

Laboratory Report Number: L12110393

Shane Lowe
CH2MHILL, Inc
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Richmond Heights, MO 63117

Please find enclosed the analytical results for the samples you submitted to Microbac Laboratories. Review and compilation of your report was completed by Microbac's Ohio Valley Division (OVD). If you have any questions, comments, or require further assistance regarding this report, please contact your service representative listed below.

Laboratory Contact:
Kathy Albertson – Team Chemist/Data Specialist
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Kathy.Albertson@microbac.com

I certify that all test results meet all of the requirements of the accrediting authority listed below. All results for soil samples are reported on a 'dry-weight' basis unless specified otherwise. Analytical results for water and wastes are reported on a 'as received' basis unless specified otherwise. A statement of uncertainty for each analysis is available upon request. This laboratory report shall not be reproduced, except in full, without the written approval of Microbac Laboratories. The reported results are related only to the samples analyzed as received.

This report was certified on November 28 2012



David Vandenberg – Managing Director

State of Origin: NY
Accrediting Authority: Department of Health ID:10861
QAPP: WATERLOO



Record of Sample Receipt and Inspection

Comments/Discrepancies

This is the record of the shipment conditions and the inspection records for the samples received and reported as a sample delivery group (SDG). All of the samples were inspected and observed to conform to our receipt policies, except as noted below.

The following discrepancies were noted:

Discrepancy	Resolution
The temperature was out of the acceptable range for the following samples Chain of custody 32863. RS	Per the client, please proceed with analysis. EDL 11/13/12 at 1023
The ice was melted. RS	Per the client, please proceed with analysis. EDL 11/13/12 at 1023
IDW-GW-110912:chain of custody says we should of received 6 bottles, but, we received 7. 2-VOAS 2-Semis 1-500P HNO3 1-500P Sulfide 1-250P 4C	

Coolers

Cooler #	Temperature Gun	Temperature	COC #	Airbill #
0017741	G	16.0		1002239561810004575000872087765190

Inspection Checklist

#	Question	Result
1	Were shipping coolers sealed?	Yes
2	Were custody seals intact?	Yes
3	Were cooler temperatures in range of 0-6?	No
4	Was ice present?	No
5	Were COC's received/information complete/signed and dated?	Yes
6	Were sample containers intact and match COC?	No
7	Were sample labels intact and match COC?	Yes
8	Were the correct containers and volumes received?	Yes
9	Were samples received within EPA hold times?	Yes
10	Were correct preservatives used? (water only)	Yes
11	Were pH ranges acceptable? (voa's excluded)	Yes
12	Were VOA samples free of headspace (less than 6mm)?	Yes

Samples Received

Client ID	Laboratory ID	Date Collected	Date Received
BLDG 4-PIT-SSP1-GW-11082012	L12110393-01	11/08/2012 14:11	11/13/2012 10:16
BLDG 4-PIT-SSP1-GW-11082012	L12110393-02	11/08/2012 14:11	11/13/2012 10:16
DUP-GW-110812	L12110393-03	11/08/2012 00:01	11/13/2012 10:16
DUP-GW-110812	L12110393-04	11/08/2012 00:01	11/13/2012 10:16
TB-110912	L12110393-05	11/08/2012 12:41	11/13/2012 10:16

Microbac REPORT L12110393
PREPARED FOR CH2MHILL, Inc
WORK ID:

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1.0 Summary Data

1.1 Narratives



Login Number: L12110393

Department: Volatiles

Analyst: Franci Bolden

METHOD

Preparation SW-846 5030C/5035A

Analysis SW-846 8260B

HOLDING TIMES

Sample Preparation: All holding times were met.

Sample Analysis: All holding times were met.

PREPARATION

Sample preparation proceeded normally.

CALIBRATION

Initial Calibration: For all compounds that yielded a %RSD greater than 15%, linear or higher order equations were applied. All acceptance criteria were met.

Alternate Source Standards: The percent difference was out of range for the following analytes: dichlorodifluoromethane. Please see the applicable QC report for a detailed presentation of the failures.

Continuing Calibration and Tune: All acceptance criteria were met.

BATCH QA/QC

Method Blank: All acceptance criteria were met.

Laboratory Control Sample: Recoveries out of range were observed for the following analytes: Dichlorodifluoromethane. Please see the applicable QC report for a detailed presentation of the failures.

Matrix Spikes: The MS/MSD results were not associated with this sample delivery group (SDG), due to insufficient volume of sample. The laboratory included an LCS and LCS duplicate in the preparation batch in lieu of the NELAC prescribed MS/MSD. Microbac Laboratories recommends site specific MS/MSD samples to avoid possible data qualifications.

SAMPLES

Internal Standards: All acceptance criteria were met.

Surrogates: All acceptance criteria were met.

Other: Samples 01, 03, were run at a dilution. Reporting limits elevated for samples 01 and 02 due to foaming during purging and the matrix.

Manual Integration Reason Codes

Reason #1: Data System Fails to Select Correct Peak. In some cases the chromatography system selects and integrates the 'wrong peak'. In this case the analyst must correct the selection and force the system to integrate the proper peak. Other times the system may miss the peak completely.

Reason #2: Data System Splits the Peak Incorrectly or Integrates a False Peak as a Rider Peak. This phenomena is common at low concentrations where the signal:noise ratio is low. A single compound (peak) is incorrectly split into multiple peaks or integrated as a main peak with one or more rider peaks resulting in low area counts for the target compound.

Reason #3: Improperly Integrated Isomers and/or coeluting compounds. This system often fails to distinguish coeluting compounds and or isomers. The integration areas and concentrations are wrong, and they must be corrected by manual integration. Prime examples are benzo(k)fluoranthene and benzo(b)fluoranthene which are often unresolved and integrated improperly when both are present at low concentrations in standards or samples.

Reason #4: System Establishes Incorrect Baseline. There are numerous situations in chromatography where the system establishes the baseline incorrectly. Some baseline errors will be obvious to the analyst and should be corrected via manual procedures.

Reason #5: Miscellaneous. Other situations involving integration errors may require in-depth review and technical judgment. These cases should be brought to the attention of the laboratory management. If the form of manual integration is not clearly covered by these four cases, then review and approval by the Managing Director or the QAO will be required.

I certify that this data package is in compliance with the terms and conditions agreed to by the client and Microbac Laboratories Inc., both technically and for completeness, except for the conditions noted above. Release of the data contained in this hard copy data package has been authorized by the Laboratory Manager or designated person, as verified by the following signature.

Narrative ID: 56055

Approved By: Michael Albertson





Login Number: L12110393
Department: Metals
Analyst: Kim Rhodes

METHOD

Preparation: SW-846 3005

Analysis: SW-846 6010

HOLDING TIMES

Sample Preparation: All holding times were met.

Sample Analysis: All holding times were met.

PREPARATION

Sample preparation proceeded normally.

CALIBRATION

Initial Calibration: All acceptance criteria were met.

Alternate Source Standards: All acceptance criteria were met.

Interference Check Standards: All acceptance criteria were met.

Continuing Calibration Verification: All acceptance criteria were met.

Continuing Calibration Blank: All acceptance criteria were met.

BATCH QA/QC

Method Blank: All acceptance criteria were met.

Laboratory Control Sample: All acceptance criteria were met.

Serial Dilution/Post Digestion Spikes: WG414521 - All acceptance criteria were met.

Matrix Spikes: All acceptance criteria were met.

SAMPLES

Samples: WG414521 - Client samples 01 through 04 required dilution analyses in order to obtain results for potassium and sodium within the linear range.

Narrative ID: 56252

Approved By: Sheri Pfalzgraf

A handwritten signature in black ink, reading "Sheri L. Pfalzgraf".



Login Number: L12110393
Department: Metals
Analyst: Ji Hu

METHOD

Preparation: SW-846 3015

Analysis: SW-846 6020

HOLDING TIMES

Sample Preparation: All holding times were met.

Sample Analysis: All holding times were met.

PREPARATION

Sample preparation proceeded normally.

CALIBRATION

Initial Calibration: All acceptance criteria were met.

Alternate Source Standards: All acceptance criteria were met.

Interference Check Standards: All acceptance criteria were met.

Continuing Calibration: All acceptance criteria were met.

Continuing Calibration Blank: All acceptance criteria were met.

Low Level Check: All acceptance criteria were met.

BATCH QA/QC

Method Blank: All acceptance criteria were met.

Laboratory Control Sample: All acceptance criteria were met.

Serial Dilution/Post Digestion Spikes: WG414570 - All acceptance criteria were met.

Matrix Spikes: All acceptance criteria were met.

SAMPLES

Samples: All acceptance criteria were met.

Narrative ID: 56221

Approved By: Sheri Pfalzgraf

A handwritten signature in black ink, appearing to read "Sheri L. Pfalzgraf".



Login Number: L12110393
Department: Metals - AA
Analyst: Pierce Morris

METHOD

Preparation: SW-846 7470

Analysis: SW-846 7470

HOLDING TIMES

Sample Preparation: All holding times were met.

Sample Analysis: All holding times were met.

PREPARATION

Sample preparation proceeded normally.

CALIBRATION

Initial Calibration: All acceptance criteria were met.

Alternate Source Standards: All acceptance criteria were met.

Interference Check Standards: All acceptance criteria were met.

Continuing Calibration Verification: All acceptance criteria were met.

Continuing Calibration Blank: All acceptance criteria were met.

BATCH QA/QC

Method Blank: All acceptance criteria were met.

Laboratory Control Sample: All acceptance criteria were met.

Serial Dilution/Post Digestion Spikes: WG414893 - All acceptance criteria were met.

Matrix Spikes: All acceptance criteria were met.

SAMPLES

Samples: All acceptance criteria were met.

Narrative ID: 56367

Approved By: Sheri Pfalzgraf

A handwritten signature in black ink, appearing to read "Sheri L. Pfalzgraf".

1.2 Certificate of Analysis

Certificate of Analysis

Sample #: L12110393-01

PrePrep Method: N/A

Instrument: HPMS6

Client ID: BLDG 4-PIT-SSP1-GW-11082012

Prep Method: 5030B/5030C/5035A

Prep Date: N/A

Matrix: Water

Analytical Method: 8260B

Cal Date: 11/12/2012 19:51

Workgroup #: WG414233

Analyst: FJB

Run Date: 11/14/2012 22:32

Collect Date: 11/08/2012 14:11

Dilution: 10

File ID: 6M112689

Sample Tag: DL01

Units: ug/L

Analyte	CAS #	Result	Qual	RL	MDL
1,1,1-Trichloroethane	71-55-6		U	10.0	2.50
1,1,2,2-Tetrachloroethane	79-34-5		U	10.0	2.00
1,1,2-Trichloro-1,2,2-Trifluoroethane	76-13-1		U	50.0	20.0
1,1,2-Trichloroethane	79-00-5		U	10.0	2.50
1,1-Dichloroethane	75-34-3		U	10.0	1.25
1,1-Dichloroethene	75-35-4		U	10.0	5.00
1,2,3-Trichlorobenzene	87-61-6		U	10.0	5.00
1,2,4-Trichlorobenzene	120-82-1		U	10.0	2.00
1,2-Dibromo-3-chloropropane	96-12-8		U	50.0	10.0
1,2-Dibromoethane	106-93-4		U	10.0	2.50
1,2-Dichlorobenzene	95-50-1		U	10.0	1.25
1,2-Dichloroethane	107-06-2		U	10.0	2.50
cis-1,2-Dichloroethene	156-59-2		U	10.0	2.50
trans-1,2-Dichloroethene	156-60-5		U	10.0	2.50
1,2-Dichloropropane	78-87-5		U	10.0	2.00
1,3-Dichlorobenzene	541-73-1		U	10.0	2.50
1,4-Dichlorobenzene	106-46-7		U	10.0	1.25
2-Butanone	78-93-3		U	100	25.0
2-Hexanone	591-78-6		U	100	25.0
4-Methyl-2-pentanone	108-10-1	2750		100	25.0
Acetone	67-64-1	712		100	25.0
Benzene	71-43-2		U	10.0	1.25
Bromochloromethane	74-97-5		U	10.0	2.00
Bromodichloromethane	75-27-4		U	10.0	2.50
Bromoform	75-25-2		U	10.0	5.00
Bromomethane	74-83-9		U	10.0	5.00
Carbon disulfide	75-15-0	73.6		10.0	5.00
Carbon tetrachloride	56-23-5		U	10.0	2.50
Chlorobenzene	108-90-7	14.6		10.0	1.25
Chloroethane	75-00-3		U	10.0	5.00
Chloroform	67-66-3	127		10.0	1.25
Chloromethane	74-87-3		U	10.0	5.00

Certificate of Analysis

Analyte	CAS #	Result	Qual	RL	MDL
cis-1,3-Dichloropropene	10061-01-5		U	10.0	2.50
Cyclohexane	110-82-7		U	50.0	10.0
Dibromochloromethane	124-48-1		U	10.0	2.50
Dichlorodifluoromethane	75-71-8		U	10.0	2.50
Ethyl benzene	100-41-4		U	10.0	2.50
Isopropylbenzene	98-82-8		U	10.0	2.50
Methyl acetate	79-20-9		U	50.0	10.0
Methyl tert-butyl ether	1634-04-4		U	10.0	5.00
Methylcyclohexane	108-87-2		U	50.0	10.0
Methylene chloride	75-09-2	14.3	J	50.0	2.50
m,p-Xylene	179601-23-1		U	10.0	5.00
o-Xylene	95-47-6		U	10.0	2.50
Styrene	100-42-5		U	10.0	1.25
Tetrachloroethene	127-18-4		U	10.0	2.50
Toluene	108-88-3	51.6		10.0	2.50
trans-1,3-Dichloropropene	10061-02-6		U	10.0	5.00
Trichloroethene	79-01-6		U	10.0	2.50
Trichlorofluoromethane	75-69-4		U	10.0	2.50
Vinyl chloride	75-01-4		U	10.0	2.50
Epichlorohydrin	106-89-8			0.000	0.000
Surrogate	Recovery	Lower Limit	Upper Limit	Q	
1,2-Dichloroethane-d4	93.3	80	120		
Dibromofluoromethane	99.9	86	118		
p-Bromofluorobenzene	102	86	115		
Toluene-d8	97.4	88	110		
J	The analyte was positively identified, but the quantitation was below the RL.				
U	Not detected at or above adjusted sample detection limit.				

Sample #: L12110393-01	PrePrep Method: N/A	Instrument: PE-ICP2
Client ID: BLDG 4-PIT-SSP1-GW-11082012	Prep Method: 3005A	Prep Date: 11/16/2012 07:06
Matrix: Water	Analytical Method: 6010B	Cal Date: 11/19/2012 07:37
Workgroup #: WG414521	Analyst: KHR	Run Date: 11/19/2012 08:52
Collect Date: 11/08/2012 14:11	Dilution: 1	File ID: P2.111912.085239
Sample Tag: 01	Units: mg/L	

Analyte	CAS #	Result	Qual	RL	MDL
Aluminum, Total	7429-90-5		U	0.100	0.0500
Barium, Total	7440-39-3	0.881		0.0100	0.00500
Beryllium, Total	7440-41-7		U	0.00200	0.00100

Certificate of Analysis

Analyte	CAS #	Result	Qual	RL	MDL
Cadmium, Total	7440-43-9		U	0.000500	0.000250
Calcium, Total	7440-70-2	294		0.200	0.100
Chromium, Total	7440-47-3	0.158		0.00500	0.00250
Cobalt, Total	7440-48-4		U	0.0200	0.0100
Copper, Total	7440-50-8		U	0.0200	0.0100
Iron, Total	7439-89-6		U	0.100	0.0500
Magnesium, Total	7439-95-4	125		0.500	0.250
Manganese, Total	7439-96-5	0.0577		0.0100	0.00500
Nickel, Total	7440-02-0	0.109		0.0400	0.0200
Silver, Total	7440-22-4		U	0.0100	0.00500
Vanadium, Total	7440-62-2	0.0121		0.0100	0.00500
Zinc, Total	7440-66-6		U	0.0200	0.0100
E	Semiquantitative result (out of calibration range)				
U	Not detected at or above adjusted sample detection limit.				

Sample #: L12110393-01

PrePrep Method: N/A

Instrument: PE-ICP2

Client ID: BLDG 4-PIT-SSP1-GW-11082012

Prep Method: 3005A

Prep Date: 11/16/2012 07:06

Matrix: Water

Analytical Method: 6010B

Cal Date: 11/19/2012 07:37

Workgroup #: WG414521

Analyst: KHR

Run Date: 11/19/2012 10:41

Collect Date: 11/08/2012 14:11

Dilution: 50

File ID: P2.111912.104149

Sample Tag: DL01

Units: mg/L

Analyte	CAS #	Result	Qual	RL	MDL
Potassium, Total	7440-09-7	114		50.0	25.0
Sodium, Total	7440-23-5	549		25.0	12.5
J	The analyte was positively identified, but the quantitation was below the RL.				
U	Not detected at or above adjusted sample detection limit.				

Sample #: L12110393-01

PrePrep Method: N/A

Instrument: ICP-MS2

Client ID: BLDG 4-PIT-SSP1-GW-11082012

Prep Method: 3015

Prep Date: 11/15/2012 07:35

Matrix: Water

Analytical Method: 6020

Cal Date: 11/18/2012 08:42

Workgroup #: WG414570

Analyst: JYH

Run Date: 11/18/2012 11:37

Collect Date: 11/08/2012 14:11

Dilution: 1

File ID: NI.111812.113704

Sample Tag: 01

Units: mg/L

Analyte	CAS #	Result	Qual	RL	MDL
Antimony, Total	7440-36-0	0.00266		0.00100	0.000500
Arsenic, Total	7440-38-2	0.112		0.00100	0.000500

Certificate of Analysis

Analyte	CAS #	Result	Qual	RL	MDL
Lead, Total	7439-92-1		U	0.00100	0.000500
Selenium, Total	7782-49-2	0.00400		0.00100	0.000500
Thallium, Total	7440-28-0		U	0.000200	0.000100
U	Not detected at or above adjusted sample detection limit.				

Sample #: L12110393-01

PrePrep Method: N/A

Instrument: HYDRA

Client ID: BLDG 4-PIT-SSP1-GW-11082012

Prep Method: 7470A

Prep Date: 11/20/2012 09:08

Matrix: Water

Analytical Method: 7470A

Cal Date: 11/21/2012 08:45

Workgroup #: WG414893

Analyst: PDM

Run Date: 11/21/2012 09:20

Collect Date: 11/08/2012 14:11

Dilution: 1

File ID: HY.112112.092010

Sample Tag: 01

Units: mg/L

Analyte	CAS #	Result	Qual	RL	MDL
Mercury	7439-97-6		U	0.000200	0.000100
U	Not detected at or above adjusted sample detection limit.				

Sample #: L12110393-02

PrePrep Method: N/A

Instrument: PE-ICP2

Client ID: BLDG 4-PIT-SSP1-GW-11082012

Prep Method: 3005A

Prep Date: 11/16/2012 07:06

Matrix: Water

Analytical Method: 6010B

Cal Date: 11/19/2012 07:37

Workgroup #: WG414521

Analyst: KHR

Run Date: 11/19/2012 08:59

Collect Date: 11/08/2012 14:11

Dilution: 1

File ID: P2.111912.085941

Sample Tag: 01

Units: mg/L

Analyte	CAS #	Result	Qual	RL	MDL
Aluminum, Dissolved	7429-90-5		U	0.100	0.0500
Barium, Dissolved	7440-39-3	0.907		0.0100	0.00500
Beryllium, Dissolved	7440-41-7		U	0.00200	0.00100
Cadmium, Dissolved	7440-43-9		U	0.000500	0.000250
Calcium, Dissolved	7440-70-2	304		0.200	0.100
Chromium, Dissolved	7440-47-3	0.168		0.00500	0.00250
Cobalt, Dissolved	7440-48-4		U	0.0200	0.0100
Copper, Dissolved	7440-50-8		U	0.0200	0.0100
Iron, Dissolved	7439-89-6		U	0.100	0.0500
Magnesium, Dissolved	7439-95-4	130		0.500	0.250
Manganese, Dissolved	7439-96-5	0.0595		0.0100	0.00500
Nickel, Dissolved	7440-02-0	0.106		0.0400	0.0200
Silver, Dissolved	7440-22-4		U	0.0100	0.00500
Vanadium, Dissolved	7440-62-2	0.0124		0.0100	0.00500

Certificate of Analysis

Analyte	CAS #	Result	Qual	RL	MDL
Zinc, Dissolved	7440-66-6		U	0.0200	0.0100
E	Semiquantitative result (out of calibration range)				
U	Not detected at or above adjusted sample detection limit.				

Sample #: L12110393-02

PrePrep Method: N/A

Instrument: PE-ICP2

Client ID: BLDG 4-PIT-SSP1-GW-11082012

Prep Method: 3005A

Prep Date: 11/16/2012 07:06

Matrix: Water

Analytical Method: 6010B

Cal Date: 11/19/2012 07:37

Workgroup #: WG414521

Analyst: KHR

Run Date: 11/19/2012 10:48

Collect Date: 11/08/2012 14:11

Dilution: 50

File ID: P2.111912.104846

Sample Tag: DL01

Units: mg/L

Analyte	CAS #	Result	Qual	RL	MDL
Potassium, Dissolved	7440-09-7	119		50.0	25.0
Sodium, Dissolved	7440-23-5	581		25.0	12.5
J	The analyte was positively identified, but the quantitation was below the RL.				
U	Not detected at or above adjusted sample detection limit.				

Sample #: L12110393-02

PrePrep Method: N/A

Instrument: ICP-MS2

Client ID: BLDG 4-PIT-SSP1-GW-11082012

Prep Method: 3015

Prep Date: 11/15/2012 07:35

Matrix: Water

Analytical Method: 6020

Cal Date: 11/18/2012 08:42

Workgroup #: WG414570

Analyst: JYH

Run Date: 11/18/2012 11:40

Collect Date: 11/08/2012 14:11

Dilution: 1

File ID: NI.111812.114016

Sample Tag: 01

Units: mg/L

Analyte	CAS #	Result	Qual	RL	MDL
Antimony, Dissolved	7440-36-0	0.00285		0.00100	0.000500
Arsenic, Dissolved	7440-38-2	0.117		0.00100	0.000500
Lead, Dissolved	7439-92-1		U	0.00100	0.000500
Selenium, Dissolved	7782-49-2	0.00456		0.00100	0.000500
Thallium, Dissolved	7440-28-0		U	0.000200	0.000100
U	Not detected at or above adjusted sample detection limit.				

Certificate of Analysis

Sample #: L12110393-02	PrePrep Method: N/A	Instrument: HYDRA
Client ID: BLDG 4-PIT-SSP1-GW-11082012	Prep Method: 7470A	Prep Date: 11/20/2012 09:08
Matrix: Water	Analytical Method: 7470A	Cal Date: 11/21/2012 08:45
Workgroup #: WG414893	Analyst: PDM	Run Date: 11/21/2012 09:23
Collect Date: 11/08/2012 14:11	Dilution: 1	File ID: HY.112112.092347
Sample Tag: 01	Units: mg/L	

Analyte	CAS #	Result	Qual	RL	MDL
Mercury, Dissolved	7439-97-6		U	0.000200	0.000100
U	Not detected at or above adjusted sample detection limit.				

Sample #: L12110393-03	PrePrep Method: N/A	Instrument: HPMS6
Client ID: DUP-GW-110812	Prep Method: 5030B/5030C/5035A	Prep Date: N/A
Matrix: Water	Analytical Method: 8260B	Cal Date: 11/12/2012 19:51
Workgroup #: WG414233	Analyst: FJB	Run Date: 11/14/2012 23:02
Collect Date: 11/08/2012 00:01	Dilution: 10	File ID: 6M112690
Sample Tag: DL01	Units: ug/L	

Analyte	CAS #	Result	Qual	RL	MDL
1,1,1-Trichloroethane	71-55-6		U	10.0	2.50
1,1,2,2-Tetrachloroethane	79-34-5		U	10.0	2.00
1,1,2-Trichloro-1,2,2-Trifluoroethane	76-13-1		U	50.0	20.0
1,1,2-Trichloroethane	79-00-5		U	10.0	2.50
1,1-Dichloroethane	75-34-3		U	10.0	1.25
1,1-Dichloroethene	75-35-4		U	10.0	5.00
1,2,3-Trichlorobenzene	87-61-6		U	10.0	5.00
1,2,4-Trichlorobenzene	120-82-1		U	10.0	2.00
1,2-Dibromo-3-chloropropane	96-12-8		U	50.0	10.0
1,2-Dibromoethane	106-93-4		U	10.0	2.50
1,2-Dichlorobenzene	95-50-1		U	10.0	1.25
1,2-Dichloroethane	107-06-2		U	10.0	2.50
cis-1,2-Dichloroethene	156-59-2	2.56	J	10.0	2.50
trans-1,2-Dichloroethene	156-60-5		U	10.0	2.50
1,2-Dichloropropane	78-87-5		U	10.0	2.00
1,3-Dichlorobenzene	541-73-1		U	10.0	2.50
1,4-Dichlorobenzene	106-46-7		U	10.0	1.25
2-Butanone	78-93-3		U	100	25.0
2-Hexanone	591-78-6		U	100	25.0
4-Methyl-2-pentanone	108-10-1	2750		100	25.0
Acetone	67-64-1	658		100	25.0

Certificate of Analysis

Analyte	CAS #	Result	Qual	RL	MDL
Benzene	71-43-2		U	10.0	1.25
Bromochloromethane	74-97-5		U	10.0	2.00
Bromodichloromethane	75-27-4		U	10.0	2.50
Bromoform	75-25-2		U	10.0	5.00
Bromomethane	74-83-9		U	10.0	5.00
Carbon disulfide	75-15-0	84.6		10.0	5.00
Carbon tetrachloride	56-23-5		U	10.0	2.50
Chlorobenzene	108-90-7	14.6		10.0	1.25
Chloroethane	75-00-3		U	10.0	5.00
Chloroform	67-66-3	126		10.0	1.25
Chloromethane	74-87-3		U	10.0	5.00
cis-1,3-Dichloropropene	10061-01-5		U	10.0	2.50
Cyclohexane	110-82-7		U	50.0	10.0
Dibromochloromethane	124-48-1		U	10.0	2.50
Dichlorodifluoromethane	75-71-8		U	10.0	2.50
Ethyl benzene	100-41-4		U	10.0	2.50
Isopropylbenzene	98-82-8		U	10.0	2.50
Methyl acetate	79-20-9		U	50.0	10.0
Methyl tert-butyl ether	1634-04-4		U	10.0	5.00
Methylcyclohexane	108-87-2		U	50.0	10.0
Methylene chloride	75-09-2	14.6	J	50.0	2.50
m,p-Xylene	179601-23-1		U	10.0	5.00
o-Xylene	95-47-6		U	10.0	2.50
Styrene	100-42-5		U	10.0	1.25
Tetrachloroethene	127-18-4		U	10.0	2.50
Toluene	108-88-3	50.9		10.0	2.50
trans-1,3-Dichloropropene	10061-02-6		U	10.0	5.00
Trichloroethene	79-01-6		U	10.0	2.50
Trichlorofluoromethane	75-69-4		U	10.0	2.50
Vinyl chloride	75-01-4		U	10.0	2.50
Epichlorohydrin	106-89-8			0.000	0.000
Surrogate	Recovery	Lower Limit	Upper Limit	Q	
1,2-Dichloroethane-d4	96.0	80	120		
Dibromofluoromethane	100	86	118		
p-Bromofluorobenzene	98.3	86	115		
Toluene-d8	96.8	88	110		
J	The analyte was positively identified, but the quantitation was below the RL.				
U	Not detected at or above adjusted sample detection limit.				

Certificate of Analysis

Sample #: L12110393-03	PrePrep Method: N/A	Instrument: PE-ICP2
Client ID: DUP-GW-110812	Prep Method: 3005A	Prep Date: 11/16/2012 07:06
Matrix: Water	Analytical Method: 6010B	Cal Date: 11/19/2012 07:37
Workgroup #: WG414521	Analyst: KHR	Run Date: 11/19/2012 09:06
Collect Date: 11/08/2012 00:01	Dilution: 1	File ID: P2.111912.090643
Sample Tag: 01	Units: mg/L	

Analyte	CAS #	Result	Qual	RL	MDL
Aluminum, Total	7429-90-5		U	0.100	0.0500
Barium, Total	7440-39-3	0.908		0.0100	0.00500
Beryllium, Total	7440-41-7		U	0.00200	0.00100
Cadmium, Total	7440-43-9		U	0.000500	0.000250
Calcium, Total	7440-70-2	299		0.200	0.100
Chromium, Total	7440-47-3	0.160		0.00500	0.00250
Cobalt, Total	7440-48-4		U	0.0200	0.0100
Copper, Total	7440-50-8		U	0.0200	0.0100
Iron, Total	7439-89-6		U	0.100	0.0500
Magnesium, Total	7439-95-4	128		0.500	0.250
Manganese, Total	7439-96-5	0.0590		0.0100	0.00500
Nickel, Total	7440-02-0	0.112		0.0400	0.0200
Silver, Total	7440-22-4		U	0.0100	0.00500
Vanadium, Total	7440-62-2	0.0124		0.0100	0.00500
Zinc, Total	7440-66-6		U	0.0200	0.0100
E	Semiquantitative result (out of calibration range)				
U	Not detected at or above adjusted sample detection limit.				

Sample #: L12110393-03	PrePrep Method: N/A	Instrument: PE-ICP2
Client ID: DUP-GW-110812	Prep Method: 3005A	Prep Date: 11/16/2012 07:06
Matrix: Water	Analytical Method: 6010B	Cal Date: 11/19/2012 07:37
Workgroup #: WG414521	Analyst: KHR	Run Date: 11/19/2012 10:55
Collect Date: 11/08/2012 00:01	Dilution: 50	File ID: P2.111912.105539
Sample Tag: DL01	Units: mg/L	

Analyte	CAS #	Result	Qual	RL	MDL
Potassium, Total	7440-09-7	113		50.0	25.0
Sodium, Total	7440-23-5	549		25.0	12.5
J	The analyte was positively identified, but the quantitation was below the RL.				
U	Not detected at or above adjusted sample detection limit.				

Certificate of Analysis

Sample #: L12110393-03	PrePrep Method: N/A	Instrument: ICP-MS2
Client ID: DUP-GW-110812	Prep Method: 3015	Prep Date: 11/15/2012 07:35
Matrix: Water	Analytical Method: 6020	Cal Date: 11/18/2012 08:42
Workgroup #: WG414570	Analyst: JYH	Run Date: 11/18/2012 11:43
Collect Date: 11/08/2012 00:01	Dilution: 1	File ID: NI.111812.114330
Sample Tag: 01	Units: mg/L	

Analyte	CAS #	Result	Qual	RL	MDL
Antimony, Total	7440-36-0	0.00258		0.00100	0.000500
Arsenic, Total	7440-38-2	0.110		0.00100	0.000500
Lead, Total	7439-92-1		U	0.00100	0.000500
Selenium, Total	7782-49-2	0.00449		0.00100	0.000500
Thallium, Total	7440-28-0		U	0.000200	0.000100
U	Not detected at or above adjusted sample detection limit.				

Sample #: L12110393-03	PrePrep Method: N/A	Instrument: HYDRA
Client ID: DUP-GW-110812	Prep Method: 7470A	Prep Date: 11/20/2012 09:08
Matrix: Water	Analytical Method: 7470A	Cal Date: 11/21/2012 08:45
Workgroup #: WG414893	Analyst: PDM	Run Date: 11/21/2012 09:25
Collect Date: 11/08/2012 00:01	Dilution: 1	File ID: HY.112112.092526
Sample Tag: 01	Units: mg/L	

Analyte	CAS #	Result	Qual	RL	MDL
Mercury	7439-97-6	0.000172	J	0.000200	0.000100
J	The analyte was positively identified, but the quantitation was below the RL.				

Sample #: L12110393-04	PrePrep Method: N/A	Instrument: PE-ICP2
Client ID: DUP-GW-110812	Prep Method: 3005A	Prep Date: 11/16/2012 07:06
Matrix: Water	Analytical Method: 6010B	Cal Date: 11/19/2012 07:37
Workgroup #: WG414521	Analyst: KHR	Run Date: 11/19/2012 09:13
Collect Date: 11/08/2012 00:01	Dilution: 1	File ID: P2.111912.091346
Sample Tag: 01	Units: mg/L	

Analyte	CAS #	Result	Qual	RL	MDL
Aluminum, Dissolved	7429-90-5		U	0.100	0.0500
Barium, Dissolved	7440-39-3	0.892		0.0100	0.00500
Beryllium, Dissolved	7440-41-7		U	0.00200	0.00100
Cadmium, Dissolved	7440-43-9		U	0.000500	0.000250
Calcium, Dissolved	7440-70-2	298		0.200	0.100
Chromium, Dissolved	7440-47-3	0.165		0.00500	0.00250
Cobalt, Dissolved	7440-48-4		U	0.0200	0.0100

Certificate of Analysis

Analyte	CAS #	Result	Qual	RL	MDL
Copper, Dissolved	7440-50-8		U	0.0200	0.0100
Iron, Dissolved	7439-89-6		U	0.100	0.0500
Magnesium, Dissolved	7439-95-4	128		0.500	0.250
Manganese, Dissolved	7439-96-5	0.0586		0.0100	0.00500
Nickel, Dissolved	7440-02-0	0.108		0.0400	0.0200
Silver, Dissolved	7440-22-4		U	0.0100	0.00500
Vanadium, Dissolved	7440-62-2	0.0114		0.0100	0.00500
Zinc, Dissolved	7440-66-6		U	0.0200	0.0100
E	Semiquantitative result (out of calibration range)				
U	Not detected at or above adjusted sample detection limit.				

Sample #: L12110393-04	PrePrep Method: N/A	Instrument: PE-ICP2
Client ID: DUP-GW-110812	Prep Method: 3005A	Prep Date: 11/16/2012 07:06
Matrix: Water	Analytical Method: 6010B	Cal Date: 11/19/2012 07:37
Workgroup #: WG414521	Analyst: KHR	Run Date: 11/19/2012 11:02
Collect Date: 11/08/2012 00:01	Dilution: 50	File ID: P2.111912.110233
Sample Tag: DL01	Units: mg/L	

Analyte	CAS #	Result	Qual	RL	MDL
Potassium, Dissolved	7440-09-7	122		50.0	25.0
Sodium, Dissolved	7440-23-5	584		25.0	12.5
U	Not detected at or above adjusted sample detection limit.				

Sample #: L12110393-04	PrePrep Method: N/A	Instrument: ICP-MS2
Client ID: DUP-GW-110812	Prep Method: 3015	Prep Date: 11/15/2012 07:35
Matrix: Water	Analytical Method: 6020	Cal Date: 11/18/2012 08:42
Workgroup #: WG414570	Analyst: JYH	Run Date: 11/18/2012 11:46
Collect Date: 11/08/2012 00:01	Dilution: 1	File ID: NI.111812.114642
Sample Tag: 01	Units: mg/L	

Analyte	CAS #	Result	Qual	RL	MDL
Antimony, Dissolved	7440-36-0	0.00269		0.00100	0.000500
Arsenic, Dissolved	7440-38-2	0.117		0.00100	0.000500
Lead, Dissolved	7439-92-1		U	0.00100	0.000500
Selenium, Dissolved	7782-49-2	0.00505		0.00100	0.000500
Thallium, Dissolved	7440-28-0		U	0.000200	0.000100
U	Not detected at or above adjusted sample detection limit.				

Certificate of Analysis

Sample #: L12110393-04	PrePrep Method: N/A	Instrument: HYDRA
Client ID: DUP-GW-110812	Prep Method: 7470A	Prep Date: 11/20/2012 09:08
Matrix: Water	Analytical Method: 7470A	Cal Date: 11/21/2012 08:45
Workgroup #: WG414893	Analyst: PDM	Run Date: 11/21/2012 09:27
Collect Date: 11/08/2012 00:01	Dilution: 1	File ID: HY.112112.092713
Sample Tag: 01	Units: mg/L	

Analyte	CAS #	Result	Qual	RL	MDL
Mercury, Dissolved	7439-97-6	0.000151	J	0.000200	0.000100
J	The analyte was positively identified, but the quantitation was below the RL.				

Sample #: L12110393-05	PrePrep Method: N/A	Instrument: HPMS6
Client ID: TB-110912	Prep Method: 5030B/5030C/5035A	Prep Date: N/A
Matrix: Water	Analytical Method: 8260B	Cal Date: 11/12/2012 19:51
Workgroup #: WG414233	Analyst: FJB	Run Date: 11/14/2012 15:55
Collect Date: 11/08/2012 12:41	Dilution: 1	File ID: 6M112676
Sample Tag: 01	Units: ug/L	

Analyte	CAS #	Result	Qual	RL	MDL
1,1,1-Trichloroethane	71-55-6		U	1.00	0.250
1,1,2,2-Tetrachloroethane	79-34-5		U	1.00	0.200
1,1,2-Trichloro-1,2,2-Trifluoroethane	76-13-1		U	5.00	2.00
1,1,2-Trichloroethane	79-00-5		U	1.00	0.250
1,1-Dichloroethane	75-34-3		U	1.00	0.125
1,1-Dichloroethene	75-35-4		U	1.00	0.500
1,2,3-Trichlorobenzene	87-61-6		U	1.00	0.500
1,2,4-Trichlorobenzene	120-82-1		U	1.00	0.200
1,2-Dibromo-3-chloropropane	96-12-8		U	5.00	1.00
1,2-Dibromoethane	106-93-4		U	1.00	0.250
1,2-Dichlorobenzene	95-50-1		U	1.00	0.125
1,2-Dichloroethane	107-06-2		U	1.00	0.250
cis-1,2-Dichloroethene	156-59-2		U	1.00	0.250
trans-1,2-Dichloroethene	156-60-5		U	1.00	0.250
1,2-Dichloropropane	78-87-5		U	1.00	0.200
1,3-Dichlorobenzene	541-73-1		U	1.00	0.250
1,4-Dichlorobenzene	106-46-7		U	1.00	0.125
2-Butanone	78-93-3		U	10.0	2.50
2-Hexanone	591-78-6		U	10.0	2.50
4-Methyl-2-pentanone	108-10-1		U	10.0	2.50
Acetone	67-64-1		U	10.0	2.50
Benzene	71-43-2		U	1.00	0.125

Certificate of Analysis

Analyte	CAS #	Result	Qual	RL	MDL
Bromochloromethane	74-97-5		U	1.00	0.200
Bromodichloromethane	75-27-4		U	1.00	0.250
Bromoform	75-25-2		U	1.00	0.500
Bromomethane	74-83-9		U	1.00	0.500
Carbon disulfide	75-15-0		U	1.00	0.500
Carbon tetrachloride	56-23-5		U	1.00	0.250
Chlorobenzene	108-90-7		U	1.00	0.125
Chloroethane	75-00-3		U	1.00	0.500
Chloroform	67-66-3		U	1.00	0.125
Chloromethane	74-87-3		U	1.00	0.500
cis-1,3-Dichloropropene	10061-01-5		U	1.00	0.250
Cyclohexane	110-82-7		U	5.00	1.00
Dibromochloromethane	124-48-1		U	1.00	0.250
Dichlorodifluoromethane	75-71-8		U	1.00	0.250
Ethyl benzene	100-41-4		U	1.00	0.250
Isopropylbenzene	98-82-8		U	1.00	0.250
Methyl acetate	79-20-9		U	5.00	1.00
Methyl tert-butyl ether	1634-04-4		U	1.00	0.500
Methylcyclohexane	108-87-2		U	5.00	1.00
Methylene chloride	75-09-2		U	5.00	0.250
m,p-Xylene	179601-23-1		U	1.00	0.500
o-Xylene	95-47-6		U	1.00	0.250
Styrene	100-42-5		U	1.00	0.125
Tetrachloroethene	127-18-4		U	1.00	0.250
Toluene	108-88-3		U	1.00	0.250
trans-1,3-Dichloropropene	10061-02-6		U	1.00	0.500
Trichloroethene	79-01-6		U	1.00	0.250
Trichlorofluoromethane	75-69-4		U	1.00	0.250
Vinyl chloride	75-01-4		U	1.00	0.250
Epichlorohydrin	106-89-8			0.000	0.000
Surrogate	Recovery	Lower Limit	Upper Limit	Q	
1,2-Dichloroethane-d4	100	80	120		
Dibromofluoromethane	101	86	118		
p-Bromofluorobenzene	103	86	115		
Toluene-d8	96.7	88	110		
U	Not detected at or above adjusted sample detection limit.				

Certificate of Analysis

2.0 Full Sample Data Package

2.1 Volatiles Data

2.1.1 Volatiles GCMS Data (8260)

2.1.1.1 Summary Data



Login Number: L12110393
Department: Volatiles
Analyst: Franci Bolden

METHOD

Preparation SW-846 5030C/5035A

Analysis SW-846 8260B

HOLDING TIMES

Sample Preparation: All holding times were met.

Sample Analysis: All holding times were met.

PREPARATION

Sample preparation proceeded normally.

CALIBRATION

Initial Calibration: For all compounds that yielded a %RSD greater than 15%, linear or higher order equations were applied. All acceptance criteria were met.

Alternate Source Standards: The percent difference was out of range for the following analytes: dichlorodifluoromethane. Please see the applicable QC report for a detailed presentation of the failures.

Continuing Calibration and Tune: All acceptance criteria were met.

BATCH QA/QC

Method Blank: All acceptance criteria were met.

Laboratory Control Sample: Recoveries out of range were observed for the following analytes: Dichlorodifluoromethane. Please see the applicable QC report for a detailed presentation of the failures.

Matrix Spikes: The MS/MSD results were not associated with this sample delivery group (SDG), due to insufficient volume of sample. The laboratory included an LCS and LCS duplicate in the preparation batch in lieu of the NELAC prescribed MS/MSD. Microbac Laboratories recommends site specific MS/MSD samples to avoid possible data qualifications.

SAMPLES

Internal Standards: All acceptance criteria were met.

Surrogates: All acceptance criteria were met.

Other: Samples 01, 03, were run at a dilution. Reporting limits elevated for samples 01 and 02 due to foaming during purging and the matrix.

Manual Integration Reason Codes

Reason #1: Data System Fails to Select Correct Peak. In some cases the chromatography system selects and integrates the 'wrong peak'. In this case the analyst must correct the selection and force the system to integrate the proper peak. Other times the system may miss the peak completely.

Reason #2: Data System Splits the Peak Incorrectly or Integrates a False Peak as a Rider Peak. This phenomena is common at low concentrations where the signal:noise ratio is low. A single compound (peak) is incorrectly split into multiple peaks or integrated as a main peak with one or more rider peaks resulting in low area counts for the target compound.

Reason #3: Improperly Integrated Isomers and/or coeluting compounds. This system often fails to distinguish coeluting compounds and or isomers. The integration areas and concentrations are wrong, and they must be corrected by manual integration. Prime examples are benzo(k)fluoranthene and benzo(b)fluoranthene which are often unresolved and integrated improperly when both are present at low concentrations in standards or samples.

Reason #4: System Establishes Incorrect Baseline. There are numerous situations in chromatography where the system establishes the baseline incorrectly. Some baseline errors will be obvious to the analyst and should be corrected via manual procedures.

Reason #5: Miscellaneous. Other situations involving integration errors may require in-depth review and technical judgment. These cases should be brought to the attention of the laboratory management. If the form of manual integration is not clearly covered by these four cases, then review and approval by the Managing Director or the QAO will be required.

I certify that this data package is in compliance with the terms and conditions agreed to by the client and Microbac Laboratories Inc., both technically and for completeness, except for the conditions noted above. Release of the data contained in this hard copy data package has been authorized by the Laboratory Manager or designated person, as verified by the following signature.

Narrative ID: 56055

Approved By: Michael Albertson



Certificate of Analysis

Sample #: L12110393-01	PrePrep Method: N/A	Instrument: HPMS6
Client ID: BLDG 4-PIT-SSP1-GW-11082012	Prep Method: 5030B/5030C/5035A	Prep Date: N/A
Matrix: Water	Analytical Method: 8260B	Cal Date: 11/12/2012 19:51
Workgroup #: WG414233	Analyst: FJB	Run Date: 11/14/2012 22:32
Collect Date: 11/08/2012 14:11	Dilution: 10	File ID: 6M112689
Sample Tag: DL01	Units: ug/L	

Analyte	CAS #	Result	Qual	RL	MDL
1,1,1-Trichloroethane	71-55-6		U	10.0	2.50
1,1,2,2-Tetrachloroethane	79-34-5		U	10.0	2.00
1,1,2-Trichloro-1,2,2-Trifluoroethane	76-13-1		U	50.0	20.0
1,1,2-Trichloroethane	79-00-5		U	10.0	2.50
1,1-Dichloroethane	75-34-3		U	10.0	1.25
1,1-Dichloroethene	75-35-4		U	10.0	5.00
1,2,3-Trichlorobenzene	87-61-6		U	10.0	5.00
1,2,4-Trichlorobenzene	120-82-1		U	10.0	2.00
1,2-Dibromo-3-chloropropane	96-12-8		U	50.0	10.0
1,2-Dibromoethane	106-93-4		U	10.0	2.50
1,2-Dichlorobenzene	95-50-1		U	10.0	1.25
1,2-Dichloroethane	107-06-2		U	10.0	2.50
cis-1,2-Dichloroethene	156-59-2		U	10.0	2.50
trans-1,2-Dichloroethene	156-60-5		U	10.0	2.50
1,2-Dichloropropane	78-87-5		U	10.0	2.00
1,3-Dichlorobenzene	541-73-1		U	10.0	2.50
1,4-Dichlorobenzene	106-46-7		U	10.0	1.25
2-Butanone	78-93-3		U	100	25.0
2-Hexanone	591-78-6		U	100	25.0
4-Methyl-2-pentanone	108-10-1	2750		100	25.0
Acetone	67-64-1	712		100	25.0
Benzene	71-43-2		U	10.0	1.25
Bromochloromethane	74-97-5		U	10.0	2.00
Bromodichloromethane	75-27-4		U	10.0	2.50
Bromoform	75-25-2		U	10.0	5.00
Bromomethane	74-83-9		U	10.0	5.00
Carbon disulfide	75-15-0	73.6		10.0	5.00
Carbon tetrachloride	56-23-5		U	10.0	2.50
Chlorobenzene	108-90-7	14.6		10.0	1.25
Chloroethane	75-00-3		U	10.0	5.00
Chloroform	67-66-3	127		10.0	1.25
Chloromethane	74-87-3		U	10.0	5.00

Certificate of Analysis

Analyte	CAS #	Result	Qual	RL	MDL
cis-1,3-Dichloropropene	10061-01-5		U	10.0	2.50
Cyclohexane	110-82-7		U	50.0	10.0
Dibromochloromethane	124-48-1		U	10.0	2.50
Dichlorodifluoromethane	75-71-8		U	10.0	2.50
Ethyl benzene	100-41-4		U	10.0	2.50
Isopropylbenzene	98-82-8		U	10.0	2.50
Methyl acetate	79-20-9		U	50.0	10.0
Methyl tert-butyl ether	1634-04-4		U	10.0	5.00
Methylcyclohexane	108-87-2		U	50.0	10.0
Methylene chloride	75-09-2	14.3	J	50.0	2.50
m,p-Xylene	179601-23-1		U	10.0	5.00
o-Xylene	95-47-6		U	10.0	2.50
Styrene	100-42-5		U	10.0	1.25
Tetrachloroethene	127-18-4		U	10.0	2.50
Toluene	108-88-3	51.6		10.0	2.50
trans-1,3-Dichloropropene	10061-02-6		U	10.0	5.00
Trichloroethene	79-01-6		U	10.0	2.50
Trichlorofluoromethane	75-69-4		U	10.0	2.50
Vinyl chloride	75-01-4		U	10.0	2.50
Epichlorohydrin	106-89-8			0.000	0.000
Surrogate	Recovery	Lower Limit	Upper Limit	Q	
1,2-Dichloroethane-d4	93.3	80	120		
Dibromofluoromethane	99.9	86	118		
p-Bromofluorobenzene	102	86	115		
Toluene-d8	97.4	88	110		
J	The analyte was positively identified, but the quantitation was below the RL.				
U	Not detected at or above adjusted sample detection limit.				

Sample #: L12110393-03	PrePrep Method: N/A	Instrument: HPMS6
Client ID: DUP-GW-110812	Prep Method: 5030B/5030C/5035A	Prep Date: N/A
Matrix: Water	Analytical Method: 8260B	Cal Date: 11/12/2012 19:51
Workgroup #: WG414233	Analyst: FJB	Run Date: 11/14/2012 23:02
Collect Date: 11/08/2012 00:01	Dilution: 10	File ID: 6M112690
Sample Tag: DL01	Units: ug/L	

Analyte	CAS #	Result	Qual	RL	MDL
1,1,1-Trichloroethane	71-55-6		U	10.0	2.50
1,1,2,2-Tetrachloroethane	79-34-5		U	10.0	2.00
1,1,2-Trichloro-1,2,2-Trifluoroethane	76-13-1		U	50.0	20.0
1,1,2-Trichloroethane	79-00-5		U	10.0	2.50

Certificate of Analysis

Analyte	CAS #	Result	Qual	RL	MDL
1,1-Dichloroethane	75-34-3		U	10.0	1.25
1,1-Dichloroethene	75-35-4		U	10.0	5.00
1,2,3-Trichlorobenzene	87-61-6		U	10.0	5.00
1,2,4-Trichlorobenzene	120-82-1		U	10.0	2.00
1,2-Dibromo-3-chloropropane	96-12-8		U	50.0	10.0
1,2-Dibromoethane	106-93-4		U	10.0	2.50
1,2-Dichlorobenzene	95-50-1		U	10.0	1.25
1,2-Dichloroethane	107-06-2		U	10.0	2.50
cis-1,2-Dichloroethene	156-59-2	2.56	J	10.0	2.50
trans-1,2-Dichloroethene	156-60-5		U	10.0	2.50
1,2-Dichloropropane	78-87-5		U	10.0	2.00
1,3-Dichlorobenzene	541-73-1		U	10.0	2.50
1,4-Dichlorobenzene	106-46-7		U	10.0	1.25
2-Butanone	78-93-3		U	100	25.0
2-Hexanone	591-78-6		U	100	25.0
4-Methyl-2-pentanone	108-10-1	2750		100	25.0
Acetone	67-64-1	658		100	25.0
Benzene	71-43-2		U	10.0	1.25
Bromochloromethane	74-97-5		U	10.0	2.00
Bromodichloromethane	75-27-4		U	10.0	2.50
Bromoform	75-25-2		U	10.0	5.00
Bromomethane	74-83-9		U	10.0	5.00
Carbon disulfide	75-15-0	84.6		10.0	5.00
Carbon tetrachloride	56-23-5		U	10.0	2.50
Chlorobenzene	108-90-7	14.6		10.0	1.25
Chloroethane	75-00-3		U	10.0	5.00
Chloroform	67-66-3	126		10.0	1.25
Chloromethane	74-87-3		U	10.0	5.00
cis-1,3-Dichloropropene	10061-01-5		U	10.0	2.50
Cyclohexane	110-82-7		U	50.0	10.0
Dibromochloromethane	124-48-1		U	10.0	2.50
Dichlorodifluoromethane	75-71-8		U	10.0	2.50
Ethyl benzene	100-41-4		U	10.0	2.50
Isopropylbenzene	98-82-8		U	10.0	2.50
Methyl acetate	79-20-9		U	50.0	10.0
Methyl tert-butyl ether	1634-04-4		U	10.0	5.00
Methylcyclohexane	108-87-2		U	50.0	10.0
Methylene chloride	75-09-2	14.6	J	50.0	2.50
m,p-Xylene	179601-23-1		U	10.0	5.00

Certificate of Analysis

Analyte	CAS #	Result	Qual	RL	MDL
o-Xylene	95-47-6		U	10.0	2.50
Styrene	100-42-5		U	10.0	1.25
Tetrachloroethene	127-18-4		U	10.0	2.50
Toluene	108-88-3	50.9		10.0	2.50
trans-1,3-Dichloropropene	10061-02-6		U	10.0	5.00
Trichloroethene	79-01-6		U	10.0	2.50
Trichlorofluoromethane	75-69-4		U	10.0	2.50
Vinyl chloride	75-01-4		U	10.0	2.50
Epichlorohydrin	106-89-8			0.000	0.000
Surrogate	Recovery	Lower Limit	Upper Limit	Q	
1,2-Dichloroethane-d4	96.0	80	120		
Dibromofluoromethane	100	86	118		
p-Bromofluorobenzene	98.3	86	115		
Toluene-d8	96.8	88	110		
J	The analyte was positively identified, but the quantitation was below the RL.				
U	Not detected at or above adjusted sample detection limit.				

Sample #: L12110393-05

PrePrep Method: N/A

Instrument: HPMS6

Client ID: TB-110912

Prep Method: 5030B/5030C/5035A

Prep Date: N/A

Matrix: Water

Analytical Method: 8260B

Cal Date: 11/12/2012 19:51

Workgroup #: WG414233

Analyst: FJB

Run Date: 11/14/2012 15:55

Collect Date: 11/08/2012 12:41

Dilution: 1

File ID: 6M112676

Sample Tag: 01

Units: ug/L

Analyte	CAS #	Result	Qual	RL	MDL
1,1,1-Trichloroethane	71-55-6		U	1.00	0.250
1,1,1,2-Tetrachloroethane	79-34-5		U	1.00	0.200
1,1,1,2-Trichloro-1,2,2-Trifluoroethane	76-13-1		U	5.00	2.00
1,1,1,2-Trichloroethane	79-00-5		U	1.00	0.250
1,1-Dichloroethane	75-34-3		U	1.00	0.125
1,1-Dichloroethene	75-35-4		U	1.00	0.500
1,2,3-Trichlorobenzene	87-61-6		U	1.00	0.500
1,2,4-Trichlorobenzene	120-82-1		U	1.00	0.200
1,2-Dibromo-3-chloropropane	96-12-8		U	5.00	1.00
1,2-Dibromoethane	106-93-4		U	1.00	0.250
1,2-Dichlorobenzene	95-50-1		U	1.00	0.125
1,2-Dichloroethane	107-06-2		U	1.00	0.250
cis-1,2-Dichloroethene	156-59-2		U	1.00	0.250
trans-1,2-Dichloroethene	156-60-5		U	1.00	0.250
1,2-Dichloropropane	78-87-5		U	1.00	0.200

Certificate of Analysis

Analyte	CAS #	Result	Qual	RL	MDL
1,3-Dichlorobenzene	541-73-1		U	1.00	0.250
1,4-Dichlorobenzene	106-46-7		U	1.00	0.125
2-Butanone	78-93-3		U	10.0	2.50
2-Hexanone	591-78-6		U	10.0	2.50
4-Methyl-2-pentanone	108-10-1		U	10.0	2.50
Acetone	67-64-1		U	10.0	2.50
Benzene	71-43-2		U	1.00	0.125
Bromochloromethane	74-97-5		U	1.00	0.200
Bromodichloromethane	75-27-4		U	1.00	0.250
Bromoform	75-25-2		U	1.00	0.500
Bromomethane	74-83-9		U	1.00	0.500
Carbon disulfide	75-15-0		U	1.00	0.500
Carbon tetrachloride	56-23-5		U	1.00	0.250
Chlorobenzene	108-90-7		U	1.00	0.125
Chloroethane	75-00-3		U	1.00	0.500
Chloroform	67-66-3		U	1.00	0.125
Chloromethane	74-87-3		U	1.00	0.500
cis-1,3-Dichloropropene	10061-01-5		U	1.00	0.250
Cyclohexane	110-82-7		U	5.00	1.00
Dibromochloromethane	124-48-1		U	1.00	0.250
Dichlorodifluoromethane	75-71-8		U	1.00	0.250
Ethyl benzene	100-41-4		U	1.00	0.250
Isopropylbenzene	98-82-8		U	1.00	0.250
Methyl acetate	79-20-9		U	5.00	1.00
Methyl tert-butyl ether	1634-04-4		U	1.00	0.500
Methylcyclohexane	108-87-2		U	5.00	1.00
Methylene chloride	75-09-2		U	5.00	0.250
m,p-Xylene	179601-23-1		U	1.00	0.500
o-Xylene	95-47-6		U	1.00	0.250
Styrene	100-42-5		U	1.00	0.125
Tetrachloroethene	127-18-4		U	1.00	0.250
Toluene	108-88-3		U	1.00	0.250
trans-1,3-Dichloropropene	10061-02-6		U	1.00	0.500
Trichloroethene	79-01-6		U	1.00	0.250
Trichlorofluoromethane	75-69-4		U	1.00	0.250
Vinyl chloride	75-01-4		U	1.00	0.250
Epichlorohydrin	106-89-8			0.000	0.000
Surrogate	Recovery	Lower Limit	Upper Limit	Q	
1,2-Dichloroethane-d4	100	80	120		

Certificate of Analysis

Dibromofluoromethane	101	86	118	
p-Bromofluorobenzene	103	86	115	
Toluene-d8	96.7	88	110	
U	Not detected at or above adjusted sample detection limit.			

2.1.1.2 QC Summary Data

Example 8260 Calculations

1.0 Calculating the Response Factor (RF) from the initial calibration (ICAL) data:

$$RF = [(Ax) (Cis)] / [(Ais) (Cx)]$$

Example

where:

Ax = Area of the characteristic ion for the compound being measured:	3399156
Cis = Concentration of the specific internal standard (ug/mL)	25
Ais = Area of the characteristic ion of the specific internal standard	846471
Cx = Concentration of the compound in the standard being measured (ug/mL)	100

RF = Calculated Response Factor	1.0039

2.0 Calculating the concentration (C) of a compound in water using the average RF: *

$$Cx = [(Ax) (Cis) (Vn)(D)] / [(Ais) (RF) (Vs)]$$

Example

where:

Ax = Area of the characteristic ion for the compound being measured	3122498
Cis = Concentration of the specific internal standard (ug/L)	25
D = Dilution factor for sample as a multiplier (10x = 10)	1
Ais = Area of the characteristic ion of the specific internal standard	611048
RF = Average RF from the ICAL	1.004
Vs = Purge volume of sample (mL)	10
Vn = Nominal purge volume of sample (mL) (10.0 mL)	10
Cx = Concentration of the compound in the sample being measured (ug/L)	127.2428

3.0 Calculating the concentration (C) of a compound in soil using the average RF: *

$$Cx = [(Ax) (Cis) (Wn)(D)] / [(Ais) (RF) (Ws)]$$

Example

where:

Ax = Area of the characteristic ion for the compound being measured	3122498
Cis = Concentration of the specific internal standard (ug/L)	25
D = Dilution factor for sample as a multiplier (10x = 10)	1
Ais = Area of the characteristic ion of the specific internal standard	611048
RF = Average RF from the ICAL	1.004
Ws = Weight of sample purged (g)	5
Wn = Nominal purge weight (g) (5.0 g)	5
Cx = Concentration of the compound in the sample being measured (ug/L)	127.2428

Dry weight correction:

Percent solids (PCT_S)	50
Cd = (Cx) (100)/PCT_S	254.4856

* Concentrations appearing on the instrument quantitation reports are on-column results and do not take into account initial volume, final volume, and the dilution factor.

4.0 Concentration from Linear Regression

Step 1: Retrieve Curve Data From Plot, $y = mx + b$

y = response ratio = response of analyte / response of IS = Ax/Ais

x = amount ratio = concentration analyte/concentration internal standard = Cx / Cis

m = slope from curve = 0.213

b = intercept from curve = - 0.00642

Step 2: Calculate y from Quantitation Report

$$y = 86550/593147 = 0.1459$$

Step 3: Solve for x

$$x = (y - b)/m = [(0.1459 - (-0.00642))/0.213] = 0.7152$$

Step 4: Solve for analyte concentration Cx

$$Cx = Cis (x) = (25.0)(0.7152) = 17.88$$

Example Spreadsheet Calculation:

Slope from curve, m:	0.213
Intercept from curve, b:	-0.00642
Area of analyte, Ax:	86550
Area of Internal Standard, Ais:	593147
Concentration of IS, Cis	25.00
Response Ratio:	0.145917
Amount Ratio:	0.715195
Concentration:	17.87988
Units of Internal Standard:	ug/L

5.0 Concentration from Quadratic Regression**Step 1 - Retrieve Curve Data from Plot, $y = Ax^2 + Bx + C$**

Where:

$$Ax^2 + Bx + (C - y) = 0$$

A, B, C = constants from the ICAL quadratic regression

y = Response ratio = Area of analyte/Area of internal standard (IS)

x = Amount ratio = Concentration of analyte/concentration of IS

Step 2: Calculate y from Quantitation Report

$$y = Ax/Ais$$

Step 3: Solve for x using the quadratic formula

$$Ax^2 + Bx + C - y = 0$$

$$x = \frac{b \pm \sqrt{(b^2 - 4a(c - y))}}{2a} \quad (\text{Two possible solutions})$$

Step 4: Solve for analyte concentration Cx

$$Cx = (Cis)(\text{Amount ratio})$$

Example Spreadsheet Calculation:

Value of A from plot:	-0.00629
Value of B from plot:	0.511
Value of C from plot:	-0.0276
Area of unknown from quantitation report:	293821
Area of IS from quantitation report:	784848
Response ratio, y:	0.374367
C - y:	-0.40197
Root 1 - Computed amount ratio, X1:	80.44567
Root 2 - Computed amount ratio, X2:	0.794396 use this solution
Concentration of IS, Cis:	25.00
Concentration of analyte, Cx:	19.86 ug/L

Microbac Laboratories Inc.
Instrument Run Log

Instrument: HPMS6 Dataset: 012512
 Analyst1: ADC Analyst2: NA
 Method: 8260B/OVAP SOP: MSV01 Rev: 14/0
 Method: 624 SOP: MSV10 Rev: 8
 Method: 5030B/5030C/5035A SOP: PAT01 Rev: 13
 Maintenance Log ID: 40412

Internal Standard: STD49576 Surrogate Standard: STD49251
 CCV: STD49665; STD49721 LCS: STD49523; STD49518 MS/MSD: NA
 Column 1 ID: RTX502.2 Column 2 ID: NA
 Workgroups: WG387849; WG387881

Comments:

File ID	Sample Information	pH	Mat	Dil	Reference	Date/Time
6M105367	WG387846-01 50ng BFB STD 8260	NA	1	1	STD49582	01/25/12 08:08
6M105368	WG387846-02 50ug/L CCV STD 8260	NA	1	1	STD49665	01/25/12 08:34
6M105369	WG387XXX-01 100ug/L A9 CCV STD 8260	NA	1	1	STD49484	01/25/12 09:07
6M105370	WG387849-01 VBLK0125 BLANK STD 826	NA	1	1		01/25/12 09:40
6M105371	WG388587-01 5ug/L 826A9FOO QC	NA	1	1	STD49721	01/25/12 10:12
6M105372	WG388587-02 20ug/L 826A9FOO QC	NA	1	1	STD49721	01/25/12 10:45
6M105373	WG388587-03 50ug/L 826A9FOO QC	NA	1	1	STD49721	01/25/12 11:17
6M105374	WG388587-04 100ug/L 826A9FOO QC	NA	1	1	STD49721	01/25/12 11:49
6M105375	WG388587-05 200ug/L 826A9FOO QC	NA	1	1	STD49721	01/25/12 12:22
6M105376	WG388587-06 300ug/L 826A9FOO QC	NA	1	1	STD49721	01/25/12 12:55
6M105377	WG388587-07 400ug/L 826A9FOO QC	NA	1	1	STD49721	01/25/12 13:27
6M105378	WG388587-08 100ug/L ALT 826A9FOO Q	NA	1	1	STD49721	01/25/12 14:00
6M105379	WG387849-02 20ug/L LCS STD 8260	NA	1	1	STD49523	01/25/12 14:32
6M105380	WG387849-03 20ug/L LCSDUP STD 8260	NA	1	1	STD49523	01/25/12 15:05
6M105381	L12010470-02 B 100X 826-SPE D1	<2	1	100		01/25/12 15:37
6M105382	L12010470-03 B 100X 826-SPE D1	<2	1	100		01/25/12 16:09
6M105383	L12010470-04 B 100X 826-SPE D1	<2	1	100		01/25/12 16:42
6M105384	L12010470-05 B 100X 826-SPE D1	<2	1	100		01/25/12 17:14
6M105385	L12010470-01 B 500X 826-SPE D1	<2	1	500		01/25/12 17:47
6M105386	L12010534-01 B 200X 826-SPE D1	<2	1	200		01/25/12 18:19
6M105387	L12010534-02 B 2X 826-SPE D1	<2	1	2		01/25/12 18:51
6M105388	L12010534-03 B 2X 826-SPE D1	<2	1	2		01/25/12 19:24
6M105389	L12010481-15 B 25X 826-SPE D1	<2	1	25		01/25/12 19:56
6M105390	RINSE	NA	1	1		01/25/12 20:29
6M105391	RINSE	NA	1	1		01/25/12 21:01
6M105392	RINSE	NA	1	1		01/25/12 21:33

Comments

Seq.	Rerun	Dil.	Reason	Analytes
3				
File ID: 6M105369				
Not needed, DNR.				
19	X	2000	Over Calibration Range	CIS12-DCE

Approved: January 26, 2012

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Microbac Laboratories Inc.
Instrument Run Log

Instrument: HPMS6 Dataset: 012512
 Analyst1: ADC Analyst2: NA
 Method: 8260B/OVAP SOP: MSV01 Rev: 14/0
 Method: 624 SOP: MSV10 Rev: 8
 Method: 5030B/5030C/5035A SOP: PAT01 Rev: 13
 Maintenance Log ID: 40412

Internal Standard: STD49576 Surrogate Standard: STD49251
 CCV: STD49665; STD49721 LCS: STD49523; STD49518 MS/MSD: NA
 Column 1 ID: RTX502.2 Column 2 ID: NA
 Workgroups: WG387849; WG387881

Comments:

Comments

Seq.	Rerun	Dil.	Reason	Analytes
File ID: 6M105385				
20	X	500	Over Calibration Range	TCE
File ID: 6M105386				

Approved: January 26, 2012

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Microbac Laboratories Inc.
Instrument Run Log

Instrument: HPMS6 Dataset: 111212
 Analyst1: ADC Analyst2: NA
 Method: 8260B SOP: MSV01 Rev: 15
 Method: 5030C SOP: PAT01 Rev: 13
 Method: 624 SOP: MSV10 Rev: 8
 Maintenance Log ID: 43972

Internal Standard: STD54653 Surrogate Standard: STD54653
 CCV: STD54883 LCS: STD54851 MS/MSD: STD54851
 Column 1 ID: RTX502.2 Column 2 ID: NA
 Workgroups: WG414018 (ICAL)

Comments:

File ID	Sample Information	pH	Mat	Dil	Reference	Date/Time
6M112620	WG414018-01 50NG/L BFB STD	NA	1	1	STD54051	11/12/12 14:09
6M112621	RINSE	NA	1	1		11/12/12 14:41
6M112622	WG414018-02 0.3 ug/L STD 8260	NA	1	1	STD54883	11/12/12 15:14
6M112623	WG414018-03 0.4 ug/L STD 8260	NA	1	1	STD54883	11/12/12 15:44
6M112624	WG414018-04 1.0ug/L STD 8260	NA	1	1	STD54883	11/12/12 16:15
6M112625	WG414018-05 2.0 ug/L STD 8260	NA	1	1	STD54883	11/12/12 16:46
6M112626	WG414018-06 5.0 ug/L STD 8260	NA	1	1	STD54883	11/12/12 17:17
6M112627	WG414018-07 20.0 ug/L STD 8260	NA	1	1	STD54883	11/12/12 17:48
6M112628	WG414018-08 50.0 ug/L STD 8260	NA	1	1	STD54883	11/12/12 18:19
6M112629	WG414018-09 100.0 ug/L STD 8260	NA	1	1	STD54883	11/12/12 18:49
6M112630	WG414018-10 200.0 ug/L STD 8260	NA	1	1	STD54883	11/12/12 19:20
6M112631	WG414018-11 300.0 ug/L STD 8260	NA	1	1	STD54883	11/12/12 19:51
6M112632	RINSE	NA	1	1		11/12/12 20:22
6M112633	WG414018-12 50.0 ug/L ALTSRC 8260	NA	1	1	STD54557	11/12/12 20:52
6M112634	rinse	NA	1	1		11/13/12 09:36
6M112635	rinse	NA	1	1		11/13/12 10:06

Approved: November 15, 2012

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Microbac Laboratories Inc.
Instrument Run Log

Instrument: HPMS6 Dataset: 111412
 Analyst1: ADC Analyst2: NA
 Method: 8260B SOP: MSV01 Rev: 15
 Method: 5030C SOP: PAT01 Rev: 13
 Method: 624 SOP: MSV10 Rev: 8
 Maintenance Log ID: 43991

Internal Standard: STD54653 Surrogate Standard: STD54653
 CCV: STD54883 LCS: STD54851 MS/MSD: STD54851
 Column 1 ID: RTX502.2 Column 2 ID: NA
 Workgroups: WG414233

Comments:

File ID	Sample Information	pH	Mat	Dil	Reference	Date/Time
6M112667	WG414232-01 BFB 50ng 8260	NA	1	1	STD54051	11/14/12 11:22
6M112668	WG414232-02 50ug/L CCV 8260	NA	1	1	STD54883	11/14/12 11:47
6M112669	WG414XXX-01 100ug/L CCV A9	NA	1	1	STDXXXXX	11/14/12 12:17
6M112670	WG414233-01 VBLK1114 BLANK 8260	NA	1	1		11/14/12 12:48
6M112671	WG414233-02 20ug/L LCS 8260	NA	1	1	STD54851	11/14/12 13:19
6M112672	WG414233-03 20ug/L LCS DUP 8260	NA	1	1	STD54851	11/14/12 13:50
6M112673	L12110306-01 50X B 826-SPE D1	<2	1	50		11/14/12 14:21
6M112674	L12110248-01 TB A 826-LOW	<2	1	1		11/14/12 14:52
6M112675	L12110322-12 TB A 826-SPE	<2	1	1		11/14/12 15:23
6M112676	L12110393-05 TB A 826-SPE	<2	1	1		11/14/12 15:55
6M112677	L12110248-02 A 826-LOW	<2	1	1		11/14/12 16:26
6M112678	L12110248-03 A 826-LOW	<2	1	1		11/14/12 16:57
6M112679	L12110248-04 A 826-LOW	<2	1	1		11/14/12 17:28
6M112680	L12110248-05 A 826-LOW	<2	1	1		11/14/12 17:59
6M112681	L12110374-01 A 826-SPE1	<2	1	1		11/14/12 18:29
6M112682	L12110286-01 A 826-SPE	<2	1	1		11/14/12 19:00
6M112683	L12110286-02 A 826-SPE	<2	1	1		11/14/12 19:30
6M112684	L12110322-07 A 826-SPE	<2	1	1		11/14/12 20:01
6M112685	L12110322-08 A 826-SPE	<2	1	1		11/14/12 20:31
6M112686	L12110322-09 A 826-SPE	<2	1	1		11/14/12 21:01
6M112687	L12110322-10 A 826-SPE	<2	1	1		11/14/12 21:32
6M112688	L12110322-11 A 826-SPE	<2	1	1		11/14/12 22:02
6M112689	L12110393-01 10X A 826-SPE	5	1	10		11/14/12 22:32
6M112690	L12110393-03 10X A 826-SPE	5	1	10		11/14/12 23:02
6M112691	RINSE	NA	1	1		11/14/12 23:32
6M112692	ANTIFOAM BLANK 8 DROPS	NA	1	1		11/15/12 00:02
6M112693	CCV	NA	1	1		11/15/12 00:33
6M112694	RINSE	NA	1	1		11/15/12 01:03

Approved: November 15, 2012

Page: 1

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Microbac Laboratories Inc.

Data Checklist

Date: 25-JAN-2012

Analyst: ADC

Analyst: NA

Method: 8260B/624/OVAP

Instrument: HPMS6

Curve Workgroup: NA

Runlog ID: 44829

Analytical Workgroups: WG387849; WG387881

System Performance Check	NA
BFB	X
Initial Calibration	X
Average RF	X
Linear Reg or Higher Order Curve	X
Second Source standard % Difference	X
Continuing Calibration /Check Standards	X
Project/Client Specific Requirements	X
Special Standards	X
Blanks	X
TCL's	X
Surrogates	X
LCS (Laboratory Control Sample)	X
Recoveries	X
Surrogates	X
MS/MSD/Duplicates	NA
Samples	X
TCL Hits	X
Spectra of TCL Hits	TMB
Surrogates	X
Internal Standards Criteria	X
Library Searches	NA
Calculations & Correct Factors	X
Dilutions Run	X
Reruns	X
Manual Integrations	NA
Case Narrative	X
Results Reporting/Data Qualifiers	X
KOBRA Workgroup Data	X
Check for Completeness	X
Primary Reviewer	TMB
Secondary Reviewer	MDA
Check for compliance with method and project specific requirements	X
Check the completeness of reported information	X
Check the information for the report narrative	X
Check the reasonableness of the results	X

Primary Reviewer:
26-JAN-2012

Tiffany Bailey

Secondary Reviewer:
26-JAN-2012

Non



Microbac Laboratories Inc.

Data Checklist

Date: 12-NOV-2012
 Analyst: ADC
 Analyst: NA
 Method: 8260
 Instrument: HPMS6
 Curve Workgroup: WG414018
 Runlog ID: 50018
 Analytical Workgroups: _____

System Performance Check	NA
BFB	X
Initial Calibration	X
Average RF	X
Linear Reg or Higher Order Curve	X
Second Source standard % Difference	X
Continuing Calibration /Check Standards	X
Project/Client Specific Requirements	X
Special Standards	NA
Blanks	X
TCL's	X
Surrogates	X
LCS (Laboratory Control Sample)	X
Recoveries	X
Surrogates	X
MS/MSD/Duplicates	NA
Samples	NA
TCL Hits	NA
Spectra of TCL Hits	NA
Surrogates	NA
Internal Standards Criteria	NA
Library Searches	NA
Calculations & Correct Factors	NA
Dilutions Run	NA
Reruns	NA
Manual Integrations	NA
Case Narrative	NA
Results Reporting/Data Qualifiers	NA
KOBRA Workgroup Data	NA
Check for Completeness	NA
Primary Reviewer	ADC
Secondary Reviewer	MDA
Check for compliance with method and project specific requirements	X
Check the completeness of reported information	X
Check the information for the report narrative	X
Check the reasonableness of the results	X

Primary Reviewer:
14-NOV-2012



Secondary Reviewer:
14-NOV-2012




Microbac Laboratories Inc.

Data Checklist

Date: 14-NOV-2012
Analyst: ADC
Analyst: NA
Method: 8260
Instrument: HPMS6
Curve Workgroup: NA
Runlog ID: 50041
Analytical Workgroups: WG414233

System Performance Check	NA
BFB	X
Initial Calibration	X
Average RF	X
Linear Reg or Higher Order Curve	X
Second Source standard % Difference	X
Continuing Calibration /Check Standards	X
Project/Client Specific Requirements	X
Special Standards	NA
Blanks	X
TCL's	X
Surrogates	X
LCS (Laboratory Control Sample)	X
Recoveries	X
Surrogates	X
MS/MSD/Duplicates	NA
Samples	X
TCL Hits	X
Spectra of TCL Hits	ADC
Surrogates	X
Internal Standards Criteria	X
Library Searches	X
Calculations & Correct Factors	X
Dilutions Run	X
Reruns	NA
Manual Integrations	NA
Case Narrative	X
Results Reporting/Data Qualifiers	X
KOBRA Workgroup Data	X
Check for Completeness	X
Primary Reviewer	ADC
Secondary Reviewer	MDA
Check for compliance with method and project specific requirements	X
Check the completeness of reported information	X
Check the information for the report narrative	X
Check the reasonableness of the results	X

Primary Reviewer:
15-NOV-2012



Secondary Reviewer:
15-NOV-2012



CHECKLIST1 - Modified 03/05/2008

Generated: NOV-15-2012 13:01:39



Microbac Laboratories Inc.
HOLDING TIMES
EQUIVALENT TO AFCEE FORM 9

Analytical Method: 8260B

AAB#: WG414233

Login Number: L12110393

Client ID	ID	Date Collected	TCLP Date	Time Held	Max Hold	Q	Extract Date	Time Held	Max Hold	Q	Run Date	Time Held	Max Hold	Q
BLDG 4-PIT-SSP1-GW-11082	01	11/08/12					11/14/2012	6.3	14		11/14/12	6.3	14	
DUP-GW-110812	03	11/08/12					11/14/2012	7	14		11/14/12	7	14	
TB-110912	05	11/08/12					11/14/2012	6.1	14		11/14/12	6.1	14	

* = SEE PROJECT QAPP REQUIREMENTS

HOLD_TIMES - Modified 03/06/2008
PDF File ID: 2666132
Report generated 11/15/2012 15:00



Microbac Laboratories Inc.
SURROGATE STANDARDS

Login Number: L12110393
Instrument Id: HPMS6
Workgroup (AAB#): WG414233

Method: 8260
CAL ID: HPMS6 - 12-NOV-12
Matrix: Water

Sample Number	Dilution	Tag	1	2	3	4
L12110393-01	10.0	DL01	93.3	99.9	102	97.4
L12110393-03	10.0	DL01	96.0	100	98.3	96.8
L12110393-05	1.00	01	100	101	103	96.7
WG414233-01	1.00	01	98.6	101	104	95.7
WG414233-02	1.00	01	99.3	102	103	95.9
WG414233-03	1.00	01	99.4	100	102	97.4

Surrogates	Surrogate Limits
1 - 1,2-Dichloroethane-d4	80 - 120
2 - Dibromofluoromethane	86 - 118
3 - p-Bromofluorobenzene	86 - 115
4 - Toluene-d8	88 - 110

Underline = Result out of surrogate limits

DL = surrogate diluted out

ND = surrogate not detected



METHOD BLANK SUMMARY

Login Number: L12110393
 Blank File ID: 6M112670
 Prep Date: 11/14/12 12:48
 Analyzed Date: 11/14/12 12:48
 Analyst: FJB

Work Group: WG414233
 Blank Sample ID: WG414233-01
 Instrument ID: HPMS6
 Method: 8260B

This Method Blank Applies To The Following Samples:

Client ID	Lab Sample ID	Lab File ID	Time Analyzed	TAG
LCS	WG414233-02	6M112671	11/14/12 13:19	01
LCS2	WG414233-03	6M112672	11/14/12 13:50	01
TB-110912	L12110393-05	6M112676	11/14/12 15:55	01
BLDG 4-PIT-SSP1-GW-11082012	L12110393-01	6M112689	11/14/12 22:32	DL01
DUP-GW-110812	L12110393-03	6M112690	11/14/12 23:02	DL01

Report Name: BLANK_SUMMARY
 PDF File ID: 2666133
 Report generated 11/15/2012 15:00



METHOD BLANK REPORT

Login Number: L12110393 Prep Date: 11/14/12 12:48 Sample ID: WG414233-01
 Instrument ID: HPMS6 Run Date: 11/14/12 12:48 Prep Method: 5030B/5030C/503
 File ID: 6M112670 Analyst: FJB Method: 8260B
 Workgroup (AAB#): WG414233 Matrix: Water Units: ug/L
 Contract #: _____ Cal ID: HPMS6 - 12-NOV-12

Analytes	MDL	RL	Concentration	Dilution	Qualifier
1,1,1-Trichloroethane	0.250	1.00	0.250	1	U
1,1,2,2-Tetrachloroethane	0.200	1.00	0.200	1	U
1,1,2-Trichloro-1,2,2-Trifluoroethane	2.00	5.00	2.00	1	U
1,1,2-Trichloroethane	0.250	1.00	0.250	1	U
1,1-Dichloroethane	0.125	1.00	0.125	1	U
1,1-Dichloroethene	0.500	1.00	0.500	1	U
1,2,3-Trichlorobenzene	0.500	1.00	0.500	1	U
1,2,4-Trichlorobenzene	0.200	1.00	0.200	1	U
1,2-Dibromo-3-chloropropane	1.00	5.00	1.00	1	U
1,2-Dibromoethane	0.250	1.00	0.250	1	U
1,2-Dichlorobenzene	0.125	1.00	0.125	1	U
1,2-Dichloroethane	0.250	1.00	0.250	1	U
cis-1,2-Dichloroethene	0.250	1.00	0.250	1	U
trans-1,2-Dichloroethene	0.250	1.00	0.250	1	U
1,2-Dichloropropane	0.200	1.00	0.200	1	U
1,3-Dichlorobenzene	0.250	1.00	0.250	1	U
1,4-Dichlorobenzene	0.125	1.00	0.125	1	U
2-Butanone	2.50	10.0	2.50	1	U
2-Hexanone	2.50	10.0	2.50	1	U
4-Methyl-2-pentanone	2.50	10.0	2.50	1	U
Acetone	2.50	10.0	2.50	1	U
Benzene	0.125	1.00	0.125	1	U
Bromochloromethane	0.200	1.00	0.200	1	U
Bromodichloromethane	0.250	1.00	0.250	1	U
Bromoform	0.500	1.00	0.500	1	U
Bromomethane	0.500	1.00	0.500	1	U
Carbon disulfide	0.500	1.00	0.500	1	U
Carbon tetrachloride	0.250	1.00	0.250	1	U
Chlorobenzene	0.125	1.00	0.125	1	U
Chloroethane	0.500	1.00	0.500	1	U
Chloroform	0.125	1.00	0.125	1	U
Chloromethane	0.500	1.00	0.500	1	U
cis-1,3-Dichloropropene	0.250	1.00	0.250	1	U
Cyclohexane	1.00	5.00	1.00	1	U
Dibromochloromethane	0.250	1.00	0.250	1	U
Dichlorodifluoromethane	0.250	1.00	0.250	1	U
Ethyl benzene	0.250	1.00	0.250	1	U
Isopropylbenzene	0.250	1.00	0.250	1	U
Methyl acetate	1.00	5.00	1.00	1	U
Methyl tert-butyl ether	0.500	1.00	0.500	1	U
Methylcyclohexane	1.00	5.00	1.00	1	U
Methylene chloride	0.250	5.00	0.250	1	U

Report Name: BLANK

PDF ID: 2666134

15-NOV-2012 15:00



METHOD BLANK REPORT

Login Number: L12110393 Prep Date: 11/14/12 12:48 Sample ID: WG414233-01
 Instrument ID: HPMS6 Run Date: 11/14/12 12:48 Prep Method: 5030B/5030C/503
 File ID: 6M112670 Analyst: FJB Method: 8260B
 Workgroup (AAB#): WG414233 Matrix: Water Units: ug/L
 Contract #: _____ Cal ID: HPMS6 - 12-NOV-12

Analytes	MDL	RL	Concentration	Dilution	Qualifier
m,p-Xylene	0.500	1.00	0.500	1	U
o-Xylene	0.250	1.00	0.250	1	U
Styrene	0.125	1.00	0.125	1	U
Tetrachloroethene	0.250	1.00	0.250	1	U
Toluene	0.250	1.00	0.250	1	U
trans-1,3-Dichloropropene	0.500	1.00	0.500	1	U
Trichloroethene	0.250	1.00	0.250	1	U
Trichlorofluoromethane	0.250	1.00	0.250	1	U
Vinyl chloride	0.250	1.00	0.250	1	U

Surrogates	% Recovery	Surrogate Limits	Qualifier
1,2-Dichloroethane-d4	98.6	80 - 120	PASS
Dibromofluoromethane	101	86 - 118	PASS
p-Bromofluorobenzene	104	86 - 115	PASS
Toluene-d8	95.7	88 - 110	PASS

MDL Method Detection Limit

RL Reporting/Practical Quantitation Limit

ND Analyte Not detected at or above reporting limit

* |Analyte concentration| > RL

Report Name: BLANK

PDF ID: 2666134

15-NOV-2012 15:00



Microbac Laboratories Inc.
LABORATORY CONTROL SAMPLE (LCS)

Login Number: L12110393 Analyst: FJB Prep Method: 5030B/5030C/503
Instrument ID: HPMS6 Matrix: Water Method: 8260B
Workgroup (AAB#): WG414233 Units: ug/L
QC Key: WATERLOO Lot #: STD54851

Sample ID: WG414233-02 LCS File ID: 6M112671 Run Date: 11/14/2012 13:19
Sample ID: WG414233-03 LCS2 File ID: 6M112672 Run Date: 11/14/2012 13:50

Analytes	LCS			LCS2			%RPD	%Rec Limits	RPD Lmt	Q
	Known	Found	% REC	Known	Found	% REC				
1,1,1-Trichloroethane	20.0	21.2	106	20.0	21.2	106	0.0816	80 - 134	30	
1,1,2,2-Tetrachloroethane	20.0	21.5	108	20.0	22.2	111	3.06	79 - 125	30	
1,1,2-Trichloro-1,2,2-Trifluoroethane	20.0	24.1	121	20.0	24.1	120	0.211	80 - 130	30	
1,1,2-Trichloroethane	20.0	19.3	96.6	20.0	19.9	99.6	3.04	80 - 125	30	
1,1-Dichloroethane	20.0	20.7	103	20.0	20.6	103	0.275	80 - 125	30	
1,1-Dichloroethene	20.0	21.3	106	20.0	21.0	105	1.27	80 - 132	30	
1,2,3-Trichlorobenzene	20.0	20.9	105	20.0	21.6	108	3.04	55 - 140	30	
1,2,4-Trichlorobenzene	20.0	20.7	103	20.0	21.0	105	1.74	65 - 135	30	
1,2-Dibromo-3-chloropropane	20.0	20.0	99.8	20.0	20.6	103	3.33	50 - 130	30	
1,2-Dibromoethane	20.0	19.4	96.9	20.0	19.3	96.6	0.256	80 - 125	30	
1,2-Dichlorobenzene	20.0	18.9	94.5	20.0	19.2	95.9	1.49	80 - 125	30	
1,2-Dichloroethane	20.0	21.6	108	20.0	21.7	109	0.397	80 - 129	30	
cis-1,2-Dichloroethene	20.0	21.3	107	20.0	20.8	104	2.71	70 - 125	30	
trans-1,2-Dichloroethene	20.0	22.1	110	20.0	21.3	107	3.39	80 - 127	30	
1,2-Dichloropropane	20.0	21.8	109	20.0	21.9	109	0.474	80 - 120	30	
1,3-Dichlorobenzene	20.0	18.9	94.5	20.0	18.8	94.1	0.401	80 - 120	30	
1,4-Dichlorobenzene	20.0	20.0	100	20.0	20.0	100	0.0379	80 - 120	30	
2-Butanone	20.0	21.1	105	20.0	21.8	109	3.38	30 - 150	30	
2-Hexanone	20.0	18.0	89.9	20.0	19.2	96.1	6.68	55 - 130	30	
4-Methyl-2-pentanone	20.0	20.2	101	20.0	20.2	101	0.217	64 - 140	30	
Acetone	20.0	22.3	111	20.0	22.3	111	0.122	40 - 142	30	
Benzene	20.0	20.4	102	20.0	20.3	101	0.780	80 - 121	30	
Bromochloromethane	20.0	21.4	107	20.0	21.3	107	0.529	65 - 130	30	
Bromodichloromethane	20.0	20.8	104	20.0	20.8	104	0.179	80 - 131	30	
Bromoform	20.0	17.8	89.2	20.0	18.2	90.9	1.93	70 - 130	30	
Bromomethane	20.0	20.8	104	20.0	21.0	105	1.27	30 - 145	30	
Carbon disulfide	20.0	22.2	111	20.0	22.0	110	0.993	58 - 138	30	
Carbon tetrachloride	20.0	21.7	109	20.0	21.7	109	0.169	65 - 140	30	
Chlorobenzene	20.0	18.1	90.6	20.0	18.1	90.4	0.248	80 - 120	30	
Chloroethane	20.0	22.3	112	20.0	21.7	109	2.79	60 - 135	30	
Chloroform	20.0	21.2	106	20.0	21.0	105	1.10	80 - 125	30	
Chloromethane	20.0	21.9	109	20.0	20.8	104	5.08	40 - 125	30	
cis-1,3-Dichloropropene	20.0	23.2	116	20.0	22.8	114	2.00	70 - 130	30	
Cyclohexane	20.0	19.1	95.4	20.0	19.3	96.7	1.39	80 - 130	30	
Dibromochloromethane	20.0	21.8	109	20.0	21.7	108	0.252	60 - 135	30	
Dichlorodifluoromethane	20.0	28.9	144	20.0	28.5	143	1.19	50 - 133	30	*
Ethyl benzene	20.0	19.2	96.0	20.0	18.9	94.6	1.40	80 - 122	30	
Isopropylbenzene	20.0	18.1	90.7	20.0	18.0	90.2	0.461	80 - 122	30	
Methyl acetate	20.0	18.5	92.3	20.0	18.8	93.8	1.61	80 - 130	30	
Methyl tert-butyl ether	20.0	21.6	108	20.0	21.5	108	0.349	65 - 125	30	

LCS_LCS2 - Modified 03/06/2008
PDF File ID: 2665889
Report generated: 11/15/2012 15:00



Microbac Laboratories Inc.
LABORATORY CONTROL SAMPLE (LCS)

Login Number: L12110393 Analyst: FJB Prep Method: 5030B/5030C/503
Instrument ID: HPMS6 Matrix: Water Method: 8260B
Workgroup (AAB#): WG414233 Units: ug/L
QC Key: WATERLOO Lot #: STD54851
Sample ID: WG414233-02 LCS File ID: 6M112671 Run Date: 11/14/2012 13:19
Sample ID: WG414233-03 LCS2 File ID: 6M112672 Run Date: 11/14/2012 13:50

Analytes	LCS			LCS2			%RPD	%Rec Limits	RPD Lmt	Q
	Known	Found	% REC	Known	Found	% REC				
Methylcyclohexane	20.0	20.6	103	20.0	20.2	101	1.84	80 - 130	30	
Methylene chloride	20.0	21.0	105	20.0	21.0	105	0.329	80 - 123	30	
m,p-Xylene	40.0	37.0	92.4	40.0	36.7	91.8	0.719	80 - 122	30	
o-Xylene	20.0	18.0	90.0	20.0	17.9	89.4	0.592	80 - 122	30	
Styrene	20.0	19.9	99.6	20.0	19.9	99.7	0.116	80 - 123	30	
Tetrachloroethene	20.0	20.2	101	20.0	20.3	102	0.661	80 - 124	30	
Toluene	20.0	19.7	98.5	20.0	19.6	97.9	0.595	80 - 124	30	
trans-1,3-Dichloropropene	20.0	17.8	88.9	20.0	17.9	89.5	0.614	80 - 130	30	
Trichloroethene	20.0	21.1	105	20.0	20.7	104	1.79	80 - 122	30	
Trichlorofluoromethane	20.0	23.4	117	20.0	23.5	117	0.219	62 - 151	30	
Vinyl chloride	20.0	20.7	104	20.0	20.0	99.8	3.78	65 - 140	30	

Surogates	LCS	LCS2	Surrogate Limits	Qualifier
	% Recovery	% Recovery		
1,2-Dichloroethane-d4	99.3	99.4	80 - 120	PASS
Dibromofluoromethane	102	100	86 - 118	PASS
p-Bromofluorobenzene	103	102	86 - 115	PASS
Toluene-d8	95.9	97.4	88 - 110	PASS

* EXCEEDS %REC LIMIT

EXCEEDS RPD LIMIT

LCS_LCS2 - Modified 03/06/2008
PDF File ID: 2665889
Report generated: 11/15/2012 15:00



Microbac Laboratories Inc.
ORGANIC INSTRUMENT CHECK

BFB

Login Number: L12110393

Instrument: HPMS6

Analyst: ADC

Workgroup: WG387846

Tune ID: WG387846-01

Run Date: 01/25/2012

Run Time: 08:08

File ID: 6M105367

Cal ID: HPMS6 - 29-NOV-11

Target Mass	Rel. to Mass	Lower Limit%	Upper Limit%	Rel. Abn%	Raw Abn	Result Pass/Fail
50.0	95.0	15.0	40.0	20.4	3936	PASS
75.0	95.0	30.0	60.0	46.9	9059	PASS
95.0	95.0	100	100	100	19320	PASS
96.0	95.0	5.00	9.00	6.53	1262	PASS
173	174	0	2.00	0	0	PASS
174	95.0	50.0	100	91.6	17704	PASS
175	174	5.00	9.00	6.91	1223	PASS
176	174	95.0	101	96.1	17017	PASS
177	176	5.00	9.00	5.94	1011	PASS

This check relates to the following samples:

Lab ID	Client ID	Tag	Date Analyzed	Q
WG388587-01	STD	01	01/25/2012 10:12	
WG388587-02	STD	01	01/25/2012 10:45	
WG388587-03	STD	01	01/25/2012 11:17	
WG388587-04	STD-CCV	01	01/25/2012 11:49	
WG388587-05	STD	01	01/25/2012 12:22	
WG388587-06	STD	01	01/25/2012 12:55	
WG388587-07	STD	01	01/25/2012 13:27	
WG388587-08	SSCV	01	01/25/2012 14:00	

* Sample past 12 hour tune limit

TUNE - Modified 03/06/2008
PDF File ID: 2666135
Report generated 11/15/2012 15:00



Microbac Laboratories Inc.
ORGANIC INSTRUMENT CHECK

BFB

Login Number: L12110393

Instrument: HPMS6

Analyst: ADC

Workgroup: WG414018

Tune ID: WG414018-01

Run Date: 11/12/2012

Run Time: 14:09

File ID: 6M112620

Cal ID: HPMS6 - 12-NOV-12

Target Mass	Rel. to Mass	Lower Limit%	Upper Limit%	Rel. Abn%	Raw Abn	Result Pass/Fail
50.0	95.0	15.0	40.0	21.7	7367	PASS
75.0	95.0	30.0	60.0	48.4	16430	PASS
95.0	95.0	100	100	100	33957	PASS
96.0	95.0	5.00	9.00	6.89	2339	PASS
173	174	0	2.00	0	0	PASS
174	95.0	50.0	100	73.9	25106	PASS
175	174	5.00	9.00	7.42	1863	PASS
176	174	95.0	101	98.0	24594	PASS
177	176	5.00	9.00	6.51	1600	PASS

This check relates to the following samples:

Lab ID	Client ID	Tag	Date Analyzed	Q
WG414018-02	STD	01	11/12/2012 15:14	
WG414018-03	STD	01	11/12/2012 15:44	
WG414018-04	STD	01	11/12/2012 16:15	
WG414018-05	STD	01	11/12/2012 16:46	
WG414018-06	STD	01	11/12/2012 17:17	
WG414018-07	STD	01	11/12/2012 17:48	
WG414018-08	STD-CCV	01	11/12/2012 18:19	
WG414018-09	STD	01	11/12/2012 18:49	
WG414018-10	STD	01	11/12/2012 19:20	
WG414018-11	STD	01	11/12/2012 19:51	
WG414018-12	SSCV	01	11/12/2012 20:52	

* Sample past 12 hour tune limit

TUNE - Modified 03/06/2008
PDF File ID: 2666135
Report generated 11/15/2012 15:00



Microbac Laboratories Inc.
ORGANIC INSTRUMENT CHECK

BFB

Login Number: L12110393
Instrument: HPMS6
Analyst: FJB
Workgroup: WG414232

Tune ID: WG414232-01
Run Date: 11/14/2012
Run Time: 11:22
File ID: 6M112667

Cal ID: HPMS6 - 12-NOV-12

Target Mass	Rel. to Mass	Lower Limit%	Upper Limit%	Rel. Abn%	Raw Abn	Result Pass/Fail
50.0	95.0	15.0	40.0	23.1	1664	PASS
75.0	95.0	30.0	60.0	48.5	3499	PASS
95.0	95.0	100	100	100	7210	PASS
96.0	95.0	5.00	9.00	7.05	508	PASS
173	174	0	2.00	0	0	PASS
174	95.0	50.0	100	75.7	5457	PASS
175	174	5.00	9.00	5.79	316	PASS
176	174	95.0	101	96.4	5259	PASS
177	176	5.00	9.00	5.89	310	PASS

This check relates to the following samples:

Lab ID	Client ID	Tag	Date Analyzed	Q
WG414232-02	CCV	01	11/14/2012 11:47	
WG414233-01	BLANK	01	11/14/2012 12:48	
WG414233-01	BLANK	01	11/14/2012 12:48	
WG414233-02	LCS	01	11/14/2012 13:19	
WG414233-03	LCS2	01	11/14/2012 13:50	
L12110393-05	TB-110912	01	11/14/2012 15:55	
L12110393-01	BLDG 4-PIT-SSP1-GW-11082012	DL01	11/14/2012 22:32	
L12110393-03	DUP-GW-110812	DL01	11/14/2012 23:02	

* Sample past 12 hour tune limit

TUNE - Modified 03/06/2008
PDF File ID: 2666135
Report generated 11/15/2012 15:00



Calibration Table Report
Method: A9F00WTR.M
Title: A9-F00 Water - IC: 01/25/12 - HPMS6
Last Calibration: Thu Feb 02 09:44:46 2012
Curve: WG388587
Calibration Files

Compound	5	20	50	100	200	300	400	R^2		
	6M105371.D	6M105372.D	6M105373.D	6M105374.D	6M105375.D	6M105376.D	6M105377.D	Avg	%RSD	LINEAR
Fluorobenzene	ISTD									
Acetonitrile	0.018	0.021	0.024	0.024	0.024	0.025	0.025	0.023	11.902	
3-Chloro-1-propene	0.472	0.497	0.558	0.566	0.573	0.567	0.568	0.543	7.526	
2-Chloro-1,3-butadiene	0.409	0.461	0.530	0.541	0.554	0.549	0.549	0.513	10.953	
Ethyl Acetate	0.123	0.135	0.147	0.153	0.159	0.163	0.167	0.150	10.598	
Methacrylonitrile	0.050	0.054	0.064	0.065	0.068	0.070	0.070	0.063	12.553	
Isobutyl Alcohol		0.006	0.006	0.007	0.007	0.007	0.007	0.007	7.775	
1-Butanol			0.002	0.001	0.002	0.002	0.002	0.002	30.823	FAIL
Methyl methacrylate	0.107	0.132	0.158	0.168	0.176	0.183	0.184	0.158	18.144	1.000
2-Nitropropane	0.030	0.037	0.043	0.047	0.050	0.053	0.055	0.045	19.886	0.999
Chlorobenzene-d5	ISTD									
1,4-Dichlorobenzene-d4	ISTD									
Cyclohexanone		0.017	0.023	0.025	0.029	0.032	0.032	0.026	22.204	0.998

Thu Feb 02 09:47:01 2012



Calibration Table Report
Method: 8260WTR.M
Title: 8260B/624_WATER SOP:OVLMSV01 011/12/12 - HPMS6
Last Calibration: Tue Nov 13 09:04:10 2012
Curve: WG414018
Calibration Files

Compound											R^2	
	0.3	0.4	1	2	5	20	50	100	200	300	Avg	%RSD
	6M112622.D	6M112623.D	6M112624.D	6M112625.D	6M112626.D	6M112627.D	6M112628.D	6M112629.D	6M112630.D	6M112631.D		
Fluorobenzene	ISTD											
Dichlorodifluoromethane			0.167	0.160	0.180	0.211	0.204	0.215	0.220	0.218	0.197	12.230
Chloromethane			0.449	0.346	0.334	0.335	0.340	0.337	0.339	0.318	0.350	11.656
Vinyl Chloride	0.327	0.330	0.302	0.292	0.302	0.285	0.263	0.256	0.238	0.288	10.844	
1,3-Butadiene			0.234	0.201	0.216	0.158	0.101	0.075		0.164	39.322	1.007
Bromomethane			0.145	0.154	0.159	0.174	0.186	0.195	0.213	0.218	0.180	15.023
Chloroethane			0.156	0.168	0.174	0.179	0.181	0.182	0.186	0.186	0.176	5.935
Trichlorofluoromethane	0.360	0.374	0.398	0.402	0.422	0.420	0.436	0.447		0.436	0.410	7.170
Diethyl ether			0.102	0.109	0.115	0.108	0.113	0.116		0.124	0.112	6.437
Isoprene			0.411	0.405	0.414	0.457	0.449	0.465	0.483	0.498	0.448	7.730
Acrolein				0.009	0.010	0.010	0.011	0.012		0.013	0.011	14.952
1,1,2-Trichloro-1,2,2-Trifluoroel			0.200	0.224	0.226	0.236	0.233	0.245	0.253	0.254	0.234	7.613
Acetone					0.035	0.031	0.033	0.033	0.034	0.032	0.033	4.541
1,1-Dichloroethene	0.390	0.404	0.384	0.394	0.407	0.412	0.421	0.435	0.430	0.409	4.341	
Tert-Butyl Alcohol				0.009	0.010	0.009	0.009	0.009	0.009	0.009	0.009	3.685
Dimethyl Sulfide			0.283	0.279	0.295	0.316	0.310	0.310	0.324	0.327	0.306	5.848
Iodomethane					0.115	0.181	0.207	0.208	0.207	0.195	0.185	19.525
Methyl acetate			0.101	0.104	0.105	0.109	0.107	0.107	0.107	0.109	0.106	2.568
Methylene Chloride	0.252	0.234	0.228	0.232	0.232	0.241	0.244	0.260	0.267	0.243	5.641	
Carbon Disulfide			0.670	0.683	0.683	0.739	0.731	0.732	0.774	0.783	0.724	5.866
Acrylonitrile			0.036	0.045	0.047	0.046	0.049	0.050		0.058	0.047	13.950
Methyl Tert Butyl Ether			0.440	0.452	0.455	0.458	0.480	0.482	0.493	0.500	0.470	4.570
trans-1,2-Dichloroethene	0.212	0.238	0.233	0.239	0.244	0.251	0.256	0.270	0.275	0.246	7.775	
n-Hexane			0.265	0.261	0.259	0.284	0.269	0.278	0.283	0.280	0.272	3.738
Diisopropyl ether			0.699	0.725	0.758	0.716	0.734	0.754		0.748	0.734	2.975
Vinyl Acetate					0.246	0.260	0.280	0.267	0.269	0.263	0.264	4.281
1,1-Dichloroethane	0.499	0.448	0.462	0.476	0.471	0.492	0.499	0.518	0.524	0.488	5.215	
Ethyl-Tert-Butyl ether		0.609	0.635	0.674	0.636	0.655	0.678		0.683	0.653	4.203	
2-Butanone				0.049	0.047	0.049	0.050	0.049	0.049	0.049	0.049	2.316
Propionitrile			0.011	0.015	0.017	0.016	0.016	0.016	0.016	0.016	0.015	13.421
2,2-Dichloropropane	0.343	0.321	0.351	0.355	0.375	0.386	0.390	0.400	0.403	0.369	7.695	
cis-1,2-Dichloroethene	0.258	0.256	0.248	0.246	0.259	0.272	0.275	0.290	0.299	0.267	6.850	
Chloroform	0.411	0.442	0.422	0.412	0.421	0.431	0.444	0.450	0.469	0.476	0.438	5.147
1-Bromopropane			0.010	0.037	0.042	0.048	0.047	0.047	0.049	0.050	0.041	32.727
Bromochloromethane	0.072	0.137	0.135	0.142	0.147	0.153	0.154	0.151	0.149	0.138	18.538	1.000
Tetrahydrofuran			0.027	0.031	0.032	0.029	0.030	0.030		0.031	0.030	5.286
Dibromofluoromethane			0.253	0.258	0.243	0.256	0.251	0.257	0.265	0.266	0.256	2.914
1,1,1-Trichloroethane	0.380	0.351	0.363	0.383	0.392	0.410	0.420	0.447	0.454	0.400	8.922	
Cyclohexane			0.434	0.415	0.411	0.442	0.421	0.441	0.463	0.465	0.437	4.708
1,1-Dichloropropene	0.304	0.310	0.312	0.317	0.331	0.342	0.347	0.364	0.368	0.333	7.136	
Tert-Amyl-Methyl ether			0.446	0.466	0.493	0.469	0.488	0.513		0.542	0.488	6.585
Carbon Tetrachloride	0.316	0.328	0.328	0.35	0.364	0.377	0.396	0.399	0.424	0.3645	10.291	
1,2-Dichloroethane-d4				0.25	0.252	0.242	0.241	0.244	0.244	0.246	0.2456	1.6734
Heptane										0.011	0.011	0
1,2-Dichloroethane	0.283	0.28	0.291	0.3	0.3	0.315	0.319	0.333	0.335	0.3062	6.6477	
Benzene	1.031	0.892	0.891	0.916	0.918	0.954	0.975	1.026	1.039	0.9603	6.254	
Trichloroethene	0.313	0.273	0.246	0.259	0.255	0.267	0.275	0.292	0.3	0.2757	7.9765	
Methylcyclohexane			0.274	0.288	0.289	0.312	0.299	0.312	0.322	0.326	0.3028	5.9953
1,2-Dichloropropane	0.201	0.217	0.236	0.243	0.248	0.257	0.26	0.272	0.276	0.2455	10.001	
1,4-Dioxane				0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.0007	17.721
Bromodichloromethane	0.29	0.263	0.276	0.294	0.302	0.317	0.327	0.341	0.345	0.3062	9.3093	
Dibromomethane	0.031	0.093	0.102	0.112	0.115	0.119	0.123	0.128	0.131	0.1058	28.885	0.999
2-Chloroethyl Vinyl Ether			0.067	0.084	0.088	0.1	0.103	0.107	0.108	0.0938	15.921	0.999
4-Methyl-2-Pentanone				0.036	0.042	0.046	0.047	0.048	0.048	0.0446	10.208	
cis-1,3-Dichloropropene	0.304	0.28	0.292	0.326	0.345	0.366	0.373	0.393		0.335	12.255	
Dimethyl Disulfide			0.152	0.173	0.201	0.208	0.214	0.229	0.237	0.2022	14.995	
Chlorobenzene-d5	ISTD											
Toluene-d8			1.308	1.236	1.183	1.193	1.183	1.198	1.238	1.27	1.2263	3.7052
Toluene	1.392	1.304	1.322	1.333	1.382	1.445	1.467	1.536	1.554	1.415	6.4493	
Ethyl Methacrylate			0.175	0.35	0.267	0.268	0.27	0.266	0.274	0.283	0.269	17.532
Paraldehyde										0	0	
trans-1,3-Dichloropropene			0.269	0.309	0.345	0.402	0.431	0.44	0.459	0.478	0.3916	19.374
1,1,2-Trichloroethane	0.131	0.167	0.199	0.206	0.214	0.223	0.221	0.229	0.238	0.2032	16.744	0.999
2-Hexanone				0.07	0.088	0.102	0.104	0.105	0.106	0.0956	14.833	
1,3-Dichloropropane	0.248	0.344	0.337	0.358	0.373	0.385	0.383	0.391	0.405	0.358	13.126	
Tetrachloroethene	0.31	0.293	0.331	0.334	0.342	0.355	0.363	0.381	0.401	0.3455	9.7493	
Dibromochloromethane	0.233	0.222	0.247	0.266	0.288	0.313	0.32			0.2701	14.225	
1,2-Dibromoethane	0.124	0.161	0.187	0.2	0.212	0.226	0.226	0.232	0.239	0.2008	18.883	0.999
1-Chlorohexane	0.421	0.405	0.391	0.409	0.448	0.442	0.442	0.46	0.476	0.4326	6.4439	
Chlorobenzene	0.907	0.895	0.872	0.902	0.919	0.959	0.976	1.034	1.072	0.9483	7.1449	
1,1,1,2-Tetrachloroethane	0.307	0.286	0.286	0.311	0.327	0.357	0.374	0.407	0.424	0.3422	14.955	
Ethylbenzene	0.501	0.46	0.467	0.47	0.488	0.521	0.543	0.597	0.621	0.5186	11.22	
m-,p-Xylene	0.595	0.581	0.575	0.577	0.596	0.64	0.671	0.72	0.709	0.6293	9.1991	
o-Xylene	0.568	0.541	0.538	0.553	0.574	0.598	0.615	0.658	0.685	0.5922	8.7588	
Styrene	0.86	0.813	0.837	0.905	0.962	1.03	1.067	1.145	1.175	0.9769	13.731	
Bromoform			0.12	0.122	0.133	0.151	0.169	0.176	0.186	0.195	0.1565	18.606
Isopropylbenzene	1.414	1.313	1.314	1.339	1.39	1.471	1.502	1.559	1.564	1.4296	6.9329	0.997
1,4-Dichlorobenzene-d4	ISTD											
1,1,2,2-Tetrachloroethane	0.381	0.398	0.46	0.452	0.457	0.471	0.459	0.473	0.47	0.4468	7.4935	
p-Bromofluorobenzene			0.921	0.957	0.892	0.887	0.888	0.877	0.918	0.911	0.9064	2.8557

1,2,3-Trichloropropane		0.028	0.109	0.123	0.127	0.133	0.13	0.135	0.136	0.1152	31.34	1
trans-1,4-Dichloro-2-Butene			0.084	0.117	0.153	0.161	0.162	0.169	0.169	0.1451	22.332	1
n-Propylbenzene	3.245	3.115	3.121	3.148	3.232	3.357	3.353	3.521	3.419	3.2791	4.3357	
Bromobenzene	0.544	0.638	0.626	0.689	0.704	0.727	0.763	0.761	0.823	0.842	0.7116	12.915
1,3,5-Trimethylbenzene		2.493	2.219	2.21	2.224	2.311	2.438	2.462	2.643	2.646	2.4051	7.2168
2-Chlorotoluene		2.446	2.361	2.181	2.317	2.286	2.158	2.431	2.729	2.634	2.3935	8.0036
4-Chlorotoluene		2.151	1.946	2.086	2.086	2.162	2.258	2.281	2.336	2.426	2.1928	6.7151
a-Methylstyrene			1.153	1.177	1.293	1.435	1.463	1.481	1.626	1.638	1.4082	13.172
tert-Butylbenzene			0.423	0.402	0.426	0.433	0.455	0.463	0.502	0.514	0.4522	8.6931
1,2,4-Trimethylbenzene		2.543	2.318	2.324	2.333	2.374	2.521	2.569	2.765	2.742	2.4987	6.9856
sec-Butylbenzene		2.453	2.471	2.489	2.489	2.563	2.676	2.702	2.838	2.804	2.6094	5.7161
p-Isopropyltoluene		2.308	2.074	2.095	2.071	2.183	2.273	2.304	2.447	2.432	2.2431	6.4923
1,3-Dichlorobenzene		1.291	1.216	1.267	1.294	1.326	1.39	1.403	1.517	1.547	1.3613	8.3027
1,4-Dichlorobenzene	1.316	1.406	1.28	1.304	1.312	1.35	1.412	1.426	1.546	1.569	1.3922	7.2305
n-Butylbenzene		1.996	1.777	1.771	1.823	1.872	1.945	1.95	2.051	2.034	1.9134	5.5947
1,2-Dichlorobenzene	1.085	1.172	1.148	1.113	1.173	1.174	1.226	1.233	1.322	1.344	1.199	6.9921
1,2-Dibromo-3-Chloropropane				0.046	0.057	0.066	0.072	0.072	0.075	0.075	0.0661	16.802
1,2,4-Trichlorobenzene	0.66	0.702	0.674	0.695	0.712	0.741	0.743	0.802	0.82	0.7278	7.5107	
Hexachlorobutadiene			0.241	0.269	0.294	0.295	0.303	0.307	0.319	0.325	0.2941	9.4099
Naphthalene		1.202	1.198	1.194	1.228	1.22	1.286	1.28	1.366	1.398	1.2635	5.9621
1,2,3-Trichlorobenzene	0.552	0.594	0.497	0.577	0.607	0.595	0.619	0.617	0.657	0.672	0.5986	8.3793

Wed Nov 14 12:43:43 2012

Microbac Laboratories Inc.
ALTERNATE SOURCE CALIBRATION REPORT

Login Number: L12110393	Run Date: 11/12/2012	Sample ID: WG414018-12
Instrument ID: HPMS6	Run Time: 20:52	Method: 8260B
File ID: 6M112633	Analyst: ADC	QC Key: WATERLOO
ICal Workgroup: WG414018	Cal ID: HPMS6 - 12-NOV-12	

Analyte		Expected	Found	Units	RF	%D	UCL	Q
1,1-Dichloroethene	CCC	50.0	51.1	ug/L	0.417	2.10	25	
1,2-Dichloropropane	CCC	50.0	54.3	ug/L	0.267	8.70	25	
Chloroform	CCC	50.0	52.0	ug/L	0.455	4.00	25	
Ethylbenzene	CCC	50.0	49.9	ug/L	0.517	0.200	25	
Toluene	CCC	50.0	50.4	ug/L	1.43	0.700	25	
Vinyl Chloride	CCC	50.0	44.3	ug/L	0.255	11.5	25	
1,1,2,2-Tetrachloroethane	SPCC	50.0	53.5	ug/L	0.478	7.00	25	
1,1-Dichloroethane	SPCC	50.0	50.8	ug/L	0.495	1.60	25	
Bromoform	SPCC	50.0	46.8	ug/L	0.172	6.40	25	
Chlorobenzene	SPCC	50.0	46.8	ug/L	0.888	6.40	25	
Chloromethane	SPCC	50.0	46.9	ug/L	0.328	6.20	25	
1,1,1-Trichloroethane		50.0	52.2	ug/L	0.417	4.30	25	
1,1,2-Trichloro-1,2,2-Trifluoroethane		50.0	57.2	ug/L	0.268	14.5	25	
1,1,2-Trichloroethane		50.0	50.0	ug/L	0.230	0.100	25	
1,2,3-Trichlorobenzene		50.0	51.8	ug/L	0.620	3.60	25	
1,2,4-Trichlorobenzene		50.0	50.9	ug/L	0.741	1.80	25	
1,2-Dibromo-3-Chloropropane		50.0	50.3	ug/L	0.0737	0.700	25	
1,2-Dibromoethane		50.0	49.1	ug/L	0.228	1.80	25	
1,2-Dichlorobenzene		50.0	47.3	ug/L	1.13	5.40	25	
1,2-Dichloroethane		50.0	53.2	ug/L	0.326	6.40	25	
cis-1,2-Dichloroethene		50.0	52.1	ug/L	0.278	4.10	25	
trans-1,2-Dichloroethene		50.0	53.1	ug/L	0.262	6.20	25	
1,3-Dichlorobenzene		50.0	47.2	ug/L	1.29	5.50	25	
1,4-Dichlorobenzene		50.0	50.3	ug/L	1.40	0.600	25	
2-Butanone		50.0	50.7	ug/L	0.0494	1.40	25	
2-Hexanone		50.0	50.0	ug/L	0.0956	0	25	
4-Methyl-2-Pentanone		50.0	49.7	ug/L	0.0444	0.600	25	
Acetone		50.0	51.2	ug/L	0.0337	2.50	25	
Benzene		50.0	50.4	ug/L	0.968	0.800	25	
Bromochloromethane		50.0	52.0	ug/L	0.156	3.90	25	
Bromodichloromethane		50.0	52.3	ug/L	0.320	4.50	25	
Bromomethane		50.0	45.8	ug/L	0.190	8.40	25	
Carbon Disulfide		50.0	51.7	ug/L	0.749	3.40	25	
Carbon Tetrachloride		50.0	52.6	ug/L	0.384	5.30	25	
Chloroethane		50.0	52.5	ug/L	0.185	5.00	25	
cis-1,3-Dichloropropene		50.0	57.9	ug/L	0.388	15.8	25	
Cyclohexane		50.0	44.5	ug/L	0.389	10.9	25	
Dibromochloromethane		50.0	56.7	ug/L	0.306	13.4	25	
Dichlorodifluoromethane		50.0	67.8	ug/L	0.267	35.5	25	*
Isopropylbenzene		50.0	47.2	ug/L	1.35	5.60	25	
Methyl acetate		50.0	44.4	ug/L	0.0941	11.2	25	
Methyl Tert Butyl Ether		50.0	50.5	ug/L	0.475	1.00	25	

ALT - Modified 09/06/2007
Version 1.5 PDF File ID: 2665891
Report generated 11/15/2012 15:00



Microbac Laboratories Inc.
ALTERNATE SOURCE CALIBRATION REPORT

Login Number: L12110393 Run Date: 11/12/2012 Sample ID: WG414018-12
Instrument ID: HPMS6 Run Time: 20:52 Method: 8260B
File ID: 6M112633 Analyst: ADC QC Key: WATERL00
ICal Workgroup: WG414018 Cal ID: HPMS6 - 12-NOV-12

Analyte		Expected	Found	Units	RF	%D	UCL	Q
Methylcyclohexane		50.0	47.1	ug/L	0.285	5.90	25	
Methylene Chloride		50.0	50.5	ug/L	0.246	0.900	25	
m-,p-Xylene		100	97.4	ug/L	0.613	2.60	25	
o-Xylene		50.0	46.8	ug/L	0.554	6.40	25	
Styrene		50.0	53.4	ug/L	1.04	6.80	25	
Tetrachloroethene		50.0	50.5	ug/L	0.349	1.00	25	
trans-1,3-Dichloropropene		50.0	46.5	ug/L	0.424	7.00	25	
Trichloroethene		50.0	50.6	ug/L	0.279	1.20	25	
Trichlorofluoromethane		50.0	54.8	ug/L	0.450	9.70	25	

* Exceeds %D Limit

CCC Calibration Check Compounds
SPCC System Performance Check Compounds

ALT - Modified 09/06/2007
Version 1.5 PDF File ID: 2665891
Report generated 11/15/2012 15:00



CONTINUING CALIBRATION VERIFICATION (CCV)

Login Number: L12110393	Run Date: 11/14/2012	Sample ID: WG414232-02
Instrument ID: HPMS6	Run Time: 11:47	Method: 8260B
File ID: 6M112668	Analyst: FJB	QC Key: WATERL00
Workgroup (AAB#): WG414233	Cal ID: HPMS6 - 12-NOV-12	
Matrix: WATER		

Analyte		Expected	Found	UNITS	RF	%D	UCL	Q
1,1-Dichloroethene	CCC	50.0	53.2	ug/L	0.435	6.38	20	
1,2-Dichloropropane	CCC	50.0	50.2	ug/L	0.246	0.357	20	
Chloroform	CCC	50.0	51.5	ug/L	0.451	3.00	20	
Ethylbenzene	CCC	50.0	48.1	ug/L	0.499	3.71	20	
Toluene	CCC	50.0	49.5	ug/L	1.40	1.05	20	
Vinyl Chloride	CCC	50.0	47.1	ug/L	0.272	5.74	20	
1,1,2,2-Tetrachloroethane	SPCC	50.0	48.9	ug/L	0.437	2.23	20	
1,1-Dichloroethane	SPCC	50.0	51.4	ug/L	0.501	2.76	20	
Bromoform	SPCC	50.0	41.6	ug/L	0.153	16.8	20	
Chlorobenzene	SPCC	50.0	48.4	ug/L	0.918	3.25	20	
Chloromethane	SPCC	50.0	47.1	ug/L	0.329	5.87	20	
Xylenes		150	147	ug/L	0.598	1.83	20	
1,1,1-Trichloroethane		50.0	51.4	ug/L	0.412	2.87	20	
1,1,2-Trichloro-1,2,2-Trifluoroethane		50.0	54.7	ug/L	0.256	9.40	20	
1,1,2-Trichloroethane		50.0	43.8	ug/L	0.202	12.4	20	
1,2,3-Trichlorobenzene		50.0	49.2	ug/L	0.589	1.62	20	
1,2,4-Trichlorobenzene		50.0	49.9	ug/L	0.727	0.140	20	
1,2-Dibromo-3-Chloropropane		50.0	44.6	ug/L	0.0651	10.9	20	
1,2-Dibromoethane		50.0	44.0	ug/L	0.204	12.0	20	
1,2-Dichlorobenzene		50.0	49.9	ug/L	1.20	0.174	20	
1,2-Dichloroethane		50.0	49.4	ug/L	0.302	1.28	20	
cis-1,2-Dichloroethene		50.0	51.3	ug/L	0.274	2.64	20	
trans-1,2-Dichloroethene		50.0	53.2	ug/L	0.262	6.41	20	
1,3-Dichlorobenzene		50.0	51.0	ug/L	1.39	2.01	20	
1,4-Dichlorobenzene		50.0	50.6	ug/L	1.41	1.11	20	
2-Butanone		50.0	44.6	ug/L	0.0434	10.8	20	
2-Hexanone		50.0	41.9	ug/L	0.0801	16.3	20	
4-Methyl-2-Pentanone		50.0	42.2	ug/L	0.0377	15.5	20	
Acetone		50.0	47.5	ug/L	0.0313	4.97	20	
Benzene		50.0	49.6	ug/L	0.952	0.848	20	
Bromochloromethane		50.0	49.1	ug/L	0.148	1.90	20	
Bromodichloromethane		50.0	50.5	ug/L	0.309	0.958	20	
Bromomethane		50.0	55.7	ug/L	0.201	11.5	20	
Carbon Disulfide		50.0	52.5	ug/L	0.760	4.99	20	
Carbon Tetrachloride		50.0	52.7	ug/L	0.384	5.32	20	
Chloroethane		50.0	54.4	ug/L	0.192	8.84	20	
cis-1,3-Dichloropropene		50.0	51.4	ug/L	0.345	2.89	20	
Cyclohexane		50.0	49.5	ug/L	0.432	1.01	20	
Dibromochloromethane		50.0	53.7	ug/L	0.290	7.37	20	
Dichlorodifluoromethane		50.0	57.6	ug/L	0.227	15.2	20	
Isopropylbenzene		50.0	49.1	ug/L	1.40	1.77	20	
Methyl acetate		50.0	47.0	ug/L	0.0997	5.97	20	

CCV - Modified 03/05/2008
 PDF File ID: 2665892
 Report generated 11/15/2012 15:00



Microbac Laboratories Inc.
CONTINUING CALIBRATION VERIFICATION (CCV)

Login Number: <u>L12110393</u>	Run Date: <u>11/14/2012</u>	Sample ID: <u>WG414232-02</u>
Instrument ID: <u>HPMS6</u>	Run Time: <u>11:47</u>	Method: <u>8260B</u>
File ID: <u>6M112668</u>	Analyst: <u>FJB</u>	QC Key: <u>WATERL00</u>
Workgroup (AAB#): <u>WG414233</u>	Cal ID: <u>HPMS6 - 12-NOV-12</u>	
Matrix: <u>WATER</u>		

Analyte	Expected	Found	UNITS	RF	%D	UCL	Q
Methyl Tert Butyl Ether	50.0	48.2	ug/L	0.453	3.66	20	
Methylcyclohexane	50.0	50.8	ug/L	0.308	1.65	20	
Methylene Chloride	50.0	50.5	ug/L	0.246	0.959	20	
m-,p-Xylene	100	98.7	ug/L	0.621	1.29	20	
o-Xylene	50.0	48.5	ug/L	0.575	2.92	20	
Styrene	50.0	49.6	ug/L	0.969	0.846	20	
Tetrachloroethene	50.0	50.8	ug/L	0.351	1.62	20	
trans-1,3-Dichloropropene	50.0	43.4	ug/L	0.395	13.3	20	
Trichloroethene	50.0	48.0	ug/L	0.265	3.99	20	
Trichlorofluoromethane	50.0	56.5	ug/L	0.464	13.0	20	

* Exceeds %D Criteria

CCC Calibration Check Compounds
SPCC System Performance Check Compounds

CCV - Modified 03/05/2008
PDF File ID: 2665892
Report generated 11/15/2012 15:00



Microbac Laboratories Inc.
INTERNAL STANDARD AREA SUMMARY
(COMPARED TO CCV)

Login Number: L12110393
Instrument ID: HPMS6
Workgroup (AAB#): WG414233

CCV Number: WG414232-02
CAL ID: HPMS6 - 12-NOV-12
Matrix: WATER

Sample Number	Dilution	Tag	IS-1	IS-2	IS-3
WG414232-02	NA	NA	192038	415446	597787
Upper Limit	NA	NA	384076	830892	1195574
Lower Limit	NA	NA	96019	207723	298894
<u>L12110393-01</u>	<u>10.0</u>	<u>DL01</u>	<u>141488</u>	<u>298436</u>	<u>399486</u>
L12110393-03	10.0	DL01	145396	302095	403386
L12110393-05	1.00	01	150798	321207	434864
WG414233-01	1.00	01	161986	350893	468293
WG414233-02	1.00	01	168074	353024	478476
WG414233-03	1.00	01	168101	349885	475235

IS-1 - 1,4-Dichlorobenzene-d4
IS-2 - Chlorobenzene-d5
IS-3 - Fluorobenzene

Underline = Response outside limits



Microbac Laboratories Inc.
INTERNAL STANDARD RETENTION TIME SUMMARY
(COMPARED TO CCV)

Login Number: L12110393
Instrument ID: HPMS6
Workgroup (AAB#): WG414233

CCV Number: WG414232-02
CAL ID: HPMS6 - 12-NOV-12
Matrix: WATER

Sample Number	Dilution	Tag	IS-1	IS-2	IS-3
WG414232-02	NA	NA	18.35	14.8	10.32
Upper Limit	NA	NA	18.85	15.3	10.82
Lower Limit	NA	NA	17.85	14.3	9.82
L12110393-01	10.0	DL01	18.35	14.79	10.31
L12110393-03	10.0	DL01	18.35	14.8	10.32
L12110393-05	1.00	01	18.35	14.8	10.32
WG414233-01	1.00	01	18.35	14.79	10.32
WG414233-02	1.00	01	18.35	14.79	10.32
WG414233-03	1.00	01	18.36	14.79	10.32

IS-1 - 1,4-Dichlorobenzene-d4
IS-2 - Chlorobenzene-d5
IS-3 - Fluorobenzene

Underline = Response outside limits

INTERNAL_STD_RT - Modified 03/06/2008
PDF File ID: 2666137
Report generated 11/15/2012 15:00



2.1.1.3 Sample Data

Data File : C:\MSDCHEM\1\DATA\111412\6M112689.D Vial: 23
 Acq On : 14 Nov 2012 22:32 Operator: FJB
 Sample : L12110393-01 10X A 826-SPE Inst : HPMS6
 Misc : 1,10 foamy/cloudy/sulfur odor Multiplr: 1.00
 MS Integration Params: RTEINT.P
 Quant Time: Nov 15 09:24:44 2012 Quant Results File: 8260WTR.RES

Quant Method : C:\MSDCHEM\1\METHODS\8260WTR.M (RTE Integrator)
 Title : 8260B/624_WATER SOP:OVLMSV01 011/12/12 - HPMS6
 Last Update : Tue Nov 13 09:04:10 2012
 Response via : Initial Calibration
 DataAcq Meth : 8260WTR

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) Fluorobenzene	10.31	96	399486	25.00	ug/L	0.00
57) Chlorobenzene-d5	14.79	117	298436	25.00	ug/L	0.00
78) 1,4-Dichlorobenzene-d4	18.35	152	141488	25.00	ug/L	0.00

System Monitoring Compounds						
37) Dibromofluoromethane	9.12	111	102312	24.9870	ug/L	0.00
Spiked Amount	25.000	Range	86 - 118	Recovery	=	99.96%
43) 1,2-Dichloroethane-d4	9.85	65	91544	23.3302	ug/L	0.00
Spiked Amount	25.000	Range	80 - 120	Recovery	=	93.32%
58) Toluene-d8	12.60	98	356288	24.3388	ug/L	0.00
Spiked Amount	25.000	Range	88 - 110	Recovery	=	97.36%
80) p-Bromofluorobenzene	16.57	95	130439	25.4280	ug/L	0.00
Spiked Amount	25.000	Range	86 - 115	Recovery	=	101.72%

Target Compounds						Qvalue
13) Acetone	5.42	43	37457	71.2037	ug/L	83
14) 1,1-Dichloroethene	5.48	61	2742	0.4200	ug/L	# 24
16) Dimethyl Sulfide	5.91	62	4788	0.9803	ug/L	97
19) Methylene Chloride	6.46	84	5573	1.4341	ug/L	99
20) Carbon Disulfide	6.47	76	85227	7.3635	ug/L	100
25) Diisopropyl ether	7.45	45	17322	1.4778	ug/L	96
26) Vinyl Acetate	7.45	43	8384	1.9865	ug/L	# 76
29) 2-Butanone	8.28	43	896	1.1511	ug/L	# 54
32) cis-1,2-Dichloroethene	8.57	96	999	0.2341	ug/L	84
33) Chloroform	8.80	83	88731	12.6866	ug/L	99
44) Heptane	9.86	57	5994	33.9926	ug/L	# 1
46) Benzene	10.01	78	1954	0.1273	ug/L	# 59
54) 4-Methyl-2-Pentanone	11.91	58	196398	275.3415	ug/L	97
59) Toluene	12.71	91	87142	5.1589	ug/L	99
63) 1,1,2-Trichloroethane	13.03	97	1693	0.8696	ug/L	# 12
65) 1,3-Dichloropropane	13.56	76	977	0.2286	ug/L	# 1
70) Chlorobenzene	14.85	112	16491	1.4568	ug/L	95
73) m-,p-Xylene	15.02	106	3223	0.4290	ug/L	88
74) o-Xylene	15.66	106	2518	0.3562	ug/L	67
75) Styrene	15.65	104	18299	1.5691	ug/L	# 27
77) Isopropylbenzene	16.18	105	3084	0.1807	ug/L	# 63

(#) = qualifier out of range (m) = manual integration
 6M112689.D 8260WTR.M Thu Nov 15 09:24:45 2012

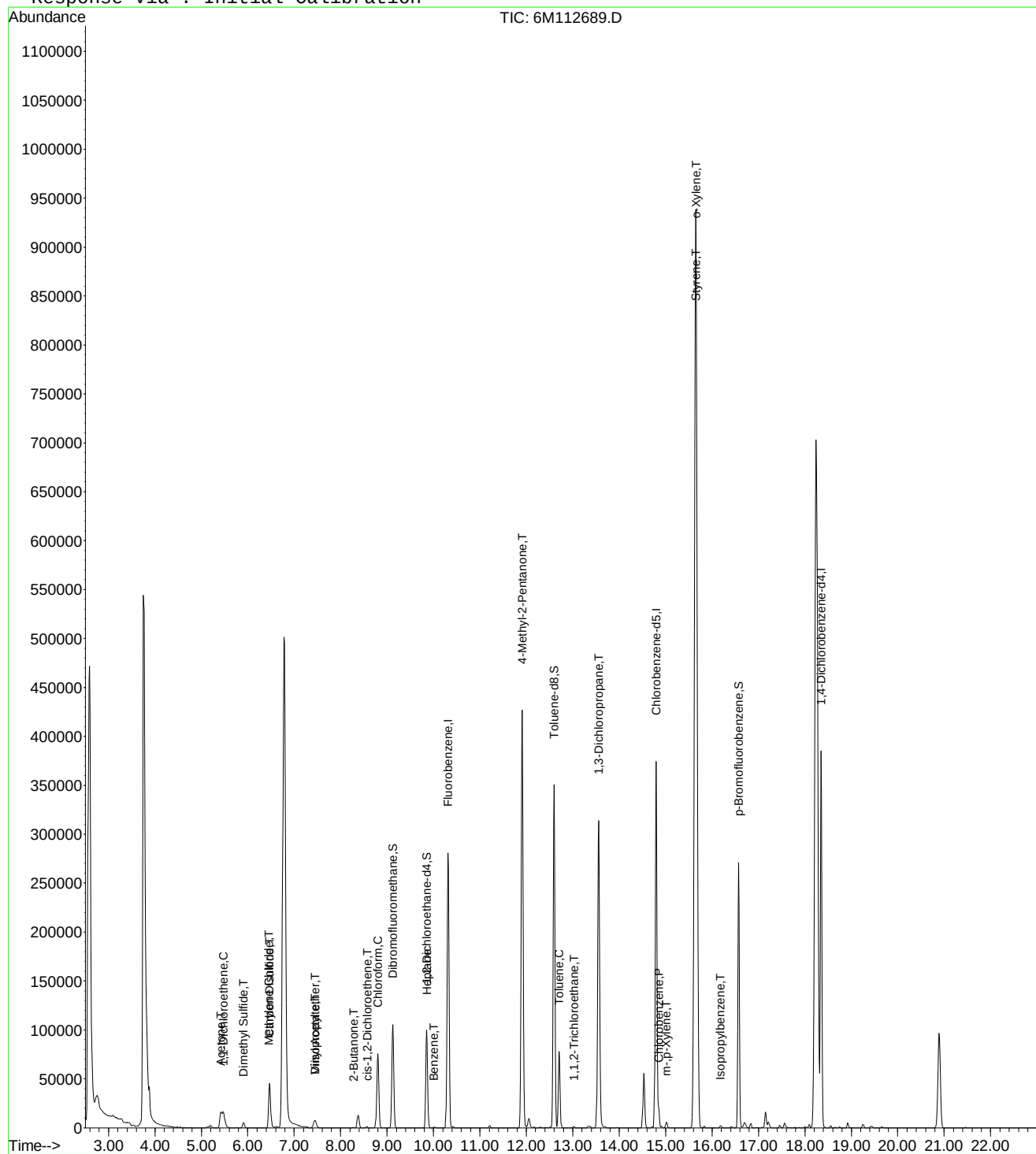
Page 1

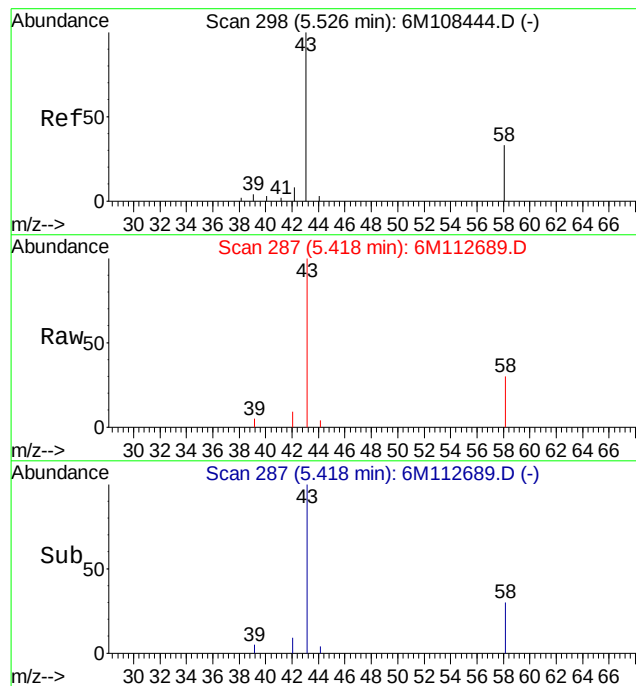
Data File : C:\MSDCHEM\1\DATA\111412\6M112689.D
Acq On : 14 Nov 2012 22:32
Sample : L12110393-01 10X A 826-SPE
Misc : 1,10 foamy/cloudy/sulfur odor
MS Integration Params: RTEINT.P
Quant Time: Nov 15 9:24 2012

Vial: 23
Operator: FJB
Inst : HPMS6
Multiplr: 1.00

Quant Results File: 8260WTR.RES

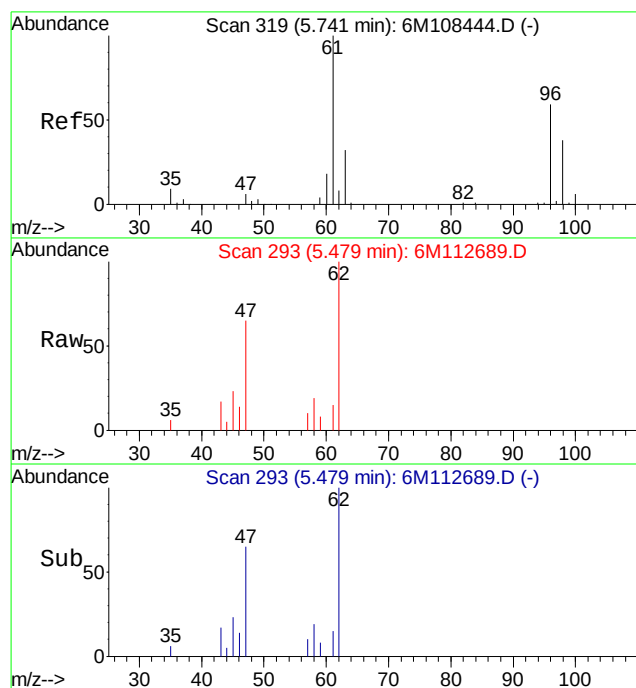
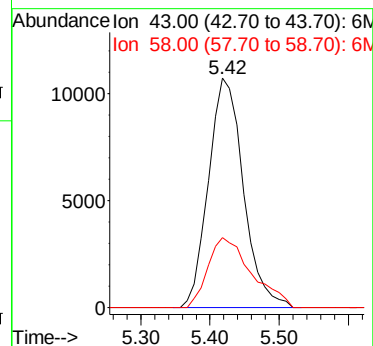
Method : C:\MSDCHEM\1\METHODS\8260WTR.M (RTE Integrator)
Title : 8260B/624_WATER SOP:OVLMSV01 011/12/12 - HPMS6
Last Update : Tue Nov 13 09:04:10 2012
Response via : Initial Calibration





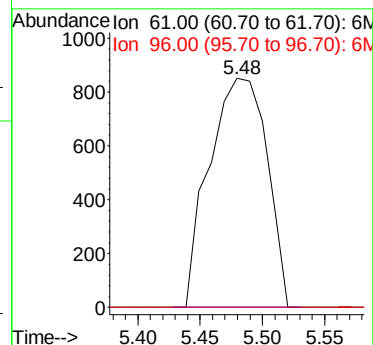
#13
Acetone
Concen: 71.20 ug/L
RT: 5.42 min Scan# 287
Delta R.T. -0.01 min
Lab File: 6M112689.D
Acq: 14 Nov 2012 22:32

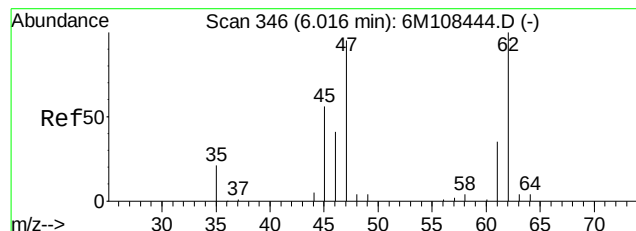
Tgt Ion: 43 Resp: 37457
Ion Ratio Lower Upper
43 100
58 37.9 17.3 40.5



#14
1,1-Dichloroethene
Concen: 0.42 ug/L
RT: 5.48 min Scan# 293
Delta R.T. -0.16 min
Lab File: 6M112689.D
Acq: 14 Nov 2012 22:32

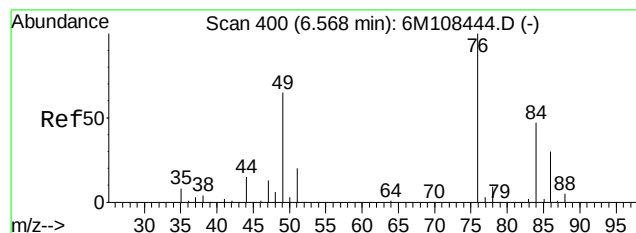
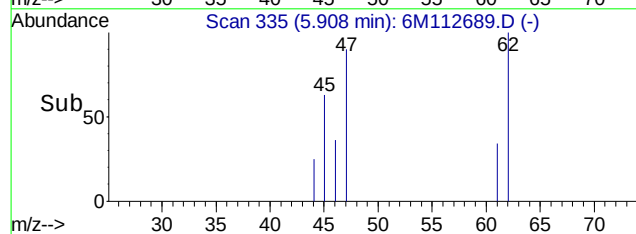
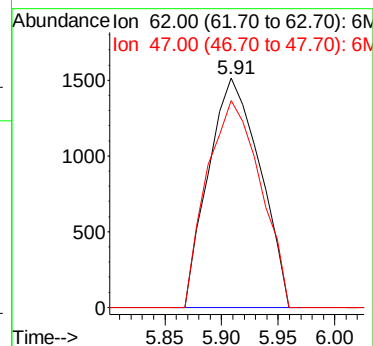
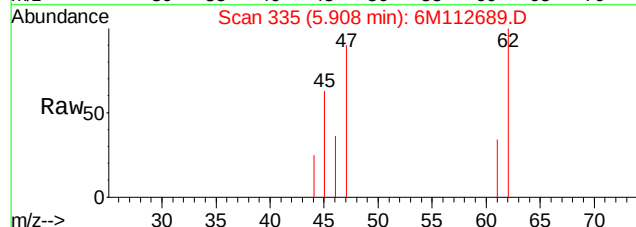
Tgt Ion: 61 Resp: 2742
Ion Ratio Lower Upper
61 100
96 0.0 32.7 76.3#





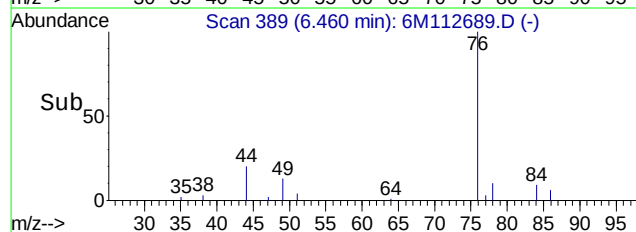
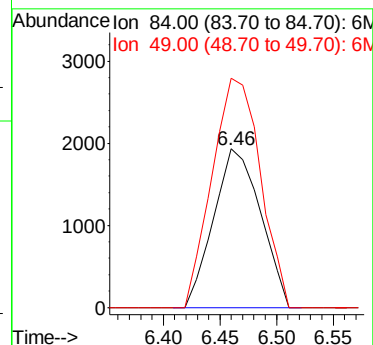
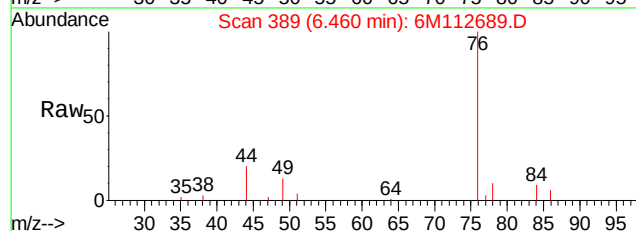
#16
Dimethyl Sulfide
Concen: 0.98 ug/L
RT: 5.91 min Scan# 335
Delta R.T. -0.01 min
Lab File: 6M112689.D
Acq: 14 Nov 2012 22:32

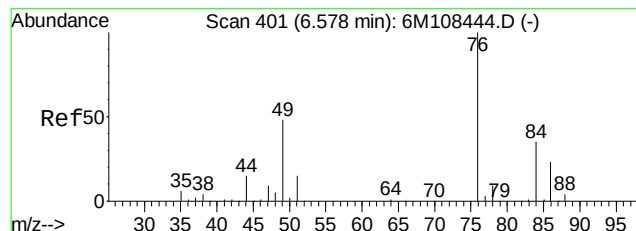
Tgt Ion: 62 Resp: 4788
Ion Ratio Lower Upper
62 100
47 93.6 57.8 134.8



#19
Methylene Chloride
Concen: 1.43 ug/L
RT: 6.46 min Scan# 389
Delta R.T. -0.01 min
Lab File: 6M112689.D
Acq: 14 Nov 2012 22:32

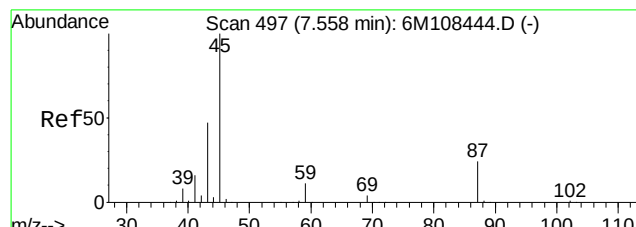
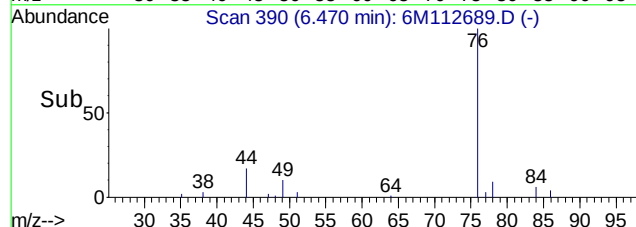
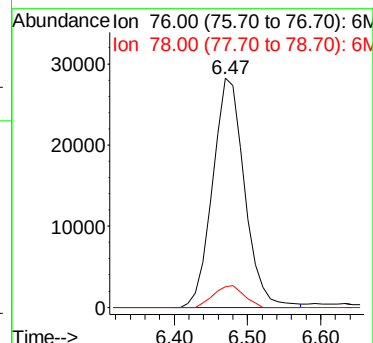
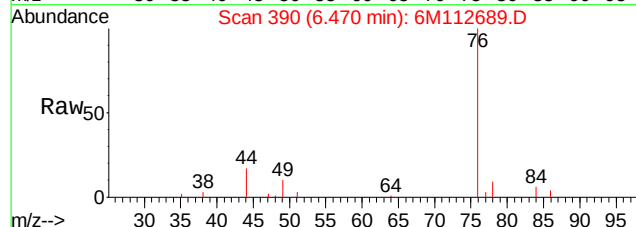
Tgt Ion: 84 Resp: 5573
Ion Ratio Lower Upper
84 100
49 148.9 88.6 206.8





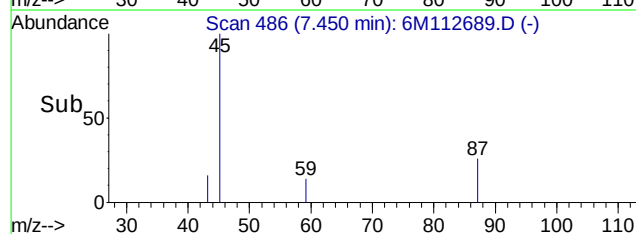
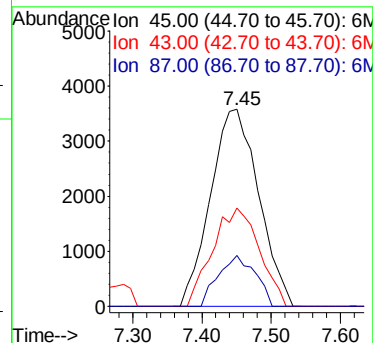
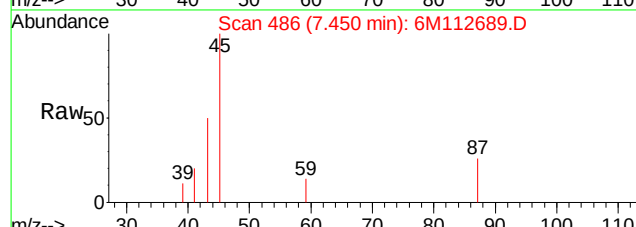
#20
Carbon Disulfide
Concen: 7.36 ug/L
RT: 6.47 min Scan# 390
Delta R.T. -0.01 min
Lab File: 6M112689.D
Acq: 14 Nov 2012 22:32

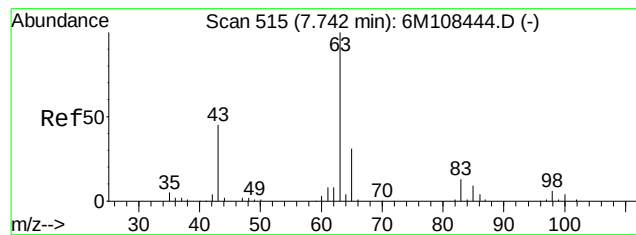
Tgt Ion	Ratio	Lower	Upper
76	100		
78	9.0	5.3	12.5



#25
Diisopropyl ether
Concen: 1.48 ug/L
RT: 7.45 min Scan# 486
Delta R.T. 0.00 min
Lab File: 6M112689.D
Acq: 14 Nov 2012 22:32

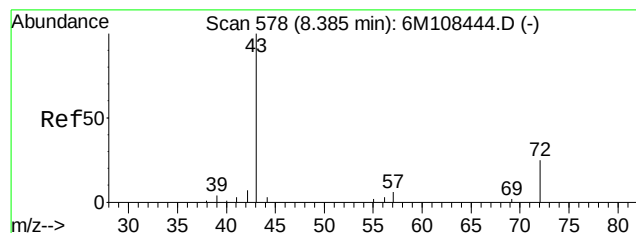
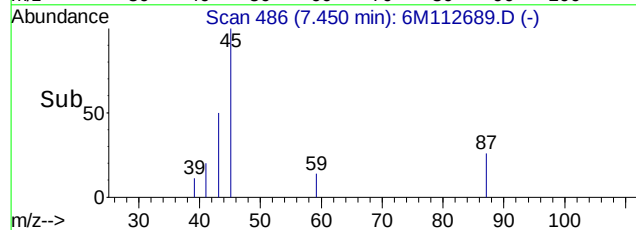
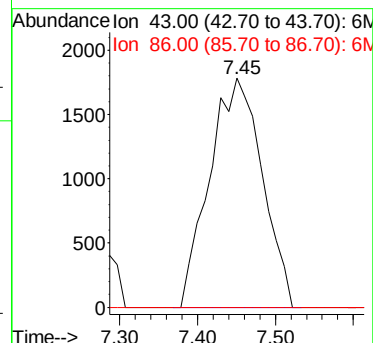
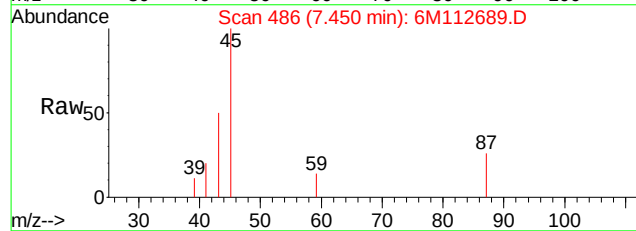
Tgt Ion	Ratio	Lower	Upper
45	100		
43	48.4	28.1	65.5
87	19.9	14.2	33.2





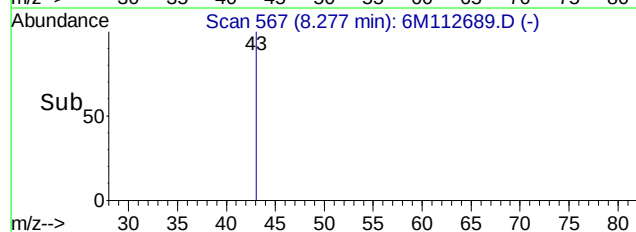
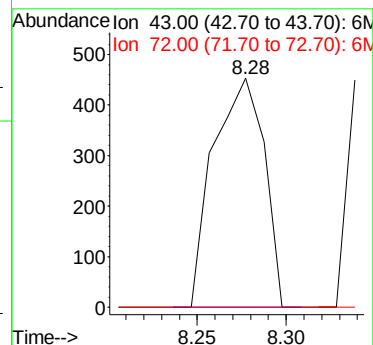
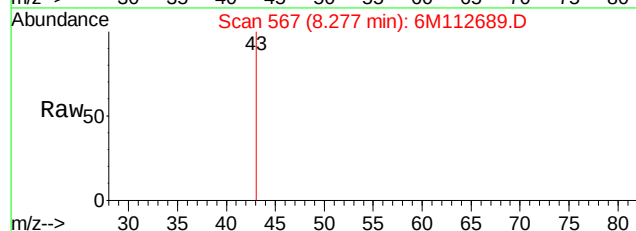
#26
 Vinyl Acetate
 Concen: 1.99 ug/L
 RT: 7.45 min Scan# 486
 Delta R.T. -0.18 min
 Lab File: 6M112689.D
 Acq: 14 Nov 2012 22:32

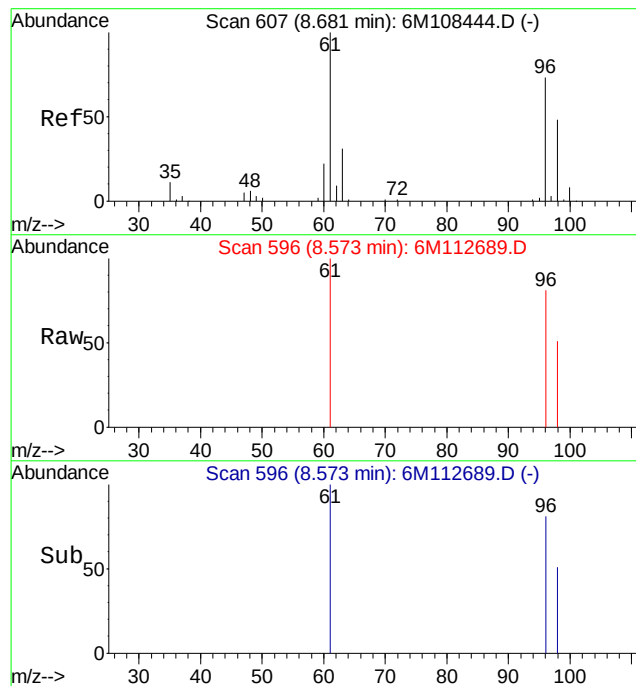
Tgt Ion: 43 Resp: 8384
 Ion Ratio Lower Upper
 43 100
 86 0.0 5.3 12.3#



#29
 2-Butanone
 Concen: 1.15 ug/L
 RT: 8.28 min Scan# 567
 Delta R.T. 0.01 min
 Lab File: 6M112689.D
 Acq: 14 Nov 2012 22:32

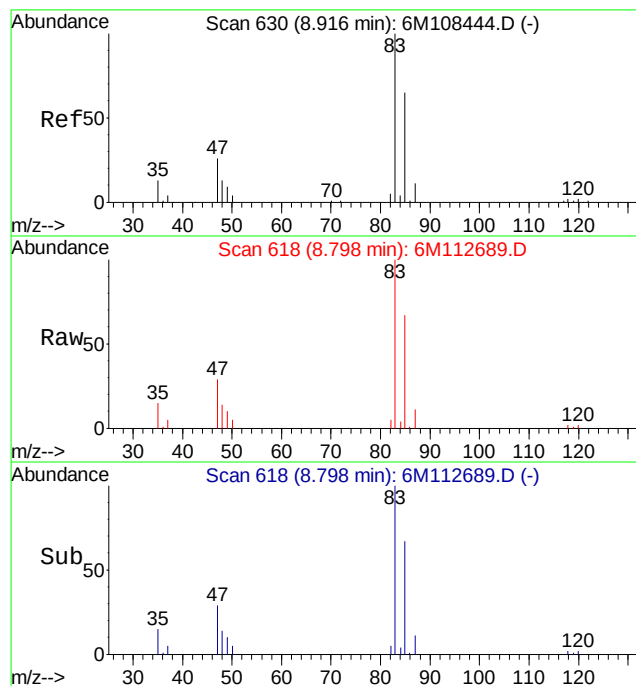
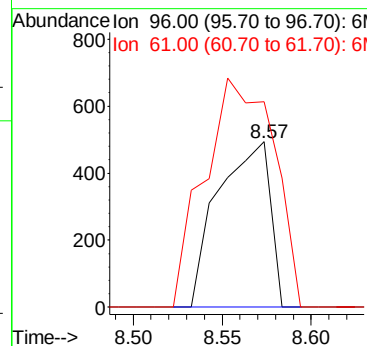
Tgt Ion: 43 Resp: 896
 Ion Ratio Lower Upper
 43 100
 72 0.0 12.9 30.1#





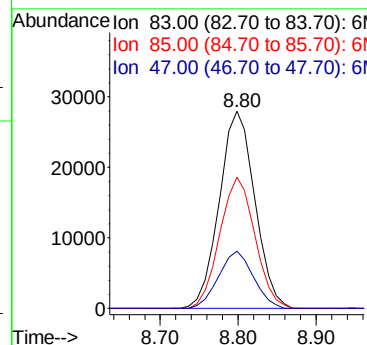
#32
 cis-1,2-Dichloroethene
 Concen: 0.23 ug/L
 RT: 8.57 min Scan# 596
 Delta R.T. 0.00 min
 Lab File: 6M112689.D
 Acq: 14 Nov 2012 22:32

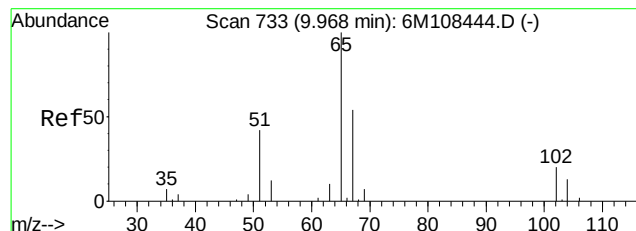
Tgt Ion	Ratio	Lower	Upper
96	100		
61	185.6	98.8	230.4



#33
 Chloroform
 Concen: 12.69 ug/L
 RT: 8.80 min Scan# 618
 Delta R.T. -0.01 min
 Lab File: 6M112689.D
 Acq: 14 Nov 2012 22:32

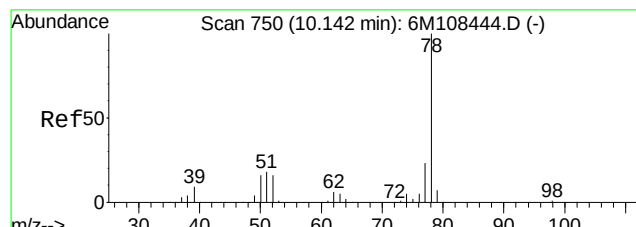
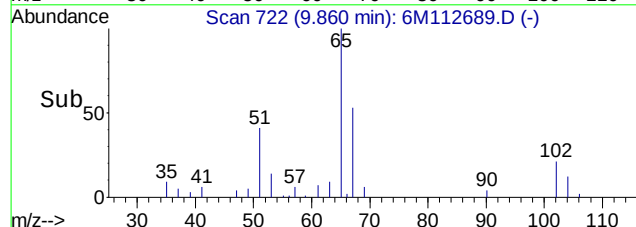
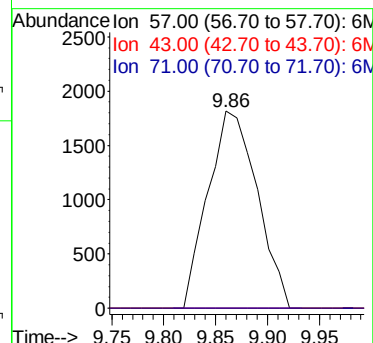
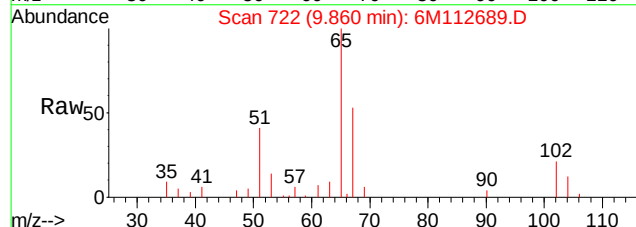
Tgt Ion	Ratio	Lower	Upper
83	100		
85	65.8	39.1	91.1
47	28.4	16.9	39.5





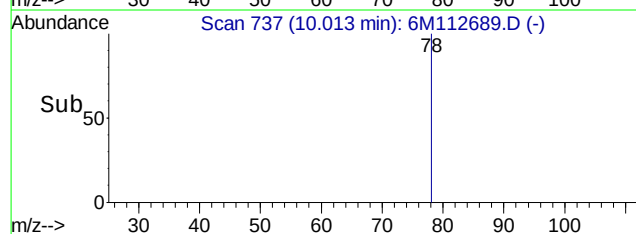
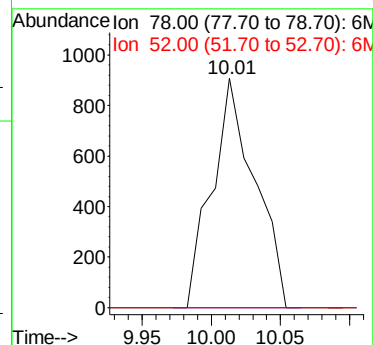
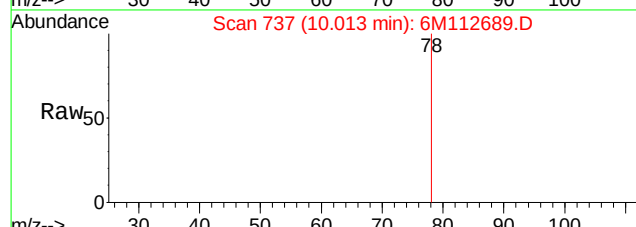
#44
Heptane
Concen: 33.99 ug/L
RT: 9.86 min Scan# 722
Delta R.T. 0.08 min
Lab File: 6M112689.D
Acq: 14 Nov 2012 22:32

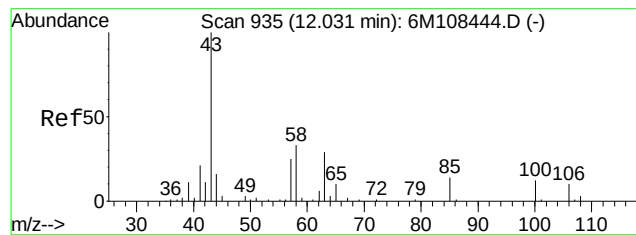
Tgt Ion: 57 Resp: 5994
Ion Ratio Lower Upper
57 100
43 0.0 1074.4 2507.0#
71 0.0 309.8 722.8#



#46
Benzene
Concen: 0.13 ug/L
RT: 10.01 min Scan# 737
Delta R.T. -0.01 min
Lab File: 6M112689.D
Acq: 14 Nov 2012 22:32

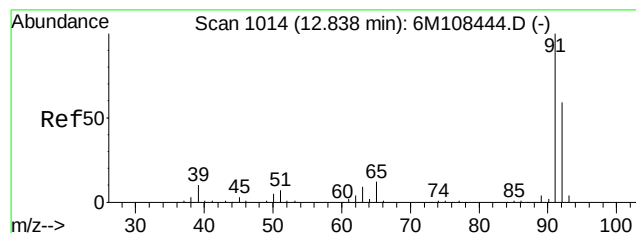
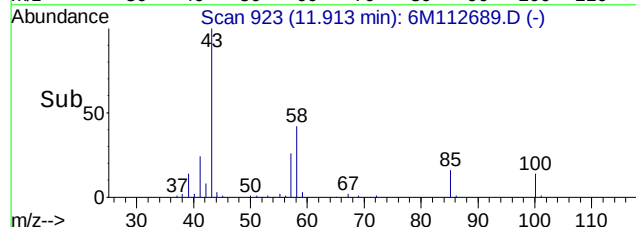
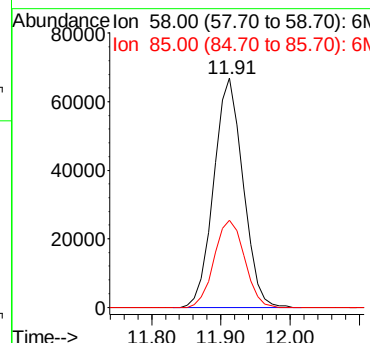
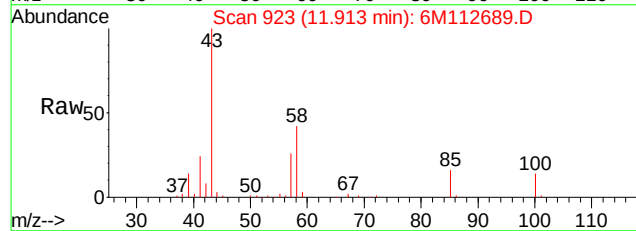
Tgt Ion: 78 Resp: 1954
Ion Ratio Lower Upper
78 100
52 0.0 11.1 25.9#





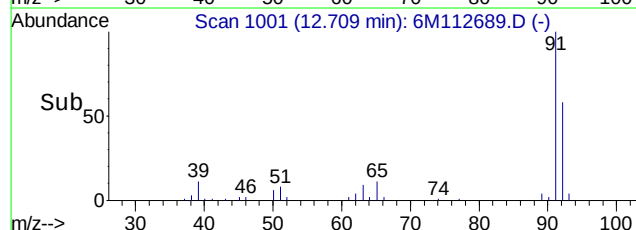
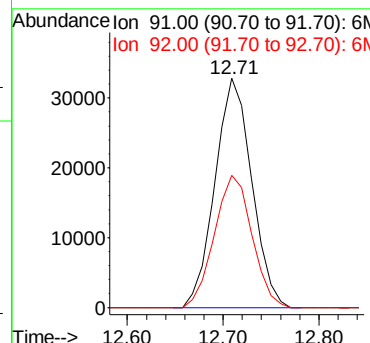
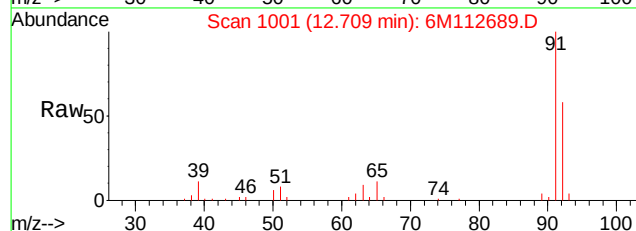
#54
4-Methyl-2-Pentanone
Concen: 275.34 ug/L
RT: 11.91 min Scan# 923
Delta R.T. -0.01 min
Lab File: 6M112689.D
Acq: 14 Nov 2012 22:32

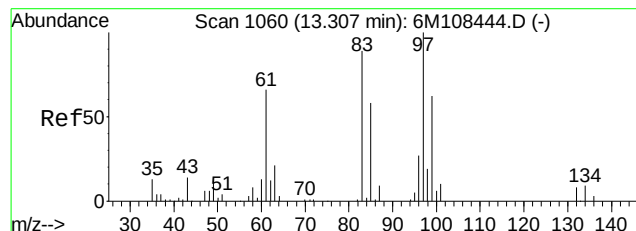
Tgt Ion: 58 Resp: 196398
Ion Ratio Lower Upper
58 100
85 39.2 22.6 52.6



#59
Toluene
Concen: 5.16 ug/L
RT: 12.71 min Scan# 1001
Delta R.T. -0.01 min
Lab File: 6M112689.D
Acq: 14 Nov 2012 22:32

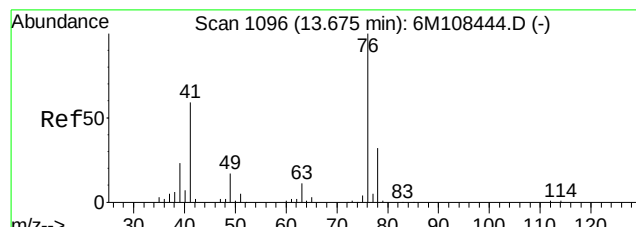
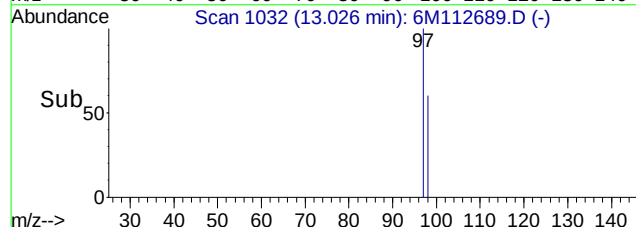
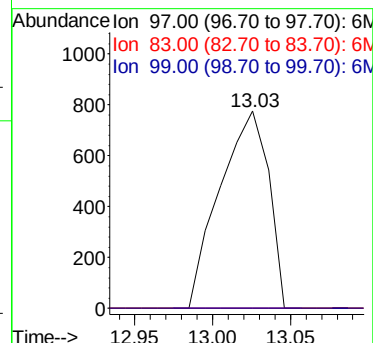
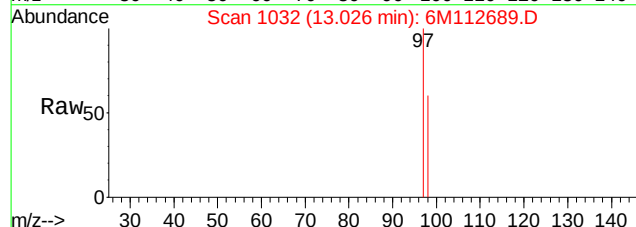
Tgt Ion: 91 Resp: 87142
Ion Ratio Lower Upper
91 100
92 58.7 35.7 83.3





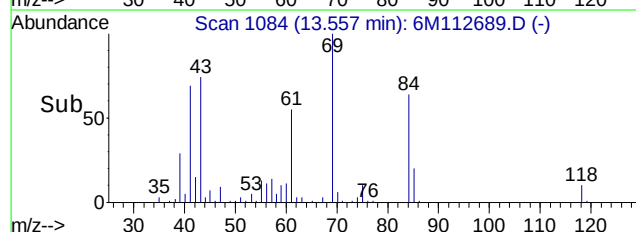
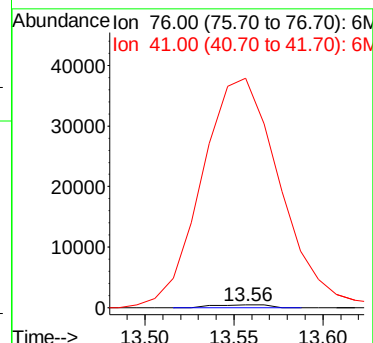
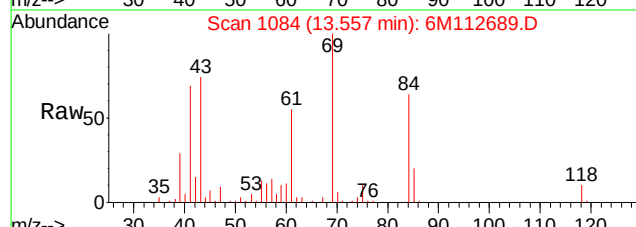
#63
 1,1,2-Trichloroethane
 Concen: 0.87 ug/L
 RT: 13.03 min Scan# 1032
 Delta R.T. -0.16 min
 Lab File: 6M112689.D
 Acq: 14 Nov 2012 22:32

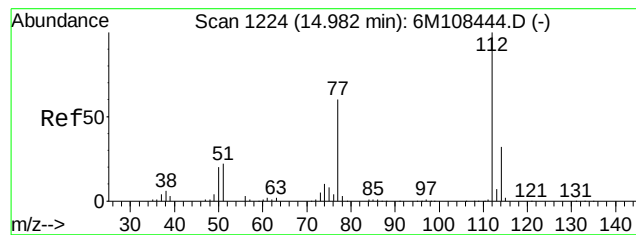
Tgt Ion:	97	Resp:	1693
Ion	Ratio	Lower	Upper
97	100		
83	0.0	50.3	117.5#
99	0.0	37.3	87.1#



#65
 1,3-Dichloropropane
 Concen: 0.23 ug/L
 RT: 13.56 min Scan# 1084
 Delta R.T. 0.01 min
 Lab File: 6M112689.D
 Acq: 14 Nov 2012 22:32

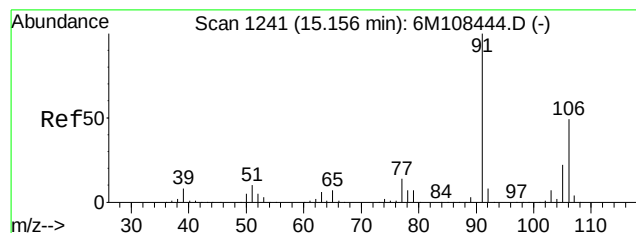
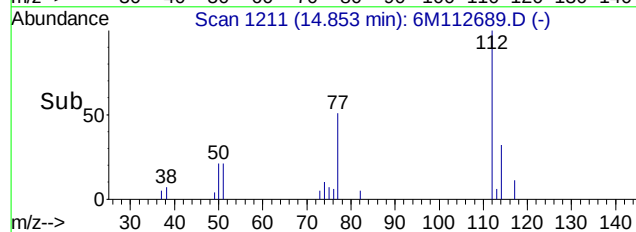
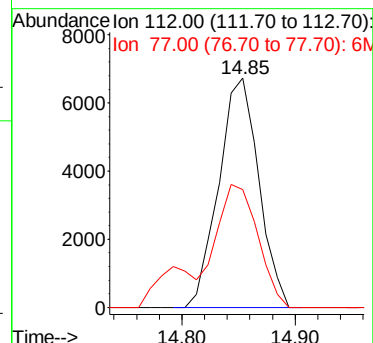
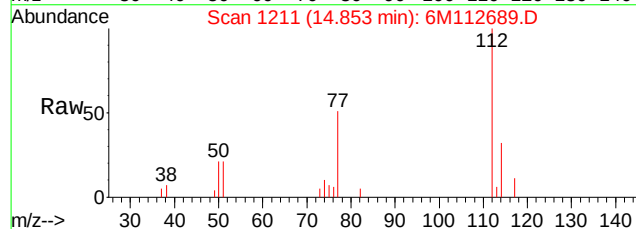
Tgt Ion:	76	Resp:	977
Ion	Ratio	Lower	Upper
76	100		
41	120	29.4	40.1
			93.5#





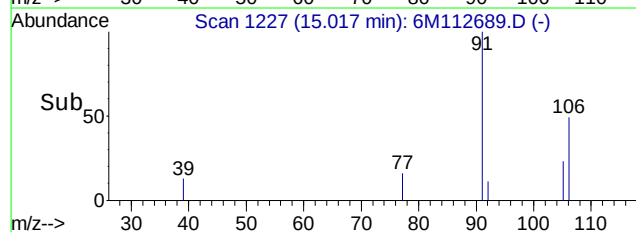
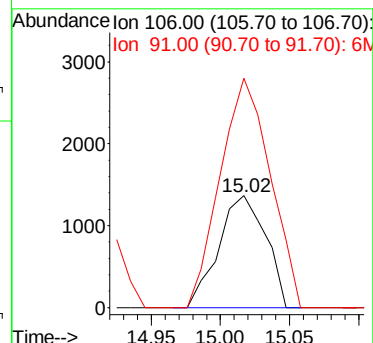
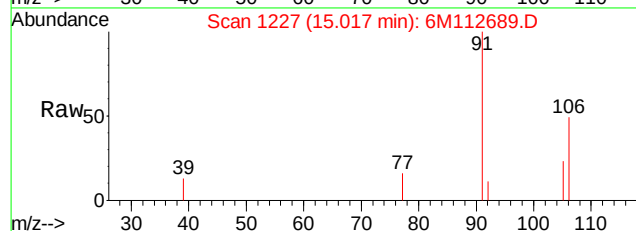
#70
Chlorobenzene
Concen: 1.46 ug/L
RT: 14.85 min Scan# 1211
Delta R.T. 0.00 min
Lab File: 6M112689.D
Acq: 14 Nov 2012 22:32

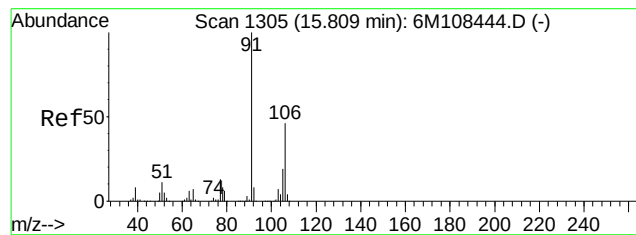
Tgt Ion:112 Resp: 16491
Ion Ratio Lower Upper
112 100
77 55.7 35.8 83.4



#73
m-,p-Xylene
Concen: 0.43 ug/L
RT: 15.02 min Scan# 1227
Delta R.T. 0.00 min
Lab File: 6M112689.D
Acq: 14 Nov 2012 22:32

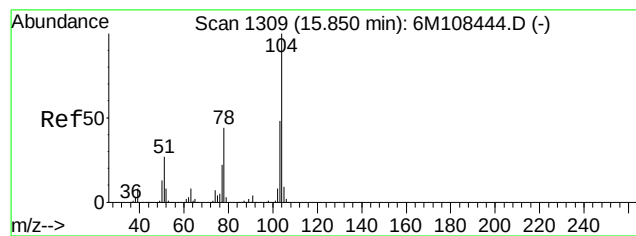
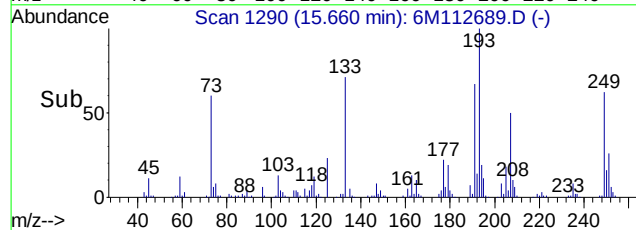
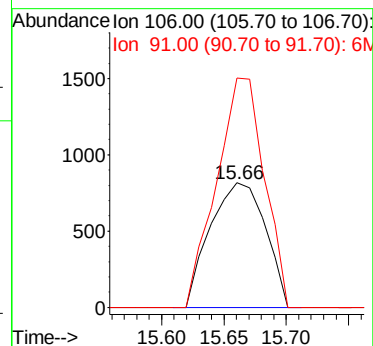
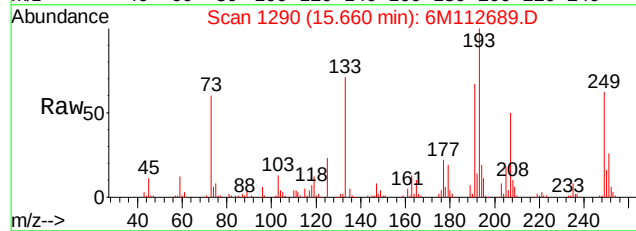
Tgt Ion:106 Resp: 3223
Ion Ratio Lower Upper
106 100
91 218.4 120.5 281.1





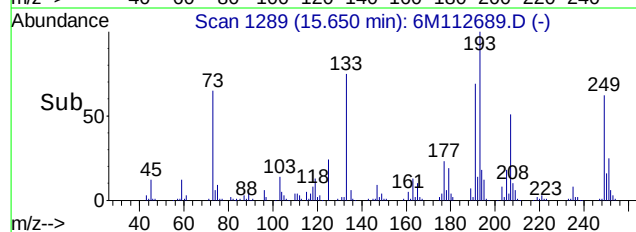
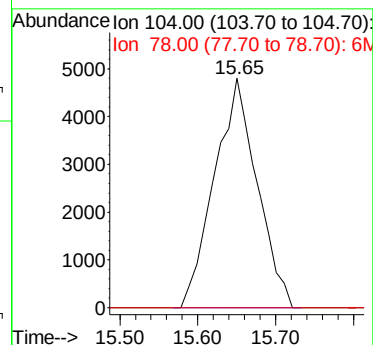
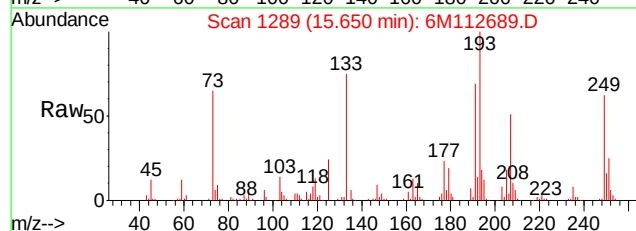
#74
o-Xylene
Concen: 0.36 ug/L
RT: 15.66 min Scan# 1290
Delta R.T. -0.01 min
Lab File: 6M112689.D
Acq: 14 Nov 2012 22:32

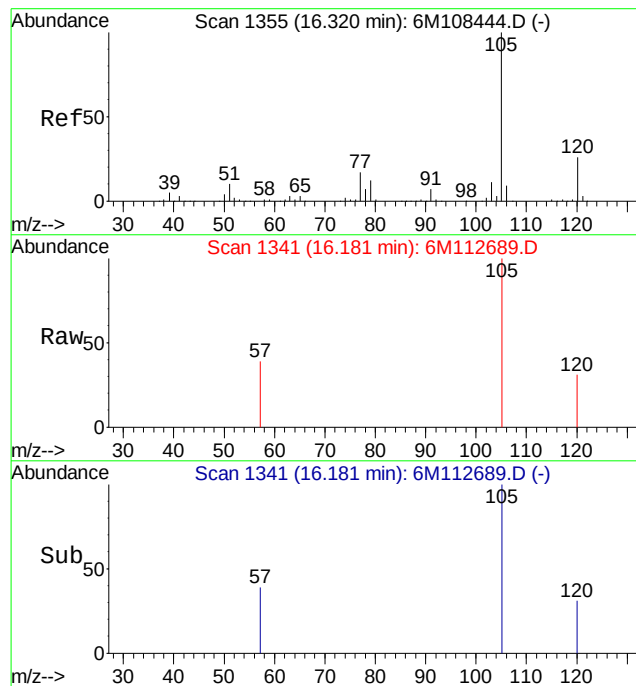
Tgt Ion:106 Resp: 2518
Ion Ratio Lower Upper
106 100
91 159.5 126.8 296.0



#75
Styrene
Concen: 1.57 ug/L
RT: 15.65 min Scan# 1289
Delta R.T. -0.07 min
Lab File: 6M112689.D
Acq: 14 Nov 2012 22:32

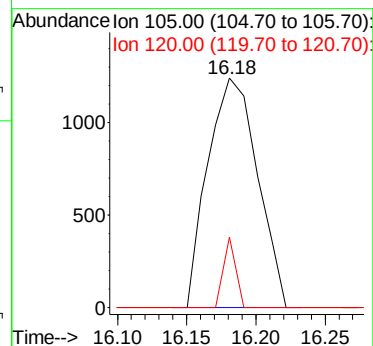
Tgt Ion:104 Resp: 18299
Ion Ratio Lower Upper
104 100
78 0.0 30.0 70.0#





#77
 Isopropylbenzene
 Concen: 0.18 ug/L
 RT: 16.18 min Scan# 1341
 Delta R.T. 0.00 min
 Lab File: 6M112689.D
 Acq: 14 Nov 2012 22:32

Tgt Ion:105 Resp: 3084
 Ion Ratio Lower Upper
 105 100
 120 7.5 16.1 37.7#



Data File : C:\MSDCHEM\1\DATA\111412\6M112689.D Vial: 23
 Acq On : 14 Nov 2012 22:32 Operator: FJB
 Sample : L12110393-01 10X A 826-SPE Inst : HPMS6
 Misc : 1,10 foamy/cloudy/sulfur odor Multiplr: 1.00
 MS Integration Params: RTEINT.P

Method : C:\MSDCHEM\1\METHODS\8260WTR.M (RTE Integrator)
 Title : 8260B/624_WATER SOP:OVLMSV01 011/12/12 - HPMS6
 Smoothing : ON Filtering: 5
 Sampling : 1 Min Area: 100 Area counts
 Start Thrs: 0.2 Max Peaks: 100
 Stop Thrs : 0 Peak Location: TOP

If leading or trailing edge < 100 prefer < Baseline drop else tangent >
 Peak separation: 5

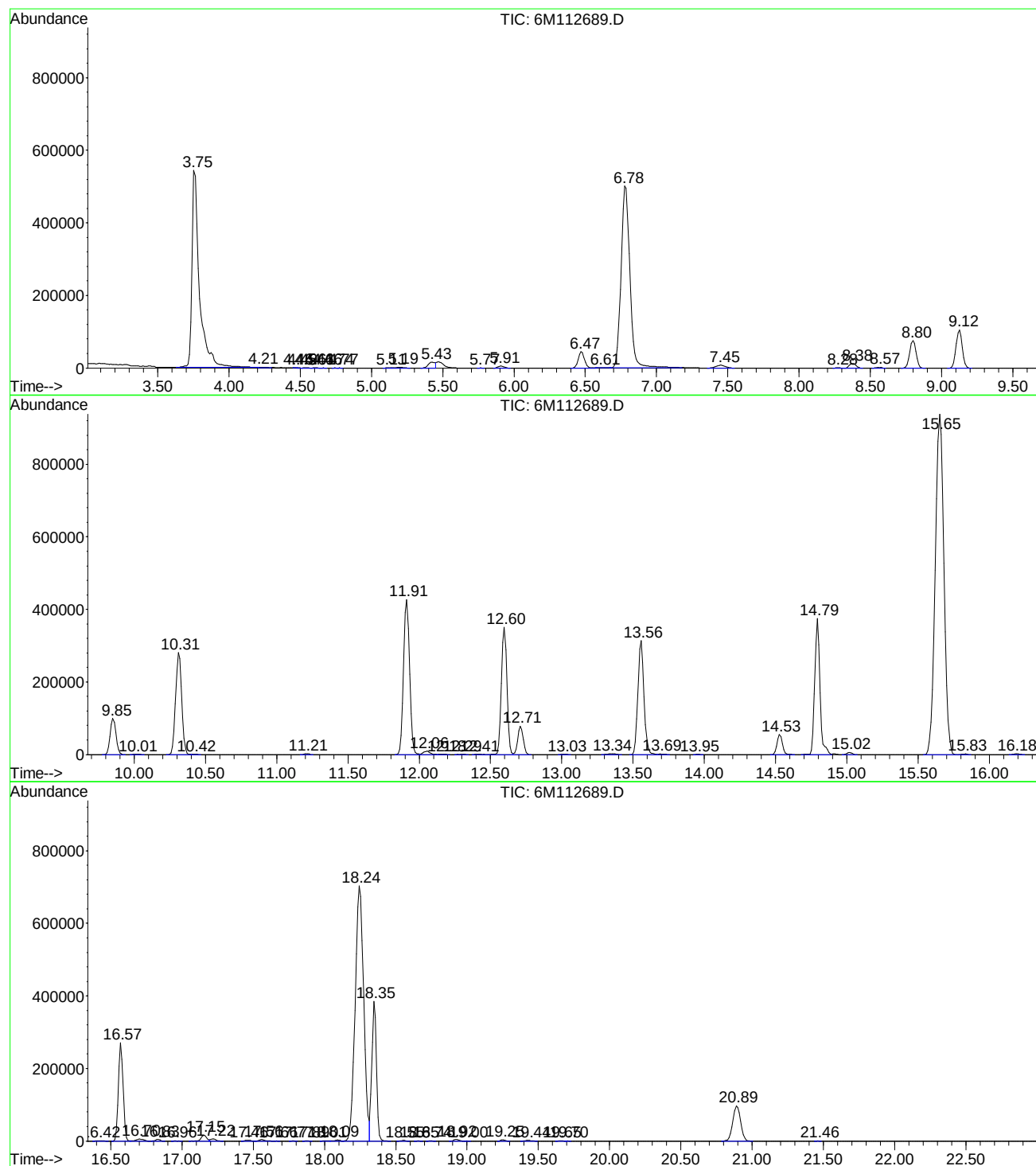
Signal : TIC

peak #	R.T. min	first scan	max scan	last scan	PK TY	peak height	corr. area	corr. % max.	% of total
1	3.754	112	124	168	rVV	542915	1972245	49.76%	10.111%
2	4.213	168	169	177	rVB3	887	3021	0.08%	0.015%
3	4.458	192	193	195	rBV3	330	229	0.01%	0.001%
4	4.489	195	196	198	rVB3	1033	835	0.02%	0.004%
5	4.540	198	201	204	rBB3	963	1403	0.04%	0.007%
6	4.611	205	208	211	rBB	336	787	0.02%	0.004%
7	4.662	212	213	215	rBB	339	208	0.01%	0.001%
8	4.744	219	221	223	rBB	348	213	0.01%	0.001%
9	4.775	223	224	226	rBB	355	217	0.01%	0.001%
10	5.112	254	257	260	rBV	825	2060	0.05%	0.011%
11	5.193	260	265	272	rVB2	2462	8175	0.21%	0.042%
12	5.428	280	288	290	rBV	15950	55321	1.40%	0.284%
13	5.765	319	321	323	rBB	301	184	0.00%	0.001%
14	5.908	330	335	341	rBB2	5287	15105	0.38%	0.077%
15	6.470	383	390	400	rBV	45488	135903	3.43%	0.697%
16	6.613	400	404	410	rVV	872	2828	0.07%	0.014%
17	6.776	410	420	459	rBV	500916	2161007	54.53%	11.079%
18	7.450	477	486	495	rBB	7860	34123	0.86%	0.175%
19	8.277	563	567	570	rBB	453	896	0.02%	0.005%
20	8.379	571	577	583	rBB	12657	41064	1.04%	0.211%
21	8.573	590	596	599	rBB	1422	3255	0.08%	0.017%
22	8.798	610	618	626	rBB	75751	234453	5.92%	1.202%
23	9.125	642	650	658	rBB	105305	317442	8.01%	1.627%
24	9.850	714	721	729	rBB	99865	279609	7.05%	1.433%
25	10.013	733	737	742	rBB	907	1951	0.05%	0.010%
26	10.309	758	766	775	rBV	280998	836595	21.11%	4.289%
27	10.422	775	777	781	rVB	1202	2655	0.07%	0.014%
28	11.208	850	854	858	rBB	1995	4627	0.12%	0.024%
29	11.913	915	923	932	rBV	427084	1257480	31.73%	6.447%
30	12.056	932	937	944	rVB2	9555	29894	0.75%	0.153%
31	12.178	944	949	952	rBB	891	2109	0.05%	0.011%
32	12.290	956	960	965	rBB	517	1418	0.04%	0.007%
33	12.413	968	972	978	rBB	425	1383	0.03%	0.007%
34	12.597	979	990	996	rBV	350606	941386	23.75%	4.826%
35	12.709	996	1001	1008	rVB	78038	204310	5.16%	1.047%
36	13.026	1027	1032	1035	rBB	1242	2222	0.06%	0.011%
37	13.342	1057	1063	1070	rBB2	1887	7703	0.19%	0.039%
38	13.557	1076	1084	1095	rBV	313895	927989	23.41%	4.758%
39	13.689	1095	1097	1103	rVB2	1442	3064	0.08%	0.016%
40	13.955	1120	1123	1126	rBB	355	611	0.02%	0.003%
41	14.527	1173	1179	1189	rBB	55515	140604	3.55%	0.721%
42	14.792	1194	1205	1215	rBV	374337	953584	24.06%	4.889%

43	15.017	1222	1227	1232	rBB	5954	13202	0.33%	0.068%
44	15.650	1278	1289	1301	rBB	938596	3963284	100.00%	20.319%
45	15.834	1302	1307	1310	rBB	1563	2699	0.07%	0.014%
46	16.181	1337	1341	1347	rBB2	2105	5379	0.14%	0.028%
47	16.416	1360	1364	1370	rBB	1109	3186	0.08%	0.016%
48	16.569	1373	1379	1386	rBV	271237	620035	15.64%	3.179%
49	16.702	1386	1392	1399	rVB2	5448	19501	0.49%	0.100%
50	16.834	1400	1405	1409	rBB	4470	10797	0.27%	0.055%
51	16.957	1414	1417	1421	rBB	377	629	0.02%	0.003%
52	17.151	1426	1436	1440	rBV	16255	43297	1.09%	0.222%
53	17.223	1440	1443	1449	rVB2	5787	14448	0.36%	0.074%
54	17.457	1462	1466	1471	rBB2	2383	5418	0.14%	0.028%
55	17.560	1472	1476	1484	rBB	4780	13027	0.33%	0.067%
56	17.662	1485	1486	1488	rBB	300	184	0.00%	0.001%
57	17.774	1495	1497	1500	rBB	629	610	0.02%	0.003%
58	17.886	1504	1508	1510	rBB	329	574	0.01%	0.003%
59	18.009	1516	1520	1523	rBV	762	2007	0.05%	0.010%
60	18.090	1523	1528	1531	rVB3	3418	6796	0.17%	0.035%
61	18.244	1532	1543	1550	rBV	703151	2928022	73.88%	15.011%
62	18.346	1550	1553	1564	rVB	385362	860408	21.71%	4.411%
63	18.550	1569	1573	1577	rBB	2238	4253	0.11%	0.022%
64	18.652	1581	1583	1586	rBB	722	684	0.02%	0.004%
65	18.744	1589	1592	1595	rBB	1032	1263	0.03%	0.006%
66	18.918	1605	1609	1615	rBB2	5081	11193	0.28%	0.057%
67	18.999	1616	1617	1619	rBB2	301	184	0.00%	0.001%
68	19.255	1638	1642	1646	rBB	3452	6825	0.17%	0.035%
69	19.438	1654	1660	1665	rBB2	1668	5668	0.14%	0.029%
70	19.653	1678	1681	1685	rBB	1035	1607	0.04%	0.008%
71	19.704	1685	1686	1688	rBB	311	191	0.00%	0.001%
72	20.888	1792	1802	1813	rBB	96486	369801	9.33%	1.896%
73	21.460	1856	1858	1860	rBB	623	382	0.01%	0.002%

Sum of corrected areas: 19505722

File : C:\MSDCHEM\1\DATA\111412\6M112689.D
Operator : FJB
Acquired : 14 Nov 2012 22:32 using AcqMethod 8260WTR
Instrument : HPMS6
Sample Name: L12110393-01 10X A 826-SPE
Misc Info : 1,10 foamy/cloudy/sulfur odor
Vial Number: 23
Quant File :8260WTR.RES (RTE Integrator)



Data File : C:\MSDCHEM\1\DATA\111412\6M112689.D
Acq On : 14 Nov 2012 22:32
Sample : L12110393-01 10X A 826-SPE
Misc : 1,10 foamy/cloudy/sulfur odor
MS Integration Params: RTEINT.P

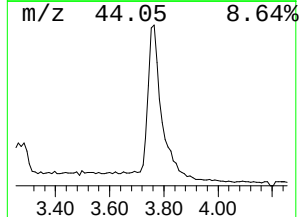
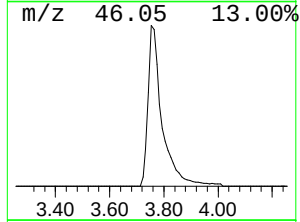
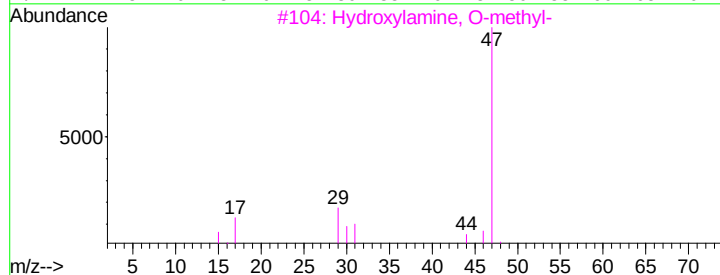
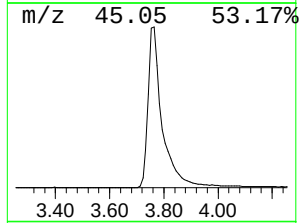
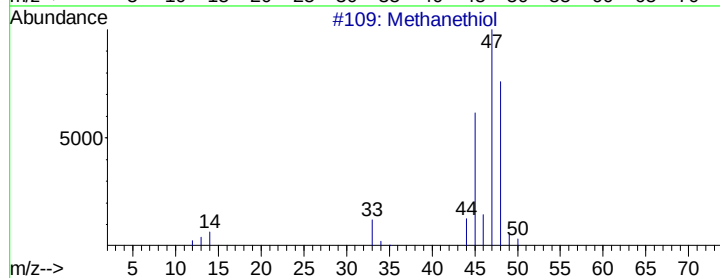
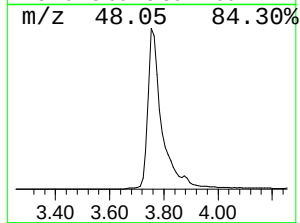
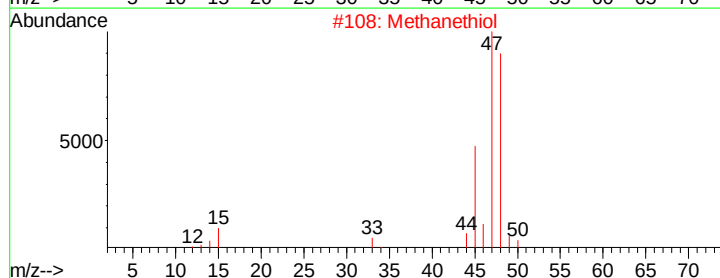
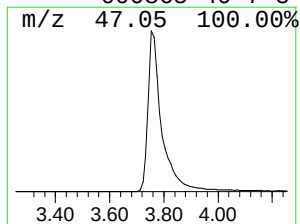
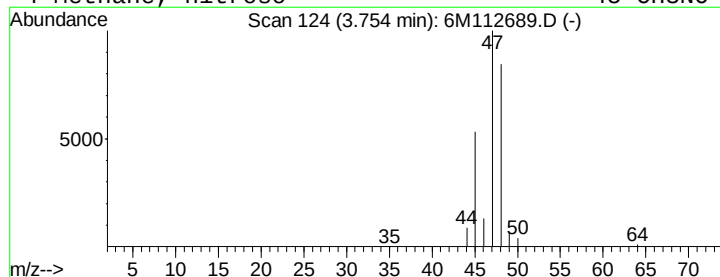
Vial: 23
Operator: FJB
Inst : HPMS6
Multiplr: 1.00

Quant Method : C:\MSDCHEM\1\METHODS\8260WTR.M (RTE Integrator)
Title : 8260B/624 WATER SOP:OVLMSV01 011/12/12 - HPMS6
Library : C:\DATABASE\NIST02.L

Peak Number 1 Methanethiol Concentration Rank 4

R.T.	EstConc	Area	Relative to ISTD	R.T.
3.75	58.94 ug/L	1972250	Fluorobenzene	10.31

Hit# of 5	Tentative ID	MW	MolForm	CAS#	Qual
1	Methanethiol	48	CH4S	000074-93-1	90
2	Methanethiol	48	CH4S	000074-93-1	90
3	Hydroxylamine, O-methyl-	47	CH5NO	000067-62-9	7
4	Methane, nitroso-	45	CH3NO	000865-40-7	5



Data File : C:\MSDCHEM\1\DATA\111412\6M112689.D
Acq On : 14 Nov 2012 22:32
Sample : L12110393-01 10X A 826-SPE
Misc : 1,10 foamy/cloudy/sulfur odor
MS Integration Params: RTEINT.P

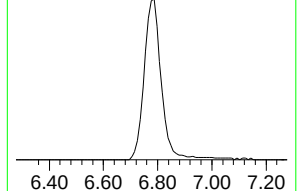
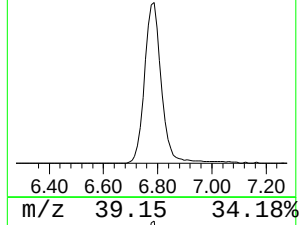
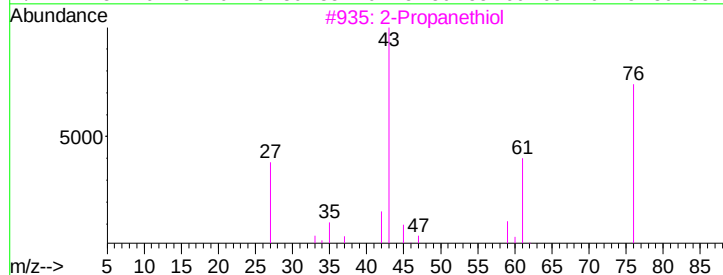
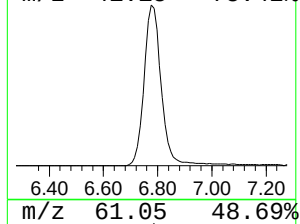
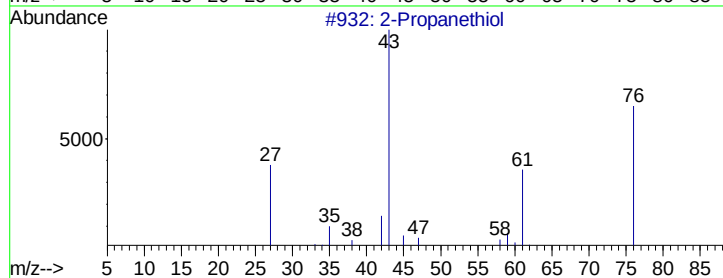
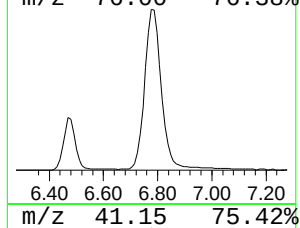
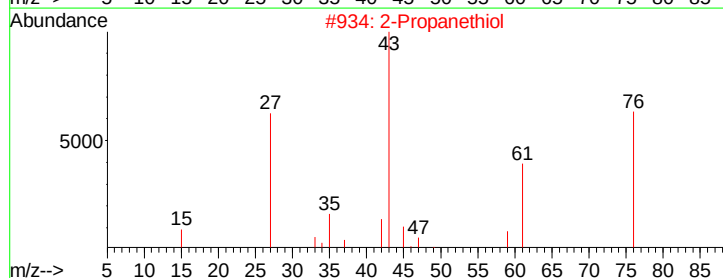
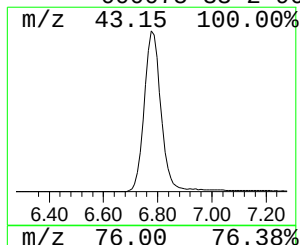
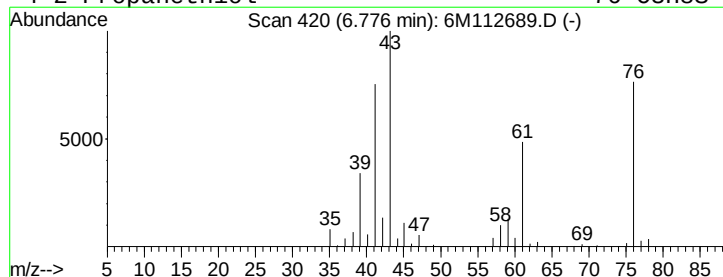
Vial: 23
Operator: FJB
Inst : HPMS6
Multiplr: 1.00

Quant Method : C:\MSDCHEM\1\METHODS\8260WTR.M (RTE Integrator)
Title : 8260B/624 WATER SOP:OVLMSV01 011/12/12 - HPMS6
Library : C:\DATABASE\NIST02.L

Peak Number 2 2-Propanethiol Concentration Rank 3

R.T.	EstConc	Area	Relative to ISTD	R.T.
6.78	64.58 ug/L	2161010	Fluorobenzene	10.31

Hit#	of	5	Tentative ID	MW	MolForm	CAS#	Qual
1			2-Propanethiol	76	C3H8S	000075-33-2	91
2			2-Propanethiol	76	C3H8S	000075-33-2	91
3			2-Propanethiol	76	C3H8S	000075-33-2	90
4			2-Propanethiol	76	C3H8S	000075-33-2	90



