2216		
Matrix (circle): <u>Water</u> Solid Waste		

Review Items	Yes	No	NA	2 nd rev	If No, why is data reportable?
A. Balance, Oven and DI water Checks					
Was the balance calibration verified before and after processing samples and noted in the "Balance Calibration Log" for the date(s) the samples were processed?	✓			✓	
Was the daily conductivity check of the deionized water recorded in the "Conductivity Logbook"?	✓			✓	
Temps. within the required temperature of the method:					
% Moisture: 100°C ± 5°C	✓			✓	
% Vol. 103°C - 105°C					
% Solids, TS, TSS, TVSS, VSS 103°C - 105°C					
TDS 180°C ± 2°C					
%Vol, TVSS, VSS 550°C ± 50°C					
Other:					
B. Method Requirements					
QC Batch contains no greater than 20 samples?	✓			✓	
If sample is visibly oily, was this noted on the benchsheet?	✓			✓	
Was final residue weight within minimum/maximum requirements?	✓			✓	
Were the initial and final drying dates and times recorded on the benchsheet/TALS and were all samples dried for at least one hour?	✓			✓	
C. Preparation/ Matrix QC					
Matrix Duplicate (RPD ± 5 %) (If > 5 %, determine corrective per SOP.)	✓			✓	
The RPD limit of 5% applies to TSS, TDS and TS, 20% RPD for all others	✓			✓	
Method blank < ½ RL or all reported samples > 10 X RL? - (HEM, SGT HEM, and TDS the MB <RL)	✓			✓	
LCS/LCSD run for batch and within QC limits?	✓			✓	
D. Preparation/ Matrix QC					
TDS/Conductivity ratio or historical data checked?	✓			✓	
For % Moisture, was the Final Dried Weight < the Initial Pan Weight or is the result greater than 100%?			✓	✓	
Were sample analyses done within holding time? If no, create HTV NCM. NCM#	✓			✓	
Were special client requirements met?	✓			✓	
Were data that were manually transcribed from instrument printouts into TALS verified 100% including dilution factors, significant figures and units?	✓			✓	
Do the prep and analysis dates in TALS reflect the actual dates?	✓			✓	
STD/True Value information is updated and included?	✓			✓	

Review Items	NA	Yes	No	2 nd rev	If No, why is data reportable?
F. Data and TALS review					
1. Raw Data					
a. Unused data is clearly identified with reason not used		✓		✓	
b. All cross outs are initialed and dated		✓		✓	
c. Raw data includes the method, date, and analyst initials/signature		✓		✓	
2. TALS Samples Tab					
a. LIMS Sample IDs / Containers are correct		✓		✓	
b. Method and matrix are correct		✓		✓	
c. Date and time match raw data		✓		✓	
d. Dilutions are correct		✓		✓	
e. Correct suffix (DU, MS, MSD) designated (where applicable)		✓		✓	
3. TALS Worksheet Tab is complete and correct (Initial Amount, Final Amount, pH, etc.)		✓		✓	
4. TALS Reagent Tab is complete and correct and properly associated with QC samples. Confirm that reagent amounts are correct. If reagents are new verify that the correct COA has been attached to the source standard		✓		✓	
5. TALS QC Links Tab is correct		✓		✓	
6. TALS Sample Results Tab					
a. All unused data are marked Rejected or Accepted		✓		✓	
b. Set status for samples based on QC and sample results info (i.e., set to primary analysis with passing QC or reject samples without passing QC or samples that are over-range.)		✓		✓	
c. Any data that has a qualifier is commented on with appropriate action taken		✓		✓	
7. TALS Batch Information Screen documentation is complete		✓		✓	
8. Historical Data Checker: Check historical data. Print charts for outliers. Take corrective action as is appropriate		✓		✓	
9. TALS Status set to appropriate review level		✓		✓	
E. Final Report and NCMs (2nd level review only)					
1. Were all job/project requirements met?				✓	
2. Results for samples and QC correct on final report?				✓	
3. Are all necessary scanned documents in TALS?				✓	
4. NCMs reviewed for applicability, correct references to batches, grammar/typographical errors?				✓	