Data File : C:\MSDCHEM\1\DATA\111412\6M112689.D
Acq On : 14 Nov 2012 22:32
Sample : L12110393-01 10X A 826-SPE
Misc : 1,10 foamy/cloudy/sulfur odor
MS Integration Params: RTEINT.P

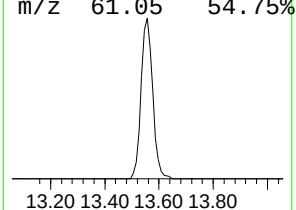
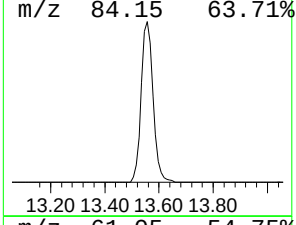
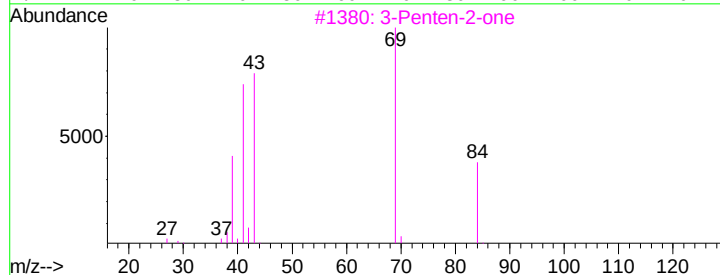
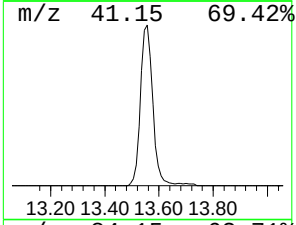
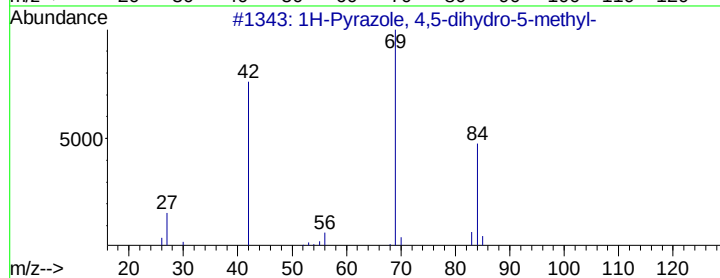
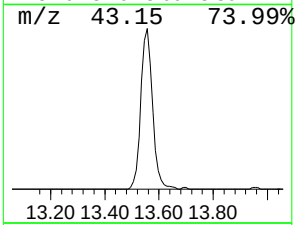
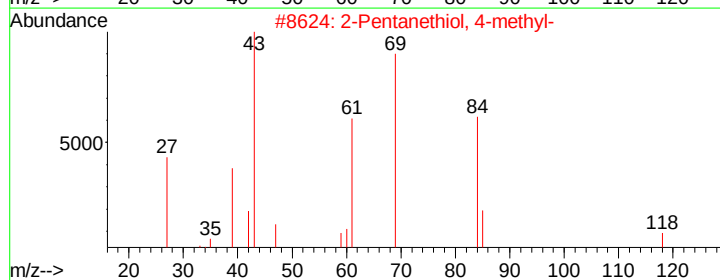
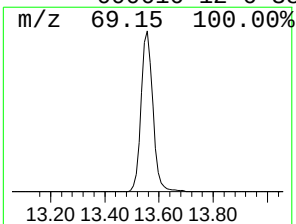
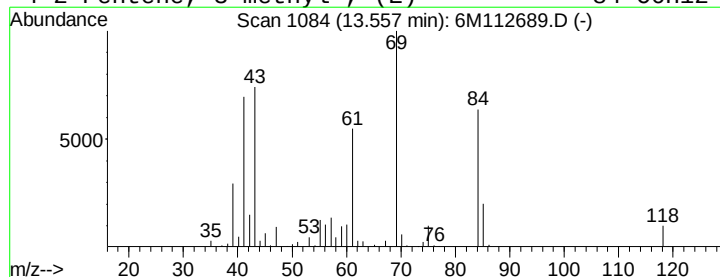
Vial: 23
Operator: FJB
Inst : HPMS6
Multiplr: 1.00

Quant Method : C:\MSDCHEM\1\METHODS\8260WTR.M (RTE Integrator)
Title : 8260B/624 WATER SOP:OVLMSV01 011/12/12 - HPMS6
Library : C:\DATABASE\NIST02.L

Peak Number 3 2-Pentanethiol, 4-methyl- Concentration Rank 5

R.T.	EstConc	Area	Relative to ISTD	R.T.
13.56	24.33 ug/L	927989	Chlorobenzene-d5	14.79

Hit#	of	Tentative ID	MW	MolForm	CAS#	Qual
1	5	2-Pentanethiol, 4-methyl-	118	C6H14S	001639-05-0	83
2		1H-Pyrazole, 4,5-dihydro-5-methyl-	84	C4H8N2	001568-20-3	43
3		3-Penten-2-one	84	C5H8O	000625-33-2	38
4		2-Pentene, 3-methyl-, (E)-	84	C6H12	000616-12-6	38



Data File : C:\MSDCHEM\1\DATA\111412\6M112689.D
Acq On : 14 Nov 2012 22:32
Sample : L12110393-01 10X A 826-SPE
Misc : 1,10 foamy/cloudy/sulfur odor
MS Integration Params: RTEINT.P

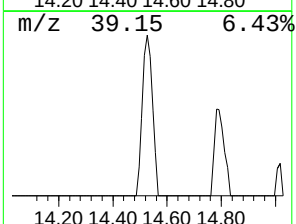
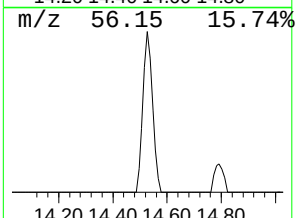
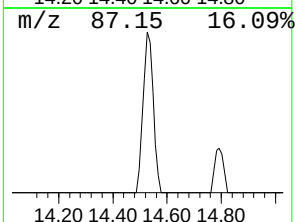
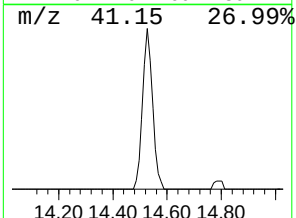
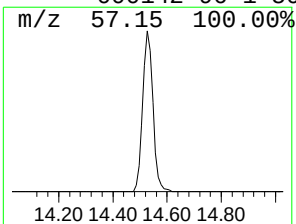
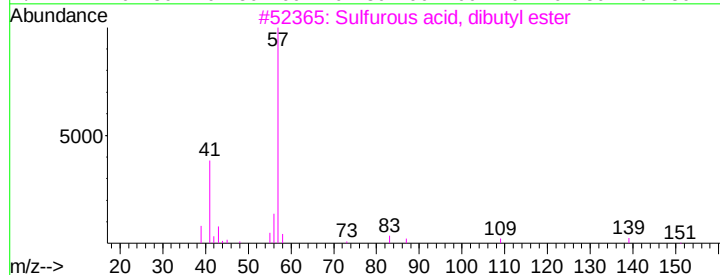
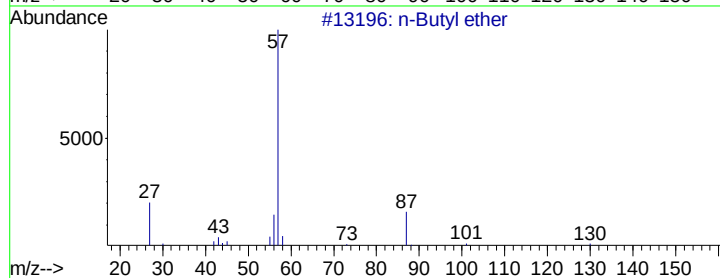
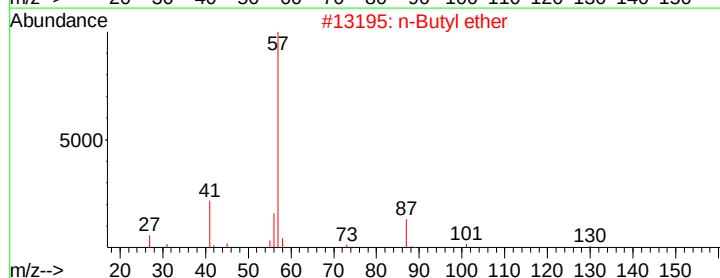
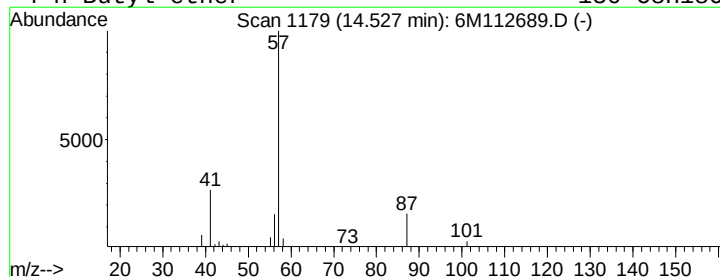
Vial: 23
Operator: FJB
Inst : HPMS6
Multiplr: 1.00

Quant Method : C:\MSDCHEM\1\METHODS\8260WTR.M (RTE Integrator)
Title : 8260B/624 WATER SOP:OVLMSV01 011/12/12 - HPMS6
Library : C:\DATABASE\NIST02.L

Peak Number 4 n-Butyl ether Concentration Rank 7

R.T.	EstConc	Area	Relative to ISTD	R.T.
14.53	3.69 ug/L	140604	Chlorobenzene-d5	14.79

Hit#	of	5	Tentative ID	MW	MolForm	CAS#	Qual
1	n-Butyl ether	130	C8H18O	000142-96-1	78		
2	n-Butyl ether	130	C8H18O	000142-96-1	78		
3	Sulfurous acid, dibutyl ester	194	C8H18O3S	000626-85-7	59		
4	n-Butyl ether	130	C8H18O	000142-96-1	50		



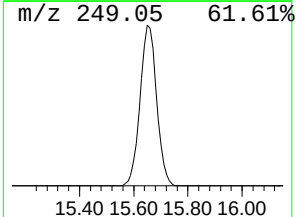
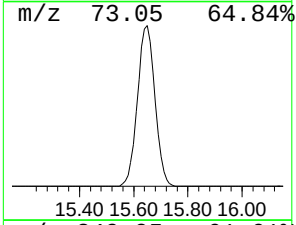
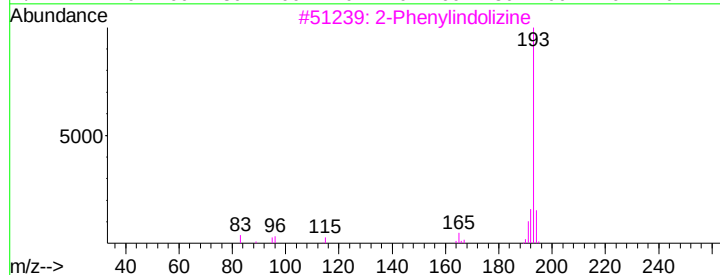
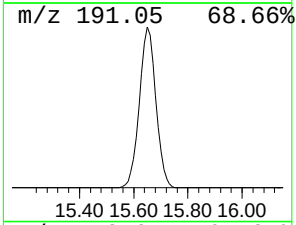
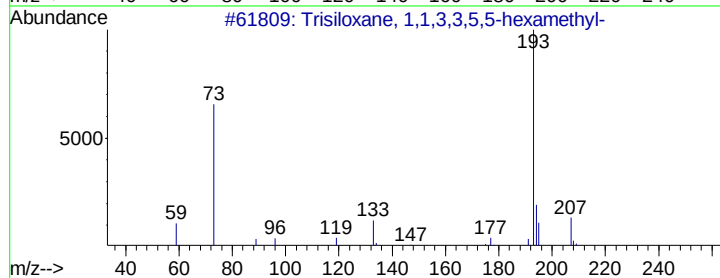
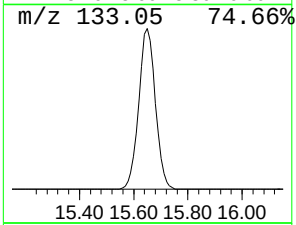
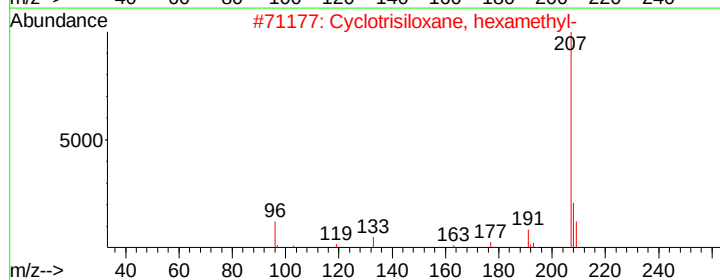
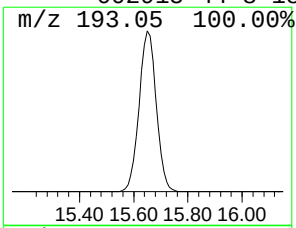
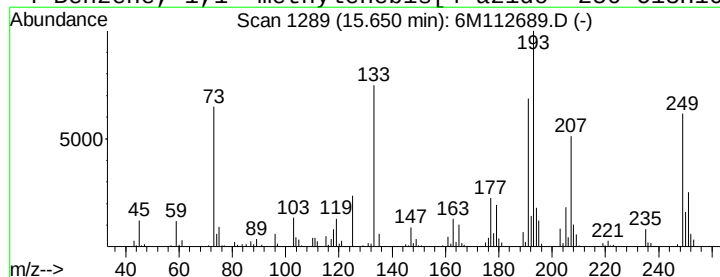
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Acq On : 14 Nov 2012 22:32
Sample : L12110393-01 10X A 826-SPE
Misc : 1,10 foamy/cloudy/sulfur odor
MS Integration Params: RTEINT.P

Vial: 23
Operator: FJB
Inst : HPMS6
Multiplr: 1.00

Quant Method : C:\MSDCHEM\1\METHODS\8260WTR.M (RTE Integrator)
Title : 8260B/624 WATER SOP:OVLMSV01 011/12/12 - HPMS6
Library : C:\DATABASE\NIST02.L

Peak Number 5 Cyclotrisiloxane, hexamethyl- Concentration Rank 1

R.T.	EstConc	Area	Relative to ISTD	R.T.	
15.65	103.91 ug/L	3963280	Chlorobenzene-d5	14.79	
Hit# of 5	Tentative ID	MW	MolForm	CAS#	Qual
1	Cyclotrisiloxane, hexamethyl-	222	C6H18O3Si3	000541-05-9	22
2	Trisiloxane, 1,1,3,3,5,5-hexamet...	208	C6H20O2Si3	001189-93-1	22
3	2-Phenylindolizine	193	C14H11N	025379-20-8	18
4	Benzene, 1,1'-methylenebis[4-azido-	250	C13H10N6	002915-44-8	18



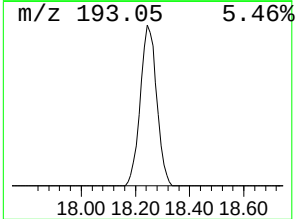
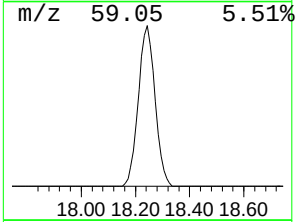
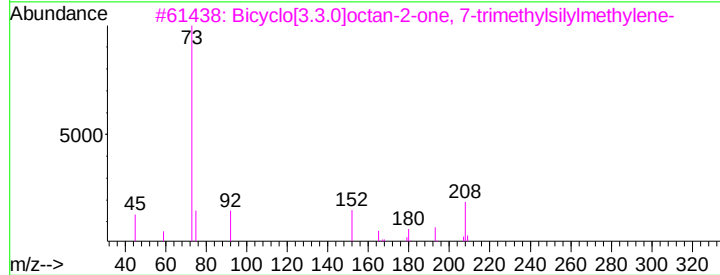
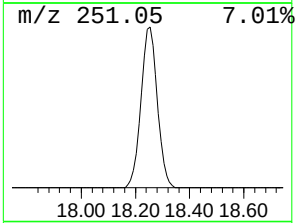
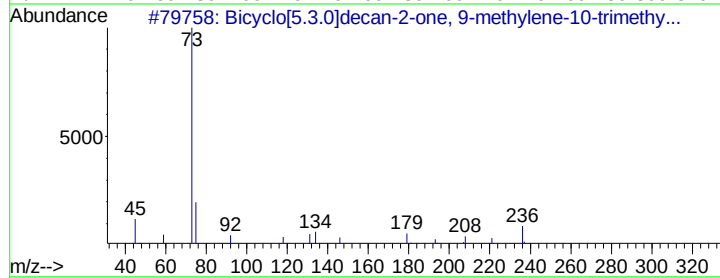
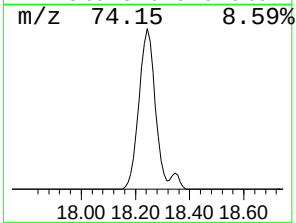
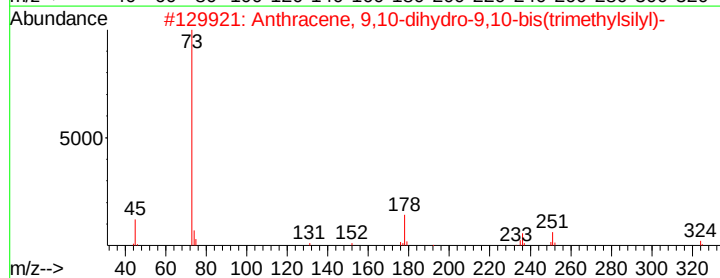
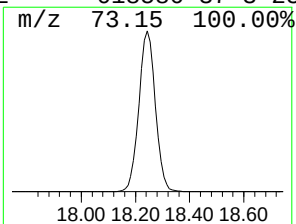
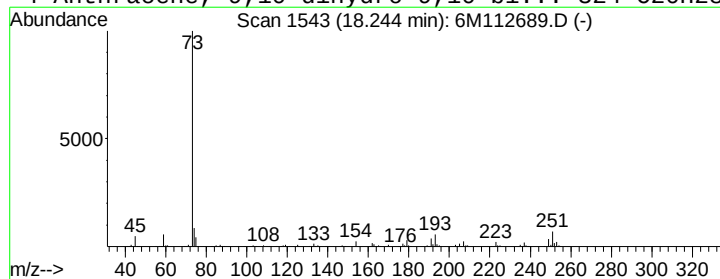
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Acq On : 14 Nov 2012 22:32
Sample : L12110393-01 10X A 826-SPE
Misc : 1,10 foamy/cloudy/sulfur odor
MS Integration Params: RTEINT.P

Vial: 23
Operator: FJB
Inst : HPMS6
Multiplr: 1.00

Quant Method : C:\MSDCHEM\1\METHODS\8260WTR.M (RTE Integrator)
Title : 8260B/624 WATER SOP:OVLMSV01 011/12/12 - HPMS6
Library : C:\DATABASE\NIST02.L

Peak Number 6 Anthracene, 9,10-dihydro-9,... Concentration Rank 2

R.T.	EstConc	Area	Relative to ISTD	R.T.		
18.24	85.08 ug/L	2928020	1,4-Dichlorobenzene-d4	18.35		
Hit# of	5	Tentative ID	MW	MolForm	CAS#	Qual
1		Anthracene, 9,10-dihydro-9,10-bi...	324	C20H28Si2	018586-37-3	37
2		Bicyclo[5.3.0]decan-2-one, 9-met...	236	C14H24OSi	1000153-97-3	33
3		Bicyclo[3.3.0]octan-2-one, 7-tri...	208	C12H20OSi	109613-14-1	28
4		Anthracene, 9,10-dihydro-9,10-bi...	324	C20H28Si2	018586-37-3	23



Data File : C:\MSDCHEM\1\DATA\111412\6M112689.D
Acq On : 14 Nov 2012 22:32
Sample : L12110393-01 10X A 826-SPE
Misc : 1,10 foamy/cloudy/sulfur odor
MS Integration Params: RTEINT.P

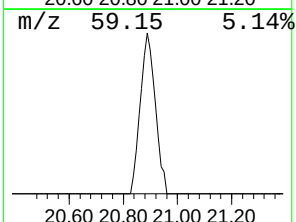
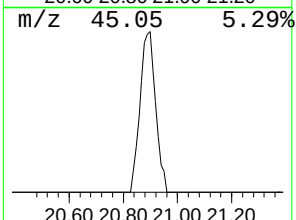
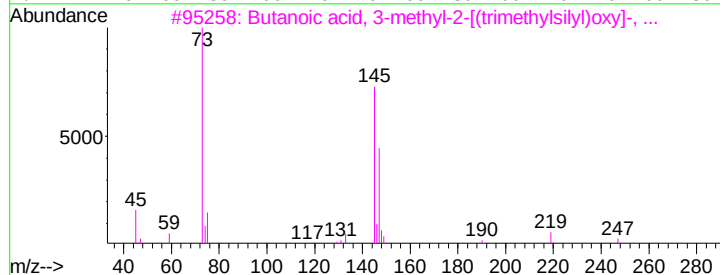
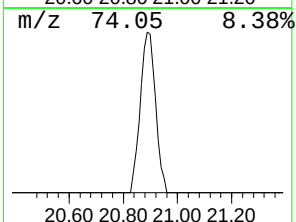
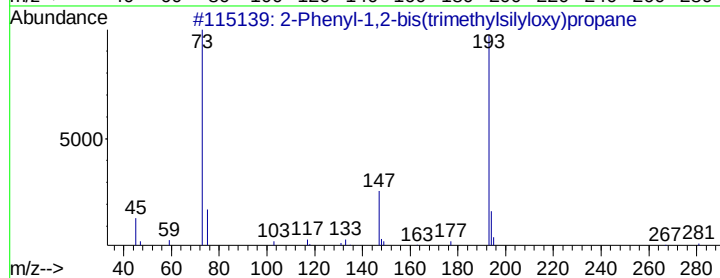
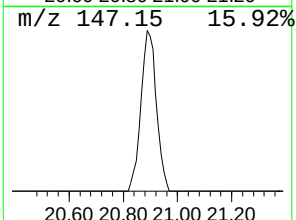
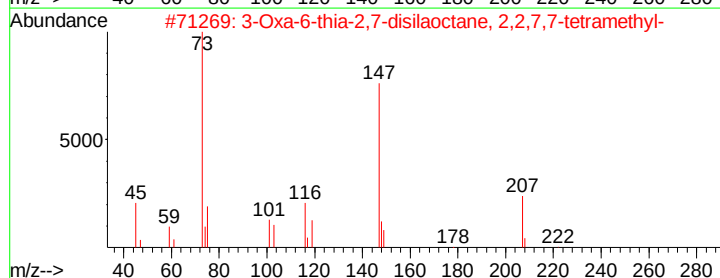
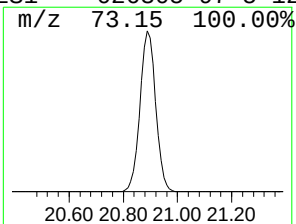
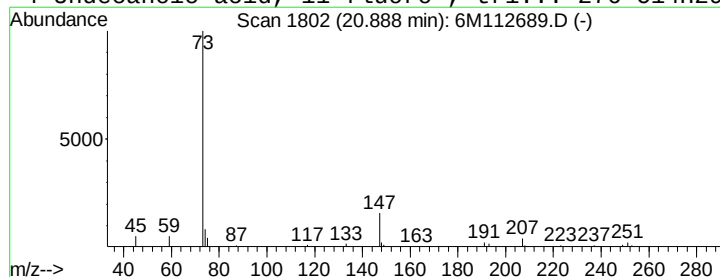
Vial: 23
Operator: FJB
Inst : HPMS6
Multiplr: 1.00

Quant Method : C:\MSDCHEM\1\METHODS\8260WTR.M (RTE Integrator)
Title : 8260B/624 WATER SOP:OVLMSV01 011/12/12 - HPMS6
Library : C:\DATABASE\NIST02.L

Peak Number 7 3-Oxa-6-thia-2,7-disilaocta... Concentration Rank 6

R.T.	EstConc	Area	Relative to ISTD	R.T.
20.89	10.74 ug/L	369801	1,4-Dichlorobenzene-d4	18.35

Hit#	of	5	Tentative ID	MW	MolForm	CAS#	Qual
1			3-Oxa-6-thia-2,7-disilaoctane, 2...	222	C8H22OSSi2	078921-31-0	37
2			2-Phenyl-1,2-bis(trimethylsilylo...	296	C15H28O2Si2	294847-15-7	33
3			Butanoic acid, 3-methyl-2-[(trim...	262	C11H26O3Si2	055124-92-0	28
4			Undecanoic acid, 11-fluoro-, tri...	276	C14H29FO2Si	026305-97-5	12



Tentatively Identified Compound (LSC) summary

Operator ID: FJB Date Acquired: 14 Nov 2012 22:32
Data File: C:\MSDCHEM\1\DATA\111412\6M112689.D
Name: L12110393-01 10X A 826-SPE
Misc: 1,10 foamy/cloudy/sulfur odor
Method: C:\MSDCHEM\1\METHODS\8260WTR.M (RTE Integrator)
Title: 8260B/624_WATER SOP:OVLMSV01 011/12/12 - HPMS6
Library Searched: C:\DATABASE\NIST02.L

TIC Top Hit name	RT	EstConc	Units	Response	--Internal Standard--			
					#	RT	Resp	Conc
Methanethiol	3.75	58.9	ug/L	1972250	1	10.31	836595	25.0
2-Propanethiol	6.78	64.6	ug/L	2161010	1	10.31	836595	25.0
2-Pentanethiol, 4...	13.56	24.3	ug/L	927989	2	14.79	953584	25.0
n-Butyl ether	14.53	3.7	ug/L	140604	2	14.79	953584	25.0
Cyclotrisiloxane, ...	15.65	103.9	ug/L	3963280	2	14.79	953584	25.0
Anthracene, 9,10-...	18.24	85.1	ug/L	2928020	3	18.35	860408	25.0
3-Oxa-6-thia-2,7-...	20.89	10.7	ug/L	369801	3	18.35	860408	25.0

Data File : C:\MSDCHEM\1\DATA\111412\6M112690.D Vial: 24
 Acq On : 14 Nov 2012 23:02 Operator: FJB
 Sample : L12110393-03 10X A 826-SPE Inst : HPMS6
 Misc : 1,10 foamy/cloudy/sulfur odor Multiplr: 1.00
 MS Integration Params: RTEINT.P
 Quant Time: Nov 15 09:24:48 2012 Quant Results File: 8260WTR.RES

Quant Method : C:\MSDCHEM\1\METHODS\8260WTR.M (RTE Integrator)
 Title : 8260B/624_WATER SOP:OVLMSV01 011/12/12 - HPMS6
 Last Update : Tue Nov 13 09:04:10 2012
 Response via : Initial Calibration
 DataAcq Meth : 8260WTR

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) Fluorobenzene	10.32	96	403386	25.00	ug/L	0.00
57) Chlorobenzene-d5	14.80	117	302095	25.00	ug/L	0.00
78) 1,4-Dichlorobenzene-d4	18.35	152	145396	25.00	ug/L	0.00

System Monitoring Compounds						
37) Dibromofluoromethane	9.12	111	103682	25.0768	ug/L	0.00
Spiked Amount	25.000	Range 86 - 118	Recovery	=	100.32%	
43) 1,2-Dichloroethane-d4	9.85	65	95066	23.9935	ug/L	-0.01
Spiked Amount	25.000	Range 80 - 120	Recovery	=	95.96%	
58) Toluene-d8	12.59	98	358588	24.1992	ug/L	0.00
Spiked Amount	25.000	Range 88 - 110	Recovery	=	96.80%	
80) p-Bromofluorobenzene	16.57	95	129508	24.5680	ug/L	0.00
Spiked Amount	25.000	Range 86 - 115	Recovery	=	98.28%	

Target Compounds	R.T.	QIon	Response	Conc	Units	Qvalue
13) Acetone	5.42	43	34975	65.8428	ug/L	79
14) 1,1-Dichloroethene	5.49	61	3022	0.4584	ug/L	# 24
16) Dimethyl Sulfide	5.91	62	4669	0.9467	ug/L	94
19) Methylene Chloride	6.47	84	5729	1.4600	ug/L	99
20) Carbon Disulfide	6.48	76	98923	8.4641	ug/L	99
25) Diisopropyl ether	7.45	45	17593	1.4864	ug/L	97
26) Vinyl Acetate	7.45	43	8086	1.8974	ug/L	# 76
29) 2-Butanone	8.27	43	939	1.1947	ug/L	# 54
32) cis-1,2-Dichloroethene	8.57	96	1102	0.2558	ug/L	73
33) Chloroform	8.80	83	88750	12.5667	ug/L	99
44) Heptane	9.87	57	6168	34.6411	ug/L	# 1
46) Benzene	10.01	78	2066	0.1333	ug/L	# 59
54) 4-Methyl-2-Pentanone	11.91	58	198235	275.2300	ug/L	98
59) Toluene	12.71	91	86993	5.0877	ug/L	100
63) 1,1,2-Trichloroethane	13.02	97	1359	0.7428	ug/L	# 12
65) 1,3-Dichloropropane	13.55	76	971	0.2244	ug/L	# 1
70) Chlorobenzene	14.85	112	16745	1.4613	ug/L	95
73) m-,p-Xylene	15.02	106	3248	0.4271	ug/L	98
74) o-Xylene	15.67	106	4539	0.6343	ug/L	# 34
75) Styrene	15.65	104	32035	2.7137	ug/L	# 27
77) Isopropylbenzene	16.18	105	3090	0.1789	ug/L	# 74

(#) = qualifier out of range (m) = manual integration
 6M112690.D 8260WTR.M Thu Nov 15 09:24:49 2012

Page 1

Data File : C:\MSDCHEM\1\DATA\111412\6M112690.D

Vial: 24

Acq On : 14 Nov 2012 23:02

Operator: FJB

Sample : L12110393-03 10X A 826-SPE

Inst : HPMS6

Misc : 1,10 foamy/cloudy/sulfur odor

Multiplr: 1.00

MS Integration Params: RTEINT.P

Quant Time: Nov 15 9:24 2012

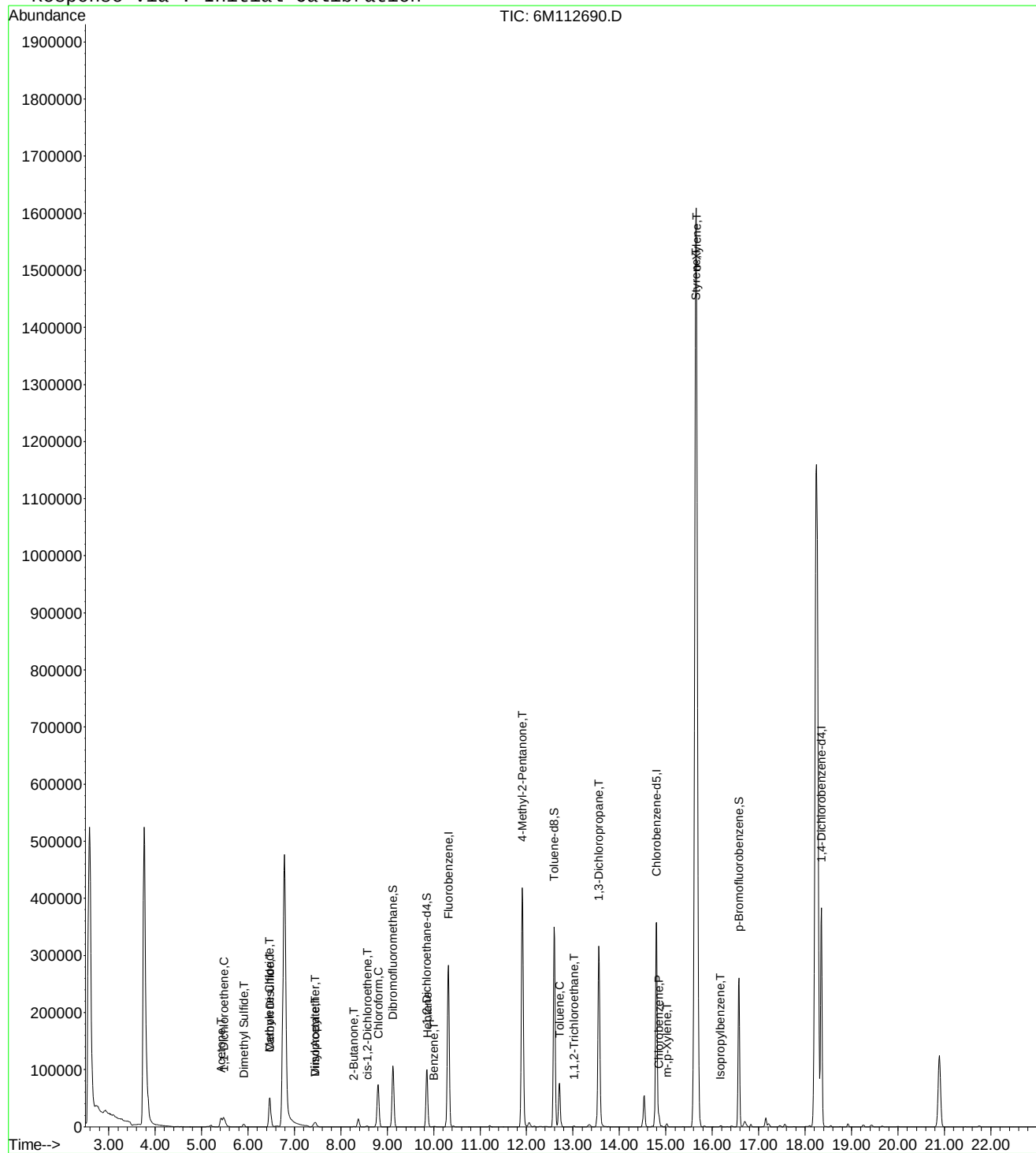
Quant Results File: 8260WTR.RES

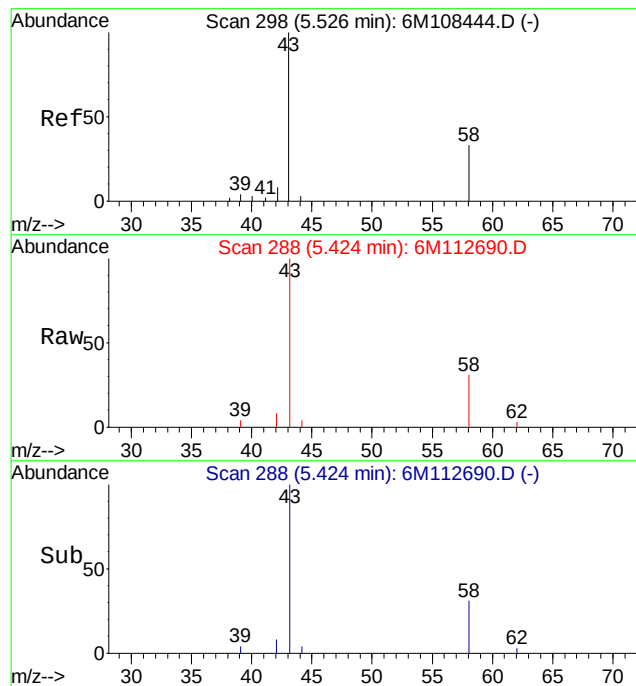
Method : C:\MSDCHEM\1\METHODS\8260WTR.M (RTE Integrator)

Title : 8260B/624_WATER SOP:OVLMSV01 011/12/12 - HPMS6

Last Update : Tue Nov 13 09:04:10 2012

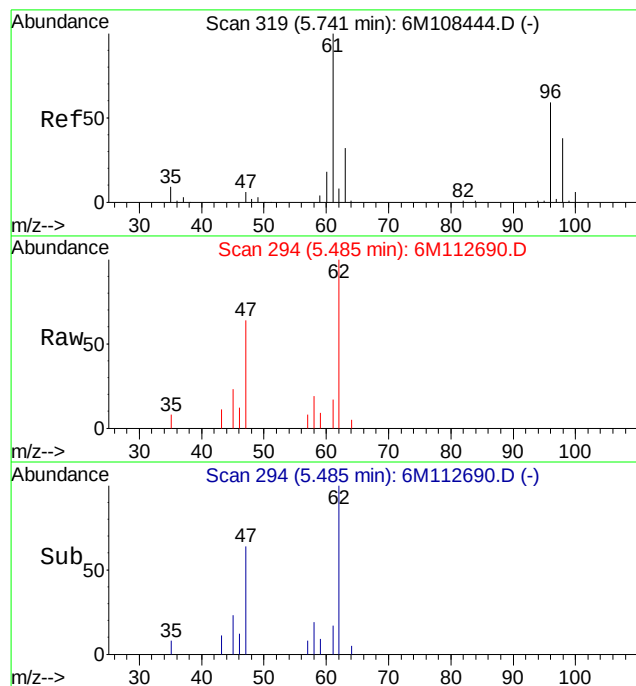
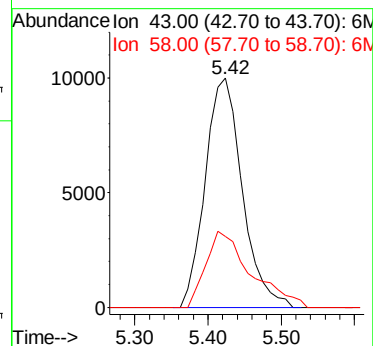
Response via : Initial Calibration





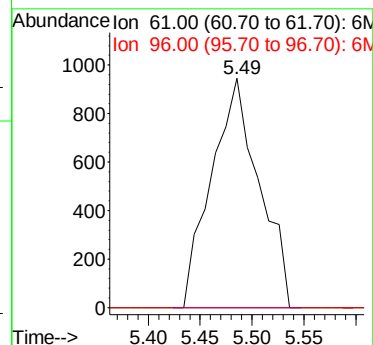
#13
Acetone
Concen: 65.84 ug/L
RT: 5.42 min Scan# 288
Delta R.T. -0.00 min
Lab File: 6M112690.D
Acq: 14 Nov 2012 23:02

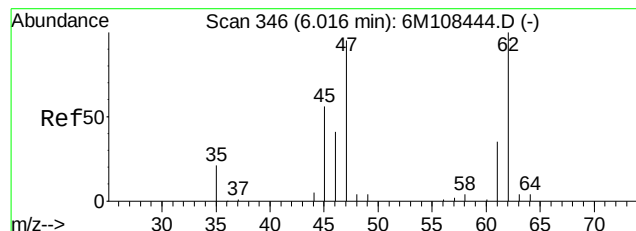
Tgt Ion: 43 Resp: 34975
Ion Ratio Lower Upper
43 100
58 40.1 17.3 40.5



#14
1,1-Dichloroethene
Concen: 0.46 ug/L
RT: 5.49 min Scan# 294
Delta R.T. -0.15 min
Lab File: 6M112690.D
Acq: 14 Nov 2012 23:02

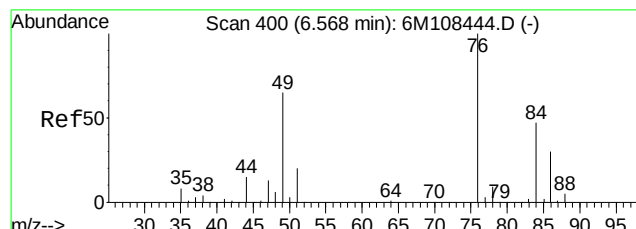
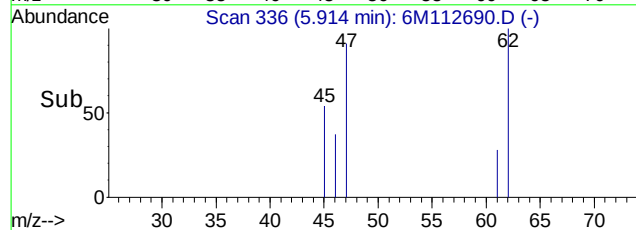
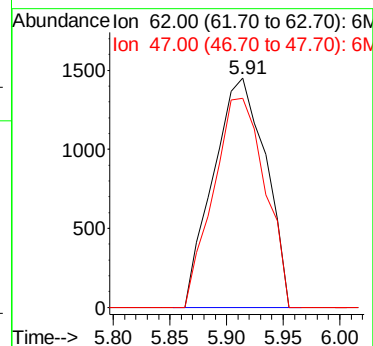
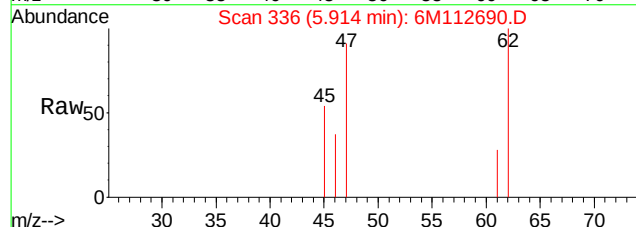
Tgt Ion: 61 Resp: 3022
Ion Ratio Lower Upper
61 100
96 0.0 32.7 76.3#





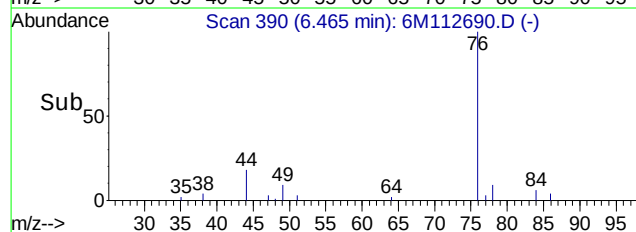
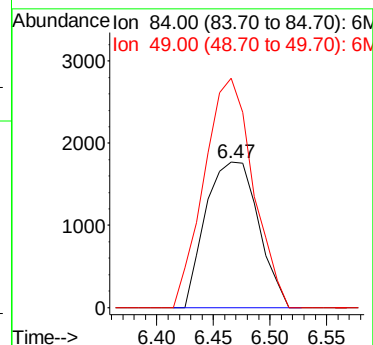
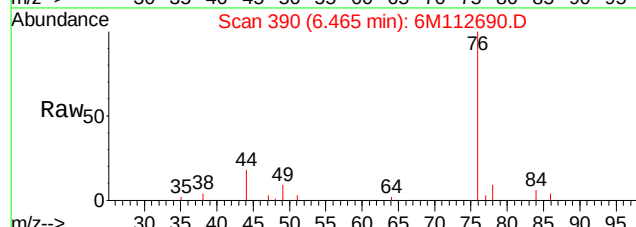
#16
Dimethyl Sulfide
Concen: 0.95 ug/L
RT: 5.91 min Scan# 336
Delta R.T. -0.00 min
Lab File: 6M112690.D
Acq: 14 Nov 2012 23:02

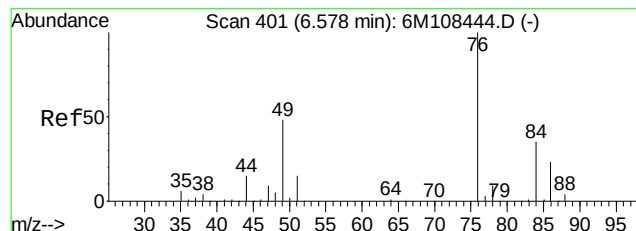
Tgt Ion	Ratio	Lower	Upper
62	100		
47	90.0	57.8	134.8



#19
Methylene Chloride
Concen: 1.46 ug/L
RT: 6.47 min Scan# 390
Delta R.T. -0.00 min
Lab File: 6M112690.D
Acq: 14 Nov 2012 23:02

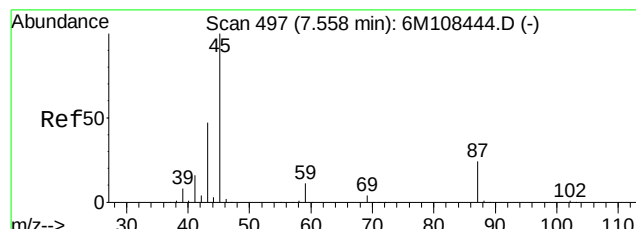
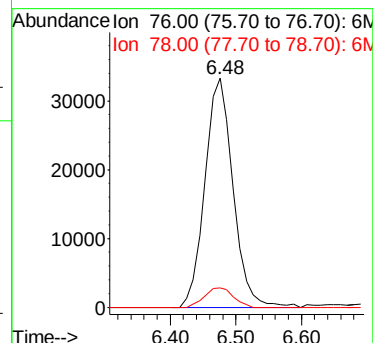
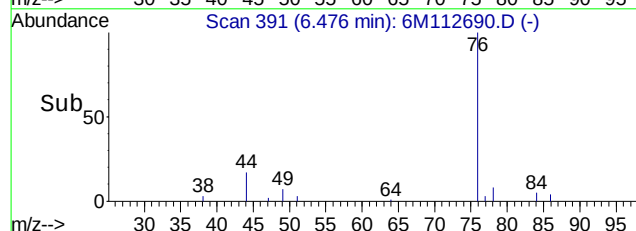
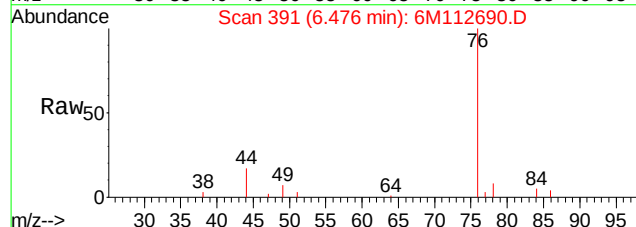
Tgt Ion	Ratio	Lower	Upper
84	100		
49	146.6	88.6	206.8





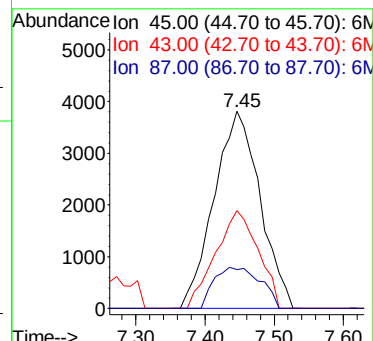
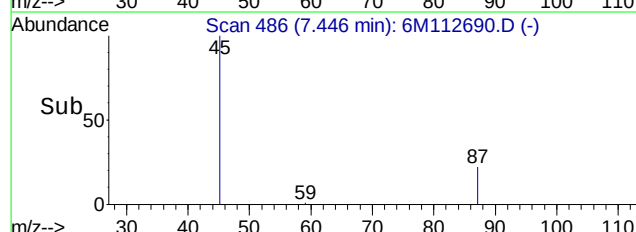
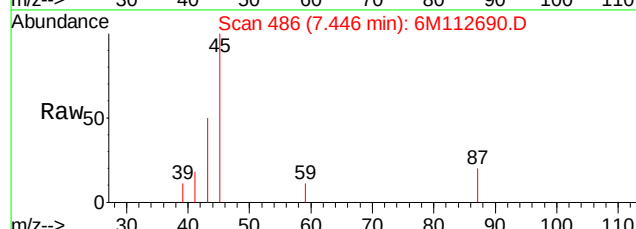
#20
Carbon Disulfide
Concen: 8.46 ug/L
RT: 6.48 min Scan# 391
Delta R.T. -0.00 min
Lab File: 6M112690.D
Acq: 14 Nov 2012 23:02

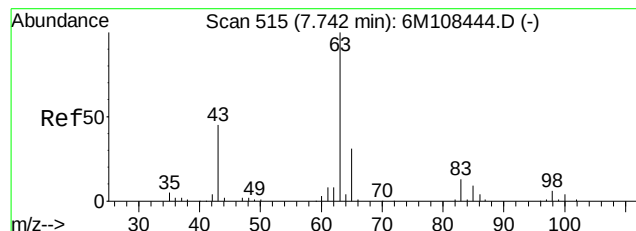
Tgt Ion	Ratio	Lower	Upper
76	100		
78	8.7	5.3	12.5



#25
Diisopropyl ether
Concen: 1.49 ug/L
RT: 7.45 min Scan# 486
Delta R.T. -0.00 min
Lab File: 6M112690.D
Acq: 14 Nov 2012 23:02

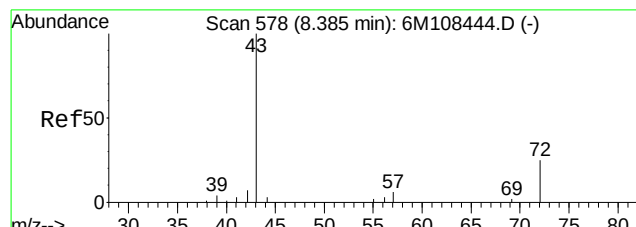
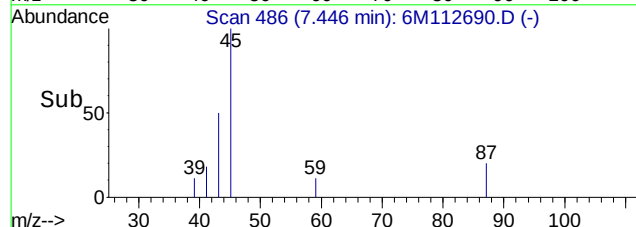
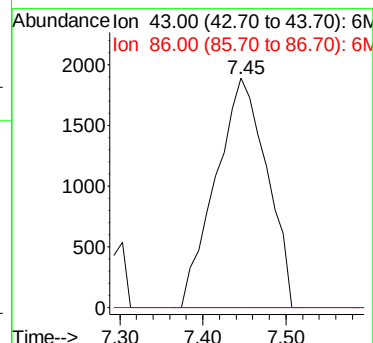
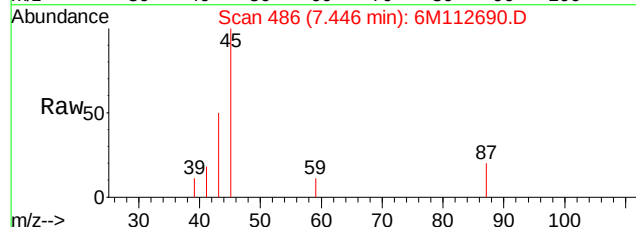
Tgt Ion	Ratio	Lower	Upper
45	100		
43	46.0	28.1	65.5
87	21.0	14.2	33.2





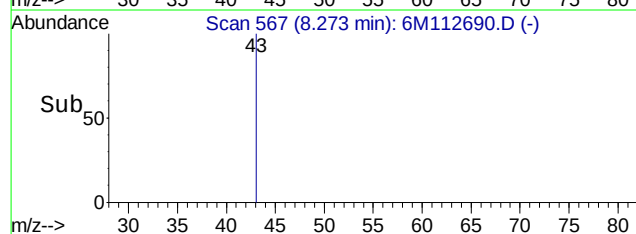
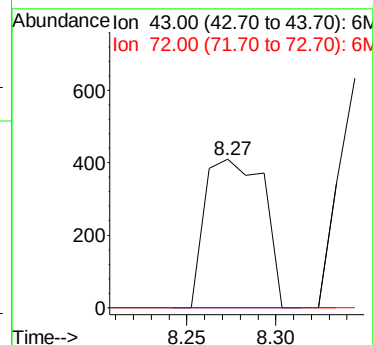
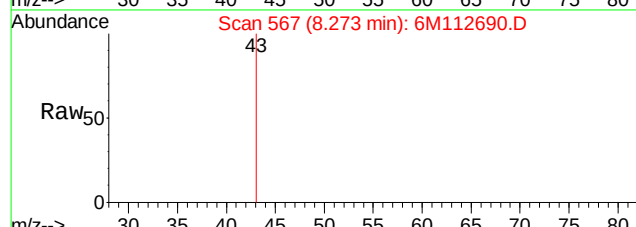
#26
 Vinyl Acetate
 Concen: 1.90 ug/L
 RT: 7.45 min Scan# 486
 Delta R.T. -0.19 min
 Lab File: 6M112690.D
 Acq: 14 Nov 2012 23:02

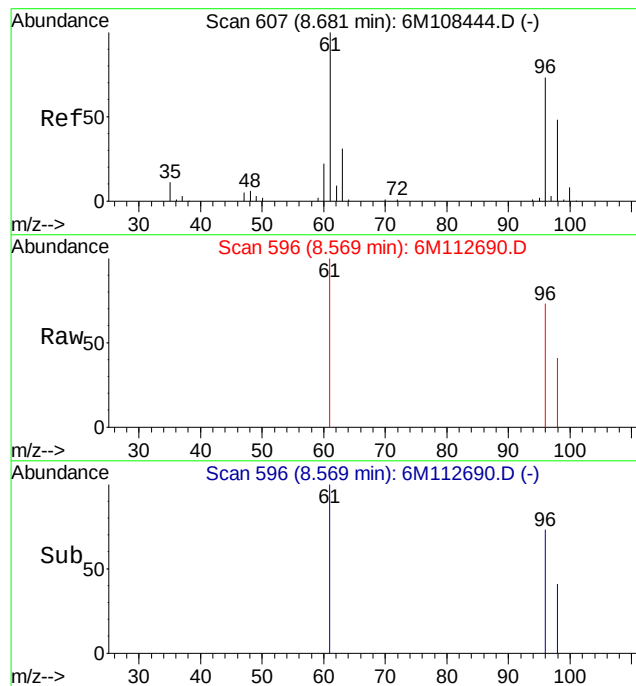
Tgt Ion: 43 Resp: 8086
 Ion Ratio Lower Upper
 43 100
 86 0.0 5.3 12.3#



#29
 2-Butanone
 Concen: 1.19 ug/L
 RT: 8.27 min Scan# 567
 Delta R.T. 0.01 min
 Lab File: 6M112690.D
 Acq: 14 Nov 2012 23:02

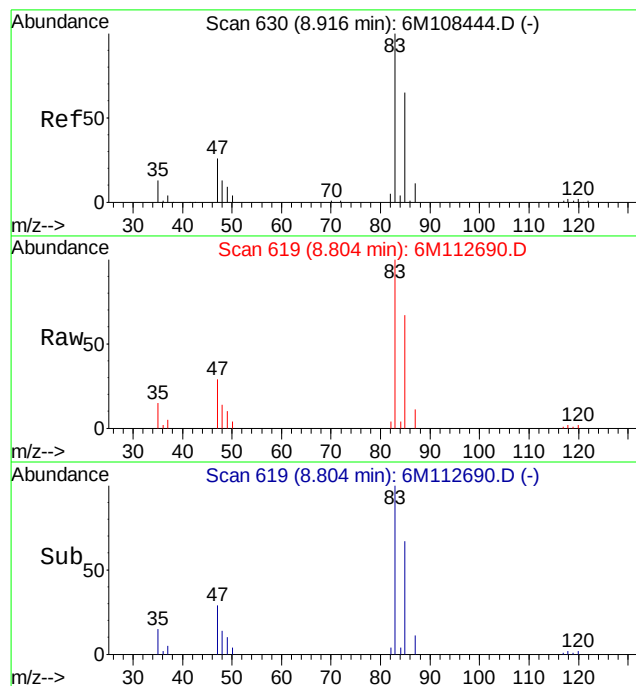
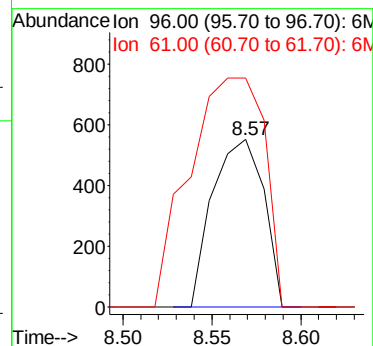
Tgt Ion: 43 Resp: 939
 Ion Ratio Lower Upper
 43 100
 72 0.0 12.9 30.1#





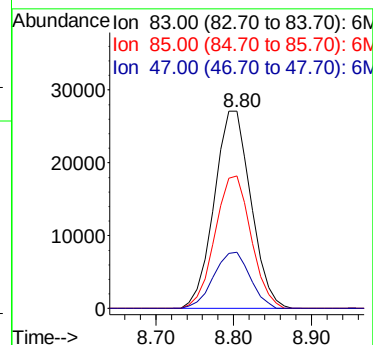
#32
 cis-1,2-Dichloroethene
 Concen: 0.26 ug/L
 RT: 8.57 min Scan# 596
 Delta R.T. -0.00 min
 Lab File: 6M112690.D
 Acq: 14 Nov 2012 23:02

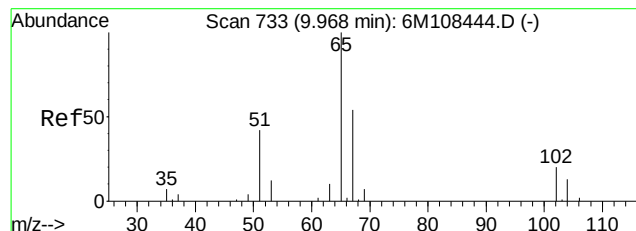
Tgt Ion: 96 Resp: 1102
 Ion Ratio Lower Upper
 96 100
 61 201.3 98.8 230.4



#33
 Chloroform
 Concen: 12.57 ug/L
 RT: 8.80 min Scan# 619
 Delta R.T. -0.00 min
 Lab File: 6M112690.D
 Acq: 14 Nov 2012 23:02

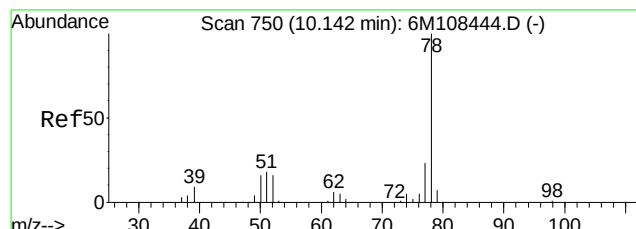
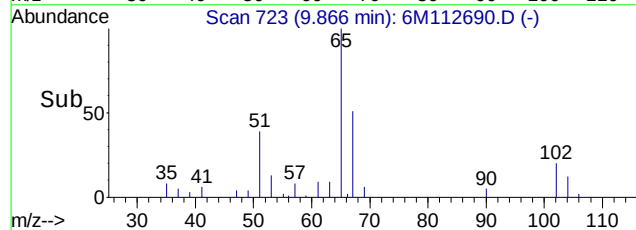
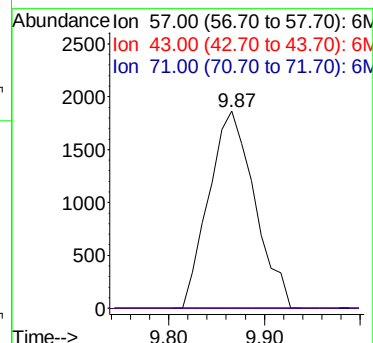
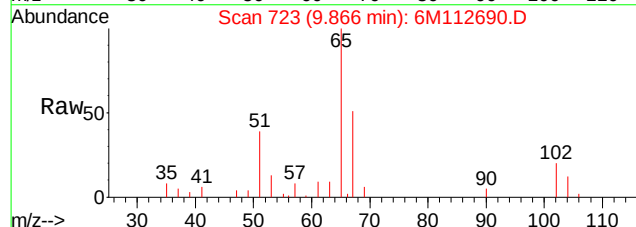
Tgt Ion: 83 Resp: 88750
 Ion Ratio Lower Upper
 83 100
 85 66.1 39.1 91.1
 47 28.5 16.9 39.5





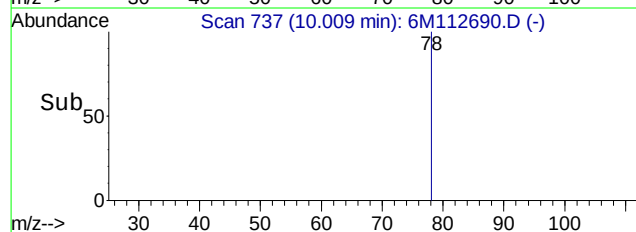
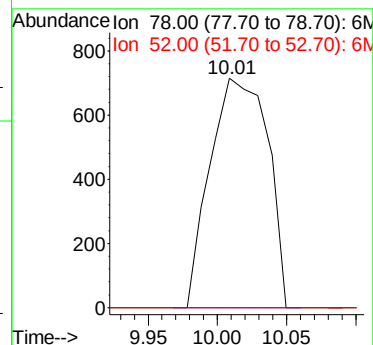
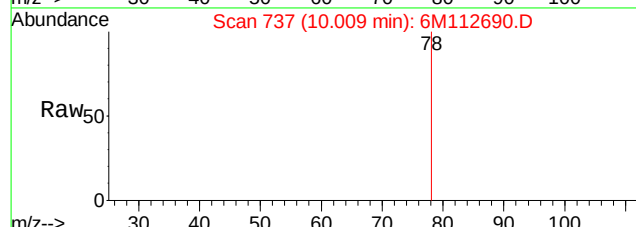
#44
Heptane
Concen: 34.64 ug/L
RT: 9.87 min Scan# 723
Delta R.T. 0.09 min
Lab File: 6M112690.D
Acq: 14 Nov 2012 23:02

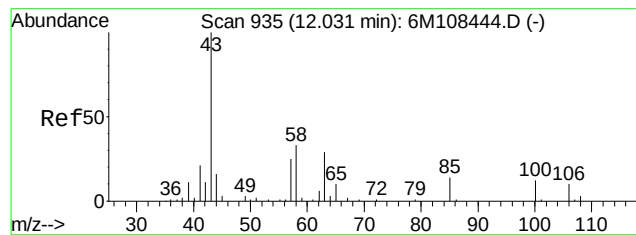
Tgt Ion: 57 Resp: 6168
Ion Ratio Lower Upper
57 100
43 0.0 1074.4 2507.0#
71 0.0 309.8 722.8#



#46
Benzene
Concen: 0.13 ug/L
RT: 10.01 min Scan# 737
Delta R.T. -0.01 min
Lab File: 6M112690.D
Acq: 14 Nov 2012 23:02

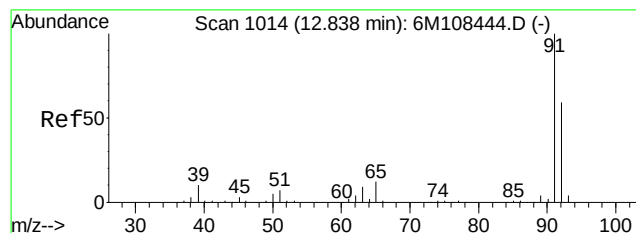
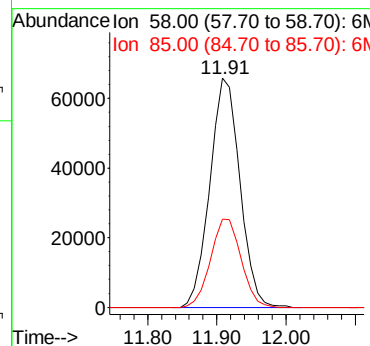
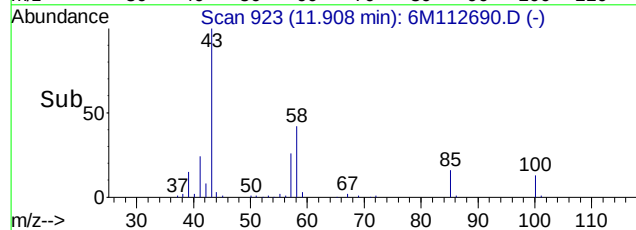
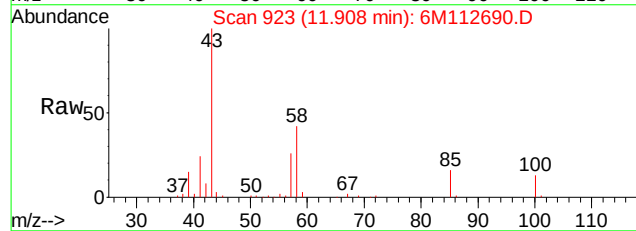
Tgt Ion: 78 Resp: 2066
Ion Ratio Lower Upper
78 100
52 0.0 11.1 25.9#





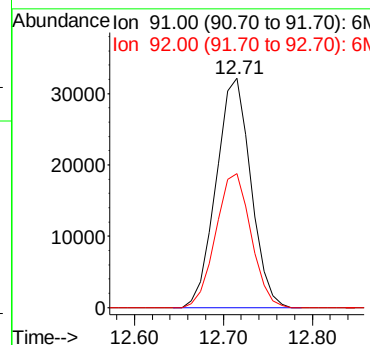
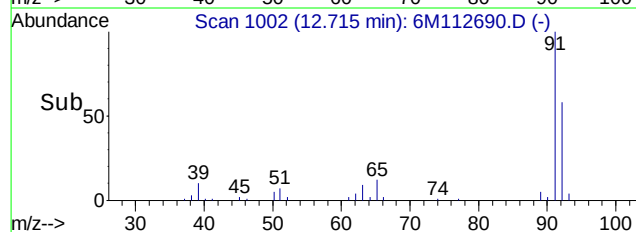
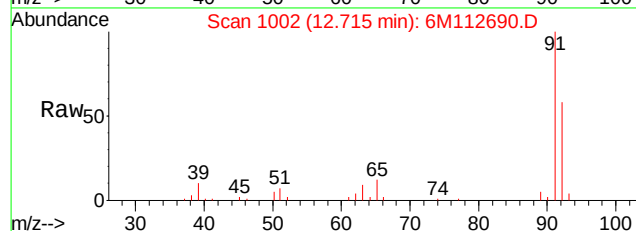
#54
4-Methyl-2-Pentanone
Concen: 275.23 ug/L
RT: 11.91 min Scan# 923
Delta R.T. -0.01 min
Lab File: 6M112690.D
Acq: 14 Nov 2012 23:02

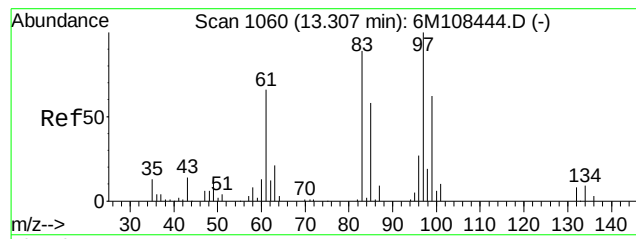
Tgt Ion: 58 Resp: 198235
Ion Ratio Lower Upper
58 100
85 39.1 22.6 52.6



#59
Toluene
Concen: 5.09 ug/L
RT: 12.71 min Scan# 1002
Delta R.T. -0.00 min
Lab File: 6M112690.D
Acq: 14 Nov 2012 23:02

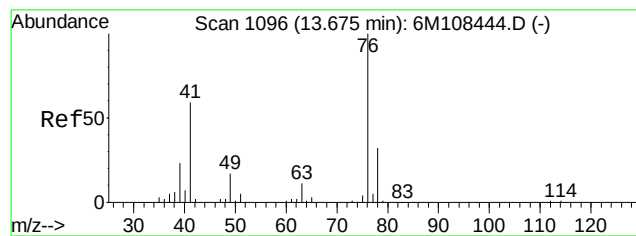
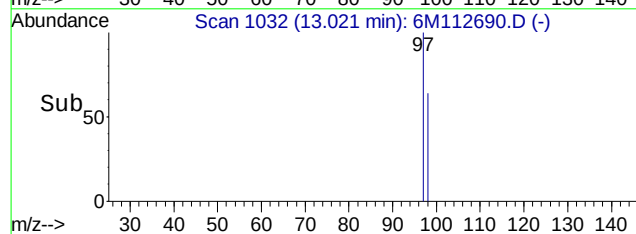
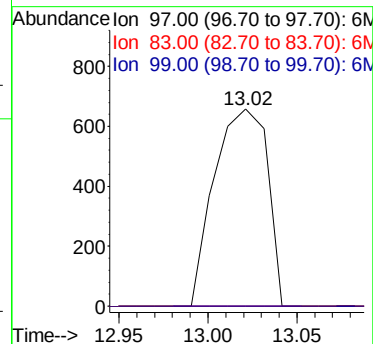
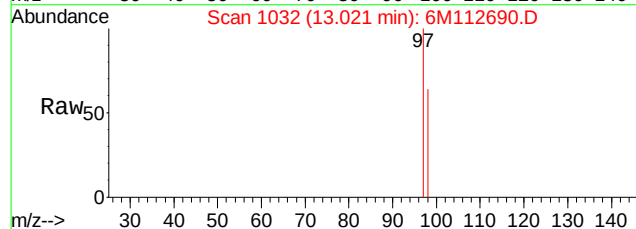
Tgt Ion: 91 Resp: 86993
Ion Ratio Lower Upper
91 100
92 59.4 35.7 83.3





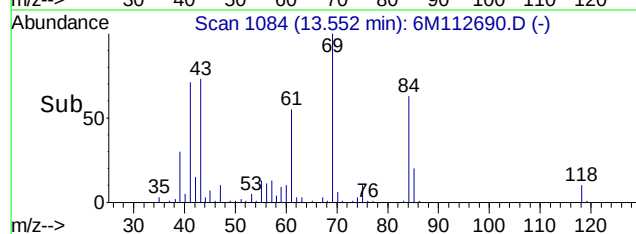
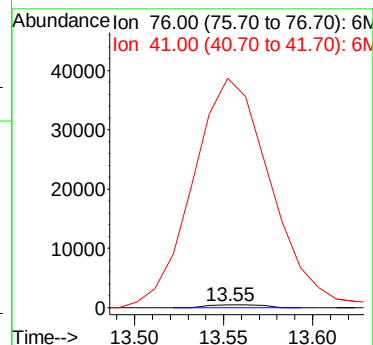
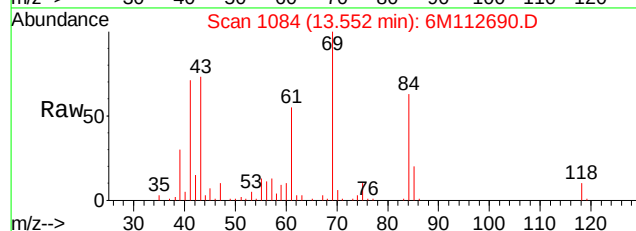
#63
 1,1,2-Trichloroethane
 Concen: 0.74 ug/L
 RT: 13.02 min Scan# 1032
 Delta R.T. -0.16 min
 Lab File: 6M112690.D
 Acq: 14 Nov 2012 23:02

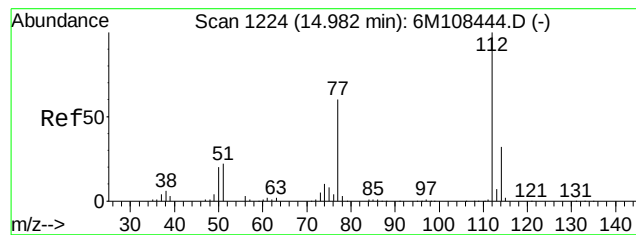
Tgt Ion: 97 Resp: 1359
 Ion Ratio Lower Upper
 97 100
 83 0.0 50.3 117.5#
 99 0.0 37.3 87.1#



#65
 1,3-Dichloropropane
 Concen: 0.22 ug/L
 RT: 13.55 min Scan# 1084
 Delta R.T. 0.01 min
 Lab File: 6M112690.D
 Acq: 14 Nov 2012 23:02

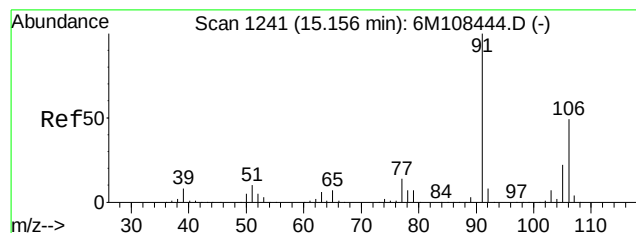
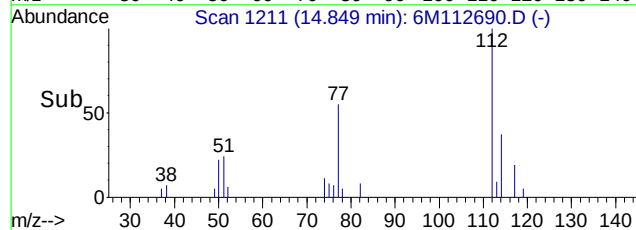
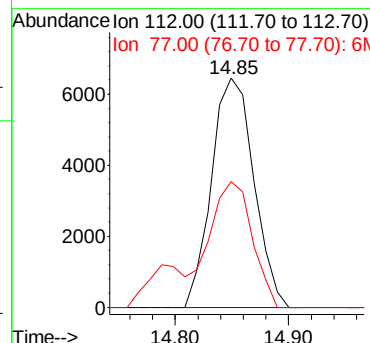
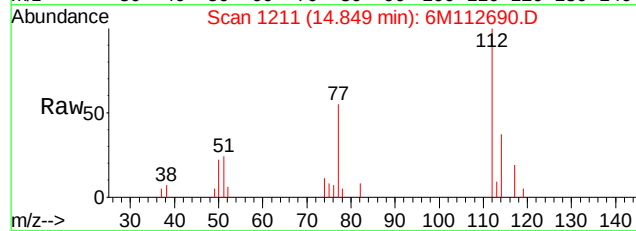
Tgt Ion: 76 Resp: 971
 Ion Ratio Lower Upper
 76 100
 41 12421.2 40.1 93.5#





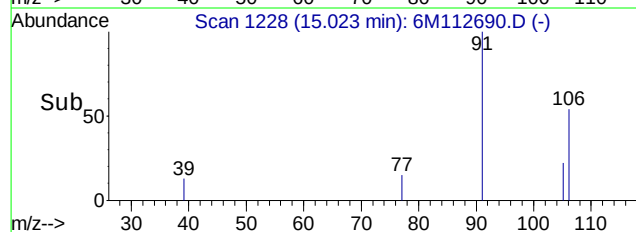
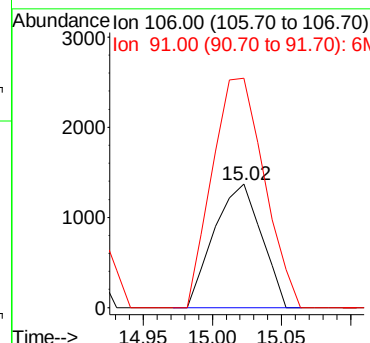
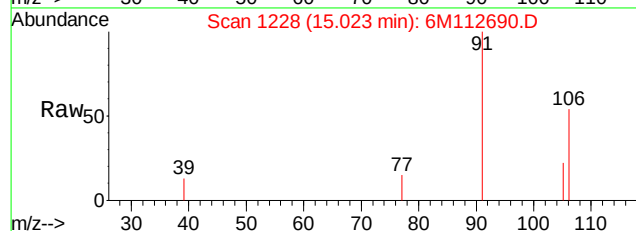
#70
Chlorobenzene
Concen: 1.46 ug/L
RT: 14.85 min Scan# 1211
Delta R.T. -0.00 min
Lab File: 6M112690.D
Acq: 14 Nov 2012 23:02

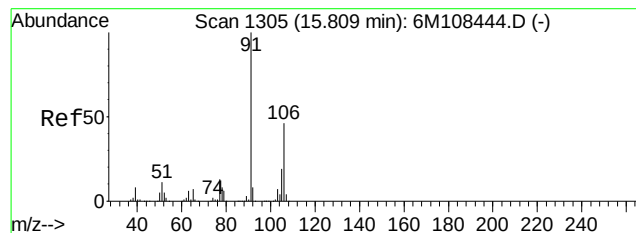
Tgt Ion:112 Resp: 16745
Ion Ratio Lower Upper
112 100
77 55.7 35.8 83.4



#73
m-,p-Xylene
Concen: 0.43 ug/L
RT: 15.02 min Scan# 1228
Delta R.T. 0.01 min
Lab File: 6M112690.D
Acq: 14 Nov 2012 23:02

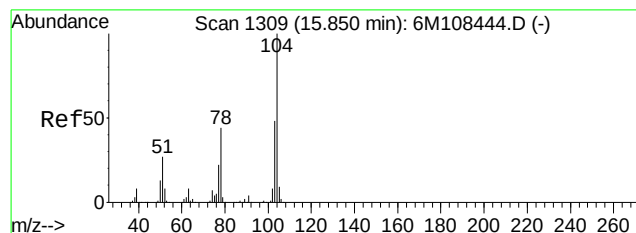
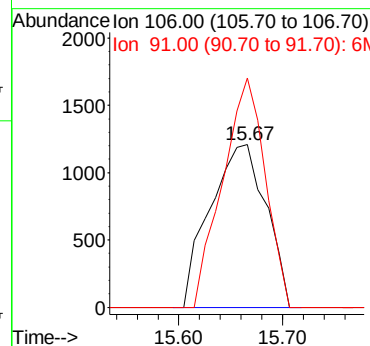
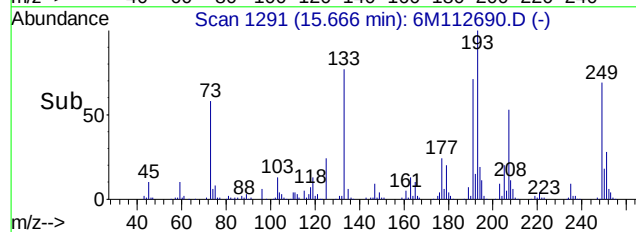
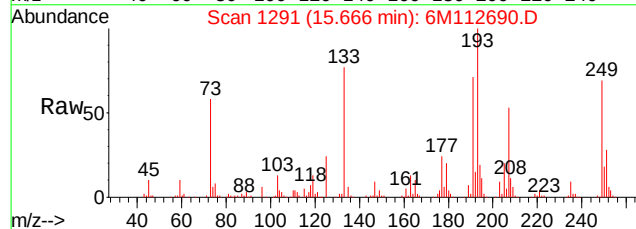
Tgt Ion:106 Resp: 3248
Ion Ratio Lower Upper
106 100
91 204.3 120.5 281.1





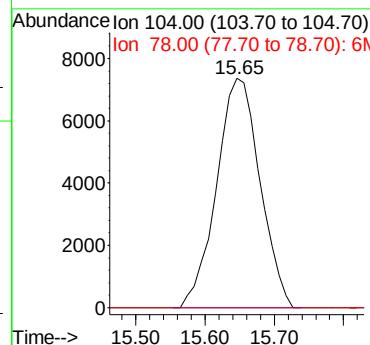
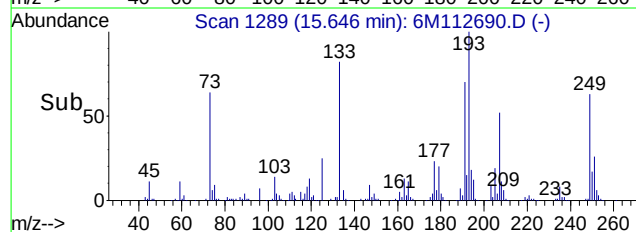
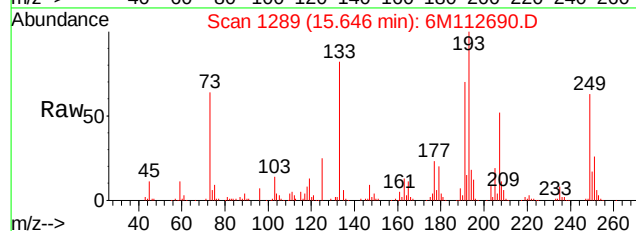
#74
o-Xylene
Concen: 0.63 ug/L
RT: 15.67 min Scan# 1291
Delta R.T. -0.00 min
Lab File: 6M112690.D
Acq: 14 Nov 2012 23:02

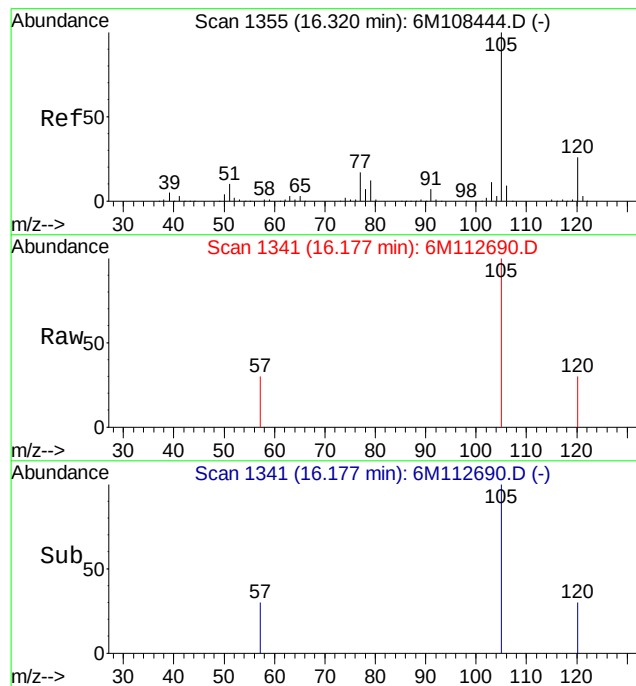
Tgt Ion:106 Resp: 4539
Ion Ratio Lower Upper
106 100
91 107.3 126.8 296.0#



#75
Styrene
Concen: 2.71 ug/L
RT: 15.65 min Scan# 1289
Delta R.T. -0.07 min
Lab File: 6M112690.D
Acq: 14 Nov 2012 23:02

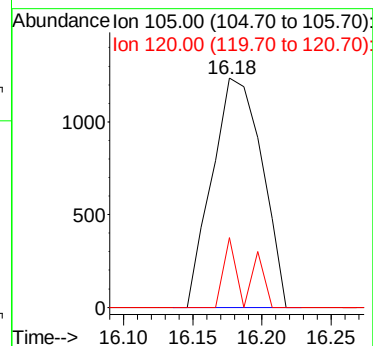
Tgt Ion:104 Resp: 32035
Ion Ratio Lower Upper
104 100
78 0.0 30.0 70.0#





#77
 Isopropylbenzene
 Concen: 0.18 ug/L
 RT: 16.18 min Scan# 1341
 Delta R.T. -0.00 min
 Lab File: 6M112690.D
 Acq: 14 Nov 2012 23:02

Tgt Ion	Ratio	Lower	Upper
105	100		
120	13.4	16.1	37.7#



Data File : C:\MSDCHEM\1\DATA\111412\6M112690.D Vial: 24
 Acq On : 14 Nov 2012 23:02 Operator: FJB
 Sample : L12110393-03 10X A 826-SPE Inst : HPMS6
 Misc : 1,10 foamy/cloudy/sulfur odor Multiplr: 1.00
 MS Integration Params: RTEINT.P

Method : C:\MSDCHEM\1\METHODS\8260WTR.M (RTE Integrator)
 Title : 8260B/624_WATER SOP:OVLMSV01 011/12/12 - HPMS6
 Smoothing : ON Filtering: 5
 Sampling : 1 Min Area: 100 Area counts
 Start Thrs: 0.2 Max Peaks: 100
 Stop Thrs : 0 Peak Location: TOP

If leading or trailing edge < 100 prefer < Baseline drop else tangent >
 Peak separation: 5

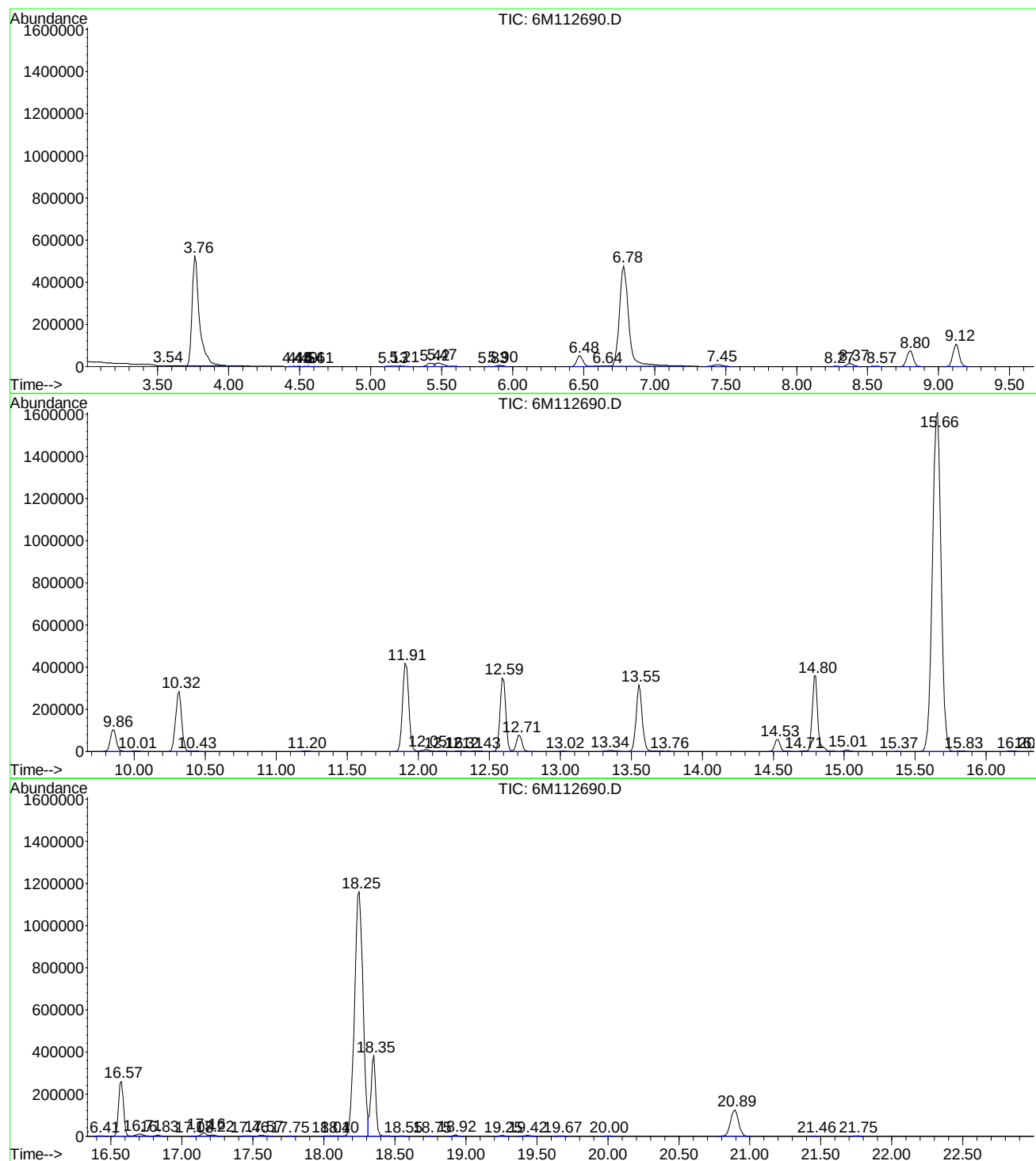
Signal : TIC

peak #	R.T. min	first scan	max scan	last scan	PK TY	peak height	corr. area	corr. % max.	% of total
1	3.545	101	104	105	rBV2	898	1903	0.03%	0.008%
2	3.759	118	125	156	rVB	522378	1866446	27.36%	7.636%
3	4.454	189	193	195	rBB	382	618	0.01%	0.003%
4	4.495	195	197	200	rBB	384	644	0.01%	0.003%
5	4.535	200	201	206	rBB	359	633	0.01%	0.003%
6	4.607	207	208	210	rBB	334	205	0.00%	0.001%
7	5.128	255	259	261	rBV	636	1564	0.02%	0.006%
8	5.209	261	267	274	rVB	2564	7716	0.11%	0.032%
9	5.424	281	288	290	rBV	14951	47843	0.70%	0.196%
10	5.475	291	293	308	rVB	16341	56098	0.82%	0.230%
11	5.832	326	328	329	rBB	321	197	0.00%	0.001%
12	5.904	330	335	341	rBB	4524	14213	0.21%	0.058%
13	6.476	384	391	401	rBV	50851	154089	2.26%	0.630%
14	6.639	401	407	411	rBV2	695	2942	0.04%	0.012%
15	6.782	411	421	464	rBV	476893	2182921	32.00%	8.931%
16	7.446	477	486	495	rBB2	7963	35369	0.52%	0.145%
17	8.273	564	567	570	rBB	409	937	0.01%	0.004%
18	8.375	571	577	584	rBB2	13754	42099	0.62%	0.172%
19	8.569	590	596	599	rBB	1613	3893	0.06%	0.016%
20	8.804	611	619	627	rBB	73530	234612	3.44%	0.960%
21	9.120	642	650	659	rBB	106539	320654	4.70%	1.312%
22	9.856	714	722	730	rBB	100302	286670	4.20%	1.173%
23	10.009	733	737	742	rBB	715	2065	0.03%	0.008%
24	10.315	759	767	775	rBV	283243	844887	12.38%	3.457%
25	10.427	775	778	782	rVB	1472	2809	0.04%	0.011%
26	11.204	850	854	859	rBB	2071	4507	0.07%	0.018%
27	11.908	915	923	932	rBV	418727	1255786	18.41%	5.138%
28	12.051	932	937	945	rVB	7570	24377	0.36%	0.100%
29	12.163	945	948	953	rBB	1170	2515	0.04%	0.010%
30	12.306	956	962	966	rBB	799	2058	0.03%	0.008%
31	12.429	967	974	978	rBB	650	2352	0.03%	0.010%
32	12.592	983	990	996	rBV	349915	948030	13.90%	3.879%
33	12.715	996	1002	1009	rVB	75942	206447	3.03%	0.845%
34	13.021	1028	1032	1035	rBB	1077	2125	0.03%	0.009%
35	13.338	1058	1063	1072	rBB2	3445	13778	0.20%	0.056%
36	13.552	1076	1084	1102	rBB	316137	937188	13.74%	3.834%
37	13.756	1103	1104	1107	rBB	349	416	0.01%	0.002%
38	14.533	1173	1180	1190	rBB	54533	141144	2.07%	0.577%
39	14.706	1194	1197	1199	rBV	1069	1947	0.03%	0.008%
40	14.798	1199	1206	1221	rVB	358344	963953	14.13%	3.944%
41	15.012	1223	1227	1233	rBB	5461	12254	0.18%	0.050%
42	15.370	1260	1262	1264	rBB	344	211	0.00%	0.001%

43	15.656	1278	1290	1302	rBB	1609423	6822005	100.00%	27.910%
44	15.829	1303	1307	1311	rBB3	1365	2938	0.04%	0.012%
45	16.197	1337	1343	1346	rBB2	2049	5003	0.07%	0.020%
46	16.320	1353	1355	1357	rBB2	324	199	0.00%	0.001%
47	16.411	1361	1364	1370	rBB2	1095	2828	0.04%	0.012%
48	16.575	1373	1380	1386	rBV	260631	619515	9.08%	2.535%
49	16.708	1386	1393	1400	rVB3	9466	34032	0.50%	0.139%
50	16.830	1401	1405	1410	rBB2	4570	9208	0.13%	0.038%
51	17.075	1427	1429	1430	rBB2	319	195	0.00%	0.001%
52	17.157	1431	1437	1440	rBV	15628	38650	0.57%	0.158%
53	17.218	1441	1443	1448	rVB2	5529	11681	0.17%	0.048%
54	17.463	1462	1467	1471	rBB	2266	5083	0.07%	0.021%
55	17.565	1472	1477	1484	rBB	4372	11724	0.17%	0.048%
56	17.749	1493	1495	1499	rBB	326	388	0.01%	0.002%
57	18.035	1518	1523	1524	rBV	377	1054	0.02%	0.004%
58	18.096	1524	1529	1532	rVB2	2149	5142	0.08%	0.021%
59	18.249	1532	1544	1550	rBV	1159672	4818051	70.63%	19.711%
60	18.352	1550	1554	1567	rVB	383196	902458	13.23%	3.692%
61	18.546	1570	1573	1577	rBB	2285	4348	0.06%	0.018%
62	18.750	1591	1593	1595	rBB	344	211	0.00%	0.001%
63	18.923	1606	1610	1615	rBB	5568	11538	0.17%	0.047%
64	19.250	1638	1642	1647	rBB2	3038	6491	0.10%	0.027%
65	19.424	1654	1659	1666	rBB2	2648	9226	0.14%	0.038%
66	19.669	1679	1683	1687	rBB	1093	2299	0.03%	0.009%
67	19.996	1712	1715	1719	rBB	744	1300	0.02%	0.005%
68	20.894	1792	1803	1813	rBB	125274	483522	7.09%	1.978%
69	21.456	1856	1858	1860	rBB	302	185	0.00%	0.001%
70	21.752	1883	1887	1891	rBB	1253	2716	0.04%	0.011%

Sum of corrected areas: 24443105

File : C:\MSDCHEM\1\DATA\111412\6M112690.D
Operator : FJB
Acquired : 14 Nov 2012 23:02 using AcqMethod 8260WTR
Instrument : HPMS6
Sample Name: L12110393-03 10X A 826-SPE
Misc Info : 1,10 foamy/cloudy/sulfur odor
Vial Number: 24
Quant File :8260WTR.RES (RTE Integrator)



Data File : C:\MSDCHEM\1\DATA\111412\6M112690.D
Acq On : 14 Nov 2012 23:02
Sample : L12110393-03 10X A 826-SPE
Misc : 1,10 foamy/cloudy/sulfur odor
MS Integration Params: RTEINT.P

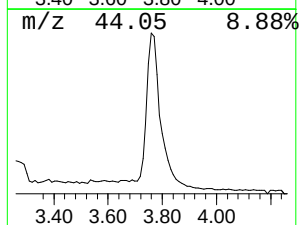
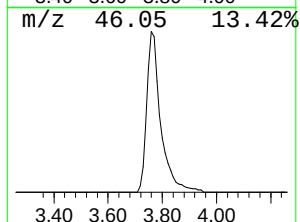
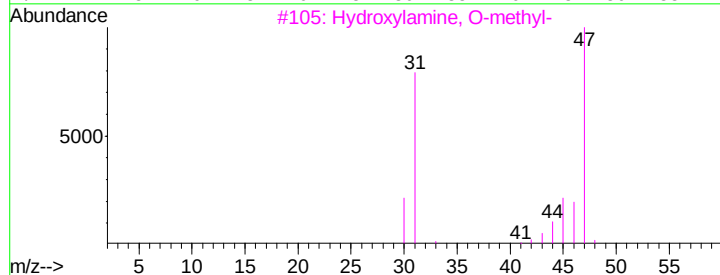
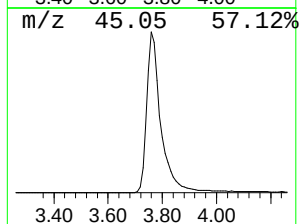
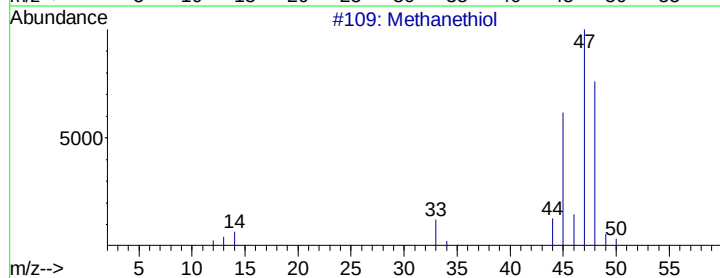
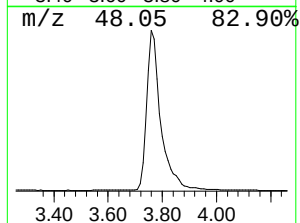
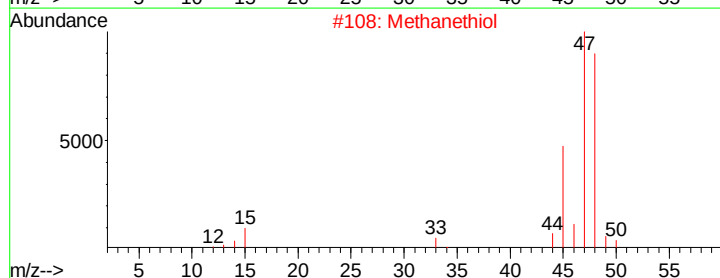
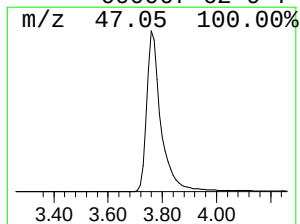
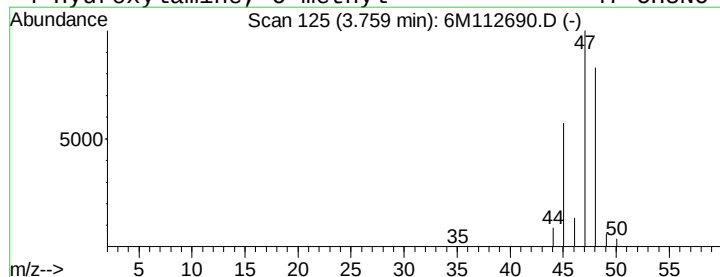
Vial: 24
Operator: FJB
Inst : HPMS6
Multiplr: 1.00

Quant Method : C:\MSDCHEM\1\METHODS\8260WTR.M (RTE Integrator)
Title : 8260B/624 WATER SOP:OVLMSV01 011/12/12 - HPMS6
Library : C:\DATABASE\NIST02.L

Peak Number 1 Methanethiol Concentration Rank 4

R.T.	EstConc	Area	Relative to ISTD	R.T.
3.76	55.23 ug/L	1866450	Fluorobenzene	10.32

Hit#	of	5	Tentative ID	MW	MolForm	CAS#	Qual
1			Methanethiol	48	CH4S	000074-93-1	90
2			Methanethiol	48	CH4S	000074-93-1	83
3			Hydroxylamine, O-methyl-	47	CH5NO	000067-62-9	9
4			Hydroxylamine, O-methyl-	47	CH5NO	000067-62-9	7



Data File : C:\MSDCHEM\1\DATA\111412\6M112690.D
Acq On : 14 Nov 2012 23:02
Sample : L12110393-03 10X A 826-SPE
Misc : 1,10 foamy/cloudy/sulfur odor
MS Integration Params: RTEINT.P

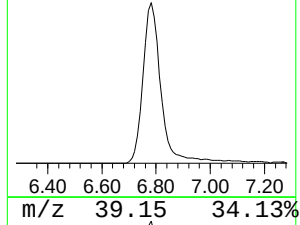
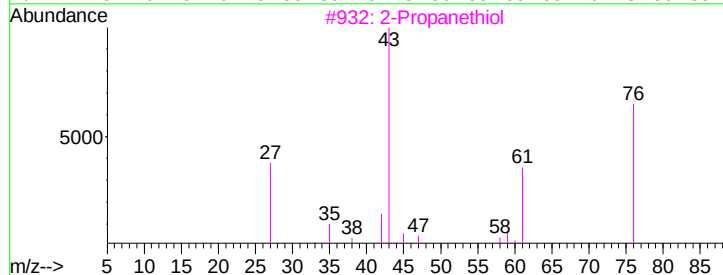
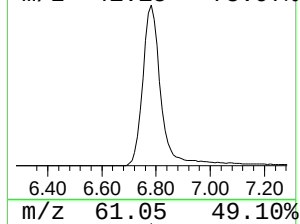
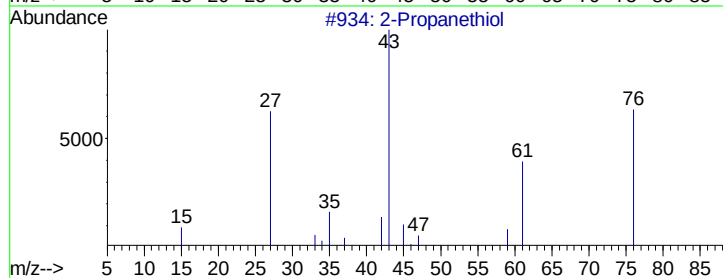
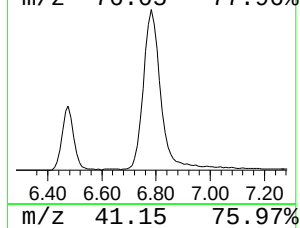
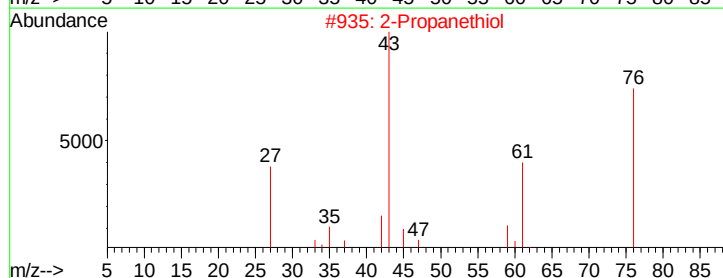
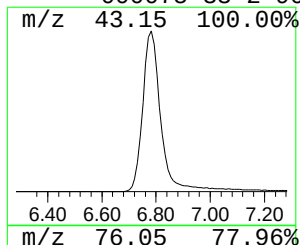
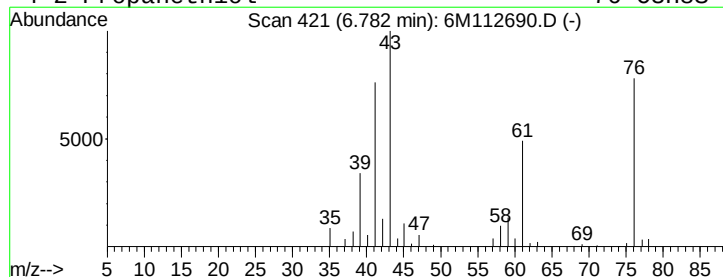
Vial: 24
Operator: FJB
Inst : HPMS6
Multiplr: 1.00

Quant Method : C:\MSDCHEM\1\METHODS\8260WTR.M (RTE Integrator)
Title : 8260B/624 WATER SOP:OVLMSV01 011/12/12 - HPMS6
Library : C:\DATABASE\NIST02.L

Peak Number 2 2-Propanethiol Concentration Rank 3

R.T.	EstConc	Area	Relative to ISTD	R.T.
6.78	64.59 ug/L	2182920	Fluorobenzene	10.32

Hit#	of	5	Tentative ID	MW	MolForm	CAS#	Qual
1	2-Propanethiol			76	C3H8S	000075-33-2	91
2	2-Propanethiol			76	C3H8S	000075-33-2	91
3	2-Propanethiol			76	C3H8S	000075-33-2	91
4	2-Propanethiol			76	C3H8S	000075-33-2	90



Data File : C:\MSDCHEM\1\DATA\111412\6M112690.D
Acq On : 14 Nov 2012 23:02
Sample : L12110393-03 10X A 826-SPE
Misc : 1,10 foamy/cloudy/sulfur odor
MS Integration Params: RTEINT.P

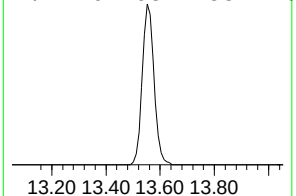
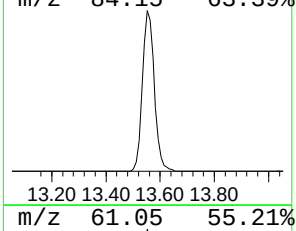
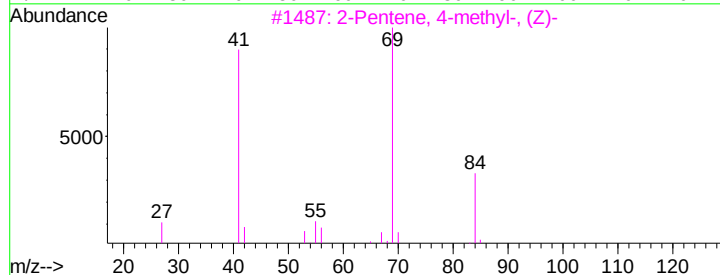
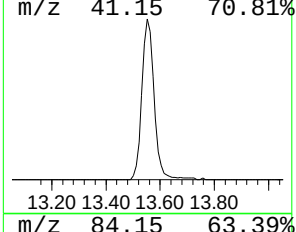
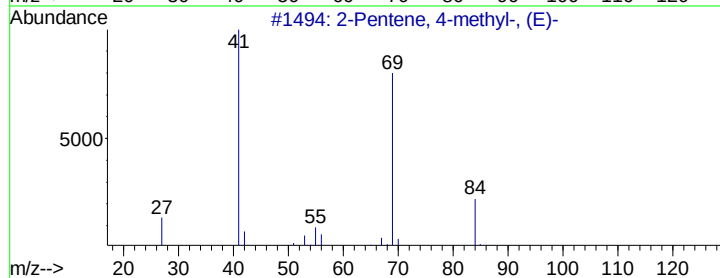
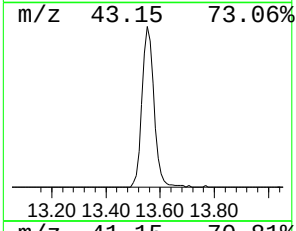
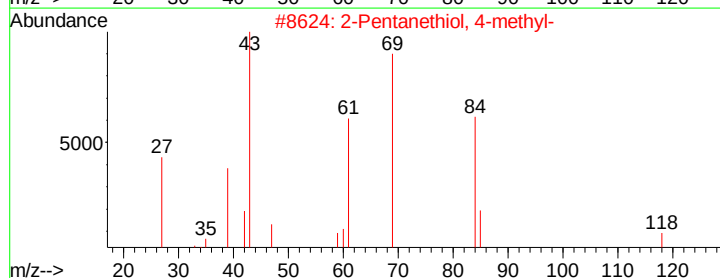
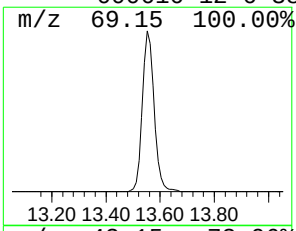
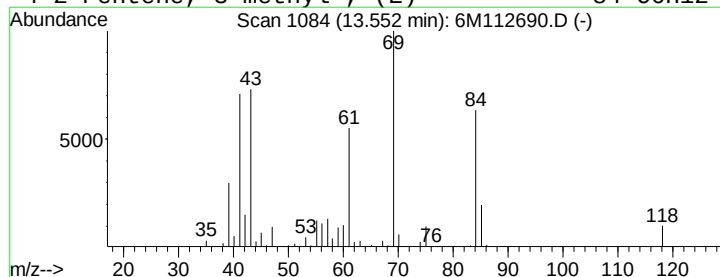
Vial: 24
Operator: FJB
Inst : HPMS6
Multiplr: 1.00

Quant Method : C:\MSDCHEM\1\METHODS\8260WTR.M (RTE Integrator)
Title : 8260B/624 WATER SOP:OVLMSV01 011/12/12 - HPMS6
Library : C:\DATABASE\NIST02.L

Peak Number 3 2-Pentanethiol, 4-methyl- Concentration Rank 5

R.T.	EstConc	Area	Relative to ISTD	R.T.
13.55	24.31 ug/L	937188	Chlorobenzene-d5	14.80

Hit#	of	5	Tentative ID	MW	MolForm	CAS#	Qual
1			2-Pentanethiol, 4-methyl-	118	C6H14S	001639-05-0	86
2			2-Pentene, 4-methyl-, (E)-	84	C6H12	000674-76-0	38
3			2-Pentene, 4-methyl-, (Z)-	84	C6H12	000691-38-3	38
4			2-Pentene, 3-methyl-, (E)-	84	C6H12	000616-12-6	38



Data File : C:\MSDCHEM\1\DATA\111412\6M112690.D
Acq On : 14 Nov 2012 23:02
Sample : L12110393-03 10X A 826-SPE
Misc : 1,10 foamy/cloudy/sulfur odor
MS Integration Params: RTEINT.P

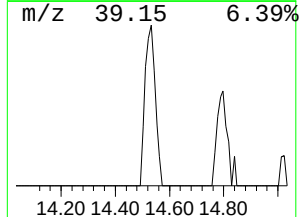
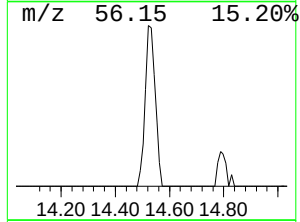
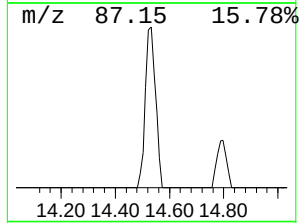
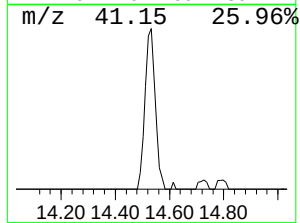
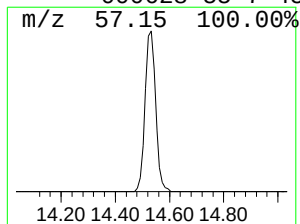
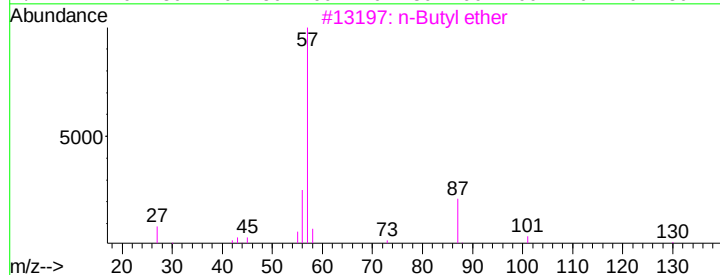
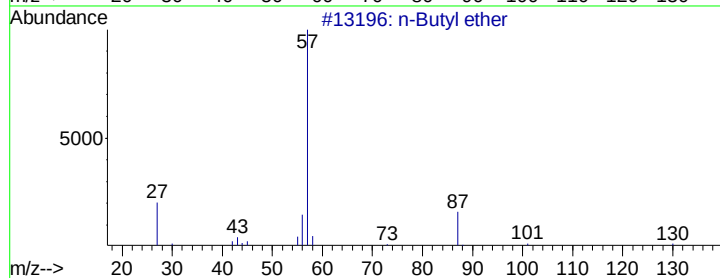
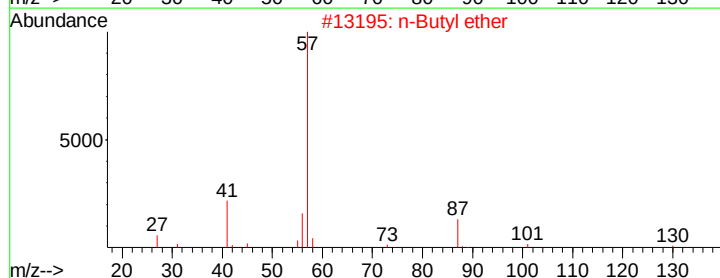
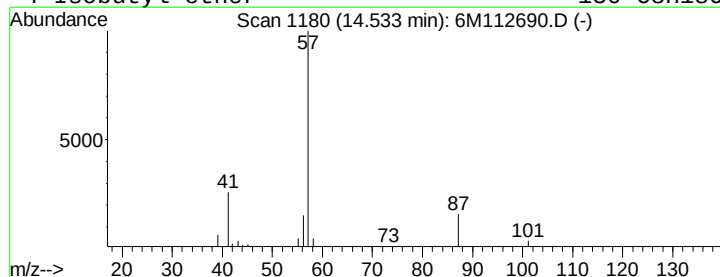
Vial: 24
Operator: FJB
Inst : HPMS6
Multiplr: 1.00

Quant Method : C:\MSDCHEM\1\METHODS\8260WTR.M (RTE Integrator)
Title : 8260B/624 WATER SOP:OVLMSV01 011/12/12 - HPMS6
Library : C:\DATABASE\NIST02.L

Peak Number 4 n-Butyl ether Concentration Rank 7

R.T.	EstConc	Area	Relative to ISTD	R.T.
14.53	3.66 ug/L	141144	Chlorobenzene-d5	14.80

Hit# of	5	Tentative ID	MW	MolForm	CAS#	Qual
1	n-Butyl ether		130	C8H18O	000142-96-1	78
2	n-Butyl ether		130	C8H18O	000142-96-1	72
3	n-Butyl ether		130	C8H18O	000142-96-1	64
4	Isobutyl ether		130	C8H18O	000628-55-7	45



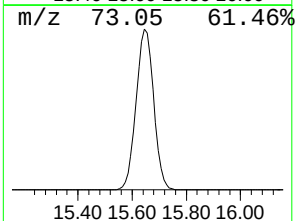
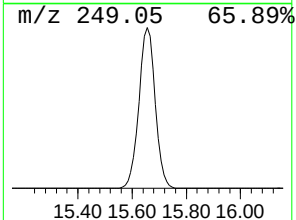
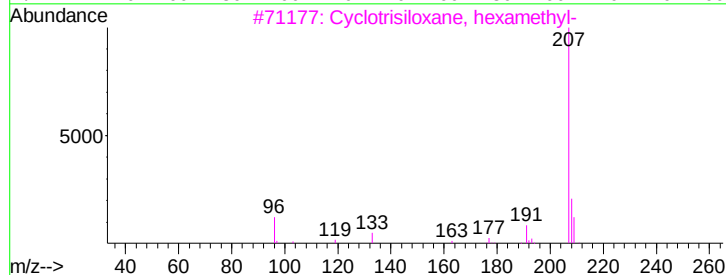
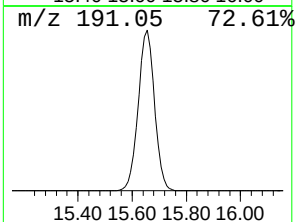
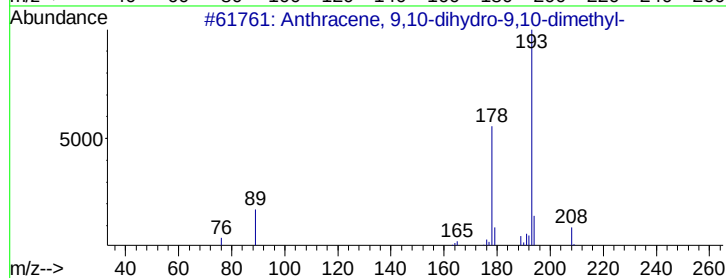
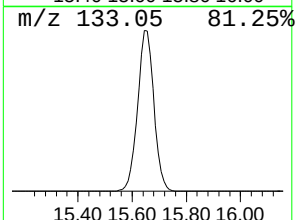
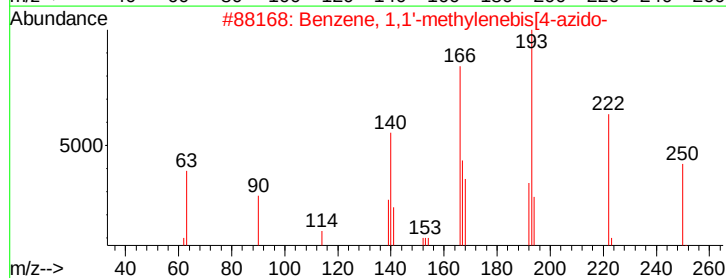
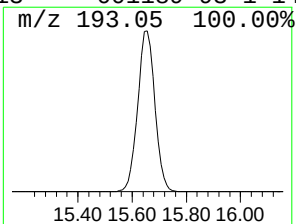
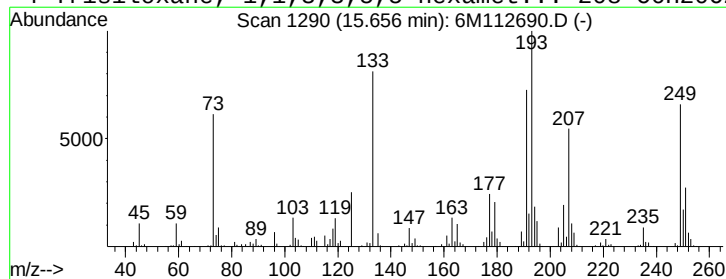
Data File : C:\MSDCHEM\1\DATA\111412\6M112690.D
Acq On : 14 Nov 2012 23:02
Sample : L12110393-03 10X A 826-SPE
Misc : 1,10 foamy/cloudy/sulfur odor
MS Integration Params: RTEINT.P

Vial: 24
Operator: FJB
Inst : HPMS6
Multiplr: 1.00

Quant Method : C:\MSDCHEM\1\METHODS\8260WTR.M (RTE Integrator)
Title : 8260B/624 WATER SOP:OVMSV01 011/12/12 - HPMS6
Library : C:\DATABASE\NIST02.L

Peak Number 5 Benzene, 1,1'-methylenebis[... Concentration Rank 1

R.T.	EstConc	Area	Relative to ISTD	R.T.	
15.66	176.93 ug/L	6822010	Chlorobenzene-d5	14.80	
Hit# of 5	Tentative ID	MW	MolForm	CAS#	Qual
1	Benzene, 1,1'-methylenebis[4-azido-	250	C13H10N6	002915-44-8	18
2	Anthracene, 9,10-dihydro-9,10-di...	208	C16H16	022566-43-4	18
3	Cyclotrisiloxane, hexamethyl-	222	C6H18O3Si3	000541-05-9	14
4	Trisiloxane, 1,1,3,3,5,5-hexamet...	208	C6H20O2Si3	001189-93-1	14



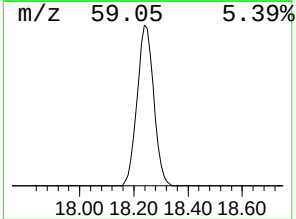
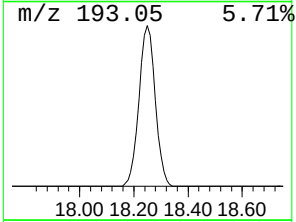
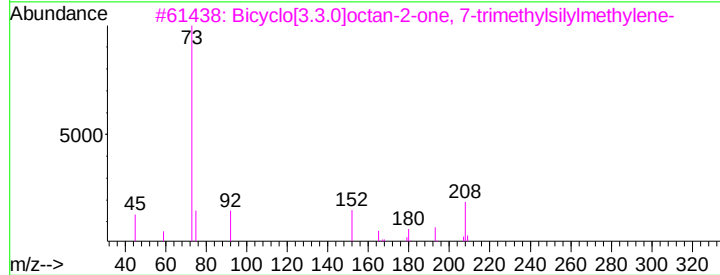
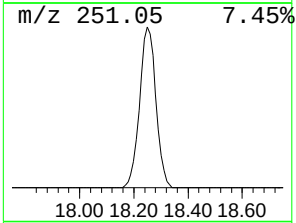
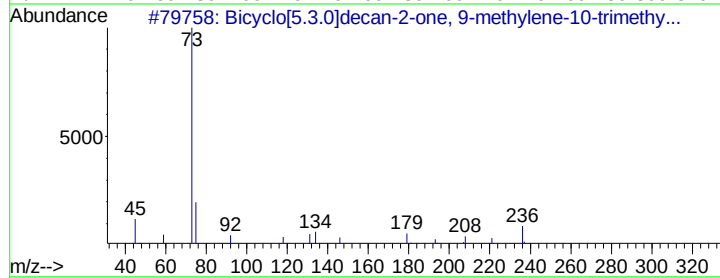
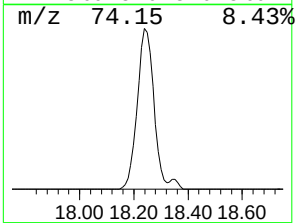
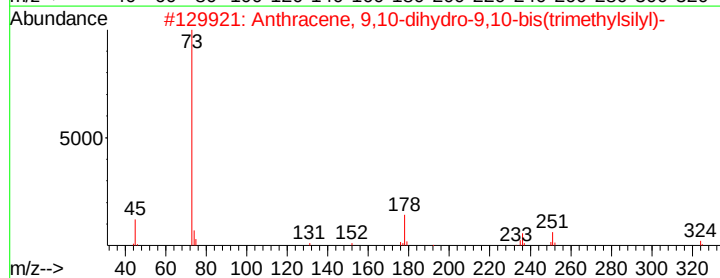
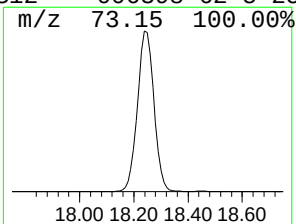
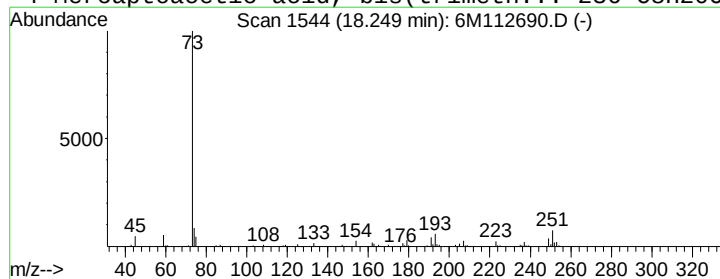
Data File : C:\MSDCHEM\1\DATA\111412\6M112690.D
Acq On : 14 Nov 2012 23:02
Sample : L12110393-03 10X A 826-SPE
Misc : 1,10 foamy/cloudy/sulfur odor
MS Integration Params: RTEINT.P

Vial: 24
Operator: FJB
Inst : HPMS6
Multiplr: 1.00

Quant Method : C:\MSDCHEM\1\METHODS\8260WTR.M (RTE Integrator)
Title : 8260B/624 WATER SOP:OVLMSV01 011/12/12 - HPMS6
Library : C:\DATABASE\NIST02.L

Peak Number 6 Anthracene, 9,10-dihydro-9,... Concentration Rank 2

R.T.	EstConc	Area	Relative to ISTD	R.T.		
18.25	133.47 ug/L	4818050	1,4-Dichlorobenzene-d4	18.35		
Hit# of	5	Tentative ID	MW	MolForm	CAS#	Qual
1		Anthracene, 9,10-dihydro-9,10-bi...	324	C20H28Si2	018586-37-3	37
2		Bicyclo[5.3.0]decan-2-one, 9-met...	236	C14H24OSi	1000153-97-3	28
3		Bicyclo[3.3.0]octan-2-one, 7-tri...	208	C12H20OSi	109613-14-1	28
4		Mercaptoacetic acid, bis(trimeth...	236	C8H20O2SSi2	006398-62-5	25



Data File : C:\MSDCHEM\1\DATA\111412\6M112690.D
Acq On : 14 Nov 2012 23:02
Sample : L12110393-03 10X A 826-SPE
Misc : 1,10 foamy/cloudy/sulfur odor
MS Integration Params: RTEINT.P

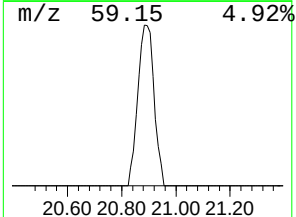
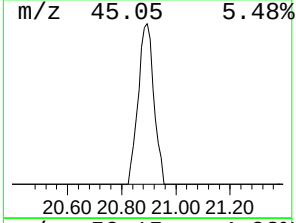
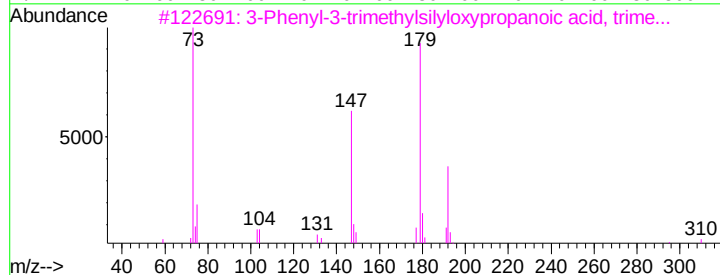
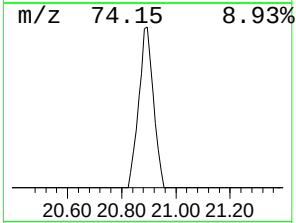
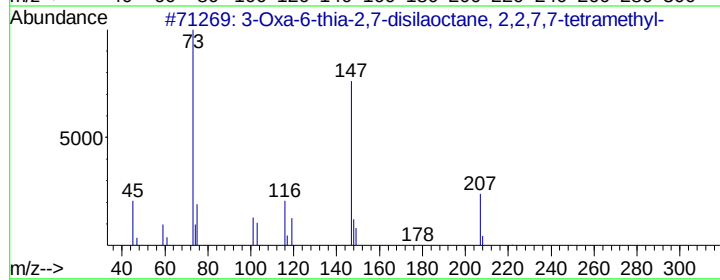
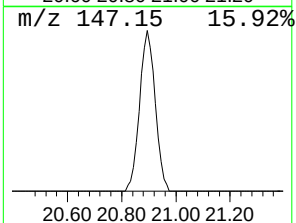
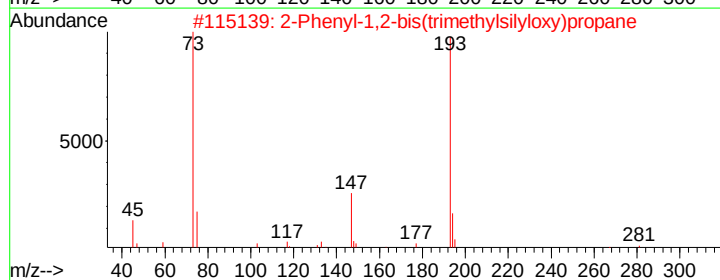
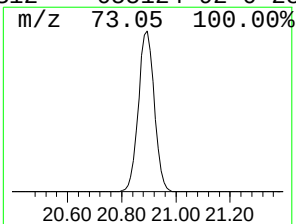
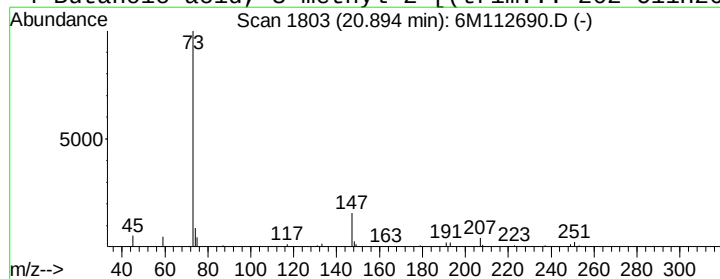
Vial: 24
Operator: FJB
Inst : HPMS6
Multiplr: 1.00

Quant Method : C:\MSDCHEM\1\METHODS\8260WTR.M (RTE Integrator)
Title : 8260B/624 WATER SOP:OVLMSV01 011/12/12 - HPMS6
Library : C:\DATABASE\NIST02.L

Peak Number 7 2-Phenyl-1,2-bis(trimethyls... Concentration Rank 6

R.T.	EstConc	Area	Relative to ISTD	R.T.
20.89	13.39 ug/L	483522	1,4-Dichlorobenzene-d4	18.35

Hit#	of	5	Tentative ID	MW	MolForm	CAS#	Qual
1			2-Phenyl-1,2-bis(trimethylsilylo...	296	C15H28O2Si2	294847-15-7	38
2			3-Oxa-6-thia-2,7-disilaoctane, 2...	222	C8H22OSSI2	078921-31-0	37
3			3-Phenyl-3-trimethylsilyloxyprop...	310	C15H26O3Si2	1000079-40-7	28
4			Butanoic acid, 3-methyl-2-[(trim...	262	C11H26O3Si2	055124-92-0	28



Tentatively Identified Compound (LSC) summary

Operator ID: FJB Date Acquired: 14 Nov 2012 23:02
Data File: C:\MSDCHEM\1\DATA\111412\6M112690.D
Name: L12110393-03 10X A 826-SPE
Misc: 1,10 foamy/cloudy/sulfur odor
Method: C:\MSDCHEM\1\METHODS\8260WTR.M (RTE Integrator)
Title: 8260B/624_WATER SOP:OVLMSV01 011/12/12 - HPMS6
Library Searched: C:\DATABASE\NIST02.L

TIC Top Hit name	RT	EstConc	Units	Response	--Internal Standard--			
					#	RT	Resp	Conc
Methanethiol	3.76	55.2	ug/L	1866450	1	10.32	844887	25.0
2-Propanethiol	6.78	64.6	ug/L	2182920	1	10.32	844887	25.0
2-Pentanethiol, 4...	13.55	24.3	ug/L	937188	2	14.80	963953	25.0
n-Butyl ether	14.53	3.7	ug/L	141144	2	14.80	963953	25.0
Benzene, 1,1'-met...	15.66	176.9	ug/L	6822010	2	14.80	963953	25.0
Anthracene, 9,10-...	18.25	133.5	ug/L	4818050	3	18.35	902458	25.0
2-Phenyl-1,2-bis(...	20.89	13.4	ug/L	483522	3	18.35	902458	25.0

Data File : C:\MSDCHEM\1\DATA\111412\6M112676.D Vial: 10
 Acq On : 14 Nov 2012 15:55 Operator: FJB
 Sample : L12110393-05 TB A 826-SPE Inst : HPMS6
 Misc : 1,1 Multiplr: 1.00
 MS Integration Params: RTEINT.P
 Quant Time: Nov 15 09:24:14 2012 Quant Results File: 8260WTR.RES

Quant Method : C:\MSDCHEM\1\METHODS\8260WTR.M (RTE Integrator)
 Title : 8260B/624_WATER SOP:OVLMSV01 011/12/12 - HPMS6
 Last Update : Tue Nov 13 09:04:10 2012
 Response via : Initial Calibration
 DataAcq Meth : 8260WTR

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) Fluorobenzene	10.32	96	434864	25.00	ug/L	0.00
57) Chlorobenzene-d5	14.80	117	321207	25.00	ug/L	0.00
78) 1,4-Dichlorobenzene-d4	18.35	152	150798	25.00	ug/L	0.00
System Monitoring Compounds						
37) Dibromofluoromethane	9.12	111	112241	25.1818	ug/L	0.00
Spiked Amount 25.000	Range 86 - 118		Recovery = 100.72%			
43) 1,2-Dichloroethane-d4	9.85	65	107273	25.1146	ug/L	-0.01
Spiked Amount 25.000	Range 80 - 120		Recovery = 100.44%			
58) Toluene-d8	12.60	98	380735	24.1650	ug/L	0.00
Spiked Amount 25.000	Range 88 - 110		Recovery = 96.68%			
80) p-Bromofluorobenzene	16.58	95	141026	25.7946	ug/L	0.00
Spiked Amount 25.000	Range 86 - 115		Recovery = 103.16%			
Target Compounds						
13) Acetone	5.44	43	417	0.7282	ug/L	# 46
19) Methylene Chloride	6.47	84	986	0.2331	ug/L	# 81

(#) = qualifier out of range (m) = manual integration
 6M112676.D 8260WTR.M Thu Nov 15 09:24:14 2012

Page 1

Data File : C:\MSDCHEM\1\DATA\111412\6M112676.D

Vial: 10

Acq On : 14 Nov 2012 15:55

Operator: FJB

Sample : L12110393-05 TB A 826-SPE

Inst : HPMS6

Misc : 1,1

Multiplr: 1.00

MS Integration Params: RTEINT.P

Quant Time: Nov 15 9:24 2012

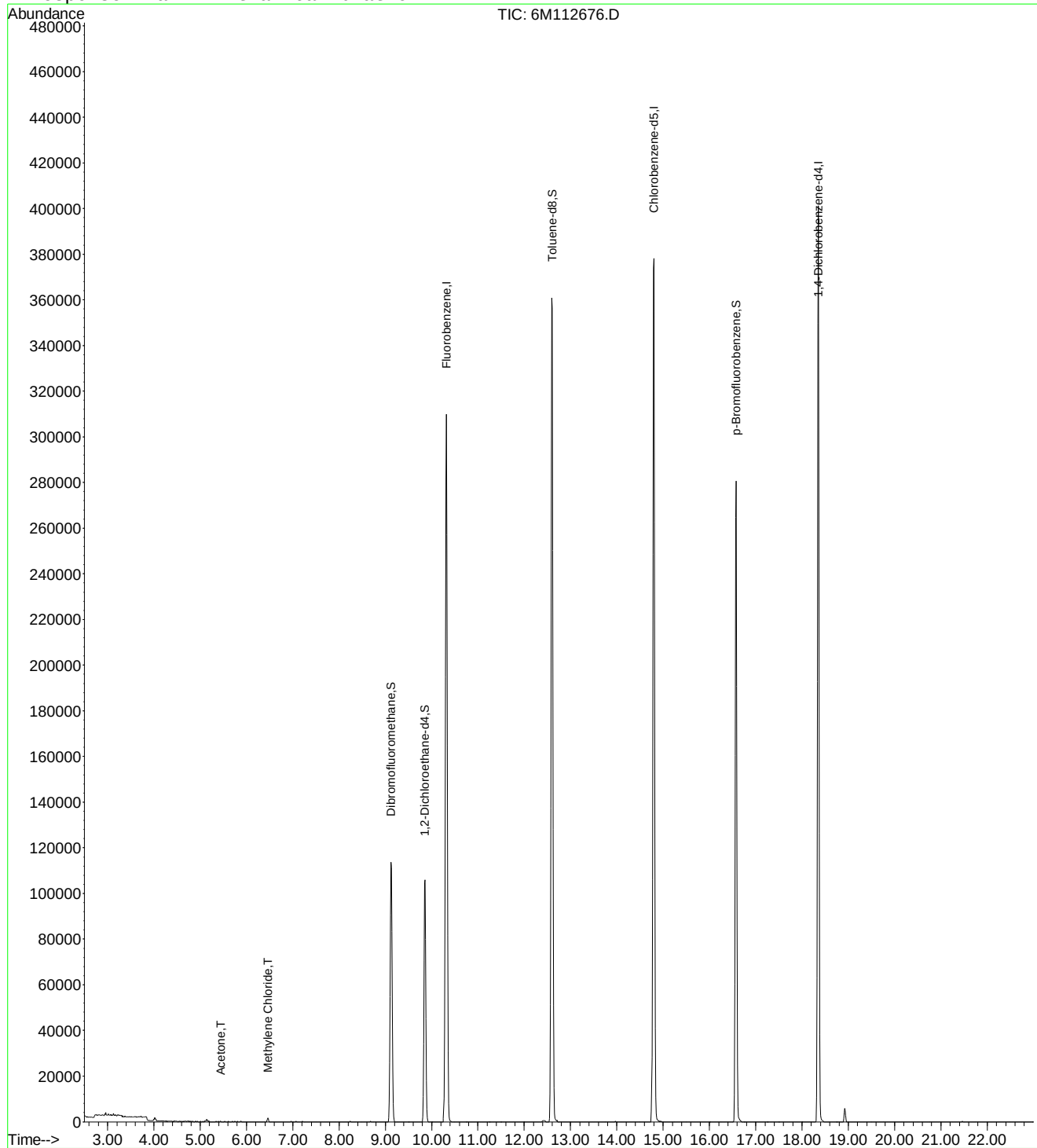
Quant Results File: 8260WTR.RES

Method : C:\MSDCHEM\1\METHODS\8260WTR.M (RTE Integrator)

Title : 8260B/624_WATER SOP:OVLMSV01 011/12/12 - HPMS6

Last Update : Tue Nov 13 09:04:10 2012

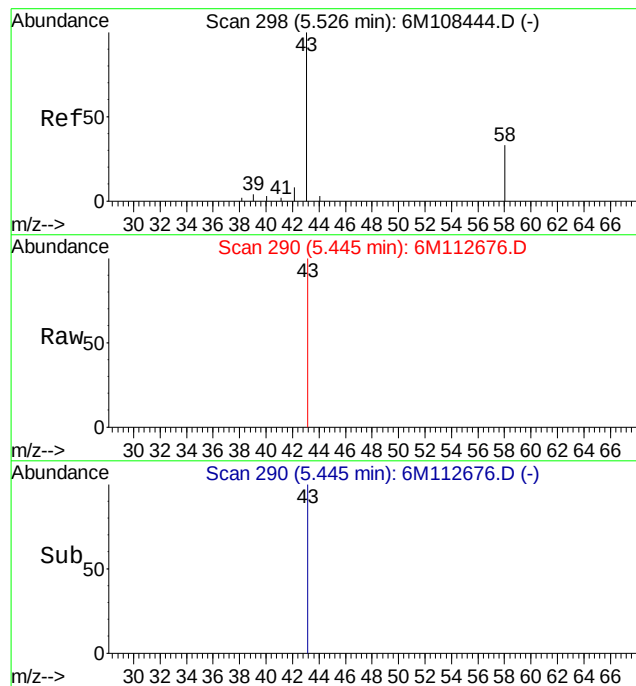
Response via : Initial Calibration



6M112676.D 8260WTR.M

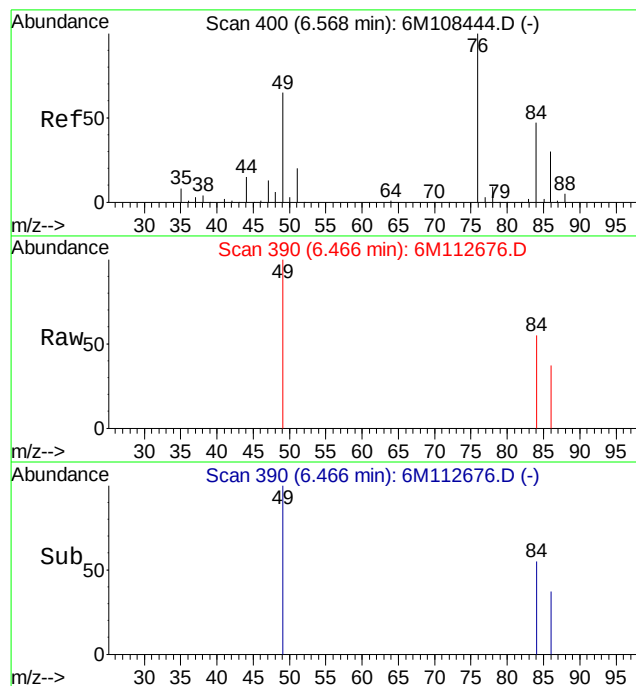
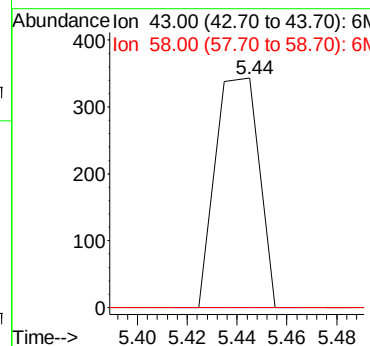
Thu Nov 15 09:24:15 2012

Page 2



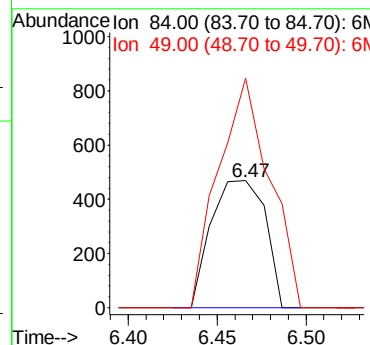
#13
Acetone
Concen: 0.73 ug/L
RT: 5.44 min Scan# 290
Delta R.T. 0.02 min
Lab File: 6M112676.D
Acq: 14 Nov 2012 15:55

Tgt Ion	Ratio	Lower	Upper
43	100		
58	0.0	17.3	40.5#



#19
Methylene Chloride
Concen: 0.23 ug/L
RT: 6.47 min Scan# 390
Delta R.T. -0.00 min
Lab File: 6M112676.D
Acq: 14 Nov 2012 15:55

Tgt Ion	Ratio	Lower	Upper
84	100		
49	171.6	88.6	206.8



2.1.1.4 Standards Data

Data File : C:\MSDCHEM\2\DATA\012512\6M105371.D Vial: 5
 Acq On : 25 Jan 2012 10:12 Operator: ADC
 Sample : WG388587-01 5ug/L 826A9F00 QC Inst : HPMS6
 Misc : 1,1 STD49721 Multiplr: 1.00
 MS Integration Params: rteint.p
 Quant Time: Feb 02 11:00:06 2012 Quant Results File: A9F00WTR.RES

Quant Method : C:\MSDCHEM\2\METHODS\A9F00WTR.M (RTE Integrator)
 Title : A9-F00 Water - IC: 01/25/12 - HPMS6
 Last Update : Thu Feb 02 09:44:46 2012
 Response via : Initial Calibration
 DataAcq Meth : 8260WT

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) Fluorobenzene	10.57	96	542118	25.00	ug/L	0.00
11) Chlorobenzene-d5	15.06	117	382891	25.00	ug/L	0.00
12) 1,4-Dichlorobenzene-d4	18.63	152	182930	25.00	ug/L	0.00

Target Compounds	R.T.	QIon	Response	Conc	Units	Qvalue
2) Acetonitrile	6.11	41	1900	3.8474	ug/L #	1
3) 3-Chloro-1-propene	6.51	41	51181	4.3471	ug/L	99
4) 2-Chloro-1,3-butadiene	8.01	53	44354	3.9841	ug/L #	29
5) Ethyl Acetate	8.76	43	13368	4.1127	ug/L #	100
6) Methacrylonitrile	8.93	67	5420	3.9672	ug/L	98
9) Methyl methacrylate	11.44	41	11648	9.5031	ug/L	99
10) 2-Nitropropane	11.80	43	3265	11.8335	ug/L	88

(#) = qualifier out of range (m) = manual integration
 6M105371.D A9F00WTR.M Thu Feb 02 15:11:53 2012



Data File : C:\MSDCHEM\2\DATA\012512\6M105371.D

Vial: 5

Acq On : 25 Jan 2012 10:12

Operator: ADC

Sample : WG388587-01 5ug/L 826A9F00 QC

Inst : HPMS6

Misc : 1,1 STD49721

Multiplr: 1.00

MS Integration Params: rteint.p

Quant Time: Feb 2 11:00 2012

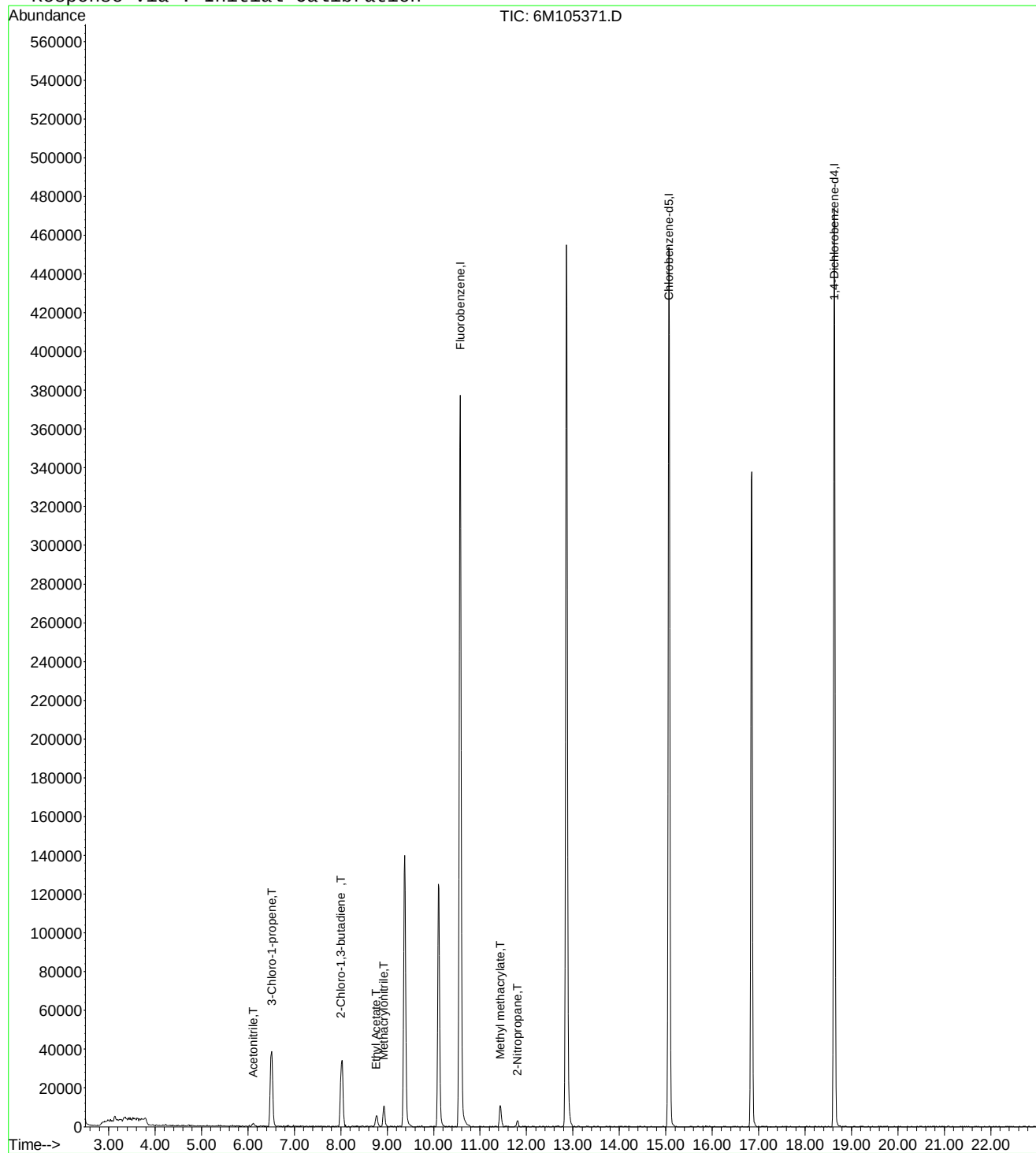
Quant Results File: A9F00WTR.RES

Method : C:\MSDCHEM\2\METHODS\A9F00WTR.M (RTE Integrator)

Title : A9-F00 Water - IC: 01/25/12 - HPMS6

Last Update : Thu Feb 02 09:44:46 2012

Response via : Initial Calibration



6M105371.D A9F00WTR.M

Thu Feb 02 15:11:54 2012

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Data File : C:\MSDCHEM\2\DATA\012512\6M105372.D Vial: 6
 Acq On : 25 Jan 2012 10:45 Operator: ADC
 Sample : WG388587-02 20ug/L 826A9F00 QC Inst : HPMS6
 Misc : 1,1 STD49721 Multiplr: 1.00
 MS Integration Params: rteint.p
 Quant Time: Feb 02 11:00:07 2012 Quant Results File: A9F00WTR.RES

Quant Method : C:\MSDCHEM\2\METHODS\A9F00WTR.M (RTE Integrator)
 Title : A9-F00 Water - IC: 01/25/12 - HPMS6
 Last Update : Thu Feb 02 09:44:46 2012
 Response via : Initial Calibration
 DataAcq Meth : 8260WT

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) Fluorobenzene	10.57	96	527412	25.00	ug/L	0.00
11) Chlorobenzene-d5	15.06	117	368818	25.00	ug/L	0.00
12) 1,4-Dichlorobenzene-d4	18.63	152	180470	25.00	ug/L	0.00

Target Compounds	R.T.	QIon	Response	Conc	Units	Qvalue
2) Acetonitrile	6.10	41	8738	18.1873	ug/L	92
3) 3-Chloro-1-propene	6.51	41	209591	18.2980	ug/L	99
4) 2-Chloro-1,3-butadiene	8.02	53	194300	17.9398	ug/L	98
5) Ethyl Acetate	8.76	43	57089	18.0532	ug/L #	100
6) Methacrylonitrile	8.93	67	22789	17.1456	ug/L	94
7) Isobutyl Alcohol	8.95	43	4943	35.3217	ug/L #	89
9) Methyl methacrylate	11.44	41	55796	20.8158	ug/L	98
10) 2-Nitropropane	11.81	43	15582	22.5273	ug/L	92
13) Cyclohexanone	16.56	55	2471	28.3472	ug/L	93

(#) = qualifier out of range (m) = manual integration
 6M105372.D A9F00WTR.M Thu Feb 02 15:11:55 2012



Data File : C:\MSDCHEM\2\DATA\012512\6M105372.D

Vial: 6

Acq On : 25 Jan 2012 10:45

Operator: ADC

Sample : WG388587-02 20ug/L 826A9F00 QC

Inst : HPMS6

Misc : 1,1 STD49721

Multiplr: 1.00

MS Integration Params: rteint.p

Quant Time: Feb 2 11:00 2012

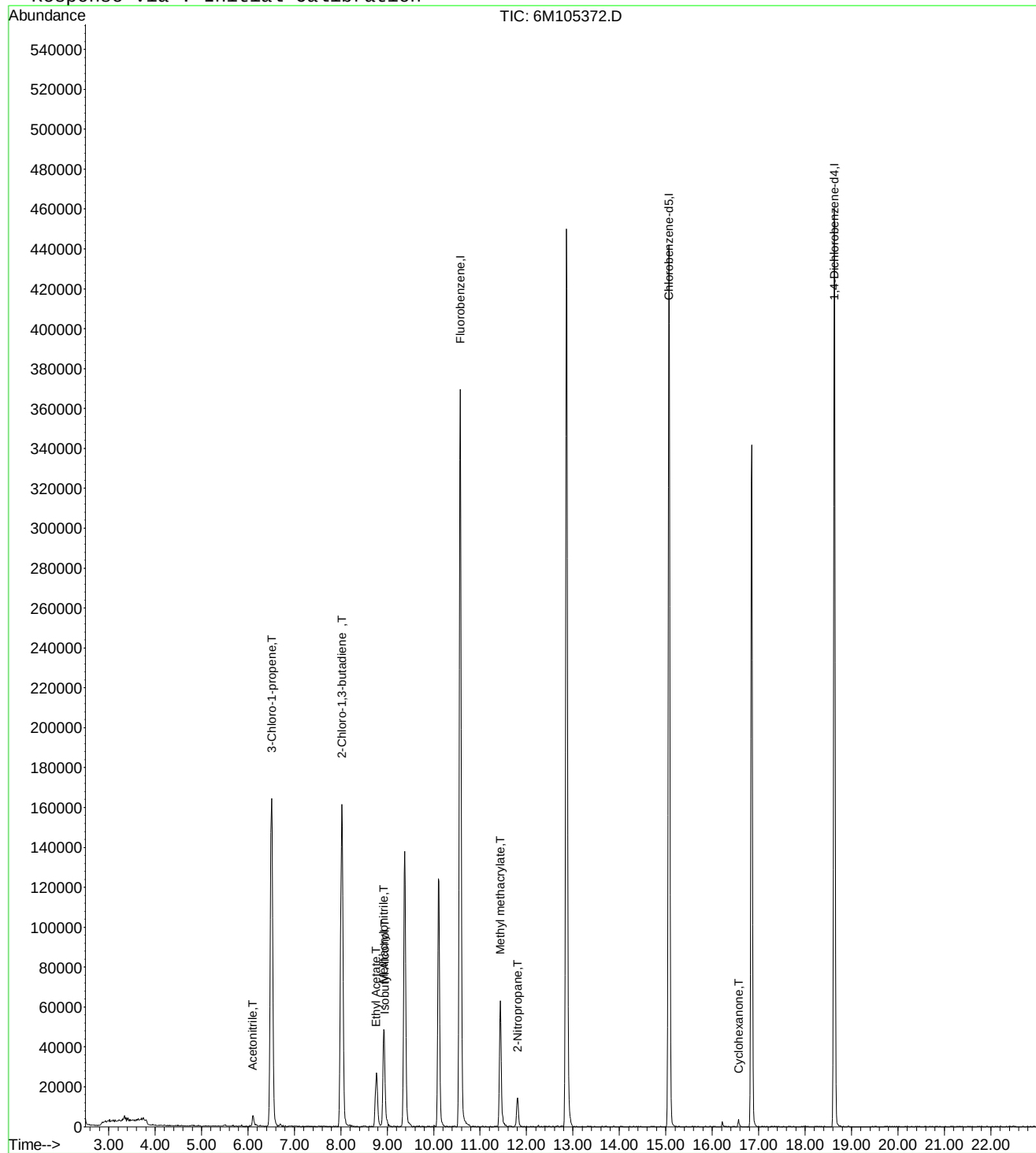
Quant Results File: A9F00WTR.RES

Method : C:\MSDCHEM\2\METHODS\A9F00WTR.M (RTE Integrator)

Title : A9-F00 Water - IC: 01/25/12 - HPMS6

Last Update : Thu Feb 02 09:44:46 2012

Response via : Initial Calibration



6M105372.D A9F00WTR.M

Thu Feb 02 15:11:55 2012

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Data File : C:\MSDCHEM\2\DATA\012512\6M105373.D Vial: 7
 Acq On : 25 Jan 2012 11:17 Operator: ADC
 Sample : WG388587-03 50ug/L 826A9F00 QC Inst : HPMS6
 Misc : 1,1 STD49721 Multiplr: 1.00
 MS Integration Params: rteint.p
 Quant Time: Feb 02 11:00:09 2012 Quant Results File: A9F00WTR.RES

Quant Method : C:\MSDCHEM\2\METHODS\A9F00WTR.M (RTE Integrator)
 Title : A9-F00 Water - IC: 01/25/12 - HPMS6
 Last Update : Thu Feb 02 09:44:46 2012
 Response via : Initial Calibration
 DataAcq Meth : 8260WT

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) Fluorobenzene	10.57	96	525930	25.00	ug/L	0.00
11) Chlorobenzene-d5	15.06	117	367927	25.00	ug/L	0.00
12) 1,4-Dichlorobenzene-d4	18.63	152	178601	25.00	ug/L	0.00

Target Compounds	R.T.	QIon	Response	Conc	Units	Qvalue
2) Acetonitrile	6.11	41	24875	51.9208	ug/L	96
3) 3-Chloro-1-propene	6.51	41	587071	51.3977	ug/L	100
4) 2-Chloro-1,3-butadiene	8.02	53	557757	51.6431	ug/L	100
5) Ethyl Acetate	8.76	43	155016	49.1587	ug/L #	100
6) Methacrylonitrile	8.93	67	67503	50.9299	ug/L	98
7) Isobutyl Alcohol	8.95	43	13279	95.1565	ug/L #	97
9) Methyl methacrylate	11.44	41	165950	48.9606	ug/L	100
10) 2-Nitropropane	11.81	43	45288	48.2442	ug/L	97
13) Cyclohexanone	16.57	55	8212	52.4388	ug/L	99

(#) = qualifier out of range (m) = manual integration
 6M105373.D A9F00WTR.M Thu Feb 02 15:11:56 2012



Data File : C:\MSDCHEM\2\DATA\012512\6M105373.D

Vial: 7

Acq On : 25 Jan 2012 11:17

Operator: ADC

Sample : WG388587-03 50ug/L 826A9F00 QC

Inst : HPMS6

Misc : 1,1 STD49721

Multiplr: 1.00

MS Integration Params: rteint.p

Quant Time: Feb 2 11:00 2012

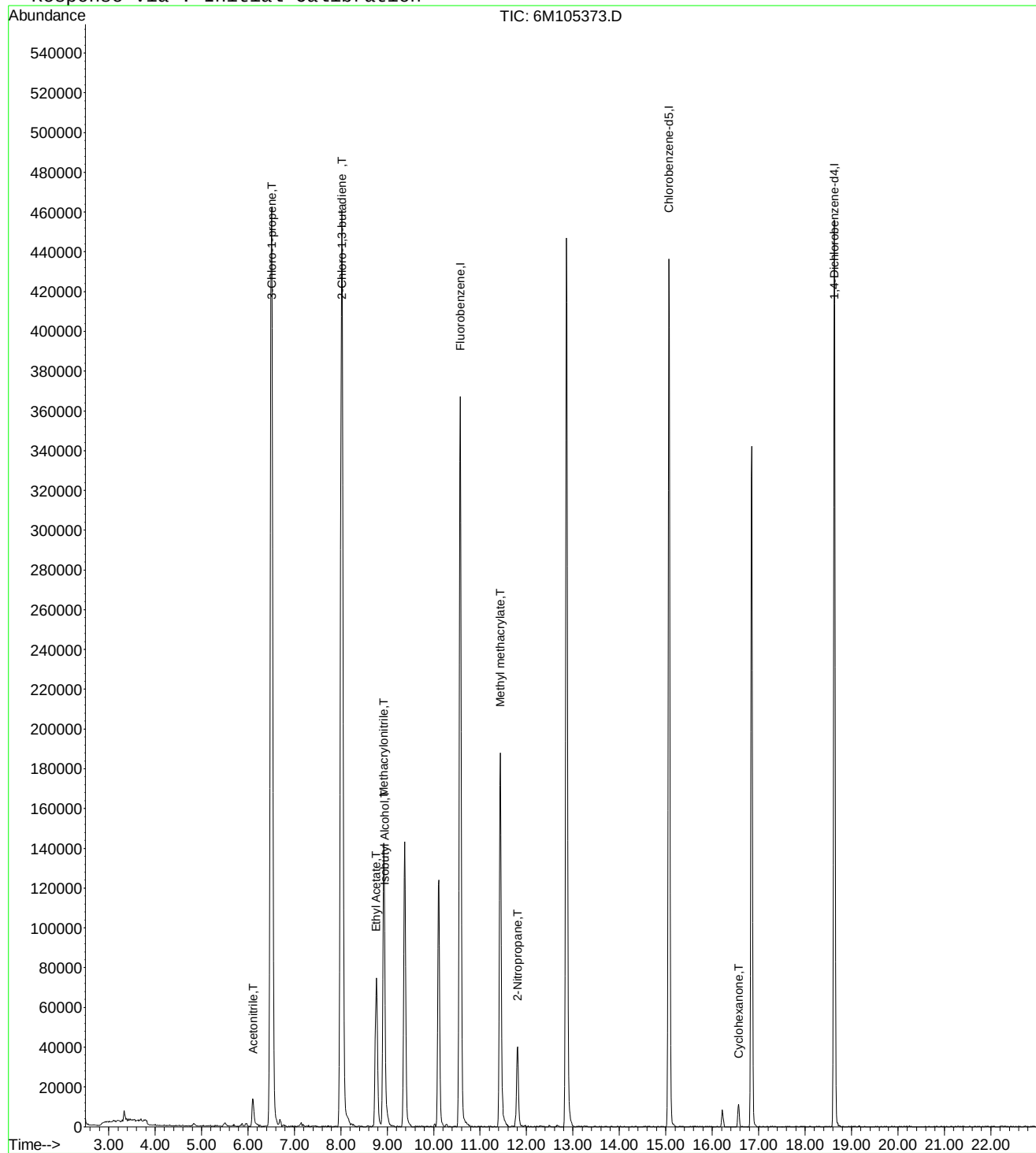
Quant Results File: A9F00WTR.RES

Method : C:\MSDCHEM\2\METHODS\A9F00WTR.M (RTE Integrator)

Title : A9-F00 Water - IC: 01/25/12 - HPMS6

Last Update : Thu Feb 02 09:44:46 2012

Response via : Initial Calibration



6M105373.D A9F00WTR.M

Thu Feb 02 15:11:56 2012

Page 2



Data File : C:\MSDCHEM\2\DATA\012512\6M105374.D Vial: 8
 Acq On : 25 Jan 2012 11:49 Operator: ADC
 Sample : WG388587-04 100ug/L 826A9F00 QC Inst : HPMS6
 Misc : 1,1 STD49721 Multiplr: 1.00
 MS Integration Params: rteint.p
 Quant Time: Feb 02 11:00:11 2012 Quant Results File: A9F00WTR.RES

Quant Method : C:\MSDCHEM\2\METHODS\A9F00WTR.M (RTE Integrator)
 Title : A9-F00 Water - IC: 01/25/12 - HPMS6
 Last Update : Thu Feb 02 09:44:46 2012
 Response via : Initial Calibration
 DataAcq Meth : 8260WT

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) Fluorobenzene	10.57	96	521985	25.00	ug/L	0.00
11) Chlorobenzene-d5	15.06	117	364007	25.00	ug/L	0.00
12) 1,4-Dichlorobenzene-d4	18.63	152	173837	25.00	ug/L	0.00

Target Compounds	R.T.	QIon	Response	Conc	Units	Qvalue
2) Acetonitrile	6.11	41	49127	103.3162	ug/L	100
3) 3-Chloro-1-propene	6.51	41	1180872	104.1659	ug/L	100
4) 2-Chloro-1,3-butadiene	8.02	53	1129950	105.4136	ug/L	100
5) Ethyl Acetate	8.76	43	319926	102.2217	ug/L #	100
6) Methacrylonitrile	8.93	67	135748	103.1936	ug/L	100
7) Isobutyl Alcohol	8.95	43	27528	198.7549	ug/L	96
8) 1-Butanol	10.01	41	1808	50.3611	ug/L	100
9) Methyl methacrylate	11.44	41	351082	96.8724	ug/L	100
10) 2-Nitropropane	11.80	43	98910	95.2434	ug/L	100
13) Cyclohexanone	16.56	55	17278	92.2929	ug/L	100

(#) = qualifier out of range (m) = manual integration
 6M105374.D A9F00WTR.M Thu Feb 02 15:11:57 2012



Data File : C:\MSDCHEM\2\DATA\012512\6M105374.D

Vial: 8

Acq On : 25 Jan 2012 11:49

Operator: ADC

Sample : WG388587-04 100ug/L 826A9F00 QC

Inst : HPMS6

Misc : 1,1 STD49721

Multiplr: 1.00

MS Integration Params: rteint.p

Quant Time: Feb 2 11:00 2012

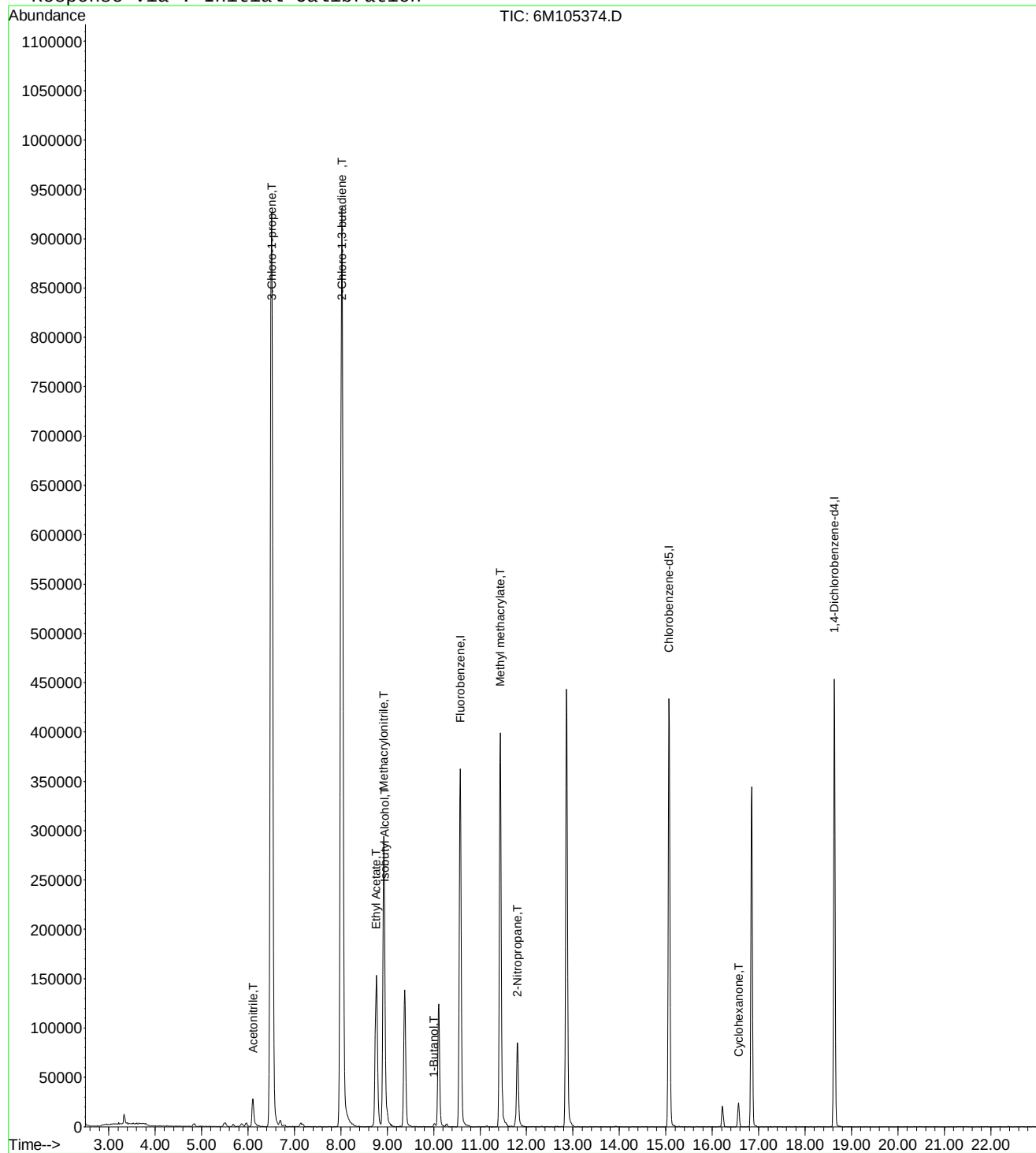
Quant Results File: A9F00WTR.RES

Method : C:\MSDCHEM\2\METHODS\A9F00WTR.M (RTE Integrator)

Title : A9-F00 Water - IC: 01/25/12 - HPMS6

Last Update : Thu Feb 02 09:44:46 2012

Response via : Initial Calibration



6M105374.D A9F00WTR.M

Thu Feb 02 15:11:58 2012

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Data File : C:\MSDCHEM\2\DATA\012512\6M105375.D Vial: 9
 Acq On : 25 Jan 2012 12:22 Operator: ADC
 Sample : WG388587-05 200ug/L 826A9F00 QC Inst : HPMS6
 Misc : 1,1 STD49721 Multiplr: 1.00
 MS Integration Params: rteint.p
 Quant Time: Feb 02 11:00:12 2012 Quant Results File: A9F00WTR.RES

Quant Method : C:\MSDCHEM\2\METHODS\A9F00WTR.M (RTE Integrator)
 Title : A9-F00 Water - IC: 01/25/12 - HPMS6
 Last Update : Thu Feb 02 09:44:46 2012
 Response via : Initial Calibration
 DataAcq Meth : 8260WT

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) Fluorobenzene	10.57	96	534922	25.00	ug/L	0.00
11) Chlorobenzene-d5	15.07	117	371767	25.00	ug/L	0.00
12) 1,4-Dichlorobenzene-d4	18.63	152	181349	25.00	ug/L	0.00

Target Compounds	R.T.	QIon	Response	Conc	Units	Qvalue
2) Acetonitrile	6.10	41	104721	214.9064	ug/L	98
3) 3-Chloro-1-propene	6.51	41	2451072	210.9824	ug/L	99
4) 2-Chloro-1,3-butadiene	8.02	53	2371831	215.9180	ug/L	100
5) Ethyl Acetate	8.77	43	681737	212.5582	ug/L #	100
6) Methacrylonitrile	8.93	67	292287	216.8185	ug/L	98
7) Isobutyl Alcohol	8.95	43	58077	409.1804	ug/L #	92
8) 1-Butanol	10.01	41	6913	187.9020	ug/L	70
9) Methyl methacrylate	11.43	41	752659	195.4261	ug/L	99
10) 2-Nitropropane	11.80	43	216103	192.7634	ug/L	98
13) Cyclohexanone	16.56	55	41618	189.3675	ug/L	99

(#) = qualifier out of range (m) = manual integration
 6M105375.D A9F00WTR.M Thu Feb 02 15:11:58 2012



Data File : C:\MSDCHEM\2\DATA\012512\6M105375.D

Vial: 9

Acq On : 25 Jan 2012 12:22

Operator: ADC

Sample : WG388587-05 200ug/L 826A9F00 QC

Inst : HPMS6

Misc : 1,1 STD49721

Multiplr: 1.00

MS Integration Params: rteint.p

Quant Time: Feb 2 11:00 2012

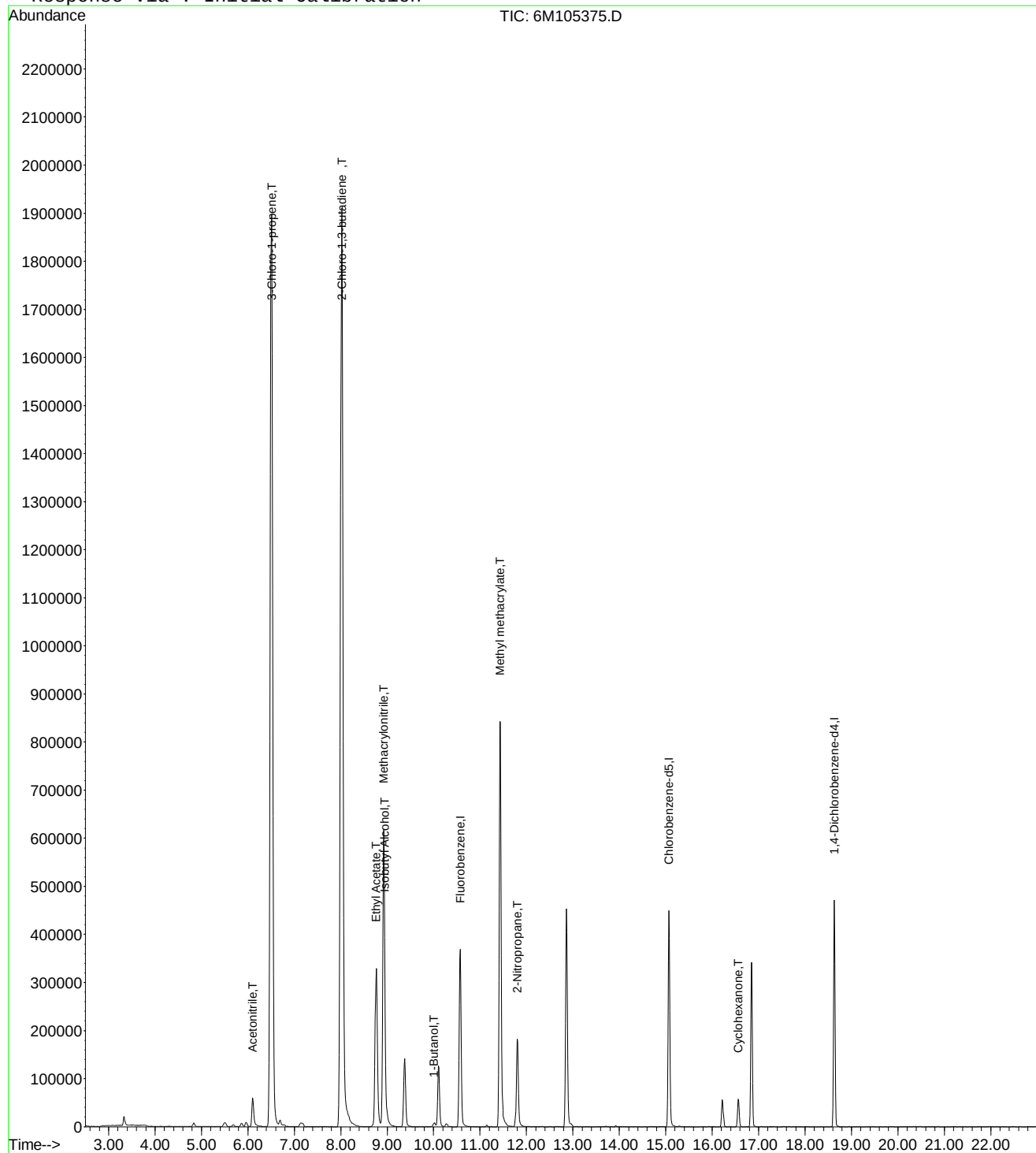
Quant Results File: A9F00WTR.RES

Method : C:\MSDCHEM\2\METHODS\A9F00WTR.M (RTE Integrator)

Title : A9-F00 Water - IC: 01/25/12 - HPMS6

Last Update : Thu Feb 02 09:44:46 2012

Response via : Initial Calibration



6M105375.D A9F00WTR.M

Thu Feb 02 15:11:59 2012

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Data File : C:\MSDCHEM\2\DATA\012512\6M105376.D Vial: 10
 Acq On : 25 Jan 2012 12:55 Operator: ADC
 Sample : WG388587-06 300ug/L 826A9F00 QC Inst : HPMS6
 Misc : 1,1 STD49721 Multiplr: 1.00
 MS Integration Params: rteint.p
 Quant Time: Feb 02 11:00:14 2012 Quant Results File: A9F00WTR.RES

Quant Method : C:\MSDCHEM\2\METHODS\A9F00WTR.M (RTE Integrator)
 Title : A9-F00 Water - IC: 01/25/12 - HPMS6
 Last Update : Thu Feb 02 09:44:46 2012
 Response via : Initial Calibration
 DataAcq Meth : 8260WT

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) Fluorobenzene	10.57	96	532868	25.00	ug/L	0.00
11) Chlorobenzene-d5	15.07	117	367343	25.00	ug/L	0.00
12) 1,4-Dichlorobenzene-d4	18.63	152	176868	25.00	ug/L	0.00

Target Compounds	R.T.	QIon	Response	Conc	Units	Qvalue
2) Acetonitrile	6.10	41	156947	323.3252	ug/L	98
3) 3-Chloro-1-propene	6.51	41	3628216	313.5120	ug/L	100
4) 2-Chloro-1,3-butadiene	8.02	53	3511500	320.8992	ug/L	100
5) Ethyl Acetate	8.77	43	1044658	326.9686	ug/L #	100
6) Methacrylonitrile	8.93	67	444609	331.0823	ug/L	99
7) Isobutyl Alcohol	8.95	43	94189	666.1648	ug/L	96
8) 1-Butanol	10.00	41	12003	327.5106	ug/L	67
9) Methyl methacrylate	11.43	41	1170130	301.2810	ug/L	100
10) 2-Nitropropane	11.80	43	338961	298.2921	ug/L	96
13) Cyclohexanone	16.56	55	67793	304.1310	ug/L	99

(#) = qualifier out of range (m) = manual integration
 6M105376.D A9F00WTR.M Thu Feb 02 15:12:00 2012



Data File : C:\MSDCHEM\2\DATA\012512\6M105376.D

Vial: 10

Acq On : 25 Jan 2012 12:55

Operator: ADC

Sample : WG388587-06 300ug/L 826A9F00 QC

Inst : HPMS6

Misc : 1,1 STD49721

Multiplr: 1.00

MS Integration Params: rteint.p

Quant Time: Feb 2 11:00 2012

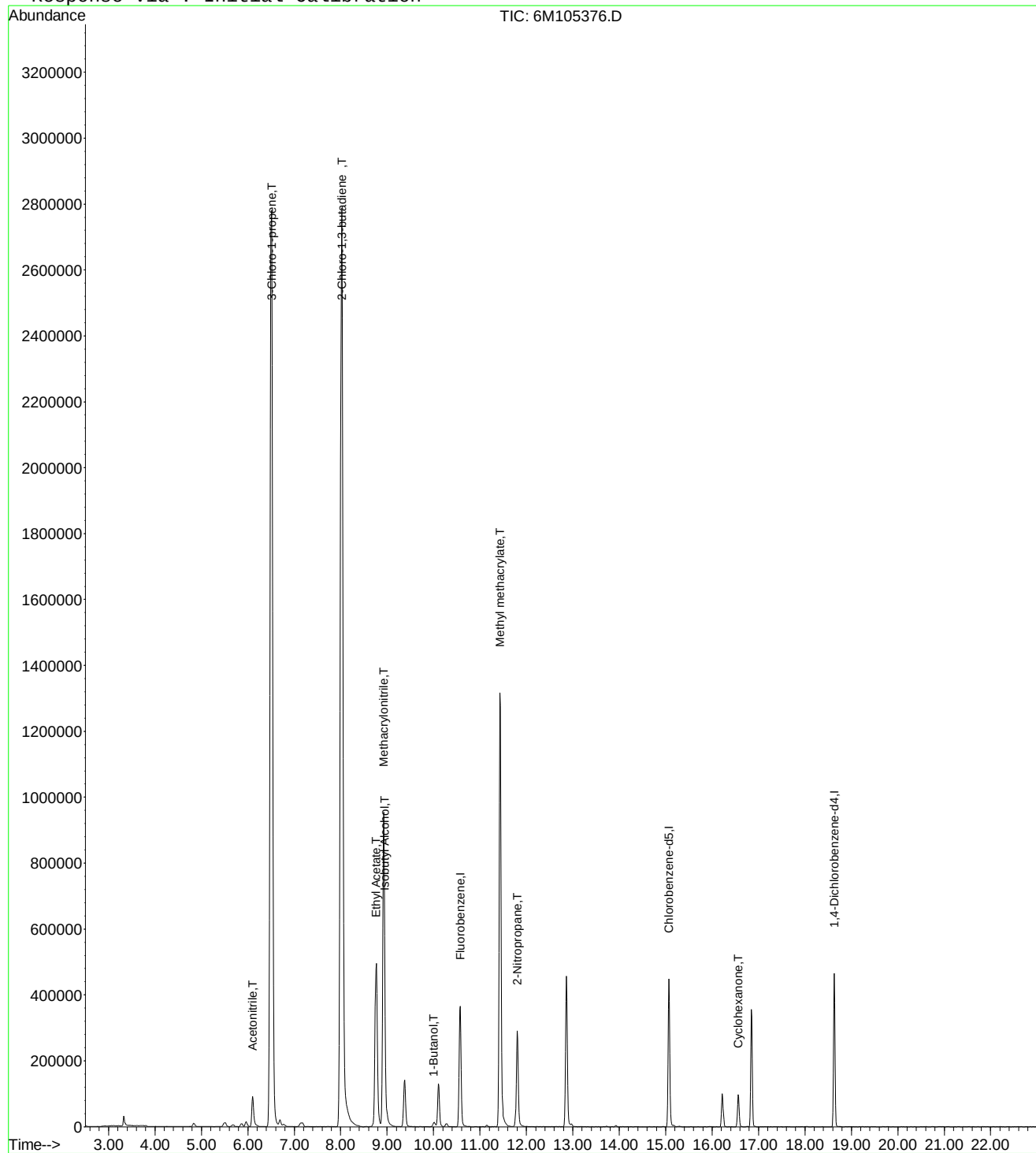
Quant Results File: A9F00WTR.RES

Method : C:\MSDCHEM\2\METHODS\A9F00WTR.M (RTE Integrator)

Title : A9-F00 Water - IC: 01/25/12 - HPMS6

Last Update : Thu Feb 02 09:44:46 2012

Response via : Initial Calibration



6M105376.D A9F00WTR.M

Thu Feb 02 15:12:00 2012

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Data File : C:\MSDCHEM\2\DATA\012512\6M105377.D Vial: 11
 Acq On : 25 Jan 2012 13:27 Operator: ADC
 Sample : WG388587-07 400ug/L 826A9F00 QC Inst : HPMS6
 Misc : 1,1 STD49721 Multiplr: 1.00
 MS Integration Params: rteint.p
 Quant Time: Feb 02 11:00:16 2012 Quant Results File: A9F00WTR.RES

Quant Method : C:\MSDCHEM\2\METHODS\A9F00WTR.M (RTE Integrator)
 Title : A9-F00 Water - IC: 01/25/12 - HPMS6
 Last Update : Thu Feb 02 09:44:46 2012
 Response via : Initial Calibration
 DataAcq Meth : 8260WT

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) Fluorobenzene	10.57	96	540011	25.00	ug/L	0.00
11) Chlorobenzene-d5	15.06	117	371362	25.00	ug/L	0.00
12) 1,4-Dichlorobenzene-d4	18.64	152	178768	25.00	ug/L	0.01

Target Compounds	R.T.	QIon	Response	Conc	Units	Qvalue
2) Acetonitrile	6.10	41	215914	438.9189	ug/L	97
3) 3-Chloro-1-propene	6.51	41	4907559	418.4500	ug/L	99
4) 2-Chloro-1,3-butadiene	8.02	53	4745927	427.9707	ug/L	100
5) Ethyl Acetate	8.76	43	1446302	446.6917	ug/L #	100
6) Methacrylonitrile	8.93	67	604809	444.4194	ug/L	100
7) Isobutyl Alcohol	8.95	43	119029	830.7136	ug/L	87
8) 1-Butanol	10.01	41	17098	460.3604	ug/L	72
9) Methyl methacrylate	11.44	41	1591710	402.1410	ug/L	100
10) 2-Nitropropane	11.81	43	471553	406.0960	ug/L	94
13) Cyclohexanone	16.56	55	92310	403.4226	ug/L	98

(#) = qualifier out of range (m) = manual integration
 6M105377.D A9F00WTR.M Thu Feb 02 15:12:01 2012



Data File : C:\MSDCHEM\2\DATA\012512\6M105377.D

Vial: 11

Acq On : 25 Jan 2012 13:27

Operator: ADC

Sample : WG388587-07 400ug/L 826A9F00 QC

Inst : HPMS6

Misc : 1,1 STD49721

Multiplr: 1.00

MS Integration Params: rteint.p

Quant Time: Feb 2 11:00 2012

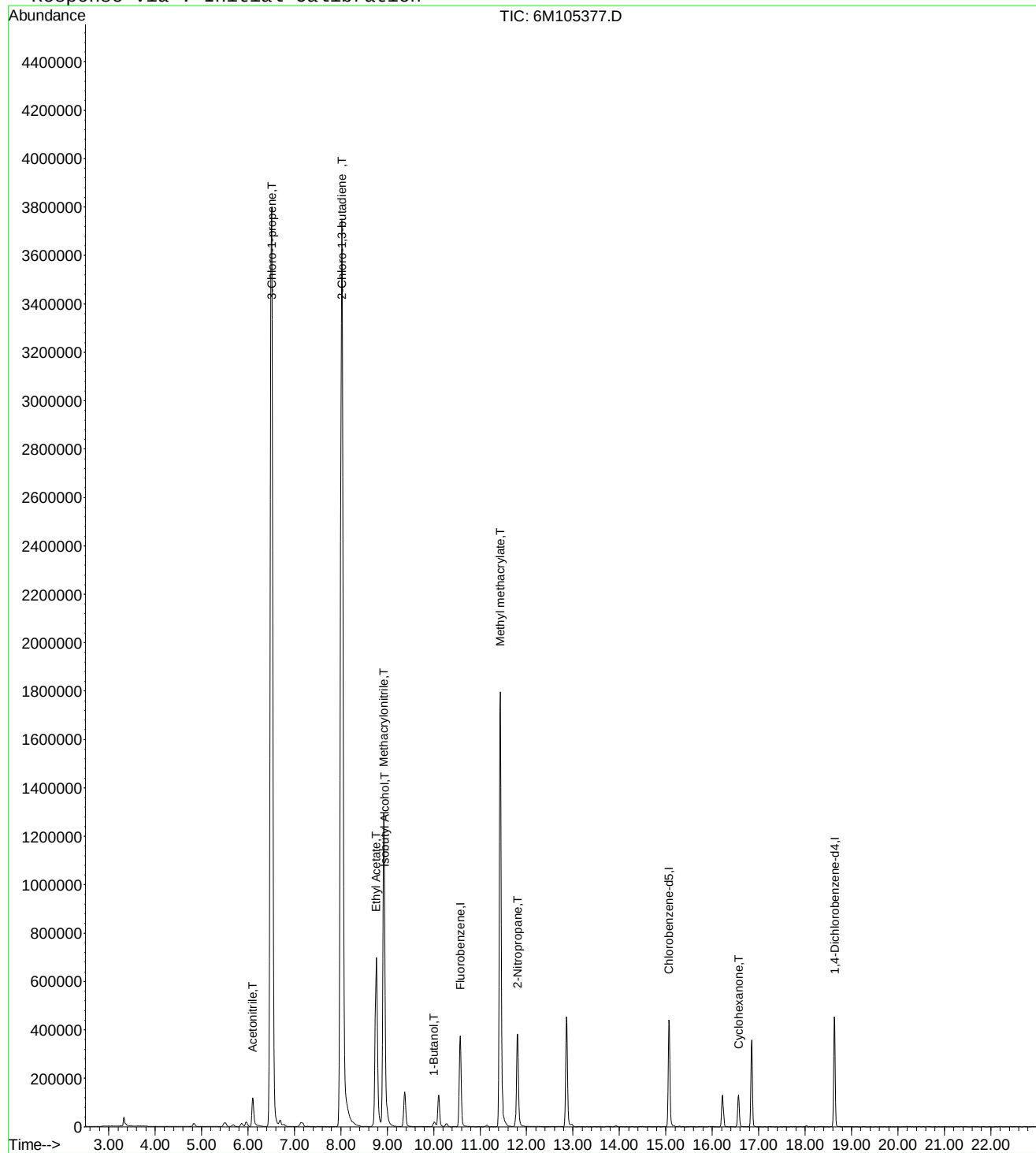
Quant Results File: A9F00WTR.RES

Method : C:\MSDCHEM\2\METHODS\A9F00WTR.M (RTE Integrator)

Title : A9-F00 Water - IC: 01/25/12 - HPMS6

Last Update : Thu Feb 02 09:44:46 2012

Response via : Initial Calibration

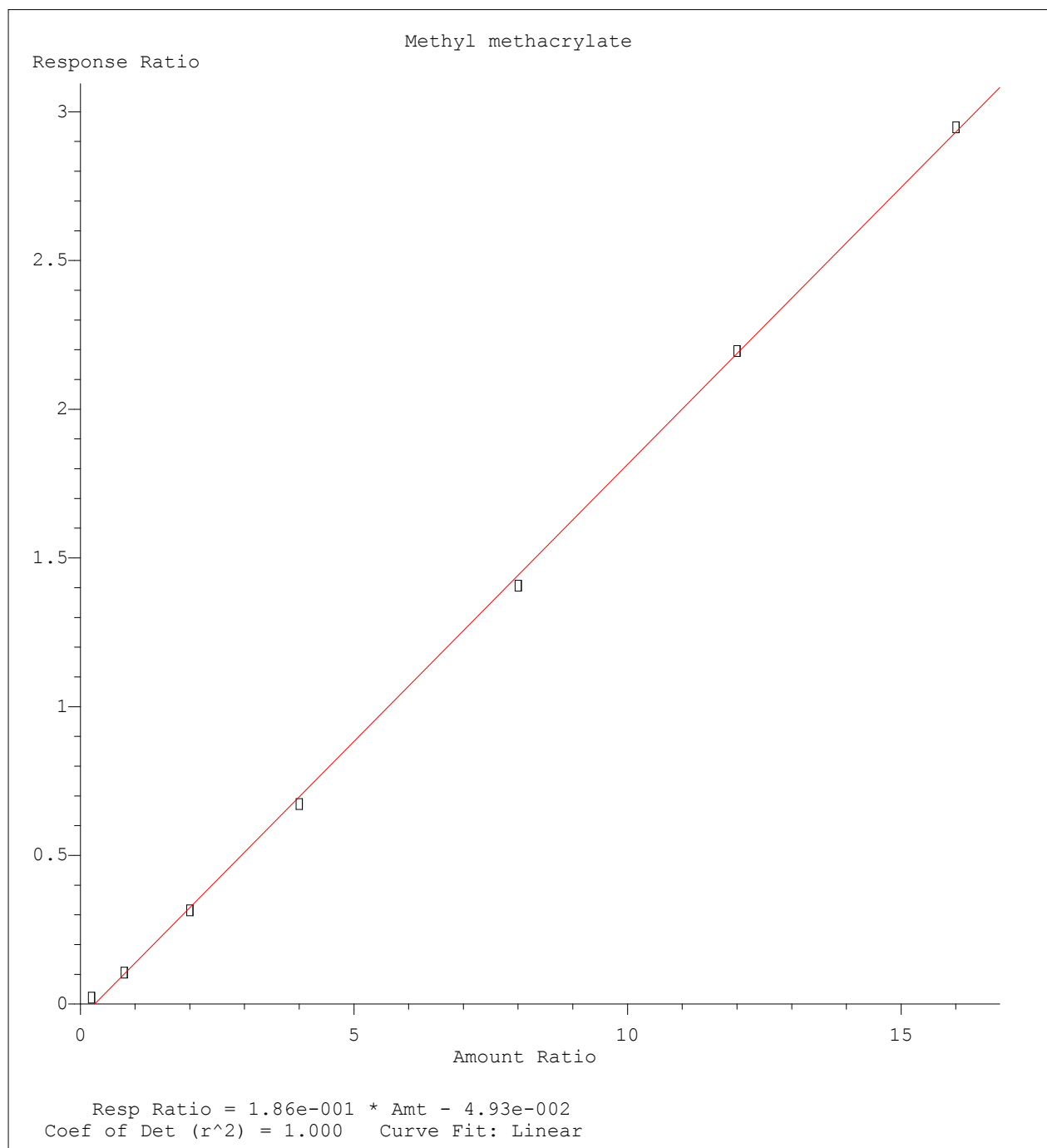


6M105377.D A9F00WTR.M

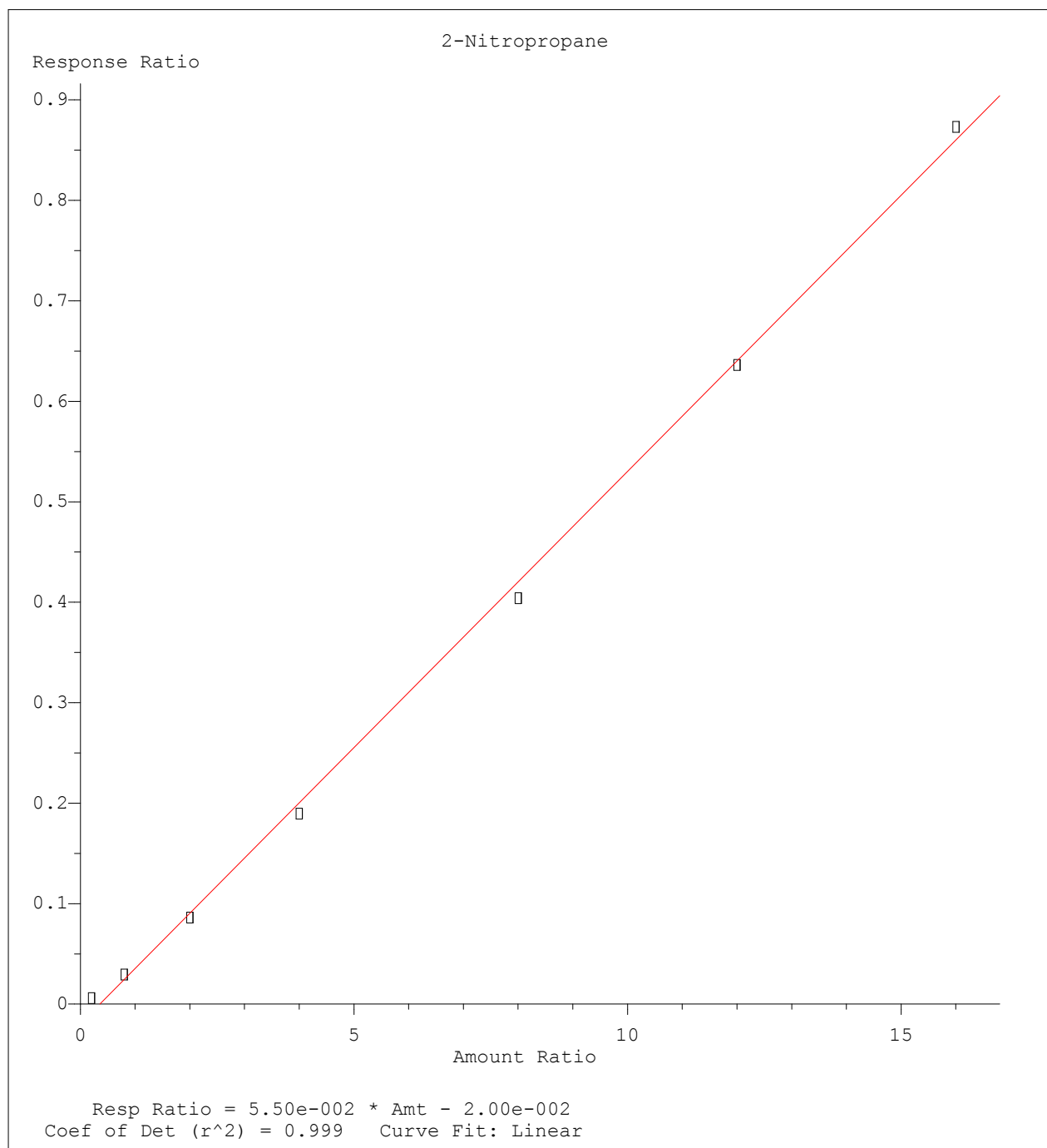
Thu Feb 02 15:12:01 2012

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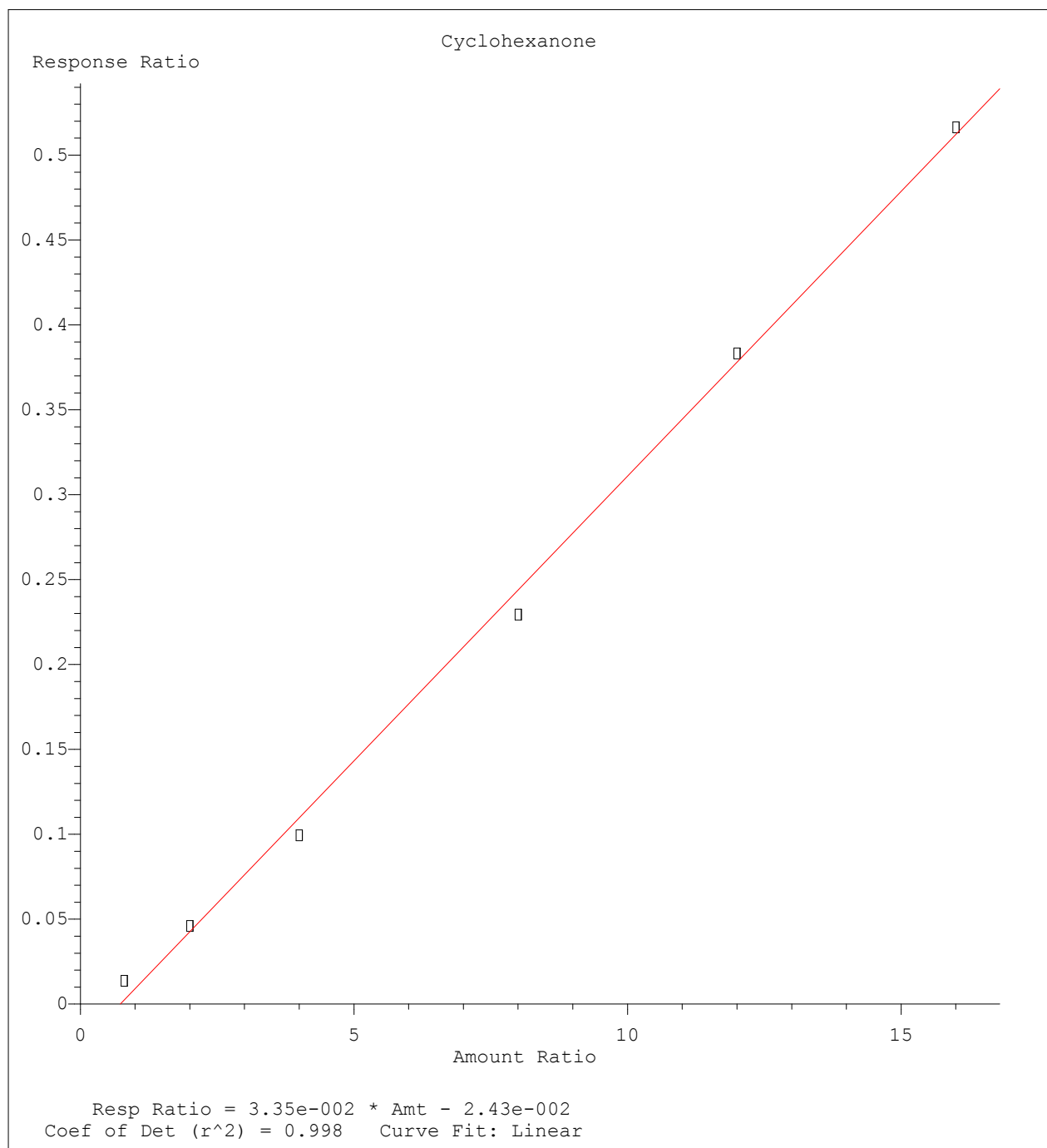




Method Name: C:\MSDCHEM\2\METHODS\A9FOOWTR.M
Calibration Table Last Updated: Thu Feb 02 09:44:46 2012



Method Name: C:\MSDCHEM\2\METHODS\A9FOOWTR.M
Calibration Table Last Updated: Thu Feb 02 09:44:46 2012



Method Name: C:\MSDCHEM\2\METHODS\A9FOOWTR.M
Calibration Table Last Updated: Thu Feb 02 09:44:46 2012

Data File : C:\MSDCHEM\2\DATA\012512\6M105378.D Vial: 12
 Acq On : 25 Jan 2012 14:00 Operator: ADC
 Sample : WG388587-08 100ug/L ALT 826A9F00 QC Inst : HPMS6
 Misc : 1,1 STD49721 Multiplr: 1.00
 MS Integration Params: rteint.p
 Quant Time: Feb 02 11:00:18 2012 Quant Results File: A9F00WTR.RES

Quant Method : C:\MSDCHEM\2\METHODS\A9F00WTR.M (RTE Integrator)
 Title : A9-F00 Water - IC: 01/25/12 - HPMS6
 Last Update : Thu Feb 02 09:44:46 2012
 Response via : Initial Calibration
 DataAcq Meth : 8260WT

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) Fluorobenzene	10.57	96	512896	25.00	ug/L	0.00
11) Chlorobenzene-d5	15.06	117	362669	25.00	ug/L	0.00
12) 1,4-Dichlorobenzene-d4	18.63	152	178315	25.00	ug/L	0.00

Target Compounds	R.T.	QIon	Response	Conc	Units	Qvalue
2) Acetonitrile	6.10	41	54059	115.7031	ug/L	98
3) 3-Chloro-1-propene	6.51	41	1081081	97.0531	ug/L	100
4) 2-Chloro-1,3-butadiene	8.02	53	1145123	108.7223	ug/L	100
5) Ethyl Acetate	8.76	43	375275	122.0315	ug/L #	100
6) Methacrylonitrile	8.93	67	141969	109.8352	ug/L	100
7) Isobutyl Alcohol	8.95	43	30619	224.9898	ug/L #	99
8) 1-Butanol	10.01	41	3160	89.5804	ug/L	61
9) Methyl methacrylate	11.44	41	366057	102.3896	ug/L	100
10) 2-Nitropropane	11.81	43	105557	102.6620	ug/L	97
13) Cyclohexanone	16.57	55	24853	122.1280	ug/L	96

(#) = qualifier out of range (m) = manual integration
 6M105378.D A9F00WTR.M Thu Feb 02 15:12:02 2012

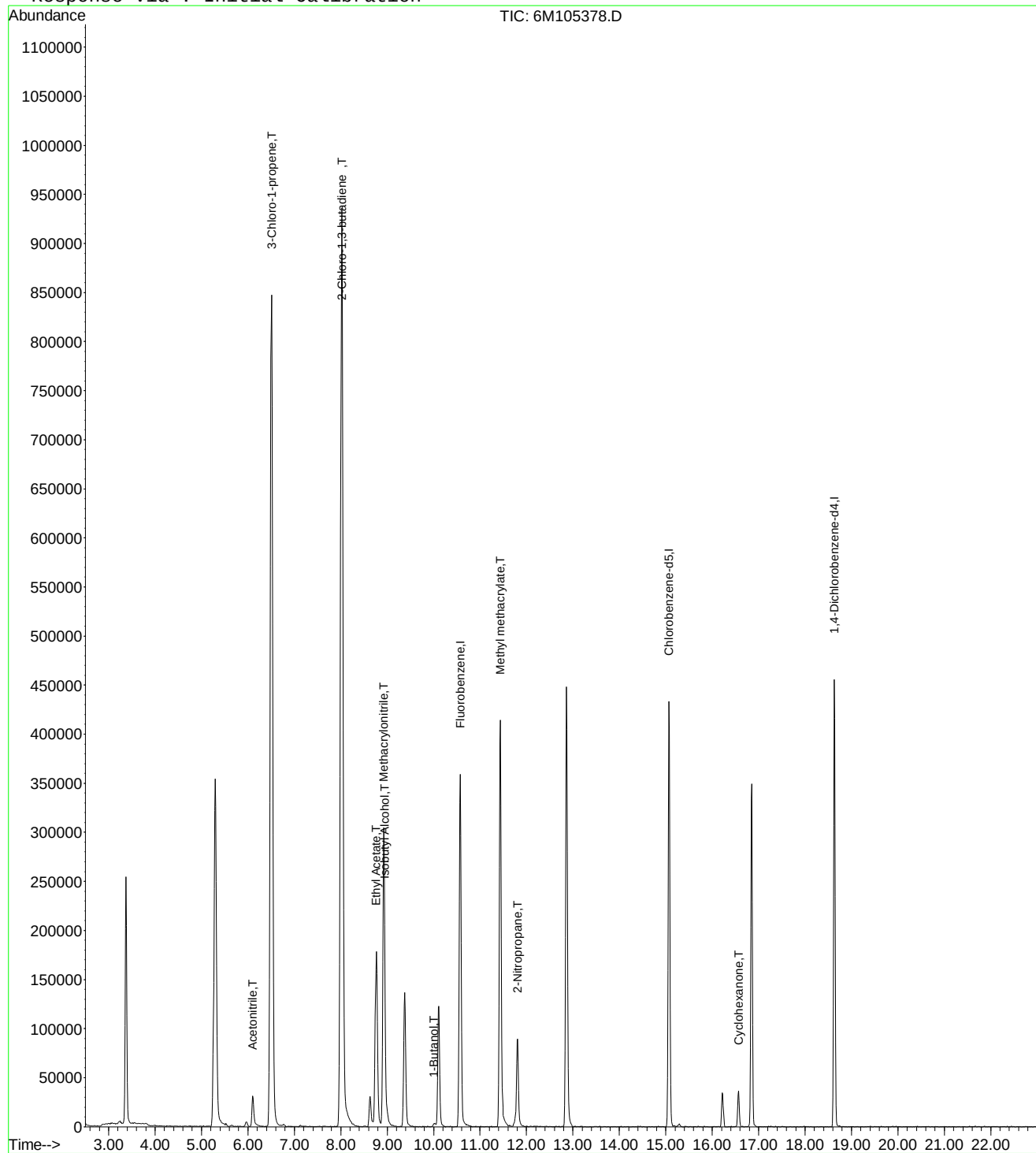


Data File : C:\MSDCHEM\2\DATA\012512\6M105378.D
Acq On : 25 Jan 2012 14:00
Sample : WG388587-08 100ug/L ALT 826A9F00 QC
Misc : 1,1 STD49721
MS Integration Params: rteint.p
Quant Time: Feb 2 11:00 2012