Comments:

2nd Reviewer:*Caitlyn Alvarado*

Review Date:

*5/13/16**CMS/1.8/16*

GENERAL CHEMISTRY BATCH WORKSHEET

Lab Name: TestAmerica Denver Job No.: 320-18796-1

SDG No.: _____

Batch Number: 325537 Batch Start Date: 05/16/16 16:19 Batch Analyst: Cherry, Scott VBatch Method: SM 2540D Batch End Date: _____

Lab Sample ID	Client Sample ID	Method Chain	Basis	FinalAmount	CrucibleID	TareWeight	InitialAmount	Weight1	Weight2
LCS 280-325537/1		SM 2540D		250 mL	B0607821 0.1085	0.1085 g	250 mL	0.1311 g	0.1310 g
MB 280-325537/2		SM 2540D		250 mL	B0607822 0.1086	0.1086 g	250 mL	0.1085 g	0.1085 g
320-18796-C-5	OF-BACKWASH-0516	SM 2540D	T	250 mL	B0607838 0.1102	0.1102 g	2 mL	0.1195 g	0.1195 g

Lab Sample ID	Client Sample ID	Method Chain	Basis	Weight3	WeightOne%Diff	Residue	Residue2	ResDishWt	DishWeight
LCS 280-325537/1		SM 2540D		0 g	PASS <0.5mg	0.0226 g	0.0225 g	0.131 g	0.1085 g
MB 280-325537/2		SM 2540D		0 g	PASS <0.5mg	-0.0001 g	-0.0001 g	0.1085 g	0.1086 g
320-18796-C-5	OF-BACKWASH-0516	SM 2540D	T	0 g	PASS <0.5mg	0.0093 g	0.0093 g	0.1195 g	0.1102 g

Lab Sample ID	Client Sample ID	Method Chain	Basis	TSS Daily STD 00456					
LCS 280-325537/1		SM 2540D		250 mL					
MB 280-325537/2		SM 2540D							
320-18796-C-5	OF-BACKWASH-0516	SM 2540D	T						

The pound sign (#) in the amount added field denotes that the reagent was used undiluted. All calculations are performed using the stated concentration for this reagent.

GENERAL CHEMISTRY BATCH WORKSHEET

Lab Name: TestAmerica Denver Job No.: 320-18796-1

SDG No.: _____

Batch Number: 325537 Batch Start Date: 05/16/16 16:19 Batch Analyst: Cherry, Scott VBatch Method: SM 2540D Batch End Date: _____

Batch Notes	
Balance ID	2485070
Constant Weight (WT2) Date/Time In	05/16/16 2120 svc
Constant Weight (WT2) Date/Time Out	05/17/16 1527 svc
Constant Weight (WT2) Temp In	104 Celsius
Constant Weight (WT2) Temp Out	104 Celsius
Uncorrected CW (Wt2) Temp In	104 Celsius
Uncorrected CW (Wt2) Temp Out	104 Celsius
Corrected Temperature in Oven	104 Celsius
Corrected Temperature out of Oven	104 Celsius
Date/Time Samples placed in Oven	05/16/16 1744 svc
Date/Time Samples Removed from Oven	05/16/16 1902 svc
Filter Paper ID	7021723
Nominal Amount Used	250 mL
Oven ID	E
Pipette ID	5000ELJ
Perform Calculation (0=No, 1=Yes)	1
Thermometer ID	1354
Uncorrected In Temperature	104 Celsius
Uncorrected Out Temperature	104 Celsius

Basis	Basis Description
T	Total/NA

The pound sign (#) in the amount added field denotes that the reagent was used undiluted. All calculations are performed using the stated concentration for this reagent.

Shipping and Receiving Documents

Chain of
Custody Record

TestAmerica

THE LEADER IN ENVIRONMENTAL TESTING

Temperature on Receipt

Drinking Water? Yes ☐ No ☐

TAL-4124 (1007)

Client
CH2M Hill
Address
5701 Cleveland Street
City
Virginia Beach
State
VA
Zip Code
23462
Project Name and Location (State)
Fentress PFC Sampling WED1
Contract/Purchase Order/Quote No.
Project Manager
Bill Friedman
Telephone Number (Area Code)/Fax Number
757-671-6232
Site Contact
Carrier/Waybill Number
Fedex
Date
05/10/2016
Chain of Custody Number
286037
Page
1 of 1

Analysis (Attach list if more space is needed)
PFCs
TSS
Total Iron
Dissolved Iron
Dissolved Iron Filtered
FIELD FILTERED

Sample I.D. No. and Description (Containers for each sample may be combined on one line)	Date	Time	Matrix				Containers & Preservatives					
			Air	Aqueous	Sed	Soil	Unpres.	H2SO4	HNO3	HCl	NaOH	ZnAc/NaOH
OF - STORLAG - Ø516	05/10/16	1210	X				2	2	2			
OF - TRMTLAG - Ø516		1150	X				2	2	2			
OF - POLLAG - Ø516		1125	X				2	2	2			
OF - CLTANK - Ø516		1048	X				2	2	2			
OF - BACKWASH - Ø516		1030	X				3	2	2			
OF - FILTER - Ø516		1015	X				2	2	2			



320-18796 Chain of Custody

Possible Hazard Identification
☐ Non-Hazard ☐ Flammable ☐ Skin Irritant ☐ Poison B ☐ Unknown
Turn Around Time Required
☐ 24 Hours ☐ 48 Hours ☐ 7 Days ☐ 14 Days ☐ 21 Days ☐ Other
Sample Disposal
☐ Return To Client ☐ Disposal By Lab ☐ Archive For _____ Months (A fee may be assessed if samples are retained longer than 1 month)

QC Requirements (Specify)
1. Received By
Date
05/10/2016
Time
1600
2. Received By
Date
Time
3. Received By
Date
Time

Comments
OF - STORLAG, OF - TRMTLAG, OF - POLLAG, & OF - CLTANK were field filtered for dissolved iron. OF - BACKWASH & OF - FILTER were NOT filtered.
DISTRIBUTION: WHITE - Returned to Client with Report, CAUTION - Stays with the Sample, PINK - Field Copy
PFC dissolved iron.