Vial: 12
Operator: ADC
Inst : HPMS6
Multiplr: 1.00

Quant Results File: A9F00WTR.RES

Method : C:\MSDCHEM\2\METHODS\A9F00WTR.M (RTE Integrator)
Title : A9-F00 Water - IC: 01/25/12 - HPMS6
Last Update : Thu Feb 02 09:44:46 2012
Response via : Initial Calibration



6M105378.D A9F00WTR.M

Thu Feb 02 15:12:03 2012

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Evaluate Continuing Calibration Report

Data File : C:\MSDCHEM\2\DATA\012512\6M105378.D Vial: 12
Acq On : 25 Jan 2012 14:00 Operator: ADC
Sample : WG388587-08 100ug/L ALT 826A9F00 QC Inst : HPMS6
Misc : 1,1 STD49721 Multiplr: 1.00
MS Integration Params: rteint.p

Method : C:\MSDCHEM\2\METHODS\A9F00WTR.M (RTE Integrator)
Title : A9-F00 Water - IC: 01/25/12 - HPMS6
Last Update : Thu Feb 02 09:44:46 2012
Response via : Multiple Level Calibration

Min. RRF : 0.000 Min. Rel. Area : 1% Max. R.T. Dev 0.50min
Max. RRF Dev : 75% Max. Rel. Area : 200%

	Compound	Amount	Calc.	%Dev	Area%	Dev(min)
1 I	Fluorobenzene	25.000	25.000	0.0	98	0.00
2 T	Acetonitrile	100.000	115.703	-15.7	110	0.00
3 T	3-Chloro-1-propene	100.000	97.053	2.9	92	0.00
4 T	2-Chloro-1,3-butadiene	100.000	108.722	-8.7	101	0.00
5 T	Ethyl Acetate	100.000	122.031	-22.0	117	0.00
6 T	Methacrylonitrile	100.000	109.835	-9.8	105	0.00
7 T	Isobutyl Alcohol	200.000	224.990	-12.5	111	0.00
8 T	1-Butanol	100.000	89.580	10.4	175	0.00
9 T	Methyl methacrylate	100.000	102.390	-2.4	104	0.00
10 T	2-Nitropropane	100.000	102.662	-2.7	107	0.01
11 I	Chlorobenzene-d5	25.000	25.000	0.0	100	0.00
12 I	1,4-Dichlorobenzene-d4	25.000	25.000	0.0	103	0.00
13 T	Cyclohexanone	100.000	122.128	-22.1	144	0.00

(#) = Out of Range SPCC's out = 0 CCC's out = 0
6M105378.D A9F00WTR.M Thu Feb 02 11:06:34 2012



Page 1

Data File : C:\MSDCHEM\1\DATA\111212\6M112622.D

Vial: 3

Acq On : 12 Nov 2012 15:14

Operator: adc

Sample : WG414018-02 0.3 ug/L STD 8260

Inst : HPMS6

Misc : 1,1 STD54883

Multiplr: 1.00

MS Integration Params: RTEINT.P

Quant Time: Nov 14 12:58:52 2012

Quant Results File: 8260WTR.RES

Quant Method : C:\MSDCHEM\1\METHODS\8260WTR.M (RTE Integrator)

Title : 8260B/624_WATER SOP:OVLMSV01 011/12/12 - HPMS6

Last Update : Tue Nov 13 09:04:10 2012

Response via : Initial Calibration

DataAcq Meth : 8260WTR

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) Fluorobenzene	10.32	96	578817	25.00	ug/L	0.00
57) Chlorobenzene-d5	14.80	117	406927	25.00	ug/L	0.00
78) 1,4-Dichlorobenzene-d4	18.35	152	193099	25.00	ug/L	0.00

System Monitoring Compounds

37) Dibromofluoromethane	0.00	111	0	0.0000	ug/L	
Spiked Amount	25.000	Range	86 - 118	Recovery	=	0.00%#
43) 1,2-Dichloroethane-d4	9.85	65	912	0.1604	ug/L	0.00
Spiked Amount	25.000	Range	80 - 120	Recovery	=	0.64%#
58) Toluene-d8	12.60	98	4313	0.2161	ug/L	0.00
Spiked Amount	25.000	Range	88 - 110	Recovery	=	0.88%#
80) p-Bromofluorobenzene	16.58	95	1539	0.2198	ug/L	0.01
Spiked Amount	25.000	Range	86 - 115	Recovery	=	0.88%#

Target Compounds

					Qvalue	
2) Dichlorodifluoromethane	2.64	85	989	0.2171	ug/L	# 65
3) Chloromethane	3.01	50	2317	0.2861	ug/L	# 64
4) Vinyl Chloride	3.19	62	2334	0.3495	ug/L	# 77
5) 1,3-Butadiene	3.23	54	2315	Below Cal		90
6) Bromomethane	3.95	94	741	0.7868	ug/L	92
7) Chloroethane	4.09	64	1026	0.2513	ug/L	# 46
8) Trichlorofluoromethane	4.56	101	2107	0.2217	ug/L	# 85
10) Isoprene	5.11	67	2902	0.2800	ug/L	74
12) 1,1,2-Trichloro-1,2,2-Trif	5.37	101	850	0.1570	ug/L	# 12
14) 1,1-Dichloroethene	5.65	61	2585	0.2733	ug/L	94
16) Dimethyl Sulfide	5.92	62	1799	0.2542	ug/L	88
19) Methylene Chloride	6.47	84	1607	0.2854	ug/L	86
20) Carbon Disulfide	6.48	76	4835	0.2883	ug/L	# 75
22) Methyl Tert Butyl Ether	6.71	73	2585	0.2376	ug/L	# 51
23) trans-1,2-Dichloroethene	6.95	96	1416	0.2483	ug/L	95
24) n-Hexane	7.06	57	2095	0.3324	ug/L	83
26) Vinyl Acetate	7.64	43	1591	0.2602	ug/L	# 76
27) 1,1-Dichloroethane	7.63	63	3118	0.2761	ug/L	# 66
31) 2,2-Dichloropropane	8.50	77	2186	0.2556	ug/L	72
32) cis-1,2-Dichloroethene	8.57	96	1437	0.2324	ug/L	96
33) Chloroform	8.80	83	2854	0.2816	ug/L	# 81
35) Bromochloromethane	9.06	130	722	0.3873	ug/L	# 43
38) 1,1,1-Trichloroethane	9.41	97	2326	0.2511	ug/L	72
39) Cyclohexane	9.41	56	3455	0.3417	ug/L	84
40) 1,1-Dichloropropene	9.63	75	1842	0.2390	ug/L	# 73
42) Carbon Tetrachloride	9.77	117	1927	0.2283	ug/L	# 89
45) 1,2-Dichloroethane	9.99	62	1683	0.2374	ug/L	# 45
46) Benzene	10.02	78	7093	0.3190	ug/L	# 82
47) Trichloroethene	10.89	130	2600	0.4074	ug/L	96
48) Methylcyclohexane	10.98	83	2010	0.2867	ug/L	# 71
49) 1,2-Dichloropropane	11.16	63	1127	0.1983	ug/L	# 35
51) Bromodichloromethane	11.48	83	1821	0.2569	ug/L	71
52) Dibromomethane	11.56	93	437	0.5070	ug/L	# 8
55) cis-1,3-Dichloropropene	12.25	75	1726	0.2225	ug/L	# 59
56) Dimethyl Disulfide	12.51	79	691	0.1476	ug/L	# 50
59) Toluene	12.72	91	6610	0.2870	ug/L	100
62) trans-1,3-Dichloropropene	12.96	75	934	0.8162	ug/L	# 50
63) 1,1,2-Trichloroethane	13.19	97	650	0.4295	ug/L	# 33
65) 1,3-Dichloropropane	13.55	76	1275	0.2188	ug/L	# 60
66) Tetrachloroethene	13.67	166	1683	0.2992	ug/L	# 60

(#) = qualifier out of range (m) = manual integration
 6M112622.D 8260WTR.M Wed Nov 14 12:58:52 2012

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Data File : C:\MSDCHEM\1\DATA\111212\6M112622.D Vial: 3
 Acq On : 12 Nov 2012 15:14 Operator: adc
 Sample : WG414018-02 0.3 ug/L STD 8260 Inst : HPMS6
 Misc : 1,1 STD54883 Multiplr: 1.00
 MS Integration Params: RTEINT.P
 Quant Time: Nov 14 12:58:52 2012 Quant Results File: 8260WTR.RES

Quant Method : C:\MSDCHEM\1\METHODS\8260WTR.M (RTE Integrator)
 Title : 8260B/624_WATER SOP:OVLMSV01 011/12/12 - HPMS6
 Last Update : Tue Nov 13 09:04:10 2012
 Response via : Initial Calibration
 DataAcq Meth : 8260WTR

Compound	R.T.	QIon	Response	Conc	Unit	Qvalue
67) Dibromochloromethane	13.95	129	768	0.1747	ug/L	87
68) 1,2-Dibromoethane	14.25	107	382	0.3942	ug/L #	2
69) 1-Chlorohexane	14.42	91	1689	0.2398	ug/L	94
70) Chlorobenzene	14.85	112	4622	0.2994	ug/L	79
71) 1,1,1,2-Tetrachloroethane	14.91	131	1262	0.2266	ug/L #	23
72) Ethylbenzene	14.91	106	2205	0.2612	ug/L	55
73) m-,p-Xylene	15.03	106	5966	0.5824	ug/L	94
74) o-Xylene	15.67	106	2317	0.2404	ug/L	73
75) Styrene	15.72	104	3272	0.2058	ug/L	81
77) Isopropylbenzene	16.19	105	6398	0.2750	ug/L	90
79) 1,1,2,2-Tetrachloroethane	16.45	83	699	0.2025	ug/L #	55
83) n-Propylbenzene	16.78	91	8005	0.3161	ug/L #	95
84) Bromobenzene	16.88	156	1261	0.2294	ug/L	88
85) 1,3,5-Trimethylbenzene	17.01	105	5748	0.3094	ug/L	99
86) 2-Chlorotoluene	17.07	91	5118	0.2768	ug/L	85
87) 4-Chlorotoluene	17.13	91	5077	0.2998	ug/L #	85
88) a-Methylstyrene	17.49	118	2704	0.2486	ug/L #	1
90) 1,2,4-Trimethylbenzene	17.61	105	6424	0.3329	ug/L	92
91) sec-Butylbenzene	17.86	105	5712	0.2834	ug/L	85
92) p-Isopropyltoluene	18.06	119	4703	0.2715	ug/L	84
93) 1,3-Dichlorobenzene	18.25	146	2863	0.2723	ug/L	93
94) 1,4-Dichlorobenzene	18.40	146	3050	0.2836	ug/L #	1
95) n-Butylbenzene	18.68	91	4003	0.2709	ug/L	93
96) 1,2-Dichlorobenzene	18.97	146	2513	0.2714	ug/L	83
98) 1,2,4-Trichlorobenzene	21.50	180	1269	0.2257	ug/L #	82
100) Naphthalene	21.91	128	2542	0.2605	ug/L #	68
101) 1,2,3-Trichlorobenzene	22.29	180	1278	0.2764	ug/L #	82

 (#) = qualifier out of range (m) = manual integration
 6M112622.D 8260WTR.M Wed Nov 14 12:58:52 2012

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Data File : C:\MSDCHEM\1\DATA\111212\6M112623.D

Vial: 4

Acq On : 12 Nov 2012 15:44

Operator: adc

Sample : WG414018-03 0.4 ug/L STD 8260

Inst : HPMS6

Misc : 1,1 STD54883

Multiplr: 1.00

MS Integration Params: RTEINT.P

Quant Time: Nov 14 12:58:54 2012

Quant Results File: 8260WTR.RES

Quant Method : C:\MSDCHEM\1\METHODS\8260WTR.M (RTE Integrator)

Title : 8260B/624_WATER SOP:OVLMSV01 011/12/12 - HPMS6

Last Update : Wed Nov 14 12:48:44 2012

Response via : Initial Calibration

DataAcq Meth : 8260WTR

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) Fluorobenzene	10.32	96	547565	25.00	ug/L	0.00
57) Chlorobenzene-d5	14.80	117	386452	25.00	ug/L	0.00
78) 1,4-Dichlorobenzene-d4	18.35	152	185616	25.00	ug/L	0.00

System Monitoring Compounds

37) Dibromofluoromethane	0.00	111	0	0.0000	ug/L	
Spiked Amount	25.000	Range	86 - 118	Recovery	=	0.00%#
43) 1,2-Dichloroethane-d4	0.00	65	0	0.0000	ug/L	
Spiked Amount	25.000	Range	80 - 120	Recovery	=	0.00%#
58) Toluene-d8	12.60	98	1873	0.0988	ug/L	0.00
Spiked Amount	25.000	Range	88 - 110	Recovery	=	0.40%#
80) p-Bromofluorobenzene	16.59	95	642	0.0954	ug/L	0.02
Spiked Amount	25.000	Range	86 - 115	Recovery	=	0.40%#

Target Compounds

					Qvalue	
2) Dichlorodifluoromethane	2.64	85	1425	0.3307	ug/L	# 65
3) Chloromethane	3.00	50	5698	0.7438	ug/L	89
4) Vinyl Chloride	3.20	62	2862	0.4530	ug/L	96
5) 1,3-Butadiene	3.24	54	2653	Below Cal		94
6) Bromomethane	3.95	94	1096	0.8726	ug/L	94
7) Chloroethane	4.10	64	1306	0.3381	ug/L	# 46
8) Trichlorofluoromethane	4.57	101	3155	0.3509	ug/L	# 92
10) Isoprene	5.12	67	3827	0.3903	ug/L	89
12) 1,1,2-Trichloro-1,2,2-Trif	5.32	101	698	0.1363	ug/L	# 27
14) 1,1-Dichloroethene	5.65	61	3419	0.3821	ug/L	96
16) Dimethyl Sulfide	5.91	62	2207	0.3297	ug/L	99
17) Iodomethane	6.16	142	193	1.9347	ug/L	# 29
18) Methyl acetate	6.22	43	474	0.2042	ug/L	# 63
19) Methylene Chloride	6.48	84	2205	0.4140	ug/L	90
20) Carbon Disulfide	6.48	76	6548	0.4127	ug/L	# 84
22) Methyl Tert Butyl Ether	6.73	73	3666	0.3561	ug/L	# 51
23) trans-1,2-Dichloroethene	6.95	96	1859	0.3446	ug/L	92
24) n-Hexane	7.06	57	2367	0.3970	ug/L	80
26) Vinyl Acetate	7.64	43	1809	0.3127	ug/L	# 76
27) 1,1-Dichloroethane	7.64	63	4373	0.4094	ug/L	85
31) 2,2-Dichloropropane	8.49	77	3001	0.3709	ug/L	89
32) cis-1,2-Dichloroethene	8.57	96	2261	0.3866	ug/L	87
33) Chloroform	8.80	83	3869	0.4036	ug/L	90
35) Bromochloromethane	9.06	130	631	0.3715	ug/L	89
38) 1,1,1-Trichloroethane	9.40	97	3333	0.3804	ug/L	84
39) Cyclohexane	9.43	56	3754	0.3925	ug/L	94
40) 1,1-Dichloropropene	9.62	75	2667	0.3658	ug/L	# 78
42) Carbon Tetrachloride	9.77	117	2765	0.3463	ug/L	# 90
45) 1,2-Dichloroethane	9.99	62	2481	0.3699	ug/L	# 57
46) Benzene	10.02	78	9035	0.4296	ug/L	88
47) Trichloroethene	10.89	130	2739	0.4536	ug/L	89
48) Methylcyclohexane	10.98	83	2393	0.3608	ug/L	# 83
49) 1,2-Dichloropropane	11.14	63	1761	0.3275	ug/L	# 52
51) Bromodichloromethane	11.48	83	2540	0.3787	ug/L	96
52) Dibromomethane	11.57	93	272	0.4564	ug/L	# 11
55) cis-1,3-Dichloropropene	12.25	75	2659	0.3623	ug/L	# 65
56) Dimethyl Disulfide	12.50	79	1165	0.2631	ug/L	# 50
59) Toluene	12.72	91	8608	0.3935	ug/L	100
60) Ethyl Methacrylate	12.91	69	458	0.2311	ug/L	87
62) trans-1,3-Dichloropropene	12.96	75	1335	0.8787	ug/L	# 50

(#)=qualifier out of range (m)=manual integration

6M112623.D 8260WTR.M Wed Nov 14 12:58:54 2012

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Data File : C:\MSDCHEM\1\DATA\111212\6M112623.D Vial: 4
 Acq On : 12 Nov 2012 15:44 Operator: adc
 Sample : WG414018-03 0.4 ug/L STD 8260 Inst : HPMS6
 Misc : 1,1 STD54883 Multiplr: 1.00
 MS Integration Params: RTEINT.P
 Quant Time: Nov 14 12:58:54 2012 Quant Results File: 8260WTR.RES

Quant Method : C:\MSDCHEM\1\METHODS\8260WTR.M (RTE Integrator)
 Title : 8260B/624_WATER SOP:OVLMSV01 011/12/12 - HPMS6
 Last Update : Wed Nov 14 12:48:44 2012
 Response via : Initial Calibration
 DataAcq Meth : 8260WTR

Compound	R.T.	QIon	Response	Conc	Unit	Qvalue
63) 1,1,2-Trichloroethane	13.20	97	812	0.4839	ug/L #	65
65) 1,3-Dichloropropane	13.55	76	1531	0.2766	ug/L	82
66) Tetrachloroethene	13.65	166	1918	0.3591	ug/L	87
67) Dibromochloromethane	13.96	129	1441	0.3451	ug/L	77
68) 1,2-Dibromoethane	14.27	107	765	0.5056	ug/L	95
69) 1-Chlorohexane	14.43	91	2605	0.3895	ug/L	91
70) Chlorobenzene	14.85	112	5611	0.3828	ug/L	72
71) 1,1,1,2-Tetrachloroethane	14.91	131	1900	0.3592	ug/L #	23
72) Ethylbenzene	14.91	106	3096	0.3862	ug/L	42
73) m-,p-Xylene	15.01	106	7354	0.7559	ug/L	91
74) o-Xylene	15.67	106	3515	0.3840	ug/L	91
75) Styrene	15.72	104	5315	0.3520	ug/L	88
76) Bromoform	16.25	173	208	0.8014	ug/L #	34
77) Isopropylbenzene	16.19	105	8744	0.3957	ug/L	93
79) 1,1,2,2-Tetrachloroethane	16.44	83	1131	0.3409	ug/L #	67
83) n-Propylbenzene	16.78	91	9638	0.3959	ug/L #	94
84) Bromobenzene	16.89	156	1895	0.3587	ug/L	94
85) 1,3,5-Trimethylbenzene	17.01	105	7404	0.4146	ug/L	93
86) 2-Chlorotoluene	17.08	91	7264	0.4088	ug/L #	86
87) 4-Chlorotoluene	17.14	91	6389	0.3924	ug/L #	87
88) a-Methylstyrene	17.48	118	3584	0.3428	ug/L #	1
89) tert-Butylbenzene	17.56	134	1044	0.3110	ug/L	67
90) 1,2,4-Trimethylbenzene	17.61	105	7552	0.4071	ug/L	89
91) sec-Butylbenzene	17.86	105	7284	0.3760	ug/L	93
92) p-Isopropyltoluene	18.07	119	6855	0.4116	ug/L	98
93) 1,3-Dichlorobenzene	18.25	146	3833	0.3792	ug/L	88
94) 1,4-Dichlorobenzene	18.39	146	4177	0.4041	ug/L	85
95) n-Butylbenzene	18.68	91	5929	0.4174	ug/L	88
96) 1,2-Dichlorobenzene	18.98	146	3481	0.3910	ug/L	86
98) 1,2,4-Trichlorobenzene	21.50	180	1961	0.3629	ug/L #	91
99) Hexachlorobutadiene	21.70	225	441	0.2019	ug/L #	45
100) Naphthalene	21.91	128	3569	0.3805	ug/L #	68
101) 1,2,3-Trichlorobenzene	22.28	180	1763	0.3967	ug/L #	74

(#) = qualifier out of range (m) = manual integration
 6M112623.D 8260WTR.M Wed Nov 14 12:58:54 2012

Page 2

Data File : C:\MSDCHEM\1\DATA\111212\6M112624.D

Vial: 5

Acq On : 12 Nov 2012 16:15

Operator: adc

Sample : WG414018-04 1.0ug/L STD 8260

Inst : HPMS6

Misc : 1,1 STD54883

Multiplr: 1.00

MS Integration Params: RTEINT.P

Quant Time: Nov 14 12:58:55 2012

Quant Results File: 8260WTR.RES

Quant Method : C:\MSDCHEM\1\METHODS\8260WTR.M (RTE Integrator)

Title : 8260B/624_WATER SOP:OVLMSV01 011/12/12 - HPMS6

Last Update : Wed Nov 14 12:48:44 2012

Response via : Initial Calibration

DataAcq Meth : 8260WTR

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) Fluorobenzene	10.32	96	533264	25.00	ug/L	0.00
57) Chlorobenzene-d5	14.80	117	374009	25.00	ug/L	0.00
78) 1,4-Dichlorobenzene-d4	18.35	152	181473	25.00	ug/L	0.00

System Monitoring Compounds

37) Dibromofluoromethane	9.13	111	2696	0.4932	ug/L	0.00
Spiked Amount	25.000	Range	86 - 118	Recovery	=	1.96%#
43) 1,2-Dichloroethane-d4	9.86	65	2754	0.5258	ug/L	0.00
Spiked Amount	25.000	Range	80 - 120	Recovery	=	2.12%#
58) Toluene-d8	12.60	98	9787	0.5335	ug/L	0.00
Spiked Amount	25.000	Range	88 - 110	Recovery	=	2.12%#
80) p-Bromofluorobenzene	16.57	95	3344	0.5083	ug/L	0.00
Spiked Amount	25.000	Range	86 - 115	Recovery	=	2.04%#

Target Compounds

						Qvalue
2) Dichlorodifluoromethane	2.64	85	3563	0.8490	ug/L	# 79
3) Chloromethane	3.00	50	9570	1.2827	ug/L	98
4) Vinyl Chloride	3.19	62	7043	1.1447	ug/L	100
5) 1,3-Butadiene	3.24	54	5645	0.4239	ug/L	93
6) Bromomethane	3.94	94	3092	1.3242	ug/L	99
7) Chloroethane	4.10	64	3320	0.8825	ug/L	80
8) Trichlorofluoromethane	4.56	101	7981	0.9115	ug/L	# 90
9) Diethyl ether	5.09	59	10831	4.5145	ug/L	99
10) Isoprene	5.11	67	8770	0.9184	ug/L	98
12) 1,1,2-Trichloro-1,2,2-Trif	5.32	101	4263	0.8546	ug/L	84
13) Acetone	5.43	43	663	0.9442	ug/L	# 46
14) 1,1-Dichloroethene	5.64	61	8620	0.9891	ug/L	92
15) Tert-Butyl Alcohol	5.76	59	1178	5.9847	ug/L	# 61
16) Dimethyl Sulfide	5.91	62	6042	0.9267	ug/L	96
17) Iodomethane	6.17	142	1428	2.2199	ug/L	# 49
18) Methyl acetate	6.21	43	2149	0.9506	ug/L	# 63
19) Methylene Chloride	6.47	84	4990	0.9620	ug/L	100
20) Carbon Disulfide	6.48	76	14299	0.9255	ug/L	93
21) Acrylonitrile	6.68	53	1915	1.8993	ug/L	97
22) Methyl Tert Butyl Ether	6.71	73	9387	0.9363	ug/L	92
23) trans-1,2-Dichloroethene	6.95	96	5070	0.9651	ug/L	94
24) n-Hexane	7.05	57	5647	0.9726	ug/L	93
25) Diisopropyl ether	7.45	45	74504	4.7617	ug/L	98
26) Vinyl Acetate	7.63	43	5047	0.8958	ug/L	# 76
27) 1,1-Dichloroethane	7.64	63	9558	0.9187	ug/L	99
28) Ethyl-Tert-Butyl ether	8.08	59	64912	4.6626	ug/L	100
29) 2-Butanone	8.29	43	658	0.6333	ug/L	# 54
30) Propionitrile	8.40	54	1145	3.5233	ug/L	# 56
31) 2,2-Dichloropropane	8.50	77	6842	0.8684	ug/L	88
32) cis-1,2-Dichloroethene	8.56	96	5459	0.9584	ug/L	89
33) Chloroform	8.80	83	9005	0.9645	ug/L	96
34) 1-Bromopropane	8.95	122	203	0.9229	ug/L	92
35) Bromochloromethane	9.05	130	2928	1.0904	ug/L	92
36) Tetrahydrofuran	9.10	42	2879	4.4968	ug/L	91
38) 1,1,1-Trichloroethane	9.40	97	7491	0.8778	ug/L	100
39) Cyclohexane	9.42	56	9264	0.9945	ug/L	93
40) 1,1-Dichloropropene	9.62	75	6603	0.9299	ug/L	97
41) Tert-Amyl-Methyl ether	9.77	73	47567	4.5690	ug/L	97
42) Carbon Tetrachloride	9.77	117	6986	0.8985	ug/L	95
45) 1,2-Dichloroethane	9.99	62	5978	0.9152	ug/L	# 88

(#) = qualifier out of range (m) = manual integration
 6M112624.D 8260WTR.M Wed Nov 14 12:58:56 2012

Page 1

Data File : C:\MSDCHEM\1\DATA\111212\6M112624.D

Vial: 5

Acq On : 12 Nov 2012 16:15

Operator: adc

Sample : WG414018-04 1.0ug/L STD 8260

Inst : HPMS6

Misc : 1,1 STD54883

Multiplr: 1.00

MS Integration Params: RTEINT.P

Quant Time: Nov 14 12:58:55 2012

Quant Results File: 8260WTR.RES

Quant Method : C:\MSDCHEM\1\METHODS\8260WTR.M (RTE Integrator)

Title : 8260B/624_WATER SOP:OVLMSV01 011/12/12 - HPMS6

Last Update : Wed Nov 14 12:48:44 2012

Response via : Initial Calibration

DataAcq Meth : 8260WTR

Compound	R.T.	QIon	Response	Conc	Unit	Qvalue
46) Benzene	10.02	78	19036	0.9293	ug/L	99
47) Trichloroethene	10.89	130	5832	0.9918	ug/L	94
48) Methylcyclohexane	10.99	83	5852	0.9059	ug/L	91
49) 1,2-Dichloropropane	11.14	63	4636	0.8853	ug/L	96
51) Bromodichloromethane	11.48	83	5616	0.8598	ug/L	99
52) Dibromomethane	11.56	93	1974	1.0840	ug/L	99
53) 2-Chloroethyl Vinyl Ether	11.88	63	735	1.3764	ug/L #	43
55) cis-1,3-Dichloropropene	12.24	75	5981	0.8369	ug/L	96
56) Dimethyl Disulfide	12.51	79	2982	0.6914	ug/L #	62
59) Toluene	12.72	91	19512	0.9217	ug/L	98
60) Ethyl Methacrylate	12.90	69	2618	0.7566	ug/L	98
62) trans-1,3-Dichloropropene	12.95	75	4018	1.2720	ug/L #	76
63) 1,1,2-Trichloroethane	13.19	97	2492	0.9765	ug/L	89
65) 1,3-Dichloropropane	13.55	76	5143	0.9601	ug/L	100
66) Tetrachloroethene	13.66	166	4384	0.8481	ug/L	96
67) Dibromochloromethane	13.96	129	3328	0.8235	ug/L	98
68) 1,2-Dibromoethane	14.26	107	2415	0.9851	ug/L	96
69) 1-Chlorohexane	14.43	91	6056	0.9357	ug/L	99
70) Chlorobenzene	14.85	112	13392	0.9440	ug/L	80
71) 1,1,1,2-Tetrachloroethane	14.90	131	4277	0.8355	ug/L #	75
72) Ethylbenzene	14.91	106	6881	0.8870	ug/L	40
73) m-,p-Xylene	15.02	106	17393	1.8474	ug/L	99
74) o-Xylene	15.67	106	8094	0.9137	ug/L	97
75) Styrene	15.72	104	12158	0.8319	ug/L	97
76) Bromoform	16.26	173	1793	1.3704	ug/L #	58
77) Isopropylbenzene	16.19	105	19638	0.9182	ug/L	97
79) 1,1,2,2-Tetrachloroethane	16.44	83	2892	0.8916	ug/L	90
81) 1,2,3-Trichloropropane	16.66	110	206	0.8638	ug/L #	1
82) trans-1,4-Dichloro-2-Buten	16.75	53	197	1.4009	ug/L	87
83) n-Propylbenzene	16.78	91	22615	0.9501	ug/L #	97
84) Bromobenzene	16.88	156	4542	0.8794	ug/L	99
85) 1,3,5-Trimethylbenzene	17.00	105	16108	0.9226	ug/L	99
86) 2-Chlorotoluene	17.07	91	17138	0.9864	ug/L	91
87) 4-Chlorotoluene	17.14	91	14126	0.8875	ug/L	95
88) a-Methylstyrene	17.48	118	8369	0.8187	ug/L #	1
89) tert-Butylbenzene	17.55	134	3069	0.9350	ug/L	95
90) 1,2,4-Trimethylbenzene	17.61	105	16828	0.9278	ug/L	88
91) sec-Butylbenzene	17.86	105	17937	0.9470	ug/L	97
92) p-Isopropyltoluene	18.07	119	15058	0.9248	ug/L	96
93) 1,3-Dichlorobenzene	18.24	146	8828	0.8934	ug/L	99
94) 1,4-Dichlorobenzene	18.40	146	9293	0.9196	ug/L	95
95) n-Butylbenzene	18.68	91	12897	0.9286	ug/L	95
96) 1,2-Dichlorobenzene	18.98	146	8336	0.9578	ug/L	98
98) 1,2,4-Trichlorobenzene	21.50	180	5096	0.9646	ug/L	98
99) Hexachlorobutadiene	21.69	225	1747	0.8183	ug/L	94
100) Naphthalene	21.91	128	8696	0.9481	ug/L	90
101) 1,2,3-Trichlorobenzene	22.28	180	3608	0.8303	ug/L	98

(#) = qualifier out of range (m) = manual integration
 6M112624.D 8260WTR.M Wed Nov 14 12:58:56 2012

Page 2

Data File : C:\MSDCHEM\1\DATA\111212\6M112624.D

Vial: 5

Acq On : 12 Nov 2012 16:15

Operator: adc

Sample : WG414018-04 1.0ug/L STD 8260

Inst : HPMS6

Misc : 1,1 STD54883

Multiplr: 1.00

MS Integration Params: RTEINT.P

Quant Time: Nov 14 12:58 2012

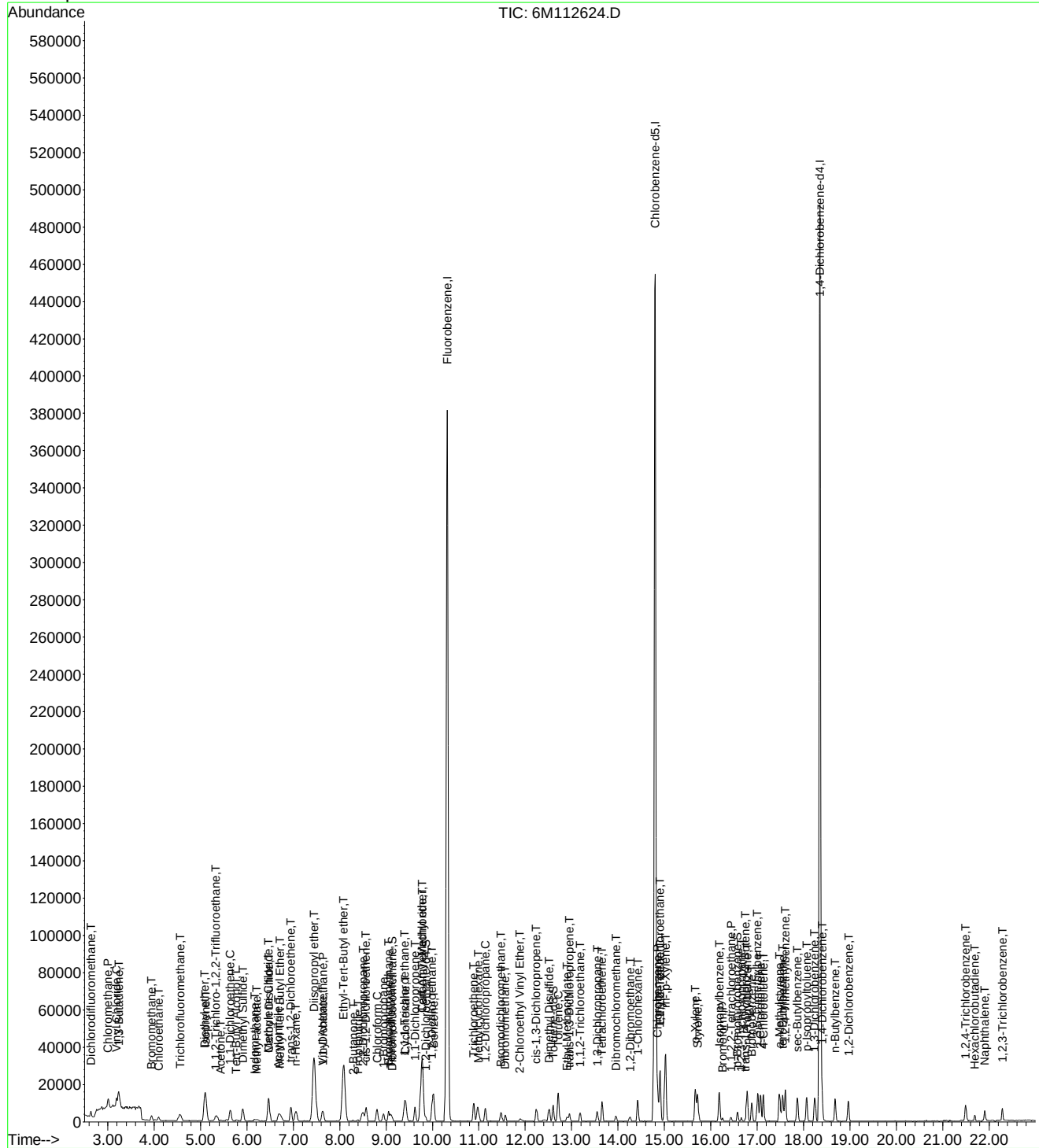
Quant Results File: 8260WTR.RES

Method : C:\MSDCHEM\1\METHODS\8260WTR.M (RTE Integrator)

Title : 8260B/624_WATER SOP:OVLMSV01 011/12/12 - HPMS6

Last Update : Wed Nov 14 12:48:44 2012

Response via : Initial Calibration



Data File : C:\MSDCHEM\1\DATA\111212\6M112625.D

Vial: 6

Acq On : 12 Nov 2012 16:46

Operator: adc

Sample : WG414018-05 2.0 ug/L STD 8260

Inst : HPMS6

Misc : 1,1 STD54883

Multiplr: 1.00

MS Integration Params: RTEINT.P

Quant Time: Nov 14 12:58:56 2012

Quant Results File: 8260WTR.RES

Quant Method : C:\MSDCHEM\1\METHODS\8260WTR.M (RTE Integrator)

Title : 8260B/624_WATER SOP:OVLMSV01 011/12/12 - HPMS6

Last Update : Wed Nov 14 12:48:44 2012

Response via : Initial Calibration

DataAcq Meth : 8260WTR

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) Fluorobenzene	10.32	96	530823	25.00	ug/L	0.00
57) Chlorobenzene-d5	14.80	117	371280	25.00	ug/L	0.00
78) 1,4-Dichlorobenzene-d4	18.35	152	178956	25.00	ug/L	0.00

System Monitoring Compounds

37) Dibromofluoromethane	9.12	111	5480	1.0072	ug/L	0.00
Spiked Amount	25.000	Range	86 - 118	Recovery	=	4.04%#
43) 1,2-Dichloroethane-d4	9.86	65	5299	1.0163	ug/L	0.00
Spiked Amount	25.000	Range	80 - 120	Recovery	=	4.08%#
58) Toluene-d8	12.60	98	18359	1.0081	ug/L	0.01
Spiked Amount	25.000	Range	88 - 110	Recovery	=	4.04%#
80) p-Bromofluorobenzene	16.58	95	6847	1.0553	ug/L	0.01
Spiked Amount	25.000	Range	86 - 115	Recovery	=	4.24%#

Target Compounds

						Qvalue
2) Dichlorodifluoromethane	2.64	85	6795	1.6266	ug/L	94
3) Chloromethane	3.00	50	14708	1.9804	ug/L	94
4) Vinyl Chloride	3.19	62	12827	2.0943	ug/L	99
5) 1,3-Butadiene	3.24	54	9951	1.6241	ug/L	97
6) Bromomethane	3.94	94	6540	2.0999	ug/L	98
7) Chloroethane	4.10	64	7118	1.9008	ug/L	91
8) Trichlorofluoromethane	4.56	101	16888	1.9376	ug/L	98
9) Diethyl ether	5.09	59	58028	24.2980	ug/L	99
10) Isoprene	5.11	67	17208	1.8103	ug/L	100
11) Acrolein	5.31	56	2417	10.4076	ug/L	92
12) 1,1,2-Trichloro-1,2,2-Trif	5.33	101	9524	1.9181	ug/L	98
13) Acetone	5.44	43	1503	2.1502	ug/L	# 46
14) 1,1-Dichloroethene	5.64	61	16294	1.8782	ug/L	98
15) Tert-Butyl Alcohol	5.78	59	9847	50.2562	ug/L	# 90
16) Dimethyl Sulfide	5.92	62	11865	1.8282	ug/L	99
17) Iodomethane	6.16	142	3724	2.7518	ug/L	92
18) Methyl acetate	6.22	43	4413	1.9610	ug/L	# 63
19) Methylene Chloride	6.47	84	9668	1.8723	ug/L	96
20) Carbon Disulfide	6.48	76	28983	1.8845	ug/L	100
21) Acrylonitrile	6.68	53	11916	11.8729	ug/L	98
22) Methyl Tert Butyl Ether	6.71	73	19187	1.9227	ug/L	97
23) trans-1,2-Dichloroethene	6.96	96	9879	1.8892	ug/L	96
24) n-Hexane	7.06	57	11086	1.9181	ug/L	98
25) Diisopropyl ether	7.45	45	384821	24.7076	ug/L	99
26) Vinyl Acetate	7.63	43	11156	1.9893	ug/L	# 80
27) 1,1-Dichloroethane	7.64	63	19613	1.8939	ug/L	96
28) Ethyl-Tert-Butyl ether	8.08	59	337258	24.3363	ug/L	99
29) 2-Butanone	8.28	43	2081	2.0120	ug/L	# 54
30) Propionitrile	8.39	54	8100	25.0392	ug/L	89
31) 2,2-Dichloropropane	8.50	77	14915	1.9016	ug/L	93
32) cis-1,2-Dichloroethene	8.57	96	10550	1.8608	ug/L	98
33) Chloroform	8.81	83	17485	1.8814	ug/L	98
34) 1-Bromopropane	8.95	122	1570	2.2357	ug/L	97
35) Bromochloromethane	9.05	130	5750	1.9756	ug/L	97
36) Tetrahydrofuran	9.09	42	16442	25.7994	ug/L	96
38) 1,1,1-Trichloroethane	9.41	97	15397	1.8125	ug/L	98
39) Cyclohexane	9.42	56	17622	1.9005	ug/L	98
40) 1,1-Dichloropropene	9.63	75	13267	1.8771	ug/L	95
41) Tert-Amyl-Methyl ether	9.78	73	247402	23.8733	ug/L	99
42) Carbon Tetrachloride	9.78	117	13923	1.7990	ug/L	99

(#) = qualifier out of range (m) = manual integration
 6M112625.D 8260WTR.M Wed Nov 14 12:58:57 2012

Data File : C:\MSDCHEM\1\DATA\111212\6M112625.D

Vial: 6

Acq On : 12 Nov 2012 16:46

Operator: adc

Sample : WG414018-05 2.0 ug/L STD 8260

Inst : HPMS6

Misc : 1,1 STD54883

Multiplr: 1.00

MS Integration Params: RTEINT.P

Quant Time: Nov 14 12:58:56 2012

Quant Results File: 8260WTR.RES

Quant Method : C:\MSDCHEM\1\METHODS\8260WTR.M (RTE Integrator)

Title : 8260B/624_WATER SOP:OVLMSV01 011/12/12 - HPMS6

Last Update : Wed Nov 14 12:48:44 2012

Response via : Initial Calibration

DataAcq Meth : 8260WTR

Compound	R.T.	QIon	Response	Conc	Unit	Qvalue
44) Heptane	9.78	57	5328	22.7396	ug/L	92
45) 1,2-Dichloroethane	9.99	62	12338	1.8975	ug/L	97
46) Benzene	10.02	78	37846	1.8561	ug/L	99
47) Trichloroethene	10.90	130	10464	1.7877	ug/L	97
48) Methylcyclohexane	10.98	83	12232	1.9022	ug/L	98
49) 1,2-Dichloropropane	11.14	63	10006	1.9195	ug/L	98
51) Bromodichloromethane	11.48	83	11713	1.8016	ug/L	99
52) Dibromomethane	11.57	93	4321	1.9531	ug/L	96
53) 2-Chloroethyl Vinyl Ether	11.88	63	2830	2.3051	ug/L #	72
54) 4-Methyl-2-Pentanone	11.92	58	1281	1.3516	ug/L #	37
55) cis-1,3-Dichloropropene	12.24	75	12405	1.7438	ug/L	98
56) Dimethyl Disulfide	12.51	79	6444	1.5010	ug/L	88
59) Toluene	12.72	91	39263	1.8684	ug/L	98
60) Ethyl Methacrylate	12.91	69	10383	2.6513	ug/L #	64
62) trans-1,3-Dichloropropene	12.95	75	9168	2.0248	ug/L	89
63) 1,1,2-Trichloroethane	13.19	97	5924	1.9799	ug/L	97
64) 2-Hexanone	13.17	43	1256	0.8843	ug/L #	23
65) 1,3-Dichloropropane	13.54	76	10000	1.8806	ug/L	91
66) Tetrachloroethene	13.67	166	9846	1.9187	ug/L	98
67) Dibromochloromethane	13.95	129	7350	1.8320	ug/L	99
68) 1,2-Dibromoethane	14.26	107	5554	1.8956	ug/L	98
69) 1-Chlorohexane	14.43	91	11611	1.8071	ug/L	97
70) Chlorobenzene	14.85	112	25891	1.8384	ug/L	81
71) 1,1,1,2-Tetrachloroethane	14.90	131	8481	1.6688	ug/L	88
72) Ethylbenzene	14.91	106	13857	1.7993	ug/L	33
73) m-,p-Xylene	15.01	106	34132	3.6520	ug/L	100
74) o-Xylene	15.67	106	15968	1.8157	ug/L	99
75) Styrene	15.72	104	24868	1.7141	ug/L	98
76) Bromoform	16.26	173	3636	2.0388	ug/L #	80
77) Isopropylbenzene	16.19	105	39042	1.8389	ug/L	98
79) 1,1,2,2-Tetrachloroethane	16.43	83	6592	2.0609	ug/L	94
81) 1,2,3-Trichloropropane	16.66	110	1566	2.2746	ug/L	85
82) trans-1,4-Dichloro-2-Butene	16.75	53	1199	2.2329	ug/L	92
83) n-Propylbenzene	16.78	91	44685	1.9037	ug/L	97
84) Bromobenzene	16.88	156	9864	1.9366	ug/L	98
85) 1,3,5-Trimethylbenzene	17.02	105	31644	1.8380	ug/L	99
86) 2-Chlorotoluene	17.07	91	31219	1.8221	ug/L	95
87) 4-Chlorotoluene	17.13	91	29870	1.9030	ug/L	95
88) a-Methylstyrene	17.48	118	16851	1.6717	ug/L #	1
89) tert-Butylbenzene	17.55	134	5757	1.7785	ug/L	95
90) 1,2,4-Trimethylbenzene	17.61	105	33266	1.8599	ug/L	100
91) sec-Butylbenzene	17.86	105	35627	1.9073	ug/L	97
92) p-Isopropyltoluene	18.07	119	29996	1.8682	ug/L	98
93) 1,3-Dichlorobenzene	18.24	146	18139	1.8615	ug/L	99
94) 1,4-Dichlorobenzene	18.40	146	18662	1.8726	ug/L	82
95) n-Butylbenzene	18.68	91	25361	1.8517	ug/L	96
96) 1,2-Dichlorobenzene	18.97	146	15928	1.8558	ug/L	100
97) 1,2-Dibromo-3-Chloropropan	20.15	75	653	2.2499	ug/L	65
98) 1,2,4-Trichlorobenzene	21.50	180	9643	1.8510	ug/L	98
99) Hexachlorobutadiene	21.69	225	3848	1.8277	ug/L	96
100) Naphthalene	21.91	128	17091	1.8897	ug/L	97
101) 1,2,3-Trichlorobenzene	22.28	180	8257	1.9270	ug/L	96

(#) = qualifier out of range (m) = manual integration
 6M112625.D 8260WTR.M Wed Nov 14 12:58:57 2012

Page 2

Data File : C:\MSDCHEM\1\DATA\111212\6M112625.D

Vial: 6

Acq On : 12 Nov 2012 16:46

Operator: adc

Sample : WG414018-05 2.0 ug/L STD 8260

Inst : HPMS6

Misc : 1,1 STD54883

Multiplr: 1.00

MS Integration Params: RTEINT.P

Quant Time: Nov 14 12:58 2012

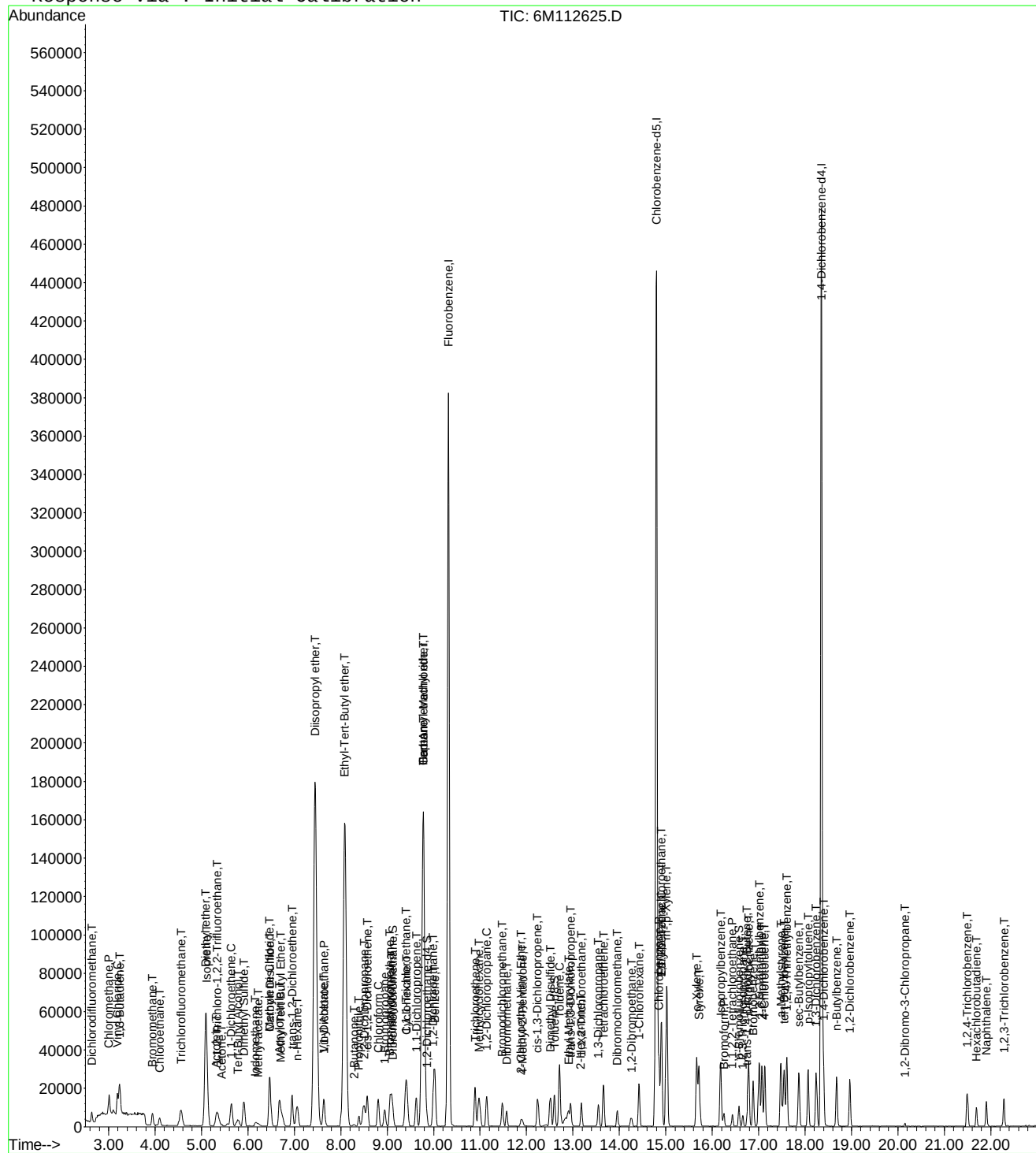
Quant Results File: 8260WTR.RES

Method : C:\MSDCHEM\1\METHODS\8260WTR.M (RTE Integrator)

Title : 8260B/624_WATER SOP:OVLMSV01 011/12/12 - HPMS6

Last Update : Wed Nov 14 12:48:44 2012

Response via : Initial Calibration



Data File : C:\MSDCHEM\1\DATA\111212\6M112626.D

Vial: 7

Acq On : 12 Nov 2012 17:17

Operator: adc

Sample : WG414018-06 5.0 ug/L STD 8260

Inst : HPMS6

Misc : 1,1 STD54883

Multiplr: 1.00

MS Integration Params: RTEINT.P

Quant Time: Nov 14 12:58:58 2012

Quant Results File: 8260WTR.RES

Quant Method : C:\MSDCHEM\1\METHODS\8260WTR.M (RTE Integrator)

Title : 8260B/624_WATER SOP:OVLMSV01 011/12/12 - HPMS6

Last Update : Wed Nov 14 12:48:44 2012

Response via : Initial Calibration

DataAcq Meth : 8260WTR

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) Fluorobenzene	10.32	96	524562	25.00	ug/L	0.00
57) Chlorobenzene-d5	14.79	117	370413	25.00	ug/L	0.00
78) 1,4-Dichlorobenzene-d4	18.35	152	178010	25.00	ug/L	0.00

System Monitoring Compounds

37) Dibromofluoromethane	9.12	111	12758	2.3729	ug/L	0.00
Spiked Amount	25.000	Range	86 - 118	Recovery	=	9.48%#
43) 1,2-Dichloroethane-d4	9.85	65	13237	2.5691	ug/L	0.00
Spiked Amount	25.000	Range	80 - 120	Recovery	=	10.28%#
58) Toluene-d8	12.60	98	43832	2.4124	ug/L	0.00
Spiked Amount	25.000	Range	88 - 110	Recovery	=	9.64%#
80) p-Bromofluorobenzene	16.57	95	15875	2.4598	ug/L	0.00
Spiked Amount	25.000	Range	86 - 115	Recovery	=	9.84%#

Target Compounds

						Qvalue
2) Dichlorodifluoromethane	2.64	85	18893	4.5765	ug/L	97
3) Chloromethane	3.01	50	35018	4.7715	ug/L	99
4) Vinyl Chloride	3.19	62	30683	5.0696	ug/L	100
5) 1,3-Butadiene	3.23	54	21136	4.8352	ug/L	98
6) Bromomethane	3.95	94	16699	4.4209	ug/L	98
7) Chloroethane	4.10	64	18205	4.9196	ug/L	98
8) Trichlorofluoromethane	4.56	101	42156	4.8943	ug/L	99
9) Diethyl ether	5.09	59	121008	51.2743	ug/L	99
10) Isoprene	5.11	67	43434	4.6238	ug/L	99
11) Acrolein	5.31	56	5145	22.4187	ug/L	89
12) 1,1,2-Trichloro-1,2,2-Trif	5.34	101	23688	4.8275	ug/L	99
13) Acetone	5.43	43	3684	5.3333	ug/L	90
14) 1,1-Dichloroethene	5.64	61	41386	4.8274	ug/L	99
15) Tert-Butyl Alcohol	5.78	59	20735	107.0886	ug/L	99
16) Dimethyl Sulfide	5.92	62	30956	4.8267	ug/L	98
17) Iodomethane	6.16	142	12029	4.7036	ug/L	94
18) Methyl acetate	6.22	43	10988	4.9410	ug/L	# 89
19) Methylene Chloride	6.47	84	24292	4.7606	ug/L	99
20) Carbon Disulfide	6.48	76	71670	4.7157	ug/L	99
21) Acrylonitrile	6.67	53	24670	24.8742	ug/L	95
22) Methyl Tert Butyl Ether	6.71	73	47786	4.8457	ug/L	98
23) trans-1,2-Dichloroethene	6.96	96	25091	4.8556	ug/L	99
24) n-Hexane	7.05	57	27126	4.7494	ug/L	97
25) Diisopropyl ether	7.45	45	795552	51.6884	ug/L	100
26) Vinyl Acetate	7.63	43	25841	4.6629	ug/L	97
27) 1,1-Dichloroethane	7.63	63	49947	4.8806	ug/L	98
28) Ethyl-Tert-Butyl ether	8.08	59	707188	51.6394	ug/L	99
29) 2-Butanone	8.29	43	5145	5.0338	ug/L	# 73
30) Propionitrile	8.39	54	17602	55.0619	ug/L	95
31) 2,2-Dichloropropane	8.50	77	37230	4.8034	ug/L	94
32) cis-1,2-Dichloroethene	8.57	96	25820	4.6085	ug/L	94
33) Chloroform	8.81	83	44219	4.8149	ug/L	99
34) 1-Bromopropane	8.96	122	4369	4.9719	ug/L	98
35) Bromochloromethane	9.05	130	14928	4.8963	ug/L	99
36) Tetrahydrofuran	9.09	42	33566	53.2976	ug/L	97
38) 1,1,1-Trichloroethane	9.40	97	40187	4.7872	ug/L	99
39) Cyclohexane	9.42	56	43117	4.7057	ug/L	98
40) 1,1-Dichloropropene	9.62	75	33278	4.7645	ug/L	96
41) Tert-Amyl-Methyl ether	9.78	73	516777	50.4621	ug/L	99
42) Carbon Tetrachloride	9.78	117	36685	4.7966	ug/L	98

(#)=qualifier out of range (m)=manual integration

6M112626.D 8260WTR.M Wed Nov 14 12:58:58 2012

Page 1

Data File : C:\MSDCHEM\1\DATA\111212\6M112626.D

Vial: 7

Acq On : 12 Nov 2012 17:17

Operator: adc

Sample : WG414018-06 5.0 ug/L STD 8260

Inst : HPMS6

Misc : 1,1 STD54883

Multiplr: 1.00

MS Integration Params: RTEINT.P

Quant Time: Nov 14 12:58:58 2012

Quant Results File: 8260WTR.RES

Quant Method : C:\MSDCHEM\1\METHODS\8260WTR.M (RTE Integrator)

Title : 8260B/624_WATER SOP:OVLMSV01 011/12/12 - HPMS6

Last Update : Wed Nov 14 12:48:44 2012

Response via : Initial Calibration

DataAcq Meth : 8260WTR

Compound	R.T.	QIon	Response	Conc	Unit	Qvalue
44) Heptane	9.78	57	10724	46.3157	ug/L	98
45) 1,2-Dichloroethane	9.99	62	31437	4.8925	ug/L	96
46) Benzene	10.02	78	96142	4.7713	ug/L	100
47) Trichloroethene	10.89	130	27172	4.6975	ug/L	99
48) Methylcyclohexane	10.98	83	30344	4.7752	ug/L	95
49) 1,2-Dichloropropane	11.15	63	25506	4.9514	ug/L	98
50) 1,4-Dioxane	11.49	88	1205	103.7260	ug/L	80
51) Bromodichloromethane	11.48	83	30869	4.8046	ug/L	96
52) Dibromomethane	11.56	93	11726	4.7364	ug/L	98
53) 2-Chloroethyl Vinyl Ether	11.88	63	8843	5.0131	ug/L	100
54) 4-Methyl-2-Pentanone	11.92	58	3811	4.0689	ug/L	77
55) cis-1,3-Dichloropropene	12.24	75	34240	4.8705	ug/L	99
56) Dimethyl Disulfide	12.51	79	18178	4.2849	ug/L	97
59) Toluene	12.72	91	98775	4.7113	ug/L	100
60) Ethyl Methacrylate	12.90	69	19773	4.9483	ug/L	89
62) trans-1,3-Dichloropropene	12.95	75	25554	4.4150	ug/L	98
63) 1,1,2-Trichloroethane	13.19	97	15253	4.7035	ug/L	99
64) 2-Hexanone	13.16	43	5170	3.6484	ug/L	88
65) 1,3-Dichloropropane	13.55	76	26525	5.0000	ug/L	97
66) Tetrachloroethene	13.66	166	24727	4.8300	ug/L	98
67) Dibromochloromethane	13.96	129	19728	4.9288	ug/L	99
68) 1,2-Dibromoethane	14.25	107	14817	4.5773	ug/L	98
69) 1-Chlorohexane	14.42	91	30302	4.7271	ug/L	99
70) Chlorobenzene	14.85	112	66806	4.7547	ug/L	94
71) 1,1,1,2-Tetrachloroethane	14.90	131	23050	4.5462	ug/L	98
72) Ethylbenzene	14.90	106	34790	4.5281	ug/L	37
73) m-,p-Xylene	15.02	106	85478	9.1671	ug/L	100
74) o-Xylene	15.67	106	40943	4.6666	ug/L	100
75) Styrene	15.72	104	67010	4.6296	ug/L	99
76) Bromoform	16.25	173	9850	4.2848	ug/L	98
77) Isopropylbenzene	16.18	105	99210	4.6838	ug/L	99
79) 1,1,2,2-Tetrachloroethane	16.44	83	16087	5.0562	ug/L	98
81) 1,2,3-Trichloropropane	16.66	110	4395	5.2271	ug/L	91
82) trans-1,4-Dichloro-2-Butene	16.74	53	4182	4.7218	ug/L	88
83) n-Propylbenzene	16.78	91	112080	4.8004	ug/L	100
84) Bromobenzene	16.88	156	25049	4.9439	ug/L	99
85) 1,3,5-Trimethylbenzene	17.01	105	79170	4.6230	ug/L	98
86) 2-Chlorotoluene	17.07	91	82475	4.8393	ug/L	92
87) 4-Chlorotoluene	17.13	91	74283	4.7577	ug/L	99
88) a-Methylstyrene	17.49	118	46042	4.5918	ug/L	# 1
89) tert-Butylbenzene	17.55	134	15173	4.7123	ug/L	99
90) 1,2,4-Trimethylbenzene	17.61	105	83056	4.6683	ug/L	100
91) sec-Butylbenzene	17.86	105	88629	4.7701	ug/L	99
92) p-Isopropyltoluene	18.07	119	73733	4.6166	ug/L	99
93) 1,3-Dichlorobenzene	18.24	146	46069	4.7530	ug/L	100
94) 1,4-Dichlorobenzene	18.40	146	46701	4.7111	ug/L	94
95) n-Butylbenzene	18.68	91	64899	4.7636	ug/L	99
96) 1,2-Dichlorobenzene	18.97	146	41757	4.8911	ug/L	99
97) 1,2-Dibromo-3-Chloropropan	20.15	75	2017	4.8195	ug/L	98
98) 1,2,4-Trichlorobenzene	21.50	180	24761	4.7782	ug/L	100
99) Hexachlorobutadiene	21.69	225	10451	4.9903	ug/L	97
100) Naphthalene	21.91	128	43732	4.8610	ug/L	99
101) 1,2,3-Trichlorobenzene	22.28	180	21611	5.0703	ug/L	100

(#) = qualifier out of range (m) = manual integration

6M112626.D 8260WTR.M Wed Nov 14 12:58:59 2012

Page 2

Data File : C:\MSDCHEM\1\DATA\111212\6M112626.D

Vial: 7

Acq On : 12 Nov 2012 17:17

Operator: adc

Sample : WG414018-06 5.0 ug/L STD 8260

Inst : HPMS6

Misc : 1,1 STD54883

Multiplr: 1.00

MS Integration Params: RTEINT.P

Quant Time: Nov 14 12:58 2012

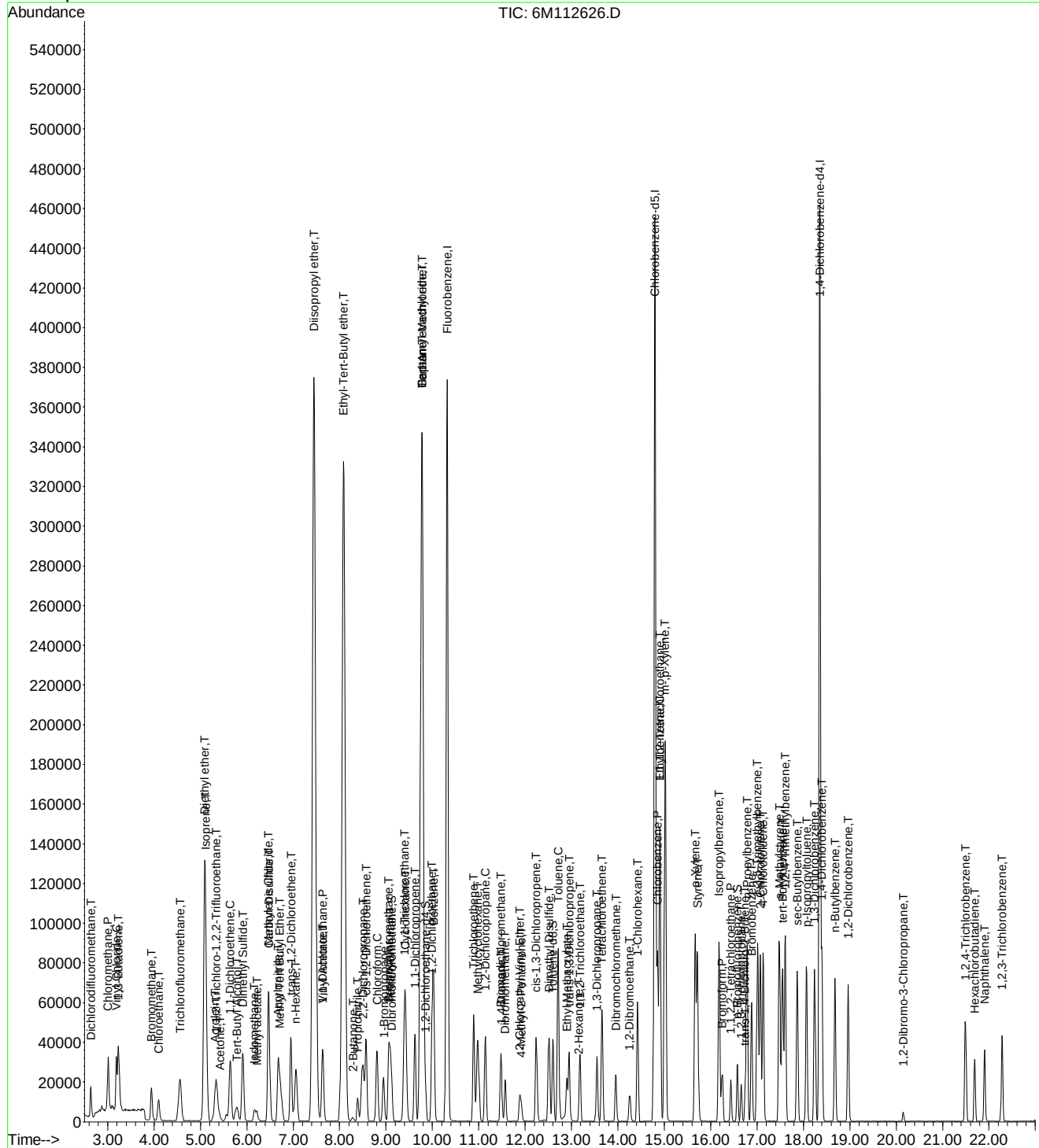
Quant Results File: 8260WTR.RES

Method : C:\MSDCHEM\1\METHODS\8260WTR.M (RTE Integrator)

Title : 8260B/624_WATER SOP:OVLMSV01 011/12/12 - HPMS6

Last Update : Wed Nov 14 12:48:44 2012

Response via : Initial Calibration



Data File : C:\MSDCHEM\1\DATA\111212\6M112627.D Vial: 8
 Acq On : 12 Nov 2012 17:48 Operator: adc
 Sample : WG414018-07 20.0 ug/L STD 8260 Inst : HPMS6
 Misc : 1,1 STD54883 Multiplr: 1.00
 MS Integration Params: RTEINT.P
 Quant Time: Nov 14 12:58:59 2012 Quant Results File: 8260WTR.RES

Quant Method : C:\MSDCHEM\1\METHODS\8260WTR.M (RTE Integrator)
 Title : 8260B/624_WATER SOP:OVLMSV01 011/12/12 - HPMS6
 Last Update : Wed Nov 14 12:48:44 2012
 Response via : Initial Calibration
 DataAcq Meth : 8260WTR

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) Fluorobenzene	10.32	96	526336	25.00	ug/L	0.00
57) Chlorobenzene-d5	14.80	117	368120	25.00	ug/L	0.00
78) 1,4-Dichlorobenzene-d4	18.35	152	179890	25.00	ug/L	0.00

System Monitoring Compounds						
37) Dibromofluoromethane	9.13	111	53995	10.0088	ug/L	0.00
Spiked Amount	25.000	Range	86 - 118	Recovery	=	40.04%#
43) 1,2-Dichloroethane-d4	9.86	65	50954	9.8561	ug/L	0.00
Spiked Amount	25.000	Range	80 - 120	Recovery	=	39.44%#
58) Toluene-d8	12.60	98	175726	9.7319	ug/L	0.00
Spiked Amount	25.000	Range	88 - 110	Recovery	=	38.92%#
80) p-Bromofluorobenzene	16.58	95	63830	9.7869	ug/L	0.00
Spiked Amount	25.000	Range	86 - 115	Recovery	=	39.16%#

Target Compounds	R.T.	QIon	Response	Conc	Units	Qvalue
2) Dichlorodifluoromethane	2.64	85	88665	21.4053	ug/L	99
3) Chloromethane	3.00	50	141061	19.1558	ug/L	99
4) Vinyl Chloride	3.19	62	127188	20.9437	ug/L	100
5) 1,3-Butadiene	3.23	54	90897	26.1421	ug/L	100
6) Bromomethane	3.94	94	73185	17.1724	ug/L	98
7) Chloroethane	4.10	64	75234	20.2624	ug/L	99
8) Trichlorofluoromethane	4.56	101	177586	20.5483	ug/L	99
9) Diethyl ether	5.09	59	181503	76.6484	ug/L	99
10) Isoprene	5.12	67	192315	20.4042	ug/L	100
11) Acrolein	5.32	56	8351	36.2658	ug/L	89
12) 1,1,2-Trichloro-1,2,2-Trif	5.33	101	99289	20.1664	ug/L	99
13) Acetone	5.42	43	13064	18.8488	ug/L	99
14) 1,1-Dichloroethene	5.64	61	171230	19.9056	ug/L	98
15) Tert-Butyl Alcohol	5.78	59	30792	158.4932	ug/L	98
16) Dimethyl Sulfide	5.91	62	133234	20.7039	ug/L	98
17) Iodomethane	6.17	142	76013	19.6016	ug/L	100
18) Methyl acetate	6.22	43	45897	20.5690	ug/L	97
19) Methylene Chloride	6.47	84	97644	19.0712	ug/L	99
20) Carbon Disulfide	6.48	76	311060	20.3980	ug/L	100
21) Acrylonitrile	6.67	53	38415	38.6024	ug/L	95
22) Methyl Tert Butyl Ether	6.71	73	192986	19.5037	ug/L	99
23) trans-1,2-Dichloroethene	6.96	96	102744	19.8161	ug/L	100
24) n-Hexane	7.06	57	119706	20.8885	ug/L	98
25) Diisopropyl ether	7.45	45	1206019	78.0930	ug/L	100
26) Vinyl Acetate	7.63	43	109287	19.6539	ug/L	99
27) 1,1-Dichloroethane	7.64	63	198375	19.3192	ug/L	100
28) Ethyl-Tert-Butyl ether	8.08	59	1070481	77.9038	ug/L	100
29) 2-Butanone	8.27	43	19584	19.0963	ug/L	98
30) Propionitrile	8.39	54	26258	81.8624	ug/L	99
31) 2,2-Dichloropropane	8.50	77	157961	20.3115	ug/L	97
32) cis-1,2-Dichloroethene	8.57	96	109009	19.3908	ug/L	98
33) Chloroform	8.80	83	181355	19.6806	ug/L	100
34) 1-Bromopropane	8.96	122	20093	20.1765	ug/L	99
35) Bromochloromethane	9.06	130	61953	19.6856	ug/L	99
36) Tetrahydrofuran	9.09	42	49632	78.5423	ug/L	97
38) 1,1,1-Trichloroethane	9.40	97	165044	19.5943	ug/L	98
39) Cyclohexane	9.42	56	186062	20.2378	ug/L	99
40) 1,1-Dichloropropene	9.62	75	139441	19.8968	ug/L	99
41) Tert-Amyl-Methyl ether	9.77	73	789678	76.8504	ug/L	99
42) Carbon Tetrachloride	9.77	117	153119	19.9529	ug/L	100

(#) = qualifier out of range (m) = manual integration
 6M112627.D 8260WTR.M Wed Nov 14 12:59:00 2012

Data File : C:\MSDCHEM\1\DATA\111212\6M112627.D

Vial: 8

Acq On : 12 Nov 2012 17:48

Operator: adc

Sample : WG414018-07 20.0 ug/L STD 8260

Inst : HPMS6

Misc : 1,1 STD54883

Multiplr: 1.00

MS Integration Params: RTEINT.P

Quant Time: Nov 14 12:58:59 2012

Quant Results File: 8260WTR.RES

Quant Method : C:\MSDCHEM\1\METHODS\8260WTR.M (RTE Integrator)

Title : 8260B/624_WATER SOP:OVLMSV01 011/12/12 - HPMS6

Last Update : Wed Nov 14 12:48:44 2012

Response via : Initial Calibration

DataAcq Meth : 8260WTR

Compound	R.T.	QIon	Response	Conc	Unit	Qvalue
44) Heptane	9.77	57	16546	71.2194	ug/L	97
45) 1,2-Dichloroethane	9.99	62	126450	19.6129	ug/L	100
46) Benzene	10.02	78	386631	19.1231	ug/L	100
47) Trichloroethene	10.89	130	107355	18.4971	ug/L	97
48) Methylcyclohexane	10.98	83	131354	20.6013	ug/L	99
49) 1,2-Dichloropropane	11.14	63	104629	20.2428	ug/L	99
50) 1,4-Dioxane	11.49	88	1948	143.1384	ug/L #	57
51) Bromodichloromethane	11.48	83	127100	19.7158	ug/L	100
52) Dibromomethane	11.56	93	48227	18.3012	ug/L	99
53) 2-Chloroethyl Vinyl Ether	11.88	63	37198	17.6562	ug/L	98
54) 4-Methyl-2-Pentanone	11.91	58	17828	18.9704	ug/L	100
55) cis-1,3-Dichloropropene	12.24	75	145452	20.6203	ug/L	100
56) Dimethyl Disulfide	12.51	79	84797	19.9208	ug/L	99
59) Toluene	12.72	91	407107	19.5390	ug/L	100
60) Ethyl Methacrylate	12.90	69	78877	19.4887	ug/L	100
62) trans-1,3-Dichloropropene	12.95	75	118380	18.0455	ug/L	99
63) 1,1,2-Trichloroethane	13.19	97	62984	18.7321	ug/L	100
64) 2-Hexanone	13.15	43	26014	18.4720	ug/L	98
65) 1,3-Dichloropropane	13.54	76	109899	20.8453	ug/L	100
66) Tetrachloroethene	13.65	166	100676	19.7876	ug/L	100
67) Dibromochloromethane	13.96	129	84956	21.3575	ug/L	100
68) 1,2-Dibromoethane	14.26	107	62462	18.4642	ug/L	100
69) 1-Chlorohexane	14.43	91	131898	20.7042	ug/L	99
70) Chlorobenzene	14.85	112	270658	19.3832	ug/L	99
71) 1,1,1,2-Tetrachloroethane	14.90	131	96425	19.1366	ug/L	99
72) Ethylbenzene	14.91	106	143765	18.8281	ug/L	35
73) m-,p-Xylene	15.01	106	351228	37.9022	ug/L	100
74) o-Xylene	15.67	106	168969	19.3787	ug/L	98
75) Styrene	15.72	104	283197	19.6873	ug/L	100
76) Bromoform	16.25	173	44614	16.9332	ug/L	99
77) Isopropylbenzene	16.19	105	409402	19.4487	ug/L	100
79) 1,1,2,2-Tetrachloroethane	16.44	83	65752	20.4501	ug/L	99
81) 1,2,3-Trichloropropane	16.66	110	18228	19.4240	ug/L	96
82) trans-1,4-Dichloro-2-Butene	16.74	53	22042	19.3997	ug/L	98
83) n-Propylbenzene	16.78	91	465108	19.7124	ug/L	100
84) Bromobenzene	16.88	156	104580	20.4253	ug/L	99
85) 1,3,5-Trimethylbenzene	17.00	105	332570	19.2167	ug/L	100
86) 2-Chlorotoluene	17.07	91	328973	19.1010	ug/L	96
87) 4-Chlorotoluene	17.13	91	311186	19.7226	ug/L	96
88) a-Methylstyrene	17.48	118	206524	20.3815	ug/L #	1
89) tert-Butylbenzene	17.55	134	62324	19.1539	ug/L	100
90) 1,2,4-Trimethylbenzene	17.61	105	341635	19.0014	ug/L	100
91) sec-Butylbenzene	17.86	105	368875	19.6457	ug/L	99
92) p-Isopropyltoluene	18.07	119	314109	19.4614	ug/L	99
93) 1,3-Dichlorobenzene	18.24	146	190833	19.4826	ug/L	100
94) 1,4-Dichlorobenzene	18.40	146	194311	19.3967	ug/L	99
95) n-Butylbenzene	18.68	91	269372	19.5653	ug/L	100
96) 1,2-Dichlorobenzene	18.96	146	168976	19.5856	ug/L	100
97) 1,2-Dibromo-3-Chloropropan	20.15	75	9519	18.7293	ug/L	99
98) 1,2,4-Trichlorobenzene	21.50	180	102522	19.5772	ug/L	100
99) Hexachlorobutadiene	21.69	225	42465	20.0651	ug/L	99
100) Naphthalene	21.91	128	175599	19.3144	ug/L	100
101) 1,2,3-Trichlorobenzene	22.28	180	85671	19.8898	ug/L	100

(#) = qualifier out of range (m) = manual integration
 6M112627.D 8260WTR.M Wed Nov 14 12:59:00 2012

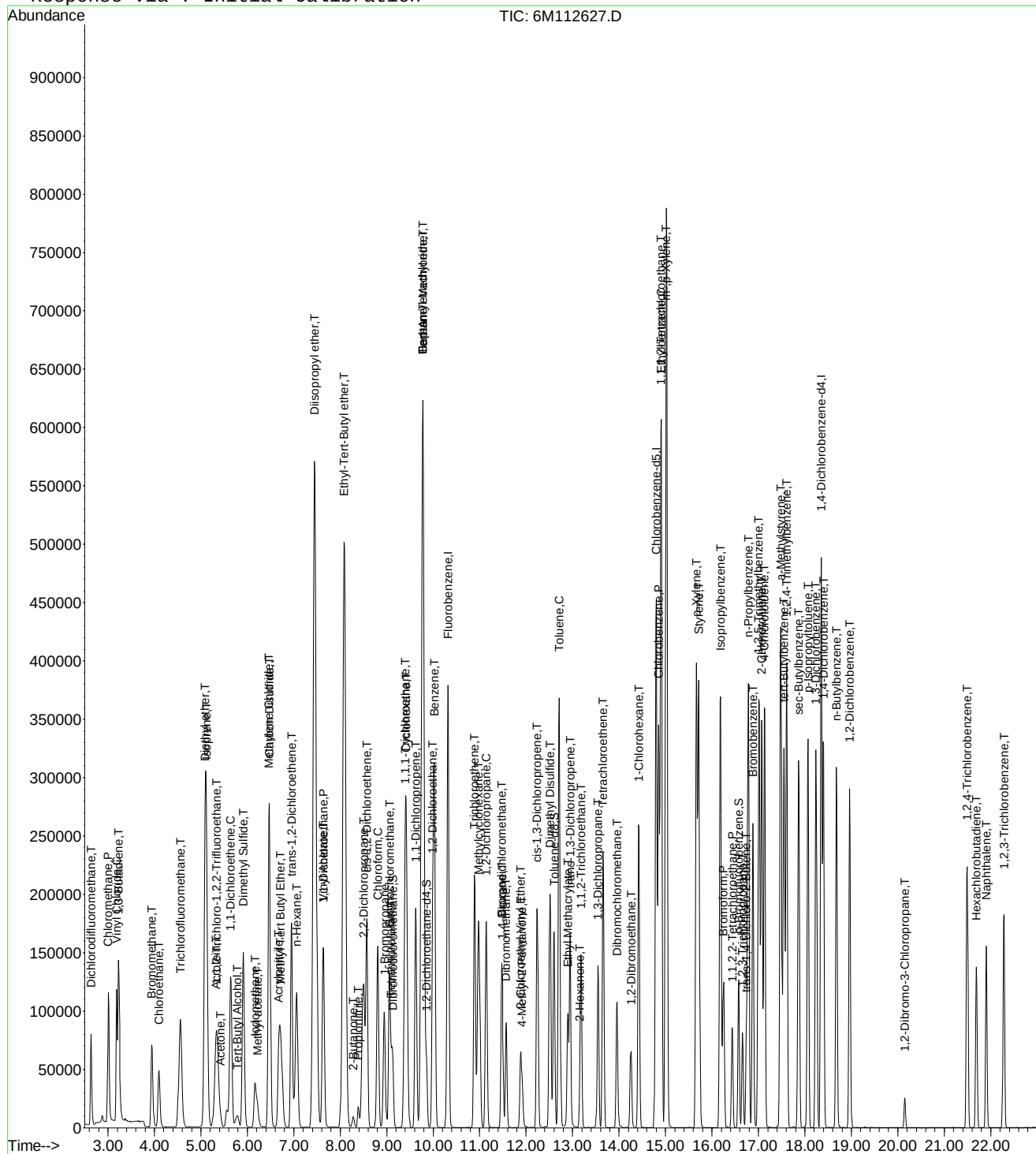
Page 2

Data File : C:\MSDCHEM\1\DATA\111212\6M112627.D
Acq On : 12 Nov 2012 17:48
Sample : WG414018-07 20.0 ug/L STD 8260
Misc : 1,1 STD54883
MS Integration Params: RTEINT.P
Quant Time: Nov 14 12:59 2012

Vial: 8
Operator: adc
Inst : HPMS6
Multiplr: 1.00

Quant Results File: 8260WTR.RES

Method : C:\MSDCHEM\1\METHODS\8260WTR.M (RTE Integrator)
Title : 8260B/624_WATER SOP:OVLMSV01 011/12/12 - HPMS6
Last Update : Wed Nov 14 12:48:44 2012
Response via : Initial Calibration



6M112627.D 8260WTR.M Wed Nov 14 12:59:00 2012

Page 3

Data File : C:\MSDCHEM\1\DATA\111212\6M112628.D Vial: 9
 Acq On : 12 Nov 2012 18:19 Operator: adc
 Sample : WG414018-08 50.0 ug/L STD 8260 Inst : HPMS6
 Misc : 1,1 STD54883 Multiplr: 1.00
 MS Integration Params: RTEINT.P
 Quant Time: Nov 14 12:59:01 2012 Quant Results File: 8260WTR.RES

Quant Method : C:\MSDCHEM\1\METHODS\8260WTR.M (RTE Integrator)
 Title : 8260B/624_WATER SOP:OVLMSV01 011/12/12 - HPMS6
 Last Update : Wed Nov 14 12:48:44 2012
 Response via : Initial Calibration
 DataAcq Meth : 8260WTR

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) Fluorobenzene	10.32	96	530555	25.00	ug/L	0.00
57) Chlorobenzene-d5	14.80	117	370757	25.00	ug/L	0.00
78) 1,4-Dichlorobenzene-d4	18.35	152	182707	25.00	ug/L	0.00

System Monitoring Compounds						
37) Dibromofluoromethane	9.12	111	133083	24.4727	ug/L	0.00
Spiked Amount	25.000	Range	86 - 118	Recovery	=	97.88%
43) 1,2-Dichloroethane-d4	9.86	65	127707	24.5061	ug/L	0.00
Spiked Amount	25.000	Range	80 - 120	Recovery	=	98.04%
58) Toluene-d8	12.59	98	438620	24.1184	ug/L	0.00
Spiked Amount	25.000	Range	88 - 110	Recovery	=	96.48%
80) p-Bromofluorobenzene	16.57	95	162313	24.5032	ug/L	0.00
Spiked Amount	25.000	Range	86 - 115	Recovery	=	98.00%

Target Compounds	R.T.	QIon	Response	Conc	Units	Qvalue
2) Dichlorodifluoromethane	2.64	85	216333	51.8114	ug/L	100
3) Chloromethane	3.01	50	360923	48.6230	ug/L	100
4) Vinyl Chloride	3.19	62	302924	49.4851	ug/L	100
5) 1,3-Butadiene	3.23	54	167947	53.6642	ug/L	100
6) Bromomethane	3.94	94	197013	44.8001	ug/L	100
7) Chloroethane	4.10	64	191845	51.2577	ug/L	100
8) Trichlorofluoromethane	4.56	101	446017	51.1977	ug/L	100
9) Diethyl ether	5.09	59	239161	100.1941	ug/L	100
10) Isoprene	5.11	67	476431	50.1462	ug/L	100
11) Acrolein	5.31	56	12004	51.7151	ug/L	100
12) 1,1,2-Trichloro-1,2,2-Trif	5.33	101	247154	49.7998	ug/L	100
13) Acetone	5.43	43	34767	49.7632	ug/L	100
14) 1,1-Dichloroethene	5.64	61	436874	50.3830	ug/L	100
15) Tert-Butyl Alcohol	5.78	59	38306	195.6015	ug/L	100
16) Dimethyl Sulfide	5.92	62	329441	50.7864	ug/L	100
17) Iodomethane	6.16	142	219490	52.6234	ug/L	100
18) Methyl acetate	6.21	43	113539	50.4786	ug/L	100
19) Methylene Chloride	6.47	84	255493	49.5045	ug/L	100
20) Carbon Disulfide	6.48	76	775175	50.4284	ug/L	100
21) Acrylonitrile	6.67	53	52313	52.1501	ug/L	100
22) Methyl Tert Butyl Ether	6.71	73	508825	51.0142	ug/L	100
23) trans-1,2-Dichloroethene	6.96	96	266010	50.8971	ug/L	100
24) n-Hexane	7.06	57	285002	49.3368	ug/L	100
25) Diisopropyl ether	7.45	45	1558686	100.1265	ug/L	100
26) Vinyl Acetate	7.63	43	297628	53.0991	ug/L	100
27) 1,1-Dichloroethane	7.63	63	522315	50.4623	ug/L	100
28) Ethyl-Tert-Butyl ether	8.08	59	1389631	100.3256	ug/L	100
29) 2-Butanone	8.26	43	52184	50.4798	ug/L	100
30) Propionitrile	8.39	54	33594	103.9004	ug/L	100
31) 2,2-Dichloropropane	8.50	77	410101	52.3136	ug/L	100
32) cis-1,2-Dichloroethene	8.57	96	288525	50.9155	ug/L	100
33) Chloroform	8.81	83	470807	50.6857	ug/L	100
34) 1-Bromopropane	8.95	122	50003	48.7407	ug/L	100
35) Bromochloromethane	9.05	130	161953	50.7636	ug/L	100
36) Tetrahydrofuran	9.09	42	62722	98.4678	ug/L	100
38) 1,1,1-Trichloroethane	9.40	97	434774	51.2067	ug/L	100
39) Cyclohexane	9.42	56	447090	48.2428	ug/L	100
40) 1,1-Dichloropropene	9.62	75	362921	51.3734	ug/L	100
41) Tert-Amyl-Methyl ether	9.78	73	1035177	99.9410	ug/L	100
42) Carbon Tetrachloride	9.78	117	399670	51.6667	ug/L	100

(#) = qualifier out of range (m) = manual integration
 6M112628.D 8260WTR.M Wed Nov 14 12:59:01 2012

Data File : C:\MSDCHEM\1\DATA\111212\6M112628.D

Vial: 9

Acq On : 12 Nov 2012 18:19

Operator: adc

Sample : WG414018-08 50.0 ug/L STD 8260

Inst : HPMS6

Misc : 1,1 STD54883

Multiplr: 1.00

MS Integration Params: RTEINT.P

Quant Time: Nov 14 12:59:01 2012

Quant Results File: 8260WTR.RES

Quant Method : C:\MSDCHEM\1\METHODS\8260WTR.M (RTE Integrator)

Title : 8260B/624_WATER SOP:OVLMSV01 011/12/12 - HPMS6

Last Update : Wed Nov 14 12:48:44 2012

Response via : Initial Calibration

DataAcq Meth : 8260WTR

Compound	R.T.	QIon	Response	Conc	Unit	Qvalue
44) Heptane	9.78	57	21216	90.5945	ug/L	100
45) 1,2-Dichloroethane	9.99	62	334126	51.4121	ug/L	100
46) Benzene	10.02	78	1011836	49.6483	ug/L	100
47) Trichloroethene	10.89	130	283826	48.5138	ug/L	100
48) Methylcyclohexane	10.98	83	317207	49.3544	ug/L	100
49) 1,2-Dichloropropane	11.14	63	272379	52.2786	ug/L	100
50) 1,4-Dioxane	11.49	88	3242	210.7820	ug/L	100
51) Bromodichloromethane	11.48	83	336857	51.8380	ug/L	100
52) Dibromomethane	11.56	93	126747	47.1384	ug/L	100
53) 2-Chloroethyl Vinyl Ether	11.88	63	106253	48.1022	ug/L	100
54) 4-Methyl-2-Pentanone	11.92	58	49223	51.9606	ug/L	100
55) cis-1,3-Dichloropropene	12.24	75	388808	54.6819	ug/L	100
56) Dimethyl Disulfide	12.51	79	221179	51.5468	ug/L	100
59) Toluene	12.72	91	1071215	51.0469	ug/L	100
60) Ethyl Methacrylate	12.90	69	200142	48.9104	ug/L	100
62) trans-1,3-Dichloropropene	12.95	75	319493	47.1933	ug/L	100
63) 1,1,2-Trichloroethane	13.19	97	165061	48.3299	ug/L	100
64) 2-Hexanone	13.16	43	75363	53.1332	ug/L	100
65) 1,3-Dichloropropane	13.54	76	285340	53.7375	ug/L	100
66) Tetrachloroethene	13.66	166	262956	51.3158	ug/L	100
67) Dibromochloromethane	13.96	129	232383	58.0043	ug/L	100
68) 1,2-Dibromoethane	14.25	107	167599	48.7024	ug/L	100
69) 1-Chlorohexane	14.42	91	327876	51.1012	ug/L	100
70) Chlorobenzene	14.85	112	710787	50.5411	ug/L	100
71) 1,1,1,2-Tetrachloroethane	14.90	131	264978	52.2137	ug/L	100
72) Ethylbenzene	14.91	106	386132	50.2099	ug/L	35
73) m-,p-Xylene	15.01	106	948382	101.6152	ug/L	100
74) o-Xylene	15.67	106	443267	50.4757	ug/L	100
75) Styrene	15.72	104	763680	52.7120	ug/L	100
76) Bromoform	16.25	173	125188	45.8742	ug/L	100
77) Isopropylbenzene	16.18	105	1090816	51.4509	ug/L	100
79) 1,1,2,2-Tetrachloroethane	16.43	83	172041	52.6829	ug/L	100
81) 1,2,3-Trichloropropane	16.66	110	48597	49.9251	ug/L	97
82) trans-1,4-Dichloro-2-Butene	16.74	53	58752	48.8976	ug/L	99
83) n-Propylbenzene	16.78	91	1226585	51.1840	ug/L	100
84) Bromobenzene	16.88	156	278636	53.5807	ug/L	100
85) 1,3,5-Trimethylbenzene	17.00	105	890981	50.6893	ug/L	100
86) 2-Chlorotoluene	17.07	91	882467	50.4482	ug/L	93
87) 4-Chlorotoluene	17.13	91	825153	51.4908	ug/L	100
88) a-Methylstyrene	17.48	118	537545	52.2316	ug/L	# 1
89) tert-Butylbenzene	17.55	134	166204	50.2915	ug/L	100
90) 1,2,4-Trimethylbenzene	17.61	105	921120	50.4418	ug/L	100
91) sec-Butylbenzene	17.86	105	977801	51.2731	ug/L	100
92) p-Isopropyltoluene	18.07	119	830598	50.6684	ug/L	100
93) 1,3-Dichlorobenzene	18.24	146	507768	51.0400	ug/L	100
94) 1,4-Dichlorobenzene	18.40	146	515920	50.7066	ug/L	100
95) n-Butylbenzene	18.68	91	710820	50.8330	ug/L	100
96) 1,2-Dichlorobenzene	18.97	146	448080	51.1350	ug/L	100
97) 1,2-Dibromo-3-Chloropropan	20.15	75	26309	49.1949	ug/L	100
98) 1,2,4-Trichlorobenzene	21.50	180	270701	50.8950	ug/L	100
99) Hexachlorobutadiene	21.69	225	110746	51.5217	ug/L	100
100) Naphthalene	21.91	128	469767	50.8738	ug/L	100
101) 1,2,3-Trichlorobenzene	22.28	180	226148	51.6941	ug/L	100

(#) = qualifier out of range (m) = manual integration

6M112628.D 8260WTR.M Wed Nov 14 12:59:02 2012

Page 2

Data File : C:\MSDCHEM\1\DATA\111212\6M112628.D

Vial: 9

Acq On : 12 Nov 2012 18:19

Operator: adc

Sample : WG414018-08 50.0 ug/L STD 8260

Inst : HPMS6

Misc : 1,1 STD54883

Multiplr: 1.00

MS Integration Params: RTEINT.P

Quant Time: Nov 14 12:59 2012

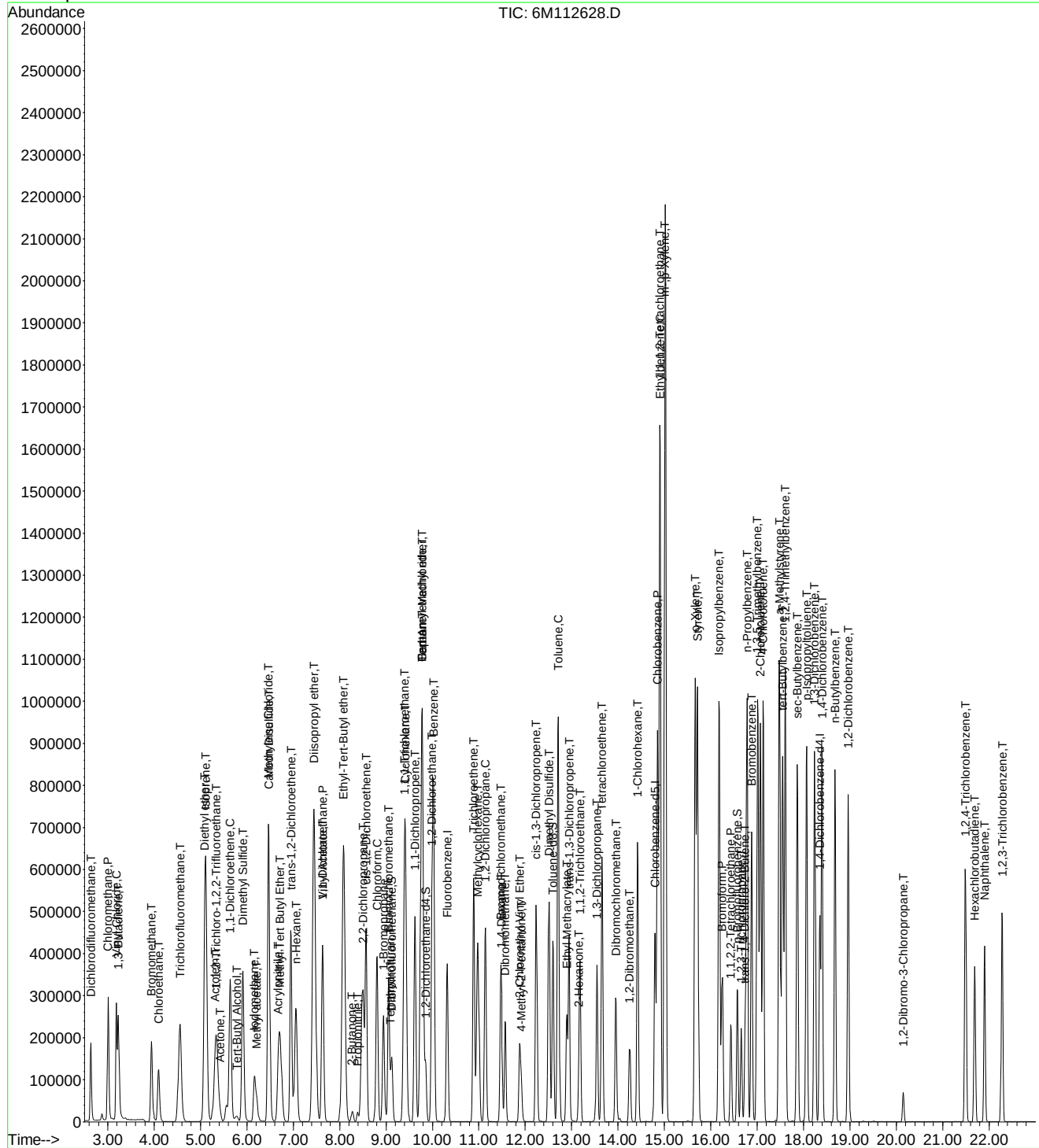
Quant Results File: 8260WTR.RES

Method : C:\MSDCHEM\1\METHODS\8260WTR.M (RTE Integrator)

Title : 8260B/624_WATER SOP:OVLMSV01 011/12/12 - HPMS6

Last Update : Wed Nov 14 12:48:44 2012

Response via : Initial Calibration



Data File : C:\MSDCHEM\1\DATA\111212\6M112629.D Vial: 10
 Acq On : 12 Nov 2012 18:49 Operator: adc
 Sample : WG414018-09 100.0 ug/L STD 8260 Inst : HPMS6
 Misc : 1,1 STD54883 Multiplr: 1.00
 MS Integration Params: RTEINT.P
 Quant Time: Nov 14 12:59:02 2012 Quant Results File: 8260WTR.RES

Quant Method : C:\MSDCHEM\1\METHODS\8260WTR.M (RTE Integrator)
 Title : 8260B/624_WATER SOP:OVLMSV01 011/12/12 - HPMS6
 Last Update : Wed Nov 14 12:48:44 2012
 Response via : Initial Calibration
 DataAcq Meth : 8260WTR

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) Fluorobenzene	10.32	96	534955	25.00	ug/L	0.00
57) Chlorobenzene-d5	14.80	117	378566	25.00	ug/L	0.00
78) 1,4-Dichlorobenzene-d4	18.35	152	188086	25.00	ug/L	0.00

System Monitoring Compounds						
37) Dibromofluoromethane	9.12	111	275462	50.2382	ug/L	0.00
Spiked Amount	25.000	Range	86 - 118	Recovery	=	200.96%#
43) 1,2-Dichloroethane-d4	9.86	65	261494	49.7662	ug/L	0.00
Spiked Amount	25.000	Range	80 - 120	Recovery	=	199.08%#
58) Toluene-d8	12.59	98	907182	48.8542	ug/L	0.00
Spiked Amount	25.000	Range	88 - 110	Recovery	=	195.40%#
80) p-Bromofluorobenzene	16.57	95	329770	48.3593	ug/L	0.00
Spiked Amount	25.000	Range	86 - 115	Recovery	=	193.44%#

Target Compounds	R.T.	QIon	Response	Conc	Units	Qvalue
2) Dichlorodifluoromethane	2.64	85	459405	109.1218	ug/L	100
3) Chloromethane	3.01	50	721329	96.3770	ug/L	100
4) Vinyl Chloride	3.18	62	563137	91.2363	ug/L	99
5) 1,3-Butadiene	3.22	54	216825	74.5616	ug/L	98
6) Bromomethane	3.94	94	416583	93.2543	ug/L	100
7) Chloroethane	4.09	64	389932	103.3263	ug/L	100
8) Trichlorofluoromethane	4.56	101	932626	106.1744	ug/L	100
9) Diethyl ether	5.09	59	498005	206.9183	ug/L	99
10) Isoprene	5.11	67	995028	103.8692	ug/L	100
11) Acrolein	5.31	56	25705	109.8304	ug/L	93
12) 1,1,2-Trichloro-1,2,2-Trif	5.33	101	524849	104.8836	ug/L	99
13) Acetone	5.43	43	69922	99.2585	ug/L	96
14) 1,1-Dichloroethene	5.64	61	900646	103.0137	ug/L	99
15) Tert-Butyl Alcohol	5.78	59	77954	394.7817	ug/L	99
16) Dimethyl Sulfide	5.92	62	663700	101.4739	ug/L	99
17) Iodomethane	6.16	142	444313	103.7432	ug/L	100
18) Methyl acetate	6.21	43	228663	100.8257	ug/L	99
19) Methylene Chloride	6.47	84	523064	100.5156	ug/L	99
20) Carbon Disulfide	6.48	76	1565721	101.0190	ug/L	100
21) Acrylonitrile	6.67	53	107804	106.5845	ug/L	100
22) Methyl Tert Butyl Ether	6.71	73	1030527	102.4697	ug/L	100
23) trans-1,2-Dichloroethene	6.95	96	547683	103.9292	ug/L	99
24) n-Hexane	7.05	57	594392	102.0491	ug/L	100
25) Diisopropyl ether	7.45	45	3227371	205.6140	ug/L	100
26) Vinyl Acetate	7.63	43	571150	101.0593	ug/L	99
27) 1,1-Dichloroethane	7.63	63	1067206	102.2576	ug/L	100
28) Ethyl-Tert-Butyl ether	8.08	59	2900722	207.6976	ug/L	100
29) 2-Butanone	8.26	43	106301	101.9837	ug/L	98
30) Propionitrile	8.39	54	69112	211.9933	ug/L	98
31) 2,2-Dichloropropane	8.49	77	835493	105.7012	ug/L	99
32) cis-1,2-Dichloroethene	8.57	96	588343	102.9698	ug/L	100
33) Chloroform	8.80	83	962906	102.8109	ug/L	100
34) 1-Bromopropane	8.95	122	100557	96.4874	ug/L	98
35) Bromochloromethane	9.05	130	329695	102.3078	ug/L	99
36) Tetrahydrofuran	9.08	42	130180	202.6898	ug/L	99
38) 1,1,1-Trichloroethane	9.40	97	899649	105.0871	ug/L	100
39) Cyclohexane	9.42	56	944139	101.0385	ug/L	99
40) 1,1-Dichloropropene	9.62	75	742743	104.2744	ug/L	99
41) Tert-Amyl-Methyl ether	9.77	73	2195271	210.1988	ug/L	99
42) Carbon Tetrachloride	9.78	117	846601	108.5428	ug/L	100

(#) = qualifier out of range (m) = manual integration
 6M112629.D 8260WTR.M Wed Nov 14 12:59:03 2012

Data File : C:\MSDCHEM\1\DATA\111212\6M112629.D

Vial: 10

Acq On : 12 Nov 2012 18:49

Operator: adc

Sample : WG414018-09 100.0 ug/L STD 8260

Inst : HPMS6

Misc : 1,1 STD54883

Multiplr: 1.00

MS Integration Params: RTEINT.P

Quant Time: Nov 14 12:59:02 2012

Quant Results File: 8260WTR.RES

Quant Method : C:\MSDCHEM\1\METHODS\8260WTR.M (RTE Integrator)

Title : 8260B/624_WATER SOP:OVLMSV01 011/12/12 - HPMS6

Last Update : Wed Nov 14 12:48:44 2012

Response via : Initial Calibration

DataAcq Meth : 8260WTR

Compound	R.T.	QIon	Response	Conc	Unit	Qvalue
44) Heptane	9.78	57	45542	192.8695	ug/L	92
45) 1,2-Dichloroethane	9.99	62	683645	104.3276	ug/L	100
46) Benzene	10.02	78	2086189	101.5222	ug/L	100
47) Trichloroethene	10.89	130	588640	99.7875	ug/L	100
48) Methylcyclohexane	10.98	83	667947	103.0714	ug/L	100
49) 1,2-Dichloropropane	11.14	63	555566	105.7546	ug/L	100
50) 1,4-Dioxane	11.48	88	6993	406.2166	ug/L	92
51) Bromodichloromethane	11.48	83	698847	106.6590	ug/L	99
52) Dibromomethane	11.56	93	262176	96.3261	ug/L	99
53) 2-Chloroethyl Vinyl Ether	11.88	63	219994	97.6663	ug/L	99
54) 4-Methyl-2-Pentanone	11.91	58	1011103	105.8481	ug/L	100
55) cis-1,3-Dichloropropene	12.24	75	798297	111.3489	ug/L	100
56) Dimethyl Disulfide	12.51	79	458098	105.8839	ug/L	100
59) Toluene	12.72	91	2221099	103.6594	ug/L	100
60) Ethyl Methacrylate	12.90	69	402478	96.2078	ug/L	100
62) trans-1,3-Dichloropropene	12.95	75	666435	95.6885	ug/L	99
63) 1,1,2-Trichloroethane	13.19	97	335146	95.8524	ug/L	99
64) 2-Hexanone	13.16	43	156972	108.3872	ug/L	100
65) 1,3-Dichloropropane	13.54	76	579245	106.8378	ug/L	99
66) Tetrachloroethene	13.66	166	548970	104.9215	ug/L	99
67) Dibromochloromethane	13.95	129	484361	118.4058	ug/L	99
68) 1,2-Dibromoethane	14.25	107	342747	97.2494	ug/L	100
69) 1-Chlorohexane	14.42	91	669123	102.1350	ug/L	100
70) Chlorobenzene	14.85	112	1477532	102.8939	ug/L	100
71) 1,1,1,2-Tetrachloroethane	14.90	131	565939	109.2175	ug/L	99
72) Ethylbenzene	14.91	106	822890	104.7957	ug/L	34
73) m-,p-Xylene	15.01	106	2033600	213.3971	ug/L	98
74) o-Xylene	15.67	106	931645	103.9000	ug/L	100
75) Styrene	15.72	104	1616083	109.2470	ug/L	100
76) Bromoform	16.25	173	266343	94.7956	ug/L	100
77) Isopropylbenzene	16.19	105	2273899	105.0413	ug/L	100
79) 1,1,2,2-Tetrachloroethane	16.43	83	345386	102.7404	ug/L	99
81) 1,2,3-Trichloropropane	16.66	110	97979	97.1516	ug/L	97
82) trans-1,4-Dichloro-2-Butene	16.74	53	121861	97.2625	ug/L	96
83) n-Propylbenzene	16.78	91	2522391	102.2463	ug/L	99
84) Bromobenzene	16.88	156	572566	106.9537	ug/L	100
85) 1,3,5-Trimethylbenzene	17.01	105	1851935	102.3464	ug/L	99
86) 2-Chlorotoluene	17.07	91	1829103	101.5743	ug/L	93
87) 4-Chlorotoluene	17.13	91	1716392	104.0424	ug/L	100
88) a-Methylstyrene	17.49	118	1114095	105.1573	ug/L	# 1
89) tert-Butylbenzene	17.55	134	348169	102.3392	ug/L	99
90) 1,2,4-Trimethylbenzene	17.61	105	1932666	102.8086	ug/L	100
91) sec-Butylbenzene	17.86	105	2033086	103.5604	ug/L	100
92) p-Isopropyltoluene	18.07	119	1733388	102.7167	ug/L	100
93) 1,3-Dichlorobenzene	18.24	146	1055829	103.0950	ug/L	99
94) 1,4-Dichlorobenzene	18.40	146	1073120	102.4541	ug/L	100
95) n-Butylbenzene	18.68	91	1467134	101.9189	ug/L	100
96) 1,2-Dichlorobenzene	18.97	146	927685	102.8400	ug/L	100
97) 1,2-Dibromo-3-Chloropropan	20.15	75	54151	97.3317	ug/L	99
98) 1,2,4-Trichlorobenzene	21.50	180	559160	102.1221	ug/L	100
99) Hexachlorobutadiene	21.69	225	231021	104.4028	ug/L	100
100) Naphthalene	21.91	128	962913	101.2972	ug/L	100
101) 1,2,3-Trichlorobenzene	22.28	180	464160	103.0659	ug/L	99

(#) = qualifier out of range (m) = manual integration

6M112629.D 8260WTR.M Wed Nov 14 12:59:03 2012

Page 2

Data File : C:\MSDCHEM\1\DATA\111212\6M112629.D

Vial: 10

Acq On : 12 Nov 2012 18:49

Operator: adc

Sample : WG414018-09 100.0 ug/L STD 8260

Inst : HPMS6

Misc : 1,1 STD54883

Multiplr: 1.00

MS Integration Params: RTEINT.P

Quant Time: Nov 14 12:59 2012

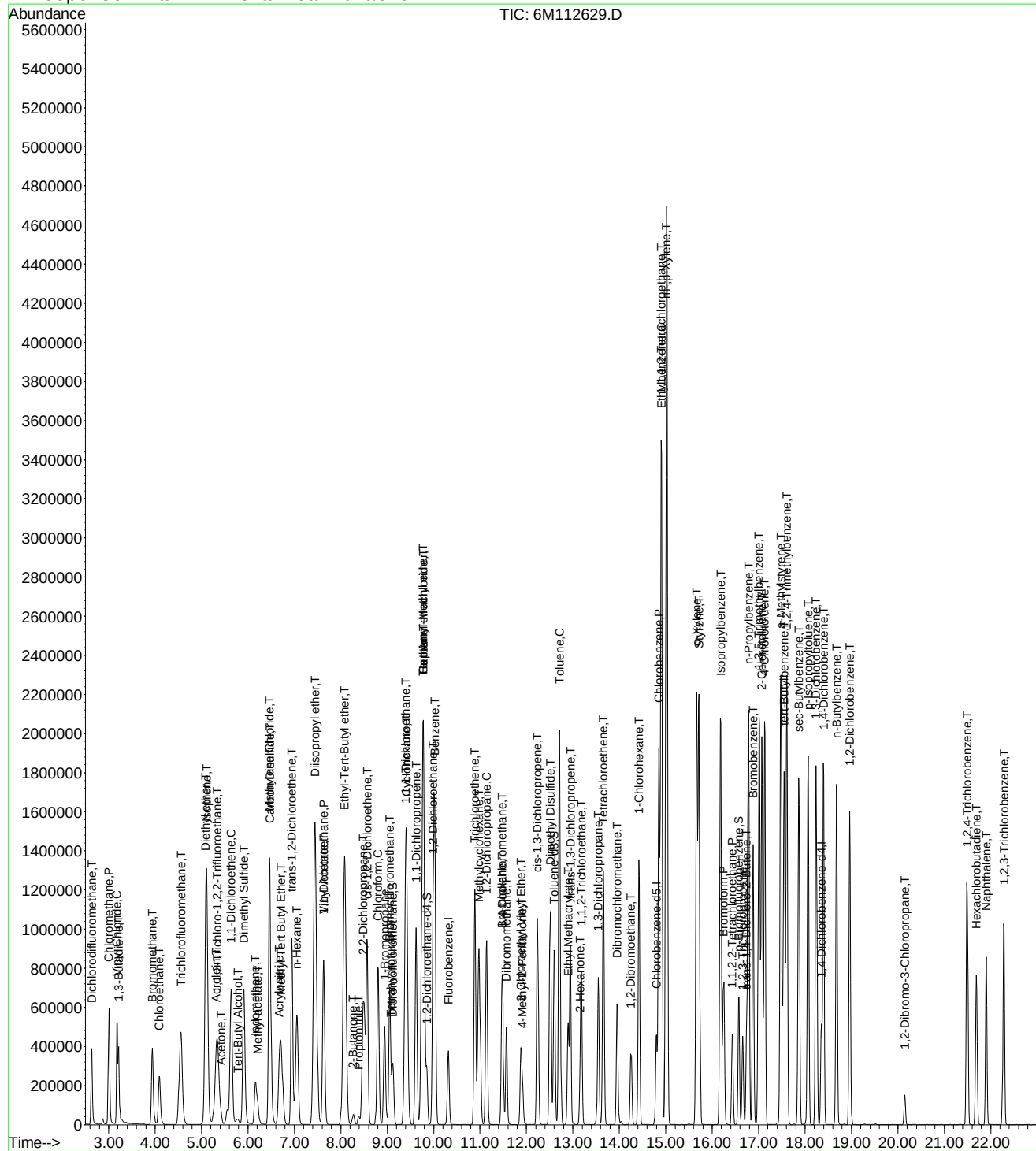
Quant Results File: 8260WTR.RES

Method : C:\MSDCHEM\1\METHODS\8260WTR.M (RTE Integrator)

Title : 8260B/624_WATER SOP:OVLMSV01 011/12/12 - HPMS6

Last Update : Wed Nov 14 12:48:44 2012

Response via : Initial Calibration



Data File : C:\MSDCHEM\1\DATA\111212\6M112630.D

Vial: 11

Acq On : 12 Nov 2012 19:20

Operator: adc

Sample : WG414018-10 200.0 ug/L STD 8260

Inst : HPMS6

Misc : 1,1 STD54883

Multiplr: 1.00

MS Integration Params: RTEINT.P

Quant Time: Nov 14 12:59:04 2012

Quant Results File: 8260WTR.RES

Quant Method : C:\MSDCHEM\1\METHODS\8260WTR.M (RTE Integrator)

Title : 8260B/624_WATER SOP:OVLMSV01 011/12/12 - HPMS6

Last Update : Wed Nov 14 12:48:44 2012

Response via : Initial Calibration

DataAcq Meth : 8260WTR

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) Fluorobenzene	10.31	96	537506	25.00	ug/L	0.00
57) Chlorobenzene-d5	14.80	117	385267	25.00	ug/L	0.00
78) 1,4-Dichlorobenzene-d4	18.35	152	186663	25.00	ug/L	0.00

System Monitoring Compounds

37) Dibromofluoromethane	9.12	111	569207	103.3181	ug/L	0.00
Spiked Amount	25.000	Range	86 - 118	Recovery	=	413.28%#
43) 1,2-Dichloroethane-d4	9.86	65	525055	99.4514	ug/L	0.00
Spiked Amount	25.000	Range	80 - 120	Recovery	=	397.80%#
58) Toluene-d8	12.60	98	1907621	100.9438	ug/L	0.00
Spiked Amount	25.000	Range	88 - 110	Recovery	=	403.76%#
80) p-Bromofluorobenzene	16.57	95	685338	101.2679	ug/L	0.00
Spiked Amount	25.000	Range	86 - 115	Recovery	=	405.08%#

Target Compounds

						Qvalue
2) Dichlorodifluoromethane	2.64	85	945366	223.4856	ug/L	100
3) Chloromethane	3.00	50	1457841	193.8582	ug/L	99
4) Vinyl Chloride	3.19	62	1099333	177.2625	ug/L	99
5) 1,3-Butadiene	3.22	54	323109	Below Cal		99
6) Bromomethane	3.94	94	913773	202.8314	ug/L	100
7) Chloroethane	4.09	64	801925	211.4899	ug/L	100
8) Trichlorofluoromethane	4.56	101	1921048	217.6628	ug/L	100
9) Diethyl ether	5.10	59	446	0.1844	ug/L	# 45
10) Isoprene	5.11	67	2075388	215.6178	ug/L	99
12) 1,1,2-Trichloro-1,2,2-Trif	5.33	101	1086275	216.0464	ug/L	100
13) Acetone	5.42	43	146754	207.3375	ug/L	96
14) 1,1-Dichloroethene	5.64	61	1871393	213.0296	ug/L	100
15) Tert-Butyl Alcohol	5.77	59	1215	6.1239	ug/L	# 61
16) Dimethyl Sulfide	5.91	62	1391453	211.7314	ug/L	98
17) Iodomethane	6.16	142	888646	204.6328	ug/L	100
18) Methyl acetate	6.21	43	460500	202.0873	ug/L	98
19) Methylene Chloride	6.47	84	1118480	213.9147	ug/L	96
20) Carbon Disulfide	6.48	76	3329391	213.7900	ug/L	99
21) Acrylonitrile	6.70	53	22511	22.1507	ug/L	# 32
22) Methyl Tert Butyl Ether	6.71	73	2120945	209.8937	ug/L	100
23) trans-1,2-Dichloroethene	6.95	96	1159069	218.9028	ug/L	99
24) n-Hexane	7.06	57	1214992	207.6077	ug/L	99
25) Diisopropyl ether	7.63	45	9195	0.5830	ug/L	# 1
26) Vinyl Acetate	7.63	43	1156301	203.6250	ug/L	99
27) 1,1-Dichloroethane	7.63	63	2227695	212.4403	ug/L	100
29) 2-Butanone	8.27	43	209178	199.7300	ug/L	97
31) 2,2-Dichloropropane	8.50	77	1721422	216.7496	ug/L	97
32) cis-1,2-Dichloroethene	8.57	96	1248531	217.4766	ug/L	99
33) Chloroform	8.80	83	2016203	214.2514	ug/L	99
34) 1-Bromopropane	8.95	122	211151	200.8494	ug/L	98
35) Bromochloromethane	9.05	130	648127	199.9934	ug/L	99
36) Tetrahydrofuran	8.95	42	155282	240.6261	ug/L	# 35
38) 1,1,1-Trichloroethane	9.40	97	1921520	223.3855	ug/L	99
39) Cyclohexane	9.42	56	1992934	212.2647	ug/L	98
40) 1,1-Dichloropropene	9.62	75	1563509	218.4608	ug/L	97
41) Tert-Amyl-Methyl ether	9.62	73	232813	22.1862	ug/L	# 56
42) Carbon Tetrachloride	9.77	117	1717843	219.1996	ug/L	100
45) 1,2-Dichloroethane	9.99	62	1430442	217.2565	ug/L	99
46) Benzene	10.02	78	4412372	213.7045	ug/L	100
47) Trichloroethene	10.89	130	1254795	211.7060	ug/L	99

(#) = qualifier out of range (m) = manual integration
 6M112630.D 8260WTR.M Wed Nov 14 12:59:05 2012

Page 1

Data File : C:\MSDCHEM\1\DATA\111212\6M112630.D Vial: 11
 Acq On : 12 Nov 2012 19:20 Operator: adc
 Sample : WG414018-10 200.0 ug/L STD 8260 Inst : HPMS6
 Misc : 1,1 STD54883 Multiplr: 1.00
 MS Integration Params: RTEINT.P
 Quant Time: Nov 14 12:59:04 2012 Quant Results File: 8260WTR.RES

Quant Method : C:\MSDCHEM\1\METHODS\8260WTR.M (RTE Integrator)
 Title : 8260B/624_WATER SOP:OVLMSV01 011/12/12 - HPMS6
 Last Update : Wed Nov 14 12:48:44 2012
 Response via : Initial Calibration
 DataAcq Meth : 8260WTR

Compound	R.T.	QIon	Response	Conc	Unit	Qvalue
48) Methylcyclohexane	10.98	83	1386109	212.8765	ug/L	99
49) 1,2-Dichloropropane	11.14	63	1168435	221.3615	ug/L	100
50) 1,4-Dioxane	11.48	88	3123	202.3484	ug/L	79
51) Bromodichloromethane	11.48	83	1466979	222.8298	ug/L	99
52) Dibromomethane	11.57	93	551451	201.2544	ug/L	99
53) 2-Chloroethyl Vinyl Ether	11.88	63	458542	201.4724	ug/L	100
54) 4-Methyl-2-Pentanone	11.92	58	205989	214.6332	ug/L	99
55) cis-1,3-Dichloropropene	12.23	75	1690115	234.6236	ug/L	98
56) Dimethyl Disulfide	12.51	79	985810	226.7768	ug/L	100
59) Toluene	12.71	91	4732722	217.0358	ug/L	99
60) Ethyl Methacrylate	12.90	69	843235	197.9287	ug/L	99
62) trans-1,3-Dichloropropene	12.95	75	1415786	198.9938	ug/L	100
63) 1,1,2-Trichloroethane	13.18	97	705824	198.0811	ug/L	99
64) 2-Hexanone	13.15	43	322231	218.6265	ug/L	99
65) 1,3-Dichloropropane	13.54	76	1205239	218.4318	ug/L	97
66) Tetrachloroethene	13.66	166	1174742	220.6166	ug/L	99
67) Dibromochloromethane	13.96	129	1027452	246.8000	ug/L	100
68) 1,2-Dibromoethane	14.26	107	713595	198.6434	ug/L	100
69) 1-Chlorohexane	14.43	91	1418158	212.7028	ug/L	98
70) Chlorobenzene	14.85	112	3185634	217.9860	ug/L	98
71) 1,1,1,2-Tetrachloroethane	14.90	131	1255686	238.1133	ug/L	99
72) Ethylbenzene	14.91	106	1839451	230.1811	ug/L	30
73) m-,p-Xylene	15.02	106	4436408	457.4402	ug/L	90
74) o-Xylene	15.67	106	2028618	222.3029	ug/L	97
75) Styrene	15.72	104	3527666	234.3219	ug/L	99
76) Bromoform	16.25	173	572123	199.2756	ug/L	100
77) Isopropylbenzene	16.19	105	4805334	218.1185	ug/L	99
79) 1,1,2,2-Tetrachloroethane	16.44	83	706324	211.7087	ug/L	99
81) 1,2,3-Trichloropropane	16.66	110	201968	201.0852	ug/L	94
82) trans-1,4-Dichloro-2-Butene	16.74	53	253105	202.1989	ug/L	91
83) n-Propylbenzene	16.78	91	5257491	214.7396	ug/L	98
84) Bromobenzene	16.88	156	1229162	231.3543	ug/L	100
85) 1,3,5-Trimethylbenzene	17.01	105	3947233	219.8052	ug/L	98
86) 2-Chlorotoluene	17.07	91	4074840	228.0103	ug/L	93
87) 4-Chlorotoluene	17.14	91	3488927	213.1003	ug/L	99
88) a-Methylstyrene	17.48	118	2427407	230.8649	ug/L #	1
89) tert-Butylbenzene	17.55	134	749302	221.9254	ug/L	99
90) 1,2,4-Trimethylbenzene	17.61	105	4129487	221.3436	ug/L	99
91) sec-Butylbenzene	17.87	105	4238314	217.5351	ug/L	99
92) p-Isopropyltoluene	18.07	119	3654019	218.1796	ug/L	99
93) 1,3-Dichlorobenzene	18.25	146	2265787	222.9264	ug/L	99
94) 1,4-Dichlorobenzene	18.40	146	2308813	222.1100	ug/L	100
95) n-Butylbenzene	18.68	91	3063345	214.4267	ug/L	99
96) 1,2-Dichlorobenzene	18.96	146	1974823	220.5911	ug/L	100
97) 1,2-Dibromo-3-Chloropropan	20.15	75	111667	201.1322	ug/L	99
98) 1,2,4-Trichlorobenzene	21.50	180	1197289	220.3336	ug/L	99
99) Hexachlorobutadiene	21.70	225	476921	217.1727	ug/L	100
100) Naphthalene	21.90	128	2040135	216.2558	ug/L	99
101) 1,2,3-Trichlorobenzene	22.28	180	981136	219.5203	ug/L	100

(#) = qualifier out of range (m) = manual integration
 6M112630.D 8260WTR.M Wed Nov 14 12:59:05 2012

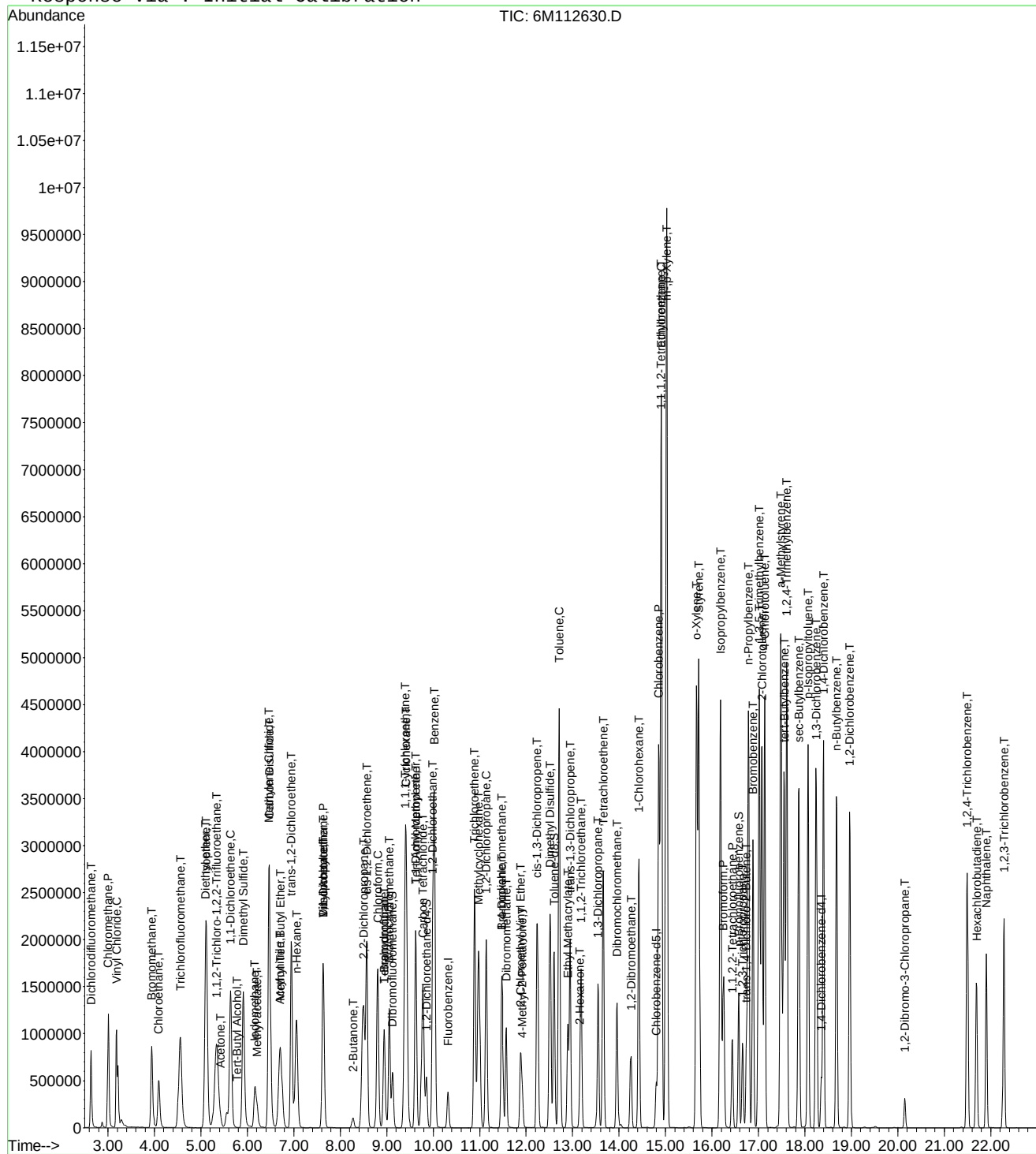
Page 2

Data File : C:\MSDCHEM\1\DATA\111212\6M112630.D
Acq On : 12 Nov 2012 19:20
Sample : WG414018-10 200.0 ug/L STD 8260
Misc : 1,1 STD54883
MS Integration Params: RTEINT.P
Quant Time: Nov 14 12:59 2012

Vial: 11
Operator: adc
Inst : HPMS6
Multiplr: 1.00

Quant Results File: 8260WTR.RES

Method : C:\MSDCHEM\1\METHODS\8260WTR.M (RTE Integrator)
Title : 8260B/624_WATER SOP:OVLMSV01 011/12/12 - HPMS6
Last Update : Wed Nov 14 12:48:44 2012
Response via : Initial Calibration



Data File : C:\MSDCHEM\1\DATA\111212\6M112631.D Vial: 12
 Acq On : 12 Nov 2012 19:51 Operator: adc
 Sample : WG414018-11 300.0 ug/L STD 8260 Inst : HPMS6
 Misc : 1,1 STD54883 Multiplr: 1.00
 MS Integration Params: RTEINT.P
 Quant Time: Nov 14 12:59:05 2012 Quant Results File: 8260WTR.RES

Quant Method : C:\MSDCHEM\1\METHODS\8260WTR.M (RTE Integrator)
 Title : 8260B/624_WATER SOP:OVLMSV01 011/12/12 - HPMS6
 Last Update : Wed Nov 14 12:48:44 2012
 Response via : Initial Calibration
 DataAcq Meth : 8260WTR

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) Fluorobenzene	10.32	96	544783	25.00	ug/L	0.00
57) Chlorobenzene-d5	14.79	117	384168	25.00	ug/L	0.00
78) 1,4-Dichlorobenzene-d4	18.36	152	188994	25.00	ug/L	0.00

System Monitoring Compounds						
37) Dibromofluoromethane	9.12	111	870589	155.9118	ug/L	0.00
Spiked Amount	25.000	Range	86 - 118	Recovery	=	623.64%#
43) 1,2-Dichloroethane-d4	9.85	65	802920	150.0508	ug/L	0.00
Spiked Amount	25.000	Range	80 - 120	Recovery	=	600.20%#
58) Toluene-d8	12.60	98	2926948	155.3256	ug/L	0.00
Spiked Amount	25.000	Range	88 - 110	Recovery	=	621.32%#
80) p-Bromofluorobenzene	16.57	95	1033570	150.8402	ug/L	0.00
Spiked Amount	25.000	Range	86 - 115	Recovery	=	603.36%#

Target Compounds	R.T.	QIon	Response	Conc	Units	Qvalue
2) Dichlorodifluoromethane	2.63	85	1424180	332.1806	ug/L	99
3) Chloromethane	3.00	50	2079584	272.8413	ug/L	99
4) Vinyl Chloride	3.18	62	1557876	247.8450	ug/L	99
5) 1,3-Butadiene	3.21	54	448832	Below Cal		99
6) Bromomethane	3.94	94	1426624	312.0967	ug/L	100
7) Chloroethane	4.09	64	1215338	316.2370	ug/L	99
8) Trichlorofluoromethane	4.56	101	2850458	318.6548	ug/L	100
9) Diethyl ether	5.08	59	812546	331.5178	ug/L	99
10) Isoprene	5.11	67	3253847	333.5357	ug/L	98
11) Acrolein	5.32	56	44024	184.7090	ug/L	90
12) 1,1,2-Trichloro-1,2,2-Trif	5.34	101	1662568	326.2469	ug/L	100
13) Acetone	5.43	43	207977	289.9099	ug/L	96
14) 1,1-Dichloroethene	5.64	61	2812685	315.9045	ug/L	99
15) Tert-Butyl Alcohol	5.77	59	116846	581.0669	ug/L	98
16) Dimethyl Sulfide	5.91	62	2137225	320.8682	ug/L	97
17) Iodomethane	6.16	142	1277270	289.4034	ug/L	100
18) Methyl acetate	6.21	43	709505	307.2024	ug/L	97
19) Methylene Chloride	6.47	84	1743175	328.9373	ug/L	93
20) Carbon Disulfide	6.48	76	5121167	324.4527	ug/L	99
21) Acrylonitrile	6.67	53	188735	183.2336	ug/L	95
22) Methyl Tert Butyl Ether	6.70	73	3267688	319.0585	ug/L	100
23) trans-1,2-Dichloroethene	6.95	96	1795036	334.4838	ug/L	97
24) n-Hexane	7.05	57	1830668	308.6309	ug/L	99
25) Diisopropyl ether	7.45	45	4891776	306.0300	ug/L	99
26) Vinyl Acetate	7.62	43	1716323	298.2077	ug/L	98
27) 1,1-Dichloroethane	7.63	63	3426941	322.4390	ug/L	99
28) Ethyl-Tert-Butyl ether	8.08	59	4461806	313.7111	ug/L	99
29) 2-Butanone	8.27	43	321736	303.1006	ug/L	96
30) Propionitrile	8.39	54	106600	321.0847	ug/L	99
31) 2,2-Dichloropropane	8.49	77	2632750	327.0697	ug/L	94
32) cis-1,2-Dichloroethene	8.56	96	1951654	335.4099	ug/L	97
33) Chloroform	8.80	83	3110084	326.0778	ug/L	99
34) 1-Bromopropane	8.95	122	323908	303.6154	ug/L	99
35) Bromochloromethane	9.05	130	976857	297.3157	ug/L	99
36) Tetrahydrofuran	9.08	42	200693	306.8411	ug/L	98
38) 1,1,1-Trichloroethane	9.40	97	2971106	340.7910	ug/L	98
39) Cyclohexane	9.42	56	3042101	319.6821	ug/L	96
40) 1,1-Dichloropropene	9.62	75	2408495	332.0310	ug/L	94
41) Tert-Amyl-Methyl ether	9.77	73	3544821	333.2960	ug/L	98
42) Carbon Tetrachloride	9.77	117	2774741	349.3321	ug/L	99

(#) = qualifier out of range (m) = manual integration
 6M112631.D 8260WTR.M Wed Nov 14 12:59:06 2012

Data File : C:\MSDCHEM\1\DATA\111212\6M112631.D Vial: 12
 Acq On : 12 Nov 2012 19:51 Operator: adc
 Sample : WG414018-11 300.0 ug/L STD 8260 Inst : HPMS6
 Misc : 1,1 STD54883 Multiplr: 1.00
 MS Integration Params: RTEINT.P
 Quant Time: Nov 14 12:59:05 2012 Quant Results File: 8260WTR.RES

Quant Method : C:\MSDCHEM\1\METHODS\8260WTR.M (RTE Integrator)
 Title : 8260B/624_WATER SOP:OVLMSV01 011/12/12 - HPMS6
 Last Update : Wed Nov 14 12:48:44 2012
 Response via : Initial Calibration
 DataAcq Meth : 8260WTR

Compound	R.T.	QIon	Response	Conc	Unit	Qvalue
44) Heptane	9.77	57	72140	300.0000	ug/L	83
45) 1,2-Dichloroethane	9.99	62	2190980	328.3225	ug/L	99
46) Benzene	10.02	78	6790507	324.4916	ug/L	100
47) Trichloroethene	10.89	130	1963053	326.7775	ug/L	97
48) Methylcyclohexane	10.98	83	2129749	322.7145	ug/L	99
49) 1,2-Dichloropropane	11.14	63	1803782	337.1642	ug/L	99
50) 1,4-Dioxane	11.48	88	10807	596.1370	ug/L	98
51) Bromodichloromethane	11.48	83	2258658	338.5007	ug/L	100
52) Dibromomethane	11.56	93	853532	307.1500	ug/L	99
53) 2-Chloroethyl Vinyl Ether	11.88	63	704319	304.7848	ug/L	99
54) 4-Methyl-2-Pentanone	11.91	58	311321	320.0524	ug/L	98
55) cis-1,3-Dichloropropene	12.24	75	2614086	358.0430	ug/L	97
56) Dimethyl Disulfide	12.51	79	1550178	351.8412	ug/L	100
59) Toluene	12.72	91	7164213	329.4804	ug/L	97
60) Ethyl Methacrylate	12.90	69	1304922	307.1062	ug/L	97
62) trans-1,3-Dichloropropene	12.94	75	2204622	310.3651	ug/L	99
63) 1,1,2-Trichloroethane	13.19	97	1099353	309.2585	ug/L	99
64) 2-Hexanone	13.16	43	488084	332.1014	ug/L	97
65) 1,3-Dichloropropane	13.55	76	1865784	339.1131	ug/L	96
66) Tetrachloroethene	13.66	166	1848963	348.2287	ug/L	98
67) Dibromochloromethane	13.95	129	1605159	386.6716	ug/L	100
68) 1,2-Dibromoethane	14.25	107	1101622	307.3748	ug/L	100
69) 1-Chlorohexane	14.42	91	2192857	329.8371	ug/L	97
70) Chlorobenzene	14.85	112	4940268	339.0188	ug/L	100
71) 1,1,1,2-Tetrachloroethane	14.90	131	1954614	371.7100	ug/L	98
72) Ethylbenzene	14.91	106	2864186	359.4375	ug/L	# 24
73) m-, p-Xylene	15.03	106	6541251	676.4011	ug/L	82
74) o-Xylene	15.67	106	3156015	346.8363	ug/L	94
75) Styrene	15.72	104	5415648	360.7585	ug/L	100
76) Bromoform	16.25	173	898483	313.4256	ug/L	100
77) Isopropylbenzene	16.18	105	7208936	328.1563	ug/L	97
79) 1,1,2,2-Tetrachloroethane	16.44	83	1066378	315.6867	ug/L	99
81) 1,2,3-Trichloropropane	16.66	110	307498	302.0487	ug/L	95
82) trans-1,4-Dichloro-2-Butene	16.74	53	383899	302.2866	ug/L	87
83) n-Propylbenzene	16.78	91	7754801	312.8343	ug/L	96
84) Bromobenzene	16.88	156	1908891	354.8623	ug/L	100
85) 1,3,5-Trimethylbenzene	17.02	105	6000575	330.0261	ug/L	97
86) 2-Chlorotoluene	17.07	91	5973148	330.1090	ug/L	94
87) 4-Chlorotoluene	17.13	91	5502760	331.9579	ug/L	98
88) a-Methylstyrene	17.49	118	3714757	348.9442	ug/L	# 1
89) tert-Butylbenzene	17.55	134	1165827	341.0315	ug/L	96
90) 1,2,4-Trimethylbenzene	17.61	105	6217767	329.1665	ug/L	96
91) sec-Butylbenzene	17.87	105	6358383	322.3243	ug/L	98
92) p-Isopropyltoluene	18.07	119	5515553	325.2690	ug/L	98
93) 1,3-Dichlorobenzene	18.24	146	3508945	340.9802	ug/L	99
94) 1,4-Dichlorobenzene	18.41	146	3558934	338.1500	ug/L	100
95) n-Butylbenzene	18.68	91	4613782	318.9703	ug/L	97
96) 1,2-Dichlorobenzene	18.97	146	3047499	336.2122	ug/L	100
97) 1,2-Dibromo-3-Chloropropan	20.15	75	170925	303.5425	ug/L	99
98) 1,2,4-Trichlorobenzene	21.49	180	1860684	338.1930	ug/L	99
99) Hexachlorobutadiene	21.69	225	737899	331.8684	ug/L	100
100) Naphthalene	21.91	128	3169968	331.8745	ug/L	99
101) 1,2,3-Trichlorobenzene	22.28	180	1523746	336.7194	ug/L	99

(#) = qualifier out of range (m) = manual integration
 6M112631.D 8260WTR.M Wed Nov 14 12:59:06 2012

Page 2

Data File : C:\MSDCHEM\1\DATA\111212\6M112631.D

Vial: 12

Acq On : 12 Nov 2012 19:51

Operator: adc

Sample : WG414018-11 300.0 ug/L STD 8260

Inst : HPMS6

Misc : 1,1 STD54883

Multiplr: 1.00

MS Integration Params: RTEINT.P

Quant Time: Nov 14 12:59 2012

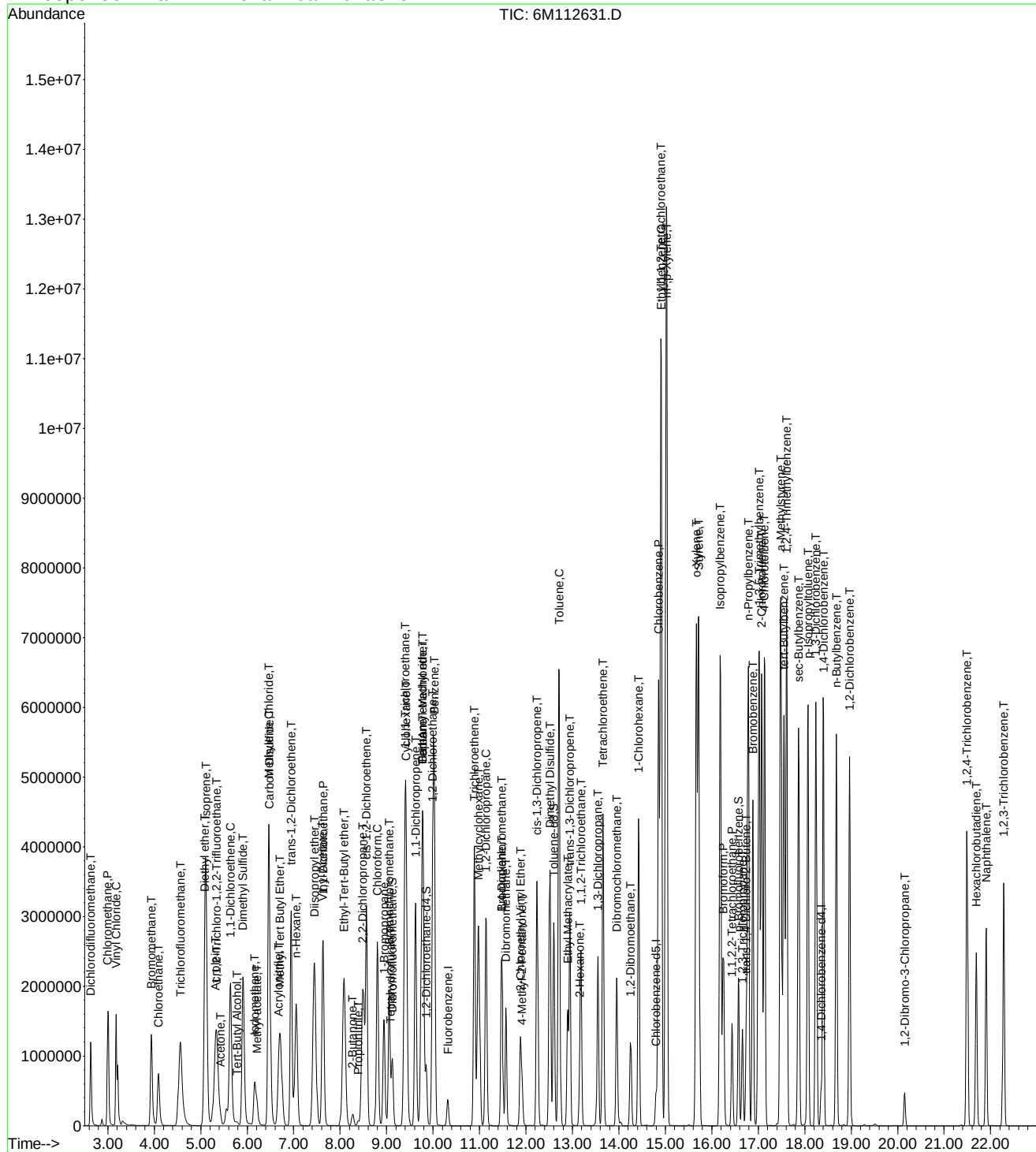
Quant Results File: 8260WTR.RES

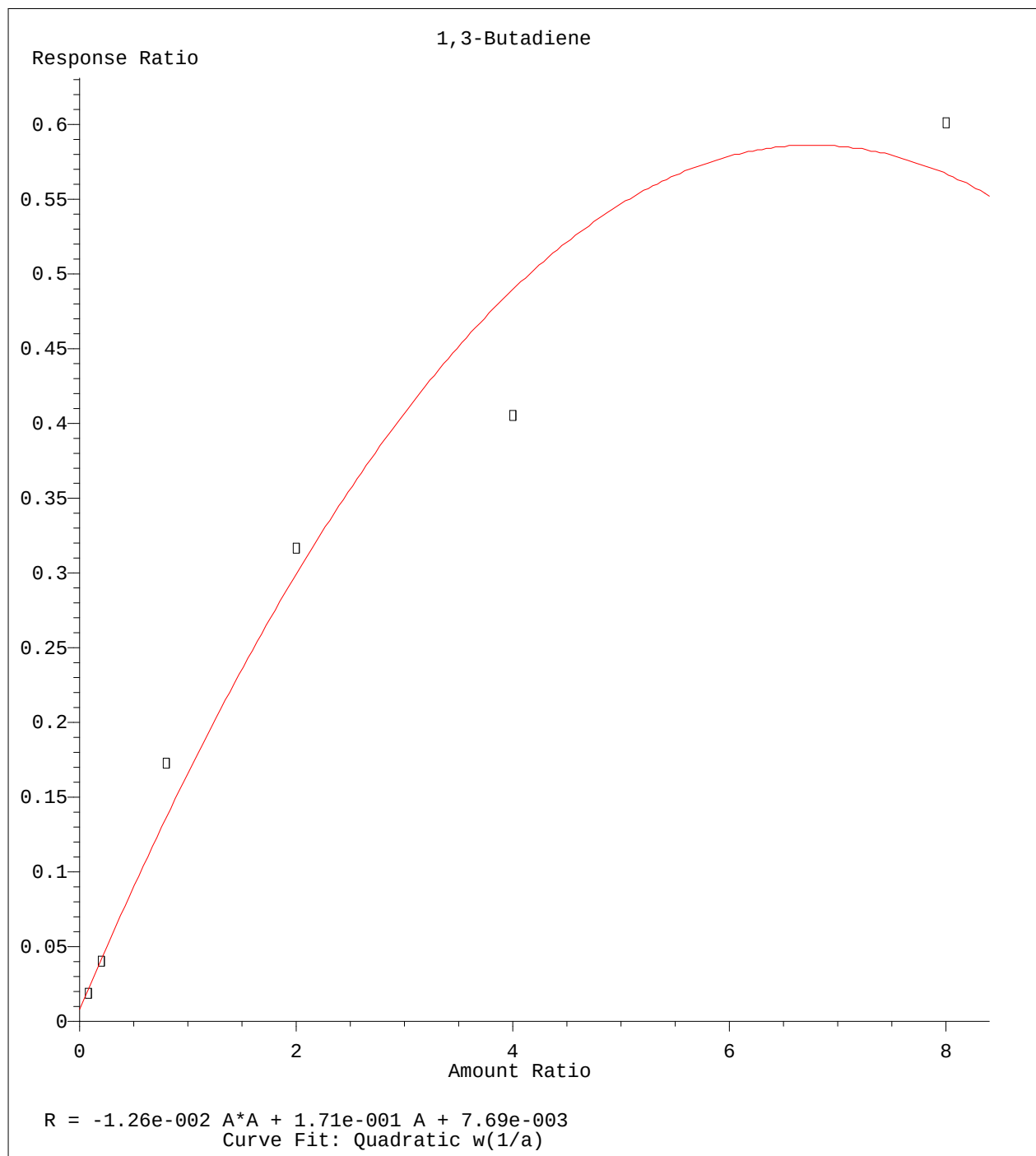
Method : C:\MSDCHEM\1\METHODS\8260WTR.M (RTE Integrator)

Title : 8260B/624_WATER SOP:OVLMSV01 011/12/12 - HPMS6

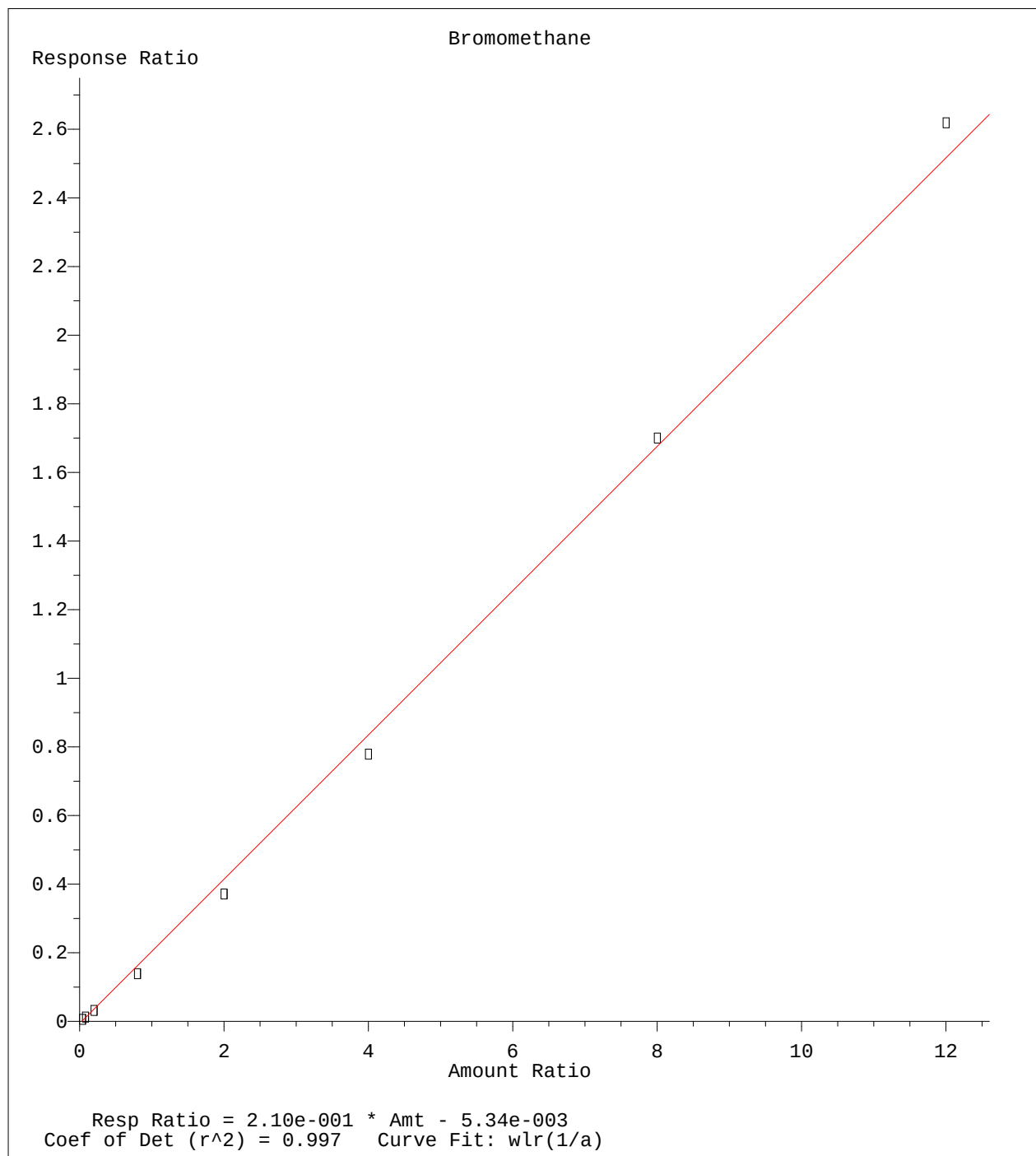
Last Update : Wed Nov 14 12:48:44 2012

Response via : Initial Calibration

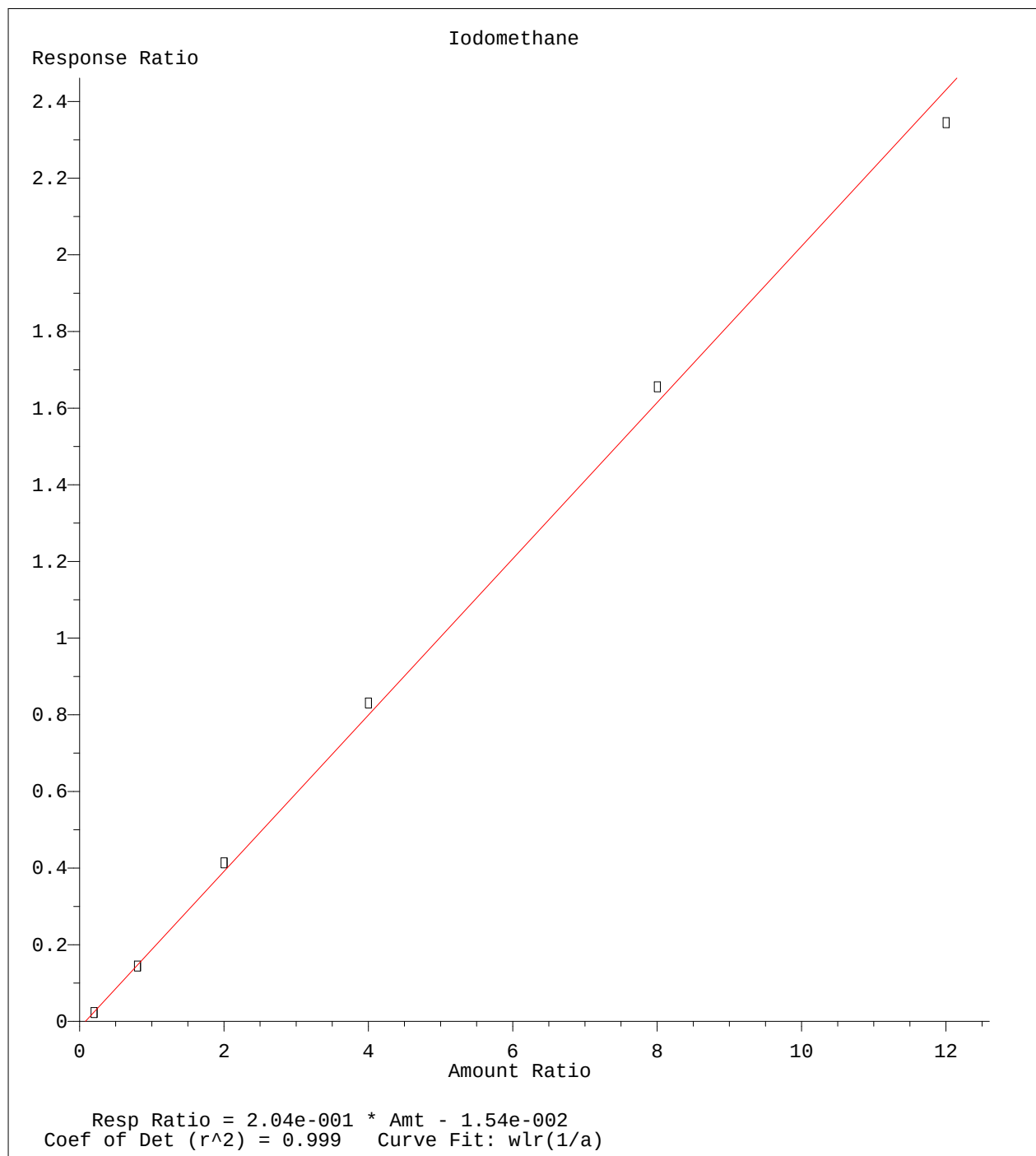




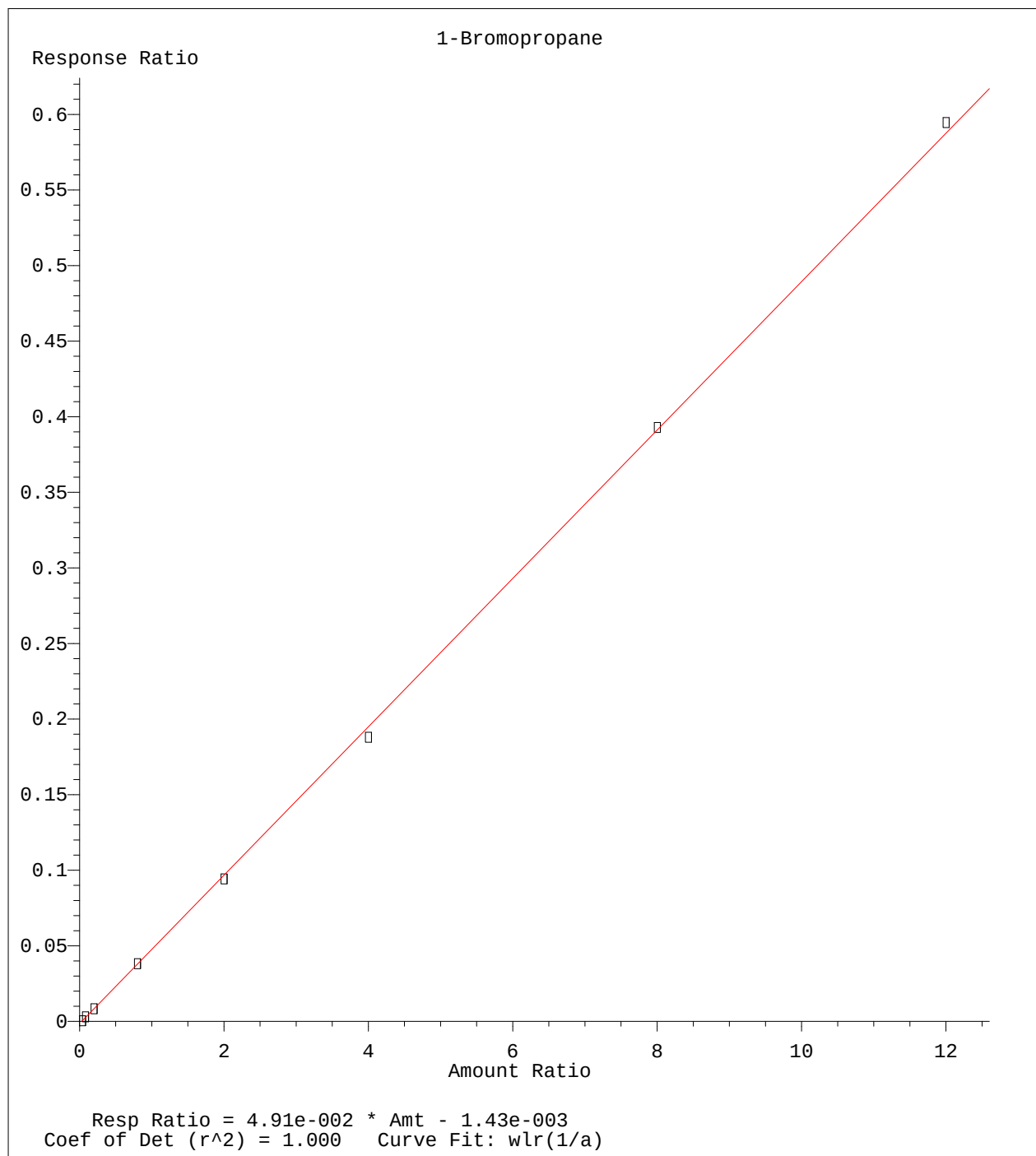
Method Name: C:\MSDCHEM\1\METHODS\8260WTR.M
Calibration Table Last Updated: Wed Nov 14 12:48:44 2012



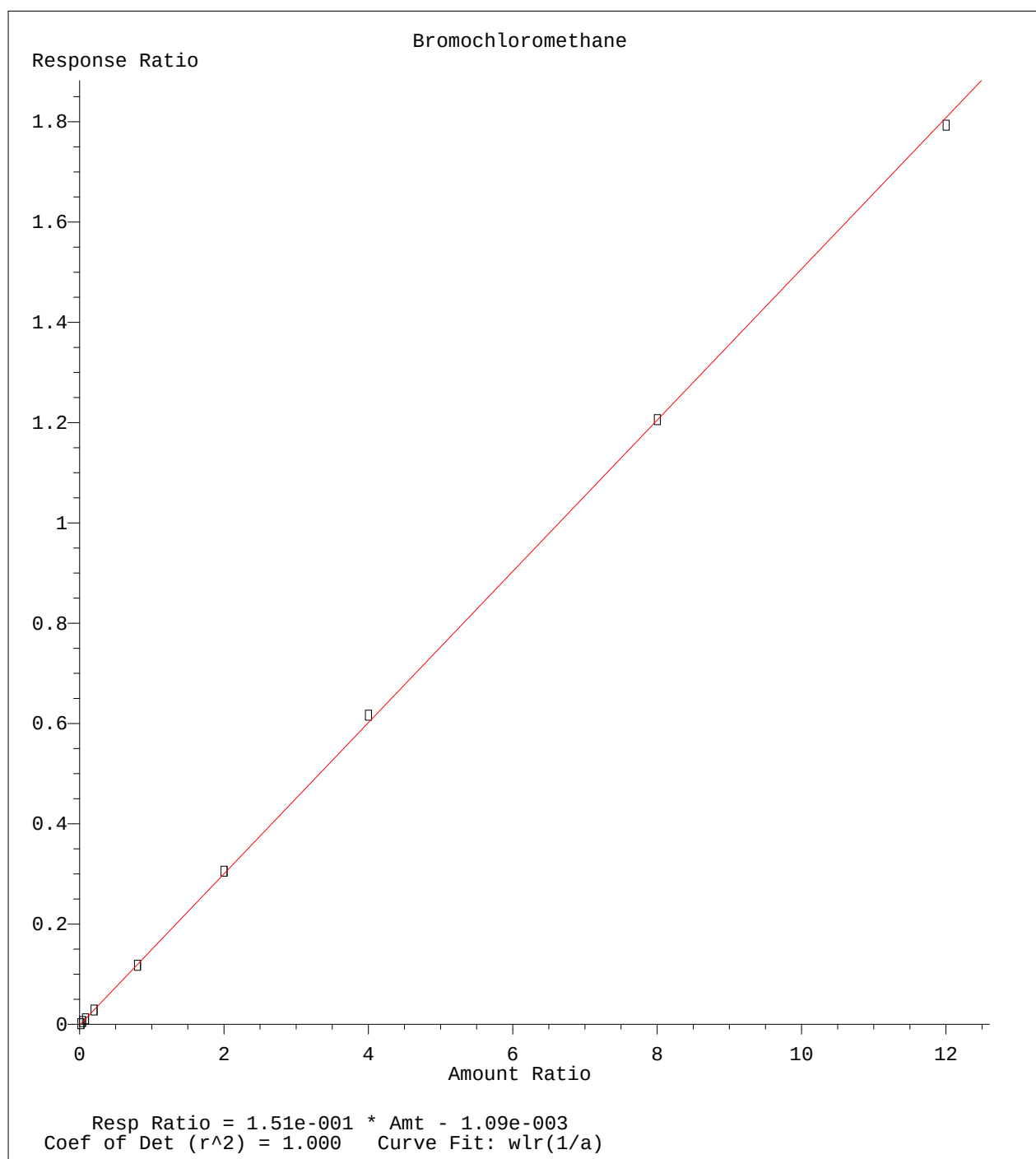
Method Name: C:\MSDCHEM\1\METHODS\8260WTR.M
Calibration Table Last Updated: Wed Nov 14 12:48:44 2012



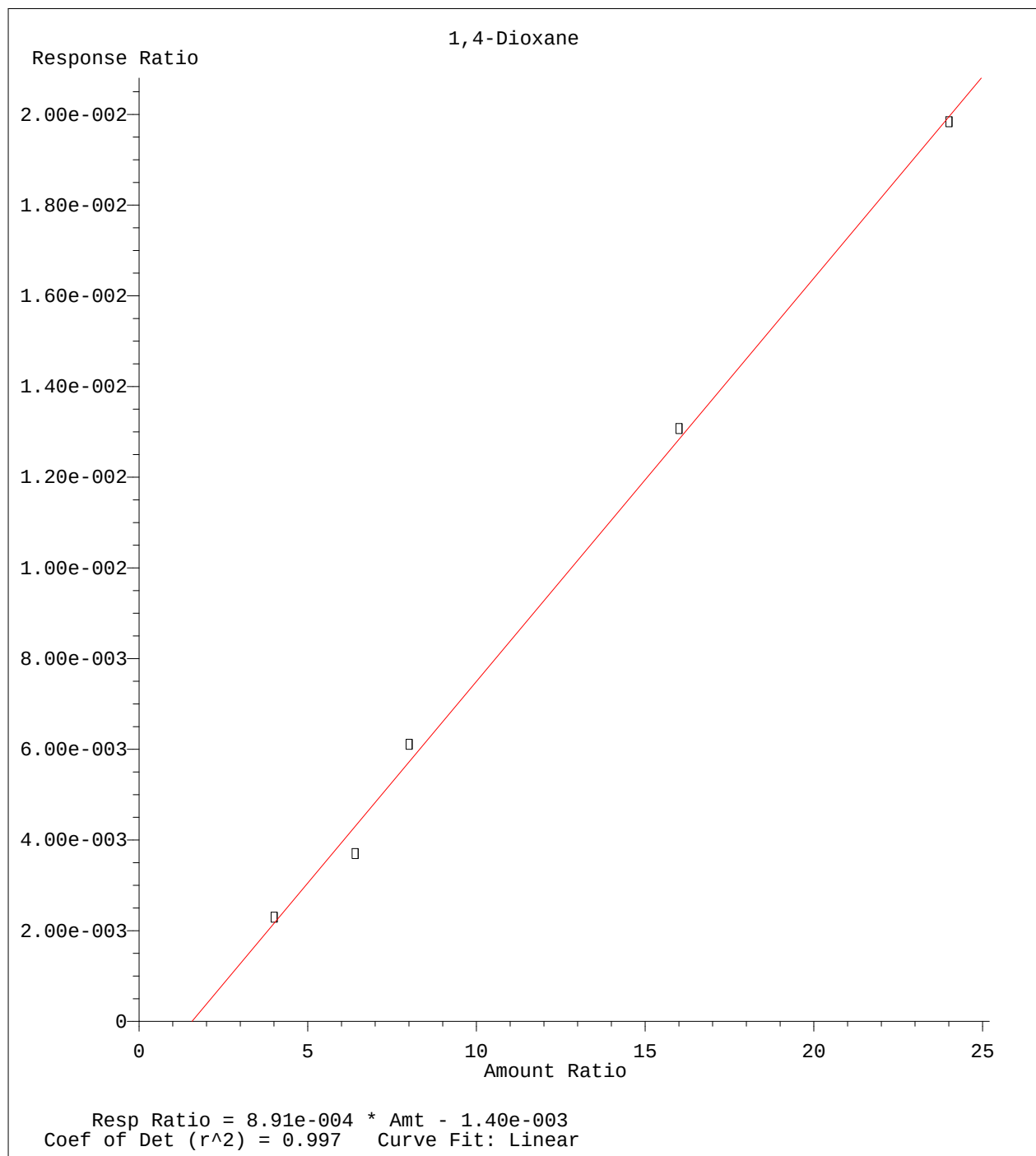
Method Name: C:\MSDCHEM\1\METHODS\8260WTR.M
Calibration Table Last Updated: Wed Nov 14 12:48:44 2012



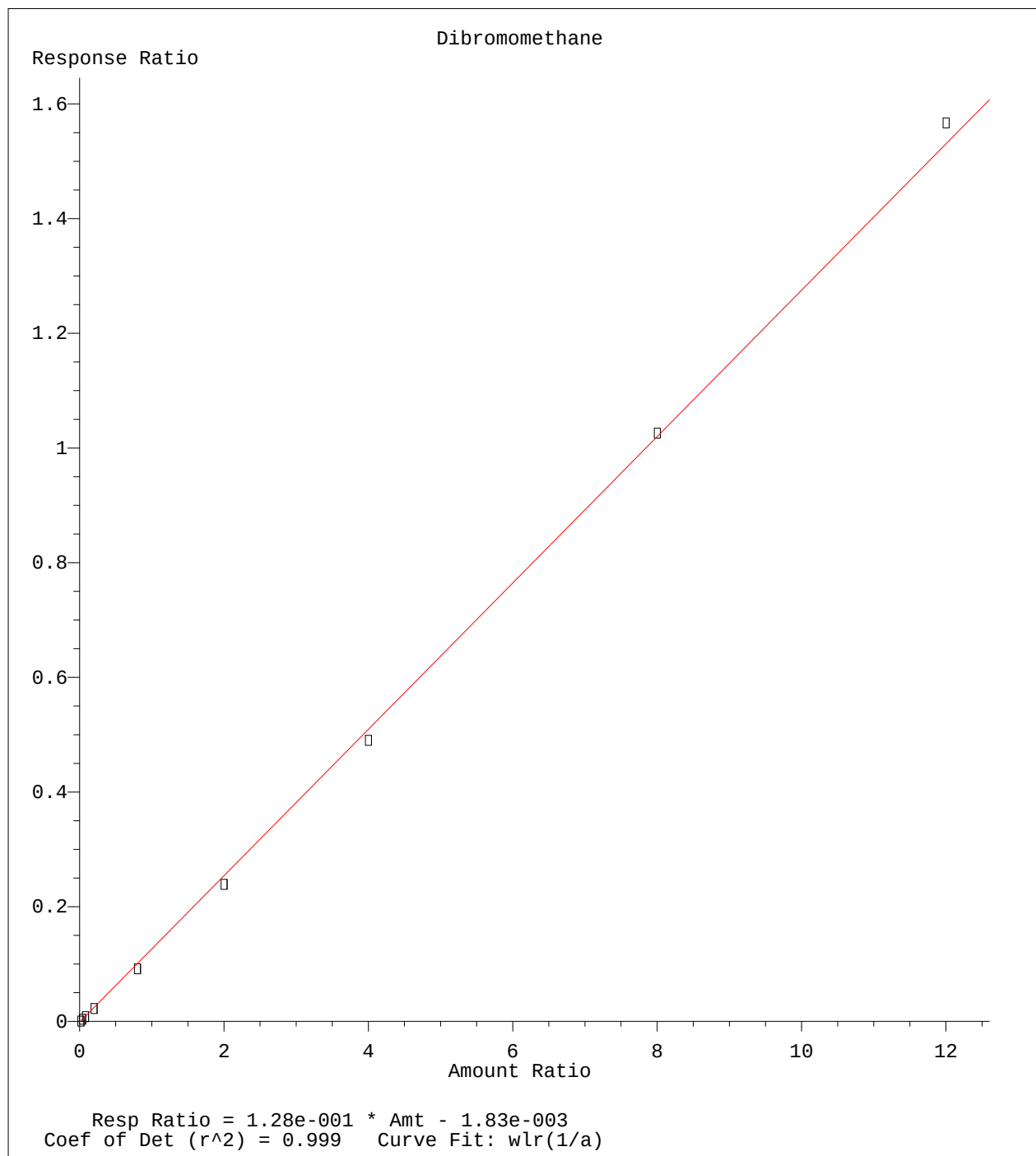
Method Name: C:\MSDCHEM\1\METHODS\8260WTR.M
Calibration Table Last Updated: Wed Nov 14 12:48:44 2012



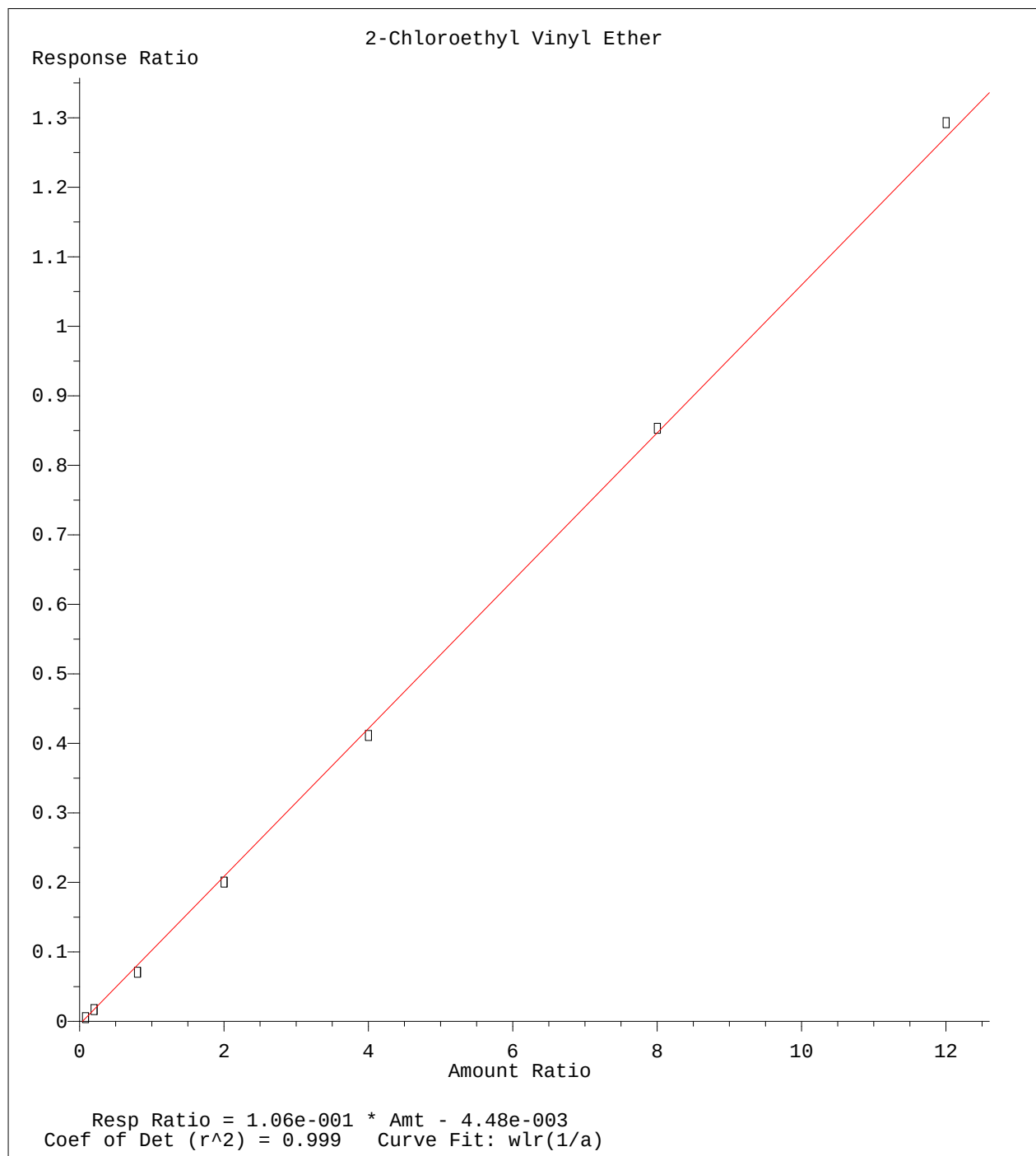
Method Name: C:\MSDCHEM\1\METHODS\8260WTR.M
Calibration Table Last Updated: Wed Nov 14 12:48:44 2012



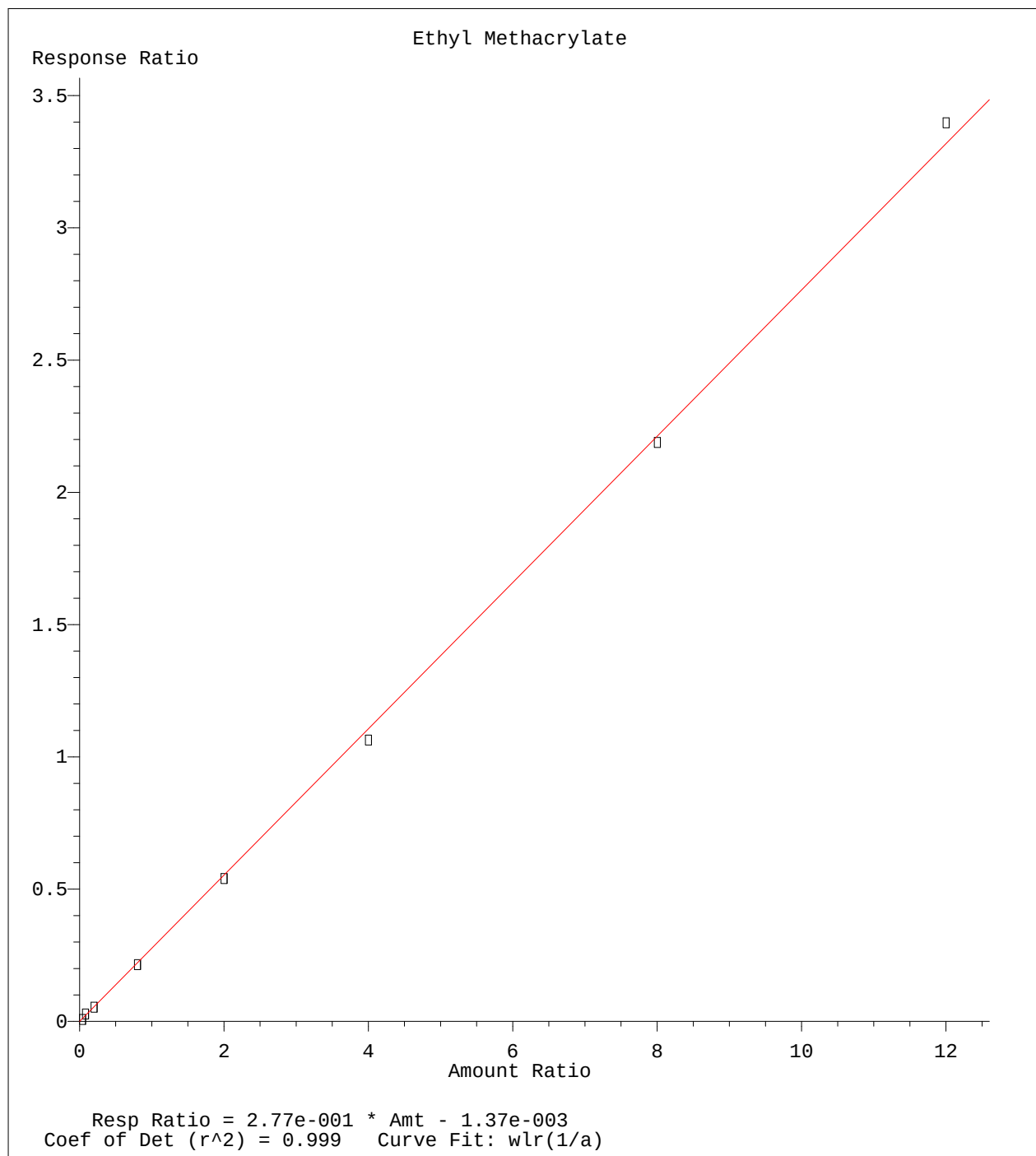
Method Name: C:\MSDCHEM\1\METHODS\8260WTR.M
Calibration Table Last Updated: Wed Nov 14 12:48:44 2012



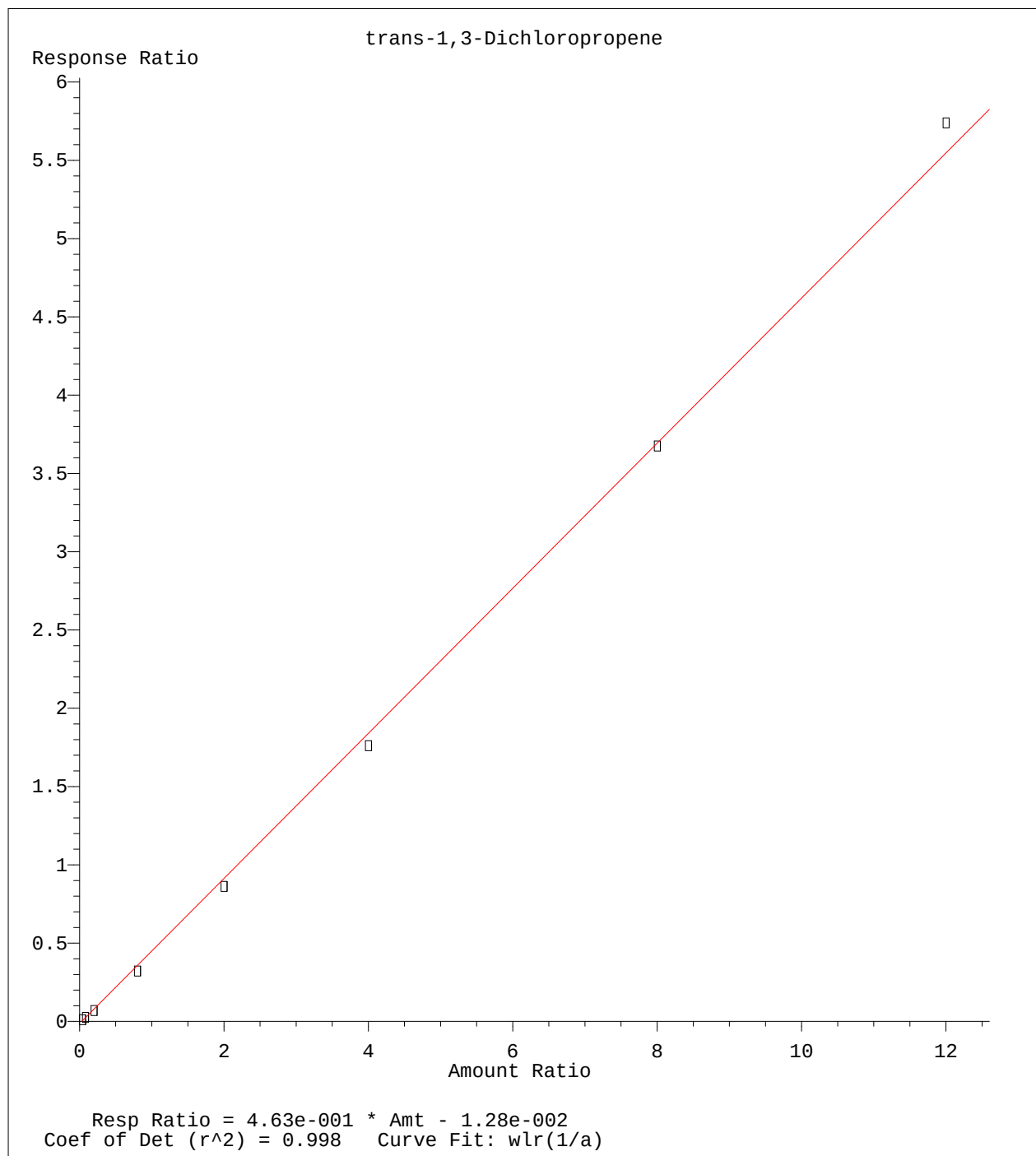
Method Name: C:\MSDCHEM\1\METHODS\8260WTR.M
Calibration Table Last Updated: Wed Nov 14 12:48:44 2012



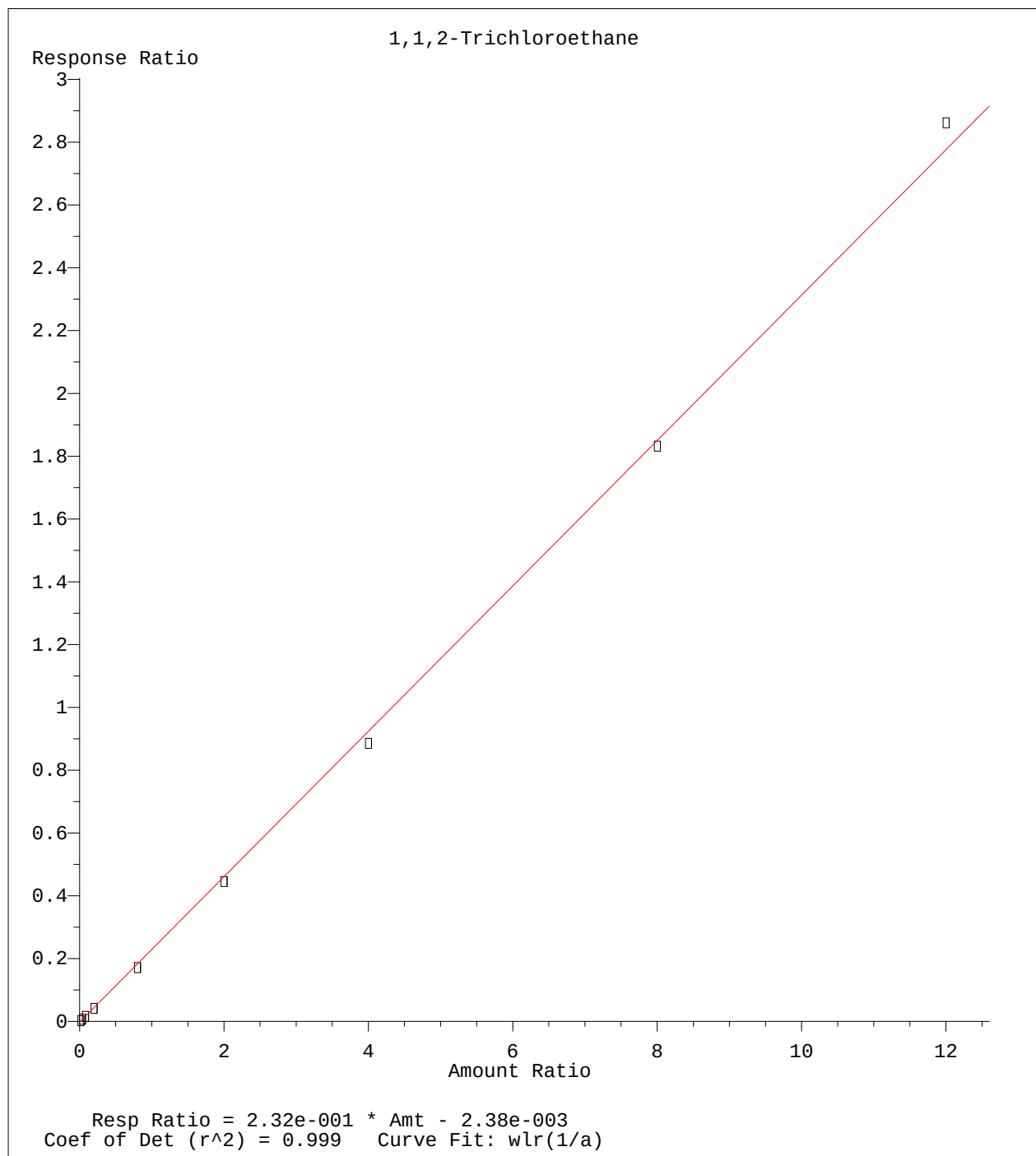
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Calibration Table Last Updated: Wed Nov 14 12:48:44 2012



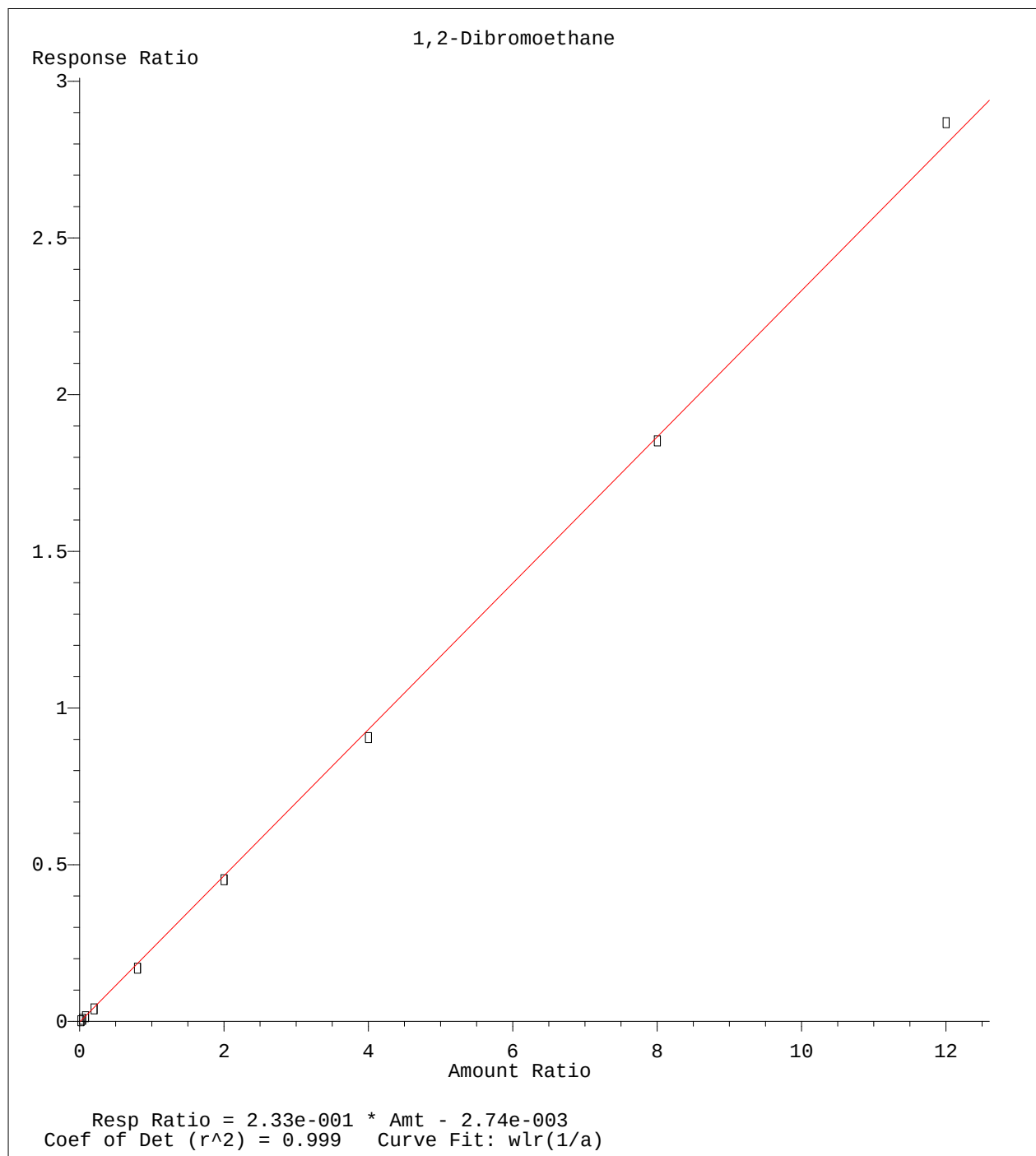
Method Name: C:\MSDCHEM\1\METHODS\8260WTR.M
Calibration Table Last Updated: Wed Nov 14 12:48:44 2012



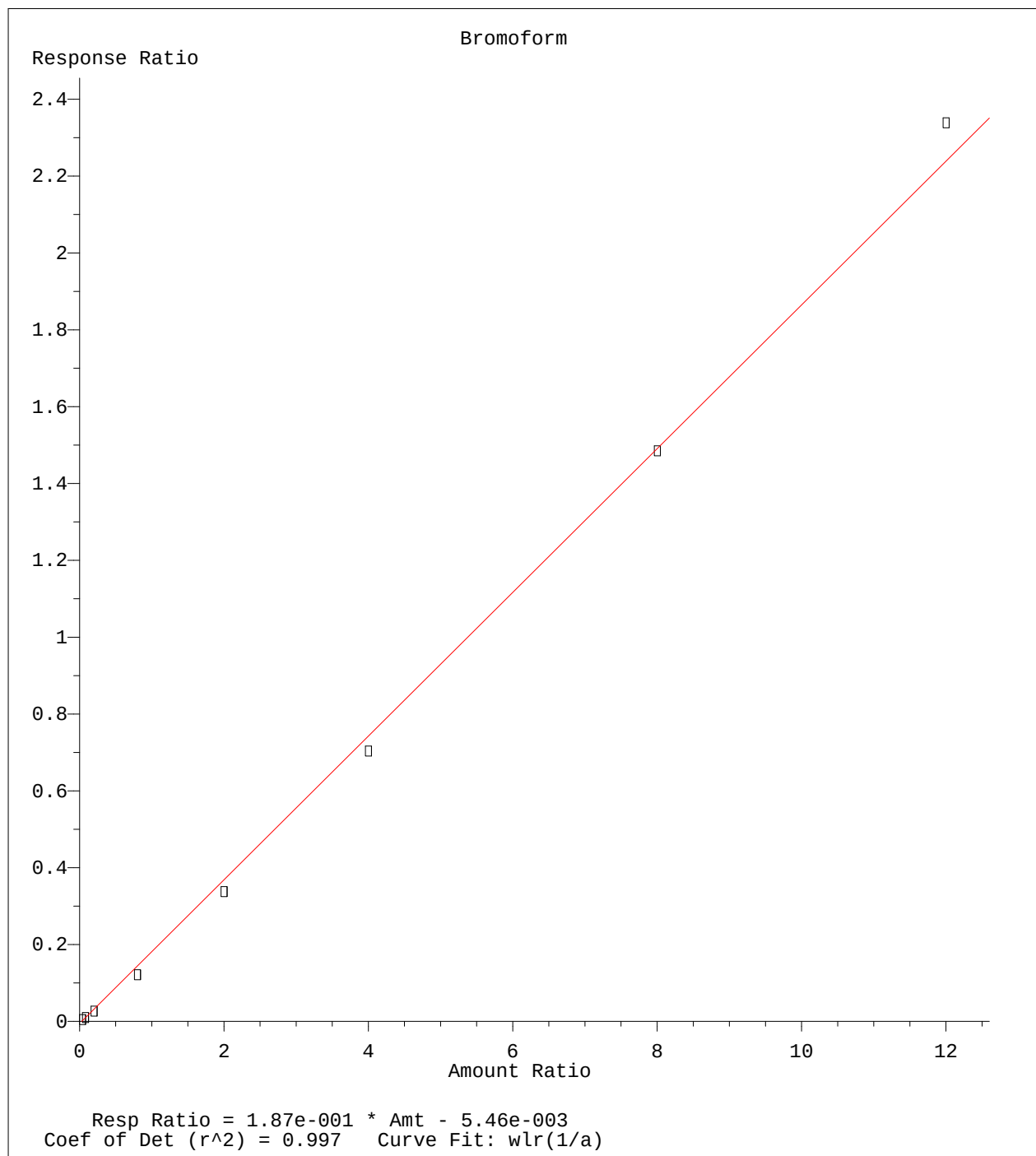
Method Name: C:\MSDCHEM\1\METHODS\8260WTR.M
Calibration Table Last Updated: Wed Nov 14 12:48:44 2012



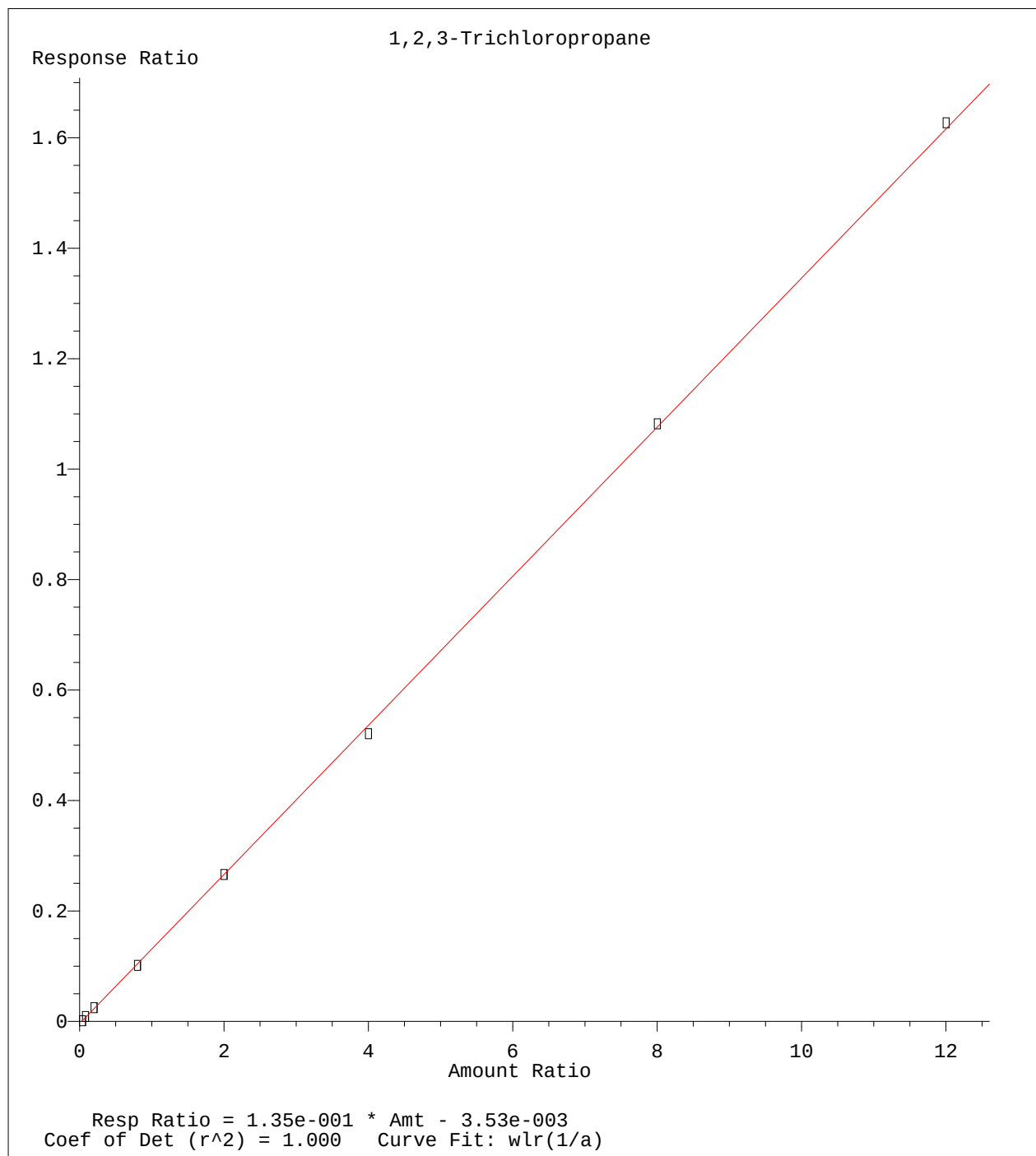
Method Name: C:\MSDCHEM\1\METHODS\8260WTR.M
Calibration Table Last Updated: Wed Nov 14 12:48:44 2012



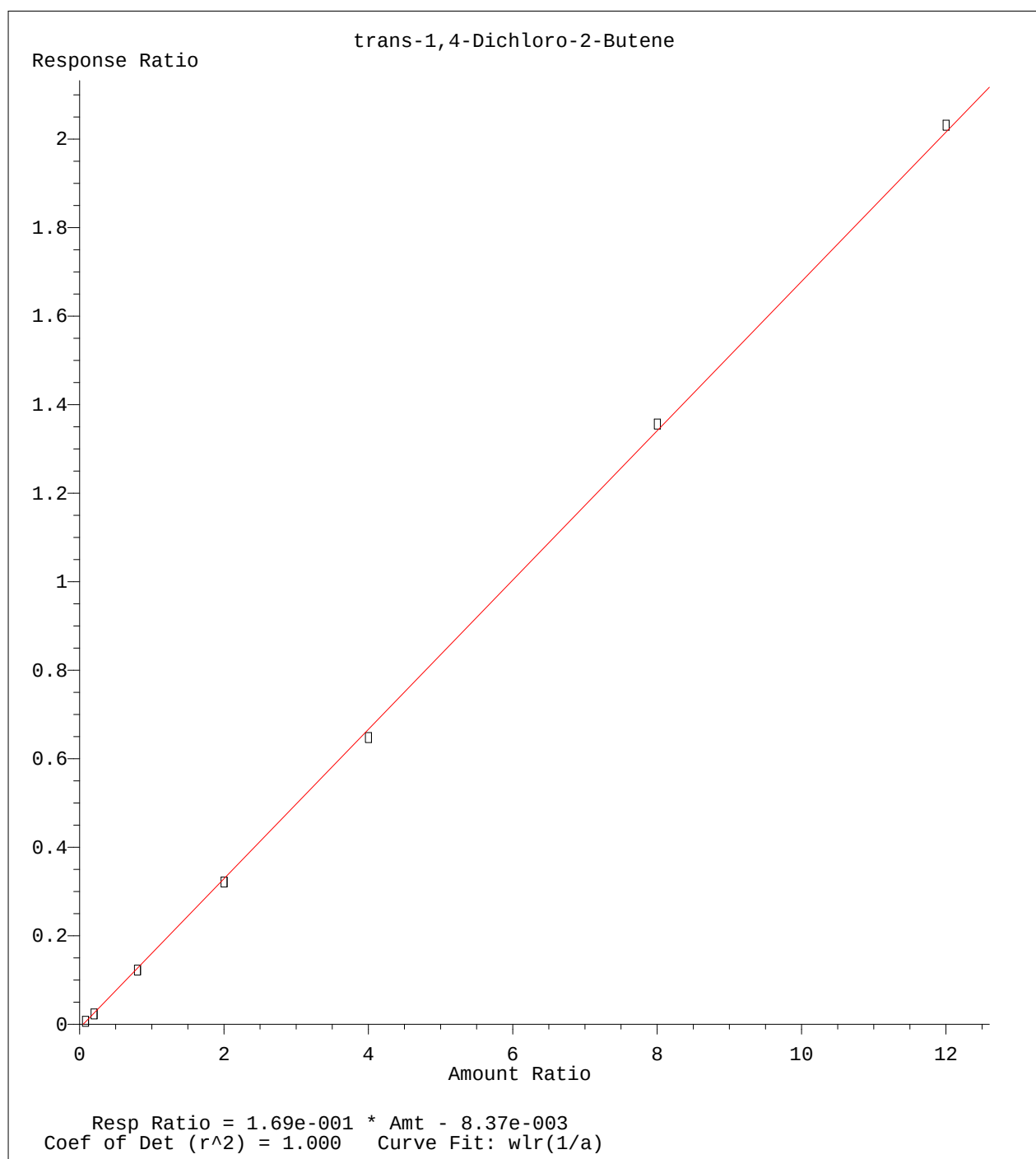
Method Name: C:\MSDCHEM\1\METHODS\8260WTR.M
Calibration Table Last Updated: Wed Nov 14 12:48:44 2012



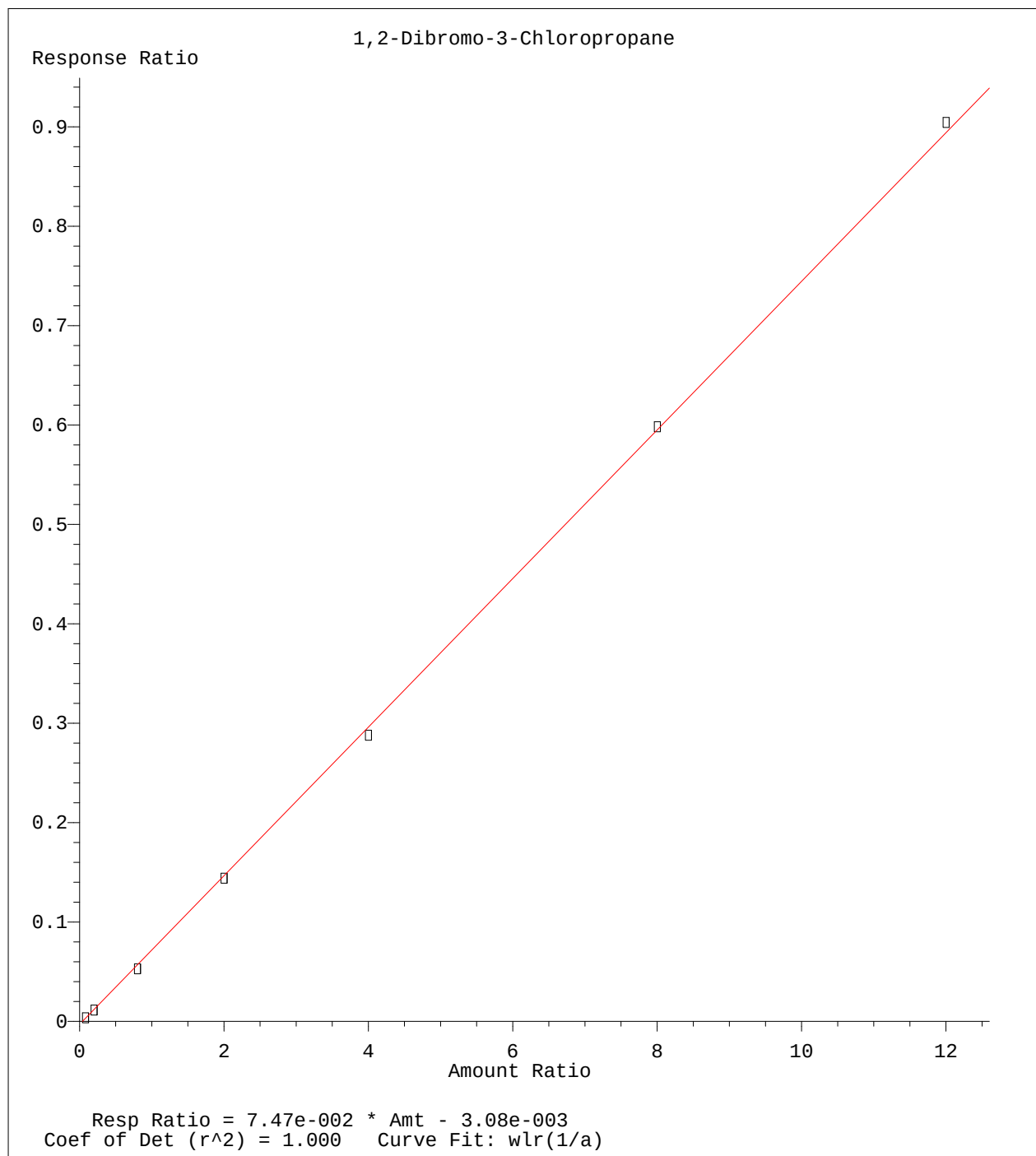
Method Name: C:\MSDCHEM\1\METHODS\8260WTR.M
Calibration Table Last Updated: Wed Nov 14 12:48:44 2012