Chain of Custody Record

TestAmerica



Client Information (Sub Contract Lab)		Lab PM: Turpen, Laura		Carrier Tracking No(s):		COC No: 320-67636.1	
Shipping/Receiving		E-Mail: laura.turpen@testamericainc.com		Page: Page 1 of 1			
Company: TestAmerica Laboratories, Inc.		Job #:		Analysis Requested		Job #:	
Address: 4955 Yarrow Street,		Due Date Requested: 5/22/2016		6010C_DOD&FILTRATION Dissolved Iron - lab filter		Preservation Codes:	
City: Arvada		TAT Requested (days):		6010C_DOD&FIELD, FLTRD Dissolved Iron - field filter		A - HCL B - NaOH C - Zn Acetate D - Nitric Acid E - NaHSO4 F - MeOH G - Amchlor H - Ascorbic Acid I - Ice J - DI Water K - EDTA L - EDA M - Hexane N - None O - AsNaO2 P - Na2O4S Q - Na2SO3 R - Na2SO4 S - H2SO4 T - TSP Dodecahydrate U - Acetone V - MCAA W - ph 4-5 Z - other (specify)	
State, Zip: CO, 80002		PO #:		6010C_DOD&FIELD, FLTRD Dissolved Iron - field filter		Other:	
Phone: 303-736-0100(Tel) 303-431-7171(Fax)		WO #:		6010C_DOD&FIELD, FLTRD Dissolved Iron - field filter			
Email:		Project #:		6010C_DOD&FIELD, FLTRD Dissolved Iron - field filter			
Project Name: NAS Oceana, VA - 9000 CTO-WE01		28015183		6010C_DOD&FIELD, FLTRD Dissolved Iron - field filter			
Site:		SSOW#:		6010C_DOD&FIELD, FLTRD Dissolved Iron - field filter			
Sample Identification - Client ID (Lab ID)		Sample Date		Sample Time		Sample Type (C=Comp, G=grab)	
OF-STORLAG-0516 (320-18796-1)		5/10/16		12:10 Pacific		Water	
OF-TRMTLAG-0516 (320-18796-2)		5/10/16		11:50 Pacific		Water	
OF-POLLGAG-0516 (320-18796-3)		5/10/16		11:25 Pacific		Water	
OF-CLTANK-0516 (320-18796-4)		5/10/16		10:48 Pacific		Water	
OF-BACKWASH-0516 (320-18796-5)		5/10/16		10:30 Pacific		Water	
OF-FILTER-0516 (320-18796-6)		5/10/16		10:15 Pacific		Water	
Possible Hazard Identification		Unconfirmed		Deliverable Requested: I, II, III, IV, Other (specify)		Sample Disposal (A fee may be assessed if samples are retained longer than 1 month)	
Empty Kit Relinquished by:		Date:		Time:		Return To Client <input type="checkbox"/> Disposal By Lab <input type="checkbox"/> Archive For <input type="checkbox"/> Months	
Relinquished by: <i>Chad</i>		Date/Time: 5-12-16 16:00		Company: <i>NAWS</i>		Received by: <i>Hayward</i>	
Relinquished by:		Date/Time:		Company:		Received by:	
Relinquished by:		Date/Time:		Company:		Received by:	
Custody Seals Intact: <input type="checkbox"/> Yes <input type="checkbox"/> No		Custody Seal No.:		Cooler Temperature(s) °C and Other Remarks: <i>Transfer by ms 2.2 DR5 o.i</i>			

Login Sample Receipt Checklist

Client: CH2M Hill Constructors, Inc.

Job Number: 320-18796-1

Login Number: 18796

List Number: 1

Creator: Hytrek, Cheryl

List Source: TestAmerica Sacramento

Question	Answer	Comment
Radioactivity wasn't checked or is \leq background as measured by a survey meter.	True	
The cooler's custody seal, if present, is intact.	True	
Sample custody seals, if present, are intact.	N/A	
The cooler or samples do not appear to have been compromised or tampered with.	True	
Samples were received on ice.	True	
Cooler Temperature is acceptable.	True	
Cooler Temperature is recorded.	True	
COC is present.	True	
COC is filled out in ink and legible.	True	
COC is filled out with all pertinent information.	True	
Is the Field Sampler's name present on COC?	N/A	
There are no discrepancies between the containers received and the COC.	True	
Samples are received within Holding Time (excluding tests with immediate HTs)	True	
Sample containers have legible labels.	True	
Containers are not broken or leaking.	True	
Sample collection date/times are provided.	True	
Appropriate sample containers are used.	False	Improper containers received.
Sample bottles are completely filled.	True	
Sample Preservation Verified.	N/A	
There is sufficient vol. for all requested analyses, incl. any requested MS/MSDs	True	
Containers requiring zero headspace have no headspace or bubble is $<6\text{mm}$ (1/4").	True	
Multiphasic samples are not present.	True	
Samples do not require splitting or compositing.	True	
Residual Chlorine Checked.	N/A	

Login Sample Receipt Checklist

Client: CH2M Hill Constructors, Inc.