Method Name: C:\MSDCHEM\1\METHODS\8260WTR.M
Calibration Table Last Updated: Wed Nov 14 12:48:44 2012



Method Name: C:\MSDCHEM\1\METHODS\8260WTR.M
Calibration Table Last Updated: Wed Nov 14 12:48:44 2012



Method Name: C:\MSDCHEM\1\METHODS\8260WTR.M
Calibration Table Last Updated: Wed Nov 14 12:48:44 2012

Data File : C:\MSDCHEM\1\DATA\111212\6M112633.D Vial: 14
 Acq On : 12 Nov 2012 20:52 Operator: adc
 Sample : WG414018-12 50.0 ug/L ALTSRC 8260 Inst : HPMS6
 Misc : 1,1 STD54557 Multiplr: 1.00
 MS Integration Params: RTEINT.P
 Quant Time: Nov 14 12:59:08 2012 Quant Results File: 8260WTR.RES

Quant Method : C:\MSDCHEM\1\METHODS\8260WTR.M (RTE Integrator)
 Title : 8260B/624_WATER SOP:OVLMSV01 011/12/12 - HPMS6
 Last Update : Wed Nov 14 12:48:44 2012
 Response via : Initial Calibration
 DataAcq Meth : 8260WTR

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) Fluorobenzene	10.32	96	528633	25.00	ug/L	0.00
57) Chlorobenzene-d5	14.80	117	373777	25.00	ug/L	0.00
78) 1,4-Dichlorobenzene-d4	18.35	152	183647	25.00	ug/L	0.00

System Monitoring Compounds						
37) Dibromofluoromethane	9.12	111	129258	23.8557	ug/L	0.00
Spiked Amount	25.000	Range	86 - 118	Recovery	=	95.44%
43) 1,2-Dichloroethane-d4	9.86	65	124477	23.9731	ug/L	0.00
Spiked Amount	25.000	Range	80 - 120	Recovery	=	95.88%
58) Toluene-d8	12.59	98	414349	22.5997	ug/L	0.00
Spiked Amount	25.000	Range	88 - 110	Recovery	=	90.40%
80) p-Bromofluorobenzene	16.57	95	155709	23.3859	ug/L	0.00
Spiked Amount	25.000	Range	86 - 115	Recovery	=	93.56%

Target Compounds	R.T.	QIon	Response	Conc	Units	Qvalue
2) Dichlorodifluoromethane	2.64	85	281910	67.7625	ug/L	100
3) Chloromethane	3.00	50	347033	46.9217	ug/L	98
4) Vinyl Chloride	3.18	62	269970	44.2621	ug/L	100
5) 1,3-Butadiene	3.22	54	77903	21.8272	ug/L	99
6) Bromomethane	3.94	94	200802	45.8132	ug/L	99
7) Chloroethane	4.09	64	195794	52.5030	ug/L	100
8) Trichlorofluoromethane	4.55	101	475914	54.8281	ug/L	100
9) Diethyl ether	5.09	59	326064	137.0979	ug/L	99
10) Isoprene	5.11	67	376400	39.7616	ug/L	100
11) Acrolein	5.31	56	40029	173.0783	ug/L	93
12) 1,1,2-Trichloro-1,2,2-Trif	5.34	101	283078	57.2456	ug/L	97
13) Acetone	5.42	43	35665	51.2341	ug/L	97
14) 1,1-Dichloroethene	5.64	61	441108	51.0562	ug/L	99
15) Tert-Butyl Alcohol	5.78	59	31299	160.4028	ug/L	99
16) Dimethyl Sulfide	5.92	62	309395	47.8695	ug/L	99
17) Iodomethane	6.16	142	185613	44.9492	ug/L	97
18) Methyl acetate	6.21	43	99495	44.3956	ug/L	99
19) Methylene Chloride	6.47	84	259507	50.4650	ug/L	99
20) Carbon Disulfide	6.48	76	791787	51.6964	ug/L	99
21) Acrylonitrile	6.67	53	55648	55.6765	ug/L	100
22) Methyl Tert Butyl Ether	6.71	73	502071	50.5201	ug/L	100
23) trans-1,2-Dichloroethene	6.95	96	276562	53.1085	ug/L	99
24) n-Hexane	7.05	57	275823	47.9214	ug/L	99
25) Diisopropyl ether	7.45	45	1575232	101.5573	ug/L	100
26) Vinyl Acetate	7.63	43	345876	61.9312	ug/L	100
27) 1,1-Dichloroethane	7.63	63	523780	50.7878	ug/L	99
28) Ethyl-Tert-Butyl ether	8.08	59	1330154	96.3808	ug/L	99
29) 2-Butanone	8.27	43	52246	50.7235	ug/L	100
30) Propionitrile	8.39	54	30617	95.0373	ug/L	97
31) 2,2-Dichloropropane	8.49	77	392497	50.2500	ug/L	99
32) cis-1,2-Dichloroethene	8.57	96	294002	52.0706	ug/L	99
33) Chloroform	8.80	83	481068	51.9786	ug/L	99
34) 1-Bromopropane	8.95	122	53890	52.6611	ug/L	99
35) Bromochloromethane	9.05	130	165153	51.9506	ug/L	100
36) Tetrahydrofuran	9.08	42	61666	97.1620	ug/L	100
38) 1,1,1-Trichloroethane	9.40	97	441284	52.1624	ug/L	99
39) Cyclohexane	9.42	56	411265	44.5385	ug/L	100
40) 1,1-Dichloropropene	9.62	75	368556	52.3607	ug/L	98
41) Tert-Amyl-Methyl ether	9.78	73	1005388	97.4179	ug/L	100
42) Carbon Tetrachloride	9.78	117	405766	52.6455	ug/L	100

(#) = qualifier out of range (m) = manual integration
 6M112633.D 8260WTR.M Wed Nov 14 12:59:09 2012

Data File : C:\MSDCHEM\1\DATA\111212\6M112633.D

Vial: 14

Acq On : 12 Nov 2012 20:52

Operator: adc

Sample : WG414018-12 50.0 ug/L ALTSRC 8260

Inst : HPMS6

Misc : 1,1 STD54557

Multiplr: 1.00

MS Integration Params: RTEINT.P

Quant Time: Nov 14 12:59:08 2012

Quant Results File: 8260WTR.RES

Quant Method : C:\MSDCHEM\1\METHODS\8260WTR.M (RTE Integrator)

Title : 8260B/624_WATER SOP:OVLMSV01 011/12/12 - HPMS6

Last Update : Wed Nov 14 12:48:44 2012

Response via : Initial Calibration

DataAcq Meth : 8260WTR

Compound	R.T.	QIon	Response	Conc	Unit	Qvalue
44) Heptane	9.76	57	21281	91.2024	ug/L	90
45) 1,2-Dichloroethane	9.99	62	344647	53.2238	ug/L	99
46) Benzene	10.02	78	1023414	50.3990	ug/L	99
47) Trichloroethene	10.89	130	295055	50.6165	ug/L	99
48) Methylcyclohexane	10.98	83	301305	47.0507	ug/L	99
49) 1,2-Dichloropropane	11.14	63	282081	54.3376	ug/L	99
50) 1,4-Dioxane	11.48	88	1495	118.6300	ug/L	91
51) Bromodichloromethane	11.48	83	338407	52.2658	ug/L	99
52) Dibromomethane	11.56	93	128510	47.9615	ug/L	100
53) 2-Chloroethyl Vinyl Ether	11.88	63	107641	48.8901	ug/L	100
54) 4-Methyl-2-Pentanone	11.92	58	46906	49.6947	ug/L	99
55) cis-1,3-Dichloropropene	12.24	75	410171	57.8961	ug/L	99
56) Dimethyl Disulfide	12.51	79	206695	48.3464	ug/L	100
59) Toluene	12.72	91	1065494	50.3641	ug/L	100
60) Ethyl Methacrylate	12.90	69	186753	45.2789	ug/L	99
62) trans-1,3-Dichloropropene	12.95	75	317279	46.4979	ug/L	99
63) 1,1,2-Trichloroethane	13.19	97	172037	49.9568	ug/L	100
64) 2-Hexanone	13.16	43	71481	49.9891	ug/L	100
65) 1,3-Dichloropropane	13.54	76	292638	54.6667	ug/L	99
66) Tetrachloroethene	13.66	166	260953	50.5135	ug/L	99
67) Dibromochloromethane	13.96	129	228925	56.6795	ug/L	100
68) 1,2-Dibromoethane	14.25	107	170415	49.1180	ug/L	100
69) 1-Chlorohexane	14.42	91	292915	45.2834	ug/L	100
70) Chlorobenzene	14.85	112	663578	46.8030	ug/L	100
71) 1,1,1,2-Tetrachloroethane	14.90	131	269559	52.6873	ug/L	100
72) Ethylbenzene	14.91	106	386783	49.8882	ug/L	35
73) m-,p-Xylene	15.01	106	916816	97.4393	ug/L	100
74) o-Xylene	15.67	106	414457	46.8138	ug/L	99
75) Styrene	15.72	104	780111	53.4111	ug/L	98
76) Bromoform	16.25	173	128815	46.8068	ug/L	99
77) Isopropylbenzene	16.19	105	1008693	47.1930	ug/L	100
79) 1,1,2,2-Tetrachloroethane	16.43	83	175660	53.5158	ug/L	99
81) 1,2,3-Trichloropropane	16.66	110	49369	50.4516	ug/L	99
82) trans-1,4-Dichloro-2-Butene	16.74	53	47382	39.4779	ug/L	96
83) n-Propylbenzene	16.78	91	1143775	47.4841	ug/L	100
84) Bromobenzene	16.88	156	276294	52.8584	ug/L	100
85) 1,3,5-Trimethylbenzene	17.00	105	919563	52.0476	ug/L	100
86) 2-Chlorotoluene	17.07	91	840111	47.7810	ug/L	95
87) 4-Chlorotoluene	17.13	91	753884	46.8027	ug/L	96
88) a-Methylstyrene	17.48	118	506968	49.0084	ug/L	# 1
89) tert-Butylbenzene	17.55	134	157116	47.2982	ug/L	99
90) 1,2,4-Trimethylbenzene	17.61	105	947294	51.6096	ug/L	100
91) sec-Butylbenzene	17.86	105	914054	47.6851	ug/L	100
92) p-Isopropyltoluene	18.07	119	805923	48.9115	ug/L	99
93) 1,3-Dichlorobenzene	18.24	146	472466	47.2484	ug/L	100
94) 1,4-Dichlorobenzene	18.40	146	514445	50.3029	ug/L	100
95) n-Butylbenzene	18.68	91	719489	51.1896	ug/L	100
96) 1,2-Dichlorobenzene	18.97	146	416394	47.2758	ug/L	100
97) 1,2-Dibromo-3-Chloropropan	20.15	75	27069	50.3326	ug/L	99
98) 1,2,4-Trichlorobenzene	21.50	180	272091	50.8944	ug/L	100
99) Hexachlorobutadiene	21.69	225	117904	54.5710	ug/L	99
100) Naphthalene	21.91	128	462731	49.8553	ug/L	100
101) 1,2,3-Trichlorobenzene	22.28	180	227882	51.8239	ug/L	99

 (#) = qualifier out of range (m) = manual integration

6M112633.D 8260WTR.M Wed Nov 14 12:59:09 2012

Page 2

Data File : C:\MSDCHEM\1\DATA\111212\6M112633.D

Vial: 14

Acq On : 12 Nov 2012 20:52

Operator: adc

Sample : WG414018-12 50.0 ug/L ALTSRC 8260

Inst : HPMS6

Misc : 1,1 STD54557

Multiplr: 1.00

MS Integration Params: RTEINT.P

Quant Time: Nov 14 12:59 2012

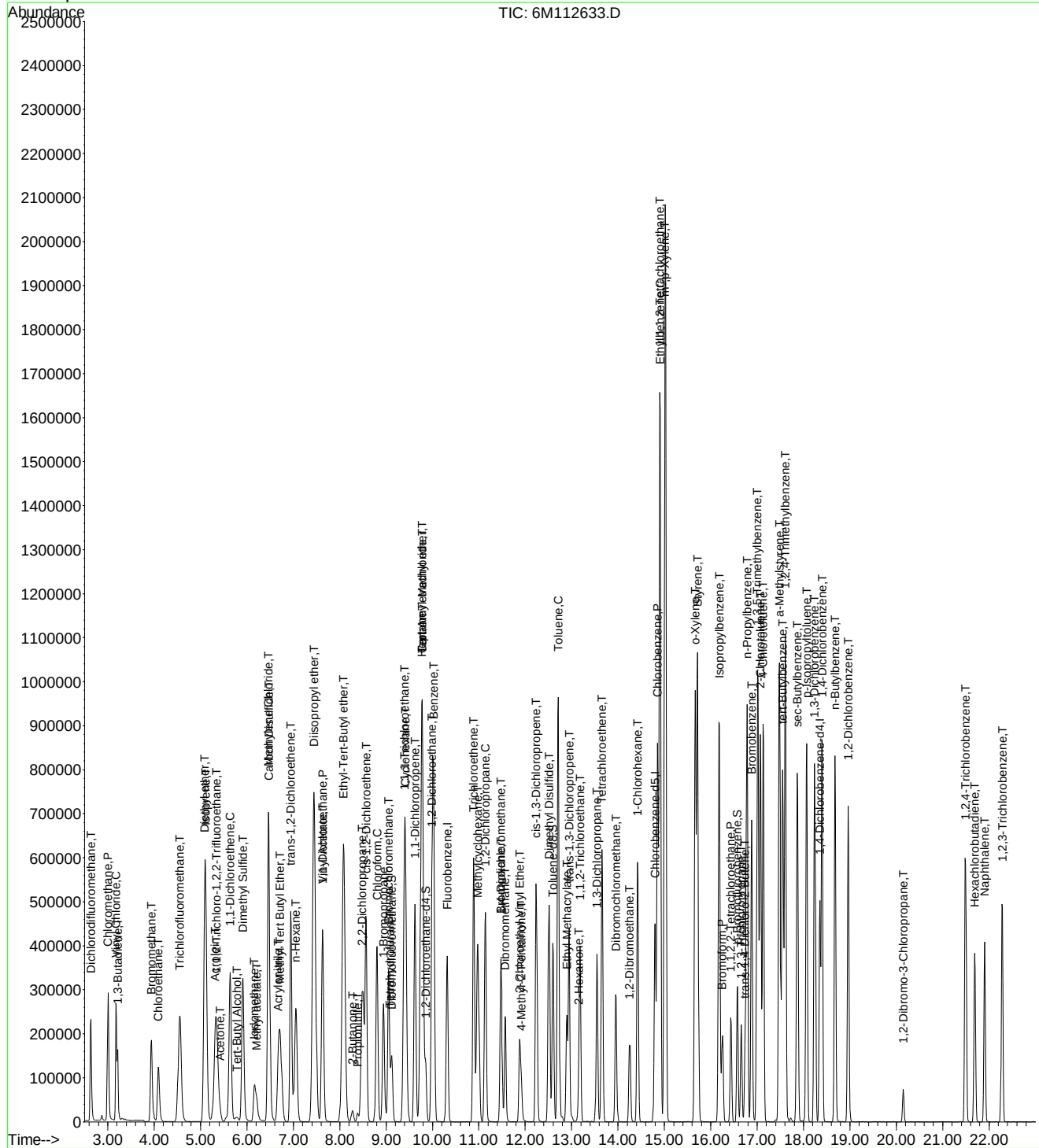
Quant Results File: 8260WTR.RES

Method : C:\MSDCHEM\1\METHODS\8260WTR.M (RTE Integrator)

Title : 8260B/624_WATER SOP:OVLMSV01 011/12/12 - HPMS6

Last Update : Wed Nov 14 12:48:44 2012

Response via : Initial Calibration



Data File : C:\MSDCHEM\1\DATA\111212\6M112633.D
 Acq On : 12 Nov 2012 20:52
 Sample : WG414018-12 50.0 ug/L ALTSRC 8260
 Misc : 1,1 STD54557
 MS Integration Params: RTEINT.P

Vial: 14
 Operator: adc
 Inst : HPMS6
 Multiplr: 1.00

Method : C:\MSDCHEM\1\METHODS\8260WTR.M (RTE Integrator)
 Title : 8260B/624 WATER SOP:OVLMSV01 011/12/12 - HPMS6
 Last Update : Wed Nov 14 12:48:44 2012
 Response via : Multiple Level Calibration

Min. RRF : 0.000 Min. Rel. Area : 50% Max. R.T. Dev 0.50min
 Max. RRF Dev : 25% Max. Rel. Area : 150%

	Compound	Amount	Calc.	%Dev	Area%	Dev(min)
1 I	Fluorobenzene	25.0000	25.0000	0.0	100	0.00
2 T	Dichlorodifluoromethane	50.0000	67.7625	-35.5#	130	0.00
3 P	Chloromethane	50.0000	46.9217	6.2	96	0.00
4 C	Vinyl Chloride	50.0000	44.2621	11.5	89	-0.01
5 T	1,3-Butadiene	50.0000	21.8272	56.3#	46	0.00
6 T	Bromomethane	50.0000	45.8132	8.4	102	0.00
7 T	Chloroethane	50.0000	52.5030	-5.0	102	-0.01
8 T	Trichlorofluoromethane	50.0000	54.8282	-9.7	107	-0.01
9 T	Diethyl ether	100.0000	137.0980	-37.1#	136	0.00
10 T	Isoprene	50.0000	39.7616	20.5	79	0.00
11 T	Acrolein	50.0000	173.0783	-246.2#	333	0.00
12 T	1,1,2-Trichloro-1,2,2-Trifl	50.0000	57.2456	-14.5	115	0.00
13 T	Acetone	50.0000	51.2341	-2.5	103	0.00
14 C	1,1-Dichloroethene	50.0000	51.0562	-2.1	101	0.00
15 T	Tert-Butyl Alcohol	200.0000	160.4028	19.8	82	0.00
16 T	Dimethyl Sulfide	50.0000	47.8695	4.3	94	0.00
17 T	Iodomethane	50.0000	44.9492	10.1	85	0.00
18 T	Methyl acetate	50.0000	44.3956	11.2	88	0.00
19 T	Methylene Chloride	50.0000	50.4650	-0.9	102	0.00
20 T	Carbon Disulfide	50.0000	51.6964	-3.4	102	0.00
21 T	Acrylonitrile	50.0000	55.6765	-11.4	106	0.00
22 T	Methyl Tert Butyl Ether	50.0000	50.5201	-1.0	99	0.00
23 T	trans-1,2-Dichloroethene	50.0000	53.1084	-6.2	104	-0.01
24 T	n-Hexane	50.0000	47.9214	4.2	97	-0.01
25 T	Diisopropyl ether	100.0000	101.5573	-1.6	101	0.00
26 T	Vinyl Acetate	50.0000	61.9312	-23.9	116	0.00
27 P	1,1-Dichloroethane	50.0000	50.7878	-1.6	100	0.00
28 T	Ethyl-Tert-Butyl ether	100.0000	96.3808	3.6	96	0.00
29 T	2-Butanone	50.0000	50.7235	-1.4	100	0.00
30 T	Propionitrile	100.0000	95.0374	5.0	91	0.00
31 T	2,2-Dichloropropane	50.0000	50.2500	-0.5	96	-0.01
32 T	cis-1,2-Dichloroethene	50.0000	52.0706	-4.1	102	0.00
33 C	Chloroform	50.0000	51.9786	-4.0	102	0.00
34	1-Bromopropane	50.0000	52.6611	-5.3	108	0.00
35 T	Bromochloromethane	50.0000	51.9507	-3.9	102	0.00
36 T	Tetrahydrofuran	100.0000	97.1620	2.8	98	-0.01
37 S	Dibromofluoromethane	25.0000	23.8557	4.6	97	0.00
38 T	1,1,1-Trichloroethane	50.0000	52.1624	-4.3	101	0.00
39 T	Cyclohexane	50.0000	44.5385	10.9	92	0.00
40 T	1,1-Dichloropropene	50.0000	52.3607	-4.7	102	0.00
41 T	Tert-Amyl-Methyl ether	100.0000	97.4179	2.6	97	0.00
42 T	Carbon Tetrachloride	50.0000	52.6455	-5.3	102	0.00
43 S	1,2-Dichloroethane-d4	25.0000	23.9731	4.1	97	0.00
44	Heptane	-1.0000	91.2024	0.0	100	-0.01
45 T	1,2-Dichloroethane	50.0000	53.2238	-6.4	103	0.00
46 T	Benzene	50.0000	50.3990	-0.8	101	0.00
47 T	Trichloroethene	50.0000	50.6165	-1.2	104	0.00
48 T	Methylcyclohexane	50.0000	47.0506	5.9	95	0.00
49 C	1,2-Dichloropropane	50.0000	54.3376	-8.7	104	0.00
50 T	1,4-Dioxane	200.0000	118.6300	40.7#	46	0.00
51 T	Bromodichloromethane	50.0000	52.2658	-4.5	100	0.00
52 T	Dibromomethane	50.0000	47.9615	4.1	101	0.00
53 T	2-Chloroethyl Vinyl Ether	50.0000	48.8901	2.2	101	0.00
54 T	4-Methyl-2-Pentanone	50.0000	49.6947	0.6	95	0.00

(#) = Out of Range

6M112633.D 8260WTR.M

Wed Nov 14 12:59:16 2012

Page 1

Data File : C:\MSDCHEM\1\DATA\111212\6M112633.D
 Acq On : 12 Nov 2012 20:52
 Sample : WG414018-12 50.0 ug/L ALTSRC 8260
 Misc : 1,1 STD54557
 MS Integration Params: RTEINT.P

Vial: 14
 Operator: adc
 Inst : HPMS6
 Multiplr: 1.00

Method : C:\MSDCHEM\1\METHODS\8260WTR.M (RTE Integrator)
 Title : 8260B/624 WATER SOP:OVLMSV01 011/12/12 - HPMS6
 Last Update : Wed Nov 14 12:48:44 2012
 Response via : Multiple Level Calibration

Min. RRF : 0.000 Min. Rel. Area : 50% Max. R.T. Dev 0.50min
 Max. RRF Dev : 25% Max. Rel. Area : 150%

	Compound	Amount	Calc.	%Dev	Area%	Dev(min)
55 T	cis-1,3-Dichloropropene	50.0000	57.8961	-15.8	105	0.00
56 T	Dimethyl Disulfide	50.0000	48.3464	3.3	93	0.00
57 I	Chlorobenzene-d5	25.0000	25.0000	0.0	101	0.00
58 S	Toluene-d8	25.0000	22.5997	9.6	94	0.00
59 C	Toluene	50.0000	50.3640	-0.7	99	0.00
60 T	Ethyl Methacrylate	50.0000	45.2789	9.4	93	0.00
61	Paraldehyde	100.0000	0.0000	100.0#	0	-13.00#
62 T	trans-1,3-Dichloropropene	50.0000	46.4979	7.0	99	0.00
63 T	1,1,2-Trichloroethane	50.0000	49.9568	0.1	104	0.00
64 T	2-Hexanone	50.0000	49.9891	0.0	95	0.00
65 T	1,3-Dichloropropane	50.0000	54.6667	-9.3	103	0.00
66 T	Tetrachloroethene	50.0000	50.5135	-1.0	99	0.00
67 T	Dibromochloromethane	50.0000	56.6795	-13.4	99	0.00
68 T	1,2-Dibromoethane	50.0000	49.1180	1.8	102	0.00
69 T	1-Chlorohexane	50.0000	45.2834	9.4	89	0.00
70 P	Chlorobenzene	50.0000	46.8030	6.4	93	0.00
71 T	1,1,1,2-Tetrachloroethane	50.0000	52.6873	-5.4	102	0.00
72 C	Ethylbenzene	50.0000	49.8882	0.2	100	0.00
73 T	m-,p-Xylene	100.0000	97.4393	2.6	97	0.00
74 T	o-Xylene	50.0000	46.8138	6.4	94	0.00
75 T	Styrene	50.0000	53.4111	-6.8	102	0.00
76 P	Bromoform	50.0000	46.8068	6.4	103	0.00
77 T	Isopropylbenzene	50.0000	47.1930	5.6	92	0.00
78 I	1,4-Dichlorobenzene-d4	25.0000	25.0000	0.0	101	0.00
79 P	1,1,2,2-Tetrachloroethane	50.0000	53.5158	-7.0	102	0.00
80 S	p-Bromofluorobenzene	25.0000	23.3860	6.5	96	0.00
81 T	1,2,3-Trichloropropane	50.0000	50.4516	-0.9	102	0.00
82 T	trans-1,4-Dichloro-2-Butene	50.0000	39.4779	21.0	81	0.00
83 T	n-Propylbenzene	50.0000	47.4841	5.0	93	0.00
84 T	Bromobenzene	50.0000	52.8584	-5.7	99	0.00
85 T	1,3,5-Trimethylbenzene	50.0000	52.0476	-4.1	103	0.00
86 T	2-Chlorotoluene	50.0000	47.7810	4.4	107	0.00
87 T	4-Chlorotoluene	50.0000	46.8027	6.4	91	0.00
88 T	a-Methylstyrene	50.0000	49.0084	2.0	95	0.00
89 T	tert-Butylbenzene	50.0000	47.2982	5.4	95	0.00
90 T	1,2,4-Trimethylbenzene	50.0000	51.6096	-3.2	103	0.00
91 T	sec-Butylbenzene	50.0000	47.6851	4.6	93	0.00
92 T	p-Isopropyltoluene	50.0000	48.9115	2.2	97	0.00
93 T	1,3-Dichlorobenzene	50.0000	47.2484	5.5	93	0.00
94 T	1,4-Dichlorobenzene	50.0000	50.3028	-0.6	100	0.00
95 T	n-Butylbenzene	50.0000	51.1896	-2.4	101	0.00
96 T	1,2-Dichlorobenzene	50.0000	47.2758	5.4	93	0.00
97 T	1,2-Dibromo-3-Chloropropane	50.0000	50.3326	-0.7	103	0.00
98 T	1,2,4-Trichlorobenzene	50.0000	50.8944	-1.8	101	0.00
99 T	Hexachlorobutadiene	50.0000	54.5710	-9.1	106	0.00
100 T	Naphthalene	50.0000	49.8554	0.3	99	0.00
101 T	1,2,3-Trichlorobenzene	50.0000	51.8239	-3.6	101	0.00

(#) = Out of Range SPCC's out = 0 CCC's out = 0
 6M112633.D 8260WTR.M Wed Nov 14 12:59:16 2012

Page 2

Data File : C:\MSDCHEM\1\data\111412\6M112668.D

Vial: 2

Acq On : 14 Nov 2012 11:47

Operator: FJB

Sample : WG414232-02 50ug/L CCV 8260

Inst : HPMS6

Misc : 1,1 STD54883

Multiplr: 1.00

MS Integration Params: RTEINT.P

Quant Time: Nov 14 12:10:16 2012

Quant Results File: 8260WTR.RES

Quant Method : C:\MSDCHEM\1\METHODS\8260WTR.M (RTE Integrator)

Title : 8260B/624_WATER SOP:OVLMSV01 011/12/12 - HPMS6

Last Update : Tue Nov 13 09:04:10 2012

Response via : Initial Calibration

DataAcq Meth : 8260WTR

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) Fluorobenzene	10.32	96	597787	25.00	ug/L	0.00
57) Chlorobenzene-d5	14.80	117	415446	25.00	ug/L	0.00
78) 1,4-Dichlorobenzene-d4	18.35	152	192038	25.00	ug/L	0.00

System Monitoring Compounds

37) Dibromofluoromethane	9.12	111	155294	25.3453	ug/L	0.00
Spiked Amount	25.000	Range	86 - 118	Recovery	=	101.40%
43) 1,2-Dichloroethane-d4	9.86	65	142175	24.2140	ug/L	0.00
Spiked Amount	25.000	Range	80 - 120	Recovery	=	96.84%
58) Toluene-d8	12.59	98	507802	24.9189	ug/L	0.00
Spiked Amount	25.000	Range	88 - 110	Recovery	=	99.68%
80) p-Bromofluorobenzene	16.57	95	182920	26.2724	ug/L	0.00
Spiked Amount	25.000	Range	86 - 115	Recovery	=	105.08%

Target Compounds

						Qvalue
2) Dichlorodifluoromethane	2.64	85	270904	57.5840	ug/L	99
3) Chloromethane	3.00	50	393624	47.0644	ug/L	100
4) Vinyl Chloride	3.19	62	325076	47.1313	ug/L	100
5) 1,3-Butadiene	3.23	54	195213	55.8278	ug/L	99
6) Bromomethane	3.94	94	240438	55.7462	ug/L	99
7) Chloroethane	4.10	64	229485	54.4185	ug/L	100
8) Trichlorofluoromethane	4.56	101	554594	56.5013	ug/L	99
9) Diethyl ether	5.09	59	237583	88.3388	ug/L	99
10) Isoprene	5.11	67	558933	52.2134	ug/L	99
11) Acrolein	5.32	56	9988	38.1904	ug/L	99
12) 1,1,2-Trichloro-1,2,2-Trif	5.34	101	305887	54.7022	ug/L	100
13) Acetone	5.42	43	37402	47.5138	ug/L	98
14) 1,1-Dichloroethene	5.64	61	519635	53.1876	ug/L	100
15) Tert-Butyl Alcohol	5.77	59	44003	199.4214	ug/L	97
16) Dimethyl Sulfide	5.91	62	374304	51.2127	ug/L	99
17) Iodomethane	6.16	142	252435	53.6760	ug/L	99
18) Methyl acetate	6.21	43	119145	47.0134	ug/L	99
19) Methylene Chloride	6.47	84	293539	50.4795	ug/L	99
20) Carbon Disulfide	6.48	76	909156	52.4926	ug/L	99
21) Acrylonitrile	6.67	53	54745	48.4367	ug/L	97
22) Methyl Tert Butyl Ether	6.71	73	541346	48.1706	ug/L	100
23) trans-1,2-Dichloroethene	6.95	96	313309	53.2049	ug/L	100
24) n-Hexane	7.06	57	351306	53.9750	ug/L	99
25) Diisopropyl ether	7.45	45	1658726	94.5691	ug/L	100
26) Vinyl Acetate	7.63	43	309359	48.9846	ug/L	100
27) 1,1-Dichloroethane	7.63	63	599232	51.3822	ug/L	100
28) Ethyl-Tert-Butyl ether	8.08	59	1446986	92.7173	ug/L	100
29) 2-Butanone	8.27	43	51939	44.5921	ug/L	98
30) Propionitrile	8.39	54	34490	94.6744	ug/L	99
31) 2,2-Dichloropropane	8.50	77	485248	54.9378	ug/L	99
32) cis-1,2-Dichloroethene	8.57	96	327665	51.3192	ug/L	100
33) Chloroform	8.80	83	539006	51.5015	ug/L	100
34) 1-Bromopropane	8.95	122	56710	49.0566	ug/L	98
35) Bromochloromethane	9.05	130	176295	49.0503	ug/L	99
36) Tetrahydrofuran	9.09	42	75126	104.6764	ug/L	99
38) 1,1,1-Trichloroethane	9.40	97	492035	51.4331	ug/L	99
39) Cyclohexane	9.42	56	516799	49.4930	ug/L	99
40) 1,1-Dichloropropene	9.62	75	408850	51.3658	ug/L	99
41) Tert-Amyl-Methyl ether	9.77	73	1063885	91.1607	ug/L	99
42) Carbon Tetrachloride	9.77	117	458961	52.6585	ug/L	100

(#) = qualifier out of range (m) = manual integration
 6M112668.D 8260WTR.M Wed Nov 14 12:10:16 2012

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Data File : C:\MSDCHEM\1\data\111412\6M112668.D

Vial: 2

Acq On : 14 Nov 2012 11:47

Operator: FJB

Sample : WG414232-02 50ug/L CCV 8260

Inst : HPMS6

Misc : 1,1 STD54883

Multiplr: 1.00

MS Integration Params: RTEINT.P

Quant Time: Nov 14 12:10:16 2012

Quant Results File: 8260WTR.RES

Quant Method : C:\MSDCHEM\1\METHODS\8260WTR.M (RTE Integrator)

Title : 8260B/624_WATER SOP:OVLMSV01 011/12/12 - HPMS6

Last Update : Tue Nov 13 09:04:10 2012

Response via : Initial Calibration

DataAcq Meth : 8260WTR

Compound	R.T.	QIon	Response	Conc	Unit	Qvalue
44) Heptane	9.76	57	22747	86.2078	ug/L	88
45) 1,2-Dichloroethane	9.99	62	361453	49.3618	ug/L	100
46) Benzene	10.02	78	1138396	49.5760	ug/L	99
47) Trichloroethene	10.89	130	316429	48.0036	ug/L	100
48) Methylcyclohexane	10.98	83	368056	50.8254	ug/L	100
49) 1,2-Dichloropropane	11.14	63	294567	50.1786	ug/L	99
50) 1,4-Dioxane	11.49	88	3480	202.6657	ug/L	96
51) Bromodichloromethane	11.48	83	369592	50.4788	ug/L	99
52) Dibromomethane	11.56	93	134772	44.5059	ug/L	100
53) 2-Chloroethyl Vinyl Ether	11.88	63	102515	41.3415	ug/L	99
54) 4-Methyl-2-Pentanone	11.92	58	45070	42.2257	ug/L	98
55) cis-1,3-Dichloropropene	12.24	75	412130	51.4430	ug/L	99
56) Dimethyl Disulfide	12.51	79	229805	47.5337	ug/L	100
59) Toluene	12.72	91	1163352	49.4742	ug/L	100
60) Ethyl Methacrylate	12.90	69	191401	41.7610	ug/L	99
62) trans-1,3-Dichloropropene	12.95	75	328540	43.3663	ug/L	99
63) 1,1,2-Trichloroethane	13.19	97	167590	43.8161	ug/L	99
64) 2-Hexanone	13.15	43	66515	41.8507	ug/L	99
65) 1,3-Dichloropropane	13.54	76	289140	48.5957	ug/L	98
66) Tetrachloroethene	13.65	166	291749	50.8104	ug/L	100
67) Dibromochloromethane	13.95	129	241013	53.6873	ug/L	99
68) 1,2-Dibromoethane	14.26	107	169502	43.9856	ug/L	100
69) 1-Chlorohexane	14.43	91	359114	49.9492	ug/L	98
70) Chlorobenzene	14.85	112	762350	48.3765	ug/L	100
71) 1,1,1,2-Tetrachloroethane	14.90	131	280155	49.2661	ug/L	100
72) Ethylbenzene	14.91	106	414876	48.1445	ug/L	35
73) m-,p-Xylene	15.01	106	1032300	98.7088	ug/L	99
74) o-Xylene	15.67	106	477644	48.5396	ug/L	99
75) Styrene	15.72	104	804833	49.5768	ug/L	100
76) Bromoform	16.25	173	127022	41.6082	ug/L	100
77) Isopropylbenzene	16.19	105	1166816	49.1155	ug/L	100
79) 1,1,2,2-Tetrachloroethane	16.43	83	167795	48.8860	ug/L	100
81) 1,2,3-Trichloropropane	16.66	110	47126	46.1121	ug/L	94
82) trans-1,4-Dichloro-2-Butene	16.74	53	56130	44.5584	ug/L	94
83) n-Propylbenzene	16.78	91	1316988	52.2861	ug/L	99
84) Bromobenzene	16.88	156	287361	52.5736	ug/L	99
85) 1,3,5-Trimethylbenzene	17.00	105	951680	51.5119	ug/L	99
86) 2-Chlorotoluene	17.07	91	938273	51.0322	ug/L	93
87) 4-Chlorotoluene	17.13	91	874297	51.9066	ug/L	100
88) a-Methylstyrene	17.48	118	564795	52.2128	ug/L	# 1
89) tert-Butylbenzene	17.55	134	179033	51.5412	ug/L	99
90) 1,2,4-Trimethylbenzene	17.61	105	984223	51.2785	ug/L	100
91) sec-Butylbenzene	17.86	105	1052878	52.5273	ug/L	100
92) p-Isopropyltoluene	18.07	119	901768	52.3370	ug/L	100
93) 1,3-Dichlorobenzene	18.24	146	533325	51.0041	ug/L	100
94) 1,4-Dichlorobenzene	18.40	146	540649	50.5552	ug/L	100
95) n-Butylbenzene	18.68	91	772757	52.5771	ug/L	99
96) 1,2-Dichlorobenzene	18.96	146	459710	49.9131	ug/L	100
97) 1,2-Dibromo-3-Chloropropan	20.15	75	24996	44.5675	ug/L	97
98) 1,2,4-Trichlorobenzene	21.50	180	279132	49.9301	ug/L	100
99) Hexachlorobutadiene	21.69	225	121138	53.6180	ug/L	99
100) Naphthalene	21.91	128	456574	47.0426	ug/L	100
101) 1,2,3-Trichlorobenzene	22.28	180	226176	49.1884	ug/L	100

(#) = qualifier out of range (m) = manual integration
 6M112668.D 8260WTR.M Wed Nov 14 12:10:16 2012

Page 2

Data File : C:\MSDchem\1\data\111412\6M112668.D

Vial: 2

Acq On : 14 Nov 2012 11:47

Operator: FJB

Sample : WG414232-02 50ug/L CCV 8260

Inst : HPMS6

Misc : 1,1 STD54883

Multiplr: 1.00

MS Integration Params: RTEINT.P

Quant Time: Nov 14 12:10 2012

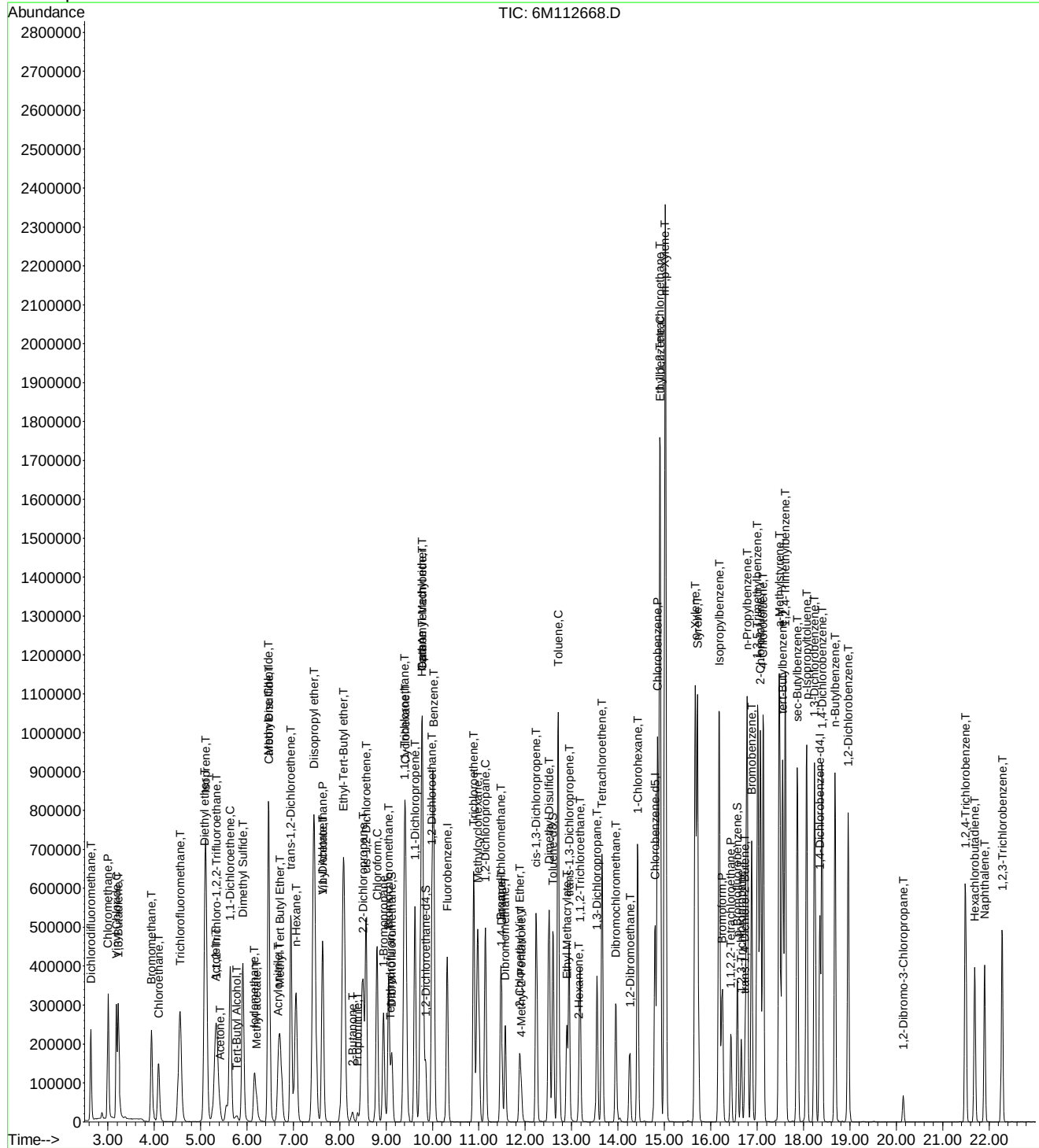
Quant Results File: 8260WTR.RES

Method : C:\MSDCHEM\1\METHODS\8260WTR.M (RTE Integrator)

Title : 8260B/624_WATER SOP:OVLMSV01 011/12/12 - HPMS6

Last Update : Tue Nov 13 09:04:10 2012

Response via : Initial Calibration



Evaluate Continuing Calibration Report

Data File : C:\MSDCHEM\1\DATA\111412\6M112668.D

Vial: 2

Acq On : 14 Nov 2012 11:47

Operator: FJB

Sample : WG414232-02 50ug/L CCV 8260

Inst : HPMS6

Misc : 1,1 STD54883

Multiplr: 1.00

MS Integration Params: RTEINT.P

Method : C:\MSDCHEM\1\METHODS\8260WTR.M (RTE Integrator)

Title : 8260B/624 WATER SOP:OVLMSV01 011/12/12 - HPMS6

Last Update : Tue Nov 13 09:04:10 2012

Response via : Multiple Level Calibration

Min. RRF : 0.000 Min. Rel. Area : 50% Max. R.T. Dev 0.50min

Max. RRF Dev : 25% Max. Rel. Area : 150%

	Compound	AvgRF	CCRF	%Dev	Area%	Dev(min)
1 I	Fluorobenzene	1.0000	1.0000	0.0	113	0.00
2 T	Dichlorodifluoromethane	0.1968	0.2266	-15.2	125	0.00
3 P	Chloromethane	0.3498	0.3292	5.9	109	0.00
4 C	Vinyl Chloride	0.2884	0.2719	5.7	107	0.00
5 T	1,3-Butadiene	0.1644	0.1633	0.7	116	0.00
6 T	Bromomethane	0.1804	0.2011	-11.5	122	0.00
7 T	Chloroethane	0.1764	0.1920	-8.8	120	0.00
8 T	Trichlorofluoromethane	0.4105	0.4639	-13.0	124	0.00
9 T	Diethyl ether	0.1125	0.0994	11.7	99	0.00
10 T	Isoprene	0.4477	0.4675	-4.4	117	0.00
11 T	Acrolein	0.0109	0.0083	23.7	83	0.01
12 T	1,1,2-Trichloro-1,2,2-Trifl	0.2339	0.2559	-9.4	124	0.00
13 T	Acetone	0.0329	0.0313	5.0	108	0.00
14 C	1,1-Dichloroethene	0.4086	0.4346	-6.4	119	0.00
15 T	Tert-Butyl Alcohol	0.0092	0.0092	0.3	115	-0.01
16 T	Dimethyl Sulfide	0.3057	0.3131	-2.4	114	0.00
17 T	Iodomethane	0.1853	0.2111	-13.9	115	0.00
18 T	Methyl acetate	0.1060	0.0997	6.0	105	0.00
19 T	Methylene Chloride	0.2432	0.2455	-1.0	115	0.00
20 T	Carbon Disulfide	0.7243	0.7604	-5.0	117	0.00
21 T	Acrylonitrile	0.0473	0.0458	3.1	105	0.00
22 T	Methyl Tert Butyl Ether	0.4700	0.4528	3.7	106	0.00
23 T	trans-1,2-Dichloroethene	0.2463	0.2621	-6.4	118	-0.01
24 T	n-Hexane	0.2722	0.2938	-8.0	123	0.00
25 T	Diisopropyl ether	0.7335	0.6937	5.4	106	0.00
26 T	Vinyl Acetate	0.2641	0.2587	2.0	104	0.00
27 P	1,1-Dichloroethane	0.4877	0.5012	-2.8	115	0.00
28 T	Ethyl-Tert-Butyl ether	0.6527	0.6051	7.3	104	0.00
29 T	2-Butanone	0.0487	0.0434	10.8	100	0.00
30 T	Propionitrile	0.0152	0.0144	5.4	103	0.00
31 T	2,2-Dichloropropane	0.3694	0.4059	-9.9	118	0.00
32 T	cis-1,2-Dichloroethene	0.2670	0.2741	-2.6	114	0.00
33 C	Chloroform	0.4377	0.4508	-3.0	114	0.00
34	1-Bromopropane	0.0411	0.0474	-15.5	113	0.00
35 T	Bromochloromethane	0.1379	0.1475	-6.9	109	0.00
36 T	Tetrahydrofuran	0.0300	0.0314	-4.7	120	0.00
37 S	Dibromofluoromethane	0.2562	0.2598	-1.4	117	0.00
38 T	1,1,1-Trichloroethane	0.4001	0.4116	-2.9	113	0.00
39 T	Cyclohexane	0.4367	0.4323	1.0	116	0.00
40 T	1,1-Dichloropropene	0.3329	0.3420	-2.7	113	0.00
41 T	Tert-Amyl-Methyl ether	0.4881	0.4449	8.8	103	0.00
42 T	Carbon Tetrachloride	0.3645	0.3839	-5.3	115	0.00
43 S	1,2-Dichloroethane-d4	0.2456	0.2378	3.1	111	0.00
44	Heptane	0.0110	0.0000	100.0#	107	-0.01
45 T	1,2-Dichloroethane	0.3062	0.3023	1.3	108	0.00
46 T	Benzene	0.9603	0.9522	0.8	113	0.00
47 T	Trichloroethene	0.2757	0.2647	4.0	111	0.00
48 T	Methylcyclohexane	0.3029	0.3079	-1.7	116	0.00
49 C	1,2-Dichloropropane	0.2455	0.2464	-0.4	108	0.00
50 T	1,4-Dioxane	0.0007	0.0007	-2.8	107	0.00
51 T	Bromodichloromethane	0.3062	0.3091	-1.0	110	0.00
52 T	Dibromomethane	0.1058	0.1127	-6.5	106	0.00
53 T	2-Chloroethyl Vinyl Ether	0.0938	0.0858	8.6	96	0.00
54 T	4-Methyl-2-Pentanone	0.0446	0.0377	15.5	92	0.00

(#) = Out of Range

6M112668.D 8260WTR.M

Wed Nov 14 12:11:08 2012

Page 1

Evaluate Continuing Calibration Report

Data File : C:\MSDCHEM\1\DATA\111412\6M112668.D

Vial: 2

Acq On : 14 Nov 2012 11:47

Operator: FJB

Sample : WG414232-02 50ug/L CCV 8260

Inst : HPMS6

Misc : 1,1 STD54883

Multiplr: 1.00

MS Integration Params: RTEINT.P

Method : C:\MSDCHEM\1\METHODS\8260WTR.M (RTE Integrator)

Title : 8260B/624 WATER SOP:OVLMSV01 011/12/12 - HPMS6

Last Update : Tue Nov 13 09:04:10 2012

Response via : Multiple Level Calibration

Min. RRF : 0.000 Min. Rel. Area : 50% Max. R.T. Dev 0.50min
 Max. RRF Dev : 25% Max. Rel. Area : 150%

	Compound	AvgRF	CCRF	%Dev	Area%	Dev(min)
55 T	cis-1,3-Dichloropropene	0.3350	0.3447	-2.9	106	0.00
56 T	Dimethyl Disulfide	0.2022	0.1922	4.9	104	0.00
57 I	Chlorobenzene-d5	1.0000	1.0000	0.0	112	0.00
58 S	Toluene-d8	1.2263	1.2223	0.3	116	0.00
59 C	Toluene	1.4150	1.4001	1.1	109	0.00
60 T	Ethyl Methacrylate	0.2690	0.2304	14.4	96	0.00
61	Paraldehyde	0.0000	0.0000	0.0	0#	-13.00#
62 T	trans-1,3-Dichloropropene	0.3916	0.3954	-1.0	103	0.00
63 T	1,1,2-Trichloroethane	0.2032	0.2017	0.7	102	0.00
64 T	2-Hexanone	0.0956	0.0800	16.3	88	0.00
65 T	1,3-Dichloropropane	0.3580	0.3480	2.8	101	0.00
66 T	Tetrachloroethene	0.3455	0.3511	-1.6	111	0.00
67 T	Dibromochloromethane	0.2701	0.2901	-7.4	104	0.00
68 T	1,2-Dibromoethane	0.2008	0.2040	-1.6	101	0.01
69 T	1-Chlorohexane	0.4326	0.4322	0.1	110	0.00
70 P	Chlorobenzene	0.9483	0.9175	3.2	107	0.00
71 T	1,1,1,2-Tetrachloroethane	0.3422	0.3372	1.5	106	0.00
72 C	Ethylbenzene	0.5186	0.4993	3.7	107	0.00
73 T	m-,p-Xylene	0.6293	0.6212	1.3	109	0.00
74 T	o-Xylene	0.5921	0.5749	2.9	108	0.00
75 T	Styrene	0.9769	0.9686	0.8	105	0.00
76 P	Bromoform	0.1565	0.1529	2.3	101	0.00
77 T	Isopropylbenzene	1.4296	1.4043	1.8	107	0.00
78 I	1,4-Dichlorobenzene-d4	1.0000	1.0000	0.0	105	0.00
79 P	1,1,2,2-Tetrachloroethane	0.4468	0.4369	2.2	98	0.00
80 S	p-Bromofluorobenzene	0.9064	0.9525	-5.1	113	0.00
81 T	1,2,3-Trichloropropane	0.1152	0.1227	-6.5	97	0.00
82 T	trans-1,4-Dichloro-2-Butene	0.1451	0.1461	-0.7	96	0.00
83 T	n-Propylbenzene	3.2790	3.4290	-4.6	107	0.00
84 T	Bromobenzene	0.7116	0.7482	-5.1	103	0.00
85 T	1,3,5-Trimethylbenzene	2.4051	2.4778	-3.0	107	0.00
86 T	2-Chlorotoluene	2.3935	2.4429	-2.1	119	0.00
87 T	4-Chlorotoluene	2.1928	2.2764	-3.8	106	0.00
88 T	a-Methylstyrene	1.4082	1.4705	-4.4	106	0.00
89 T	tert-Butylbenzene	0.4522	0.4661	-3.1	108	0.00
90 T	1,2,4-Trimethylbenzene	2.4987	2.5626	-2.6	107	0.00
91 T	sec-Butylbenzene	2.6094	2.7413	-5.1	108	0.00
92 T	p-Isopropyltoluene	2.2431	2.3479	-4.7	109	0.00
93 T	1,3-Dichlorobenzene	1.3613	1.3886	-2.0	105	0.00
94 T	1,4-Dichlorobenzene	1.3922	1.4077	-1.1	105	0.00
95 T	n-Butylbenzene	1.9134	2.0120	-5.2	109	0.00
96 T	1,2-Dichlorobenzene	1.1990	1.1969	0.2	103	0.00
97 T	1,2-Dibromo-3-Chloropropane	0.0661	0.0651	1.5	95	0.00
98 T	1,2,4-Trichlorobenzene	0.7278	0.7268	0.1	103	0.00
99 T	Hexachlorobutadiene	0.2941	0.3154	-7.2	109	0.00
100 T	Naphthalene	1.2635	1.1888	5.9	97	0.00
101 T	1,2,3-Trichlorobenzene	0.5986	0.5889	1.6	100	0.00

(#) = Out of Range
 6M112668.D 8260WTR.M

SPCC's out = 0 CCC's out = 0
 Wed Nov 14 12:11:09 2012

Page 2

Evaluate Continuing Calibration Report

Data File : C:\MSDCHEM\1\DATA\111412\6M112668.D

Vial: 2

Acq On : 14 Nov 2012 11:47

Operator: FJB

Sample : WG414232-02 50ug/L CCV 8260

Inst : HPMS6

Misc : 1,1 STD54883

Multiplr: 1.00

MS Integration Params: RTEINT.P

Method : C:\MSDCHEM\1\METHODS\8260WTR.M (RTE Integrator)

Title : 8260B/624 WATER SOP:OVLMSV01 011/12/12 - HPMS6

Last Update : Tue Nov 13 09:04:10 2012

Response via : Multiple Level Calibration

Min. RRF : 0.000 Min. Rel. Area : 50% Max. R.T. Dev 0.50min

Max. RRF Dev : 25% Max. Rel. Area : 150%

	Compound	Amount	Calc.	%Dev	Area%	Dev(min)
1 I	Fluorobenzene	25.0000	25.0000	0.0	113	0.00
2 T	Dichlorodifluoromethane	50.0000	57.5840	-15.2	125	0.00
3 P	Chloromethane	50.0000	47.0644	5.9	109	0.00
4 C	Vinyl Chloride	50.0000	47.1313	5.7	107	0.00
5 T	1,3-Butadiene	50.0000	55.8278	-11.7	116	0.00
6 T	Bromomethane	50.0000	55.7462	-11.5	122	0.00
7 T	Chloroethane	50.0000	54.4186	-8.8	120	0.00
8 T	Trichlorofluoromethane	50.0000	56.5012	-13.0	124	0.00
9 T	Diethyl ether	100.0000	88.3388	11.7	99	0.00
10 T	Isoprene	50.0000	52.2134	-4.4	117	0.00
11 T	Acrolein	50.0000	38.1904	23.6	83	0.01
12 T	1,1,2-Trichloro-1,2,2-Trifl	50.0000	54.7022	-9.4	124	0.00
13 T	Acetone	50.0000	47.5138	5.0	108	0.00
14 C	1,1-Dichloroethene	50.0000	53.1876	-6.4	119	0.00
15 T	Tert-Butyl Alcohol	200.0000	199.4214	0.3	115	-0.01
16 T	Dimethyl Sulfide	50.0000	51.2127	-2.4	114	0.00
17 T	Iodomethane	50.0000	53.6760	-7.4	115	0.00
18 T	Methyl acetate	50.0000	47.0134	6.0	105	0.00
19 T	Methylene Chloride	50.0000	50.4795	-1.0	115	0.00
20 T	Carbon Disulfide	50.0000	52.4926	-5.0	117	0.00
21 T	Acrylonitrile	50.0000	48.4367	3.1	105	0.00
22 T	Methyl Tert Butyl Ether	50.0000	48.1706	3.7	106	0.00
23 T	trans-1,2-Dichloroethene	50.0000	53.2049	-6.4	118	-0.01
24 T	n-Hexane	50.0000	53.9750	-7.9	123	0.00
25 T	Diisopropyl ether	100.0000	94.5691	5.4	106	0.00
26 T	Vinyl Acetate	50.0000	48.9846	2.0	104	0.00
27 P	1,1-Dichloroethane	50.0000	51.3822	-2.8	115	0.00
28 T	Ethyl-Tert-Butyl ether	100.0000	92.7173	7.3	104	0.00
29 T	2-Butanone	50.0000	44.5921	10.8	100	0.00
30 T	Propionitrile	100.0000	94.6744	5.3	103	0.00
31 T	2,2-Dichloropropane	50.0000	54.9378	-9.9	118	0.00
32 T	cis-1,2-Dichloroethene	50.0000	51.3192	-2.6	114	0.00
33 C	Chloroform	50.0000	51.5015	-3.0	114	0.00
34	1-Bromopropane	50.0000	49.0566	1.9	113	0.00
35 T	Bromochloromethane	50.0000	49.0503	1.9	109	0.00
36 T	Tetrahydrofuran	100.0000	104.6764	-4.7	120	0.00
37 S	Dibromofluoromethane	25.0000	25.3453	-1.4	117	0.00
38 T	1,1,1-Trichloroethane	50.0000	51.4331	-2.9	113	0.00
39 T	Cyclohexane	50.0000	49.4930	1.0	116	0.00
40 T	1,1-Dichloropropene	50.0000	51.3658	-2.7	113	0.00
41 T	Tert-Amyl-Methyl ether	100.0000	91.1607	8.8	103	0.00
42 T	Carbon Tetrachloride	50.0000	52.6585	-5.3	115	0.00
43 S	1,2-Dichloroethane-d4	25.0000	24.2140	3.1	111	0.00
44	Heptane	-1.0000	86.2078	0.0	107	-0.01
45 T	1,2-Dichloroethane	50.0000	49.3618	1.3	108	0.00
46 T	Benzene	50.0000	49.5760	0.8	113	0.00
47 T	Trichloroethene	50.0000	48.0036	4.0	111	0.00
48 T	Methylcyclohexane	50.0000	50.8254	-1.7	116	0.00
49 C	1,2-Dichloropropane	50.0000	50.1786	-0.4	108	0.00
50 T	1,4-Dioxane	200.0000	202.6657	-1.3	107	0.00
51 T	Bromodichloromethane	50.0000	50.4788	-1.0	110	0.00
52 T	Dibromomethane	50.0000	44.5059	11.0	106	0.00
53 T	2-Chloroethyl Vinyl Ether	50.0000	41.3415	17.3	96	0.00
54 T	4-Methyl-2-Pentanone	50.0000	42.2257	15.5	92	0.00

(#)= Out of Range

6M112668.D 8260WTR.M

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Page 1

Data File : C:\MSDCHEM\1\DATA\111412\6M112668.D

Vial: 2

Acq On : 14 Nov 2012 11:47

Operator: FJB

Sample : WG414232-02 50ug/L CCV 8260

Inst : HPMS6

Misc : 1,1 STD54883

Multiplr: 1.00

MS Integration Params: RTEINT.P

Method : C:\MSDCHEM\1\METHODS\8260WTR.M (RTE Integrator)

Title : 8260B/624 WATER SOP:OVLMSV01 011/12/12 - HPMS6

Last Update : Tue Nov 13 09:04:10 2012

Response via : Multiple Level Calibration

Min. RRF : 0.000 Min. Rel. Area : 50% Max. R.T. Dev 0.50min

Max. RRF Dev : 25% Max. Rel. Area : 150%

	Compound	Amount	Calc.	%Dev	Area%	Dev(min)
55 T	cis-1,3-Dichloropropene	50.0000	51.4430	-2.9	106	0.00
56 T	Dimethyl Disulfide	50.0000	47.5337	4.9	104	0.00
57 I	Chlorobenzene-d5	25.0000	25.0000	0.0	112	0.00
58 S	Toluene-d8	25.0000	24.9189	0.3	116	0.00
59 C	Toluene	50.0000	49.4742	1.1	109	0.00
60 T	Ethyl Methacrylate	50.0000	41.7610	16.5	96	0.00
61	Paraldehyde	100.0000	0.0000	100.0#	0	-13.00#
62 T	trans-1,3-Dichloropropene	50.0000	43.3663	13.3	103	0.00
63 T	1,1,2-Trichloroethane	50.0000	43.8161	12.4	102	0.00
64 T	2-Hexanone	50.0000	41.8507	16.3	88	0.00
65 T	1,3-Dichloropropane	50.0000	48.5957	2.8	101	0.00
66 T	Tetrachloroethene	50.0000	50.8104	-1.6	111	0.00
67 T	Dibromochloromethane	50.0000	53.6873	-7.4	104	0.00
68 T	1,2-Dibromoethane	50.0000	43.9857	12.0	101	0.01
69 T	1-Chlorohexane	50.0000	49.9492	0.1	110	0.00
70 P	Chlorobenzene	50.0000	48.3765	3.2	107	0.00
71 T	1,1,1,2-Tetrachloroethane	50.0000	49.2661	1.5	106	0.00
72 C	Ethylbenzene	50.0000	48.1445	3.7	107	0.00
73 T	m-,p-Xylene	100.0000	98.7088	1.3	109	0.00
74 T	o-Xylene	50.0000	48.5396	2.9	108	0.00
75 T	Styrene	50.0000	49.5768	0.8	105	0.00
76 P	Bromoform	50.0000	41.6082	16.8	101	0.00
77 T	Isopropylbenzene	50.0000	49.1155	1.8	107	0.00
78 I	1,4-Dichlorobenzene-d4	25.0000	25.0000	0.0	105	0.00
79 P	1,1,2,2-Tetrachloroethane	50.0000	48.8860	2.2	98	0.00
80 S	p-Bromofluorobenzene	25.0000	26.2724	-5.1	113	0.00
81 T	1,2,3-Trichloropropane	50.0000	46.1121	7.8	97	0.00
82 T	trans-1,4-Dichloro-2-Butene	50.0000	44.5584	10.9	96	0.00
83 T	n-Propylbenzene	50.0000	52.2861	-4.6	107	0.00
84 T	Bromobenzene	50.0000	52.5736	-5.1	103	0.00
85 T	1,3,5-Trimethylbenzene	50.0000	51.5119	-3.0	107	0.00
86 T	2-Chlorotoluene	50.0000	51.0322	-2.1	119	0.00
87 T	4-Chlorotoluene	50.0000	51.9066	-3.8	106	0.00
88 T	a-Methylstyrene	50.0000	52.2128	-4.4	106	0.00
89 T	tert-Butylbenzene	50.0000	51.5412	-3.1	108	0.00
90 T	1,2,4-Trimethylbenzene	50.0000	51.2785	-2.6	107	0.00
91 T	sec-Butylbenzene	50.0000	52.5273	-5.1	108	0.00
92 T	p-Isopropyltoluene	50.0000	52.3370	-4.7	109	0.00
93 T	1,3-Dichlorobenzene	50.0000	51.0041	-2.0	105	0.00
94 T	1,4-Dichlorobenzene	50.0000	50.5552	-1.1	105	0.00
95 T	n-Butylbenzene	50.0000	52.5772	-5.2	109	0.00
96 T	1,2-Dichlorobenzene	50.0000	49.9131	0.2	103	0.00
97 T	1,2-Dibromo-3-Chloropropane	50.0000	44.5675	10.9	95	0.00
98 T	1,2,4-Trichlorobenzene	50.0000	49.9301	0.1	103	0.00
99 T	Hexachlorobutadiene	50.0000	53.6180	-7.2	109	0.00
100 T	Naphthalene	50.0000	47.0426	5.9	97	0.00
101 T	1,2,3-Trichlorobenzene	50.0000	49.1884	1.6	100	0.00

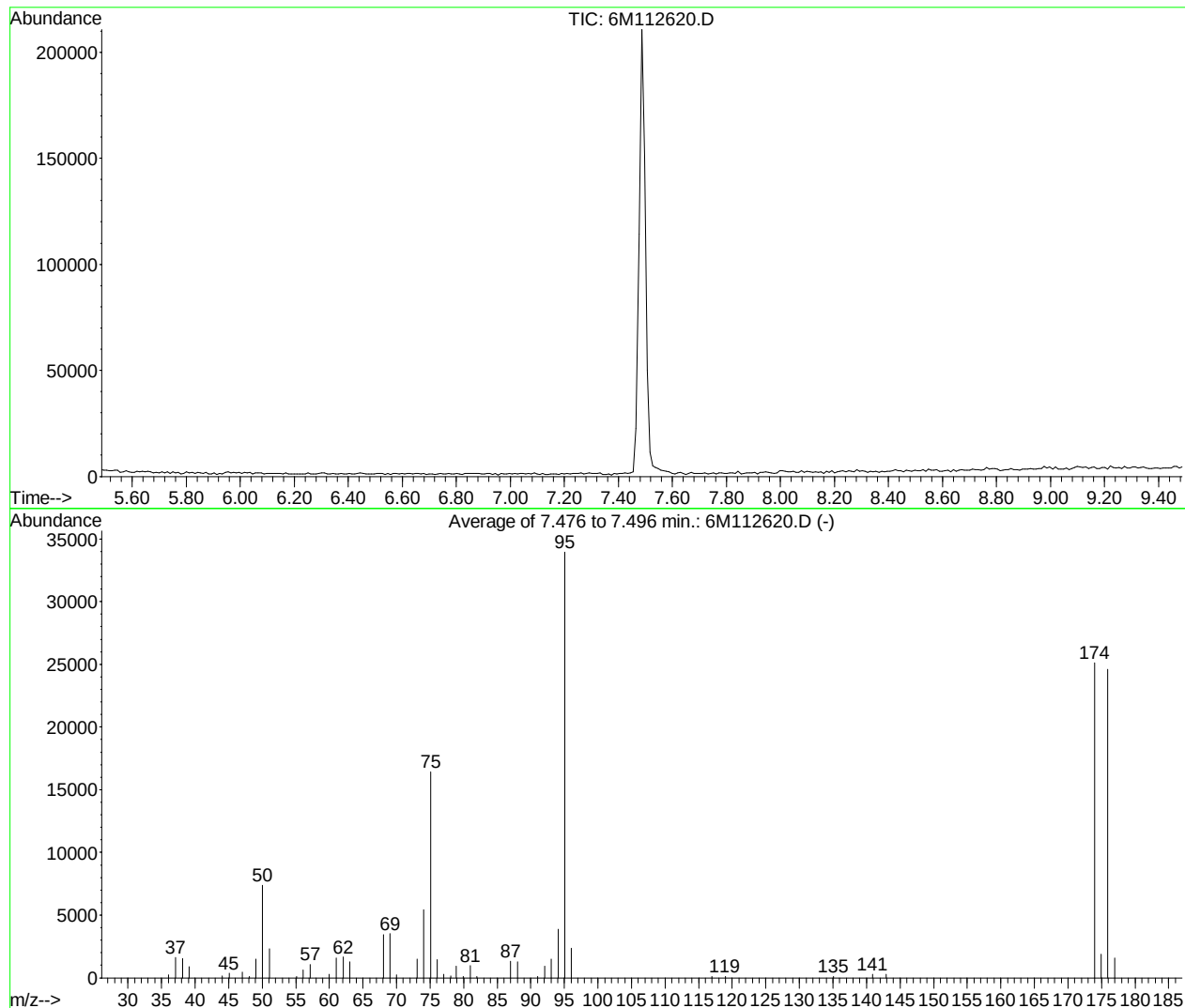
(#) = Out of Range
6M112668.D 8260WTR.M

SPCC's out = 0 CCC's out = 0
Wed Nov 14 12:11:11 2012

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2.1.1.5 Raw QC Data

Data File : C:\MSDCHEM\1\DATA\111212\6M112620.D Vial: 1
 Acq On : 12 Nov 2012 14:09 Operator: adc
 Sample : WG414018-01 50NG/L BFB STD Inst : HPMS6
 Misc : 1,1 STD54051 Multiplr: 1.00
 MS Integration Params: RTEINT.P
 Method : C:\MSDCHEM\1\METHODS\8260WTR.M (RTE Integrator)
 Title : 8260B/624_WATER SOP:OVLMSV01 011/12/12 - HPMS6

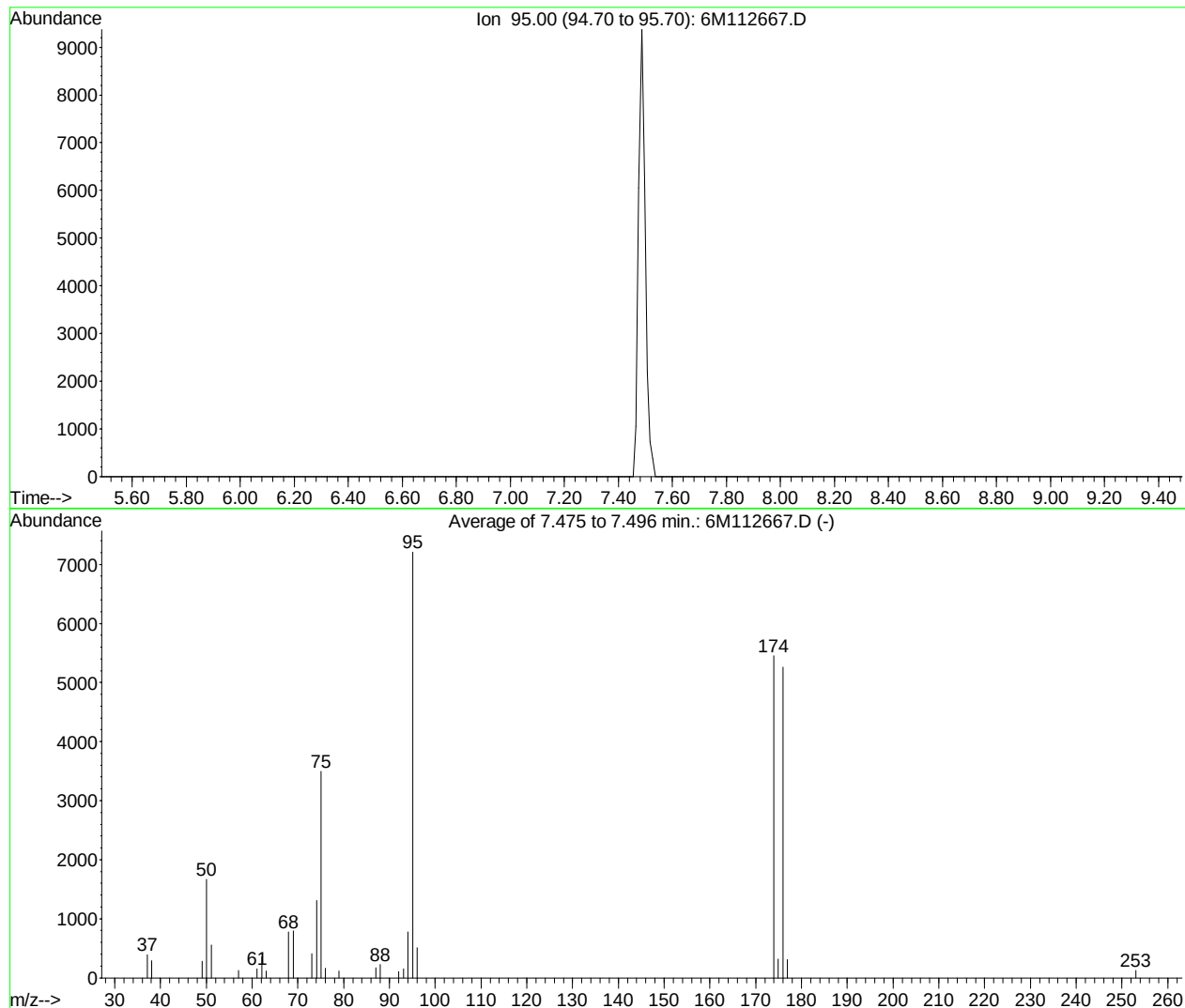


AutoFind: Scans 234, 235, 236; Background Corrected with Scan 229

Target Mass	Rel. to Mass	Lower Limit%	Upper Limit%	Rel. Abn%	Raw Abn	Result Pass/Fail
50	95	15	40	21.7	7367	PASS
75	95	30	60	48.4	16430	PASS
95	95	100	100	100.0	33957	PASS
96	95	5	9	6.9	2339	PASS
173	174	0.00	2	0.0	0	PASS
174	95	50	100	73.9	25106	PASS
175	174	5	9	7.4	1863	PASS
176	174	95	101	98.0	24594	PASS
177	176	5	9	6.5	1600	PASS

6M112620.D 8260WTR.M Tue Nov 13 09:09:47 2012

Data File : C:\MSDCHEM\1\DATA\111412\6M112667.D Vial: 1
 Acq On : 14 Nov 2012 11:22 Operator: FJB
 Sample : WG414232-01 BFB 50ng 8260 Inst : HPMS6
 Misc : 1,1 STD54051 Multiplr: 1.00
 MS Integration Params: rteint.p
 Method : C:\MSDCHEM\1\METHODS\BFB.M (RTE Integrator)
 Title : SOP: OVL MSV01



AutoFind: Scans 234, 235, 236; Background Corrected with Scan 230

Target Mass	Rel. to Mass	Lower Limit%	Upper Limit%	Rel. Abn%	Raw Abn	Result Pass/Fail
50	95	15	40	23.1	1664	PASS
75	95	30	60	48.5	3499	PASS
95	95	100	100	100.0	7210	PASS
96	95	5	9	7.0	508	PASS
173	174	0.00	2	0.0	0	PASS
174	95	50	100	75.7	5457	PASS
175	174	5	9	5.8	316	PASS
176	174	95	101	96.4	5259	PASS
177	176	5	9	5.9	310	PASS

6M112667.D BFB.M Wed Nov 14 12:10:50 2012

Data File : C:\MSDCHEM\1\DATA\111412\6M112670.D Vial: 4
 Acq On : 14 Nov 2012 12:48 Operator: FJB
 Sample : WG414233-01 VBLK1114 BLANK 8260 Inst : HPMS6
 Misc : 1,1 Multiplr: 1.00
 MS Integration Params: RTEINT.P
 Quant Time: Nov 15 09:24:03 2012 Quant Results File: 8260WTR.RES

Quant Method : C:\MSDCHEM\1\METHODS\8260WTR.M (RTE Integrator)
 Title : 8260B/624_WATER SOP:OVLMSV01 011/12/12 - HPMS6
 Last Update : Tue Nov 13 09:04:10 2012
 Response via : Initial Calibration
 DataAcq Meth : 8260WTR

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) Fluorobenzene	10.32	96	468293	25.00	ug/L	0.00
57) Chlorobenzene-d5	14.79	117	350893	25.00	ug/L	0.00
78) 1,4-Dichlorobenzene-d4	18.35	152	161986	25.00	ug/L	0.00

System Monitoring Compounds

37) Dibromofluoromethane	9.12	111	121327	25.2772	ug/L	0.00
Spiked Amount	25.000	Range	86 - 118	Recovery	=	101.12%
43) 1,2-Dichloroethane-d4	9.85	65	113370	24.6473	ug/L	0.00
Spiked Amount	25.000	Range	80 - 120	Recovery	=	98.60%
58) Toluene-d8	12.59	98	411818	23.9265	ug/L	0.00
Spiked Amount	25.000	Range	88 - 110	Recovery	=	95.72%
80) p-Bromofluorobenzene	16.57	95	153063	26.0626	ug/L	0.00
Spiked Amount	25.000	Range	86 - 115	Recovery	=	104.24%

Target Compounds Qvalue

 (#) = qualifier out of range (m) = manual integration
 6M112670.D 8260WTR.M Thu Nov 15 09:24:05 2012

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Data File : C:\MSDCHEM\1\DATA\111412\6M112670.D

Vial: 4

Acq On : 14 Nov 2012 12:48

Operator: FJB

Sample : WG414233-01 VBLK1114 BLANK 8260

Inst : HPMS6

Misc : 1,1

Multiplr: 1.00

MS Integration Params: RTEINT.P

Quant Time: Nov 15 9:24 2012

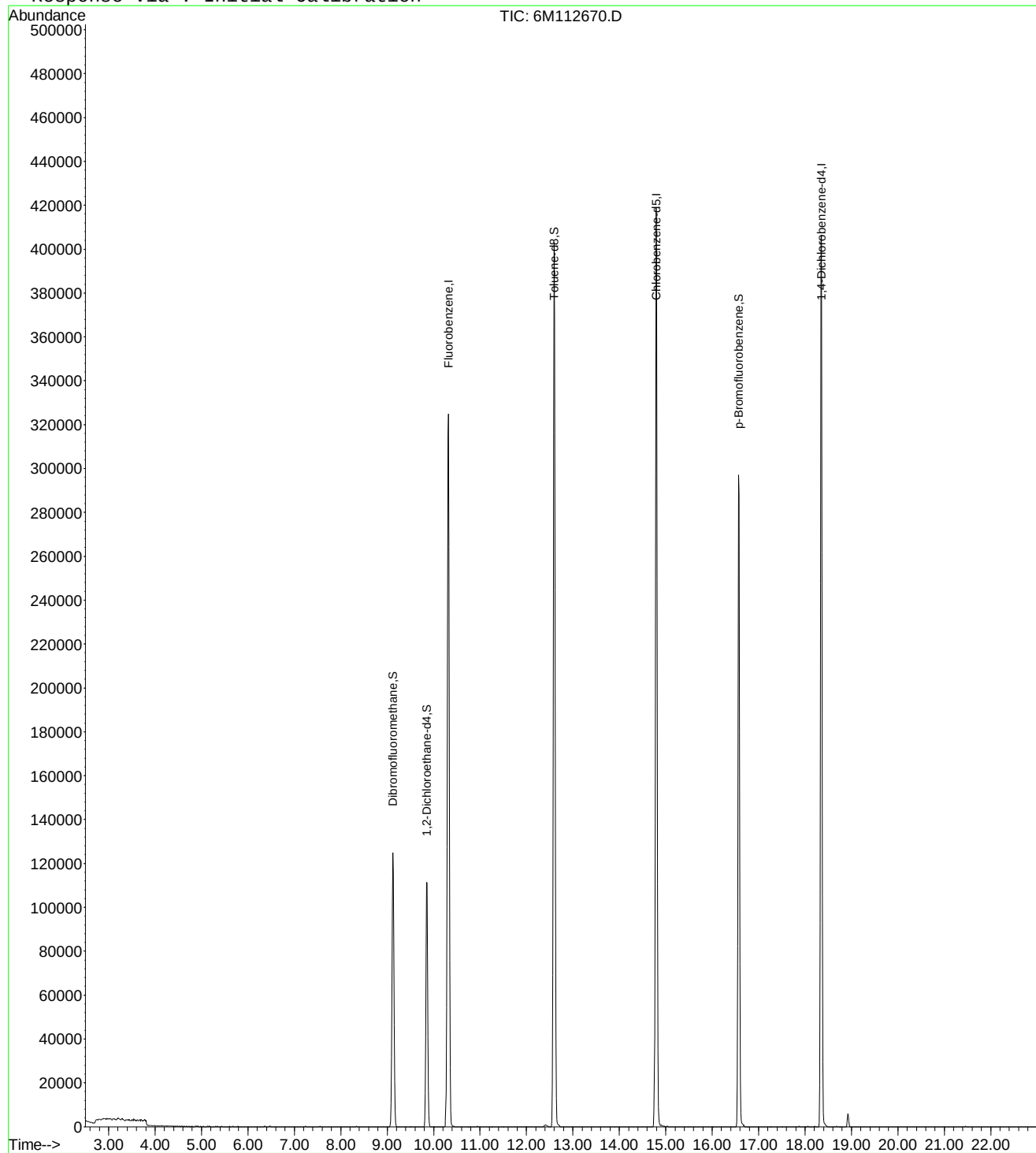
Quant Results File: 8260WTR.RES

Method : C:\MSDCHEM\1\METHODS\8260WTR.M (RTE Integrator)

Title : 8260B/624_WATER SOP:OVLMSV01 011/12/12 - HPMS6

Last Update : Tue Nov 13 09:04:10 2012

Response via : Initial Calibration



6M112670.D 8260WTR.M

Thu Nov 15 09:24:05 2012

Page 2

Data File : C:\MSDCHEM\1\DATA\111412\6M112670.D Vial: 4
 Acq On : 14 Nov 2012 12:48 Operator: FJB
 Sample : WG414233-01 VBLK1114 BLANK 8260 Inst : HPMS6
 Misc : 1,1 Multiplr: 1.00
 MS Integration Params: RTEINT.P

Method : C:\MSDCHEM\1\METHODS\8260WTR.M (RTE Integrator)
 Title : 8260B/624_WATER SOP:OVLMSV01 011/12/12 - HPMS6
 Smoothing : ON Filtering: 5
 Sampling : 1 Min Area: 100 Area counts
 Start Thrs: 0.2 Max Peaks: 100
 Stop Thrs : 0 Peak Location: TOP

If leading or trailing edge < 100 prefer < Baseline drop else tangent >
 Peak separation: 5

Signal : TIC

peak #	R.T. min	first scan	max scan	last scan	PK TY	peak height	corr. area	corr. % max.	% of total
1	3.291	76	79	85	rVB3	1404	4090	0.37%	0.074%
2	4.139	160	162	167	rBV	186	450	0.04%	0.008%
3	4.323	179	180	183	rBV	89	173	0.02%	0.003%
4	4.404	187	188	190	rBB	369	440	0.04%	0.008%
5	4.445	190	192	193	rBB	326	385	0.04%	0.007%
6	4.486	193	196	198	rBB	385	900	0.08%	0.016%
7	4.517	198	199	201	rBB	429	461	0.04%	0.008%
8	4.578	202	205	208	rBB	319	760	0.07%	0.014%
9	4.639	209	211	213	rBB	352	415	0.04%	0.007%
10	4.680	214	215	218	rBB	340	412	0.04%	0.007%
11	4.731	219	220	222	rBB	398	244	0.02%	0.004%
12	4.772	223	224	226	rBB	396	243	0.02%	0.004%
13	4.803	226	227	229	rBB	300	184	0.02%	0.003%
14	4.864	231	233	237	rBB	349	800	0.07%	0.014%
15	4.935	237	240	242	rBB	361	610	0.06%	0.011%
16	4.986	243	245	247	rBB	318	195	0.02%	0.004%
17	5.037	248	250	252	rBB	332	203	0.02%	0.004%
18	5.140	257	260	261	rBB	345	401	0.04%	0.007%
19	5.170	262	263	266	rBB	359	404	0.04%	0.007%
20	5.303	274	276	278	rBB	366	224	0.02%	0.004%
21	5.344	279	280	282	rBB	306	187	0.02%	0.003%
22	5.436	287	289	291	rBB	302	185	0.02%	0.003%
23	5.609	304	306	308	rBB	339	208	0.02%	0.004%
24	5.681	311	313	315	rBB	337	206	0.02%	0.004%
25	5.783	321	323	325	rBB	311	190	0.02%	0.003%
26	6.365	377	380	382	rBB	313	379	0.03%	0.007%
27	6.467	388	390	394	rBB	359	602	0.06%	0.011%
28	7.243	464	466	468	rBB	317	194	0.02%	0.004%
29	7.550	494	496	498	rBB	304	186	0.02%	0.003%
30	8.336	571	573	575	rBB	317	194	0.02%	0.004%
31	9.122	642	650	659	rBB2	124903	376733	34.51%	6.806%
32	9.847	714	721	730	rBB	111427	308962	28.30%	5.582%
33	10.317	758	767	781	rBB	325021	986143	90.32%	17.816%
34	10.950	827	829	831	rBB	301	184	0.02%	0.003%
35	12.410	967	972	979	rBB	883	3417	0.31%	0.062%
36	12.594	983	990	1004	rBB	402928	1091795	100.00%	19.725%
37	14.789	1198	1205	1215	rBV	418828	1047448	95.94%	18.923%
38	15.024	1227	1228	1231	rBB	327	384	0.04%	0.007%
39	16.566	1373	1379	1393	rBB	297135	721245	66.06%	13.030%
40	17.873	1505	1507	1509	rBB	308	189	0.02%	0.003%
41	18.057	1523	1525	1527	rBB	312	191	0.02%	0.003%
42	18.210	1538	1540	1542	rBB	321	197	0.02%	0.004%

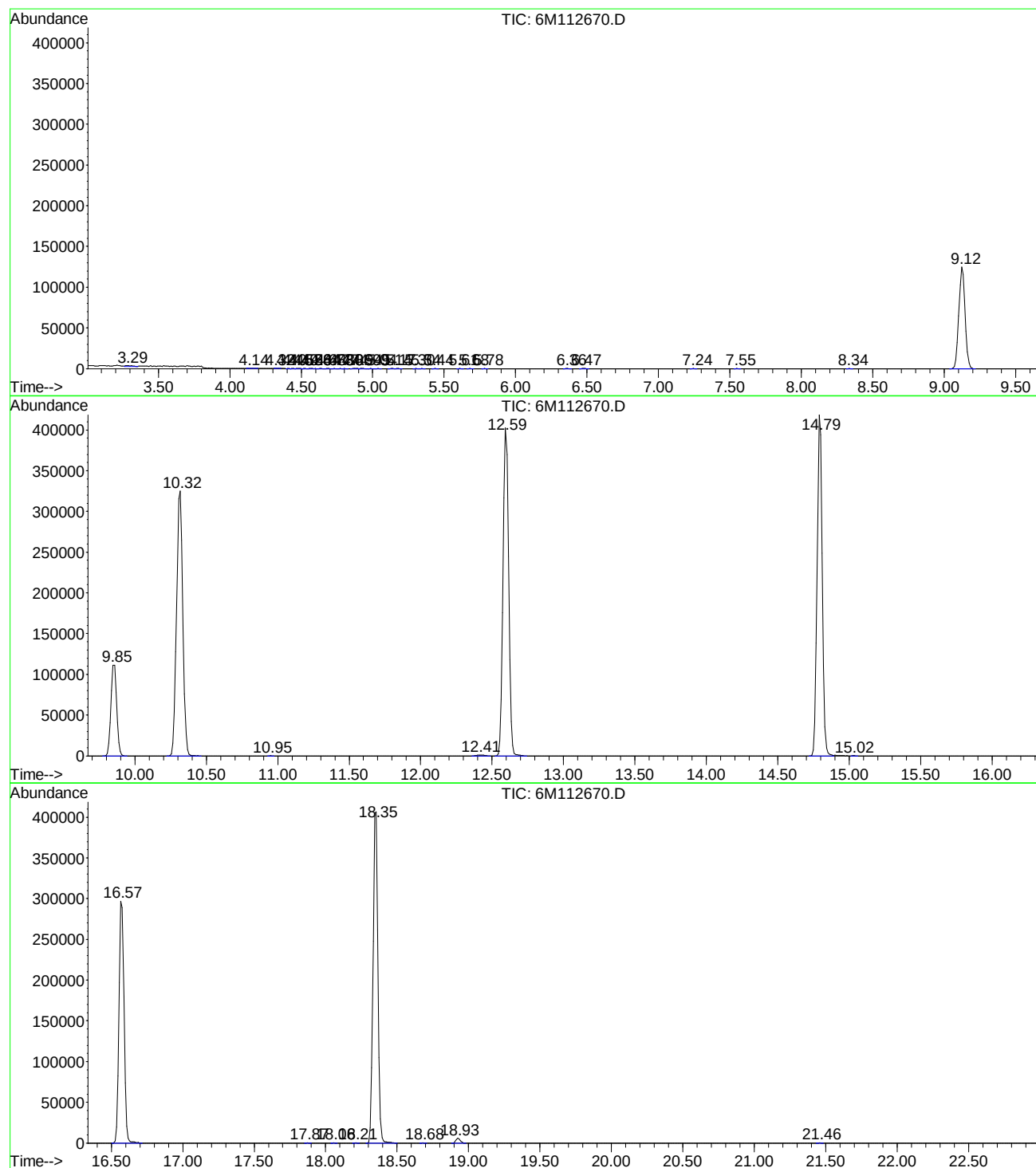
6M112670.D 8260WTR.M Thu Nov 15 10:45:06 2012

Page 1

43	18.353	1547	1554	1568	rBB	406517	970680	88.91%	17.536%
44	18.680	1584	1586	1588	rBB	338	207	0.02%	0.004%
45	18.925	1606	1610	1615	rBB	6013	12691	1.16%	0.229%
46	21.458	1856	1858	1860	rBB	372	228	0.02%	0.004%

Sum of corrected areas: 5535219

File : C:\MSDCHEM\1\DATA\111412\6M112670.D
Operator : FJB
Acquired : 14 Nov 2012 12:48 using AcqMethod 8260WTR
Instrument : HPMS6
Sample Name: WG414233-01 VBLK1114 BLANK 8260
Misc Info : 1,1
Vial Number: 4
Quant File :8260WTR.RES (RTE Integrator)



Data File : C:\MSDCHEM\1\data\111412\6M112671.D

Vial: 5

Acq On : 14 Nov 2012 13:19

Operator: FJB

Sample : WG414233-02 20ug/L LCS 8260

Inst : HPMS6

Misc : 1,1 STD54851

Multiplr: 1.00

MS Integration Params: RTEINT.P

Quant Time: Nov 14 13:42:09 2012

Quant Results File: 8260WTR.RES

Quant Method : C:\MSDCHEM\1\METHODS\8260WTR.M (RTE Integrator)

Title : 8260B/624_WATER SOP:OVLMSV01 011/12/12 - HPMS6

Last Update : Tue Nov 13 09:04:10 2012

Response via : Initial Calibration

DataAcq Meth : 8260WTR

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) Fluorobenzene	10.32	96	478476	25.00	ug/L	0.00
57) Chlorobenzene-d5	14.79	117	353024	25.00	ug/L	0.00
78) 1,4-Dichlorobenzene-d4	18.35	152	168074	25.00	ug/L	0.00

System Monitoring Compounds

37) Dibromofluoromethane	9.12	111	124789	25.4452	ug/L	0.00
Spiked Amount	25.000	Range	86 - 118	Recovery	=	101.80%
43) 1,2-Dichloroethane-d4	9.85	65	116646	24.8199	ug/L	0.00
Spiked Amount	25.000	Range	80 - 120	Recovery	=	99.28%
58) Toluene-d8	12.60	98	415351	23.9861	ug/L	0.00
Spiked Amount	25.000	Range	88 - 110	Recovery	=	95.96%
80) p-Bromofluorobenzene	16.57	95	156383	25.6634	ug/L	0.00
Spiked Amount	25.000	Range	86 - 115	Recovery	=	102.64%

Target Compounds

						Qvalue
2) Dichlorodifluoromethane	2.64	85	108768	28.8851	ug/L	100
3) Chloromethane	3.01	50	146312	21.8563	ug/L	99
4) Vinyl Chloride	3.18	62	114442	20.7299	ug/L	99
5) 1,3-Butadiene	3.22	54	38644	11.0430	ug/L	94
6) Bromomethane	3.95	94	71699	20.7688	ug/L	99
7) Chloroethane	4.09	64	75429	22.3469	ug/L	98
8) Trichlorofluoromethane	4.56	101	184045	23.4257	ug/L	100
9) Diethyl ether	5.09	59	328950	152.8101	ug/L	99
10) Isoprene	5.11	67	149347	17.4303	ug/L	99
11) Acrolein	5.32	56	29928	142.9683	ug/L	94
12) 1,1,2-Trichloro-1,2,2-Trif	5.34	101	107993	24.1283	ug/L	97
13) Acetone	5.43	43	14029	22.2658	ug/L	98
14) 1,1-Dichloroethene	5.64	61	166233	21.2577	ug/L	100
15) Tert-Butyl Alcohol	5.78	59	31008	175.5697	ug/L	97
16) Dimethyl Sulfide	5.91	62	118411	20.2410	ug/L	98
17) Iodomethane	6.16	142	78203	21.9344	ug/L	98
18) Methyl acetate	6.21	43	37460	18.4672	ug/L	99
19) Methylene Chloride	6.47	84	97591	20.9674	ug/L	97
20) Carbon Disulfide	6.48	76	307426	22.1762	ug/L	100
21) Acrylonitrile	6.68	53	20816	23.0098	ug/L	97
22) Methyl Tert Butyl Ether	6.71	73	194370	21.6084	ug/L	100
23) trans-1,2-Dichloroethene	6.95	96	104083	22.0823	ug/L	97
24) n-Hexane	7.05	57	109676	21.0526	ug/L	99
25) Diisopropyl ether	7.45	45	1503305	107.0799	ug/L	99
26) Vinyl Acetate	7.63	43	133160	26.3425	ug/L	100
27) 1,1-Dichloroethane	7.63	63	192959	20.6714	ug/L	99
28) Ethyl-Tert-Butyl ether	8.08	59	1288411	103.1423	ug/L	100
29) 2-Butanone	8.28	43	19635	21.0611	ug/L	97
30) Propionitrile	8.39	54	29212	100.1814	ug/L	99
31) 2,2-Dichloropropane	8.49	77	152076	21.5107	ug/L	99
32) cis-1,2-Dichloroethene	8.56	96	109055	21.3394	ug/L	99
33) Chloroform	8.80	83	177569	21.1973	ug/L	99
34) 1-Bromopropane	8.95	122	21478	23.5963	ug/L	98
35) Bromochloromethane	9.05	130	61365	21.4329	ug/L	100
36) Tetrahydrofuran	9.08	42	58451	101.7505	ug/L	99
38) 1,1,1-Trichloroethane	9.40	97	162329	21.1997	ug/L	99
39) Cyclohexane	9.42	56	159475	19.0810	ug/L	98
40) 1,1-Dichloropropene	9.62	75	136890	21.4866	ug/L	99
41) Tert-Amyl-Methyl ether	9.77	73	962358	103.0234	ug/L	100
42) Carbon Tetrachloride	9.77	117	151727	21.7491	ug/L	99

(#) = qualifier out of range (m) = manual integration
 6M112671.D 8260WTR.M Wed Nov 14 13:42:09 2012

Page 1

Data File : C:\MSDCHEM\1\data\111412\6M112671.D

Vial: 5

Acq On : 14 Nov 2012 13:19

Operator: FJB

Sample : WG414233-02 20ug/L LCS 8260

Inst : HPMS6

Misc : 1,1 STD54851

Multiplr: 1.00

MS Integration Params: RTEINT.P

Quant Time: Nov 14 13:42:09 2012

Quant Results File: 8260WTR.RES

Quant Method : C:\MSDCHEM\1\METHODS\8260WTR.M (RTE Integrator)

Title : 8260B/624_WATER SOP:OVLMSV01 011/12/12 - HPMS6

Last Update : Tue Nov 13 09:04:10 2012

Response via : Initial Calibration

DataAcq Meth : 8260WTR

Compound	R.T.	QIon	Response	Conc	Unit	Qvalue
44) Heptane	9.77	57	19666	93.1160	ug/L	98
45) 1,2-Dichloroethane	9.99	62	126689	21.6155	ug/L	99
46) Benzene	10.02	78	375386	20.4241	ug/L	99
47) Trichloroethene	10.89	130	111255	21.0864	ug/L	100
48) Methylcyclohexane	10.98	83	119322	20.5861	ug/L	99
49) 1,2-Dichloropropane	11.14	63	102277	21.7670	ug/L	100
50) 1,4-Dioxane	11.48	88	1048	100.7258	ug/L	90
51) Bromodichloromethane	11.48	83	121932	20.8061	ug/L	99
52) Dibromomethane	11.56	93	47600	19.8393	ug/L	99
53) 2-Chloroethyl Vinyl Ether	11.88	63	38508	19.9602	ug/L	100
54) 4-Methyl-2-Pentanone	11.91	58	17258	20.2007	ug/L	98
55) cis-1,3-Dichloropropene	12.24	75	149035	23.2417	ug/L	99
56) Dimethyl Disulfide	12.51	79	73069	18.8826	ug/L	99
59) Toluene	12.71	91	393572	19.6971	ug/L	100
60) Ethyl Methacrylate	12.89	69	69449	17.9031	ug/L	100
62) trans-1,3-Dichloropropene	12.94	75	111825	17.7856	ug/L	100
63) 1,1,2-Trichloroethane	13.18	97	62333	19.3230	ug/L	98
64) 2-Hexanone	13.16	43	24274	17.9736	ug/L	98
65) 1,3-Dichloropropane	13.55	76	107861	21.3336	ug/L	98
66) Tetrachloroethene	13.66	166	98433	20.1741	ug/L	99
67) Dibromochloromethane	13.95	129	82973	21.7509	ug/L	98
68) 1,2-Dibromoethane	14.25	107	62909	19.3768	ug/L	98
69) 1-Chlorohexane	14.42	91	115284	18.8701	ug/L	99
70) Chlorobenzene	14.85	112	242612	18.1177	ug/L	98
71) 1,1,1,2-Tetrachloroethane	14.90	131	97134	20.1016	ug/L	100
72) Ethylbenzene	14.90	106	140541	19.1930	ug/L	34
73) m-,p-Xylene	15.02	106	328563	36.9725	ug/L	99
74) o-Xylene	15.67	106	150437	17.9911	ug/L	98
75) Styrene	15.71	104	274784	19.9193	ug/L	99
76) Bromoform	16.25	173	45171	17.8370	ug/L	98
77) Isopropylbenzene	16.18	105	366041	18.1324	ug/L	99
79) 1,1,2,2-Tetrachloroethane	16.44	83	64719	21.5439	ug/L	98
81) 1,2,3-Trichloropropane	16.66	110	18829	21.4060	ug/L	97
82) trans-1,4-Dichloro-2-Butene	16.74	53	16990	16.2215	ug/L	98
83) n-Propylbenzene	16.78	91	417852	18.9546	ug/L	100
84) Bromobenzene	16.88	156	102015	21.3251	ug/L	100
85) 1,3,5-Trimethylbenzene	17.01	105	328273	20.3020	ug/L	99
86) 2-Chlorotoluene	17.07	91	310211	19.2779	ug/L	93
87) 4-Chlorotoluene	17.13	91	265111	17.9836	ug/L	99
88) a-Methylstyrene	17.48	118	187947	19.8522	ug/L	# 1
89) tert-Butylbenzene	17.55	134	55927	18.3963	ug/L	95
90) 1,2,4-Trimethylbenzene	17.61	105	338999	20.1803	ug/L	100
91) sec-Butylbenzene	17.87	105	332994	18.9815	ug/L	99
92) p-Isopropyltoluene	18.06	119	291137	19.3063	ug/L	100
93) 1,3-Dichlorobenzene	18.24	146	172965	18.8998	ug/L	99
94) 1,4-Dichlorobenzene	18.40	146	187404	20.0224	ug/L	100
95) n-Butylbenzene	18.68	91	262594	20.4139	ug/L	99
96) 1,2-Dichlorobenzene	18.97	146	152315	18.8956	ug/L	100
97) 1,2-Dibromo-3-Chloropropan	20.15	75	9511	19.9577	ug/L	99
98) 1,2,4-Trichlorobenzene	21.49	180	101165	20.6762	ug/L	100
99) Hexachlorobutadiene	21.69	225	41776	21.1273	ug/L	98
100) Naphthalene	21.91	128	180170	21.2104	ug/L	100
101) 1,2,3-Trichlorobenzene	22.28	180	84195	20.9213	ug/L	99

(#) = qualifier out of range (m) = manual integration
 6M112671.D 8260WTR.M Wed Nov 14 13:42:10 2012

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Data File : C:\MSDCHEM\1\data\111412\6M112672.D Vial: 6
 Acq On : 14 Nov 2012 13:50 Operator: FJB
 Sample : WG414233-03 20ug/L LCS DUP 8260 Inst : HPMS6
 Misc : 1,1 STD54851 Multiplr: 1.00
 MS Integration Params: RTEINT.P
 Quant Time: Nov 14 14:13:07 2012 Quant Results File: 8260WTR.RES

Quant Method : C:\MSDCHEM\1\METHODS\8260WTR.M (RTE Integrator)
 Title : 8260B/624_WATER SOP:OVLMSV01 011/12/12 - HPMS6
 Last Update : Tue Nov 13 09:04:10 2012
 Response via : Initial Calibration
 DataAcq Meth : 8260WTR

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) Fluorobenzene	10.32	96	475235	25.00	ug/L	0.00
57) Chlorobenzene-d5	14.79	117	349885	25.00	ug/L	0.00
78) 1,4-Dichlorobenzene-d4	18.36	152	168101	25.00	ug/L	0.00

System Monitoring Compounds						
37) Dibromofluoromethane	9.12	111	122140	25.0749	ug/L	0.00
Spiked Amount	25.000	Range	86 - 118	Recovery	=	100.28%
43) 1,2-Dichloroethane-d4	9.85	65	115975	24.8454	ug/L	0.00
Spiked Amount	25.000	Range	80 - 120	Recovery	=	99.40%
58) Toluene-d8	12.60	98	418089	24.3609	ug/L	0.00
Spiked Amount	25.000	Range	88 - 110	Recovery	=	97.44%
80) p-Bromofluorobenzene	16.57	95	155759	25.5569	ug/L	0.00
Spiked Amount	25.000	Range	86 - 115	Recovery	=	102.24%

Target Compounds	R.T.	QIon	Response	Conc	Units	Qvalue
2) Dichlorodifluoromethane	2.63	85	106752	28.5431	ug/L	100
3) Chloromethane	3.01	50	138122	20.7736	ug/L	98
4) Vinyl Chloride	3.18	62	109451	19.9610	ug/L	99
5) 1,3-Butadiene	3.21	54	33295	9.3776	ug/L	98
6) Bromomethane	3.94	94	72121	21.0335	ug/L	99
7) Chloroethane	4.09	64	72860	21.7330	ug/L	100
8) Trichlorofluoromethane	4.55	101	183200	23.4772	ug/L	100
9) Diethyl ether	5.09	59	326283	152.6049	ug/L	98
10) Isoprene	5.11	67	144896	17.0262	ug/L	100
11) Acrolein	5.32	56	32292	155.3133	ug/L	95
12) 1,1,2-Trichloro-1,2,2-Trif	5.34	101	107035	24.0773	ug/L	96
13) Acetone	5.43	43	13951	22.2930	ug/L	100
14) 1,1-Dichloroethene	5.64	61	163020	20.9889	ug/L	100
15) Tert-Butyl Alcohol	5.77	59	35420	201.9184	ug/L	98
16) Dimethyl Sulfide	5.91	62	118023	20.3123	ug/L	98
17) Iodomethane	6.16	142	77462	21.8798	ug/L	99
18) Methyl acetate	6.21	43	37810	18.7668	ug/L	99
19) Methylene Chloride	6.47	84	97249	21.0364	ug/L	97
20) Carbon Disulfide	6.47	76	302327	21.9571	ug/L	99
21) Acrylonitrile	6.67	53	21192	23.5852	ug/L	100
22) Methyl Tert Butyl Ether	6.71	73	192380	21.5330	ug/L	99
23) trans-1,2-Dichloroethene	6.95	96	99931	21.3460	ug/L	100
24) n-Hexane	7.05	57	109164	21.0972	ug/L	99
25) Diisopropyl ether	7.45	45	1481543	106.2495	ug/L	99
26) Vinyl Acetate	7.63	43	130006	25.8940	ug/L	100
27) 1,1-Dichloroethane	7.63	63	191126	20.6146	ug/L	100
28) Ethyl-Tert-Butyl ether	8.08	59	1281032	103.2510	ug/L	100
29) 2-Butanone	8.28	43	20172	21.7847	ug/L	96
30) Propionitrile	8.39	54	29412	101.5552	ug/L	99
31) 2,2-Dichloropropane	8.49	77	148482	21.1456	ug/L	99
32) cis-1,2-Dichloroethene	8.56	96	105419	20.7686	ug/L	100
33) Chloroform	8.80	83	174441	20.9659	ug/L	100
34) 1-Bromopropane	8.95	122	21172	23.4243	ug/L	100
35) Bromochloromethane	9.05	130	60625	21.3198	ug/L	98
36) Tetrahydrofuran	9.08	42	59160	103.6871	ug/L	99
38) 1,1,1-Trichloroethane	9.40	97	161361	21.2170	ug/L	100
39) Cyclohexane	9.42	56	160617	19.3487	ug/L	99
40) 1,1-Dichloropropene	9.62	75	134530	21.2602	ug/L	99
41) Tert-Amyl-Methyl ether	9.77	73	960263	103.5002	ug/L	100
42) Carbon Tetrachloride	9.78	117	150445	21.7125	ug/L	99

(#) = qualifier out of range (m) = manual integration
 6M112672.D 8260WTR.M Wed Nov 14 14:13:07 2012

Data File : C:\MSDCHEM\1\data\111412\6M112672.D

Vial: 6

Acq On : 14 Nov 2012 13:50

Operator: FJB

Sample : WG414233-03 20ug/L LCS DUP 8260

Inst : HPMS6

Misc : 1,1 STD54851

Multiplr: 1.00

MS Integration Params: RTEINT.P

Quant Time: Nov 14 14:13:07 2012

Quant Results File: 8260WTR.RES

Quant Method : C:\MSDCHEM\1\METHODS\8260WTR.M (RTE Integrator)

Title : 8260B/624_WATER SOP:OVLMSV01 011/12/12 - HPMS6

Last Update : Tue Nov 13 09:04:10 2012

Response via : Initial Calibration

DataAcq Meth : 8260WTR

Compound	R.T.	QIon	Response	Conc	Unit	Qvalue
44) Heptane	9.77	57	19957	95.1383	ug/L	95
45) 1,2-Dichloroethane	9.99	62	126332	21.7016	ug/L	98
46) Benzene	10.02	78	369945	20.2653	ug/L	99
47) Trichloroethene	10.89	130	108539	20.7120	ug/L	100
48) Methylcyclohexane	10.98	83	116351	20.2104	ug/L	99
49) 1,2-Dichloropropane	11.14	63	102067	21.8705	ug/L	100
50) 1,4-Dioxane	11.49	88	2533	188.8682	ug/L	84
51) Bromodichloromethane	11.47	83	120889	20.7688	ug/L	99
52) Dibromomethane	11.56	93	47105	19.7682	ug/L	100
53) 2-Chloroethyl Vinyl Ether	11.88	63	39040	20.3521	ug/L	99
54) 4-Methyl-2-Pentanone	11.91	58	17104	20.1570	ug/L	99
55) cis-1,3-Dichloropropene	12.24	75	145097	22.7818	ug/L	99
56) Dimethyl Disulfide	12.51	79	72850	18.9544	ug/L	100
59) Toluene	12.71	91	387760	19.5803	ug/L	100
60) Ethyl Methacrylate	12.90	69	70839	18.4217	ug/L	98
62) trans-1,3-Dichloropropene	12.94	75	111541	17.8951	ug/L	99
63) 1,1,2-Trichloroethane	13.19	97	63714	19.9202	ug/L	100
64) 2-Hexanone	13.16	43	25720	19.2151	ug/L	94
65) 1,3-Dichloropropane	13.55	76	108823	21.7170	ug/L	98
66) Tetrachloroethene	13.66	166	98205	20.3079	ug/L	99
67) Dibromochloromethane	13.95	129	82028	21.6961	ug/L	99
68) 1,2-Dibromoethane	14.25	107	62188	19.3273	ug/L	100
69) 1-Chlorohexane	14.42	91	113340	18.7184	ug/L	99
70) Chlorobenzene	14.85	112	239858	18.0727	ug/L	99
71) 1,1,1,2-Tetrachloroethane	14.90	131	95651	19.9723	ug/L	100
72) Ethylbenzene	14.90	106	137354	18.9260	ug/L	35
73) m-,p-Xylene	15.02	106	323309	36.7077	ug/L	100
74) o-Xylene	15.67	106	148219	17.8848	ug/L	99
75) Styrene	15.71	104	272657	19.9425	ug/L	99
76) Bromoform	16.25	173	45678	18.1843	ug/L	99
77) Isopropylbenzene	16.18	105	361116	18.0490	ug/L	100
79) 1,1,2,2-Tetrachloroethane	16.44	83	66739	22.2128	ug/L	99
81) 1,2,3-Trichloropropane	16.66	110	18695	21.2550	ug/L	98
82) trans-1,4-Dichloro-2-Butene	16.74	53	17082	16.3003	ug/L	99
83) n-Propylbenzene	16.78	91	413797	18.7676	ug/L	99
84) Bromobenzene	16.88	156	100467	20.9981	ug/L	98
85) 1,3,5-Trimethylbenzene	17.01	105	325895	20.1517	ug/L	99
86) 2-Chlorotoluene	17.07	91	307935	19.1333	ug/L	93
87) 4-Chlorotoluene	17.13	91	263335	17.8603	ug/L	99
88) a-Methylstyrene	17.48	118	186451	19.6910	ug/L	# 1
89) tert-Butylbenzene	17.55	134	55823	18.3591	ug/L	98
90) 1,2,4-Trimethylbenzene	17.61	105	335070	19.9432	ug/L	99
91) sec-Butylbenzene	17.87	105	329685	18.7898	ug/L	100
92) p-Isopropyltoluene	18.06	119	286846	19.0187	ug/L	99
93) 1,3-Dichlorobenzene	18.24	146	172301	18.8243	ug/L	99
94) 1,4-Dichlorobenzene	18.40	146	187363	20.0148	ug/L	100
95) n-Butylbenzene	18.68	91	259566	20.1752	ug/L	100
96) 1,2-Dichlorobenzene	18.97	146	154619	19.1783	ug/L	98
97) 1,2-Dibromo-3-Chloropropan	20.15	75	9852	20.6332	ug/L	97
98) 1,2,4-Trichlorobenzene	21.49	180	102960	21.0396	ug/L	98
99) Hexachlorobutadiene	21.69	225	42476	21.4778	ug/L	100
100) Naphthalene	21.91	128	180962	21.3002	ug/L	100
101) 1,2,3-Trichlorobenzene	22.28	180	86811	21.5679	ug/L	99

 (#) = qualifier out of range (m) = manual integration

6M112672.D 8260WTR.M Wed Nov 14 14:13:07 2012

Page 2

Data File : C:\MSDCHEM\1\data\111412\6M112672.D

Vial: 6

Acq On : 14 Nov 2012 13:50

Operator: FJB

Sample : WG414233-03 20ug/L LCS DUP 8260

Inst : HPMS6

Misc : 1,1 STD54851

Multiplr: 1.00

MS Integration Params: RTEINT.P

Quant Time: Nov 14 14:13 2012

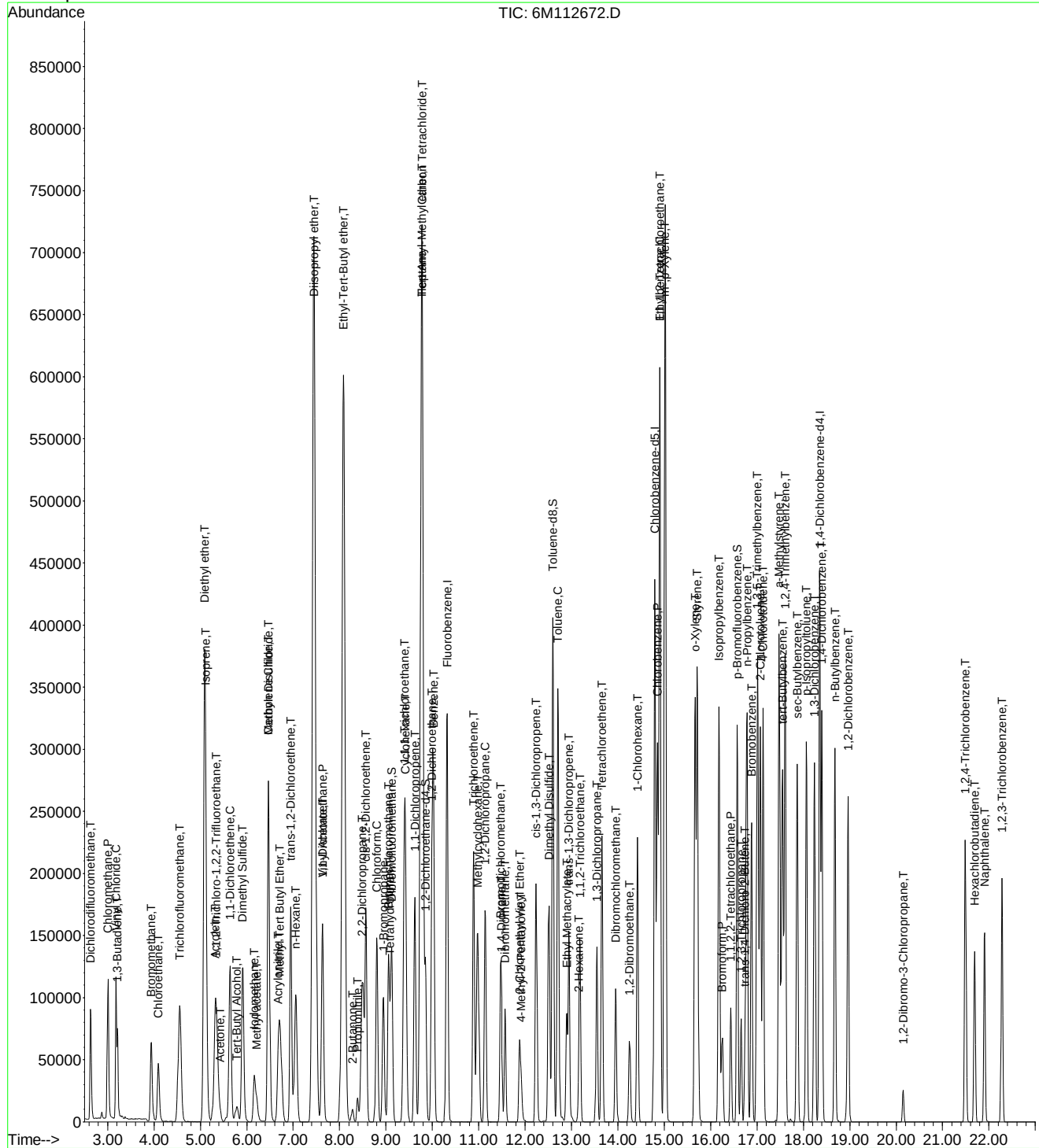
Quant Results File: 8260WTR.RES

Method : C:\MSDCHEM\1\METHODS\8260WTR.M (RTE Integrator)

Title : 8260B/624_WATER SOP:OVLMSV01 011/12/12 - HPMS6

Last Update : Tue Nov 13 09:04:10 2012

Response via : Initial Calibration



2.2 Metals Data

2.2.1 Metals I C P Data

2.2.1.1 Summary Data



Login Number: L12110393
Department: Metals
Analyst: Kim Rhodes

METHOD

Preparation: SW-846 3005

Analysis: SW-846 6010

HOLDING TIMES

Sample Preparation: All holding times were met.

Sample Analysis: All holding times were met.

PREPARATION

Sample preparation proceeded normally.

CALIBRATION

Initial Calibration: All acceptance criteria were met.

Alternate Source Standards: All acceptance criteria were met.

Interference Check Standards: All acceptance criteria were met.

Continuing Calibration Verification: All acceptance criteria were met.

Continuing Calibration Blank: All acceptance criteria were met.

BATCH QA/QC

Method Blank: All acceptance criteria were met.

Laboratory Control Sample: All acceptance criteria were met.

Serial Dilution/Post Digestion Spikes: WG414521 - All acceptance criteria were met.

Matrix Spikes: All acceptance criteria were met.

SAMPLES

Samples: WG414521 - Client samples 01 through 04 required dilution analyses in order to obtain results for potassium and sodium within the linear range.

Narrative ID: 56252

Approved By: Sheri Pfalzgraf

A handwritten signature in black ink, appearing to read "Sheri L. Pfalzgraf", is written over the printed name.

Certificate of Analysis

Sample #: L12110393-01

PrePrep Method: N/A

Instrument: PE-ICP2

Client ID: BLDG 4-PIT-SSP1-GW-11082012

Prep Method: 3005A

Prep Date: 11/16/2012 07:06

Matrix: Water

Analytical Method: 6010B

Cal Date: 11/19/2012 07:37

Workgroup #: WG414521

Analyst: KHR

Run Date: 11/19/2012 08:52

Collect Date: 11/08/2012 14:11

Dilution: 1

File ID: P2.111912.085239

Sample Tag: 01

Units: mg/L

Analyte	CAS #	Result	Qual	RL	MDL
Aluminum, Total	7429-90-5		U	0.100	0.0500
Barium, Total	7440-39-3	0.881		0.0100	0.00500
Beryllium, Total	7440-41-7		U	0.00200	0.00100
Cadmium, Total	7440-43-9		U	0.000500	0.000250
Calcium, Total	7440-70-2	294		0.200	0.100
Chromium, Total	7440-47-3	0.158		0.00500	0.00250
Cobalt, Total	7440-48-4		U	0.0200	0.0100
Copper, Total	7440-50-8		U	0.0200	0.0100
Iron, Total	7439-89-6		U	0.100	0.0500
Magnesium, Total	7439-95-4	125		0.500	0.250
Manganese, Total	7439-96-5	0.0577		0.0100	0.00500
Nickel, Total	7440-02-0	0.109		0.0400	0.0200
Silver, Total	7440-22-4		U	0.0100	0.00500
Vanadium, Total	7440-62-2	0.0121		0.0100	0.00500
Zinc, Total	7440-66-6		U	0.0200	0.0100
E	Semiquantitative result (out of calibration range)				
U	Not detected at or above adjusted sample detection limit.				

Sample #: L12110393-01

PrePrep Method: N/A

Instrument: PE-ICP2

Client ID: BLDG 4-PIT-SSP1-GW-11082012

Prep Method: 3005A

Prep Date: 11/16/2012 07:06

Matrix: Water

Analytical Method: 6010B

Cal Date: 11/19/2012 07:37

Workgroup #: WG414521

Analyst: KHR

Run Date: 11/19/2012 10:41

Collect Date: 11/08/2012 14:11

Dilution: 50

File ID: P2.111912.104149

Sample Tag: DL01

Units: mg/L

Analyte	CAS #	Result	Qual	RL	MDL
Potassium, Total	7440-09-7	114		50.0	25.0
Sodium, Total	7440-23-5	549		25.0	12.5
J	The analyte was positively identified, but the quantitation was below the RL.				
U	Not detected at or above adjusted sample detection limit.				

Certificate of Analysis

Sample #: L12110393-02

PrePrep Method: N/A

Instrument: PE-ICP2

Client ID: BLDG 4-PIT-SSP1-GW-11082012

Prep Method: 3005A

Prep Date: 11/16/2012 07:06

Matrix: Water

Analytical Method: 6010B

Cal Date: 11/19/2012 07:37

Workgroup #: WG414521

Analyst: KHR

Run Date: 11/19/2012 08:59

Collect Date: 11/08/2012 14:11

Dilution: 1

File ID: P2.111912.085941

Sample Tag: 01

Units: mg/L

Analyte	CAS #	Result	Qual	RL	MDL
Aluminum, Dissolved	7429-90-5		U	0.100	0.0500
Barium, Dissolved	7440-39-3	0.907		0.0100	0.00500
Beryllium, Dissolved	7440-41-7		U	0.00200	0.00100
Cadmium, Dissolved	7440-43-9		U	0.000500	0.000250
Calcium, Dissolved	7440-70-2	304		0.200	0.100
Chromium, Dissolved	7440-47-3	0.168		0.00500	0.00250
Cobalt, Dissolved	7440-48-4		U	0.0200	0.0100
Copper, Dissolved	7440-50-8		U	0.0200	0.0100
Iron, Dissolved	7439-89-6		U	0.100	0.0500
Magnesium, Dissolved	7439-95-4	130		0.500	0.250
Manganese, Dissolved	7439-96-5	0.0595		0.0100	0.00500
Nickel, Dissolved	7440-02-0	0.106		0.0400	0.0200
Silver, Dissolved	7440-22-4		U	0.0100	0.00500
Vanadium, Dissolved	7440-62-2	0.0124		0.0100	0.00500
Zinc, Dissolved	7440-66-6		U	0.0200	0.0100
E	Semiquantitative result (out of calibration range)				
U	Not detected at or above adjusted sample detection limit.				

Sample #: L12110393-02

PrePrep Method: N/A

Instrument: PE-ICP2

Client ID: BLDG 4-PIT-SSP1-GW-11082012

Prep Method: 3005A

Prep Date: 11/16/2012 07:06

Matrix: Water

Analytical Method: 6010B

Cal Date: 11/19/2012 07:37

Workgroup #: WG414521

Analyst: KHR

Run Date: 11/19/2012 10:48

Collect Date: 11/08/2012 14:11

Dilution: 50

File ID: P2.111912.104846

Sample Tag: DL01

Units: mg/L

Analyte	CAS #	Result	Qual	RL	MDL
Potassium, Dissolved	7440-09-7	119		50.0	25.0
Sodium, Dissolved	7440-23-5	581		25.0	12.5
J	The analyte was positively identified, but the quantitation was below the RL.				
U	Not detected at or above adjusted sample detection limit.				

Certificate of Analysis

Sample #: L12110393-03	PrePrep Method: N/A	Instrument: PE-ICP2
Client ID: DUP-GW-110812	Prep Method: 3005A	Prep Date: 11/16/2012 07:06
Matrix: Water	Analytical Method: 6010B	Cal Date: 11/19/2012 07:37
Workgroup #: WG414521	Analyst: KHR	Run Date: 11/19/2012 09:06
Collect Date: 11/08/2012 00:01	Dilution: 1	File ID: P2.111912.090643
Sample Tag: 01	Units: mg/L	

Analyte	CAS #	Result	Qual	RL	MDL
Aluminum, Total	7429-90-5		U	0.100	0.0500
Barium, Total	7440-39-3	0.908		0.0100	0.00500
Beryllium, Total	7440-41-7		U	0.00200	0.00100
Cadmium, Total	7440-43-9		U	0.000500	0.000250
Calcium, Total	7440-70-2	299		0.200	0.100
Chromium, Total	7440-47-3	0.160		0.00500	0.00250
Cobalt, Total	7440-48-4		U	0.0200	0.0100
Copper, Total	7440-50-8		U	0.0200	0.0100
Iron, Total	7439-89-6		U	0.100	0.0500
Magnesium, Total	7439-95-4	128		0.500	0.250
Manganese, Total	7439-96-5	0.0590		0.0100	0.00500
Nickel, Total	7440-02-0	0.112		0.0400	0.0200
Silver, Total	7440-22-4		U	0.0100	0.00500
Vanadium, Total	7440-62-2	0.0124		0.0100	0.00500
Zinc, Total	7440-66-6		U	0.0200	0.0100
E	Semiquantitative result (out of calibration range)				
U	Not detected at or above adjusted sample detection limit.				

Sample #: L12110393-03	PrePrep Method: N/A	Instrument: PE-ICP2
Client ID: DUP-GW-110812	Prep Method: 3005A	Prep Date: 11/16/2012 07:06
Matrix: Water	Analytical Method: 6010B	Cal Date: 11/19/2012 07:37
Workgroup #: WG414521	Analyst: KHR	Run Date: 11/19/2012 10:55
Collect Date: 11/08/2012 00:01	Dilution: 50	File ID: P2.111912.105539
Sample Tag: DL01	Units: mg/L	

Analyte	CAS #	Result	Qual	RL	MDL
Potassium, Total	7440-09-7	113		50.0	25.0
Sodium, Total	7440-23-5	549		25.0	12.5
J	The analyte was positively identified, but the quantitation was below the RL.				
U	Not detected at or above adjusted sample detection limit.				

Certificate of Analysis

Sample #: L12110393-04	PrePrep Method: N/A	Instrument: PE-ICP2
Client ID: DUP-GW-110812	Prep Method: 3005A	Prep Date: 11/16/2012 07:06
Matrix: Water	Analytical Method: 6010B	Cal Date: 11/19/2012 07:37
Workgroup #: WG414521	Analyst: KHR	Run Date: 11/19/2012 09:13
Collect Date: 11/08/2012 00:01	Dilution: 1	File ID: P2.111912.091346
Sample Tag: 01	Units: mg/L	

Analyte	CAS #	Result	Qual	RL	MDL
Aluminum, Dissolved	7429-90-5		U	0.100	0.0500
Barium, Dissolved	7440-39-3	0.892		0.0100	0.00500
Beryllium, Dissolved	7440-41-7		U	0.00200	0.00100
Cadmium, Dissolved	7440-43-9		U	0.000500	0.000250
Calcium, Dissolved	7440-70-2	298		0.200	0.100
Chromium, Dissolved	7440-47-3	0.165		0.00500	0.00250
Cobalt, Dissolved	7440-48-4		U	0.0200	0.0100
Copper, Dissolved	7440-50-8		U	0.0200	0.0100
Iron, Dissolved	7439-89-6		U	0.100	0.0500
Magnesium, Dissolved	7439-95-4	128		0.500	0.250
Manganese, Dissolved	7439-96-5	0.0586		0.0100	0.00500
Nickel, Dissolved	7440-02-0	0.108		0.0400	0.0200
Silver, Dissolved	7440-22-4		U	0.0100	0.00500
Vanadium, Dissolved	7440-62-2	0.0114		0.0100	0.00500
Zinc, Dissolved	7440-66-6		U	0.0200	0.0100
E	Semiquantitative result (out of calibration range)				
U	Not detected at or above adjusted sample detection limit.				

Sample #: L12110393-04	PrePrep Method: N/A	Instrument: PE-ICP2
Client ID: DUP-GW-110812	Prep Method: 3005A	Prep Date: 11/16/2012 07:06
Matrix: Water	Analytical Method: 6010B	Cal Date: 11/19/2012 07:37
Workgroup #: WG414521	Analyst: KHR	Run Date: 11/19/2012 11:02
Collect Date: 11/08/2012 00:01	Dilution: 50	File ID: P2.111912.110233
Sample Tag: DL01	Units: mg/L	

Analyte	CAS #	Result	Qual	RL	MDL
Potassium, Dissolved	7440-09-7	122		50.0	25.0
Sodium, Dissolved	7440-23-5	584		25.0	12.5
U	Not detected at or above adjusted sample detection limit.				

2.2.1.2 QC Summary Data

Example 6010 Calculations
Perkin Elmer Optima 4300 DV

1.0 Initial Calibration (ICAL) Parameters

The system performs linear regression from data consisting of a blank and three standards.

2.0 Calculating the concentration (C) of an element in water using data from prep log, run log, and quantitation report (note: the data system performs this calculation automatically when correction factors have been entered):

$$Cx = Cs \times \frac{Vf}{Vi} \times D$$

Where:

Cs = Concentration computed by the data system in ug/mL (ppm)

Vf = Final volume (mL)

Vi = Initial volume (mL)

D = Dilution factor as a multiplier (10X = 10)

Cx = Concentration of element in ug/mL (mg/L)

Example:

0.1

50

50

1

0.1

3.0 Calculating the concentration (C) of an element in soil using data from prep log, run log, and quantitation report (note: the data system performs this calculation automatically when correction factors have been entered):

$$Cx = Cs \times \frac{Vf}{Vi} \times D$$

Where:

Cs = Concentration computed by the data system (mg/L) (ppm)

Vf = Final volume (mL)

Vi = Initial weight (g)

D = Dilution factor as a multiplier (10X = 10)

Cx = Concentration of element in ug/g (mg/kg)

Example:

0.1

50

1

1

5

4.0 Adjusting the concentration to dry weight:

$$Cdry = \frac{Cx \times 100}{Px}$$

Where:

Cx = Concentration calculated as received (wet basis)

Px = Percent solids of sample (%wt)

$Cdry$ = Concentration calculated as dry weight (mg/kg)

Example:

5

80

6.25

Microbac Laboratories Inc.
Metals Digest Log

Workgroup: WG414452
Analyst: REK
Spike Analyst: REK
Method: 3005A
Run Date: 11/16/2012 07:06
Hotblock Start Temp: 95 @ 05:45
Hotblock End Temp: 95 @ 09:45
Instrument: HB6

SOP: ME401 Revision 14
Spike Solution: STD54722
Spike Witness: BRG
ICP;WG401305 Filter Lot COA16240
HCL Lot #: COA16368
Digestion Tubes Lot #: COA16400
HN03 Lot #: COA16520

	SAMPLE #	Type	Matrix	Initial Amount	Final Volume	Spike Amount	Due Date
1	WG414452-04	BLANK	1	50 mL	50 mL		
2	WG414452-05	LCS	1	50 mL	50 mL	5 mL	
3	L12110393-01	SAMP	1	50 mL	50 mL		11/27/12
4	L12110393-02	SAMP	1	50 mL	50 mL		11/27/12
5	L12110393-03	SAMP	1	50 mL	50 mL		11/27/12
6	L12110393-04	SAMP	1	50 mL	50 mL		11/27/12
7	L12110429-01	SAMP	1	50 mL	50 mL		11/26/12
8	L12110429-02	SAMP	1	50 mL	50 mL		11/26/12
9	L12110429-03	SAMP	1	50 mL	50 mL		11/26/12
10	L12110438-01	SAMP	1	50 mL	50 mL		11/26/12
11	WG414452-01	REF	1	50 mL	50 mL		
12	L12110439-01	RS01	1	50 mL	50 mL		11/26/12
13	WG414452-02	REF	1	50 mL	50 mL		
14	L12110439-02	RS02	1	50 mL	50 mL		11/26/12
15	WG414452-06	MS	1	50 mL	50 mL	5 mL	
16	L12110439-03	MS01	1	50 mL	50 mL	5 mL	11/26/12
17	WG414452-08	MS	1	50 mL	50 mL	5 mL	
18	L12110439-04	MS02	1	50 mL	50 mL	5 mL	11/26/12
19	WG414452-07	MSD	1	50 mL	50 mL	5 mL	
20	L12110439-05	SD01	1	50 mL	50 mL	5 mL	11/26/12
21	WG414452-09	MSD	1	50 mL	50 mL	5 mL	
22	L12110439-06	SD02	1	50 mL	50 mL	5 mL	11/26/12
23	L12110447-02	SAMP	1	50 mL	50 mL		11/29/12
24	WG414452-03	REF	1	50 mL	50 mL		
25	L12110447-05	RS02	1	50 mL	50 mL		11/29/12
26	WG414452-10	MS	1	50 mL	50 mL	5 mL	
27	L12110447-08	MS02	1	50 mL	50 mL	5 mL	11/29/12
28	WG414452-11	MSD	1	50 mL	50 mL	5 mL	
29	L12110447-11	SD02	1	50 mL	50 mL	5 mL	11/29/12
30	L12110447-14	SAMP	1	50 mL	50 mL		11/29/12
31	L12110447-17	SAMP	1	50 mL	50 mL		11/29/12
32	L12110447-20	SAMP	1	50 mL	50 mL		11/29/12
33	L12110447-23	SAMP	1	50 mL	50 mL		11/29/12

HB_DIG - Modified 07/26/2012
PDF ID: 2667223
Report generated: 11/16/2012 10:10



Microbac Laboratories Inc.
Metals Digest Log

Workgroup: WG414452
Analyst: REK
Spike Analyst: REK
Method: 3005A
Run Date: 11/16/2012 07:06
Hotblock Start Temp: 95 @ 05:45
Hotblock End Temp: 95 @ 09:45
Instrument: HB6

SOP: ME401 Revision 14
Spike Solution: STD54722
Spike Witness: BRG
ICP;WG401305 Filter Lot COA16240
HCL Lot #: COA16368
Digestion Tubes Lot #: COA16400
HN03 Lot #: COA16520

Analyst: _____

Reviewer: _____

HB_DIG - Modified 07/26/2012
PDF ID: 2667223
Report generated: 11/16/2012 10:10



Microbac Laboratories Inc. **Instrument Run Log**

Instrument: PE-ICP2 Dataset: 111912HR.CSV
 Analyst1: KHR Analyst2: N/A
 Method: 6010B/6010C/200.7 SOP: ME600E Rev: 12
 Maintenance Log ID: 44008

Calibration Std: STD54901 ICV Std: STD54812 Post Spike: STD53996
 ICSA: STD54822 ICSAB: STD54811 Int. Std: RG17684
 CCV: STD54922 LLCCV: STD54901

414521, 414094, 414522, 414695, 414696

Workgroups:

Comments:

Seq.	File ID	Sample	ID	Prep	Dil	Reference	Date/Time
1	P2.111912.071110	WG414710-01	Calibration Point		1		11/19/12 07:11
2	P2.111912.071805	WG414710-02	Calibration Point		1		11/19/12 07:18
3	P2.111912.072500	WG414710-03	Calibration Point		1		11/19/12 07:25
4	P2.111912.073155	WG414710-04	Calibration Point		1		11/19/12 07:31
5	P2.111912.073754	WG414710-05	Calibration Point		1		11/19/12 07:37
6	P2.111912.074357	WG414710-06	Initial Calibration Verification		1		11/19/12 07:43
7	P2.111912.074955	WG414710-07	Initial Calib Blank		1		11/19/12 07:49
8	P2.111912.075649	WG414710-08	Low Level Initial Calibration V		1		11/19/12 07:56
9	P2.111912.080344	WG414710-09	Low Level Initial Calibration V		1		11/19/12 08:03
10	P2.111912.081039	WG414710-10	Interference Check		1		11/19/12 08:10
11	P2.111912.081635	WG414710-11	Interference Check		1		11/19/12 08:16
12	P2.111912.082231	WG414710-12	CCV		1		11/19/12 08:22
13	P2.111912.082832	WG414710-13	CCB		1		11/19/12 08:28
14	P2.111912.083944	WG414452-04	Method/Prep Blank	50/50	1		11/19/12 08:39
15	P2.111912.084639	WG414452-05	Laboratory Control S	50/50	1		11/19/12 08:46
16	P2.111912.085239	L12110393-01	BLDG 4-PIT-SSP1-GW-1108	50/50	1		11/19/12 08:52
17	P2.111912.085941	L12110393-02	BLDG 4-PIT-SSP1-GW-1108	50/50	1		11/19/12 08:59
18	P2.111912.090643	L12110393-03	DUP-GW-110812	50/50	1		11/19/12 09:06
19	P2.111912.091346	L12110393-04	DUP-GW-110812	50/50	1		11/19/12 09:13
20	P2.111912.092043	L12110429-01	MW44102312	50/50	1		11/19/12 09:20
21	P2.111912.092745	L12110429-02	MW21102312	50/50	1		11/19/12 09:27
22	P2.111912.093443	WG414521-01	Post Digestion Spike		1	L12110429-02	11/19/12 09:34
23	P2.111912.094041	WG414521-02	Serial Dilution		5	L12110429-02	11/19/12 09:40
24	P2.111912.094735	WG414710-14	CCV		1		11/19/12 09:47
25	P2.111912.095336	WG414710-15	CCB		1		11/19/12 09:53
26	P2.111912.100159	WG414452-01	Reference Sample		1	L12110439-01	11/19/12 10:01
27	P2.111912.100809	WG414452-06	Matrix Spike	50/50	1	L12110439-01	11/19/12 10:08
28	P2.111912.101416	WG414452-07	Matrix Spike Duplica	50/50	1	L12110439-01	11/19/12 10:14
29	P2.111912.102027	L12110438-01	LF9MW05-121114	50/50	1		11/19/12 10:20
30	P2.111912.102755	L12110438-01	LF9MW05-121114	50/50	100		11/19/12 10:27
31	P2.111912.103450	L12110309-01	MW95-2-121109	50/50	100		11/19/12 10:34
32	P2.111912.104149	L12110393-01	BLDG 4-PIT-SSP1-GW-1108	50/50	50		11/19/12 10:41
33	P2.111912.104846	L12110393-02	BLDG 4-PIT-SSP1-GW-1108	50/50	50		11/19/12 10:48
34	P2.111912.105539	L12110393-03	DUP-GW-110812	50/50	50		11/19/12 10:55

Page: 1 Approved: November 20, 2012

Maren Beery



Microbac Laboratories Inc. Instrument Run Log

Instrument: PE-ICP2 Dataset: 111912HR.CSV
 Analyst1: KHR Analyst2: N/A
 Method: 6010B/6010C/200.7 SOP: ME600E Rev: 12
 Maintenance Log ID: 44008

Calibration Std: STD54901 ICV Std: STD54812 Post Spike: STD53996
 ICSA: STD54822 ICSAB: STD54811 Int. Std: RG17684
 CCV: STD54922 LLCCV: STD54901

414521, 414094, 414522, 414695, 414696

Workgroups:

Comments:

Seq.	File ID	Sample	ID	Prep	Dil	Reference	Date/Time
35	P2.111912.110233	L12110393-04	DUP-GW-110812	50/50	50		11/19/12 11:02
36	P2.111912.110928	WG414710-16	CCV		1		11/19/12 11:09
37	P2.111912.111529	WG414710-17	CCB		1		11/19/12 11:15
38	P2.111912.112222	WG414710-18	Interference Check		1		11/19/12 11:22
39	P2.111912.112818	WG414710-19	Interference Check		1		11/19/12 11:28
40	P2.111912.113415	WG414710-20	CCV		1		11/19/12 11:34
41	P2.111912.114016	WG414710-21	CCB		1		11/19/12 11:40
42	P2.111912.114710	WG414710-22	Low Level Continuing Calibra		1		11/19/12 11:47
43	P2.111912.115405	WG414710-23	Low Level Continuing Calibra		1		11/19/12 11:54
44	P2.111912.120102	L12110429-03	MW45102312	50/50	1		11/19/12 12:01
45	P2.111912.120803	WG414452-02	Reference Sample		1	L12110439-02	11/19/12 12:08
46	P2.111912.121413	WG414452-08	Matrix Spike	50/50	1	L12110439-02	11/19/12 12:14
47	P2.111912.122019	WG414452-09	Matrix Spike Duplica	50/50	1	L12110439-02	11/19/12 12:20
48	P2.111912.122625	L12110447-02	SW1A-279-14	50/50	1		11/19/12 12:26
49	P2.111912.123223	WG414452-03	Reference Sample		1	L12110447-05	11/19/12 12:32
50	P2.111912.123820	WG414452-10	Matrix Spike	50/50	1	L12110447-05	11/19/12 12:38
51	P2.111912.124418	WG414452-11	Matrix Spike Duplica	50/50	1	L12110447-05	11/19/12 12:44
52	P2.111912.125328	L12110447-14	SW3A-279-14	50/50	1		11/19/12 12:53
53	P2.111912.125926	WG414710-24	CCV		1		11/19/12 12:59
54	P2.111912.130527	WG414710-25	CCB		1		11/19/12 13:05
55	P2.111912.131220	L12110447-17	SW3B-279-14	50/50	1		11/19/12 13:12
56	P2.111912.131819	L12110447-20	SW4A-279-14	50/50	1		11/19/12 13:18
57	P2.111912.132514	L12110447-23	SW5A-279-14	50/50	1		11/19/12 13:25
58	P2.111912.133211	WG414452-01	Reference Sample		100	L12110439-01	11/19/12 13:32
59	P2.111912.133905	WG414452-06	Matrix Spike	50/50	100	L12110439-01	11/19/12 13:39
60	P2.111912.134600	WG414452-07	Matrix Spike Duplica	50/50	100	L12110439-01	11/19/12 13:46
61	P2.111912.135255	WG414452-02	Reference Sample		100	L12110439-02	11/19/12 13:52
62	P2.111912.135949	WG414452-08	Matrix Spike	50/50	100	L12110439-02	11/19/12 13:59
63	P2.111912.140643	WG414452-09	Matrix Spike Duplica	50/50	100	L12110439-02	11/19/12 14:06
64	P2.111912.141337	WG414710-26	CCV		1		11/19/12 14:13
65	P2.111912.141938	WG414710-27	CCB		1		11/19/12 14:19
66	P2.111912.142633	WG414030-01	Reference Sample		2	L12110290-04	11/19/12 14:26
67	P2.111912.143233	WG414030-04	Matrix Spike		2	L12110290-04	11/19/12 14:32
68	P2.111912.143838	WG414030-05	Matrix Spike Duplica		2	L12110290-04	11/19/12 14:38

Page: 2 Approved: November 20, 2012

Maren Beery



Microbac Laboratories Inc. **Instrument Run Log**

Instrument: PE-ICP2 Dataset: 111912HR.CSV
 Analyst1: KHR Analyst2: N/A
 Method: 6010B/6010C/200.7 SOP: ME600E Rev: 12
 Maintenance Log ID: 44008

Calibration Std: STD54901 ICV Std: STD54812 Post Spike: STD53996
 ICSA: STD54822 ICSAB: STD54811 Int. Std: RG17684
 CCV: STD54922 LLCCV: STD54901

414521, 414094, 414522, 414695, 414696

Workgroups:

Comments:

Seq.	File ID	Sample	ID	Prep	Dil	Reference	Date/Time
69	P2.111912.144438	L12110290-17	MW004-GW-110912D		2		11/19/12 14:44
70	P2.111912.145134	L12110339-01	WV OIL	50/50	500		11/19/12 14:51
71	P2.111912.145832	WG414094-03	Post Digestion Spike		500	L12110339-01	11/19/12 14:58
72	P2.111912.150432	L12110345-13	PZ 89-1	50/50	2		11/19/12 15:04
73	P2.111912.151029	WG414710-28	CCV		1		11/19/12 15:10
74	P2.111912.151631	WG414710-29	CCB		1		11/19/12 15:16
75	P2.111912.152324	WG414500-02	Method/Prep Blank	5/50	1		11/19/12 15:23
76	P2.111912.153019	WG414500-03	Laboratory Control S	5/50	1		11/19/12 15:30
77	P2.111912.153618	WG414334-01	Fluid Blank		1		11/19/12 15:36
78	P2.111912.154316	WG414458-01	TCLP Fluid Blank 1		1		11/19/12 15:43
79	P2.111912.155014	WG414458-02	TCLP Fluid Blank 2		1		11/19/12 15:50
80	P2.111912.155708	L12110375-02	Q	5/50	1		11/19/12 15:57
81	P2.111912.160411	L12110375-04	E-0005	5/50	1		11/19/12 16:04
82	P2.111912.161010	L12110375-09	E-2025	5/50	1		11/19/12 16:10
83	P2.111912.161610	WG414522-01	Post Digestion Spike		1	L12110375-09	11/19/12 16:16
84	P2.111912.162210	WG414522-02	Serial Dilution		5	L12110375-09	11/19/12 16:22
85	P2.111912.162906	WG414710-30	CCV		1		11/19/12 16:29
86	P2.111912.163508	WG414710-31	CCB		1		11/19/12 16:35
87	P2.111912.164201	L12110433-04	D-1015	5/50	1		11/19/12 16:42
88	P2.111912.164802	L12110433-09	C-0005	5/50	1		11/19/12 16:48
89	P2.111912.165458	L12110433-14	C-2025	5/50	1		11/19/12 16:54
90	P2.111912.170057	L12110433-19	B-1015	5/50	1		11/19/12 17:00
91	P2.111912.170656	WG414500-01	Reference Sample		1	L12110433-24	11/19/12 17:06
92	P2.111912.171255	WG414500-04	Matrix Spike	5/50	1	L12110433-24	11/19/12 17:12
93	P2.111912.171854	WG414500-05	Matrix Spike Duplica	5/50	1	L12110433-24	11/19/12 17:18
94	P2.111912.172453	L12110433-29	A-2025	5/50	1		11/19/12 17:24
95	P2.111912.173053	L12110436-02	5386-SSP0006	5/50	1		11/19/12 17:30
96	P2.111912.173752	L12110462-01	FOUNDRY SAND	5/50	1		11/19/12 17:37
97	P2.111912.174451	WG414710-32	CCV		1		11/19/12 17:44
98	P2.111912.175052	WG414710-33	CCB		1		11/19/12 17:50
99	P2.111912.175745	WG414710-34	Low Level Continuing Calibra		1		11/19/12 17:57
100	P2.111912.180440	WG414710-35	Low Level Continuing Calibra		1		11/19/12 18:04
101	P2.111912.181135	WG414710-36	Linear Range Check		1		11/19/12 18:11
102	P2.111912.181832	WG414710-36	Linear Range Check		1		11/19/12 18:18

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Microbac Laboratories Inc. **Instrument Run Log**

Instrument: PE-ICP2 Dataset: 111912HR.CSV
 Analyst1: KHR Analyst2: N/A
 Method: 6010B/6010C/200.7 SOP: ME600E Rev: 12
 Maintenance Log ID: 44008

Calibration Std: STD54901 ICV Std: STD54812 Post Spike: STD53996
 ICSA: STD54822 ICSAB: STD54811 Int. Std: RG17684
 CCV: STD54922 LLCCV: STD54901

414521, 414094, 414522, 414695, 414696

Workgroups:

Comments:

Seq.	File ID	Sample	ID	Prep	Dil	Reference	Date/Time
103	P2.111912.182529	BLANK	BLANK		1		11/19/12 18:25
104	P2.111912.183223	WG414710-37	CCV		1		11/19/12 18:32
105	P2.111912.183824	WG414710-38	CCB		1		11/19/12 18:38
106	P2.111912.184518	WG414642-02	Method/Prep Blank	50/50	1		11/19/12 18:45
107	P2.111912.185212	WG414642-03	Laboratory Control S	50/50	1		11/19/12 18:52
108	P2.111912.185811	L12110492-01	MW-1001	50/50	1		11/19/12 18:58
109	P2.111912.190506	WG414642-01	Reference Sample		1	L12110492-02	11/19/12 19:05
110	P2.111912.191205	L12110492-03	MW-0901FD	50/50	1		11/19/12 19:12
111	P2.111912.191905	WG414642-04	Matrix Spike	50/50	1	L12110492-02	11/19/12 19:19
112	P2.111912.192505	WG414642-05	Matrix Spike Duplica	50/50	1	L12110492-02	11/19/12 19:25
113	P2.111912.193105	L12110497-01	LF30/31-EWTS-EFFLUENT-	50/50	1		11/19/12 19:31
114	P2.111912.193800	WG414695-01	Post Digestion Spike		1	L12110497-01	11/19/12 19:38
115	P2.111912.194400	WG414695-02	Serial Dilution		5	L12110497-01	11/19/12 19:44
116	P2.111912.195057	WG414710-39	CCV		1		11/19/12 19:50
117	P2.111912.195658	WG414710-40	CCB		1		11/19/12 19:56
118	P2.111912.200351	L12110506-01	70214-W0001	50/50	1		11/19/12 20:03
119	P2.111912.201048	L12110506-02	70236-W0002	50/50	1		11/19/12 20:10
120	P2.111912.201743	L12110506-03	70385-W0001	50/50	1		11/19/12 20:17
121	P2.111912.202438	L12110506-04	7456-W0002	50/50	1		11/19/12 20:24
122	P2.111912.203133	WG414710-41	CCV		1		11/19/12 20:31
123	P2.111912.203734	WG414710-42	CCB		1		11/19/12 20:37
124	P2.111912.204427	WG414640-02	Method/Prep Blank	50/50	1		11/19/12 20:44
125	P2.111912.205122	WG414640-03	Laboratory Control S	50/50	1		11/19/12 20:51
126	P2.111912.205722	L12110489-01	OUTFALL 003		1	WG414640-01	11/19/12 20:57
127	P2.111912.210320	WG414640-04	Duplicate	50/50	1	L12110489-01	11/19/12 21:03
128	P2.111912.210918	WG414640-05	Matrix Spike	50/50	1	L12110489-01	11/19/12 21:09
129	P2.111912.211517	L12110489-02	OUTFALL 009	50/50	1		11/19/12 21:15
130	P2.111912.212116	L12110511-01	1211-177-1	50/50	1		11/19/12 21:21
131	P2.111912.212720	L12110511-02	1211-209-1	50/50	1		11/19/12 21:27
132	P2.111912.213325	WG414696-01	Post Digestion Spike		1	L12110511-02	11/19/12 21:33
133	P2.111912.213930	WG414696-02	Serial Dilution		5	L12110511-02	11/19/12 21:39
134	P2.111912.214626	WG414710-43	CCV		1		11/19/12 21:46
135	P2.111912.215227	WG414710-44	CCB		1		11/19/12 21:52
136	P2.111912.215920	L12110511-04	1211-178-1	50/50	1		11/19/12 21:59

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Microbac Laboratories Inc.
Instrument Run Log

Instrument: PE-ICP2 Dataset: 111912HR.CSV
 Analyst1: KHR Analyst2: N/A
 Method: 6010B/6010C/200.7 SOP: ME600E Rev: 12
 Maintenance Log ID: 44008

Calibration Std: STD54901 ICV Std: STD54812 Post Spike: STD53996
 ICSA: STD54822 ICSAB: STD54811 Int. Std: RGT17684
 CCV: STD54922 LLCCV: STD54901

414521, 414094, 414522, 414695, 414696

Workgroups:

Comments:

Seq.	File ID	Sample	ID	Prep	Dil	Reference	Date/Time
137	P2.111912.220524	L12110511-05	1211-207-1	50/50	1		11/19/12 22:05
138	P2.111912.221221	L12110511-07	1211-208-1	50/50	1		11/19/12 22:12
139	P2.111912.221819	L12110518-01	1211-214-1	50/50	1		11/19/12 22:18
140	P2.111912.222418	WG414710-45	CCV		1		11/19/12 22:24
141	P2.111912.223019	WG414710-46	CCB		1		11/19/12 22:30

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Maren Beery



Microbac Laboratories Inc.

Data Checklist

Date: 19-NOV-2012

Analyst: KHR

Analyst: NA

Method: 6010B/6010C/200.7

Instrument: PE-ICP2

Curve Workgroup: 414710

Runlog ID: 50102

Analytical Workgroups: 414521, 414094, 414522, 414695, 414696

Calibration/Linearity	X
ICV/CCV	X
ICV RSD <= 3% (EPA 200.7 only)	X
ICB/CCB	X
ICSA/ICSAB	X
CRI	X
Blank/LCS	X
MS/MSD	X
Post Spike/Serial Dilution	X
Upload Results	X
Data Qualifiers	
Generate PDF Instrument Data	X
Sign/Annotate PDF Data	X
Upload Curve Data	X
Workgroup Forms	X
Case Narrative	X
Client Forms	X
Level X	
Level 3	375, 433
Level 4	393, 429, 438, 439, 345, 436, 492
Level 4	497, 506
Check for compliance with method and project specific requirements	X
Check the completeness of reported information	X
Check the information for the report narrative	X
Primary Reviewer	KHR
Secondary Reviewer	MMB
Comments	

Primary Reviewer:
20-NOV-2012

Kim H. Rhodes

Secondary Reviewer:
20-NOV-2012

Maren Beery

CHECKLIST1 - Modified 03/05/2008

Generated: NOV-20-2012 13:14:12



Microbac Laboratories Inc.
HOLDING TIMES
EQUIVALENT TO AFCEE FORM 9

Analytical Method: 6010B

AAB#: WG414521

Login Number: L12110393

Client ID	ID	Date Collected	TCLP Date	Time Held	Max Hold	Q	Extract Date	Time Held	Max Hold	Q	Run Date	Time Held	Max Hold	Q
BLDG 4-PIT-SSP1-GW-11082	01	11/08/12					11/16/2012	7.7	180		11/19/12	10.9	180	
BLDG 4-PIT-SSP1-GW-11082	01	11/08/12					11/16/2012	7.7	180		11/19/12	10.8	180	
BLDG 4-PIT-SSP1-GW-11082	02	11/08/12					11/16/2012	7.7	180		11/19/12	10.9	180	
BLDG 4-PIT-SSP1-GW-11082	02	11/08/12					11/16/2012	7.7	180		11/19/12	10.8	180	
DUP-GW-110812	03	11/08/12					11/16/2012	8.3	180		11/19/12	11.5	180	
DUP-GW-110812	03	11/08/12					11/16/2012	8.3	180		11/19/12	11.4	180	
DUP-GW-110812	04	11/08/12					11/16/2012	8.3	180		11/19/12	11.4	180	
DUP-GW-110812	04	11/08/12					11/16/2012	8.3	180		11/19/12	11.5	180	

* = SEE PROJECT QAPP REQUIREMENTS

HOLD_TIMES - Modified 03/06/2008
PDF File ID: 2670640
Report generated 11/20/2012 07:13



METHOD BLANK SUMMARY

Login Number: L12110393
 Blank File ID: P2.111912.083944
 Prep Date: 11/16/12 07:06
 Analyzed Date: 11/19/12 08:39
 Analyst: KHR

Work Group: WG414521
 Blank Sample ID: WG414452-04
 Instrument ID: PE-ICP2
 Method: 6010B

This Method Blank Applies To The Following Samples:

Client ID	Lab Sample ID	Lab File ID	Time Analyzed	TAG
LCS	WG414452-05	P2.111912.084639	11/19/12 08:46	01
BLDG 4-PIT-SSP1-GW-11082012	L12110393-01	P2.111912.085239	11/19/12 08:52	01
BLDG 4-PIT-SSP1-GW-11082012	L12110393-02	P2.111912.085941	11/19/12 08:59	01
DUP-GW-110812	L12110393-03	P2.111912.090643	11/19/12 09:06	01
DUP-GW-110812	L12110393-04	P2.111912.091346	11/19/12 09:13	01
BLDG 4-PIT-SSP1-GW-11082012	L12110393-01	P2.111912.104149	11/19/12 10:41	DL01
BLDG 4-PIT-SSP1-GW-11082012	L12110393-02	P2.111912.104846	11/19/12 10:48	DL01
DUP-GW-110812	L12110393-03	P2.111912.105539	11/19/12 10:55	DL01
DUP-GW-110812	L12110393-04	P2.111912.110233	11/19/12 11:02	DL01

Report Name: BLANK_SUMMARY
 PDF File ID: 2670641
 Report generated 11/20/2012 07:30



METHOD BLANK REPORT

Login Number: L12110393 Prep Date: 11/16/12 07:06 Sample ID: WG414452-04
 Instrument ID: PE-ICP2 Run Date: 11/19/12 08:39 Prep Method: 3005A
 File ID: P2.111912.083944 Analyst: KHR Method: 6010B
 Workgroup (AAB#): WG414521 Matrix: Water Units: mg/L
 Contract #: _____ Cal ID: PE-ICP - 19-NOV-12

Analytes	MDL	RL	Concentration	Dilution	Qualifier
Aluminum, Total	0.0500	0.100	0.0500	1	U
Barium, Total	0.00500	0.0100	0.00500	1	U
Beryllium, Total	0.00100	0.00200	0.00100	1	U
Cadmium, Total	0.000250	0.000500	0.000250	1	U
Calcium, Total	0.100	0.200	0.100	1	U
Chromium, Total	0.00250	0.00500	0.00250	1	U
Cobalt, Total	0.0100	0.0200	0.0100	1	U
Copper, Total	0.0100	0.0200	0.0100	1	U
Iron, Total	0.0500	0.100	0.0500	1	U
Magnesium, Total	0.250	0.500	0.250	1	U
Manganese, Total	0.00500	0.0100	0.00500	1	U
Nickel, Total	0.0200	0.0400	0.0200	1	U
Potassium, Total	0.500	1.00	0.500	1	U
Silver, Total	0.00500	0.0100	0.00500	1	U
Sodium, Total	0.250	0.500	0.250	1	U
Vanadium, Total	0.00500	0.0100	0.00500	1	U
Zinc, Total	0.0100	0.0200	0.0100	1	U

MDL Method Detection Limit
 RL Reporting/Practical Quantitation Limit
 ND Analyte Not detected at or above reporting limit
 * |Analyte concentration| > RL

Report Name: BLANK
 PDF ID: 2670642
 20-NOV-2012 07:30



Microbac Laboratories Inc.
LABORATORY CONTROL SAMPLE (LCS)

Login Number: <u>L12110393</u>	Run Date: <u>11/19/2012</u>	Sample ID: <u>WG414452-05</u>
Instrument ID: <u>PE-ICP2</u>	Run Time: <u>08:46</u>	Prep Method: <u>3005A</u>
File ID: <u>P2.111912.084639</u>	Analyst: <u>KHR</u>	Method: <u>6010B</u>
Workgroup (AAB#): <u>WG414521</u>	Matrix: <u>Water</u>	Units: <u>mg/L</u>
QC Key: <u>WATERL00</u>	Lot#: <u>STD54722</u>	Cal ID: <u>PE-ICP - 19-NOV-12</u>

Analytes	Expected	Found	% Rec	LCS Limits			Q
Aluminum, Total	5.00	4.85	97.0	85	-	115	
Barium, Total	0.500	0.489	97.7	85	-	115	
Beryllium, Total	0.0250	0.0236	94.3	85	-	115	
Cadmium, Total	0.0250	0.0233	93.1	85	-	115	
Calcium, Total	5.00	5.03	101	85	-	115	
Chromium, Total	0.250	0.246	98.3	85	-	115	
Cobalt, Total	0.100	0.0980	98.0	85	-	115	
Copper, Total	0.250	0.246	98.2	85	-	115	
Iron, Total	2.00	2.01	100	85	-	115	
Magnesium, Total	5.00	4.96	99.2	85	-	115	
Manganese, Total	0.250	0.249	99.5	85	-	115	
Nickel, Total	0.250	0.258	103	85	-	115	
Potassium, Total	25.0	23.8	95.3	85	-	115	
Silver, Total	0.200	0.197	98.7	85	-	115	
Sodium, Total	25.0	24.5	98.1	85	-	115	
Vanadium, Total	0.500	0.490	98.0	85	-	115	
Zinc, Total	0.500	0.486	97.2	85	-	115	

LCS - Modified 03/06/2008
 PDF File ID: 2670643
 Report generated: 11/20/2012 07:30



MATRIX SPIKE AND MATRIX SPIKE DUP (MS/MSD)

Loginnum: L12110393

Cal ID: PE-ICP2 -

Worknum: WG414521

Instrument ID: PE-ICP2

Contract #:

Method: 6010B

Parent ID: WG414452-03

File ID: P2.111912.123223

Dil: 1

Matrix: WATER

Sample ID: WG414452-10 MS

File ID: P2.111912.123820

Dil: 1

Units: mg/L

Sample ID: WG414452-11 MSD

File ID: P2.111912.124418

Dil: 1

Analyte	Parent	MS Spiked	MS Found	MS %Rec	MSD Spiked	MSD Found	MSD %Rec	%RPD	%Rec Limits	RPD Limit	Q
Aluminum, Total	0.152	5.00	5.08	98.5	5.00	5.09	98.8	0.285	85 - 115	20	
Barium, Total	0.00877	0.500	0.499	98.1	0.500	0.499	98.1	0.0277	85 - 115	20	
Beryllium, Total	ND	0.0250	0.0237	94.7	0.0250	0.0235	94.0	0.768	85 - 115	20	
Cadmium, Total	ND	0.0250	0.0231	92.4	0.0250	0.0230	92.1	0.335	85 - 115	20	
Calcium, Total	1.87	5.00	6.92	101	5.00	6.92	101	0.0474	85 - 115	20	
Chromium, Total	ND	0.250	0.246	98.3	0.250	0.245	98.1	0.195	85 - 115	20	
Cobalt, Total	ND	0.100	0.0979	97.9	0.100	0.0977	97.7	0.130	85 - 115	20	
Copper, Total	ND	0.250	0.247	98.8	0.250	0.246	98.5	0.336	85 - 115	20	
Iron, Total	0.320	2.00	2.30	98.8	2.00	2.31	99.4	0.479	85 - 115	20	
Magnesium, Total	0.898	5.00	5.80	98.0	5.00	5.82	98.3	0.341	85 - 115	20	
Manganese, Total	0.0158	0.250	0.267	100	0.250	0.266	100	0.161	85 - 115	20	
Nickel, Total	ND	0.250	0.257	103	0.250	0.258	103	0.180	85 - 115	20	
Potassium, Total	0.724	25.0	24.8	96.2	25.0	24.9	96.6	0.402	85 - 115	20	
Silver, Total	ND	0.200	0.197	98.5	0.200	0.196	98.0	0.526	85 - 115	20	
Sodium, Total	1.83	25.0	26.2	97.5	25.0	26.2	97.4	0.0887	85 - 115	20	
Vanadium, Total	ND	0.500	0.492	98.5	0.500	0.493	98.5	0.0541	85 - 115	20	
Zinc, Total	ND	0.500	0.478	95.6	0.500	0.476	95.1	0.441	85 - 115	20	

* FAILS %REC LIMIT

FAILS RPD LIMIT

NOTE: This is an internal quality control sample.

WG_MS_MSD_DRYWT - Modified 05/26/2011

PDF File ID: 2670644

Report generated 11/20/2012 07:30

Microbac®

Microbac Laboratories Inc.
Serial Dilution Report

Login: L12110393 **Worknum:** WG414521
Instrument: PE-ICP2 **Method:** 6010B
Serial Dil: WG414521-02 **File ID:** P2.111912.094041 **Dil:** 5 **Units:** mg/L
Sample: L12110429-02 **File ID:** P2.111912.092745 **Dil:** 1

Analyte	Sample	Qual	Serial Dil	Qual	% Diff	Q
Aluminum	ND	U	ND	U		
Barium	0.0653	X	0.0609	X	6.74	
Beryllium	ND	U	ND	U		
Cadmium	ND	U	ND	U		
Calcium	61.1		63.3		3.63	
Chromium	ND	U	ND	U		
Cobalt	ND	U	ND	U		
Copper	ND	U	ND	U		
Iron	0.0797	F	ND	U		
Magnesium	13.2		13.4		1.15	
Manganese	0.0822	X	0.0736	X	10.40	
Nickel	ND	U	ND	U		
Potassium	6.89	X	7.49	X	8.63	
Silver	ND	U	ND	U		
Sodium	41.4		41.2		0.45	
Vanadium	ND	U	ND	U		
Zinc	ND	U	ND	U		

U = Result is below MDL.

F = Result is greater than or equal to MDL and less than the RL.

X = Result is greater than or equal to RL and less than 50 times the MDL.

E = %D exceeds control limit of 10% and initial sample result is greater than or equal to 50 times the MDL.

SERIAL_DIL - Modified 09/22/2008

PDF File ID: 2670638

11/20/2012 07:30



Microbac Laboratories Inc.
POST SPIKE REPORT

Sample Login ID: L12110393
Instrument ID: PE-ICP2
Post Spike ID: WG414521-01
Sample ID: L12110429-02

Worknum: WG414521
Method: 6010B
Units: mg/L
Matrix: Water
File ID: P2.111912.093443 Dil: 1
File ID: P2.111912.092745 Dil: 1

Analyte	Post Spike Result	C	Sample Result	C	Spike Added(SA)	% R	Control Limit %R	Q
ALUMINUM	4.95		0	U	5	99.0	75 - 125	
BARIUM	0.557		0.0653		.5	99.6	75 - 125	
BERYLLIUM	0.0239		0	U	.025	95.7	75 - 125	
CADMIUM	0.0228		0	U	.025	91.4	75 - 125	
CALCIUM	65.5		61.1		5	209.6	75 - 125	N
CHROMIUM	0.250		0	U	.25	100.1	75 - 125	
COBALT	0.0996		0	U	.1	99.6	75 - 125	
COPPER	0.244		0	U	.25	97.5	75 - 125	
IRON	2.08		0.0797	F	2	100.5	75 - 125	
MAGNESIUM	16.8		13.2		5	97.9	75 - 125	
MANGANESE	0.332		0.0822		.25	103.1	75 - 125	
NICKEL	0.260		0	U	.25	104.0	75 - 125	
POTASSIUM	30.8		6.89		25	98.5	75 - 125	
SILVER	0.197		0	U	.2	98.5	75 - 125	
SODIUM	65.2		41.4		25	112.0	75 - 125	
VANADIUM	0.514		0	U	.5	102.8	75 - 125	
ZINC	0.483		0	U	.5	96.5	75 - 125	

N = % Recovery exceeds control limits

F = Result is between MDL and RL

U = Sample result is below MDL. A value of zero is used in the calculation

POST_SPIKE - Modified 03/06/2008
PDF File ID: 2670639
Report generated: 11/20/2012 07:30



Microbac Laboratories Inc.
Initial Calibration Summary

Login:	L12110393	Workgroup (AAB#):	WG414521
Analytical Method:	6010B	Instrument ID:	PE-ICP2
ICAL Worknum:	WG414710	Initial Calibration Date:	19-NOV-2012 07:37

	WG414710-01		WG414710-02		WG414710-03		WG414710-04		WG414710-05			
	Conc	INT	Conc	INT	Conc	INT	Conc	INT	Conc	INT	R	Q
ALUMINUM	0	-11.9	.1	681	.2	1330	10	66800	20	132000	.999985	
BARIUM	0	-217	.01	1530	.02	3070	1	149000	2	294000	.999982	
BERYLLIUM	0	-2100	.0005	588	.001	1120	.05	55900	.1	112000	1	
CADMIUM	0	55.2	.0005	19.2	.001	42.6	.05	2250	.1	4480	.999997	
CALCIUM	0	-109	NA	NA	.2	87.9	10	3780	20	7640	.999987	
CHROMIUM	0	226	.005	654	.01	1360	.5	65300	1	129000	.999993	
COBALT	0	7.67	.002	73.8	.004	156	.1	7440	.4	14600	.999965	
COPPER	0	-692	.005	1470	.01	2820	.5	136000	1	269000	.999994	
IRON	0	-0.676	.04	392	.08	763	4	38500	8	76000	.999983	
MAGNESIUM	0	26.0	.1	297	.2	564	10	27900	20	55500	.999997	
MANGANESE	0	899	.005	4560	.01	8680	.5	428000	1	830000	.999896	
NICKEL	0	-172	.005	323	.01	638	.5	30200	1	59200	.99995	
POTASSIUM	0	-96.6	.5	1440	1	2930	50	149000	100	295000	1	
SILVER	0	-224	.004	1350	.008	2760	.4	131000	.8	260000	.999985	
SODIUM	0	1090	.5	10400	1	19900	50	985000	100	1920000	1	
VANADIUM	0	9090	.01	2130	.02	4730	1	232000	2	456000	.999973	
ZINC	0	-20.8	.01	481	.02	913	1	44900	2	88900	.999987	

INT = Instrument intensity
R = Coefficient of correlation
Q = Data Qualifier
* = Out of Compliance; R < 0.995



Microbac Laboratories Inc.
INITIAL CALIBRATION BLANK (ICB)

Login Number: L12110393 Run Date: 11/19/2012 Sample ID: WG414710-07
Instrument ID: PE-ICP2 Run Time: 07:49 Method: 6010B
File ID: P2.111912.074955 Analyst: KHR Units: mg/L
Workgroup (AAB#): WG414521 Cal ID: PE-ICP2 - 19-NOV-12
Matrix: WATER

Analytes	MDL	RDL	Concentration	Qualifier
ALUMINUM	.05	.1	.05	U
BARIUM	.005	.01	.005	U
BERYLLIUM	.001	.002	.001	U
CADMIUM	.00025	.0005	.00025	U
CALCIUM	.1	.2	.1	U
CHROMIUM	.0025	.005	.0025	U
COBALT	.01	.02	.01	U
COPPER	.01	.02	.01	U
IRON	.05	.1	.05	U
MAGNESIUM	.25	.5	.25	U
MANGANESE	.005	.01	.005	U
NICKEL	.02	.04	.02	U
POTASSIUM	.5	1	.5	U
SILVER	.005	.01	.005	U
SODIUM	.25	.5	.25	U
VANADIUM	.005	.01	.005	U
ZINC	.01	.02	.01	U

ICB - Modified 07/14/2009
PDF File ID: 2670649
Report generated 11/20/2012 07:13



Microbac Laboratories Inc.
CONTINUING CALIBRATION BLANK (CCB)

Login Number: <u>L12110393</u>	Run Date: <u>11/19/2012</u>	Sample ID: <u>WG414710-13</u>
Instrument ID: <u>PE-ICP2</u>	Run Time: <u>08:28</u>	Method: <u>6010B</u>
File ID: <u>P2.111912.082832</u>	Analyst: <u>KHR</u>	Units: <u>mg/L</u>
Workgroup (AAB#): <u>WG414521</u>	Cal ID: <u>PE-ICP - 19-NOV-12</u>	
Matrix: <u>WATER</u>	QAPP: <u>WATERLOO</u>	

Analytes	MDL	RDL	Concentration	Qualifier
Aluminum	0.0500	0.100	0.0500	U
Barium	0.00500	0.0100	0.00500	U
Beryllium	0.00100	0.00200	0.00100	U
Cadmium	0.000250	0.000500	0.000250	U
Calcium	0.100	0.200	0.100	U
Chromium	0.00250	0.00500	0.00250	U
Cobalt	0.0100	0.0200	0.0100	U
Copper	0.0100	0.0200	0.0100	U
Iron	0.0500	0.100	0.0500	U
Magnesium	0.250	0.500	0.250	U
Manganese	0.00500	0.0100	0.00500	U
Nickel	0.0200	0.0400	0.0200	U
Potassium	0.500	1.00	0.500	U
Silver	0.00500	0.0100	0.00500	U
Sodium	0.250	0.500	0.250	U
Vanadium	0.00500	0.0100	0.00500	U
Zinc	0.0100	0.0200	0.0100	U

U = Result is less than MDL.
F = Result is between MDL and RL.
* = Result is above RL.

CCB - Modified 03/05/2008
PDF File ID: 2670652
Report generated 11/20/2012 07:13



Microbac Laboratories Inc.
CONTINUING CALIBRATION BLANK (CCB)

Login Number: L12110393 Run Date: 11/19/2012 Sample ID: WG414710-15
Instrument ID: PE-ICP2 Run Time: 09:53 Method: 6010B
File ID: P2.111912.095336 Analyst: KHR Units: mg/L
Workgroup (AAB#): WG414521 Cal ID: PE-ICP - 19-NOV-12
Matrix: WATER QAPP: WATERLOO

Analytes	MDL	RDL	Concentration	Qualifier
Aluminum	0.0500	0.100	0.0500	U
Barium	0.00500	0.0100	0.00500	U
Beryllium	0.00100	0.00200	0.00100	U
Cadmium	0.000250	0.000500	0.000250	U
Calcium	0.100	0.200	0.100	U
Chromium	0.00250	0.00500	0.00250	U
Cobalt	0.0100	0.0200	0.0100	U
Copper	0.0100	0.0200	0.0100	U
Iron	0.0500	0.100	0.0500	U
Magnesium	0.250	0.500	0.250	U
Manganese	0.00500	0.0100	0.00500	U
Nickel	0.0200	0.0400	0.0200	U
Potassium	0.500	1.00	0.500	U
Silver	0.00500	0.0100	0.00500	U
Sodium	0.250	0.500	0.250	U
Vanadium	0.00500	0.0100	0.00500	U
Zinc	0.0100	0.0200	0.0100	U

U = Result is less than MDL.
F = Result is between MDL and RL.
* = Result is above RL.

CCB - Modified 03/05/2008
PDF File ID: 2670652
Report generated 11/20/2012 07:13



Microbac Laboratories Inc.
CONTINUING CALIBRATION BLANK (CCB)

Login Number: <u>L12110393</u>	Run Date: <u>11/19/2012</u>	Sample ID: <u>WG414710-17</u>
Instrument ID: <u>PE-ICP2</u>	Run Time: <u>11:15</u>	Method: <u>6010B</u>
File ID: <u>P2.111912.111529</u>	Analyst: <u>KHR</u>	Units: <u>mg/L</u>
Workgroup (AAB#): <u>WG414521</u>	Cal ID: <u>PE-ICP - 19-NOV-12</u>	
Matrix: <u>WATER</u>	QAPP: <u>WATERLOO</u>	

Analytes	MDL	RDL	Concentration	Qualifier
Aluminum	0.0500	0.100	0.0500	U
Barium	0.00500	0.0100	0.00500	U
Beryllium	0.00100	0.00200	0.00100	U
Cadmium	0.000250	0.000500	0.000250	U
Calcium	0.100	0.200	0.100	U
Chromium	0.00250	0.00500	0.00250	U
Cobalt	0.0100	0.0200	0.0100	U
Copper	0.0100	0.0200	0.0100	U
Iron	0.0500	0.100	0.0500	U
Magnesium	0.250	0.500	0.250	U
Manganese	0.00500	0.0100	0.00500	U
Nickel	0.0200	0.0400	0.0200	U
Potassium	0.500	1.00	0.500	U
Silver	0.00500	0.0100	0.00500	U
Sodium	0.250	0.500	0.250	U
Vanadium	0.00500	0.0100	0.00500	U
Zinc	0.0100	0.0200	0.0100	U

U = Result is less than MDL.
F = Result is between MDL and RL.
* = Result is above RL.

CCB - Modified 03/05/2008
PDF File ID: 2670652
Report generated 11/20/2012 07:13



Microbac Laboratories Inc.
CONTINUING CALIBRATION BLANK (CCB)

Login Number: <u>L12110393</u>	Run Date: <u>11/19/2012</u>	Sample ID: <u>WG414710-21</u>
Instrument ID: <u>PE-ICP2</u>	Run Time: <u>11:40</u>	Method: <u>6010B</u>
File ID: <u>P2.111912.114016</u>	Analyst: <u>KHR</u>	Units: <u>mg/L</u>
Workgroup (AAB#): <u>WG414521</u>	Cal ID: <u>PE-ICP - 19-NOV-12</u>	
Matrix: <u>WATER</u>	QAPP: <u>WATERLOO</u>	

Analytes	MDL	RDL	Concentration	Qualifier
Aluminum	0.0500	0.100	0.0500	U
Barium	0.00500	0.0100	0.00500	U
Beryllium	0.00100	0.00200	0.00100	U
Cadmium	0.000250	0.000500	0.000250	U
Calcium	0.100	0.200	0.100	U
Chromium	0.00250	0.00500	0.00250	U
Cobalt	0.0100	0.0200	0.0100	U
Copper	0.0100	0.0200	0.0100	U
Iron	0.0500	0.100	0.0500	U
Magnesium	0.250	0.500	0.250	U
Manganese	0.00500	0.0100	0.00500	U
Nickel	0.0200	0.0400	0.0200	U
Potassium	0.500	1.00	0.500	U
Silver	0.00500	0.0100	0.00500	U
Sodium	0.250	0.500	0.250	U
Vanadium	0.00500	0.0100	0.00500	U
Zinc	0.0100	0.0200	0.0100	U

U = Result is less than MDL.
F = Result is between MDL and RL.
* = Result is above RL.

CCB - Modified 03/05/2008
PDF File ID: 2670652
Report generated 11/20/2012 07:13



Microbac Laboratories Inc.
CONTINUING CALIBRATION BLANK (CCB)

Login Number: L12110393	Run Date: 11/19/2012	Sample ID: WG414710-33
Instrument ID: PE-ICP2	Run Time: 17:50	Method: 6010B
File ID: P2.111912.175052	Analyst: KHR	Units: mg/L
Workgroup (AAB#): WG414521	Cal ID: PE-ICP - 19-NOV-12	
Matrix: WATER	QAPP: WATERLOO	

Analytes	MDL	RDL	Concentration	Qualifier
Aluminum	0.0500	0.100	0.0500	U
Barium	0.00500	0.0100	0.00500	U
Beryllium	0.00100	0.00200	0.00100	U
Cadmium	0.000250	0.000500	0.000250	U
Calcium	0.100	0.200	0.100	U
Chromium	0.00250	0.00500	0.00250	U
Cobalt	0.0100	0.0200	0.0100	U
Copper	0.0100	0.0200	0.0100	U
Iron	0.0500	0.100	0.0500	U
Magnesium	0.250	0.500	0.250	U
Manganese	0.00500	0.0100	0.00500	U
Nickel	0.0200	0.0400	0.0200	U
Potassium	0.500	1.00	0.500	U
Silver	0.00500	0.0100	0.00500	U
Sodium	0.250	0.500	0.250	U
Vanadium	0.00500	0.0100	0.00500	U
Zinc	0.0100	0.0200	0.0100	U

U = Result is less than MDL.
F = Result is between MDL and RL.
* = Result is above RL.

CCB - Modified 03/05/2008
PDF File ID: 2670652
Report generated 11/20/2012 07:13



Microbac Laboratories Inc.
CONTINUING CALIBRATION BLANK (CCB)

Login Number: <u>L12110393</u>	Run Date: <u>11/19/2012</u>	Sample ID: <u>WG414710-38</u>
Instrument ID: <u>PE-ICP2</u>	Run Time: <u>18:38</u>	Method: <u>6010B</u>
File ID: <u>P2.111912.183824</u>	Analyst: <u>KHR</u>	Units: <u>mg/L</u>
Workgroup (AAB#): <u>WG414521</u>	Cal ID: <u>PE-ICP - 19-NOV-12</u>	
Matrix: <u>WATER</u>	QAPP: <u>WATERLOO</u>	

Analytes	MDL	RDL	Concentration	Qualifier
Aluminum	0.0500	0.100	0.0500	U
Barium	0.00500	0.0100	0.00500	U
Beryllium	0.00100	0.00200	0.00100	U
Cadmium	0.000250	0.000500	0.000250	U
Calcium	0.100	0.200	0.100	U
Chromium	0.00250	0.00500	0.00250	U
Cobalt	0.0100	0.0200	0.0100	U
Copper	0.0100	0.0200	0.0100	U
Iron	0.0500	0.100	0.0500	U
Magnesium	0.250	0.500	0.250	U
Manganese	0.00500	0.0100	0.00500	U
Nickel	0.0200	0.0400	0.0200	U
Potassium	0.500	1.00	0.500	U
Silver	0.00500	0.0100	0.00500	U
Sodium	0.250	0.500	0.250	U
Vanadium	0.00500	0.0100	0.00500	U
Zinc	0.0100	0.0200	0.0100	U

U = Result is less than MDL.
F = Result is between MDL and RL.
* = Result is above RL.

CCB - Modified 03/05/2008
PDF File ID: 2670652
Report generated 11/20/2012 07:13



Microbac Laboratories Inc.
INITIAL CALIBRATION VERIFICATION (ICV)
 (Alternate Source)

Login Number: <u>L12110393</u>	Run Date: <u>11/19/2012</u>	Sample ID: <u>WG414710-06</u>
Instrument ID: <u>PE-ICP2</u>	Run Time: <u>07:43</u>	Method: <u>6010B</u>
File ID: <u>P2.111912.074357</u>	Analyst: <u>KHR</u>	Units: <u>mg/L</u>
Workgroup (AAB#): <u>WG414521</u>	Cal ID: <u>PE-ICP - 19-NOV-12</u>	
QC Key: <u>WATERL00</u>		

Analyte	Expected	Found	%REC	LIMITS	Q
Aluminum	10	10.0	100	90 - 110	
Barium	1	1.02	102	90 - 110	
Beryllium	.05	0.0501	100	90 - 110	
Cadmium	.05	0.0490	98.0	90 - 110	
Calcium	10	10.5	105	90 - 110	
Chromium	.5	0.510	102	90 - 110	
Cobalt	.2	0.204	102	90 - 110	
Copper	.5	0.511	102	90 - 110	
Iron	4	4.00	100	90 - 110	
Magnesium	10	10.0	100	90 - 110	
Manganese	.5	0.520	104	90 - 110	
Nickel	.5	0.515	103	90 - 110	
Potassium	50	49.3	98.6	90 - 110	
Silver	.4	0.415	104	90 - 110	
Sodium	50	49.5	98.9	90 - 110	
Vanadium	1	1.01	101	90 - 110	
Zinc	1	1.03	103	90 - 110	

* Exceeds LIMITS Limit

ICV - Modified 03/06/2008
 PDF File ID: 2670648
 Report generated 11/20/2012 07:13



CONTINUING CALIBRATION VERIFICATION (CCV)

Login Number: L12110393 Run Date: 11/19/2012 Sample ID: WG414710-12
 Instrument ID: PE-ICP2 Run Time: 08:22 Method: 6010B
 File ID: P2.111912.082231 Analyst: KHR QC Key: WATERL00
 Workgroup (AAB#): WG414521 Cal ID: PE-ICP - 19-NOV-12
 Matrix: WATER

Analyte		Expected	Found	UNITS	%REC	LIMITS		Q
Aluminum		10.0	10.0	mg/L	100	90 - 110		
Barium		1.00	1.01	mg/L	101	90 - 110		
Beryllium		0.0500	0.0497	mg/L	99.4	90 - 110		
Cadmium		0.0500	0.0491	mg/L	98.1	90 - 110		
Calcium		10.0	10.5	mg/L	105	90 - 110		
Chromium		0.500	0.503	mg/L	101	90 - 110		
Cobalt		0.200	0.202	mg/L	101	90 - 110		
Copper		0.500	0.506	mg/L	101	90 - 110		
Iron		4.00	4.07	mg/L	102	90 - 110		
Magnesium		10.0	10.2	mg/L	102	90 - 110		
Manganese		0.500	0.511	mg/L	102	90 - 110		
Nickel		0.500	0.504	mg/L	101	90 - 110		
Potassium		50.0	49.6	mg/L	99.2	90 - 110		
Silver		0.400	0.406	mg/L	102	90 - 110		
Sodium		50.0	50.7	mg/L	101	90 - 110		
Vanadium		1.00	1.01	mg/L	101	90 - 110		
Zinc		1.00	1.01	mg/L	101	90 - 110		

* Exceeds LIMITS Criteria

CCV - Modified 03/05/2008
 PDF File ID: 2670651
 Report generated 11/20/2012 07:13



CONTINUING CALIBRATION VERIFICATION (CCV)

Login Number: L12110393 Run Date: 11/19/2012 Sample ID: WG414710-14
 Instrument ID: PE-ICP2 Run Time: 09:47 Method: 6010B
 File ID: P2.111912.094735 Analyst: KHR QC Key: WATERL00
 Workgroup (AAB#): WG414521 Cal ID: PE-ICP - 19-NOV-12
 Matrix: WATER

Analyte		Expected	Found	UNITS	%REC	LIMITS		Q
Aluminum		10.0	9.85	mg/L	98.5	90 - 110		
Barium		1.00	0.998	mg/L	99.8	90 - 110		
Beryllium		0.0500	0.0488	mg/L	97.5	90 - 110		
Cadmium		0.0500	0.0485	mg/L	96.9	90 - 110		
Calcium		10.0	10.3	mg/L	103	90 - 110		
Chromium		0.500	0.497	mg/L	99.4	90 - 110		
Cobalt		0.200	0.200	mg/L	100	90 - 110		
Copper		0.500	0.501	mg/L	100	90 - 110		
Iron		4.00	3.97	mg/L	99.2	90 - 110		
Magnesium		10.0	9.90	mg/L	99.0	90 - 110		
Manganese		0.500	0.505	mg/L	101	90 - 110		
Nickel		0.500	0.499	mg/L	99.7	90 - 110		
Potassium		50.0	49.1	mg/L	98.2	90 - 110		
Silver		0.400	0.400	mg/L	100	90 - 110		
Sodium		50.0	50.2	mg/L	100	90 - 110		
Vanadium		1.00	0.996	mg/L	99.6	90 - 110		
Zinc		1.00	0.989	mg/L	98.9	90 - 110		

* Exceeds LIMITS Criteria

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CONTINUING CALIBRATION VERIFICATION (CCV)

Login Number: L12110393 Run Date: 11/19/2012 Sample ID: WG414710-16
 Instrument ID: PE-ICP2 Run Time: 11:09 Method: 6010B
 File ID: P2.111912.110928 Analyst: KHR QC Key: WATERL00
 Workgroup (AAB#): WG414521 Cal ID: PE-ICP - 19-NOV-12
 Matrix: WATER

Analyte		Expected	Found	UNITS	%REC	LIMITS		Q
Aluminum		10.0	9.58	mg/L	95.8	90 - 110		
Barium		1.00	0.972	mg/L	97.2	90 - 110		
Beryllium		0.0500	0.0480	mg/L	96.0	90 - 110		
Cadmium		0.0500	0.0471	mg/L	94.3	90 - 110		
Calcium		10.0	10.1	mg/L	101	90 - 110		
Chromium		0.500	0.483	mg/L	96.7	90 - 110		
Cobalt		0.200	0.194	mg/L	96.8	90 - 110		
Copper		0.500	0.490	mg/L	98.1	90 - 110		
Iron		4.00	3.87	mg/L	96.8	90 - 110		
Magnesium		10.0	9.77	mg/L	97.7	90 - 110		
Manganese		0.500	0.493	mg/L	98.6	90 - 110		
Nickel		0.500	0.485	mg/L	97.0	90 - 110		
Potassium		50.0	48.2	mg/L	96.3	90 - 110		
Silver		0.400	0.394	mg/L	98.4	90 - 110		
Sodium		50.0	48.0	mg/L	96.0	90 - 110		
Vanadium		1.00	0.972	mg/L	97.2	90 - 110		
Zinc		1.00	0.961	mg/L	96.1	90 - 110		

* Exceeds LIMITS Criteria

CCV - Modified 03/05/2008
 PDF File ID: 2670651
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CONTINUING CALIBRATION VERIFICATION (CCV)

Login Number: L12110393 Run Date: 11/19/2012 Sample ID: WG414710-20
 Instrument ID: PE-ICP2 Run Time: 11:34 Method: 6010B
 File ID: P2.111912.113415 Analyst: KHR QC Key: WATERL00
 Workgroup (AAB#): WG414521 Cal ID: PE-ICP - 19-NOV-12
 Matrix: WATER

Analyte		Expected	Found	UNITS	%REC	LIMITS		Q
Aluminum		10.0	9.91	mg/L	99.1	90 - 110		
Barium		1.00	1.01	mg/L	101	90 - 110		
Beryllium		0.0500	0.0497	mg/L	99.4	90 - 110		
Cadmium		0.0500	0.0489	mg/L	97.9	90 - 110		
Calcium		10.0	10.4	mg/L	104	90 - 110		
Chromium		0.500	0.504	mg/L	101	90 - 110		
Cobalt		0.200	0.201	mg/L	100	90 - 110		
Copper		0.500	0.506	mg/L	101	90 - 110		
Iron		4.00	4.01	mg/L	100	90 - 110		
Magnesium		10.0	10.1	mg/L	101	90 - 110		
Manganese		0.500	0.510	mg/L	102	90 - 110		
Nickel		0.500	0.504	mg/L	101	90 - 110		
Potassium		50.0	49.3	mg/L	98.7	90 - 110		
Silver		0.400	0.407	mg/L	102	90 - 110		
Sodium		50.0	49.8	mg/L	99.6	90 - 110		
Vanadium		1.00	1.01	mg/L	101	90 - 110		
Zinc		1.00	1.01	mg/L	101	90 - 110		

* Exceeds LIMITS Criteria

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CONTINUING CALIBRATION VERIFICATION (CCV)

Login Number: L12110393 Run Date: 11/19/2012 Sample ID: WG414710-32
 Instrument ID: PE-ICP2 Run Time: 17:44 Method: 6010B
 File ID: P2.111912.174451 Analyst: KHR QC Key: WATERL00
 Workgroup (AAB#): WG414521 Cal ID: PE-ICP - 19-NOV-12
 Matrix: WATER

Analyte		Expected	Found	UNITS	%REC	LIMITS		Q
Aluminum		10.0	9.96	mg/L	99.6	90 - 110		
Barium		1.00	1.01	mg/L	101	90 - 110		
Beryllium		0.0500	0.0489	mg/L	97.8	90 - 110		
Cadmium		0.0500	0.0477	mg/L	95.5	90 - 110		
Calcium		10.0	10.2	mg/L	102	90 - 110		
Chromium		0.500	0.500	mg/L	100	90 - 110		
Cobalt		0.200	0.201	mg/L	101	90 - 110		
Copper		0.500	0.500	mg/L	100	90 - 110		
Iron		4.00	4.02	mg/L	101	90 - 110		
Magnesium		10.0	10.1	mg/L	101	90 - 110		
Manganese		0.500	0.512	mg/L	102	90 - 110		
Nickel		0.500	0.502	mg/L	100	90 - 110		
Potassium		50.0	50.0	mg/L	99.9	90 - 110		
Silver		0.400	0.400	mg/L	100	90 - 110		
Sodium		50.0	49.6	mg/L	99.2	90 - 110		
Vanadium		1.00	1.01	mg/L	101	90 - 110		
Zinc		1.00	0.985	mg/L	98.5	90 - 110		

* Exceeds LIMITS Criteria

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CONTINUING CALIBRATION VERIFICATION (CCV)

Login Number: L12110393 Run Date: 11/19/2012 Sample ID: WG414710-37
 Instrument ID: PE-ICP2 Run Time: 18:32 Method: 6010B
 File ID: P2.111912.183223 Analyst: KHR QC Key: WATERL00
 Workgroup (AAB#): WG414521 Cal ID: PE-ICP - 19-NOV-12
 Matrix: WATER

Analyte		Expected	Found	UNITS	%REC	LIMITS		Q
Aluminum		10.0	9.76	mg/L	97.6	90 - 110		
Barium		1.00	1.01	mg/L	101	90 - 110		
Beryllium		0.0500	0.0488	mg/L	97.6	90 - 110		
Cadmium		0.0500	0.0477	mg/L	95.5	90 - 110		
Calcium		10.0	10.2	mg/L	102	90 - 110		
Chromium		0.500	0.497	mg/L	99.3	90 - 110		
Cobalt		0.200	0.202	mg/L	101	90 - 110		
Copper		0.500	0.491	mg/L	98.2	90 - 110		
Iron		4.00	3.97	mg/L	99.2	90 - 110		
Magnesium		10.0	10.0	mg/L	100	90 - 110		
Manganese		0.500	0.511	mg/L	102	90 - 110		
Nickel		0.500	0.502	mg/L	100	90 - 110		
Potassium		50.0	49.2	mg/L	98.4	90 - 110		
Silver		0.400	0.397	mg/L	99.4	90 - 110		
Sodium		50.0	48.3	mg/L	96.6	90 - 110		
Vanadium		1.00	1.00	mg/L	100	90 - 110		
Zinc		1.00	1.00	mg/L	100	90 - 110		

* Exceeds LIMITS Criteria

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INTERFERENCE CHECK SAMPLES**

Login number: L12110393
Instrument ID: PE-ICP2
Sol. A: WG414710-10
Sol. AB: WG414710-11

File ID: P2.111912.081039
File ID: P2.111912.081635

Workgroup (AAB#): WG414521
Method: 6010B
Units: mg/L
Matrix: Water

ANALYTE	Sol. A			Sol. AB			Q
	True	Found	%Recovery	True	Found	%Recovery	
Aluminum	250	250	100	250	253	101	
Barium	NS	-0.00241	NS	0.250	0.242	96.8	
Beryllium	NS	0.0000300	NS	0.250	0.245	98.0	
Cadmium	NS	-0.000110	NS	0.500	0.447	89.4	
Calcium	250	260	104	250	267	107	
Chromium	NS	-0.000490	NS	0.250	0.242	96.8	
Cobalt	NS	-0.00210	NS	0.250	0.227	90.8	
Copper	NS	0.00325	NS	0.250	0.252	101	
Iron	100	93.8	93.8	100	94.8	94.8	
Magnesium	250	248	99.2	250	251	100	
Manganese	NS	-0.00324	NS	0.250	0.238	95.2	
Nickel	NS	-0.000570	NS	0.500	0.470	94.0	
Potassium	NS	-0.0261	NS	5.00	4.88	97.6	
Silver	NS	-0.0000600	NS	0.500	0.510	102	
Sodium	NS	0.0173	NS	5.00	5.05	101	
Vanadium	NS	-0.00190	NS	0.250	0.245	98.0	
Zinc	NS	-0.00181	NS	0.500	0.471	94.2	

NS = Not spiked

*** = Recovery of spiked element is outside acceptance limit of 80% - 120% of true value.**

= Result for unspiked element is outside the acceptance limits of (+/-) the project reporting limit (RL).

+ = Result for unspiked element is outside the acceptance limits of (+/-) 2 times the project method detection limit (MDL). This criteria is only applicable to specific QAPPs.

ICS - Modified 03/06/2008
PDF File ID: 2670650
Report generated 11/20/2012 07:13



Microbac Laboratories Inc.
INTERFERENCE CHECK SAMPLES

Login number: L12110393
Instrument ID: PE-ICP2
Sol. A: WG414710-18
Sol. AB: WG414710-19

File ID: P2.111912.112222
File ID: P2.111912.112818

Workgroup (AAB#): WG414521
Method: 6010B
Units: mg/L
Matrix: Water

ANALYTE	Sol. A			Sol. AB			Q
	True	Found	%Recovery	True	Found	%Recovery	
Aluminum	250	253	101	250	248	99.2	
Barium	NS	-0.00238	NS	0.250	0.240	96.0	
Beryllium	NS	0.000500	NS	0.250	0.243	97.2	
Cadmium	NS	0.0000400	NS	0.500	0.444	88.8	
Calcium	250	267	107	250	264	106	
Chromium	NS	-0.000640	NS	0.250	0.240	96.0	
Cobalt	NS	-0.00218	NS	0.250	0.226	90.4	
Copper	NS	0.00329	NS	0.250	0.250	100	
Iron	100	95.8	95.8	100	93.4	93.4	
Magnesium	250	254	102	250	247	98.8	
Manganese	NS	-0.00209	NS	0.250	0.237	94.8	
Nickel	NS	-0.000400	NS	0.500	0.467	93.4	
Potassium	NS	-0.0108	NS	5.00	4.83	96.6	
Silver	NS	-0.000690	NS	0.500	0.504	101	
Sodium	NS	0.0546	NS	5.00	5.00	100	
Vanadium	NS	-0.00131	NS	0.250	0.241	96.4	
Zinc	NS	-0.00279	NS	0.500	0.464	92.8	

NS = Not spiked

*** = Recovery of spiked element is outside acceptance limit of 80% - 120% of true value.**

= Result for unspiked element is outside the acceptance limits of (+/-) the project reporting limit (RL).

+ = Result for unspiked element is outside the acceptance limits of (+/-) 2 times the project method detection limit (MDL). This criteria is only applicable to specific QAPPs.

ICS - Modified 03/06/2008
PDF File ID: 2670650
Report generated 11/20/2012 07:13



Microbac Laboratories Inc.
INTERELEMENT CORRECTION FACTORS (ANNUALLY)

Login Number: L12110393
Instrument ID: PE-ICP2

Date: 12/30/2011
Method: 6010B

Analyte	Wave Length	AG	AL	AS	B	BA
ALUMINUM	396.15	0	0	0.206	0	0
ANTIMONY	206.84	0	0	-0.740	0	0
ARSENIC	188.98	0	0.0776	0	0	0
BARIUM	233.53	0	0	0	0	0
BERYLLIUM	234.86	0	0	0	0	0
BORON	249.68	0	1.12	0	0	0
CADMIUM	228.80	0	0	3.00	0	0
CALCIUM	227.55	0	0.195	10.0	0	0
CHROMIUM	267.72	0	-0.00252	0	0	0
COBALT	228.62	0	0	0	0	0.337
COPPER	327.39	0	0	0	0	0
IRON	239.56	0	0	0	0	0
LEAD	220.35	0	-0.0265	0	0	0
LITHIUM	670.78	0	0	0	0	0
MAGNESIUM	279.08	0	0	0	0	0
MANGANESE	257.61	-0.185	0	-0.231	-0.0949	-0.230
MOLYBDENUM	202.03	0	0	0	0	0
NICKEL	231.60	0	0	0	0	0
POTASSIUM	766.49	0	0	0	0	0
SELENIUM	196.03	0	0.147	0	0	0
SILICON	251.61	0	0	0	0	0
SILVER	328.07	0	0	0	0	0
SODIUM	589.59	0	0	0	0	0
STRONTIUM	407.77	0	0	0	0	0
THALLIUM	190.80	0	0	0	0	0
TIN	189.93	0	0	0	0	0
TITANIUM	334.94	0	0	0	0	0
VANADIUM	290.88	0	0	0.200	0	0.0400
ZINC	206.20	0	0	0	0	0

CORR_FACTORS - Modified 03/05/2008
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 Report generated: 11/20/2012 07:13



Microbac Laboratories Inc.
INTERELEMENT CORRECTION FACTORS (ANNUALLY)

Login Number: L12110393
Instrument ID: PE-ICP2

Date: 12/30/2011
Method: 6010B

Analyte	Wave Length	BE	CA	CD	CO	CR
ALUMINUM	396.15	0	0	0	0	0
ANTIMONY	206.84	0	0	0	0	6.33
ARSENIC	188.98	0	0.0200	0	0	-6.59
BARIUM	233.53	0	0	0	0	0
BERYLLIUM	234.86	0	0	0	0	-0.0733
BORON	249.68	0	0	24.1	5.90	1.50
CADMIUM	228.80	0	0	0	0	0
CALCIUM	227.55	0	0	0	300	0
CHROMIUM	267.72	0	0	0	0	0
COBALT	228.62	0	0	0	0	-0.244
COPPER	327.39	0	0	0	0.380	-0.0400
IRON	239.56	0	0	0	1.91	0
LEAD	220.35	0	-0.0480	0	0.116	-0.0700
LITHIUM	670.78	0	0	0	0	0
MAGNESIUM	279.08	0	0	0	0	0
MANGANESE	257.61	-1.04	0	-0.755	-0.0418	-0.110
MOLYBDENUM	202.03	0	0	0	0	0
NICKEL	231.60	0	0	0	-0.566	0
POTASSIUM	766.49	0	0	0	0	0
SELENIUM	196.03	0	-0.300	0	-1.52	0
SILICON	251.61	0	0	0	0	0
SILVER	328.07	0	0	0	0	0
SODIUM	589.59	0	0	0	0	0
STRONTIUM	407.77	0	0	0	0	0
THALLIUM	190.80	0	0.400	0	3.48	0
TIN	189.93	0	0	0	0	0
TITANIUM	334.94	0	-0.0100	0	0	0.297
VANADIUM	290.88	0	0	0	0	0
ZINC	206.20	0	0	0	0	-3.64

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Microbac Laboratories Inc.
INTERELEMENT CORRECTION FACTORS (ANNUALLY)

Login Number: L12110393
Instrument ID: PE-ICP2

Date: 12/30/2011
Method: 6010B

Analyte	Wave Length	CU	FE	K	LI	MG
ALUMINUM	396.15	0	0.0192	0	0	0
ANTIMONY	206.84	0	0	0	0	0
ARSENIC	188.98	0	-0.00250	0	0	0
BARIUM	233.53	0	-0.0187	0	0	0
BERYLLIUM	234.86	0	0.210	0	0	0
BORON	249.68	0	-4.66	0	0	0
CADMIUM	228.80	0	-0.00420	0	0	0
CALCIUM	227.55	-2.00	100	0	0	0.104
CHROMIUM	267.72	0	0.0391	0	0	0
COBALT	228.62	0	0.0262	0	0	0
COPPER	327.39	0	-0.0688	0	0.154	0
IRON	239.56	0	0	0	0	0.0276
LEAD	220.35	0.740	0.0440	0	0	0
LITHIUM	670.78	0	0	0	0	0
MAGNESIUM	279.08	0	0.540	0	0	0
MANGANESE	257.61	-0.0457	-0.0580	-0.0181	-0.794	0.0147
MOLYBDENUM	202.03	0	-0.0494	0	0	0
NICKEL	231.60	0	0	0	0	0
POTASSIUM	766.49	0	0	0	0	0
SELENIUM	196.03	0	-0.465	0	0	0
SILICON	251.61	0	0	0	0	0
SILVER	328.07	0.0717	0.0240	0	0	0
SODIUM	589.59	0	0	0	0	0
STRONTIUM	407.77	0	0.120	0	0	0
THALLIUM	190.80	0	0	0	0	0
TIN	189.93	0	0	0	0	0
TITANIUM	334.94	0	0	0	0	0
VANADIUM	290.88	0	0.134	0	0	0
ZINC	206.20	-0.200	0.0198	0	0	0

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Microbac Laboratories Inc.
INTERELEMENT CORRECTION FACTORS (ANNUALLY)

Login Number: L12110393
Instrument ID: PE-ICP2

Date: 12/30/2011
Method: 6010B

Analyte	Wave Length	MN	MO	NA	NI	PB
ALUMINUM	396.15	0	13.5	0	0	0
ANTIMONY	206.84	0	-7.69	0	0	0
ARSENIC	188.98	0	6.00	0	0	0
BARIUM	233.53	0	-0.548	0	0	0
BERYLLIUM	234.86	-0.131	-1.50	0	-0.00974	0
BORON	249.68	0	-2.20	0	0	0
CADMIUM	228.80	0	-0.00900	0	-0.398	0
CALCIUM	227.55	0	-8.00	0	-900	0
CHROMIUM	267.72	0.434	-0.00100	0	0	0
COBALT	228.62	0	-0.125	0	0.129	0
COPPER	327.39	0	-0.0774	0	0.150	0.257
IRON	239.56	0.480	0	0	0	0.407
LEAD	220.35	0.100	-5.00	0	0.100	0
LITHIUM	670.78	0	0	0	0	0
MAGNESIUM	279.08	0	-5.00	0	0	0.0252
MANGANESE	257.61	0	-0.0482	-0.00916	-0.0340	-0.0413
MOLYBDENUM	202.03	-0.209	0	0	0.120	0
NICKEL	231.60	0	0	0	0	0
POTASSIUM	766.49	0	0	1.00	0	0
SELENIUM	196.03	0.451	0.300	0	0.0940	0
SILICON	251.61	0	15.0	0	0	0
SILVER	328.07	0.130	0.100	0	0	0
SODIUM	589.59	0	0	0	0	0
STRONTIUM	407.77	0	0	0	0	0
THALLIUM	190.80	-1.50	1.20	0	0	0
TIN	189.93	0	0	0	0	0
TITANIUM	334.94	0	0	0	0	0
VANADIUM	290.88	0	0.578	0	0	0
ZINC	206.20	0	0.180	0	-0.200	-0.100

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Microbac Laboratories Inc.
INTERELEMENT CORRECTION FACTORS (ANNUALLY)

Login Number: L12110393
Instrument ID: PE-ICP2

Date: 12/30/2011
Method: 6010B

Analyte	Wave Length	SB	SE	SI	SN	SR
ALUMINUM	396.15	0	0	0	0	0
ANTIMONY	206.84	0	0	0	0	0
ARSENIC	188.98	0	0	0	0	0
BARIUM	233.53	0	0	0	0	0
BERYLLIUM	234.86	0	0	0	0	0
BORON	249.68	0	0	0	0	0
CADMIUM	228.80	0	0	0	0	0
CALCIUM	227.55	0	0	0	0	0
CHROMIUM	267.72	0	0	0	0	0
COBALT	228.62	0	0	0	0	0
COPPER	327.39	0	0.148	0	0	0
IRON	239.56	0	0	0	0	0
LEAD	220.35	-0.0100	0	0	0	0
LITHIUM	670.78	0	0	0	0	0
MAGNESIUM	279.08	0	-0.0924	0	0	0
MANGANESE	257.61	-0.0505	-0.0281	-0.185	-0.0445	-0.625
MOLYBDENUM	202.03	0	0	0	0	0
NICKEL	231.60	-0.0500	-0.0100	0	0	0
POTASSIUM	766.49	0	0	0	0	0
SELENIUM	196.03	0	0	0	0	0
SILICON	251.61	0	0	0	0	0
SILVER	328.07	0	0	0	0	0.200
SODIUM	589.59	0	0	0	0	0
STRONTIUM	407.77	0	0	0	0	0
THALLIUM	190.80	0	0	0	0	0
TIN	189.93	0	0	0	0	0
TITANIUM	334.94	0	0	0	0	0
VANADIUM	290.88	0	0	0	0	0
ZINC	206.20	-0.300	0	0	0	0

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Microbac Laboratories Inc.
INTERELEMENT CORRECTION FACTORS (ANNUALLY)

Login Number: L12110393

Date: 12/30/2011

Instrument ID: PE-ICP2

Method: 6010B

Analyte	Wave Length	TI	TL	V	ZN
ALUMINUM	396.15	0	0	0	0
ANTIMONY	206.84	0	0	0.000100	0
ARSENIC	188.98	0	0	0.0930	0
BARIUM	233.53	0	0	-2.29	0
BERYLLIUM	234.86	0	0	0	0
BORON	249.68	0	0	0	0
CADMIUM	228.80	0	0	0.0800	0
CALCIUM	227.55	3.00	0	60.0	0
CHROMIUM	267.72	0	0	-0.567	-0.0400
COBALT	228.62	2.21	0	0	0
COPPER	327.39	-1.05	0	-0.700	-0.0613
IRON	239.56	0	0	0	0
LEAD	220.35	0	0	0.0560	0
LITHIUM	670.78	0	0	0	0
MAGNESIUM	279.08	0	0	0	0
MANGANESE	257.61	-0.00931	-0.0414	-0.0601	-0.0552
MOLYBDENUM	202.03	0	0	-0.288	0
NICKEL	231.60	0	0.617	0	0
POTASSIUM	766.49	0	0	0	0
SELENIUM	196.03	-0.220	0	-0.126	0
SILICON	251.61	0	0	0	0
SILVER	328.07	0	0	-1.67	0
SODIUM	589.59	0	0	0	0
STRONTIUM	407.77	0	0	0	0
THALLIUM	190.80	-12.0	0	-1.41	0
TIN	189.93	0	0	0	0
TITANIUM	334.94	0	0	0	0
VANADIUM	290.88	0	0	0	0
ZINC	206.20	0	0	-0.100	0

CORR_FACTORS - Modified 03/05/2008
 PDF File ID: 2670646
 Report generated: 11/20/2012 07:13



Microbac Laboratories Inc.
LINEAR RANGE (QUARTERLY)

Login Number: L12110393

Date: 09/28/2012

Instrument ID: PE-ICP2

Method: 6010B

Analyte	Integration Time (Sec.)	Concentration (mg/L)
Aluminum	10.00	450.0
Antimony	10.00	45.0
Arsenic	10.00	9.0
Barium	10.00	9.0
Beryllium	10.00	4.5
Boron	10.00	45.0
Cadmium	10.00	4.5
Calcium	10.00	450.0
Chromium	10.00	45.0
Cobalt	10.00	45.0
Copper	10.00	45.0
Iron	10.00	450.0
Lead	10.00	90.0
Lithium	10.00	0.9
Magnesium	10.00	450.0
Manganese	10.00	27.0
Molybdenum	10.00	45.0
Nickel	10.00	45.0
Potassium	10.00	80.0
Selenium	10.00	45.0
Silicon	10.00	36.0
Silver	10.00	4.5
Sodium	10.00	180.0
Strontium	10.00	2.7
Thallium	10.00	45.0
Tin	10.00	45.0
Titanium	10.00	18.0
Vanadium	10.00	45.0
Zinc	10.00	45.0

Comments:

All analytes passed acceptance criteria at the specified concentration.

LINEAR_RANGE - Modified 03/06/2008
PDF File ID: 2670645
Report generated: 11/20/2012 07:13



2.2.1.3 Raw Data

=====

Reprocessing Begun

Logged In Analyst: peicp2

echnique: ICP Continuous

Results Data Set (original): 111912H

Results Library (original): C:\pe\peicp2\Results\Results.mdb

Results Data Set (reprocessed): 111912HR

Results Library (reprocessed): C:\pe\peicp2\Results\Results.mdb

=====

Sequence No.: 1

Autosampler Location: 1

Sample ID: S0

Date Collected: 11/19/2012 7:11:10 AM

Analyst:

Data Type: Reprocessed on 11/19/2012 8:37:49 AM

Logged In Analyst (Original) : peicp2

Initial Sample Wt:

Initial Sample Vol:

Dilution:

Sample Prep Vol:

Nebulizer Parameters: S0

Analyte

Back Pressure

Flow

All

172.0 kPa

0.50 L/min

Mean Data: S0

Analyte	Mean Corrected		RSD	Calib
	Intensity	Std.Dev.		
Y 371.029	2435123.2	12278.78	0.50%	
YRADIAL	285420.0	4459.53	1.56%	
Ga 417.206	1188354.2	8587.45	0.72%	
GaRADIAL	75730.0	1213.22	1.60%	
Ag 328.068†	-224.1	145.62	64.99%	[0.00] mg/L
Al 396.153†	-11.9	2.47	20.79%	[0.00] mg/L
As 188.979†	-14.1	2.39	16.93%	[0.00] mg/L
Ba 233.527†	-217.2	8.28	3.81%	[0.00] mg/L
Be 234.861†	-2101.5	23.25	1.11%	[0.00] mg/L
B 249.677†	162.7	21.74	13.37%	[0.00] mg/L
Ca 227.546†	-108.6	8.40	7.74%	[0.00] mg/L
Cd 228.802†	55.2	4.02	7.28%	[0.00] mg/L
Co 228.616†	7.7	3.10	40.42%	[0.00] mg/L
Cr 267.716†	226.4	8.54	3.77%	[0.00] mg/L
Cu 327.393†	-691.6	83.56	12.08%	[0.00] mg/L
Fe 239.562†	-0.7	3.82	565.63%	[0.00] mg/L
Mg 279.077†	26.0	9.52	36.60%	[0.00] mg/L
Mn 257.610†	898.5	33.26	3.70%	[0.00] mg/L
Mo 202.031†	86.7	5.25	6.06%	[0.00] mg/L
Ni 231.604†	-172.5	8.49	4.92%	[0.00] mg/L
Pb 220.353†	-50.2	9.55	19.01%	[0.00] mg/L
Sb 206.836†	17.0	0.83	4.91%	[0.00] mg/L
Se 196.026†	20.2	3.02	14.93%	[0.00] mg/L
Si 251.611†	516.0	16.30	3.16%	[0.00] mg/L
Sn 189.927†	58.9	4.32	7.34%	[0.00] mg/L
Ti 334.940†	599.7	110.45	18.42%	[0.00] mg/L
Tl 190.801†	-72.0	0.50	0.69%	[0.00] mg/L
V 290.880†	9090.2	266.05	2.93%	[0.00] mg/L
Zn 206.200†	-20.8	0.58	2.77%	[0.00] mg/L
K 766.490†	-96.6	72.20	74.72%	[0.00] mg/L
Na 589.592†	1089.9	97.96	8.99%	[0.00] mg/L
Sr 407.771†	-925.1	146.88	15.88%	[0.00] mg/L
Li 670.784†	189.7	64.30	33.89%	[0.00] mg/L

=====

Sequence No.: 2

Autosampler Location: 2

Sample ID: S1

Date Collected: 11/19/2012 7:18:05 AM

Analyst:

Data Type: Reprocessed on 11/19/2012 8:37:51 AM

Logged In Analyst (Original) : peicp2

Initial Sample Wt:

Initial Sample Vol:

Dilution:

Sample Prep Vol:

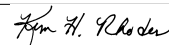
Nebulizer Parameters: S1

Analyte

Back Pressure

Flow

Approved: November 20, 2012



All 172.0 kPa 0.50 L/min

Mean Data: S1

Analyte	Mean Corrected Intensity	Std.Dev.	RSD	Conc.	Calib Units
Y 371.029	2414823.2	30726.31	1.27%		
YRADIAL	278765.2	4646.51	1.67%		
Ga 417.206	1192045.3	17714.69	1.49%		
GaRADIAL	74056.4	2138.56	2.89%		
Ag 328.068†	1347.0	87.23	6.48%	[0.0040]	mg/L
Al 396.153†	681.1	9.93	1.46%	[0.10]	mg/L
Ba 233.527†	1525.7	8.14	0.53%	[0.010]	mg/L
Be 234.861†	588.4	50.45	8.57%	[0.0005]	mg/L
Cd 228.802†	19.2	6.93	36.01%	[0.00050]	mg/L
Co 228.616†	73.8	9.55	12.95%	[0.0020]	mg/L
Cr 267.716†	653.6	1.52	0.23%	[0.0050]	mg/L
Cu 327.393†	1466.3	70.66	4.82%	[0.0050]	mg/L
Fe 239.562†	391.9	6.17	1.57%	[0.040]	mg/L
Mg 279.077†	297.0	4.15	1.40%	[0.10]	mg/L
Mn 257.610†	4559.2	59.91	1.31%	[0.0050]	mg/L
Mo 202.031†	309.2	3.31	1.07%	[0.010]	mg/L
Ni 231.604†	323.0	10.90	3.37%	[0.0050]	mg/L
Pb 220.353†	52.2	5.03	9.65%	[0.0050]	mg/L
Sb 206.836†	41.7	2.26	5.41%	[0.012]	mg/L
Si 251.611†	2402.7	47.58	1.98%	[0.050]	mg/L
Sn 189.927†	91.7	8.03	8.76%	[0.010]	mg/L
Ti 334.940†	11070.5	89.05	0.80%	[0.010]	mg/L
V 290.880†	2128.1	92.45	4.34%	[0.010]	mg/L
Zn 206.200†	481.1	4.56	0.95%	[0.010]	mg/L
K 766.490†	1436.0	31.40	2.19%	[0.50]	mg/L
Na 589.592†	10374.4	448.34	4.32%	[0.50]	mg/L
Sr 407.771†	25258.3	386.47	1.53%	[0.010]	mg/L
Li 670.784†	1363.8	31.42	2.30%	[0.010]	mg/L

Sequence No.: 3

Sample ID: S2

Analyst:

Logged In Analyst (Original) : peicp2

Initial Sample Wt:

Dilution:

Autosampler Location: 3

Date Collected: 11/19/2012 7:25:00 AM

Data Type: Reprocessed on 11/19/2012 8:37:52 AM

Initial Sample Vol:

Sample Prep Vol:

Nebulizer Parameters: S2

Analyte	Back Pressure	Flow
All	173.0 kPa	0.50 L/min

Mean Data: S2

Analyte	Mean Corrected Intensity	Std.Dev.	RSD	Conc.	Calib Units
Y 371.029	2415217.6	10069.57	0.42%		
YRADIAL	286491.7	3348.57	1.17%		
Ga 417.206	1191810.6	8232.49	0.69%		
GaRADIAL	75620.7	1658.38	2.19%		
Ag 328.068†	2759.3	17.90	0.65%	[0.0080]	mg/L
Al 396.153†	1333.1	13.24	0.99%	[0.20]	mg/L
As 188.979†	22.4	4.09	18.23%	[0.0080]	mg/L
Ba 233.527†	3068.3	3.79	0.12%	[0.020]	mg/L
Be 234.861†	1121.0	21.52	1.92%	[0.0010]	mg/L
B 249.677†	868.5	7.32	0.84%	[0.010]	mg/L
Ca 227.546†	87.9	4.13	4.70%	[0.20]	mg/L
Cd 228.802†	42.6	7.25	17.04%	[0.0010]	mg/L
Co 228.616†	156.1	3.15	2.02%	[0.0040]	mg/L
Cr 267.716†	1362.6	9.87	0.72%	[0.010]	mg/L
Cu 327.393†	2824.6	25.84	0.91%	[0.010]	mg/L
Fe 239.562†	762.6	5.77	0.76%	[0.080]	mg/L
Mg 279.077†	563.7	8.04	1.43%	[0.20]	mg/L
Mn 257.610†	8676.9	106.77	1.23%	[0.010]	mg/L
Mo 202.031†	593.1	2.78	0.47%	[0.020]	mg/L
Ni 231.604†	637.5	12.72	2.00%	[0.010]	mg/L

Approved: November 20, 2012

Ken H. Rhodes

Pb 220.353†	96.2	5.94	6.17%	[0.010]	mg/L
Sb 206.836†	87.1	2.86	3.28%	[0.024]	mg/L
Se 196.026†	11.6	1.07	9.27%	[0.0080]	mg/L
Si 251.611†	4931.5	32.56	0.66%	[0.10]	mg/L
Sn 189.927†	180.7	2.47	1.37%	[0.020]	mg/L
Ti 334.940†	22373.1	305.83	1.37%	[0.020]	mg/L
Tl 190.801†	22.2	5.81	26.15%	[0.010]	mg/L
V 290.880†	4725.6	275.66	5.83%	[0.020]	mg/L
Zn 206.200†	913.3	4.32	0.47%	[0.020]	mg/L
K 766.490†	2928.0	64.94	2.22%	[1.00]	mg/L
Na 589.592†	19892.7	415.65	2.09%	[1.00]	mg/L
Sr 407.771†	50004.7	1152.34	2.30%	[0.020]	mg/L
Li 670.784†	2711.7	45.73	1.69%	[0.020]	mg/L

Sequence No.: 4

Sample ID: S3

Analyst:

Logged In Analyst (Original) : peicp2

Initial Sample Wt:

Dilution:

autosampler Location: 4

Date Collected: 11/19/2012 7:31:55 AM

Data Type: Reprocessed on 11/19/2012 8:37:53 AM

Initial Sample Vol:

Sample Prep Vol:

Nebulizer Parameters: S3

Analyte	Back Pressure	Flow
All	172.0 kPa	0.50 L/min

Mean Data: S3

Analyte	Mean Corrected Intensity	Std.Dev.	RSD	Calib Conc. Units
Y 371.029	2353652.5	13261.32	0.56%	
YRADIAL	280087.8	553.74	0.20%	
Ga 417.206	1162387.6	27810.13	2.39%	
GaRADIAL	72543.5	91.96	0.13%	
Ag 328.068†	131464.6	2908.02	2.21%	[0.40] mg/L
Al 396.153†	66773.5	123.82	0.19%	[10.00] mg/L
As 188.979†	1095.7	22.68	2.07%	[0.40] mg/L
Ba 233.527†	148631.1	1198.98	0.81%	[1.00] mg/L
Be 234.861†	55931.8	1320.88	2.36%	[0.05] mg/L
B 249.677†	46290.1	874.59	1.89%	[0.50] mg/L
Ca 227.546†	3783.5	112.76	2.98%	[10.00] mg/L
Cd 228.802†	2252.3	82.26	3.65%	[0.05] mg/L
Co 228.616†	7442.0	79.26	1.06%	[0.20] mg/L
Cr 267.716†	65264.8	133.58	0.20%	[0.50] mg/L
Cu 327.393†	135547.1	2121.79	1.57%	[0.50] mg/L
Fe 239.562†	38470.8	16.24	0.04%	[4.00] mg/L
Mg 279.077†	27894.1	172.76	0.62%	[10.00] mg/L
Mn 257.610†	427553.4	6062.48	1.42%	[0.50] mg/L
Mo 202.031†	29692.6	244.03	0.82%	[1.00] mg/L
Ni 231.604†	30204.0	392.48	1.30%	[0.50] mg/L
Pb 220.353†	5312.2	45.68	0.86%	[0.50] mg/L
Sb 206.836†	4290.6	131.60	3.07%	[1.20] mg/L
Se 196.026†	648.2	22.05	3.40%	[0.40] mg/L
Si 251.611†	238941.6	2017.29	0.84%	[5.00] mg/L
Sn 189.927†	9614.2	94.81	0.99%	[1.00] mg/L
Ti 334.940†	1120215.7	5331.26	0.48%	[1.00] mg/L
Tl 190.801†	1505.0	10.74	0.71%	[0.50] mg/L
V 290.880†	231582.3	1165.80	0.50%	[1.00] mg/L
Zn 206.200†	44902.1	312.70	0.70%	[1.00] mg/L
K 766.490†	149095.7	761.23	0.51%	[50.00] mg/L
Na 589.592†	985071.8	5743.02	0.58%	[50.00] mg/L
Sr 407.771†	2422865.8	13334.21	0.55%	[1.00] mg/L
Li 670.784†	135731.2	567.50	0.42%	[1.00] mg/L

Sequence No.: 5

Sample ID: S4

Analyst:

Logged In Analyst (Original) : peicp2

Initial Sample Wt:

Dilution:

autosampler Location: 5

Date Collected: 11/19/2012 7:37:54 AM

Data Type: Reprocessed on 11/19/2012 8:37:54 AM

Initial Sample Vol:

Sample Prep Vol:

Approved: November 20, 2012

Ken H. Rhodes

Nebulizer Parameters: S4

Analyte Back Pressure Flow
All 172.0 kPa 0.50 L/min

Mean Data: S4

Analyte	Mean Corrected Intensity	Std.Dev.	RSD	Calib Conc. Units
Y 371.029	2317768.0	9062.09	0.39%	
YRADIAL	280874.6	1811.02	0.64%	
Ga 417.206	1148551.2	29239.32	2.55%	
GaRADIAL	73761.8	512.60	0.69%	
Ag 328.068†	259901.7	6284.21	2.42%	[0.80] mg/L
Al 396.153†	132041.7	148.12	0.11%	[20.00] mg/L
As 188.979†	2223.6	54.18	2.44%	[0.80] mg/L
Ba 233.527†	293586.7	2166.65	0.74%	[2.00] mg/L
Be 234.861†	111648.4	2273.88	2.04%	[0.10] mg/L
B 249.677†	93800.2	2338.76	2.49%	[1.00] mg/L
Ca 227.546†	7635.1	221.87	2.91%	[20.00] mg/L
Cd 228.802†	4482.9	162.33	3.62%	[0.10] mg/L
Co 228.616†	14630.4	69.61	0.48%	[0.40] mg/L
Cr 267.716†	129487.0	358.66	0.28%	[1.00] mg/L
Cu 327.393†	269084.1	6260.14	2.33%	[1.00] mg/L
Fe 239.562†	76022.2	134.96	0.18%	[8.00] mg/L
Mg 279.077†	55501.9	308.28	0.56%	[20.00] mg/L
Mn 257.610†	830238.1	7531.22	0.91%	[1.00] mg/L
Mo 202.031†	59077.5	381.34	0.65%	[2.00] mg/L
Ni 231.604†	59173.6	658.21	1.11%	[1.00] mg/L
Pb 220.353†	10443.3	12.80	0.12%	[1.00] mg/L
Sb 206.836†	8584.3	263.54	3.07%	[2.40] mg/L
Se 196.026†	1301.5	34.66	2.66%	[0.80] mg/L
Si 251.611†	471416.1	6573.91	1.39%	[10.00] mg/L
Sn 189.927†	19033.6	19.77	0.10%	[2.00] mg/L
Ti 334.940†	2231324.5	2466.20	0.11%	[2.00] mg/L
Tl 190.801†	2925.6	0.57	0.02%	[1.00] mg/L
V 290.880†	456254.3	586.10	0.13%	[2.00] mg/L
Zn 206.200†	88864.5	828.45	0.93%	[2.00] mg/L
K 766.490†	295388.5	981.94	0.33%	[100.00] mg/L
Na 589.592†	1923420.4	35351.51	1.84%	[100.00] mg/L
Sr 407.771†	4755936.4	36041.03	0.76%	[2.00] mg/L
Li 670.784†	265552.6	2000.77	0.75%	[2.00] mg/L

Calibration Summary

Analyte	Stds.	Equation	Intercept	Slope	Curvature	Corr. Coef.	Reslope
Ag 328.068	4	Lin, Calc Int	253.5	325300	0.00000	0.999985	
Al 396.153	4	Lin, Calc Int	104.3	6611	0.00000	0.999985	
As 188.979	3	Wt. Lin	0.4	2759	0.00000	0.999972	
Ba 233.527	4	Lin, Calc Int	288.4	147000	0.00000	0.999982	
Be 234.861	4	Lin, Calc Int	24.3	1117000	0.00000	1.000000	
B 249.677	3	Lin, Calc Int	-142.6	93730	0.00000	0.999978	
Ca 227.546	3	Lin, Calc Int	-0.9	381.1	0.00000	0.999987	
Cd 228.802	4	Lin, Calc Int	-0.4	44880	0.00000	0.999997	
Co 228.616	4	Lin, Calc Int	19.0	36650	0.00000	0.999965	
Cr 267.716	4	Lin, Calc Int	88.0	129600	0.00000	0.999993	
Cu 327.393	4	Lin, Calc Int	204.9	269200	0.00000	0.999994	
Fe 239.562	4	Lin, Calc Int	61.7	9516	0.00000	0.999983	
Mg 279.077	4	Lin, Calc Int	26.6	2776	0.00000	0.999997	
Mn 257.610	4	Lin, Calc Int	1793.7	833000	0.00000	0.999896	
Mo 202.031	4	Lin, Calc Int	24.2	29550	0.00000	0.999997	
Ni 231.604	4	Lin, Calc Int	99.7	59300	0.00000	0.999950	
Pb 220.353	4	Lin, Calc Int	8.7	10470	0.00000	0.999963	
Sb 206.836	4	Lin, Calc Int	-0.2	3577	0.00000	1.000000	
Se 196.026	3	Wt. Lin	-1.4	1626	0.00000	0.999999	
Si 251.611	4	Lin, Calc Int	484.9	47210	0.00000	0.999978	
Sn 189.927	4	Lin, Calc Int	8.0	9531	0.00000	0.999987	
Ti 334.940	4	Lin, Calc Int	558.7	1116000	0.00000	0.999998	
Tl 190.801	3	Lin, Calc Int	4.5	2937	0.00000	0.999878	
V 290.880	4	Lin, Calc Int	433.1	228600	0.00000	0.999973	

Approved: November 20, 2012

Ken H. Rhodes

Zn 206.200	4	Lin, Calc Int	77.8	44480	0.00000	0.999987
K 766.490	4	Non Lin, Calc Int	-50.4	3011	-0.56991	1.000000
Na 589.592	4	Non Lin, Calc Int	10.2	20170	-9.34021	1.000000
Sr 407.771	4	Lin, Calc Int	6819.7	2383000	0.00000	0.999959
Li 670.784	4	Lin, Calc Int	396.9	133100	0.00000	0.999942

Sequence No.: 6

Sample ID: ICV 2nd Vendor

Analyst:

Logged In Analyst (Original) : peicp2

Initial Sample Wt:

Dilution:

Sampler Location: 11

Date Collected: 11/19/2012 7:43:57 AM

Data Type: Reprocessed on 11/19/2012 8:37:55 AM

Initial Sample Vol:

Sample Prep Vol:

Nebulizer Parameters: ICV 2nd Vendor

Analyte

Back Pressure

Flow

All

173.0 kPa

0.50 L/min

Mean Data: ICV 2nd Vendor

Analyte	Mean Corrected Intensity	Calib. Conc. Units	Std.Dev.	Sample Conc. Units	Std.Dev.	RSD
Y 371.029	2343013.6				24585.86	1.05%
YRADIAL	284164.8				3998.82	1.41%
Ga 417.206	1156155.1				16586.37	1.43%
GA RADIAL	73532.2				898.66	1.22%
Ag 328.068†	134102.7	0.415 mg/L	0.0073	0.415 mg/L	0.0073	1.77%
QC value within limits for Ag	328.068	Recovery = 103.78%				
Al 396.153†	66661.9	10.0 mg/L	0.06	10.0 mg/L	0.06	0.55%
QC value within limits for Al	396.153	Recovery = 100.00%				
As 188.979†	1114.8	0.399 mg/L	0.0068	0.399 mg/L	0.0068	1.70%
QC value within limits for As	188.979	Recovery = 99.77%				
Ba 233.527†	149867.6	1.02 mg/L	0.016	1.02 mg/L	0.016	1.60%
QC value within limits for Ba	233.527	Recovery = 101.78%				
Be 234.861†	56398.7	0.0501 mg/L	0.00054	0.0501 mg/L	0.00054	1.08%
QC value within limits for Be	234.861	Recovery = 100.10%				
B 249.677†	47237.5	0.502 mg/L	0.0110	0.502 mg/L	0.0110	2.20%
QC value within limits for B	249.677	Recovery = 100.32%				
Ca 227.546†	3818.4	10.5 mg/L	0.17	10.5 mg/L	0.17	1.61%
QC value within limits for Ca	227.546	Recovery = 104.92%				
Cd 228.802†	2261.2	0.0490 mg/L	0.00164	0.0490 mg/L	0.00164	3.34%
QC value within limits for Cd	228.802	Recovery = 98.03%				
Co 228.616†	7538.8	0.204 mg/L	0.0036	0.204 mg/L	0.0036	1.75%
QC value within limits for Co	228.616	Recovery = 102.16%				
Cr 267.716†	66138.0	0.510 mg/L	0.0047	0.510 mg/L	0.0047	0.92%
QC value within limits for Cr	267.716	Recovery = 102.02%				
Cu 327.393†	137404.7	0.511 mg/L	0.0107	0.511 mg/L	0.0107	2.08%
QC value within limits for Cu	327.393	Recovery = 102.27%				
Fe 239.562†	38142.1	4.00 mg/L	0.046	4.00 mg/L	0.046	1.15%
QC value within limits for Fe	239.562	Recovery = 100.02%				
Mg 279.077†	27787.2	10.0 mg/L	0.15	10.0 mg/L	0.15	1.54%
QC value within limits for Mg	279.077	Recovery = 100.15%				
Mn 257.610†	434917.5	0.520 mg/L	0.0102	0.520 mg/L	0.0102	1.95%
QC value within limits for Mn	257.610	Recovery = 104.09%				
Mo 202.031†	29273.0	0.990 mg/L	0.0114	0.990 mg/L	0.0114	1.15%
QC value within limits for Mo	202.031	Recovery = 99.04%				
Ni 231.604†	30686.7	0.515 mg/L	0.0082	0.515 mg/L	0.0082	1.60%
QC value within limits for Ni	231.604	Recovery = 103.09%				
Pb 220.353†	5357.4	0.512 mg/L	0.0069	0.512 mg/L	0.0069	1.36%
QC value within limits for Pb	220.353	Recovery = 102.46%				
Sb 206.836†	4446.9	1.24 mg/L	0.029	1.24 mg/L	0.029	2.37%
QC value within limits for Sb	206.836	Recovery = 103.51%				
Se 196.026†	666.1	0.412 mg/L	0.0098	0.412 mg/L	0.0098	2.38%
QC value within limits for Se	196.026	Recovery = 102.98%				
Si 251.611†	240146.5	5.07 mg/L	0.028	5.07 mg/L	0.028	0.55%
QC value within limits for Si	251.611	Recovery = 101.31%				
Sn 189.927†	9864.8	1.03 mg/L	0.016	1.03 mg/L	0.016	1.53%
QC value within limits for Sn	189.927	Recovery = 103.41%				
Ti 334.940†	1134705.1	1.02 mg/L	0.008	1.02 mg/L	0.008	0.77%
QC value within limits for Ti	334.940	Recovery = 101.74%				
Tl 190.801†	1523.5	0.532 mg/L	0.0059	0.532 mg/L	0.0059	1.12%

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QC value greater than the upper limit for Tl 190.801 Recovery = 106.37%
 V 290.880† 231613.4 1.01 mg/L 0.008 1.01 mg/L 0.008 0.83%
 QC value within limits for V 290.880 Recovery = 101.07%
 Zn 206.200† 45579.0 1.03 mg/L 0.016 1.03 mg/L 0.016 1.56%
 QC value within limits for Zn 206.200 Recovery = 102.75%
 K 766.490† 147215.7 49.3 mg/L 0.48 49.3 mg/L 0.48 0.98%
 QC value within limits for K 766.490 Recovery = 98.63%
 Na 589.592† 974781.2 49.5 mg/L 0.81 49.5 mg/L 0.81 1.65%
 QC value within limits for Na 589.592 Recovery = 98.93%
 Sr 407.771† 2407620.6 1.01 mg/L 0.019 1.01 mg/L 0.019 1.88%
 QC value within limits for Sr 407.771 Recovery = 100.73%
 Li 670.784† 136541.5 1.02 mg/L 0.011 1.02 mg/L 0.011 1.10%
 QC value within limits for Li 670.784 Recovery = 102.27%
 QC Failed. Continue with analysis.

Sequence No.: 7

Sample ID: ICB

Analyst:

Logged In Analyst (Original) : peicp2

Initial Sample Wt:

Dilution:

Autosampler Location: 1

Date Collected: 11/19/2012 7:49:55 AM

Data Type: Reprocessed on 11/19/2012 8:37:56 AM

Initial Sample Vol:

Sample Prep Vol:

Nebulizer Parameters: ICB

Analyte

Back Pressure

Flow

All

173.0 kPa

0.50 L/min

Mean Data: ICB

Analyte	Mean Corrected Intensity	Conc. Units	Calib. Units	Std.Dev.	Sample Conc. Units	Std.Dev.	RSD
Y 371.029	2458707.5					26653.02	1.08%
YRADIAL	287384.0					2979.33	1.04%
Ga 417.206	1224155.5					13000.54	1.06%
GaRADIAL	76700.1					1334.31	1.74%
Ag 328.068†	40.6	-0.00066 mg/L		0.000470	-0.00066 mg/L	0.000470	71.12%
QC value within limits for Ag 328.068				Recovery = Not calculated			
Al 396.153†	-3.3	-0.0162 mg/L		0.00226	-0.0162 mg/L	0.00226	13.94%
QC value within limits for Al 396.153				Recovery = Not calculated			
As 188.979†	-0.5	-0.00031 mg/L		0.002573	-0.00031 mg/L	0.002573	837.89%
QC value within limits for As 188.979				Recovery = Not calculated			
Ba 233.527†	18.0	-0.00184 mg/L		0.000120	-0.00184 mg/L	0.000120	6.53%
QC value within limits for Ba 233.527				Recovery = Not calculated			
Be 234.861†	82.0	0.00005 mg/L		0.000021	0.00005 mg/L	0.000021	40.39%
QC value within limits for Be 234.861				Recovery = Not calculated			
B 249.677†	452.7	0.00635 mg/L		0.000341	0.00635 mg/L	0.000341	5.36%
QC value within limits for B 249.677				Recovery = Not calculated			
Ca 227.546†	13.0	0.0353 mg/L		0.01357	0.0353 mg/L	0.01357	38.44%
QC value within limits for Ca 227.546				Recovery = Not calculated			
Cd 228.802†	4.0	0.00010 mg/L		0.000117	0.00010 mg/L	0.000117	119.39%
QC value within limits for Cd 228.802				Recovery = Not calculated			
Co 228.616†	0.1	-0.00052 mg/L		0.000103	-0.00052 mg/L	0.000103	20.01%
QC value within limits for Co 228.616				Recovery = Not calculated			
Cr 267.716†	-11.5	-0.00077 mg/L		0.000098	-0.00077 mg/L	0.000098	12.79%
QC value within limits for Cr 267.716				Recovery = Not calculated			
Cu 327.393†	128.0	-0.00029 mg/L		0.000168	-0.00029 mg/L	0.000168	58.48%
QC value within limits for Cu 327.393				Recovery = Not calculated			
Fe 239.562†	18.4	-0.00455 mg/L		0.000415	-0.00455 mg/L	0.000415	9.11%
QC value within limits for Fe 239.562				Recovery = Not calculated			
Mg 279.077†	1.5	-0.00906 mg/L		0.003752	-0.00906 mg/L	0.003752	41.43%
QC value within limits for Mg 279.077				Recovery = Not calculated			
Mn 257.610†	163.6	-0.00196 mg/L		0.000004	-0.00196 mg/L	0.000004	0.18%
QC value within limits for Mn 257.610				Recovery = Not calculated			
Mo 202.031†	-1.4	-0.00087 mg/L		0.000084	-0.00087 mg/L	0.000084	9.65%
QC value within limits for Mo 202.031				Recovery = Not calculated			
Ni 231.604†	9.5	-0.00152 mg/L		0.000231	-0.00152 mg/L	0.000231	15.19%
QC value within limits for Ni 231.604				Recovery = Not calculated			
Pb 220.353†	-3.9	-0.00121 mg/L		0.001027	-0.00121 mg/L	0.001027	85.08%
QC value within limits for Pb 220.353				Recovery = Not calculated			
Sb 206.836†	1.2	0.00038 mg/L		0.000582	0.00038 mg/L	0.000582	152.86%
QC value within limits for Sb 206.836				Recovery = Not calculated			

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Se 196.026†	4.8	0.00386 mg/L	0.002914	0.00386 mg/L	0.002914	75.55%
QC value within limits	for Se 196.026	Recovery =	Not calculated			
Si 251.611†	62.1	-0.00895 mg/L	0.000445	-0.00895 mg/L	0.000445	4.97%
QC value within limits	for Si 251.611	Recovery =	Not calculated			
Sn 189.927†	3.6	-0.00047 mg/L	0.000104	-0.00047 mg/L	0.000104	22.16%
QC value within limits	for Sn 189.927	Recovery =	Not calculated			
Ti 334.940†	10.7	-0.00049 mg/L	0.000185	-0.00049 mg/L	0.000185	38.14%
QC value within limits	for Ti 334.940	Recovery =	Not calculated			
Tl 190.801†	-1.2	-0.00194 mg/L	0.001961	-0.00194 mg/L	0.001961	100.94%
QC value within limits	for Tl 190.801	Recovery =	Not calculated			
V 290.880†	-58.3	-0.00215 mg/L	0.000784	-0.00215 mg/L	0.000784	36.47%
QC value within limits	for V 290.880	Recovery =	Not calculated			
Zn 206.200†	8.1	-0.00157 mg/L	0.000196	-0.00157 mg/L	0.000196	12.48%
QC value within limits	for Zn 206.200	Recovery =	Not calculated			
K 766.490†	131.7	0.0604 mg/L	0.01468	0.0604 mg/L	0.01468	24.28%
QC value within limits	for K 766.490	Recovery =	Not calculated			
Na 589.592†	339.2	0.0163 mg/L	0.00604	0.0163 mg/L	0.00604	37.04%
QC value within limits	for Na 589.592	Recovery =	Not calculated			
Sr 407.771†	81.8	-0.00283 mg/L	0.000030	-0.00283 mg/L	0.000030	1.05%
QC value within limits	for Sr 407.771	Recovery =	Not calculated			
Li 670.784†	46.3	-0.00263 mg/L	0.000337	-0.00263 mg/L	0.000337	12.80%
QC value within limits	for Li 670.784	Recovery =	Not calculated			
All analyte(s) passed QC.						

Sequence No.: 8

Sample ID: LLICV

Analyst: KHR

Logged In Analyst (Original) : peicp2

Initial Sample Wt:

Dilution:

UASampler Location: 14

Date Collected: 11/19/2012 7:56:49 AM

Data Type: Reprocessed on 11/19/2012 8:37:57 AM

Initial Sample Vol:

Sample Prep Vol:

Nebulizer Parameters: LLICV

Analyte	Back Pressure	Flow
All	172.0 kPa	0.50 L/min

Mean Data: LLICV

Analyte	Mean Corrected Intensity	Calib. Conc. Units	Std.Dev.	Sample Conc. Units	Std.Dev.	RSD
Y 371.029	2428570.0				2234.92	0.09%
YRADIAL	285488.0				4760.24	1.67%
Ga 417.206	1186244.3				28020.95	2.36%
GaRADIAL	75794.9				2491.42	3.29%
Ag 328.068†	1342.6	0.00338 mg/L	0.000292	0.00338 mg/L	0.000292	8.63%
Al 396.153†	664.3	0.0841 mg/L	0.00134	0.0841 mg/L	0.00134	1.60%
As 188.979†	7.0	0.00237 mg/L	0.001246	0.00237 mg/L	0.001246	52.61%
Ba 233.527†	1508.5	0.00830 mg/L	0.000194	0.00830 mg/L	0.000194	2.34%
Be 234.861†	553.5	0.00047 mg/L	0.000006	0.00047 mg/L	0.000006	1.25%
B 249.677†	632.8	0.00824 mg/L	0.000362	0.00824 mg/L	0.000362	4.39%
Ca 227.546†	47.9	0.131 mg/L	0.0258	0.131 mg/L	0.0258	19.66%
Cd 228.802†	23.5	0.00052 mg/L	0.000186	0.00052 mg/L	0.000186	35.46%
Co 228.616†	75.3	0.00153 mg/L	0.000384	0.00153 mg/L	0.000384	25.13%
Cr 267.716†	664.9	0.00446 mg/L	0.000090	0.00446 mg/L	0.000090	2.02%
Cu 327.393†	1510.4	0.00486 mg/L	0.000417	0.00486 mg/L	0.000417	8.58%
Fe 239.562†	386.3	0.0341 mg/L	0.00139	0.0341 mg/L	0.00139	4.09%
Mg 279.077†	278.2	0.0907 mg/L	0.00336	0.0907 mg/L	0.00336	3.70%
Mn 257.610†	4905.1	0.00374 mg/L	0.000014	0.00374 mg/L	0.000014	0.38%
Mo 202.031†	289.6	0.00899 mg/L	0.000295	0.00899 mg/L	0.000295	3.28%
Ni 231.604†	310.1	0.00355 mg/L	0.000269	0.00355 mg/L	0.000269	7.59%
Pb 220.353†	44.2	0.00340 mg/L	0.000886	0.00340 mg/L	0.000886	26.05%
Sb 206.836†	42.7	0.0120 mg/L	0.00063	0.0120 mg/L	0.00063	5.29%
Se 196.026†	15.1	0.0102 mg/L	0.00396	0.0102 mg/L	0.00396	38.89%
Si 251.611†	2579.0	0.0443 mg/L	0.00183	0.0443 mg/L	0.00183	4.14%
Sn 189.927†	84.7	0.00804 mg/L	0.000856	0.00804 mg/L	0.000856	10.64%
Ti 334.940†	11031.4	0.00940 mg/L	0.000098	0.00940 mg/L	0.000098	1.04%
Tl 190.801†	9.7	0.00190 mg/L	0.001261	0.00190 mg/L	0.001261	66.36%
V 290.880†	2511.6	0.00909 mg/L	0.001017	0.00909 mg/L	0.001017	11.19%
Zn 206.200†	589.7	0.0115 mg/L	0.00057	0.0115 mg/L	0.00057	4.92%
K 766.490†	1412.3	0.485 mg/L	0.0250	0.485 mg/L	0.0250	5.14%
Na 589.592†	11207.6	0.555 mg/L	0.0180	0.555 mg/L	0.0180	3.25%

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Sr 407.771†	24726.7	0.00751 mg/L	0.000234	0.00751 mg/L	0.000234	3.11%
Li 670.784†	1361.4	0.00725 mg/L	0.000208	0.00725 mg/L	0.000208	2.87%

Sequence No.: 9
 Sample ID: LLICV
 Analyst: KHR
 Logged In Analyst (Original) : peicp2
 Initial Sample Wt:
 Dilution:

Autosampler Location: 15
 Date Collected: 11/19/2012 8:03:44 AM
 Date Type: Reprocessed on 11/19/2012 8:37:59 AM
 Initial Sample Vol:
 Sample Prep Vol:

Nebulizer Parameters: LLICV

Analyte	Back Pressure	Flow
All	173.0 kPa	0.50 L/min

Mean Data: LLICV

Analyte	Mean Corrected Intensity	Calib. Conc. Units	Std.Dev.	Sample Conc. Units	Std.Dev.	RSD
Y 371.029	2399665.8				20297.31	0.85%
YRADIAL	282656.2				4580.87	1.62%
Ga 417.206	1182358.7				9850.25	0.83%
GARADIAL	74280.5				2600.34	3.50%
Ag 328.068†	2641.5	0.00741 mg/L	0.000296	0.00741 mg/L	0.000296	3.99%
Al 396.153†	1354.6	0.188 mg/L	0.0047	0.188 mg/L	0.0047	2.51%
As 188.979†	21.6	0.00760 mg/L	0.001650	0.00760 mg/L	0.001650	21.71%
Ba 233.527†	3044.3	0.0188 mg/L	0.00025	0.0188 mg/L	0.00025	1.34%
Be 234.861†	1115.4	0.00097 mg/L	0.000033	0.00097 mg/L	0.000033	3.43%
B 249.677†	1294.7	0.0153 mg/L	0.00048	0.0153 mg/L	0.00048	3.14%
Ca 227.546†	91.1	0.250 mg/L	0.0033	0.250 mg/L	0.0033	1.33%
Cd 228.802†	47.6	0.00104 mg/L	0.000031	0.00104 mg/L	0.000031	2.94%
Co 228.616†	148.9	0.00353 mg/L	0.000217	0.00353 mg/L	0.000217	6.16%
Cr 267.716†	1345.6	0.00971 mg/L	0.000203	0.00971 mg/L	0.000203	2.09%
Cu 327.393†	2689.9	0.00926 mg/L	0.000217	0.00926 mg/L	0.000217	2.34%
Fe 239.562†	793.0	0.0768 mg/L	0.00266	0.0768 mg/L	0.00266	3.46%
Mg 279.077†	560.0	0.192 mg/L	0.0055	0.192 mg/L	0.0055	2.88%
Mn 257.610†	8735.1	0.00834 mg/L	0.000150	0.00834 mg/L	0.000150	1.80%
Mo 202.031†	605.0	0.0197 mg/L	0.00019	0.0197 mg/L	0.00019	0.94%
Ni 231.604†	622.1	0.00880 mg/L	0.000135	0.00880 mg/L	0.000135	1.54%
Pb 220.353†	92.2	0.00801 mg/L	0.001204	0.00801 mg/L	0.001204	15.04%
Sb 206.836†	81.0	0.0227 mg/L	0.00169	0.0227 mg/L	0.00169	7.47%
Se 196.026†	21.3	0.0140 mg/L	0.00334	0.0140 mg/L	0.00334	23.81%
Si 251.611†	5023.5	0.0959 mg/L	0.00110	0.0959 mg/L	0.00110	1.15%
Sn 189.927†	190.8	0.0192 mg/L	0.00061	0.0192 mg/L	0.00061	3.17%
Ti 334.940†	22209.9	0.0194 mg/L	0.00011	0.0194 mg/L	0.00011	0.55%
Tl 190.801†	27.5	0.00812 mg/L	0.001449	0.00812 mg/L	0.001449	17.84%
V 290.880†	5013.5	0.0200 mg/L	0.00064	0.0200 mg/L	0.00064	3.21%
Zn 206.200†	1005.0	0.0209 mg/L	0.00026	0.0209 mg/L	0.00026	1.22%
K 766.490†	2921.1	0.986 mg/L	0.0182	0.986 mg/L	0.0182	1.84%
Na 589.592†	21006.8	1.04 mg/L	0.047	1.04 mg/L	0.047	4.48%
Sr 407.771†	50844.9	0.0185 mg/L	0.00030	0.0185 mg/L	0.00030	1.61%
Li 670.784†	2820.5	0.0182 mg/L	0.00105	0.0182 mg/L	0.00105	5.79%

Sequence No.: 10
 Sample ID: ICSA
 Analyst:
 Logged In Analyst (Original) : peicp2
 Initial Sample Wt:
 Dilution:

Autosampler Location: 12
 Date Collected: 11/19/2012 8:10:39 AM
 Date Type: Reprocessed on 11/19/2012 8:38:00 AM
 Initial Sample Vol:
 Sample Prep Vol:

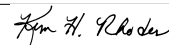
Nebulizer Parameters: ICSA

Analyte	Back Pressure	Flow
All	173.0 kPa	0.50 L/min

Mean Data: ICSA

Analyte	Mean Corrected Intensity	Calib. Conc. Units	Std.Dev.	Sample Conc. Units	Std.Dev.	RSD
Y 371.029	2198082.6				16468.87	0.75%

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YRADIAL	275447.9				4464.08	1.62%
Ga 417.206	1150819.9				10244.64	0.89%
GA RADIAL	73304.5				1226.88	1.67%
Ag 328.068†	-13712.8	-0.00006 mg/L	0.002304	-0.00006 mg/L	0.002304	>999.9%
QC value within limits for Ag	328.068	Recovery =	Not calculated			
Al 396.153†	1653792.8	250 mg/L	5.8	250 mg/L	5.8	2.33%
QC value within limits for Al	396.153	Recovery =	100.06%			
As 188.979†	5.4	0.00740 mg/L	0.002852	0.00740 mg/L	0.002852	38.55%
QC value within limits for As	188.979	Recovery =	Not calculated			
Ba 233.527†	748.4	-0.00241 mg/L	0.000168	-0.00241 mg/L	0.000168	6.99%
QC value within limits for Ba	233.527	Recovery =	Not calculated			
Be 234.861†	22994.2	0.00003 mg/L	0.000596	0.00003 mg/L	0.000596	>999.9%
QC value within limits for Be	234.861	Recovery =	Not calculated			
B 249.677†	5844.1	0.0235 mg/L	0.00310	0.0235 mg/L	0.00310	13.18%
QC value within limits for B	249.677	Recovery =	Not calculated			
Ca 227.546†	98278.6	260 mg/L	4.6	260 mg/L	4.6	1.76%
QC value within limits for Ca	227.546	Recovery =	104.05%			
Cd 228.802†	-1.1	-0.00010 mg/L	0.000217	-0.00010 mg/L	0.000217	207.21%
QC value within limits for Cd	228.802	Recovery =	Not calculated			
Co 228.616†	29.3	-0.00210 mg/L	0.000232	-0.00210 mg/L	0.000232	11.01%
QC value within limits for Co	228.616	Recovery =	Not calculated			
Cr 267.716†	127.6	-0.00049 mg/L	0.000213	-0.00049 mg/L	0.000213	43.18%
QC value within limits for Cr	267.716	Recovery =	Not calculated			
Cu 327.393†	-1563.9	0.00325 mg/L	0.000253	0.00325 mg/L	0.000253	7.79%
QC value within limits for Cu	327.393	Recovery =	Not calculated			
Fe 239.562†	892459.9	93.8 mg/L	1.74	93.8 mg/L	1.74	1.85%
QC value within limits for Fe	239.562	Recovery =	93.77%			
Mg 279.077†	687419.0	248 mg/L	4.7	248 mg/L	4.7	1.89%
QC value within limits for Mg	279.077	Recovery =	99.02%			
Mn 257.610†	-1095.7	-0.00324 mg/L	0.000436	-0.00324 mg/L	0.000436	13.45%
QC value within limits for Mn	257.610	Recovery =	Not calculated			
Mo 202.031†	-52.8	0.00199 mg/L	0.000674	0.00199 mg/L	0.000674	33.80%
QC value within limits for Mo	202.031	Recovery =	Not calculated			
Ni 231.604†	65.4	-0.00057 mg/L	0.000581	-0.00057 mg/L	0.000581	102.08%
QC value within limits for Ni	231.604	Recovery =	Not calculated			
Pb 220.353†	-393.3	0.00001 mg/L	0.002150	0.00001 mg/L	0.002150	>999.9%
QC value within limits for Pb	220.353	Recovery =	Not calculated			
Sb 206.836†	-12.7	-0.00006 mg/L	0.003067	-0.00006 mg/L	0.003067	>999.9%
QC value within limits for Sb	206.836	Recovery =	Not calculated			
Se 196.026†	-38.8	0.00342 mg/L	0.000960	0.00342 mg/L	0.000960	28.04%
QC value within limits for Se	196.026	Recovery =	Not calculated			
Si 251.611†	7877.9	0.157 mg/L	0.0013	0.157 mg/L	0.0013	0.85%
QC value within limits for Si	251.611	Recovery =	Not calculated			
Sn 189.927†	-359.0	-0.0385 mg/L	0.00022	-0.0385 mg/L	0.00022	0.57%
QC value within limits for Sn	189.927	Recovery =	Not calculated			
Ti 334.940†	-39706.0	0.00261 mg/L	0.002464	0.00261 mg/L	0.002464	94.54%
QC value within limits for Ti	334.940	Recovery =	Not calculated			
Tl 190.801†	-64.0	-0.0170 mg/L	0.00645	-0.0170 mg/L	0.00645	38.01%
QC value within limits for Tl	190.801	Recovery =	Not calculated			
V 290.880†	2777.6	-0.00190 mg/L	0.000701	-0.00190 mg/L	0.000701	36.91%
QC value within limits for V	290.880	Recovery =	Not calculated			
Zn 206.200†	378.5	-0.00181 mg/L	0.000079	-0.00181 mg/L	0.000079	4.34%
QC value within limits for Zn	206.200	Recovery =	Not calculated			
K 766.490†	-128.9	-0.0261 mg/L	0.02549	-0.0261 mg/L	0.02549	97.71%
QC value within limits for K	766.490	Recovery =	Not calculated			
Na 589.592†	359.8	0.0173 mg/L	0.00702	0.0173 mg/L	0.00702	40.51%
QC value within limits for Na	589.592	Recovery =	Not calculated			
Sr 407.771†	2583.8	-0.00688 mg/L	0.000075	-0.00688 mg/L	0.000075	1.09%
QC value within limits for Sr	407.771	Recovery =	Not calculated			
Li 670.784†	84.5	-0.00235 mg/L	0.000293	-0.00235 mg/L	0.000293	12.47%
QC value within limits for Li	670.784	Recovery =	Not calculated			
All analyte(s) passed QC.						

Sequence No.: 11
Sample ID: ICSAB
Analyst:
Logged In Analyst (Original) : peicp2
Initial Sample Wt:
Dilution:

autosampler Location: 13
Date Collected: 11/19/2012 8:16:35 AM
Data Type: Reprocessed on 11/19/2012 8:38:01 AM
Initial Sample Vol:
Sample Prep Vol:

Approved: November 20, 2012

Ken H. Rhodes

Nebulizer Parameters: ICSAB

Analyte Back Pressure Flow
All 172.0 kPa 0.50 L/min

Mean Data: ICSAB

Analyte	Mean Corrected Intensity	Calib. Conc. Units	Std.Dev.	Sample Conc. Units	Std.Dev.	RSD
Y 371.029	2199935.9				24353.09	1.11%
YRADIAL	275286.7				4908.08	1.78%
Ga 417.206	1137294.0				19615.22	1.72%
GaRADIAL	73084.5				889.07	1.22%
Ag 328.068†	151840.9	0.510 mg/L	0.0131	0.510 mg/L	0.0131	2.56%
QC value within limits for Ag 328.068		Recovery = 101.97%				
Al 396.153†	1669572.3	253 mg/L	5.0	253 mg/L	5.0	1.98%
QC value within limits for Al 396.153		Recovery = 101.02%				
As 188.979†	636.5	0.236 mg/L	0.0059	0.236 mg/L	0.0059	2.51%
QC value within limits for As 188.979		Recovery = 94.53%				
Ba 233.527†	36728.0	0.242 mg/L	0.0019	0.242 mg/L	0.0019	0.79%
QC value within limits for Ba 233.527		Recovery = 96.91%				
Be 234.861†	297007.2	0.245 mg/L	0.0041	0.245 mg/L	0.0041	1.67%
QC value within limits for Be 234.861		Recovery = 98.10%				
B 249.677†	4374.8	-0.00506 mg/L	0.004211	-0.00506 mg/L	0.004211	83.17%
QC value within limits for B 249.677		Recovery = Not calculated				
Ca 227.546†	100633.1	267 mg/L	7.2	267 mg/L	7.2	2.71%
QC value within limits for Ca 227.546		Recovery = 106.67%				
Cd 228.802†	20084.7	0.447 mg/L	0.0045	0.447 mg/L	0.0045	1.00%
QC value within limits for Cd 228.802		Recovery = 89.43%				
Co 228.616†	8440.0	0.227 mg/L	0.0040	0.227 mg/L	0.0040	1.77%
QC value within limits for Co 228.616		Recovery = 90.92%				
Cr 267.716†	31537.6	0.242 mg/L	0.0013	0.242 mg/L	0.0013	0.55%
QC value within limits for Cr 267.716		Recovery = 96.81%				
Cu 327.393†	65361.4	0.252 mg/L	0.0059	0.252 mg/L	0.0059	2.34%
QC value within limits for Cu 327.393		Recovery = 100.77%				
Fe 239.562†	901922.8	94.8 mg/L	1.58	94.8 mg/L	1.58	1.67%
QC value within limits for Fe 239.562		Recovery = 94.76%				
Mg 279.077†	695827.4	251 mg/L	4.7	251 mg/L	4.7	1.86%
QC value within limits for Mg 279.077		Recovery = 100.23%				
Mn 257.610†	199910.6	0.238 mg/L	0.0017	0.238 mg/L	0.0017	0.73%
QC value within limits for Mn 257.610		Recovery = 95.26%				
Mo 202.031†	-60.9	0.00194 mg/L	0.000954	0.00194 mg/L	0.000954	49.22%
QC value within limits for Mo 202.031		Recovery = Not calculated				
Ni 231.604†	28009.9	0.470 mg/L	0.0076	0.470 mg/L	0.0076	1.62%
QC value within limits for Ni 231.604		Recovery = 94.05%				
Pb 220.353†	4574.6	0.475 mg/L	0.0090	0.475 mg/L	0.0090	1.91%
QC value within limits for Pb 220.353		Recovery = 94.91%				
Sb 206.836†	1728.5	0.485 mg/L	0.0131	0.485 mg/L	0.0131	2.70%
QC value within limits for Sb 206.836		Recovery = 97.07%				
Se 196.026†	349.1	0.242 mg/L	0.0089	0.242 mg/L	0.0089	3.66%
QC value within limits for Se 196.026		Recovery = 96.96%				
Si 251.611†	-246.1	-0.0155 mg/L	0.00073	-0.0155 mg/L	0.00073	4.72%
QC value within limits for Si 251.611		Recovery = Not calculated				
Sn 189.927†	-348.2	-0.0374 mg/L	0.00180	-0.0374 mg/L	0.00180	4.81%
QC value within limits for Sn 189.927		Recovery = Not calculated				
Ti 334.940†	-39641.0	0.00352 mg/L	0.003115	0.00352 mg/L	0.003115	88.51%
QC value within limits for Ti 334.940		Recovery = Not calculated				
Tl 190.801†	1377.2	0.474 mg/L	0.0093	0.474 mg/L	0.0093	1.96%
QC value within limits for Tl 190.801		Recovery = 94.81%				
V 290.880†	59238.8	0.245 mg/L	0.0013	0.245 mg/L	0.0013	0.51%
QC value within limits for V 290.880		Recovery = 97.98%				
Zn 206.200†	21287.3	0.471 mg/L	0.0059	0.471 mg/L	0.0059	1.25%
QC value within limits for Zn 206.200		Recovery = 94.10%				
K 766.490†	14650.2	4.88 mg/L	0.035	4.88 mg/L	0.035	0.72%
QC value within limits for K 766.490		Recovery = 97.62%				
Na 589.592†	101719.8	5.05 mg/L	0.023	5.05 mg/L	0.023	0.46%
QC value within limits for Na 589.592		Recovery = 101.10%				
Sr 407.771†	2507.3	-0.00704 mg/L	0.000158	-0.00704 mg/L	0.000158	2.25%
QC value within limits for Sr 407.771		Recovery = Not calculated				
Li 670.784†	156.9	-0.00180 mg/L	0.000303	-0.00180 mg/L	0.000303	16.84%
QC value within limits for Li 670.784		Recovery = Not calculated				

All analyte(s) passed QC.

Approved: November 20, 2012

Ken H. Rhodes

Sequence No.: 12
 Sample ID: CCV
 Analyst:
 Logged In Analyst (Original) : peicp2
 Initial Sample Wt:
 Dilution:

Sampler Location: 6
 Date Collected: 11/19/2012 8:22:31 AM
 Data Type: Reprocessed on 11/19/2012 8:38:02 AM
 Initial Sample Vol:
 Sample Prep Vol:

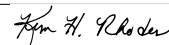
Nebulizer Parameters: CCV

Analyte Back Pressure Flow
 All 173.0 kPa 0.50 L/min

Mean Data: CCV

Analyte	Mean Corrected Intensity	Calib. Conc. Units	Std.Dev.	Sample Conc. Units	Std.Dev.	RSD
Y 371.029	2331311.6				23950.97	1.03%
YRADIAL	279566.2				2325.84	0.83%
Ga 417.206	1146793.8				16017.32	1.40%
GaRADIAL	72284.5				343.06	0.47%
Ag 328.068†	131251.1	0.406 mg/L	0.0060	0.406 mg/L	0.0060	1.47%
QC value within limits for Ag						
Al 396.153†	66843.3	10.0 mg/L	0.01	10.0 mg/L	0.01	0.12%
QC value within limits for Al						
As 188.979†	1110.6	0.398 mg/L	0.0057	0.398 mg/L	0.0057	1.42%
QC value within limits for As						
Ba 233.527†	148594.8	1.01 mg/L	0.019	1.01 mg/L	0.019	1.87%
QC value within limits for Ba						
Be 234.861†	56032.9	0.0497 mg/L	0.00055	0.0497 mg/L	0.00055	1.10%
QC value within limits for Be						
B 249.677†	46563.2	0.494 mg/L	0.0080	0.494 mg/L	0.0080	1.62%
QC value within limits for B						
Ca 227.546†	3831.4	10.5 mg/L	0.19	10.5 mg/L	0.19	1.84%
QC value within limits for Ca						
Cd 228.802†	2263.0	0.0491 mg/L	0.00133	0.0491 mg/L	0.00133	2.72%
QC value within limits for Cd						
Co 228.616†	7439.9	0.202 mg/L	0.0027	0.202 mg/L	0.0027	1.35%
QC value within limits for Co						
Cr 267.716†	65186.0	0.503 mg/L	0.0063	0.503 mg/L	0.0063	1.25%
QC value within limits for Cr						
Cu 327.393†	135896.4	0.506 mg/L	0.0079	0.506 mg/L	0.0079	1.56%
QC value within limits for Cu						
Fe 239.562†	38781.6	4.07 mg/L	0.012	4.07 mg/L	0.012	0.30%
QC value within limits for Fe						
Mg 279.077†	28184.9	10.2 mg/L	0.06	10.2 mg/L	0.06	0.60%
QC value within limits for Mg						
Mn 257.610†	427083.6	0.511 mg/L	0.0107	0.511 mg/L	0.0107	2.09%
QC value within limits for Mn						
Mo 202.031†	29590.8	1.00 mg/L	0.015	1.00 mg/L	0.015	1.47%
QC value within limits for Mo						
Ni 231.604†	30009.0	0.504 mg/L	0.0104	0.504 mg/L	0.0104	2.07%
QC value within limits for Ni						
Pb 220.353†	5294.5	0.506 mg/L	0.0066	0.506 mg/L	0.0066	1.31%
QC value within limits for Pb						
Sb 206.836†	4341.5	1.21 mg/L	0.026	1.21 mg/L	0.026	2.16%
QC value within limits for Sb						
Se 196.026†	657.1	0.406 mg/L	0.0087	0.406 mg/L	0.0087	2.13%
QC value within limits for Se						
Si 251.611†	239836.0	5.06 mg/L	0.019	5.06 mg/L	0.019	0.38%
QC value within limits for Si						
Sn 189.927†	9584.7	1.00 mg/L	0.015	1.00 mg/L	0.015	1.52%
QC value within limits for Sn						
Ti 334.940†	1115991.6	1.00 mg/L	0.002	1.00 mg/L	0.002	0.24%
QC value within limits for Ti						
Tl 190.801†	1504.9	0.525 mg/L	0.0025	0.525 mg/L	0.0025	0.47%
QC value within limits for Tl						
V 290.880†	232474.1	1.01 mg/L	0.012	1.01 mg/L	0.012	1.23%
QC value within limits for V						
Zn 206.200†	44708.8	1.01 mg/L	0.021	1.01 mg/L	0.021	2.13%
QC value within limits for Zn						
K 766.490†	148038.3	49.6 mg/L	0.11	49.6 mg/L	0.11	0.22%

Approved: November 20, 2012



QC value within limits for K 766.490 Recovery = 99.18%
 Na 589.592† 998431.3 50.7 mg/L 0.38 50.7 mg/L 0.38 0.75%
 QC value within limits for Na 589.592 Recovery = 101.39%
 Sr 407.771† 2457068.2 1.03 mg/L 0.012 1.03 mg/L 0.012 1.19%
 QC value within limits for Sr 407.771 Recovery = 102.81%
 Li 670.784† 136109.3 1.02 mg/L 0.008 1.02 mg/L 0.008 0.76%
 QC value within limits for Li 670.784 Recovery = 101.94%
 All analyte(s) passed QC.

Sequence No.: 13
 Sample ID: CCB
 Analyst:
 Logged In Analyst (Original) : peicp2
 Initial Sample Wt:
 Dilution:

Autosampler Location: 1
 Date Collected: 11/19/2012 8:28:32 AM
 Data Type: Reprocessed on 11/19/2012 8:38:03 AM
 Initial Sample Vol:
 Sample Prep Vol:

Nebulizer Parameters: CCB

Analyte Back Pressure Flow
 All 173.0 kPa 0.50 L/min

Mean Data: CCB

Analyte	Mean Corrected Intensity	Calib. Conc. Units	Std.Dev.	Sample Conc. Units	Std.Dev.	RSD
Y 371.029	2453053.8				16683.33	0.68%
YRADIAL	287832.3				2460.68	0.85%
Ga 417.206	1202102.0				22270.47	1.85%
GaRADIAL	76383.5				2027.78	2.65%
Ag 328.068†	12.3	-0.00075 mg/L	0.000106	-0.00075 mg/L	0.000106	14.23%
QC value within limits for Ag 328.068			Recovery = Not calculated			
Al 396.153†	18.2	-0.0130 mg/L	0.00088	-0.0130 mg/L	0.00088	6.76%
QC value within limits for Al 396.153			Recovery = Not calculated			
As 188.979†	5.0	0.00168 mg/L	0.000458	0.00168 mg/L	0.000458	27.33%
QC value within limits for As 188.979			Recovery = Not calculated			
Ba 233.527†	19.9	-0.00183 mg/L	0.000075	-0.00183 mg/L	0.000075	4.08%
QC value within limits for Ba 233.527			Recovery = Not calculated			
Be 234.861†	55.1	0.00003 mg/L	0.000010	0.00003 mg/L	0.000010	36.49%
QC value within limits for Be 234.861			Recovery = Not calculated			
B 249.677†	342.0	0.00517 mg/L	0.000481	0.00517 mg/L	0.000481	9.30%
QC value within limits for B 249.677			Recovery = Not calculated			
Ca 227.546†	14.4	0.0391 mg/L	0.04469	0.0391 mg/L	0.04469	114.41%
QC value within limits for Ca 227.546			Recovery = Not calculated			
Cd 228.802†	0.5	0.00001 mg/L	0.000145	0.00001 mg/L	0.000145	>999.9%
QC value within limits for Cd 228.802			Recovery = Not calculated			
Co 228.616†	0.1	-0.00052 mg/L	0.000100	-0.00052 mg/L	0.000100	19.43%
QC value within limits for Co 228.616			Recovery = Not calculated			
Cr 267.716†	1.1	-0.00067 mg/L	0.000048	-0.00067 mg/L	0.000048	7.20%
QC value within limits for Cr 267.716			Recovery = Not calculated			
Cu 327.393†	136.4	-0.00026 mg/L	0.000661	-0.00026 mg/L	0.000661	258.50%
QC value within limits for Cu 327.393			Recovery = Not calculated			
Fe 239.562†	28.7	-0.00347 mg/L	0.000374	-0.00347 mg/L	0.000374	10.78%
QC value within limits for Fe 239.562			Recovery = Not calculated			
Mg 279.077†	13.2	-0.00485 mg/L	0.003339	-0.00485 mg/L	0.003339	68.87%
QC value within limits for Mg 279.077			Recovery = Not calculated			
Mn 257.610†	19.7	-0.00213 mg/L	0.000018	-0.00213 mg/L	0.000018	0.86%
QC value within limits for Mn 257.610			Recovery = Not calculated			
Mo 202.031†	9.3	-0.00050 mg/L	0.000403	-0.00050 mg/L	0.000403	79.85%
QC value within limits for Mo 202.031			Recovery = Not calculated			
Ni 231.604†	20.3	-0.00134 mg/L	0.000237	-0.00134 mg/L	0.000237	17.68%
QC value within limits for Ni 231.604			Recovery = Not calculated			
Pb 220.353†	-7.4	-0.00154 mg/L	0.001253	-0.00154 mg/L	0.001253	81.28%
QC value within limits for Pb 220.353			Recovery = Not calculated			
Sb 206.836†	-2.5	-0.00064 mg/L	0.001564	-0.00064 mg/L	0.001564	243.66%
QC value within limits for Sb 206.836			Recovery = Not calculated			
Se 196.026†	8.5	0.00612 mg/L	0.002035	0.00612 mg/L	0.002035	33.26%
QC value within limits for Se 196.026			Recovery = Not calculated			
Si 251.611†	14.6	-0.00996 mg/L	0.000545	-0.00996 mg/L	0.000545	5.47%
QC value within limits for Si 251.611			Recovery = Not calculated			
Sn 189.927†	-7.2	-0.00160 mg/L	0.000632	-0.00160 mg/L	0.000632	39.45%
QC value within limits for Sn 189.927			Recovery = Not calculated			

Approved: November 20, 2012

Ken H. Rhodes

Ti 334.940†	91.4	-0.00041 mg/L	0.000027	-0.00041 mg/L	0.000027	6.52%
QC value within limits for Ti 334.940 Recovery = Not calculated						
Tl 190.801†	-1.5	-0.00204 mg/L	0.001976	-0.00204 mg/L	0.001976	96.76%
QC value within limits for Tl 190.801 Recovery = Not calculated						
V 290.880†	121.2	-0.00136 mg/L	0.001758	-0.00136 mg/L	0.001758	128.84%
QC value within limits for V 290.880 Recovery = Not calculated						
Zn 206.200†	6.3	-0.00161 mg/L	0.000128	-0.00161 mg/L	0.000128	7.91%
QC value within limits for Zn 206.200 Recovery = Not calculated						
K 766.490†	25.2	0.0251 mg/L	0.01715	0.0251 mg/L	0.01715	68.33%
QC value within limits for K 766.490 Recovery = Not calculated						
Na 589.592†	249.8	0.0119 mg/L	0.00690	0.0119 mg/L	0.00690	58.03%
QC value within limits for Na 589.592 Recovery = Not calculated						
Sr 407.771†	150.8	-0.00280 mg/L	0.000039	-0.00280 mg/L	0.000039	1.40%
QC value within limits for Sr 407.771 Recovery = Not calculated						
Li 670.784†	7.2	-0.00293 mg/L	0.000610	-0.00293 mg/L	0.000610	20.84%
QC value within limits for Li 670.784 Recovery = Not calculated						

All analyte(s) passed QC.

Approved: November 20, 2012

Ken H. Rhodes

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Analysis Begun

Start Time: 11/19/2012 8:39:43 AM

Plasma On Time: 11/19/2012 5:57:57 AM

Logged In Analyst: peicp2

echnique: ICP Continuous

Spectrometer Model: Optima 4300 DV, S/N 077N401140 Autosampler Model: Cetac

Sample Information File: C:\pe\peicp2\Sample Information\MONDAY1.sif

Batch ID:

Results Data Set: 111912HR

Results Library: C:\pe\peicp2\Results\Results.mdb

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Sequence No.: 1

Autosampler Location: 16

Sample ID: PBW 12 WG414452-04

Date Collected: 11/19/2012 8:39:44 AM

Analyst: KHR

Data Type: Original

Initial Sample Wt:

Initial Sample Vol:

Dilution:

Sample Prep Vol:

Nebulizer Parameters: PBW 12 WG414452-04

Analyte Back Pressure Flow

All 172.0 kPa 0.50 L/min

Mean Data: PBW 12 WG414452-04

Analyte	Mean Corrected Intensity	Conc. Units	Calib. Units	Std.Dev.	Sample Conc. Units	Std.Dev.	RSD
Y 371.029	2419450.8					18189.27	0.75%
YRADIAL	285536.5					8180.81	2.87%
Ga 417.206	1218224.4					6528.41	0.54%
GaRADIAL	76521.1					684.75	0.89%
Ag 328.068†	58.0	-0.00060	mg/L	0.000381	-0.00060	0.000381	63.17%
Al 396.153†	28.0	-0.0115	mg/L	0.00175	-0.0115	0.00175	15.26%
As 188.979†	0.0	-0.00012	mg/L	0.002535	-0.00012	0.002535	>999.9%
Ba 233.527†	23.0	-0.00181	mg/L	0.000122	-0.00181	0.000122	6.75%
Be 234.861†	82.9	0.00005	mg/L	0.000033	0.00005	0.000033	63.39%
B 249.677†	190.8	0.00356	mg/L	0.000263	0.00356	0.000263	7.39%
Ca 227.546†	10.6	0.0290	mg/L	0.01218	0.0290	0.01218	41.95%
Cd 228.802†	0.4	0.00002	mg/L	0.000159	0.00002	0.000159	>999.9%
Co 228.616†	1.6	-0.00048	mg/L	0.000173	-0.00048	0.000173	36.33%
Cr 267.716†	3.8	-0.00065	mg/L	0.000086	-0.00065	0.000086	13.15%
Cu 327.393†	80.3	-0.00046	mg/L	0.000318	-0.00046	0.000318	68.64%
Fe 239.562†	32.3	-0.00309	mg/L	0.000693	-0.00309	0.000693	22.46%
Mg 279.077†	7.6	-0.00686	mg/L	0.001158	-0.00686	0.001158	16.88%
Mn 257.610†	80.3	-0.00206	mg/L	0.000007	-0.00206	0.000007	0.34%
Mo 202.031†	5.7	-0.00063	mg/L	0.000344	-0.00063	0.000344	54.90%
Ni 231.604†	8.6	-0.00153	mg/L	0.000286	-0.00153	0.000286	18.62%
Pb 220.353†	-13.7	-0.00214	mg/L	0.000802	-0.00214	0.000802	37.57%
Sb 206.836†	0.3	0.00013	mg/L	0.001065	0.00013	0.001065	803.55%
Se 196.026†	5.8	0.00442	mg/L	0.000463	0.00442	0.000463	10.47%
Si 251.611†	19.8	-0.00985	mg/L	0.000255	-0.00985	0.000255	2.59%
Sn 189.927†	-12.3	-0.00213	mg/L	0.001004	-0.00213	0.001004	47.13%
Ti 334.940†	34.8	-0.00046	mg/L	0.000149	-0.00046	0.000149	32.04%
Tl 190.801†	-6.0	-0.00356	mg/L	0.002351	-0.00356	0.002351	66.06%
V 290.880†	274.2	-0.00069	mg/L	0.001101	-0.00069	0.001101	158.47%
Zn 206.200†	73.2	-0.00011	mg/L	0.000202	-0.00011	0.000202	185.13%
K 766.490†	-45.0	0.00181	mg/L	0.023269	0.00181	0.023269	>999.9%
Na 589.592†	-199.2	-0.0104	mg/L	0.00382	-0.0104	0.00382	36.78%
Sr 407.771†	-1.1	-0.00286	mg/L	0.000032	-0.00286	0.000032	1.12%
Li 670.784†	-73.9	-0.00354	mg/L	0.000335	-0.00354	0.000335	9.49%

=====

Sequence No.: 2

Autosampler Location: 17

Sample ID: LCSW 12 WG414452-05

Date Collected: 11/19/2012 8:46:39 AM

Analyst: KHR

Data Type: Original

Initial Sample Wt:

Initial Sample Vol:

Dilution:

Sample Prep Vol:

Nebulizer Parameters: LCSW 12 WG414452-05

Approved: November 20, 2012

Ken H. Rhodes

Analyte Back Pressure Flow
All 173.0 kPa 0.50 L/min

Mean Data: LCSW 12 WG414452-05

Analyte	Mean Corrected Intensity	Calib. Conc. Units	Std.Dev.	Sample Conc. Units	Std.Dev.	RSD
Y 371.029	2401463.0				21796.79	0.91%
YRADIAL	283196.9				6711.92	2.37%
Ga 417.206	1209541.8				51884.52	4.29%
GaRADIAL	74899.3				1723.31	2.30%
Ag 328.068†	63891.7	0.197 mg/L	0.0085	0.197 mg/L	0.0085	4.29%
Al 396.153†	32389.6	4.85 mg/L	0.059	4.85 mg/L	0.059	1.21%
As 188.979†	524.4	0.188 mg/L	0.0080	0.188 mg/L	0.0080	4.25%
Ba 233.527†	72101.4	0.489 mg/L	0.0035	0.489 mg/L	0.0035	0.72%
Be 234.861†	26589.6	0.0236 mg/L	0.00089	0.0236 mg/L	0.00089	3.78%
B 249.677†	88977.4	0.949 mg/L	0.0392	0.949 mg/L	0.0392	4.13%
Ca 227.546†	1826.3	5.03 mg/L	0.228	5.03 mg/L	0.228	4.53%
Cd 228.802†	1073.0	0.0233 mg/L	0.00136	0.0233 mg/L	0.00136	5.82%
Co 228.616†	3626.0	0.0980 mg/L	0.00054	0.0980 mg/L	0.00054	0.55%
Cr 267.716†	31925.2	0.246 mg/L	0.0009	0.246 mg/L	0.0009	0.35%
Cu 327.393†	66072.8	0.246 mg/L	0.0121	0.246 mg/L	0.0121	4.92%
Fe 239.562†	19179.9	2.01 mg/L	0.035	2.01 mg/L	0.035	1.74%
Mg 279.077†	13779.6	4.96 mg/L	0.120	4.96 mg/L	0.120	2.42%
Mn 257.610†	208767.9	0.249 mg/L	0.0027	0.249 mg/L	0.0027	1.10%
Mo 202.031†	14327.4	0.484 mg/L	0.0044	0.484 mg/L	0.0044	0.91%
Ni 231.604†	15396.2	0.258 mg/L	0.0019	0.258 mg/L	0.0019	0.74%
Pb 220.353†	2586.3	0.247 mg/L	0.0022	0.247 mg/L	0.0022	0.90%
Sb 206.836†	2083.9	0.582 mg/L	0.0291	0.582 mg/L	0.0291	4.99%
Se 196.026†	315.0	0.195 mg/L	0.0046	0.195 mg/L	0.0046	2.36%
Si 251.611†	113408.7	2.39 mg/L	0.073	2.39 mg/L	0.073	3.06%
Sn 189.927†	4872.4	0.510 mg/L	0.0027	0.510 mg/L	0.0027	0.53%
Ti 334.940†	545755.0	0.489 mg/L	0.0030	0.489 mg/L	0.0030	0.62%
Tl 190.801†	755.8	0.263 mg/L	0.0038	0.263 mg/L	0.0038	1.46%
V 290.880†	112464.9	0.490 mg/L	0.0040	0.490 mg/L	0.0040	0.81%
Zn 206.200†	21598.9	0.486 mg/L	0.0057	0.486 mg/L	0.0057	1.18%
K 766.490†	71410.3	23.8 mg/L	0.33	23.8 mg/L	0.33	1.37%
Na 589.592†	489010.6	24.5 mg/L	0.05	24.5 mg/L	0.05	0.20%
Sr 407.771†	1229755.6	0.513 mg/L	0.0039	0.513 mg/L	0.0039	0.77%
Li 670.784†	68092.2	0.509 mg/L	0.0085	0.509 mg/L	0.0085	1.67%

Sequence No.: 3

Sample ID: L1211039301

Analyst: KHR

Initial Sample Wt:

Dilution:

autosampler Location: 18

Date Collected: 11/19/2012 8:52:39 AM

Data Type: Original

Initial Sample Vol:

Sample Prep Vol:

Nebulizer Parameters: L1211039301

Analyte Back Pressure Flow
All 173.0 kPa 0.50 L/min

Mean Data: L1211039301

Analyte	Mean Corrected Intensity	Calib. Conc. Units	Std.Dev.	Sample Conc. Units	Std.Dev.	RSD
Y 371.029	2073281.4				9234.52	0.45%
YRADIAL	265327.9				2507.37	0.95%
Ga 417.206	1174072.9				18181.61	1.55%
GaRADIAL	74823.5				2255.52	3.01%
Ag 328.068†	1417.3	0.00362 mg/L	0.000288	0.00362 mg/L	0.000288	7.96%
Al 396.153†	-3.9	-0.0172 mg/L	0.00311	-0.0172 mg/L	0.00311	18.07%
As 188.979†	224.4	0.0812 mg/L	0.00266	0.0812 mg/L	0.00266	3.27%
Ba 233.527†	129816.5	0.881 mg/L	0.0038	0.881 mg/L	0.0038	0.43%
Be 234.861†	191.1	0.00016 mg/L	0.000024	0.00016 mg/L	0.000024	15.78%
B 249.677†	59612.4	0.637 mg/L	0.0090	0.637 mg/L	0.0090	1.41%
Ca 227.546†	112182.6	294 mg/L	7.0	294 mg/L	7.0	2.38%
Cd 228.802†	23.2	0.00013 mg/L	0.000187	0.00013 mg/L	0.000187	148.65%
Co 228.616†	64.6	0.00108 mg/L	0.000050	0.00108 mg/L	0.000050	4.58%
Cr 267.716†	20566.7	0.158 mg/L	0.0015	0.158 mg/L	0.0015	0.93%
Cu 327.393†	-89.0	-0.00116 mg/L	0.000304	-0.00116 mg/L	0.000304	26.12%

Approved: November 20, 2012

Ken H. Rhodes

Fe 239.562†	462.0	0.0396 mg/L	0.00055	0.0396 mg/L	0.00055	1.38%
Mg 279.077†	345908.9	125 mg/L	1.0	125 mg/L	1.0	0.79%
Mn 257.610†	49807.3	0.0577 mg/L	0.00020	0.0577 mg/L	0.00020	0.35%
Mo 202.031†	389.2	0.0124 mg/L	0.00021	0.0124 mg/L	0.00021	1.66%
Ni 231.604†	6538.9	0.109 mg/L	0.0008	0.109 mg/L	0.0008	0.71%
Pb 220.353†	-7.8	-0.00160 mg/L	0.001440	-0.00160 mg/L	0.001440	90.10%
Sb 206.836†	11.2	0.00203 mg/L	0.001449	0.00203 mg/L	0.001449	71.27%
Se 196.026†	10.1	0.00714 mg/L	0.000843	0.00714 mg/L	0.000843	11.81%
Si 251.611†	709469.6	15.0 mg/L	0.13	15.0 mg/L	0.13	0.83%
Sn 189.927†	-395.9	-0.0424 mg/L	0.00043	-0.0424 mg/L	0.00043	1.02%
Ti 334.940†	-49640.7	-0.00087 mg/L	0.001723	-0.00087 mg/L	0.001723	198.41%
Tl 190.801†	-43.7	-0.0170 mg/L	0.00067	-0.0170 mg/L	0.00067	3.94%
V 290.880†	3961.3	0.0121 mg/L	0.00280	0.0121 mg/L	0.00280	23.03%
Zn 206.200†	320.4	0.00676 mg/L	0.000131	0.00676 mg/L	0.000131	1.94%
K 766.490†	289189.3	97.2 mg/L	0.91	97.2 mg/L	0.91	0.93%
Na 589.592†	9043492.2	636 mg/L	34.8	636 mg/L	34.8	5.47%
Sr 407.771†	Saturated2					
Li 670.784†	23292.7	0.172 mg/L	0.0019	0.172 mg/L	0.0019	1.10%

Sequence No.: 4

Sample ID: L1211039302

Analyst: KHR

Initial Sample Wt:

Dilution:

Utosampler Location: 19

Date Collected: 11/19/2012 8:59:41 AM

Data Type: Original

Initial Sample Vol:

Sample Prep Vol:

Nebulizer Parameters: L1211039302

Analyte	Back Pressure	Flow
All	172.0 kPa	0.50 L/min

Mean Data: L1211039302

Analyte	Mean Corrected Intensity	Conc.	Calib. Units	Std.Dev.	Conc.	Sample Units	Std.Dev.	RSD
Y 371.029	2091548.7						28843.29	1.38%
YRADIAL	260039.7						5430.93	2.09%
Ga 417.206	1185416.8						12365.62	1.04%
GaRADIAL	73310.0						1250.21	1.71%
Ag 328.068†	1493.0	0.00384	mg/L	0.000378	0.00384	mg/L	0.000378	9.85%
Al 396.153†	-4.7	-0.0174	mg/L	0.00121	-0.0174	mg/L	0.00121	6.99%
As 188.979†	240.3	0.0870	mg/L	0.00392	0.0870	mg/L	0.00392	4.51%
Ba 233.527†	133661.9	0.907	mg/L	0.0107	0.907	mg/L	0.0107	1.18%
Be 234.861†	174.0	0.00015	mg/L	0.000030	0.00015	mg/L	0.000030	20.41%
B 249.677†	60807.7	0.650	mg/L	0.0039	0.650	mg/L	0.0039	0.60%
Ca 227.546†	115723.1	304	mg/L	2.9	304	mg/L	2.9	0.96%
Cd 228.802†	14.3	-0.00010	mg/L	0.000178	-0.00010	mg/L	0.000178	176.27%
Co 228.616†	71.0	0.00126	mg/L	0.000309	0.00126	mg/L	0.000309	24.63%
Cr 267.716†	21912.0	0.168	mg/L	0.0027	0.168	mg/L	0.0027	1.59%
Cu 327.393†	-343.9	-0.00212	mg/L	0.000449	-0.00212	mg/L	0.000449	21.23%
Fe 239.562†	129.6	0.00453	mg/L	0.001390	0.00453	mg/L	0.001390	30.68%
Mg 279.077†	361037.6	130	mg/L	0.2	130	mg/L	0.2	0.15%
Mn 257.610†	51347.6	0.0595	mg/L	0.00079	0.0595	mg/L	0.00079	1.34%
Mo 202.031†	391.7	0.0125	mg/L	0.00034	0.0125	mg/L	0.00034	2.74%
Ni 231.604†	6356.1	0.106	mg/L	0.0007	0.106	mg/L	0.0007	0.65%
Pb 220.353†	9.3	0.00004	mg/L	0.001889	0.00004	mg/L	0.001889	>999.9%
Sb 206.836†	3.9	-0.00010	mg/L	0.000422	-0.00010	mg/L	0.000422	440.99%
Se 196.026†	7.2	0.00531	mg/L	0.005115	0.00531	mg/L	0.005115	96.26%
Si 251.611†	729101.2	15.4	mg/L	0.15	15.4	mg/L	0.15	0.94%
Sn 189.927†	-392.1	-0.0420	mg/L	0.00155	-0.0420	mg/L	0.00155	3.69%
Ti 334.940†	-50883.7	-0.00059	mg/L	0.001642	-0.00059	mg/L	0.001642	277.52%
Tl 190.801†	-55.0	-0.0208	mg/L	0.00143	-0.0208	mg/L	0.00143	6.88%
V 290.880†	4063.6	0.0124	mg/L	0.00166	0.0124	mg/L	0.00166	13.31%
Zn 206.200†	239.0	0.00502	mg/L	0.000116	0.00502	mg/L	0.000116	2.32%
K 766.490†	299002.4	101	mg/L	0.0	101	mg/L	0.0	0.05%
Na 589.592†	9449239.4	689	mg/L	39.5	689	mg/L	39.5	5.73%
Sr 407.771†	Saturated2							
Li 670.784†	24031.0	0.178	mg/L	0.0058	0.178	mg/L	0.0058	3.26%

Sequence No.: 5

Sample ID: L1211039303

Utosampler Location: 20

Date Collected: 11/19/2012 9:06:43 AM

Approved: November 20, 2012

Ken H. Rhodes

Analyst: KHR
Initial Sample Wt:
Dilution:

data Type: Original
Initial Sample Vol:
Sample Prep Vol:

Nebulizer Parameters: L1211039303

Analyte Back Pressure Flow
All 174.0 kPa 0.50 L/min

Mean Data: L1211039303

Analyte	Mean Corrected Intensity	Calib. Conc. Units	Std.Dev.	Sample Conc. Units	Std.Dev.	RSD
Y 371.029	2072137.5				35933.73	1.73%
YRADIAL	264245.5				6726.45	2.55%
Ga 417.206	1189330.7				31386.97	2.64%
GA RADIAL	74328.4				2133.00	2.87%
Ag 328.068†	1538.7	0.00399 mg/L	0.000483	0.00399 mg/L	0.000483	12.11%
Al 396.153†	1.3	-0.0165 mg/L	0.00100	-0.0165 mg/L	0.00100	6.08%
As 188.979†	225.9	0.0818 mg/L	0.00357	0.0818 mg/L	0.00357	4.36%
Ba 233.527†	133680.8	0.908 mg/L	0.0210	0.908 mg/L	0.0210	2.32%
Be 234.861†	193.2	0.00016 mg/L	0.000008	0.00016 mg/L	0.000008	5.10%
B 249.677†	60911.4	0.651 mg/L	0.0196	0.651 mg/L	0.0196	3.02%
Ca 227.546†	113996.1	299 mg/L	9.6	299 mg/L	9.6	3.22%
Cd 228.802†	15.6	-0.00005 mg/L	0.000208	-0.00005 mg/L	0.000208	453.40%
Co 228.616†	63.2	0.00104 mg/L	0.000083	0.00104 mg/L	0.000083	7.93%
Cr 267.716†	20767.0	0.160 mg/L	0.0036	0.160 mg/L	0.0036	2.27%
Cu 327.393†	-187.4	-0.00153 mg/L	0.000218	-0.00153 mg/L	0.000218	14.23%
Fe 239.562†	411.3	0.0342 mg/L	0.00162	0.0342 mg/L	0.00162	4.74%
Mg 279.077†	356764.0	128 mg/L	4.6	128 mg/L	4.6	3.55%
Mn 257.610†	50884.5	0.0590 mg/L	0.00146	0.0590 mg/L	0.00146	2.48%
Mo 202.031†	396.5	0.0126 mg/L	0.00036	0.0126 mg/L	0.00036	2.82%
Ni 231.604†	6733.4	0.112 mg/L	0.0020	0.112 mg/L	0.0020	1.77%
Pb 220.353†	-0.9	-0.00093 mg/L	0.000616	-0.00093 mg/L	0.000616	66.04%
Sb 206.836†	5.0	0.00029 mg/L	0.001564	0.00029 mg/L	0.001564	542.30%
Se 196.026†	3.7	0.00317 mg/L	0.003110	0.00317 mg/L	0.003110	98.12%
Si 251.611†	731176.2	15.5 mg/L	0.53	15.5 mg/L	0.53	3.42%
Sn 189.927†	-398.1	-0.0426 mg/L	0.00076	-0.0426 mg/L	0.00076	1.78%
Ti 334.940†	-51069.7	-0.00144 mg/L	0.001772	-0.00144 mg/L	0.001772	123.46%
Tl 190.801†	-58.0	-0.0219 mg/L	0.00139	-0.0219 mg/L	0.00139	6.38%
V 290.880†	4039.8	0.0124 mg/L	0.00178	0.0124 mg/L	0.00178	14.37%
Zn 206.200†	325.4	0.00689 mg/L	0.000142	0.00689 mg/L	0.000142	2.06%
K 766.490†	296886.2	99.8 mg/L	3.79	99.8 mg/L	3.79	3.80%
Na 589.592†	9440351.3	687 mg/L	37.1	687 mg/L	37.1	5.40%
Sr 407.771†	Saturated					
Li 670.784†	23721.5	0.175 mg/L	0.0108	0.175 mg/L	0.0108	6.19%

Sequence No.: 6

Sample ID: L1211039304

Analyst: KHR

Initial Sample Wt:

Dilution:

Autosampler Location: 21

Date Collected: 11/19/2012 9:13:46 AM

data Type: Original

Initial Sample Vol:

Sample Prep Vol:

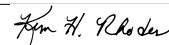
Nebulizer Parameters: L1211039304

Analyte Back Pressure Flow
All 173.0 kPa 0.50 L/min

Mean Data: L1211039304

Analyte	Mean Corrected Intensity	Calib. Conc. Units	Std.Dev.	Sample Conc. Units	Std.Dev.	RSD
Y 371.029	2135136.1				14334.31	0.67%
YRADIAL	266516.8				7564.87	2.84%
Ga 417.206	1211156.9				6576.26	0.54%
GA RADIAL	74690.3				864.32	1.16%
Ag 328.068†	1515.5	0.00391 mg/L	0.000458	0.00391 mg/L	0.000458	11.73%
Al 396.153†	-22.6	-0.0199 mg/L	0.00161	-0.0199 mg/L	0.00161	8.07%
As 188.979†	232.7	0.0843 mg/L	0.00249	0.0843 mg/L	0.00249	2.95%
Ba 233.527†	131410.9	0.892 mg/L	0.0132	0.892 mg/L	0.0132	1.48%
Be 234.861†	211.4	0.00018 mg/L	0.000020	0.00018 mg/L	0.000020	11.07%

Approved: November 20, 2012



B 249.677†	59807.5	0.639 mg/L	0.0074	0.639 mg/L	0.0074	1.15%
Ca 227.546†	113461.0	298 mg/L	1.9	298 mg/L	1.9	0.62%
Cd 228.802†	14.7	-0.00008 mg/L	0.000070	-0.00008 mg/L	0.000070	88.87%
Co 228.616†	59.4	0.00094 mg/L	0.000031	0.00094 mg/L	0.000031	3.29%
Cr 267.716†	21504.9	0.165 mg/L	0.0018	0.165 mg/L	0.0018	1.09%
Cu 327.393†	-397.6	-0.00231 mg/L	0.000348	-0.00231 mg/L	0.000348	15.06%
Fe 239.562†	119.5	0.00351 mg/L	0.000529	0.00351 mg/L	0.000529	15.08%
Mg 279.077†	355755.3	128 mg/L	2.1	128 mg/L	2.1	1.61%
Mn 257.610†	50630.7	0.0586 mg/L	0.00078	0.0586 mg/L	0.00078	1.34%
Mo 202.031†	331.2	0.0104 mg/L	0.00039	0.0104 mg/L	0.00039	3.71%
Ni 231.604†	6521.3	0.108 mg/L	0.0002	0.108 mg/L	0.0002	0.16%
Pb 220.353†	-3.2	-0.00115 mg/L	0.000229	-0.00115 mg/L	0.000229	19.83%
Sb 206.836†	5.3	0.00032 mg/L	0.001766	0.00032 mg/L	0.001766	553.93%
Se 196.026†	3.2	0.00283 mg/L	0.002347	0.00283 mg/L	0.002347	82.83%
Si 251.611†	716278.5	15.2 mg/L	0.05	15.2 mg/L	0.05	0.31%
Sn 189.927†	-379.0	-0.0406 mg/L	0.00112	-0.0406 mg/L	0.00112	2.76%
Ti 334.940†	-49849.4	-0.00055 mg/L	0.002140	-0.00055 mg/L	0.002140	386.12%
Tl 190.801†	-40.9	-0.0160 mg/L	0.00201	-0.0160 mg/L	0.00201	12.58%
V 290.880†	3815.6	0.0114 mg/L	0.00151	0.0114 mg/L	0.00151	13.24%
Zn 206.200†	246.0	0.00515 mg/L	0.000159	0.00515 mg/L	0.000159	3.09%
K 766.490†	295834.5	100 mg/L	1.2	100 mg/L	1.2	1.22%
Na 589.592†	Saturated2					
Sr 407.771†	Saturated2					
Li 670.784†	23783.7	0.176 mg/L	0.0035	0.176 mg/L	0.0035	2.01%

Sequence No.: 7

Sample ID: L1211042901

Analyst: KHR

Initial Sample Wt:

Dilution:

Autosampler Location: 22

Date Collected: 11/19/2012 9:20:43 AM

Data Type: Original

Initial Sample Vol:

Sample Prep Vol:

Nebulizer Parameters: L1211042901

Analyte	Back Pressure	Flow
All	174.0 kPa	0.50 L/min

Mean Data: L1211042901

Analyte	Mean Corrected Intensity	Conc.	Calib. Units	Std.Dev.	Conc.	Sample Units	Std.Dev.	RSD
Y 371.029	2367332.4						27474.08	1.16%
YRADIAL	287455.0						4002.41	1.39%
Ga 417.206	1288360.3						24282.47	1.88%
GaRADIAL	78784.3						1804.96	2.29%
Ag 328.068†	620.6	0.00065	mg/L	0.000163	0.00065	mg/L	0.000163	25.22%
Al 396.153†	68.0	-0.0214	mg/L	0.00072	-0.0214	mg/L	0.00072	3.38%
As 188.979†	294.3	0.105	mg/L	0.0006	0.105	mg/L	0.0006	0.60%
Ba 233.527†	13992.2	0.0934	mg/L	0.00024	0.0934	mg/L	0.00024	0.25%
Be 234.861†	140.1	0.00037	mg/L	0.000003	0.00037	mg/L	0.000003	0.82%
B 249.677†	178800.0	1.91	mg/L	0.037	1.91	mg/L	0.037	1.95%
Ca 227.546†	34043.3	89.3	mg/L	2.24	89.3	mg/L	2.24	2.51%
Cd 228.802†	11.0	-0.00029	mg/L	0.000104	-0.00029	mg/L	0.000104	36.05%
Co 228.616†	22.3	0.00050	mg/L	0.000137	0.00050	mg/L	0.000137	27.40%
Cr 267.716†	125.4	0.00024	mg/L	0.000009	0.00024	mg/L	0.000009	3.86%
Cu 327.393†	66.8	-0.00048	mg/L	0.000367	-0.00048	mg/L	0.000367	75.76%
Fe 239.562†	2590.4	0.265	mg/L	0.0021	0.265	mg/L	0.0021	0.80%
Mg 279.077†	35741.0	12.9	mg/L	0.08	12.9	mg/L	0.08	0.59%
Mn 257.610†	2021678.7	2.42	mg/L	0.020	2.42	mg/L	0.020	0.84%
Mo 202.031†	6864.4	0.232	mg/L	0.0031	0.232	mg/L	0.0031	1.36%
Ni 231.604†	67.6	-0.00054	mg/L	0.000358	-0.00054	mg/L	0.000358	66.70%
Pb 220.353†	17.2	-0.00055	mg/L	0.001214	-0.00055	mg/L	0.001214	219.07%
Sb 206.836†	-4.6	-0.00081	mg/L	0.001319	-0.00081	mg/L	0.001319	161.97%
Se 196.026†	6.6	0.00426	mg/L	0.003462	0.00426	mg/L	0.003462	81.20%
Si 251.611†	132543.4	2.79	mg/L	0.040	2.79	mg/L	0.040	1.42%
Sn 189.927†	-282.0	-0.0304	mg/L	0.00132	-0.0304	mg/L	0.00132	4.35%
Ti 334.940†	-16564.5	-0.00194	mg/L	0.000757	-0.00194	mg/L	0.000757	38.99%
Tl 190.801†	-28.5	-0.0138	mg/L	0.00034	-0.0138	mg/L	0.00034	2.47%
V 290.880†	986.7	0.00201	mg/L	0.001646	0.00201	mg/L	0.001646	82.10%
Zn 206.200†	153.6	0.00168	mg/L	0.000158	0.00168	mg/L	0.000158	9.41%
K 766.490†	16461.5	5.46	mg/L	0.031	5.46	mg/L	0.031	0.57%
Na 589.592†	610139.0	30.7	mg/L	0.91	30.7	mg/L	0.91	2.97%

Approved: November 20, 2012

Ken H. Rhodes

Sr 407.771†	3512185.3	1.47 mg/L	0.029	1.47 mg/L	0.029	1.95%
Li 670.784†	1559.9	0.00874 mg/L	0.000304	0.00874 mg/L	0.000304	3.48%

Sequence No.: 8

Sample ID: L1211042902

Analyst: KHR

Initial Sample Wt:

Dilution:

Sampler Location: 23

Date Collected: 11/19/2012 9:27:45 AM

Data Type: Original

Initial Sample Vol:

Sample Prep Vol:

Nebulizer Parameters: L1211042902

Analyte

Back Pressure

Flow

All

174.0 kPa

0.50 L/min

Mean Data: L1211042902

Analyte	Mean Corrected Intensity	Conc. Units	Calib. Units	Std.Dev.	Conc. Units	Sample Std.Dev.	RSD
Y 371.029	2338495.9					41689.80	1.78%
YRADIAL	285311.2					3778.24	1.32%
Ga 417.206	1286291.7					5693.45	0.44%
GA RADIAL	78851.1					2758.42	3.50%
Ag 328.068†	354.5	0.00014 mg/L		0.000285	0.00014 mg/L	0.000285	200.77%
Al 396.153†	24.8	-0.0160 mg/L		0.00092	-0.0160 mg/L	0.00092	5.80%
As 188.979†	-12.5	-0.00494 mg/L		0.001394	-0.00494 mg/L	0.001394	28.20%
Ba 233.527†	9881.7	0.0653 mg/L		0.00083	0.0653 mg/L	0.00083	1.28%
Be 234.861†	216.7	0.00018 mg/L		0.000047	0.00018 mg/L	0.000047	25.62%
B 249.677†	74245.0	0.794 mg/L		0.0109	0.794 mg/L	0.0109	1.37%
Ca 227.546†	23284.3	61.1 mg/L		0.58	61.1 mg/L	0.58	0.95%
Cd 228.802†	2.9	0.00010 mg/L		0.000068	0.00010 mg/L	0.000068	68.82%
Co 228.616†	78.6	0.00173 mg/L		0.000111	0.00173 mg/L	0.000111	6.45%
Cr 267.716†	99.6	0.00008 mg/L		0.000082	0.00008 mg/L	0.000082	106.18%
Cu 327.393†	130.3	-0.00028 mg/L		0.000249	-0.00028 mg/L	0.000249	88.30%
Fe 239.562†	822.3	0.0797 mg/L		0.00145	0.0797 mg/L	0.00145	1.83%
Mg 279.077†	36689.9	13.2 mg/L		0.18	13.2 mg/L	0.18	1.36%
Mn 257.610†	70256.3	0.0822 mg/L		0.00174	0.0822 mg/L	0.00174	2.12%
Mo 202.031†	1713.9	0.0572 mg/L		0.00074	0.0572 mg/L	0.00074	1.30%
Ni 231.604†	186.2	0.00146 mg/L		0.000217	0.00146 mg/L	0.000217	14.83%
Pb 220.353†	24.6	0.00149 mg/L		0.002287	0.00149 mg/L	0.002287	153.22%
Sb 206.836†	-2.3	-0.00050 mg/L		0.001670	-0.00050 mg/L	0.001670	335.94%
Se 196.026†	2.3	0.00226 mg/L		0.003664	0.00226 mg/L	0.003664	161.97%
Si 251.611†	518942.1	11.0 mg/L		0.12	11.0 mg/L	0.12	1.07%
Sn 189.927†	-274.3	-0.0296 mg/L		0.00142	-0.0296 mg/L	0.00142	4.80%
Ti 334.940†	-11685.4	-0.00181 mg/L		0.000567	-0.00181 mg/L	0.000567	31.41%
Tl 190.801†	-24.6	-0.0101 mg/L		0.00294	-0.0101 mg/L	0.00294	29.10%
V 290.880†	785.5	0.00118 mg/L		0.001131	0.00118 mg/L	0.001131	95.73%
Zn 206.200†	115.9	0.00085 mg/L		0.000132	0.00085 mg/L	0.000132	15.53%
K 766.490†	20797.6	6.89 mg/L		0.075	6.89 mg/L	0.075	1.09%
Na 589.592†	818111.1	41.4 mg/L		1.52	41.4 mg/L	1.52	3.69%
Sr 407.771†	2360263.4	0.986 mg/L		0.0189	0.986 mg/L	0.0189	1.92%
Li 670.784†	6082.2	0.0427 mg/L		0.00202	0.0427 mg/L	0.00202	4.73%

Sequence No.: 9

Sample ID: L1211042902PS WG414521-01

Analyst: KHR

Initial Sample Wt:

Dilution:

Sampler Location: 24

Date Collected: 11/19/2012 9:34:43 AM

Data Type: Original

Initial Sample Vol:

Sample Prep Vol:

Nebulizer Parameters: L1211042902PS WG414521-01

Analyte

Back Pressure

Flow

All

174.0 kPa

0.50 L/min

Mean Data: L1211042902PS WG414521-01

Analyte	Mean Corrected Intensity	Conc. Units	Calib. Units	Std.Dev.	Conc. Units	Sample Std.Dev.	RSD
Y 371.029	2301084.2					16816.49	0.73%
YRADIAL	282577.1					3444.91	1.22%
Ga 417.206	1205669.7					27596.15	2.29%

Approved: November 20, 2012

Ken H. Rhodes

GA RADIAL	74356.1				713.82	0.96%
Ag 328.068†	63753.7	0.197 mg/L	0.0056	0.197 mg/L	0.0056	2.85%
Al 396.153†	33093.4	4.95 mg/L	0.014	4.95 mg/L	0.014	0.29%
As 188.979†	529.9	0.189 mg/L	0.0067	0.189 mg/L	0.0067	3.54%
Ba 233.527†	82137.6	0.557 mg/L	0.0093	0.557 mg/L	0.0093	1.67%
Be 234.861†	26956.7	0.0239 mg/L	0.00077	0.0239 mg/L	0.00077	3.22%
B 249.677†	164996.8	1.76 mg/L	0.057	1.76 mg/L	0.057	3.25%
Ca 227.546†	24858.7	65.5 mg/L	1.93	65.5 mg/L	1.93	2.95%
Cd 228.802†	1054.3	0.0228 mg/L	0.00111	0.0228 mg/L	0.00111	4.86%
Co 228.616†	3679.2	0.0996 mg/L	0.00094	0.0996 mg/L	0.00094	0.95%
Cr 267.716†	32500.1	0.250 mg/L	0.0034	0.250 mg/L	0.0034	1.35%
Cu 327.393†	65587.6	0.244 mg/L	0.0072	0.244 mg/L	0.0072	2.96%
Fe 239.562†	19872.0	2.08 mg/L	0.014	2.08 mg/L	0.014	0.66%
Mg 279.077†	46595.5	16.8 mg/L	0.13	16.8 mg/L	0.13	0.75%
Mn 257.610†	277811.8	0.332 mg/L	0.0059	0.332 mg/L	0.0059	1.79%
Mo 202.031†	16399.4	0.554 mg/L	0.0082	0.554 mg/L	0.0082	1.47%
Ni 231.604†	15524.4	0.260 mg/L	0.0023	0.260 mg/L	0.0023	0.88%
Pb 220.353†	2610.4	0.249 mg/L	0.0015	0.249 mg/L	0.0015	0.59%
Sb 206.836†	2129.3	0.595 mg/L	0.0187	0.595 mg/L	0.0187	3.15%
Se 196.026†	318.9	0.198 mg/L	0.0093	0.198 mg/L	0.0093	4.72%
Si 251.611†	605942.0	12.8 mg/L	0.27	12.8 mg/L	0.27	2.12%
Sn 189.927†	-108.3	-0.0122 mg/L	0.00075	-0.0122 mg/L	0.00075	6.11%
Ti 334.940†	553369.2	0.505 mg/L	0.0010	0.505 mg/L	0.0010	0.19%
Tl 190.801†	725.5	0.253 mg/L	0.0010	0.253 mg/L	0.0010	0.38%
V 290.880†	118042.2	0.514 mg/L	0.0062	0.514 mg/L	0.0062	1.20%
Zn 206.200†	21449.9	0.483 mg/L	0.0099	0.483 mg/L	0.0099	2.05%
K 766.490†	92404.4	30.8 mg/L	0.17	30.8 mg/L	0.17	0.55%
Na 589.592†	1275769.6	65.2 mg/L	0.97	65.2 mg/L	0.97	1.49%
Sr 407.771†	3340419.2	1.40 mg/L	0.022	1.40 mg/L	0.022	1.59%
Li 670.784†	75184.4	0.562 mg/L	0.0005	0.562 mg/L	0.0005	0.10%

Sequence No.: 10

Sample ID: L1211042902DL WG414521-02

Analyst: KHR

Initial Sample Wt:

Dilution:

autosampler Location: 25

Date Collected: 11/19/2012 9:40:41 AM

Data Type: Original

Initial Sample Vol:

Sample Prep Vol:

Nebulizer Parameters: L1211042902DL WG414521-02

Analyte	Back Pressure	Flow
All	174.0 kPa	0.50 L/min

Mean Data: L1211042902DL WG414521-02

Analyte	Mean Corrected Intensity	Conc.	Calib. Units	Std.Dev.	Conc.	Sample Units	Std.Dev.	RSD
Y 371.029	2429619.0						6150.80	0.25%
Y RADIAL	285721.8						4232.77	1.48%
Ga 417.206	1265946.9						9664.07	0.76%
GA RADIAL	78332.2						1237.01	1.58%
Ag 328.068†	56.8	-0.00064 mg/L		0.000457	-0.00064 mg/L		0.000457	71.24%
Al 396.153†	14.9	-0.0143 mg/L		0.00116	-0.0143 mg/L		0.00116	8.13%
As 188.979†	-4.5	-0.00180 mg/L		0.001847	-0.00180 mg/L		0.001847	102.44%
Ba 233.527†	2077.7	0.0122 mg/L		0.00012	0.0122 mg/L		0.00012	0.97%
Be 234.861†	173.8	0.00014 mg/L		0.000035	0.00014 mg/L		0.000035	25.37%
B 249.677†	16111.1	0.173 mg/L		0.0019	0.173 mg/L		0.0019	1.09%
Ca 227.546†	4825.3	12.7 mg/L		0.11	12.7 mg/L		0.11	0.89%
Cd 228.802†	-6.6	-0.00013 mg/L		0.000072	-0.00013 mg/L		0.000072	55.06%
Co 228.616†	15.3	-0.00008 mg/L		0.000288	-0.00008 mg/L		0.000288	353.83%
Cr 267.716†	41.6	-0.00036 mg/L		0.000098	-0.00036 mg/L		0.000098	27.07%
Cu 327.393†	166.9	-0.00014 mg/L		0.000112	-0.00014 mg/L		0.000112	78.09%
Fe 239.562†	177.6	0.0121 mg/L		0.00076	0.0121 mg/L		0.00076	6.29%
Mg 279.077†	7443.5	2.67 mg/L		0.018	2.67 mg/L		0.018	0.67%
Mn 257.610†	14061.5	0.0147 mg/L		0.00008	0.0147 mg/L		0.00008	0.58%
Mo 202.031†	356.1	0.0112 mg/L		0.00049	0.0112 mg/L		0.00049	4.36%
Ni 231.604†	62.1	-0.00063 mg/L		0.000374	-0.00063 mg/L		0.000374	59.29%
Pb 220.353†	-1.4	-0.00097 mg/L		0.000368	-0.00097 mg/L		0.000368	37.91%
Sb 206.836†	-0.6	-0.00010 mg/L		0.000243	-0.00010 mg/L		0.000243	240.92%
Se 196.026†	2.0	0.00212 mg/L		0.001906	0.00212 mg/L		0.001906	89.75%
Si 251.611†	108315.6	2.28 mg/L		0.025	2.28 mg/L		0.025	1.10%
Sn 189.927†	-146.9	-0.0162 mg/L		0.00053	-0.0162 mg/L		0.00053	3.23%

Approved: November 20, 2012

Ken H. Rhodes

Ti 334.940†	-2409.2	-0.00076 mg/L	0.000091	-0.00076 mg/L	0.000091	12.05%
Tl 190.801†	-12.0	-0.00567 mg/L	0.003626	-0.00567 mg/L	0.003626	63.97%
V 290.880†	333.6	-0.00051 mg/L	0.001387	-0.00051 mg/L	0.001387	273.19%
Zn 206.200†	70.7	-0.00016 mg/L	0.000124	-0.00016 mg/L	0.000124	75.26%
K 766.490†	4481.4	1.50 mg/L	0.023	1.50 mg/L	0.023	1.54%
Na 589.592†	165446.3	8.23 mg/L	0.195	8.23 mg/L	0.195	2.37%
Sr 407.771†	475341.0	0.196 mg/L	0.0041	0.196 mg/L	0.0041	2.10%
Li 670.784†	1311.9	0.00687 mg/L	0.000267	0.00687 mg/L	0.000267	3.88%

Sequence No.: 11

Sample ID: CCV

Analyst:

Initial Sample Wt:

Dilution:

Autosampler Location: 6

Date Collected: 11/19/2012 9:47:35 AM

Data Type: Original

Initial Sample Vol:

Sample Prep Vol:

Nebulizer Parameters: CCV

Analyte	Back Pressure	Flow
All	173.0 kPa	0.50 L/min

Mean Data: CCV

Analyte	Mean Corrected Intensity	Calib. Conc. Units	Std.Dev.	Sample Conc. Units	Std.Dev.	RSD
Y 371.029	2374885.0				33134.26	1.40%
YRADIAL	282630.9				480.49	0.17%
Ga 417.206	1173444.0				25931.96	2.21%
GaRADIAL	72935.5				567.63	0.78%
Ag 328.068†	129293.8	0.400 mg/L	0.0096	0.400 mg/L	0.0096	2.41%
QC value within limits for Ag		328.068	Recovery = 100.07%			
Al 396.153†	65645.2	9.85 mg/L	0.012	9.85 mg/L	0.012	0.12%
QC value within limits for Al		396.153	Recovery = 98.46%			
As 188.979†	1086.0	0.389 mg/L	0.0112	0.389 mg/L	0.0112	2.89%
QC value within limits for As		188.979	Recovery = 97.17%			
Ba 233.527†	146928.9	0.998 mg/L	0.0259	0.998 mg/L	0.0259	2.60%
QC value within limits for Ba		233.527	Recovery = 99.78%			
Be 234.861†	54948.9	0.0488 mg/L	0.00092	0.0488 mg/L	0.00092	1.89%
QC value within limits for Be		234.861	Recovery = 97.51%			
B 249.677†	47115.8	0.500 mg/L	0.0124	0.500 mg/L	0.0124	2.47%
QC value within limits for B		249.677	Recovery = 100.07%			
Ca 227.546†	3757.5	10.3 mg/L	0.25	10.3 mg/L	0.25	2.41%
QC value within limits for Ca		227.546	Recovery = 103.18%			
Cd 228.802†	2234.1	0.0485 mg/L	0.00175	0.0485 mg/L	0.00175	3.61%
QC value within limits for Cd		228.802	Recovery = 96.90%			
Co 228.616†	7382.0	0.200 mg/L	0.0036	0.200 mg/L	0.0036	1.82%
QC value within limits for Co		228.616	Recovery = 100.06%			
Cr 267.716†	64416.8	0.497 mg/L	0.0074	0.497 mg/L	0.0074	1.50%
QC value within limits for Cr		267.716	Recovery = 99.36%			
Cu 327.393†	134520.2	0.501 mg/L	0.0125	0.501 mg/L	0.0125	2.49%
QC value within limits for Cu		327.393	Recovery = 100.12%			
Fe 239.562†	37813.5	3.97 mg/L	0.011	3.97 mg/L	0.011	0.29%
QC value within limits for Fe		239.562	Recovery = 99.16%			
Mg 279.077†	27478.8	9.90 mg/L	0.010	9.90 mg/L	0.010	0.10%
QC value within limits for Mg		279.077	Recovery = 99.03%			
Mn 257.610†	421722.1	0.505 mg/L	0.0138	0.505 mg/L	0.0138	2.74%
QC value within limits for Mn		257.610	Recovery = 100.92%			
Mo 202.031†	29203.7	0.988 mg/L	0.0212	0.988 mg/L	0.0212	2.14%
QC value within limits for Mo		202.031	Recovery = 98.81%			
Ni 231.604†	29692.9	0.499 mg/L	0.0149	0.499 mg/L	0.0149	3.00%
QC value within limits for Ni		231.604	Recovery = 99.74%			
Pb 220.353†	5266.9	0.504 mg/L	0.0081	0.504 mg/L	0.0081	1.61%
QC value within limits for Pb		220.353	Recovery = 100.73%			
Sb 206.836†	4254.2	1.19 mg/L	0.036	1.19 mg/L	0.036	3.02%
QC value within limits for Sb		206.836	Recovery = 99.03%			
Se 196.026†	642.0	0.397 mg/L	0.0119	0.397 mg/L	0.0119	3.01%
QC value within limits for Se		196.026	Recovery = 99.27%			
Si 251.611†	236180.8	4.98 mg/L	0.063	4.98 mg/L	0.063	1.27%
QC value within limits for Si		251.611	Recovery = 99.63%			
Sn 189.927†	9509.9	0.997 mg/L	0.0152	0.997 mg/L	0.0152	1.52%
QC value within limits for Sn		189.927	Recovery = 99.69%			
Ti 334.940†	1104922.4	0.991 mg/L	0.0072	0.991 mg/L	0.0072	0.72%

Approved: November 20, 2012

Ken H. Rhodes

QC value within limits for Ti 334.940 Recovery = 99.07%
 Tl 190.801† 1489.2 0.520 mg/L 0.0072 0.520 mg/L 0.0072 1.39%
 QC value within limits for Tl 190.801 Recovery = 103.96%
 V 290.880† 228194.1 0.996 mg/L 0.0159 0.996 mg/L 0.0159 1.59%
 QC value within limits for V 290.880 Recovery = 99.57%
 Zn 206.200† 43865.0 0.989 mg/L 0.0238 0.989 mg/L 0.0238 2.40%
 QC value within limits for Zn 206.200 Recovery = 98.88%
 K 766.490† 146532.1 49.1 mg/L 0.29 49.1 mg/L 0.29 0.59%
 QC value within limits for K 766.490 Recovery = 98.17%
 Na 589.592† 988569.6 50.2 mg/L 0.27 50.2 mg/L 0.27 0.55%
 QC value within limits for Na 589.592 Recovery = 100.36%
 Sr 407.771† 2421222.8 1.01 mg/L 0.010 1.01 mg/L 0.010 0.96%
 QC value within limits for Sr 407.771 Recovery = 101.31%
 Li 670.784† 134561.2 1.01 mg/L 0.006 1.01 mg/L 0.006 0.60%
 QC value within limits for Li 670.784 Recovery = 100.78%
 All analyte(s) passed QC.

Sequence No.: 12

Sample ID: CCB

Analyst:

Initial Sample Wt:

Dilution:

Sampler Location: 1

Date Collected: 11/19/2012 9:53:36 AM

Data Type: Original

Initial Sample Vol:

Sample Prep Vol:

Nebulizer Parameters: CCB

Analyte Back Pressure Flow
 All 173.0 kPa 0.50 L/min

Mean Data: CCB

Analyte	Mean Corrected Intensity	Calib. Conc. Units	Std.Dev.	Sample Conc. Units	Std.Dev.	RSD
Y 371.029	2447143.9				11947.50	0.49%
YRADIAL	288378.9				6406.11	2.22%
Ga 417.206	1194226.3				8965.22	0.75%
GA RADIAL	76119.2				931.08	1.22%
Ag 328.068†	7.1	-0.00076 mg/L	0.000250	-0.00076 mg/L	0.000250	32.93%
QC value within limits for Ag 328.068			Recovery = Not calculated			
Al 396.153†	22.2	-0.0124 mg/L	0.00031	-0.0124 mg/L	0.00031	2.55%
QC value within limits for Al 396.153			Recovery = Not calculated			
As 188.979†	1.2	0.00031 mg/L	0.001055	0.00031 mg/L	0.001055	345.28%
QC value within limits for As 188.979			Recovery = Not calculated			
Ba 233.527†	15.6	-0.00186 mg/L	0.000135	-0.00186 mg/L	0.000135	7.27%
QC value within limits for Ba 233.527			Recovery = Not calculated			
Be 234.861†	50.7	0.00002 mg/L	0.000011	0.00002 mg/L	0.000011	44.91%
QC value within limits for Be 234.861			Recovery = Not calculated			
B 249.677†	1170.3	0.0140 mg/L	0.00051	0.0140 mg/L	0.00051	3.63%
QC value within limits for B 249.677			Recovery = Not calculated			
Ca 227.546†	5.1	0.0146 mg/L	0.02004	0.0146 mg/L	0.02004	136.78%
QC value within limits for Ca 227.546			Recovery = Not calculated			
Cd 228.802†	1.7	0.00004 mg/L	0.000135	0.00004 mg/L	0.000135	319.02%
QC value within limits for Cd 228.802			Recovery = Not calculated			
Co 228.616†	-2.5	-0.00059 mg/L	0.000122	-0.00059 mg/L	0.000122	20.78%
QC value within limits for Co 228.616			Recovery = Not calculated			
Cr 267.716†	-4.7	-0.00072 mg/L	0.000108	-0.00072 mg/L	0.000108	15.04%
QC value within limits for Cr 267.716			Recovery = Not calculated			
Cu 327.393†	188.9	-0.00006 mg/L	0.000390	-0.00006 mg/L	0.000390	648.83%
QC value within limits for Cu 327.393			Recovery = Not calculated			
Fe 239.562†	16.5	-0.00475 mg/L	0.000490	-0.00475 mg/L	0.000490	10.33%
QC value within limits for Fe 239.562			Recovery = Not calculated			
Mg 279.077†	10.3	-0.00591 mg/L	0.002419	-0.00591 mg/L	0.002419	40.95%
QC value within limits for Mg 279.077			Recovery = Not calculated			
Mn 257.610†	-68.3	-0.00224 mg/L	0.000002	-0.00224 mg/L	0.000002	0.08%
QC value within limits for Mn 257.610			Recovery = Not calculated			
Mo 202.031†	2.1	-0.00075 mg/L	0.000263	-0.00075 mg/L	0.000263	35.06%
QC value within limits for Mo 202.031			Recovery = Not calculated			
Ni 231.604†	5.5	-0.00159 mg/L	0.000155	-0.00159 mg/L	0.000155	9.80%
QC value within limits for Ni 231.604			Recovery = Not calculated			
Pb 220.353†	-6.7	-0.00148 mg/L	0.001197	-0.00148 mg/L	0.001197	81.14%
QC value within limits for Pb 220.353			Recovery = Not calculated			
Sb 206.836†	3.3	0.00097 mg/L	0.001039	0.00097 mg/L	0.001039	107.31%

Approved: November 20, 2012

Ken H. Rhodes

QC value within limits for Sb	206.836	Recovery = Not calculated			
Se 196.026†	2.2	0.00222 mg/L	0.000881	0.00222 mg/L	0.000881 39.64%
QC value within limits for Se	196.026	Recovery = Not calculated			
Si 251.611†	72.0	-0.00874 mg/L	0.000378	-0.00874 mg/L	0.000378 4.33%
QC value within limits for Si	251.611	Recovery = Not calculated			
Sn 189.927†	-18.1	-0.00274 mg/L	0.000310	-0.00274 mg/L	0.000310 11.32%
QC value within limits for Sn	189.927	Recovery = Not calculated			
Ti 334.940†	78.0	-0.00043 mg/L	0.000127	-0.00043 mg/L	0.000127 29.67%
QC value within limits for Ti	334.940	Recovery = Not calculated			
Tl 190.801†	-2.3	-0.00230 mg/L	0.002217	-0.00230 mg/L	0.002217 96.46%
QC value within limits for Tl	190.801	Recovery = Not calculated			
V 290.880†	329.5	-0.00045 mg/L	0.001319	-0.00045 mg/L	0.001319 291.23%
QC value within limits for V	290.880	Recovery = Not calculated			
Zn 206.200†	4.8	-0.00165 mg/L	0.000127	-0.00165 mg/L	0.000127 7.74%
QC value within limits for Zn	206.200	Recovery = Not calculated			
K 766.490†	47.4	0.0324 mg/L	0.01000	0.0324 mg/L	0.01000 30.87%
QC value within limits for K	766.490	Recovery = Not calculated			
Na 589.592†	1076.4	0.0529 mg/L	0.00721	0.0529 mg/L	0.00721 13.63%
QC value within limits for Na	589.592	Recovery = Not calculated			
Sr 407.771†	285.6	-0.00274 mg/L	0.000019	-0.00274 mg/L	0.000019 0.69%
QC value within limits for Sr	407.771	Recovery = Not calculated			
Li 670.784†	2.2	-0.00296 mg/L	0.000158	-0.00296 mg/L	0.000158 5.34%
QC value within limits for Li	670.784	Recovery = Not calculated			

All analyte(s) passed QC.
User canceled analysis.

Approved: November 20, 2012

Ken H. Rhodes

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Analysis Begun

Start Time: 11/19/2012 10:01:58 AM
 Logged In Analyst: peicp2
 Spectrometer Model: Optima 4300 DV, S/N 077N401140

Plasma On Time: 11/19/2012 5:57:57 AM
 Technique: ICP Continuous
 Autosampler Model: Cetac

Sample Information File: C:\pe\peicp2\Sample Information\MONDAY1.sif

Batch ID:

Results Data Set: 111912HR

Results Library: C:\pe\peicp2\Results\Results.mdb

Sequence No.: 1

Sample ID: L1211043901 WG414452-01

Analyst: KHR

Initial Sample Wt:

Dilution:

Autosampler Location: 26

Date Collected: 11/19/2012 10:01:59 AM

Sample Type: Original

Initial Sample Vol:

Sample Prep Vol:

Nebulizer Parameters: L1211043901 WG414452-01

Analyte	Back Pressure	Flow
All	175.0 kPa	0.50 L/min

Mean Data: L1211043901 WG414452-01

Analyte	Mean Corrected Intensity	Calib. Conc. Units	Std.Dev.	Sample Conc. Units	Std.Dev.	RSD
Y 371.029	2783069.7				9977.09	0.36%
Y RADIAL	353978.2				3715.74	1.05%
Ga 417.206	1160417.4				14061.95	1.21%
Ga RADIAL	75037.1				1203.92	1.60%
Ag 328.068†	-651.7	0.00465 mg/L	0.001017	0.00465 mg/L	0.001017	21.88%
Al 396.153†	366617.9	55.4 mg/L	0.86	55.4 mg/L	0.86	1.55%
As 188.979†	21.3	0.00901 mg/L	0.000981	0.00901 mg/L	0.000981	10.88%
Ba 233.527†	14192.4	0.0934 mg/L	0.00046	0.0934 mg/L	0.00046	0.49%
Be 234.861†	22357.2	0.0168 mg/L	0.00039	0.0168 mg/L	0.00039	2.34%
B 249.677†	10418.8	0.102 mg/L	0.0017	0.102 mg/L	0.0017	1.67%
Ca 227.546†	219493.2	576 mg/L	11.9	576 mg/L	11.9	2.06%
Cd 228.802†	268.9	0.00682 mg/L	0.000287	0.00682 mg/L	0.000287	4.21%
Co 228.616†	8741.6	0.238 mg/L	0.0008	0.238 mg/L	0.0008	0.34%
Cr 267.716†	486.1	0.00289 mg/L	0.000277	0.00289 mg/L	0.000277	9.57%
Cu 327.393†	20080.0	0.0760 mg/L	0.00100	0.0760 mg/L	0.00100	1.31%
Fe 239.562†	204947.7	21.5 mg/L	0.26	21.5 mg/L	0.26	1.23%
Mg 279.077†	125263.7	45.1 mg/L	0.35	45.1 mg/L	0.35	0.77%
Mn 257.610†	13014793.0	15.6 mg/L	0.21	15.6 mg/L	0.21	1.37%
Mo 202.031†	38.9	0.00481 mg/L	0.000184	0.00481 mg/L	0.000184	3.82%
Ni 231.604†	8454.8	0.141 mg/L	0.0006	0.141 mg/L	0.0006	0.44%
Pb 220.353†	-28.7	-0.00466 mg/L	0.002204	-0.00466 mg/L	0.002204	47.30%
Sb 206.836†	-19.8	-0.00477 mg/L	0.002941	-0.00477 mg/L	0.002941	61.63%
Se 196.026†	0.1	0.00232 mg/L	0.003072	0.00232 mg/L	0.003072	132.35%
Si 251.611†	821522.6	17.4 mg/L	0.13	17.4 mg/L	0.13	0.75%
Sn 189.927†	-406.5	-0.0435 mg/L	0.00201	-0.0435 mg/L	0.00201	4.63%
Ti 334.940†	-59757.2	0.0323 mg/L	0.00445	0.0323 mg/L	0.00445	13.76%
Tl 190.801†	-46.3	-0.0323 mg/L	0.00241	-0.0323 mg/L	0.00241	7.46%
V 290.880†	-148.3	-0.00504 mg/L	0.001734	-0.00504 mg/L	0.001734	34.43%
Zn 206.200†	30541.2	0.683 mg/L	0.0050	0.683 mg/L	0.0050	0.73%
K 766.490†	26557.9	8.40 mg/L	0.132	8.40 mg/L	0.132	1.57%
Na 589.592†	7208747.9	452 mg/L	5.8	452 mg/L	5.8	1.29%
Sr 407.771†	4414741.1	1.84 mg/L	0.026	1.84 mg/L	0.026	1.42%
Li 670.784†	10085.8	0.0728 mg/L	0.00099	0.0728 mg/L	0.00099	1.36%

Sequence No.: 2

Sample ID: L1211043903S WG414452-06

Analyst: KHR

Initial Sample Wt:

Dilution:

Autosampler Location: 27

Date Collected: 11/19/2012 10:08:09 AM

Sample Type: Original

Initial Sample Vol:

Sample Prep Vol:

Nebulizer Parameters: L1211043903S WG414452-06

Approved: November 20, 2012

Ken H. Rhodes

Analyte Back Pressure Flow
All 177.0 kPa 0.50 L/min

Mean Data: L1211043903S WG414452-06

Analyte	Mean Corrected Intensity	Conc. Units	Std.Dev.	Sample Conc. Units	Std.Dev.	RSD
Y 371.029	2764716.0				30973.90	1.12%
YRADIAL	348362.4				850.05	0.24%
Ga 417.206	1167329.3				21044.74	1.80%
GaRADIAL	75233.4				344.72	0.46%
Ag 328.068†	61450.6	0.197 mg/L	0.0051	0.197 mg/L	0.0051	2.59%
Al 396.153†	402683.4	60.9 mg/L	0.27	60.9 mg/L	0.27	0.44%
As 188.979†	547.4	0.198 mg/L	0.0066	0.198 mg/L	0.0066	3.31%
Ba 233.527†	66781.8	0.451 mg/L	0.0041	0.451 mg/L	0.0041	0.91%
Be 234.861†	47856.3	0.0394 mg/L	0.00100	0.0394 mg/L	0.00100	2.54%
B 249.677†	98434.5	1.04 mg/L	0.029	1.04 mg/L	0.029	2.83%
Ca 227.546†	218301.4	574 mg/L	16.9	574 mg/L	16.9	2.94%
Cd 228.802†	1266.9	0.0283 mg/L	0.00113	0.0283 mg/L	0.00113	3.99%
Co 228.616†	11274.2	0.306 mg/L	0.0044	0.306 mg/L	0.0044	1.44%
Cr 267.716†	25109.9	0.193 mg/L	0.0007	0.193 mg/L	0.0007	0.37%
Cu 327.393†	83066.8	0.311 mg/L	0.0077	0.311 mg/L	0.0077	2.49%
Fe 239.562†	225209.9	23.7 mg/L	0.14	23.7 mg/L	0.14	0.61%
Mg 279.077†	135805.2	48.9 mg/L	0.38	48.9 mg/L	0.38	0.77%
Mn 257.610†	12929136.6	15.5 mg/L	0.10	15.5 mg/L	0.10	0.65%
Mo 202.031†	11145.6	0.381 mg/L	0.0030	0.381 mg/L	0.0030	0.78%
Ni 231.604†	19167.6	0.321 mg/L	0.0035	0.321 mg/L	0.0035	1.10%
Pb 220.353†	1802.2	0.171 mg/L	0.0019	0.171 mg/L	0.0019	1.12%
Sb 206.836†	2030.2	0.568 mg/L	0.0169	0.568 mg/L	0.0169	2.97%
Se 196.026†	315.6	0.197 mg/L	0.0035	0.197 mg/L	0.0035	1.78%
Si 251.611†	925749.0	19.6 mg/L	0.29	19.6 mg/L	0.29	1.50%
Sn 189.927†	3199.0	0.335 mg/L	0.0049	0.335 mg/L	0.0049	1.46%
Ti 334.940†	362798.7	0.410 mg/L	0.0049	0.410 mg/L	0.0049	1.19%
Tl 190.801†	463.8	0.147 mg/L	0.0044	0.147 mg/L	0.0044	3.01%
V 290.880†	86071.4	0.372 mg/L	0.0015	0.372 mg/L	0.0015	0.41%
Zn 206.200†	45039.8	1.01 mg/L	0.003	1.01 mg/L	0.003	0.28%
K 766.490†	99149.6	32.7 mg/L	0.07	32.7 mg/L	0.07	0.22%
Na 589.592†	7621560.8	488 mg/L	5.1	488 mg/L	5.1	1.04%
Sr 407.771†	5392496.6	2.25 mg/L	0.019	2.25 mg/L	0.019	0.84%
Li 670.784†	75852.5	0.567 mg/L	0.0026	0.567 mg/L	0.0026	0.45%

Sequence No.: 3

Sample ID: L1211043905SD WG414452-07

Analyst: KHR

Initial Sample Wt:

Dilution:

autosampler Location: 28

Date Collected: 11/19/2012 10:14:16 AM

Data Type: Original

Initial Sample Vol:

Sample Prep Vol:

Nebulizer Parameters: L1211043905SD WG414452-07

Analyte Back Pressure Flow
All 176.0 kPa 0.50 L/min

Mean Data: L1211043905SD WG414452-07

Analyte	Mean Corrected Intensity	Conc. Units	Std.Dev.	Sample Conc. Units	Std.Dev.	RSD
Y 371.029	2793006.1				16849.57	0.60%
YRADIAL	347523.8				4119.40	1.19%
Ga 417.206	1163235.8				32373.32	2.78%
GaRADIAL	74867.9				500.92	0.67%
Ag 328.068†	62531.4	0.201 mg/L	0.0074	0.201 mg/L	0.0074	3.66%
Al 396.153†	421443.7	63.7 mg/L	0.31	63.7 mg/L	0.31	0.48%
As 188.979†	567.4	0.205 mg/L	0.0062	0.205 mg/L	0.0062	3.01%
Ba 233.527†	68152.2	0.460 mg/L	0.0017	0.460 mg/L	0.0017	0.37%
Be 234.861†	50078.2	0.0411 mg/L	0.00127	0.0411 mg/L	0.00127	3.08%
B 249.677†	100904.3	1.06 mg/L	0.038	1.06 mg/L	0.038	3.53%
Ca 227.546†	225302.4	592 mg/L	19.1	592 mg/L	19.1	3.22%
Cd 228.802†	1302.1	0.0291 mg/L	0.00116	0.0291 mg/L	0.00116	4.00%
Co 228.616†	11441.9	0.311 mg/L	0.0039	0.311 mg/L	0.0039	1.26%
Cr 267.716†	25278.7	0.194 mg/L	0.0007	0.194 mg/L	0.0007	0.38%
Cu 327.393†	84572.7	0.316 mg/L	0.0102	0.316 mg/L	0.0102	3.21%

Approved: November 20, 2012

Ken H. Rhodes

Fe 239.562†	239518.6	25.2 mg/L	0.18	25.2 mg/L	0.18	0.73%
Mg 279.077†	138784.0	50.0 mg/L	0.43	50.0 mg/L	0.43	0.85%
Mn 257.610†	13328828.4	16.0 mg/L	0.18	16.0 mg/L	0.18	1.15%
Mo 202.031†	11198.7	0.383 mg/L	0.0022	0.383 mg/L	0.0022	0.57%
Ni 231.604†	19358.3	0.324 mg/L	0.0032	0.324 mg/L	0.0032	0.98%
Pb 220.353†	1816.9	0.173 mg/L	0.0033	0.173 mg/L	0.0033	1.89%
Sb 206.836†	2060.9	0.577 mg/L	0.0212	0.577 mg/L	0.0212	3.68%
Se 196.026†	317.3	0.198 mg/L	0.0028	0.198 mg/L	0.0028	1.39%
Si 251.611†	966393.6	20.5 mg/L	0.41	20.5 mg/L	0.41	2.00%
Sn 189.927†	3266.3	0.342 mg/L	0.0046	0.342 mg/L	0.0046	1.33%
Ti 334.940†	368094.3	0.418 mg/L	0.0054	0.418 mg/L	0.0054	1.28%
Tl 190.801†	468.4	0.148 mg/L	0.0043	0.148 mg/L	0.0043	2.92%
V 290.880†	86556.1	0.374 mg/L	0.0009	0.374 mg/L	0.0009	0.25%
Zn 206.200†	46264.5	1.04 mg/L	0.011	1.04 mg/L	0.011	1.03%
K 766.490†	101175.0	33.3 mg/L	0.39	33.3 mg/L	0.39	1.16%
Na 589.592†	7811745.2	506 mg/L	2.6	506 mg/L	2.6	0.52%
Sr 407.771†	5507290.4	2.30 mg/L	0.048	2.30 mg/L	0.048	2.09%
Li 670.784†	77705.7	0.581 mg/L	0.0024	0.581 mg/L	0.0024	0.41%

Sequence No.: 4

Sample ID: L1211043801

Analyst: KHR

Initial Sample Wt:

Dilution:

Utosampler Location: 29

Date Collected: 11/19/2012 10:20:27 AM

Data Type: Original

Initial Sample Vol:

Sample Prep Vol:

Nebulizer Parameters: L1211043801

Analyte	Back Pressure	Flow
All	177.0 kPa	0.50 L/min

Mean Data: L1211043801

Analyte	Mean Corrected Intensity	Conc. Units	Calib. Units	Std.Dev.	Conc. Units	Sample Std.Dev.	RSD
Y 371.029	2161017.3					12500.21	0.58%
YRADIAL	276457.1					2025.11	0.73%
Ga 417.206	1225062.0					13875.57	1.13%
GaRADIAL	77080.7					1662.75	2.16%
Ag 328.068†	1048.3	0.00198 mg/L	0.000188	0.00198 mg/L	0.000188	9.48%	
Al 396.153†	-29.7	-0.0205 mg/L	0.00611	-0.0205 mg/L	0.00611	29.75%	
As 188.979†	-5.0	-0.00196 mg/L	0.000732	-0.00196 mg/L	0.000732	37.27%	
Ba 233.527†	1680.0	0.00947 mg/L	0.000223	0.00947 mg/L	0.000223	2.35%	
Be 234.861†	207.3	0.00017 mg/L	0.000021	0.00017 mg/L	0.000021	12.46%	
B 249.677†	43528.0	0.466 mg/L	0.0083	0.466 mg/L	0.0083	1.78%	
Ca 227.546†	78176.3	205 mg/L	3.5	205 mg/L	3.5	1.70%	
Cd 228.802†	4.1	0.00011 mg/L	0.000226	0.00011 mg/L	0.000226	207.85%	
Co 228.616†	14.3	-0.00005 mg/L	0.000079	-0.00005 mg/L	0.000079	163.22%	
Cr 267.716†	409.2	0.00248 mg/L	0.000101	0.00248 mg/L	0.000101	4.05%	
Cu 327.393†	21.6	-0.00073 mg/L	0.000284	-0.00073 mg/L	0.000284	38.88%	
Fe 239.562†	22.1	-0.00706 mg/L	0.001241	-0.00706 mg/L	0.001241	17.56%	
Mg 279.077†	403362.3	145 mg/L	1.1	145 mg/L	1.1	0.73%	
Mn 257.610†	20603.0	0.0226 mg/L	0.00090	0.0226 mg/L	0.00090	3.99%	
Mo 202.031†	145.5	0.00411 mg/L	0.000562	0.00411 mg/L	0.000562	13.66%	
Ni 231.604†	173.8	0.00126 mg/L	0.000273	0.00126 mg/L	0.000273	21.76%	
Pb 220.353†	19.4	0.00101 mg/L	0.001414	0.00101 mg/L	0.001414	140.63%	
Sb 206.836†	-6.1	-0.00166 mg/L	0.000653	-0.00166 mg/L	0.000653	39.26%	
Se 196.026†	4.6	0.00372 mg/L	0.002740	0.00372 mg/L	0.002740	73.64%	
Si 251.611†	246887.0	5.22 mg/L	0.084	5.22 mg/L	0.084	1.60%	
Sn 189.927†	-382.1	-0.0409 mg/L	0.00036	-0.0409 mg/L	0.00036	0.87%	
Ti 334.940†	-37962.4	-0.00374 mg/L	0.001273	-0.00374 mg/L	0.001273	34.02%	
Tl 190.801†	-44.6	-0.0171 mg/L	0.00188	-0.0171 mg/L	0.00188	10.98%	
V 290.880†	1719.3	0.00185 mg/L	0.001722	0.00185 mg/L	0.001722	93.09%	
Zn 206.200†	77.3	0.00001 mg/L	0.000289	0.00001 mg/L	0.000289	>999.9%	
K 766.490†	8089.5	2.70 mg/L	0.088	2.70 mg/L	0.088	3.27%	
Na 589.592†	Saturated2						
Sr 407.771†	5583542.5	2.34 mg/L	0.044	2.34 mg/L	0.044	1.87%	
Li 670.784†	14550.5	0.106 mg/L	0.0027	0.106 mg/L	0.0027	2.51%	

Sequence No.: 5

Sample ID: L1211043801 0.01

Utosampler Location: 30

Date Collected: 11/19/2012 10:27:55 AM

Approved: November 20, 2012

Ken H. Rhodes

Analyst: KHR
Initial Sample Wt:
Dilution:

data Type: Original
Initial Sample Vol:
Sample Prep Vol:

Nebulizer Parameters: L1211043801 0.01

Analyte Back Pressure Flow
All 174.0 kPa 0.50 L/min

Mean Data: L1211043801 0.01

Analyte	Mean Corrected Intensity	Calib. Conc. Units	Std.Dev.	Sample Conc. Units	Std.Dev.	RSD
Y 371.029	2446548.0				12771.67	0.52%
YRADIAL	287130.9				4985.60	1.74%
Ga 417.206	1232192.3				8535.69	0.69%
GA RADIAL	77023.8				1646.86	2.14%
Ag 328.068†	41.3	-0.00066 mg/L	0.000090	-0.00066 mg/L	0.000090	13.67%
Al 396.153†	25.6	-0.0119 mg/L	0.00111	-0.0119 mg/L	0.00111	9.38%
As 188.979†	0.5	0.00006 mg/L	0.001932	0.00006 mg/L	0.001932	>999.9%
Ba 233.527†	25.3	-0.00179 mg/L	0.000115	-0.00179 mg/L	0.000115	6.41%
Be 234.861†	96.0	0.00007 mg/L	0.000038	0.00007 mg/L	0.000038	57.87%
B 249.677†	1325.9	0.0157 mg/L	0.00128	0.0157 mg/L	0.00128	8.14%
Ca 227.546†	815.0	2.14 mg/L	0.014	2.14 mg/L	0.014	0.65%
Cd 228.802†	-0.7	-0.00001 mg/L	0.000120	-0.00001 mg/L	0.000120	>999.9%
Co 228.616†	-1.8	-0.00057 mg/L	0.000204	-0.00057 mg/L	0.000204	35.86%
Cr 267.716†	10.5	-0.00060 mg/L	0.000118	-0.00060 mg/L	0.000118	19.71%
Cu 327.393†	264.2	0.00022 mg/L	0.000502	0.00022 mg/L	0.000502	229.46%
Fe 239.562†	12.2	-0.00524 mg/L	0.000305	-0.00524 mg/L	0.000305	5.82%
Mg 279.077†	4229.2	1.51 mg/L	0.020	1.51 mg/L	0.020	1.31%
Mn 257.610†	2610.4	0.00098 mg/L	0.000034	0.00098 mg/L	0.000034	3.45%
Mo 202.031†	5.2	-0.00065 mg/L	0.000234	-0.00065 mg/L	0.000234	36.31%
Ni 231.604†	6.4	-0.00157 mg/L	0.000149	-0.00157 mg/L	0.000149	9.49%
Pb 220.353†	-0.3	-0.00086 mg/L	0.000854	-0.00086 mg/L	0.000854	99.21%
Sb 206.836†	0.5	0.00019 mg/L	0.001634	0.00019 mg/L	0.001634	838.34%
Se 196.026†	4.2	0.00349 mg/L	0.001056	0.00349 mg/L	0.001056	30.27%
Si 251.611†	2842.1	0.0499 mg/L	0.00022	0.0499 mg/L	0.00022	0.45%
Sn 189.927†	-43.9	-0.00544 mg/L	0.000105	-0.00544 mg/L	0.000105	1.93%
Ti 334.940†	-377.4	-0.00052 mg/L	0.000020	-0.00052 mg/L	0.000020	3.88%
Tl 190.801†	-2.2	-0.00229 mg/L	0.002454	-0.00229 mg/L	0.002454	107.21%
V 290.880†	253.9	-0.00082 mg/L	0.000590	-0.00082 mg/L	0.000590	71.69%
Zn 206.200†	103.7	0.00058 mg/L	0.000028	0.00058 mg/L	0.000028	4.82%
K 766.490†	122.8	0.0514 mg/L	0.00613	0.0514 mg/L	0.00613	11.92%
Na 589.592†	122904.3	6.11 mg/L	0.137	6.11 mg/L	0.137	2.25%
Sr 407.771†	59203.7	0.0219 mg/L	0.00068	0.0219 mg/L	0.00068	3.08%
Li 670.784†	171.4	-0.00169 mg/L	0.000297	-0.00169 mg/L	0.000297	17.55%

Sequence No.: 6

Sample ID: L1211030901 0.01

Analyst: KHR

Initial Sample Wt:

Dilution:

autosampler Location: 31

Date Collected: 11/19/2012 10:34:50 AM

data Type: Original

Initial Sample Vol:

Sample Prep Vol:

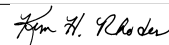
Nebulizer Parameters: L1211030901 0.01

Analyte Back Pressure Flow
All 175.0 kPa 0.50 L/min

Mean Data: L1211030901 0.01

Analyte	Mean Corrected Intensity	Calib. Conc. Units	Std.Dev.	Sample Conc. Units	Std.Dev.	RSD
Y 371.029	2427635.7				20710.41	0.85%
YRADIAL	284619.9				7000.94	2.46%
Ga 417.206	1231322.1				17713.48	1.44%
GA RADIAL	76707.0				1350.92	1.76%
Ag 328.068†	149.4	-0.00033 mg/L	0.000212	-0.00033 mg/L	0.000212	64.04%
Al 396.153†	18.5	-0.0129 mg/L	0.00209	-0.0129 mg/L	0.00209	16.15%
As 188.979†	1.7	0.00050 mg/L	0.002814	0.00050 mg/L	0.002814	561.66%
Ba 233.527†	158.4	-0.00088 mg/L	0.000112	-0.00088 mg/L	0.000112	12.67%
Be 234.861†	118.8	0.00009 mg/L	0.000009	0.00009 mg/L	0.000009	11.06%

Approved: November 20, 2012



B 249.677†	2337.2	0.0265 mg/L	0.00195	0.0265 mg/L	0.00195	7.37%
Ca 227.546†	163.3	0.430 mg/L	0.0133	0.430 mg/L	0.0133	3.10%
Cd 228.802†	-3.0	-0.00006 mg/L	0.000122	-0.00006 mg/L	0.000122	193.75%
Co 228.616†	-3.0	-0.00060 mg/L	0.000349	-0.00060 mg/L	0.000349	58.19%
Cr 267.716†	4.6	-0.00064 mg/L	0.000124	-0.00064 mg/L	0.000124	19.21%
Cu 327.393†	117.3	-0.00033 mg/L	0.000361	-0.00033 mg/L	0.000361	110.66%
Fe 239.562†	14.2	-0.00499 mg/L	0.000187	-0.00499 mg/L	0.000187	3.75%
Mg 279.077†	602.3	0.207 mg/L	0.0072	0.207 mg/L	0.0072	3.49%
Mn 257.610†	1584.0	-0.00025 mg/L	0.000095	-0.00025 mg/L	0.000095	37.62%
Mo 202.031†	7.8	-0.00055 mg/L	0.000221	-0.00055 mg/L	0.000221	39.83%
Ni 231.604†	12.3	-0.00147 mg/L	0.000121	-0.00147 mg/L	0.000121	8.25%
Pb 220.353†	-4.9	-0.00130 mg/L	0.000580	-0.00130 mg/L	0.000580	44.45%
Sb 206.836†	-2.0	-0.00049 mg/L	0.001067	-0.00049 mg/L	0.001067	219.08%
Se 196.026†	7.0	0.00519 mg/L	0.000435	0.00519 mg/L	0.000435	8.37%
Si 251.611†	1701.9	0.0258 mg/L	0.00095	0.0258 mg/L	0.00095	3.69%
Sn 189.927†	-36.6	-0.00469 mg/L	0.000512	-0.00469 mg/L	0.000512	10.92%
Ti 334.940†	-74.6	-0.00050 mg/L	0.000148	-0.00050 mg/L	0.000148	29.41%
Tl 190.801†	-6.6	-0.00380 mg/L	0.002686	-0.00380 mg/L	0.002686	70.78%
V 290.880†	441.7	0.00003 mg/L	0.001131	0.00003 mg/L	0.001131	>999.9%
Zn 206.200†	123.3	0.00102 mg/L	0.000078	0.00102 mg/L	0.000078	7.66%
K 766.490†	198.8	0.0491 mg/L	0.01231	0.0491 mg/L	0.01231	25.10%
Na 589.592†	668738.6	33.7 mg/L	0.52	33.7 mg/L	0.52	1.54%
Sr 407.771†	117595.6	0.0465 mg/L	0.00189	0.0465 mg/L	0.00189	4.07%
Li 670.784†	284.3	-0.00085 mg/L	0.000451	-0.00085 mg/L	0.000451	53.34%

Sequence No.: 7

Sample ID: L1211039301 0.02

Analyst: KHR

Initial Sample Wt:

Dilution:

Autosampler Location: 46

Date Collected: 11/19/2012 10:41:49 AM

Data Type: Original

Initial Sample Vol:

Sample Prep Vol:

Nebulizer Parameters: L1211039301 0.02

Analyte

Back Pressure

Flow

All

174.0 kPa

0.50 L/min

Mean Data: L1211039301 0.02

Analyte	Mean Corrected Intensity	Conc.	Calib. Units	Std.Dev.	Conc.	Sample Units	Std.Dev.	RSD
Y 371.029	2379611.3						15494.54	0.65%
YRADIAL	282686.5						4920.84	1.74%
Ga 417.206	1235926.9						21167.52	1.71%
GaRADIAL	77638.2						1018.53	1.31%
Ag 328.068†	101.1	-0.00049 mg/L	0.000097	-0.00049 mg/L	0.000097	19.61%		
Al 396.153†	9.6	-0.0143 mg/L	0.00160	-0.0143 mg/L	0.00160	11.18%		
As 188.979†	4.6	0.00154 mg/L	0.001195	0.00154 mg/L	0.001195	77.52%		
Ba 233.527†	2694.6	0.0164 mg/L	0.00049	0.0164 mg/L	0.00049	2.96%		
Be 234.861†	193.6	0.00015 mg/L	0.000024	0.00015 mg/L	0.000024	15.68%		
B 249.677†	1594.5	0.0185 mg/L	0.00078	0.0185 mg/L	0.00078	4.19%		
Ca 227.546†	2147.0	5.64 mg/L	0.250	5.64 mg/L	0.250	4.43%		
Cd 228.802†	0.1	0.00000 mg/L	0.000195	0.00000 mg/L	0.000195	>999.9%		
Co 228.616†	8.0	-0.00031 mg/L	0.000252	-0.00031 mg/L	0.000252	82.49%		
Cr 267.716†	422.4	0.00258 mg/L	0.000187	0.00258 mg/L	0.000187	7.24%		
Cu 327.393†	76.9	-0.00048 mg/L	0.000156	-0.00048 mg/L	0.000156	32.70%		
Fe 239.562†	25.5	-0.00386 mg/L	0.000477	-0.00386 mg/L	0.000477	12.37%		
Mg 279.077†	8458.1	3.04 mg/L	0.130	3.04 mg/L	0.130	4.29%		
Mn 257.610†	2395.1	0.00072 mg/L	0.000040	0.00072 mg/L	0.000040	5.55%		
Mo 202.031†	10.0	-0.00048 mg/L	0.000093	-0.00048 mg/L	0.000093	19.39%		
Ni 231.604†	137.4	0.00064 mg/L	0.000043	0.00064 mg/L	0.000043	6.78%		
Pb 220.353†	-3.0	-0.00112 mg/L	0.000337	-0.00112 mg/L	0.000337	30.18%		
Sb 206.836†	-1.0	-0.00024 mg/L	0.000484	-0.00024 mg/L	0.000484	203.39%		
Se 196.026†	4.8	0.00385 mg/L	0.000922	0.00385 mg/L	0.000922	23.97%		
Si 251.611†	14732.1	0.302 mg/L	0.0136	0.302 mg/L	0.0136	4.51%		
Sn 189.927†	-87.7	-0.0100 mg/L	0.00034	-0.0100 mg/L	0.00034	3.40%		
Ti 334.940†	-1087.1	-0.00063 mg/L	0.000095	-0.00063 mg/L	0.000095	15.16%		
Tl 190.801†	-7.1	-0.00395 mg/L	0.000556	-0.00395 mg/L	0.000556	14.07%		
V 290.880†	715.8	0.00116 mg/L	0.000629	0.00116 mg/L	0.000629	54.40%		
Zn 206.200†	49.3	-0.00062 mg/L	0.000015	-0.00062 mg/L	0.000015	2.41%		
K 766.490†	6861.7	2.29 mg/L	0.110	2.29 mg/L	0.110	4.80%		
Na 589.592†	220304.8	11.0 mg/L	0.82	11.0 mg/L	0.82	7.48%		

Approved: November 20, 2012

Ken H. Rhodes

Sr 407.771†	298992.8	0.123 mg/L	0.0047	0.123 mg/L	0.0047	3.80%
Li 670.784†	505.9	0.00082 mg/L	0.000625	0.00082 mg/L	0.000625	76.28%

Sequence No.: 8

Sample ID: L1211039302 0.02

Analyst: KHR

Initial Sample Wt:

Dilution:

Sampler Location: 47

Date Collected: 11/19/2012 10:48:46 AM

Data Type: Original

Initial Sample Vol:

Sample Prep Vol:

Nebulizer Parameters: L1211039302 0.02

Analyte

Back Pressure

Flow

All

175.0 kPa

0.50 L/min

Mean Data: L1211039302 0.02

Analyte	Mean Corrected Intensity	Conc. Units	Calib. Units	Std.Dev.	Conc. Units	Sample Std.Dev.	RSD
Y 371.029	2439289.6					3151.28	0.13%
YRADIAL	273630.5					15652.20	5.72%
Ga 417.206	1261215.9					9198.04	0.73%
GaRADIAL	75572.6					6199.15	8.20%
Ag 328.068†	20.1	-0.00075 mg/L	0.000100	-0.00075 mg/L	0.000100	13.32%	
Al 396.153†	18.3	-0.0130 mg/L	0.00111	-0.0130 mg/L	0.00111	8.60%	
As 188.979†	5.1	0.00173 mg/L	0.001396	0.00173 mg/L	0.001396	80.48%	
Ba 233.527†	2643.1	0.0160 mg/L	0.00078	0.0160 mg/L	0.00078	4.84%	
Be 234.861†	239.6	0.00019 mg/L	0.000024	0.00019 mg/L	0.000024	12.13%	
B 249.677†	1510.6	0.0176 mg/L	0.00106	0.0176 mg/L	0.00106	6.02%	
Ca 227.546†	2127.6	5.58 mg/L	0.268	5.58 mg/L	0.268	4.81%	
Cd 228.802†	-4.2	-0.00010 mg/L	0.000116	-0.00010 mg/L	0.000116	120.70%	
Co 228.616†	2.4	-0.00046 mg/L	0.000126	-0.00046 mg/L	0.000126	27.56%	
Cr 267.716†	417.9	0.00255 mg/L	0.000097	0.00255 mg/L	0.000097	3.83%	
Cu 327.393†	166.5	-0.00015 mg/L	0.000153	-0.00015 mg/L	0.000153	105.47%	
Fe 239.562†	8.5	-0.00566 mg/L	0.000288	-0.00566 mg/L	0.000288	5.08%	
Mg 279.077†	9070.4	3.26 mg/L	0.455	3.26 mg/L	0.455	13.98%	
Mn 257.610†	1953.1	0.00019 mg/L	0.000137	0.00019 mg/L	0.000137	71.51%	
Mo 202.031†	3.2	-0.00071 mg/L	0.000149	-0.00071 mg/L	0.000149	20.95%	
Ni 231.604†	128.8	0.00049 mg/L	0.000292	0.00049 mg/L	0.000292	59.26%	
Pb 220.353†	-2.6	-0.00109 mg/L	0.001616	-0.00109 mg/L	0.001616	148.94%	
Sb 206.836†	-0.9	-0.00023 mg/L	0.000349	-0.00023 mg/L	0.000349	152.46%	
Se 196.026†	3.3	0.00291 mg/L	0.001620	0.00291 mg/L	0.001620	55.71%	
Si 251.611†	14583.6	0.299 mg/L	0.0194	0.299 mg/L	0.0194	6.50%	
Sn 189.927†	-93.4	-0.0106 mg/L	0.00068	-0.0106 mg/L	0.00068	6.35%	
Ti 334.940†	-1175.8	-0.00072 mg/L	0.000054	-0.00072 mg/L	0.000054	7.56%	
Tl 190.801†	-5.2	-0.00330 mg/L	0.003803	-0.00330 mg/L	0.003803	115.15%	
V 290.880†	390.9	-0.00027 mg/L	0.001915	-0.00027 mg/L	0.001915	709.29%	
Zn 206.200†	52.6	-0.00054 mg/L	0.000027	-0.00054 mg/L	0.000027	5.03%	
K 766.490†	7122.1	2.37 mg/L	0.296	2.37 mg/L	0.296	12.49%	
Na 589.592†	233279.1	11.6 mg/L	1.71	11.6 mg/L	1.71	14.67%	
Sr 407.771†	320743.9	0.132 mg/L	0.0144	0.132 mg/L	0.0144	10.97%	
Li 670.784†	532.7	0.00102 mg/L	0.000704	0.00102 mg/L	0.000704	68.95%	

Sequence No.: 9

Sample ID: L1211039303 0.02

Analyst: KHR

Initial Sample Wt:

Dilution:

Sampler Location: 48

Date Collected: 11/19/2012 10:55:39 AM

Data Type: Original

Initial Sample Vol:

Sample Prep Vol:

Nebulizer Parameters: L1211039303 0.02

Analyte

Back Pressure

Flow

All

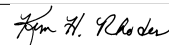
174.0 kPa

0.50 L/min

Mean Data: L1211039303 0.02

Analyte	Mean Corrected Intensity	Conc. Units	Calib. Units	Std.Dev.	Conc. Units	Sample Std.Dev.	RSD
Y 371.029	2402715.9					13469.01	0.56%
YRADIAL	282780.7					5722.58	2.02%
Ga 417.206	1238168.9					10673.37	0.86%

Approved: November 20, 2012



GA RADIAL	77461.3				1852.81	2.39%
Ag 328.068†	70.9	-0.00059 mg/L	0.000567	-0.00059 mg/L	0.000567	96.79%
Al 396.153†	8.5	-0.0144 mg/L	0.00070	-0.0144 mg/L	0.00070	4.84%
As 188.979†	3.5	0.00114 mg/L	0.000494	0.00114 mg/L	0.000494	43.33%
Ba 233.527†	2683.8	0.0163 mg/L	0.00080	0.0163 mg/L	0.00080	4.90%
Be 234.861†	200.5	0.00016 mg/L	0.000021	0.00016 mg/L	0.000021	13.26%
B 249.677†	1527.2	0.0178 mg/L	0.00042	0.0178 mg/L	0.00042	2.35%
Ca 227.546†	2152.9	5.65 mg/L	0.265	5.65 mg/L	0.265	4.69%
Cd 228.802†	-3.6	-0.00008 mg/L	0.000204	-0.00008 mg/L	0.000204	260.65%
Co 228.616†	5.5	-0.00037 mg/L	0.000254	-0.00037 mg/L	0.000254	68.22%
Cr 267.716†	412.2	0.00250 mg/L	0.000151	0.00250 mg/L	0.000151	6.04%
Cu 327.393†	73.1	-0.00049 mg/L	0.000291	-0.00049 mg/L	0.000291	59.23%
Fe 239.562†	15.8	-0.00488 mg/L	0.000513	-0.00488 mg/L	0.000513	10.50%
Mg 279.077†	8395.2	3.01 mg/L	0.083	3.01 mg/L	0.083	2.76%
Mn 257.610†	1672.6	-0.00015 mg/L	0.000084	-0.00015 mg/L	0.000084	58.14%
Mo 202.031†	0.0	-0.00082 mg/L	0.000205	-0.00082 mg/L	0.000205	25.01%
Ni 231.604†	135.7	0.00061 mg/L	0.000317	0.00061 mg/L	0.000317	52.08%
Pb 220.353†	13.2	0.00043 mg/L	0.000870	0.00043 mg/L	0.000870	201.45%
Sb 206.836†	-1.3	-0.00033 mg/L	0.001336	-0.00033 mg/L	0.001336	406.32%
Se 196.026†	3.6	0.00307 mg/L	0.000658	0.00307 mg/L	0.000658	21.44%
Si 251.611†	14953.3	0.306 mg/L	0.0220	0.306 mg/L	0.0220	7.17%
Sn 189.927†	-101.5	-0.0115 mg/L	0.00092	-0.0115 mg/L	0.00092	8.03%
Ti 334.940†	-1019.9	-0.00057 mg/L	0.000068	-0.00057 mg/L	0.000068	12.03%
Tl 190.801†	-2.0	-0.00220 mg/L	0.001154	-0.00220 mg/L	0.001154	52.36%
V 290.880†	685.2	0.00102 mg/L	0.001672	0.00102 mg/L	0.001672	163.25%
Zn 206.200†	84.9	0.00018 mg/L	0.000602	0.00018 mg/L	0.000602	332.64%
K 766.490†	6784.9	2.26 mg/L	0.068	2.26 mg/L	0.068	3.02%
Na 589.592†	220497.3	11.0 mg/L	0.46	11.0 mg/L	0.46	4.17%
Sr 407.771†	300025.9	0.123 mg/L	0.0015	0.123 mg/L	0.0015	1.22%
Li 670.784†	576.9	0.00135 mg/L	0.000130	0.00135 mg/L	0.000130	9.61%

Sequence No.: 10

Sample ID: L1211039304 0.02

Analyst: KHR

Initial Sample Wt:

Dilution:

autosampler Location: 49

Date Collected: 11/19/2012 11:02:33 AM

Data Type: Original

Initial Sample Vol:

Sample Prep Vol:

Nebulizer Parameters: L1211039304 0.02

Analyte

Back Pressure

Flow

All

175.0 kPa

0.50 L/min

Mean Data: L1211039304 0.02

Analyte	Mean Corrected Intensity	Conc.	Calib. Units	Std.Dev.	Conc.	Sample Units	Std.Dev.	RSD
Y 371.029	2432253.8						8967.00	0.37%
YRADIAL	286308.1						5280.09	1.84%
Ga 417.206	1276138.2						17808.08	1.40%
GA RADIAL	78874.6						1560.71	1.98%
Ag 328.068†	187.7	-0.00023	mg/L	0.000061	-0.00023	mg/L	0.000061	26.43%
Al 396.153†	14.7	-0.0135	mg/L	0.00123	-0.0135	mg/L	0.00123	9.13%
As 188.979†	9.1	0.00317	mg/L	0.000588	0.00317	mg/L	0.000588	18.53%
Ba 233.527†	2567.5	0.0155	mg/L	0.00100	0.0155	mg/L	0.00100	6.46%
Be 234.861†	264.4	0.00022	mg/L	0.000020	0.00022	mg/L	0.000020	9.25%
B 249.677†	1408.2	0.0165	mg/L	0.00217	0.0165	mg/L	0.00217	13.09%
Ca 227.546†	2035.2	5.34	mg/L	0.312	5.34	mg/L	0.312	5.84%
Cd 228.802†	-7.9	-0.00019	mg/L	0.000212	-0.00019	mg/L	0.000212	114.18%
Co 228.616†	4.9	-0.00039	mg/L	0.000199	-0.00039	mg/L	0.000199	51.26%
Cr 267.716†	407.5	0.00247	mg/L	0.000102	0.00247	mg/L	0.000102	4.15%
Cu 327.393†	86.6	-0.00044	mg/L	0.000326	-0.00044	mg/L	0.000326	73.91%
Fe 239.562†	10.3	-0.00546	mg/L	0.000501	-0.00546	mg/L	0.000501	9.18%
Mg 279.077†	8759.0	3.15	mg/L	0.190	3.15	mg/L	0.190	6.05%
Mn 257.610†	1483.5	-0.00037	mg/L	0.000034	-0.00037	mg/L	0.000034	9.06%
Mo 202.031†	4.7	-0.00066	mg/L	0.000331	-0.00066	mg/L	0.000331	50.16%
Ni 231.604†	135.7	0.00061	mg/L	0.000441	0.00061	mg/L	0.000441	72.46%
Pb 220.353†	1.8	-0.00066	mg/L	0.000389	-0.00066	mg/L	0.000389	58.84%
Sb 206.836†	-8.9	-0.00244	mg/L	0.000926	-0.00244	mg/L	0.000926	37.93%
Se 196.026†	1.2	0.00159	mg/L	0.000265	0.00159	mg/L	0.000265	16.70%
Si 251.611†	14182.6	0.290	mg/L	0.0262	0.290	mg/L	0.0262	9.04%
Sn 189.927†	-95.4	-0.0109	mg/L	0.00044	-0.0109	mg/L	0.00044	4.01%

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Ti 334.940†	-1061.3	-0.00065 mg/L	0.000137	-0.00065 mg/L	0.000137	21.07%
Tl 190.801†	-1.3	-0.00197 mg/L	0.000294	-0.00197 mg/L	0.000294	14.93%
V 290.880†	534.0	0.00036 mg/L	0.001736	0.00036 mg/L	0.001736	483.80%
Zn 206.200†	53.3	-0.00053 mg/L	0.000037	-0.00053 mg/L	0.000037	6.95%
K 766.490†	7319.3	2.44 mg/L	0.132	2.44 mg/L	0.132	5.44%
Na 589.592†	234265.8	11.7 mg/L	1.01	11.7 mg/L	1.01	8.61%
Sr 407.771†	324681.7	0.133 mg/L	0.0055	0.133 mg/L	0.0055	4.12%
Li 670.784†	601.9	0.00154 mg/L	0.000844	0.00154 mg/L	0.000844	54.78%

Sequence No.: 11

Sample ID: CCV

Analyst:

Initial Sample Wt:

Dilution:

Autosampler Location: 6

Date Collected: 11/19/2012 11:09:28 AM

Data Type: Original

Initial Sample Vol:

Sample Prep Vol:

Nebulizer Parameters: CCV

Analyte

All

Back Pressure

174.0 kPa

Flow

0.50 L/min

Mean Data: CCV

Analyte	Mean Corrected Intensity	Calib. Conc. Units	Std.Dev.	Sample Conc. Units	Std.Dev.	RSD
Y 371.029	2422693.6				41066.27	1.70%
YRADIAL	285285.8				3232.49	1.13%
Ga 417.206	1186064.1				22775.23	1.92%
GaRADIAL	74790.4				1397.77	1.87%
Ag 328.068†	127118.4	0.394 mg/L	0.0095	0.394 mg/L	0.0095	2.41%
QC value within limits for Ag						
Al 396.153†	63875.9	9.58 mg/L	0.027	9.58 mg/L	0.027	0.29%
QC value within limits for Al						
As 188.979†	1062.2	0.380 mg/L	0.0077	0.380 mg/L	0.0077	2.02%
QC value within limits for As						
Ba 233.527†	143095.4	0.972 mg/L	0.0167	0.972 mg/L	0.0167	1.72%
QC value within limits for Ba						
Be 234.861†	54082.8	0.0480 mg/L	0.00118	0.0480 mg/L	0.00118	2.45%
QC value within limits for Be						
B 249.677†	45300.2	0.481 mg/L	0.0119	0.481 mg/L	0.0119	2.47%
QC value within limits for B						
Ca 227.546†	3664.6	10.1 mg/L	0.21	10.1 mg/L	0.21	2.05%
QC value within limits for Ca						
Cd 228.802†	2174.7	0.0471 mg/L	0.00132	0.0471 mg/L	0.00132	2.80%
QC value within limits for Cd						
Co 228.616†	7143.3	0.194 mg/L	0.0045	0.194 mg/L	0.0045	2.31%
QC value within limits for Co						
Cr 267.716†	62687.2	0.483 mg/L	0.0050	0.483 mg/L	0.0050	1.04%
QC value within limits for Cr						
Cu 327.393†	131754.6	0.490 mg/L	0.0122	0.490 mg/L	0.0122	2.48%
QC value within limits for Cu						
Fe 239.562†	36925.5	3.87 mg/L	0.017	3.87 mg/L	0.017	0.43%
QC value within limits for Fe						
Mg 279.077†	27115.5	9.77 mg/L	0.070	9.77 mg/L	0.070	0.72%
QC value within limits for Mg						
Mn 257.610†	412177.5	0.493 mg/L	0.0097	0.493 mg/L	0.0097	1.97%
QC value within limits for Mn						
Mo 202.031†	28230.8	0.955 mg/L	0.0105	0.955 mg/L	0.0105	1.10%
QC value within limits for Mo						
Ni 231.604†	28868.9	0.485 mg/L	0.0074	0.485 mg/L	0.0074	1.53%
QC value within limits for Ni						
Pb 220.353†	5077.4	0.486 mg/L	0.0112	0.486 mg/L	0.0112	2.30%
QC value within limits for Pb						
Sb 206.836†	4140.9	1.16 mg/L	0.032	1.16 mg/L	0.032	2.74%
QC value within limits for Sb						
Se 196.026†	627.6	0.388 mg/L	0.0065	0.388 mg/L	0.0065	1.68%
QC value within limits for Se						
Si 251.611†	232294.9	4.90 mg/L	0.077	4.90 mg/L	0.077	1.57%
QC value within limits for Si						
Sn 189.927†	9133.8	0.957 mg/L	0.0184	0.957 mg/L	0.0184	1.92%
QC value within limits for Sn						
Ti 334.940†	1075187.3	0.964 mg/L	0.0073	0.964 mg/L	0.0073	0.76%

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QC value within limits for Ti 334.940 Recovery = 96.40%
 Tl 190.801† 1427.8 0.499 mg/L 0.0088 0.499 mg/L 0.0088 1.77%
 QC value within limits for Tl 190.801 Recovery = 99.71%
 V 290.880† 222874.1 0.972 mg/L 0.0134 0.972 mg/L 0.0134 1.38%
 QC value within limits for V 290.880 Recovery = 97.25%
 Zn 206.200† 42613.2 0.961 mg/L 0.0077 0.961 mg/L 0.0077 0.80%
 QC value within limits for Zn 206.200 Recovery = 96.06%
 K 766.490† 143823.5 48.2 mg/L 0.35 48.2 mg/L 0.35 0.72%
 QC value within limits for K 766.490 Recovery = 96.34%
 Na 589.592† 946920.4 48.0 mg/L 0.48 48.0 mg/L 0.48 1.00%
 QC value within limits for Na 589.592 Recovery = 96.04%
 Sr 407.771† 2355854.4 0.986 mg/L 0.0068 0.986 mg/L 0.0068 0.69%
 QC value within limits for Sr 407.771 Recovery = 98.56%
 Li 670.784† 130416.9 0.977 mg/L 0.0092 0.977 mg/L 0.0092 0.95%
 QC value within limits for Li 670.784 Recovery = 97.67%
 All analyte(s) passed QC.

Sequence No.: 12

Sample ID: CCB

Analyst:

Initial Sample Wt:

Dilution:

Sampler Location: 1

Date Collected: 11/19/2012 11:15:29 AM

Data Type: Original

Initial Sample Vol:

Sample Prep Vol:

Nebulizer Parameters: CCB

Analyte Back Pressure Flow
 All 175.0 kPa 0.50 L/min

Mean Data: CCB

Analyte	Mean Corrected Intensity	Calib. Conc. Units	Std.Dev.	Sample Conc. Units	Std.Dev.	RSD
Y 371.029	2471822.6				16432.65	0.66%
YRADIAL	289828.7				3550.57	1.23%
Ga 417.206	1215739.4				25261.72	2.08%
GARADIAL	76789.4				1850.54	2.41%
Ag 328.068†	2.5	-0.00078 mg/L	0.000366	-0.00078 mg/L	0.000366	47.09%
QC value within limits for Ag 328.068			Recovery = Not calculated			
Al 396.153†	17.2	-0.0131 mg/L	0.00104	-0.0131 mg/L	0.00104	7.91%
QC value within limits for Al 396.153			Recovery = Not calculated			
As 188.979†	2.6	0.00082 mg/L	0.000862	0.00082 mg/L	0.000862	105.39%
QC value within limits for As 188.979			Recovery = Not calculated			
Ba 233.527†	14.1	-0.00187 mg/L	0.000077	-0.00187 mg/L	0.000077	4.11%
QC value within limits for Ba 233.527			Recovery = Not calculated			
Be 234.861†	68.6	0.00004 mg/L	0.000011	0.00004 mg/L	0.000011	27.45%
QC value within limits for Be 234.861			Recovery = Not calculated			
B 249.677†	405.9	0.00586 mg/L	0.000302	0.00586 mg/L	0.000302	5.16%
QC value within limits for B 249.677			Recovery = Not calculated			
Ca 227.546†	7.2	0.0200 mg/L	0.02076	0.0200 mg/L	0.02076	103.75%
QC value within limits for Ca 227.546			Recovery = Not calculated			
Cd 228.802†	-1.6	-0.00003 mg/L	0.000108	-0.00003 mg/L	0.000108	321.64%
QC value within limits for Cd 228.802			Recovery = Not calculated			
Co 228.616†	-3.3	-0.00061 mg/L	0.000254	-0.00061 mg/L	0.000254	41.64%
QC value within limits for Co 228.616			Recovery = Not calculated			
Cr 267.716†	-4.3	-0.00071 mg/L	0.000104	-0.00071 mg/L	0.000104	14.62%
QC value within limits for Cr 267.716			Recovery = Not calculated			
Cu 327.393†	118.4	-0.00032 mg/L	0.000328	-0.00032 mg/L	0.000328	101.80%
QC value within limits for Cu 327.393			Recovery = Not calculated			
Fe 239.562†	12.4	-0.00518 mg/L	0.000771	-0.00518 mg/L	0.000771	14.89%
QC value within limits for Fe 239.562			Recovery = Not calculated			
Mg 279.077†	2.9	-0.00855 mg/L	0.003748	-0.00855 mg/L	0.003748	43.83%
QC value within limits for Mg 279.077			Recovery = Not calculated			
Mn 257.610†	628.0	-0.00140 mg/L	0.000013	-0.00140 mg/L	0.000013	0.95%
QC value within limits for Mn 257.610			Recovery = Not calculated			
Mo 202.031†	-3.4	-0.00093 mg/L	0.000245	-0.00093 mg/L	0.000245	26.26%
QC value within limits for Mo 202.031			Recovery = Not calculated			
Ni 231.604†	5.8	-0.00158 mg/L	0.000430	-0.00158 mg/L	0.000430	27.16%
QC value within limits for Ni 231.604			Recovery = Not calculated			
Pb 220.353†	-3.1	-0.00113 mg/L	0.001454	-0.00113 mg/L	0.001454	128.50%
QC value within limits for Pb 220.353			Recovery = Not calculated			
Sb 206.836†	-1.6	-0.00038 mg/L	0.000500	-0.00038 mg/L	0.000500	132.95%

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QC value within limits for Sb 206.836 Recovery = Not calculated
 Se 196.026† 1.6 0.00183 mg/L 0.001580 0.00183 mg/L 0.001580 86.23%
 QC value within limits for Se 196.026 Recovery = Not calculated
 Si 251.611† 30.8 -0.00961 mg/L 0.000572 -0.00961 mg/L 0.000572 5.95%
 QC value within limits for Si 251.611 Recovery = Not calculated
 Sn 189.927† -19.8 -0.00291 mg/L 0.000373 -0.00291 mg/L 0.000373 12.81%
 QC value within limits for Sn 189.927 Recovery = Not calculated
 Ti 334.940† 16.0 -0.00048 mg/L 0.000098 -0.00048 mg/L 0.000098 20.31%
 QC value within limits for Ti 334.940 Recovery = Not calculated
 Tl 190.801† -3.7 -0.00279 mg/L 0.001564 -0.00279 mg/L 0.001564 56.12%
 QC value within limits for Tl 190.801 Recovery = Not calculated
 V 290.880† 38.9 -0.00172 mg/L 0.001382 -0.00172 mg/L 0.001382 80.15%
 QC value within limits for V 290.880 Recovery = Not calculated
 Zn 206.200† 6.6 -0.00161 mg/L 0.000205 -0.00161 mg/L 0.000205 12.74%
 QC value within limits for Zn 206.200 Recovery = Not calculated
 K 766.490† -4.6 0.0152 mg/L 0.02102 0.0152 mg/L 0.02102 138.77%
 QC value within limits for K 766.490 Recovery = Not calculated
 Na 589.592† 823.4 0.0403 mg/L 0.00303 0.0403 mg/L 0.00303 7.51%
 QC value within limits for Na 589.592 Recovery = Not calculated
 Sr 407.771† 267.3 -0.00275 mg/L 0.000027 -0.00275 mg/L 0.000027 0.99%
 QC value within limits for Sr 407.771 Recovery = Not calculated
 Li 670.784† 26.2 -0.00278 mg/L 0.000531 -0.00278 mg/L 0.000531 19.07%
 QC value within limits for Li 670.784 Recovery = Not calculated
 All analyte(s) passed QC.

Sequence No.: 13

Sample ID: ICSA

Analyst:

Initial Sample Wt:

Dilution:

Autosampler Location: 12

Date Collected: 11/19/2012 11:22:22 AM

Data Type: Original

Initial Sample Vol:

Sample Prep Vol:

Nebulizer Parameters: ICSA

Analyte

Back Pressure

Flow

All

174.0 kPa

0.50 L/min

Mean Data: ICSA

Analyte	Mean Corrected Intensity	Calib. Conc. Units	Std.Dev.	Sample Conc. Units	Std.Dev.	RSD
Y 371.029	2204573.1				14420.08	0.65%
YRADIAL	271479.3				2979.61	1.10%
Ga 417.206	1134960.8				23329.42	2.06%
GaRADIAL	72527.4				1076.98	1.48%
Ag 328.068†	-14217.5	-0.00069 mg/L	0.001776	-0.00069 mg/L	0.001776	257.83%
QC value within limits for Ag 328.068		Recovery = Not calculated				
Al 396.153†	1671958.5	253 mg/L	3.2	253 mg/L	3.2	1.28%
QC value within limits for Al 396.153		Recovery = 101.16%				
As 188.979†	-3.0	0.00465 mg/L	0.000422	0.00465 mg/L	0.000422	9.08%
QC value within limits for As 188.979		Recovery = Not calculated				
Ba 233.527†	770.1	-0.00238 mg/L	0.000226	-0.00238 mg/L	0.000226	9.49%
QC value within limits for Ba 233.527		Recovery = Not calculated				
Be 234.861†	24005.7	0.00050 mg/L	0.000602	0.00050 mg/L	0.000602	121.43%
QC value within limits for Be 234.861		Recovery = Not calculated				
B 249.677†	6030.7	0.0247 mg/L	0.00406	0.0247 mg/L	0.00406	16.45%
QC value within limits for B 249.677		Recovery = Not calculated				
Ca 227.546†	100969.5	267 mg/L	7.2	267 mg/L	7.2	2.70%
QC value within limits for Ca 227.546		Recovery = 106.89%				
Cd 228.802†	5.0	0.00004 mg/L	0.000077	0.00004 mg/L	0.000077	171.97%
QC value within limits for Cd 228.802		Recovery = Not calculated				
Co 228.616†	28.3	-0.00218 mg/L	0.000128	-0.00218 mg/L	0.000128	5.86%
QC value within limits for Co 228.616		Recovery = Not calculated				
Cr 267.716†	114.5	-0.00064 mg/L	0.000207	-0.00064 mg/L	0.000207	32.42%
QC value within limits for Cr 267.716		Recovery = Not calculated				
Cu 327.393†	-1610.4	0.00329 mg/L	0.000267	0.00329 mg/L	0.000267	8.11%
QC value within limits for Cu 327.393		Recovery = Not calculated				
Fe 239.562†	911700.2	95.8 mg/L	1.46	95.8 mg/L	1.46	1.53%
QC value within limits for Fe 239.562		Recovery = 95.79%				
Mg 279.077†	705807.3	254 mg/L	3.2	254 mg/L	3.2	1.24%
QC value within limits for Mg 279.077		Recovery = 101.66%				
Mn 257.610†	-143.5	-0.00209 mg/L	0.000177	-0.00209 mg/L	0.000177	8.43%

Approved: November 20, 2012

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QC value within limits for Mn 257.610 Recovery = Not calculated
 Mo 202.031† -57.3 0.00194 mg/L 0.000943 0.00194 mg/L 0.000943 48.62%
 QC value within limits for Mo 202.031 Recovery = Not calculated
 Ni 231.604† 75.4 -0.00040 mg/L 0.000570 -0.00040 mg/L 0.000570 141.91%
 QC value within limits for Ni 231.604 Recovery = Not calculated
 Pb 220.353† -403.0 -0.00058 mg/L 0.002227 -0.00058 mg/L 0.002227 382.19%
 QC value within limits for Pb 220.353 Recovery = Not calculated
 Sb 206.836† -8.3 0.00125 mg/L 0.000527 0.00125 mg/L 0.000527 42.23%
 QC value within limits for Sb 206.836 Recovery = Not calculated
 Se 196.026† -37.6 0.00462 mg/L 0.005956 0.00462 mg/L 0.005956 129.03%
 QC value within limits for Se 196.026 Recovery = Not calculated
 Si 251.611† 8291.7 0.165 mg/L 0.0034 0.165 mg/L 0.0034 2.06%
 QC value within limits for Si 251.611 Recovery = Not calculated
 Sn 189.927† -364.2 -0.0391 mg/L 0.00041 -0.0391 mg/L 0.00041 1.04%
 QC value within limits for Sn 189.927 Recovery = Not calculated
 Ti 334.940† -39381.3 0.00396 mg/L 0.003012 0.00396 mg/L 0.003012 76.12%
 QC value within limits for Ti 334.940 Recovery = Not calculated
 Tl 190.801† -53.1 -0.0132 mg/L 0.00180 -0.0132 mg/L 0.00180 13.68%
 QC value within limits for Tl 190.801 Recovery = Not calculated
 V 290.880† 2979.6 -0.00131 mg/L 0.001559 -0.00131 mg/L 0.001559 118.95%
 QC value within limits for V 290.880 Recovery = Not calculated
 Zn 206.200† 343.2 -0.00279 mg/L 0.000552 -0.00279 mg/L 0.000552 19.79%
 QC value within limits for Zn 206.200 Recovery = Not calculated
 K 766.490† -82.8 -0.0108 mg/L 0.01154 -0.0108 mg/L 0.01154 106.54%
 QC value within limits for K 766.490 Recovery = Not calculated
 Na 589.592† 1111.2 0.0546 mg/L 0.00612 0.0546 mg/L 0.00612 11.22%
 QC value within limits for Na 589.592 Recovery = Not calculated
 Sr 407.771† 2794.9 -0.00693 mg/L 0.000162 -0.00693 mg/L 0.000162 2.34%
 QC value within limits for Sr 407.771 Recovery = Not calculated
 Li 670.784† 149.0 -0.00186 mg/L 0.000220 -0.00186 mg/L 0.000220 11.83%
 QC value within limits for Li 670.784 Recovery = Not calculated
 All analyte(s) passed QC.

Sequence No.: 14

Sample ID: ICSAB

Analyst:

Initial Sample Wt:

Dilution:

Autosampler Location: 13

Date Collected: 11/19/2012 11:28:18 AM

Data Type: Original

Initial Sample Vol:

Sample Prep Vol:

Nebulizer Parameters: ICSAB

Analyste Back Pressure Flow
 All 175.0 kPa 0.50 L/min

Mean Data: ICSAB

Analyste	Mean Corrected Intensity	Calib. Conc. Units	Std.Dev.	Sample Conc. Units	Std.Dev.	RSD
Y 371.029	2254096.3				17309.01	0.77%
Y RADIAL	282077.5				2485.77	0.88%
Ga 417.206	1164842.8				28368.67	2.44%
Ga RADIAL	74707.6				813.87	1.09%
Ag 328.068†	150146.7	0.504 mg/L	0.0138	0.504 mg/L	0.0138	2.74%
QC value within limits for Ag 328.068			100.80%			
Al 396.153†	1641212.1	248 mg/L	2.5	248 mg/L	2.5	0.99%
QC value within limits for Al 396.153			99.30%			
As 188.979†	635.0	0.236 mg/L	0.0032	0.236 mg/L	0.0032	1.34%
QC value within limits for As 188.979			94.29%			
Ba 233.527†	36386.0	0.240 mg/L	0.0010	0.240 mg/L	0.0010	0.40%
QC value within limits for Ba 233.527			96.01%			
Be 234.861†	294015.4	0.243 mg/L	0.0055	0.243 mg/L	0.0055	2.26%
QC value within limits for Be 234.861			97.15%			
B 249.677†	4369.5	-0.00444 mg/L	0.000882	-0.00444 mg/L	0.000882	19.85%
QC value within limits for B 249.677			Not calculated			
Ca 227.546†	99497.2	264 mg/L	7.1	264 mg/L	7.1	2.69%
QC value within limits for Ca 227.546			105.46%			
Cd 228.802†	19964.0	0.444 mg/L	0.0089	0.444 mg/L	0.0089	2.00%
QC value within limits for Cd 228.802			88.89%			
Co 228.616†	8379.3	0.226 mg/L	0.0031	0.226 mg/L	0.0031	1.36%
QC value within limits for Co 228.616			90.27%			
Cr 267.716†	31328.4	0.240 mg/L	0.0009	0.240 mg/L	0.0009	0.37%

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Cu	327.393†	QC value within limits for Cu	327.393	Recovery = 96.17%	0.250 mg/L	0.0055	2.19%
Fe	239.562†	QC value within limits for Fe	239.562	Recovery = 99.83%	93.4 mg/L	0.68	0.73%
Mg	279.077†	QC value within limits for Mg	279.077	Recovery = 93.36%	247 mg/L	2.1	0.84%
Mn	257.610†	QC value within limits for Mn	257.610	Recovery = 98.88%	0.237 mg/L	0.0022	0.91%
Mo	202.031†	QC value within limits for Mo	202.031	Recovery = 94.97%	0.00183 mg/L	0.000286	15.64%
Ni	231.604†	QC value within limits for Ni	231.604	Recovery = Not calculated	0.467 mg/L	0.0053	1.14%
Pb	220.353†	QC value within limits for Pb	220.353	Recovery = 93.35%	0.469 mg/L	0.0057	1.23%
Sb	206.836†	QC value within limits for Sb	206.836	Recovery = 93.71%	0.479 mg/L	0.0133	2.79%
Se	196.026†	QC value within limits for Se	196.026	Recovery = 95.73%	0.245 mg/L	0.0065	2.65%
Si	251.611†	QC value within limits for Si	251.611	Recovery = 98.08%	-0.0160 mg/L	0.00046	2.85%
Sn	189.927†	QC value within limits for Sn	189.927	Recovery = Not calculated	-0.0405 mg/L	0.00070	1.73%
Ti	334.940†	QC value within limits for Ti	334.940	Recovery = Not calculated	0.00312 mg/L	0.003145	100.82%
Tl	190.801†	QC value within limits for Tl	190.801	Recovery = Not calculated	0.465 mg/L	0.0026	0.56%
V	290.880†	QC value within limits for V	290.880	Recovery = 92.97%	0.241 mg/L	0.0014	0.57%
Zn	206.200†	QC value within limits for Zn	206.200	Recovery = 96.27%	0.464 mg/L	0.0036	0.77%
K	766.490†	QC value within limits for K	766.490	Recovery = 92.76%	4.83 mg/L	0.041	0.84%
Na	589.592†	QC value within limits for Na	589.592	Recovery = 96.51%	5.00 mg/L	0.014	0.28%
Sr	407.771†	QC value within limits for Sr	407.771	Recovery = 99.96%	-0.00696 mg/L	0.000162	2.33%
Li	670.784†	QC value within limits for Li	670.784	Recovery = Not calculated	-0.00158 mg/L	0.000407	25.75%

All analyte(s) passed QC.

Sequence No.: 15

Sample ID: CCV

Analyst:

Initial Sample Wt:

Dilution:

autosampler Location: 6

Date Collected: 11/19/2012 11:34:15 AM

Data Type: Original

Initial Sample Vol:

Sample Prep Vol:

Nebulizer Parameters: CCV

Analyte	Back Pressure	Flow
All	174.0 kPa	0.50 L/min

Mean Data: CCV

Analyte	Mean Corrected Intensity	Calib. Conc. Units	Std.Dev.	Sample Conc. Units	Std.Dev.	RSD
Y 371.029	2380010.7				22924.12	0.96%
YRADIAL	283093.6				986.93	0.35%
Ga 417.206	1167383.6				23046.71	1.97%
GaRADIAL	73474.4				309.27	0.42%
Ag 328.068†	131314.9	0.407 mg/L	0.0120	0.407 mg/L	0.0120	2.95%
QC value within limits for Ag	328.068	Recovery = 101.64%				
Al 396.153†	66054.7	9.91 mg/L	0.008	9.91 mg/L	0.008	0.08%
QC value within limits for Al	396.153	Recovery = 99.08%				
As 188.979†	1098.4	0.393 mg/L	0.0066	0.393 mg/L	0.0066	1.68%
QC value within limits for As	188.979	Recovery = 98.29%				
Ba 233.527†	148397.4	1.01 mg/L	0.006	1.01 mg/L	0.006	0.56%
QC value within limits for Ba	233.527	Recovery = 100.78%				
Be 234.861†	55998.8	0.0497 mg/L	0.00151	0.0497 mg/L	0.00151	3.03%
QC value within limits for Be	234.861	Recovery = 99.38%				
B 249.677†	46632.4	0.495 mg/L	0.0158	0.495 mg/L	0.0158	3.18%

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Ca	227.546†	3780.2	10.4 mg/L	0.24	10.4 mg/L	0.24	2.33%
QC value within limits for B 249.677 Recovery = 99.03%							
Cd	228.802†	2257.3	0.0489 mg/L	0.00183	0.0489 mg/L	0.00183	3.74%
QC value within limits for Cd 228.802 Recovery = 97.89%							
Co	228.616†	7408.7	0.201 mg/L	0.0024	0.201 mg/L	0.0024	1.20%
QC value within limits for Co 228.616 Recovery = 100.42%							
Cr	267.716†	65311.7	0.504 mg/L	0.0022	0.504 mg/L	0.0022	0.44%
QC value within limits for Cr 267.716 Recovery = 100.74%							
Cu	327.393†	135875.1	0.506 mg/L	0.0138	0.506 mg/L	0.0138	2.73%
QC value within limits for Cu 327.393 Recovery = 101.13%							
Fe	239.562†	38192.4	4.01 mg/L	0.006	4.01 mg/L	0.006	0.15%
QC value within limits for Fe 239.562 Recovery = 100.15%							
Mg	279.077†	27924.8	10.1 mg/L	0.05	10.1 mg/L	0.05	0.53%
QC value within limits for Mg 279.077 Recovery = 100.64%							
Mn	257.610†	426348.2	0.510 mg/L	0.0039	0.510 mg/L	0.0039	0.76%
QC value within limits for Mn 257.610 Recovery = 102.03%							
Mo	202.031†	29284.0	0.991 mg/L	0.0061	0.991 mg/L	0.0061	0.61%
QC value within limits for Mo 202.031 Recovery = 99.08%							
Ni	231.604†	30033.9	0.504 mg/L	0.0028	0.504 mg/L	0.0028	0.56%
QC value within limits for Ni 231.604 Recovery = 100.89%							
Pb	220.353†	5259.7	0.503 mg/L	0.0050	0.503 mg/L	0.0050	1.00%
QC value within limits for Pb 220.353 Recovery = 100.60%							
Sb	206.836†	4272.6	1.19 mg/L	0.038	1.19 mg/L	0.038	3.22%
QC value within limits for Sb 206.836 Recovery = 99.45%							
Se	196.026†	654.4	0.405 mg/L	0.0139	0.405 mg/L	0.0139	3.43%
QC value within limits for Se 196.026 Recovery = 101.18%							
Si	251.611†	239446.0	5.05 mg/L	0.095	5.05 mg/L	0.095	1.89%
QC value within limits for Si 251.611 Recovery = 101.01%							
Sn	189.927†	9494.2	0.995 mg/L	0.0093	0.995 mg/L	0.0093	0.93%
QC value within limits for Sn 189.927 Recovery = 99.53%							
Ti	334.940†	1101228.5	0.987 mg/L	0.0026	0.987 mg/L	0.0026	0.26%
QC value within limits for Ti 334.940 Recovery = 98.74%							
Tl	190.801†	1485.4	0.519 mg/L	0.0034	0.519 mg/L	0.0034	0.65%
QC value within limits for Tl 190.801 Recovery = 103.71%							
V	290.880†	230896.0	1.01 mg/L	0.002	1.01 mg/L	0.002	0.19%
QC value within limits for V 290.880 Recovery = 100.75%							
Zn	206.200†	44597.1	1.01 mg/L	0.006	1.01 mg/L	0.006	0.63%
QC value within limits for Zn 206.200 Recovery = 100.54%							
K	766.490†	147309.0	49.3 mg/L	0.04	49.3 mg/L	0.04	0.09%
QC value within limits for K 766.490 Recovery = 98.69%							
Na	589.592†	980890.3	49.8 mg/L	0.34	49.8 mg/L	0.34	0.68%
QC value within limits for Na 589.592 Recovery = 99.57%							
Sr	407.771†	2428866.9	1.02 mg/L	0.015	1.02 mg/L	0.015	1.43%
QC value within limits for Sr 407.771 Recovery = 101.63%							
Li	670.784†	133467.2	1.000 mg/L	0.0007	1.000 mg/L	0.0007	0.07%
QC value within limits for Li 670.784 Recovery = 99.96%							
All analyte(s) passed QC.							

Sequence No.: 16

Sample ID: CCB

Analyst:

Initial Sample Wt:

Dilution:

Autosampler Location: 1

Date Collected: 11/19/2012 11:40:16 AM

Data Type: Original

Initial Sample Vol:

Sample Prep Vol:

Nebulizer Parameters: CCB

Analyte	Back Pressure	Flow
All	175.0 kPa	0.50 L/min

Mean Data: CCB

Analyte	Mean Corrected Intensity	Calib. Conc. Units	Std.Dev.	Sample Conc. Units	Std.Dev.	RSD
Y 371.029	2446043.9				17356.55	0.71%
YRADIAL	286818.1				9039.15	3.15%
Ga 417.206	1207067.5				21698.14	1.80%
GaRADIAL	75837.1				88.40	0.12%
Ag 328.068†	0.7	-0.00078 mg/L	0.000405	-0.00078 mg/L	0.000405	51.95%
QC value within limits for Ag 328.068 Recovery = Not calculated						
Al 396.153†	29.4	-0.0113 mg/L	0.00200	-0.0113 mg/L	0.00200	17.72%

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QC value within limits for Al	396.153	Recovery = Not calculated			
As 188.979†	2.9	0.00093 mg/L	0.002005	0.00093 mg/L	0.002005 215.78%
QC value within limits for As	188.979	Recovery = Not calculated			
Ba 233.527†	21.8	-0.00181 mg/L	0.000095	-0.00181 mg/L	0.000095 5.26%
QC value within limits for Ba	233.527	Recovery = Not calculated			
Be 234.861†	65.8	0.00004 mg/L	0.000031	0.00004 mg/L	0.000031 83.84%
QC value within limits for Be	234.861	Recovery = Not calculated			
B 249.677†	286.0	0.00457 mg/L	0.000251	0.00457 mg/L	0.000251 5.48%
QC value within limits for B	249.677	Recovery = Not calculated			
Ca 227.546†	7.7	0.0213 mg/L	0.01091	0.0213 mg/L	0.01091 51.11%
QC value within limits for Ca	227.546	Recovery = Not calculated			
Cd 228.802†	5.7	0.00013 mg/L	0.000109	0.00013 mg/L	0.000109 84.57%
QC value within limits for Cd	228.802	Recovery = Not calculated			
Co 228.616†	3.1	-0.00044 mg/L	0.000145	-0.00044 mg/L	0.000145 33.20%
QC value within limits for Co	228.616	Recovery = Not calculated			
Cr 267.716†	15.7	-0.00056 mg/L	0.000030	-0.00056 mg/L	0.000030 5.29%
QC value within limits for Cr	267.716	Recovery = Not calculated			
Cu 327.393†	217.8	0.00005 mg/L	0.000111	0.00005 mg/L	0.000111 235.92%
QC value within limits for Cu	327.393	Recovery = Not calculated			
Fe 239.562†	32.4	-0.00307 mg/L	0.000199	-0.00307 mg/L	0.000199 6.47%
QC value within limits for Fe	239.562	Recovery = Not calculated			
Mg 279.077†	22.1	-0.00166 mg/L	0.000458	-0.00166 mg/L	0.000458 27.53%
QC value within limits for Mg	279.077	Recovery = Not calculated			
Mn 257.610†	604.9	-0.00143 mg/L	0.000019	-0.00143 mg/L	0.000019 1.34%
QC value within limits for Mn	257.610	Recovery = Not calculated			
Mo 202.031†	7.1	-0.00058 mg/L	0.000295	-0.00058 mg/L	0.000295 50.98%
QC value within limits for Mo	202.031	Recovery = Not calculated			
Ni 231.604†	0.9	-0.00166 mg/L	0.000312	-0.00166 mg/L	0.000312 18.74%
QC value within limits for Ni	231.604	Recovery = Not calculated			
Pb 220.353†	-4.3	-0.00124 mg/L	0.001471	-0.00124 mg/L	0.001471 118.72%
QC value within limits for Pb	220.353	Recovery = Not calculated			
Sb 206.836†	-4.8	-0.00129 mg/L	0.001018	-0.00129 mg/L	0.001018 78.94%
QC value within limits for Sb	206.836	Recovery = Not calculated			
Se 196.026†	9.0	0.00642 mg/L	0.001138	0.00642 mg/L	0.001138 17.71%
QC value within limits for Se	196.026	Recovery = Not calculated			
Si 251.611†	17.2	-0.00990 mg/L	0.000341	-0.00990 mg/L	0.000341 3.44%
QC value within limits for Si	251.611	Recovery = Not calculated			
Sn 189.927†	-22.3	-0.00318 mg/L	0.000376	-0.00318 mg/L	0.000376 11.84%
QC value within limits for Sn	189.927	Recovery = Not calculated			
Ti 334.940†	100.7	-0.00041 mg/L	0.000152	-0.00041 mg/L	0.000152 37.44%
QC value within limits for Ti	334.940	Recovery = Not calculated			
Tl 190.801†	-7.6	-0.00413 mg/L	0.004048	-0.00413 mg/L	0.004048 97.97%
QC value within limits for Tl	190.801	Recovery = Not calculated			
V 290.880†	329.0	-0.00046 mg/L	0.000276	-0.00046 mg/L	0.000276 60.67%
QC value within limits for V	290.880	Recovery = Not calculated			
Zn 206.200†	7.5	-0.00159 mg/L	0.000021	-0.00159 mg/L	0.000021 1.35%
QC value within limits for Zn	206.200	Recovery = Not calculated			
K 766.490†	1.6	0.0172 mg/L	0.00773	0.0172 mg/L	0.00773 44.89%
QC value within limits for K	766.490	Recovery = Not calculated			
Na 589.592†	581.5	0.0283 mg/L	0.00981	0.0283 mg/L	0.00981 34.63%
QC value within limits for Na	589.592	Recovery = Not calculated			
Sr 407.771†	286.8	-0.00274 mg/L	0.000025	-0.00274 mg/L	0.000025 0.90%
QC value within limits for Sr	407.771	Recovery = Not calculated			
Li 670.784†	55.5	-0.00256 mg/L	0.000592	-0.00256 mg/L	0.000592 23.11%
QC value within limits for Li	670.784	Recovery = Not calculated			

All analyte(s) passed QC.

Sequence No.: 17
 Sample ID: LLCCV
 Analyst: KHR
 Initial Sample Wt:
 Dilution:

Sampler Location: 32
 Date Collected: 11/19/2012 11:47:10 AM
 Data Type: Original
 Initial Sample Vol:
 Sample Prep Vol:

Nebulizer Parameters: LLCCV

Analyte	Back Pressure	Flow
All	174.0 kPa	0.50 L/min

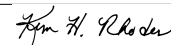
Mean Data: LLCCV

Mean Corrected

Calib.