Job Number: 320-18796-1

Login Number: 18796
List Number: 2
Creator: Soto, Mayra A

List Source: TestAmerica Denver
List Creation: 05/13/16 05:05 PM

Question	Answer	Comment
Radioactivity wasn't checked or is \leq background as measured by a survey meter.	N/A	
The cooler's custody seal, if present, is intact.	True	
Sample custody seals, if present, are intact.	True	
The cooler or samples do not appear to have been compromised or tampered with.	True	
Samples were received on ice.	True	
Cooler Temperature is acceptable.	True	
Cooler Temperature is recorded.	True	
COC is present.	True	
COC is filled out in ink and legible.	True	
COC is filled out with all pertinent information.	True	
Is the Field Sampler's name present on COC?	False	Received project as a subcontract.
There are no discrepancies between the containers received and the COC.	True	
Samples are received within Holding Time (excluding tests with immediate HTs)	True	
Sample containers have legible labels.	True	
Containers are not broken or leaking.	True	
Sample collection date/times are provided.	True	
Appropriate sample containers are used.	True	
Sample bottles are completely filled.	True	
Sample Preservation Verified.	True	
There is sufficient vol. for all requested analyses, incl. any requested MS/MSDs	True	
Containers requiring zero headspace have no headspace or bubble is $<6\text{mm}$ (1/4").	N/A	
Multiphasic samples are not present.	True	
Samples do not require splitting or compositing.	True	
Residual Chlorine Checked.	N/A	

[illegible]

[illegible]

[illegible]

[illegible]

Data Validation Summary

Oceana CTO-WE44, NALF Fentress

TO: Tiffany Hill/CVO
Anita Dodson/VBO

FROM: Tiffany McGlynn/GNV

CC: Herb Kelly/GNV

DATE: June 14, 2016

Introduction

The following data validation report discusses the data validation process and findings for TestAmerica Laboratories in the Sample Delivery Groups (SDGs) listed in the table below.

Samples were analyzed using the following analytical methods:

- WS-LC-0025 Perfluorinated Hydrocarbons
- SW6010C Iron, total & dissolved

The samples included in these SDGs are listed in the table below.

SDG	Sample_Name	Matrix
320-18704-1	OF-RW44-0516	Water
320-18704-1	OF-FB44-0516	Water
320-18704-1	OF-RW42B2-0516	Water
320-18704-1	OF-FB42B2-0516	Water
320-18704-1	OF-RW42A-0516	Water
320-18704-1	OF-FB42A-0516	Water
320-18704-1	OF-RW42B-0516	Water
320-18704-1	OF-FB42B-0516	Water
320-18704-1	OF-RW42C-516	Water
320-18704-1	OF-RW42CD-0516	Water

SDG	Sample_Name	Matrix
320-18704-1	OF-FB42C-0516	Water
320-18719-1	OF-FB08-0516	Water
320-18719-1	OF-RW08-0516	Water
320-18719-1	OF-FB71-0516	Water
320-18719-1	OF-RW71-0516	Water
320-18719-1	OF-FB84-0516	Water
320-18719-1	OF-RW84-0516	Water
320-18794-1	OF-INF01-0516	Water
320-18794-1	OF-EFF01-0516	Water
320-18794-1	OF-FB78-0516	Water
320-18794-1	OF-RW78-0516	Water
320-18794-1	OF-RW78D-0516	Water
320-18794-1	OF-FB77-0516	Water
320-18794-1	OF-RW77-0516	Water
320-18796-1	OF-STORLAG-0516	Water
320-18796-1	OF-TRMTLAG-0516	Water
320-18796-1	OF-POLLAG-0516	Water
320-18796-1	OF-CLTANK-0516	Water
320-18796-1	OF-BACKWASH-0516	Water
320-18796-1	OF-FILTER-0516	Water
320-18918-1	OF-RW83-0516	Water
320-18918-1	OF-FB83-0516	Water
320-18849-1	OF-FB74-0516	Water
320-18849-1	OF-RW74-0516	Water
320-18849-1	OF-FB59-0516	Water
320-18849-1	OF-RW59-0516	Water
320-19022-1	OF-STORLAG-PT-0516	Water
320-19022-1	OF-TRMLAG-PT-0516	Water
320-19022-1	OF-POLLAG-PT-0516	Water
320-19022-1	OF-CLTANK-PT-0516	Water
320-19022-1	OF-BACKWASH-PT-0516	Water
320-19022-1	OF-FILTER-PT-0516	Water
320-19022-1	OF-INF01-PT-0615	Water
320-19022-1	OF-PROCESS BLANK-PT-0516	Water