Sample

Approved: November 20, 2012



Analyte	Intensity	Conc. Units	Std.Dev.	Conc. Units	Std.Dev.	RSD
Y 371.029	2472606.4				16659.34	0.67%
YRADIAL	288750.1				4138.42	1.43%
Ga 417.206	1217736.0				9056.99	0.74%
GaRADIAL	76616.1				1061.92	1.39%
Ag 328.068†	1397.9	0.00355 mg/L	0.000392	0.00355 mg/L	0.000392	11.04%
Al 396.153†	689.4	0.0879 mg/L	0.00162	0.0879 mg/L	0.00162	1.84%
As 188.979†	14.7	0.00517 mg/L	0.001253	0.00517 mg/L	0.001253	24.21%
Ba 233.527†	1559.4	0.00865 mg/L	0.000148	0.00865 mg/L	0.000148	1.71%
Be 234.861†	631.8	0.00054 mg/L	0.000012	0.00054 mg/L	0.000012	2.19%
B 249.677†	619.3	0.00809 mg/L	0.000377	0.00809 mg/L	0.000377	4.65%
Ca 227.546†	65.6	0.178 mg/L	0.0162	0.178 mg/L	0.0162	9.06%
Cd 228.802†	19.8	0.00043 mg/L	0.000090	0.00043 mg/L	0.000090	21.12%
Co 228.616†	81.5	0.00170 mg/L	0.000387	0.00170 mg/L	0.000387	22.81%
Cr 267.716†	697.2	0.00470 mg/L	0.000146	0.00470 mg/L	0.000146	3.11%
Cu 327.393†	1500.1	0.00483 mg/L	0.000114	0.00483 mg/L	0.000114	2.37%
Fe 239.562†	404.5	0.0360 mg/L	0.00042	0.0360 mg/L	0.00042	1.17%
Mg 279.077†	303.8	0.1000 mg/L	0.00183	0.1000 mg/L	0.00183	1.83%
Mn 257.610†	4899.5	0.00373 mg/L	0.000074	0.00373 mg/L	0.000074	1.98%
Mo 202.031†	303.1	0.00944 mg/L	0.000145	0.00944 mg/L	0.000145	1.54%
Ni 231.604†	334.9	0.00397 mg/L	0.000216	0.00397 mg/L	0.000216	5.44%
Pb 220.353†	43.4	0.00333 mg/L	0.000914	0.00333 mg/L	0.000914	27.43%
Sb 206.836†	45.2	0.0127 mg/L	0.00024	0.0127 mg/L	0.00024	1.87%
Se 196.026†	10.3	0.00722 mg/L	0.004534	0.00722 mg/L	0.004534	62.78%
Si 251.611†	2458.1	0.0417 mg/L	0.00110	0.0417 mg/L	0.00110	2.63%
Sn 189.927†	72.2	0.00673 mg/L	0.000472	0.00673 mg/L	0.000472	7.02%
Ti 334.940†	11147.4	0.00951 mg/L	0.000072	0.00951 mg/L	0.000072	0.76%
Tl 190.801†	0.0	-0.00138 mg/L	0.000516	-0.00138 mg/L	0.000516	37.39%
V 290.880†	2450.9	0.00882 mg/L	0.001350	0.00882 mg/L	0.001350	15.31%
Zn 206.200†	566.4	0.0110 mg/L	0.00027	0.0110 mg/L	0.00027	2.49%
K 766.490†	1524.7	0.523 mg/L	0.0057	0.523 mg/L	0.0057	1.09%
Na 589.592†	10383.8	0.514 mg/L	0.0127	0.514 mg/L	0.0127	2.46%
Sr 407.771†	25494.0	0.00783 mg/L	0.000236	0.00783 mg/L	0.000236	3.01%
Li 670.784†	1377.7	0.00737 mg/L	0.000572	0.00737 mg/L	0.000572	7.77%

Sequence No.: 18
Sample ID: LLCCV
Analyst: KHR
Initial Sample Wt:
Dilution:

Autosampler Location: 33
Date Collected: 11/19/2012 11:54:05 AM
Data Type: Original
Initial Sample Vol:
Sample Prep Vol:

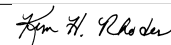
Nebulizer Parameters: LLCCV

Analyte	Back Pressure	Flow
All	174.0 kPa	0.50 L/min

Mean Data: LLCCV

Analyte	Mean Corrected Intensity	Calib. Conc. Units	Std.Dev.	Sample Conc. Units	Std.Dev.	RSD
Y 371.029	2458631.8				19623.43	0.80%
YRADIAL	290983.6				3555.15	1.22%
Ga 417.206	1211245.3				14208.01	1.17%
GaRADIAL	77160.2				1695.36	2.20%
Ag 328.068†	2737.7	0.00771 mg/L	0.000090	0.00771 mg/L	0.000090	1.17%
Al 396.153†	1342.5	0.186 mg/L	0.0019	0.186 mg/L	0.0019	1.01%
As 188.979†	20.4	0.00718 mg/L	0.000594	0.00718 mg/L	0.000594	8.27%
Ba 233.527†	3116.7	0.0192 mg/L	0.00025	0.0192 mg/L	0.00025	1.31%
Be 234.861†	1191.1	0.00104 mg/L	0.000031	0.00104 mg/L	0.000031	3.00%
B 249.677†	1046.4	0.0126 mg/L	0.00007	0.0126 mg/L	0.00007	0.58%
Ca 227.546†	88.8	0.245 mg/L	0.0160	0.245 mg/L	0.0160	6.56%
Cd 228.802†	42.1	0.00092 mg/L	0.000165	0.00092 mg/L	0.000165	17.87%
Co 228.616†	157.6	0.00376 mg/L	0.000328	0.00376 mg/L	0.000328	8.71%
Cr 267.716†	1376.8	0.00995 mg/L	0.000264	0.00995 mg/L	0.000264	2.65%
Cu 327.393†	2853.7	0.00987 mg/L	0.000446	0.00987 mg/L	0.000446	4.52%
Fe 239.562†	801.3	0.0777 mg/L	0.00192	0.0777 mg/L	0.00192	2.47%
Mg 279.077†	589.0	0.203 mg/L	0.0034	0.203 mg/L	0.0034	1.66%
Mn 257.610†	9265.1	0.00898 mg/L	0.000148	0.00898 mg/L	0.000148	1.65%
Mo 202.031†	599.7	0.0195 mg/L	0.00040	0.0195 mg/L	0.00040	2.04%
Ni 231.604†	692.4	0.00999 mg/L	0.000104	0.00999 mg/L	0.000104	1.05%
Pb 220.353†	110.0	0.00970 mg/L	0.001949	0.00970 mg/L	0.001949	20.09%

Approved: November 20, 2012



Sb 206.836†	82.2	0.0230 mg/L	0.00178	0.0230 mg/L	0.00178	7.74%
Se 196.026†	17.8	0.0119 mg/L	0.00109	0.0119 mg/L	0.00109	9.18%
Si 251.611†	4973.2	0.0948 mg/L	0.00165	0.0948 mg/L	0.00165	1.74%
Sn 189.927†	167.2	0.0167 mg/L	0.00020	0.0167 mg/L	0.00020	1.21%
Ti 334.940†	22357.4	0.0196 mg/L	0.00019	0.0196 mg/L	0.00019	0.99%
Tl 190.801†	25.9	0.00758 mg/L	0.001249	0.00758 mg/L	0.001249	16.48%
V 290.880†	4895.7	0.0195 mg/L	0.00100	0.0195 mg/L	0.00100	5.13%
Zn 206.200†	1061.2	0.0222 mg/L	0.00036	0.0222 mg/L	0.00036	1.62%
K 766.490†	2952.1	0.996 mg/L	0.0072	0.996 mg/L	0.0072	0.72%
Na 589.592†	20718.8	1.03 mg/L	0.014	1.03 mg/L	0.014	1.38%
Sr 407.771†	50581.3	0.0184 mg/L	0.00052	0.0184 mg/L	0.00052	2.85%
Li 670.784†	2693.8	0.0173 mg/L	0.00013	0.0173 mg/L	0.00013	0.73%

Sequence No.: 19

Sample ID: L1211042903

Analyst: KHR

Initial Sample Wt:

Dilution:

UASampler Location: 34

Date Collected: 11/19/2012 12:01:02 PM

Data Type: Original

Initial Sample Vol:

Sample Prep Vol:

Nebulizer Parameters: L1211042903

Analyte	Back Pressure	Flow
All	175.0 kPa	0.50 L/min

Mean Data: L1211042903

Analyte	Mean Corrected Intensity	Conc. Units	Calib. Units	Std.Dev.	Sample Conc. Units	Std.Dev.	RSD
Y 371.029	2302136.7					8410.38	0.37%
YRADIAL	279797.9					1949.83	0.70%
Ga 417.206	1273416.9					8885.39	0.70%
GaRADIAL	78570.9					2280.95	2.90%
Ag 328.068†	1215.5	0.00274 mg/L	0.000351	0.00274 mg/L	0.000351	12.84%	
Al 396.153†	188.0	0.0122 mg/L	0.00118	0.0122 mg/L	0.00118	9.66%	
As 188.979†	-5.8	-0.00225 mg/L	0.001346	-0.00225 mg/L	0.001346	59.84%	
Ba 233.527†	7249.3	0.0474 mg/L	0.00029	0.0474 mg/L	0.00029	0.61%	
Be 234.861†	248.2	0.00018 mg/L	0.000024	0.00018 mg/L	0.000024	12.89%	
B 249.677†	297344.5	3.17 mg/L	0.011	3.17 mg/L	0.011	0.34%	
Ca 227.546†	80089.1	210 mg/L	1.7	210 mg/L	1.7	0.81%	
Cd 228.802†	-2.8	-0.00004 mg/L	0.000085	-0.00004 mg/L	0.000085	224.04%	
Co 228.616†	76.7	0.00165 mg/L	0.00055	0.00165 mg/L	0.00055	3.32%	
Cr 267.716†	167.3	0.00061 mg/L	0.000071	0.00061 mg/L	0.000071	11.73%	
Cu 327.393†	-188.6	-0.00149 mg/L	0.000491	-0.00149 mg/L	0.000491	32.91%	
Fe 239.562†	1047.7	0.103 mg/L	0.0015	0.103 mg/L	0.0015	1.46%	
Mg 279.077†	106813.1	38.5 mg/L	0.35	38.5 mg/L	0.35	0.91%	
Mn 257.610†	19138.7	0.0208 mg/L	0.00015	0.0208 mg/L	0.00015	0.71%	
Mo 202.031†	232.9	0.00707 mg/L	0.000190	0.00707 mg/L	0.000190	2.68%	
Ni 231.604†	62.5	-0.00062 mg/L	0.000360	-0.00062 mg/L	0.000360	57.78%	
Pb 220.353†	8.0	-0.00008 mg/L	0.001247	-0.00008 mg/L	0.001247	>999.9%	
Sb 206.836†	-2.0	-0.00050 mg/L	0.001275	-0.00050 mg/L	0.001275	256.70%	
Se 196.026†	14.5	0.00980 mg/L	0.003601	0.00980 mg/L	0.003601	36.73%	
Si 251.611†	378820.5	8.01 mg/L	0.056	8.01 mg/L	0.056	0.70%	
Sn 189.927†	-354.8	-0.0381 mg/L	0.00015	-0.0381 mg/L	0.00015	0.39%	
Ti 334.940†	-38155.5	-0.00316 mg/L	0.001290	-0.00316 mg/L	0.001290	40.79%	
Tl 190.801†	-38.1	-0.0149 mg/L	0.00345	-0.0149 mg/L	0.00345	23.11%	
V 290.880†	1114.2	0.00197 mg/L	0.002413	0.00197 mg/L	0.002413	122.43%	
Zn 206.200†	107.2	0.00066 mg/L	0.000236	0.00066 mg/L	0.000236	35.93%	
K 766.490†	11421.5	3.78 mg/L	0.044	3.78 mg/L	0.044	1.18%	
Na 589.592†	690890.2	34.8 mg/L	1.61	34.8 mg/L	1.61	4.61%	
Sr 407.771†	3256558.8	1.36 mg/L	0.028	1.36 mg/L	0.028	2.08%	
Li 670.784†	4710.7	0.0324 mg/L	0.00113	0.0324 mg/L	0.00113	3.49%	

Sequence No.: 20

Sample ID: L1211043902 WG414452-02

Analyst: KHR

Initial Sample Wt:

Dilution:

UASampler Location: 35

Date Collected: 11/19/2012 12:08:03 PM

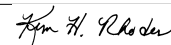
Data Type: Original

Initial Sample Vol:

Sample Prep Vol:

Nebulizer Parameters: L1211043902 WG414452-02

Approved: November 20, 2012



Analyte Back Pressure Flow
All 177.0 kPa 0.50 L/min

Mean Data: L1211043902 WG414452-02

Analyte	Mean Corrected Intensity	Conc. Units	Calib. Units	Std.Dev.	Sample Conc. Units	Std.Dev.	RSD
Y 371.029	2792262.3					11660.25	0.42%
YRADIAL	354992.6					3156.80	0.89%
Ga 417.206	1181667.8					19201.05	1.62%
GaRADIAL	76087.9					706.73	0.93%
Ag 328.068†	977.8	0.00581 mg/L		0.000445	0.00581 mg/L	0.000445	7.66%
Al 396.153†	274284.5	41.5 mg/L		0.28	41.5 mg/L	0.28	0.67%
As 188.979†	11.7	0.00443 mg/L		0.000845	0.00443 mg/L	0.000845	19.09%
Ba 233.527†	12938.9	0.0853 mg/L		0.00168	0.0853 mg/L	0.00168	1.96%
Be 234.861†	17990.4	0.0148 mg/L		0.00026	0.0148 mg/L	0.00026	1.74%
B 249.677†	10337.5	0.105 mg/L		0.0029	0.105 mg/L	0.0029	2.81%
Ca 227.546†	210730.8	553 mg/L		9.6	553 mg/L	9.6	1.74%
Cd 228.802†	251.3	0.00643 mg/L		0.000081	0.00643 mg/L	0.000081	1.26%
Co 228.616†	8603.0	0.234 mg/L		0.0009	0.234 mg/L	0.0009	0.39%
Cr 267.716†	312.5	0.00172 mg/L		0.000469	0.00172 mg/L	0.000469	27.30%
Cu 327.393†	19000.1	0.0710 mg/L		0.00163	0.0710 mg/L	0.00163	2.29%
Fe 239.562†	123703.5	13.0 mg/L		0.02	13.0 mg/L	0.02	0.19%
Mg 279.077†	121969.7	43.9 mg/L		0.12	43.9 mg/L	0.12	0.26%
Mn 257.610†	12737342.0	15.3 mg/L		0.22	15.3 mg/L	0.22	1.42%
Mo 202.031†	25.8	0.00388 mg/L		0.000146	0.00388 mg/L	0.000146	3.76%
Ni 231.604†	8355.6	0.139 mg/L		0.0010	0.139 mg/L	0.0010	0.70%
Pb 220.353†	-33.0	-0.00672 mg/L		0.000822	-0.00672 mg/L	0.000822	12.22%
Sb 206.836†	-15.0	-0.00375 mg/L		0.001660	-0.00375 mg/L	0.001660	44.26%
Se 196.026†	8.6	0.00567 mg/L		0.002948	0.00567 mg/L	0.002948	51.98%
Si 251.611†	715246.3	15.1 mg/L		0.15	15.1 mg/L	0.15	0.98%
Sn 189.927†	-398.3	-0.0426 mg/L		0.00135	-0.0426 mg/L	0.00135	3.16%
Ti 334.940†	-79941.8	0.0108 mg/L		0.00373	0.0108 mg/L	0.00373	34.45%
Tl 190.801†	-34.2	-0.0284 mg/L		0.00610	-0.0284 mg/L	0.00610	21.45%
V 290.880†	-190.4	-0.00467 mg/L		0.000440	-0.00467 mg/L	0.000440	9.43%
Zn 206.200†	29774.6	0.667 mg/L		0.0163	0.667 mg/L	0.0163	2.45%
K 766.490†	25175.9	7.96 mg/L		0.004	7.96 mg/L	0.004	0.05%
Na 589.592†	6903939.9	427 mg/L		7.3	427 mg/L	7.3	1.71%
Sr 407.771†	4262423.1	1.77 mg/L		0.019	1.77 mg/L	0.019	1.09%
Li 670.784†	9520.0	0.0685 mg/L		0.00042	0.0685 mg/L	0.00042	0.62%

Sequence No.: 21

Sample ID: L1211043904S WG414452-08

Analyst: KHR

Initial Sample Wt:

Dilution:

autosampler Location: 36

Date Collected: 11/19/2012 12:14:13 PM

Data Type: Original

Initial Sample Vol:

Sample Prep Vol:

Nebulizer Parameters: L1211043904S WG414452-08

Analyte Back Pressure Flow
All 177.0 kPa 0.50 L/min

Mean Data: L1211043904S WG414452-08

Analyte	Mean Corrected Intensity	Conc. Units	Calib. Units	Std.Dev.	Sample Conc. Units	Std.Dev.	RSD
Y 371.029	2769893.5					31209.09	1.13%
YRADIAL	339557.0					3544.51	1.04%
Ga 417.206	1162581.9					15093.68	1.30%
GaRADIAL	73553.2					1201.17	1.63%
Ag 328.068†	64806.5	0.204 mg/L		0.0052	0.204 mg/L	0.0052	2.54%
Al 396.153†	314578.1	47.5 mg/L		0.04	47.5 mg/L	0.04	0.08%
As 188.979†	567.1	0.204 mg/L		0.0023	0.204 mg/L	0.0023	1.12%
Ba 233.527†	67709.0	0.458 mg/L		0.0019	0.458 mg/L	0.0019	0.41%
Be 234.861†	45080.7	0.0388 mg/L		0.00084	0.0388 mg/L	0.00084	2.17%
B 249.677†	100874.8	1.07 mg/L		0.031	1.07 mg/L	0.031	2.93%
Ca 227.546†	219040.8	575 mg/L		15.4	575 mg/L	15.4	2.69%
Cd 228.802†	1300.8	0.0290 mg/L		0.00069	0.0290 mg/L	0.00069	2.36%
Co 228.616†	11381.2	0.310 mg/L		0.0054	0.310 mg/L	0.0054	1.76%
Cr 267.716†	25548.1	0.197 mg/L		0.0013	0.197 mg/L	0.0013	0.65%
Cu 327.393†	84313.4	0.314 mg/L		0.0080	0.314 mg/L	0.0080	2.54%

Approved: November 20, 2012

Ken H. Rhodes

Fe 239.562†	143270.8	15.0 mg/L	0.03	15.0 mg/L	0.03	0.22%
Mg 279.077†	137950.3	49.7 mg/L	0.17	49.7 mg/L	0.17	0.35%
Mn 257.610†	13100594.5	15.7 mg/L	0.19	15.7 mg/L	0.19	1.23%
Mo 202.031†	11325.3	0.387 mg/L	0.0039	0.387 mg/L	0.0039	1.01%
Ni 231.604†	19424.4	0.326 mg/L	0.0043	0.326 mg/L	0.0043	1.31%
Pb 220.353†	1849.5	0.174 mg/L	0.0023	0.174 mg/L	0.0023	1.35%
Sb 206.836†	2066.9	0.578 mg/L	0.0110	0.578 mg/L	0.0110	1.90%
Se 196.026†	323.7	0.200 mg/L	0.0065	0.200 mg/L	0.0065	3.25%
Si 251.611†	850840.1	18.0 mg/L	0.23	18.0 mg/L	0.23	1.27%
Sn 189.927†	3267.5	0.342 mg/L	0.0060	0.342 mg/L	0.0060	1.76%
Ti 334.940†	349770.9	0.399 mg/L	0.0047	0.399 mg/L	0.0047	1.17%
Tl 190.801†	478.2	0.151 mg/L	0.0020	0.151 mg/L	0.0020	1.29%
V 290.880†	87874.4	0.380 mg/L	0.0010	0.380 mg/L	0.0010	0.27%
Zn 206.200†	46027.0	1.03 mg/L	0.005	1.03 mg/L	0.005	0.47%
K 766.490†	100542.8	33.1 mg/L	0.20	33.1 mg/L	0.20	0.61%
Na 589.592†	7696014.6	495 mg/L	5.0	495 mg/L	5.0	1.01%
Sr 407.771†	5406722.0	2.25 mg/L	0.043	2.25 mg/L	0.043	1.90%
Li 670.784†	75823.1	0.567 mg/L	0.0010	0.567 mg/L	0.0010	0.18%

Sequence No.: 22

Sample ID: L1211043906SD WG414452-09

Analyst: KHR

Initial Sample Wt:

Dilution:

Utosampler Location: 37

Date Collected: 11/19/2012 12:20:19 PM

Data Type: Original

Initial Sample Vol:

Sample Prep Vol:

Nebulizer Parameters: L1211043906SD WG414452-09

Analyte	Back Pressure	Flow
All	178.0 kPa	0.50 L/min

Mean Data: L1211043906SD WG414452-09

Analyte	Mean Corrected Intensity	Conc. Units	Calib. Std.Dev.	Sample Conc. Units	Std.Dev.	RSD
Y 371.029	2757489.0				4150.08	0.15%
YRADIAL	340960.9				2611.72	0.77%
Ga 417.206	1174903.9				18195.55	1.55%
GaRADIAL	74604.3				593.06	0.79%
Ag 328.068†	62632.3	0.197 mg/L	0.0034	0.197 mg/L	0.0034	1.75%
Al 396.153†	300843.6	45.5 mg/L	0.13	45.5 mg/L	0.13	0.28%
As 188.979†	546.0	0.196 mg/L	0.0017	0.196 mg/L	0.0017	0.89%
Ba 233.527†	66716.4	0.451 mg/L	0.0015	0.451 mg/L	0.0015	0.32%
Be 234.861†	43413.2	0.0373 mg/L	0.00081	0.0373 mg/L	0.00081	2.17%
B 249.677†	97661.7	1.03 mg/L	0.020	1.03 mg/L	0.020	1.90%
Ca 227.546†	208277.3	547 mg/L	12.3	547 mg/L	12.3	2.26%
Cd 228.802†	1248.5	0.0279 mg/L	0.00079	0.0279 mg/L	0.00079	2.83%
Co 228.616†	11010.0	0.299 mg/L	0.0008	0.299 mg/L	0.0008	0.26%
Cr 267.716†	25083.0	0.193 mg/L	0.0018	0.193 mg/L	0.0018	0.96%
Cu 327.393†	81188.7	0.303 mg/L	0.0054	0.303 mg/L	0.0054	1.80%
Fe 239.562†	138379.4	14.5 mg/L	0.08	14.5 mg/L	0.08	0.52%
Mg 279.077†	133237.5	48.0 mg/L	0.23	48.0 mg/L	0.23	0.48%
Mn 257.610†	12662408.2	15.2 mg/L	0.12	15.2 mg/L	0.12	0.76%
Mo 202.031†	11138.4	0.380 mg/L	0.0017	0.380 mg/L	0.0017	0.44%
Ni 231.604†	18963.3	0.318 mg/L	0.0007	0.318 mg/L	0.0007	0.22%
Pb 220.353†	1826.1	0.172 mg/L	0.0019	0.172 mg/L	0.0019	1.10%
Sb 206.836†	1999.2	0.559 mg/L	0.0123	0.559 mg/L	0.0123	2.20%
Se 196.026†	314.7	0.195 mg/L	0.0070	0.195 mg/L	0.0070	3.62%
Si 251.611†	813654.1	17.2 mg/L	0.20	17.2 mg/L	0.20	1.15%
Sn 189.927†	3676.6	0.385 mg/L	0.0027	0.385 mg/L	0.0027	0.70%
Ti 334.940†	347881.0	0.393 mg/L	0.0051	0.393 mg/L	0.0051	1.29%
Tl 190.801†	466.2	0.148 mg/L	0.0022	0.148 mg/L	0.0022	1.50%
V 290.880†	86917.9	0.376 mg/L	0.0025	0.376 mg/L	0.0025	0.67%
Zn 206.200†	44729.5	1.00 mg/L	0.007	1.00 mg/L	0.007	0.66%
K 766.490†	97916.0	32.3 mg/L	0.14	32.3 mg/L	0.14	0.43%
Na 589.592†	7398194.0	468 mg/L	6.7	468 mg/L	6.7	1.44%
Sr 407.771†	5307647.3	2.21 mg/L	0.044	2.21 mg/L	0.044	1.97%
Li 670.784†	73935.0	0.552 mg/L	0.0063	0.552 mg/L	0.0063	1.14%

Sequence No.: 23

Sample ID: L1211044702

Utosampler Location: 38

Date Collected: 11/19/2012 12:26:25 PM

Approved: November 20, 2012

Ken H. Rhodes

Analyst: KHR
Initial Sample Wt:
Dilution:

data Type: Original
Initial Sample Vol:
Sample Prep Vol:

Nebulizer Parameters: L1211044702

Analyte Back Pressure Flow
All 176.0 kPa 0.50 L/min

Mean Data: L1211044702

Analyte	Mean Corrected Intensity	Calib. Conc. Units	Std.Dev.	Sample Conc. Units	Std.Dev.	RSD
Y 371.029	2506677.0				34656.54	1.38%
YRADIAL	299156.2				4650.96	1.55%
Ga 417.206	1258549.4				11353.98	0.90%
GaRADIAL	78493.7				603.05	0.77%
Ag 328.068†	81.2	-0.00036 mg/L	0.000506	-0.00036 mg/L	0.000506	140.03%
Al 396.153†	1483.8	0.209 mg/L	0.0072	0.209 mg/L	0.0072	3.43%
As 188.979†	-1.6	-0.00061 mg/L	0.002074	-0.00061 mg/L	0.002074	339.40%
Ba 233.527†	1721.5	0.00973 mg/L	0.000125	0.00973 mg/L	0.000125	1.28%
Be 234.861†	541.9	0.00038 mg/L	0.000030	0.00038 mg/L	0.000030	7.80%
B 249.677†	1626.9	0.0187 mg/L	0.00059	0.0187 mg/L	0.00059	3.17%
Ca 227.546†	853.6	2.25 mg/L	0.007	2.25 mg/L	0.007	0.32%
Cd 228.802†	11.1	0.00026 mg/L	0.000235	0.00026 mg/L	0.000235	90.47%
Co 228.616†	23.5	0.00010 mg/L	0.000228	0.00010 mg/L	0.000228	223.63%
Cr 267.716†	41.4	-0.00037 mg/L	0.000127	-0.00037 mg/L	0.000127	34.19%
Cu 327.393†	386.8	0.00072 mg/L	0.000206	0.00072 mg/L	0.000206	28.69%
Fe 239.562†	3680.6	0.380 mg/L	0.0090	0.380 mg/L	0.0090	2.36%
Mg 279.077†	2594.3	0.925 mg/L	0.0384	0.925 mg/L	0.0384	4.16%
Mn 257.610†	14782.1	0.0156 mg/L	0.00023	0.0156 mg/L	0.00023	1.45%
Mo 202.031†	19.0	-0.00016 mg/L	0.000083	-0.00016 mg/L	0.000083	53.07%
Ni 231.604†	104.2	0.00008 mg/L	0.000758	0.00008 mg/L	0.000758	980.79%
Pb 220.353†	-35.5	-0.00422 mg/L	0.002272	-0.00422 mg/L	0.002272	53.81%
Sb 206.836†	-4.1	-0.00107 mg/L	0.001390	-0.00107 mg/L	0.001390	129.93%
Se 196.026†	6.2	0.00477 mg/L	0.002434	0.00477 mg/L	0.002434	51.01%
Si 251.611†	216621.9	4.58 mg/L	0.044	4.58 mg/L	0.044	0.96%
Sn 189.927†	-62.2	-0.00737 mg/L	0.000730	-0.00737 mg/L	0.000730	9.91%
Ti 334.940†	3967.7	0.00339 mg/L	0.000096	0.00339 mg/L	0.000096	2.82%
Tl 190.801†	-0.6	-0.00171 mg/L	0.001947	-0.00171 mg/L	0.001947	113.67%
V 290.880†	364.6	-0.00035 mg/L	0.000614	-0.00035 mg/L	0.000614	176.89%
Zn 206.200†	173.4	0.00211 mg/L	0.000229	0.00211 mg/L	0.000229	10.85%
K 766.490†	2529.7	0.855 mg/L	0.0275	0.855 mg/L	0.0275	3.22%
Na 589.592†	38539.5	1.91 mg/L	0.013	1.91 mg/L	0.013	0.68%
Sr 407.771†	36255.0	0.0123 mg/L	0.00008	0.0123 mg/L	0.00008	0.65%
Li 670.784†	239.2	-0.00118 mg/L	0.000071	-0.00118 mg/L	0.000071	5.96%

Sequence No.: 24

Sample ID: L1211044705 WG414452-03

Analyst: KHR

Initial Sample Wt:

Dilution:

Autosampler Location: 39

Date Collected: 11/19/2012 12:32:23 PM

data Type: Original

Initial Sample Vol:

Sample Prep Vol:

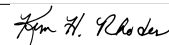
Nebulizer Parameters: L1211044705 WG414452-03

Analyte Back Pressure Flow
All 176.0 kPa 0.50 L/min

Mean Data: L1211044705 WG414452-03

Analyte	Mean Corrected Intensity	Calib. Conc. Units	Std.Dev.	Sample Conc. Units	Std.Dev.	RSD
Y 371.029	2484372.9				21846.36	0.88%
YRADIAL	299496.1				1409.12	0.47%
Ga 417.206	1239135.6				22314.46	1.80%
GaRADIAL	77787.9				129.04	0.17%
Ag 328.068†	150.8	-0.00017 mg/L	0.000133	-0.00017 mg/L	0.000133	76.56%
Al 396.153†	1110.1	0.152 mg/L	0.0030	0.152 mg/L	0.0030	2.00%
As 188.979†	5.1	0.00179 mg/L	0.001643	0.00179 mg/L	0.001643	91.58%
Ba 233.527†	1580.2	0.00877 mg/L	0.000120	0.00877 mg/L	0.000120	1.37%
Be 234.861†	461.6	0.00032 mg/L	0.000091	0.00032 mg/L	0.000091	28.31%

Approved: November 20, 2012



B 249.677†	1295.3	0.0152 mg/L	0.00059	0.0152 mg/L	0.00059	3.87%
Ca 227.546†	709.7	1.87 mg/L	0.040	1.87 mg/L	0.040	2.13%
Cd 228.802†	9.1	0.00020 mg/L	0.000213	0.00020 mg/L	0.000213	105.40%
Co 228.616†	21.7	0.00006 mg/L	0.000269	0.00006 mg/L	0.000269	476.63%
Cr 267.716†	28.4	-0.00047 mg/L	0.000145	-0.00047 mg/L	0.000145	30.91%
Cu 327.393†	385.0	0.00070 mg/L	0.000568	0.00070 mg/L	0.000568	80.63%
Fe 239.562†	3105.0	0.320 mg/L	0.0019	0.320 mg/L	0.0019	0.58%
Mg 279.077†	2520.9	0.898 mg/L	0.0253	0.898 mg/L	0.0253	2.82%
Mn 257.610†	14929.5	0.0158 mg/L	0.00088	0.0158 mg/L	0.00088	5.55%
Mo 202.031†	5.4	-0.00062 mg/L	0.000308	-0.00062 mg/L	0.000308	49.90%
Ni 231.604†	92.6	-0.00012 mg/L	0.000589	-0.00012 mg/L	0.000589	493.47%
Pb 220.353†	-31.0	-0.00380 mg/L	0.001668	-0.00380 mg/L	0.001668	43.89%
Sb 206.836†	-6.6	-0.00179 mg/L	0.000999	-0.00179 mg/L	0.000999	55.97%
Se 196.026†	5.8	0.00448 mg/L	0.002768	0.00448 mg/L	0.002768	61.81%
Si 251.611†	225853.1	4.77 mg/L	0.075	4.77 mg/L	0.075	1.57%
Sn 189.927†	-49.7	-0.00606 mg/L	0.000528	-0.00606 mg/L	0.000528	8.72%
Ti 334.940†	2930.1	0.00240 mg/L	0.000200	0.00240 mg/L	0.000200	8.33%
Tl 190.801†	3.5	-0.00031 mg/L	0.001927	-0.00031 mg/L	0.001927	615.99%
V 290.880†	529.5	0.00038 mg/L	0.000246	0.00038 mg/L	0.000246	64.99%
Zn 206.200†	210.6	0.00295 mg/L	0.000151	0.00295 mg/L	0.000151	5.13%
K 766.490†	2134.7	0.724 mg/L	0.0340	0.724 mg/L	0.0340	4.70%
Na 589.592†	36788.2	1.83 mg/L	0.006	1.83 mg/L	0.006	0.31%
Sr 407.771†	32911.3	0.0109 mg/L	0.00005	0.0109 mg/L	0.00005	0.44%
Li 670.784†	212.9	-0.00138 mg/L	0.000663	-0.00138 mg/L	0.000663	47.98%

Sequence No.: 25

Sample ID: L1211044708 WG414452-10

Analyst: KHR

Initial Sample Wt:

Dilution:

Autosampler Location: 40

Date Collected: 11/19/2012 12:38:20 PM

Data Type: Original

Initial Sample Vol:

Sample Prep Vol:

Nebulizer Parameters: L1211044708 WG414452-10

Analyte	Back Pressure	Flow
All	176.0 kPa	0.50 L/min

Mean Data: L1211044708 WG414452-10

Analyte	Mean Corrected Intensity	Conc. Units	Calib. Units	Std.Dev.	Sample Conc. Units	Std.Dev.	RSD
Y 371.029	2440703.0					33211.91	1.36%
YRADIAL	293609.4					521.46	0.18%
Ga 417.206	1222582.4					18310.63	1.50%
GaRADIAL	76357.0					210.94	0.28%
Ag 328.068†	63692.4	0.197 mg/L	0.0045	0.0045	0.197 mg/L	0.0045	2.28%
Al 396.153†	33887.7	5.08 mg/L	0.019	0.019	5.08 mg/L	0.019	0.37%
As 188.979†	513.7	0.184 mg/L	0.0023	0.0023	0.184 mg/L	0.0023	1.24%
Ba 233.527†	73665.9	0.499 mg/L	0.0050	0.0050	0.499 mg/L	0.0050	1.00%
Be 234.861†	26776.5	0.0237 mg/L	0.00065	0.00065	0.0237 mg/L	0.00065	2.73%
B 249.677†	90617.7	0.966 mg/L	0.0237	0.0237	0.966 mg/L	0.0237	2.45%
Ca 227.546†	2542.4	6.92 mg/L	0.121	0.121	6.92 mg/L	0.121	1.75%
Cd 228.802†	1063.9	0.0231 mg/L	0.00081	0.00081	0.0231 mg/L	0.00081	3.53%
Co 228.616†	3621.4	0.0979 mg/L	0.00168	0.00168	0.0979 mg/L	0.00168	1.72%
Cr 267.716†	31897.7	0.246 mg/L	0.0022	0.0022	0.246 mg/L	0.0022	0.88%
Cu 327.393†	66483.1	0.247 mg/L	0.0047	0.0047	0.247 mg/L	0.0047	1.92%
Fe 239.562†	21919.9	2.30 mg/L	0.019	0.019	2.30 mg/L	0.019	0.81%
Mg 279.077†	16097.1	5.80 mg/L	0.064	0.064	5.80 mg/L	0.064	1.10%
Mn 257.610†	223865.3	0.267 mg/L	0.0036	0.0036	0.267 mg/L	0.0036	1.34%
Mo 202.031†	14180.3	0.479 mg/L	0.0044	0.0044	0.479 mg/L	0.0044	0.92%
Ni 231.604†	15369.4	0.257 mg/L	0.0042	0.0042	0.257 mg/L	0.0042	1.64%
Pb 220.353†	2565.3	0.245 mg/L	0.0041	0.0041	0.245 mg/L	0.0041	1.67%
Sb 206.836†	2058.0	0.575 mg/L	0.0117	0.0117	0.575 mg/L	0.0117	2.03%
Se 196.026†	308.1	0.191 mg/L	0.0029	0.0029	0.191 mg/L	0.0029	1.51%
Si 251.611†	352920.2	7.46 mg/L	0.107	0.107	7.46 mg/L	0.107	1.43%
Sn 189.927†	4852.6	0.508 mg/L	0.0087	0.0087	0.508 mg/L	0.0087	1.72%
Ti 334.940†	545901.3	0.489 mg/L	0.0022	0.0022	0.489 mg/L	0.0022	0.45%
Tl 190.801†	739.5	0.257 mg/L	0.0022	0.0022	0.257 mg/L	0.0022	0.85%
V 290.880†	113043.0	0.492 mg/L	0.0061	0.0061	0.492 mg/L	0.0061	1.25%
Zn 206.200†	21235.6	0.478 mg/L	0.0043	0.0043	0.478 mg/L	0.0043	0.90%
K 766.490†	74246.4	24.8 mg/L	0.07	0.07	24.8 mg/L	0.07	0.27%
Na 589.592†	521848.1	26.2 mg/L	0.16	0.16	26.2 mg/L	0.16	0.62%

Approved: November 20, 2012

Ken H. Rhodes

Sr 407.771†	1241029.6	0.518 mg/L	0.0015	0.518 mg/L	0.0015	0.29%
Li 670.784†	67804.8	0.506 mg/L	0.0024	0.506 mg/L	0.0024	0.47%

Sequence No.: 26

Sample ID: L1211044711SD WG414452-11

Analyst: KHR

Initial Sample Wt:

Dilution:

Autosampler Location: 41

Date Collected: 11/19/2012 12:44:18 PM

Data Type: Original

Initial Sample Vol:

Sample Prep Vol:

Nebulizer Parameters: L1211044711SD WG414452-11

Analyte

Back Pressure

Flow

All

176.0 kPa

0.50 L/min

Mean Data: L1211044711SD WG414452-11

Analyte	Mean Corrected Intensity	Calib. Conc. Units	Std.Dev.	Sample Conc. Units	Std.Dev.	RSD
Y 371.029	2442758.4				17675.81	0.72%
YRADIAL	295046.7				3294.98	1.12%
Ga 417.206	1232541.8				32778.79	2.66%
GaRADIAL	76763.5				1090.93	1.42%
Ag 328.068†	63354.7	0.196 mg/L	0.0071	0.196 mg/L	0.0071	3.63%
Al 396.153†	33983.5	5.09 mg/L	0.025	5.09 mg/L	0.025	0.49%
As 188.979†	511.6	0.183 mg/L	0.0036	0.183 mg/L	0.0036	1.95%
Ba 233.527†	73645.7	0.499 mg/L	0.0075	0.499 mg/L	0.0075	1.50%
Be 234.861†	26577.0	0.0235 mg/L	0.00104	0.0235 mg/L	0.00104	4.43%
B 249.677†	90303.6	0.963 mg/L	0.0361	0.963 mg/L	0.0361	3.75%
Ca 227.546†	2543.4	6.92 mg/L	0.211	6.92 mg/L	0.211	3.05%
Cd 228.802†	1060.3	0.0230 mg/L	0.00101	0.0230 mg/L	0.00101	4.40%
Co 228.616†	3616.9	0.0977 mg/L	0.00111	0.0977 mg/L	0.00111	1.14%
Cr 267.716†	31835.7	0.245 mg/L	0.0035	0.245 mg/L	0.0035	1.43%
Cu 327.393†	66259.4	0.246 mg/L	0.0071	0.246 mg/L	0.0071	2.88%
Fe 239.562†	22024.9	2.31 mg/L	0.016	2.31 mg/L	0.016	0.71%
Mg 279.077†	16152.1	5.82 mg/L	0.059	5.82 mg/L	0.059	1.02%
Mn 257.610†	223507.1	0.266 mg/L	0.0024	0.266 mg/L	0.0024	0.90%
Mo 202.031†	14188.2	0.480 mg/L	0.0069	0.480 mg/L	0.0069	1.45%
Ni 231.604†	15396.9	0.258 mg/L	0.0027	0.258 mg/L	0.0027	1.04%
Pb 220.353†	2569.0	0.245 mg/L	0.0037	0.245 mg/L	0.0037	1.51%
Sb 206.836†	2042.0	0.570 mg/L	0.0161	0.570 mg/L	0.0161	2.82%
Se 196.026†	305.8	0.190 mg/L	0.0049	0.190 mg/L	0.0049	2.60%
Si 251.611†	354822.2	7.50 mg/L	0.215	7.50 mg/L	0.215	2.87%
Sn 189.927†	4882.2	0.511 mg/L	0.0050	0.511 mg/L	0.0050	0.98%
Ti 334.940†	548180.5	0.492 mg/L	0.0013	0.492 mg/L	0.0013	0.27%
Tl 190.801†	739.8	0.257 mg/L	0.0021	0.257 mg/L	0.0021	0.80%
V 290.880†	113104.2	0.493 mg/L	0.0073	0.493 mg/L	0.0073	1.48%
Zn 206.200†	21142.3	0.476 mg/L	0.0125	0.476 mg/L	0.0125	2.63%
K 766.490†	74544.1	24.9 mg/L	0.08	24.9 mg/L	0.08	0.34%
Na 589.592†	521390.8	26.2 mg/L	0.32	26.2 mg/L	0.32	1.24%
Sr 407.771†	1240430.6	0.518 mg/L	0.0067	0.518 mg/L	0.0067	1.30%
Li 670.784†	68257.7	0.510 mg/L	0.0039	0.510 mg/L	0.0039	0.76%

User canceled analysis.

Approved: November 20, 2012

Ken H. Rhodes

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Analysis Begun

Start Time: 11/19/2012 12:53:26 PM

Plasma On Time: 11/19/2012 5:57:57 AM

Logged In Analyst: peicp2

Technique: ICP Continuous

Spectrometer Model: Optima 4300 DV, S/N 077N401140 Autosampler Model: Cetac

Sample Information File: C:\pe\peicp2\Sample Information\MONDAY1.sif

Batch ID:

Results Data Set: 111912HR

Results Library: C:\pe\peicp2\Results\Results.mdb

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Sequence No.: 1

Autosampler Location: 42

Sample ID: L1211044714

Date Collected: 11/19/2012 12:53:28 PM

Analyst: KHR

Data Type: Original

Initial Sample Wt:

Initial Sample Vol:

Dilution:

Sample Prep Vol:

Nebulizer Parameters: L1211044714

Analyte

Back Pressure

Flow

All

175.0 kPa

0.50 L/min

Mean Data: L1211044714

Analyste	Mean Corrected Intensity	Conc.	Calib. Units	Std.Dev.	Sample Conc.	Units	Std.Dev.	RSD
Y 371.029	2498858.9						26678.17	1.07%
YRADIAL	298042.8						2677.89	0.90%
Ga 417.206	1252176.6						17550.35	1.40%
GaRADIAL	78401.2						886.43	1.13%
Ag 328.068†	102.6	-0.00024	mg/L	0.000327	-0.00024	mg/L	0.000327	135.19%
Al 396.153†	1314.9	0.183	mg/L	0.0016	0.183	mg/L	0.0016	0.88%
As 188.979†	-0.4	-0.00015	mg/L	0.000894	-0.00015	mg/L	0.000894	580.64%
Ba 233.527†	1849.4	0.0106	mg/L	0.00016	0.0106	mg/L	0.00016	1.50%
Be 234.861†	572.1	0.00038	mg/L	0.000093	0.00038	mg/L	0.000093	24.18%
B 249.677†	1322.6	0.0154	mg/L	0.00053	0.0154	mg/L	0.00053	3.45%
Ca 227.546†	879.2	2.32	mg/L	0.038	2.32	mg/L	0.038	1.65%
Cd 228.802†	8.9	0.00021	mg/L	0.000207	0.00021	mg/L	0.000207	99.52%
Co 228.616†	21.1	0.00003	mg/L	0.000448	0.00003	mg/L	0.000448	>999.9%
Cr 267.716†	44.5	-0.00035	mg/L	0.000062	-0.00035	mg/L	0.000062	17.48%
Cu 327.393†	387.0	0.00073	mg/L	0.000595	0.00073	mg/L	0.000595	81.32%
Fe 239.562†	4793.7	0.497	mg/L	0.0096	0.497	mg/L	0.0096	1.93%
Mg 279.077†	3126.7	1.12	mg/L	0.019	1.12	mg/L	0.019	1.70%
Mn 257.610†	14798.0	0.0156	mg/L	0.00033	0.0156	mg/L	0.00033	2.13%
Mo 202.031†	11.7	-0.00040	mg/L	0.000451	-0.00040	mg/L	0.000451	113.61%
Ni 231.604†	93.1	-0.00011	mg/L	0.000430	-0.00011	mg/L	0.000430	386.85%
Pb 220.353†	-28.1	-0.00353	mg/L	0.001449	-0.00353	mg/L	0.001449	40.99%
Sb 206.836†	-1.7	-0.00039	mg/L	0.000556	-0.00039	mg/L	0.000556	143.25%
Se 196.026†	7.5	0.00554	mg/L	0.002978	0.00554	mg/L	0.002978	53.73%
Si 251.611†	254173.6	5.37	mg/L	0.087	5.37	mg/L	0.087	1.62%
Sn 189.927†	-54.4	-0.00655	mg/L	0.000205	-0.00655	mg/L	0.000205	3.13%
Ti 334.940†	3903.8	0.00334	mg/L	0.000110	0.00334	mg/L	0.000110	3.30%
Tl 190.801†	-1.3	-0.00193	mg/L	0.002170	-0.00193	mg/L	0.002170	112.20%
V 290.880†	418.3	-0.00012	mg/L	0.000379	-0.00012	mg/L	0.000379	305.03%
Zn 206.200†	128.2	0.00109	mg/L	0.000201	0.00109	mg/L	0.000201	18.55%
K 766.490†	2650.3	0.895	mg/L	0.0054	0.895	mg/L	0.0054	0.60%
Na 589.592†	44897.4	2.23	mg/L	0.024	2.23	mg/L	0.024	1.09%
Sr 407.771†	43177.7	0.0152	mg/L	0.00007	0.0152	mg/L	0.00007	0.44%
Li 670.784†	226.3	-0.00128	mg/L	0.000215	-0.00128	mg/L	0.000215	16.79%

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Sequence No.: 2

Autosampler Location: 6

Sample ID: CCV

Date Collected: 11/19/2012 12:59:26 PM

Analyst:

Data Type: Original

Initial Sample Wt:

Initial Sample Vol:

Dilution:

Sample Prep Vol:

Nebulizer Parameters: CCV

Approved: November 20, 2012

Ken H. Rhodes

Analyte Back Pressure Flow
All 176.0 kPa 0.50 L/min

Mean Data: CCV

Analyte	Mean Corrected Intensity	Calib. Conc. Units	Std.Dev.	Sample Conc. Units	Std.Dev.	RSD
Y 371.029	2391711.2				23492.90	0.98%
YRADIAL	284573.3				1585.39	0.56%
Ga 417.206	1173857.8				21185.63	1.80%
GaRADIAL	73813.5				549.14	0.74%
Ag 328.068†	130853.9	0.405 mg/L	0.0109	0.405 mg/L	0.0109	2.70%
QC value within limits for Ag		328.068 Recovery = 101.28%				
Al 396.153†	65998.5	9.90 mg/L	0.021	9.90 mg/L	0.021	0.22%
QC value within limits for Al		396.153 Recovery = 99.00%				
As 188.979†	1097.4	0.393 mg/L	0.0084	0.393 mg/L	0.0084	2.13%
QC value within limits for As		188.979 Recovery = 98.21%				
Ba 233.527†	147798.1	1.00 mg/L	0.012	1.00 mg/L	0.012	1.24%
QC value within limits for Ba		233.527 Recovery = 100.37%				
Be 234.861†	55834.2	0.0495 mg/L	0.00125	0.0495 mg/L	0.00125	2.53%
QC value within limits for Be		234.861 Recovery = 99.08%				
B 249.677†	47230.3	0.502 mg/L	0.0134	0.502 mg/L	0.0134	2.67%
QC value within limits for B		249.677 Recovery = 100.31%				
Ca 227.546†	3768.5	10.4 mg/L	0.24	10.4 mg/L	0.24	2.27%
QC value within limits for Ca		227.546 Recovery = 103.51%				
Cd 228.802†	2233.5	0.0484 mg/L	0.00196	0.0484 mg/L	0.00196	4.04%
QC value within limits for Cd		228.802 Recovery = 96.83%				
Co 228.616†	7370.9	0.200 mg/L	0.0015	0.200 mg/L	0.0015	0.74%
QC value within limits for Co		228.616 Recovery = 99.90%				
Cr 267.716†	64806.8	0.500 mg/L	0.0046	0.500 mg/L	0.0046	0.92%
QC value within limits for Cr		267.716 Recovery = 99.96%				
Cu 327.393†	135644.6	0.505 mg/L	0.0128	0.505 mg/L	0.0128	2.54%
QC value within limits for Cu		327.393 Recovery = 100.96%				
Fe 239.562†	38230.9	4.01 mg/L	0.024	4.01 mg/L	0.024	0.60%
QC value within limits for Fe		239.562 Recovery = 100.25%				
Mg 279.077†	27914.7	10.1 mg/L	0.11	10.1 mg/L	0.11	1.06%
QC value within limits for Mg		279.077 Recovery = 100.60%				
Mn 257.610†	425727.2	0.509 mg/L	0.0074	0.509 mg/L	0.0074	1.46%
QC value within limits for Mn		257.610 Recovery = 101.88%				
Mo 202.031†	29127.2	0.985 mg/L	0.0113	0.985 mg/L	0.0113	1.14%
QC value within limits for Mo		202.031 Recovery = 98.55%				
Ni 231.604†	29882.6	0.502 mg/L	0.0057	0.502 mg/L	0.0057	1.13%
QC value within limits for Ni		231.604 Recovery = 100.38%				
Pb 220.353†	5236.3	0.501 mg/L	0.0049	0.501 mg/L	0.0049	0.98%
QC value within limits for Pb		220.353 Recovery = 100.15%				
Sb 206.836†	4246.8	1.19 mg/L	0.036	1.19 mg/L	0.036	3.00%
QC value within limits for Sb		206.836 Recovery = 98.85%				
Se 196.026†	649.1	0.401 mg/L	0.0140	0.401 mg/L	0.0140	3.50%
QC value within limits for Se		196.026 Recovery = 100.37%				
Si 251.611†	239435.6	5.05 mg/L	0.072	5.05 mg/L	0.072	1.43%
QC value within limits for Si		251.611 Recovery = 101.01%				
Sn 189.927†	9447.0	0.990 mg/L	0.0055	0.990 mg/L	0.0055	0.55%
QC value within limits for Sn		189.927 Recovery = 99.03%				
Ti 334.940†	1102895.0	0.989 mg/L	0.0029	0.989 mg/L	0.0029	0.30%
QC value within limits for Ti		334.940 Recovery = 98.89%				
Tl 190.801†	1475.6	0.515 mg/L	0.0034	0.515 mg/L	0.0034	0.65%
QC value within limits for Tl		190.801 Recovery = 103.04%				
V 290.880†	230256.8	1.00 mg/L	0.012	1.00 mg/L	0.012	1.21%
QC value within limits for V		290.880 Recovery = 100.47%				
Zn 206.200†	43928.3	0.990 mg/L	0.0029	0.990 mg/L	0.0029	0.30%
QC value within limits for Zn		206.200 Recovery = 99.03%				
K 766.490†	148054.5	49.6 mg/L	0.43	49.6 mg/L	0.43	0.87%
QC value within limits for K		766.490 Recovery = 99.19%				
Na 589.592†	998359.5	50.7 mg/L	0.55	50.7 mg/L	0.55	1.09%
QC value within limits for Na		589.592 Recovery = 101.38%				
Sr 407.771†	2479913.8	1.04 mg/L	0.000	1.04 mg/L	0.000	0.05%
QC value within limits for Sr		407.771 Recovery = 103.77%				
Li 670.784†	133420.4	0.999 mg/L	0.0019	0.999 mg/L	0.0019	0.19%
QC value within limits for Li		670.784 Recovery = 99.92%				

All analyte(s) passed QC.

Approved: November 20, 2012

Ken H. Rhodes

Sequence No.: 3
 Sample ID: CCB
 Analyst:
 Initial Sample Wt:
 Dilution:

AutoSampler Location: 1
 Date Collected: 11/19/2012 1:05:27 PM
 Data Type: Original
 Initial Sample Vol:
 Sample Prep Vol:

Nebulizer Parameters: CCB

Analyte Back Pressure Flow
 All 175.0 kPa 0.50 L/min

Mean Data: CCB

Analyte	Mean Corrected Intensity	Conc. Units	Calib.	Std.Dev.	Sample Conc. Units	Std.Dev.	RSD
Y 371.029	2503531.9					12296.12	0.49%
YRADIAL	290312.2					508.22	0.18%
Ga 417.206	1222373.6					16866.31	1.38%
GaRADIAL	77581.5					2520.17	3.25%
Ag 328.068†	139.3	-0.00036 mg/L	0.000278	-0.00036 mg/L	0.000278	78.07%	
QC value within limits for Ag	328.068	Recovery = Not calculated					
Al 396.153†	19.9	-0.0127 mg/L	0.00025	-0.0127 mg/L	0.00025	1.96%	
QC value within limits for Al	396.153	Recovery = Not calculated					
As 188.979†	2.8	0.00087 mg/L	0.002679	0.00087 mg/L	0.002679	306.48%	
QC value within limits for As	188.979	Recovery = Not calculated					
Ba 233.527†	16.3	-0.00185 mg/L	0.000124	-0.00185 mg/L	0.000124	6.70%	
QC value within limits for Ba	233.527	Recovery = Not calculated					
Be 234.861†	69.6	0.00004 mg/L	0.000026	0.00004 mg/L	0.000026	62.21%	
QC value within limits for Be	234.861	Recovery = Not calculated					
B 249.677†	731.3	0.00933 mg/L	0.000519	0.00933 mg/L	0.000519	5.56%	
QC value within limits for B	249.677	Recovery = Not calculated					
Ca 227.546†	24.1	0.0647 mg/L	0.02021	0.0647 mg/L	0.02021	31.25%	
QC value within limits for Ca	227.546	Recovery = Not calculated					
Cd 228.802†	1.9	0.00004 mg/L	0.000219	0.00004 mg/L	0.000219	499.18%	
QC value within limits for Cd	228.802	Recovery = Not calculated					
Co 228.616†	-3.7	-0.00062 mg/L	0.000077	-0.00062 mg/L	0.000077	12.38%	
QC value within limits for Co	228.616	Recovery = Not calculated					
Cr 267.716†	5.7	-0.00064 mg/L	0.000028	-0.00064 mg/L	0.000028	4.40%	
QC value within limits for Cr	267.716	Recovery = Not calculated					
Cu 327.393†	166.6	-0.00014 mg/L	0.000317	-0.00014 mg/L	0.000317	220.86%	
QC value within limits for Cu	327.393	Recovery = Not calculated					
Fe 239.562†	22.3	-0.00414 mg/L	0.000442	-0.00414 mg/L	0.000442	10.67%	
QC value within limits for Fe	239.562	Recovery = Not calculated					
Mg 279.077†	12.3	-0.00517 mg/L	0.001873	-0.00517 mg/L	0.001873	36.22%	
QC value within limits for Mg	279.077	Recovery = Not calculated					
Mn 257.610†	1043.7	-0.00090 mg/L	0.000064	-0.00090 mg/L	0.000064	7.09%	
QC value within limits for Mn	257.610	Recovery = Not calculated					
Mo 202.031†	0.8	-0.00079 mg/L	0.000098	-0.00079 mg/L	0.000098	12.37%	
QC value within limits for Mo	202.031	Recovery = Not calculated					
Ni 231.604†	18.1	-0.00137 mg/L	0.000151	-0.00137 mg/L	0.000151	10.99%	
QC value within limits for Ni	231.604	Recovery = Not calculated					
Pb 220.353†	-0.6	-0.00089 mg/L	0.001521	-0.00089 mg/L	0.001521	171.51%	
QC value within limits for Pb	220.353	Recovery = Not calculated					
Sb 206.836†	1.0	0.00035 mg/L	0.001299	0.00035 mg/L	0.001299	371.57%	
QC value within limits for Sb	206.836	Recovery = Not calculated					
Se 196.026†	9.1	0.00646 mg/L	0.003474	0.00646 mg/L	0.003474	53.81%	
QC value within limits for Se	196.026	Recovery = Not calculated					
Si 251.611†	41.3	-0.00939 mg/L	0.000394	-0.00939 mg/L	0.000394	4.19%	
QC value within limits for Si	251.611	Recovery = Not calculated					
Sn 189.927†	-24.5	-0.00342 mg/L	0.000209	-0.00342 mg/L	0.000209	6.12%	
QC value within limits for Sn	189.927	Recovery = Not calculated					
Ti 334.940†	111.0	-0.00039 mg/L	0.000059	-0.00039 mg/L	0.000059	15.07%	
QC value within limits for Ti	334.940	Recovery = Not calculated					
Tl 190.801†	-3.7	-0.00281 mg/L	0.002276	-0.00281 mg/L	0.002276	81.00%	
QC value within limits for Tl	190.801	Recovery = Not calculated					
V 290.880†	93.7	-0.00148 mg/L	0.000760	-0.00148 mg/L	0.000760	51.17%	
QC value within limits for V	290.880	Recovery = Not calculated					
Zn 206.200†	6.8	-0.00160 mg/L	0.000152	-0.00160 mg/L	0.000152	9.51%	
QC value within limits for Zn	206.200	Recovery = Not calculated					
K 766.490†	93.3	0.0477 mg/L	0.02211	0.0477 mg/L	0.02211	46.36%	
QC value within limits for K	766.490	Recovery = Not calculated					
Na 589.592†	733.8	0.0359 mg/L	0.00385	0.0359 mg/L	0.00385	10.74%	

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QC value within limits for Na 589.592 Recovery = Not calculated
 Sr 407.771† 421.5 -0.00269 mg/L 0.000013 -0.00269 mg/L 0.000013 0.48%
 QC value within limits for Sr 407.771 Recovery = Not calculated
 Li 670.784† 69.6 -0.00246 mg/L 0.000264 -0.00246 mg/L 0.000264 10.73%
 QC value within limits for Li 670.784 Recovery = Not calculated
 All analyte(s) passed QC.

Sequence No.: 4

Sample ID: L1211044717

Analyst: KHR

Initial Sample Wt:

Dilution:

Udosampler Location: 43

Date Collected: 11/19/2012 1:12:20 PM

Data Type: Original

Initial Sample Vol:

Sample Prep Vol:

Nebulizer Parameters: L1211044717

Analyste Back Pressure Flow
 All 176.0 kPa 0.50 L/min

Mean Data: L1211044717

Analyste	Mean Corrected Intensity	Calib. Conc. Units	Std.Dev.	Sample Conc. Units	Std.Dev.	RSD
Y 371.029	2515659.8				13946.27	0.55%
YRADIAL	299035.3				1720.77	0.58%
Ga 417.206	1263117.7				42382.68	3.36%
GARADIAL	78758.3				759.72	0.96%
Ag 328.068†	85.6	-0.00028 mg/L	0.000185	-0.00028 mg/L	0.000185	65.08%
Al 396.153†	1382.6	0.193 mg/L	0.0043	0.193 mg/L	0.0043	2.23%
As 188.979†	-3.6	-0.00132 mg/L	0.001383	-0.00132 mg/L	0.001383	104.73%
Ba 233.527†	1891.6	0.0109 mg/L	0.00034	0.0109 mg/L	0.00034	3.09%
Be 234.861†	524.9	0.00034 mg/L	0.000107	0.00034 mg/L	0.000107	31.70%
B 249.677†	941.3	0.0113 mg/L	0.00080	0.0113 mg/L	0.00080	7.05%
Ca 227.546†	915.9	2.42 mg/L	0.095	2.42 mg/L	0.095	3.92%
Cd 228.802†	6.5	0.00016 mg/L	0.000213	0.00016 mg/L	0.000213	132.96%
Co 228.616†	17.9	-0.00006 mg/L	0.000284	-0.00006 mg/L	0.000284	513.21%
Cr 267.716†	34.5	-0.00043 mg/L	0.000116	-0.00043 mg/L	0.000116	27.07%
Cu 327.393†	397.3	0.00077 mg/L	0.000244	0.00077 mg/L	0.000244	31.66%
Fe 239.562†	4984.6	0.517 mg/L	0.0087	0.517 mg/L	0.0087	1.67%
Mg 279.077†	3163.5	1.13 mg/L	0.013	1.13 mg/L	0.013	1.15%
Mn 257.610†	14941.9	0.0158 mg/L	0.00023	0.0158 mg/L	0.00023	1.46%
Mo 202.031†	14.6	-0.00030 mg/L	0.000268	-0.00030 mg/L	0.000268	90.19%
Ni 231.604†	90.1	-0.00016 mg/L	0.000531	-0.00016 mg/L	0.000531	329.91%
Pb 220.353†	-22.7	-0.00302 mg/L	0.001733	-0.00302 mg/L	0.001733	57.39%
Sb 206.836†	-4.4	-0.00116 mg/L	0.000993	-0.00116 mg/L	0.000993	85.43%
Se 196.026†	5.3	0.00424 mg/L	0.000819	0.00424 mg/L	0.000819	19.32%
Si 251.611†	262959.7	5.56 mg/L	0.148	5.56 mg/L	0.148	2.66%
Sn 189.927†	-60.9	-0.00723 mg/L	0.000303	-0.00723 mg/L	0.000303	4.20%
Ti 334.940†	3991.3	0.00344 mg/L	0.000056	0.00344 mg/L	0.000056	1.62%
Tl 190.801†	0.6	-0.00131 mg/L	0.004444	-0.00131 mg/L	0.004444	339.95%
V 290.880†	463.8	0.00007 mg/L	0.000858	0.00007 mg/L	0.000858	>999.9%
Zn 206.200†	110.9	0.00069 mg/L	0.000016	0.00069 mg/L	0.000016	2.37%
K 766.490†	2647.6	0.894 mg/L	0.0180	0.894 mg/L	0.0180	2.01%
Na 589.592†	46279.3	2.30 mg/L	0.021	2.30 mg/L	0.021	0.90%
Sr 407.771†	44833.3	0.0159 mg/L	0.00031	0.0159 mg/L	0.00031	1.95%
Li 670.784†	165.5	-0.00174 mg/L	0.000535	-0.00174 mg/L	0.000535	30.76%

Sequence No.: 5

Sample ID: L1211044720

Analyst: KHR

Initial Sample Wt:

Dilution:

Udosampler Location: 44

Date Collected: 11/19/2012 1:18:19 PM

Data Type: Original

Initial Sample Vol:

Sample Prep Vol:

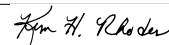
Nebulizer Parameters: L1211044720

Analyste Back Pressure Flow
 All 175.0 kPa 0.50 L/min

Mean Data: L1211044720

Mean Corrected Calib. Sample

Approved: November 20, 2012



Analyte	Intensity	Conc. Units	Std.Dev.	Conc. Units	Std.Dev.	RSD
Y 371.029	2479261.5				40115.75	1.62%
YRADIAL	289249.0				3419.72	1.18%
Ga 417.206	1269561.5				13398.37	1.06%
GaRADIAL	77821.8				1501.27	1.93%
Ag 328.068†	39.6	-0.00066 mg/L	0.000193	-0.00066 mg/L	0.000193	29.34%
Al 396.153†	16.8	-0.0132 mg/L	0.00139	-0.0132 mg/L	0.00139	10.56%
As 188.979†	0.6	0.00008 mg/L	0.000821	0.00008 mg/L	0.000821	>999.9%
Ba 233.527†	98.8	-0.00129 mg/L	0.000111	-0.00129 mg/L	0.000111	8.58%
Be 234.861†	134.7	0.00010 mg/L	0.000008	0.00010 mg/L	0.000008	8.37%
B 249.677†	554.7	0.00745 mg/L	0.000040	0.00745 mg/L	0.000040	0.54%
Ca 227.546†	29.1	0.00775 mg/L	0.000690	0.00775 mg/L	0.000690	8.91%
Cd 228.802†	-3.8	-0.00008 mg/L	0.000075	-0.00008 mg/L	0.000075	95.50%
Co 228.616†	-1.7	-0.00057 mg/L	0.000026	-0.00057 mg/L	0.000026	4.58%
Cr 267.716†	8.0	-0.00062 mg/L	0.000043	-0.00062 mg/L	0.000043	6.89%
Cu 327.393†	181.8	-0.00009 mg/L	0.000278	-0.00009 mg/L	0.000278	322.20%
Fe 239.562†	15.3	-0.00487 mg/L	0.000520	-0.00487 mg/L	0.000520	10.68%
Mg 279.077†	0.1	-0.00957 mg/L	0.001290	-0.00957 mg/L	0.001290	13.49%
Mn 257.610†	861.6	-0.00112 mg/L	0.000038	-0.00112 mg/L	0.000038	3.37%
Mo 202.031†	-6.9	-0.00105 mg/L	0.000270	-0.00105 mg/L	0.000270	25.60%
Ni 231.604†	5.3	-0.00159 mg/L	0.000169	-0.00159 mg/L	0.000169	10.61%
Pb 220.353†	3.9	-0.00046 mg/L	0.001774	-0.00046 mg/L	0.001774	389.09%
Sb 206.836†	1.1	0.00037 mg/L	0.001505	0.00037 mg/L	0.001505	406.02%
Se 196.026†	5.0	0.00396 mg/L	0.001644	0.00396 mg/L	0.001644	41.55%
Si 251.611†	18049.2	0.372 mg/L	0.0046	0.372 mg/L	0.0046	1.23%
Sn 189.927†	-34.1	-0.00442 mg/L	0.000911	-0.00442 mg/L	0.000911	20.63%
Ti 334.940†	-29.7	-0.00052 mg/L	0.000201	-0.00052 mg/L	0.000201	38.99%
Tl 190.801†	-7.7	-0.00415 mg/L	0.002568	-0.00415 mg/L	0.002568	61.84%
V 290.880†	437.7	0.00002 mg/L	0.001603	0.00002 mg/L	0.001603	>999.9%
Zn 206.200†	83.9	0.00013 mg/L	0.000040	0.00013 mg/L	0.000040	30.48%
K 766.490†	38.3	0.0286 mg/L	0.00333	0.0286 mg/L	0.00333	11.66%
Na 589.592†	18077.1	0.896 mg/L	0.0236	0.896 mg/L	0.0236	2.63%
Sr 407.771†	670.7	-0.00258 mg/L	0.000021	-0.00258 mg/L	0.000021	0.80%
Li 670.784†	-9.7	-0.00305 mg/L	0.000376	-0.00305 mg/L	0.000376	12.31%

Sequence No.: 6

Sample ID: L1211044723

Analyst: KHR

Initial Sample Wt:

Dilution:

Autosampler Location: 45

Date Collected: 11/19/2012 1:25:14 PM

Data Type: Original

Initial Sample Vol:

Sample Prep Vol:

Nebulizer Parameters: L1211044723

Analyte	Back Pressure	Flow
All	176.0 kPa	0.50 L/min

Mean Data: L1211044723

Analyte	Mean Corrected Intensity	Calib. Conc. Units	Std.Dev.	Sample Conc. Units	Std.Dev.	RSD
Y 371.029	2452694.8				43604.13	1.78%
YRADIAL	290965.5				2557.18	0.88%
Ga 417.206	1242050.8				4812.45	0.39%
GaRADIAL	78270.2				2878.55	3.68%
Ag 328.068†	97.7	-0.00048 mg/L	0.000373	-0.00048 mg/L	0.000373	77.45%
Al 396.153†	22.0	-0.0124 mg/L	0.00100	-0.0124 mg/L	0.00100	8.07%
As 188.979†	-0.8	-0.00042 mg/L	0.000665	-0.00042 mg/L	0.000665	157.07%
Ba 233.527†	112.7	-0.00120 mg/L	0.000102	-0.00120 mg/L	0.000102	8.52%
Be 234.861†	93.3	0.00006 mg/L	0.000041	0.00006 mg/L	0.000041	66.52%
B 249.677†	532.5	0.00721 mg/L	0.000257	0.00721 mg/L	0.000257	3.56%
Ca 227.546†	20.6	0.0551 mg/L	0.01201	0.0551 mg/L	0.01201	21.81%
Cd 228.802†	-4.3	-0.00009 mg/L	0.000124	-0.00009 mg/L	0.000124	142.55%
Co 228.616†	-3.9	-0.00063 mg/L	0.000270	-0.00063 mg/L	0.000270	43.09%
Cr 267.716†	-3.7	-0.00071 mg/L	0.000082	-0.00071 mg/L	0.000082	11.63%
Cu 327.393†	277.6	0.00027 mg/L	0.000403	0.00027 mg/L	0.000403	149.51%
Fe 239.562†	16.0	-0.00480 mg/L	0.000329	-0.00480 mg/L	0.000329	6.86%
Mg 279.077†	-3.7	-0.0109 mg/L	0.00240	-0.0109 mg/L	0.00240	21.89%
Mn 257.610†	790.7	-0.00120 mg/L	0.000055	-0.00120 mg/L	0.000055	4.59%
Mo 202.031†	-8.8	-0.00112 mg/L	0.000078	-0.00112 mg/L	0.000078	6.96%
Ni 231.604†	-1.7	-0.00171 mg/L	0.000225	-0.00171 mg/L	0.000225	13.15%
Pb 220.353†	-1.9	-0.00101 mg/L	0.001419	-0.00101 mg/L	0.001419	140.00%

Approved: November 20, 2012

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Sb 206.836†	-2.1	-0.00053 mg/L	0.000658	-0.00053 mg/L	0.000658	125.34%
Se 196.026†	3.8	0.00321 mg/L	0.005496	0.00321 mg/L	0.005496	171.28%
Si 251.611†	12980.3	0.265 mg/L	0.0027	0.265 mg/L	0.0027	1.04%
Sn 189.927†	-29.2	-0.00391 mg/L	0.000573	-0.00391 mg/L	0.000573	14.67%
Ti 334.940†	236.5	-0.00028 mg/L	0.000061	-0.00028 mg/L	0.000061	21.91%
Tl 190.801†	-6.5	-0.00374 mg/L	0.002005	-0.00374 mg/L	0.002005	53.69%
V 290.880†	377.4	-0.00024 mg/L	0.000729	-0.00024 mg/L	0.000729	300.30%
Zn 206.200†	130.7	0.00118 mg/L	0.000067	0.00118 mg/L	0.000067	5.65%
K 766.490†	-11.9	0.0117 mg/L	0.00906	0.0117 mg/L	0.00906	77.16%
Na 589.592†	20672.1	1.02 mg/L	0.014	1.02 mg/L	0.014	1.41%
Sr 407.771†	753.2	-0.00255 mg/L	0.000042	-0.00255 mg/L	0.000042	1.63%
Li 670.784†	-16.9	-0.00311 mg/L	0.000244	-0.00311 mg/L	0.000244	7.84%

Sequence No.: 7

Sample ID: L1211043901 WG414452-01

Analyst: KHR

Initial Sample Wt:

Dilution:

UASampler Location: 50

Date Collected: 11/19/2012 1:32:11 PM

Data Type: Original

Initial Sample Vol:

Sample Prep Vol:

Nebulizer Parameters: L1211043901 WG414452-01

Analyte	Back Pressure	Flow
All	175.0 kPa	0.50 L/min

Mean Data: L1211043901 WG414452-01

Analyte	Mean Corrected Intensity	Calib. Conc. Units	Std.Dev.	Sample Conc. Units	Std.Dev.	RSD
Y 371.029	2436422.5				26774.74	1.10%
YRADIAL	282791.7				1709.87	0.60%
Ga 417.206	1252286.5				19882.44	1.59%
GaRADIAL	77938.0				2823.06	3.62%
Ag 328.068†	155.4	-0.00018 mg/L	0.000216	-0.00018 mg/L	0.000216	120.34%
Al 396.153†	4493.4	0.664 mg/L	0.0694	0.664 mg/L	0.0694	10.45%
As 188.979†	-0.5	-0.00027 mg/L	0.001841	-0.00027 mg/L	0.001841	683.45%
Ba 233.527†	188.3	-0.00070 mg/L	0.000182	-0.00070 mg/L	0.000182	26.02%
Be 234.861†	543.4	0.00041 mg/L	0.000081	0.00041 mg/L	0.000081	19.78%
B 249.677†	297.4	0.00453 mg/L	0.000207	0.00453 mg/L	0.000207	4.57%
Ca 227.546†	1972.2	5.18 mg/L	0.156	5.18 mg/L	0.156	3.02%
Cd 228.802†	-4.2	-0.00008 mg/L	0.000102	-0.00008 mg/L	0.000102	135.64%
Co 228.616†	117.4	0.00268 mg/L	0.000266	0.00268 mg/L	0.000266	9.94%
Cr 267.716†	-1.3	-0.00069 mg/L	0.000152	-0.00069 mg/L	0.000152	21.84%
Cu 327.393†	289.2	0.00035 mg/L	0.000132	0.00035 mg/L	0.000132	38.00%
Fe 239.562†	3355.7	0.346 mg/L	0.0351	0.346 mg/L	0.0351	10.14%
Mg 279.077†	2087.1	0.742 mg/L	0.0655	0.742 mg/L	0.0655	8.82%
Mn 257.610†	188558.3	0.224 mg/L	0.0081	0.224 mg/L	0.0081	3.62%
Mo 202.031†	1.2	-0.00072 mg/L	0.000153	-0.00072 mg/L	0.000153	21.31%
Ni 231.604†	101.9	0.00004 mg/L	0.000273	0.00004 mg/L	0.000273	768.57%
Pb 220.353†	17.1	0.00076 mg/L	0.000133	0.00076 mg/L	0.000133	17.38%
Sb 206.836†	-0.8	-0.00015 mg/L	0.000484	-0.00015 mg/L	0.000484	318.55%
Se 196.026†	1.4	0.00178 mg/L	0.001573	0.00178 mg/L	0.001573	88.59%
Si 251.611†	8053.8	0.160 mg/L	0.0075	0.160 mg/L	0.0075	4.70%
Sn 189.927†	-87.6	-0.0100 mg/L	0.00064	-0.0100 mg/L	0.00064	6.34%
Ti 334.940†	-1015.3	-0.00063 mg/L	0.000013	-0.00063 mg/L	0.000013	2.04%
Tl 190.801†	2.1	-0.00104 mg/L	0.002323	-0.00104 mg/L	0.002323	224.06%
V 290.880†	273.1	-0.00074 mg/L	0.001455	-0.00074 mg/L	0.001455	196.54%
Zn 206.200†	485.0	0.00912 mg/L	0.000278	0.00912 mg/L	0.000278	3.05%
K 766.490†	479.7	0.172 mg/L	0.0151	0.172 mg/L	0.0151	8.81%
Na 589.592†	90872.5	4.51 mg/L	0.374	4.51 mg/L	0.374	8.28%
Sr 407.771†	74624.7	0.0284 mg/L	0.00134	0.0284 mg/L	0.00134	4.74%
Li 670.784†	100.8	-0.00222 mg/L	0.000207	-0.00222 mg/L	0.000207	9.30%

Sequence No.: 8

Sample ID: L1211043903S WG414452-06

Analyst: KHR

Initial Sample Wt:

Dilution:

UASampler Location: 51

Date Collected: 11/19/2012 1:39:05 PM

Data Type: Original

Initial Sample Vol:

Sample Prep Vol:

Nebulizer Parameters: L1211043903S WG414452-06

Approved: November 20, 2012

Ken H. Rhodes

Analyte Back Pressure Flow
All 176.0 kPa 0.50 L/min

Mean Data: L1211043903S WG414452-06

Analyte	Mean Corrected Intensity	Conc. Units	Calib. Units	Std.Dev.	Sample Conc. Units	Std.Dev.	RSD
Y 371.029	2454496.8					15971.74	0.65%
YRADIAL	286394.9					4586.20	1.60%
Ga 417.206	1264245.7					20305.00	1.61%
GaRADIAL	78313.2					2186.05	2.79%
Ag 328.068†	595.5	0.00118 mg/L		0.000310	0.00118 mg/L	0.000310	26.33%
Al 396.153†	4419.1	0.652 mg/L		0.0439	0.652 mg/L	0.0439	6.72%
As 188.979†	5.1	0.00172 mg/L		0.000502	0.00172 mg/L	0.000502	29.13%
Ba 233.527†	940.4	0.00442 mg/L		0.000164	0.00442 mg/L	0.000164	3.71%
Be 234.861†	733.4	0.00059 mg/L		0.000034	0.00059 mg/L	0.000034	5.86%
B 249.677†	1148.9	0.0136 mg/L		0.00033	0.0136 mg/L	0.00033	2.44%
Ca 227.546†	2079.8	5.47 mg/L		0.134	5.47 mg/L	0.134	2.45%
Cd 228.802†	6.8	0.00016 mg/L		0.000191	0.00016 mg/L	0.000191	116.46%
Co 228.616†	159.4	0.00382 mg/L		0.000210	0.00382 mg/L	0.000210	5.51%
Cr 267.716†	317.9	0.00177 mg/L		0.000013	0.00177 mg/L	0.000013	0.73%
Cu 327.393†	923.4	0.00271 mg/L		0.000215	0.00271 mg/L	0.000215	7.93%
Fe 239.562†	3300.8	0.340 mg/L		0.0181	0.340 mg/L	0.0181	5.32%
Mg 279.077†	2010.2	0.714 mg/L		0.0352	0.714 mg/L	0.0352	4.93%
Mn 257.610†	197216.4	0.235 mg/L		0.0014	0.235 mg/L	0.0014	0.58%
Mo 202.031†	140.1	0.00399 mg/L		0.000247	0.00399 mg/L	0.000247	6.19%
Ni 231.604†	268.5	0.00284 mg/L		0.000314	0.00284 mg/L	0.000314	11.03%
Pb 220.353†	37.5	0.00270 mg/L		0.000602	0.00270 mg/L	0.000602	22.32%
Sb 206.836†	18.5	0.00524 mg/L		0.000571	0.00524 mg/L	0.000571	10.90%
Se 196.026†	6.1	0.00463 mg/L		0.004436	0.00463 mg/L	0.004436	95.75%
Si 251.611†	9492.4	0.191 mg/L		0.0056	0.191 mg/L	0.0056	2.93%
Sn 189.927†	-41.5	-0.00520 mg/L		0.000304	-0.00520 mg/L	0.000304	5.84%
Ti 334.940†	4531.7	0.00438 mg/L		0.000040	0.00438 mg/L	0.000040	0.91%
Tl 190.801†	4.3	-0.00024 mg/L		0.002779	-0.00024 mg/L	0.002779	>999.9%
V 290.880†	1271.6	0.00363 mg/L		0.001987	0.00363 mg/L	0.001987	54.78%
Zn 206.200†	712.1	0.0142 mg/L		0.00032	0.0142 mg/L	0.00032	2.27%
K 766.490†	1242.4	0.425 mg/L		0.0279	0.425 mg/L	0.0279	6.56%
Na 589.592†	86436.7	4.29 mg/L		0.329	4.29 mg/L	0.329	7.65%
Sr 407.771†	80102.9	0.0306 mg/L		0.00090	0.0306 mg/L	0.00090	2.93%
Li 670.784†	799.0	0.00302 mg/L		0.000559	0.00302 mg/L	0.000559	18.50%

Sequence No.: 9

Sample ID: L1211043905SD WG414452-07

Analyst: KHR

Initial Sample Wt:

Dilution:

autosampler Location: 52

Date Collected: 11/19/2012 1:46:00 PM

Data Type: Original

Initial Sample Vol:

Sample Prep Vol:

Nebulizer Parameters: L1211043905SD WG414452-07

Analyte Back Pressure Flow
All 176.0 kPa 0.50 L/min

Mean Data: L1211043905SD WG414452-07

Analyte	Mean Corrected Intensity	Conc. Units	Calib. Units	Std.Dev.	Sample Conc. Units	Std.Dev.	RSD
Y 371.029	2437075.4					41427.39	1.70%
YRADIAL	287882.5					3480.60	1.21%
Ga 417.206	1260112.6					14697.19	1.17%
GaRADIAL	78853.7					2265.25	2.87%
Ag 328.068†	689.7	0.00148 mg/L		0.000416	0.00148 mg/L	0.000416	28.01%
Al 396.153†	4707.1	0.696 mg/L		0.0424	0.696 mg/L	0.0424	6.09%
As 188.979†	6.2	0.00215 mg/L		0.000775	0.00215 mg/L	0.000775	36.10%
Ba 233.527†	950.7	0.00449 mg/L		0.000077	0.00449 mg/L	0.000077	1.71%
Be 234.861†	730.2	0.00057 mg/L		0.000056	0.00057 mg/L	0.000056	9.82%
B 249.677†	1090.4	0.0130 mg/L		0.00024	0.0130 mg/L	0.00024	1.86%
Ca 227.546†	2093.1	5.50 mg/L		0.142	5.50 mg/L	0.142	2.57%
Cd 228.802†	3.9	0.00010 mg/L		0.000158	0.00010 mg/L	0.000158	161.83%
Co 228.616†	160.9	0.00386 mg/L		0.000197	0.00386 mg/L	0.000197	5.10%
Cr 267.716†	321.0	0.00179 mg/L		0.000057	0.00179 mg/L	0.000057	3.18%
Cu 327.393†	930.1	0.00274 mg/L		0.000059	0.00274 mg/L	0.000059	2.16%

Approved: November 20, 2012

Ken H. Rhodes

Fe 239.562†	3649.6	0.377 mg/L	0.0210	0.377 mg/L	0.0210	5.58%
Mg 279.077†	2119.0	0.754 mg/L	0.0325	0.754 mg/L	0.0325	4.31%
Mn 257.610†	199827.9	0.238 mg/L	0.0058	0.238 mg/L	0.0058	2.45%
Mo 202.031†	139.2	0.00396 mg/L	0.000253	0.00396 mg/L	0.000253	6.40%
Ni 231.604†	270.4	0.00288 mg/L	0.000300	0.00288 mg/L	0.000300	10.43%
Pb 220.353†	34.7	0.00244 mg/L	0.000965	0.00244 mg/L	0.000965	39.56%
Sb 206.836†	17.0	0.00483 mg/L	0.000846	0.00483 mg/L	0.000846	17.52%
Se 196.026†	3.0	0.00274 mg/L	0.000986	0.00274 mg/L	0.000986	35.96%
Si 251.611†	9672.1	0.195 mg/L	0.0062	0.195 mg/L	0.0062	3.18%
Sn 189.927†	-56.4	-0.00676 mg/L	0.000372	-0.00676 mg/L	0.000372	5.50%
Ti 334.940†	4471.9	0.00433 mg/L	0.000089	0.00433 mg/L	0.000089	2.06%
Tl 190.801†	6.2	0.00043 mg/L	0.002271	0.00043 mg/L	0.002271	533.08%
V 290.880†	1349.5	0.00397 mg/L	0.001131	0.00397 mg/L	0.001131	28.53%
Zn 206.200†	731.1	0.0147 mg/L	0.00021	0.0147 mg/L	0.00021	1.41%
K 766.490†	1290.6	0.441 mg/L	0.0219	0.441 mg/L	0.0219	4.96%
Na 589.592†	91453.3	4.54 mg/L	0.166	4.54 mg/L	0.166	3.66%
Sr 407.771†	85103.2	0.0327 mg/L	0.00060	0.0327 mg/L	0.00060	1.83%
Li 670.784†	829.1	0.00325 mg/L	0.000474	0.00325 mg/L	0.000474	14.59%

Sequence No.: 10

Sample ID: L1211043902 WG414452-02

Analyst: KHR

Initial Sample Wt:

Dilution:

Autosampler Location: 60

Date Collected: 11/19/2012 1:52:55 PM

Data Type: Original

Initial Sample Vol:

Sample Prep Vol:

Nebulizer Parameters: L1211043902 WG414452-02

Analyte	Back Pressure	Flow
All	176.0 kPa	0.50 L/min

Mean Data: L1211043902 WG414452-02

Analyte	Mean Corrected Intensity	Conc. Units	Calib. Units	Std.Dev.	Sample Conc. Units	Std.Dev.	RSD
Y 371.029	2420356.7					13253.27	0.55%
YRADIAL	286126.7					2824.77	0.99%
Ga 417.206	1251448.3					11633.05	0.93%
GaRADIAL	77572.7					2061.89	2.66%
Ag 328.068†	40.2	-0.00061 mg/L	0.000368	-0.00061 mg/L	0.000368	60.72%	
Al 396.153†	3101.9	0.454 mg/L	0.0327	0.454 mg/L	0.0327	7.22%	
As 188.979†	1.1	0.00028 mg/L	0.001415	0.00028 mg/L	0.001415	496.80%	
Ba 233.527†	173.8	-0.00079 mg/L	0.000091	-0.00079 mg/L	0.000091	11.49%	
Be 234.861†	413.5	0.00033 mg/L	0.000032	0.00033 mg/L	0.000032	9.59%	
B 249.677†	167.2	0.00321 mg/L	0.000205	0.00321 mg/L	0.000205	6.39%	
Ca 227.546†	1979.8	5.20 mg/L	0.122	5.20 mg/L	0.122	2.35%	
Cd 228.802†	-3.6	-0.00006 mg/L	0.000093	-0.00006 mg/L	0.000093	145.29%	
Co 228.616†	116.1	0.00265 mg/L	0.000257	0.00265 mg/L	0.000257	9.71%	
Cr 267.716†	-10.0	-0.00076 mg/L	0.000063	-0.00076 mg/L	0.000063	8.25%	
Cu 327.393†	331.8	0.00049 mg/L	0.000405	0.00049 mg/L	0.000405	82.85%	
Fe 239.562†	1832.3	0.186 mg/L	0.0132	0.186 mg/L	0.0132	7.10%	
Mg 279.077†	1841.2	0.653 mg/L	0.0405	0.653 mg/L	0.0405	6.20%	
Mn 257.610†	188305.7	0.224 mg/L	0.0032	0.224 mg/L	0.0032	1.41%	
Mo 202.031†	-2.7	-0.00085 mg/L	0.000191	-0.00085 mg/L	0.000191	22.38%	
Ni 231.604†	101.5	0.00003 mg/L	0.000315	0.00003 mg/L	0.000315	>999.9%	
Pb 220.353†	0.7	-0.00083 mg/L	0.000797	-0.00083 mg/L	0.000797	96.06%	
Sb 206.836†	-4.6	-0.00121 mg/L	0.000630	-0.00121 mg/L	0.000630	52.15%	
Se 196.026†	2.5	0.00239 mg/L	0.001846	0.00239 mg/L	0.001846	77.33%	
Si 251.611†	7099.6	0.140 mg/L	0.0032	0.140 mg/L	0.0032	2.32%	
Sn 189.927†	-100.4	-0.0114 mg/L	0.00062	-0.0114 mg/L	0.00062	5.49%	
Ti 334.940†	-1214.7	-0.00081 mg/L	0.000166	-0.00081 mg/L	0.000166	20.56%	
Tl 190.801†	-4.3	-0.00322 mg/L	0.001695	-0.00322 mg/L	0.001695	52.70%	
V 290.880†	221.8	-0.00095 mg/L	0.000606	-0.00095 mg/L	0.000606	63.63%	
Zn 206.200†	452.5	0.00840 mg/L	0.000225	0.00840 mg/L	0.000225	2.68%	
K 766.490†	444.5	0.160 mg/L	0.0061	0.160 mg/L	0.0061	3.81%	
Na 589.592†	81942.6	4.07 mg/L	0.265	4.07 mg/L	0.265	6.52%	
Sr 407.771†	66059.9	0.0248 mg/L	0.00071	0.0248 mg/L	0.00071	2.86%	
Li 670.784†	78.5	-0.00239 mg/L	0.000108	-0.00239 mg/L	0.000108	4.50%	

Sequence No.: 11

Sample ID: L1211043904S WG414452-08

Autosampler Location: 61

Date Collected: 11/19/2012 1:59:49 PM

Approved: November 20, 2012

Ken H. Rhodes

Analyst: KHR
Initial Sample Wt:
Dilution:

data Type: Original
Initial Sample Vol:
Sample Prep Vol:

Nebulizer Parameters: L1211043904S WG414452-08

Analyte Back Pressure Flow
All 175.0 kPa 0.50 L/min

Mean Data: L1211043904S WG414452-08

Analyte	Mean Corrected Intensity	Calib. Conc. Units	Std.Dev.	Sample Conc. Units	Std.Dev.	RSD
Y 371.029	2393273.1				17488.01	0.73%
YRADIAL	278789.1				3947.43	1.42%
Ga 417.206	1228728.4				18733.32	1.52%
GaRADIAL	76422.8				1676.55	2.19%
Ag 328.068†	601.6	0.00115 mg/L	0.000137	0.00115 mg/L	0.000137	11.97%
Al 396.153†	3612.8	0.530 mg/L	0.0192	0.530 mg/L	0.0192	3.62%
As 188.979†	9.3	0.00322 mg/L	0.001196	0.00322 mg/L	0.001196	37.08%
Ba 233.527†	955.4	0.00453 mg/L	0.000341	0.00453 mg/L	0.000341	7.52%
Be 234.861†	640.0	0.00053 mg/L	0.000024	0.00053 mg/L	0.000024	4.54%
B 249.677†	1023.7	0.0123 mg/L	0.00176	0.0123 mg/L	0.00176	14.32%
Ca 227.546†	2087.3	5.49 mg/L	0.204	5.49 mg/L	0.204	3.72%
Cd 228.802†	8.2	0.00019 mg/L	0.000215	0.00019 mg/L	0.000215	114.82%
Co 228.616†	159.4	0.00382 mg/L	0.000461	0.00382 mg/L	0.000461	12.06%
Cr 267.716†	332.5	0.00189 mg/L	0.000044	0.00189 mg/L	0.000044	2.33%
Cu 327.393†	944.5	0.00278 mg/L	0.000314	0.00278 mg/L	0.000314	11.30%
Fe 239.562†	2166.2	0.221 mg/L	0.0080	0.221 mg/L	0.0080	3.64%
Mg 279.077†	2117.1	0.753 mg/L	0.0217	0.753 mg/L	0.0217	2.88%
Mn 257.610†	200033.2	0.238 mg/L	0.0101	0.238 mg/L	0.0101	4.26%
Mo 202.031†	144.8	0.00414 mg/L	0.000504	0.00414 mg/L	0.000504	12.16%
Ni 231.604†	267.8	0.00283 mg/L	0.000204	0.00283 mg/L	0.000204	7.20%
Pb 220.353†	30.7	0.00203 mg/L	0.000883	0.00203 mg/L	0.000883	43.39%
Sb 206.836†	23.8	0.00671 mg/L	0.000501	0.00671 mg/L	0.000501	7.47%
Se 196.026†	2.3	0.00230 mg/L	0.000833	0.00230 mg/L	0.000833	36.16%
Si 251.611†	8809.4	0.176 mg/L	0.0101	0.176 mg/L	0.0101	5.73%
Sn 189.927†	-46.7	-0.00574 mg/L	0.000362	-0.00574 mg/L	0.000362	6.31%
Ti 334.940†	4367.1	0.00423 mg/L	0.000401	0.00423 mg/L	0.000401	9.47%
Tl 190.801†	4.0	-0.00034 mg/L	0.003436	-0.00034 mg/L	0.003436	>999.9%
V 290.880†	1733.7	0.00566 mg/L	0.002048	0.00566 mg/L	0.002048	36.21%
Zn 206.200†	741.5	0.0149 mg/L	0.00078	0.0149 mg/L	0.00078	5.22%
K 766.490†	1297.8	0.443 mg/L	0.0163	0.443 mg/L	0.0163	3.68%
Na 589.592†	89051.0	4.42 mg/L	0.163	4.42 mg/L	0.163	3.69%
Sr 407.771†	82465.7	0.0316 mg/L	0.00059	0.0316 mg/L	0.00059	1.85%
Li 670.784†	839.1	0.00332 mg/L	0.000371	0.00332 mg/L	0.000371	11.18%

Sequence No.: 12

Sample ID: L1211043906SD WG414452-09

Analyst: KHR

Initial Sample Wt:

Dilution:

Sampler Location: 62

date Collected: 11/19/2012 2:06:43 PM

data Type: Original

Initial Sample Vol:

Sample Prep Vol:

Nebulizer Parameters: L1211043906SD WG414452-09

Analyte Back Pressure Flow
All 176.0 kPa 0.50 L/min

Mean Data: L1211043906SD WG414452-09

Analyte	Mean Corrected Intensity	Calib. Conc. Units	Std.Dev.	Sample Conc. Units	Std.Dev.	RSD
Y 371.029	2408077.3				11345.14	0.47%
YRADIAL	283884.9				5611.10	1.98%
Ga 417.206	1240223.5				18647.52	1.50%
GaRADIAL	77691.2				957.50	1.23%
Ag 328.068†	687.6	0.00141 mg/L	0.000449	0.00141 mg/L	0.000449	31.92%
Al 396.153†	3550.8	0.521 mg/L	0.0182	0.521 mg/L	0.0182	3.49%
As 188.979†	7.1	0.00245 mg/L	0.000693	0.00245 mg/L	0.000693	28.33%
Ba 233.527†	888.4	0.00407 mg/L	0.000351	0.00407 mg/L	0.000351	8.62%
Be 234.861†	635.6	0.00052 mg/L	0.000045	0.00052 mg/L	0.000045	8.51%

Approved: November 20, 2012

Ken H. Rhodes

B 249.677†	982.1	0.0119 mg/L	0.00042	0.0119 mg/L	0.00042	3.51%
Ca 227.546†	1944.8	5.11 mg/L	0.225	5.11 mg/L	0.225	4.40%
Cd 228.802†	9.7	0.00022 mg/L	0.000193	0.00022 mg/L	0.000193	86.37%
Co 228.616†	153.1	0.00365 mg/L	0.000230	0.00365 mg/L	0.000230	6.29%
Cr 267.716†	305.1	0.00167 mg/L	0.000068	0.00167 mg/L	0.000068	4.08%
Cu 327.393†	868.4	0.00249 mg/L	0.000077	0.00249 mg/L	0.000077	3.10%
Fe 239.562†	2131.2	0.217 mg/L	0.0071	0.217 mg/L	0.0071	3.28%
Mg 279.077†	2070.9	0.736 mg/L	0.0243	0.736 mg/L	0.0243	3.31%
Mn 257.610†	186063.3	0.221 mg/L	0.0113	0.221 mg/L	0.0113	5.11%
Mo 202.031†	138.2	0.00391 mg/L	0.000326	0.00391 mg/L	0.000326	8.33%
Ni 231.604†	253.3	0.00259 mg/L	0.000411	0.00259 mg/L	0.000411	15.88%
Pb 220.353†	42.7	0.00319 mg/L	0.000557	0.00319 mg/L	0.000557	17.46%
Sb 206.836†	14.8	0.00419 mg/L	0.000554	0.00419 mg/L	0.000554	13.22%
Se 196.026†	2.2	0.00223 mg/L	0.002809	0.00223 mg/L	0.002809	125.91%
Si 251.611†	8087.7	0.161 mg/L	0.0073	0.161 mg/L	0.0073	4.53%
Sn 189.927†	-48.2	-0.00590 mg/L	0.000501	-0.00590 mg/L	0.000501	8.49%
Ti 334.940†	4136.1	0.00397 mg/L	0.000276	0.00397 mg/L	0.000276	6.95%
Tl 190.801†	-2.7	-0.00259 mg/L	0.002075	-0.00259 mg/L	0.002075	80.08%
V 290.880†	1347.4	0.00397 mg/L	0.001458	0.00397 mg/L	0.001458	36.76%
Zn 206.200†	674.9	0.0134 mg/L	0.00043	0.0134 mg/L	0.00043	3.19%
K 766.490†	1285.7	0.439 mg/L	0.0124	0.439 mg/L	0.0124	2.83%
Na 589.592†	88461.5	4.39 mg/L	0.168	4.39 mg/L	0.168	3.83%
Sr 407.771†	82507.2	0.0317 mg/L	0.00038	0.0317 mg/L	0.00038	1.20%
Li 670.784†	846.1	0.00337 mg/L	0.000342	0.00337 mg/L	0.000342	10.13%

Sequence No.: 13

Sample ID: CCV

Analyst:

Initial Sample Wt:

Dilution:

Autosampler Location: 6

Date Collected: 11/19/2012 2:13:37 PM

Data Type: Original

Initial Sample Vol:

Sample Prep Vol:

Nebulizer Parameters: CCV

Analyte

Back Pressure

Flow

All

175.0 kPa

0.50 L/min

Mean Data: CCV

Analyte	Mean Corrected Intensity	Calib. Conc. Units	Std.Dev.	Sample Conc. Units	Std.Dev.	RSD
Y 371.029	2365599.2				21364.19	0.90%
YRADIAL	278017.8				1949.33	0.70%
Ga 417.206	1168559.8				19322.14	1.65%
GaRADIAL	72918.8				693.44	0.95%
Ag 328.068†	129430.3	0.401 mg/L	0.0082	0.401 mg/L	0.0082	2.04%
QC value within limits for Ag 328.068 Recovery = 100.18%						
Al 396.153†	65254.7	9.79 mg/L	0.036	9.79 mg/L	0.036	0.37%
QC value within limits for Al 396.153 Recovery = 97.88%						
As 188.979†	1081.9	0.387 mg/L	0.0060	0.387 mg/L	0.0060	1.54%
QC value within limits for As 188.979 Recovery = 96.80%						
Ba 233.527†	147559.7	1.00 mg/L	0.013	1.00 mg/L	0.013	1.29%
QC value within limits for Ba 233.527 Recovery = 100.21%						
Be 234.861†	55140.3	0.0489 mg/L	0.00080	0.0489 mg/L	0.00080	1.64%
QC value within limits for Be 234.861 Recovery = 97.85%						
B 249.677†	45639.9	0.485 mg/L	0.0110	0.485 mg/L	0.0110	2.26%
QC value within limits for B 249.677 Recovery = 96.92%						
Ca 227.546†	3713.9	10.2 mg/L	0.19	10.2 mg/L	0.19	1.87%
QC value within limits for Ca 227.546 Recovery = 102.05%						
Cd 228.802†	2213.3	0.0480 mg/L	0.00146	0.0480 mg/L	0.00146	3.04%
QC value within limits for Cd 228.802 Recovery = 95.99%						
Co 228.616†	7399.3	0.201 mg/L	0.0027	0.201 mg/L	0.0027	1.37%
QC value within limits for Co 228.616 Recovery = 100.29%						
Cr 267.716†	64489.3	0.497 mg/L	0.0052	0.497 mg/L	0.0052	1.04%
QC value within limits for Cr 267.716 Recovery = 99.47%						
Cu 327.393†	134115.0	0.499 mg/L	0.0122	0.499 mg/L	0.0122	2.44%
QC value within limits for Cu 327.393 Recovery = 99.82%						
Fe 239.562†	37842.9	3.97 mg/L	0.022	3.97 mg/L	0.022	0.55%
QC value within limits for Fe 239.562 Recovery = 99.23%						
Mg 279.077†	27705.3	9.98 mg/L	0.057	9.98 mg/L	0.057	0.57%
QC value within limits for Mg 279.077 Recovery = 99.85%						
Mn 257.610†	424508.5	0.508 mg/L	0.0082	0.508 mg/L	0.0082	1.62%

Approved: November 20, 2012

Ken H. Rhodes

QC value within limits for Mn	257.610	Recovery = 101.59%			
Mo 202.031†	29028.4	0.982 mg/L	0.0168	1.71%	
QC value within limits for Mo	202.031	Recovery = 98.21%			
Ni 231.604†	29768.6	0.500 mg/L	0.0090	1.80%	
QC value within limits for Ni	231.604	Recovery = 99.99%			
Pb 220.353†	5256.0	0.503 mg/L	0.0053	1.06%	
QC value within limits for Pb	220.353	Recovery = 100.52%			
Sb 206.836†	4189.5	1.17 mg/L	0.029	2.49%	
QC value within limits for Sb	206.836	Recovery = 97.52%			
Se 196.026†	631.2	0.390 mg/L	0.0076	1.95%	
QC value within limits for Se	196.026	Recovery = 97.61%			
Si 251.611†	236646.3	4.99 mg/L	0.063	1.27%	
QC value within limits for Si	251.611	Recovery = 99.82%			
Sn 189.927†	9416.7	0.987 mg/L	0.0099	1.00%	
QC value within limits for Sn	189.927	Recovery = 98.71%			
Ti 334.940†	1097776.8	0.984 mg/L	0.0048	0.48%	
QC value within limits for Ti	334.940	Recovery = 98.43%			
Tl 190.801†	1477.3	0.516 mg/L	0.0039	0.76%	
QC value within limits for Tl	190.801	Recovery = 103.14%			
V 290.880†	229500.4	1.00 mg/L	0.007	0.73%	
QC value within limits for V	290.880	Recovery = 100.14%			
Zn 206.200†	43880.0	0.989 mg/L	0.0138	1.39%	
QC value within limits for Zn	206.200	Recovery = 98.92%			
K 766.490†	146118.4	48.9 mg/L	0.29	0.59%	
QC value within limits for K	766.490	Recovery = 97.89%			
Na 589.592†	971089.7	49.3 mg/L	0.41	0.84%	
QC value within limits for Na	589.592	Recovery = 98.55%			
Sr 407.771†	2437303.3	1.02 mg/L	0.009	0.88%	
QC value within limits for Sr	407.771	Recovery = 101.98%			
Li 670.784†	130650.9	0.978 mg/L	0.0060	0.62%	
QC value within limits for Li	670.784	Recovery = 97.84%			

All analyte(s) passed QC.

Sequence No.: 14

Sample ID: CCB

Analyst:

Initial Sample Wt:

Dilution:

UAsampler Location: 1

Date Collected: 11/19/2012 2:19:38 PM

Data Type: Original

Initial Sample Vol:

Sample Prep Vol:

Nebulizer Parameters: CCB

Analyte	Back Pressure	Flow
All	176.0 kPa	0.50 L/min

Mean Data: CCB

Analyte	Mean Corrected Intensity	Calib. Conc. Units	Std.Dev.	Sample Conc. Units	Std.Dev.	RSD
Y 371.029	2455052.2				9817.55	0.40%
Y RADIAL	284061.7				5282.04	1.86%
Ga 417.206	1219101.1				23494.42	1.93%
Ga RADIAL	76428.5				1178.70	1.54%
Ag 328.068†	129.3	-0.00039 mg/L	0.000239	-0.00039 mg/L	0.000239	61.96%
QC value within limits for Ag	328.068	Recovery = Not calculated				
Al 396.153†	27.7	-0.0115 mg/L	0.00067	-0.0115 mg/L	0.00067	5.85%
QC value within limits for Al	396.153	Recovery = Not calculated				
As 188.979†	-1.5	-0.00068 mg/L	0.002405	-0.00068 mg/L	0.002405	355.50%
QC value within limits for As	188.979	Recovery = Not calculated				
Ba 233.527†	2.0	-0.00195 mg/L	0.000166	-0.00195 mg/L	0.000166	8.55%
QC value within limits for Ba	233.527	Recovery = Not calculated				
Be 234.861†	50.9	0.00002 mg/L	0.000035	0.00002 mg/L	0.000035	144.33%
QC value within limits for Be	234.861	Recovery = Not calculated				
B 249.677†	191.6	0.00357 mg/L	0.000306	0.00357 mg/L	0.000306	8.56%
QC value within limits for B	249.677	Recovery = Not calculated				
Ca 227.546†	25.4	0.0678 mg/L	0.00633	0.0678 mg/L	0.00633	9.33%
QC value within limits for Ca	227.546	Recovery = Not calculated				
Cd 228.802†	-2.2	-0.00004 mg/L	0.000159	-0.00004 mg/L	0.000159	388.79%
QC value within limits for Cd	228.802	Recovery = Not calculated				
Co 228.616†	-5.9	-0.00068 mg/L	0.000122	-0.00068 mg/L	0.000122	17.89%
QC value within limits for Co	228.616	Recovery = Not calculated				
Cr 267.716†	10.6	-0.00060 mg/L	0.000140	-0.00060 mg/L	0.000140	23.42%

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Cu	327.393†	QC value within limits for Cu	327.393	Recovery = Not calculated	0.000323	-0.00082 mg/L	0.000323	39.30%
Fe	239.562†	QC value within limits for Fe	239.562	Recovery = Not calculated	0.000239	-0.00433 mg/L	0.000239	5.51%
Mg	279.077†	QC value within limits for Mg	279.077	Recovery = Not calculated	0.004352	-0.00605 mg/L	0.004352	71.89%
Mn	257.610†	QC value within limits for Mn	257.610	Recovery = Not calculated	0.000029	-0.00106 mg/L	0.000029	2.71%
Mo	202.031†	QC value within limits for Mo	202.031	Recovery = Not calculated	0.000247	-0.00098 mg/L	0.000247	25.35%
Ni	231.604†	QC value within limits for Ni	231.604	Recovery = Not calculated	0.000181	-0.00155 mg/L	0.000181	11.65%
Pb	220.353†	QC value within limits for Pb	220.353	Recovery = Not calculated	0.000958	-0.00022 mg/L	0.000958	428.52%
Sb	206.836†	QC value within limits for Sb	206.836	Recovery = Not calculated	0.001040	0.00140 mg/L	0.001040	74.28%
Se	196.026†	QC value within limits for Se	196.026	Recovery = Not calculated	0.002101	0.00307 mg/L	0.002101	68.50%
Si	251.611†	QC value within limits for Si	251.611	Recovery = Not calculated	0.00057	-0.0100 mg/L	0.00057	5.64%
Sn	189.927†	QC value within limits for Sn	189.927	Recovery = Not calculated	0.000372	-0.00393 mg/L	0.000372	9.48%
Ti	334.940†	QC value within limits for Ti	334.940	Recovery = Not calculated	0.000043	-0.00034 mg/L	0.000043	12.67%
Tl	190.801†	QC value within limits for Tl	190.801	Recovery = Not calculated	0.003621	-0.00211 mg/L	0.003621	171.42%
V	290.880†	QC value within limits for V	290.880	Recovery = Not calculated	0.001687	-0.00119 mg/L	0.001687	142.12%
Zn	206.200†	QC value within limits for Zn	206.200	Recovery = Not calculated	0.000179	-0.00154 mg/L	0.000179	11.60%
K	766.490†	QC value within limits for K	766.490	Recovery = Not calculated	0.01074	0.0224 mg/L	0.01074	47.98%
Na	589.592†	QC value within limits for Na	589.592	Recovery = Not calculated	0.00313	0.0189 mg/L	0.00313	16.58%
Sr	407.771†	QC value within limits for Sr	407.771	Recovery = Not calculated	0.000084	-0.00269 mg/L	0.000084	3.12%
Li	670.784†	QC value within limits for Li	670.784	Recovery = Not calculated	0.000761	-0.00272 mg/L	0.000761	28.04%

All analyte(s) passed QC.

Sequence No.: 15

Sample ID: L1211029004 WG414030-01

Analyst: KHR

Initial Sample Wt:

Dilution:

uSampler Location: 53

Date Collected: 11/19/2012 2:26:33 PM

Data Type: Original

Initial Sample Vol:

Sample Prep Vol:

Nebulizer Parameters: L1211029004 WG414030-01

Analyte	Back Pressure	Flow
All	175.0 kPa	0.50 L/min

Mean Data: L1211029004 WG414030-01

Analyte	Mean Corrected Intensity	Conc. Units	Calib. Units	Std.Dev.	Conc. Units	Sample Std.Dev.	RSD
Y 371.029	2399684.5					22147.74	0.92%
YRADIAL	286957.3					3102.76	1.08%
Ga 417.206	1237668.0					16305.13	1.32%
GaRADIAL	76805.5					256.56	0.33%
Ag 328.068†	-6157.9	-0.00041 mg/L	0.000128	-0.00041 mg/L	0.000128	31.59%	
Al 396.153†	-2.3	-0.0107 mg/L	0.00571	-0.0107 mg/L	0.00571	53.41%	
As 188.979†	-3.3	0.00949 mg/L	0.000632	0.00949 mg/L	0.000632	6.66%	
Ba 233.527†	19595.6	0.129 mg/L	0.0006	0.129 mg/L	0.0006	0.44%	
Be 234.861†	11092.0	0.00099 mg/L	0.000138	0.00099 mg/L	0.000138	13.96%	
B 249.677†	5203.6	0.0377 mg/L	0.00080	0.0377 mg/L	0.00080	2.13%	
Ca 227.546†	8764.3	24.1 mg/L	0.54	24.1 mg/L	0.54	2.24%	
Cd 228.802†	4.1	0.00011 mg/L	0.000144	0.00011 mg/L	0.000144	136.20%	
Co 228.616†	384.2	0.00875 mg/L	0.000269	0.00875 mg/L	0.000269	3.07%	
Cr 267.716†	-28.1	-0.00253 mg/L	0.000168	-0.00253 mg/L	0.000168	6.63%	
Cu 327.393†	-529.9	0.00197 mg/L	0.000271	0.00197 mg/L	0.000271	13.78%	

Approved: November 20, 2012

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Fe 239.562†	426051.9	44.8 mg/L	0.51	44.8 mg/L	0.51	1.13%
Mg 279.077†	21717.8	7.79 mg/L	0.169	7.79 mg/L	0.169	2.18%
Mn 257.610†	7327829.3	8.79 mg/L	0.096	8.79 mg/L	0.096	1.09%
Mo 202.031†	-22.9	0.00244 mg/L	0.000355	0.00244 mg/L	0.000355	14.55%
Ni 231.604†	306.4	0.00348 mg/L	0.000515	0.00348 mg/L	0.000515	14.80%
Pb 220.353†	47.2	-0.00548 mg/L	0.001106	-0.00548 mg/L	0.001106	20.17%
Sb 206.836†	-6.6	-0.00016 mg/L	0.001244	-0.00016 mg/L	0.001244	789.44%
Se 196.026†	-11.7	-0.00189 mg/L	0.002013	-0.00189 mg/L	0.002013	106.46%
Si 251.611†	297417.5	6.29 mg/L	0.047	6.29 mg/L	0.047	0.74%
Sn 189.927†	-208.0	-0.0227 mg/L	0.00073	-0.0227 mg/L	0.00073	3.22%
Ti 334.940†	-4170.2	-0.00079 mg/L	0.000330	-0.00079 mg/L	0.000330	41.89%
Tl 190.801†	-8.1	-0.0131 mg/L	0.00324	-0.0131 mg/L	0.00324	24.70%
V 290.880†	1422.6	0.00139 mg/L	0.001522	0.00139 mg/L	0.001522	109.45%
Zn 206.200†	168.7	-0.00205 mg/L	0.000170	-0.00205 mg/L	0.000170	8.28%
K 766.490†	961.8	0.329 mg/L	0.0159	0.329 mg/L	0.0159	4.85%
Na 589.592†	152484.1	7.59 mg/L	0.027	7.59 mg/L	0.027	0.35%
Sr 407.771†	232986.2	0.0945 mg/L	0.00152	0.0945 mg/L	0.00152	1.61%
Li 670.784†	56.9	-0.00255 mg/L	0.000432	-0.00255 mg/L	0.000432	16.92%

Sequence No.: 16

Sample ID: L1211029006S WG414030-04

Analyst: KHR

Initial Sample Wt:

Dilution:

Udosampler Location: 54

Date Collected: 11/19/2012 2:32:33 PM

Data Type: Original

Initial Sample Vol:

Sample Prep Vol:

Nebulizer Parameters: L1211029006S WG414030-04

Analyte	Back Pressure	Flow
All	176.0 kPa	0.50 L/min

Mean Data: L1211029006S WG414030-04

Analyte	Mean Corrected Intensity	Conc. Units	Calib. Units	Std.Dev.	Sample Conc. Units	Std.Dev.	RSD
Y 371.029	2416416.3					16440.74	0.68%
YRADIAL	295424.7					2470.75	0.84%
Ga 417.206	1243108.1					29398.66	2.36%
GaRADIAL	77148.5					250.27	0.32%
Ag 328.068†	23623.5	0.0911 mg/L	0.00366	0.00366	0.0911 mg/L	0.00366	4.02%
Al 396.153†	15176.5	2.27 mg/L	0.003	0.003	2.27 mg/L	0.003	0.15%
As 188.979†	238.2	0.0954 mg/L	0.00219	0.00219	0.0954 mg/L	0.00219	2.29%
Ba 233.527†	53398.2	0.359 mg/L	0.0005	0.0005	0.359 mg/L	0.0005	0.13%
Be 234.861†	23473.0	0.0124 mg/L	0.00063	0.00063	0.0124 mg/L	0.00063	5.07%
B 249.677†	46888.2	0.482 mg/L	0.0173	0.0173	0.482 mg/L	0.0173	3.59%
Ca 227.546†	9645.5	26.4 mg/L	0.97	0.97	26.4 mg/L	0.97	3.67%
Cd 228.802†	495.4	0.0108 mg/L	0.00065	0.00065	0.0108 mg/L	0.00065	6.01%
Co 228.616†	2072.8	0.0547 mg/L	0.00020	0.00020	0.0547 mg/L	0.00020	0.36%
Cr 267.716†	15089.8	0.114 mg/L	0.0014	0.0014	0.114 mg/L	0.0014	1.25%
Cu 327.393†	30027.8	0.116 mg/L	0.0042	0.0042	0.116 mg/L	0.0042	3.60%
Fe 239.562†	416536.7	43.8 mg/L	0.42	0.42	43.8 mg/L	0.42	0.97%
Mg 279.077†	27372.4	9.83 mg/L	0.071	0.071	9.83 mg/L	0.071	0.72%
Mn 257.610†	7249048.5	8.70 mg/L	0.035	0.035	8.70 mg/L	0.035	0.40%
Mo 202.031†	6884.8	0.236 mg/L	0.0003	0.0003	0.236 mg/L	0.0003	0.14%
Ni 231.604†	7494.0	0.125 mg/L	0.0002	0.0002	0.125 mg/L	0.0002	0.16%
Pb 220.353†	1272.6	0.112 mg/L	0.0017	0.0017	0.112 mg/L	0.0017	1.47%
Sb 206.836†	961.3	0.270 mg/L	0.0087	0.0087	0.270 mg/L	0.0087	3.23%
Se 196.026†	136.4	0.0893 mg/L	0.00722	0.00722	0.0893 mg/L	0.00722	8.08%
Si 251.611†	349372.9	7.39 mg/L	0.193	0.193	7.39 mg/L	0.193	2.62%
Sn 189.927†	2180.2	0.228 mg/L	0.0021	0.0021	0.228 mg/L	0.0021	0.92%
Ti 334.940†	260041.1	0.236 mg/L	0.0010	0.0010	0.236 mg/L	0.0010	0.42%
Tl 190.801†	334.9	0.107 mg/L	0.0032	0.0032	0.107 mg/L	0.0032	2.98%
V 290.880†	55186.3	0.237 mg/L	0.0020	0.0020	0.237 mg/L	0.0020	0.84%
Zn 206.200†	10388.9	0.229 mg/L	0.0006	0.0006	0.229 mg/L	0.0006	0.25%
K 766.490†	34712.2	11.5 mg/L	0.03	0.03	11.5 mg/L	0.03	0.30%
Na 589.592†	382070.9	19.1 mg/L	0.27	0.27	19.1 mg/L	0.27	1.40%
Sr 407.771†	798294.9	0.332 mg/L	0.0066	0.0066	0.332 mg/L	0.0066	1.99%
Li 670.784†	31600.0	0.234 mg/L	0.0004	0.0004	0.234 mg/L	0.0004	0.17%

Sequence No.: 17

Sample ID: L1211029008SD WG414030-05

Udosampler Location: 55

Date Collected: 11/19/2012 2:38:38 PM

Approved: November 20, 2012

Ken H. Rhodes

Analyst: KHR
Initial Sample Wt:
Dilution:

alpha Type: Original
Initial Sample Vol:
Sample Prep Vol:

Nebulizer Parameters: L1211029008SD WG414030-05
Analyte Back Pressure Flow
All 175.0 kPa 0.50 L/min

Mean Data: L1211029008SD WG414030-05

Analyste	Mean Corrected Intensity	Calib. Conc. Units	Std.Dev.	Sample Conc. Units	Std.Dev.	RSD
Y 371.029	2372838.5				13040.33	0.55%
YRADIAL	292479.9				5283.60	1.81%
Ga 417.206	1233282.5				20422.31	1.66%
GaRADIAL	76649.8				1610.15	2.10%
Ag 328.068†	24085.1	0.0941 mg/L	0.00437	0.0941 mg/L	0.00437	4.64%
Al 396.153†	16243.7	2.43 mg/L	0.014	2.43 mg/L	0.014	0.58%
As 188.979†	240.0	0.0968 mg/L	0.00421	0.0968 mg/L	0.00421	4.35%
Ba 233.527†	55295.6	0.372 mg/L	0.0083	0.372 mg/L	0.0083	2.24%
Be 234.861†	23856.8	0.0120 mg/L	0.00054	0.0120 mg/L	0.00054	4.51%
B 249.677†	47855.9	0.491 mg/L	0.0189	0.491 mg/L	0.0189	3.85%
Ca 227.546†	9477.5	26.1 mg/L	1.22	26.1 mg/L	1.22	4.67%
Cd 228.802†	496.4	0.0108 mg/L	0.00060	0.0108 mg/L	0.00060	5.55%
Co 228.616†	2053.1	0.0541 mg/L	0.00088	0.0541 mg/L	0.00088	1.64%
Cr 267.716†	15693.5	0.119 mg/L	0.0031	0.119 mg/L	0.0031	2.64%
Cu 327.393†	30579.0	0.118 mg/L	0.0047	0.118 mg/L	0.0047	3.97%
Fe 239.562†	447554.3	47.0 mg/L	0.96	47.0 mg/L	0.96	2.03%
Mg 279.077†	28474.2	10.2 mg/L	0.19	10.2 mg/L	0.19	1.87%
Mn 257.610†	7157359.6	8.59 mg/L	0.165	8.59 mg/L	0.165	1.92%
Mo 202.031†	7028.1	0.241 mg/L	0.0040	0.241 mg/L	0.0040	1.65%
Ni 231.604†	7622.3	0.127 mg/L	0.0020	0.127 mg/L	0.0020	1.59%
Pb 220.353†	1312.9	0.116 mg/L	0.0021	0.116 mg/L	0.0021	1.81%
Sb 206.836†	966.5	0.272 mg/L	0.0116	0.272 mg/L	0.0116	4.26%
Se 196.026†	133.4	0.0880 mg/L	0.00544	0.0880 mg/L	0.00544	6.18%
Si 251.611†	356830.0	7.55 mg/L	0.250	7.55 mg/L	0.250	3.31%
Sn 189.927†	2250.8	0.235 mg/L	0.0026	0.235 mg/L	0.0026	1.08%
Ti 334.940†	268219.6	0.243 mg/L	0.0049	0.243 mg/L	0.0049	2.03%
Tl 190.801†	342.8	0.110 mg/L	0.0029	0.110 mg/L	0.0029	2.59%
V 290.880†	57082.0	0.245 mg/L	0.0059	0.245 mg/L	0.0059	2.43%
Zn 206.200†	10627.9	0.234 mg/L	0.0041	0.234 mg/L	0.0041	1.75%
K 766.490†	37161.4	12.4 mg/L	0.05	12.4 mg/L	0.05	0.44%
Na 589.592†	400922.2	20.1 mg/L	0.39	20.1 mg/L	0.39	1.96%
Sr 407.771†	839912.1	0.349 mg/L	0.0052	0.349 mg/L	0.0052	1.49%
Li 670.784†	34088.7	0.253 mg/L	0.0030	0.253 mg/L	0.0030	1.18%

Sequence No.: 18

Sample ID: L1211029017 0.5

Analyst: KHR

Initial Sample Wt:

Dilution:

Autosampler Location: 56

Sample Collected: 11/19/2012 2:44:38 PM

alpha Type: Original

Initial Sample Vol:

Sample Prep Vol:

Nebulizer Parameters: L1211029017 0.5
Analyte Back Pressure Flow
All 176.0 kPa 0.50 L/min

Mean Data: L1211029017 0.5

Analyste	Mean Corrected Intensity	Calib. Conc. Units	Std.Dev.	Sample Conc. Units	Std.Dev.	RSD
Y 371.029	2431396.2				18840.11	0.77%
YRADIAL	288729.9				1712.38	0.59%
Ga 417.206	1288883.0				19866.38	1.54%
GaRADIAL	79475.7				2504.56	3.15%
Ag 328.068†	159.1	-0.00057 mg/L	0.000326	-0.00057 mg/L	0.000326	56.80%
Al 396.153†	147.6	0.00660 mg/L	0.000908	0.00660 mg/L	0.000908	13.76%
As 188.979†	-4.9	-0.00186 mg/L	0.001323	-0.00186 mg/L	0.001323	71.17%
Ba 233.527†	8656.4	0.0569 mg/L	0.00051	0.0569 mg/L	0.00051	0.90%
Be 234.861†	169.5	0.00037 mg/L	0.000001	0.00037 mg/L	0.000001	0.25%

Approved: November 20, 2012

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B 249.677†	1366.1	0.0159 mg/L	0.00069	0.0159 mg/L	0.00069	4.34%
Ca 227.546†	5281.3	13.9 mg/L	0.21	13.9 mg/L	0.21	1.52%
Cd 228.802†	-2.6	0.00000 mg/L	0.000119	0.00000 mg/L	0.000119	>999.9%
Co 228.616†	435.0	0.0113 mg/L	0.00021	0.0113 mg/L	0.00021	1.83%
Cr 267.716†	114.8	0.00020 mg/L	0.000061	0.00020 mg/L	0.000061	30.81%
Cu 327.393†	165.5	-0.00013 mg/L	0.000074	-0.00013 mg/L	0.000074	56.73%
Fe 239.562†	2070.0	0.211 mg/L	0.0017	0.211 mg/L	0.0017	0.79%
Mg 279.077†	16041.3	5.77 mg/L	0.022	5.77 mg/L	0.022	0.38%
Mn 257.610†	2358169.8	2.83 mg/L	0.025	2.83 mg/L	0.025	0.88%
Mo 202.031†	16.2	0.00033 mg/L	0.000352	0.00033 mg/L	0.000352	106.53%
Ni 231.604†	479.9	0.00640 mg/L	0.000298	0.00640 mg/L	0.000298	4.66%
Pb 220.353†	14.6	-0.00115 mg/L	0.000990	-0.00115 mg/L	0.000990	85.91%
Sb 206.836†	-2.1	-0.00053 mg/L	0.000166	-0.00053 mg/L	0.000166	31.05%
Se 196.026†	3.4	0.00216 mg/L	0.000763	0.00216 mg/L	0.000763	35.42%
Si 251.611†	182242.3	3.85 mg/L	0.034	3.85 mg/L	0.034	0.89%
Sn 189.927†	-157.4	-0.0174 mg/L	0.00041	-0.0174 mg/L	0.00041	2.37%
Ti 334.940†	-2438.6	-0.00061 mg/L	0.000095	-0.00061 mg/L	0.000095	15.72%
Tl 190.801†	-6.8	-0.00672 mg/L	0.002986	-0.00672 mg/L	0.002986	44.44%
V 290.880†	472.6	0.00001 mg/L	0.001869	0.00001 mg/L	0.001869	>999.9%
Zn 206.200†	411.8	0.00749 mg/L	0.000172	0.00749 mg/L	0.000172	2.29%
K 766.490†	1435.0	0.489 mg/L	0.0066	0.489 mg/L	0.0066	1.35%
Na 589.592†	92757.1	4.61 mg/L	0.100	4.61 mg/L	0.100	2.17%
Sr 407.771†	165048.3	0.0661 mg/L	0.00185	0.0661 mg/L	0.00185	2.79%
Li 670.784†	92.7	-0.00228 mg/L	0.000170	-0.00228 mg/L	0.000170	7.44%

Sequence No.: 19

Sample ID: L1211033901 500X

Analyst: KHR

Initial Sample Wt:

Dilution:

Autosampler Location: 57

Date Collected: 11/19/2012 2:51:34 PM

Data Type: Original

Initial Sample Vol:

Sample Prep Vol:

Nebulizer Parameters: L1211033901 500X

Analyte	Back Pressure	Flow
All	175.0 kPa	0.50 L/min

Mean Data: L1211033901 500X

Analyte	Mean Corrected Intensity	Conc.	Calib. Units	Std.Dev.	Sample Conc.	Units	Std.Dev.	RSD
Y 371.029	2334014.5						18403.18	0.79%
YRADIAL	273856.4						6237.68	2.28%
Ga 417.206	1209963.6						5729.99	0.47%
GaRADIAL	74714.2						1521.47	2.04%
Ag 328.068†	254.9	0.00006	mg/L	0.000229	0.00006	mg/L	0.000229	414.29%
Al 396.153†	-2.0	-0.0162	mg/L	0.00190	-0.0162	mg/L	0.00190	11.73%
As 188.979†	-3.3	-0.00130	mg/L	0.003034	-0.00130	mg/L	0.003034	232.68%
Ba 233.527†	170561.6	1.16	mg/L	0.001	1.16	mg/L	0.001	0.06%
Be 234.861†	107.2	0.00005	mg/L	0.000011	0.00005	mg/L	0.000011	21.86%
B 249.677†	9278.9	0.100	mg/L	0.0020	0.100	mg/L	0.0020	1.98%
Ca 227.546†	13102.7	34.4	mg/L	0.72	34.4	mg/L	0.72	2.09%
Cd 228.802†	1.1	0.00003	mg/L	0.000062	0.00003	mg/L	0.000062	200.09%
Co 228.616†	-59.1	-0.00251	mg/L	0.000091	-0.00251	mg/L	0.000091	3.64%
Cr 267.716†	60.7	-0.00021	mg/L	0.000101	-0.00021	mg/L	0.000101	46.95%
Cu 327.393†	4.6	-0.00076	mg/L	0.000469	-0.00076	mg/L	0.000469	61.58%
Fe 239.562†	1139.8	0.113	mg/L	0.0017	0.113	mg/L	0.0017	1.51%
Mg 279.077†	10720.6	3.85	mg/L	0.082	3.85	mg/L	0.082	2.13%
Mn 257.610†	22165.9	0.0245	mg/L	0.00033	0.0245	mg/L	0.00033	1.36%
Mo 202.031†	67.7	0.00148	mg/L	0.000276	0.00148	mg/L	0.000276	18.62%
Ni 231.604†	0.3	-0.00167	mg/L	0.000316	-0.00167	mg/L	0.000316	18.94%
Pb 220.353†	17.4	0.00081	mg/L	0.000942	0.00081	mg/L	0.000942	116.37%
Sb 206.836†	0.9	0.00031	mg/L	0.002001	0.00031	mg/L	0.002001	641.26%
Se 196.026†	5.9	0.00451	mg/L	0.001919	0.00451	mg/L	0.001919	42.51%
Si 251.611†	528.8	0.00091	mg/L	0.000268	0.00091	mg/L	0.000268	29.32%
Sn 189.927†	-231.9	-0.0252	mg/L	0.00071	-0.0252	mg/L	0.00071	2.81%
Ti 334.940†	-6541.6	-0.00120	mg/L	0.000099	-0.00120	mg/L	0.000099	8.21%
Tl 190.801†	-21.4	-0.00891	mg/L	0.002665	-0.00891	mg/L	0.002665	29.90%
V 290.880†	689.6	0.00097	mg/L	0.001169	0.00097	mg/L	0.001169	120.66%
Zn 206.200†	168.7	0.00203	mg/L	0.000232	0.00203	mg/L	0.000232	11.40%
K 766.490†	5038.8	1.61	mg/L	0.017	1.61	mg/L	0.017	1.07%
Na 589.592†	1603541.8	82.7	mg/L	1.97	82.7	mg/L	1.97	2.38%

Approved: November 20, 2012

Ken H. Rhodes

Sr 407.771† Saturated2
 Li 670.784† 20612.5 0.152 mg/L 0.0045 0.152 mg/L 0.0045 2.97%

Sequence No.: 20

Sample ID: L1211033901PS WG414094-03

Analyst: KHR

Initial Sample Wt:

Dilution:

UAsampler Location: 58

Date Collected: 11/19/2012 2:58:32 PM

Data Type: Original

Initial Sample Vol:

Sample Prep Vol:

Nebulizer Parameters: L1211033901PS WG414094-03

Analyte Back Pressure Flow
 All 175.0 kPa 0.50 L/min

Mean Data: L1211033901PS WG414094-03

Analyte	Mean Corrected Intensity	Calib. Conc. Units	Std.Dev.	Sample Conc. Units	Std.Dev.	RSD
Y 371.029	2399769.5				27359.44	1.14%
YRADIAL	285750.9				582.24	0.20%
Ga 417.206	1198435.7				22548.99	1.88%
GaRADIAL	74878.3				173.38	0.23%
Ag 328.068†	63120.0	0.195 mg/L	0.0072	0.195 mg/L	0.0072	3.70%
Al 396.153†	31835.9	4.77 mg/L	0.024	4.77 mg/L	0.024	0.51%
As 188.979†	521.2	0.186 mg/L	0.0043	0.186 mg/L	0.0043	2.28%
Ba 233.527†	233597.6	1.59 mg/L	0.012	1.59 mg/L	0.012	0.77%
Be 234.861†	26999.9	0.0239 mg/L	0.00084	0.0239 mg/L	0.00084	3.49%
B 249.677†	98467.9	1.05 mg/L	0.043	1.05 mg/L	0.043	4.10%
Ca 227.546†	14973.1	39.5 mg/L	1.30	39.5 mg/L	1.30	3.29%
Cd 228.802†	1064.7	0.0231 mg/L	0.00111	0.0231 mg/L	0.00111	4.80%
Co 228.616†	3470.1	0.0934 mg/L	0.00111	0.0934 mg/L	0.00111	1.19%
Cr 267.716†	31084.2	0.239 mg/L	0.0019	0.239 mg/L	0.0019	0.78%
Cu 327.393†	63974.4	0.238 mg/L	0.0071	0.238 mg/L	0.0071	3.00%
Fe 239.562†	19539.0	2.05 mg/L	0.004	2.05 mg/L	0.004	0.17%
Mg 279.077†	23382.4	8.42 mg/L	0.082	8.42 mg/L	0.082	0.97%
Mn 257.610†	223451.3	0.266 mg/L	0.0021	0.266 mg/L	0.0021	0.81%
Mo 202.031†	14115.6	0.477 mg/L	0.0049	0.477 mg/L	0.0049	1.02%
Ni 231.604†	14953.1	0.250 mg/L	0.0022	0.250 mg/L	0.0022	0.88%
Pb 220.353†	2536.5	0.242 mg/L	0.0033	0.242 mg/L	0.0033	1.38%
Sb 206.836†	2067.6	0.578 mg/L	0.0172	0.578 mg/L	0.0172	2.97%
Se 196.026†	311.1	0.193 mg/L	0.0035	0.193 mg/L	0.0035	1.84%
Si 251.611†	115210.0	2.42 mg/L	0.063	2.42 mg/L	0.063	2.59%
Sn 189.927†	-239.1	-0.0259 mg/L	0.00116	-0.0259 mg/L	0.00116	4.48%
Ti 334.940†	529768.9	0.480 mg/L	0.0037	0.480 mg/L	0.0037	0.78%
Tl 190.801†	693.5	0.241 mg/L	0.0028	0.241 mg/L	0.0028	1.15%
V 290.880†	111352.7	0.485 mg/L	0.0034	0.485 mg/L	0.0034	0.70%
Zn 206.200†	21281.0	0.479 mg/L	0.0009	0.479 mg/L	0.0009	0.19%
K 766.490†	76342.5	25.4 mg/L	0.09	25.4 mg/L	0.09	0.36%
Na 589.592†	2001388.2	104 mg/L	1.7	104 mg/L	1.7	1.67%
Sr 407.771†	Saturated2					
Li 670.784†	84371.1	0.631 mg/L	0.0043	0.631 mg/L	0.0043	0.68%

Sequence No.: 21

Sample ID: L1211034513 0.5

Analyst: KHR

Initial Sample Wt:

Dilution:

UAsampler Location: 59

Date Collected: 11/19/2012 3:04:32 PM

Data Type: Original

Initial Sample Vol:

Sample Prep Vol:

Nebulizer Parameters: L1211034513 0.5

Analyte Back Pressure Flow
 All 176.0 kPa 0.50 L/min

Mean Data: L1211034513 0.5

Analyte	Mean Corrected Intensity	Calib. Conc. Units	Std.Dev.	Sample Conc. Units	Std.Dev.	RSD
Y 371.029	2392743.1				24781.10	1.04%
YRADIAL	284563.8				2404.46	0.84%
Ga 417.206	1232972.7				15631.96	1.27%

Approved: November 20, 2012

Ken H. Rhodes

GA RADIAL	76051.1					1094.79	1.44%
Ag 328.068†	-103.4	0.00044 mg/L	0.000177	0.00044 mg/L	0.000177	40.67%	
Al 396.153†	15.3	-0.0130 mg/L	0.00100	-0.0130 mg/L	0.00100	7.71%	
As 188.979†	11.7	0.00516 mg/L	0.001938	0.00516 mg/L	0.001938	37.54%	
Ba 233.527†	14278.8	0.0949 mg/L	0.00003	0.0949 mg/L	0.00003	0.03%	
Be 234.861†	1261.4	0.00049 mg/L	0.000055	0.00049 mg/L	0.000055	11.29%	
B 249.677†	2879.3	0.0304 mg/L	0.00116	0.0304 mg/L	0.00116	3.81%	
Ca 227.546†	16453.3	43.3 mg/L	0.97	43.3 mg/L	0.97	2.23%	
Cd 228.802†	11.6	0.00025 mg/L	0.000238	0.00025 mg/L	0.000238	95.11%	
Co 228.616†	106.8	0.00227 mg/L	0.000212	0.00227 mg/L	0.000212	9.36%	
Cr 267.716†	104.8	-0.00003 mg/L	0.000069	-0.00003 mg/L	0.000069	250.56%	
Cu 327.393†	7.2	-0.00029 mg/L	0.000111	-0.00029 mg/L	0.000111	38.69%	
Fe 239.562†	41303.9	4.33 mg/L	0.063	4.33 mg/L	0.063	1.45%	
Mg 279.077†	35501.3	12.8 mg/L	0.20	12.8 mg/L	0.20	1.55%	
Mn 257.610†	2761143.6	3.31 mg/L	0.023	3.31 mg/L	0.023	0.69%	
Mo 202.031†	49.1	0.00175 mg/L	0.000093	0.00175 mg/L	0.000093	5.30%	
Ni 231.604†	102.4	0.00005 mg/L	0.000460	0.00005 mg/L	0.000460	988.81%	
Pb 220.353†	9.7	-0.00227 mg/L	0.000973	-0.00227 mg/L	0.000973	42.84%	
Sb 206.836†	-2.4	-0.00046 mg/L	0.001327	-0.00046 mg/L	0.001327	291.32%	
Se 196.026†	0.3	0.00073 mg/L	0.000425	0.00073 mg/L	0.000425	58.60%	
Si 251.611†	221270.5	4.68 mg/L	0.073	4.68 mg/L	0.073	1.57%	
Sn 189.927†	-252.2	-0.0273 mg/L	0.00091	-0.0273 mg/L	0.00091	3.34%	
Ti 334.940†	-6995.7	-0.00029 mg/L	0.000661	-0.00029 mg/L	0.000661	226.37%	
Tl 190.801†	-15.6	-0.0102 mg/L	0.00027	-0.0102 mg/L	0.00027	2.64%	
V 290.880†	995.5	0.00186 mg/L	0.000944	0.00186 mg/L	0.000944	50.79%	
Zn 206.200†	100.7	0.00012 mg/L	0.000058	0.00012 mg/L	0.000058	47.89%	
K 766.490†	936.9	0.311 mg/L	0.0221	0.311 mg/L	0.0221	7.10%	
Na 589.592†	343667.0	17.2 mg/L	0.18	17.2 mg/L	0.18	1.04%	
Sr 407.771†	282509.8	0.115 mg/L	0.0004	0.115 mg/L	0.0004	0.36%	
Li 670.784†	247.0	-0.00113 mg/L	0.000524	-0.00113 mg/L	0.000524	46.57%	

Sequence No.: 22

Sample ID: CCV

Analyst:

Initial Sample Wt:

Dilution:

autosampler Location: 6

Date Collected: 11/19/2012 3:10:29 PM

Data Type: Original

Initial Sample Vol:

Sample Prep Vol:

Nebulizer Parameters: CCV

Analyte	Back Pressure	Flow
All	175.0 kPa	0.50 L/min

Mean Data: CCV

Analyte	Mean Corrected Intensity	Conc.	Calib. Units	Std.Dev.	Sample Conc.	Std.Dev.	RSD
Y 371.029	2395789.1					24109.51	1.01%
Y RADIAL	282765.8					3298.52	1.17%
Ga 417.206	1179437.0					24700.96	2.09%
GA RADIAL	73614.3					144.59	0.20%
Ag 328.068†	128254.8	0.397 mg/L		0.0111	0.397 mg/L	0.0111	2.80%
QC value within limits for Ag 328.068 Recovery = 99.27%							
Al 396.153†	64703.5	9.71 mg/L		0.010	9.71 mg/L	0.010	0.11%
QC value within limits for Al 396.153 Recovery = 97.05%							
As 188.979†	1080.9	0.387 mg/L		0.0059	0.387 mg/L	0.0059	1.52%
QC value within limits for As 188.979 Recovery = 96.73%							
Ba 233.527†	146085.3	0.992 mg/L		0.0047	0.992 mg/L	0.0047	0.48%
QC value within limits for Ba 233.527 Recovery = 99.21%							
Be 234.861†	54693.9	0.0485 mg/L		0.00152	0.0485 mg/L	0.00152	3.14%
QC value within limits for Be 234.861 Recovery = 97.05%							
B 249.677†	45483.4	0.483 mg/L		0.0164	0.483 mg/L	0.0164	3.39%
QC value within limits for B 249.677 Recovery = 96.59%							
Ca 227.546†	3695.9	10.2 mg/L		0.29	10.2 mg/L	0.29	2.88%
QC value within limits for Ca 227.546 Recovery = 101.55%							
Cd 228.802†	2205.1	0.0478 mg/L		0.00185	0.0478 mg/L	0.00185	3.87%
QC value within limits for Cd 228.802 Recovery = 95.62%							
Co 228.616†	7324.1	0.199 mg/L		0.0027	0.199 mg/L	0.0027	1.36%
QC value within limits for Co 228.616 Recovery = 99.26%							
Cr 267.716†	63907.5	0.493 mg/L		0.0045	0.493 mg/L	0.0045	0.92%
QC value within limits for Cr 267.716 Recovery = 98.57%							
Cu 327.393†	131866.3	0.491 mg/L		0.0120	0.491 mg/L	0.0120	2.44%

Approved: November 20, 2012

Ken H. Rhodes

QC value within limits for Cu	327.393	Recovery = 98.15%			
Fe 239.562†	37763.4	3.96 mg/L	0.030	0.76%	
QC value within limits for Fe	239.562	Recovery = 99.03%			
Mg 279.077†	27565.7	9.93 mg/L	0.077	0.78%	
QC value within limits for Mg	279.077	Recovery = 99.34%			
Mn 257.610†	420442.5	0.503 mg/L	0.0037	0.74%	
QC value within limits for Mn	257.610	Recovery = 100.61%			
Mo 202.031†	28681.6	0.970 mg/L	0.0063	0.65%	
QC value within limits for Mo	202.031	Recovery = 97.04%			
Ni 231.604†	29570.0	0.497 mg/L	0.0008	0.15%	
QC value within limits for Ni	231.604	Recovery = 99.32%			
Pb 220.353†	5201.0	0.497 mg/L	0.0049	0.99%	
QC value within limits for Pb	220.353	Recovery = 99.47%			
Sb 206.836†	4188.2	1.17 mg/L	0.035	2.95%	
QC value within limits for Sb	206.836	Recovery = 97.49%			
Se 196.026†	635.9	0.393 mg/L	0.0165	4.19%	
QC value within limits for Se	196.026	Recovery = 98.33%			
Si 251.611†	234124.7	4.94 mg/L	0.096	1.94%	
QC value within limits for Si	251.611	Recovery = 98.76%			
Sn 189.927†	9348.4	0.980 mg/L	0.0072	0.74%	
QC value within limits for Sn	189.927	Recovery = 98.00%			
Ti 334.940†	1090448.0	0.978 mg/L	0.0033	0.34%	
QC value within limits for Ti	334.940	Recovery = 97.77%			
Tl 190.801†	1464.6	0.511 mg/L	0.0070	1.37%	
QC value within limits for Tl	190.801	Recovery = 102.26%			
V 290.880†	226664.7	0.989 mg/L	0.0074	0.75%	
QC value within limits for V	290.880	Recovery = 98.90%			
Zn 206.200†	43798.6	0.987 mg/L	0.0054	0.54%	
QC value within limits for Zn	206.200	Recovery = 98.73%			
K 766.490†	145206.4	48.6 mg/L	0.23	0.47%	
QC value within limits for K	766.490	Recovery = 97.27%			
Na 589.592†	954323.3	48.4 mg/L	0.43	0.88%	
QC value within limits for Na	589.592	Recovery = 96.81%			
Sr 407.771†	2367462.4	0.990 mg/L	0.0194	1.96%	
QC value within limits for Sr	407.771	Recovery = 99.05%			
Li 670.784†	129086.2	0.967 mg/L	0.0091	0.94%	
QC value within limits for Li	670.784	Recovery = 96.67%			

All analyte(s) passed QC.

Sequence No.: 23

Sample ID: CCB

Analyst:

Initial Sample Wt:

Dilution:

Autosampler Location: 1

Date Collected: 11/19/2012 3:16:31 PM

Data Type: Original

Initial Sample Vol:

Sample Prep Vol:

Nebulizer Parameters: CCB

Analyte	Back Pressure	Flow
All	176.0 kPa	0.50 L/min

Mean Data: CCB

Analyte	Mean Corrected Intensity	Conc. Units	Calib. Units	Std.Dev.	Sample Conc. Units	Std.Dev.	RSD
Y 371.029	2461598.8					47463.65	1.93%
YRADIAL	289530.6					5098.83	1.76%
Ga 417.206	1204356.0					23187.41	1.93%
GaRADIAL	77207.4					1622.71	2.10%
Ag 328.068†	55.1	-0.00061 mg/L		0.000388	-0.00061 mg/L	0.000388	63.15%
QC value within limits for Ag	328.068	Recovery = Not calculated					
Al 396.153†	16.8	-0.0132 mg/L		0.00162	-0.0132 mg/L	0.00162	12.29%
QC value within limits for Al	396.153	Recovery = Not calculated					
As 188.979†	2.9	0.00092 mg/L		0.000710	0.00092 mg/L	0.000710	76.93%
QC value within limits for As	188.979	Recovery = Not calculated					
Ba 233.527†	7.7	-0.00191 mg/L		0.000140	-0.00191 mg/L	0.000140	7.34%
QC value within limits for Ba	233.527	Recovery = Not calculated					
Be 234.861†	38.3	0.00001 mg/L		0.000031	0.00001 mg/L	0.000031	235.47%
QC value within limits for Be	234.861	Recovery = Not calculated					
B 249.677†	360.6	0.00538 mg/L		0.000438	0.00538 mg/L	0.000438	8.15%
QC value within limits for B	249.677	Recovery = Not calculated					
Ca 227.546†	8.1	0.0223 mg/L		0.02922	0.0223 mg/L	0.02922	130.99%

Approved: November 20, 2012

Ken H. Rhodes

Cd	228.802†	QC value within limits for Cd	228.802	Recovery = Not calculated	-0.00003 mg/L	0.000105	308.88%
Co	228.616†	QC value within limits for Co	228.616	Recovery = Not calculated	-0.00087 mg/L	0.000189	21.67%
Cr	267.716†	QC value within limits for Cr	267.716	Recovery = Not calculated	-0.00065 mg/L	0.000081	12.36%
Cu	327.393†	QC value within limits for Cu	327.393	Recovery = Not calculated	-0.00030 mg/L	0.000304	102.88%
Fe	239.562†	QC value within limits for Fe	239.562	Recovery = Not calculated	-0.00485 mg/L	0.000801	16.53%
Mg	279.077†	QC value within limits for Mg	279.077	Recovery = Not calculated	-0.00727 mg/L	0.003790	52.16%
Mn	257.610†	QC value within limits for Mn	257.610	Recovery = Not calculated	-0.00041 mg/L	0.000053	12.86%
Mo	202.031†	QC value within limits for Mo	202.031	Recovery = Not calculated	-0.00103 mg/L	0.000175	17.02%
Ni	231.604†	QC value within limits for Ni	231.604	Recovery = Not calculated	-0.00162 mg/L	0.000337	20.73%
Pb	220.353†	QC value within limits for Pb	220.353	Recovery = Not calculated	-0.00167 mg/L	0.001126	67.57%
Sb	206.836†	QC value within limits for Sb	206.836	Recovery = Not calculated	0.00183 mg/L	0.000313	17.08%
Se	196.026†	QC value within limits for Se	196.026	Recovery = Not calculated	0.00553 mg/L	0.000570	10.31%
Si	251.611†	QC value within limits for Si	251.611	Recovery = Not calculated	-0.0102 mg/L	0.00037	3.63%
Sn	189.927†	QC value within limits for Sn	189.927	Recovery = Not calculated	-0.00492 mg/L	0.000874	17.77%
Ti	334.940†	QC value within limits for Ti	334.940	Recovery = Not calculated	-0.00039 mg/L	0.000231	58.63%
Tl	190.801†	QC value within limits for Tl	190.801	Recovery = Not calculated	-0.00431 mg/L	0.002588	60.03%
V	290.880†	QC value within limits for V	290.880	Recovery = Not calculated	-0.00130 mg/L	0.001158	89.15%
Zn	206.200†	QC value within limits for Zn	206.200	Recovery = Not calculated	-0.00161 mg/L	0.000037	2.30%
K	766.490†	QC value within limits for K	766.490	Recovery = Not calculated	0.01682 mg/L	0.01682	77.10%
Na	589.592†	QC value within limits for Na	589.592	Recovery = Not calculated	0.0184 mg/L	0.00188	10.21%
Sr	407.771†	QC value within limits for Sr	407.771	Recovery = Not calculated	-0.00275 mg/L	0.000086	3.13%
Li	670.784†	QC value within limits for Li	670.784	Recovery = Not calculated	-0.00254 mg/L	0.000175	6.89%

All analyte(s) passed QC.

Sequence No.: 24

Sample ID: PBW ZB WG414500-02

Analyst: KHR

Initial Sample Wt:

Dilution:

UASampler Location: 71

Date Collected: 11/19/2012 3:23:24 PM

Data Type: Original

Initial Sample Vol:

Sample Prep Vol:

Nebulizer Parameters: PBW ZB WG414500-02

Analyte	Back Pressure	Flow
All	175.0 kPa	0.50 L/min

Mean Data: PBW ZB WG414500-02

Analyte	Mean Corrected Intensity	Calib. Conc. Units	Std.Dev.	Sample Conc. Units	Std.Dev.	RSD
Y 371.029	2486755.7				24583.92	0.99%
YRADIAL	293905.9				5064.86	1.72%
Ga 417.206	1181642.9				32936.75	2.79%
GaRADIAL	78734.6				1986.39	2.52%
Ag 328.068†	61.8	-0.00059 mg/L	0.000400	-0.00059 mg/L	0.000400	67.74%
Al 396.153†	35.8	-0.0103 mg/L	0.00076	-0.0103 mg/L	0.00076	7.33%
As 188.979†	-4.8	-0.00186 mg/L	0.002651	-0.00186 mg/L	0.002651	142.63%
Ba 233.527†	-29.7	-0.00216 mg/L	0.000070	-0.00216 mg/L	0.000070	3.25%
Be 234.861†	-246.2	-0.00024 mg/L	0.000046	-0.00024 mg/L	0.000046	19.08%

Approved: November 20, 2012

Ken H. Rhodes

B 249.677†	270.5	0.00441 mg/L	0.000378	0.00441 mg/L	0.000378	8.57%
Ca 227.546†	15.4	0.0413 mg/L	0.03136	0.0413 mg/L	0.03136	75.89%
Cd 228.802†	8.4	0.00020 mg/L	0.000090	0.00020 mg/L	0.000090	44.69%
Co 228.616†	-5.5	-0.00067 mg/L	0.000259	-0.00067 mg/L	0.000259	38.81%
Cr 267.716†	34.5	-0.00041 mg/L	0.000062	-0.00041 mg/L	0.000062	14.92%
Cu 327.393†	152.6	-0.00019 mg/L	0.000491	-0.00019 mg/L	0.000491	251.91%
Fe 239.562†	66.2	0.00047 mg/L	0.000424	0.00047 mg/L	0.000424	90.30%
Mg 279.077†	54.1	0.00989 mg/L	0.004612	0.00989 mg/L	0.004612	46.63%
Mn 257.610†	826.4	-0.00116 mg/L	0.000067	-0.00116 mg/L	0.000067	5.73%
Mo 202.031†	10.0	-0.00048 mg/L	0.000350	-0.00048 mg/L	0.000350	72.72%
Ni 231.604†	-28.1	-0.00215 mg/L	0.000440	-0.00215 mg/L	0.000440	20.47%
Pb 220.353†	7.9	-0.00008 mg/L	0.001316	-0.00008 mg/L	0.001316	>999.9%
Sb 206.836†	5.4	0.00157 mg/L	0.001135	0.00157 mg/L	0.001135	72.28%
Se 196.026†	12.0	0.00826 mg/L	0.003213	0.00826 mg/L	0.003213	38.91%
Si 251.611†	128.5	-0.00754 mg/L	0.000735	-0.00754 mg/L	0.000735	9.74%
Sn 189.927†	-11.3	-0.00203 mg/L	0.000376	-0.00203 mg/L	0.000376	18.53%
Ti 334.940†	139.9	-0.00037 mg/L	0.000103	-0.00037 mg/L	0.000103	27.83%
Tl 190.801†	-18.5	-0.00785 mg/L	0.001396	-0.00785 mg/L	0.001396	17.79%
V 290.880†	247.8	-0.00081 mg/L	0.001282	-0.00081 mg/L	0.001282	158.25%
Zn 206.200†	78.1	0.00000 mg/L	0.000230	0.00000 mg/L	0.000230	>999.9%
K 766.490†	4.0	0.0181 mg/L	0.01078	0.0181 mg/L	0.01078	59.67%
Na 589.592†	55.8	0.00226 mg/L	0.010116	0.00226 mg/L	0.010116	446.97%
Sr 407.771†	457.0	-0.00267 mg/L	0.000014	-0.00267 mg/L	0.000014	0.51%
Li 670.784†	-61.4	-0.00344 mg/L	0.000414	-0.00344 mg/L	0.000414	12.02%

Sequence No.: 25

Sample ID: LCSW ZB WG414500-03

Analyst: KHR

Initial Sample Wt:

Dilution:

Autosampler Location: 72

Date Collected: 11/19/2012 3:30:19 PM

Data Type: Original

Initial Sample Vol:

Sample Prep Vol:

Nebulizer Parameters: LCSW ZB WG414500-03

Analyte	Back Pressure	Flow
All	176.0 kPa	0.50 L/min

Mean Data: LCSW ZB WG414500-03

Analyte	Mean Corrected Intensity	Conc. Units	Calib. Units	Std.Dev.	Sample Conc. Units	Std.Dev.	RSD
Y 371.029	2434483.4					26473.09	1.09%
YRADIAL	285187.4					4635.93	1.63%
Ga 417.206	1180444.9					17542.43	1.49%
GaRADIAL	75330.3					260.82	0.35%
Ag 328.068†	64202.7	0.198 mg/L	0.0035	0.0035	0.198 mg/L	0.0035	1.74%
Al 396.153†	32772.4	4.91 mg/L	0.038	0.038	4.91 mg/L	0.038	0.77%
As 188.979†	517.0	0.185 mg/L	0.0056	0.0056	0.185 mg/L	0.0056	3.05%
Ba 233.527†	72423.9	0.491 mg/L	0.0053	0.0053	0.491 mg/L	0.0053	1.08%
Be 234.861†	26091.0	0.0231 mg/L	0.00058	0.00058	0.0231 mg/L	0.00058	2.51%
B 249.677†	87685.4	0.935 mg/L	0.0212	0.0212	0.935 mg/L	0.0212	2.27%
Ca 227.546†	1796.3	4.95 mg/L	0.074	0.074	4.95 mg/L	0.074	1.50%
Cd 228.802†	1077.8	0.0234 mg/L	0.00074	0.00074	0.0234 mg/L	0.00074	3.16%
Co 228.616†	3615.0	0.0977 mg/L	0.00116	0.00116	0.0977 mg/L	0.00116	1.18%
Cr 267.716†	32186.3	0.248 mg/L	0.0018	0.0018	0.248 mg/L	0.0018	0.74%
Cu 327.393†	67734.9	0.252 mg/L	0.0046	0.0046	0.252 mg/L	0.0046	1.85%
Fe 239.562†	19220.8	2.01 mg/L	0.022	0.022	2.01 mg/L	0.022	1.10%
Mg 279.077†	13783.0	4.96 mg/L	0.074	0.074	4.96 mg/L	0.074	1.50%
Mn 257.610†	211182.7	0.252 mg/L	0.0034	0.0034	0.252 mg/L	0.0034	1.37%
Mo 202.031†	14354.3	0.485 mg/L	0.0052	0.0052	0.485 mg/L	0.0052	1.07%
Ni 231.604†	15210.7	0.255 mg/L	0.0022	0.0022	0.255 mg/L	0.0022	0.85%
Pb 220.353†	2512.5	0.240 mg/L	0.0032	0.0032	0.240 mg/L	0.0032	1.34%
Sb 206.836†	2091.7	0.584 mg/L	0.0117	0.0117	0.584 mg/L	0.0117	2.00%
Se 196.026†	312.7	0.194 mg/L	0.0049	0.0049	0.194 mg/L	0.0049	2.53%
Si 251.611†	116710.5	2.46 mg/L	0.037	0.037	2.46 mg/L	0.037	1.49%
Sn 189.927†	-70.3	-0.00822 mg/L	0.000798	0.000798	-0.00822 mg/L	0.000798	9.71%
Ti 334.940†	549502.8	0.492 mg/L	0.0028	0.0028	0.492 mg/L	0.0028	0.56%
Tl 190.801†	706.3	0.246 mg/L	0.0024	0.0024	0.246 mg/L	0.0024	0.96%
V 290.880†	113957.0	0.496 mg/L	0.0030	0.0030	0.496 mg/L	0.0030	0.61%
Zn 206.200†	20756.6	0.467 mg/L	0.0043	0.0043	0.467 mg/L	0.0043	0.92%
K 766.490†	72772.8	24.3 mg/L	0.14	0.14	24.3 mg/L	0.14	0.57%
Na 589.592†	479221.0	24.0 mg/L	0.16	0.16	24.0 mg/L	0.16	0.65%

Approved: November 20, 2012

Ken H. Rhodes

Sr 407.771†	1230605.4	0.513 mg/L	0.0058	0.513 mg/L	0.0058	1.12%
Li 670.784†	67563.1	0.505 mg/L	0.0069	0.505 mg/L	0.0069	1.37%

Sequence No.: 26

Sample ID: FBLK WG414334-01

Analyst: KHR

Initial Sample Wt:

Dilution:

Autosampler Location: 73

Date Collected: 11/19/2012 3:36:18 PM

Data Type: Original

Initial Sample Vol:

Sample Prep Vol:

Nebulizer Parameters: FBLK WG414334-01

Analyte

Back Pressure

Flow

All

175.0 kPa

0.50 L/min

Mean Data: FBLK WG414334-01

Analyte	Mean Corrected Intensity	Conc. Units	Calib. Units	Std.Dev.	Conc. Units	Sample Std.Dev.	RSD
Y 371.029	2384022.1					10425.71	0.44%
YRADIAL	284841.4					5328.01	1.87%
Ga 417.206	1209762.2					17459.80	1.44%
GARADIAL	74738.7					1266.33	1.69%
Ag 328.068†	-34.9	-0.00088 mg/L		0.000188	-0.00088 mg/L	0.000188	21.22%
Al 396.153†	17.1	-0.0132 mg/L		0.00069	-0.0132 mg/L	0.00069	5.24%
As 188.979†	-13.6	-0.00506 mg/L		0.001336	-0.00506 mg/L	0.001336	26.40%
Ba 233.527†	-17.2	-0.00208 mg/L		0.000117	-0.00208 mg/L	0.000117	5.64%
Be 234.861†	-205.0	-0.00021 mg/L		0.000019	-0.00021 mg/L	0.000019	9.09%
B 249.677†	434.1	0.00615 mg/L		0.000438	0.00615 mg/L	0.000438	7.12%
Ca 227.546†	34.2	0.0904 mg/L		0.01790	0.0904 mg/L	0.01790	19.79%
Cd 228.802†	9.2	0.00024 mg/L		0.000075	0.00024 mg/L	0.000075	31.96%
Co 228.616†	-9.4	-0.00077 mg/L		0.000135	-0.00077 mg/L	0.000135	17.50%
Cr 267.716†	38.8	-0.00038 mg/L		0.000021	-0.00038 mg/L	0.000021	5.61%
Cu 327.393†	215.6	0.00004 mg/L		0.000452	0.00004 mg/L	0.000452	>999.9%
Fe 239.562†	45.5	-0.00170 mg/L		0.000314	-0.00170 mg/L	0.000314	18.50%
Mg 279.077†	111.1	0.0304 mg/L		0.00147	0.0304 mg/L	0.00147	4.83%
Mn 257.610†	340.2	-0.00174 mg/L		0.000022	-0.00174 mg/L	0.000022	1.24%
Mo 202.031†	22.8	-0.00005 mg/L		0.000398	-0.00005 mg/L	0.000398	814.31%
Ni 231.604†	-42.4	-0.00239 mg/L		0.000094	-0.00239 mg/L	0.000094	3.94%
Pb 220.353†	6.0	-0.00026 mg/L		0.000448	-0.00026 mg/L	0.000448	173.98%
Sb 206.836†	3.8	0.00111 mg/L		0.000966	0.00111 mg/L	0.000966	87.44%
Se 196.026†	18.8	0.0125 mg/L		0.00228	0.0125 mg/L	0.00228	18.30%
Si 251.611†	174.1	-0.00658 mg/L		0.000191	-0.00658 mg/L	0.000191	2.91%
Sn 189.927†	-11.1	-0.00200 mg/L		0.000528	-0.00200 mg/L	0.000528	26.34%
Ti 334.940†	79.5	-0.00042 mg/L		0.000148	-0.00042 mg/L	0.000148	35.74%
Tl 190.801†	-27.9	-0.0110 mg/L		0.00214	-0.0110 mg/L	0.00214	19.38%
V 290.880†	715.9	0.00124 mg/L		0.000835	0.00124 mg/L	0.000835	67.47%
Zn 206.200†	132.1	0.00122 mg/L		0.000107	0.00122 mg/L	0.000107	8.78%
K 766.490†	118.0	-0.0915 mg/L		0.00218	-0.0915 mg/L	0.00218	2.39%
Na 589.592†	2769330.1	147 mg/L		4.3	147 mg/L	4.3	2.94%
Sr 407.771†	1297.4	-0.00232 mg/L		0.000023	-0.00232 mg/L	0.000023	1.00%
Li 670.784†	-89.5	-0.00365 mg/L		0.000522	-0.00365 mg/L	0.000522	14.28%

Sequence No.: 27

Sample ID: FBLK1 WG414458-01

Analyst: KHR

Initial Sample Wt:

Dilution:

Autosampler Location: 74

Date Collected: 11/19/2012 3:43:16 PM

Data Type: Original

Initial Sample Vol:

Sample Prep Vol:

Nebulizer Parameters: FBLK1 WG414458-01

Analyte

Back Pressure

Flow

All

176.0 kPa

0.50 L/min

Mean Data: FBLK1 WG414458-01

Analyte	Mean Corrected Intensity	Conc. Units	Calib. Units	Std.Dev.	Conc. Units	Sample Std.Dev.	RSD
Y 371.029	2362586.6					16088.04	0.68%
YRADIAL	286825.1					4125.25	1.44%
Ga 417.206	1186175.4					15714.52	1.32%

Approved: November 20, 2012

Ken H. Rhodes

GA RADIAL	74859.3				1287.83	1.72%
Ag 328.068†	20.4	-0.00071 mg/L	0.000089	-0.00071 mg/L	0.000089	12.47%
Al 396.153†	21.1	-0.0126 mg/L	0.00060	-0.0126 mg/L	0.00060	4.80%
As 188.979†	-7.8	-0.00295 mg/L	0.001510	-0.00295 mg/L	0.001510	51.17%
Ba 233.527†	-33.5	-0.00219 mg/L	0.000136	-0.00219 mg/L	0.000136	6.23%
Be 234.861†	-224.7	-0.00022 mg/L	0.000012	-0.00022 mg/L	0.000012	5.55%
B 249.677†	234.6	0.00403 mg/L	0.000203	0.00403 mg/L	0.000203	5.04%
Ca 227.546†	23.5	0.0623 mg/L	0.02841	0.0623 mg/L	0.02841	45.57%
Cd 228.802†	1.4	0.00005 mg/L	0.000097	0.00005 mg/L	0.000097	190.62%
Co 228.616†	-7.6	-0.00072 mg/L	0.000229	-0.00072 mg/L	0.000229	31.61%
Cr 267.716†	44.2	-0.00034 mg/L	0.000030	-0.00034 mg/L	0.000030	8.99%
Cu 327.393†	195.8	-0.00003 mg/L	0.000277	-0.00003 mg/L	0.000277	814.75%
Fe 239.562†	30.9	-0.00324 mg/L	0.000113	-0.00324 mg/L	0.000113	3.48%
Mg 279.077†	59.3	0.0118 mg/L	0.00173	0.0118 mg/L	0.00173	14.72%
Mn 257.610†	330.7	-0.00176 mg/L	0.000004	-0.00176 mg/L	0.000004	0.20%
Mo 202.031†	24.4	0.00001 mg/L	0.000262	0.00001 mg/L	0.000262	>999.9%
Ni 231.604†	-41.1	-0.00237 mg/L	0.000146	-0.00237 mg/L	0.000146	6.17%
Pb 220.353†	-5.8	-0.00139 mg/L	0.000762	-0.00139 mg/L	0.000762	54.90%
Sb 206.836†	4.4	0.00129 mg/L	0.001251	0.00129 mg/L	0.001251	97.04%
Se 196.026†	15.9	0.0106 mg/L	0.00148	0.0106 mg/L	0.00148	13.94%
Si 251.611†	-20.2	-0.0107 mg/L	0.00018	-0.0107 mg/L	0.00018	1.64%
Sn 189.927†	-8.5	-0.00173 mg/L	0.000455	-0.00173 mg/L	0.000455	26.32%
Ti 334.940†	80.3	-0.00042 mg/L	0.000033	-0.00042 mg/L	0.000033	7.92%
Tl 190.801†	-27.2	-0.0108 mg/L	0.00071	-0.0108 mg/L	0.00071	6.56%
V 290.880†	705.4	0.00119 mg/L	0.001720	0.00119 mg/L	0.001720	144.31%
Zn 206.200†	139.2	0.00138 mg/L	0.000125	0.00138 mg/L	0.000125	9.06%
K 766.490†	11.3	-0.125 mg/L	0.0236	-0.125 mg/L	0.0236	18.86%
Na 589.592†	2741587.3	146 mg/L	3.0	146 mg/L	3.0	2.08%
Sr 407.771†	948.3	-0.00247 mg/L	0.000041	-0.00247 mg/L	0.000041	1.65%
Li 670.784†	-22.7	-0.00315 mg/L	0.000392	-0.00315 mg/L	0.000392	12.43%

Sequence No.: 28

Sample ID: FBLK2 WG414458-02

Analyst: KHR

Initial Sample Wt:

Dilution:

Sampler Location: 75

Date Collected: 11/19/2012 3:50:14 PM

Data Type: Original

Initial Sample Vol:

Sample Prep Vol:

Nebulizer Parameters: FBLK2 WG414458-02

Analyte	Back Pressure	Flow
All	175.0 kPa	0.50 L/min

Mean Data: FBLK2 WG414458-02

Analyte	Mean Corrected Intensity	Conc.	Calib. Units	Std.Dev.	Conc.	Sample Units	Std.Dev.	RSD
Y 371.029	2476841.7						2997.59	0.12%
YRADIAL	289783.5						4624.10	1.60%
Ga 417.206	1165905.0						11566.05	0.99%
GaRADIAL	77885.8						1304.92	1.68%
Ag 328.068†	-69.6	-0.00099	mg/L	0.000133	-0.00099	mg/L	0.000133	13.35%
Al 396.153†	24.1	-0.0121	mg/L	0.00112	-0.0121	mg/L	0.00112	9.22%
As 188.979†	-7.5	-0.00284	mg/L	0.002134	-0.00284	mg/L	0.002134	75.08%
Ba 233.527†	-19.8	-0.00210	mg/L	0.000139	-0.00210	mg/L	0.000139	6.65%
Be 234.861†	-300.5	-0.00029	mg/L	0.000022	-0.00029	mg/L	0.000022	7.67%
B 249.677†	162.3	0.00326	mg/L	0.000210	0.00326	mg/L	0.000210	6.45%
Ca 227.546†	7.0	0.0198	mg/L	0.02750	0.0198	mg/L	0.02750	138.54%
Cd 228.802†	3.1	0.00009	mg/L	0.000199	0.00009	mg/L	0.000199	222.62%
Co 228.616†	-6.1	-0.00068	mg/L	0.000251	-0.00068	mg/L	0.000251	36.67%
Cr 267.716†	36.9	-0.00039	mg/L	0.000111	-0.00039	mg/L	0.000111	28.25%
Cu 327.393†	184.8	-0.00007	mg/L	0.000464	-0.00007	mg/L	0.000464	619.32%
Fe 239.562†	55.4	-0.00066	mg/L	0.000163	-0.00066	mg/L	0.000163	24.58%
Mg 279.077†	9.0	-0.00636	mg/L	0.001048	-0.00636	mg/L	0.001048	16.48%
Mn 257.610†	649.3	-0.00137	mg/L	0.000016	-0.00137	mg/L	0.000016	1.20%
Mo 202.031†	16.6	-0.00026	mg/L	0.000259	-0.00026	mg/L	0.000259	100.14%
Ni 231.604†	20.5	-0.00133	mg/L	0.000160	-0.00133	mg/L	0.000160	12.02%
Pb 220.353†	2.1	-0.00063	mg/L	0.002460	-0.00063	mg/L	0.002460	387.38%
Sb 206.836†	8.8	0.00252	mg/L	0.000918	0.00252	mg/L	0.000918	36.37%
Se 196.026†	17.5	0.0116	mg/L	0.00129	0.0116	mg/L	0.00129	11.11%
Si 251.611†	-12.9	-0.0105	mg/L	0.00042	-0.0105	mg/L	0.00042	4.02%
Sn 189.927†	-9.3	-0.00182	mg/L	0.000335	-0.00182	mg/L	0.000335	18.43%

Approved: November 20, 2012

Ken H. Rhodes

Ti 334.940†	151.7	-0.00036 mg/L	0.000099	-0.00036 mg/L	0.000099	27.32%
Tl 190.801†	-28.6	-0.0113 mg/L	0.00024	-0.0113 mg/L	0.00024	2.15%
V 290.880†	209.1	-0.00098 mg/L	0.001154	-0.00098 mg/L	0.001154	117.84%
Zn 206.200†	594.7	0.0116 mg/L	0.00013	0.0116 mg/L	0.00013	1.10%
K 766.490†	29.7	0.0265 mg/L	0.01015	0.0265 mg/L	0.01015	38.23%
Na 589.592†	1045.5	0.0513 mg/L	0.00868	0.0513 mg/L	0.00868	16.92%
Sr 407.771†	75.6	-0.00283 mg/L	0.000037	-0.00283 mg/L	0.000037	1.30%
Li 670.784†	-86.3	-0.00363 mg/L	0.000231	-0.00363 mg/L	0.000231	6.36%

Sequence No.: 29

Sample ID: L1211037502

Analyst: KHR

Initial Sample Wt:

Dilution:

Autosampler Location: 76

Date Collected: 11/19/2012 3:57:08 PM

Data Type: Original

Initial Sample Vol:

Sample Prep Vol:

Nebulizer Parameters: L1211037502

Analyte	Back Pressure	Flow
All	176.0 kPa	0.50 L/min

Mean Data: L1211037502

Analyte	Mean Corrected Intensity	Calib. Conc. Units	Std.Dev.	Sample Conc. Units	Std.Dev.	RSD
Y 371.029	2333128.5				12866.32	0.55%
YRADIAL	284055.2				4333.95	1.53%
Ga 417.206	1219892.9				24409.35	2.00%
GaRADIAL	76771.7				1118.12	1.46%
Ag 328.068†	453.8	0.00061 mg/L	0.000549	0.00061 mg/L	0.000549	89.47%
Al 396.153†	440.6	0.0507 mg/L	0.00056	0.0507 mg/L	0.00056	1.11%
As 188.979†	-22.2	-0.00817 mg/L	0.002481	-0.00817 mg/L	0.002481	30.36%
Ba 233.527†	4580.5	0.0292 mg/L	0.00025	0.0292 mg/L	0.00025	0.85%
Be 234.861†	-146.0	-0.00016 mg/L	0.000029	-0.00016 mg/L	0.000029	18.65%
B 249.677†	1229.6	0.0146 mg/L	0.00118	0.0146 mg/L	0.00118	8.04%
Ca 227.546†	24886.5	65.3 mg/L	2.44	65.3 mg/L	2.44	3.74%
Cd 228.802†	-2.2	0.00000 mg/L	0.000139	0.00000 mg/L	0.000139	>999.9%
Co 228.616†	-4.9	-0.00064 mg/L	0.000397	-0.00064 mg/L	0.000397	62.08%
Cr 267.716†	115.4	0.00021 mg/L	0.000151	0.00021 mg/L	0.000151	71.16%
Cu 327.393†	165.0	-0.00015 mg/L	0.000520	-0.00015 mg/L	0.000520	341.54%
Fe 239.562†	319.9	0.0271 mg/L	0.00048	0.0271 mg/L	0.00048	1.76%
Mg 279.077†	2986.6	1.07 mg/L	0.017	1.07 mg/L	0.017	1.57%
Mn 257.610†	13631.5	0.0142 mg/L	0.00025	0.0142 mg/L	0.00025	1.73%
Mo 202.031†	109.3	0.00288 mg/L	0.000426	0.00288 mg/L	0.000426	14.78%
Ni 231.604†	1.6	-0.00165 mg/L	0.000181	-0.00165 mg/L	0.000181	10.97%
Pb 220.353†	26.8	0.00173 mg/L	0.000353	0.00173 mg/L	0.000353	20.38%
Sb 206.836†	3.1	0.00093 mg/L	0.000557	0.00093 mg/L	0.000557	59.93%
Se 196.026†	13.6	0.00926 mg/L	0.004279	0.00926 mg/L	0.004279	46.22%
Si 251.611†	138193.6	2.92 mg/L	0.068	2.92 mg/L	0.068	2.32%
Sn 189.927†	-272.0	-0.0294 mg/L	0.00044	-0.0294 mg/L	0.00044	1.49%
Ti 334.940†	-8779.6	0.00143 mg/L	0.000414	0.00143 mg/L	0.000414	28.96%
Tl 190.801†	-44.9	-0.0169 mg/L	0.00259	-0.0169 mg/L	0.00259	15.30%
V 290.880†	1078.5	0.00279 mg/L	0.002216	0.00279 mg/L	0.002216	79.28%
Zn 206.200†	133.6	0.00125 mg/L	0.000093	0.00125 mg/L	0.000093	7.42%
K 766.490†	2676.3	0.771 mg/L	0.0091	0.771 mg/L	0.0091	1.18%
Na 589.592†	2543732.1	135 mg/L	4.4	135 mg/L	4.4	3.25%
Sr 407.771†	223206.4	0.0895 mg/L	0.00196	0.0895 mg/L	0.00196	2.19%
Li 670.784†	1.1	-0.00297 mg/L	0.000543	-0.00297 mg/L	0.000543	18.27%

Sequence No.: 30

Sample ID: L1211037504

Analyst: KHR

Initial Sample Wt:

Dilution:

Autosampler Location: 77

Date Collected: 11/19/2012 4:04:11 PM

Data Type: Original

Initial Sample Vol:

Sample Prep Vol:

Nebulizer Parameters: L1211037504

Analyte	Back Pressure	Flow
All	175.0 kPa	0.50 L/min

Approved: November 20, 2012

Ken H. Rhodes

Mean Data: L1211037504

Analyte	Mean Corrected Intensity	Calib. Conc. Units	Std.Dev.	Sample Conc. Units	Std.Dev.	RSD
Y 371.029	2383653.6				3683.70	0.15%
YRADIAL	282226.9				2389.13	0.85%
Ga 417.206	1220388.0				14687.91	1.20%
GarADIAL	75658.5				513.57	0.68%
Ag 328.068†	254.8	0.00063 mg/L	0.000082	0.00063 mg/L	0.000082	13.11%
Al 396.153†	5403.0	0.802 mg/L	0.0088	0.802 mg/L	0.0088	1.10%
As 188.979†	-16.0	-0.00561 mg/L	0.002392	-0.00561 mg/L	0.002392	42.66%
Ba 233.527†	6917.4	0.0450 mg/L	0.00018	0.0450 mg/L	0.00018	0.41%
Be 234.861†	541.6	0.00015 mg/L	0.000044	0.00015 mg/L	0.000044	30.04%
B 249.677†	3575.1	0.0389 mg/L	0.00077	0.0389 mg/L	0.00077	1.99%
Ca 227.546†	28532.8	74.9 mg/L	1.69	74.9 mg/L	1.69	2.26%
Cd 228.802†	22.0	0.00053 mg/L	0.000108	0.00053 mg/L	0.000108	20.23%
Co 228.616†	79.5	0.00161 mg/L	0.000420	0.00161 mg/L	0.000420	26.12%
Cr 267.716†	389.9	0.00228 mg/L	0.000043	0.00228 mg/L	0.000043	1.88%
Cu 327.393†	601.6	0.00164 mg/L	0.000274	0.00164 mg/L	0.000274	16.70%
Fe 239.562†	15404.0	1.61 mg/L	0.014	1.61 mg/L	0.014	0.86%
Mg 279.077†	4273.4	1.53 mg/L	0.014	1.53 mg/L	0.014	0.89%
Mn 257.610†	295242.1	0.352 mg/L	0.0024	0.352 mg/L	0.0024	0.68%
Mo 202.031†	85.1	0.00221 mg/L	0.000108	0.00221 mg/L	0.000108	4.87%
Ni 231.604†	226.8	0.00215 mg/L	0.000613	0.00215 mg/L	0.000613	28.54%
Pb 220.353†	155.1	0.0138 mg/L	0.00266	0.0138 mg/L	0.00266	19.28%
Sb 206.836†	-2.5	-0.00061 mg/L	0.001741	-0.00061 mg/L	0.001741	285.30%
Se 196.026†	10.2	0.00736 mg/L	0.003795	0.00736 mg/L	0.003795	51.54%
Si 251.611†	57938.2	1.22 mg/L	0.011	1.22 mg/L	0.011	0.87%
Sn 189.927†	-273.3	-0.0295 mg/L	0.00064	-0.0295 mg/L	0.00064	2.17%
Ti 334.940†	-4925.1	0.00632 mg/L	0.000940	0.00632 mg/L	0.000940	14.88%
Tl 190.801†	-42.0	-0.0162 mg/L	0.00432	-0.0162 mg/L	0.00432	26.66%
V 290.880†	1144.0	0.00297 mg/L	0.000164	0.00297 mg/L	0.000164	5.51%
Zn 206.200†	2435.8	0.0529 mg/L	0.00035	0.0529 mg/L	0.00035	0.66%
K 766.490†	1887.3	0.502 mg/L	0.0070	0.502 mg/L	0.0070	1.40%
Na 589.592†	2670532.0	142 mg/L	0.4	142 mg/L	0.4	0.26%
Sr 407.771†	885879.2	0.367 mg/L	0.0020	0.367 mg/L	0.0020	0.54%
Li 670.784†	60.5	-0.00253 mg/L	0.000237	-0.00253 mg/L	0.000237	9.39%

Sequence No.: 31

Sample ID: L1211037509

Analyst: KHR

Initial Sample Wt:

Dilution:

Sampler Location: 78

Date Collected: 11/19/2012 4:10:10 PM

Data Type: Original

Initial Sample Vol:

Sample Prep Vol:

Nebulizer Parameters: L1211037509

Analyte	Back Pressure	Flow
All	176.0 kPa	0.50 L/min

Mean Data: L1211037509

Analyte	Mean Corrected Intensity	Calib. Conc. Units	Std.Dev.	Sample Conc. Units	Std.Dev.	RSD
Y 371.029	2332621.9				5176.28	0.22%
YRADIAL	280425.5				2087.86	0.74%
Ga 417.206	1191065.9				20640.08	1.73%
GarADIAL	74760.4				261.72	0.35%
Ag 328.068†	-221.7	0.00085 mg/L	0.000368	0.00085 mg/L	0.000368	43.44%
Al 396.153†	428.9	0.0495 mg/L	0.00497	0.0495 mg/L	0.00497	10.03%
As 188.979†	-21.5	-0.00670 mg/L	0.002144	-0.00670 mg/L	0.002144	31.98%
Ba 233.527†	11989.2	0.0793 mg/L	0.00044	0.0793 mg/L	0.00044	0.56%
Be 234.861†	1261.3	0.00000 mg/L	0.000087	0.00000 mg/L	0.000087	>999.9%
B 249.677†	2820.1	0.0294 mg/L	0.00088	0.0294 mg/L	0.00088	2.99%
Ca 227.546†	26332.6	69.2 mg/L	1.63	69.2 mg/L	1.63	2.36%
Cd 228.802†	12.8	0.00035 mg/L	0.000208	0.00035 mg/L	0.000208	59.69%
Co 228.616†	221.4	0.00538 mg/L	0.000239	0.00538 mg/L	0.000239	4.43%
Cr 267.716†	61.8	-0.00038 mg/L	0.000082	-0.00038 mg/L	0.000082	21.32%
Cu 327.393†	6.2	-0.00020 mg/L	0.000228	-0.00020 mg/L	0.000228	116.56%
Fe 239.562†	49172.7	5.16 mg/L	0.055	5.16 mg/L	0.055	1.07%
Mg 279.077†	7449.0	2.67 mg/L	0.055	2.67 mg/L	0.055	2.07%
Mn 257.610†	139669.6	0.166 mg/L	0.0013	0.166 mg/L	0.0013	0.81%
Mo 202.031†	101.0	0.00289 mg/L	0.000119	0.00289 mg/L	0.000119	4.14%

Approved: November 20, 2012

Ken H. Rhodes

Ni 231.604†	709.1	0.0103 mg/L	0.00066	0.0103 mg/L	0.00066	6.41%
Pb 220.353†	8.0	-0.00060 mg/L	0.002212	-0.00060 mg/L	0.002212	368.55%
Sb 206.836†	1.3	0.00062 mg/L	0.000559	0.00062 mg/L	0.000559	90.65%
Se 196.026†	10.5	0.00808 mg/L	0.004995	0.00808 mg/L	0.004995	61.83%
Si 251.611†	43851.4	0.919 mg/L	0.0077	0.919 mg/L	0.0077	0.84%
Sn 189.927†	-275.8	-0.0298 mg/L	0.00166	-0.0298 mg/L	0.00166	5.59%
Ti 334.940†	-7608.6	0.00305 mg/L	0.000814	0.00305 mg/L	0.000814	26.73%
Tl 190.801†	-30.4	-0.0121 mg/L	0.00383	-0.0121 mg/L	0.00383	31.60%
V 290.880†	1136.9	0.00269 mg/L	0.000433	0.00269 mg/L	0.000433	16.09%
Zn 206.200†	7444.6	0.165 mg/L	0.0011	0.165 mg/L	0.0011	0.67%
K 766.490†	4178.8	1.26 mg/L	0.021	1.26 mg/L	0.021	1.64%
Na 589.592†	2740728.9	146 mg/L	0.9	146 mg/L	0.9	0.62%
Sr 407.771†	418333.8	0.171 mg/L	0.0005	0.171 mg/L	0.0005	0.29%
Li 670.784†	99.9	-0.00223 mg/L	0.000247	-0.00223 mg/L	0.000247	11.07%

Sequence No.: 32

Sample ID: L1211037509PS WG414522-01

Analyst: KHR

Initial Sample Wt:

Dilution:

Autosampler Location: 79

Date Collected: 11/19/2012 4:16:10 PM

Data Type: Original

Initial Sample Vol:

Sample Prep Vol:

Nebulizer Parameters: L1211037509PS WG414522-01

Analyte	Back Pressure	Flow
All	176.0 kPa	0.50 L/min

Mean Data: L1211037509PS WG414522-01

Analyte	Mean Corrected Intensity	Calib. Conc. Units	Std.Dev.	Sample Conc. Units	Std.Dev.	RSD
Y 371.029	2318852.0				17639.14	0.76%
YRADIAL	283904.0				2046.64	0.72%
Ga 417.206	1165479.5				27947.90	2.40%
GaRADIAL	74048.3				646.82	0.87%
Ag 328.068†	63935.4	0.200 mg/L	0.0052	0.200 mg/L	0.0052	2.61%
Al 396.153†	33473.9	5.01 mg/L	0.024	5.01 mg/L	0.024	0.47%
As 188.979†	520.2	0.187 mg/L	0.0034	0.187 mg/L	0.0034	1.84%
Ba 233.527†	82662.9	0.560 mg/L	0.0146	0.560 mg/L	0.0146	2.60%
Be 234.861†	28056.9	0.0239 mg/L	0.00028	0.0239 mg/L	0.00028	1.15%
B 249.677†	91126.8	0.970 mg/L	0.0279	0.970 mg/L	0.0279	2.87%
Ca 227.546†	25848.2	68.2 mg/L	2.23	68.2 mg/L	2.23	3.27%
Cd 228.802†	1074.1	0.0233 mg/L	0.00096	0.0233 mg/L	0.00096	4.10%
Co 228.616†	3767.2	0.102 mg/L	0.0010	0.102 mg/L	0.0010	1.01%
Cr 267.716†	32551.8	0.251 mg/L	0.0039	0.251 mg/L	0.0039	1.57%
Cu 327.393†	67479.2	0.251 mg/L	0.0093	0.251 mg/L	0.0093	3.72%
Fe 239.562†	62088.5	6.52 mg/L	0.073	6.52 mg/L	0.073	1.12%
Mg 279.077†	20066.6	7.22 mg/L	0.075	7.22 mg/L	0.075	1.04%
Mn 257.610†	339482.6	0.406 mg/L	0.0102	0.406 mg/L	0.0102	2.52%
Mo 202.031†	14774.5	0.500 mg/L	0.0097	0.500 mg/L	0.0097	1.95%
Ni 231.604†	15747.4	0.264 mg/L	0.0021	0.264 mg/L	0.0021	0.79%
Pb 220.353†	2522.9	0.240 mg/L	0.0018	0.240 mg/L	0.0018	0.76%
Sb 206.836†	2104.3	0.588 mg/L	0.0183	0.588 mg/L	0.0183	3.12%
Se 196.026†	316.1	0.197 mg/L	0.0064	0.197 mg/L	0.0064	3.24%
Si 251.611†	157601.8	3.32 mg/L	0.042	3.32 mg/L	0.042	1.27%
Sn 189.927†	-260.4	-0.0282 mg/L	0.00029	-0.0282 mg/L	0.00029	1.05%
Ti 334.940†	553195.6	0.505 mg/L	0.0014	0.505 mg/L	0.0014	0.28%
Tl 190.801†	656.0	0.229 mg/L	0.0026	0.229 mg/L	0.0026	1.16%
V 290.880†	117854.8	0.513 mg/L	0.0065	0.513 mg/L	0.0065	1.27%
Zn 206.200†	28048.8	0.631 mg/L	0.0214	0.631 mg/L	0.0214	3.39%
K 766.490†	77869.0	25.8 mg/L	0.13	25.8 mg/L	0.13	0.52%
Na 589.592†	2949054.7	158 mg/L	1.4	158 mg/L	1.4	0.89%
Sr 407.771†	1577003.0	0.658 mg/L	0.0095	0.658 mg/L	0.0095	1.44%
Li 670.784†	66960.7	0.500 mg/L	0.0035	0.500 mg/L	0.0035	0.70%

Sequence No.: 33

Sample ID: L1211037509DL WG414522-02

Analyst: KHR

Initial Sample Wt:

Dilution:

Autosampler Location: 80

Date Collected: 11/19/2012 4:22:10 PM

Data Type: Original

Initial Sample Vol:

Sample Prep Vol:

Approved: November 20, 2012

Ken H. Rhodes

Nebulizer Parameters: L1211037509DL WG414522-02

Analyte Back Pressure Flow
All 176.0 kPa 0.50 L/min

Mean Data: L1211037509DL WG414522-02

Analyte	Mean Corrected Intensity	Calib. Conc. Units	Std.Dev.	Sample Conc. Units	Std.Dev.	RSD
Y 371.029	2395138.5				16467.06	0.69%
YRADIAL	283167.8				7203.60	2.54%
Ga 417.206	1236136.6				12734.80	1.03%
GaRADIAL	77060.2				789.43	1.02%
Ag 328.068†	25.2	-0.00023 mg/L	0.000280	-0.00023 mg/L	0.000280	120.97%
Al 396.153†	111.1	0.00117 mg/L	0.002107	0.00117 mg/L	0.002107	180.32%
As 188.979†	-12.4	-0.00437 mg/L	0.000554	-0.00437 mg/L	0.000554	12.67%
Ba 233.527†	2410.6	0.0144 mg/L	0.00011	0.0144 mg/L	0.00011	0.79%
Be 234.861†	370.1	0.00008 mg/L	0.000025	0.00008 mg/L	0.000025	29.92%
B 249.677†	871.9	0.0104 mg/L	0.00045	0.0104 mg/L	0.00045	4.31%
Ca 227.546†	5169.4	13.6 mg/L	0.21	13.6 mg/L	0.21	1.53%
Cd 228.802†	-2.5	-0.00002 mg/L	0.000067	-0.00002 mg/L	0.000067	272.21%
Co 228.616†	32.7	0.00034 mg/L	0.000461	0.00034 mg/L	0.000461	133.97%
Cr 267.716†	36.5	-0.00043 mg/L	0.000124	-0.00043 mg/L	0.000124	28.60%
Cu 327.393†	-51.8	-0.00084 mg/L	0.000251	-0.00084 mg/L	0.000251	29.75%
Fe 239.562†	10049.5	1.05 mg/L	0.002	1.05 mg/L	0.002	0.19%
Mg 279.077†	1532.9	0.542 mg/L	0.0076	0.542 mg/L	0.0076	1.40%
Mn 257.610†	29187.5	0.0329 mg/L	0.00047	0.0329 mg/L	0.00047	1.44%
Mo 202.031†	23.3	0.00003 mg/L	0.000181	0.00003 mg/L	0.000181	624.60%
Ni 231.604†	116.5	0.00029 mg/L	0.000289	0.00029 mg/L	0.000289	101.11%
Pb 220.353†	15.7	0.00056 mg/L	0.001235	0.00056 mg/L	0.001235	221.96%
Sb 206.836†	2.6	0.00081 mg/L	0.001176	0.00081 mg/L	0.001176	145.22%
Se 196.026†	7.5	0.00563 mg/L	0.001232	0.00563 mg/L	0.001232	21.88%
Si 251.611†	8787.7	0.176 mg/L	0.0012	0.176 mg/L	0.0012	0.71%
Sn 189.927†	-151.2	-0.0167 mg/L	0.00068	-0.0167 mg/L	0.00068	4.06%
Ti 334.940†	-1812.3	-0.00009 mg/L	0.000149	-0.00009 mg/L	0.000149	166.92%
Tl 190.801†	-18.2	-0.00779 mg/L	0.000816	-0.00779 mg/L	0.000816	10.48%
V 290.880†	612.4	0.00071 mg/L	0.000698	0.00071 mg/L	0.000698	98.84%
Zn 206.200†	1600.2	0.0341 mg/L	0.00035	0.0341 mg/L	0.00035	1.03%
K 766.490†	1045.5	0.336 mg/L	0.0042	0.336 mg/L	0.0042	1.24%
Na 589.592†	556536.2	28.0 mg/L	0.92	28.0 mg/L	0.92	3.29%
Sr 407.771†	87562.0	0.0336 mg/L	0.00053	0.0336 mg/L	0.00053	1.57%
Li 670.784†	39.9	-0.00268 mg/L	0.000103	-0.00268 mg/L	0.000103	3.84%

Sequence No.: 34

Sample ID: CCV

Analyst:

Initial Sample Wt:

Dilution:

Autosampler Location: 6

Date Collected: 11/19/2012 4:29:06 PM

Data Type: Original

Initial Sample Vol:

Sample Prep Vol:

Nebulizer Parameters: CCV

Analyte Back Pressure Flow
All 176.0 kPa 0.50 L/min

Mean Data: CCV

Analyte	Mean Corrected Intensity	Calib. Conc. Units	Std.Dev.	Sample Conc. Units	Std.Dev.	RSD
Y 371.029	2426024.7				13721.08	0.57%
YRADIAL	287473.5				4420.10	1.54%
Ga 417.206	1193565.4				1542.37	0.13%
GaRADIAL	74962.2				616.44	0.82%
Ag 328.068†	126349.7	0.391 mg/L	0.0019	0.391 mg/L	0.0019	0.47%
QC value within limits for Ag 328.068 Recovery = 97.79%						
Al 396.153†	63773.5	9.57 mg/L	0.033	9.57 mg/L	0.033	0.35%
QC value within limits for Al 396.153 Recovery = 95.66%						
As 188.979†	1049.0	0.375 mg/L	0.0013	0.375 mg/L	0.0013	0.34%
QC value within limits for As 188.979 Recovery = 93.86%						
Ba 233.527†	143372.0	0.974 mg/L	0.0082	0.974 mg/L	0.0082	0.84%
QC value within limits for Ba 233.527 Recovery = 97.36%						
Be 234.861†	53743.1	0.0477 mg/L	0.00042	0.0477 mg/L	0.00042	0.89%

Approved: November 20, 2012

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QC value within limits for Be 234.861	Recovery = 95.37%			
B 249.677†	44912.0	0.477 mg/L	0.0043	0.90%
QC value within limits for B 249.677	Recovery = 95.39%			
Ca 227.546†	3637.8	9.99 mg/L	0.068	0.68%
QC value within limits for Ca 227.546	Recovery = 99.93%			
Cd 228.802†	2144.5	0.0465 mg/L	0.00111	2.38%
QC value within limits for Cd 228.802	Recovery = 93.01%			
Co 228.616†	7184.5	0.195 mg/L	0.0013	0.68%
QC value within limits for Co 228.616	Recovery = 97.37%			
Cr 267.716†	62663.3	0.483 mg/L	0.0036	0.74%
QC value within limits for Cr 267.716	Recovery = 96.65%			
Cu 327.393†	130674.3	0.486 mg/L	0.0008	0.16%
QC value within limits for Cu 327.393	Recovery = 97.26%			
Fe 239.562†	36869.5	3.87 mg/L	0.027	0.71%
QC value within limits for Fe 239.562	Recovery = 96.68%			
Mg 279.077†	26766.2	9.65 mg/L	0.099	1.03%
QC value within limits for Mg 279.077	Recovery = 96.46%			
Mn 257.610†	413212.8	0.494 mg/L	0.0050	1.01%
QC value within limits for Mn 257.610	Recovery = 98.87%			
Mo 202.031†	28205.5	0.954 mg/L	0.0102	1.07%
QC value within limits for Mo 202.031	Recovery = 95.43%			
Ni 231.604†	28987.5	0.487 mg/L	0.0023	0.48%
QC value within limits for Ni 231.604	Recovery = 97.36%			
Pb 220.353†	5094.1	0.487 mg/L	0.0013	0.26%
QC value within limits for Pb 220.353	Recovery = 97.42%			
Sb 206.836†	4092.4	1.14 mg/L	0.012	1.08%
QC value within limits for Sb 206.836	Recovery = 95.26%			
Se 196.026†	627.9	0.388 mg/L	0.0033	0.84%
QC value within limits for Se 196.026	Recovery = 97.10%			
Si 251.611†	231867.9	4.89 mg/L	0.022	0.45%
QC value within limits for Si 251.611	Recovery = 97.81%			
Sn 189.927†	9145.6	0.959 mg/L	0.0022	0.23%
QC value within limits for Sn 189.927	Recovery = 95.87%			
Ti 334.940†	1073851.4	0.963 mg/L	0.0019	0.20%
QC value within limits for Ti 334.940	Recovery = 96.28%			
Tl 190.801†	1435.7	0.501 mg/L	0.0025	0.50%
QC value within limits for Tl 190.801	Recovery = 100.24%			
V 290.880†	222036.6	0.969 mg/L	0.0034	0.35%
QC value within limits for V 290.880	Recovery = 96.88%			
Zn 206.200†	42581.4	0.960 mg/L	0.0101	1.05%
QC value within limits for Zn 206.200	Recovery = 95.99%			
K 766.490†	144163.2	48.3 mg/L	0.23	0.48%
QC value within limits for K 766.490	Recovery = 96.57%			
Na 589.592†	939371.6	47.6 mg/L	1.13	2.38%
QC value within limits for Na 589.592	Recovery = 95.25%			
Sr 407.771†	2345024.0	0.981 mg/L	0.0311	3.17%
QC value within limits for Sr 407.771	Recovery = 98.11%			
Li 670.784†	128111.2	0.959 mg/L	0.0079	0.83%
QC value within limits for Li 670.784	Recovery = 95.93%			
All analyte(s) passed QC.				

Sequence No.: 35

Sample ID: CCB

Analyst:

Initial Sample Wt:

Dilution:

autosampler Location: 1

Date Collected: 11/19/2012 4:35:08 PM

Data Type: Original

Initial Sample Vol:

Sample Prep Vol:

Nebulizer Parameters: CCB

Analyte	Back Pressure	Flow
All	176.0 kPa	0.50 L/min

Mean Data: CCB

Analyte	Mean Corrected Intensity	Calib. Conc. Units	Std.Dev.	Sample Conc. Units	Std.Dev.	RSD
Y 371.029	2481087.5				26490.21	1.07%
YRADIAL	286766.0				2466.01	0.86%
Ga 417.206	1216540.6				16929.46	1.39%
GaRADIAL	77130.9				3091.47	4.01%
Ag 328.068†	64.2	-0.00059 mg/L	0.000095	-0.00059 mg/L	0.000095	16.12%

Approved: November 20, 2012

Ken H. Rhodes

QC value within limits for Ag	328.068	Recovery = Not calculated			
Al 396.153†	13.9	-0.0136 mg/L	0.00128	-0.0136 mg/L	0.00128 9.41%
QC value within limits for Al	396.153	Recovery = Not calculated			
As 188.979†	1.5	0.00042 mg/L	0.001339	0.00042 mg/L	0.001339 315.26%
QC value within limits for As	188.979	Recovery = Not calculated			
Ba 233.527†	-12.9	-0.00205 mg/L	0.000046	-0.00205 mg/L	0.000046 2.25%
QC value within limits for Ba	233.527	Recovery = Not calculated			
Be 234.861†	61.1	0.00003 mg/L	0.000014	0.00003 mg/L	0.000014 43.35%
QC value within limits for Be	234.861	Recovery = Not calculated			
B 249.677†	282.6	0.00454 mg/L	0.000353	0.00454 mg/L	0.000353 7.77%
QC value within limits for B	249.677	Recovery = Not calculated			
Ca 227.546†	20.0	0.0535 mg/L	0.01227	0.0535 mg/L	0.01227 22.95%
QC value within limits for Ca	227.546	Recovery = Not calculated			
Cd 228.802†	-3.6	-0.00008 mg/L	0.000108	-0.00008 mg/L	0.000108 141.51%
QC value within limits for Cd	228.802	Recovery = Not calculated			
Co 228.616†	0.6	-0.00050 mg/L	0.000172	-0.00050 mg/L	0.000172 34.04%
QC value within limits for Co	228.616	Recovery = Not calculated			
Cr 267.716†	-8.3	-0.00074 mg/L	0.000064	-0.00074 mg/L	0.000064 8.62%
QC value within limits for Cr	267.716	Recovery = Not calculated			
Cu 327.393†	127.6	-0.00029 mg/L	0.000207	-0.00029 mg/L	0.000207 71.85%
QC value within limits for Cu	327.393	Recovery = Not calculated			
Fe 239.562†	22.1	-0.00416 mg/L	0.000414	-0.00416 mg/L	0.000414 9.95%
QC value within limits for Fe	239.562	Recovery = Not calculated			
Mg 279.077†	7.8	-0.00679 mg/L	0.003799	-0.00679 mg/L	0.003799 55.96%
QC value within limits for Mg	279.077	Recovery = Not calculated			
Mn 257.610†	707.4	-0.00130 mg/L	0.000041	-0.00130 mg/L	0.000041 3.10%
QC value within limits for Mn	257.610	Recovery = Not calculated			
Mo 202.031†	-4.3	-0.00097 mg/L	0.000363	-0.00097 mg/L	0.000363 37.51%
QC value within limits for Mo	202.031	Recovery = Not calculated			
Ni 231.604†	-10.5	-0.00186 mg/L	0.000332	-0.00186 mg/L	0.000332 17.90%
QC value within limits for Ni	231.604	Recovery = Not calculated			
Pb 220.353†	8.3	-0.00004 mg/L	0.000445	-0.00004 mg/L	0.000445 >999.9%
QC value within limits for Pb	220.353	Recovery = Not calculated			
Sb 206.836†	2.6	0.00079 mg/L	0.001288	0.00079 mg/L	0.001288 163.53%
QC value within limits for Sb	206.836	Recovery = Not calculated			
Se 196.026†	5.6	0.00431 mg/L	0.004230	0.00431 mg/L	0.004230 98.09%
QC value within limits for Se	196.026	Recovery = Not calculated			
Si 251.611†	-44.0	-0.0112 mg/L	0.00024	-0.0112 mg/L	0.00024 2.17%
QC value within limits for Si	251.611	Recovery = Not calculated			
Sn 189.927†	-38.6	-0.00490 mg/L	0.000446	-0.00490 mg/L	0.000446 9.11%
QC value within limits for Sn	189.927	Recovery = Not calculated			
Ti 334.940†	-77.9	-0.00056 mg/L	0.000106	-0.00056 mg/L	0.000106 18.94%
QC value within limits for Ti	334.940	Recovery = Not calculated			
Tl 190.801†	-9.0	-0.00459 mg/L	0.002076	-0.00459 mg/L	0.002076 45.27%
QC value within limits for Tl	190.801	Recovery = Not calculated			
V 290.880†	20.0	-0.00181 mg/L	0.001164	-0.00181 mg/L	0.001164 64.40%
QC value within limits for V	290.880	Recovery = Not calculated			
Zn 206.200†	9.1	-0.00155 mg/L	0.000070	-0.00155 mg/L	0.000070 4.53%
QC value within limits for Zn	206.200	Recovery = Not calculated			
K 766.490†	21.5	0.0238 mg/L	0.01841	0.0238 mg/L	0.01841 77.26%
QC value within limits for K	766.490	Recovery = Not calculated			
Na 589.592†	556.2	0.0271 mg/L	0.00432	0.0271 mg/L	0.00432 15.95%
QC value within limits for Na	589.592	Recovery = Not calculated			
Sr 407.771†	102.5	-0.00282 mg/L	0.000032	-0.00282 mg/L	0.000032 1.12%
QC value within limits for Sr	407.771	Recovery = Not calculated			
Li 670.784†	30.7	-0.00275 mg/L	0.000770	-0.00275 mg/L	0.000770 27.99%
QC value within limits for Li	670.784	Recovery = Not calculated			

All analyte(s) passed QC.

Sequence No.: 36

Sample ID: L1211043304

Analyst: KHR

Initial Sample Wt:

Dilution:

Autosampler Location: 81

Date Collected: 11/19/2012 4:42:01 PM

Data Type: Original

Initial Sample Vol:

Sample Prep Vol:

Nebulizer Parameters: L1211043304

Analyte

Back Pressure

Flow

All

175.0 kPa

0.50 L/min

Approved: November 20, 2012

Ken H. Rhodes

Mean Data: L1211043304

Analyte	Mean Corrected Intensity	Calib. Conc. Units	Std.Dev.	Sample Conc. Units	Std.Dev.	RSD
Y 371.029	2355133.6				29484.12	1.25%
YRADIAL	282562.0				1645.27	0.58%
Ga 417.206	1192451.1				6258.47	0.52%
GA RADIAL	75166.2				906.27	1.21%
Ag 328.068†	182.2	0.00003 mg/L	0.000186	0.00003 mg/L	0.000186	727.30%
Al 396.153†	443.7	0.0513 mg/L	0.00381	0.0513 mg/L	0.00381	7.43%
As 188.979†	-14.6	-0.00529 mg/L	0.001517	-0.00529 mg/L	0.001517	28.65%
Ba 233.527†	13791.9	0.0918 mg/L	0.00104	0.0918 mg/L	0.00104	1.14%
Be 234.861†	275.1	0.00011 mg/L	0.000077	0.00011 mg/L	0.000077	70.60%
B 249.677†	2835.8	0.0314 mg/L	0.00086	0.0314 mg/L	0.00086	2.75%
Ca 227.546†	11340.4	29.8 mg/L	0.28	29.8 mg/L	0.28	0.95%
Cd 228.802†	53.4	0.00124 mg/L	0.000246	0.00124 mg/L	0.000246	19.81%
Co 228.616†	200.7	0.00492 mg/L	0.000384	0.00492 mg/L	0.000384	7.81%
Cr 267.716†	185.1	0.00073 mg/L	0.000095	0.00073 mg/L	0.000095	12.92%
Cu 327.393†	659.8	0.00176 mg/L	0.000664	0.00176 mg/L	0.000664	37.76%
Fe 239.562†	6084.4	0.633 mg/L	0.0099	0.633 mg/L	0.0099	1.56%
Mg 279.077†	3053.5	1.09 mg/L	0.014	1.09 mg/L	0.014	1.27%
Mn 257.610†	191903.1	0.228 mg/L	0.0046	0.228 mg/L	0.0046	2.04%
Mo 202.031†	70.5	0.00165 mg/L	0.000070	0.00165 mg/L	0.000070	4.23%
Ni 231.604†	495.3	0.00667 mg/L	0.000554	0.00667 mg/L	0.000554	8.31%
Pb 220.353†	1756.8	0.167 mg/L	0.0029	0.167 mg/L	0.0029	1.75%
Sb 206.836†	1.5	0.00050 mg/L	0.002227	0.00050 mg/L	0.002227	448.43%
Se 196.026†	15.3	0.0103 mg/L	0.00122	0.0103 mg/L	0.00122	11.82%
Si 251.611†	92024.8	1.94 mg/L	0.016	1.94 mg/L	0.016	0.80%
Sn 189.927†	-208.7	-0.0227 mg/L	0.00079	-0.0227 mg/L	0.00079	3.46%
Ti 334.940†	-3238.0	0.00106 mg/L	0.000413	0.00106 mg/L	0.000413	38.91%
Tl 190.801†	-17.5	-0.00775 mg/L	0.002045	-0.00775 mg/L	0.002045	26.40%
V 290.880†	934.4	0.00212 mg/L	0.000459	0.00212 mg/L	0.000459	21.60%
Zn 206.200†	6375.7	0.142 mg/L	0.0039	0.142 mg/L	0.0039	2.73%
K 766.490†	2694.3	0.773 mg/L	0.0169	0.773 mg/L	0.0169	2.19%
Na 589.592†	2610467.1	138 mg/L	0.7	138 mg/L	0.7	0.53%
Sr 407.771†	234569.1	0.0950 mg/L	0.00083	0.0950 mg/L	0.00083	0.87%
Li 670.784†	73.8	-0.00243 mg/L	0.000422	-0.00243 mg/L	0.000422	17.41%

Sequence No.: 37

Sample ID: L1211043309

Analyst: KHR

Initial Sample Wt:

Dilution:

Sampler Location: 82

Date Collected: 11/19/2012 4:48:02 PM

Data Type: Original

Initial Sample Vol:

Sample Prep Vol:

Nebulizer Parameters: L1211043309

Analyte	Back Pressure	Flow
All	176.0 kPa	0.50 L/min

Mean Data: L1211043309

Analyte	Mean Corrected Intensity	Calib. Conc. Units	Std.Dev.	Sample Conc. Units	Std.Dev.	RSD
Y 371.029	2350886.4				22283.49	0.95%
YRADIAL	282984.5				2042.97	0.72%
Ga 417.206	1251715.5				8930.07	0.71%
GA RADIAL	78262.0				1707.44	2.18%
Ag 328.068†	1028.4	0.00236 mg/L	0.000132	0.00236 mg/L	0.000132	5.60%
Al 396.153†	436.6	0.0501 mg/L	0.00055	0.0501 mg/L	0.00055	1.09%
As 188.979†	-28.2	-0.0103 mg/L	0.00268	-0.0103 mg/L	0.00268	25.95%
Ba 233.527†	10329.7	0.0683 mg/L	0.00081	0.0683 mg/L	0.00081	1.19%
Be 234.861†	-38.1	-0.00006 mg/L	0.000020	-0.00006 mg/L	0.000020	34.85%
B 249.677†	981.7	0.0120 mg/L	0.00020	0.0120 mg/L	0.00020	1.63%
Ca 227.546†	67125.5	176 mg/L	1.2	176 mg/L	1.2	0.66%
Cd 228.802†	3.3	0.00013 mg/L	0.000117	0.00013 mg/L	0.000117	90.36%
Co 228.616†	-12.4	-0.00081 mg/L	0.000167	-0.00081 mg/L	0.000167	20.55%
Cr 267.716†	135.3	0.00037 mg/L	0.000127	0.00037 mg/L	0.000127	34.63%
Cu 327.393†	-220.8	-0.00161 mg/L	0.000452	-0.00161 mg/L	0.000452	28.10%
Fe 239.562†	179.7	0.0124 mg/L	0.00096	0.0124 mg/L	0.00096	7.79%
Mg 279.077†	5873.6	2.11 mg/L	0.014	2.11 mg/L	0.014	0.66%
Mn 257.610†	936.6	-0.00103 mg/L	0.000024	-0.00103 mg/L	0.000024	2.38%
Mo 202.031†	86.5	0.00211 mg/L	0.000276	0.00211 mg/L	0.000276	13.06%

Approved: November 20, 2012

Ken H. Rhodes

Ni 231.604†	8.3	-0.00153 mg/L	0.000062	-0.00153 mg/L	0.000062	4.07%
Pb 220.353†	20.8	0.00117 mg/L	0.000268	0.00117 mg/L	0.000268	22.91%
Sb 206.836†	-0.0	0.00004 mg/L	0.000463	0.00004 mg/L	0.000463	>999.9%
Se 196.026†	11.9	0.00817 mg/L	0.004234	0.00817 mg/L	0.004234	51.83%
Si 251.611†	158252.6	3.34 mg/L	0.027	3.34 mg/L	0.027	0.80%
Sn 189.927†	-330.1	-0.0355 mg/L	0.00142	-0.0355 mg/L	0.00142	4.00%
Ti 334.940†	-31518.2	-0.00232 mg/L	0.001183	-0.00232 mg/L	0.001183	51.03%
Tl 190.801†	-49.4	-0.0187 mg/L	0.00257	-0.0187 mg/L	0.00257	13.78%
V 290.880†	884.0	0.00192 mg/L	0.002121	0.00192 mg/L	0.002121	110.67%
Zn 206.200†	248.9	0.00385 mg/L	0.000205	0.00385 mg/L	0.000205	5.34%
K 766.490†	2445.7	0.828 mg/L	0.0113	0.828 mg/L	0.0113	1.37%
Na 589.592†	24619.4	1.22 mg/L	0.021	1.22 mg/L	0.021	1.76%
Sr 407.771†	366896.4	0.148 mg/L	0.0034	0.148 mg/L	0.0034	2.28%
Li 670.784†	317.2	-0.00060 mg/L	0.000614	-0.00060 mg/L	0.000614	102.75%

Sequence No.: 38

Sample ID: L1211043314

Analyst: KHR

Initial Sample Wt:

Dilution:

Autosampler Location: 83

Date Collected: 11/19/2012 4:54:58 PM

Data Type: Original

Initial Sample Vol:

Sample Prep Vol:

Nebulizer Parameters: L1211043314

Analyte

Back Pressure

Flow

All

176.0 kPa

0.50 L/min

Mean Data: L1211043314

Analyte	Mean Corrected Intensity	Calib. Conc. Units	Std.Dev.	Sample Conc. Units	Std.Dev.	RSD
Y 371.029	2308844.1				28603.75	1.24%
YRADIAL	278083.4				263.72	0.09%
Ga 417.206	1168533.5				23512.91	2.01%
GaRADIAL	74367.4				252.15	0.34%
Ag 328.068†	-113.5	0.00045 mg/L	0.000637	0.00045 mg/L	0.000637	139.98%
Al 396.153†	229.0	0.0192 mg/L	0.00384	0.0192 mg/L	0.00384	20.00%
As 188.979†	-26.5	-0.00887 mg/L	0.000466	-0.00887 mg/L	0.000466	5.26%
Ba 233.527†	7703.8	0.0502 mg/L	0.00042	0.0502 mg/L	0.00042	0.84%
Be 234.861†	867.3	-0.00001 mg/L	0.000024	-0.00001 mg/L	0.000024	331.47%
B 249.677†	4668.3	0.0497 mg/L	0.00247	0.0497 mg/L	0.00247	4.96%
Ca 227.546†	25415.5	66.8 mg/L	1.30	66.8 mg/L	1.30	1.94%
Cd 228.802†	20.5	0.00052 mg/L	0.000203	0.00052 mg/L	0.000203	38.75%
Co 228.616†	139.5	0.00319 mg/L	0.000289	0.00319 mg/L	0.000289	9.06%
Cr 267.716†	74.0	-0.00023 mg/L	0.000063	-0.00023 mg/L	0.000063	27.24%
Cu 327.393†	39.9	-0.00023 mg/L	0.000581	-0.00023 mg/L	0.000581	249.27%
Fe 239.562†	34557.9	3.62 mg/L	0.043	3.62 mg/L	0.043	1.18%
Mg 279.077†	4862.2	1.74 mg/L	0.010	1.74 mg/L	0.010	0.56%
Mn 257.610†	257847.6	0.307 mg/L	0.0036	0.307 mg/L	0.0036	1.18%
Mo 202.031†	81.6	0.00219 mg/L	0.000446	0.00219 mg/L	0.000446	20.41%
Ni 231.604†	1383.6	0.0217 mg/L	0.00063	0.0217 mg/L	0.00063	2.89%
Pb 220.353†	19.6	0.00055 mg/L	0.000947	0.00055 mg/L	0.000947	170.86%
Sb 206.836†	-3.1	-0.00066 mg/L	0.000561	-0.00066 mg/L	0.000561	85.01%
Se 196.026†	5.8	0.00493 mg/L	0.002516	0.00493 mg/L	0.002516	50.99%
Si 251.611†	49792.9	1.04 mg/L	0.018	1.04 mg/L	0.018	1.69%
Sn 189.927†	-279.4	-0.0302 mg/L	0.00090	-0.0302 mg/L	0.00090	2.98%
Ti 334.940†	-8262.5	0.00210 mg/L	0.000812	0.00210 mg/L	0.000812	38.65%
Tl 190.801†	-43.7	-0.0168 mg/L	0.00542	-0.0168 mg/L	0.00542	32.31%
V 290.880†	1113.8	0.00271 mg/L	0.000640	0.00271 mg/L	0.000640	23.59%
Zn 206.200†	7969.9	0.177 mg/L	0.0033	0.177 mg/L	0.0033	1.85%
K 766.490†	2624.4	0.746 mg/L	0.0271	0.746 mg/L	0.0271	3.64%
Na 589.592†	2680679.3	142 mg/L	0.3	142 mg/L	0.3	0.23%
Sr 407.771†	479622.9	0.197 mg/L	0.0009	0.197 mg/L	0.0009	0.45%
Li 670.784†	547.1	0.00113 mg/L	0.000237	0.00113 mg/L	0.000237	21.03%

Sequence No.: 39

Sample ID: L1211043319

Analyst: KHR

Initial Sample Wt:

Dilution:

Autosampler Location: 84

Date Collected: 11/19/2012 5:00:57 PM

Data Type: Original

Initial Sample Vol:

Sample Prep Vol:

Approved: November 20, 2012

Ken H. Rhodes

Nebulizer Parameters: L1211043319

Analyte Back Pressure Flow
All 176.0 kPa 0.50 L/min

Mean Data: L1211043319

Analyte	Mean Corrected Intensity	Conc. Units	Calib. Units	Std.Dev.	Sample Conc. Units	Std.Dev.	RSD
Y 371.029	2375173.2					24551.21	1.03%
YRADIAL	287276.3					2190.50	0.76%
Ga 417.206	1170484.9					14432.82	1.23%
GaRADIAL	75274.7					812.65	1.08%
Ag 328.068†	-268.6	-0.00039	mg/L	0.000408	-0.00039	0.000408	105.19%
Al 396.153†	1167.2	0.161	mg/L	0.0047	0.161	0.0047	2.90%
As 188.979†	-10.6	-0.00334	mg/L	0.001442	-0.00334	0.001442	43.18%
Ba 233.527†	6940.6	0.0451	mg/L	0.00037	0.0451	0.00037	0.83%
Be 234.861†	824.8	0.00014	mg/L	0.000069	0.00014	0.000069	49.43%
B 249.677†	2244.6	0.0243	mg/L	0.00076	0.0243	0.00076	3.11%
Ca 227.546†	1865.2	4.96	mg/L	0.099	4.96	0.099	1.99%
Cd 228.802†	22.3	0.00053	mg/L	0.000254	0.00053	0.000254	47.68%
Co 228.616†	125.1	0.00280	mg/L	0.000454	0.00280	0.000454	16.21%
Cr 267.716†	167.9	0.00052	mg/L	0.000133	0.00052	0.000133	25.50%
Cu 327.393†	767.0	0.00238	mg/L	0.000674	0.00238	0.000674	28.32%
Fe 239.562†	25878.1	2.71	mg/L	0.053	2.71	0.053	1.94%
Mg 279.077†	3569.9	1.27	mg/L	0.012	1.27	0.012	0.96%
Mn 257.610†	141519.1	0.168	mg/L	0.0020	0.168	0.0020	1.22%
Mo 202.031†	32.6	0.00045	mg/L	0.000221	0.00045	0.000221	48.84%
Ni 231.604†	342.0	0.00408	mg/L	0.000747	0.00408	0.000747	18.30%
Pb 220.353†	109.7	0.00934	mg/L	0.000571	0.00934	0.000571	6.12%
Sb 206.836†	-3.9	-0.00095	mg/L	0.001059	-0.00095	0.001059	111.84%
Se 196.026†	10.2	0.00754	mg/L	0.005687	0.00754	0.005687	75.44%
Si 251.611†	15055.9	0.309	mg/L	0.0082	0.309	0.0082	2.65%
Sn 189.927†	-75.1	-0.00872	mg/L	0.000607	-0.00872	0.000607	6.96%
Ti 334.940†	3999.6	0.00382	mg/L	0.000141	0.00382	0.000141	3.70%
Tl 190.801†	-10.5	-0.00524	mg/L	0.002367	-0.00524	0.002367	45.19%
V 290.880†	878.3	0.00175	mg/L	0.000690	0.00175	0.000690	39.47%
Zn 206.200†	2230.7	0.0482	mg/L	0.00005	0.0482	0.00005	0.10%
K 766.490†	4382.1	1.34	mg/L	0.024	1.34	0.024	1.79%
Na 589.592†	2561268.8	135	mg/L	0.1	135	0.1	0.09%
Sr 407.771†	66270.2	0.0249	mg/L	0.00021	0.0249	0.00021	0.83%
Li 670.784†	33.6	-0.00273	mg/L	0.000345	-0.00273	0.000345	12.66%

Sequence No.: 40

Sample ID: L1211043324 WG414500-01

Analyst: KHR

Initial Sample Wt:

Dilution:

Autosampler Location: 85

Date Collected: 11/19/2012 5:06:56 PM

Data Type: Original

Initial Sample Vol:

Sample Prep Vol:

Nebulizer Parameters: L1211043324 WG414500-01

Analyte Back Pressure Flow
All 176.0 kPa 0.50 L/min

Mean Data: L1211043324 WG414500-01

Analyte	Mean Corrected Intensity	Conc. Units	Calib. Units	Std.Dev.	Sample Conc. Units	Std.Dev.	RSD
Y 371.029	2378130.7					17136.56	0.72%
YRADIAL	285357.6					1521.19	0.53%
Ga 417.206	1176057.3					29692.23	2.52%
GaRADIAL	75225.4					629.69	0.84%
Ag 328.068†	-35.3	-0.00047	mg/L	0.000161	-0.00047	0.000161	34.02%
Al 396.153†	578.7	0.0718	mg/L	0.00421	0.0718	0.00421	5.86%
As 188.979†	-11.6	-0.00411	mg/L	0.001421	-0.00411	0.001421	34.56%
Ba 233.527†	10030.8	0.0662	mg/L	0.00065	0.0662	0.00065	0.99%
Be 234.861†	371.9	0.00013	mg/L	0.000059	0.00013	0.000059	46.77%
B 249.677†	2666.3	0.0295	mg/L	0.00220	0.0295	0.00220	7.46%
Ca 227.546†	3558.7	9.36	mg/L	0.329	9.36	0.329	3.51%
Cd 228.802†	28.4	0.00068	mg/L	0.000413	0.00068	0.000413	61.18%
Co 228.616†	163.8	0.00390	mg/L	0.000414	0.00390	0.000414	10.60%

Approved: November 20, 2012

Ken H. Rhodes

Cr 267.716†	73.1	-0.00015 mg/L	0.000116	-0.00015 mg/L	0.000116	77.91%
Cu 327.393†	292.8	0.00043 mg/L	0.000580	0.00043 mg/L	0.000580	133.79%
Fe 239.562†	9665.9	1.01 mg/L	0.013	1.01 mg/L	0.013	1.34%
Mg 279.077†	3595.7	1.28 mg/L	0.008	1.28 mg/L	0.008	0.65%
Mn 257.610†	299656.0	0.358 mg/L	0.0038	0.358 mg/L	0.0038	1.06%
Mo 202.031†	43.4	0.00077 mg/L	0.000368	0.00077 mg/L	0.000368	47.56%
Ni 231.604†	185.6	0.00145 mg/L	0.000486	0.00145 mg/L	0.000486	33.55%
Pb 220.353†	71.9	0.00575 mg/L	0.001293	0.00575 mg/L	0.001293	22.50%
Sb 206.836†	-1.1	-0.00022 mg/L	0.002245	-0.00022 mg/L	0.002245	>999.9%
Se 196.026†	14.9	0.0101 mg/L	0.00464	0.0101 mg/L	0.00464	45.89%
Si 251.611†	20469.5	0.423 mg/L	0.0115	0.423 mg/L	0.0115	2.71%
Sn 189.927†	-112.4	-0.0126 mg/L	0.00107	-0.0126 mg/L	0.00107	8.51%
Ti 334.940†	889.1	0.00170 mg/L	0.000110	0.00170 mg/L	0.000110	6.46%
Tl 190.801†	-20.6	-0.00887 mg/L	0.001936	-0.00887 mg/L	0.001936	21.81%
V 290.880†	881.1	0.00186 mg/L	0.000758	0.00186 mg/L	0.000758	40.69%
Zn 206.200†	891.3	0.0182 mg/L	0.00007	0.0182 mg/L	0.00007	0.38%
K 766.490†	1057.5	0.234 mg/L	0.0162	0.234 mg/L	0.0162	6.93%
Na 589.592†	2535512.4	134 mg/L	0.8	134 mg/L	0.8	0.60%
Sr 407.771†	66760.9	0.0250 mg/L	0.00007	0.0250 mg/L	0.00007	0.30%
Li 670.784†	14.3	-0.00287 mg/L	0.000374	-0.00287 mg/L	0.000374	13.00%

Sequence No.: 41

Sample ID: L1211043324S WG414500-04

Analyst: KHR

Initial Sample Wt:

Dilution:

autosampler Location: 86

Date Collected: 11/19/2012 5:12:55 PM

Data Type: Original

Initial Sample Vol:

Sample Prep Vol:

Nebulizer Parameters: L1211043324S WG414500-04

Analyte	Back Pressure	Flow
All	176.0 kPa	0.50 L/min

Mean Data: L1211043324S WG414500-04

Analyte	Mean Corrected Intensity	Calib. Conc. Units	Std.Dev.	Sample Conc. Units	Std.Dev.	RSD
Y 371.029	2335745.3				9078.43	0.39%
YRADIAL	283730.5				2405.69	0.85%
Ga 417.206	1166009.2				21921.60	1.88%
GaRADIAL	73330.3				684.20	0.93%
Ag 328.068†	61978.7	0.192 mg/L	0.0051	0.192 mg/L	0.0051	2.63%
Al 396.153†	34256.9	5.13 mg/L	0.024	5.13 mg/L	0.024	0.47%
As 188.979†	509.1	0.182 mg/L	0.0016	0.182 mg/L	0.0016	0.88%
Ba 233.527†	80557.4	0.546 mg/L	0.0021	0.546 mg/L	0.0021	0.38%
Be 234.861†	26111.4	0.0229 mg/L	0.00067	0.0229 mg/L	0.00067	2.91%
B 249.677†	87759.7	0.935 mg/L	0.0251	0.935 mg/L	0.0251	2.68%
Ca 227.546†	5419.3	14.5 mg/L	0.41	14.5 mg/L	0.41	2.85%
Cd 228.802†	1043.2	0.0226 mg/L	0.00097	0.0226 mg/L	0.00097	4.29%
Co 228.616†	3657.3	0.0988 mg/L	0.00027	0.0988 mg/L	0.00027	0.27%
Cr 267.716†	31459.1	0.242 mg/L	0.0021	0.242 mg/L	0.0021	0.85%
Cu 327.393†	65783.7	0.245 mg/L	0.0057	0.245 mg/L	0.0057	2.34%
Fe 239.562†	30727.8	3.22 mg/L	0.031	3.22 mg/L	0.031	0.96%
Mg 279.077†	16802.5	6.05 mg/L	0.067	6.05 mg/L	0.067	1.11%
Mn 257.610†	522831.6	0.626 mg/L	0.0052	0.626 mg/L	0.0052	0.82%
Mo 202.031†	14147.5	0.478 mg/L	0.0061	0.478 mg/L	0.0061	1.27%
Ni 231.604†	14834.0	0.248 mg/L	0.0002	0.248 mg/L	0.0002	0.09%
Pb 220.353†	2524.6	0.241 mg/L	0.0005	0.241 mg/L	0.0005	0.20%
Sb 206.836†	2020.9	0.565 mg/L	0.0174	0.565 mg/L	0.0174	3.08%
Se 196.026†	314.3	0.195 mg/L	0.0045	0.195 mg/L	0.0045	2.30%
Si 251.611†	135636.8	2.86 mg/L	0.055	2.86 mg/L	0.055	1.92%
Sn 189.927†	-140.0	-0.0155 mg/L	0.00067	-0.0155 mg/L	0.00067	4.33%
Ti 334.940†	542796.5	0.488 mg/L	0.0018	0.488 mg/L	0.0018	0.37%
Tl 190.801†	659.1	0.230 mg/L	0.0035	0.230 mg/L	0.0035	1.53%
V 290.880†	112794.8	0.491 mg/L	0.0011	0.491 mg/L	0.0011	0.22%
Zn 206.200†	21768.3	0.490 mg/L	0.0034	0.490 mg/L	0.0034	0.70%
K 766.490†	72665.9	24.1 mg/L	0.07	24.1 mg/L	0.07	0.31%
Na 589.592†	3050648.1	164 mg/L	4.7	164 mg/L	4.7	2.89%
Sr 407.771†	1260304.8	0.526 mg/L	0.0158	0.526 mg/L	0.0158	3.00%
Li 670.784†	65438.0	0.489 mg/L	0.0014	0.489 mg/L	0.0014	0.28%

Approved: November 20, 2012

Ken H. Rhodes

Sequence No.: 42
 Sample ID: L1211043324SD WG414500-05
 Analyst: KHR
 Initial Sample Wt:
 Dilution:

Autosampler Location: 87
 Date Collected: 11/19/2012 5:18:54 PM
 Data Type: Original
 Initial Sample Vol:
 Sample Prep Vol:

Nebulizer Parameters: L1211043324SD WG414500-05
 Analyte Back Pressure Flow
 All 176.0 kPa 0.50 L/min

Mean Data: L1211043324SD WG414500-05

Analyte	Mean Corrected Intensity	Calib. Conc. Units	Std.Dev.	Sample Conc. Units	Std.Dev.	RSD
Y 371.029	2377181.3				23238.64	0.98%
YRADIAL	287881.5				2424.08	0.84%
Ga 417.206	1176272.7				17899.69	1.52%
GaRADIAL	74571.6				558.68	0.75%
Ag 328.068†	61587.1	0.191 mg/L	0.0049	0.191 mg/L	0.0049	2.58%
Al 396.153†	32163.7	4.82 mg/L	0.025	4.82 mg/L	0.025	0.52%
As 188.979†	498.1	0.178 mg/L	0.0055	0.178 mg/L	0.0055	3.08%
Ba 233.527†	78614.6	0.533 mg/L	0.0042	0.533 mg/L	0.0042	0.79%
Be 234.861†	25735.4	0.0226 mg/L	0.00057	0.0226 mg/L	0.00057	2.52%
B 249.677†	87840.5	0.936 mg/L	0.0301	0.936 mg/L	0.0301	3.21%
Ca 227.546†	5342.4	14.3 mg/L	0.34	14.3 mg/L	0.34	2.40%
Cd 228.802†	1039.2	0.0226 mg/L	0.00091	0.0226 mg/L	0.00091	4.04%
Co 228.616†	3595.0	0.0971 mg/L	0.00106	0.0971 mg/L	0.00106	1.09%
Cr 267.716†	30858.0	0.238 mg/L	0.0028	0.238 mg/L	0.0028	1.19%
Cu 327.393†	65570.8	0.244 mg/L	0.0081	0.244 mg/L	0.0081	3.32%
Fe 239.562†	27426.4	2.88 mg/L	0.010	2.88 mg/L	0.010	0.36%
Mg 279.077†	16590.5	5.97 mg/L	0.024	5.97 mg/L	0.024	0.39%
Mn 257.610†	507020.5	0.607 mg/L	0.0041	0.607 mg/L	0.0041	0.67%
Mo 202.031†	13902.7	0.470 mg/L	0.0031	0.470 mg/L	0.0031	0.66%
Ni 231.604†	14637.8	0.245 mg/L	0.0021	0.245 mg/L	0.0021	0.85%
Pb 220.353†	2487.6	0.237 mg/L	0.0019	0.237 mg/L	0.0019	0.80%
Sb 206.836†	2006.7	0.561 mg/L	0.0158	0.561 mg/L	0.0158	2.82%
Se 196.026†	313.7	0.195 mg/L	0.0009	0.195 mg/L	0.0009	0.47%
Si 251.611†	131869.9	2.78 mg/L	0.056	2.78 mg/L	0.056	2.01%
Sn 189.927†	-137.7	-0.0153 mg/L	0.00057	-0.0153 mg/L	0.00057	3.70%
Ti 334.940†	528260.1	0.475 mg/L	0.0030	0.475 mg/L	0.0030	0.63%
Tl 190.801†	652.6	0.227 mg/L	0.0037	0.227 mg/L	0.0037	1.62%
V 290.880†	110235.0	0.480 mg/L	0.0062	0.480 mg/L	0.0062	1.29%
Zn 206.200†	21177.8	0.476 mg/L	0.0026	0.476 mg/L	0.0026	0.54%
K 766.490†	70998.1	23.5 mg/L	0.06	23.5 mg/L	0.06	0.24%
Na 589.592†	2976473.9	159 mg/L	1.0	159 mg/L	1.0	0.64%
Sr 407.771†	1237215.2	0.516 mg/L	0.0056	0.516 mg/L	0.0056	1.09%
Li 670.784†	63396.5	0.473 mg/L	0.0037	0.473 mg/L	0.0037	0.79%

Sequence No.: 43
 Sample ID: L1211043329
 Analyst: KHR
 Initial Sample Wt:
 Dilution:

Autosampler Location: 88
 Date Collected: 11/19/2012 5:24:53 PM
 Data Type: Original
 Initial Sample Vol:
 Sample Prep Vol:

Nebulizer Parameters: L1211043329
 Analyte Back Pressure Flow
 All 176.0 kPa 0.50 L/min

Mean Data: L1211043329

Analyte	Mean Corrected Intensity	Calib. Conc. Units	Std.Dev.	Sample Conc. Units	Std.Dev.	RSD
Y 371.029	2362749.2				11390.16	0.48%
YRADIAL	280297.5				291.80	0.10%
Ga 417.206	1184081.6				23611.70	1.99%
GaRADIAL	74423.9				407.65	0.55%
Ag 328.068†	-2542.9	0.00003 mg/L	0.000700	0.00003 mg/L	0.000700	>999.9%
Al 396.153†	36.4	-0.00812 mg/L	0.009610	-0.00812 mg/L	0.009610	118.33%
As 188.979†	-24.1	-0.00428 mg/L	0.002956	-0.00428 mg/L	0.002956	69.01%

Approved: November 20, 2012

Ken H. Rhodes

Ba 233.527†	20258.8	0.135 mg/L	0.0016	0.135 mg/L	0.0016	1.18%
Be 234.861†	4763.7	0.00011 mg/L	0.000139	0.00011 mg/L	0.000139	127.21%
B 249.677†	3038.2	0.0257 mg/L	0.00141	0.0257 mg/L	0.00141	5.46%
Ca 227.546†	17942.5	47.5 mg/L	1.70	47.5 mg/L	1.70	3.57%
Cd 228.802†	17.8	0.00045 mg/L	0.000182	0.00045 mg/L	0.000182	40.67%
Co 228.616†	169.9	0.00359 mg/L	0.000314	0.00359 mg/L	0.000314	8.75%
Cr 267.716†	-6.4	-0.00142 mg/L	0.000170	-0.00142 mg/L	0.000170	11.98%
Cu 327.393†	-223.4	0.00040 mg/L	0.000526	0.00040 mg/L	0.000526	131.16%
Fe 239.562†	180927.3	19.0 mg/L	0.09	19.0 mg/L	0.09	0.46%
Mg 279.077†	5301.6	1.89 mg/L	0.011	1.89 mg/L	0.011	0.60%
Mn 257.610†	221179.4	0.263 mg/L	0.0030	0.263 mg/L	0.0030	1.14%
Mo 202.031†	72.7	0.00263 mg/L	0.000049	0.00263 mg/L	0.000049	1.87%
Ni 231.604†	731.4	0.0107 mg/L	0.00050	0.0107 mg/L	0.00050	4.69%
Pb 220.353†	35.4	0.00075 mg/L	0.001834	0.00075 mg/L	0.001834	245.54%
Sb 206.836†	-3.6	-0.00024 mg/L	0.000909	-0.00024 mg/L	0.000909	382.14%
Se 196.026†	9.2	0.00946 mg/L	0.001892	0.00946 mg/L	0.001892	20.00%
Si 251.611†	28222.9	0.587 mg/L	0.0119	0.587 mg/L	0.0119	2.03%
Sn 189.927†	-248.3	-0.0269 mg/L	0.00062	-0.0269 mg/L	0.00062	2.32%
Ti 334.940†	-7296.5	0.00002 mg/L	0.000695	0.00002 mg/L	0.000695	>999.9%
Tl 190.801†	-36.2	-0.0142 mg/L	0.00297	-0.0142 mg/L	0.00297	20.88%
V 290.880†	976.8	0.00117 mg/L	0.000612	0.00117 mg/L	0.000612	52.49%
Zn 206.200†	4147.8	0.0898 mg/L	0.00041	0.0898 mg/L	0.00041	0.46%
K 766.490†	3593.0	1.07 mg/L	0.019	1.07 mg/L	0.019	1.72%
Na 589.592†	2560871.7	135 mg/L	1.0	135 mg/L	1.0	0.71%
Sr 407.771†	403568.5	0.166 mg/L	0.0007	0.166 mg/L	0.0007	0.42%
Li 670.784†	67.6	-0.00247 mg/L	0.000755	-0.00247 mg/L	0.000755	30.55%

Sequence No.: 44

Sample ID: L1211043602

Analyst: KHR

Initial Sample Wt:

Dilution:

Udosampler Location: 89

Date Collected: 11/19/2012 5:30:53 PM

Data Type: Original

Initial Sample Vol:

Sample Prep Vol:

Nebulizer Parameters: L1211043602

Analyte	Back Pressure	Flow
All	176.0 kPa	0.50 L/min

Mean Data: L1211043602

Analyte	Mean Corrected Intensity	Calib. Conc. Units	Std.Dev.	Sample Conc. Units	Std.Dev.	RSD
Y 371.029	2359324.6				25764.90	1.09%
YRADIAL	288151.2				7941.43	2.76%
Ga 417.206	1218639.6				14655.71	1.20%
GA RADIAL	76250.1				402.24	0.53%
Ag 328.068†	174.6	-0.00025 mg/L	0.000079	-0.00025 mg/L	0.000079	31.53%
Al 396.153†	405.5	0.0455 mg/L	0.00198	0.0455 mg/L	0.00198	4.35%
As 188.979†	-11.7	-0.00436 mg/L	0.000823	-0.00436 mg/L	0.000823	18.86%
Ba 233.527†	11762.8	0.0781 mg/L	0.00039	0.0781 mg/L	0.00039	0.50%
Be 234.861†	-148.4	-0.00016 mg/L	0.000016	-0.00016 mg/L	0.000016	10.06%
B 249.677†	15918.0	0.171 mg/L	0.0013	0.171 mg/L	0.0013	0.75%
Ca 227.546†	9882.2	25.9 mg/L	0.25	25.9 mg/L	0.25	0.96%
Cd 228.802†	61.2	0.00139 mg/L	0.000091	0.00139 mg/L	0.000091	6.54%
Co 228.616†	-17.5	-0.00102 mg/L	0.000104	-0.00102 mg/L	0.000104	10.21%
Cr 267.716†	146.6	0.00046 mg/L	0.000049	0.00046 mg/L	0.000049	10.77%
Cu 327.393†	138.9	-0.00023 mg/L	0.000035	-0.00023 mg/L	0.000035	14.94%
Fe 239.562†	444.3	0.0402 mg/L	0.00026	0.0402 mg/L	0.00026	0.65%
Mg 279.077†	3896.0	1.39 mg/L	0.027	1.39 mg/L	0.027	1.91%
Mn 257.610†	41268.6	0.0474 mg/L	0.00014	0.0474 mg/L	0.00014	0.29%
Mo 202.031†	45.4	0.00073 mg/L	0.000239	0.00073 mg/L	0.000239	32.77%
Ni 231.604†	-24.9	-0.00209 mg/L	0.000272	-0.00209 mg/L	0.000272	13.00%
Pb 220.353†	36.4	0.00263 mg/L	0.001010	0.00263 mg/L	0.001010	38.49%
Sb 206.836†	5.4	0.00157 mg/L	0.001341	0.00157 mg/L	0.001341	85.30%
Se 196.026†	11.0	0.00763 mg/L	0.001783	0.00763 mg/L	0.001783	23.35%
Si 251.611†	21523.8	0.446 mg/L	0.0025	0.446 mg/L	0.0025	0.55%
Sn 189.927†	-194.3	-0.0212 mg/L	0.00083	-0.0212 mg/L	0.00083	3.93%
Ti 334.940†	-3115.8	0.00060 mg/L	0.000230	0.00060 mg/L	0.000230	38.56%
Tl 190.801†	-38.2	-0.0146 mg/L	0.00217	-0.0146 mg/L	0.00217	14.87%
V 290.880†	700.0	0.00113 mg/L	0.001460	0.00113 mg/L	0.001460	129.59%
Zn 206.200†	8057.0	0.179 mg/L	0.0023	0.179 mg/L	0.0023	1.28%

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K 766.490†	1856.6	0.485 mg/L	0.0222	0.485 mg/L	0.0222	4.58%
Na 589.592†	2781672.2	148 mg/L	1.0	148 mg/L	1.0	0.66%
Sr 407.771†	285091.4	0.116 mg/L	0.0043	0.116 mg/L	0.0043	3.66%
Li 670.784†	-45.9	-0.00333 mg/L	0.000316	-0.00333 mg/L	0.000316	9.51%

Sequence No.: 45

Sample ID: L1211046201

Analyst: KHR

Initial Sample Wt:

Dilution:

Autosampler Location: 90

Date Collected: 11/19/2012 5:37:52 PM

Data Type: Original

Initial Sample Vol:

Sample Prep Vol:

Nebulizer Parameters: L1211046201

Analyte	Back Pressure	Flow
All	176.0 kPa	0.50 L/min

Mean Data: L1211046201

Analyte	Mean Corrected Intensity	Conc. Units	Calib. Units	Std.Dev.	Sample Conc. Units	Std.Dev.	RSD
Y 371.029	2385200.2					11311.87	0.47%
YRADIAL	289354.6					4840.21	1.67%
Ga 417.206	1248515.0					6263.77	0.50%
GaRADIAL	78455.3					1418.20	1.81%
Ag 328.068†	-95.0	-0.00085 mg/L	0.000012	0.000012	-0.00085 mg/L	0.000012	1.40%
Al 396.153†	3047.5	0.445 mg/L	0.0023	0.0023	0.445 mg/L	0.0023	0.52%
As 188.979†	-6.2	-0.00228 mg/L	0.001671	0.001671	-0.00228 mg/L	0.001671	73.43%
Ba 233.527†	3531.1	0.0220 mg/L	0.00007	0.00007	0.0220 mg/L	0.00007	0.33%
Be 234.861†	127.9	-0.00001 mg/L	0.000039	0.000039	-0.00001 mg/L	0.000039	267.24%
B 249.677†	18610.7	0.200 mg/L	0.0027	0.0027	0.200 mg/L	0.0027	1.34%
Ca 227.546†	2333.9	6.14 mg/L	0.037	0.037	6.14 mg/L	0.037	0.60%
Cd 228.802†	4.3	0.00011 mg/L	0.000208	0.000208	0.00011 mg/L	0.000208	182.87%
Co 228.616†	0.6	-0.00053 mg/L	0.000225	0.000225	-0.00053 mg/L	0.000225	42.44%
Cr 267.716†	219.5	0.00100 mg/L	0.000035	0.000035	0.00100 mg/L	0.000035	3.48%
Cu 327.393†	3009.9	0.0105 mg/L	0.00031	0.00031	0.0105 mg/L	0.00031	3.00%
Fe 239.562†	4872.1	0.505 mg/L	0.0028	0.0028	0.505 mg/L	0.0028	0.55%
Mg 279.077†	1849.1	0.656 mg/L	0.0123	0.0123	0.656 mg/L	0.0123	1.87%
Mn 257.610†	29584.2	0.0334 mg/L	0.00016	0.00016	0.0334 mg/L	0.00016	0.49%
Mo 202.031†	27.7	0.00015 mg/L	0.000223	0.000223	0.00015 mg/L	0.000223	149.54%
Ni 231.604†	28.5	-0.00120 mg/L	0.000156	0.000156	-0.00120 mg/L	0.000156	13.05%
Pb 220.353†	40.5	0.00305 mg/L	0.001365	0.001365	0.00305 mg/L	0.001365	44.76%
Sb 206.836†	5.9	0.00172 mg/L	0.002177	0.002177	0.00172 mg/L	0.002177	126.26%
Se 196.026†	12.7	0.00879 mg/L	0.002867	0.002867	0.00879 mg/L	0.002867	32.60%
Si 251.611†	52553.5	1.10 mg/L	0.009	0.009	1.10 mg/L	0.009	0.83%
Sn 189.927†	-83.5	-0.00961 mg/L	0.000533	0.000533	-0.00961 mg/L	0.000533	5.55%
Ti 334.940†	3899.1	0.00391 mg/L	0.000086	0.000086	0.00391 mg/L	0.000086	2.20%
Tl 190.801†	-32.4	-0.0125 mg/L	0.00185	0.00185	-0.0125 mg/L	0.00185	14.75%
V 290.880†	851.1	0.00178 mg/L	0.001865	0.001865	0.00178 mg/L	0.001865	104.71%
Zn 206.200†	1169.3	0.0245 mg/L	0.00025	0.00025	0.0245 mg/L	0.00025	1.01%
K 766.490†	2061.2	0.553 mg/L	0.0056	0.0056	0.553 mg/L	0.0056	1.01%
Na 589.592†	2789750.3	149 mg/L	3.3	3.3	149 mg/L	3.3	2.23%
Sr 407.771†	109930.0	0.0432 mg/L	0.00084	0.00084	0.0432 mg/L	0.00084	1.94%
Li 670.784†	81.0	-0.00237 mg/L	0.000063	0.000063	-0.00237 mg/L	0.000063	2.65%

Sequence No.: 46

Sample ID: CCV

Analyst:

Initial Sample Wt:

Dilution:

Autosampler Location: 6

Date Collected: 11/19/2012 5:44:51 PM

Data Type: Original

Initial Sample Vol:

Sample Prep Vol:

Nebulizer Parameters: CCV

Analyte	Back Pressure	Flow
All	176.0 kPa	0.50 L/min

Mean Data: CCV

Analyte	Mean Corrected Intensity	Conc. Units	Calib. Units	Std.Dev.	Sample Conc. Units	Std.Dev.	RSD
Y 371.029	2357438.2					33446.28	1.42%

Approved: November 20, 2012

Ken H. Rhodes

YRADIAL	281606.1				2539.81	0.90%
Ga 417.206	1171677.8				22040.59	1.88%
GA RADIAL	73782.1				856.74	1.16%
Ag 328.068†	129124.8	0.400 mg/L	0.0112	0.400 mg/L	0.0112	2.81%
QC value within limits for Ag 328.068			Recovery = 99.95%			
Al 396.153†	66417.7	9.96 mg/L	0.059	9.96 mg/L	0.059	0.59%
QC value within limits for Al 396.153			Recovery = 99.64%			
As 188.979†	1073.4	0.384 mg/L	0.0060	0.384 mg/L	0.0060	1.56%
QC value within limits for As 188.979			Recovery = 96.03%			
Ba 233.527†	148068.2	1.01 mg/L	0.011	1.01 mg/L	0.011	1.11%
QC value within limits for Ba 233.527			Recovery = 100.56%			
Be 234.861†	55116.1	0.0489 mg/L	0.00127	0.0489 mg/L	0.00127	2.59%
QC value within limits for Be 234.861			Recovery = 97.79%			
B 249.677†	45944.0	0.488 mg/L	0.0153	0.488 mg/L	0.0153	3.14%
QC value within limits for B 249.677			Recovery = 97.57%			
Ca 227.546†	3727.0	10.2 mg/L	0.30	10.2 mg/L	0.30	2.92%
QC value within limits for Ca 227.546			Recovery = 102.42%			
Cd 228.802†	2201.0	0.0477 mg/L	0.00172	0.0477 mg/L	0.00172	3.61%
QC value within limits for Cd 228.802			Recovery = 95.48%			
Co 228.616†	7419.4	0.201 mg/L	0.0029	0.201 mg/L	0.0029	1.42%
QC value within limits for Co 228.616			Recovery = 100.56%			
Cr 267.716†	64805.1	0.500 mg/L	0.0014	0.500 mg/L	0.0014	0.28%
QC value within limits for Cr 267.716			Recovery = 99.96%			
Cu 327.393†	134360.9	0.500 mg/L	0.0144	0.500 mg/L	0.0144	2.89%
QC value within limits for Cu 327.393			Recovery = 100.00%			
Fe 239.562†	38355.6	4.02 mg/L	0.015	4.02 mg/L	0.015	0.37%
QC value within limits for Fe 239.562			Recovery = 100.58%			
Mg 279.077†	27972.9	10.1 mg/L	0.02	10.1 mg/L	0.02	0.23%
QC value within limits for Mg 279.077			Recovery = 100.81%			
Mn 257.610†	427844.9	0.512 mg/L	0.0070	0.512 mg/L	0.0070	1.37%
QC value within limits for Mn 257.610			Recovery = 102.39%			
Mo 202.031†	29095.0	0.984 mg/L	0.0051	0.984 mg/L	0.0051	0.52%
QC value within limits for Mo 202.031			Recovery = 98.44%			
Ni 231.604†	29915.4	0.502 mg/L	0.0019	0.502 mg/L	0.0019	0.37%
QC value within limits for Ni 231.604			Recovery = 100.49%			
Pb 220.353†	5266.5	0.504 mg/L	0.0063	0.504 mg/L	0.0063	1.26%
QC value within limits for Pb 220.353			Recovery = 100.73%			
Sb 206.836†	4178.2	1.17 mg/L	0.033	1.17 mg/L	0.033	2.86%
QC value within limits for Sb 206.836			Recovery = 97.25%			
Se 196.026†	644.1	0.398 mg/L	0.0122	0.398 mg/L	0.0122	3.06%
QC value within limits for Se 196.026			Recovery = 99.60%			
Si 251.611†	237712.7	5.01 mg/L	0.089	5.01 mg/L	0.089	1.77%
QC value within limits for Si 251.611			Recovery = 100.28%			
Sn 189.927†	9416.7	0.987 mg/L	0.0123	0.987 mg/L	0.0123	1.24%
QC value within limits for Sn 189.927			Recovery = 98.71%			
Ti 334.940†	1104796.4	0.991 mg/L	0.0013	0.991 mg/L	0.0013	0.13%
QC value within limits for Ti 334.940			Recovery = 99.06%			
Tl 190.801†	1486.5	0.519 mg/L	0.0023	0.519 mg/L	0.0023	0.44%
QC value within limits for Tl 190.801			Recovery = 103.79%			
V 290.880†	230426.7	1.01 mg/L	0.005	1.01 mg/L	0.005	0.52%
QC value within limits for V 290.880			Recovery = 100.55%			
Zn 206.200†	43685.9	0.985 mg/L	0.0076	0.985 mg/L	0.0076	0.77%
QC value within limits for Zn 206.200			Recovery = 98.48%			
K 766.490†	149106.9	50.0 mg/L	0.47	50.0 mg/L	0.47	0.94%
QC value within limits for K 766.490			Recovery = 99.91%			
Na 589.592†	977207.8	49.6 mg/L	0.36	49.6 mg/L	0.36	0.72%
QC value within limits for Na 589.592			Recovery = 99.18%			
Sr 407.771†	2461229.1	1.03 mg/L	0.005	1.03 mg/L	0.005	0.49%
QC value within limits for Sr 407.771			Recovery = 102.98%			
Li 670.784†	133168.0	0.997 mg/L	0.0066	0.997 mg/L	0.0066	0.66%
QC value within limits for Li 670.784			Recovery = 99.73%			
All analyte(s) passed QC.						

Sequence No.: 47

Sample ID: CCB

Analyst:

Initial Sample Wt:

Dilution:

autosampler Location: 1

Date Collected: 11/19/2012 5:50:52 PM

Data Type: Original

Initial Sample Vol:

Sample Prep Vol:

Nebulizer Parameters: CCB

Approved: November 20, 2012

Ken H. Rhodes

Analyte Back Pressure Flow
All 176.0 kPa 0.50 L/min

Mean Data: CCB

Analyte	Mean Corrected Intensity	Calib. Conc. Units	Std.Dev.	Sample Conc. Units	Std.Dev.	RSD
Y 371.029	2484465.4				13141.07	0.53%
YRADIAL	283017.6				4908.11	1.73%
Ga 417.206	1229991.2				16433.28	1.34%
GaRADIAL	76448.5				1939.48	2.54%
Ag 328.068†	27.1	-0.00070 mg/L	0.000077	-0.00070 mg/L	0.000077	10.95%
QC value within limits for Ag	328.068	Recovery = Not calculated				
Al 396.153†	15.6	-0.0134 mg/L	0.00114	-0.0134 mg/L	0.00114	8.51%
QC value within limits for Al	396.153	Recovery = Not calculated				
As 188.979†	5.9	0.00203 mg/L	0.001066	0.00203 mg/L	0.001066	52.50%
QC value within limits for As	188.979	Recovery = Not calculated				
Ba 233.527†	5.8	-0.00192 mg/L	0.000100	-0.00192 mg/L	0.000100	5.22%
QC value within limits for Ba	233.527	Recovery = Not calculated				
Be 234.861†	73.3	0.00004 mg/L	0.000023	0.00004 mg/L	0.000023	52.84%
QC value within limits for Be	234.861	Recovery = Not calculated				
B 249.677†	339.1	0.00515 mg/L	0.000429	0.00515 mg/L	0.000429	8.34%
QC value within limits for B	249.677	Recovery = Not calculated				
Ca 227.546†	17.9	0.0479 mg/L	0.00434	0.0479 mg/L	0.00434	9.06%
QC value within limits for Ca	227.546	Recovery = Not calculated				
Cd 228.802†	-7.2	-0.00017 mg/L	0.000030	-0.00017 mg/L	0.000030	17.97%
QC value within limits for Cd	228.802	Recovery = Not calculated				
Co 228.616†	-4.8	-0.00065 mg/L	0.000044	-0.00065 mg/L	0.000044	6.82%
QC value within limits for Co	228.616	Recovery = Not calculated				
Cr 267.716†	-0.5	-0.00068 mg/L	0.000028	-0.00068 mg/L	0.000028	4.11%
QC value within limits for Cr	267.716	Recovery = Not calculated				
Cu 327.393†	92.2	-0.00042 mg/L	0.000168	-0.00042 mg/L	0.000168	39.95%
QC value within limits for Cu	327.393	Recovery = Not calculated				
Fe 239.562†	17.9	-0.00460 mg/L	0.000144	-0.00460 mg/L	0.000144	3.12%
QC value within limits for Fe	239.562	Recovery = Not calculated				
Mg 279.077†	7.0	-0.00710 mg/L	0.001641	-0.00710 mg/L	0.001641	23.09%
QC value within limits for Mg	279.077	Recovery = Not calculated				
Mn 257.610†	547.8	-0.00150 mg/L	0.000057	-0.00150 mg/L	0.000057	3.80%
QC value within limits for Mn	257.610	Recovery = Not calculated				
Mo 202.031†	-2.4	-0.00090 mg/L	0.000147	-0.00090 mg/L	0.000147	16.29%
QC value within limits for Mo	202.031	Recovery = Not calculated				
Ni 231.604†	-8.9	-0.00183 mg/L	0.000139	-0.00183 mg/L	0.000139	7.60%
QC value within limits for Ni	231.604	Recovery = Not calculated				
Pb 220.353†	7.0	-0.00016 mg/L	0.000564	-0.00016 mg/L	0.000564	353.93%
QC value within limits for Pb	220.353	Recovery = Not calculated				
Sb 206.836†	1.4	0.00044 mg/L	0.000589	0.00044 mg/L	0.000589	135.26%
QC value within limits for Sb	206.836	Recovery = Not calculated				
Se 196.026†	4.3	0.00352 mg/L	0.002414	0.00352 mg/L	0.002414	68.51%
QC value within limits for Se	196.026	Recovery = Not calculated				
Si 251.611†	-13.4	-0.0105 mg/L	0.00050	-0.0105 mg/L	0.00050	4.72%
QC value within limits for Si	251.611	Recovery = Not calculated				
Sn 189.927†	-32.6	-0.00427 mg/L	0.000795	-0.00427 mg/L	0.000795	18.62%
QC value within limits for Sn	189.927	Recovery = Not calculated				
Ti 334.940†	137.4	-0.00037 mg/L	0.000092	-0.00037 mg/L	0.000092	24.95%
QC value within limits for Ti	334.940	Recovery = Not calculated				
Tl 190.801†	-6.4	-0.00371 mg/L	0.001965	-0.00371 mg/L	0.001965	52.99%
QC value within limits for Tl	190.801	Recovery = Not calculated				
V 290.880†	-63.2	-0.00217 mg/L	0.001496	-0.00217 mg/L	0.001496	68.89%
QC value within limits for V	290.880	Recovery = Not calculated				
Zn 206.200†	17.8	-0.00136 mg/L	0.000205	-0.00136 mg/L	0.000205	15.15%
QC value within limits for Zn	206.200	Recovery = Not calculated				
K 766.490†	68.2	0.0393 mg/L	0.01454	0.0393 mg/L	0.01454	36.96%
QC value within limits for K	766.490	Recovery = Not calculated				
Na 589.592†	825.5	0.0404 mg/L	0.00653	0.0404 mg/L	0.00653	16.16%
QC value within limits for Na	589.592	Recovery = Not calculated				
Sr 407.771†	179.6	-0.00279 mg/L	0.000024	-0.00279 mg/L	0.000024	0.86%
QC value within limits for Sr	407.771	Recovery = Not calculated				
Li 670.784†	-8.8	-0.00305 mg/L	0.000501	-0.00305 mg/L	0.000501	16.44%
QC value within limits for Li	670.784	Recovery = Not calculated				

All analyte(s) passed QC.

Approved: November 20, 2012

Ken H. Rhodes

Sequence No.: 48
 Sample ID: LLCCV
 Analyst: KHR
 Initial Sample Wt:
 Dilution:

Autosampler Location: 91
 Date Collected: 11/19/2012 5:57:45 PM
 Data Type: Original
 Initial Sample Vol:
 Sample Prep Vol:

Nebulizer Parameters: LLCCV

Analyte Back Pressure Flow
 All 176.0 kPa 0.50 L/min

Mean Data: LLCCV

Analyte	Mean Corrected Intensity	Conc. Units	Calib.	Std.Dev.	Sample Conc. Units	Std.Dev.	RSD
Y 371.029	2475260.0					14050.35	0.57%
YRADIAL	287013.9					8087.51	2.82%
Ga 417.206	1236349.7					12131.69	0.98%
GaRADIAL	77373.2					800.43	1.03%
Ag 328.068†	1302.1	0.00325 mg/L		0.000337	0.00325 mg/L	0.000337	10.36%
Al 396.153†	673.6	0.0855 mg/L		0.00159	0.0855 mg/L	0.00159	1.86%
As 188.979†	10.0	0.00345 mg/L		0.000864	0.00345 mg/L	0.000864	25.02%
Ba 233.527†	1504.9	0.00828 mg/L		0.000034	0.00828 mg/L	0.000034	0.41%
Be 234.861†	610.4	0.00052 mg/L		0.000011	0.00052 mg/L	0.000011	2.10%
B 249.677†	638.5	0.00831 mg/L		0.000199	0.00831 mg/L	0.000199	2.39%
Ca 227.546†	56.9	0.155 mg/L		0.0295	0.155 mg/L	0.0295	19.03%
Cd 228.802†	14.5	0.00032 mg/L		0.000113	0.00032 mg/L	0.000113	35.40%
Co 228.616†	62.9	0.00119 mg/L		0.000299	0.00119 mg/L	0.000299	25.18%
Cr 267.716†	670.3	0.00450 mg/L		0.000092	0.00450 mg/L	0.000092	2.04%
Cu 327.393†	1461.3	0.00468 mg/L		0.000370	0.00468 mg/L	0.000370	7.91%
Fe 239.562†	390.0	0.0345 mg/L		0.00133	0.0345 mg/L	0.00133	3.85%
Mg 279.077†	285.7	0.0934 mg/L		0.00189	0.0934 mg/L	0.00189	2.02%
Mn 257.610†	4717.8	0.00351 mg/L		0.000037	0.00351 mg/L	0.000037	1.06%
Mo 202.031†	281.4	0.00871 mg/L		0.000170	0.00871 mg/L	0.000170	1.95%
Ni 231.604†	313.8	0.00361 mg/L		0.000152	0.00361 mg/L	0.000152	4.20%
Pb 220.353†	63.7	0.00527 mg/L		0.000620	0.00527 mg/L	0.000620	11.77%
Sb 206.836†	43.8	0.0123 mg/L		0.00048	0.0123 mg/L	0.00048	3.91%
Se 196.026†	10.9	0.00762 mg/L		0.001646	0.00762 mg/L	0.001646	21.60%
Si 251.611†	2343.5	0.0393 mg/L		0.00096	0.0393 mg/L	0.00096	2.45%
Sn 189.927†	63.0	0.00577 mg/L		0.000674	0.00577 mg/L	0.000674	11.68%
Ti 334.940†	11145.6	0.00951 mg/L		0.000100	0.00951 mg/L	0.000100	1.05%
Tl 190.801†	5.6	0.00053 mg/L		0.001545	0.00053 mg/L	0.001545	293.23%
V 290.880†	2053.6	0.00708 mg/L		0.001382	0.00708 mg/L	0.001382	19.51%
Zn 206.200†	533.4	0.0103 mg/L		0.00038	0.0103 mg/L	0.00038	3.67%
K 766.490†	1453.6	0.499 mg/L		0.0389	0.499 mg/L	0.0389	7.79%
Na 589.592†	10005.9	0.496 mg/L		0.0073	0.496 mg/L	0.0073	1.47%
Sr 407.771†	25196.7	0.00771 mg/L		0.000293	0.00771 mg/L	0.000293	3.80%
Li 670.784†	1283.4	0.00666 mg/L		0.000557	0.00666 mg/L	0.000557	8.36%

Sequence No.: 49
 Sample ID: LLCCV
 Analyst: KHR
 Initial Sample Wt:
 Dilution:

Autosampler Location: 92
 Date Collected: 11/19/2012 6:04:40 PM
 Data Type: Original
 Initial Sample Vol:
 Sample Prep Vol:

Nebulizer Parameters: LLCCV

Analyte Back Pressure Flow
 All 176.0 kPa 0.50 L/min

Mean Data: LLCCV

Analyte	Mean Corrected Intensity	Conc. Units	Calib.	Std.Dev.	Sample Conc. Units	Std.Dev.	RSD
Y 371.029	2479034.4					20838.12	0.84%
YRADIAL	291825.4					5542.81	1.90%
Ga 417.206	1235678.0					12499.35	1.01%
GaRADIAL	78367.0					2131.98	2.72%
Ag 328.068†	2586.6	0.00724 mg/L		0.000176	0.00724 mg/L	0.000176	2.44%
Al 396.153†	1315.7	0.182 mg/L		0.0035	0.182 mg/L	0.0035	1.90%
As 188.979†	18.1	0.00636 mg/L		0.000315	0.00636 mg/L	0.000315	4.95%

Approved: November 20, 2012

Ken H. Rhodes

Ba 233.527†	3059.4	0.0189 mg/L	0.00011	0.0189 mg/L	0.00011	0.57%
Be 234.861†	1160.4	0.00101 mg/L	0.000011	0.00101 mg/L	0.000011	1.11%
B 249.677†	1059.2	0.0128 mg/L	0.00013	0.0128 mg/L	0.00013	0.99%
Ca 227.546†	91.5	0.252 mg/L	0.0335	0.252 mg/L	0.0335	13.30%
Cd 228.802†	32.8	0.00072 mg/L	0.000122	0.00072 mg/L	0.000122	17.06%
Co 228.616†	142.0	0.00334 mg/L	0.000131	0.00334 mg/L	0.000131	3.91%
Cr 267.716†	1347.0	0.00972 mg/L	0.000099	0.00972 mg/L	0.000099	1.02%
Cu 327.393†	2747.5	0.00948 mg/L	0.000083	0.00948 mg/L	0.000083	0.87%
Fe 239.562†	790.6	0.0766 mg/L	0.00103	0.0766 mg/L	0.00103	1.34%
Mg 279.077†	555.9	0.191 mg/L	0.0035	0.191 mg/L	0.0035	1.83%
Mn 257.610†	9076.8	0.00875 mg/L	0.000045	0.00875 mg/L	0.000045	0.51%
Mo 202.031†	572.2	0.0186 mg/L	0.00009	0.0186 mg/L	0.00009	0.51%
Ni 231.604†	679.2	0.00977 mg/L	0.000281	0.00977 mg/L	0.000281	2.88%
Pb 220.353†	109.5	0.00965 mg/L	0.000544	0.00965 mg/L	0.000544	5.63%
Sb 206.836†	82.4	0.0231 mg/L	0.00158	0.0231 mg/L	0.00158	6.85%
Se 196.026†	20.6	0.0136 mg/L	0.00211	0.0136 mg/L	0.00211	15.54%
Si 251.611†	4790.9	0.0910 mg/L	0.00126	0.0910 mg/L	0.00126	1.39%
Sn 189.927†	159.6	0.0159 mg/L	0.00047	0.0159 mg/L	0.00047	2.93%
Ti 334.940†	22157.2	0.0194 mg/L	0.00023	0.0194 mg/L	0.00023	1.18%
Tl 190.801†	31.3	0.00940 mg/L	0.001621	0.00940 mg/L	0.001621	17.24%
V 290.880†	4283.0	0.0168 mg/L	0.00134	0.0168 mg/L	0.00134	7.97%
Zn 206.200†	970.8	0.0202 mg/L	0.00012	0.0202 mg/L	0.00012	0.60%
K 766.490†	2942.5	0.993 mg/L	0.0079	0.993 mg/L	0.0079	0.80%
Na 589.592†	20316.9	1.01 mg/L	0.028	1.01 mg/L	0.028	2.82%
Sr 407.771†	50570.5	0.0184 mg/L	0.00045	0.0184 mg/L	0.00045	2.45%
Li 670.784†	2693.2	0.0172 mg/L	0.00044	0.0172 mg/L	0.00044	2.53%

Sequence No.: 50

Sample ID: LRC

Analyst: KHR

Initial Sample Wt:

Dilution:

Sampler Location: 93

Date Collected: 11/19/2012 6:11:35 PM

Data Type: Original

Initial Sample Vol:

Sample Prep Vol:

Nebulizer Parameters: LRC

Analyte	Back Pressure	Flow
All	176.0 kPa	0.50 L/min

Mean Data: LRC

Analyte	Mean Corrected Intensity	Calib. Conc. Units	Std.Dev.	Sample Conc. Units	Std.Dev.	RSD
Y 371.029	2172523.8				9307.63	0.43%
YRADIAL	270540.7				6248.95	2.31%
Ga 417.206	1173198.8				2359.82	0.20%
GaRADIAL	73657.4				1496.85	2.03%
Ag 328.068†	2625.3	0.00729 mg/L	0.000827	0.00729 mg/L	0.000827	11.34%
Al 396.153†	-82.1	-0.0282 mg/L	0.00107	-0.0282 mg/L	0.00107	3.81%
As 188.979†	-13.8	-0.00513 mg/L	0.001963	-0.00513 mg/L	0.001963	38.25%
Ba 233.527†	22.0	-0.00181 mg/L	0.000064	-0.00181 mg/L	0.000064	3.54%
Be 234.861†	148.0	0.00011 mg/L	0.000012	0.00011 mg/L	0.000012	10.19%
B 249.677†	-43.1	0.00106 mg/L	0.000043	0.00106 mg/L	0.000043	4.02%
Ca 227.546†	191089.1	501 mg/L	9.1	501 mg/L	9.1	1.82%
Cd 228.802†	-5.6	-0.00009 mg/L	0.000213	-0.00009 mg/L	0.000213	228.81%
Co 228.616†	3.9	-0.00023 mg/L	0.000184	-0.00023 mg/L	0.000184	81.50%
Cr 267.716†	1179.0	0.00842 mg/L	0.000255	0.00842 mg/L	0.000255	3.03%
Cu 327.393†	-818.8	-0.00389 mg/L	0.000384	-0.00389 mg/L	0.000384	9.87%
Fe 239.562†	-32.1	-0.00985 mg/L	0.000339	-0.00985 mg/L	0.000339	3.44%
Mg 279.077†	39.7	0.00470 mg/L	0.001348	0.00470 mg/L	0.001348	28.66%
Mn 257.610†	354.9	-0.00173 mg/L	0.000010	-0.00173 mg/L	0.000010	0.58%
Mo 202.031†	27.1	0.00010 mg/L	0.000370	0.00010 mg/L	0.000370	383.27%
Ni 231.604†	-30.7	-0.00219 mg/L	0.000145	-0.00219 mg/L	0.000145	6.60%
Pb 220.353†	-25.6	-0.00328 mg/L	0.000428	-0.00328 mg/L	0.000428	13.07%
Sb 206.836†	-6.3	-0.00177 mg/L	0.001295	-0.00177 mg/L	0.001295	73.20%
Se 196.026†	4.5	0.00365 mg/L	0.001680	0.00365 mg/L	0.001680	46.03%
Si 251.611†	6.8	-0.0101 mg/L	0.00029	-0.0101 mg/L	0.00029	2.89%
Sn 189.927†	-475.9	-0.0508 mg/L	0.00115	-0.0508 mg/L	0.00115	2.27%
Ti 334.940†	-93089.7	-0.00869 mg/L	0.003075	-0.00869 mg/L	0.003075	35.36%
Tl 190.801†	-47.2	-0.0186 mg/L	0.00299	-0.0186 mg/L	0.00299	16.08%
V 290.880†	1090.2	0.00288 mg/L	0.001060	0.00288 mg/L	0.001060	36.84%
Zn 206.200†	104.5	0.00067 mg/L	0.000231	0.00067 mg/L	0.000231	34.54%

Approved: November 20, 2012

Ken H. Rhodes

K 766.490†	-36.2	0.00469 mg/L	0.034002	0.00469 mg/L	0.034002	725.74%
Na 589.592†	471.9	0.0229 mg/L	0.00520	0.0229 mg/L	0.00520	22.72%
Sr 407.771†	45902.4	0.00647 mg/L	0.001033	0.00647 mg/L	0.001033	15.96%
Li 670.784†	-88.4	-0.00365 mg/L	0.000257	-0.00365 mg/L	0.000257	7.04%

Sequence No.: 51

Sample ID: LRC

Analyst: KHR

Initial Sample Wt:

Dilution:

Autosampler Location: 94

Date Collected: 11/19/2012 6:18:32 PM

Data Type: Original

Initial Sample Vol:

Sample Prep Vol:

Nebulizer Parameters: LRC

Analyte	Back Pressure	Flow
All	176.0 kPa	0.50 L/min

Mean Data: LRC

Analyte	Mean Corrected Intensity	Conc.	Calib. Units	Std.Dev.	Conc.	Sample Units	Std.Dev.	RSD
Y 371.029	2237468.0						6013.84	0.27%
YRADIAL	269436.7						673.38	0.25%
Ga 417.206	1256253.2						10842.27	0.86%
GaRADIAL	76058.0						2321.64	3.05%
Ag 328.068†	48.8	-0.00063	mg/L	0.000270	-0.00063	mg/L	0.000270	43.09%
Al 396.153†	24.0	-0.0121	mg/L	0.00067	-0.0121	mg/L	0.00067	5.52%
As 188.979†	22.2	0.00791	mg/L	0.002156	0.00791	mg/L	0.002156	27.25%
Ba 233.527†	5.1	-0.00193	mg/L	0.000137	-0.00193	mg/L	0.000137	7.11%
Be 234.861†	208.8	0.00017	mg/L	0.000002	0.00017	mg/L	0.000002	1.38%
B 249.677†	77.5	0.00235	mg/L	0.000188	0.00235	mg/L	0.000188	8.01%
Ca 227.546†	45.3	0.0721	mg/L	0.01171	0.0721	mg/L	0.01171	16.24%
Cd 228.802†	-9.7	-0.00025	mg/L	0.000121	-0.00025	mg/L	0.000121	48.02%
Co 228.616†	-13.4	-0.00088	mg/L	0.000086	-0.00088	mg/L	0.000086	9.69%
Cr 267.716†	463.3	0.00290	mg/L	0.000555	0.00290	mg/L	0.000555	19.15%
Cu 327.393†	51.1	-0.00057	mg/L	0.000335	-0.00057	mg/L	0.000335	58.70%
Fe 239.562†	33.2	-0.0121	mg/L	0.00118	-0.0121	mg/L	0.00118	9.73%
Mg 279.077†	1265711.9	456	mg/L	21.1	456	mg/L	21.1	4.64%
Mn 257.610†	2481.4	0.00083	mg/L	0.000075	0.00083	mg/L	0.000075	9.08%
Mo 202.031†	-5.7	-0.00101	mg/L	0.000152	-0.00101	mg/L	0.000152	15.03%
Ni 231.604†	-32.3	-0.00222	mg/L	0.000330	-0.00222	mg/L	0.000330	14.83%
Pb 220.353†	1.4	-0.00070	mg/L	0.000733	-0.00070	mg/L	0.000733	104.10%
Sb 206.836†	3.5	0.00101	mg/L	0.001224	0.00101	mg/L	0.001224	121.02%
Se 196.026†	-7.1	-0.00351	mg/L	0.004045	-0.00351	mg/L	0.004045	115.16%
Si 251.611†	386.5	-0.00207	mg/L	0.000249	-0.00207	mg/L	0.000249	12.01%
Sn 189.927†	-19.5	-0.00288	mg/L	0.000769	-0.00288	mg/L	0.000769	26.66%
Ti 334.940†	70.9	-0.00042	mg/L	0.000205	-0.00042	mg/L	0.000205	48.84%
Tl 190.801†	-15.5	-0.00682	mg/L	0.003414	-0.00682	mg/L	0.003414	50.09%
V 290.880†	884.6	-0.00988	mg/L	0.000792	-0.00988	mg/L	0.000792	8.01%
Zn 206.200†	171.5	0.00213	mg/L	0.000237	0.00213	mg/L	0.000237	11.13%
K 766.490†	285.0	0.111	mg/L	0.0276	0.111	mg/L	0.0276	24.75%
Na 589.592†	180.2	0.00843	mg/L	0.004552	0.00843	mg/L	0.004552	54.00%
Sr 407.771†	42.1	-0.00285	mg/L	0.000036	-0.00285	mg/L	0.000036	1.28%
Li 670.784†	273.5	-0.00093	mg/L	0.000645	-0.00093	mg/L	0.000645	69.67%

Sequence No.: 52

Sample ID: BLANK

Analyst: KHR

Initial Sample Wt:

Dilution:

Autosampler Location: 95

Date Collected: 11/19/2012 6:25:29 PM

Data Type: Original

Initial Sample Vol:

Sample Prep Vol:

Nebulizer Parameters: BLANK

Analyte	Back Pressure	Flow
All	176.0 kPa	0.50 L/min

Mean Data: BLANK

Analyte	Mean Corrected Intensity	Conc.	Calib. Units	Std.Dev.	Conc.	Sample Units	Std.Dev.	RSD
Y 371.029	2470943.8						11676.09	0.47%

Approved: November 20, 2012

Ken H. Rhodes

YRADIAL	290852.6					8675.16	2.98%
Ga 417.206	1219432.3					6001.72	0.49%
GA RADIAL	78410.4					1307.89	1.67%
Ag 328.068†	-14.7	-0.00083 mg/L	0.000077	-0.00083 mg/L	0.000077	9.22%	
Al 396.153†	9.8	-0.0142 mg/L	0.00020	-0.0142 mg/L	0.00020	1.40%	
As 188.979†	0.7	0.00014 mg/L	0.001878	0.00014 mg/L	0.001878	>999.9%	
Ba 233.527†	-18.7	-0.00209 mg/L	0.000118	-0.00209 mg/L	0.000118	5.64%	
Be 234.861†	61.0	0.00003 mg/L	0.000018	0.00003 mg/L	0.000018	53.46%	
B 249.677†	12.9	0.00167 mg/L	0.000042	0.00167 mg/L	0.000042	2.52%	
Ca 227.546†	20.3	0.0543 mg/L	0.01231	0.0543 mg/L	0.01231	22.65%	
Cd 228.802†	-3.2	-0.00007 mg/L	0.000151	-0.00007 mg/L	0.000151	230.54%	
Co 228.616†	-4.9	-0.00065 mg/L	0.000347	-0.00065 mg/L	0.000347	52.98%	
Cr 267.716†	4.4	-0.00065 mg/L	0.000074	-0.00065 mg/L	0.000074	11.51%	
Cu 327.393†	129.1	-0.00028 mg/L	0.000355	-0.00028 mg/L	0.000355	124.87%	
Fe 239.562†	4.4	-0.00602 mg/L	0.000485	-0.00602 mg/L	0.000485	8.05%	
Mg 279.077†	38.4	0.00422 mg/L	0.005988	0.00422 mg/L	0.005988	141.90%	
Mn 257.610†	242.5	-0.00186 mg/L	0.000025	-0.00186 mg/L	0.000025	1.32%	
Mo 202.031†	-9.4	-0.00114 mg/L	0.000422	-0.00114 mg/L	0.000422	36.98%	
Ni 231.604†	-4.8	-0.00176 mg/L	0.000261	-0.00176 mg/L	0.000261	14.82%	
Pb 220.353†	14.3	0.00053 mg/L	0.000183	0.00053 mg/L	0.000183	34.37%	
Sb 206.836†	4.5	0.00131 mg/L	0.001302	0.00131 mg/L	0.001302	99.72%	
Se 196.026†	9.4	0.00666 mg/L	0.002022	0.00666 mg/L	0.002022	30.36%	
Si 251.611†	-69.6	-0.0117 mg/L	0.00037	-0.0117 mg/L	0.00037	3.13%	
Sn 189.927†	-34.7	-0.00448 mg/L	0.000069	-0.00448 mg/L	0.000069	1.53%	
Ti 334.940†	12.7	-0.00048 mg/L	0.000056	-0.00048 mg/L	0.000056	11.55%	
Tl 190.801†	-8.7	-0.00449 mg/L	0.005119	-0.00449 mg/L	0.005119	113.91%	
V 290.880†	-229.9	-0.00290 mg/L	0.001607	-0.00290 mg/L	0.001607	55.42%	
Zn 206.200†	55.6	-0.00050 mg/L	0.000155	-0.00050 mg/L	0.000155	30.81%	
K 766.490†	-25.7	0.00817 mg/L	0.025537	0.00817 mg/L	0.025537	312.45%	
Na 589.592†	103.9	0.00465 mg/L	0.008534	0.00465 mg/L	0.008534	183.59%	
Sr 407.771†	-79.5	-0.00290 mg/L	0.000027	-0.00290 mg/L	0.000027	0.93%	
Li 670.784†	61.8	-0.00252 mg/L	0.000372	-0.00252 mg/L	0.000372	14.77%	

Sequence No.: 53

Sample ID: CCV

Analyst:

Initial Sample Wt:

Dilution:

AutoSampler Location: 6

Date Collected: 11/19/2012 6:32:23 PM

Data Type: Original

Initial Sample Vol:

Sample Prep Vol:

Nebulizer Parameters: CCV

Analyte

Back Pressure

Flow

All

176.0 kPa

0.50 L/min

Mean Data: CCV

Analyte	Mean Corrected Intensity	Calib. Conc. Units	Std.Dev.	Sample Conc. Units	Std.Dev.	RSD
Y 371.029	2365908.9				33771.09	1.43%
YRADIAL	281515.6				3400.34	1.21%
Ga 417.206	1172397.1				13452.66	1.15%
GA RADIAL	74565.7				977.90	1.31%
Ag 328.068†	128358.7	0.397 mg/L	0.0059	0.397 mg/L	0.0059	1.49%
QC value within limits for Ag 328.068		Recovery = 99.36%				
Al 396.153†	65096.2	9.76 mg/L	0.033	9.76 mg/L	0.033	0.34%
QC value within limits for Al 396.153		Recovery = 97.64%				
As 188.979†	1087.0	0.389 mg/L	0.0077	0.389 mg/L	0.0077	1.97%
QC value within limits for As 188.979		Recovery = 97.27%				
Ba 233.527†	148600.3	1.01 mg/L	0.006	1.01 mg/L	0.006	0.58%
QC value within limits for Ba 233.527		Recovery = 100.92%				
Be 234.861†	54999.1	0.0488 mg/L	0.00098	0.0488 mg/L	0.00098	2.01%
QC value within limits for Be 234.861		Recovery = 97.60%				
B 249.677†	45302.0	0.481 mg/L	0.0049	0.481 mg/L	0.0049	1.01%
QC value within limits for B 249.677		Recovery = 96.20%				
Ca 227.546†	3721.7	10.2 mg/L	0.16	10.2 mg/L	0.16	1.55%
QC value within limits for Ca 227.546		Recovery = 102.27%				
Cd 228.802†	2201.9	0.0477 mg/L	0.00130	0.0477 mg/L	0.00130	2.72%
QC value within limits for Cd 228.802		Recovery = 95.48%				
Co 228.616†	7442.9	0.202 mg/L	0.0029	0.202 mg/L	0.0029	1.42%
QC value within limits for Co 228.616		Recovery = 100.88%				
Cr 267.716†	64398.7	0.497 mg/L	0.0021	0.497 mg/L	0.0021	0.42%

Approved: November 20, 2012

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Cu	327.393†	131943.4	0.491 mg/L	0.0048	0.491 mg/L	0.0048	0.97%
QC value within limits for Cu	327.393	Recovery =	98.21%				
Fe	239.562†	37823.9	3.97 mg/L	0.036	3.97 mg/L	0.036	0.90%
QC value within limits for Fe	239.562	Recovery =	99.18%				
Mg	279.077†	27821.3	10.0 mg/L	0.11	10.0 mg/L	0.11	1.06%
QC value within limits for Mg	279.077	Recovery =	100.27%				
Mn	257.610†	426736.8	0.511 mg/L	0.0070	0.511 mg/L	0.0070	1.37%
QC value within limits for Mn	257.610	Recovery =	102.12%				
Mo	202.031†	28932.9	0.979 mg/L	0.0089	0.979 mg/L	0.0089	0.91%
QC value within limits for Mo	202.031	Recovery =	97.89%				
Ni	231.604†	29908.2	0.502 mg/L	0.0052	0.502 mg/L	0.0052	1.03%
QC value within limits for Ni	231.604	Recovery =	100.46%				
Pb	220.353†	5274.6	0.504 mg/L	0.0055	0.504 mg/L	0.0055	1.08%
QC value within limits for Pb	220.353	Recovery =	100.88%				
Sb	206.836†	4183.1	1.17 mg/L	0.026	1.17 mg/L	0.026	2.25%
QC value within limits for Sb	206.836	Recovery =	97.37%				
Se	196.026†	642.0	0.397 mg/L	0.0087	0.397 mg/L	0.0087	2.20%
QC value within limits for Se	196.026	Recovery =	99.27%				
Si	251.611†	236676.3	4.99 mg/L	0.054	4.99 mg/L	0.054	1.08%
QC value within limits for Si	251.611	Recovery =	99.84%				
Sn	189.927†	9447.2	0.990 mg/L	0.0127	0.990 mg/L	0.0127	1.28%
QC value within limits for Sn	189.927	Recovery =	99.03%				
Ti	334.940†	1102590.9	0.989 mg/L	0.0031	0.989 mg/L	0.0031	0.32%
QC value within limits for Ti	334.940	Recovery =	98.86%				
Tl	190.801†	1473.9	0.515 mg/L	0.0025	0.515 mg/L	0.0025	0.49%
QC value within limits for Tl	190.801	Recovery =	102.92%				
V	290.880†	229663.2	1.00 mg/L	0.008	1.00 mg/L	0.008	0.83%
QC value within limits for V	290.880	Recovery =	100.22%				
Zn	206.200†	44381.1	1.00 mg/L	0.005	1.00 mg/L	0.005	0.51%
QC value within limits for Zn	206.200	Recovery =	100.04%				
K	766.490†	146895.9	49.2 mg/L	0.15	49.2 mg/L	0.15	0.30%
QC value within limits for K	766.490	Recovery =	98.42%				
Na	589.592†	952116.1	48.3 mg/L	1.29	48.3 mg/L	1.29	2.67%
QC value within limits for Na	589.592	Recovery =	96.58%				
Sr	407.771†	2423022.6	1.01 mg/L	0.023	1.01 mg/L	0.023	2.26%
QC value within limits for Sr	407.771	Recovery =	101.38%				
Li	670.784†	130299.5	0.976 mg/L	0.0018	0.976 mg/L	0.0018	0.18%
QC value within limits for Li	670.784	Recovery =	97.58%				

All analyte(s) passed QC.

Sequence No.: 54

Sample ID: CCB

Analyst:

Initial Sample Wt:

Dilution:

autosampler Location: 1

Date Collected: 11/19/2012 6:38:24 PM

Data Type: Original

Initial Sample Vol:

Sample Prep Vol:

Nebulizer Parameters: CCB

Analyte	Back Pressure	Flow
All	177.0 kPa	0.50 L/min

Mean Data: CCB

Analyte	Mean Corrected Intensity	Conc.	Calib. Units	Std.Dev.	Sample Conc.	Sample Units	Std.Dev.	RSD
Y 371.029	2446274.2						9926.76	0.41%
YRADIAL	288094.0						3483.20	1.21%
Ga 417.206	1211287.2						10562.07	0.87%
GaRADIAL	77832.5						1728.00	2.22%
Ag 328.068†	91.5	-0.00050 mg/L		0.000516	-0.00050 mg/L		0.000516	102.43%
QC value within limits for Ag	328.068	Recovery =	Not calculated					
Al 396.153†	12.0	-0.0139 mg/L		0.00157	-0.0139 mg/L		0.00157	11.31%
QC value within limits for Al	396.153	Recovery =	Not calculated					
As 188.979†	4.3	0.00144 mg/L		0.002020	0.00144 mg/L		0.002020	139.93%
QC value within limits for As	188.979	Recovery =	Not calculated					
Ba 233.527†	2.7	-0.00194 mg/L		0.000079	-0.00194 mg/L		0.000079	4.05%
QC value within limits for Ba	233.527	Recovery =	Not calculated					
Be 234.861†	33.9	0.00001 mg/L		0.000033	0.00001 mg/L		0.000033	360.92%
QC value within limits for Be	234.861	Recovery =	Not calculated					
B 249.677†	176.7	0.00341 mg/L		0.000210	0.00341 mg/L		0.000210	6.14%

Approved: November 20, 2012

Ken H. Rhodes

Ca	227.546†	QC value within limits for B 249.677 Recovery = Not calculated	14.6	0.0391 mg/L	0.01717	0.0391 mg/L	0.01717	43.88%
Cd	228.802†	QC value within limits for Ca 227.546 Recovery = Not calculated	-4.2	-0.00009 mg/L	0.000132	-0.00009 mg/L	0.000132	138.83%
Co	228.616†	QC value within limits for Cd 228.802 Recovery = Not calculated	-7.1	-0.00071 mg/L	0.000188	-0.00071 mg/L	0.000188	26.37%
Cr	267.716†	QC value within limits for Co 228.616 Recovery = Not calculated	9.3	-0.00061 mg/L	0.000059	-0.00061 mg/L	0.000059	9.62%
Cu	327.393†	QC value within limits for Cr 267.716 Recovery = Not calculated	137.1	-0.00025 mg/L	0.000063	-0.00025 mg/L	0.000063	24.94%
Fe	239.562†	QC value within limits for Cu 327.393 Recovery = Not calculated	8.6	-0.00558 mg/L	0.000299	-0.00558 mg/L	0.000299	5.35%
Mg	279.077†	QC value within limits for Fe 239.562 Recovery = Not calculated	17.3	-0.00339 mg/L	0.001937	-0.00339 mg/L	0.001937	57.17%
Mn	257.610†	QC value within limits for Mg 279.077 Recovery = Not calculated	108.9	-0.00202 mg/L	0.000020	-0.00202 mg/L	0.000020	0.97%
Mo	202.031†	QC value within limits for Mn 257.610 Recovery = Not calculated	2.2	-0.00075 mg/L	0.000207	-0.00075 mg/L	0.000207	27.73%
Ni	231.604†	QC value within limits for Mo 202.031 Recovery = Not calculated	-16.6	-0.00196 mg/L	0.000212	-0.00196 mg/L	0.000212	10.83%
Pb	220.353†	QC value within limits for Ni 231.604 Recovery = Not calculated	0.5	-0.00078 mg/L	0.000765	-0.00078 mg/L	0.000765	98.06%
Sb	206.836†	QC value within limits for Pb 220.353 Recovery = Not calculated	3.2	0.00096 mg/L	0.000684	0.00096 mg/L	0.000684	71.22%
Se	196.026†	QC value within limits for Sb 206.836 Recovery = Not calculated	10.9	0.00755 mg/L	0.004213	0.00755 mg/L	0.004213	55.78%
Si	251.611†	QC value within limits for Se 196.026 Recovery = Not calculated	-23.9	-0.0108 mg/L	0.00018	-0.0108 mg/L	0.00018	1.69%
Sn	189.927†	QC value within limits for Si 251.611 Recovery = Not calculated	-31.9	-0.00418 mg/L	0.000952	-0.00418 mg/L	0.000952	22.75%
Ti	334.940†	QC value within limits for Sn 189.927 Recovery = Not calculated	142.7	-0.00037 mg/L	0.000017	-0.00037 mg/L	0.000017	4.59%
Tl	190.801†	QC value within limits for Ti 334.940 Recovery = Not calculated	-5.9	-0.00353 mg/L	0.002629	-0.00353 mg/L	0.002629	74.58%
V	290.880†	QC value within limits for Tl 190.801 Recovery = Not calculated	26.6	-0.00178 mg/L	0.000594	-0.00178 mg/L	0.000594	33.38%
Zn	206.200†	QC value within limits for V 290.880 Recovery = Not calculated	23.4	-0.00123 mg/L	0.000108	-0.00123 mg/L	0.000108	8.81%
K	766.490†	QC value within limits for Zn 206.200 Recovery = Not calculated	55.9	0.0353 mg/L	0.00186	0.0353 mg/L	0.00186	5.28%
Na	589.592†	QC value within limits for K 766.490 Recovery = Not calculated	389.6	0.0188 mg/L	0.00512	0.0188 mg/L	0.00512	27.23%
Sr	407.771†	QC value within limits for Na 589.592 Recovery = Not calculated	294.4	-0.00274 mg/L	0.000019	-0.00274 mg/L	0.000019	0.71%
Li	670.784†	QC value within limits for Sr 407.771 Recovery = Not calculated	51.1	-0.00260 mg/L	0.000271	-0.00260 mg/L	0.000271	10.42%
		QC value within limits for Li 670.784 Recovery = Not calculated						

All analyte(s) passed QC.

Sequence No.: 55

Sample ID: PBW 15 WG414642-02

Analyst: KHR

Initial Sample Wt:

Dilution:

Sampler Location: 96

Date Collected: 11/19/2012 6:45:18 PM

Data Type: Original

Initial Sample Vol:

Sample Prep Vol:

Nebulizer Parameters: PBW 15 WG414642-02

Analyte	Back Pressure	Flow
All	176.0 kPa	0.50 L/min

Mean Data: PBW 15 WG414642-02

Analyte	Mean Corrected Intensity	Calib. Conc. Units	Std.Dev.	Sample Conc. Units	Std.Dev.	RSD
Y 371.029	2472486.5				21016.04	0.85%
YRADIAL	285254.2				1339.24	0.47%
Ga 417.206	1257973.7				13656.10	1.09%
GaRADIAL	77868.0				2003.31	2.57%
Ag 328.068†	52.2	-0.00062 mg/L	0.000068	-0.00062 mg/L	0.000068	10.94%
Al 396.153†	15.9	-0.0133 mg/L	0.00172	-0.0133 mg/L	0.00172	12.92%
As 188.979†	0.0	-0.00012 mg/L	0.000973	-0.00012 mg/L	0.000973	800.79%

Approved: November 20, 2012

Ken H. Rhodes

Ba 233.527†	-6.5	-0.00201 mg/L	0.000115	-0.00201 mg/L	0.000115	5.72%
Be 234.861†	128.4	0.00009 mg/L	0.000015	0.00009 mg/L	0.000015	15.47%
B 249.677†	49.9	0.00206 mg/L	0.000256	0.00206 mg/L	0.000256	12.40%
Ca 227.546†	23.9	0.0636 mg/L	0.02019	0.0636 mg/L	0.02019	31.73%
Cd 228.802†	-6.0	-0.00013 mg/L	0.000059	-0.00013 mg/L	0.000059	46.71%
Co 228.616†	-7.6	-0.00073 mg/L	0.000202	-0.00073 mg/L	0.000202	27.73%
Cr 267.716†	1.4	-0.00067 mg/L	0.000095	-0.00067 mg/L	0.000095	14.24%
Cu 327.393†	95.0	-0.00041 mg/L	0.000429	-0.00041 mg/L	0.000429	104.99%
Fe 239.562†	8.2	-0.00562 mg/L	0.000219	-0.00562 mg/L	0.000219	3.89%
Mg 279.077†	24.1	-0.00094 mg/L	0.006041	-0.00094 mg/L	0.006041	645.36%
Mn 257.610†	198.8	-0.00192 mg/L	0.000013	-0.00192 mg/L	0.000013	0.70%
Mo 202.031†	-7.0	-0.00106 mg/L	0.000139	-0.00106 mg/L	0.000139	13.15%
Ni 231.604†	-8.9	-0.00183 mg/L	0.000282	-0.00183 mg/L	0.000282	15.43%
Pb 220.353†	11.7	0.00028 mg/L	0.000835	0.00028 mg/L	0.000835	295.06%
Sb 206.836†	-0.9	-0.00018 mg/L	0.001020	-0.00018 mg/L	0.001020	563.24%
Se 196.026†	-0.3	0.00069 mg/L	0.000869	0.00069 mg/L	0.000869	126.36%
Si 251.611†	-48.0	-0.0113 mg/L	0.00052	-0.0113 mg/L	0.00052	4.57%
Sn 189.927†	-38.0	-0.00483 mg/L	0.000623	-0.00483 mg/L	0.000623	12.89%
Ti 334.940†	81.8	-0.00042 mg/L	0.000049	-0.00042 mg/L	0.000049	11.85%
Tl 190.801†	-6.7	-0.00380 mg/L	0.001312	-0.00380 mg/L	0.001312	34.51%
V 290.880†	161.4	-0.00119 mg/L	0.000955	-0.00119 mg/L	0.000955	80.39%
Zn 206.200†	89.8	0.00026 mg/L	0.000083	0.00026 mg/L	0.000083	31.46%
K 766.490†	-71.9	-0.00715 mg/L	0.011647	-0.00715 mg/L	0.011647	162.95%
Na 589.592†	-84.0	-0.00467 mg/L	0.003482	-0.00467 mg/L	0.003482	74.58%
Sr 407.771†	43.1	-0.00285 mg/L	0.000022	-0.00285 mg/L	0.000022	0.76%
Li 670.784†	4.4	-0.00295 mg/L	0.000473	-0.00295 mg/L	0.000473	16.05%

Sequence No.: 56

Sample ID: LCSW 15 WG414642-03

Analyst: KHR

Initial Sample Wt:

Dilution:

Sampler Location: 97

Date Collected: 11/19/2012 6:52:12 PM

Data Type: Original

Initial Sample Vol:

Sample Prep Vol:

Nebulizer Parameters: LCSW 15 WG414642-03

Analyte

Back Pressure

Flow

All

177.0 kPa

0.50 L/min

Mean Data: LCSW 15 WG414642-03

Analyte	Mean Corrected Intensity	Calib. Conc. Units	Std.Dev.	Sample Conc. Units	Std.Dev.	RSD
Y 371.029	2419797.1				29128.29	1.20%
YRADIAL	286381.9				2553.04	0.89%
Ga 417.206	1240409.0				16029.55	1.29%
GaRADIAL	77249.8				484.95	0.63%
Ag 328.068†	61241.0	0.189 mg/L	0.0033	0.189 mg/L	0.0033	1.75%
Al 396.153†	31801.5	4.76 mg/L	0.081	4.76 mg/L	0.081	1.69%
As 188.979†	497.9	0.178 mg/L	0.0028	0.178 mg/L	0.0028	1.59%
Ba 233.527†	70854.4	0.480 mg/L	0.0048	0.480 mg/L	0.0048	1.00%
Be 234.861†	25622.2	0.0227 mg/L	0.00031	0.0227 mg/L	0.00031	1.35%
B 249.677†	85650.0	0.913 mg/L	0.0136	0.913 mg/L	0.0136	1.49%
Ca 227.546†	1756.5	4.84 mg/L	0.078	4.84 mg/L	0.078	1.62%
Cd 228.802†	1017.1	0.0221 mg/L	0.00056	0.0221 mg/L	0.00056	2.53%
Co 228.616†	3565.6	0.0964 mg/L	0.00090	0.0964 mg/L	0.00090	0.93%
Cr 267.716†	31116.1	0.240 mg/L	0.0015	0.240 mg/L	0.0015	0.63%
Cu 327.393†	63991.1	0.238 mg/L	0.0030	0.238 mg/L	0.0030	1.25%
Fe 239.562†	18611.3	1.95 mg/L	0.016	1.95 mg/L	0.016	0.82%
Mg 279.077†	13595.0	4.89 mg/L	0.035	4.89 mg/L	0.035	0.72%
Mn 257.610†	206062.3	0.245 mg/L	0.0036	0.245 mg/L	0.0036	1.45%
Mo 202.031†	13900.7	0.470 mg/L	0.0019	0.470 mg/L	0.0019	0.40%
Ni 231.604†	15132.2	0.253 mg/L	0.0027	0.253 mg/L	0.0027	1.08%
Pb 220.353†	2546.5	0.243 mg/L	0.0036	0.243 mg/L	0.0036	1.49%
Sb 206.836†	1964.6	0.549 mg/L	0.0144	0.549 mg/L	0.0144	2.62%
Se 196.026†	294.7	0.183 mg/L	0.0047	0.183 mg/L	0.0047	2.59%
Si 251.611†	110859.9	2.33 mg/L	0.010	2.33 mg/L	0.010	0.45%
Sn 189.927†	4880.3	0.511 mg/L	0.0051	0.511 mg/L	0.0051	0.99%
Ti 334.940†	533974.7	0.478 mg/L	0.0031	0.478 mg/L	0.0031	0.64%
Tl 190.801†	734.7	0.256 mg/L	0.0010	0.256 mg/L	0.0010	0.39%
V 290.880†	110159.6	0.480 mg/L	0.0040	0.480 mg/L	0.0040	0.83%
Zn 206.200†	20763.6	0.467 mg/L	0.0047	0.467 mg/L	0.0047	1.01%

Approved: November 20, 2012

Ken H. Rhodes

K 766.490†	71429.0	23.8 mg/L	0.41	23.8 mg/L	0.41	1.73%
Na 589.592†	469567.3	23.5 mg/L	0.14	23.5 mg/L	0.14	0.60%
Sr 407.771†	1223568.4	0.511 mg/L	0.0027	0.511 mg/L	0.0027	0.53%
Li 670.784†	66101.1	0.494 mg/L	0.0114	0.494 mg/L	0.0114	2.31%

Sequence No.: 57

Sample ID: L1211049201

Analyst: KHR

Initial Sample Wt:

Dilution:

Autosampler Location: 98

Date Collected: 11/19/2012 6:58:11 PM

Data Type: Original

Initial Sample Vol:

Sample Prep Vol:

Nebulizer Parameters: L1211049201

Analyte	Back Pressure	Flow
All	176.0 kPa	0.50 L/min

Mean Data: L1211049201

Analyte	Mean Corrected Intensity	Conc. Units	Calib. Units	Std.Dev.	Sample Conc. Units	Std.Dev.	RSD
Y 371.029	2335744.5					22090.97	0.95%
YRADIAL	278587.0					5501.13	1.97%
Ga 417.206	1274446.5					31103.62	2.44%
GaRADIAL	77916.2					733.05	0.94%
Ag 328.068†	565.8	0.00095 mg/L	0.000115	0.00095 mg/L	0.000115	12.02%	
Al 396.153†	40.5	-0.00968 mg/L	0.000438	-0.00968 mg/L	0.000438	4.52%	
As 188.979†	-9.0	-0.00336 mg/L	0.001543	-0.00336 mg/L	0.001543	45.95%	
Ba 233.527†	4897.8	0.0314 mg/L	0.00048	0.0314 mg/L	0.00048	1.53%	
Be 234.861†	197.4	0.00014 mg/L	0.000005	0.00014 mg/L	0.000005	3.62%	
B 249.677†	2319.3	0.0262 mg/L	0.00100	0.0262 mg/L	0.00100	3.81%	
Ca 227.546†	33293.4	87.4 mg/L	1.44	87.4 mg/L	1.44	1.65%	
Cd 228.802†	-9.5	-0.00019 mg/L	0.000095	-0.00019 mg/L	0.000095	50.55%	
Co 228.616†	-1.4	-0.00053 mg/L	0.000365	-0.00053 mg/L	0.000365	68.35%	
Cr 267.716†	89.4	0.00001 mg/L	0.000094	0.00001 mg/L	0.000094	>999.9%	
Cu 327.393†	61.4	-0.00053 mg/L	0.000450	-0.00053 mg/L	0.000450	84.18%	
Fe 239.562†	1354.1	0.136 mg/L	0.0016	0.136 mg/L	0.0016	1.17%	
Mg 279.077†	33865.9	12.2 mg/L	0.22	12.2 mg/L	0.22	1.77%	
Mn 257.610†	105522.8	0.125 mg/L	0.0005	0.125 mg/L	0.0005	0.38%	
Mo 202.031†	45.7	0.00076 mg/L	0.000247	0.00076 mg/L	0.000247	32.53%	
Ni 231.604†	31.3	-0.00115 mg/L	0.000213	-0.00115 mg/L	0.000213	18.53%	
Pb 220.353†	43.1	0.00319 mg/L	0.000232	0.00319 mg/L	0.000232	7.26%	
Sb 206.836†	-0.1	0.00004 mg/L	0.001435	0.00004 mg/L	0.001435	>999.9%	
Se 196.026†	1.7	0.00193 mg/L	0.001854	0.00193 mg/L	0.001854	95.94%	
Si 251.611†	172348.5	3.64 mg/L	0.054	3.64 mg/L	0.054	1.47%	
Sn 189.927†	-303.1	-0.0326 mg/L	0.00013	-0.0326 mg/L	0.00013	0.39%	
Ti 334.940†	-17007.6	-0.00263 mg/L	0.000554	-0.00263 mg/L	0.000554	21.05%	
Tl 190.801†	-37.6	-0.0146 mg/L	0.00189	-0.0146 mg/L	0.00189	12.93%	
V 290.880†	579.0	0.00031 mg/L	0.001031	0.00031 mg/L	0.001031	330.02%	
Zn 206.200†	89.2	0.00025 mg/L	0.000027	0.00025 mg/L	0.000027	11.07%	
K 766.490†	2107.6	0.689 mg/L	0.0042	0.689 mg/L	0.0042	0.60%	
Na 589.592†	553944.5	27.8 mg/L	0.42	27.8 mg/L	0.42	1.52%	
Sr 407.771†	641070.0	0.264 mg/L	0.0066	0.264 mg/L	0.0066	2.48%	
Li 670.784†	77.5	-0.00240 mg/L	0.000047	-0.00240 mg/L	0.000047	1.95%	

Sequence No.: 58

Sample ID: L1211049202 WG414642-01

Analyst: KHR

Initial Sample Wt:

Dilution:

Autosampler Location: 99

Date Collected: 11/19/2012 7:05:06 PM

Data Type: Original

Initial Sample Vol:

Sample Prep Vol:

Nebulizer Parameters: L1211049202 WG414642-01

Analyte	Back Pressure	Flow
All	177.0 kPa	0.50 L/min

Mean Data: L1211049202 WG414642-01

Analyte	Mean Corrected Intensity	Conc. Units	Calib. Units	Std.Dev.	Sample Conc. Units	Std.Dev.	RSD
Y 371.029	2300448.1					21255.47	0.92%

Approved: November 20, 2012

Ken H. Rhodes

YRADIAL	282336.8					6529.58	2.31%
Ga 417.206	1259582.7					26001.36	2.06%
GA RADIAL	78437.1					785.71	1.00%
Ag 328.068†	917.9	0.00137 mg/L	0.000081	0.00137 mg/L	0.000081	5.95%	
Al 396.153†	9.4	-0.0144 mg/L	0.00165	-0.0144 mg/L	0.00165	11.41%	
As 188.979†	-13.5	-0.00503 mg/L	0.000422	-0.00503 mg/L	0.000422	8.38%	
Ba 233.527†	5106.3	0.0328 mg/L	0.00024	0.0328 mg/L	0.00024	0.73%	
Be 234.861†	-24.7	0.00042 mg/L	0.000015	0.00042 mg/L	0.000015	3.59%	
B 249.677†	6039.3	0.0659 mg/L	0.00044	0.0659 mg/L	0.00044	0.66%	
Ca 227.546†	47131.4	124 mg/L	2.6	124 mg/L	2.6	2.07%	
Cd 228.802†	-7.9	-0.00014 mg/L	0.000068	-0.00014 mg/L	0.000068	50.04%	
Co 228.616†	72.6	0.00150 mg/L	0.000436	0.00150 mg/L	0.000436	29.08%	
Cr 267.716†	139.7	0.00040 mg/L	0.000083	0.00040 mg/L	0.000083	20.82%	
Cu 327.393†	462.2	0.00094 mg/L	0.000856	0.00094 mg/L	0.000856	91.52%	
Fe 239.562†	363.0	0.0313 mg/L	0.00126	0.0313 mg/L	0.00126	4.02%	
Mg 279.077†	49594.3	17.9 mg/L	0.23	17.9 mg/L	0.23	1.27%	
Mn 257.610†	3957607.0	4.75 mg/L	0.050	4.75 mg/L	0.050	1.05%	
Mo 202.031†	58.8	0.00216 mg/L	0.000142	0.00216 mg/L	0.000142	6.54%	
Ni 231.604†	219.3	0.00202 mg/L	0.000178	0.00202 mg/L	0.000178	8.80%	
Pb 220.353†	46.7	0.00077 mg/L	0.000943	0.00077 mg/L	0.000943	121.74%	
Sb 206.836†	-5.4	-0.00145 mg/L	0.001141	-0.00145 mg/L	0.001141	78.72%	
Se 196.026†	3.8	0.00178 mg/L	0.002716	0.00178 mg/L	0.002716	152.63%	
Si 251.611†	238372.5	5.04 mg/L	0.119	5.04 mg/L	0.119	2.37%	
Sn 189.927†	-327.8	-0.0352 mg/L	0.00095	-0.0352 mg/L	0.00095	2.69%	
Ti 334.940†	-24126.9	-0.00357 mg/L	0.001145	-0.00357 mg/L	0.001145	32.12%	
Tl 190.801†	-25.7	-0.0153 mg/L	0.00228	-0.0153 mg/L	0.00228	14.91%	
V 290.880†	706.9	0.00073 mg/L	0.001815	0.00073 mg/L	0.001815	248.13%	
Zn 206.200†	397.3	0.00718 mg/L	0.000108	0.00718 mg/L	0.000108	1.51%	
K 766.490†	3517.6	1.14 mg/L	0.022	1.14 mg/L	0.022	1.92%	
Na 589.592†	933969.7	47.3 mg/L	0.80	47.3 mg/L	0.80	1.69%	
Sr 407.771†	932093.3	0.386 mg/L	0.0104	0.386 mg/L	0.0104	2.69%	
Li 670.784†	641.6	0.00184 mg/L	0.000175	0.00184 mg/L	0.000175	9.54%	

Sequence No.: 59

Sample ID: L1211049203

Analyst: KHR

Initial Sample Wt:

Dilution:

UASampler Location: 100

Date Collected: 11/19/2012 7:12:05 PM

Data Type: Original

Initial Sample Vol:

Sample Prep Vol:

Nebulizer Parameters: L1211049203

Analyte	Back Pressure	Flow
All	175.0 kPa	0.50 L/min

Mean Data: L1211049203

Analyte	Mean Corrected Intensity	Calib. Conc. Units	Std.Dev.	Sample Conc. Units	Std.Dev.	RSD
Y 371.029	2315415.6				12934.98	0.56%
YRADIAL	295322.1				12648.15	4.28%
Ga 417.206	1285543.0				17588.32	1.37%
GA RADIAL	82045.0				5803.84	7.07%
Ag 328.068†	868.2	0.00117 mg/L	0.000125	0.00117 mg/L	0.000125	10.66%
Al 396.153†	15.4	-0.0135 mg/L	0.00019	-0.0135 mg/L	0.00019	1.38%
As 188.979†	-13.6	-0.00506 mg/L	0.001259	-0.00506 mg/L	0.001259	24.88%
Ba 233.527†	4742.0	0.0303 mg/L	0.00036	0.0303 mg/L	0.00036	1.17%
Be 234.861†	7.5	0.00048 mg/L	0.000014	0.00048 mg/L	0.000014	2.85%
B 249.677†	6033.2	0.0659 mg/L	0.00189	0.0659 mg/L	0.00189	2.87%
Ca 227.546†	46436.0	122 mg/L	2.2	122 mg/L	2.2	1.80%
Cd 228.802†	-5.3	-0.00008 mg/L	0.000051	-0.00008 mg/L	0.000051	65.29%
Co 228.616†	68.8	0.00140 mg/L	0.000183	0.00140 mg/L	0.000183	13.09%
Cr 267.716†	129.1	0.00032 mg/L	0.000115	0.00032 mg/L	0.000115	36.32%
Cu 327.393†	515.9	0.00113 mg/L	0.000311	0.00113 mg/L	0.000311	27.38%
Fe 239.562†	341.6	0.0291 mg/L	0.00102	0.0291 mg/L	0.00102	3.50%
Mg 279.077†	47828.0	17.2 mg/L	1.26	17.2 mg/L	1.26	7.35%
Mn 257.610†	4206335.6	5.05 mg/L	0.022	5.05 mg/L	0.022	0.44%
Mo 202.031†	46.8	0.00182 mg/L	0.000521	0.00182 mg/L	0.000521	28.59%
Ni 231.604†	223.8	0.00210 mg/L	0.000104	0.00210 mg/L	0.000104	4.98%
Pb 220.353†	36.1	-0.00042 mg/L	0.002156	-0.00042 mg/L	0.002156	511.83%
Sb 206.836†	-0.9	-0.00019 mg/L	0.001115	-0.00019 mg/L	0.001115	574.53%
Se 196.026†	7.9	0.00419 mg/L	0.002042	0.00419 mg/L	0.002042	48.69%

Approved: November 20, 2012

Ken H. Rhodes

Si 251.611†	241568.2	5.11 mg/L	0.072	5.11 mg/L	0.072	1.42%
Sn 189.927†	-321.8	-0.0346 mg/L	0.00110	-0.0346 mg/L	0.00110	3.17%
Ti 334.940†	-23984.2	-0.00371 mg/L	0.001138	-0.00371 mg/L	0.001138	30.66%
Tl 190.801†	-22.6	-0.0145 mg/L	0.00282	-0.0145 mg/L	0.00282	19.38%
V 290.880†	400.6	-0.00059 mg/L	0.001936	-0.00059 mg/L	0.001936	327.01%
Zn 206.200†	376.5	0.00672 mg/L	0.000221	0.00672 mg/L	0.000221	3.29%
K 766.490†	3404.2	1.10 mg/L	0.070	1.10 mg/L	0.070	6.39%
Na 589.592†	911570.0	46.2 mg/L	3.96	46.2 mg/L	3.96	8.57%
Sr 407.771†	902850.9	0.374 mg/L	0.0190	0.374 mg/L	0.0190	5.08%
Li 670.784†	614.3	0.00163 mg/L	0.000847	0.00163 mg/L	0.000847	51.85%

Sequence No.: 60

Sample ID: L1211049205S WG414642-04

Analyst: KHR

Initial Sample Wt:

Dilution:

Udosampler Location: 101

Date Collected: 11/19/2012 7:19:05 PM

Data Type: Original

Initial Sample Vol:

Sample Prep Vol:

Nebulizer Parameters: L1211049205S WG414642-04

Analyte	Back Pressure	Flow
All	177.0 kPa	0.50 L/min

Mean Data: L1211049205S WG414642-04

Analyte	Mean Corrected Intensity	Calib. Conc. Units	Std.Dev.	Sample Conc. Units	Std.Dev.	RSD
Y 371.029	2332863.6				16822.70	0.72%
YRADIAL	287950.0				2385.51	0.83%
Ga 417.206	1232404.6				25097.12	2.04%
GaRADIAL	77516.3				271.57	0.35%
Ag 328.068†	60115.2	0.185 mg/L	0.0057	0.185 mg/L	0.0057	3.08%
Al 396.153†	31266.2	4.68 mg/L	0.019	4.68 mg/L	0.019	0.40%
As 188.979†	472.4	0.169 mg/L	0.0041	0.169 mg/L	0.0041	2.45%
Ba 233.527†	71877.7	0.487 mg/L	0.0045	0.487 mg/L	0.0045	0.92%
Be 234.861†	25204.6	0.0228 mg/L	0.00055	0.0228 mg/L	0.00055	2.41%
B 249.677†	90175.2	0.962 mg/L	0.0326	0.962 mg/L	0.0326	3.38%
Ca 227.546†	49874.2	131 mg/L	4.7	131 mg/L	4.7	3.55%
Cd 228.802†	976.9	0.0212 mg/L	0.00093	0.0212 mg/L	0.00093	4.41%
Co 228.616†	3448.1	0.0932 mg/L	0.00057	0.0932 mg/L	0.00057	0.61%
Cr 267.716†	30276.4	0.233 mg/L	0.0016	0.233 mg/L	0.0016	0.71%
Cu 327.393†	61426.8	0.228 mg/L	0.0078	0.228 mg/L	0.0078	3.41%
Fe 239.562†	17929.6	1.88 mg/L	0.010	1.88 mg/L	0.010	0.55%
Mg 279.077†	60697.9	21.9 mg/L	0.21	21.9 mg/L	0.21	0.98%
Mn 257.610†	4236031.1	5.08 mg/L	0.052	5.08 mg/L	0.052	1.03%
Mo 202.031†	13713.5	0.465 mg/L	0.0029	0.465 mg/L	0.0029	0.63%
Ni 231.604†	14442.1	0.242 mg/L	0.0016	0.242 mg/L	0.0016	0.67%
Pb 220.353†	2463.3	0.232 mg/L	0.0022	0.232 mg/L	0.0022	0.93%
Sb 206.836†	1918.8	0.536 mg/L	0.0176	0.536 mg/L	0.0176	3.29%
Se 196.026†	291.1	0.179 mg/L	0.0062	0.179 mg/L	0.0062	3.49%
Si 251.611†	353002.0	7.46 mg/L	0.171	7.46 mg/L	0.171	2.29%
Sn 189.927†	4391.6	0.460 mg/L	0.0033	0.460 mg/L	0.0033	0.71%
Ti 334.940†	505800.9	0.472 mg/L	0.0012	0.472 mg/L	0.0012	0.25%
Tl 190.801†	662.4	0.226 mg/L	0.0038	0.226 mg/L	0.0038	1.68%
V 290.880†	110034.4	0.479 mg/L	0.0025	0.479 mg/L	0.0025	0.53%
Zn 206.200†	19646.3	0.442 mg/L	0.0071	0.442 mg/L	0.0071	1.61%
K 766.490†	73901.4	24.6 mg/L	0.19	24.6 mg/L	0.19	0.77%
Na 589.592†	1400357.8	71.8 mg/L	0.69	71.8 mg/L	0.69	0.96%
Sr 407.771†	2070692.0	0.864 mg/L	0.0024	0.864 mg/L	0.0024	0.28%
Li 670.784†	64903.1	0.485 mg/L	0.0017	0.485 mg/L	0.0017	0.35%

Sequence No.: 61

Sample ID: L1211049206SD WG414642-05

Analyst: KHR

Initial Sample Wt:

Dilution:

Udosampler Location: 102

Date Collected: 11/19/2012 7:25:05 PM

Data Type: Original

Initial Sample Vol:

Sample Prep Vol:

Nebulizer Parameters: L1211049206SD WG414642-05

Analyte	Back Pressure	Flow
All	175.0 kPa	0.50 L/min

Approved: November 20, 2012

Ken H. Rhodes

Mean Data: L1211049206SD WG414642-05

Analyte	Mean Corrected Intensity	Conc.	Calib. Units	Std.Dev.	Sample Conc.	Units	Std.Dev.	RSD
Y 371.029	2335657.0						8062.63	0.35%
YRADIAL	284007.8						5352.34	1.88%
Ga 417.206	1232501.5						20153.43	1.64%
GaRADIAL	76539.8						927.28	1.21%
Ag 328.068†	60148.9	0.185	mg/L	0.0046	0.185	mg/L	0.0046	2.49%
Al 396.153†	31265.4	4.68	mg/L	0.022	4.68	mg/L	0.022	0.46%
As 188.979†	485.5	0.174	mg/L	0.0029	0.174	mg/L	0.0029	1.67%
Ba 233.527†	72207.7	0.489	mg/L	0.0032	0.489	mg/L	0.0032	0.66%
Be 234.861†	25290.5	0.0229	mg/L	0.00046	0.0229	mg/L	0.00046	2.00%
B 249.677†	90696.6	0.967	mg/L	0.0272	0.967	mg/L	0.0272	2.81%
Ca 227.546†	49935.7	131	mg/L	4.1	131	mg/L	4.1	3.11%
Cd 228.802†	974.9	0.0211	mg/L	0.00081	0.0211	mg/L	0.00081	3.81%
Co 228.616†	3447.8	0.0932	mg/L	0.00055	0.0932	mg/L	0.00055	0.59%
Cr 267.716†	30410.0	0.234	mg/L	0.0008	0.234	mg/L	0.0008	0.36%
Cu 327.393†	60776.9	0.226	mg/L	0.0076	0.226	mg/L	0.0076	3.38%
Fe 239.562†	17999.7	1.88	mg/L	0.007	1.88	mg/L	0.007	0.38%
Mg 279.077†	61785.4	22.3	mg/L	0.19	22.3	mg/L	0.19	0.85%
Mn 257.610†	4272842.3	5.13	mg/L	0.030	5.13	mg/L	0.030	0.59%
Mo 202.031†	13871.3	0.470	mg/L	0.0018	0.470	mg/L	0.0018	0.37%
Ni 231.604†	14445.4	0.242	mg/L	0.0003	0.242	mg/L	0.0003	0.14%
Pb 220.353†	2458.5	0.232	mg/L	0.0014	0.232	mg/L	0.0014	0.62%
Sb 206.836†	1920.0	0.536	mg/L	0.0160	0.536	mg/L	0.0160	2.99%
Se 196.026†	293.3	0.180	mg/L	0.0045	0.180	mg/L	0.0045	2.47%
Si 251.611†	354888.5	7.50	mg/L	0.114	7.50	mg/L	0.114	1.53%
Sn 189.927†	4392.4	0.460	mg/L	0.0038	0.460	mg/L	0.0038	0.83%
Ti 334.940†	506564.6	0.473	mg/L	0.0034	0.473	mg/L	0.0034	0.72%
Tl 190.801†	659.7	0.225	mg/L	0.0030	0.225	mg/L	0.0030	1.33%
V 290.880†	109614.6	0.477	mg/L	0.0028	0.477	mg/L	0.0028	0.60%
Zn 206.200†	20004.0	0.450	mg/L	0.0063	0.450	mg/L	0.0063	1.40%
K 766.490†	74032.8	24.6	mg/L	0.10	24.6	mg/L	0.10	0.42%
Na 589.592†	1399616.4	71.8	mg/L	0.48	71.8	mg/L	0.48	0.67%
Sr 407.771†	2064851.0	0.861	mg/L	0.0132	0.861	mg/L	0.0132	1.53%
Li 670.784†	65077.5	0.486	mg/L	0.0038	0.486	mg/L	0.0038	0.78%

Sequence No.: 62

Sample ID: L1211049701

Analyst: KHR

Initial Sample Wt:

Dilution:

Autosampler Location: 103

Date Collected: 11/19/2012 7:31:05 PM

Data Type: Original

Initial Sample Vol:

Sample Prep Vol:

Nebulizer Parameters: L1211049701

Analyte	Back Pressure	Flow
All	176.0 kPa	0.50 L/min

Mean Data: L1211049701

Analyte	Mean Corrected Intensity	Conc.	Calib. Units	Std.Dev.	Sample Conc.	Units	Std.Dev.	RSD
Y 371.029	2375210.9						13734.52	0.58%
YRADIAL	283848.3						1895.02	0.67%
Ga 417.206	1286632.2						28500.22	2.22%
GaRADIAL	78117.9						2429.26	3.11%
Ag 328.068†	433.0	0.00054	mg/L	0.000488	0.00054	mg/L	0.000488	90.61%
Al 396.153†	23.2	-0.0123	mg/L	0.00193	-0.0123	mg/L	0.00193	15.66%
As 188.979†	-15.4	-0.00573	mg/L	0.000681	-0.00573	mg/L	0.000681	11.89%
Ba 233.527†	1862.2	0.0107	mg/L	0.00005	0.0107	mg/L	0.00005	0.43%
Be 234.861†	190.7	0.00015	mg/L	0.000027	0.00015	mg/L	0.000027	18.34%
B 249.677†	1419.4	0.0167	mg/L	0.00062	0.0167	mg/L	0.00062	3.74%
Ca 227.546†	22176.2	58.2	mg/L	1.61	58.2	mg/L	1.61	2.76%
Cd 228.802†	-5.3	-0.00008	mg/L	0.000064	-0.00008	mg/L	0.000064	76.02%
Co 228.616†	-9.2	-0.00075	mg/L	0.000341	-0.00075	mg/L	0.000341	45.48%
Cr 267.716†	79.8	-0.00006	mg/L	0.000096	-0.00006	mg/L	0.000096	151.22%
Cu 327.393†	116.7	-0.00034	mg/L	0.000135	-0.00034	mg/L	0.000135	39.81%
Fe 239.562†	66.7	0.00036	mg/L	0.000415	0.00036	mg/L	0.000415	113.93%
Mg 279.077†	23014.2	8.28	mg/L	0.080	8.28	mg/L	0.080	0.96%

Approved: November 20, 2012

Ken H. Rhodes

Mn 257.610†	1072.2	-0.00087 mg/L	0.000154	-0.00087 mg/L	0.000154	17.76%
Mo 202.031†	49.0	0.00084 mg/L	0.000153	0.00084 mg/L	0.000153	18.26%
Ni 231.604†	26.2	-0.00123 mg/L	0.000360	-0.00123 mg/L	0.000360	29.16%
Pb 220.353†	29.6	0.00200 mg/L	0.000233	0.00200 mg/L	0.000233	11.64%
Sb 206.836†	-2.5	-0.00065 mg/L	0.000387	-0.00065 mg/L	0.000387	59.89%
Se 196.026†	-0.5	0.00056 mg/L	0.002395	0.00056 mg/L	0.002395	430.65%
Si 251.611†	144220.2	3.04 mg/L	0.051	3.04 mg/L	0.051	1.68%
Sn 189.927†	-276.9	-0.0299 mg/L	0.00083	-0.0299 mg/L	0.00083	2.79%
Ti 334.940†	-11391.4	-0.00198 mg/L	0.000586	-0.00198 mg/L	0.000586	29.63%
Tl 190.801†	-27.1	-0.0109 mg/L	0.00185	-0.0109 mg/L	0.00185	16.98%
V 290.880†	421.0	-0.00027 mg/L	0.000995	-0.00027 mg/L	0.000995	371.55%
Zn 206.200†	93.3	0.00035 mg/L	0.000159	0.00035 mg/L	0.000159	45.62%
K 766.490†	2513.0	0.848 mg/L	0.0202	0.848 mg/L	0.0202	2.38%
Na 589.592†	65087.6	3.23 mg/L	0.055	3.23 mg/L	0.055	1.72%
Sr 407.771†	175214.0	0.0695 mg/L	0.00163	0.0695 mg/L	0.00163	2.34%
Li 670.784†	109.1	-0.00216 mg/L	0.000665	-0.00216 mg/L	0.000665	30.76%

Sequence No.: 63

Sample ID: L1211049701PS WG414695-01

Analyst: KHR

Initial Sample Wt:

Dilution:

Sampler Location: 104

Date Collected: 11/19/2012 7:38:00 PM

Data Type: Original

Initial Sample Vol:

Sample Prep Vol:

Nebulizer Parameters: L1211049701PS WG414695-01

Analyte	Back Pressure	Flow
All	176.0 kPa	0.50 L/min

Mean Data: L1211049701PS WG414695-01

Analyte	Mean Corrected Intensity	Calib. Conc. Units	Std.Dev.	Sample Conc. Units	Std.Dev.	RSD
Y 371.029	2362312.6				603.88	0.03%
YRADIAL	287863.7				2098.33	0.73%
Ga 417.206	1230719.7				16679.71	1.36%
GA RADIAL	77002.4				1292.00	1.68%
Ag 328.068†	62454.9	0.193 mg/L	0.0033	0.193 mg/L	0.0033	1.71%
Al 396.153†	32296.9	4.84 mg/L	0.027	4.84 mg/L	0.027	0.56%
As 188.979†	499.0	0.178 mg/L	0.0024	0.178 mg/L	0.0024	1.35%
Ba 233.527†	72917.3	0.494 mg/L	0.0047	0.494 mg/L	0.0047	0.95%
Be 234.861†	26309.0	0.0233 mg/L	0.00035	0.0233 mg/L	0.00035	1.50%
B 249.677†	89301.0	0.952 mg/L	0.0124	0.952 mg/L	0.0124	1.31%
Ca 227.546†	22594.8	59.5 mg/L	1.00	59.5 mg/L	1.00	1.68%
Cd 228.802†	1029.3	0.0223 mg/L	0.00073	0.0223 mg/L	0.00073	3.28%
Co 228.616†	3597.1	0.0972 mg/L	0.00034	0.0972 mg/L	0.00034	0.35%
Cr 267.716†	31892.0	0.246 mg/L	0.0017	0.246 mg/L	0.0017	0.71%
Cu 327.393†	64146.5	0.238 mg/L	0.0030	0.238 mg/L	0.0030	1.26%
Fe 239.562†	18445.4	1.93 mg/L	0.009	1.93 mg/L	0.009	0.48%
Mg 279.077†	33420.0	12.0 mg/L	0.07	12.0 mg/L	0.07	0.61%
Mn 257.610†	210122.0	0.250 mg/L	0.0024	0.250 mg/L	0.0024	0.98%
Mo 202.031†	14342.3	0.485 mg/L	0.0024	0.485 mg/L	0.0024	0.49%
Ni 231.604†	15232.3	0.255 mg/L	0.0008	0.255 mg/L	0.0008	0.31%
Pb 220.353†	2604.1	0.249 mg/L	0.0015	0.249 mg/L	0.0015	0.61%
Sb 206.836†	2029.5	0.567 mg/L	0.0103	0.567 mg/L	0.0103	1.81%
Se 196.026†	306.3	0.190 mg/L	0.0043	0.190 mg/L	0.0043	2.26%
Si 251.611†	245485.5	5.18 mg/L	0.046	5.18 mg/L	0.046	0.89%
Sn 189.927†	-236.4	-0.0256 mg/L	0.00101	-0.0256 mg/L	0.00101	3.93%
Ti 334.940†	538305.0	0.491 mg/L	0.0020	0.491 mg/L	0.0020	0.41%
Tl 190.801†	722.1	0.251 mg/L	0.0026	0.251 mg/L	0.0026	1.03%
V 290.880†	114080.2	0.497 mg/L	0.0015	0.497 mg/L	0.0015	0.29%
Zn 206.200†	20763.7	0.467 mg/L	0.0070	0.467 mg/L	0.0070	1.49%
K 766.490†	74498.1	24.8 mg/L	0.12	24.8 mg/L	0.12	0.49%
Na 589.592†	533290.4	26.8 mg/L	0.40	26.8 mg/L	0.40	1.50%
Sr 407.771†	1361132.4	0.567 mg/L	0.0087	0.567 mg/L	0.0087	1.53%
Li 670.784†	66299.8	0.495 mg/L	0.0016	0.495 mg/L	0.0016	0.33%

Sequence No.: 64

Sample ID: L1211049701DL WG414695-02

Analyst: KHR

Initial Sample Wt:

Sampler Location: 105

Date Collected: 11/19/2012 7:44:00 PM

Data Type: Original

Initial Sample Vol:

Approved: November 20, 2012

Ken H. Rhodes

Dilution:

Sample Prep Vol:

Nebulizer Parameters: L1211049701DL WG414695-02

Analyte	Back Pressure	Flow
All	176.0 kPa	0.50 L/min

Mean Data: L1211049701DL WG414695-02

Analyte	Mean Corrected Intensity	Conc. Units	Calib. Units	Std.Dev.	Sample Conc. Units	Std.Dev.	RSD
Y 371.029	2426295.9					22662.81	0.93%
YRADIAL	289393.2					4251.95	1.47%
Ga 417.206	1248725.7					910.31	0.07%
GaRADIAL	78107.8					1419.13	1.82%
Ag 328.068†	91.5	-0.00051 mg/L		0.000228	-0.00051 mg/L	0.000228	45.20%
Al 396.153†	11.2	-0.0141 mg/L		0.00166	-0.0141 mg/L	0.00166	11.81%
As 188.979†	-6.1	-0.00235 mg/L		0.001304	-0.00235 mg/L	0.001304	55.49%
Ba 233.527†	378.8	0.00062 mg/L		0.000101	0.00062 mg/L	0.000101	16.33%
Be 234.861†	108.3	0.00008 mg/L		0.000026	0.00008 mg/L	0.000026	34.31%
B 249.677†	745.5	0.00949 mg/L		0.000278	0.00949 mg/L	0.000278	2.93%
Ca 227.546†	4549.0	11.9 mg/L		0.05	11.9 mg/L	0.05	0.42%
Cd 228.802†	-10.0	-0.00021 mg/L		0.000049	-0.00021 mg/L	0.000049	23.98%
Co 228.616†	-7.5	-0.00072 mg/L		0.000292	-0.00072 mg/L	0.000292	40.61%
Cr 267.716†	31.0	-0.00044 mg/L		0.000155	-0.00044 mg/L	0.000155	35.15%
Cu 327.393†	47.2	-0.00059 mg/L		0.000217	-0.00059 mg/L	0.000217	36.78%
Fe 239.562†	13.7	-0.00508 mg/L		0.000149	-0.00508 mg/L	0.000149	2.93%
Mg 279.077†	4696.5	1.68 mg/L		0.018	1.68 mg/L	0.018	1.09%
Mn 257.610†	479.7	-0.00158 mg/L		0.000058	-0.00158 mg/L	0.000058	3.68%
Mo 202.031†	18.7	-0.00019 mg/L		0.000049	-0.00019 mg/L	0.000049	26.18%
Ni 231.604†	-2.9	-0.00173 mg/L		0.000059	-0.00173 mg/L	0.000059	3.44%
Pb 220.353†	14.7	0.00057 mg/L		0.000430	0.00057 mg/L	0.000430	75.31%
Sb 206.836†	-0.9	-0.00019 mg/L		0.000876	-0.00019 mg/L	0.000876	452.11%
Se 196.026†	5.1	0.00401 mg/L		0.001101	0.00401 mg/L	0.001101	27.46%
Si 251.611†	29524.9	0.615 mg/L		0.0056	0.615 mg/L	0.0056	0.91%
Sn 189.927†	-140.8	-0.0156 mg/L		0.00032	-0.0156 mg/L	0.00032	2.08%
Ti 334.940†	-2383.1	-0.00084 mg/L		0.000188	-0.00084 mg/L	0.000188	22.28%
Tl 190.801†	-15.0	-0.00667 mg/L		0.001692	-0.00667 mg/L	0.001692	25.37%
V 290.880†	136.8	-0.00134 mg/L		0.000846	-0.00134 mg/L	0.000846	63.15%
Zn 206.200†	121.9	0.00099 mg/L		0.000291	0.00099 mg/L	0.000291	29.44%
K 766.490†	527.5	0.191 mg/L		0.0079	0.191 mg/L	0.0079	4.13%
Na 589.592†	13146.9	0.652 mg/L		0.0142	0.652 mg/L	0.0142	2.18%
Sr 407.771†	35091.5	0.0116 mg/L		0.00031	0.0116 mg/L	0.00031	2.64%
Li 670.784†	21.3	-0.00282 mg/L		0.000620	-0.00282 mg/L	0.000620	21.97%

Sequence No.: 65

Sample ID: CCV

Analyst:

Initial Sample Wt:

Dilution:

Autosampler Location: 6

Date Collected: 11/19/2012 7:50:57 PM

Data Type: Original

Initial Sample Vol:

Sample Prep Vol:

Nebulizer Parameters: CCV

Analyte	Back Pressure	Flow
All	176.0 kPa	0.50 L/min

Mean Data: CCV

Analyte	Mean Corrected Intensity	Conc. Units	Calib. Units	Std.Dev.	Sample Conc. Units	Std.Dev.	RSD
Y 371.029	2405279.6					21730.35	0.90%
YRADIAL	283718.6					3478.73	1.23%
Ga 417.206	1199692.2					23163.00	1.93%
GaRADIAL	74590.3					830.57	1.11%
Ag 328.068†	126302.2	0.391 mg/L		0.0078	0.391 mg/L	0.0078	1.99%
QC value within limits for Ag 328.068 Recovery = 97.76%							
Al 396.153†	64473.2	9.67 mg/L		0.041	9.67 mg/L	0.041	0.42%
QC value within limits for Al 396.153 Recovery = 96.71%							
As 188.979†	1042.9	0.373 mg/L		0.0050	0.373 mg/L	0.0050	1.34%
QC value within limits for As 188.979 Recovery = 93.29%							
Ba 233.527†	145577.9	0.989 mg/L		0.0116	0.989 mg/L	0.0116	1.18%

Approved: November 20, 2012

Ken H. Rhodes

QC value within limits for Ba	233.527	Recovery = 98.86%			
Be 234.861†	53736.4	0.0477 mg/L	0.00068	0.0477 mg/L	0.00068 1.42%
QC value within limits for Be	234.861	Recovery = 95.35%			
B 249.677†	45015.2	0.478 mg/L	0.0110	0.478 mg/L	0.0110 2.31%
QC value within limits for B	249.677	Recovery = 95.61%			
Ca 227.546†	3610.4	9.93 mg/L	0.232	9.93 mg/L	0.232 2.34%
QC value within limits for Ca	227.546	Recovery = 99.28%			
Cd 228.802†	2131.5	0.0462 mg/L	0.00185	0.0462 mg/L	0.00185 4.01%
QC value within limits for Cd	228.802	Recovery = 92.46%			
Co 228.616†	7243.9	0.196 mg/L	0.0017	0.196 mg/L	0.0017 0.85%
QC value within limits for Co	228.616	Recovery = 98.17%			
Cr 267.716†	63418.5	0.489 mg/L	0.0029	0.489 mg/L	0.0029 0.60%
QC value within limits for Cr	267.716	Recovery = 97.82%			
Cu 327.393†	130927.7	0.487 mg/L	0.0106	0.487 mg/L	0.0106 2.18%
QC value within limits for Cu	327.393	Recovery = 97.45%			
Fe 239.562†	37192.0	3.90 mg/L	0.012	3.90 mg/L	0.012 0.30%
QC value within limits for Fe	239.562	Recovery = 97.52%			
Mg 279.077†	27322.2	9.85 mg/L	0.014	9.85 mg/L	0.014 0.14%
QC value within limits for Mg	279.077	Recovery = 98.47%			
Mn 257.610†	419433.3	0.502 mg/L	0.0075	0.502 mg/L	0.0075 1.49%
QC value within limits for Mn	257.610	Recovery = 100.37%			
Mo 202.031†	28564.6	0.966 mg/L	0.0089	0.966 mg/L	0.0089 0.92%
QC value within limits for Mo	202.031	Recovery = 96.64%			
Ni 231.604†	29470.1	0.495 mg/L	0.0067	0.495 mg/L	0.0067 1.36%
QC value within limits for Ni	231.604	Recovery = 98.99%			
Pb 220.353†	5133.4	0.491 mg/L	0.0041	0.491 mg/L	0.0041 0.83%
QC value within limits for Pb	220.353	Recovery = 98.18%			
Sb 206.836†	4054.6	1.13 mg/L	0.036	1.13 mg/L	0.036 3.20%
QC value within limits for Sb	206.836	Recovery = 94.38%			
Se 196.026†	617.2	0.382 mg/L	0.0106	0.382 mg/L	0.0106 2.77%
QC value within limits for Se	196.026	Recovery = 95.46%			
Si 251.611†	232288.8	4.90 mg/L	0.072	4.90 mg/L	0.072 1.47%
QC value within limits for Si	251.611	Recovery = 97.98%			
Sn 189.927†	9198.1	0.964 mg/L	0.0076	0.964 mg/L	0.0076 0.79%
QC value within limits for Sn	189.927	Recovery = 96.42%			
Ti 334.940†	1084233.3	0.972 mg/L	0.0023	0.972 mg/L	0.0023 0.24%
QC value within limits for Ti	334.940	Recovery = 97.21%			
Tl 190.801†	1447.2	0.505 mg/L	0.0031	0.505 mg/L	0.0031 0.61%
QC value within limits for Tl	190.801	Recovery = 101.05%			
V 290.880†	225926.0	0.986 mg/L	0.0087	0.986 mg/L	0.0087 0.88%
QC value within limits for V	290.880	Recovery = 98.58%			
Zn 206.200†	43116.5	0.972 mg/L	0.0047	0.972 mg/L	0.0047 0.48%
QC value within limits for Zn	206.200	Recovery = 97.19%			
K 766.490†	144775.5	48.5 mg/L	0.11	48.5 mg/L	0.11 0.23%
QC value within limits for K	766.490	Recovery = 96.98%			
Na 589.592†	956957.1	48.5 mg/L	1.00	48.5 mg/L	1.00 2.05%
QC value within limits for Na	589.592	Recovery = 97.08%			
Sr 407.771†	2422260.8	1.01 mg/L	0.020	1.01 mg/L	0.020 2.01%
QC value within limits for Sr	407.771	Recovery = 101.35%			
Li 670.784†	128737.6	0.964 mg/L	0.0028	0.964 mg/L	0.0028 0.29%
QC value within limits for Li	670.784	Recovery = 96.40%			

All analyte(s) passed QC.

Sequence No.: 66

Sample ID: CCB

Analyst:

Initial Sample Wt:

Dilution:

Autosampler Location: 1

Date Collected: 11/19/2012 7:56:58 PM

Data Type: Original

Initial Sample Vol:

Sample Prep Vol:

Nebulizer Parameters: CCB

Analyte	Back Pressure	Flow
All	176.0 kPa	0.50 L/min

Mean Data: CCB

Analyte	Mean Corrected Intensity	Calib. Conc. Units	Std.Dev.	Sample Conc. Units	Std.Dev.	RSD
Y 371.029	2495453.4				6935.48	0.28%
YRADIAL	290136.2				1696.10	0.58%
Ga 417.206	1236302.2				8783.78	0.71%

Approved: November 20, 2012

Ken H. Rhodes

Ag	328.068†	78431.1	-3.7	-0.00080 mg/L	0.000291	-0.00080 mg/L	0.000291	1759.96	2.24%
QC value	within limits	for Ag	328.068	Recovery =	Not calculated				
Al	396.153†	14.3	-0.0135	mg/L	0.00155	-0.0135 mg/L	0.00155	11.41%	
QC value	within limits	for Al	396.153	Recovery =	Not calculated				
As	188.979†	4.3	0.00144	mg/L	0.001576	0.00144 mg/L	0.001576	109.34%	
QC value	within limits	for As	188.979	Recovery =	Not calculated				
Ba	233.527†	5.8	-0.00192	mg/L	0.000126	-0.00192 mg/L	0.000126	6.55%	
QC value	within limits	for Ba	233.527	Recovery =	Not calculated				
Be	234.861†	93.2	0.00006	mg/L	0.000011	0.00006 mg/L	0.000011	17.16%	
QC value	within limits	for Be	234.861	Recovery =	Not calculated				
B	249.677†	426.0	0.00608	mg/L	0.000285	0.00608 mg/L	0.000285	4.69%	
QC value	within limits	for B	249.677	Recovery =	Not calculated				
Ca	227.546†	23.7	0.0632	mg/L	0.02253	0.0632 mg/L	0.02253	35.67%	
QC value	within limits	for Ca	227.546	Recovery =	Not calculated				
Cd	228.802†	-7.2	-0.00016	mg/L	0.000031	-0.00016 mg/L	0.000031	18.96%	
QC value	within limits	for Cd	228.802	Recovery =	Not calculated				
Co	228.616†	-12.0	-0.00085	mg/L	0.000081	-0.00085 mg/L	0.000081	9.59%	
QC value	within limits	for Co	228.616	Recovery =	Not calculated				
Cr	267.716†	21.7	-0.00051	mg/L	0.000106	-0.00051 mg/L	0.000106	20.56%	
QC value	within limits	for Cr	267.716	Recovery =	Not calculated				
Cu	327.393†	150.3	-0.00020	mg/L	0.000152	-0.00020 mg/L	0.000152	74.35%	
QC value	within limits	for Cu	327.393	Recovery =	Not calculated				
Fe	239.562†	9.6	-0.00548	mg/L	0.000529	-0.00548 mg/L	0.000529	9.66%	
QC value	within limits	for Fe	239.562	Recovery =	Not calculated				
Mg	279.077†	5.9	-0.00750	mg/L	0.001286	-0.00750 mg/L	0.001286	17.15%	
QC value	within limits	for Mg	279.077	Recovery =	Not calculated				
Mn	257.610†	334.8	-0.00175	mg/L	0.000043	-0.00175 mg/L	0.000043	2.44%	
QC value	within limits	for Mn	257.610	Recovery =	Not calculated				
Mo	202.031†	-1.2	-0.00086	mg/L	0.000215	-0.00086 mg/L	0.000215	24.99%	
QC value	within limits	for Mo	202.031	Recovery =	Not calculated				
Ni	231.604†	-15.1	-0.00193	mg/L	0.000274	-0.00193 mg/L	0.000274	14.17%	
QC value	within limits	for Ni	231.604	Recovery =	Not calculated				
Pb	220.353†	3.9	-0.00046	mg/L	0.000325	-0.00046 mg/L	0.000325	70.71%	
QC value	within limits	for Pb	220.353	Recovery =	Not calculated				
Sb	206.836†	1.8	0.00056	mg/L	0.001458	0.00056 mg/L	0.001458	258.21%	
QC value	within limits	for Sb	206.836	Recovery =	Not calculated				
Se	196.026†	9.3	0.00656	mg/L	0.002902	0.00656 mg/L	0.002902	44.21%	
QC value	within limits	for Se	196.026	Recovery =	Not calculated				
Si	251.611†	-3.2	-0.0103	mg/L	0.00031	-0.0103 mg/L	0.00031	3.00%	
QC value	within limits	for Si	251.611	Recovery =	Not calculated				
Sn	189.927†	-34.4	-0.00445	mg/L	0.000696	-0.00445 mg/L	0.000696	15.64%	
QC value	within limits	for Sn	189.927	Recovery =	Not calculated				
Ti	334.940†	181.6	-0.00033	mg/L	0.000103	-0.00033 mg/L	0.000103	31.41%	
QC value	within limits	for Ti	334.940	Recovery =	Not calculated				
Tl	190.801†	-2.4	-0.00234	mg/L	0.000341	-0.00234 mg/L	0.000341	14.58%	
QC value	within limits	for Tl	190.801	Recovery =	Not calculated				
V	290.880†	-256.4	-0.00302	mg/L	0.000997	-0.00302 mg/L	0.000997	33.04%	
QC value	within limits	for V	290.880	Recovery =	Not calculated				
Zn	206.200†	16.8	-0.00138	mg/L	0.000194	-0.00138 mg/L	0.000194	14.11%	
QC value	within limits	for Zn	206.200	Recovery =	Not calculated				
K	766.490†	76.2	0.0420	mg/L	0.00817	0.0420 mg/L	0.00817	19.44%	
QC value	within limits	for K	766.490	Recovery =	Not calculated				
Na	589.592†	465.2	0.0226	mg/L	0.00386	0.0226 mg/L	0.00386	17.11%	
QC value	within limits	for Na	589.592	Recovery =	Not calculated				
Sr	407.771†	282.3	-0.00274	mg/L	0.000032	-0.00274 mg/L	0.000032	1.17%	
QC value	within limits	for Sr	407.771	Recovery =	Not calculated				
Li	670.784†	112.0	-0.00214	mg/L	0.000176	-0.00214 mg/L	0.000176	8.20%	
QC value	within limits	for Li	670.784	Recovery =	Not calculated				
All analyte(s) passed QC.									

Sequence No.: 67
Sample ID: L1211050601
Analyst: KHR
Initial Sample Wt:
Dilution:

Udosampler Location: 106
Date Collected: 11/19/2012 8:03:51 PM
Data Type: Original
Initial Sample Vol:
Sample Prep Vol:

Nebulizer Parameters: L1211050601

Analyte Back Pressure Flow
All 177.0 kPa 0.50 L/min

Approved: November 20, 2012

Ken H. Rhodes

Mean Data: L1211050601

Analyte	Mean Corrected Intensity	Calib. Conc. Units	Std.Dev.	Sample Conc. Units	Std.Dev.	RSD
Y 371.029	2447261.7				9993.23	0.41%
YRADIAL	290679.2				7388.31	2.54%
Ga 417.206	1256804.7				22974.97	1.83%
GaRADIAL	79472.6				713.35	0.90%
Ag 328.068†	34.7	-0.00067 mg/L	0.000414	-0.00067 mg/L	0.000414	61.37%
Al 396.153†	20.4	-0.0126 mg/L	0.00074	-0.0126 mg/L	0.00074	5.86%
As 188.979†	-3.4	-0.00134 mg/L	0.001489	-0.00134 mg/L	0.001489	111.00%
Ba 233.527†	-3.8	-0.00199 mg/L	0.000146	-0.00199 mg/L	0.000146	7.35%
Be 234.861†	105.9	0.00007 mg/L	0.000047	0.00007 mg/L	0.000047	63.84%
B 249.677†	375.5	0.00554 mg/L	0.000275	0.00554 mg/L	0.000275	4.98%
Ca 227.546†	64.7	0.171 mg/L	0.0431	0.171 mg/L	0.0431	25.19%
Cd 228.802†	-5.3	-0.00011 mg/L	0.000095	-0.00011 mg/L	0.000095	89.42%
Co 228.616†	-13.5	-0.00089 mg/L	0.000176	-0.00089 mg/L	0.000176	19.86%
Cr 267.716†	39.7	-0.00037 mg/L	0.000076	-0.00037 mg/L	0.000076	20.39%
Cu 327.393†	279.0	0.00027 mg/L	0.000459	0.00027 mg/L	0.000459	166.98%
Fe 239.562†	30.0	-0.00333 mg/L	0.001002	-0.00333 mg/L	0.001002	30.12%
Mg 279.077†	10.7	-0.00576 mg/L	0.002288	-0.00576 mg/L	0.002288	39.75%
Mn 257.610†	489.0	-0.00157 mg/L	0.000070	-0.00157 mg/L	0.000070	4.49%
Mo 202.031†	-4.9	-0.00099 mg/L	0.000078	-0.00099 mg/L	0.000078	7.93%
Ni 231.604†	8.7	-0.00153 mg/L	0.000101	-0.00153 mg/L	0.000101	6.61%
Pb 220.353†	14.4	0.00054 mg/L	0.000669	0.00054 mg/L	0.000669	123.57%
Sb 206.836†	5.9	0.00169 mg/L	0.000703	0.00169 mg/L	0.000703	41.56%
Se 196.026†	4.0	0.00333 mg/L	0.000366	0.00333 mg/L	0.000366	10.98%
Si 251.611†	7795.3	0.155 mg/L	0.0060	0.155 mg/L	0.0060	3.91%
Sn 189.927†	-36.3	-0.00465 mg/L	0.000332	-0.00465 mg/L	0.000332	7.14%
Ti 334.940†	33.3	-0.00044 mg/L	0.000131	-0.00044 mg/L	0.000131	29.50%
Tl 190.801†	-9.0	-0.00460 mg/L	0.001681	-0.00460 mg/L	0.001681	36.52%
V 290.880†	365.1	-0.00030 mg/L	0.001966	-0.00030 mg/L	0.001966	662.64%
Zn 206.200†	85.2	0.00016 mg/L	0.000083	0.00016 mg/L	0.000083	50.75%
K 766.490†	182.2	0.0754 mg/L	0.02140	0.0754 mg/L	0.02140	28.40%
Na 589.592†	37952.1	1.88 mg/L	0.033	1.88 mg/L	0.033	1.76%
Sr 407.771†	855.1	-0.00251 mg/L	0.000028	-0.00251 mg/L	0.000028	1.13%
Li 670.784†	11.0	-0.00290 mg/L	0.000417	-0.00290 mg/L	0.000417	14.38%

Sequence No.: 68

Sample ID: L1211050602

Analyst: KHR

Initial Sample Wt:

Dilution:

Autosampler Location: 107

Date Collected: 11/19/2012 8:10:48 PM

Data Type: Original

Initial Sample Vol:

Sample Prep Vol:

Nebulizer Parameters: L1211050602

Analyte	Back Pressure	Flow
All	176.0 kPa	0.50 L/min

Mean Data: L1211050602

Analyte	Mean Corrected Intensity	Calib. Conc. Units	Std.Dev.	Sample Conc. Units	Std.Dev.	RSD
Y 371.029	2438727.6				37949.75	1.56%
YRADIAL	284344.6				3092.67	1.09%
Ga 417.206	1248370.9				34920.79	2.80%
GaRADIAL	77564.6				1488.84	1.92%
Ag 328.068†	-52.6	-0.00094 mg/L	0.000212	-0.00094 mg/L	0.000212	22.54%
Al 396.153†	35.1	-0.0104 mg/L	0.00069	-0.0104 mg/L	0.00069	6.63%
As 188.979†	1.1	0.00027 mg/L	0.001700	0.00027 mg/L	0.001700	635.81%
Ba 233.527†	-3.7	-0.00199 mg/L	0.000143	-0.00199 mg/L	0.000143	7.17%
Be 234.861†	114.4	0.00008 mg/L	0.000042	0.00008 mg/L	0.000042	52.09%
B 249.677†	310.9	0.00484 mg/L	0.000197	0.00484 mg/L	0.000197	4.06%
Ca 227.546†	69.0	0.182 mg/L	0.0330	0.182 mg/L	0.0330	18.12%
Cd 228.802†	-1.8	-0.00004 mg/L	0.000116	-0.00004 mg/L	0.000116	318.24%
Co 228.616†	-12.5	-0.00086 mg/L	0.000266	-0.00086 mg/L	0.000266	30.93%
Cr 267.716†	35.2	-0.00041 mg/L	0.000106	-0.00041 mg/L	0.000106	25.94%
Cu 327.393†	342.2	0.00051 mg/L	0.000264	0.00051 mg/L	0.000264	51.86%
Fe 239.562†	61.3	-0.00003 mg/L	0.000421	-0.00003 mg/L	0.000421	>999.9%
Mg 279.077†	13.0	-0.00492 mg/L	0.001685	-0.00492 mg/L	0.001685	34.25%

Approved: November 20, 2012

Ken H. Rhodes

Mn 257.610†	496.6	-0.00156 mg/L	0.000044	-0.00156 mg/L	0.000044	2.81%
Mo 202.031†	-1.6	-0.00088 mg/L	0.000113	-0.00088 mg/L	0.000113	12.91%
Ni 231.604†	0.5	-0.00167 mg/L	0.000366	-0.00167 mg/L	0.000366	21.89%
Pb 220.353†	11.1	0.00023 mg/L	0.001087	0.00023 mg/L	0.001087	482.20%
Sb 206.836†	4.4	0.00127 mg/L	0.001319	0.00127 mg/L	0.001319	103.63%
Se 196.026†	7.5	0.00549 mg/L	0.001312	0.00549 mg/L	0.001312	23.88%
Si 251.611†	7621.7	0.151 mg/L	0.00057	0.151 mg/L	0.00057	3.76%
Sn 189.927†	-38.9	-0.00492 mg/L	0.000097	-0.00492 mg/L	0.000097	1.97%
Ti 334.940†	129.0	-0.00036 mg/L	0.000091	-0.00036 mg/L	0.000091	25.60%
Tl 190.801†	-6.2	-0.00363 mg/L	0.001738	-0.00363 mg/L	0.001738	47.88%
V 290.880†	230.4	-0.00089 mg/L	0.000725	-0.00089 mg/L	0.000725	81.78%
Zn 206.200†	83.0	0.00011 mg/L	0.000165	0.00011 mg/L	0.000165	144.13%
K 766.490†	198.5	0.0808 mg/L	0.01878	0.0808 mg/L	0.01878	23.25%
Na 589.592†	38116.0	1.89 mg/L	0.055	1.89 mg/L	0.055	2.91%
Sr 407.771†	951.2	-0.00247 mg/L	0.000012	-0.00247 mg/L	0.000012	0.48%
Li 670.784†	-66.9	-0.00348 mg/L	0.000755	-0.00348 mg/L	0.000755	21.67%

Sequence No.: 69

Sample ID: L1211050603

Analyst: KHR

Initial Sample Wt:

Dilution:

Utosampler Location: 108

Date Collected: 11/19/2012 8:17:43 PM

Data Type: Original

Initial Sample Vol:

Sample Prep Vol:

Nebulizer Parameters: L1211050603

Analyte	Back Pressure	Flow
All	176.0 kPa	0.50 L/min

Mean Data: L1211050603

Analyte	Mean Corrected Intensity	Calib. Conc. Units	Std.Dev.	Sample Conc. Units	Std.Dev.	RSD
Y 371.029	2432525.5				9559.54	0.39%
YRADIAL	291381.1				7643.53	2.62%
Ga 417.206	1258764.8				16409.21	1.30%
GA RADIAL	79032.7				807.47	1.02%
Ag 328.068†	-14.1	-0.00081 mg/L	0.000507	-0.00081 mg/L	0.000507	62.21%
Al 396.153†	106.9	0.00047 mg/L	0.000728	0.00047 mg/L	0.000728	155.67%
As 188.979†	-4.2	-0.00162 mg/L	0.000854	-0.00162 mg/L	0.000854	52.57%
Ba 233.527†	4.7	-0.00193 mg/L	0.000119	-0.00193 mg/L	0.000119	6.14%
Be 234.861†	116.2	0.00008 mg/L	0.000029	0.00008 mg/L	0.000029	37.87%
B 249.677†	253.7	0.00422 mg/L	0.000104	0.00422 mg/L	0.000104	2.47%
Ca 227.546†	58.8	0.156 mg/L	0.0079	0.156 mg/L	0.0079	5.07%
Cd 228.802†	-2.7	-0.00005 mg/L	0.000117	-0.00005 mg/L	0.000117	247.68%
Co 228.616†	-12.3	-0.00086 mg/L	0.000159	-0.00086 mg/L	0.000159	18.57%
Cr 267.716†	34.5	-0.00041 mg/L	0.000119	-0.00041 mg/L	0.000119	28.71%
Cu 327.393†	204.9	0.00000 mg/L	0.000386	0.00000 mg/L	0.000386	>999.9%
Fe 239.562†	255.4	0.0204 mg/L	0.00116	0.0204 mg/L	0.00116	5.68%
Mg 279.077†	16.1	-0.00382 mg/L	0.002754	-0.00382 mg/L	0.002754	72.04%
Mn 257.610†	760.2	-0.00124 mg/L	0.000021	-0.00124 mg/L	0.000021	1.70%
Mo 202.031†	-3.5	-0.00094 mg/L	0.000150	-0.00094 mg/L	0.000150	16.05%
Ni 231.604†	6.3	-0.00157 mg/L	0.000227	-0.00157 mg/L	0.000227	14.42%
Pb 220.353†	2.3	-0.00062 mg/L	0.001536	-0.00062 mg/L	0.001536	249.71%
Sb 206.836†	-0.7	-0.00015 mg/L	0.000923	-0.00015 mg/L	0.000923	625.21%
Se 196.026†	4.6	0.00369 mg/L	0.001065	0.00369 mg/L	0.001065	28.88%
Si 251.611†	8378.3	0.167 mg/L	0.0033	0.167 mg/L	0.0033	1.96%
Sn 189.927†	-36.2	-0.00464 mg/L	0.000668	-0.00464 mg/L	0.000668	14.41%
Ti 334.940†	164.0	-0.00033 mg/L	0.000076	-0.00033 mg/L	0.000076	22.94%
Tl 190.801†	-2.0	-0.00222 mg/L	0.004031	-0.00222 mg/L	0.004031	181.60%
V 290.880†	233.0	-0.00088 mg/L	0.001497	-0.00088 mg/L	0.001497	170.88%
Zn 206.200†	98.0	0.00045 mg/L	0.000097	0.00045 mg/L	0.000097	21.60%
K 766.490†	197.1	0.0803 mg/L	0.02039	0.0803 mg/L	0.02039	25.39%
Na 589.592†	38255.3	1.90 mg/L	0.042	1.90 mg/L	0.042	2.21%
Sr 407.771†	929.2	-0.00248 mg/L	0.000009	-0.00248 mg/L	0.000009	0.38%
Li 670.784†	29.6	-0.00276 mg/L	0.000409	-0.00276 mg/L	0.000409	14.83%

Sequence No.: 70

Sample ID: L1211050604

Analyst: KHR

Initial Sample Wt:

Utosampler Location: 109

Date Collected: 11/19/2012 8:24:38 PM

Data Type: Original

Initial Sample Vol:

Approved: November 20, 2012

Ken H. Rhodes

Dilution:

Sample Prep Vol:

Nebulizer Parameters: L1211050604

Analyte Back Pressure Flow
All 176.0 kPa 0.50 L/min

Mean Data: L1211050604

Analyte	Mean Corrected Intensity	Calib. Conc. Units	Std.Dev.	Sample Conc. Units	Std.Dev.	RSD
Y 371.029	2450972.1				32829.55	1.34%
YRADIAL	290110.3				5912.58	2.04%
Ga 417.206	1264971.4				14720.47	1.16%
GaRADIAL	79224.1				987.80	1.25%
Ag 328.068†	48.6	-0.00063 mg/L	0.000313	-0.00063 mg/L	0.000313	49.60%
Al 396.153†	33.5	-0.0106 mg/L	0.00093	-0.0106 mg/L	0.00093	8.73%
As 188.979†	0.8	0.00015 mg/L	0.001977	0.00015 mg/L	0.001977	>999.9%
Ba 233.527†	-8.3	-0.00202 mg/L	0.000113	-0.00202 mg/L	0.000113	5.61%
Be 234.861†	107.1	0.00007 mg/L	0.000016	0.00007 mg/L	0.000016	21.34%
B 249.677†	206.3	0.00373 mg/L	0.000271	0.00373 mg/L	0.000271	7.25%
Ca 227.546†	57.9	0.153 mg/L	0.0292	0.153 mg/L	0.0292	19.11%
Cd 228.802†	-8.0	-0.00017 mg/L	0.000035	-0.00017 mg/L	0.000035	20.13%
Co 228.616†	-8.6	-0.00075 mg/L	0.000068	-0.00075 mg/L	0.000068	9.04%
Cr 267.716†	27.1	-0.00047 mg/L	0.000083	-0.00047 mg/L	0.000083	17.54%
Cu 327.393†	194.8	-0.00004 mg/L	0.000505	-0.00004 mg/L	0.000505	>999.9%
Fe 239.562†	47.5	-0.00149 mg/L	0.000603	-0.00149 mg/L	0.000603	40.54%
Mg 279.077†	6.2	-0.00739 mg/L	0.002010	-0.00739 mg/L	0.002010	27.20%
Mn 257.610†	402.5	-0.00167 mg/L	0.000008	-0.00167 mg/L	0.000008	0.47%
Mo 202.031†	-2.6	-0.00091 mg/L	0.000289	-0.00091 mg/L	0.000289	31.87%
Ni 231.604†	2.0	-0.00164 mg/L	0.000160	-0.00164 mg/L	0.000160	9.73%
Pb 220.353†	10.4	0.00016 mg/L	0.001191	0.00016 mg/L	0.001191	751.09%
Sb 206.836†	1.5	0.00047 mg/L	0.000390	0.00047 mg/L	0.000390	83.71%
Se 196.026†	5.4	0.00422 mg/L	0.003542	0.00422 mg/L	0.003542	83.89%
Si 251.611†	7493.3	0.148 mg/L	0.0021	0.148 mg/L	0.0021	1.44%
Sn 189.927†	-37.2	-0.00475 mg/L	0.000609	-0.00475 mg/L	0.000609	12.83%
Ti 334.940†	-31.6	-0.00051 mg/L	0.000030	-0.00051 mg/L	0.000030	5.92%
Tl 190.801†	-11.4	-0.00543 mg/L	0.000593	-0.00543 mg/L	0.000593	10.93%
V 290.880†	214.9	-0.00095 mg/L	0.001797	-0.00095 mg/L	0.001797	188.30%
Zn 206.200†	81.5	0.00008 mg/L	0.000064	0.00008 mg/L	0.000064	80.69%
K 766.490†	163.6	0.0692 mg/L	0.01030	0.0692 mg/L	0.01030	14.88%
Na 589.592†	37415.4	1.86 mg/L	0.043	1.86 mg/L	0.043	2.31%
Sr 407.771†	815.3	-0.00252 mg/L	0.000020	-0.00252 mg/L	0.000020	0.78%
Li 670.784†	-15.4	-0.00310 mg/L	0.000130	-0.00310 mg/L	0.000130	4.20%

Sequence No.: 71

Sample ID: CCV

Analyst:

Initial Sample Wt:

Dilution:

Autosampler Location: 6

Date Collected: 11/19/2012 8:31:33 PM

Data Type: Original

Initial Sample Vol:

Sample Prep Vol:

Nebulizer Parameters: CCV

Analyte Back Pressure Flow
All 177.0 kPa 0.50 L/min

Mean Data: CCV

Analyte	Mean Corrected Intensity	Calib. Conc. Units	Std.Dev.	Sample Conc. Units	Std.Dev.	RSD
Y 371.029	2362612.8				9454.62	0.40%
YRADIAL	285869.6				2070.24	0.72%
Ga 417.206	1185311.1				27032.88	2.28%
GaRADIAL	75202.7				613.60	0.82%
Ag 328.068†	126833.5	0.393 mg/L	0.0125	0.393 mg/L	0.0125	3.18%
QC value within limits for Ag 328.068 Recovery = 98.17%						
Al 396.153†	64751.2	9.71 mg/L	0.039	9.71 mg/L	0.039	0.40%
QC value within limits for Al 396.153 Recovery = 97.12%						
As 188.979†	1058.6	0.379 mg/L	0.0104	0.379 mg/L	0.0104	2.74%
QC value within limits for As 188.979 Recovery = 94.70%						
Ba 233.527†	146677.1	0.996 mg/L	0.0052	0.996 mg/L	0.0052	0.52%

Approved: November 20, 2012

Ken H. Rhodes

QC value within limits for Ba	233.527	Recovery = 99.61%			
Be 234.861†	54063.9	0.0480 mg/L	0.00128	0.0480 mg/L	0.00128 2.68%
QC value within limits for Be	234.861	Recovery = 95.95%			
B 249.677†	44868.4	0.476 mg/L	0.0178	0.476 mg/L	0.0178 3.74%
QC value within limits for B	249.677	Recovery = 95.29%			
Ca 227.546†	3680.1	10.1 mg/L	0.30	10.1 mg/L	0.30 2.95%
QC value within limits for Ca	227.546	Recovery = 101.12%			
Cd 228.802†	2162.8	0.0469 mg/L	0.00177	0.0469 mg/L	0.00177 3.77%
QC value within limits for Cd	228.802	Recovery = 93.82%			
Co 228.616†	7380.4	0.200 mg/L	0.0012	0.200 mg/L	0.0012 0.58%
QC value within limits for Co	228.616	Recovery = 100.03%			
Cr 267.716†	63820.2	0.492 mg/L	0.0062	0.492 mg/L	0.0062 1.26%
QC value within limits for Cr	267.716	Recovery = 98.44%			
Cu 327.393†	132156.3	0.492 mg/L	0.0164	0.492 mg/L	0.0164 3.33%
QC value within limits for Cu	327.393	Recovery = 98.36%			
Fe 239.562†	37123.3	3.89 mg/L	0.022	3.89 mg/L	0.022 0.56%
QC value within limits for Fe	239.562	Recovery = 97.34%			
Mg 279.077†	27039.5	9.75 mg/L	0.033	9.75 mg/L	0.033 0.34%
QC value within limits for Mg	279.077	Recovery = 97.45%			
Mn 257.610†	422644.5	0.506 mg/L	0.0006	0.506 mg/L	0.0006 0.12%
QC value within limits for Mn	257.610	Recovery = 101.14%			
Mo 202.031†	28789.0	0.974 mg/L	0.0089	0.974 mg/L	0.0089 0.91%
QC value within limits for Mo	202.031	Recovery = 97.40%			
Ni 231.604†	29598.7	0.497 mg/L	0.0012	0.497 mg/L	0.0012 0.24%
QC value within limits for Ni	231.604	Recovery = 99.42%			
Pb 220.353†	5231.6	0.500 mg/L	0.0012	0.500 mg/L	0.0012 0.23%
QC value within limits for Pb	220.353	Recovery = 100.06%			
Sb 206.836†	4119.4	1.15 mg/L	0.039	1.15 mg/L	0.039 3.38%
QC value within limits for Sb	206.836	Recovery = 95.89%			
Se 196.026†	620.3	0.384 mg/L	0.0098	0.384 mg/L	0.0098 2.55%
QC value within limits for Se	196.026	Recovery = 95.93%			
Si 251.611†	233453.1	4.92 mg/L	0.109	4.92 mg/L	0.109 2.22%
QC value within limits for Si	251.611	Recovery = 98.47%			
Sn 189.927†	9368.9	0.982 mg/L	0.0047	0.982 mg/L	0.0047 0.48%
QC value within limits for Sn	189.927	Recovery = 98.21%			
Ti 334.940†	1091522.6	0.979 mg/L	0.0027	0.979 mg/L	0.0027 0.27%
QC value within limits for Ti	334.940	Recovery = 97.87%			
Tl 190.801†	1467.6	0.512 mg/L	0.0021	0.512 mg/L	0.0021 0.41%
QC value within limits for Tl	190.801	Recovery = 102.46%			
V 290.880†	228253.7	0.996 mg/L	0.0145	0.996 mg/L	0.0145 1.46%
QC value within limits for V	290.880	Recovery = 99.60%			
Zn 206.200†	43076.5	0.971 mg/L	0.0046	0.971 mg/L	0.0046 0.48%
QC value within limits for Zn	206.200	Recovery = 97.11%			
K 766.490†	145788.5	48.8 mg/L	0.30	48.8 mg/L	0.30 0.62%
QC value within limits for K	766.490	Recovery = 97.67%			
Na 589.592†	951025.7	48.2 mg/L	0.73	48.2 mg/L	0.73 1.51%
QC value within limits for Na	589.592	Recovery = 96.46%			
Sr 407.771†	2419682.6	1.01 mg/L	0.021	1.01 mg/L	0.021 2.03%
QC value within limits for Sr	407.771	Recovery = 101.24%			
Li 670.784†	130935.6	0.981 mg/L	0.0083	0.981 mg/L	0.0083 0.84%
QC value within limits for Li	670.784	Recovery = 98.06%			

All analyte(s) passed QC.

Sequence No.: 72

Sample ID: CCB

Analyst:

Initial Sample Wt:

Dilution:

Autosampler Location: 1

Date Collected: 11/19/2012 8:37:34 PM

Data Type: Original

Initial Sample Vol:

Sample Prep Vol:

Nebulizer Parameters: CCB

Analyte

Back Pressure

Flow

All

176.0 kPa

0.50 L/min

Mean Data: CCB

Analyte	Mean Corrected Intensity	Calib. Conc. Units	Std.Dev.	Sample Conc. Units	Std.Dev.	RSD
Y 371.029	2469828.8				16608.11	0.67%
YRADIAL	286281.7				2270.86	0.79%
Ga 417.206	1227433.2				28027.40	2.28%

Approved: November 20, 2012

Ken H. Rhodes

Ag	328.068†	77180.0	-75.5	-0.00102 mg/L	0.000415	-0.00102 mg/L	1903.28	2.47%
QC value	within limits	for Ag	328.068	Recovery =	Not calculated		0.000415	40.87%
Al	396.153†	25.2	-0.0119 mg/L	0.00142	-0.0119 mg/L	0.00142	11.93%	
QC value	within limits	for Al	396.153	Recovery =	Not calculated			
As	188.979†	2.6	0.00082 mg/L	0.002069	0.00082 mg/L	0.002069	253.21%	
QC value	within limits	for As	188.979	Recovery =	Not calculated			
Ba	233.527†	8.3	-0.00191 mg/L	0.000066	-0.00191 mg/L	0.000066	3.47%	
QC value	within limits	for Ba	233.527	Recovery =	Not calculated			
Be	234.861†	55.1	0.00003 mg/L	0.000031	0.00003 mg/L	0.000031	108.71%	
QC value	within limits	for Be	234.861	Recovery =	Not calculated			
B	249.677†	236.6	0.00405 mg/L	0.000299	0.00405 mg/L	0.000299	7.39%	
QC value	within limits	for B	249.677	Recovery =	Not calculated			
Ca	227.546†	20.5	0.0547 mg/L	0.02817	0.0547 mg/L	0.02817	51.49%	
QC value	within limits	for Ca	227.546	Recovery =	Not calculated			
Cd	228.802†	-5.1	-0.00011 mg/L	0.000115	-0.00011 mg/L	0.000115	101.57%	
QC value	within limits	for Cd	228.802	Recovery =	Not calculated			
Co	228.616†	-8.1	-0.00074 mg/L	0.000256	-0.00074 mg/L	0.000256	34.52%	
QC value	within limits	for Co	228.616	Recovery =	Not calculated			
Cr	267.716†	27.4	-0.00047 mg/L	0.000086	-0.00047 mg/L	0.000086	18.29%	
QC value	within limits	for Cr	267.716	Recovery =	Not calculated			
Cu	327.393†	195.8	-0.00003 mg/L	0.000272	-0.00003 mg/L	0.000272	777.17%	
QC value	within limits	for Cu	327.393	Recovery =	Not calculated			
Fe	239.562†	15.4	-0.00486 mg/L	0.000137	-0.00486 mg/L	0.000137	2.82%	
QC value	within limits	for Fe	239.562	Recovery =	Not calculated			
Mg	279.077†	13.9	-0.00461 mg/L	0.001564	-0.00461 mg/L	0.001564	33.95%	
QC value	within limits	for Mg	279.077	Recovery =	Not calculated			
Mn	257.610†	328.5	-0.00176 mg/L	0.000018	-0.00176 mg/L	0.000018	1.02%	
QC value	within limits	for Mn	257.610	Recovery =	Not calculated			
Mo	202.031†	-0.4	-0.00083 mg/L	0.000285	-0.00083 mg/L	0.000285	34.17%	
QC value	within limits	for Mo	202.031	Recovery =	Not calculated			
Ni	231.604†	-6.4	-0.00179 mg/L	0.000264	-0.00179 mg/L	0.000264	14.78%	
QC value	within limits	for Ni	231.604	Recovery =	Not calculated			
Pb	220.353†	13.2	0.00043 mg/L	0.000441	0.00043 mg/L	0.000441	103.29%	
QC value	within limits	for Pb	220.353	Recovery =	Not calculated			
Sb	206.836†	4.8	0.00139 mg/L	0.000768	0.00139 mg/L	0.000768	55.10%	
QC value	within limits	for Sb	206.836	Recovery =	Not calculated			
Se	196.026†	7.4	0.00544 mg/L	0.001977	0.00544 mg/L	0.001977	36.38%	
QC value	within limits	for Se	196.026	Recovery =	Not calculated			
Si	251.611†	2.8	-0.0102 mg/L	0.00053	-0.0102 mg/L	0.00053	5.18%	
QC value	within limits	for Si	251.611	Recovery =	Not calculated			
Sn	189.927†	-31.5	-0.00414 mg/L	0.000307	-0.00414 mg/L	0.000307	7.41%	
QC value	within limits	for Sn	189.927	Recovery =	Not calculated			
Ti	334.940†	259.6	-0.00026 mg/L	0.000030	-0.00026 mg/L	0.000030	11.61%	
QC value	within limits	for Ti	334.940	Recovery =	Not calculated			
Tl	190.801†	-6.4	-0.00370 mg/L	0.001927	-0.00370 mg/L	0.001927	52.03%	
QC value	within limits	for Tl	190.801	Recovery =	Not calculated			
V	290.880†	40.1	-0.00172 mg/L	0.001835	-0.00172 mg/L	0.001835	106.77%	
QC value	within limits	for V	290.880	Recovery =	Not calculated			
Zn	206.200†	14.8	-0.00142 mg/L	0.000142	-0.00142 mg/L	0.000142	9.98%	
QC value	within limits	for Zn	206.200	Recovery =	Not calculated			
K	766.490†	122.0	0.0572 mg/L	0.02058	0.0572 mg/L	0.02058	35.97%	
QC value	within limits	for K	766.490	Recovery =	Not calculated			
Na	589.592†	489.9	0.0238 mg/L	0.00098	0.0238 mg/L	0.00098	4.14%	
QC value	within limits	for Na	589.592	Recovery =	Not calculated			
Sr	407.771†	649.3	-0.00259 mg/L	0.000080	-0.00259 mg/L	0.000080	3.09%	
QC value	within limits	for Sr	407.771	Recovery =	Not calculated			
Li	670.784†	56.4	-0.00256 mg/L	0.000327	-0.00256 mg/L	0.000327	12.79%	
QC value	within limits	for Li	670.784	Recovery =	Not calculated			

All analyte(s) passed QC.

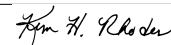
Sequence No.: 73
Sample ID: PBW 52 WG414640-02
Analyst: KHR
Initial Sample Wt:
Dilution:

Udosampler Location: 110
Date Collected: 11/19/2012 8:44:27 PM
Data Type: Original
Initial Sample Vol:
Sample Prep Vol:

Nebulizer Parameters: PBW 52 WG414640-02

Analyte Back Pressure Flow
All 177.0 kPa 0.50 L/min

Approved: November 20, 2012



Mean Data: PBW 52 WG414640-02

Analyte	Mean Corrected Intensity	Calib. Conc. Units	Std.Dev.	Sample Conc. Units	Std.Dev.	RSD
Y 371.029	2453090.0				24286.03	0.99%
YRADIAL	284950.1				3855.64	1.35%
Ga 417.206	1252542.5				17345.96	1.38%
GaRADIAL	77030.9				1412.75	1.83%
Ag 328.068†	6.9	-0.00076 mg/L	0.000294	-0.00076 mg/L	0.000294	38.55%
Al 396.153†	22.1	-0.0124 mg/L	0.00176	-0.0124 mg/L	0.00176	14.26%
As 188.979†	-0.0	-0.00014 mg/L	0.000650	-0.00014 mg/L	0.000650	480.50%
Ba 233.527†	112.4	-0.00120 mg/L	0.000136	-0.00120 mg/L	0.000136	11.39%
Be 234.861†	112.3	0.00008 mg/L	0.000013	0.00008 mg/L	0.000013	16.66%
B 249.677†	117.3	0.00279 mg/L	0.000280	0.00279 mg/L	0.000280	10.06%
Ca 227.546†	40.4	0.107 mg/L	0.0062	0.107 mg/L	0.0062	5.82%
Cd 228.802†	-8.6	-0.00019 mg/L	0.000098	-0.00019 mg/L	0.000098	52.27%
Co 228.616†	-14.8	-0.00092 mg/L	0.000137	-0.00092 mg/L	0.000137	14.79%
Cr 267.716†	-1.6	-0.00069 mg/L	0.000033	-0.00069 mg/L	0.000033	4.76%
Cu 327.393†	149.1	-0.00021 mg/L	0.000304	-0.00021 mg/L	0.000304	145.95%
Fe 239.562†	4.2	-0.00604 mg/L	0.000262	-0.00604 mg/L	0.000262	4.34%
Mg 279.077†	4.4	-0.00804 mg/L	0.002393	-0.00804 mg/L	0.002393	29.77%
Mn 257.610†	366.1	-0.00171 mg/L	0.000028	-0.00171 mg/L	0.000028	1.64%
Mo 202.031†	-5.5	-0.00101 mg/L	0.000299	-0.00101 mg/L	0.000299	29.73%
Ni 231.604†	-3.6	-0.00174 mg/L	0.000278	-0.00174 mg/L	0.000278	15.98%
Pb 220.353†	11.4	0.00026 mg/L	0.000895	0.00026 mg/L	0.000895	347.76%
Sb 206.836†	2.9	0.00085 mg/L	0.000595	0.00085 mg/L	0.000595	69.60%
Se 196.026†	7.9	0.00576 mg/L	0.001100	0.00576 mg/L	0.001100	19.12%
Si 251.611†	-49.7	-0.0113 mg/L	0.00053	-0.0113 mg/L	0.00053	4.67%
Sn 189.927†	-33.9	-0.00440 mg/L	0.000356	-0.00440 mg/L	0.000356	8.10%
Ti 334.940†	109.3	-0.00039 mg/L	0.000170	-0.00039 mg/L	0.000170	44.08%
Tl 190.801†	-8.0	-0.00426 mg/L	0.000993	-0.00426 mg/L	0.000993	23.29%
V 290.880†	80.0	-0.00154 mg/L	0.001183	-0.00154 mg/L	0.001183	76.61%
Zn 206.200†	83.1	0.00011 mg/L	0.000111	0.00011 mg/L	0.000111	96.97%
K 766.490†	19.1	0.0231 mg/L	0.01625	0.0231 mg/L	0.01625	70.42%
Na 589.592†	-167.9	-0.00883 mg/L	0.001210	-0.00883 mg/L	0.001210	13.70%
Sr 407.771†	283.5	-0.00275 mg/L	0.000026	-0.00275 mg/L	0.000026	0.94%
Li 670.784†	16.3	-0.00286 mg/L	0.000150	-0.00286 mg/L	0.000150	5.24%

Sequence No.: 74

Sample ID: LCSW 52 WG414640-03

Analyst: KHR

Initial Sample Wt:

Dilution:

Autosampler Location: 111

Date Collected: 11/19/2012 8:51:22 PM

Data Type: Original

Initial Sample Vol:

Sample Prep Vol:

Nebulizer Parameters: LCSW 52 WG414640-03

Analyte	Back Pressure	Flow
All	175.0 kPa	0.50 L/min

Mean Data: LCSW 52 WG414640-03

Analyte	Mean Corrected Intensity	Calib. Conc. Units	Std.Dev.	Sample Conc. Units	Std.Dev.	RSD
Y 371.029	2426392.5				38778.09	1.60%
YRADIAL	286897.9				2401.75	0.84%
Ga 417.206	1232969.5				18953.11	1.54%
GaRADIAL	76732.7				753.84	0.98%
Ag 328.068†	62683.3	0.194 mg/L	0.0039	0.194 mg/L	0.0039	2.01%
Al 396.153†	31576.0	4.73 mg/L	0.075	4.73 mg/L	0.075	1.58%
As 188.979†	508.8	0.182 mg/L	0.0020	0.182 mg/L	0.0020	1.11%
Ba 233.527†	72088.4	0.489 mg/L	0.0079	0.489 mg/L	0.0079	1.61%
Be 234.861†	26084.9	0.0231 mg/L	0.00040	0.0231 mg/L	0.00040	1.73%
B 249.677†	87679.3	0.935 mg/L	0.0157	0.935 mg/L	0.0157	1.68%
Ca 227.546†	1783.6	4.91 mg/L	0.103	4.91 mg/L	0.103	2.09%
Cd 228.802†	1033.4	0.0224 mg/L	0.00055	0.0224 mg/L	0.00055	2.44%
Co 228.616†	3585.2	0.0969 mg/L	0.00145	0.0969 mg/L	0.00145	1.50%
Cr 267.716†	31624.7	0.244 mg/L	0.0028	0.244 mg/L	0.0028	1.16%
Cu 327.393†	64624.6	0.240 mg/L	0.0040	0.240 mg/L	0.0040	1.66%
Fe 239.562†	18463.9	1.93 mg/L	0.011	1.93 mg/L	0.011	0.59%
Mg 279.077†	13480.8	4.85 mg/L	0.058	4.85 mg/L	0.058	1.20%

Approved: November 20, 2012

Ken H. Rhodes

Mn 257.610†	208881.7	0.249 mg/L	0.0050	0.249 mg/L	0.0050	2.00%
Mo 202.031†	14147.0	0.478 mg/L	0.0080	0.478 mg/L	0.0080	1.68%
Ni 231.604†	15225.9	0.255 mg/L	0.0046	0.255 mg/L	0.0046	1.80%
Pb 220.353†	2550.1	0.243 mg/L	0.0043	0.243 mg/L	0.0043	1.75%
Sb 206.836†	2013.3	0.562 mg/L	0.0106	0.562 mg/L	0.0106	1.89%
Se 196.026†	301.2	0.187 mg/L	0.0031	0.187 mg/L	0.0031	1.68%
Si 251.611†	112551.3	2.37 mg/L	0.014	2.37 mg/L	0.014	0.60%
Sn 189.927†	-90.6	-0.0104 mg/L	0.00072	-0.0104 mg/L	0.00072	6.93%
Ti 334.940†	536847.5	0.481 mg/L	0.0036	0.481 mg/L	0.0036	0.74%
Tl 190.801†	735.8	0.256 mg/L	0.0018	0.256 mg/L	0.0018	0.70%
V 290.880†	111717.4	0.487 mg/L	0.0060	0.487 mg/L	0.0060	1.22%
Zn 206.200†	21249.9	0.478 mg/L	0.0060	0.478 mg/L	0.0060	1.26%
K 766.490†	70276.8	23.4 mg/L	0.31	23.4 mg/L	0.31	1.33%
Na 589.592†	469892.9	23.6 mg/L	0.10	23.6 mg/L	0.10	0.42%
Sr 407.771†	1217967.3	0.508 mg/L	0.0038	0.508 mg/L	0.0038	0.75%
Li 670.784†	65256.7	0.487 mg/L	0.0097	0.487 mg/L	0.0097	2.00%

Sequence No.: 75

Sample ID: L1211048901 WG414640-01

Analyst: KHR

Initial Sample Wt:

Dilution:

Sampler Location: 112

Date Collected: 11/19/2012 8:57:22 PM

Data Type: Original

Initial Sample Vol:

Sample Prep Vol:

Nebulizer Parameters: L1211048901 WG414640-01

Analyte	Back Pressure	Flow
All	176.0 kPa	0.50 L/min

Mean Data: L1211048901 WG414640-01

Analyte	Mean Corrected Intensity	Calib. Conc. Units	Std.Dev.	Sample Conc. Units	Std.Dev.	RSD
Y 371.029	2387800.9				28690.04	1.20%
YRADIAL	285174.4				3269.74	1.15%
Ga 417.206	1255368.4				23431.59	1.87%
GA RADIAL	77664.7				568.55	0.73%
Ag 328.068†	181.0	-0.00009 mg/L	0.000549	-0.00009 mg/L	0.000549	628.27%
Al 396.153†	112.6	0.00120 mg/L	0.000301	0.00120 mg/L	0.000301	25.06%
As 188.979†	-4.9	-0.00180 mg/L	0.001717	-0.00180 mg/L	0.001717	95.62%
Ba 233.527†	5377.5	0.0346 mg/L	0.00029	0.0346 mg/L	0.00029	0.84%
Be 234.861†	381.5	0.00025 mg/L	0.000103	0.00025 mg/L	0.000103	41.30%
B 249.677†	2157.5	0.0244 mg/L	0.00116	0.0244 mg/L	0.00116	4.78%
Ca 227.546†	13570.9	35.6 mg/L	0.73	35.6 mg/L	0.73	2.06%
Cd 228.802†	6.1	0.00015 mg/L	0.000229	0.00015 mg/L	0.000229	150.73%
Co 228.616†	13.3	-0.00016 mg/L	0.000235	-0.00016 mg/L	0.000235	143.76%
Cr 267.716†	77.1	-0.00010 mg/L	0.000176	-0.00010 mg/L	0.000176	179.16%
Cu 327.393†	1208.0	0.00376 mg/L	0.000187	0.00376 mg/L	0.000187	4.97%
Fe 239.562†	4044.4	0.418 mg/L	0.0088	0.418 mg/L	0.0088	2.10%
Mg 279.077†	18423.6	6.63 mg/L	0.153	6.63 mg/L	0.153	2.31%
Mn 257.610†	166004.7	0.197 mg/L	0.0033	0.197 mg/L	0.0033	1.65%
Mo 202.031†	70.4	0.00162 mg/L	0.000453	0.00162 mg/L	0.000453	27.87%
Ni 231.604†	194.8	0.00161 mg/L	0.000418	0.00161 mg/L	0.000418	26.02%
Pb 220.353†	11.0	0.00007 mg/L	0.001105	0.00007 mg/L	0.001105	>999.9%
Sb 206.836†	-2.7	-0.00068 mg/L	0.001141	-0.00068 mg/L	0.001141	168.89%
Se 196.026†	0.4	0.00114 mg/L	0.001857	0.00114 mg/L	0.001857	162.59%
Si 251.611†	133889.6	2.83 mg/L	0.053	2.83 mg/L	0.053	1.87%
Sn 189.927†	-232.5	-0.0252 mg/L	0.00093	-0.0252 mg/L	0.00093	3.67%
Ti 334.940†	-5754.3	-0.00031 mg/L	0.000776	-0.00031 mg/L	0.000776	246.77%
Tl 190.801†	-17.7	-0.00780 mg/L	0.003308	-0.00780 mg/L	0.003308	42.44%
V 290.880†	908.6	0.00188 mg/L	0.000853	0.00188 mg/L	0.000853	45.35%
Zn 206.200†	903.5	0.0185 mg/L	0.00043	0.0185 mg/L	0.00043	2.30%
K 766.490†	7076.2	2.34 mg/L	0.042	2.34 mg/L	0.042	1.79%
Na 589.592†	592702.2	29.8 mg/L	0.30	29.8 mg/L	0.30	1.02%
Sr 407.771†	413274.9	0.170 mg/L	0.0008	0.170 mg/L	0.0008	0.49%
Li 670.784†	963.4	0.00426 mg/L	0.000603	0.00426 mg/L	0.000603	14.16%

Sequence No.: 76

Sample ID: L1211048901DU WG414640-04

Analyst: KHR

Initial Sample Wt:

Sampler Location: 113

Date Collected: 11/19/2012 9:03:20 PM

Data Type: Original

Initial Sample Vol:

Approved: November 20, 2012

Ken H. Rhodes

Dilution:

Sample Prep Vol:

Nebulizer Parameters: L1211048901DU WG414640-04

Analyte	Back Pressure	Flow
All	176.0 kPa	0.50 L/min

Mean Data: L1211048901DU WG414640-04

Analyte	Mean Corrected Intensity	Conc. Units	Calib. Units	Std.Dev.	Sample Conc. Units	Std.Dev.	RSD
Y 371.029	2371912.4					24801.20	1.05%
YRADIAL	282820.5					2315.15	0.82%
Ga 417.206	1251556.6					32461.75	2.59%
GaRADIAL	77138.5					630.19	0.82%
Ag 328.068†	309.0	0.00031 mg/L		0.000400	0.00031 mg/L	0.000400	127.30%
Al 396.153†	82.8	-0.00330 mg/L		0.010000	-0.00330 mg/L	0.010000	303.37%
As 188.979†	-6.1	-0.00223 mg/L		0.000936	-0.00223 mg/L	0.000936	41.97%
Ba 233.527†	5575.3	0.0359 mg/L		0.00022	0.0359 mg/L	0.00022	0.60%
Be 234.861†	377.3	0.00024 mg/L		0.000083	0.00024 mg/L	0.000083	34.74%
B 249.677†	2059.5	0.0233 mg/L		0.00039	0.0233 mg/L	0.00039	1.66%
Ca 227.546†	14027.5	36.8 mg/L		0.88	36.8 mg/L	0.88	2.38%
Cd 228.802†	9.4	0.00023 mg/L		0.000094	0.00023 mg/L	0.000094	41.40%
Co 228.616†	10.8	-0.00023 mg/L		0.000203	-0.00023 mg/L	0.000203	86.83%
Cr 267.716†	90.1	0.00000 mg/L		0.000052	0.00000 mg/L	0.000052	>999.9%
Cu 327.393†	1211.6	0.00378 mg/L		0.000461	0.00378 mg/L	0.000461	12.21%
Fe 239.562†	4285.0	0.444 mg/L		0.0041	0.444 mg/L	0.0041	0.91%
Mg 279.077†	19562.5	7.04 mg/L		0.011	7.04 mg/L	0.011	0.16%
Mn 257.610†	172494.6	0.205 mg/L		0.0033	0.205 mg/L	0.0033	1.63%
Mo 202.031†	69.2	0.00159 mg/L		0.000169	0.00159 mg/L	0.000169	10.66%
Ni 231.604†	185.8	0.00145 mg/L		0.000223	0.00145 mg/L	0.000223	15.35%
Pb 220.353†	-1.6	-0.00115 mg/L		0.001774	-0.00115 mg/L	0.001774	154.51%
Sb 206.836†	-1.0	-0.00021 mg/L		0.001223	-0.00021 mg/L	0.001223	570.59%
Se 196.026†	1.9	0.00203 mg/L		0.001043	0.00203 mg/L	0.001043	51.32%
Si 251.611†	139190.7	2.94 mg/L		0.041	2.94 mg/L	0.041	1.39%
Sn 189.927†	-245.5	-0.0266 mg/L		0.00057	-0.0266 mg/L	0.00057	2.13%
Ti 334.940†	-6164.2	-0.00050 mg/L		0.000576	-0.00050 mg/L	0.000576	114.80%
Tl 190.801†	-8.5	-0.00469 mg/L		0.001934	-0.00469 mg/L	0.001934	41.21%
V 290.880†	765.0	0.00124 mg/L		0.000521	0.00124 mg/L	0.000521	41.96%
Zn 206.200†	929.1	0.0191 mg/L		0.00015	0.0191 mg/L	0.00015	0.78%
K 766.490†	7487.2	2.47 mg/L		0.050	2.47 mg/L	0.050	2.03%
Na 589.592†	616460.4	31.0 mg/L		0.25	31.0 mg/L	0.25	0.80%
Sr 407.771†	430459.3	0.177 mg/L		0.0009	0.177 mg/L	0.0009	0.50%
Li 670.784†	1036.3	0.00480 mg/L		0.000258	0.00480 mg/L	0.000258	5.37%

Sequence No.: 77

Sample ID: L1211048901MS WG414640-05

Analyst: KHR

Initial Sample Wt:

Dilution:

Autosampler Location: 114

Date Collected: 11/19/2012 9:09:18 PM

Data Type: Original

Initial Sample Vol:

Sample Prep Vol:

Nebulizer Parameters: L1211048901MS WG414640-05

Analyte	Back Pressure	Flow
All	177.0 kPa	0.50 L/min

Mean Data: L1211048901MS WG414640-05

Analyte	Mean Corrected Intensity	Conc. Units	Calib. Units	Std.Dev.	Sample Conc. Units	Std.Dev.	RSD
Y 371.029	2385524.6					13796.58	0.58%
YRADIAL	291097.4					2105.27	0.72%
Ga 417.206	1249975.2					30455.45	2.44%
GaRADIAL	78390.4					726.12	0.93%
Ag 328.068†	59697.0	0.185 mg/L		0.0053	0.185 mg/L	0.0053	2.89%
Al 396.153†	31167.7	4.67 mg/L		0.019	4.67 mg/L	0.019	0.40%
As 188.979†	495.8	0.177 mg/L		0.0055	0.177 mg/L	0.0055	3.12%
Ba 233.527†	74629.7	0.506 mg/L		0.0014	0.506 mg/L	0.0014	0.28%
Be 234.861†	25413.6	0.0225 mg/L		0.00049	0.0225 mg/L	0.00049	2.17%
B 249.677†	86591.1	0.923 mg/L		0.0278	0.923 mg/L	0.0278	3.01%
Ca 227.546†	15825.9	41.8 mg/L		1.45	41.8 mg/L	1.45	3.48%

Approved: November 20, 2012

Ken H. Rhodes

Cd 228.802†	985.7	0.0214 mg/L	0.00096	0.0214 mg/L	0.00096	4.50%
Co 228.616†	3480.3	0.0940 mg/L	0.00035	0.0940 mg/L	0.00035	0.37%
Cr 267.716†	30696.5	0.236 mg/L	0.0023	0.236 mg/L	0.0023	0.99%
Cu 327.393†	63136.9	0.235 mg/L	0.0078	0.235 mg/L	0.0078	3.31%
Fe 239.562†	21936.1	2.30 mg/L	0.034	2.30 mg/L	0.034	1.46%
Mg 279.077†	31586.9	11.4 mg/L	0.08	11.4 mg/L	0.08	0.70%
Mn 257.610†	372474.4	0.445 mg/L	0.0018	0.445 mg/L	0.0018	0.40%
Mo 202.031†	13958.5	0.472 mg/L	0.0048	0.472 mg/L	0.0048	1.02%
Ni 231.604†	14808.8	0.248 mg/L	0.0010	0.248 mg/L	0.0010	0.42%
Pb 220.353†	2496.7	0.238 mg/L	0.0011	0.238 mg/L	0.0011	0.46%
Sb 206.836†	1971.9	0.551 mg/L	0.0181	0.551 mg/L	0.0181	3.29%
Se 196.026†	295.7	0.183 mg/L	0.0073	0.183 mg/L	0.0073	4.00%
Si 251.611†	247722.2	5.23 mg/L	0.117	5.23 mg/L	0.117	2.23%
Sn 189.927†	-249.7	-0.0270 mg/L	0.00097	-0.0270 mg/L	0.00097	3.59%
Ti 334.940†	525855.4	0.477 mg/L	0.0008	0.477 mg/L	0.0008	0.17%
Tl 190.801†	686.3	0.239 mg/L	0.0012	0.239 mg/L	0.0012	0.51%
V 290.880†	110638.4	0.482 mg/L	0.0060	0.482 mg/L	0.0060	1.24%
Zn 206.200†	20882.3	0.470 mg/L	0.0023	0.470 mg/L	0.0023	0.49%
K 766.490†	76789.9	25.6 mg/L	0.08	25.6 mg/L	0.08	0.33%
Na 589.592†	1071180.9	54.5 mg/L	0.73	54.5 mg/L	0.73	1.34%
Sr 407.771†	1609708.9	0.672 mg/L	0.0081	0.672 mg/L	0.0081	1.21%
Li 670.784†	65350.0	0.488 mg/L	0.0021	0.488 mg/L	0.0021	0.43%

Sequence No.: 78

Sample ID: L1211048902

Analyst: KHR

Initial Sample Wt:

Dilution:

Sampler Location: 115

Date Collected: 11/19/2012 9:15:17 PM

Data Type: Original

Initial Sample Vol:

Sample Prep Vol:

Nebulizer Parameters: L1211048902

Analyte

Back Pressure

Flow

All

177.0 kPa

0.50 L/min

Mean Data: L1211048902

Analyte	Mean Corrected Intensity	Conc.	Calib. Units	Std.Dev.	Sample Conc.	Std.Dev.	RSD	
Y 371.029	2387189.3					22934.93	0.96%	
YRADIAL	285256.7					6241.95	2.19%	
Ga 417.206	1260339.7					15847.60	1.26%	
GA RADIAL	78328.1					1044.90	1.33%	
Ag 328.068†	312.1	0.00044	mg/L	0.000328	0.00044	mg/L	0.000328	74.54%
Al 396.153†	1738.4	0.247	mg/L	0.0083	0.247	mg/L	0.0083	3.34%
As 188.979†	-11.0	-0.00400	mg/L	0.001415	-0.00400	mg/L	0.001415	35.34%
Ba 233.527†	5445.6	0.0350	mg/L	0.00001	0.0350	mg/L	0.00001	0.02%
Be 234.861†	590.8	0.00038	mg/L	0.000104	0.00038	mg/L	0.000104	27.28%
B 249.677†	3565.5	0.0392	mg/L	0.00114	0.0392	mg/L	0.00114	2.92%
Ca 227.546†	16926.2	44.4	mg/L	1.09	44.4	mg/L	1.09	2.45%
Cd 228.802†	152.9	0.00344	mg/L	0.000163	0.00344	mg/L	0.000163	4.75%
Co 228.616†	41.2	0.00057	mg/L	0.000423	0.00057	mg/L	0.000423	73.95%
Cr 267.716†	809.0	0.00558	mg/L	0.000101	0.00558	mg/L	0.000101	1.82%
Cu 327.393†	33473.4	0.124	mg/L	0.0019	0.124	mg/L	0.0019	1.55%
Fe 239.562†	5953.7	0.619	mg/L	0.0059	0.619	mg/L	0.0059	0.96%
Mg 279.077†	22780.7	8.20	mg/L	0.108	8.20	mg/L	0.108	1.32%
Mn 257.610†	74851.3	0.0877	mg/L	0.00156	0.0877	mg/L	0.00156	1.77%
Mo 202.031†	102.1	0.00269	mg/L	0.000522	0.00269	mg/L	0.000522	19.38%
Ni 231.604†	720.8	0.0105	mg/L	0.00061	0.0105	mg/L	0.00061	5.81%
Pb 220.353†	133.3	0.0117	mg/L	0.00247	0.0117	mg/L	0.00247	21.03%
Sb 206.836†	-2.6	-0.00068	mg/L	0.001012	-0.00068	mg/L	0.001012	148.73%
Se 196.026†	8.1	0.00596	mg/L	0.002707	0.00596	mg/L	0.002707	45.44%
Si 251.611†	179973.3	3.80	mg/L	0.033	3.80	mg/L	0.033	0.87%
Sn 189.927†	-257.3	-0.0278	mg/L	0.00102	-0.0278	mg/L	0.00102	3.68%
Ti 334.940†	6034.7	0.0116	mg/L	0.00093	0.0116	mg/L	0.00093	8.07%
Tl 190.801†	-15.3	-0.00671	mg/L	0.006105	-0.00671	mg/L	0.006105	91.05%
V 290.880†	4692.5	0.0184	mg/L	0.00039	0.0184	mg/L	0.00039	2.11%
Zn 206.200†	27949.5	0.627	mg/L	0.0081	0.627	mg/L	0.0081	1.29%
K 766.490†	29195.2	9.67	mg/L	0.148	9.67	mg/L	0.148	1.53%
Na 589.592†	1088215.2	55.4	mg/L	0.43	55.4	mg/L	0.43	0.77%
Sr 407.771†	500253.7	0.206	mg/L	0.0008	0.206	mg/L	0.0008	0.37%
Li 670.784†	1279.5	0.00663	mg/L	0.000560	0.00663	mg/L	0.000560	8.44%

Approved: November 20, 2012

Ken H. Rhodes

Sequence No.: 79
 Sample ID: L1211051101
 Analyst: KHR
 Initial Sample Wt:
 Dilution:

Autosampler Location: 116
 Date Collected: 11/19/2012 9:21:16 PM
 Data Type: Original
 Initial Sample Vol:
 Sample Prep Vol:

Nebulizer Parameters: L1211051101

Analyte Back Pressure Flow
 All 176.0 kPa 0.50 L/min

Mean Data: L1211051101

Analyte	Mean Corrected Intensity	Calib. Conc. Units	Std.Dev.	Sample Conc. Units	Std.Dev.	RSD
Y 371.029	2223372.4				20774.38	0.93%
YRADIAL	269028.2				1229.86	0.46%
Ga 417.206	1215802.3				25360.49	2.09%
GaRADIAL	75052.2				70.95	0.09%
Ag 328.068†	291.9	0.00112 mg/L	0.000296	0.00112 mg/L	0.000296	26.31%
Al 396.153†	877.9	0.116 mg/L	0.0071	0.116 mg/L	0.0071	6.07%
As 188.979†	-20.3	-0.00699 mg/L	0.001606	-0.00699 mg/L	0.001606	22.98%
Ba 233.527†	2407.8	0.0143 mg/L	0.00017	0.0143 mg/L	0.00017	1.18%
Be 234.861†	887.8	0.00027 mg/L	0.000007	0.00027 mg/L	0.000007	2.61%
B 249.677†	20177.8	0.216 mg/L	0.0067	0.216 mg/L	0.0067	3.11%
Ca 227.546†	44921.6	118 mg/L	3.2	118 mg/L	3.2	2.71%
Cd 228.802†	28.8	0.00069 mg/L	0.000159	0.00069 mg/L	0.000159	23.12%
Co 228.616†	30.3	0.00026 mg/L	0.000299	0.00026 mg/L	0.000299	113.13%
Cr 267.716†	5835.7	0.0443 mg/L	0.00047	0.0443 mg/L	0.00047	1.05%
Cu 327.393†	2275.4	0.00794 mg/L	0.000412	0.00794 mg/L	0.000412	5.18%
Fe 239.562†	22298.0	2.34 mg/L	0.017	2.34 mg/L	0.017	0.71%
Mg 279.077†	3126.0	1.12 mg/L	0.024	1.12 mg/L	0.024	2.16%
Mn 257.610†	15195.5	0.0161 mg/L	0.00016	0.0161 mg/L	0.00016	1.00%
Mo 202.031†	383.2	0.0123 mg/L	0.00019	0.0123 mg/L	0.00019	1.53%
Ni 231.604†	559.5	0.00776 mg/L	0.000507	0.00776 mg/L	0.000507	6.53%
Pb 220.353†	13.9	0.00030 mg/L	0.001933	0.00030 mg/L	0.001933	637.26%
Sb 206.836†	-4.7	-0.00152 mg/L	0.000594	-0.00152 mg/L	0.000594	39.05%
Se 196.026†	5.6	0.00472 mg/L	0.002686	0.00472 mg/L	0.002686	56.87%
Si 251.611†	221139.2	4.67 mg/L	0.100	4.67 mg/L	0.100	2.15%
Sn 189.927†	-328.9	-0.0353 mg/L	0.00049	-0.0353 mg/L	0.00049	1.38%
Ti 334.940†	3467.7	0.0203 mg/L	0.00075	0.0203 mg/L	0.00075	3.72%
Tl 190.801†	-43.4	-0.0163 mg/L	0.00234	-0.0163 mg/L	0.00234	14.39%
V 290.880†	1772.1	0.00569 mg/L	0.000472	0.00569 mg/L	0.000472	8.31%
Zn 206.200†	1679.7	0.0362 mg/L	0.00018	0.0362 mg/L	0.00018	0.48%
K 766.490†	72475.8	23.7 mg/L	0.04	23.7 mg/L	0.04	0.18%
Na 589.592†	7144642.0	447 mg/L	2.4	447 mg/L	2.4	0.53%
Sr 407.771†	854852.8	0.354 mg/L	0.0020	0.354 mg/L	0.0020	0.57%
Li 670.784†	987.8	0.00444 mg/L	0.000608	0.00444 mg/L	0.000608	13.69%

Sequence No.: 80
 Sample ID: L1211051102
 Analyst: KHR
 Initial Sample Wt:
 Dilution:

Autosampler Location: 117
 Date Collected: 11/19/2012 9:27:20 PM
 Data Type: Original
 Initial Sample Vol:
 Sample Prep Vol:

Nebulizer Parameters: L1211051102

Analyte Back Pressure Flow
 All 177.0 kPa 0.50 L/min

Mean Data: L1211051102

Analyte	Mean Corrected Intensity	Calib. Conc. Units	Std.Dev.	Sample Conc. Units	Std.Dev.	RSD
Y 371.029	2298621.1				25169.27	1.09%
YRADIAL	282139.3				1186.57	0.42%
Ga 417.206	1191978.0				21509.19	1.80%
GaRADIAL	75237.7				870.24	1.16%
Ag 328.068†	-1139.1	0.00027 mg/L	0.000407	0.00027 mg/L	0.000407	151.94%

Approved: November 20, 2012

Ken H. Rhodes

Al 396.153†	474091.1	71.7 mg/L	0.14	71.7 mg/L	0.14	0.20%
As 188.979†	16.2	0.00329 mg/L	0.000914	0.00329 mg/L	0.000914	27.79%
Ba 233.527†	5748.7	0.0366 mg/L	0.00028	0.0366 mg/L	0.00028	0.77%
Be 234.861†	2738.8	0.00027 mg/L	0.000217	0.00027 mg/L	0.000217	80.18%
B 249.677†	4296.2	0.0430 mg/L	0.00103	0.0430 mg/L	0.00103	2.39%
Ca 227.546†	1895.3	5.25 mg/L	0.139	5.25 mg/L	0.139	2.64%
Cd 228.802†	8.4	0.00016 mg/L	0.000208	0.00016 mg/L	0.000208	129.56%
Co 228.616†	46.2	0.00046 mg/L	0.000307	0.00046 mg/L	0.000307	66.55%
Cr 267.716†	1713.1	0.0129 mg/L	0.00018	0.0129 mg/L	0.00018	1.38%
Cu 327.393†	9301.9	0.0349 mg/L	0.00117	0.0349 mg/L	0.00117	3.36%
Fe 239.562†	95885.2	10.1 mg/L	0.02	10.1 mg/L	0.02	0.20%
Mg 279.077†	3219.7	1.14 mg/L	0.006	1.14 mg/L	0.006	0.49%
Mn 257.610†	361881.5	0.432 mg/L	0.0056	0.432 mg/L	0.0056	1.29%
Mo 202.031†	118.0	0.00376 mg/L	0.000146	0.00376 mg/L	0.000146	3.88%
Ni 231.604†	1557.1	0.0246 mg/L	0.00057	0.0246 mg/L	0.00057	2.32%
Pb 220.353†	-135.3	-0.00158 mg/L	0.002616	-0.00158 mg/L	0.002616	165.23%
Sb 206.836†	6.1	0.00206 mg/L	0.000361	0.00206 mg/L	0.000361	17.51%
Se 196.026†	5.2	0.00887 mg/L	0.004454	0.00887 mg/L	0.004454	50.22%
Si 251.611†	183182.4	3.87 mg/L	0.100	3.87 mg/L	0.100	2.57%
Sn 189.927†	-68.2	-0.00799 mg/L	0.000895	-0.00799 mg/L	0.000895	11.20%
Ti 334.940†	4492.5	0.00427 mg/L	0.000491	0.00427 mg/L	0.000491	11.51%
Tl 190.801†	-9.6	-0.00323 mg/L	0.001760	-0.00323 mg/L	0.001760	54.58%
V 290.880†	1658.8	0.00472 mg/L	0.000387	0.00472 mg/L	0.000387	8.21%
Zn 206.200†	6406.5	0.141 mg/L	0.0017	0.141 mg/L	0.0017	1.19%
K 766.490†	39888.9	13.0 mg/L	0.16	13.0 mg/L	0.16	1.23%
Na 589.592†	4857779.0	276 mg/L	3.3	276 mg/L	3.3	1.20%
Sr 407.771†	67514.2	0.0254 mg/L	0.00019	0.0254 mg/L	0.00019	0.75%
Li 670.784†	26.0	-0.00279 mg/L	0.000169	-0.00279 mg/L	0.000169	6.05%

Sequence No.: 81

Sample ID: L1211051102PS WG414696-01

Analyst: KHR

Initial Sample Wt:

Dilution:

Sampler Location: 118

Date Collected: 11/19/2012 9:33:25 PM

Data Type: Original

Initial Sample Vol:

Sample Prep Vol:

Nebulizer Parameters: L1211051102PS WG414696-01

Analyte

Back Pressure

Flow

All

176.0 kPa

0.50 L/min

Mean Data: L1211051102PS WG414696-01

Analyte	Mean Corrected Intensity	Calib. Conc. Units	Std.Dev.	Sample Conc. Units	Std.Dev.	RSD
Y 371.029	2294067.0				21392.53	0.93%
YRADIAL	289397.2				4352.19	1.50%
Ga 417.206	1182730.7				20698.50	1.75%
GaRADIAL	76565.8				1303.93	1.70%
Ag 328.068†	62017.1	0.196 mg/L	0.0075	0.196 mg/L	0.0075	3.84%
Al 396.153†	447069.0	67.6 mg/L	1.66	67.6 mg/L	1.66	2.45%
As 188.979†	540.8	0.191 mg/L	0.0057	0.191 mg/L	0.0057	2.98%
Ba 233.527†	77206.3	0.523 mg/L	0.0063	0.523 mg/L	0.0063	1.21%
Be 234.861†	29178.8	0.0240 mg/L	0.00091	0.0240 mg/L	0.00091	3.79%
B 249.677†	93043.1	0.989 mg/L	0.0386	0.989 mg/L	0.0386	3.90%
Ca 227.546†	3531.2	9.73 mg/L	0.294	9.73 mg/L	0.294	3.02%
Cd 228.802†	1056.1	0.0229 mg/L	0.00104	0.0229 mg/L	0.00104	4.57%
Co 228.616†	3597.6	0.0970 mg/L	0.00037	0.0970 mg/L	0.00037	0.38%
Cr 267.716†	32698.3	0.252 mg/L	0.0048	0.252 mg/L	0.0048	1.90%
Cu 327.393†	74918.9	0.279 mg/L	0.0083	0.279 mg/L	0.0083	2.97%
Fe 239.562†	101131.4	10.6 mg/L	0.20	10.6 mg/L	0.20	1.91%
Mg 279.077†	15874.5	5.71 mg/L	0.089	5.71 mg/L	0.089	1.57%
Mn 257.610†	529206.2	0.633 mg/L	0.0032	0.633 mg/L	0.0032	0.51%
Mo 202.031†	14261.2	0.483 mg/L	0.0069	0.483 mg/L	0.0069	1.43%
Ni 231.604†	16373.3	0.274 mg/L	0.0007	0.274 mg/L	0.0007	0.24%
Pb 220.353†	2381.4	0.238 mg/L	0.0024	0.238 mg/L	0.0024	1.03%
Sb 206.836†	2049.7	0.573 mg/L	0.0185	0.573 mg/L	0.0185	3.24%
Se 196.026†	307.2	0.195 mg/L	0.0080	0.195 mg/L	0.0080	4.10%
Si 251.611†	278361.1	5.88 mg/L	0.167	5.88 mg/L	0.167	2.84%
Sn 189.927†	-110.0	-0.0124 mg/L	0.00044	-0.0124 mg/L	0.00044	3.54%
Ti 334.940†	545645.2	0.490 mg/L	0.0019	0.490 mg/L	0.0019	0.39%
Tl 190.801†	677.8	0.238 mg/L	0.0040	0.238 mg/L	0.0040	1.69%

Approved: November 20, 2012

Ken H. Rhodes

V 290.880†	113238.3	0.493 mg/L	0.0081	0.493 mg/L	0.0081	1.65%
Zn 206.200†	27245.8	0.612 mg/L	0.0185	0.612 mg/L	0.0185	3.02%
K 766.490†	107205.5	35.6 mg/L	0.87	35.6 mg/L	0.87	2.44%
Na 589.592†	4696573.1	266 mg/L	4.2	266 mg/L	4.2	1.59%
Sr 407.771†	1262750.5	0.527 mg/L	0.0126	0.527 mg/L	0.0126	2.39%
Li 670.784†	66279.8	0.495 mg/L	0.0145	0.495 mg/L	0.0145	2.92%

Sequence No.: 82

Sample ID: L1211051102DL WG414696-02

Analyst: KHR

Initial Sample Wt:

Dilution:

Sampler Location: 119

Date Collected: 11/19/2012 9:39:30 PM

Data Type: Original

Initial Sample Vol:

Sample Prep Vol:

Nebulizer Parameters: L1211051102DL WG414696-02

Analyte

Back Pressure

Flow

All

176.0 kPa

0.50 L/min

Mean Data: L1211051102DL WG414696-02

Analyte	Mean Corrected Intensity	Calib. Conc. Units	Std.Dev.	Sample Conc. Units	Std.Dev.	RSD
Y 371.029	2340759.5				16337.18	0.70%
YRADIAL	275340.3				4613.68	1.68%
Ga 417.206	1242439.0				23238.44	1.87%
GARADIAL	76596.3				1123.14	1.47%
Ag 328.068†	-392.7	-0.00102 mg/L	0.000220	-0.00102 mg/L	0.000220	21.63%
Al 396.153†	96414.6	14.6 mg/L	0.09	14.6 mg/L	0.09	0.64%
As 188.979†	1.9	0.00007 mg/L	0.000840	0.00007 mg/L	0.000840	>999.9%
Ba 233.527†	1171.7	0.00588 mg/L	0.000130	0.00588 mg/L	0.000130	2.21%
Be 234.861†	740.8	0.00018 mg/L	0.000057	0.00018 mg/L	0.000057	31.34%
B 249.677†	1229.7	0.0137 mg/L	0.00164	0.0137 mg/L	0.00164	11.96%
Ca 227.546†	382.5	1.06 mg/L	0.019	1.06 mg/L	0.019	1.80%
Cd 228.802†	-0.1	0.00000 mg/L	0.000062	0.00000 mg/L	0.000062	>999.9%
Co 228.616†	-3.3	-0.00067 mg/L	0.000148	-0.00067 mg/L	0.000148	22.14%
Cr 267.716†	369.7	0.00225 mg/L	0.000010	0.00225 mg/L	0.000010	0.46%
Cu 327.393†	1907.7	0.00655 mg/L	0.000344	0.00655 mg/L	0.000344	5.25%
Fe 239.562†	20410.9	2.14 mg/L	0.020	2.14 mg/L	0.020	0.95%
Mg 279.077†	699.0	0.241 mg/L	0.0042	0.241 mg/L	0.0042	1.73%
Mn 257.610†	78040.1	0.0915 mg/L	0.00090	0.0915 mg/L	0.00090	0.98%
Mo 202.031†	23.1	0.00009 mg/L	0.000257	0.00009 mg/L	0.000257	291.52%
Ni 231.604†	331.0	0.00390 mg/L	0.000244	0.00390 mg/L	0.000244	6.25%
Pb 220.353†	-16.6	0.00004 mg/L	0.000530	0.00004 mg/L	0.000530	>999.9%
Sb 206.836†	1.1	0.00044 mg/L	0.000948	0.00044 mg/L	0.000948	215.19%
Se 196.026†	4.4	0.00459 mg/L	0.002694	0.00459 mg/L	0.002694	58.65%
Si 251.611†	36125.4	0.755 mg/L	0.0208	0.755 mg/L	0.0208	2.75%
Sn 189.927†	-41.7	-0.00521 mg/L	0.000751	-0.00521 mg/L	0.000751	14.39%
Ti 334.940†	1016.7	0.00056 mg/L	0.000424	0.00056 mg/L	0.000424	75.57%
Tl 190.801†	-1.2	-0.00163 mg/L	0.001095	-0.00163 mg/L	0.001095	67.27%
V 290.880†	862.6	0.00174 mg/L	0.001636	0.00174 mg/L	0.001636	93.92%
Zn 206.200†	1523.4	0.0323 mg/L	0.00009	0.0323 mg/L	0.00009	0.28%
K 766.490†	8341.3	2.74 mg/L	0.026	2.74 mg/L	0.026	0.94%
Na 589.592†	974672.5	49.5 mg/L	0.76	49.5 mg/L	0.76	1.54%
Sr 407.771†	14226.9	0.00309 mg/L	0.000125	0.00309 mg/L	0.000125	4.04%
Li 670.784†	44.2	-0.00265 mg/L	0.000055	-0.00265 mg/L	0.000055	2.07%

Sequence No.: 83

Sample ID: CCV

Analyst:

Initial Sample Wt:

Dilution:

Sampler Location: 6

Date Collected: 11/19/2012 9:46:26 PM

Data Type: Original

Initial Sample Vol:

Sample Prep Vol:

Nebulizer Parameters: CCV

Analyte

Back Pressure

Flow

All

176.0 kPa

0.50 L/min

Mean Data: CCV

Mean Corrected

Calib.