Data Evaluation

Data was evaluated in accordance with the analytical methods and with the criteria found in the following guidance documents: Sampling and Analysis Plan Perfluorinated Compound Investigation, Naval Auxiliary Landing Field Fentress, Chesapeake, Virginia Contract Task Order WE44 (December 2015), National Functional Guidelines for Organic Data Review

(August 2014), and National Functional Guidelines for Inorganic Data Review (August 2014), with Region 3 Modification (Use of 'B' qualifier) as applicable. The samples were evaluated based on the following criteria:

- Data Completeness
- Technical Holding Times
- Tuning Instrument
- Initial/Continuing Calibrations
- Blanks
- Internal Standards
- Laboratory Control Samples
- Matrix Spike/Spike Duplicate
- Serial Dilution
- Isotope Dilution Analyte
- Field Duplicates
- Identification/Quantitation
- Reporting Limits
- Total vs. Dissolved

Overall Evaluation of Data/Potential Usability Issues

Specific details regarding qualification of the data are addressed in the sections below. If an issue is not addressed there were no actions required based on unmet quality criteria. When more than one qualifier is associated with a compound/analyte, the validator has chosen the qualifier that best indicates possible bias in the results and qualified these data accordingly.

Data Completeness

The SDGs were received complete and intact.

Technical Holding Times

According to the chain of custody records, sampling was performed on 5/4/16 through 5/19/16. Samples were received at the laboratory 5/6/16 through 5/20/16. All sample preparation and analyses were performed within holding time requirements.

Blanks

Several compounds were detected in the field blanks and method blanks as listed below. Affected data are summarized in **Attachment 1**.

Blank ID	Compound	Conc.	Units
OF-FB42C-0516	Perfluorohexanesulfonic acid (PFHxS)	0.0011	UG_L
OF-FB44-0516	Perfluorooctane Sulfonate (PFOS)	0.0037	UG_L
OF-FB42B2-0516	Perfluorohexanesulfonic acid (PFHxS)	0.00097	UG_L
OF-FB42A-0516	Perfluorooctane Sulfonate (PFOS)	0.0029	UG_L
OF-FB78-0516	Perfluorooctane Sulfonate (PFOS)	0.011	UG_L
OF-FB78-0516	Perfluorooctanoic acid (PFOA)	0.0040	UG_L
OF-FB78-0516	Perfluorohexanesulfonic acid (PFHxS)	0.0016	UG_L
MB 280-325382/1-A	Iron	23.7	UG_L
MB 320-109334/1-A	Perfluorooctane Sulfonate (PFOS)	0.00149	UG_L
MB 320-109334/1-A	Perfluorooctane Sulfonate (PFOS)	0.00149	UG_L
MB 320-109640/1-A	Perfluorooctane Sulfonate (PFOS)	0.00136	UG_L
MB 320-109640/1-A	Perfluorooctane Sulfonate (PFOS)	0.00136	UG_L

Lab Control Sample/Sample Duplicate

Perfluorohexanesulfonic acid (PFHxS) did not meet RPD criteria between the LCS and LCSD in SDGs 320-18719-1 and 320-18704-1. Affected data are summarized in **Attachment 1**.

Isotope Dilution Analyte

Internal standards exhibited low or high recoveries for the samples listed below. Affected data are summarized in **Attachment 1**.

SDG	Sample_Name
320-18794-1	OF-INF01-0516
320-18794-1	OF-EFF01-0516
320-18794-1	OF-RW78-0516
320-18796-1	OF-STORLAG-0516
320-18796-1	OF-POLLLAG-0516
320-18796-1	OF-CLTANK-0516
320-18796-1	OF-BACKWASH-0516

SDG	Sample_Name
320-18918-1	OF-RW83-0516
320-18918-1	OF-FB83-0516
320-19022-1	OF-INF01-PT-0615

Total vs. Dissolved

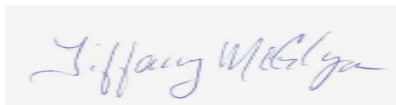
Iron did not meet criteria for total and dissolved for sample OF-STORLAG-0516. Affected data are summarized in **Attachment 1**.

Conclusion

These data can be used in the project decision-making process as qualified by the data quality evaluation process.

Please do not hesitate to contact us about this validation report.

Sincerely,

A handwritten signature in blue ink that reads "Tiffany McGlynn". The signature is written in a cursive, flowing style.

Tiffany McGlynn

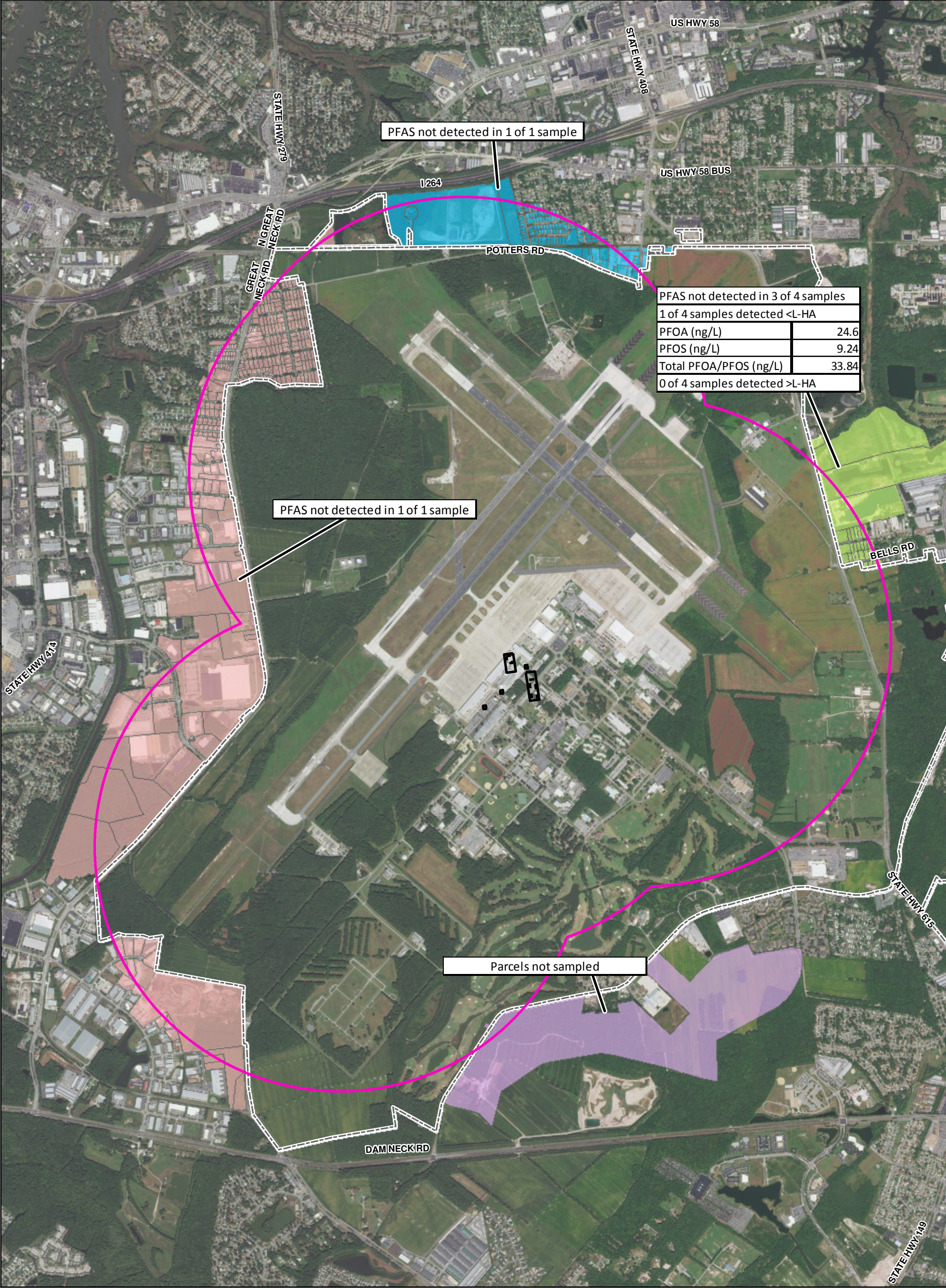
Qualification Flags

Exclude	More appropriate data exist for this analyte.
R	Data were rejected for use.
UL	Analyte not detected, quantitation limit is potentially biased low.
UJ	Analyte not detected, estimated quantitation limit.
U	Analyte not detected.
B	Not detected substantially above the level reported in laboratory or field blanks.
L	Analyte present, estimated value potentially biased low.
K	Analyte present, estimated value potentially biased high.
N	Analyte identification presumptive; no second column analysis performed or GC/MS tentative identification.
J	Analyte present, estimated value.
NJ	Analysis indicates the presence of an analyte that was "tentatively identified" and the associated value represents its approximate concentration.
None	Placeholder for calculating quality control issues that do not require flagging.
=	Analyte was detected at a concentration greater than the quantitation limit.

Qualifier Code Reference

Value	Description
%SOL	High Moisture content
2C	Second Column – Poor Dual Column Reproducibility
2S	Second Source – Bad reproducibility between tandem detectors
BD	Blank Spike/Blank Spike Duplicate(LCS/LCSD) Precision
BRL	Below Reporting Limit
BSH	Blank Spike/LCS – High Recovery
BSL	Blank Spike/LCS – Low Recovery
CC	Continuing Calibration
CCBL	Continuing Calibration Blank Contamination
CCH	Continuing Calibration Verification – High Recovery
CCL	Continuing Calibration Verification – Low Recovery
DL	Redundant Result – due to Dilution
EBL	Equipment Blank Contamination
EMPC	Estimated Possible Maximum Concentration
ESH	Extraction Standard - High Recovery
ESL	Extraction Standard - Low Recovery
FBL	Field Blank Contamination
FD	Field Duplicate
HT	Holding Time
ICB	Initial Calibration – Bad Linearity or Curve Function
ICH	Initial Calibration – High Relative Response Factors
ICL	Initial Calibration – Low Relative Response Factors
IR15	Ion ratio exceeds +/- 15% difference
ISH	Internal Standard – High Recovery
ISL	Internal Standard – Low Recovery
LD	Lab Duplicate Reproducibility
LR	Concentration Exceeds Linear Range
MBL	Method Blank Contamination
MDP	Matrix Spike/Matrix Spike Duplicate Precision
MI	Matrix interference obscuring the raw data

Value	Description
MSH	Matrix Spike and/or Matrix Spike Duplicate – High Recovery
MSL	Matrix Spike and/or Matrix Spike Duplicate – Low Recovery
OT	Other
PD	Pesticide Degradation
RE	Redundant Result - due to Reanalysis or Re-extraction
SD	Serial Dilution Reproducibility
SSH	Spiked Surrogate – High Recovery
SSL	Spiked Surrogate – Low Recovery
TBL	Trip Blank Contamination
TN	Tune



Legend
— Non-Core Target Treatment Area (2004)
- - Core Target Treatment Area (2004) (Core)
[Pink Line] Sampling Area
[Dashed Line] Installation Boundary
Off-Base Parcels
[Green] East
[Blue] North
[Purple] South
[Red] West

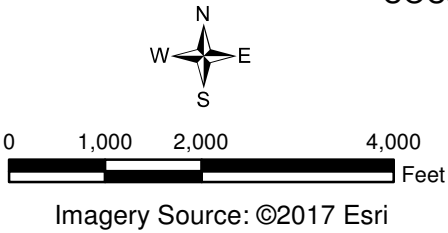


Figure 4-3
COCs Detections in Potable Wells Sampled from Parcels Located Off-Base
Basewide Per- and Polyfluoroalkyl Substances Site Inspection Report
NAS Oceana, Virginia Beach, Virginia