Sample

Approved: November 20, 2012

Ken H. Rhodes

Analyte	Intensity	Conc. Units	Std.Dev.	Conc. Units	Std.Dev.	RSD
Y 371.029	2374335.1				12603.83	0.53%
YRADIAL	284522.3				1932.13	0.68%
Ga 417.206	1200558.9				14547.50	1.21%
GaRADIAL	74871.6				571.95	0.76%
Ag 328.068†	124868.2	0.387 mg/L	0.0080	0.387 mg/L	0.0080	2.06%
QC value within limits for Ag	328.068	Recovery = 96.66%				
Al 396.153†	64910.2	9.74 mg/L	0.048	9.74 mg/L	0.048	0.49%
QC value within limits for Al	396.153	Recovery = 97.37%				
As 188.979†	1054.6	0.377 mg/L	0.0061	0.377 mg/L	0.0061	1.62%
QC value within limits for As	188.979	Recovery = 94.34%				
Ba 233.527†	144921.2	0.984 mg/L	0.0061	0.984 mg/L	0.0061	0.62%
QC value within limits for Ba	233.527	Recovery = 98.42%				
Be 234.861†	53058.4	0.0471 mg/L	0.00077	0.0471 mg/L	0.00077	1.63%
QC value within limits for Be	234.861	Recovery = 94.14%				
B 249.677†	44359.2	0.471 mg/L	0.0087	0.471 mg/L	0.0087	1.86%
QC value within limits for B	249.677	Recovery = 94.21%				
Ca 227.546†	3628.1	9.97 mg/L	0.190	9.97 mg/L	0.190	1.91%
QC value within limits for Ca	227.546	Recovery = 99.72%				
Cd 228.802†	2113.7	0.0458 mg/L	0.00138	0.0458 mg/L	0.00138	3.01%
QC value within limits for Cd	228.802	Recovery = 91.63%				
Co 228.616†	7293.9	0.198 mg/L	0.0022	0.198 mg/L	0.0022	1.14%
QC value within limits for Co	228.616	Recovery = 98.85%				
Cr 267.716†	63047.6	0.486 mg/L	0.0034	0.486 mg/L	0.0034	0.70%
QC value within limits for Cr	267.716	Recovery = 97.25%				
Cu 327.393†	129672.1	0.483 mg/L	0.0085	0.483 mg/L	0.0085	1.77%
QC value within limits for Cu	327.393	Recovery = 96.52%				
Fe 239.562†	37148.1	3.90 mg/L	0.027	3.90 mg/L	0.027	0.69%
QC value within limits for Fe	239.562	Recovery = 97.41%				
Mg 279.077†	27144.1	9.78 mg/L	0.114	9.78 mg/L	0.114	1.17%
QC value within limits for Mg	279.077	Recovery = 97.83%				
Mn 257.610†	418631.5	0.501 mg/L	0.0026	0.501 mg/L	0.0026	0.52%
QC value within limits for Mn	257.610	Recovery = 100.18%				
Mo 202.031†	28598.2	0.968 mg/L	0.0034	0.968 mg/L	0.0034	0.35%
QC value within limits for Mo	202.031	Recovery = 96.76%				
Ni 231.604†	29328.8	0.493 mg/L	0.0043	0.493 mg/L	0.0043	0.88%
QC value within limits for Ni	231.604	Recovery = 98.51%				
Pb 220.353†	5176.9	0.495 mg/L	0.0043	0.495 mg/L	0.0043	0.87%
QC value within limits for Pb	220.353	Recovery = 99.01%				
Sb 206.836†	4065.9	1.14 mg/L	0.023	1.14 mg/L	0.023	2.00%
QC value within limits for Sb	206.836	Recovery = 94.64%				
Se 196.026†	614.5	0.380 mg/L	0.0081	0.380 mg/L	0.0081	2.13%
QC value within limits for Se	196.026	Recovery = 95.04%				
Si 251.611†	229299.0	4.84 mg/L	0.066	4.84 mg/L	0.066	1.37%
QC value within limits for Si	251.611	Recovery = 96.72%				
Sn 189.927†	9309.1	0.976 mg/L	0.0097	0.976 mg/L	0.0097	1.00%
QC value within limits for Sn	189.927	Recovery = 97.58%				
Ti 334.940†	1092932.8	0.980 mg/L	0.0040	0.980 mg/L	0.0040	0.41%
QC value within limits for Ti	334.940	Recovery = 97.99%				
Tl 190.801†	1451.4	0.507 mg/L	0.0009	0.507 mg/L	0.0009	0.17%
QC value within limits for Tl	190.801	Recovery = 101.36%				
V 290.880†	225221.1	0.983 mg/L	0.0020	0.983 mg/L	0.0020	0.20%
QC value within limits for V	290.880	Recovery = 98.27%				
Zn 206.200†	42691.7	0.962 mg/L	0.0091	0.962 mg/L	0.0091	0.95%
QC value within limits for Zn	206.200	Recovery = 96.24%				
K 766.490†	145826.5	48.8 mg/L	0.30	48.8 mg/L	0.30	0.61%
QC value within limits for K	766.490	Recovery = 97.69%				
Na 589.592†	963875.5	48.9 mg/L	0.63	48.9 mg/L	0.63	1.29%
QC value within limits for Na	589.592	Recovery = 97.80%				
Sr 407.771†	2445315.2	1.02 mg/L	0.010	1.02 mg/L	0.010	0.95%
QC value within limits for Sr	407.771	Recovery = 102.32%				
Li 670.784†	130617.9	0.978 mg/L	0.0049	0.978 mg/L	0.0049	0.50%
QC value within limits for Li	670.784	Recovery = 97.82%				

All analyte(s) passed QC.

Sequence No.: 84

Sample ID: CCB

Analyst:

Initial Sample Wt:

Dilution:

autosampler Location: 1

Date Collected: 11/19/2012 9:52:27 PM

Data Type: Original

Initial Sample Vol:

Sample Prep Vol:

Approved: November 20, 2012

Ken H. Rhodes

Nebulizer Parameters: CCB

Analyte Back Pressure Flow
All 176.0 kPa 0.50 L/min

Mean Data: CCB

Analyte	Mean Corrected Intensity	Calib. Conc. Units	Std.Dev.	Sample Conc. Units	Std.Dev.	RSD
Y 371.029	2462456.6				8559.58	0.35%
YRADIAL	287676.2				5638.38	1.96%
Ga 417.206	1238406.1				1690.12	0.14%
GaRADIAL	77920.2				2117.74	2.72%
Ag 328.068†	2.0	-0.00078 mg/L	0.000371	-0.00078 mg/L	0.000371	47.61%
QC value within limits for Ag	328.068	Recovery =	Not calculated			
Al 396.153†	22.5	-0.0123 mg/L	0.00125	-0.0123 mg/L	0.00125	10.11%
QC value within limits for Al	396.153	Recovery =	Not calculated			
As 188.979†	4.5	0.00150 mg/L	0.001243	0.00150 mg/L	0.001243	82.78%
QC value within limits for As	188.979	Recovery =	Not calculated			
Ba 233.527†	13.2	-0.00187 mg/L	0.000146	-0.00187 mg/L	0.000146	7.83%
QC value within limits for Ba	233.527	Recovery =	Not calculated			
Be 234.861†	91.4	0.00006 mg/L	0.000016	0.00006 mg/L	0.000016	26.79%
QC value within limits for Be	234.861	Recovery =	Not calculated			
B 249.677†	373.8	0.00552 mg/L	0.000266	0.00552 mg/L	0.000266	4.82%
QC value within limits for B	249.677	Recovery =	Not calculated			
Ca 227.546†	25.6	0.0682 mg/L	0.01528	0.0682 mg/L	0.01528	22.39%
QC value within limits for Ca	227.546	Recovery =	Not calculated			
Cd 228.802†	-5.3	-0.00012 mg/L	0.000017	-0.00012 mg/L	0.000017	14.33%
QC value within limits for Cd	228.802	Recovery =	Not calculated			
Co 228.616†	-6.9	-0.00071 mg/L	0.000130	-0.00071 mg/L	0.000130	18.46%
QC value within limits for Co	228.616	Recovery =	Not calculated			
Cr 267.716†	21.7	-0.00051 mg/L	0.000106	-0.00051 mg/L	0.000106	20.63%
QC value within limits for Cr	267.716	Recovery =	Not calculated			
Cu 327.393†	88.8	-0.00043 mg/L	0.000259	-0.00043 mg/L	0.000259	59.81%
QC value within limits for Cu	327.393	Recovery =	Not calculated			
Fe 239.562†	34.2	-0.00289 mg/L	0.000638	-0.00289 mg/L	0.000638	22.04%
QC value within limits for Fe	239.562	Recovery =	Not calculated			
Mg 279.077†	7.5	-0.00691 mg/L	0.003110	-0.00691 mg/L	0.003110	45.01%
QC value within limits for Mg	279.077	Recovery =	Not calculated			
Mn 257.610†	636.2	-0.00139 mg/L	0.000022	-0.00139 mg/L	0.000022	1.59%
QC value within limits for Mn	257.610	Recovery =	Not calculated			
Mo 202.031†	6.1	-0.00061 mg/L	0.000207	-0.00061 mg/L	0.000207	33.70%
QC value within limits for Mo	202.031	Recovery =	Not calculated			
Ni 231.604†	-4.9	-0.00176 mg/L	0.000214	-0.00176 mg/L	0.000214	12.17%
QC value within limits for Ni	231.604	Recovery =	Not calculated			
Pb 220.353†	2.8	-0.00056 mg/L	0.000668	-0.00056 mg/L	0.000668	118.84%
QC value within limits for Pb	220.353	Recovery =	Not calculated			
Sb 206.836†	2.1	0.00063 mg/L	0.000702	0.00063 mg/L	0.000702	111.05%
QC value within limits for Sb	206.836	Recovery =	Not calculated			
Se 196.026†	9.1	0.00646 mg/L	0.000803	0.00646 mg/L	0.000803	12.44%
QC value within limits for Se	196.026	Recovery =	Not calculated			
Si 251.611†	1.4	-0.0102 mg/L	0.00039	-0.0102 mg/L	0.00039	3.85%
QC value within limits for Si	251.611	Recovery =	Not calculated			
Sn 189.927†	-33.2	-0.00432 mg/L	0.000202	-0.00432 mg/L	0.000202	4.67%
QC value within limits for Sn	189.927	Recovery =	Not calculated			
Ti 334.940†	162.8	-0.00034 mg/L	0.000137	-0.00034 mg/L	0.000137	39.75%
QC value within limits for Ti	334.940	Recovery =	Not calculated			
Tl 190.801†	-4.6	-0.00309 mg/L	0.001368	-0.00309 mg/L	0.001368	44.26%
QC value within limits for Tl	190.801	Recovery =	Not calculated			
V 290.880†	-108.7	-0.00237 mg/L	0.001505	-0.00237 mg/L	0.001505	63.52%
QC value within limits for V	290.880	Recovery =	Not calculated			
Zn 206.200†	17.7	-0.00135 mg/L	0.000122	-0.00135 mg/L	0.000122	8.97%
QC value within limits for Zn	206.200	Recovery =	Not calculated			
K 766.490†	67.2	0.0390 mg/L	0.01961	0.0390 mg/L	0.01961	50.27%
QC value within limits for K	766.490	Recovery =	Not calculated			
Na 589.592†	697.3	0.0341 mg/L	0.00451	0.0341 mg/L	0.00451	13.23%
QC value within limits for Na	589.592	Recovery =	Not calculated			
Sr 407.771†	435.5	-0.00268 mg/L	0.000013	-0.00268 mg/L	0.000013	0.50%
QC value within limits for Sr	407.771	Recovery =	Not calculated			
Li 670.784†	91.9	-0.00229 mg/L	0.000250	-0.00229 mg/L	0.000250	10.90%
QC value within limits for Li	670.784	Recovery =	Not calculated			
All analyte(s) passed QC.						

Approved: November 20, 2012

Ken H. Rhodes

Sequence No.: 85

Sample ID: L1211051104

Analyst: KHR

Initial Sample Wt:

Dilution:

autosampler Location: 120

Date Collected: 11/19/2012 9:59:20 PM

Data Type: Original

Initial Sample Vol:

Sample Prep Vol:

Nebulizer Parameters: L1211051104

Analyte	Back Pressure	Flow
All	177.0 kPa	0.50 L/min

Mean Data: L1211051104

Analyte	Mean Corrected Intensity	Calib. Conc. Units	Std.Dev.	Sample Conc. Units	Std.Dev.	RSD
Y 371.029	2185625.3				24207.57	1.11%
YRADIAL	276394.6				2024.56	0.73%
Ga 417.206	1200053.9				10220.43	0.85%
GaRADIAL	77199.7				843.54	1.09%
Ag 328.068†	294.1	0.00110 mg/L	0.000237	0.00110 mg/L	0.000237	21.52%
Al 396.153†	838.9	0.111 mg/L	0.0051	0.111 mg/L	0.0051	4.60%
As 188.979†	-17.0	-0.00579 mg/L	0.002338	-0.00579 mg/L	0.002338	40.42%
Ba 233.527†	2530.8	0.0151 mg/L	0.00013	0.0151 mg/L	0.00013	0.86%
Be 234.861†	934.1	0.00032 mg/L	0.000076	0.00032 mg/L	0.000076	23.36%
B 249.677†	21465.4	0.229 mg/L	0.0022	0.229 mg/L	0.0022	0.96%
Ca 227.546†	47915.6	126 mg/L	2.1	126 mg/L	2.1	1.64%
Cd 228.802†	25.2	0.00060 mg/L	0.000252	0.00060 mg/L	0.000252	42.08%
Co 228.616†	30.1	0.00027 mg/L	0.000416	0.00027 mg/L	0.000416	156.43%
Cr 267.716†	6189.3	0.0470 mg/L	0.00047	0.0470 mg/L	0.00047	0.99%
Cu 327.393†	2614.7	0.00920 mg/L	0.000457	0.00920 mg/L	0.000457	4.97%
Fe 239.562†	21740.9	2.28 mg/L	0.021	2.28 mg/L	0.021	0.93%
Mg 279.077†	3232.1	1.15 mg/L	0.033	1.15 mg/L	0.033	2.88%
Mn 257.610†	15562.0	0.0165 mg/L	0.00027	0.0165 mg/L	0.00027	1.62%
Mo 202.031†	408.2	0.0131 mg/L	0.00020	0.0131 mg/L	0.00020	1.53%
Ni 231.604†	539.9	0.00743 mg/L	0.000582	0.00743 mg/L	0.000582	7.83%
Pb 220.353†	23.2	0.00120 mg/L	0.000602	0.00120 mg/L	0.000602	50.37%
Sb 206.836†	-1.9	-0.00076 mg/L	0.001380	-0.00076 mg/L	0.001380	181.98%
Se 196.026†	4.8	0.00417 mg/L	0.004345	0.00417 mg/L	0.004345	104.08%
Si 251.611†	234055.4	4.95 mg/L	0.028	4.95 mg/L	0.028	0.57%
Sn 189.927†	-326.3	-0.0351 mg/L	0.00158	-0.0351 mg/L	0.00158	4.50%
Ti 334.940†	2469.8	0.0206 mg/L	0.00162	0.0206 mg/L	0.00162	7.90%
Tl 190.801†	-40.2	-0.0152 mg/L	0.00529	-0.0152 mg/L	0.00529	34.87%
V 290.880†	1868.2	0.00611 mg/L	0.000154	0.00611 mg/L	0.000154	2.53%
Zn 206.200†	1676.5	0.0361 mg/L	0.00053	0.0361 mg/L	0.00053	1.47%
K 766.490†	74593.8	24.4 mg/L	0.18	24.4 mg/L	0.18	0.73%
Na 589.592†	7485702.6	476 mg/L	7.5	476 mg/L	7.5	1.57%
Sr 407.771†	899828.7	0.372 mg/L	0.0017	0.372 mg/L	0.0017	0.45%
Li 670.784†	1000.2	0.00453 mg/L	0.000579	0.00453 mg/L	0.000579	12.78%

Sequence No.: 86

Sample ID: L1211051105

Analyst: KHR

Initial Sample Wt:

Dilution:

autosampler Location: 121

Date Collected: 11/19/2012 10:05:24 PM

Data Type: Original

Initial Sample Vol:

Sample Prep Vol:

Nebulizer Parameters: L1211051105

Analyte	Back Pressure	Flow
All	176.0 kPa	0.50 L/min

Mean Data: L1211051105

Analyte	Mean Corrected Intensity	Calib. Conc. Units	Std.Dev.	Sample Conc. Units	Std.Dev.	RSD
Y 371.029	2400570.6				20804.72	0.87%
YRADIAL	283831.4				4389.44	1.55%
Ga 417.206	1274810.6				9481.32	0.74%
GaRADIAL	79238.7				927.87	1.17%
Ag 328.068†	-57.9	-0.00092 mg/L	0.000442	-0.00092 mg/L	0.000442	47.97%

Approved: November 20, 2012

Ken H. Rhodes

Al 396.153†	123.1	0.00289 mg/L	0.001523	0.00289 mg/L	0.001523	52.71%
As 188.979†	-1.5	-0.00062 mg/L	0.001368	-0.00062 mg/L	0.001368	220.80%
Ba 233.527†	1339.2	0.00715 mg/L	0.000033	0.00715 mg/L	0.000033	0.46%
Be 234.861†	156.8	0.00010 mg/L	0.000015	0.00010 mg/L	0.000015	14.58%
B 249.677†	1480.7	0.0172 mg/L	0.00032	0.0172 mg/L	0.00032	1.85%
Ca 227.546†	1779.5	4.68 mg/L	0.049	4.68 mg/L	0.049	1.05%
Cd 228.802†	27.3	0.00066 mg/L	0.000130	0.00066 mg/L	0.000130	19.77%
Co 228.616†	413.3	0.0108 mg/L	0.00019	0.0108 mg/L	0.00019	1.75%
Cr 267.716†	4237.1	0.0320 mg/L	0.00022	0.0320 mg/L	0.00022	0.69%
Cu 327.393†	4170.7	0.0148 mg/L	0.00033	0.0148 mg/L	0.00033	2.25%
Fe 239.562†	917.8	0.0899 mg/L	0.00010	0.0899 mg/L	0.00010	0.11%
Mg 279.077†	5179.0	1.86 mg/L	0.007	1.86 mg/L	0.007	0.39%
Mn 257.610†	1741.1	-0.00004 mg/L	0.000033	-0.00004 mg/L	0.000033	90.33%
Mo 202.031†	12.3	-0.00040 mg/L	0.000088	-0.00040 mg/L	0.000088	21.89%
Ni 231.604†	494.9	0.00666 mg/L	0.000279	0.00666 mg/L	0.000279	4.20%
Pb 220.353†	12.2	0.00030 mg/L	0.000434	0.00030 mg/L	0.000434	142.45%
Sb 206.836†	2.0	0.00035 mg/L	0.000340	0.00035 mg/L	0.000340	97.85%
Se 196.026†	7.6	0.00555 mg/L	0.001617	0.00555 mg/L	0.001617	29.12%
Si 251.611†	175957.9	3.72 mg/L	0.034	3.72 mg/L	0.034	0.91%
Sn 189.927†	654.3	0.0678 mg/L	0.00096	0.0678 mg/L	0.00096	1.41%
Ti 334.940†	617.0	0.00074 mg/L	0.000220	0.00074 mg/L	0.000220	29.60%
Tl 190.801†	-16.8	-0.00724 mg/L	0.000574	-0.00724 mg/L	0.000574	7.93%
V 290.880†	427.0	-0.00008 mg/L	0.001947	-0.00008 mg/L	0.001947	>999.9%
Zn 206.200†	18706.2	0.419 mg/L	0.0082	0.419 mg/L	0.0082	1.96%
K 766.490†	5169.4	1.72 mg/L	0.020	1.72 mg/L	0.020	1.14%
Na 589.592†	336901.0	16.8 mg/L	0.34	16.8 mg/L	0.34	2.01%
Sr 407.771†	64185.6	0.0240 mg/L	0.00053	0.0240 mg/L	0.00053	2.21%
Li 670.784†	357.3	-0.00030 mg/L	0.000094	-0.00030 mg/L	0.000094	31.54%

Sequence No.: 87

Sample ID: L1211051107

Analyst: KHR

Initial Sample Wt:

Dilution:

Autosampler Location: 122

Date Collected: 11/19/2012 10:12:21 PM

Data Type: Original

Initial Sample Vol:

Sample Prep Vol:

Nebulizer Parameters: L1211051107

Analyte	Back Pressure	Flow
All	176.0 kPa	0.50 L/min

Mean Data: L1211051107

Analyte	Mean Corrected Intensity	Calib. Conc. Units	Std.Dev.	Sample Conc. Units	Std.Dev.	RSD
Y 371.029	2355986.2				15382.66	0.65%
YRADIAL	285390.7				2253.47	0.79%
Ga 417.206	1247646.7				15053.45	1.21%
GaRADIAL	77973.9				807.62	1.04%
Ag 328.068†	184.7	0.00005 mg/L	0.000401	0.00005 mg/L	0.000401	757.27%
Al 396.153†	148.0	0.00656 mg/L	0.002594	0.00656 mg/L	0.002594	39.57%
As 188.979†	3.8	0.00158 mg/L	0.002613	0.00158 mg/L	0.002613	165.47%
Ba 233.527†	997.5	0.00481 mg/L	0.000220	0.00481 mg/L	0.000220	4.58%
Be 234.861†	426.2	0.00024 mg/L	0.000046	0.00024 mg/L	0.000046	19.35%
B 249.677†	2113.6	0.0227 mg/L	0.00154	0.0227 mg/L	0.00154	6.78%
Ca 227.546†	1705.6	4.52 mg/L	0.080	4.52 mg/L	0.080	1.77%
Cd 228.802†	8.1	0.00052 mg/L	0.000201	0.00052 mg/L	0.000201	38.78%
Co 228.616†	3382.1	0.0918 mg/L	0.00051	0.0918 mg/L	0.00051	0.55%
Cr 267.716†	52001.5	0.401 mg/L	0.0020	0.401 mg/L	0.0020	0.50%
Cu 327.393†	48241.0	0.179 mg/L	0.0022	0.179 mg/L	0.0022	1.21%
Fe 239.562†	5824.0	0.605 mg/L	0.0146	0.605 mg/L	0.0146	2.41%
Mg 279.077†	3094.4	1.10 mg/L	0.032	1.10 mg/L	0.032	2.87%
Mn 257.610†	7895.3	0.00759 mg/L	0.000105	0.00759 mg/L	0.000105	1.38%
Mo 202.031†	81.9	0.00198 mg/L	0.000132	0.00198 mg/L	0.000132	6.64%
Ni 231.604†	3594.9	0.0588 mg/L	0.00059	0.0588 mg/L	0.00059	1.01%
Pb 220.353†	-3.2	-0.00143 mg/L	0.001556	-0.00143 mg/L	0.001556	109.06%
Sb 206.836†	12.1	0.00005 mg/L	0.002083	0.00005 mg/L	0.002083	>999.9%
Se 196.026†	3.6	0.00322 mg/L	0.003934	0.00322 mg/L	0.003934	122.21%
Si 251.611†	195781.3	4.14 mg/L	0.049	4.14 mg/L	0.049	1.19%
Sn 189.927†	4.0	-0.00043 mg/L	0.000538	-0.00043 mg/L	0.000538	126.02%
Ti 334.940†	661.9	0.00065 mg/L	0.000085	0.00065 mg/L	0.000085	13.20%
Tl 190.801†	-3.9	-0.00293 mg/L	0.000483	-0.00293 mg/L	0.000483	16.48%

Approved: November 20, 2012

Ken H. Rhodes

V 290.880†	1061.5	0.00268 mg/L	0.000324	0.00268 mg/L	0.000324	12.07%
Zn 206.200†	174951.7	3.93 mg/L	0.108	3.93 mg/L	0.108	2.73%
K 766.490†	5238.1	1.70 mg/L	0.039	1.70 mg/L	0.039	2.33%
Na 589.592†	1156164.3	58.9 mg/L	0.99	58.9 mg/L	0.99	1.68%
Sr 407.771†	56620.1	0.0208 mg/L	0.00033	0.0208 mg/L	0.00033	1.58%
Li 670.784†	52.4	-0.00259 mg/L	0.000415	-0.00259 mg/L	0.000415	16.04%

Sequence No.: 88

Sample ID: L1211051801

Analyst: KHR

Initial Sample Wt:

Dilution:

Autosampler Location: 123

Date Collected: 11/19/2012 10:18:19 PM

Data Type: Original

Initial Sample Vol:

Sample Prep Vol:

Nebulizer Parameters: L1211051801

Analyte	Back Pressure	Flow
All	177.0 kPa	0.50 L/min

Mean Data: L1211051801

Analyte	Mean Corrected Intensity	Calib. Conc. Units	Std.Dev.	Sample Conc. Units	Std.Dev.	RSD
Y 371.029	2406032.7				25269.96	1.05%
YRADIAL	293225.5				4157.95	1.42%
Ga 417.206	1249236.2				28479.94	2.28%
GARADIAL	78044.7				737.88	0.95%
Ag 328.068†	-1048.9	-0.00049 mg/L	0.000045	-0.00049 mg/L	0.000045	9.16%
Al 396.153†	84842.9	12.8 mg/L	0.17	12.8 mg/L	0.17	1.31%
As 188.979†	175.3	0.0644 mg/L	0.00278	0.0644 mg/L	0.00278	4.31%
Ba 233.527†	8112.2	0.0528 mg/L	0.00035	0.0528 mg/L	0.00035	0.67%
Be 234.861†	2561.1	0.00062 mg/L	0.000035	0.00062 mg/L	0.000035	5.62%
B 249.677†	1925.0	0.0186 mg/L	0.00005	0.0186 mg/L	0.00005	0.27%
Ca 227.546†	1755.9	4.80 mg/L	0.188	4.80 mg/L	0.188	3.93%
Cd 228.802†	33.6	0.00044 mg/L	0.000356	0.00044 mg/L	0.000356	81.51%
Co 228.616†	62.5	0.00061 mg/L	0.000283	0.00061 mg/L	0.000283	46.12%
Cr 267.716†	8870.4	0.0676 mg/L	0.00074	0.0676 mg/L	0.00074	1.10%
Cu 327.393†	18599.9	0.0693 mg/L	0.00218	0.0693 mg/L	0.00218	3.15%
Fe 239.562†	72912.1	7.66 mg/L	0.102	7.66 mg/L	0.102	1.34%
Mg 279.077†	3456.0	1.23 mg/L	0.013	1.23 mg/L	0.013	1.06%
Mn 257.610†	181859.5	0.216 mg/L	0.0042	0.216 mg/L	0.0042	1.93%
Mo 202.031†	37.1	0.00087 mg/L	0.000317	0.00087 mg/L	0.000317	36.49%
Ni 231.604†	410.0	0.00523 mg/L	0.000600	0.00523 mg/L	0.000600	11.47%
Pb 220.353†	163.9	0.0163 mg/L	0.00167	0.0163 mg/L	0.00167	10.24%
Sb 206.836†	-1.2	-0.00049 mg/L	0.001619	-0.00049 mg/L	0.001619	328.52%
Se 196.026†	3.9	0.00506 mg/L	0.002536	0.00506 mg/L	0.002536	50.14%
Si 251.611†	556563.6	11.8 mg/L	0.26	11.8 mg/L	0.26	2.22%
Sn 189.927†	-218.1	-0.0237 mg/L	0.00557	-0.0237 mg/L	0.00557	23.45%
Ti 334.940†	186134.8	0.167 mg/L	0.0025	0.167 mg/L	0.0025	1.51%
Tl 190.801†	-7.7	-0.00195 mg/L	0.002843	-0.00195 mg/L	0.002843	145.40%
V 290.880†	6211.7	0.0248 mg/L	0.00016	0.0248 mg/L	0.00016	0.65%
Zn 206.200†	6383.7	0.142 mg/L	0.0035	0.142 mg/L	0.0035	2.50%
K 766.490†	13094.4	4.37 mg/L	0.025	4.37 mg/L	0.025	0.56%
Na 589.592†	20105.4	0.997 mg/L	0.0057	0.997 mg/L	0.0057	0.57%
Sr 407.771†	45571.7	0.0162 mg/L	0.00024	0.0162 mg/L	0.00024	1.49%
Li 670.784†	965.4	0.00427 mg/L	0.000257	0.00427 mg/L	0.000257	6.01%

Sequence No.: 89

Sample ID: CCV

Analyst:

Initial Sample Wt:

Dilution:

Autosampler Location: 6

Date Collected: 11/19/2012 10:24:18 PM

Data Type: Original

Initial Sample Vol:

Sample Prep Vol:

Nebulizer Parameters: CCV

Analyte	Back Pressure	Flow
All	177.0 kPa	0.50 L/min

Mean Data: CCV

Mean Corrected	Calib.	Sample

Approved: November 20, 2012

Ken H. Rhodes

Analyte	Intensity	Conc. Units	Std.Dev.	Conc. Units	Std.Dev.	RSD
Y 371.029	2351807.9				21540.13	0.92%
YRADIAL	286276.7				3841.33	1.34%
Ga 417.206	1178114.0				26344.05	2.24%
GaRADIAL	75874.5				716.11	0.94%
Ag 328.068†	128267.8	0.397 mg/L	0.0133	0.397 mg/L	0.0133	3.36%
QC value within limits for Ag	328.068	Recovery = 99.28%				
Al 396.153†	65322.0	9.80 mg/L	0.007	9.80 mg/L	0.007	0.07%
QC value within limits for Al	396.153	Recovery = 97.98%				
As 188.979†	1067.2	0.382 mg/L	0.0087	0.382 mg/L	0.0087	2.29%
QC value within limits for As	188.979	Recovery = 95.46%				
Ba 233.527†	147678.6	1.00 mg/L	0.014	1.00 mg/L	0.014	1.43%
QC value within limits for Ba	233.527	Recovery = 100.29%				
Be 234.861†	54577.8	0.0484 mg/L	0.00142	0.0484 mg/L	0.00142	2.93%
QC value within limits for Be	234.861	Recovery = 96.87%				
B 249.677†	45450.4	0.483 mg/L	0.0168	0.483 mg/L	0.0168	3.48%
QC value within limits for B	249.677	Recovery = 96.53%				
Ca 227.546†	3702.4	10.2 mg/L	0.28	10.2 mg/L	0.28	2.76%
QC value within limits for Ca	227.546	Recovery = 101.77%				
Cd 228.802†	2160.7	0.0468 mg/L	0.00187	0.0468 mg/L	0.00187	3.98%
QC value within limits for Cd	228.802	Recovery = 93.69%				
Co 228.616†	7353.7	0.199 mg/L	0.0025	0.199 mg/L	0.0025	1.24%
QC value within limits for Co	228.616	Recovery = 99.67%				
Cr 267.716†	64505.0	0.497 mg/L	0.0045	0.497 mg/L	0.0045	0.90%
QC value within limits for Cr	267.716	Recovery = 99.50%				
Cu 327.393†	133861.6	0.498 mg/L	0.0186	0.498 mg/L	0.0186	3.74%
QC value within limits for Cu	327.393	Recovery = 99.63%				
Fe 239.562†	37291.4	3.91 mg/L	0.034	3.91 mg/L	0.034	0.86%
QC value within limits for Fe	239.562	Recovery = 97.79%				
Mg 279.077†	27175.0	9.79 mg/L	0.111	9.79 mg/L	0.111	1.14%
QC value within limits for Mg	279.077	Recovery = 97.94%				
Mn 257.610†	426572.6	0.510 mg/L	0.0083	0.510 mg/L	0.0083	1.63%
QC value within limits for Mn	257.610	Recovery = 102.09%				
Mo 202.031†	29123.4	0.985 mg/L	0.0090	0.985 mg/L	0.0090	0.91%
QC value within limits for Mo	202.031	Recovery = 98.54%				
Ni 231.604†	29994.2	0.504 mg/L	0.0053	0.504 mg/L	0.0053	1.05%
QC value within limits for Ni	231.604	Recovery = 100.75%				
Pb 220.353†	5225.6	0.500 mg/L	0.0055	0.500 mg/L	0.0055	1.10%
QC value within limits for Pb	220.353	Recovery = 99.94%				
Sb 206.836†	4144.8	1.16 mg/L	0.042	1.16 mg/L	0.042	3.59%
QC value within limits for Sb	206.836	Recovery = 96.48%				
Se 196.026†	629.5	0.389 mg/L	0.0084	0.389 mg/L	0.0084	2.17%
QC value within limits for Se	196.026	Recovery = 97.35%				
Si 251.611†	236225.0	4.98 mg/L	0.110	4.98 mg/L	0.110	2.21%
QC value within limits for Si	251.611	Recovery = 99.65%				
Sn 189.927†	9376.3	0.983 mg/L	0.0103	0.983 mg/L	0.0103	1.05%
QC value within limits for Sn	189.927	Recovery = 98.29%				
Ti 334.940†	1105296.6	0.991 mg/L	0.0059	0.991 mg/L	0.0059	0.60%
QC value within limits for Ti	334.940	Recovery = 99.10%				
Tl 190.801†	1467.4	0.512 mg/L	0.0072	0.512 mg/L	0.0072	1.41%
QC value within limits for Tl	190.801	Recovery = 102.49%				
V 290.880†	230267.0	1.00 mg/L	0.012	1.00 mg/L	0.012	1.20%
QC value within limits for V	290.880	Recovery = 100.48%				
Zn 206.200†	43254.1	0.975 mg/L	0.0136	0.975 mg/L	0.0136	1.40%
QC value within limits for Zn	206.200	Recovery = 97.51%				
K 766.490†	145785.9	48.8 mg/L	0.26	48.8 mg/L	0.26	0.54%
QC value within limits for K	766.490	Recovery = 97.66%				
Na 589.592†	952408.7	48.3 mg/L	0.97	48.3 mg/L	0.97	2.00%
QC value within limits for Na	589.592	Recovery = 96.61%				
Sr 407.771†	2428186.4	1.02 mg/L	0.026	1.02 mg/L	0.026	2.57%
QC value within limits for Sr	407.771	Recovery = 101.60%				
Li 670.784†	131646.8	0.986 mg/L	0.0078	0.986 mg/L	0.0078	0.79%
QC value within limits for Li	670.784	Recovery = 98.59%				

All analyte(s) passed QC.

Sequence No.: 90

Sample ID: CCB

Analyst:

Initial Sample Wt:

Dilution:

autosampler Location: 1

Date Collected: 11/19/2012 10:30:19 PM

Data Type: Original

Initial Sample Vol:

Sample Prep Vol:

Approved: November 20, 2012

Ken H. Rhodes

Nebulizer Parameters: CCB

Analyte Back Pressure Flow
All 177.0 kPa 0.50 L/min

Mean Data: CCB

Analyte	Mean Corrected Intensity	Calib. Conc. Units	Std.Dev.	Sample Conc. Units	Std.Dev.	RSD
Y 371.029	2427060.5				13863.86	0.57%
YRADIAL	287405.9				5328.94	1.85%
Ga 417.206	1223454.9				8125.57	0.66%
GaRADIAL	78041.8				867.97	1.11%
Ag 328.068†	-12.9	-0.00082 mg/L	0.000143	-0.00082 mg/L	0.000143	17.38%
QC value within limits for Ag		328.068 Recovery =	Not calculated			
Al 396.153†	29.8	-0.0112 mg/L	0.00087	-0.0112 mg/L	0.00087	7.78%
QC value within limits for Al		396.153 Recovery =	Not calculated			
As 188.979†	-4.1	-0.00159 mg/L	0.002267	-0.00159 mg/L	0.002267	142.29%
QC value within limits for As		188.979 Recovery =	Not calculated			
Ba 233.527†	16.9	-0.00185 mg/L	0.000099	-0.00185 mg/L	0.000099	5.36%
QC value within limits for Ba		233.527 Recovery =	Not calculated			
Be 234.861†	76.5	0.00005 mg/L	0.000020	0.00005 mg/L	0.000020	43.72%
QC value within limits for Be		234.861 Recovery =	Not calculated			
B 249.677†	267.4	0.00438 mg/L	0.000222	0.00438 mg/L	0.000222	5.06%
QC value within limits for B		249.677 Recovery =	Not calculated			
Ca 227.546†	19.4	0.0519 mg/L	0.03706	0.0519 mg/L	0.03706	71.42%
QC value within limits for Ca		227.546 Recovery =	Not calculated			
Cd 228.802†	-3.1	-0.00005 mg/L	0.000098	-0.00005 mg/L	0.000098	177.52%
QC value within limits for Cd		228.802 Recovery =	Not calculated			
Co 228.616†	-6.2	-0.00069 mg/L	0.000277	-0.00069 mg/L	0.000277	40.33%
QC value within limits for Co		228.616 Recovery =	Not calculated			
Cr 267.716†	21.8	-0.00051 mg/L	0.000056	-0.00051 mg/L	0.000056	10.91%
QC value within limits for Cr		267.716 Recovery =	Not calculated			
Cu 327.393†	140.8	-0.00024 mg/L	0.000259	-0.00024 mg/L	0.000259	108.70%
QC value within limits for Cu		327.393 Recovery =	Not calculated			
Fe 239.562†	63.5	0.00019 mg/L	0.000913	0.00019 mg/L	0.000913	485.30%
QC value within limits for Fe		239.562 Recovery =	Not calculated			
Mg 279.077†	18.4	-0.00297 mg/L	0.002478	-0.00297 mg/L	0.002478	83.33%
QC value within limits for Mg		279.077 Recovery =	Not calculated			
Mn 257.610†	529.9	-0.00152 mg/L	0.000011	-0.00152 mg/L	0.000011	0.73%
QC value within limits for Mn		257.610 Recovery =	Not calculated			
Mo 202.031†	6.6	-0.00060 mg/L	0.000266	-0.00060 mg/L	0.000266	44.65%
QC value within limits for Mo		202.031 Recovery =	Not calculated			
Ni 231.604†	-8.1	-0.00182 mg/L	0.000390	-0.00182 mg/L	0.000390	21.44%
QC value within limits for Ni		231.604 Recovery =	Not calculated			
Pb 220.353†	13.7	0.00047 mg/L	0.001471	0.00047 mg/L	0.001471	311.59%
QC value within limits for Pb		220.353 Recovery =	Not calculated			
Sb 206.836†	6.9	0.00198 mg/L	0.000370	0.00198 mg/L	0.000370	18.75%
QC value within limits for Sb		206.836 Recovery =	Not calculated			
Se 196.026†	9.0	0.00643 mg/L	0.001648	0.00643 mg/L	0.001648	25.63%
QC value within limits for Se		196.026 Recovery =	Not calculated			
Si 251.611†	87.7	-0.00841 mg/L	0.000532	-0.00841 mg/L	0.000532	6.33%
QC value within limits for Si		251.611 Recovery =	Not calculated			
Sn 189.927†	-27.6	-0.00374 mg/L	0.000442	-0.00374 mg/L	0.000442	11.82%
QC value within limits for Sn		189.927 Recovery =	Not calculated			
Ti 334.940†	299.2	-0.00022 mg/L	0.000049	-0.00022 mg/L	0.000049	21.97%
QC value within limits for Ti		334.940 Recovery =	Not calculated			
Tl 190.801†	-4.0	-0.00288 mg/L	0.001329	-0.00288 mg/L	0.001329	46.20%
QC value within limits for Tl		190.801 Recovery =	Not calculated			
V 290.880†	173.7	-0.00113 mg/L	0.001346	-0.00113 mg/L	0.001346	118.67%
QC value within limits for V		290.880 Recovery =	Not calculated			
Zn 206.200†	15.7	-0.00140 mg/L	0.000162	-0.00140 mg/L	0.000162	11.58%
QC value within limits for Zn		206.200 Recovery =	Not calculated			
K 766.490†	56.3	0.0354 mg/L	0.01708	0.0354 mg/L	0.01708	48.27%
QC value within limits for K		766.490 Recovery =	Not calculated			
Na 589.592†	661.8	0.0323 mg/L	0.00606	0.0323 mg/L	0.00606	18.76%
QC value within limits for Na		589.592 Recovery =	Not calculated			
Sr 407.771†	521.5	-0.00264 mg/L	0.000049	-0.00264 mg/L	0.000049	1.87%
QC value within limits for Sr		407.771 Recovery =	Not calculated			
Li 670.784†	44.7	-0.00265 mg/L	0.000470	-0.00265 mg/L	0.000470	17.75%
QC value within limits for Li		670.784 Recovery =	Not calculated			
All analyte(s) passed QC.						

Approved: November 20, 2012

Ken H. Rhodes

2.2.2 Metals ICP-MS Data

2.2.2.1 Summary Data



Login Number: L12110393
Department: Metals
Analyst: Ji Hu

METHOD

Preparation: SW-846 3015

Analysis: SW-846 6020

HOLDING TIMES

Sample Preparation: All holding times were met.

Sample Analysis: All holding times were met.

PREPARATION

Sample preparation proceeded normally.

CALIBRATION

Initial Calibration: All acceptance criteria were met.

Alternate Source Standards: All acceptance criteria were met.

Interference Check Standards: All acceptance criteria were met.

Continuing Calibration: All acceptance criteria were met.

Continuing Calibration Blank: All acceptance criteria were met.

Low Level Check: All acceptance criteria were met.

BATCH QA/QC

Method Blank: All acceptance criteria were met.

Laboratory Control Sample: All acceptance criteria were met.

Serial Dilution/Post Digestion Spikes: WG414570 - All acceptance criteria were met.

Matrix Spikes: All acceptance criteria were met.

SAMPLES

Samples: All acceptance criteria were met.

Narrative ID: 56221

Approved By: Sheri Pfalzgraf

A handwritten signature in black ink, appearing to read "Sheri L. Pfalzgraf", is written over the printed name.

Certificate of Analysis

Sample #: L12110393-01	PrePrep Method: N/A	Instrument: ICP-MS2
Client ID: BLDG 4-PIT-SSP1-GW-11082012	Prep Method: 3015	Prep Date: 11/15/2012 07:35
Matrix: Water	Analytical Method: 6020	Cal Date: 11/18/2012 08:42
Workgroup #: WG414570	Analyst: JYH	Run Date: 11/18/2012 11:37
Collect Date: 11/08/2012 14:11	Dilution: 1	File ID: NI.111812.113704
Sample Tag: 01	Units: mg/L	

Analyte	CAS #	Result	Qual	RL	MDL
Antimony, Total	7440-36-0	0.00266		0.00100	0.000500
Arsenic, Total	7440-38-2	0.112		0.00100	0.000500
Lead, Total	7439-92-1		U	0.00100	0.000500
Selenium, Total	7782-49-2	0.00400		0.00100	0.000500
Thallium, Total	7440-28-0		U	0.000200	0.000100
U	Not detected at or above adjusted sample detection limit.				

Sample #: L12110393-02	PrePrep Method: N/A	Instrument: ICP-MS2
Client ID: BLDG 4-PIT-SSP1-GW-11082012	Prep Method: 3015	Prep Date: 11/15/2012 07:35
Matrix: Water	Analytical Method: 6020	Cal Date: 11/18/2012 08:42
Workgroup #: WG414570	Analyst: JYH	Run Date: 11/18/2012 11:40
Collect Date: 11/08/2012 14:11	Dilution: 1	File ID: NI.111812.114016
Sample Tag: 01	Units: mg/L	

Analyte	CAS #	Result	Qual	RL	MDL
Antimony, Dissolved	7440-36-0	0.00285		0.00100	0.000500
Arsenic, Dissolved	7440-38-2	0.117		0.00100	0.000500
Lead, Dissolved	7439-92-1		U	0.00100	0.000500
Selenium, Dissolved	7782-49-2	0.00456		0.00100	0.000500
Thallium, Dissolved	7440-28-0		U	0.000200	0.000100
U	Not detected at or above adjusted sample detection limit.				

Sample #: L12110393-03	PrePrep Method: N/A	Instrument: ICP-MS2
Client ID: DUP-GW-110812	Prep Method: 3015	Prep Date: 11/15/2012 07:35
Matrix: Water	Analytical Method: 6020	Cal Date: 11/18/2012 08:42
Workgroup #: WG414570	Analyst: JYH	Run Date: 11/18/2012 11:43
Collect Date: 11/08/2012 00:01	Dilution: 1	File ID: NI.111812.114330
Sample Tag: 01	Units: mg/L	

Analyte	CAS #	Result	Qual	RL	MDL
Antimony, Total	7440-36-0	0.00258		0.00100	0.000500

Certificate of Analysis

Analyte	CAS #	Result	Qual	RL	MDL
Arsenic, Total	7440-38-2	0.110		0.00100	0.000500
Lead, Total	7439-92-1		U	0.00100	0.000500
Selenium, Total	7782-49-2	0.00449		0.00100	0.000500
Thallium, Total	7440-28-0		U	0.000200	0.000100
U	Not detected at or above adjusted sample detection limit.				

Sample #: L12110393-04

PrePrep Method: N/A

Instrument: ICP-MS2

Client ID: DUP-GW-110812

Prep Method: 3015

Prep Date: 11/15/2012 07:35

Matrix: Water

Analytical Method: 6020

Cal Date: 11/18/2012 08:42

Workgroup #: WG414570

Analyst: JYH

Run Date: 11/18/2012 11:46

Collect Date: 11/08/2012 00:01

Dilution: 1

File ID: NI.111812.114642

Sample Tag: 01

Units: mg/L

Analyte	CAS #	Result	Qual	RL	MDL
Antimony, Dissolved	7440-36-0	0.00269		0.00100	0.000500
Arsenic, Dissolved	7440-38-2	0.117		0.00100	0.000500
Lead, Dissolved	7439-92-1		U	0.00100	0.000500
Selenium, Dissolved	7782-49-2	0.00505		0.00100	0.000500
Thallium, Dissolved	7440-28-0		U	0.000200	0.000100
U	Not detected at or above adjusted sample detection limit.				

2.2.2.2 QC Summary Data

Example 6020 Calculations
Perkin Elmer NexION 300X

1.0 Initial Calibration (ICAL) Parameters

The system performs linear regression from data consisting of a blank and three standards.

2.0 Calculating the concentration (C) of an element in water using data from prep log, run log, and quantitation report (note: the data system performs this calculation automatically when correction factors have been entered):

$$Cx = Cs \times \frac{Vf}{Vi} \times D$$

Where:

Cs = Concentration computed by the data system (ug/L)

Vf = Final volume

Vi = Initial volume

D = Dilution factor as a multiplier (10X = 10)

Cx = Concentration of element in (ug/L)

Example:

0.1

100

40

1

0.25

3.0 Calculating the concentration (C) of an element in soil using data from prep log, run log, and quantitation report (note: the data system performs this calculation automatically when correction factors have been entered):

$$Cx = Cs \times \frac{Vf}{Vi} \times D$$

Where:

Cs = Concentration computed by the data system (ug/L)

Vf = Final volume

Vi = Initial volume

D = Dilution factor as a multiplier (10X = 10)

Cx = Concentration of element in (ug/kg)

Example:

0.1

200

0.5

1

40

4.0 Adjusting the concentration to dry weight:

$$Cdry = \frac{Cx \times 100}{Px}$$

Where:

Cx = Concentration calculated as received (wet basis)

Px = Percent solids of sample (%wt)

$Cdry$ = Concentration calculated as dry weight (ug/kg)

Example:

40

80

50

50 ug/kg = 0.050 mg/kg

Perkin Elmer NexION ICP/MS

STANDARDS KEY

QC Std 1 - ICV

QC Std 2 - ICB

QC Std 3 - LLICV

QC Std 4 - ICSA

QC Std 5 - ICSAB

QC Std 6 - CCV

QC Std 7 - CCB

QC Std 8 - LLCCV

Calibration Solutions

Analyte	Stock Conc. (mg/L)	S1 (mg/L)	S2 (mg/L)	S3 (mg/L)	S4 (mg/L)
Al	10	0	0.00005	0.05	0.1
Sb	10	0	0.00005	0.05	0.1
As	10	0	0.00005	0.05	0.1
Ba	10	0	0.00005	0.05	0.1
Be	10	0	0.00005	0.05	0.1
Ca	1000	0	0.005	5	10
Cd	10	0	0.0005	0.05	0.1
Cr	10	0	0.0005	0.05	0.1
Co	10	0	0.0005	0.05	0.1
Cu	10	0	0.0005	0.05	0.1
Fe	1000	0	0.005	5	10
Pb	10	0	0.00005	0.05	0.1
Mg	1000	0	0.005	5	10
Mn	10	0	0.00005	0.05	0.1
Ni	10	0	0.00005	0.05	0.1
K	1000	0	0.005	5	10
Se	10	0	0.00005	0.05	0.1
Ag	10	0	0.00005	0.05	0.1
Na	1000	0	0.005	5	10
Tl	10	0	0.00005	0.05	0.1
V	10	0	0.00005	0.05	0.1
U	1000	0	0.00005	0.05	0.1
Zn	10	0	0.00005	0.05	0.1

Microbac Laboratories Inc.
Microwave Digestion Log

Workgroup: WG414324
Analyst: REK
Spike Analyst: REK
Run Date: 11/15/2012 07:35
Method: 3015
Balance: BAL016
Instrument: MW-2
Instrument Start: 11/15/2012 07:52

SOP: ME407 Revision 13
Spike Solution: STD53323
Spike Witness: BRG
MS WG# 401311 SYRINGE FIC0A16241
Digestion Tubes Lot #: COA16400
HN03 Lot #: COA16520

	SAMPLE #	Type	Matrix	Initial Amount	Final Volume	Initial Vessel Wt	Final Vessel Wt	Spike Amount	Due Date
1	WG414324-03	BLANK	1	40 mL	100 mL	206.633 g	206.621 g		
2	WG414324-04	LCS	1	40 mL	100 mL	206.766 g	206.753 g	.25 mL	
3	L12110393-01	SAMP	1	40 mL	100 mL	207.424 g	207.403 g		11/27/12
4	L12110393-02	SAMP	1	40 mL	100 mL	205.824 g	205.8 g		11/27/12
5	L12110393-03	SAMP	1	40 mL	100 mL	206.215 g	206.199 g		11/27/12
6	L12110393-04	SAMP	1	40 mL	100 mL	208.329 g	208.3 g		11/27/12
7	L12110411-20	SAMP	1	40 mL	100 mL	206.084 g	206.052 g		11/21/12
8	L12110411-21	SAMP	1	40 mL	100 mL	209.322 g	209.3 g		11/21/12
9	WG414324-01	REF	1	40 mL	100 mL	207.109 g	207.084 g		
10	L12110411-22	SAMP	1	40 mL	100 mL	207.109 g	207.084 g		11/21/12
11	L12110411-23	SAMP	1	40 mL	100 mL	209.571 g	209.542 g		11/21/12
12	L12110411-24	SAMP	1	40 mL	100 mL	206.393 g	206.37 g		11/21/12
13	L12110411-25	SAMP	1	40 mL	100 mL	206.623 g	206.602 g		11/21/12
14	L12110411-26	SAMP	1	40 mL	100 mL	207.691 g	207.654 g		11/21/12
15	L12110411-27	SAMP	1	40 mL	100 mL	212.002 g	211.985 g		11/21/12
16	L12110411-28	SAMP	1	40 mL	100 mL	207.892 g	207.868 g		11/21/12
17	L12110411-29	SAMP	1	40 mL	100 mL	204.074 g	204.058 g		11/21/12
18	L12110419-01	SAMP	2	40 mL	100 mL	205.888 g	205.859 g		11/21/12
19	WG414324-02	REF	2	40 mL	100 mL	207.159 g	207.133 g		
20	L12110419-02	SAMP	2	40 mL	100 mL	207.159 g	207.133 g		11/21/12
21	L12110420-01	SAMP	2	40 mL	100 mL	207.356 g	207.314 g		11/21/12
22	WG414324-05	MS	1	40 mL	100 mL	207.253 g	207.213 g	.25 mL	
23	WG414324-06	MSD	1	40 mL	100 mL	208.421 g	208.404 g	.25 mL	
24	WG414324-07	DUP	1	40 mL	100 mL	205.685 g	205.66 g		

L12110393-01	FILTERED DIGESTATE
L12110393-02	FILTERED DIGESTATE
L12110393-03	FILTERED DIGESTATE
L12110393-04	FILTERED DIGESTATE
L12110411-20	FILTERED DIGESTATE
L12110411-28	FILTERED DIGESTATE
L12110411-29	FILTERED DIGESTATE
L12110420-01	FILTERED DIGESTATE

Analyst: REK

Reviewer: Eun Poto

MW_DIG - Modified 09/30/2009
PDF ID: 2664966
Report generated: 11/15/2012 08:56



Microbac Laboratories Inc.

Instrument Run Log

Instrument: ICP-MS2 Dataset: 111812C.REP
 Analyst1: JYH Analyst2: N/A
 Method: 6020/6020A/200.8 SOP: ME700A Rev: _____
 Maintenance Log ID: 44016

Calibration Std: STD54940 ICV Std: STD54793 Post Spike: STD53712
 ICSA: STD54863 IC SAB: STD54862 Int. Std: RGT17307
 CCV: STD54792 LLCCV: STD54861

414364,414581,414570,414510,414621,414580,414439,414623

Workgroups:

Comments: Additional workgroup: 414163

Seq.	File ID	Sample	ID	Prep	Dil	Reference	Date/Time
1	NI.111812.082955	Blank	Blank		1		11/18/12 08:29
2	NI.111812.083307	WG414625-01	Calibration Point		1		11/18/12 08:33
3	NI.111812.083619	WG414625-02	Calibration Point		1		11/18/12 08:36
4	NI.111812.083931	WG414625-03	Calibration Point		1		11/18/12 08:39
5	NI.111812.084244	WG414625-04	Calibration Point		1		11/18/12 08:42
6	NI.111812.084558	WG414625-05	Initial Calibration Verification		1		11/18/12 08:45
7	NI.111812.084912	WG414625-06	Initial Calib Blank		1		11/18/12 08:49
8	NI.111812.085226	WG414625-07	Low Level Initial Calibration V		1		11/18/12 08:52
9	NI.111812.085538	WG414625-08	Interference Check		1		11/18/12 08:55
10	NI.111812.085850	WG414625-09	Interference Check		1		11/18/12 08:58
11	NI.111812.090205	WG414625-10	CCV		1		11/18/12 09:02
12	NI.111812.090517	WG414625-11	CCB		1		11/18/12 09:05
13	NI.111812.090830	WG414309-02	Method/Prep Blank	40/100	1		11/18/12 09:08
14	NI.111812.091143	WG414309-03	Laboratory Control S	40/100	1		11/18/12 09:11
15	NI.111812.091455	WG414309-01	Reference Sample		1	L12110411-08	11/18/12 09:14
16	NI.111812.091807	WG414309-04	MATRIX SPIKE	40/100	1	L12110411-08	11/18/12 09:18
17	NI.111812.092119	WG414309-05	Matrix Spike Duplica	40/100	1	L12110411-08	11/18/12 09:21
18	NI.111812.092432	L12110411-01	4104-MW1	40/100	1		11/18/12 09:24
19	NI.111812.092744	L12110411-02	4104-MW2	40/100	1		11/18/12 09:27
20	NI.111812.093056	WG414364-01	Post Digestion Spike		1	L12110411-02	11/18/12 09:30
21	NI.111812.093408	WG414364-02	Serial Dilution		5		11/18/12 09:34
22	NI.111812.093723	WG414625-12	CCV		1		11/18/12 09:37
23	NI.111812.094035	WG414625-13	CCB		1		11/18/12 09:40
24	NI.111812.094349	L12110411-03	4104-MW3A	40/100	1		11/18/12 09:43
25	NI.111812.094702	L12110411-04	4104-MW4	40/100	1		11/18/12 09:47
26	NI.111812.095014	L12110411-05	4104-MW6A	40/100	1		11/18/12 09:50
27	NI.111812.095326	L12110411-06	4104-MW7D	40/100	1		11/18/12 09:53
28	NI.111812.095717	L12110411-07	4104-MW8A	40/100	1		11/18/12 09:57
29	NI.111812.100029	L12110411-09	4104-MW9	40/100	1		11/18/12 10:00
30	NI.111812.100341	L12110411-10	4104-MW9DR	40/100	1		11/18/12 10:03
31	NI.111812.100654	L12110411-11	4104-MW10	40/100	1		11/18/12 10:06
32	NI.111812.101006	L12110411-12	4104-MW11	40/100	1		11/18/12 10:10
33	NI.111812.101318	L12110411-13	4104-MW12	40/100	1		11/18/12 10:13
34	NI.111812.101632	WG414625-14	CCV		1		11/18/12 10:16

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Maren Beery



Microbac Laboratories Inc. **Instrument Run Log**

Instrument: ICP-MS2 Dataset: 111812C.REP
 Analyst1: JYH Analyst2: N/A
 Method: 6020/6020A/200.8 SOP: ME700A Rev: _____
 Maintenance Log ID: 44016

Calibration Std: STD54940 ICV Std: STD54793 Post Spike: STD53712
 ICSA: STD54863 IC SAB: STD54862 Int. Std: RG17307
 CCV: STD54792 LLCCV: STD54861

414364,414581,414570,414510,414621,414580,414439,414623

Workgroups:

Comments: Additional workgroup: 414163

Seq.	File ID	Sample	ID	Prep	Dil	Reference	Date/Time
35	NI.111812.101944	WG414625-15	CCB		1		11/18/12 10:19
36	NI.111812.102259	L12110411-14	4104-MW14	40/100	1		11/18/12 10:22
37	NI.111812.102611	L12110411-15	4104-MW15	40/100	1		11/18/12 10:26
38	NI.111812.102924	L12110411-16	4104-SW1	40/100	1		11/18/12 10:29
39	NI.111812.103237	L12110411-17	4104-SW2A	40/100	1		11/18/12 10:32
40	NI.111812.103549	L12110411-18	4104-SW3	40/100	1		11/18/12 10:35
41	NI.111812.103901	L12110411-19	4104-SW4	40/100	1		11/18/12 10:39
42	NI.111812.104213	L12110394-01	IDW-GW-110912	40/100	1		11/18/12 10:42
43	NI.111812.104526	L12110394-01	IDW-GW-110912		50		11/18/12 10:45
44	NI.111812.104838	L12110337-18	7291SS01900A	.513/200	100		11/18/12 10:48
45	NI.111812.105151	WG414625-16	CCV		1		11/18/12 10:51
46	NI.111812.105510	WG414625-17	CCB		1		11/18/12 10:55
47	NI.111812.105824	WG414625-18	Low Level Continuing Calibra		1		11/18/12 10:58
48	NI.111812.110144	WG414324-03	Method/Prep Blank	40/100	1		11/18/12 11:01
49	NI.111812.110456	WG414324-04	Laboratory Control S	40/100	1		11/18/12 11:04
50	NI.111812.110809	WG414324-01	Reference Sample		1	L12110411-22	11/18/12 11:08
51	NI.111812.111121	WG414324-05	Matrix Spike	40/100	1	L12110411-22	11/18/12 11:11
52	NI.111812.111433	WG414324-06	Matrix Spike Duplica	40/100	1	L12110411-22	11/18/12 11:14
53	NI.111812.111745	L12110411-20	4104-SW5	40/100	1		11/18/12 11:17
54	NI.111812.112058	L12110411-21	4104-MW13S	40/100	1		11/18/12 11:20
55	NI.111812.112410	WG414570-01	Post Digestion Spike		1	L12110411-21	11/18/12 11:24
56	NI.111812.112723	WG411570-02	Serial Dilution		5	L12100430-01	11/18/12 11:27
57	NI.111812.113038	WG414625-19	CCV		1		11/18/12 11:30
58	NI.111812.113350	WG414625-20	CCB		1		11/18/12 11:33
59	NI.111812.113704	L12110393-01	BLDG 4-PIT-SSP1-GW-1108	40/100	1		11/18/12 11:37
60	NI.111812.114016	L12110393-02	BLDG 4-PIT-SSP1-GW-1108	40/100	1		11/18/12 11:40
61	NI.111812.114330	L12110393-03	DUP-GW-110812	40/100	1		11/18/12 11:43
62	NI.111812.114642	L12110393-04	DUP-GW-110812	40/100	1		11/18/12 11:46
63	NI.111812.114954	L12110411-23	4104-MW19S	40/100	1		11/18/12 11:49
64	NI.111812.115306	L12110411-24	4104-MW19D	40/100	1		11/18/12 11:53
65	NI.111812.115618	L12110411-25	4104-SW6	40/100	1		11/18/12 11:56
66	NI.111812.115930	L12110411-26	4104-SW7	40/100	1		11/18/12 11:59
67	NI.111812.120243	L12110411-27	4104-SW8	40/100	1		11/18/12 12:02
68	NI.111812.120556	L12110411-28	4104-SW9	40/100	1		11/18/12 12:05

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Microbac Laboratories Inc. **Instrument Run Log**

Instrument: ICP-MS2 Dataset: 111812C.REP
 Analyst1: JYH Analyst2: N/A
 Method: 6020/6020A/200.8 SOP: ME700A Rev: _____
 Maintenance Log ID: 44016

Calibration Std: STD54940 ICV Std: STD54793 Post Spike: STD53712
 ICSA: STD54863 ICSAB: STD54862 Int. Std: RGT17307
 CCV: STD54792 LLCCV: STD54861

414364,414581,414570,414510,414621,414580,414439,414623

Workgroups:

Comments: Additional workgroup: 414163

Seq.	File ID	Sample	ID	Prep	Dil	Reference	Date/Time
69	NI.111812.120911	WG414625-21	CCV		1		11/18/12 12:09
70	NI.111812.121223	WG414625-22	CCB		1		11/18/12 12:12
71	NI.111812.121538	L12110411-29	4104-LEACHATE	40/100	1		11/18/12 12:15
72	NI.111812.121850	L12110419-01	2110650-01	40/100	5		11/18/12 12:18
73	NI.111812.122202	WG414324-02	Reference Sample		5	L12110419-02	11/18/12 12:22
74	NI.111812.122515	WG414324-07	Duplicate	40/100	5	L12110419-02	11/18/12 12:25
75	NI.111812.122828	L12110420-01	2110655-01	40/100	5		11/18/12 12:28
76	NI.111812.123251	WG414625-23	CCV		1		11/18/12 12:32
77	NI.111812.123604	WG414625-24	CCB		1		11/18/12 12:36
78	NI.111812.124039	WG414625-25	Interference Check		1		11/18/12 12:40
79	NI.111812.124350	WG414625-26	Interference Check		1		11/18/12 12:43
80	NI.111812.124707	WG414625-27	CCV		1		11/18/12 12:47
81	NI.111812.125020	WG414625-28	CCB		1		11/18/12 12:50
82	NI.111812.125539	WG414625-29	Low Level Continuing Calibra		1		11/18/12 12:55
83	NI.111812.130104	WG414031-02	Method/Prep Blank	40/100	1		11/18/12 13:01
84	NI.111812.130416	WG414031-03	Laboratory Control S	40/100	1		11/18/12 13:04
85	NI.111812.130729	WG414031-01	Reference Sample		1	L12110294-02	11/18/12 13:07
86	NI.111812.131041	WG414031-04	Matrix Spike	40/100	1	L12110294-02	11/18/12 13:10
87	NI.111812.131355	WG414031-05	Matrix Spike Duplica	40/100	1	L12110294-02	11/18/12 13:13
88	NI.111812.131707	L12110248-02	SS052PS741-121108	40/100	1		11/18/12 13:17
89	NI.111812.132019	WG414510-03	Post Digestion Spike		1	L12110248-02	11/18/12 13:20
90	NI.111812.132331	WG414510-04	Serial Dilution		5	L12110248-02	11/18/12 13:23
91	NI.111812.132645	WG414625-30	CCV		1		11/18/12 13:26
92	NI.111812.132957	WG414625-31	CCB		1		11/18/12 13:29
93	NI.111812.133311	L12110246-01	LF1MW07-121108	40/100	10		11/18/12 13:33
94	NI.111812.133623	L12110246-02	CLAOW02-121108	40/100	10		11/18/12 13:36
95	NI.111812.133935	L12110246-03	DUP-02-121108	40/100	10		11/18/12 13:39
96	NI.111812.134500	L12110248-03	SS052PS590-121108	40/100	1		11/18/12 13:45
97	NI.111812.134812	L12110248-04	SS050PS635-121108	40/100	1		11/18/12 13:48
98	NI.111812.135124	L12110248-05	SS050PS590-121108	40/100	1		11/18/12 13:51
99	NI.111812.135641	L12110248-05	SS050PS590-121108		50		11/18/12 13:56
100	NI.111812.135956	WG414625-32	CCV		1		11/18/12 13:59
101	NI.111812.140308	WG414625-33	CCB		1		11/18/12 14:03
102	NI.111812.140622	WG414625-34	Low Level Continuing Calibra		1		11/18/12 14:06

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Maren Beery



Microbac Laboratories Inc. Instrument Run Log

Instrument: ICP-MS2 Dataset: 111812C.REP
 Analyst1: JYH Analyst2: N/A
 Method: 6020/6020A/200.8 SOP: ME700A Rev: _____
 Maintenance Log ID: 44016

Calibration Std: STD54940 ICV Std: STD54793 Post Spike: STD53712
 ICSA: STD54863 IC SAB: STD54862 Int. Std: RGT17307
 CCV: STD54792 LLCCV: STD54861

414364,414581,414570,414510,414621,414580,414439,414623

Workgroups:

Comments: Additional workgroup: 414163

Seq.	File ID	Sample	ID	Prep	Dil	Reference	Date/Time
103	NI.111812.140937	WG414119-03	Method/Prep Blank	40/100	1		11/18/12 14:09
104	NI.111812.141249	WG414119-04	Laboratory Control S	40/100	1		11/18/12 14:12
105	NI.111812.142704	WG414119-01	Reference Sample		1	L12110230-01	11/18/12 14:27
106	NI.111812.143016	WG414119-05	Duplicate	40/100	1	L12110230-01	11/18/12 14:30
107	NI.111812.143329	WG414119-06	Matrix Spike	40/100	1	L12110230-01	11/18/12 14:33
108	NI.111812.143641	L12110251-03	BEF-VSE-T1-W243-U	40/100	1		11/18/12 14:36
109	NI.111812.143954	WG414621-01	Post Digestion Spike		1	L12110251-03	11/18/12 14:39
110	NI.111812.144306	WG414621-02	Serial Dilution		5	L12110251-03	11/18/12 14:43
111	NI.111812.144619	L12110251-03	BEF-VSE-T1-W243-U		25		11/18/12 14:46
112	NI.111812.144934	WG414625-35	CCV		1		11/18/12 14:49
113	NI.111812.145246	WG414625-36	CCB		1		11/18/12 14:52
114	NI.111812.145602	WG414119-02	Reference Sample		5	L12110251-01	11/18/12 14:56
115	NI.111812.145914	WG414119-07	Matrix Spike	40/100	5	L12110251-01	11/18/12 14:59
116	NI.111812.150227	WG414119-08	Matrix Spike Duplica	40/100	5	L12110251-01	11/18/12 15:02
117	NI.111812.150539	L12110251-02	BEF-SPND-T1-W243-F	40/100	1		11/18/12 15:05
118	NI.111812.150852	L12110251-02	BEF-SPND-T1-W243-F	40/100	5		11/18/12 15:08
119	NI.111812.151204	L12110251-04	BEF-VSE-T1-W243-F	40/100	1		11/18/12 15:12
120	NI.111812.151516	L12110251-05	BEF-CST-T1-W243-U	40/100	1		11/18/12 15:15
121	NI.111812.151828	L12110251-04	BEF-VSE-T1-W243-F		50		11/18/12 15:18
122	NI.111812.152140	L12110251-05	BEF-CST-T1-W243-U		50		11/18/12 15:21
123	NI.111812.152455	WG414625-37	CCV		1		11/18/12 15:24
124	NI.111812.152807	WG414625-38	CCB		1		11/18/12 15:28
125	NI.111812.153121	L12110251-06	BEF-CST-T1-W243-F	40/100	1		11/18/12 15:31
126	NI.111812.153433	L12110251-07	BEF-SPND-T1-W243L-U	40/100	1		11/18/12 15:34
127	NI.111812.153746	L12110251-08	BEF-SPND-T1-W243L-F	40/100	1		11/18/12 15:37
128	NI.111812.154058	L12110251-09	BEF-VSE-T1-W243L-U	40/100	1		11/18/12 15:40
129	NI.111812.154410	L12110251-10	BEF-VSE-T1-W243L-F	40/100	1		11/18/12 15:44
130	NI.111812.154723	L12110251-11	BEF-CST-T1-W243L-U	40/100	1		11/18/12 15:47
131	NI.111812.155035	L12110251-12	BEF-CST-T1-W243L-F	40/100	1		11/18/12 15:50
132	NI.111812.155347	L12110332-18	FT22SQ00100B	40/100	1		11/18/12 15:53
133	NI.111812.155659	L12110332-19	8119SQ00100A	40/100	1		11/18/12 15:56
134	NI.111812.160011	L12110332-20	1358SQ00100A	40/100	1		11/18/12 16:00
135	NI.111812.160325	WG414625-39	CCV		1		11/18/12 16:03
136	NI.111812.160638	WG414625-40	CCB		1		11/18/12 16:06

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Microbac Laboratories Inc. **Instrument Run Log**

Instrument: ICP-MS2 Dataset: 111812C.REP
 Analyst1: JYH Analyst2: N/A
 Method: 6020/6020A/200.8 SOP: ME700A Rev: _____
 Maintenance Log ID: 44016

Calibration Std: STD54940 ICV Std: STD54793 Post Spike: STD53712
 ICSA: STD54863 ICSAB: STD54862 Int. Std: RG17307
 CCV: STD54792 LLCCV: STD54861

414364,414581,414570,414510,414621,414580,414439,414623

Workgroups:

Comments: Additional workgroup: 414163

Seq.	File ID	Sample	ID	Prep	Dil	Reference	Date/Time
137	NI.111812.160952	WG414625-41	Low Level Continuing Calibra		1		11/18/12 16:09
138	NI.111812.161306	L12110456-13	7417SQ00000E	40/100	1		11/18/12 16:13
139	NI.111812.161618	L12110458-03	SD33T01615A	40/100	1		11/18/12 16:16
140	NI.111812.161931	L12110458-04	SD33T01615A	40/100	1		11/18/12 16:19
141	NI.111812.162243	L12110458-24	7291SQ00000E	40/100	1		11/18/12 16:22
142	NI.111812.162555	L12110447-14	SW3A-279-14	40/100	1		11/18/12 16:25
143	NI.111812.162908	L12110447-17	SW3B-279-14	40/100	1		11/18/12 16:29
144	NI.111812.163221	L12110447-20	SW4A-279-14	40/100	1		11/18/12 16:32
145	NI.111812.163535	L12110447-23	SW5A-279-14	40/100	1		11/18/12 16:35
146	NI.111812.163848	WG414625-42	CCV		1		11/18/12 16:38
147	NI.111812.164200	WG414625-43	CCB		1		11/18/12 16:42
148	NI.111812.164513	WG413848-02	Method/Prep Blank	40/100	1		11/18/12 16:45
149	NI.111812.164825	WG413848-03	Laboratory Control S	40/100	1		11/18/12 16:48
150	NI.111812.165137	WG413848-01	Reference Sample		1	L12110201-01	11/18/12 16:51
151	NI.111812.165451	WG413848-04	Matrix Spike	40/100	1	L12110201-01	11/18/12 16:54
152	NI.111812.165803	WG413848-05	Matrix Spike Duplica	40/100	1	L12110201-01	11/18/12 16:58
153	NI.111812.170115	L12110200-02	KY038PS041-121107	40/100	1		11/18/12 17:01
154	NI.111812.170427	L12110200-03	KY038PS035-121107	40/100	1		11/18/12 17:04
155	NI.111812.170739	WG414163-01	Post Digestion Spike		1	L12110200-03	11/18/12 17:07
156	NI.111812.171052	WG414163-02	Serial Dilution		5	L12110200-03	11/18/12 17:10
157	NI.111812.171405	L12110200-03	KY038PS035-121107		25		11/18/12 17:14
158	NI.111812.171720	WG414625-44	CCV		1		11/18/12 17:17
159	NI.111812.172033	WG414625-45	CCB		1		11/18/12 17:20
160	NI.111812.172347	L12110200-04	KY038PS036-121107	40/100	1		11/18/12 17:23
161	NI.111812.172659	L12110200-06	KY038PS027-121107	40/100	1		11/18/12 17:26
162	NI.111812.173012	WG414625-46	CCV		1		11/18/12 17:30
163	NI.111812.173326	WG414625-47	CCB		1		11/18/12 17:33
164	NI.111812.173639	WG414625-48	Low Level Continuing Calibra		1		11/18/12 17:36
165	NI.111812.173953	WG414134-02	Method/Prep Blank	.5/200	1		11/18/12 17:39
166	NI.111812.174306	WG414134-03	Laboratory Control S	.5/200	1		11/18/12 17:43
167	NI.111812.174618	WG414134-04	Matrix Spike	.527/200	20	L12110332-21	11/18/12 17:46
168	NI.111812.174931	WG414134-05	Matrix Spike Duplica	.537/200	20	L12110332-21	11/18/12 17:49
169	NI.111812.175244	WG414134-01	Reference Sample		20	L12110332-21	11/18/12 17:52
170	NI.111812.175556	L12110332-01	1358SS02302A	.53/200	20		11/18/12 17:55

Page: 5 Approved: November 19, 2012

Maren Beery



Microbac Laboratories Inc. **Instrument Run Log**

Instrument: ICP-MS2 Dataset: 111812C.REP
 Analyst1: JYH Analyst2: N/A
 Method: 6020/6020A/200.8 SOP: ME700A Rev: _____
 Maintenance Log ID: 44016

Calibration Std: STD54940 ICV Std: STD54793 Post Spike: STD53712
 ICSA: STD54863 ICSAB: STD54862 Int. Std: RG17307
 CCV: STD54792 LLCCV: STD54861

414364,414581,414570,414510,414621,414580,414439,414623

Workgroups:

Comments: Additional workgroup: 414163

Seq.	File ID	Sample	ID	Prep	Dil	Reference	Date/Time
171	NI.111812.175908	L12110332-02	7291SS00600A	.515/200	20		11/18/12 17:59
172	NI.111812.180220	WG414439-01	Post Digestion Spike		20	L12110332-02	11/18/12 18:02
173	NI.111812.180533	WG414439-02	Serial Dilution		100	L12110332-02	11/18/12 18:05
174	NI.111812.180847	WG414625-49	CCV		1		11/18/12 18:08
175	NI.111812.181200	WG414625-50	CCB		1		11/18/12 18:12
176	NI.111812.181514	L12110332-03	7291SS00600C	.513/200	20		11/18/12 18:15
177	NI.111812.181826	L12110332-04	7291SS00601A	.534/200	20		11/18/12 18:18
178	NI.111812.182140	L12110332-05	7291SS00602A	.52/200	20		11/18/12 18:21
179	NI.111812.182452	L12110332-06	7291SS00700A	.517/200	20		11/18/12 18:24
180	NI.111812.182805	L12110332-07	7291SS00701A	.539/200	20		11/18/12 18:28
181	NI.111812.183117	L12110332-11	7291SS01300A		20		11/18/12 18:31
182	NI.111812.183430	L12110332-12	7291SS01301A	.514/200	20		11/18/12 18:34
183	NI.111812.183742	L12110332-13	7291SS01302A	.532/200	20		11/18/12 18:37
184	NI.111812.184055	L12110332-14	7291SS01401A	.532/200	20		11/18/12 18:40
185	NI.111812.184408	L12110332-15	7291SS01402A	.542/200	20		11/18/12 18:44
186	NI.111812.184723	WG414625-51	CCV		1		11/18/12 18:47
187	NI.111812.185035	WG414625-52	CCB		1		11/18/12 18:50
188	NI.111812.185349	L12110332-16	7291SS02100A	.532/200	20		11/18/12 18:53
189	NI.111812.185702	L12110332-17	7291SS02101A	.505/200	20		11/18/12 18:57
190	NI.111812.190014	L12110337-01	7291SS01202A	.541/200	20		11/18/12 19:00
191	NI.111812.190327	L12110337-02	7291SS01100A	.504/200	20		11/18/12 19:03
192	NI.111812.190639	L12110337-03	7291SS01101A	.516/200	20		11/18/12 19:06
193	NI.111812.190952	L12110337-04	7291SS01102A	.526/200	20		11/18/12 19:09
194	NI.111812.191304	L12110337-05	7291SS01001A	.506/200	20		11/18/12 19:13
195	NI.111812.191618	WG414625-53	CCV		1		11/18/12 19:16
196	NI.111812.191930	WG414625-54	CCB		1		11/18/12 19:19
197	NI.111812.192244	WG414371-02	Method/Prep Blank	.5/200	1		11/18/12 19:22
198	NI.111812.192556	WG414371-03	Laboratory Control S	.5/200	1		11/18/12 19:25
199	NI.111812.192909	L12110338-13	7291SS00402A		20	WG414371-01	11/18/12 19:29
200	NI.111812.193223	L12110338-14	7291SS00402S	.514/200	20	WG414371-04	11/18/12 19:32
201	NI.111812.193536	L12110338-15	7291SS00402D	.508/200	20	WG414371-05	11/18/12 19:35
202	NI.111812.193848	L12110338-08	7291SS00202C	.545/200	20		11/18/12 19:38
203	NI.111812.194201	L12110338-09	7291SS00301A	.537/200	20		11/18/12 19:42
204	NI.111812.194514	WG414623-01	Post Digestion Spike		20	L12110338-09	11/18/12 19:45

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Maren Beery



Microbac Laboratories Inc.
Instrument Run Log

Instrument: ICP-MS2 Dataset: 111812C.REP
 Analyst1: JYH Analyst2: N/A
 Method: 6020/6020A/200.8 SOP: ME700A Rev: _____
 Maintenance Log ID: 44016

Calibration Std: STD54940 ICV Std: STD54793 Post Spike: STD53712
 ICSA: STD54863 ICSAB: STD54862 Int. Std: RGT17307
 CCV: STD54792 LLCCV: STD54861

414364,414581,414570,414510,414621,414580,414439,414623

Workgroups:

Comments: Additional workgroup: 414163

Seq.	File ID	Sample	ID	Prep	Dil	Reference	Date/Time
205	NI.111812.194828	WG414623-02	Serial Dilution		100	L12110338-09	11/18/12 19:48
206	NI.111812.195143	WG414625-55	CCV		1		11/18/12 19:51
207	NI.111812.195456	WG414625-56	CCB		1		11/18/12 19:54
208	NI.111812.195811	L12110338-10	7291SS00302A	.542/200	20		11/18/12 19:58
209	NI.111812.200124	L12110338-11	7291SS00302C		20		11/18/12 20:01
210	NI.111812.200436	L12110338-12	7291SS00401A	.52/200	20		11/18/12 20:04
211	NI.111812.200748	L12110338-16	7291SS00500A	.537/200	20		11/18/12 20:07
212	NI.111812.201101	L12110338-17	7291SS00501A	.547/200	20		11/18/12 20:11
213	NI.111812.201413	L12110338-18	7291SS00502A	.525/200	20		11/18/12 20:14
214	NI.111812.201725	L12110338-19	7291SS01200A		20		11/18/12 20:17
215	NI.111812.202038	L12110338-20	7291SS01201A		20		11/18/12 20:20
216	NI.111812.202350	L12110340-01	7291SS03100A	.534/200	20		11/18/12 20:23
217	NI.111812.202702	L12110340-02	7291SS03101A	.534/200	20		11/18/12 20:27
218	NI.111812.203017	WG414625-57	CCV		1		11/18/12 20:30
219	NI.111812.203329	WG414625-58	CCB		1		11/18/12 20:33
220	NI.111812.203644	L12110340-03	7291SS03102A		20		11/18/12 20:36
221	NI.111812.203957	L12110340-04	7291SS03000A		20		11/18/12 20:39
222	NI.111812.204310	L12110340-05	7291SS03001A		20		11/18/12 20:43
223	NI.111812.204622	L12110340-06	7291SS03002A		20		11/18/12 20:46
224	NI.111812.204934	L12110340-07	7291SS03002C		20		11/18/12 20:49
225	NI.111812.205246	L12110340-08	7291SS02901A		20		11/18/12 20:52
226	NI.111812.205558	L12110341-01	7291SS02400A		20		11/18/12 20:55
227	NI.111812.205913	WG414625-59	QC Std 6		1		11/18/12 20:59
228	NI.111812.210226	WG414625-60	QC Std 7		1		11/18/12 21:02
229	NI.111812.210541	WG414625-61	QC Std 8		1		11/18/12 21:05

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Maren Beery



Microbac Laboratories Inc.

Data Checklist

Date: 18-NOV-2012

Analyst: JYH

Analyst: NA

Method: 6020/6020A/200.8

Instrument: ICP-MS2

Curve Workgroup: 414625

Runlog ID: 50088

Analytical Workgroups: 414364,414581,414570,414510,414621,414580,414439,414623

Additional Workgroup:	414163
Calibration/Linearity	X
ICV/CCV	X
ICV RSD <= 3% (EPA 200.7 only)	
ICB/CCB	X
ICSA/ICSAB	X
CRI	X
Blank/LCS	X
MS/MSD	X
Post Spike/Serial Dilution	X
Upload Results	X
Data Qualifiers	
Generate PDF Instrument Data	X
Sign/Annotate PDF Data	X
Upload Curve Data	X
Workgroup Forms	X
Case Narrative	394,411,393,419,420,251,332,456
	458,200,201,338,340
Client Forms	X
Level X	
Level 3	200
Level 4	394,411,337,393,246,248,251,332
	456,458,201,338,340
Check for compliance with method and project specific requirements	X
Check the completeness of reported information	X
Check the information for the report narrative	X
Primary Reviewer	JYH
Secondary Reviewer	MMB
Comments	

Primary Reviewer:

Secondary Reviewer:
19-NOV-2012

CHECKLIST1 - Modified 03/05/2008

Generated: NOV-19-2012 13:34:34



Microbac Laboratories Inc.
HOLDING TIMES
EQUIVALENT TO AFCEE FORM 9

Analytical Method: 6020
Login Number: L12110393

AAB#: WG414570

Client ID	ID	Date Collected	TCLP Date	Time Held	Max Hold	Q	Extract Date	Time Held	Max Hold	Q	Run Date	Time Held	Max Hold	Q
BLDG 4-PIT-SSP1-GW-11082	01	11/08/12					11/15/2012	6.7	180		11/18/12	9.9	180	
BLDG 4-PIT-SSP1-GW-11082	02	11/08/12					11/15/2012	6.7	180		11/18/12	9.9	180	
DUP-GW-110812	03	11/08/12					11/15/2012	7.3	180		11/18/12	10.5	180	
DUP-GW-110812	04	11/08/12					11/15/2012	7.3	180		11/18/12	10.5	180	

* = SEE PROJECT QAPP REQUIREMENTS

HOLD_TIMES - Modified 03/06/2008
PDF File ID: 2668644
Report generated 11/18/2012 13:14



METHOD BLANK SUMMARY

Login Number: L12110393
 Blank File ID: NI.111812.110144
 Prep Date: 11/15/12 07:35
 Analyzed Date: 11/18/12 11:01
 Analyst: JYH

Work Group: WG414570
 Blank Sample ID: WG414324-03
 Instrument ID: ICP-MS2
 Method: 6020

This Method Blank Applies To The Following Samples:

Client ID	Lab Sample ID	Lab File ID	Time Analyzed	TAG
LCS	WG414324-04	NI.111812.110456	11/18/12 11:04	01
BLDG 4-PIT-SSP1-GW-11082012	L12110393-01	NI.111812.113704	11/18/12 11:37	01
BLDG 4-PIT-SSP1-GW-11082012	L12110393-02	NI.111812.114016	11/18/12 11:40	01
DUP-GW-110812	L12110393-03	NI.111812.114330	11/18/12 11:43	01
DUP-GW-110812	L12110393-04	NI.111812.114642	11/18/12 11:46	01
DUP	WG414324-07	NI.111812.122515	11/18/12 12:25	DL01

Report Name: BLANK_SUMMARY
 PDF File ID: 2668645
 Report generated 11/18/2012 13:14



Microbac Laboratories Inc.
METHOD BLANK REPORT

Login Number: L12110393 Prep Date: 11/15/12 07:35 Sample ID: WG414324-03
Instrument ID: ICP-MS2 Run Date: 11/18/12 11:01 Prep Method: 3015
File ID: NI.111812.110144 Analyst: JYH Method: 6020
Workgroup (AAB#): WG414570 Matrix: Water Units: mg/L
Contract #: _____ Cal ID: ICP-MS - 18-NOV-12

Analytes	MDL	RL	Concentration	Dilution	Qualifier
Antimony, Total	0.000500	0.00100	0.000500	1	U
Arsenic, Total	0.000500	0.00100	0.000500	1	U
Lead, Total	0.000500	0.00100	0.000500	1	U
Selenium, Total	0.000500	0.00100	0.000500	1	U
Thallium, Total	0.000100	0.000200	0.000100	1	U

MDL Method Detection Limit
RL Reporting/Practical Quantitation Limit
ND Analyte Not detected at or above reporting limit
* |Analyte concentration| > RL

Report Name: BLANK
PDF ID: 2668646
18-NOV-2012 13:14



Microbac Laboratories Inc.
LABORATORY CONTROL SAMPLE (LCS)

Login Number: L12110393 Run Date: 11/18/2012 Sample ID: WG414324-04
Instrument ID: ICP-MS2 Run Time: 11:04 Prep Method: 3015
File ID: NI.111812.110456 Analyst: JYH Method: 6020
Workgroup (AAB#): WG414570 Matrix: Water Units: mg/L
QC Key: WATERL00 Lot#: STD53323 Cal ID: ICP-MS - 18-NOV-12

Analytes	Expected	Found	% Rec	LCS Limits	Q
Antimony, Total	0.0625	0.0573	91.7	80 - 120	
Arsenic, Total	0.0625	0.0560	89.6	80 - 120	
Lead, Total	0.0625	0.0574	91.9	80 - 120	
Selenium, Total	0.0625	0.0547	87.6	80 - 120	
Thallium, Total	0.0625	0.0575	92.0	80 - 120	

LCS - Modified 03/06/2008
PDF File ID: 2668647
Report generated: 11/18/2012 13:14



Microbac Laboratories Inc.
MATRIX SPIKE AND MATRIX SPIKE DUP (MS/MSD)

Loginnum: <u>L12110393</u>	Cal ID: <u>ICP-MS2 -</u>	Worknum: <u>WG414570</u>
Instrument ID: <u>ICP-MS2</u>	Contract #: _____	Method: <u>6020</u>
Parent ID: <u>WG414324-01</u>	File ID: <u>NI.111812.110809</u> Dil: <u>1</u>	Matrix: <u>WATER</u>
Sample ID: <u>WG414324-05 MS</u>	File ID: <u>NI.111812.111121</u> Dil: <u>1</u>	Units: <u>mg/L</u>
Sample ID: <u>WG414324-06 MSD</u>	File ID: <u>NI.111812.111433</u> Dil: <u>1</u>	

Analyte	Parent	MS Spiked	MS Found	MS %Rec	MSD Spiked	MSD Found	MSD %Rec	%RPD	%Rec Limits	RPD Limit	Q
Antimony, Total	ND	0.0625	0.0566	90.6	0.0625	0.0565	90.3	0.337	80 - 120	20	
Arsenic, Total	ND	0.0625	0.0561	89.7	0.0625	0.0562	89.9	0.177	80 - 120	20	
Lead, Total	ND	0.0625	0.0563	90.1	0.0625	0.0569	91.0	0.974	80 - 120	20	
Selenium, Total	ND	0.0625	0.0552	88.4	0.0625	0.0554	88.6	0.241	80 - 120	20	
Thallium, Total	ND	0.0625	0.0561	89.7	0.0625	0.0572	91.5	1.94	80 - 120	20	

* FAILS %REC LIMIT

FAILS RPD LIMIT

NOTE: This is an internal quality control sample.

WG_MS_MSD_DRYWT - Modified 05/26/2011
PDF File ID: 2670096
Report generated 11/19/2012 13:55



Microbac Laboratories Inc.
Serial Dilution Report

Login: L12110393 Worknum: WG414570
Instrument: ICP-MS2 Method: 6020
Serial Dil: WG414570-02 File ID: NI.111812.112723 Dil: 5 Units: ug/L
Sample: L12110411-21 File ID: NI.111812.112058 Dil: 1

Analyte	Sample	Qual	Serial Dil	Qual	% Diff	Q
Antimony	ND	U	ND	U		
Arsenic	ND	U	ND	U		
Lead	0.325	F	ND	U		
Selenium	0.336	F	ND	U		
Thallium	ND	U	ND	U		

U = Result is below MDL.

F = Result is greater than or equal to MDL and less than the RL.

X = Result is greater than or equal to RL and less than 100 times the MDL.

E = %D exceeds control limit of 10% and initial sample result is greater than or equal to 100 times the MDL.

SERIAL_DIL - Modified 09/22/2008

PDF File ID: 2668642

11/18/2012 13:14



Microbac Laboratories Inc.
POST SPIKE REPORT

Sample Login ID: L12110393
Instrument ID: ICP-MS2
Post Spike ID: WG414570-01
Sample ID: L12110411-21

Worknum: WG414570
Method: 6020
File ID: NI.111812.112410 Dil: 1 Units: ug/L
File ID: NI.111812.112058 Dil: 1 Matrix: Water

Analyte	Post Spike Result	C	Sample Result	C	Spike Added(SA)	% R	Control Limit %R	Q
ANTIMONY	47.1		0	U	50	94.2	75 - 125	
ARSENIC	45.8		0	U	50	91.5	75 - 125	
LEAD	49.4		0.325	F	50	98.2	75 - 125	
SELENIUM	43.9		0.336	F	50	87.2	75 - 125	
THALLIUM	49.3		0	U	50	98.7	75 - 125	

N = % Recovery exceeds control limits

F = Result is between MDL and RL

U = Sample result is below MDL. A value of zero is used in the calculation



Microbac Laboratories Inc.
Initial Calibration Summary

Login:	<u>L12110393</u>	Workgroup (AAB#):	<u>WG414570</u>
Analytical Method:	<u>6020</u>	Instrument ID:	<u>ICP-MS2</u>
ICAL Worknum:	<u>WG414625</u>	Initial Calibration Date:	<u>18-NOV-2012 08:42</u>

	WG414625-01		WG414625-02		WG414625-03		WG414625-04			
	Conc	INT	Conc	INT	Conc	INT	Conc	INT	R	Q
ANTIMONY	0	67.1	.4	403	50	398000	100	749000	.999549	
ARSENIC	0	-196	.4	-130	50	75800	100	143000	.99964	
LEAD	0	1410	.4	3410	50	2060000	100	3880000	.999797	
SELENIUM	0	-1.00	.4	5.80	50	6780	100	12800	.999657	
THALLIUM	0	34.7	.4	686	50	651000	100	1220000	.999765	

INT = Instrument intensity
R = Coefficient of correlation
Q = Data Qualifier
* = Out of Compliance; R < 0.995

INT_CAL_ICP - Modified 03/06/2008
PDF File ID: 2668651
Report generated: 18-NOV-2012 13:14



Microbac Laboratories Inc.
INITIAL CALIBRATION BLANK (ICB)

Login Number: L12110393 Run Date: 11/18/2012 Sample ID: WG414625-06
Instrument ID: ICP-MS2 Run Time: 08:49 Method: 6020
File ID: NI.111812.084912 Analyst: JYH Units: ug/L
Workgroup (AAB#): WG414570 Cal ID: ICP-MS2 - 18-NOV-12
Matrix: WATER

Analytes	MDL	RDL	Concentration	Qualifier
ARSENIC	.2	.4	.2	U
LEAD	.2	.4	.2	U
ANTIMONY	.2	.4	.2	U
SELENIUM	.2	.4	.2	U
THALLIUM	.04	.08	.04	U

ICB - Modified 07/14/2009
PDF File ID: 2668653
Report generated 11/18/2012 13:14



Microbac Laboratories Inc.
CONTINUING CALIBRATION BLANK (CCB)

Login Number: L12110393 Run Date: 11/18/2012 Sample ID: WG414625-11
Instrument ID: ICP-MS2 Run Time: 09:05 Method: 6020
File ID: NI.111812.090517 Analyst: JYH Units: ug/L
Workgroup (AAB#): WG414570 Cal ID: ICP-MS - 18-NOV-12
Matrix: WATER QAPP: WATERLOO

Analytes	MDL	RDL	Concentration	Qualifier
Antimony	0.200	0.400	0.200	U
Arsenic	0.200	0.400	0.200	U
Lead	0.200	0.400	0.200	U
Selenium	0.200	0.400	0.200	U
Thallium	0.0400	0.0800	0.0400	U

U = Result is less than MDL.
F = Result is between MDL and RL.
* = Result is above RL.

CCB - Modified 03/05/2008
PDF File ID: 2668656
Report generated 11/18/2012 13:14



Microbac Laboratories Inc.
CONTINUING CALIBRATION BLANK (CCB)

Login Number: L12110393 Run Date: 11/18/2012 Sample ID: WG414625-17
Instrument ID: ICP-MS2 Run Time: 10:55 Method: 6020
File ID: NI.111812.105510 Analyst: JYH Units: ug/L
Workgroup (AAB#): WG414570 Cal ID: ICP-MS - 18-NOV-12
Matrix: WATER QAPP: WATERLOO

Analytes	MDL	RDL	Concentration	Qualifier
Antimony	0.200	0.400	0.200	U
Arsenic	0.200	0.400	0.200	U
Lead	0.200	0.400	0.200	U
Selenium	0.200	0.400	0.200	U
Thallium	0.0400	0.0800	0.0400	U

U = Result is less than MDL.
F = Result is between MDL and RL.
* = Result is above RL.

CCB - Modified 03/05/2008
PDF File ID: 2668656
Report generated 11/18/2012 13:14



Microbac Laboratories Inc.
CONTINUING CALIBRATION BLANK (CCB)

Login Number: L12110393 Run Date: 11/18/2012 Sample ID: WG414625-20
Instrument ID: ICP-MS2 Run Time: 11:33 Method: 6020
File ID: NI.111812.113350 Analyst: JYH Units: ug/L
Workgroup (AAB#): WG414570 Cal ID: ICP-MS - 18-NOV-12
Matrix: WATER QAPP: WATERLOO

Analytes	MDL	RDL	Concentration	Qualifier
Antimony	0.200	0.400	0.200	U
Arsenic	0.200	0.400	0.200	U
Lead	0.200	0.400	0.200	U
Selenium	0.200	0.400	0.200	U
Thallium	0.0400	0.0800	0.0400	U

U = Result is less than MDL.
F = Result is between MDL and RL.
* = Result is above RL.

CCB - Modified 03/05/2008
PDF File ID: 2668656
Report generated 11/18/2012 13:14



Microbac Laboratories Inc.
CONTINUING CALIBRATION BLANK (CCB)

Login Number: L12110393 Run Date: 11/18/2012 Sample ID: WG414625-22
Instrument ID: ICP-MS2 Run Time: 12:12 Method: 6020
File ID: NI.111812.121223 Analyst: JYH Units: ug/L
Workgroup (AAB#): WG414570 Cal ID: ICP-MS - 18-NOV-12
Matrix: WATER QAPP: WATERLOO

Analytes	MDL	RDL	Concentration	Qualifier
Antimony	0.200	0.400	0.200	U
Arsenic	0.200	0.400	0.200	U
Lead	0.200	0.400	0.200	U
Selenium	0.200	0.400	0.200	U
Thallium	0.0400	0.0800	0.0400	U

U = Result is less than MDL.
F = Result is between MDL and RL.
* = Result is above RL.

CCB - Modified 03/05/2008
PDF File ID: 2668656
Report generated 11/18/2012 13:14



Microbac Laboratories Inc.
CONTINUING CALIBRATION BLANK (CCB)

Login Number: L12110393 Run Date: 11/18/2012 Sample ID: WG414625-24
Instrument ID: ICP-MS2 Run Time: 12:36 Method: 6020
File ID: NI.111812.123604 Analyst: JYH Units: ug/L
Workgroup (AAB#): WG414570 Cal ID: ICP-MS - 18-NOV-12
Matrix: WATER QAPP: WATERLOO

Analytes	MDL	RDL	Concentration	Qualifier
Antimony	0.200	0.400	0.200	U
Arsenic	0.200	0.400	0.200	U
Lead	0.200	0.400	0.200	U
Selenium	0.200	0.400	0.200	U
Thallium	0.0400	0.0800	0.0400	U

U = Result is less than MDL.
F = Result is between MDL and RL.
* = Result is above RL.

CCB - Modified 03/05/2008
PDF File ID: 2668656
Report generated 11/18/2012 13:14



Microbac Laboratories Inc.
CONTINUING CALIBRATION BLANK (CCB)

Login Number: L12110393 Run Date: 11/18/2012 Sample ID: WG414625-28
Instrument ID: ICP-MS2 Run Time: 12:50 Method: 6020
File ID: NI.111812.125020 Analyst: JYH Units: ug/L
Workgroup (AAB#): WG414570 Cal ID: ICP-MS - 18-NOV-12
Matrix: WATER QAPP: WATERLOO

Analytes	MDL	RDL	Concentration	Qualifier
Antimony	0.200	0.400	0.200	U
Arsenic	0.200	0.400	0.200	U
Lead	0.200	0.400	0.200	U
Selenium	0.200	0.400	0.200	U
Thallium	0.0400	0.0800	0.0400	U

U = Result is less than MDL.
F = Result is between MDL and RL.
* = Result is above RL.

CCB - Modified 03/05/2008
PDF File ID: 2668656
Report generated 11/18/2012 13:14



Microbac Laboratories Inc.
INITIAL CALIBRATION VERIFICATION (ICV)
(Alternate Source)

Login Number: L12110393 Run Date: 11/18/2012 Sample ID: WG414625-05
Instrument ID: ICP-MS2 Run Time: 08:45 Method: 6020
File ID: NI.111812.084558 Analyst: JYH Units: ug/L
Workgroup (AAB#): WG414570 Cal ID: ICP-MS - 18-NOV-12
QC Key: WATERL00

Analyte	Expected	Found	%REC	LIMITS	Q
Antimony	50	51.3	103	90 - 110	
Arsenic	50	50.5	101	90 - 110	
Lead	50	50.4	101	90 - 110	
Selenium	50	50.7	101	90 - 110	
Thallium	50	50.3	101	90 - 110	

* Exceeds LIMITS Limit



Microbac Laboratories Inc.
CONTINUING CALIBRATION VERIFICATION (CCV)

Login Number: <u>L12110393</u>	Run Date: <u>11/18/2012</u>	Sample ID: <u>WG414625-10</u>
Instrument ID: <u>ICP-MS2</u>	Run Time: <u>09:02</u>	Method: <u>6020</u>
File ID: <u>NI.111812.090205</u>	Analyst: <u>JYH</u>	QC Key: <u>WATERL00</u>
Workgroup (AAB#): <u>WG414570</u>	Cal ID: <u>ICP-MS - 18-NOV-12</u>	
Matrix: <u>WATER</u>		

Analyte		Expected	Found	UNITS	%REC	LIMITS		Q
Antimony		50.0	50.5	ug/L	101	90 - 110		
Arsenic		50.0	50.0	ug/L	99.9	90 - 110		
Lead		50.0	49.6	ug/L	99.2	90 - 110		
Selenium		50.0	50.2	ug/L	100	90 - 110		
Thallium		50.0	49.8	ug/L	99.6	90 - 110		

* Exceeds LIMITS Criteria

CCV - Modified 03/05/2008
PDF File ID: 2668655
Report generated 11/18/2012 13:14



Microbac Laboratories Inc.
CONTINUING CALIBRATION VERIFICATION (CCV)

Login Number: L12110393 Run Date: 11/18/2012 Sample ID: WG414625-16
Instrument ID: ICP-MS2 Run Time: 10:51 Method: 6020
File ID: NI.111812.105151 Analyst: JYH QC Key: WATERL00
Workgroup (AAB#): WG414570 Cal ID: ICP-MS - 18-NOV-12
Matrix: WATER

Analyte		Expected	Found	UNITS	%REC	LIMITS		Q
Antimony		50.0	50.4	ug/L	101	90 - 110		
Arsenic		50.0	50.1	ug/L	100	90 - 110		
Lead		50.0	50.5	ug/L	101	90 - 110		
Selenium		50.0	49.9	ug/L	99.8	90 - 110		
Thallium		50.0	50.7	ug/L	101	90 - 110		

* Exceeds LIMITS Criteria

CCV - Modified 03/05/2008
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Microbac Laboratories Inc.
CONTINUING CALIBRATION VERIFICATION (CCV)

Login Number: <u>L12110393</u>	Run Date: <u>11/18/2012</u>	Sample ID: <u>WG414625-19</u>
Instrument ID: <u>ICP-MS2</u>	Run Time: <u>11:30</u>	Method: <u>6020</u>
File ID: <u>NI.111812.113038</u>	Analyst: <u>JYH</u>	QC Key: <u>WATERL00</u>
Workgroup (AAB#): <u>WG414570</u>	Cal ID: <u>ICP-MS - 18-NOV-12</u>	
Matrix: <u>WATER</u>		

Analyte		Expected	Found	UNITS	%REC	LIMITS		Q
Antimony		50.0	49.8	ug/L	99.7	90 - 110		
Arsenic		50.0	49.4	ug/L	98.7	90 - 110		
Lead		50.0	50.1	ug/L	100	90 - 110		
Selenium		50.0	48.3	ug/L	96.7	90 - 110		
Thallium		50.0	50.1	ug/L	100	90 - 110		

* Exceeds LIMITS Criteria

CCV - Modified 03/05/2008
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Microbac Laboratories Inc.
CONTINUING CALIBRATION VERIFICATION (CCV)

Login Number: L12110393 Run Date: 11/18/2012 Sample ID: WG414625-21
Instrument ID: ICP-MS2 Run Time: 12:09 Method: 6020
File ID: NI.111812.120911 Analyst: JYH QC Key: WATERL00
Workgroup (AAB#): WG414570 Cal ID: ICP-MS - 18-NOV-12
Matrix: WATER

Analyte		Expected	Found	UNITS	%REC	LIMITS		Q
Antimony		50.0	50.0	ug/L	100	90 - 110		
Arsenic		50.0	49.2	ug/L	98.5	90 - 110		
Lead		50.0	49.8	ug/L	99.6	90 - 110		
Selenium		50.0	48.0	ug/L	96.0	90 - 110		
Thallium		50.0	50.0	ug/L	100	90 - 110		

* Exceeds LIMITS Criteria

CCV - Modified 03/05/2008
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Microbac Laboratories Inc.
CONTINUING CALIBRATION VERIFICATION (CCV)

Login Number: L12110393 Run Date: 11/18/2012 Sample ID: WG414625-23
Instrument ID: ICP-MS2 Run Time: 12:32 Method: 6020
File ID: NI.111812.123251 Analyst: JYH QC Key: WATERL00
Workgroup (AAB#): WG414570 Cal ID: ICP-MS - 18-NOV-12
Matrix: WATER

Analyte		Expected	Found	UNITS	%REC	LIMITS		Q
Antimony		50.0	50.7	ug/L	101	90 - 110		
Arsenic		50.0	49.5	ug/L	99.1	90 - 110		
Lead		50.0	50.2	ug/L	100	90 - 110		
Selenium		50.0	49.0	ug/L	98.1	90 - 110		
Thallium		50.0	50.3	ug/L	101	90 - 110		

* Exceeds LIMITS Criteria

CCV - Modified 03/05/2008
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Microbac Laboratories Inc.
CONTINUING CALIBRATION VERIFICATION (CCV)

Login Number: L12110393 Run Date: 11/18/2012 Sample ID: WG414625-27
Instrument ID: ICP-MS2 Run Time: 12:47 Method: 6020
File ID: NI.111812.124707 Analyst: JYH QC Key: WATERL00
Workgroup (AAB#): WG414570 Cal ID: ICP-MS - 18-NOV-12
Matrix: WATER

Analyte	Expected	Found	UNITS	%REC	LIMITS	Q
Antimony	50.0	51.2	ug/L	102	90 - 110	
Arsenic	50.0	50.0	ug/L	100	90 - 110	
Lead	50.0	50.4	ug/L	101	90 - 110	
Selenium	50.0	49.0	ug/L	98.0	90 - 110	
Thallium	50.0	50.7	ug/L	101	90 - 110	

* Exceeds LIMITS Criteria

CCV - Modified 03/05/2008
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**Microbac Laboratories Inc.
INTERFERENCE CHECK SAMPLES**

Login number: L12110393
Instrument ID: ICP-MS2
Sol. A : WG414625-08
Sol. AB : WG414625-09

File ID: NI.111812.085538
File ID: NI.111812.085850

Workgroup (AAB#): WG414570
Method: 6020
Units: ug/L
Matrix: Water

ANALYTE	Sol. A			Sol. AB			Q
	True	Found	%Recovery	True	Found	%Recovery	
Antimony	NS	0.0467	NS	100	97.4	97.4	
Arsenic	NS	0.0337	NS	100	98.7	98.7	
Lead	NS	0.0266	NS	100	99.1	99.1	
Selenium	NS	0.0230	NS	100	97.6	97.6	
Thallium	NS	0.0177	NS	100	98.0	98.0	

NS = Not spiked

*** = Recovery of spiked element is outside acceptance limit of 80% - 120% of true value.**

= Result for unspiked element is outside the acceptance limits of (+/-) the project reporting limit (RL).

+ = Result for unspiked element is outside the acceptance limits of (+/-) 2 times the project method detection limit (MDL). This criteria is only applicable to specific QAPPs.

ICS - Modified 03/06/2008
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Microbac Laboratories Inc.
INTERFERENCE CHECK SAMPLES

Login number: L12110393
Instrument ID: ICP-MS2
Sol. A : WG414625-25
Sol. AB : WG414625-26

File ID: NI.111812.124039
File ID: NI.111812.124350

Workgroup (AAB#): WG414570
Method: 6020
Units: ug/L
Matrix: Water

ANALYTE	Sol. A			Sol. AB			Q
	True	Found	%Recovery	True	Found	%Recovery	
Antimony	NS	0.0413	NS	100	96.4	96.4	
Arsenic	NS	0.0360	NS	100	94.3	94.3	
Lead	NS	0.0238	NS	100	97.4	97.4	
Selenium	NS	0.0194	NS	100	92.2	92.2	
Thallium	NS	0.0106	NS	100	96.2	96.2	

NS = Not spiked

* = Recovery of spiked element is outside acceptance limit of 80% - 120% of true value.

= Result for unspiked element is outside the acceptance limits of (+/-) the project reporting limit (RL).

+ = Result for unspiked element is outside the acceptance limits of (+/-) 2 times the project method detection limit (MDL). This criteria is only applicable to specific QAPPs.

ICS - Modified 03/06/2008
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INTERNAL STANDARD REPORT

Login: L12110393 Analytical Method: 6020
 Analytical Workgroup: WG414570 Matrix: 1
 Instrument: ICP-MS2 Analyst: JYH
 ICAL Date: 18-NOV-2012 08:33

Sample	Type	Run Date	BISMUTH	GERMANIUM	INDIUM
			% Rec	% Rec	% Rec
L12110393-01	SAMP	18-NOV-2012 11:37	84.56	93.084	93.636
L12110393-02	SAMP	18-NOV-2012 11:40	85.777	95.634	92.991
L12110393-03	SAMP	18-NOV-2012 11:43	85.867	94.607	94.616
L12110393-04	SAMP	18-NOV-2012 11:46	84.033	93.562	92.936
L12110411-21	SAMP	18-NOV-2012 11:20	103.707	99.097	100.861
WG414324-03	BLANK	18-NOV-2012 11:01	102.245	93.354	97.806
WG414324-04	LCS	18-NOV-2012 11:04	102.378	95.693	98.176
WG414570-01	PSPK	18-NOV-2012 11:24	104.903	105.191	105.13
WG414570-02	SERIAL	18-NOV-2012 11:27	104.15	97.617	100.226
WG414625-05	ICV	18-NOV-2012 08:45	98.305	101.015	98.003
WG414625-06	ICB	18-NOV-2012 08:49	98.116	98.612	96.749
WG414625-07	LLICV	18-NOV-2012 08:52	97.24	96.726	96.273
WG414625-08	ICS	18-NOV-2012 08:55	100.383	102.031	99.219
WG414625-09	ICS	18-NOV-2012 08:58	100.582	102.971	101.101
WG414625-10	CCV	18-NOV-2012 09:02	101.289	100.958	99.923
WG414625-11	CCB	18-NOV-2012 09:05	99.627	97.195	97.709
WG414625-16	CCV	18-NOV-2012 10:51	106.183	99.474	102.765
WG414625-17	CCB	18-NOV-2012 10:55	105.083	98.304	101.531
WG414625-18	LLCCV	18-NOV-2012 10:58	103.036	96.215	99.464
WG414625-19	CCV	18-NOV-2012 11:30	100.343	97.428	100.222
WG414625-20	CCB	18-NOV-2012 11:33	100.638	95.531	97.598
WG414625-21	CCV	18-NOV-2012 12:09	100.652	94.782	97.848
WG414625-22	CCB	18-NOV-2012 12:12	97.73	89.833	95.087
WG414625-23	CCV	18-NOV-2012 12:32	98.432	93.74	96.608
WG414625-24	CCB	18-NOV-2012 12:36	95.27	88.861	92.213
WG414625-25	ICS	18-NOV-2012 12:40	96.827	93.213	94.525
WG414625-26	ICS	18-NOV-2012 12:43	95.459	91.552	94.119
WG414625-27	CCV	18-NOV-2012 12:47	97.181	92.035	95.777
WG414625-28	CCB	18-NOV-2012 12:50	94.048	88.695	90.736
WG414625-29	LLCCV	18-NOV-2012 12:55	94.574	89.185	90.997

Acceptance criteria: 30% - 120% Underlined recoveries are out of range
 Acceptance criteria for CCVs and CCBs for method SW846-6020: 80% - 120%

INT_STD_ICPMS - Modified 07/28/2010
 PDF File ID: 2668650
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Microbac Laboratories Inc.
LINEAR RANGE (QUARTERLY)

Login Number: L12110393

Date: 09/24/2012

Instrument ID: ICP-MS2

Method: 6020

Analyte	Integration Time (Sec.)	Concentration (ug/L)
Antimony	1.00	100.0
Arsenic	1.00	100.0
Barium	1.00	100.0
Cadmium	1.00	100.0
Chromium	1.00	100.0
Cobalt	1.00	100.0
Copper	1.00	100.0
Lead	1.00	100.0
Manganese	1.00	100.0
Nickel	1.00	100.0
Selenium	1.00	100.0
Silver	1.00	100.0
Thallium	1.00	100.0
Uranium	1.00	100.0
Vanadium	1.00	100.0
Zinc	1.00	100.0

Comments:

All analytes passed acceptance criteria at the specified concentration.

LINEAR_RANGE - Modified 03/06/2008
PDF File ID: 2668648
Report generated: 11/18/2012 13:14



2.2.2.3 Raw Data

MassCal File Name

Mass Calibration File Name Default.tun

MassCal File Path C:\NexlONData\MassCal\Default.tun

Peak Search Window: 1.00

Sample Information

Sample Date/Time: Sunday, November 18, 2012 06:29:14

Mass Calibration and Resolution

Analyte	E Mass	Meas Mass	Mass C DAC Val	Res DAC Value	Meas Peak WCustom Res
Li	7.016	7.025	1333	2024	0.691
Mg	23.985	23.975	4502	2020	0.687
Co	58.933	58.975	11697	2020	0.700
In	114.904	114.925	22865	2024	0.703
U	238.050	238.075	47464	2037	0.704

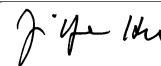
Relative Std. Dev.

Mass	Meas. Intens. RSD
5.525	2.063
5.575	2.074
5.625	3.381
5.675	3.385
5.725	2.687
5.775	1.939
5.825	1.395
5.875	2.658
5.925	3.738
5.975	1.845
6.025	2.475
6.075	1.515
6.125	3.116
6.175	3.954
6.225	9.875
6.275	34.312
6.325	138.332
6.375	108.653
6.425	69.722
6.475	91.287
6.525	44.599
6.575	25.086
6.625	19.854
6.675	8.477
6.725	9.244
6.775	8.055
6.825	5.126

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6.875	7.153
6.925	5.226
6.975	4.830
7.025	3.557
7.075	6.581
7.125	8.973
7.175	4.126
7.225	4.652
7.275	20.721
7.325	55.902
7.375	46.481
7.425	162.980
7.475	63.888
7.525	136.931
7.575	104.583
7.625	136.931
7.675	104.583
7.725	69.722
7.775	162.980
7.825	108.653
7.875	91.287
7.925	83.853
7.975	81.441
8.025	141.421
8.075	69.722
8.125	100.000
8.175	81.441
8.225	106.863
8.275	136.931
8.325	69.722
8.375	55.902
8.425	106.066
8.475	104.583
22.525	91.287
22.575	55.902
22.625	78.174
22.675	39.411
22.725	54.772
22.775	38.207
22.825	44.628
22.875	31.923
22.925	45.026
22.975	34.993
23.025	23.385
23.075	15.786
23.125	34.810
23.175	26.504

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23.225	32.478
23.275	28.315
23.325	19.628
23.375	38.083
23.425	46.505
23.475	41.782
23.525	6.783
23.575	6.255
23.625	4.946
23.675	2.783
23.725	2.928
23.775	4.230
23.825	3.784
23.875	3.289
23.925	3.016
23.975	2.449
24.025	3.931
24.075	3.293
24.125	3.551
24.175	3.259
24.225	2.234
24.275	6.507
24.325	52.973
24.375	63.888
24.425	79.756
24.475	41.691
24.525	23.176
24.575	7.549
24.625	5.906
24.675	7.684
24.725	5.527
24.775	7.849
24.825	2.696
24.875	5.834
24.925	3.903
24.975	4.438
25.025	2.953
25.075	4.669
25.125	3.817
25.175	6.323
25.225	3.214
25.275	59.266
25.325	39.123
25.375	100.000
25.425	69.722
25.475	74.536
57.525	12.310

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57.575	4.452
57.625	4.536
57.675	2.059
57.725	3.569
57.775	2.518
57.825	1.157
57.875	2.325
57.925	2.880
57.975	3.020
58.025	3.382
58.075	2.931
58.125	3.874
58.175	2.223
58.225	2.817
58.275	5.164
58.325	10.871
58.375	13.925
58.425	43.154
58.475	17.023
58.525	7.273
58.575	3.753
58.625	1.881
58.675	4.131
58.725	2.165
58.775	0.762
58.825	1.499
58.875	3.704
58.925	0.629
58.975	3.838
59.025	3.678
59.075	3.658
59.125	4.744
59.175	3.972
59.225	2.958
59.275	36.367
59.325	29.235
59.375	86.958
59.425	67.711
59.475	29.737
59.525	10.355
59.575	4.428
59.625	3.997
59.675	3.245
59.725	4.802
59.775	6.247
59.825	4.158
59.875	4.866

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59.925	2.670
59.975	2.946
60.025	6.763
60.075	7.839
60.125	4.539
60.175	6.014
60.225	4.149
60.275	32.323
60.325	69.722
60.375	223.607
60.425	39.123
60.475	81.441
113.525	21.721
113.575	7.105
113.625	5.971
113.675	3.230
113.725	1.881
113.775	2.361
113.825	2.007
113.875	2.202
113.925	1.680
113.975	1.959
114.025	1.263
114.075	2.215
114.125	2.168
114.175	4.036
114.225	8.115
114.275	14.746
114.325	37.378
114.375	10.648
114.425	19.952
114.475	4.048
114.525	2.954
114.575	2.709
114.625	2.600
114.675	2.324
114.725	2.332
114.775	2.707
114.825	2.244
114.875	0.954
114.925	0.811
114.975	1.144
115.025	1.389
115.075	2.066
115.125	1.567
115.175	2.089
115.225	3.114

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115.275	7.797
115.325	20.836
115.375	57.051
115.425	65.526
115.475	31.623
115.525	9.821
115.575	3.567
115.625	6.804
115.675	3.984
115.725	7.238
115.775	3.765
115.825	3.061
115.875	5.881
115.925	4.915
115.975	3.315
116.025	4.840
116.075	4.036
116.125	5.341
116.175	3.373
116.225	7.145
116.275	15.689
116.325	47.140
116.375	63.888
116.425	84.984
116.475	52.705
236.525	
236.575	68.698
236.625	82.402
236.675	58.630
236.725	54.565
236.775	47.574
236.825	55.902
236.875	17.669
236.925	48.247
236.975	25.913
237.025	34.468
237.075	42.426
237.125	97.328
237.175	35.972
237.225	63.738
237.275	41.110
237.325	35.315
237.375	49.215
237.425	51.719
237.475	36.944
237.525	13.681
237.575	15.841

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237.625	7.355
237.675	4.997
237.725	3.446
237.775	2.863
237.825	1.578
237.875	1.135
237.925	1.921
237.975	1.436
238.025	1.141
238.075	2.155
238.125	1.611
238.175	0.953
238.225	2.075
238.275	1.404
238.325	2.612
238.375	3.061
238.425	4.758
238.475	4.188
238.525	27.384
238.575	23.981
238.625	31.025
238.675	54.565
238.725	56.398
238.775	38.065
238.825	26.146
238.875	28.384
238.925	37.268
238.975	26.503
239.025	35.315
239.075	64.947
239.125	37.268
239.175	42.633
239.225	37.741
239.275	44.628
239.325	23.570
239.375	28.085
239.425	24.495
239.475	33.919

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SmartTune Wizard - Summary

Optimization Summary

SmartTune file: C:\NexIONData\wizard\SmartTune\ESI SmartTune Fullmicrobac.swz

Start Time: 11/18/2012 7:12:09 AM

End Time: 11/18/2012 7:14:13 AM

Daily Performance Check - [Passed] Optimum value(s): N/A

Obtained Intensity (Be 9.0122): 3912.51

Obtained Intensity (Mg 23.985): 61701.36

Obtained Intensity (In 114.904): 99907.60

Obtained Intensity (U 238.05): 68638.79

Obtained Intensity (Bkgd 220): 0.27

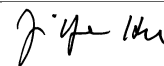
Obtained Formula (CeO 155.9 / Ce 139.905): 0.016 (=1682.96 / 107499.41)

Obtained Formula (Ce++ 69.9527 / Ce 139.905): 0.006 (=628.48 / 107499.41)

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SmartTune Wizard - Details

Optimization Details

SmartTune file: C:\NexIONData\Wizard\SmartTune\ESI SmartTune Fullmicrobac.swz

Optimization Status

Start Time: 11/18/2012 7:12:09 AM

Daily Performance Check

Optimization Settings:

Method: C:\NexIONData\Method\ESI Daily Performance.mth.
Intensity Criterion: Be 9.0122 > 2000
Intensity Criterion: Mg 23.985 > 15000
Intensity Criterion: In 114.904 > 40000
Intensity Criterion: U 238.05 > 30000
Intensity Criterion: Bkgd 220 <= 1
Formula Criterion: CeO 155.9 / Ce 139.905 <= 0.025
Formula Criterion: Ce++ 69.9527 / Ce 139.905 <= 0.03

Optimization Results:

Initial Try

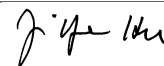
Obtained Intensity (Be 9.0122): 3912.51
Obtained Intensity (Mg 23.985): 61701.36
Obtained Intensity (In 114.904): 99907.60
Obtained Intensity (U 238.05): 68638.79
Obtained Intensity (Bkgd 220): 0.27
Obtained Formula (CeO 155.9 / Ce 139.905): 0.016 (=1682.96 / 107499.41)
Obtained Formula (Ce++ 69.9527 / Ce 139.905): 0.006 (=628.48 / 107499.41)

[Passed] Optimum value(s): N/A

End Time: 11/18/2012 7:14:13 AM

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Method 6020 - Summary Report

Sample ID: Blank

Sample Date/Time: Sunday, November 18, 2012 08:29:55

Number of Replicates: 3

Autosampler Position: 1

Sample Description:

Method File: C:\NexIONData\Method\6020a.mth

Aliquot Volume (mL):

Diluted to Volume (mL):

User Name: JYH user

Cumulative Autodilution Factor: 1

Nexion-ICP 200.8\6020

Concentration Results

IS	Analyte	Mass	Intensity	RSD	Conc.	SD	RSD	Units	Blank Intens.	Mode
[	Li	7	8369.0	6.2				ug/L		Standard
	Be	9	18.3	31.5				ug/L		Standard
	Al	27	215.0	18.6				ug/L		Standard
[>	Sc	45	53004.3	4.1				ug/L		Standard
[	Ti	47	25.7	8.1				ug/L		Standard
	V	51	3222.9	2.8				ug/L		Standard
	Cr	52	10378.6	2.5				ug/L		Standard
	Cr	53	191.7	12.1				ug/L		Standard
	Mn	55	1840.4	3.9				ug/L		Standard
	Co	59	115.3	6.4				ug/L		Standard
	Ni	60	75.0	17.6				ug/L		Standard
	Cu	65	154.7	6.3				ug/L		Standard
	Zn	66	237.3	5.2				ug/L		Standard
[>	Ge	72	413855.7	5.0				ug/L		Standard
	As	75	-197.1	12.5				ug/L		Standard
	Se	82	-5.4	204.2				ug/L		Standard
[	Se-1	77	105.3	2.4				ug/L		Standard
[>	Ga	71	225.0	35.3				mg/L		Standard
[	Rb	85	28.3	10.2				ug/L		Standard
[	Y	89	322845.1	7.8				ug/L		Standard
[>	Rh	103	91.7	47.7				ug/L		Standard
[	Mo	98	18.4	16.2				ug/L		Standard
	Ag	107	62.7	14.5				ug/L		Standard
	Cd	111	19.6	23.5				mg/L		Standard
	Cd	114	55.8	11.3				ug/L		Standard
[>	In	115	657101.6	4.5				ug/L		Standard
	Sn	118	554.7	7.2				ug/L		Standard
	Sb	123	62.0	10.9				ug/L		Standard
[	Ba	135	19.3	32.8				ug/L		Standard
[	Ce	140	24.0	20.8				ug/L		Standard
[>	Tb	159	910513.6	3.6				ug/L		Standard
[	Ho	165	7.3	20.8				ug/L		Standard
	Tl	203	13.0	7.7				ug/L		Standard
	Tl	205	0.7	86.6				ug/L		Standard
	Pb	206	342.3	5.1				ug/L		Standard
	Pb	207	284.0	6.1				ug/L		Standard
	Pb	208	1363.0	3.3				ug/L		Standard
	U	238	2.3	65.5				ug/L		Standard
[>	Bi	209	470591.7	3.6				ug/L		Standard

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[	Na	23	1.7	173.2	mg/L	Standard
	Mg	24	5586.0	4.7	mg/L	Standard
	K	39	5.0	100.0	mg/L	Standard
	Ca	43	45.0	29.4	mg/L	Standard
	Fe	54	350.4	9.4	mg/L	Standard
	Fe	57	101.7	10.2	mg/L	Standard
>	Sc-1	45	53004.3	4.1	mg/L	Standard
	Cl	35	2.3	49.5	ug/L	Standard
	Kr	83	157.3	0.8	ug/L	Standard
	Br	81	2.5	0.0	ug/L	Standard
	P	31	91587.9	4.0	ug/L	Standard
	S	34	32555.8	2.3	ug/L	Standard
	Sr	88	61.7	54.0	ug/L	Standard
	C	12	133.3	4.3	mg/L	Standard
	N	14	0.0		mg/L	Standard
	Hg	202	6.7	86.6	mg/L	Standard

QC Calculated Values

Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recovery
[	Li	7		
	Be	9		
	Al	27		
>	Sc	45		
[	Ti	47		
	V	51		
	Cr	52		
	Cr	53		
	Mn	55		
	Co	59		
	Ni	60		
	Cu	65		
	Zn	66		
>	Ge	72		
	As	75		
	Se	82		
	Se-1	77		
>	Ga	71		
	Rb	85		
	Y	89		
>	Rh	103		

Sample ID: Blank

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[	Mo	98
[	Ag	107
[	Cd	111
[	Cd	114
>	In	115
[	Sn	118
[	Sb	123
[	Ba	135
[	Ce	140
>	Tb	159
[	Ho	165
[	Tl	203
[	Tl	205
[	Pb	206
[	Pb	207
[	Pb	208
[	U	238
>	Bi	209
[	Na	23
[	Mg	24
[	K	39
[	Ca	43
[	Fe	54
[	Fe	57
>	Sc-1	45
[	Cl	35
[	Kr	83
[	Br	81
[	P	31
[	S	34
[	Sr	88
[	C	12
[	N	14
[	Hg	202

QC Out of Limits

Measurement Type	Analyte	Mass	Out of Limits Message

Sample ID: Blank

Report Date/Time: Sunday, November 18, 2012 08:32:26

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Method 6020 - Summary Report

Sample ID: Standard 1

Sample Date/Time: Sunday, November 18, 2012 08:33:07

Number of Replicates: 3

Autosampler Position: 1

Sample Description:

Method File: C:\NexIONData\Method\6020a.mth

Aliquot Volume (mL):

Diluted to Volume (mL):

User Name: JYH user

Cumulative Autodilution Factor: 1

Nexion-ICP 200.8\6020

Concentration Results

IS	Analyte	Mass	Intensity	RSD	Conc.	SD	RSD	Units	Blank Intens.	Mode
[	Li	7	8329.0	7.8				ug/L	8369	Standard
	Be	9	20.0	25.0				ug/L	18	Standard
	Al	27	271.7	63.2				ug/L	215	Standard
[>	Sc	45	53062.8	1.0				ug/L	53004	Standard
[	Ti	47	20.3	5.7				ug/L	26	Standard
	V	51	3083.2	2.8				ug/L	3223	Standard
	Cr	52	9958.9	2.5				ug/L	10379	Standard
	Cr	53	170.8	8.9				ug/L	192	Standard
	Mn	55	2007.5	4.1				ug/L	1840	Standard
	Co	59	125.7	22.5				ug/L	115	Standard
	Ni	60	85.7	18.9				ug/L	75	Standard
	Cu	65	147.7	5.0				ug/L	155	Standard
	Zn	66	242.7	9.8				ug/L	237	Standard
[>	Ge	72	409139.1	1.7				ug/L	413856	Standard
	As	75	-195.7	9.1				ug/L	-197	Standard
	Se	82	-1.0	1527.2				ug/L	-5	Standard
[	Se-1	77	95.7	8.4				ug/L	105	Standard
[>	Ga	71	190.0	9.5				mg/L	225	Standard
[	Rb	85	28.3	79.6				ug/L	28	Standard
[	Y	89	316528.3	2.4				ug/L	322845	Standard
[>	Rh	103	108.3	22.8				ug/L	92	Standard
[	Mo	98	67.5	132.6				ug/L	18	Standard
	Ag	107	95.7	62.8				ug/L	63	Standard
	Cd	111	33.3	55.7				mg/L	20	Standard
	Cd	114	97.3	57.8				ug/L	56	Standard
[>	In	115	649229.5	2.2				ug/L	657102	Standard
	Sn	118	548.3	6.3				ug/L	555	Standard
	Sb	123	67.1	60.7				ug/L	62	Standard
[	Ba	135	33.0	33.7				ug/L	19	Standard
[	Ce	140	37.3	41.5				ug/L	24	Standard
[>	Tb	159	906036.9	2.1				ug/L	910514	Standard
[	Ho	165	8.0	50.0				ug/L	7	Standard
	Tl	203	34.7	106.0				ug/L	13	Standard
	Tl	205	1.0	100.0				ug/L	1	Standard
	Pb	206	369.0	11.6				ug/L	342	Standard
	Pb	207	308.3	15.8				ug/L	284	Standard
	Pb	208	1410.0	8.4				ug/L	1363	Standard
	U	238	13.7	166.9				ug/L	2	Standard
[>	Bi	209	469624.6	1.6				ug/L	470592	Standard

Sample ID: Standard 1

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[	Na	23	6.7	173.2	mg/L	2	Standard
	Mg	24	5747.8	7.8	mg/L	5586	Standard
	K	39	10.0		mg/L	5	Standard
	Ca	43	40.0	21.7	mg/L	45	Standard
	Fe	54	357.1	11.7	mg/L	350	Standard
	Fe	57	95.0	19.0	mg/L	102	Standard
>	Sc-1	45	53062.8	1.0	mg/L	53004	Standard
	Cl	35	2.0	50.0	ug/L	2	Standard
	Kr	83	157.0	3.5	ug/L	157	Standard
	Br	81	5.0	50.0	ug/L	3	Standard
	P	31	90186.0	1.8	ug/L	91588	Standard
	S	34	31348.2	1.3	ug/L	32556	Standard
	Sr	88	76.7	16.4	ug/L	62	Standard
	C	12	120.0	7.2	mg/L	133	Standard
	N	14	0.0		mg/L	0	Standard
	Hg	202	1.7	173.2	mg/L	7	Standard

QC Calculated Values

Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recovery
[	Li	7		
	Be	9		
	Al	27		
>	Sc	45		
[	Ti	47		
	V	51		
	Cr	52		
	Cr	53		
	Mn	55		
	Co	59		
	Ni	60		
	Cu	65		
	Zn	66		
>	Ge	72		
	As	75		
	Se	82		
	Se-1	77		
>	Ga	71		
	Rb	85		
	Y	89		
>	Rh	103		

Sample ID: Standard 1

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[	Mo	98
[	Ag	107
[	Cd	111
[	Cd	114
>	In	115
[	Sn	118
[	Sb	123
[	Ba	135
[	Ce	140
>	Tb	159
[	Ho	165
[	Tl	203
[	Tl	205
[	Pb	206
[	Pb	207
[	Pb	208
[	U	238
>	Bi	209
[	Na	23
[	Mg	24
[	K	39
[	Ca	43
[	Fe	54
[	Fe	57
>	Sc-1	45
[	Cl	35
[	Kr	83
[	Br	81
[	P	31
[	S	34
[	Sr	88
[	C	12
[	N	14
[	Hg	202

QC Out of Limits

Measurement Type	Analyte	Mass	Out of Limits Message

Sample ID: Standard 1

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Method 6020 - Summary Report

Sample ID: Standard 2

Sample Date/Time: Sunday, November 18, 2012 08:36:19

Number of Replicates: 3

Autosampler Position: 2

Sample Description:

Method File: C:\NexIONData\Method\6020a.mth

Aliquot Volume (mL):

Diluted to Volume (mL):

User Name: JYH user

Cumulative Autodilution Factor: 1

Nexion-ICP 200.8\6020

Concentration Results

IS	Analyte	Mass	Intensity	RSD	Conc.	SD	RSD	Units	Blank Intens.	Mode
[	Li	7	8300.6	2.1				ug/L	8369	Standard
	Be	9	121.7	17.1				ug/L	18	Standard
	Al	27	6298.0	6.6				ug/L	215	Standard
[>	Sc	45	52076.0	0.8				ug/L	53004	Standard
[	Ti	47	81.7	19.1				ug/L	26	Standard
	V	51	3745.6	2.0				ug/L	3223	Standard
	Cr	52	10551.0	0.9				ug/L	10379	Standard
	Cr	53	219.2	18.2				ug/L	192	Standard
	Mn	55	2397.9	6.2				ug/L	1840	Standard
	Co	59	870.4	17.4				ug/L	115	Standard
	Ni	60	244.3	21.6				ug/L	75	Standard
	Cu	65	296.3	9.2				ug/L	155	Standard
	Zn	66	340.0	10.1				ug/L	237	Standard
[>	Ge	72	411496.5	1.2				ug/L	413856	Standard
	As	75	-129.9	14.4				ug/L	-197	Standard
	Se	82	5.8	165.8				ug/L	-5	Standard
[	Se-1	77	100.3	5.0				ug/L	105	Standard
[>	Ga	71	201.7	3.8				mg/L	225	Standard
[	Rb	85	35.0	51.5				ug/L	28	Standard
[	Y	89	319255.4	1.3				ug/L	322845	Standard
[>	Rh	103	103.3	12.2				ug/L	92	Standard
[	Mo	98	476.4	13.5				ug/L	18	Standard
	Ag	107	446.0	8.3				ug/L	63	Standard
	Cd	111	204.1	9.7				mg/L	20	Standard
	Cd	114	522.9	6.9				ug/L	56	Standard
[>	In	115	638906.4	1.3				ug/L	657102	Standard
	Sn	118	962.0	6.2				ug/L	555	Standard
	Sb	123	403.1	5.5				ug/L	62	Standard
[	Ba	135	231.7	11.9				ug/L	19	Standard
[	Ce	140	30.3	1.9				ug/L	24	Standard
[>	Tb	159	908996.7	2.2				ug/L	910514	Standard
[	Ho	165	12.3	52.8				ug/L	7	Standard
	Tl	203	685.7	2.1				ug/L	13	Standard
	Tl	205	19.0	13.9				ug/L	1	Standard
	Pb	206	849.4	2.6				ug/L	342	Standard
	Pb	207	750.0	5.1				ug/L	284	Standard
	Pb	208	3414.5	3.9				ug/L	1363	Standard
	U	238	516.0	7.1				ug/L	2	Standard
[>	Bi	209	469421.3	1.3				ug/L	470592	Standard

Sample ID: Standard 2

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Na	23	0.0		mg/L	2	Standard
Mg	24	15861.6	4.8	mg/L	5586	Standard
K	39	3.3	86.6	mg/L	5	Standard
Ca	43	51.7	22.3	mg/L	45	Standard
Fe	54	405.2	4.7	mg/L	350	Standard
Fe	57	83.3	9.2	mg/L	102	Standard
Sc-1	45	52076.0	0.8	mg/L	53004	Standard
Cl	35	2.0	50.0	ug/L	2	Standard
Kr	83	158.6	4.4	ug/L	157	Standard
Br	81	6.7	57.3	ug/L	3	Standard
P	31	87642.8	2.4	ug/L	91588	Standard
S	34	30062.3	1.1	ug/L	32556	Standard
Sr	88	70.0	12.4	ug/L	62	Standard
C	12	98.3	35.7	mg/L	133	Standard
N	14	1.7	173.2	mg/L	0	Standard
Hg	202	0.0		mg/L	7	Standard

QC Calculated Values

Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recovery
Li	7			
Be	9			
Al	27			
Sc	45			
Ti	47			
V	51			
Cr	52			
Cr	53			
Mn	55			
Co	59			
Ni	60			
Cu	65			
Zn	66			
Ge	72			
As	75			
Se	82			
Se-1	77			
Ga	71			
Rb	85			
Y	89			
Rh	103			

Sample ID: Standard 2

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[	Mo	98
[	Ag	107
[	Cd	111
[	Cd	114
>	In	115
[	Sn	118
[	Sb	123
[	Ba	135
[	Ce	140
>	Tb	159
[	Ho	165
[	Tl	203
[	Tl	205
[	Pb	206
[	Pb	207
[	Pb	208
[	U	238
>	Bi	209
[	Na	23
[	Mg	24
[	K	39
[	Ca	43
[	Fe	54
[	Fe	57
>	Sc-1	45
[	Cl	35
[	Kr	83
[	Br	81
[	P	31
[	S	34
[	Sr	88
[	C	12
[	N	14
[	Hg	202

QC Out of Limits

Measurement Type	Analyte	Mass	Out of Limits Message

Sample ID: Standard 2

Report Date/Time: Sunday, November 18, 2012 08:38:51

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Method 6020 - Summary Report

Sample ID: Standard 3

Sample Date/Time: Sunday, November 18, 2012 08:39:31

Number of Replicates: 3

Autosampler Position: 3

Sample Description:

Method File: C:\NexIONData\Method\6020a.mth

Aliquot Volume (mL):

Diluted to Volume (mL):

User Name: JYH user

Cumulative Autodilution Factor: 1

Nexion-ICP 200.8\6020

Concentration Results

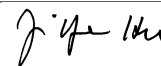
IS	Analyte	Mass	Intensity	RSD	Conc.	SD	RSD	Units	Blank Intens.	Mode
[	Li	7	8293.9	3.9	50.0000	59.414	118.8	ug/L	8369	Standard
	Be	9	107191.3	2.1	50.0000	0.914	1.8	ug/L	18	Standard
	Al	27	6433378.6	1.1	50.0000	1.530	3.1	ug/L	215	Standard
[>	Sc	45	53390.6	3.4				ug/L	53004	Standard
[	Ti	47	53863.6	2.8	100.0000	0.748	0.7	ug/L	26	Standard
	V	51	619131.4	3.5	50.0000	0.970	1.9	ug/L	3223	Standard
	Cr	52	587890.6	2.7	50.0000	0.425	0.8	ug/L	10379	Standard
	Cr	53	72942.7	1.4	50.0000	0.412	0.8	ug/L	192	Standard
	Mn	55	906870.4	2.8	50.0000	0.523	1.0	ug/L	1840	Standard
	Co	59	703013.6	2.1	50.0000	0.455	0.9	ug/L	115	Standard
	Ni	60	150612.7	3.2	50.0000	0.565	1.1	ug/L	75	Standard
	Cu	65	145756.2	1.6	50.0000	0.271	0.5	ug/L	155	Standard
	Zn	66	71832.0	3.0	50.0000	0.789	1.6	ug/L	237	Standard
[>	Ge	72	421989.4	2.1				ug/L	413856	Standard
	As	75	75787.3	2.3	50.0000	0.113	0.2	ug/L	-197	Standard
	Se	82	6779.7	2.7	50.0000	0.474	0.9	ug/L	-5	Standard
[	Se-1	77	5239.6	4.7	50.0000	1.571	3.1	ug/L	105	Standard
[>	Ga	71	238.3	4.4				mg/L	225	Standard
[	Rb	85	938.4	12.1				ug/L	28	Standard
[	Y	89	320390.2	2.7				ug/L	322845	Standard
[>	Rh	103	138.3	23.2				ug/L	92	Standard
[	Mo	98	453194.7	2.8	100.0000	0.582	0.6	ug/L	18	Standard
	Ag	107	400930.0	2.8	50.0000	0.349	0.7	ug/L	63	Standard
	Cd	111	174010.0	2.6	50.0000	0.141	0.3	mg/L	20	Standard
	Cd	114	457288.7	2.0	50.0000	0.425	0.8	ug/L	56	Standard
[>	In	115	648510.0	2.3				ug/L	657102	Standard
	Sn	118	503976.2	1.5	50.0000	0.532	1.1	ug/L	555	Standard
	Sb	123	398037.3	1.9	50.0000	0.500	1.0	ug/L	62	Standard
[	Ba	135	173901.5	2.0	50.0000	0.279	0.6	ug/L	19	Standard
[	Ce	140	729.4	3.7				ug/L	24	Standard
[>	Tb	159	928443.5	2.3				ug/L	910514	Standard
[	Ho	165	448.3	3.5				ug/L	7	Standard
[	Tl	203	650603.8	2.1	50.0000	0.334	0.7	ug/L	13	Standard
	Tl	205	19746.5	2.8	50.0000	0.410	0.8	ug/L	1	Standard
	Pb	206	520714.2	2.3	50.0000	0.143	0.3	ug/L	342	Standard
	Pb	207	443568.9	2.6	50.0000	0.272	0.5	ug/L	284	Standard
	Pb	208	2055711.2	2.3	50.0000	0.171	0.3	ug/L	1363	Standard
	U	238	516230.1	1.8	50.0000	0.179	0.4	ug/L	2	Standard
[>	Bi	209	467622.4	2.1				ug/L	470592	Standard

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Na	23	53.3	23.6	5.0000	1.184	23.7	mg/L	2	Standard
Mg	24	10609350.1	2.7	5.0000	0.136	2.7	mg/L	5586	Standard
K	39	380.0	25.1	5.0000	1.124	22.5	mg/L	5	Standard
Ca	43	166.7	15.1	5.0000	0.895	17.9	mg/L	45	Standard
Fe	54	13849.7	2.6	5.0000	0.221	4.4	mg/L	350	Standard
Fe	57	3452.1	5.8	5.0000	0.129	2.6	mg/L	102	Standard
Sc-1	45	53390.6	3.4				mg/L	53004	Standard
Cl	35	2.3	24.7				ug/L	2	Standard
Kr	83	143.7	3.2				ug/L	157	Standard
Br	81	3.3	43.3				ug/L	3	Standard
P	31	93944.7	2.9				ug/L	91588	Standard
S	34	36149.7	0.8				ug/L	32556	Standard
Sr	88	66.7	24.1				ug/L	62	Standard
C	12	131.7	15.3				mg/L	133	Standard
N	14	0.0					mg/L	0	Standard
Hg	202	0.0					mg/L	7	Standard

QC Calculated Values

Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recovery
Li	7			
Be	9			
Al	27			
Sc	45			
Ti	47			
V	51			
Cr	52			
Cr	53			
Mn	55			
Co	59			
Ni	60			
Cu	65			
Zn	66			
Ge	72			
As	75			
Se	82			
Se-1	77			
Ga	71			
Rb	85			
Y	89			
Rh	103			

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[	Mo	98
[	Ag	107
[	Cd	111
[	Cd	114
>	In	115
[	Sn	118
[	Sb	123
[	Ba	135
[	Ce	140
>	Tb	159
[	Ho	165
[	Tl	203
[	Tl	205
[	Pb	206
[	Pb	207
[	Pb	208
[	U	238
>	Bi	209
[	Na	23
[	Mg	24
[	K	39
[	Ca	43
[	Fe	54
[	Fe	57
>	Sc-1	45
[	Cl	35
[	Kr	83
[	Br	81
[	P	31
[	S	34
[	Sr	88
[	C	12
[	N	14
[	Hg	202

QC Out of Limits

Measurement Type	Analyte	Mass	Out of Limits Message

Sample ID: Standard 3

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Method 6020 - Summary Report

Sample ID: Standard 4

Sample Date/Time: Sunday, November 18, 2012 08:42:44

Number of Replicates: 3

Autosampler Position: 4

Sample Description:

Method File: C:\NexIONData\Method\6020a.mth

Aliquot Volume (mL):

Diluted to Volume (mL):

User Name: JYH user

Cumulative Autodilution Factor: 1

Nexion-ICP 200.8\6020

Concentration Results

IS	Analyte	Mass	Intensity	RSD	Conc.	SD	RSD	Units	Blank Intens.	Mode
[	Li	7	8790.9	5.2	-35.2561	87.834	249.1	ug/L	8369	Standard
	Be	9	210101.2	6.9	97.7032	2.489	2.5	ug/L	18	Standard
	Al	27	12180688.8	6.1	95.9685	1.854	1.9	ug/L	215	Standard
[>	Sc	45	54730.5	4.4				ug/L	53004	Standard
	Ti	47	101713.1	7.2	194.7312	8.957	4.6	ug/L	26	Standard
	V	51	1185232.1	4.8	98.1851	1.915	2.0	ug/L	3223	Standard
	Cr	52	1090961.3	5.6	96.9070	2.953	3.0	ug/L	10379	Standard
	Cr	53	134882.9	6.8	96.3564	4.632	4.8	ug/L	192	Standard
	Mn	55	1722020.4	6.1	97.6826	3.501	3.6	ug/L	1840	Standard
	Co	59	1309516.8	5.1	96.6887	2.146	2.2	ug/L	115	Standard
	Ni	60	282929.9	5.3	97.1368	3.277	3.4	ug/L	75	Standard
	Cu	65	272566.1	6.4	96.8932	3.920	4.0	ug/L	155	Standard
	Zn	66	136016.6	6.1	97.5863	2.991	3.1	ug/L	237	Standard
[>	Ge	72	419859.5	3.4				ug/L	413856	Standard
	As	75	143181.6	5.7	97.3200	2.640	2.7	ug/L	-197	Standard
	Se	82	12807.1	5.1	97.3844	2.129	2.2	ug/L	-5	Standard
[	Se-1	77	9780.8	4.8	97.2494	1.800	1.9	ug/L	105	Standard
[>	Ga	71	255.0	20.8				mg/L	225	Standard
[	Rb	85	6578.1	5.7				ug/L	28	Standard
[	Y	89	321292.6	4.0				ug/L	322845	Standard
[>	Rh	103	158.3	10.2				ug/L	92	Standard
[	Mo	98	871199.0	7.4	196.0894	12.466	6.4	ug/L	18	Standard
	Ag	107	761545.4	5.0	97.4565	3.919	4.0	ug/L	63	Standard
	Cd	111	328778.6	6.4	97.1867	5.238	5.4	mg/L	20	Standard
	Cd	114	866496.0	5.4	97.3272	4.256	4.4	ug/L	56	Standard
[>	In	115	647985.0	1.2				ug/L	657102	Standard
	Sn	118	957202.3	6.5	97.4565	5.401	5.5	ug/L	555	Standard
	Sb	123	749317.4	5.4	96.9975	4.304	4.4	ug/L	62	Standard
[	Ba	135	324116.6	4.8	96.5103	3.750	3.9	ug/L	19	Standard
[	Ce	140	323.0	6.7				ug/L	24	Standard
[>	Tb	159	914554.2	1.8				ug/L	910514	Standard
[	Ho	165	861.0	7.9				ug/L	7	Standard
	Tl	203	1224891.1	3.8	97.8344	2.493	2.5	ug/L	13	Standard
	Tl	205	37576.3	4.2	98.3699	2.905	3.0	ug/L	1	Standard
	Pb	206	983511.4	5.7	98.0054	4.517	4.6	ug/L	342	Standard
	Pb	207	834491.2	5.0	97.8111	3.606	3.7	ug/L	284	Standard
	Pb	208	3882128.3	6.8	97.9877	5.319	5.4	ug/L	1363	Standard
	U	238	946277.4	6.9	96.4784	5.224	5.4	ug/L	2	Standard
[>	Bi	209	459619.1	1.7				ug/L	470592	Standard

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Na	23	118.3	28.8	10.4093	3.134	30.1	mg/L	2	Standard
Mg	24	20350493.4	5.5	9.6652	0.122	1.3	mg/L	5586	Standard
K	39	753.4	6.9	9.8736	0.319	3.2	mg/L	5	Standard
Ca	43	306.7	5.0	10.4102	0.267	2.6	mg/L	45	Standard
Fe	54	26593.2	7.3	9.7342	0.348	3.6	mg/L	350	Standard
Fe	57	6336.3	8.2	9.4986	0.396	4.2	mg/L	102	Standard
Sc-1	45	54730.5	4.4				mg/L	53004	Standard
Cl	35	2.7	57.3				ug/L	2	Standard
Kr	83	164.3	0.7				ug/L	157	Standard
Br	81	8.3	62.4				ug/L	3	Standard
P	31	96518.3	3.0				ug/L	91588	Standard
S	34	37143.0	1.0				ug/L	32556	Standard
Sr	88	61.7	9.4				ug/L	62	Standard
C	12	136.7	11.2				mg/L	133	Standard
N	14	1.7	173.2				mg/L	0	Standard
Hg	202	11.7	24.7				mg/L	7	Standard

QC Calculated Values

Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recovery
Li	7			
Be	9			
Al	27			
Sc	45			
Ti	47			
V	51			
Cr	52			
Cr	53			
Mn	55			
Co	59			
Ni	60			
Cu	65			
Zn	66			
Ge	72			
As	75			
Se	82			
Se-1	77			
Ga	71			
Rb	85			
Y	89			
Rh	103			

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[	Mo	98
[	Ag	107
[	Cd	111
[	Cd	114
>	In	115
[	Sn	118
[	Sb	123
[	Ba	135
[	Ce	140
>	Tb	159
[	Ho	165
[	Tl	203
[	Tl	205
[	Pb	206
[	Pb	207
[	Pb	208
[	U	238
>	Bi	209
[	Na	23
[	Mg	24
[	K	39
[	Ca	43
[	Fe	54
[	Fe	57
>	Sc-1	45
[	Cl	35
[	Kr	83
[	Br	81
[	P	31
[	S	34
[	Sr	88
[	C	12
[	N	14
[	Hg	202

QC Out of Limits

Measurement Type	Analyte	Mass	Out of Limits Message

Sample ID: Standard 4

Report Date/Time: Sunday, November 18, 2012 08:45:16

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Method 6020 - Summary Report

Sample ID: QC Std 1

Sample Date/Time: Sunday, November 18, 2012 08:45:58

Number of Replicates: 3

Autosampler Position: 201

Sample Description:

Method File: C:\NexIONData\Method\6020a.mth

Aliquot Volume (mL):

Diluted to Volume (mL):

User Name: JYH user

Cumulative Autodilution Factor: 1

Nexion-ICP 200.8\6020

Concentration Results

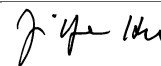
IS	Analyte	Mass	Intensity	RSD	Conc.	SD	RSD	Units	Blank Intens.	Mode
[	Li	7	8552.4	3.9	4.8986	95.856	1956.8	ug/L	8369	Standard
	Be	9	107376.7	5.8	50.8768	0.776	1.5	ug/L	18	Standard
	Al	27	6241226.4	2.6	50.1500	1.481	3.0	ug/L	215	Standard
[>	Sc	45	53726.9	4.3				ug/L	53004	Standard
[	Ti	47	52870.8	4.0	101.7028	1.275	1.3	ug/L	26	Standard
	V	51	603785.3	1.6	50.1479	1.284	2.6	ug/L	3223	Standard
	Cr	52	573498.0	2.1	50.7731	0.948	1.9	ug/L	10379	Standard
	Cr	53	71147.7	4.3	51.0374	2.053	4.0	ug/L	192	Standard
	Mn	55	892762.6	2.8	50.8564	0.676	1.3	ug/L	1840	Standard
	Co	59	676082.9	1.8	50.1746	1.301	2.6	ug/L	115	Standard
	Ni	60	145966.9	1.7	50.3534	1.284	2.5	ug/L	75	Standard
	Cu	65	143114.5	1.3	51.1268	1.352	2.6	ug/L	155	Standard
	Zn	66	70537.9	2.8	50.7769	0.841	1.7	ug/L	237	Standard
[>	Ge	72	418058.3	3.9				ug/L	413856	Standard
	As	75	73800.3	2.6	50.4869	0.817	1.6	ug/L	-197	Standard
	Se	82	6634.1	3.6	50.6930	1.072	2.1	ug/L	-5	Standard
[	Se-1	77	5119.2	1.9	50.6968	1.165	2.3	ug/L	105	Standard
[>	Ga	71	213.3	13.7				mg/L	225	Standard
[	Rb	85	2078.5	10.5				ug/L	28	Standard
[	Y	89	313499.7	4.7				ug/L	322845	Standard
[>	Rh	103	146.7	34.3				ug/L	92	Standard
[	Mo	98	449107.3	1.2	101.7937	1.995	2.0	ug/L	18	Standard
	Ag	107	393415.6	2.1	50.6784	0.525	1.0	ug/L	63	Standard
	Cd	111	170543.4	2.0	50.7509	0.579	1.1	mg/L	20	Standard
	Cd	114	449418.5	2.5	50.8101	0.260	0.5	ug/L	56	Standard
[>	In	115	643979.5	3.0				ug/L	657102	Standard
	Sn	118	505125.0	2.5	51.7529	0.788	1.5	ug/L	555	Standard
	Sb	123	393649.8	1.9	51.2994	0.584	1.1	ug/L	62	Standard
[	Ba	135	170714.8	1.4	51.1694	0.911	1.8	ug/L	19	Standard
[	Ce	140	453.7	3.2				ug/L	24	Standard
[>	Tb	159	924098.9	2.5				ug/L	910514	Standard
[	Ho	165	449.0	4.3				ug/L	7	Standard
	Tl	203	634104.1	1.5	50.3422	0.798	1.6	ug/L	13	Standard
	Tl	205	19335.3	1.3	50.3214	1.118	2.2	ug/L	1	Standard
	Pb	206	512540.0	1.5	50.7590	0.860	1.7	ug/L	342	Standard
	Pb	207	437936.3	1.9	51.0079	0.629	1.2	ug/L	284	Standard
	Pb	208	2007028.1	1.8	50.3523	0.739	1.5	ug/L	1363	Standard
	U	238	505239.6	2.6	51.2151	0.841	1.6	ug/L	2	Standard
[>	Bi	209	462614.1	3.1				ug/L	470592	Standard

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Na	23	65.0	7.7	5.7940	0.207	3.6	mg/L	2	Standard
Mg	24	10381433.3	1.9	5.0264	0.124	2.5	mg/L	5586	Standard
K	39	386.7	20.7	5.1299	0.942	18.4	mg/L	5	Standard
Ca	43	186.7	6.7	5.6297	0.840	14.9	mg/L	45	Standard
Fe	54	13940.7	5.0	5.1296	0.078	1.5	mg/L	350	Standard
Fe	57	3345.4	3.5	5.0569	0.117	2.3	mg/L	102	Standard
Sc-1	45	53726.9	4.3				mg/L	53004	Standard
Cl	35	3.0	57.7				ug/L	2	Standard
Kr	83	162.2	0.6				ug/L	157	Standard
Br	81	3.3	114.6				ug/L	3	Standard
P	31	97704.4	4.1				ug/L	91588	Standard
S	34	37771.2	2.3				ug/L	32556	Standard
Sr	88	66.7	11.5				ug/L	62	Standard
C	12	93.3	16.4				mg/L	133	Standard
N	14	0.0					mg/L	0	Standard
Hg	202	1.7	173.2				mg/L	7	Standard

QC Calculated Values

Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recovery
Li	7			
Be	9	101.754		
Al	27	100.300		
Sc	45			
Ti	47	101.703		
V	51	100.296		
Cr	52	101.546		
Cr	53			
Mn	55	101.713		
Co	59	100.349		
Ni	60	100.707		
Cu	65	102.254		
Zn	66	101.554		
Ge	72		101.015	
As	75	100.974		
Se	82	101.386		
Se-1	77			
Ga	71			
Rb	85			
Y	89			
Rh	103			

Sample ID: QC Std 1

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[	Mo	98	101.794	
[	Ag	107	101.357	
[	Cd	111	101.502	
[	Cd	114		
>	In	115		98.003
[	Sn	118	103.506	
[	Sb	123	102.599	
[	Ba	135	102.339	
[	Ce	140		
>	Tb	159		
[	Ho	165		
[	Tl	203	100.684	
[	Tl	205		
[	Pb	206	101.518	
[	Pb	207	102.016	
[	Pb	208	100.705	
[	U	238	102.430	
>	Bi	209		98.305
[	Na	23	115.879	
[	Mg	24	100.528	
[	K	39	102.598	
[	Ca	43	112.595	
[	Fe	54	102.592	
[	Fe	57	101.139	
>	Sc-1	45		
	Cl	35		
	Kr	83		
	Br	81		
	P	31		
	S	34		
	Sr	88		
	C	12		
	N	14		
	Hg	202		

QC Out of Limits

Measurement Type	Analyte	Mass	Out of Limits Message
QC Std 1	Na	23	
QC Std 1	Ca	43	

Sample ID: QC Std 1

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Method 6020 - Summary Report

Sample ID: QC Std 2

Sample Date/Time: Sunday, November 18, 2012 08:49:12

Number of Replicates: 3

Autosampler Position: 102

Sample Description:

Method File: C:\NexIONData\Method\6020a.mth

Aliquot Volume (mL):

Diluted to Volume (mL):

User Name: JYH user

Cumulative Autodilution Factor: 1

Nexion-ICP 200.8\6020

Concentration Results

IS	Analyte	Mass	Intensity	RSD	Conc.	SD	RSD	Units	Blank Intens.	Mode
[	Li	7	7943.8	5.1	190.5235	103.814	54.5	ug/L	8369	Standard
	Be	9	33.3	45.8	0.0067	0.007	99.6	ug/L	18	Standard
	Al	27	920.0	100.1	0.0055	0.008	140.3	ug/L	215	Standard
[>	Sc	45	51962.4	4.8				ug/L	53004	Standard
[	Ti	47	30.3	33.7	-0.0001	0.018	20927.1	ug/L	26	Standard
	V	51	3093.9	5.3	-0.0032	0.005	173.0	ug/L	3223	Standard
	Cr	52	9763.8	4.2	-0.0148	0.015	103.0	ug/L	10379	Standard
	Cr	53	166.7	10.6	0.0127	0.009	71.5	ug/L	192	Standard
	Mn	55	1518.7	17.4	-0.0004	0.013	3021.8	ug/L	1840	Standard
	Co	59	228.3	60.8	0.0016	0.010	607.1	ug/L	115	Standard
	Ni	60	103.7	30.5	0.0009	0.010	1069.9	ug/L	75	Standard
	Cu	65	170.0	16.3	0.0046	0.008	182.6	ug/L	155	Standard
	Zn	66	244.7	17.2	-0.0189	0.025	133.7	ug/L	237	Standard
[>	Ge	72	408112.2	3.3				ug/L	413856	Standard
	As	75	-151.0	32.4	0.0343	0.035	101.8	ug/L	-197	Standard
	Se	82	15.4	75.2	0.1263	0.091	71.8	ug/L	-5	Standard
[	Se-1	77	88.7	14.3	-0.0626	0.124	198.6	ug/L	105	Standard
[>	Ga	71	221.7	11.4				mg/L	225	Standard
	Rb	85	21.7	35.3				ug/L	28	Standard
[	Y	89	312663.3	6.4				ug/L	322845	Standard
[>	Rh	103	131.7	29.0				ug/L	92	Standard
[	Mo	98	139.2	74.4	0.0230	0.023	101.7	ug/L	18	Standard
	Ag	107	158.7	83.9	0.0127	0.017	135.0	ug/L	63	Standard
	Cd	111	56.8	91.4	0.0059	0.015	263.9	mg/L	20	Standard
	Cd	114	166.3	82.5	0.0094	0.016	165.1	ug/L	56	Standard
[>	In	115	635737.0	2.5				ug/L	657102	Standard
	Sn	118	522.0	33.6	0.0047	0.018	375.2	ug/L	555	Standard
	Sb	123	372.5	22.5	0.0461	0.010	21.7	ug/L	62	Standard
[	Ba	135	40.3	80.6	-0.0078	0.010	125.5	ug/L	19	Standard
[	Ce	140	31.3	3.7				ug/L	24	Standard
[>	Tb	159	888922.7	3.5				ug/L	910514	Standard
[	Ho	165	10.7	27.1				ug/L	7	Standard
	Tl	203	133.0	120.5	0.0070	0.013	184.3	ug/L	13	Standard
	Tl	205	3.3	45.8	0.0100	0.004	40.4	ug/L	1	Standard
	Pb	206	399.3	28.4	0.0068	0.012	171.7	ug/L	342	Standard
	Pb	207	345.0	34.0	0.0042	0.014	330.9	ug/L	284	Standard
	Pb	208	1549.0	28.4	0.0046	0.011	249.5	ug/L	1363	Standard
	U	238	58.3	133.3	0.0044	0.008	179.9	ug/L	2	Standard
[>	Bi	209	461724.1	2.8				ug/L	470592	Standard

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Na	23	0.0		0.0050	0.000	0.0	mg/L	2	Standard
Mg	24	8285.6	12.7	0.0012	0.001	40.9	mg/L	5586	Standard
K	39	1.7	173.2	-0.0193	0.038	197.5	mg/L	5	Standard
Ca	43	48.3	26.0	-0.1116	0.645	577.7	mg/L	45	Standard
Fe	54	316.5	5.5	-0.0293	0.007	22.7	mg/L	350	Standard
Fe	57	101.7	12.4	0.0345	0.016	46.9	mg/L	102	Standard
Sc-1	45	51962.4	4.8				mg/L	53004	Standard
Cl	35	2.7	78.1				ug/L	2	Standard
Kr	83	147.7	8.5				ug/L	157	Standard
Br	81	5.0	50.0				ug/L	3	Standard
P	31	93829.1	4.2				ug/L	91588	Standard
S	34	35404.7	4.0				ug/L	32556	Standard
Sr	88	51.7	34.0				ug/L	62	Standard
C	12	118.3	32.8				mg/L	133	Standard
N	14	0.0					mg/L	0	Standard
Hg	202	0.0					mg/L	7	Standard

QC Calculated Values

Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recovery
Li	7			
Be	9			
Al	27			
Sc	45			
Ti	47			
V	51			
Cr	52			
Cr	53			
Mn	55			
Co	59			
Ni	60			
Cu	65			
Zn	66			
Ge	72		98.612	
As	75			
Se	82			
Se-1	77			
Ga	71			
Rb	85			
Y	89			
Rh	103			

Sample ID: QC Std 2

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[	Mo	98	
[	Ag	107	
[	Cd	111	
[	Cd	114	
>	In	115	96.749
[	Sn	118	
[	Sb	123	
[	Ba	135	
[	Ce	140	
>	Tb	159	
[	Ho	165	
[	Tl	203	
[	Tl	205	
[	Pb	206	
[	Pb	207	
[	Pb	208	
[	U	238	
>	Bi	209	98.116
[	Na	23	
[	Mg	24	
[	K	39	
[	Ca	43	
[	Fe	54	
[	Fe	57	
>	Sc-1	45	
[	Cl	35	
[	Kr	83	
[	Br	81	
[	P	31	
[	S	34	
[	Sr	88	
[	C	12	
[	N	14	
[	Hg	202	

QC Out of Limits

Measurement Type	Analyte	Mass	Out of Limits Message
QC Std 2	Ca	43	

Sample ID: QC Std 2

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Method 6020 - Summary Report

Sample ID: QC Std 3

Sample Date/Time: Sunday, November 18, 2012 08:52:26

Number of Replicates: 3

Autosampler Position: 202

Sample Description:

Method File: C:\NexIONData\Method\6020a.mth

Aliquot Volume (mL):

Diluted to Volume (mL):

User Name: JYH user

Cumulative Autodilution Factor: 1

Nexion-ICP 200.8\6020

Concentration Results

IS	Analyte	Mass	Intensity	RSD	Conc.	SD	RSD	Units	Blank Intens.	Mode
[	Li	7	8160.5	8.1	-43.3450	197.672	456.0	ug/L	8369	Standard
	Be	9	465.0	23.6	0.2267	0.070	31.0	ug/L	18	Standard
	Al	27	6154.7	145.2	0.0533	0.082	153.5	ug/L	215	Standard
[>	Sc	45	50701.5	5.7				ug/L	53004	Standard
	Ti	47	42.7	66.5	0.0267	0.058	217.8	ug/L	26	Standard
	V	51	7630.0	2.9	0.3976	0.022	5.6	ug/L	3223	Standard
	Cr	52	18053.1	1.0	0.7834	0.033	4.2	ug/L	10379	Standard
	Cr	53	1241.7	8.5	0.8220	0.074	9.0	ug/L	192	Standard
	Mn	55	10349.9	5.4	0.5274	0.016	3.0	ug/L	1840	Standard
	Co	59	5526.3	7.4	0.4126	0.028	6.8	ug/L	115	Standard
	Ni	60	4900.8	4.9	1.7295	0.036	2.1	ug/L	75	Standard
	Cu	65	2402.9	5.6	0.8389	0.024	2.8	ug/L	155	Standard
	Zn	66	8803.9	5.8	6.4400	0.227	3.5	ug/L	237	Standard
[>	Ge	72	400306.3	2.9				ug/L	413856	Standard
	As	75	391.0	16.8	0.4183	0.046	11.1	ug/L	-197	Standard
	Se	82	42.9	13.6	0.3465	0.037	10.6	ug/L	-5	Standard
[	Se-1	77	143.3	2.8	0.5316	0.019	3.6	ug/L	105	Standard
[>	Ga	71	178.3	17.1				mg/L	225	Standard
	Rb	85	13.3	21.7				ug/L	28	Standard
	Y	89	304165.0	3.4				ug/L	322845	Standard
[>	Rh	103	90.0	20.0				ug/L	92	Standard
	Mo	98	70.3	38.8	0.0075	0.006	81.2	ug/L	18	Standard
	Ag	107	3118.7	2.0	0.4012	0.012	2.9	ug/L	63	Standard
	Cd	111	844.3	4.0	0.2446	0.006	2.5	mg/L	20	Standard
	Cd	114	2225.5	6.3	0.2466	0.013	5.4	ug/L	56	Standard
[>	In	115	632610.6	3.3				ug/L	657102	Standard
	Sn	118	559.7	17.0	0.0091	0.011	118.7	ug/L	555	Standard
	Sb	123	3217.0	5.1	0.4239	0.022	5.2	ug/L	62	Standard
[	Ba	135	2543.9	5.9	0.7560	0.025	3.3	ug/L	19	Standard
	Ce	140	20.7	15.6				ug/L	24	Standard
[>	Tb	159	883394.9	2.7				ug/L	910514	Standard
	Ho	165	10.0	43.6				ug/L	7	Standard
	Tl	203	1106.0	6.7	0.0851	0.005	6.0	ug/L	13	Standard
	Tl	205	40.0	32.7	0.1072	0.038	35.4	ug/L	1	Standard
	Pb	206	2473.2	1.8	0.2148	0.005	2.1	ug/L	342	Standard
	Pb	207	2166.5	7.3	0.2196	0.026	11.7	ug/L	284	Standard
	Pb	208	10301.1	11.6	0.2276	0.038	16.7	ug/L	1363	Standard
	U	238	4327.3	15.1	0.4434	0.081	18.3	ug/L	2	Standard
[>	Bi	209	457602.9	3.2				ug/L	470592	Standard

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Na	23	1.7	173.2	0.1560	0.262	167.7	mg/L	2	Standard
Mg	24	15221.0	80.9	0.0051	0.007	135.9	mg/L	5586	Standard
K	39	3.3	86.6	0.0067	0.042	622.2	mg/L	5	Standard
Ca	43	43.3	24.0	-0.3005	0.451	149.9	mg/L	45	Standard
Fe	54	344.6	15.4	-0.0145	0.024	167.2	mg/L	350	Standard
Fe	57	93.3	15.5	0.0248	0.019	75.3	mg/L	102	Standard
Sc-1	45	50701.5	5.7				mg/L	53004	Standard
Cl	35	3.0	33.3				ug/L	2	Standard
Kr	83	163.7	0.7				ug/L	157	Standard
Br	81	5.0	50.0				ug/L	3	Standard
P	31	88830.6	2.9				ug/L	91588	Standard
S	34	32758.7	2.4				ug/L	32556	Standard
Sr	88	56.7	20.4				ug/L	62	Standard
C	12	116.7	17.8				mg/L	133	Standard
N	14	0.0					mg/L	0	Standard
Hg	202	0.0					mg/L	7	Standard

QC Calculated Values

Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recovery
Li	7			
Be	9	113.365		
Al	27			
Sc	45			
Ti	47			
V	51	99.411		
Cr	52	97.919		
Cr	53			
Mn	55	105.482		
Co	59	103.146		
Ni	60	108.097		
Cu	65	104.861		
Zn	66	103.040		
Ge	72		96.726	
As	75	104.584		
Se	82	86.633		
Se-1	77			
Ga	71			
Rb	85			
Y	89			
Rh	103			

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[	Mo	98		
[	Ag	107	100.312	
[	Cd	111	101.905	
[	Cd	114		
>	In	115		96.273
[	Sn	118		
[	Sb	123	105.981	
[	Ba	135	100.795	
[	Ce	140		
>	Tb	159		
[	Ho	165		
[	Tl	203	106.375	
[	Tl	205		
[	Pb	206		
[	Pb	207		
[	Pb	208	113.823	
[	U	238	110.856	
>	Bi	209		97.240
[	Na	23		
[	Mg	24		
[	K	39		
[	Ca	43		
[	Fe	54		
[	Fe	57		
>	Sc-1	45		
[	Cl	35		
[	Kr	83		
[	Br	81		
[	P	31		
[	S	34		
[	Sr	88		
[	C	12		
[	N	14		
[	Hg	202		

QC Out of Limits

Measurement Type	Analyte	Mass	Out of Limits Message

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Method 6020 - Summary Report

Sample ID: QC Std 4

Sample Date/Time: Sunday, November 18, 2012 08:55:38

Number of Replicates: 3

Autosampler Position: 203

Sample Description:

Method File: C:\NexIONData\Method\6020a.mth

Aliquot Volume (mL):

Diluted to Volume (mL):

User Name: JYH user

Cumulative Autodilution Factor: 1

Nexion-ICP 200.8\6020

Concentration Results

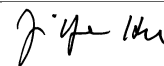
IS	Analyte	Mass	Intensity	RSD	Conc.	SD	RSD	Units	Blank Intens.	Mode
[	Li	7	8762.5	4.1	-110.3024	124.863	113.2	ug/L	8369	Standard
	Be	9	16.7	45.8	-0.0016	0.003	201.7	ug/L	18	Standard
	Al	27	5687041.6	2.4	45.7343	2.431	5.3	ug/L	215	Standard
[>	Sc	45	53710.1	3.6				ug/L	53004	Standard
[	Ti	47	51029.8	1.3	97.1877	1.722	1.8	ug/L	26	Standard
	V	51	2305.4	0.7	-0.0770	0.003	4.0	ug/L	3223	Standard
	Cr	52	10839.9	0.8	0.0511	0.011	21.1	ug/L	10379	Standard
	Cr	53	1636.8	8.8	1.0542	0.094	9.0	ug/L	192	Standard
	Mn	55	2670.6	3.0	0.0619	0.005	7.6	ug/L	1840	Standard
	Co	59	351.0	6.2	0.0103	0.002	17.9	ug/L	115	Standard
	Ni	60	1064.0	3.6	0.3280	0.016	4.8	ug/L	75	Standard
	Cu	65	531.7	5.0	0.1307	0.011	8.5	ug/L	155	Standard
	Zn	66	1948.8	8.9	1.1953	0.136	11.4	ug/L	237	Standard
[>	Ge	72	422260.5	1.0				ug/L	413856	Standard
	As	75	-157.0	38.3	0.0337	0.041	122.9	ug/L	-197	Standard
	Se	82	2.5	745.9	0.0230	0.138	599.0	ug/L	-5	Standard
[	Se-1	77	267.7	7.9	1.6947	0.208	12.3	ug/L	105	Standard
[>	Ga	71	391.7	6.0				mg/L	225	Standard
[	Rb	85	3052.0	2.8				ug/L	28	Standard
[	Y	89	317218.1	0.7				ug/L	322845	Standard
[>	Rh	103	83.3	33.0				ug/L	92	Standard
[	Mo	98	402956.8	2.5	90.2508	4.395	4.9	ug/L	18	Standard
	Ag	107	101.7	6.3	0.0051	0.001	18.6	ug/L	63	Standard
	Cd	111	200.1	27.2	0.0477	0.017	34.8	mg/L	20	Standard
	Cd	114	1433.4	3.8	0.1507	0.010	6.6	ug/L	56	Standard
[>	In	115	651968.7	2.5				ug/L	657102	Standard
	Sn	118	509.3	10.2	0.0022	0.005	239.3	ug/L	555	Standard
	Sb	123	385.5	6.5	0.0467	0.004	8.5	ug/L	62	Standard
[	Ba	135	158.0	12.8	0.0270	0.007	26.1	ug/L	19	Standard
[	Ce	140	1794.1	6.1				ug/L	24	Standard
[>	Tb	159	928836.3	3.1				ug/L	910514	Standard
[	Ho	165	16.0	25.0				ug/L	7	Standard
	Tl	203	275.0	16.6	0.0177	0.004	20.0	ug/L	13	Standard
	Tl	205	7.3	20.8	0.0200	0.004	20.7	ug/L	1	Standard
	Pb	206	622.3	4.1	0.0275	0.003	9.9	ug/L	342	Standard
	Pb	207	530.7	13.5	0.0246	0.009	37.4	ug/L	284	Standard
	Pb	208	2482.4	6.3	0.0266	0.005	18.7	ug/L	1363	Standard
	U	238	38.3	44.9	0.0023	0.002	77.0	ug/L	2	Standard
[>	Bi	209	472395.9	2.1				ug/L	470592	Standard

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Na	23	133.3	15.6	11.8664	1.522	12.8	mg/L	2	Standard
Mg	24	23597885.4	1.4	11.4374	0.538	4.7	mg/L	5586	Standard
K	39	336.7	0.9	4.4808	0.174	3.9	mg/L	5	Standard
Ca	43	370.0	12.0	13.3003	1.671	12.6	mg/L	45	Standard
Fe	54	30626.4	7.7	11.4856	1.237	10.8	mg/L	350	Standard
Fe	57	7418.5	0.4	11.3787	0.402	3.5	mg/L	102	Standard
Sc-1	45	53710.1	3.6				mg/L	53004	Standard
Cl	35	1.3	86.6				ug/L	2	Standard
Kr	83	171.7	6.9				ug/L	157	Standard
Br	81	6.7	57.3				ug/L	3	Standard
P	31	80012.4	0.9				ug/L	91588	Standard
S	34	32192.5	2.1				ug/L	32556	Standard
Sr	88	46.7	27.0				ug/L	62	Standard
C	12	291.7	11.4				mg/L	133	Standard
N	14	0.0					mg/L	0	Standard
Hg	202	3.3	173.2				mg/L	7	Standard

QC Calculated Values

Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recovery
Li	7			
Be	9			
Al	27	0.915		
Sc	45			
Ti	47	97.188		
V	51			
Cr	52			
Cr	53			
Mn	55			
Co	59			
Ni	60			
Cu	65			
Zn	66			
Ge	72		102.031	
As	75			
Se	82			
Se-1	77			
Ga	71			
Rb	85			
Y	89			
Rh	103			

Sample ID: QC Std 4

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[	Mo	98	90.251	
[	Ag	107		
[	Cd	111		
[	Cd	114		
>	In	115		99.219
[	Sn	118		
[	Sb	123		
[	Ba	135		
[	Ce	140		
>	Tb	159		
[	Ho	165		
[	Tl	203		
[	Tl	205		
[	Pb	206		
[	Pb	207		
[	Pb	208		
[	U	238		
>	Bi	209		100.383
[	Na	23	94.931	
[	Mg	24	228.748	
[	K	39	89.615	
[	Ca	43	88.669	
[	Fe	54	91.885	
[	Fe	57	91.029	
>	Sc-1	45		
[	Cl	35		
[	Kr	83		
[	Br	81		
[	P	31		
[	S	34		
[	Sr	88		
[	C	12		
[	N	14		
[	Hg	202		

QC Out of Limits

Measurement Type	Analyte	Mass	Out of Limits Message
QC Std 4	Al	27	
QC Std 4	Mg	24	

Sample ID: QC Std 4

Report Date/Time: Sunday, November 18, 2012 08:58:10

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Method 6020 - Summary Report

Sample ID: QC Std 5

Sample Date/Time: Sunday, November 18, 2012 08:58:50

Number of Replicates: 3

Autosampler Position: 204

Sample Description:

Method File: C:\NexIONData\Method\6020a.mth

Aliquot Volume (mL):

Diluted to Volume (mL):

User Name: JYH user

Cumulative Autodilution Factor: 1

Nexion-ICP 200.8\6020

Concentration Results

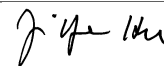
IS	Analyte	Mass	Intensity	RSD	Conc.	SD	RSD	Units	Blank Intens.	Mode
[	Li	7	8849.3	3.7	-240.8875	140.509	58.3	ug/L	8369	Standard
	Be	9	218121.3	4.9	105.1823	2.106	2.0	ug/L	18	Standard
	Al	27	5090293.1	5.0	41.5758	0.934	2.2	ug/L	215	Standard
>	Sc	45	52855.6	6.4				ug/L	53004	Standard
[	Ti	47	45132.7	6.8	85.1097	3.583	4.2	ug/L	26	Standard
	V	51	1141629.0	6.0	93.1369	2.375	2.6	ug/L	3223	Standard
	Cr	52	1115129.1	6.0	97.5788	2.456	2.5	ug/L	10379	Standard
	Cr	53	138092.2	4.4	97.2215	1.302	1.3	ug/L	192	Standard
	Mn	55	1712368.8	5.1	95.7135	2.134	2.2	ug/L	1840	Standard
	Co	59	1344913.3	5.1	97.8345	1.489	1.5	ug/L	115	Standard
	Ni	60	287566.6	5.5	97.2443	1.877	1.9	ug/L	75	Standard
	Cu	65	277601.5	6.6	97.2044	2.958	3.0	ug/L	155	Standard
	Zn	66	139614.2	5.5	98.7109	2.545	2.6	ug/L	237	Standard
>	Ge	72	426150.3	3.5				ug/L	413856	Standard
	As	75	147430.2	4.9	98.7453	1.870	1.9	ug/L	-197	Standard
	Se	82	13017.8	3.9	97.5544	1.392	1.4	ug/L	-5	Standard
[	Se-1	77	10248.5	3.1	100.4684	1.298	1.3	ug/L	105	Standard
>	Ga	71	428.3	8.4				mg/L	225	Standard
[	Rb	85	2710.2	7.7				ug/L	28	Standard
[	Y	89	322608.4	2.8				ug/L	322845	Standard
>	Rh	103	175.0	12.5				ug/L	92	Standard
[	Mo	98	358057.0	3.8	78.6475	1.006	1.3	ug/L	18	Standard
	Ag	107	753779.3	4.5	94.1148	2.090	2.2	ug/L	63	Standard
	Cd	111	339226.8	4.3	97.8517	2.030	2.1	mg/L	20	Standard
	Cd	114	885176.0	3.5	97.0370	2.145	2.2	ug/L	56	Standard
>	In	115	664335.5	4.1				ug/L	657102	Standard
	Sn	118	1230.7	4.9	0.0730	0.006	8.4	ug/L	555	Standard
	Sb	123	771195.0	3.4	97.4316	2.108	2.2	ug/L	62	Standard
[	Ba	135	331829.8	4.1	96.4179	2.378	2.5	ug/L	19	Standard
[	Ce	140	1647.1	4.5				ug/L	24	Standard
>	Tb	159	939828.4	3.2				ug/L	910514	Standard
[	Ho	165	166.7	6.6				ug/L	7	Standard
	Tl	203	1263180.6	3.9	97.9668	1.583	1.6	ug/L	13	Standard
	Tl	205	38548.0	3.2	98.0007	1.216	1.2	ug/L	1	Standard
	Pb	206	1008321.2	3.4	97.5850	1.557	1.6	ug/L	342	Standard
	Pb	207	862452.1	3.7	98.1736	1.729	1.8	ug/L	284	Standard
	Pb	208	4042904.8	3.2	99.1301	1.349	1.4	ug/L	1363	Standard
	U	238	993041.6	4.1	98.3518	2.489	2.5	ug/L	2	Standard
>	Bi	209	473330.2	2.5				ug/L	470592	Standard

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Na	23	135.0	22.5	12.1569	1.916	15.8	mg/L	2	Standard
Mg	24	20776650.6	5.5	10.2285	0.346	3.4	mg/L	5586	Standard
K	39	325.0	5.5	4.3937	0.145	3.3	mg/L	5	Standard
Ca	43	325.0	7.1	11.6450	0.546	4.7	mg/L	45	Standard
Fe	54	25948.6	5.5	9.8479	0.155	1.6	mg/L	350	Standard
Fe	57	6448.0	4.5	10.0364	0.301	3.0	mg/L	102	Standard
Sc-1	45	52855.6	6.4				mg/L	53004	Standard
Cl	35	2.0	50.0				ug/L	2	Standard
Kr	83	170.0	4.2				ug/L	157	Standard
Br	81	9.2	41.7				ug/L	3	Standard
P	31	85670.9	3.9				ug/L	91588	Standard
S	34	32337.8	3.7				ug/L	32556	Standard
Sr	88	55.0	32.8				ug/L	62	Standard
C	12	250.0	9.2				mg/L	133	Standard
N	14	3.3	173.2				mg/L	0	Standard
Hg	202	3.3	173.2				mg/L	7	Standard

QC Calculated Values

Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recovery
Li	7			
Be	9	105.182		
Al	27	0.832		
Sc	45			
Ti	47	85.110		
V	51	93.137		
Cr	52	97.579		
Cr	53			
Mn	55	95.713		
Co	59	97.834		
Ni	60	97.244		
Cu	65	97.204		
Zn	66	98.711		
Ge	72		102.971	
As	75	98.745		
Se	82	97.554		
Se-1	77			
Ga	71			
Rb	85			
Y	89			
Rh	103			

Sample ID: QC Std 5

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[	Mo	98	78.648	
[	Ag	107	94.115	
[	Cd	111	97.852	
[	Cd	114		
>	In	115		101.101
[	Sn	118		
[	Sb	123	97.432	
[	Ba	135	96.418	
[	Ce	140		
>	Tb	159		
[	Ho	165		
[	Tl	203	97.967	
[	Tl	205		
[	Pb	206	97.585	
[	Pb	207	98.174	
[	Pb	208	99.130	
[	U	238	98.352	
>	Bi	209		100.582
[	Na	23	97.256	
[	Mg	24	204.570	
[	K	39	87.874	
[	Ca	43	77.633	
[	Fe	54	78.784	
[	Fe	57	80.292	
>	Sc-1	45		
	Cl	35		
	Kr	83		
	Br	81		
	P	31		
	S	34		
	Sr	88		
	C	12		
	N	14		
	Hg	202		

QC Out of Limits

Measurement Type	Analyte	Mass	Out of Limits Message
QC Std 5	Al	27	
QC Std 5	Mo	98	
QC Std 5	Mg	24	
QC Std 5	Ca	43	
QC Std 5	Fe	54	

Sample ID: QC Std 5

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Method 6020 - Summary Report

Sample ID: QC Std 6

Sample Date/Time: Sunday, November 18, 2012 09:02:05

Number of Replicates: 3

Autosampler Position: 101

Sample Description:

Method File: C:\NexIONData\Method\6020a.mth

Aliquot Volume (mL):

Diluted to Volume (mL):

User Name: JYH user

Cumulative Autodilution Factor: 1

Nexion-ICP 200.8\6020

Concentration Results

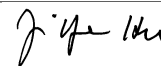
IS	Analyte	Mass	Intensity	RSD	Conc.	SD	RSD	Units	Blank Intens.	Mode
[	Li	7	8869.3	6.1	-213.2674	98.846	46.3	ug/L	8369	Standard
	Be	9	106841.9	7.7	51.1576	3.230	6.3	ug/L	18	Standard
	Al	27	6394633.3	5.9	51.8935	2.921	5.6	ug/L	215	Standard
[>	Sc	45	53188.3	4.5				ug/L	53004	Standard
	Ti	47	49781.6	7.3	95.7524	3.876	4.0	ug/L	26	Standard
	V	51	588602.5	7.0	48.8579	2.147	4.4	ug/L	3223	Standard
	Cr	52	557394.1	7.2	49.3040	2.290	4.6	ug/L	10379	Standard
	Cr	53	67693.5	9.8	48.5051	3.165	6.5	ug/L	192	Standard
	Mn	55	870810.7	8.0	49.5767	2.227	4.5	ug/L	1840	Standard
	Co	59	662596.1	8.0	49.1443	2.689	5.5	ug/L	115	Standard
	Ni	60	143354.9	8.1	49.4170	2.597	5.3	ug/L	75	Standard
	Cu	65	139438.5	7.6	49.7904	2.778	5.6	ug/L	155	Standard
	Zn	66	68872.4	7.0	49.5714	2.376	4.8	ug/L	237	Standard
[>	Ge	72	417820.3	4.4				ug/L	413856	Standard
	As	75	73027.6	6.2	49.9671	2.160	4.3	ug/L	-197	Standard
	Se	82	6575.2	6.5	50.2475	2.037	4.1	ug/L	-5	Standard
[	Se-1	77	5065.9	7.6	50.1337	2.569	5.1	ug/L	105	Standard
[>	Ga	71	236.7	2.4				mg/L	225	Standard
	Rb	85	970.0	6.7				ug/L	28	Standard
	Y	89	322558.3	3.5				ug/L	322845	Standard
[>	Rh	103	141.7	16.7				ug/L	92	Standard
	Mo	98	438536.8	6.7	97.4600	6.494	6.7	ug/L	18	Standard
	Ag	107	402603.8	5.2	50.8513	2.327	4.6	ug/L	63	Standard
	Cd	111	173635.4	6.1	50.6663	2.918	5.8	mg/L	20	Standard
	Cd	114	452902.4	6.8	50.2151	3.281	6.5	ug/L	56	Standard
[>	In	115	656593.9	1.8				ug/L	657102	Standard
	Sn	118	496872.1	7.5	49.9195	3.656	7.3	ug/L	555	Standard
	Sb	123	395538.6	6.5	50.5464	3.221	6.4	ug/L	62	Standard
[	Ba	135	170336.8	7.3	50.0601	3.563	7.1	ug/L	19	Standard
	Ce	140	737.4	7.9				ug/L	24	Standard
[>	Tb	159	928800.4	1.7				ug/L	910514	Standard
	Ho	165	420.0	7.6				ug/L	7	Standard
	Tl	203	646563.2	5.0	49.8185	2.845	5.7	ug/L	13	Standard
	Tl	205	19741.9	3.8	49.8518	2.039	4.1	ug/L	1	Standard
	Pb	206	518587.1	6.7	49.8508	3.750	7.5	ug/L	342	Standard
	Pb	207	444289.2	6.2	50.2309	3.464	6.9	ug/L	284	Standard
	Pb	208	2036728.3	6.0	49.5965	3.299	6.7	ug/L	1363	Standard
	U	238	519619.0	6.0	51.1300	3.408	6.7	ug/L	2	Standard
[>	Bi	209	476658.5	1.4				ug/L	470592	Standard

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Na	23	71.7	28.2	6.4473	1.784	27.7	mg/L	2	Standard
Mg	24	10350638.0	5.7	5.0605	0.247	4.9	mg/L	5586	Standard
K	39	363.3	2.9	4.8922	0.343	7.0	mg/L	5	Standard
Ca	43	148.3	20.3	4.0397	1.053	26.1	mg/L	45	Standard
Fe	54	13631.7	7.9	5.0641	0.306	6.0	mg/L	350	Standard
Fe	57	3178.7	5.1	4.8481	0.206	4.2	mg/L	102	Standard
Sc-1	45	53188.3	4.5				mg/L	53004	Standard
Cl	35	2.3	49.5				ug/L	2	Standard
Kr	83	171.2	5.3				ug/L	157	Standard
Br	81	8.3	45.8				ug/L	3	Standard
P	31	90668.2	3.7				ug/L	91588	Standard
S	34	35881.6	0.9				ug/L	32556	Standard
Sr	88	61.7	38.3				ug/L	62	Standard
C	12	165.0	9.1				mg/L	133	Standard
N	14	1.7	173.2				mg/L	0	Standard
Hg	202	6.7	43.3				mg/L	7	Standard

QC Calculated Values

Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recovery
Li	7			
Be	9	102.315		
Al	27	103.787		
Sc	45			
Ti	47	95.752		
V	51	97.716		
Cr	52	98.608		
Cr	53			
Mn	55	99.153		
Co	59	98.289		
Ni	60	98.834		
Cu	65	99.581		
Zn	66	99.143		
Ge	72		100.958	
As	75	99.934		
Se	82	100.495		
Se-1	77			
Ga	71			
Rb	85			
Y	89			
Rh	103			

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[	Mo	98	97.460	
[	Ag	107	101.703	
[	Cd	111	101.333	
[	Cd	114		
>	In	115		99.923
[	Sn	118	99.839	
[	Sb	123	101.093	
[	Ba	135	100.120	
[	Ce	140		
>	Tb	159		
[	Ho	165		
[	Tl	203	99.637	
[	Tl	205		
[	Pb	206	99.702	
[	Pb	207	100.462	
[	Pb	208	99.193	
[	U	238	102.260	
>	Bi	209		101.289
[	Na	23		
[	Mg	24		
[	K	39		
[	Ca	43		
[	Fe	54		
[	Fe	57		
>	Sc-1	45		
[	Cl	35		
[	Kr	83		
[	Br	81		
[	P	31		
[	S	34		
[	Sr	88		
[	C	12		
[	N	14		
[	Hg	202		

QC Out of Limits

Measurement Type	Analyte	Mass	Out of Limits Message

Sample ID: QC Std 6

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Method 6020 - Summary Report

Sample ID: QC Std 7

Sample Date/Time: Sunday, November 18, 2012 09:05:17

Number of Replicates: 3

Autosampler Position: 102

Sample Description:

Method File: C:\NexIONData\Method\6020a.mth

Aliquot Volume (mL):

Diluted to Volume (mL):

User Name: JYH user

Cumulative Autodilution Factor: 1

Nexion-ICP 200.8\6020

Concentration Results

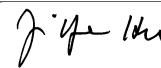
IS	Analyte	Mass	Intensity	RSD	Conc.	SD	RSD	Units	Blank Intens.	Mode
[	Li	7	8027.1	1.3	-108.7096	26.394	24.3	ug/L	8369	Standard
	Be	9	45.0	58.8	0.0138	0.014	98.4	ug/L	18	Standard
	Al	27	1260.1	71.3	0.0089	0.008	87.7	ug/L	215	Standard
[>	Sc	45	49214.8	1.5				ug/L	53004	Standard
[	Ti	47	22.3	36.5	-0.0151	0.016	103.7	ug/L	26	Standard
	V	51	2929.6	2.6	-0.0134	0.000	1.6	ug/L	3223	Standard
	Cr	52	9520.7	2.2	-0.0243	0.006	25.2	ug/L	10379	Standard
	Cr	53	261.7	11.2	0.0854	0.016	19.3	ug/L	192	Standard
	Mn	55	1442.4	5.7	-0.0034	0.003	80.6	ug/L	1840	Standard
	Co	59	165.7	39.7	-0.0028	0.005	166.8	ug/L	115	Standard
	Ni	60	81.3	17.8	-0.0063	0.006	88.4	ug/L	75	Standard
	Cu	65	184.3	19.6	0.0108	0.012	113.0	ug/L	155	Standard
	Zn	66	286.0	16.1	0.0148	0.029	198.5	ug/L	237	Standard
[>	Ge	72	402246.3	2.7				ug/L	413856	Standard
	As	75	-187.4	2.5	0.0071	0.002	26.2	ug/L	-197	Standard
	Se	82	-0.7	1671.8	0.0004	0.098	21884.7	ug/L	-5	Standard
[	Se-1	77	105.0	17.5	0.1254	0.216	171.9	ug/L	105	Standard
[>	Ga	71	190.0	16.0				mg/L	225	Standard
[	Rb	85	18.3	63.0				ug/L	28	Standard
[	Y	89	305722.2	5.1				ug/L	322845	Standard
[>	Rh	103	103.3	7.4				ug/L	92	Standard
[	Mo	98	438.9	92.6	0.0897	0.090	100.6	ug/L	18	Standard
	Ag	107	483.7	82.0	0.0539	0.050	92.8	ug/L	63	Standard
	Cd	111	183.1	84.8	0.0428	0.045	105.6	mg/L	20	Standard
	Cd	114	474.0	80.3	0.0436	0.042	96.9	ug/L	56	Standard
[>	In	115	642047.3	2.3				ug/L	657102	Standard
	Sn	118	608.3	38.2	0.0128	0.022	174.7	ug/L	555	Standard
	Sb	123	553.8	55.6	0.0689	0.039	56.1	ug/L	62	Standard
[	Ba	135	100.0	83.0	0.0098	0.024	249.6	ug/L	19	Standard
[	Ce	140	30.3	18.2				ug/L	24	Standard
[>	Tb	159	908551.9	1.6				ug/L	910514	Standard
[	Ho	165	11.0	78.7				ug/L	7	Standard
	Tl	203	245.3	87.0	0.0154	0.016	106.8	ug/L	13	Standard
	Tl	205	3.7	78.7	0.0106	0.007	68.2	ug/L	1	Standard
	Pb	206	478.7	30.8	0.0138	0.014	101.1	ug/L	342	Standard
	Pb	207	379.0	27.0	0.0074	0.011	152.7	ug/L	284	Standard
	Pb	208	1789.4	31.1	0.0098	0.013	136.1	ug/L	1363	Standard
	U	238	111.3	80.4	0.0095	0.009	92.7	ug/L	2	Standard
[>	Bi	209	468837.8	1.1				ug/L	470592	Standard

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Na	23	0.0		0.0050	0.000	0.0	mg/L	2	Standard
Mg	24	10395.4	22.5	0.0026	0.001	47.9	mg/L	5586	Standard
K	39	3.3	173.2	0.0075	0.085	1126.7	mg/L	5	Standard
Ca	43	40.0	37.5	-0.4038	0.660	163.4	mg/L	45	Standard
Fe	54	332.2	2.3	-0.0160	0.002	15.5	mg/L	350	Standard
Fe	57	98.3	25.6	0.0386	0.045	117.0	mg/L	102	Standard
Sc-1	45	49214.8	1.5				mg/L	53004	Standard
Cl	35	3.7	68.6				ug/L	2	Standard
Kr	83	179.8	2.9				ug/L	157	Standard
Br	81	2.5	0.0				ug/L	3	Standard
P	31	90226.2	0.9				ug/L	91588	Standard
S	34	33974.7	1.8				ug/L	32556	Standard
Sr	88	46.7	37.6				ug/L	62	Standard
C	12	161.7	9.9				mg/L	133	Standard
N	14	0.0					mg/L	0	Standard
Hg	202	1.7	173.2				mg/L	7	Standard

QC Calculated Values

Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recovery
Li	7			
Be	9			
Al	27			
Sc	45			
Ti	47			
V	51			
Cr	52			
Cr	53			
Mn	55			
Co	59			
Ni	60			
Cu	65			
Zn	66			
Ge	72		97.195	
As	75			
Se	82			
Se-1	77			
Ga	71			
Rb	85			
Y	89			
Rh	103			

Sample ID: QC Std 7

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[	Mo	98	
[	Ag	107	
[	Cd	111	
[	Cd	114	
>	In	115	97.709
[	Sn	118	
[	Sb	123	
[	Ba	135	
[	Ce	140	
>	Tb	159	
[	Ho	165	
[	Tl	203	
[	Tl	205	
[	Pb	206	
[	Pb	207	
[	Pb	208	
[	U	238	
>	Bi	209	99.627
[	Na	23	
[	Mg	24	
[	K	39	
[	Ca	43	
[	Fe	54	
[	Fe	57	
>	Sc-1	45	
[	Cl	35	
[	Kr	83	
[	Br	81	
[	P	31	
[	S	34	
[	Sr	88	
[	C	12	
[	N	14	
[	Hg	202	

QC Out of Limits

Measurement Type	Analyte	Mass	Out of Limits Message

Sample ID: QC Std 7

Report Date/Time: Sunday, November 18, 2012 09:07:49

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Method 6020 - Summary Report

Sample ID: PBW 5A WG414309-02

Sample Date/Time: Sunday, November 18, 2012 09:08:30

Number of Replicates: 3

Autosampler Position: 301

Sample Description: 1

Method File: C:\NexIONData\Method\6020a.mth

Aliquot Volume (mL):

Diluted to Volume (mL):

User Name: JYH user

Cumulative Autodilution Factor: 1

Nexion-ICP 200.8\6020

Concentration Results

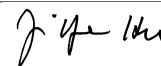
IS	Analyte	Mass	Intensity	RSD	Conc.	SD	RSD	Units	Blank Intens.	Mode
[	Li	7	8924.3	4.5	-355.0136	26.048	7.3	ug/L	8369	Standard
	Be	9	30.0	33.3	0.0053	0.005	96.9	ug/L	18	Standard
	Al	27	305.0	23.2	0.0004	0.001	167.8	ug/L	215	Standard
[>	Sc	45	52024.3	4.0				ug/L	53004	Standard
[	Ti	47	20.3	17.3	-0.0205	0.006	29.6	ug/L	26	Standard
	V	51	3095.7	1.3	-0.0089	0.003	36.2	ug/L	3223	Standard
	Cr	52	10054.0	0.5	-0.0088	0.013	141.8	ug/L	10379	Standard
	Cr	53	221.7	9.2	0.0496	0.012	24.8	ug/L	192	Standard
	Mn	55	1395.1	4.0	-0.0092	0.004	47.8	ug/L	1840	Standard
	Co	59	109.3	6.6	-0.0074	0.000	5.4	ug/L	115	Standard
	Ni	60	104.0	19.3	0.0005	0.008	1522.9	ug/L	75	Standard
	Cu	65	136.7	2.6	-0.0086	0.002	23.1	ug/L	155	Standard
	Zn	66	368.3	0.4	0.0670	0.005	6.7	ug/L	237	Standard
[>	Ge	72	417598.6	1.9				ug/L	413856	Standard
	As	75	-202.7	16.1	0.0018	0.021	1145.4	ug/L	-197	Standard
	Se	82	7.1	33.5	0.0598	0.019	32.2	ug/L	-5	Standard
[	Se-1	77	105.7	4.4	0.0893	0.067	74.9	ug/L	105	Standard
[>	Ga	71	215.0	14.5				mg/L	225	Standard
[	Rb	85	30.0	44.1				ug/L	28	Standard
[	Y	89	321298.4	1.9				ug/L	322845	Standard
[>	Rh	103	91.7	17.5				ug/L	92	Standard
[	Mo	98	33.8	18.1	-0.0012	0.001	118.9	ug/L	18	Standard
	Ag	107	76.0	9.2	0.0016	0.001	45.7	ug/L	63	Standard
	Cd	111	26.0	23.1	-0.0036	0.002	51.3	mg/L	20	Standard
	Cd	114	64.7	16.1	-0.0025	0.001	41.8	ug/L	56	Standard
[>	In	115	661563.7	1.7				ug/L	657102	Standard
	Sn	118	373.0	9.3	-0.0122	0.003	25.2	ug/L	555	Standard
	Sb	123	146.3	7.5	0.0156	0.002	10.1	ug/L	62	Standard
[	Ba	135	13.3	18.9	-0.0160	0.001	5.0	ug/L	19	Standard
[	Ce	140	24.0	15.0				ug/L	24	Standard
[>	Tb	159	927279.3	1.9				ug/L	910514	Standard
[	Ho	165	9.0	40.1				ug/L	7	Standard
	Tl	203	27.0	11.1	-0.0016	0.000	16.0	ug/L	13	Standard
	Tl	205	1.3	43.3	0.0046	0.001	31.8	ug/L	1	Standard
	Pb	206	352.3	4.3	0.0006	0.001	165.6	ug/L	342	Standard
	Pb	207	285.3	2.7	-0.0042	0.001	29.7	ug/L	284	Standard
	Pb	208	1353.0	2.1	-0.0018	0.000	21.6	ug/L	1363	Standard
	U	238	8.0	82.0	-0.0007	0.001	87.2	ug/L	2	Standard
[>	Bi	209	481772.3	1.5				ug/L	470592	Standard

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Na	23	3.3	173.2	0.3132	0.534	170.4	mg/L	2	Standard
Mg	24	7210.0	3.6	0.0007	0.000	21.6	mg/L	5586	Standard
K	39	8.3	34.6	0.0752	0.043	57.7	mg/L	5	Standard
Ca	43	56.7	41.7	0.2215	0.997	450.1	mg/L	45	Standard
Fe	54	370.6	9.5	-0.0079	0.020	247.1	mg/L	350	Standard
Fe	57	80.0	10.8	-0.0001	0.015	29573.1	mg/L	102	Standard
Sc-1	45	52024.3	4.0				mg/L	53004	Standard
Cl	35	3.3	62.4				ug/L	2	Standard
Kr	83	185.3	1.3				ug/L	157	Standard
Br	81	6.7	57.3				ug/L	3	Standard
P	31	91902.9	1.6				ug/L	91588	Standard
S	34	32757.0	1.6				ug/L	32556	Standard
Sr	88	51.7	24.4				ug/L	62	Standard
C	12	135.0	32.9				mg/L	133	Standard
N	14	0.0					mg/L	0	Standard
Hg	202	1.7	173.2				mg/L	7	Standard

QC Calculated Values

Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recovery
Li	7			
Be	9			
Al	27			
Sc	45			
Ti	47			
V	51			
Cr	52			
Cr	53			
Mn	55			
Co	59			
Ni	60			
Cu	65			
Zn	66			
Ge	72		100.904	
As	75			
Se	82			
Se-1	77			
Ga	71			
Rb	85			
Y	89			
Rh	103			

Sample ID: PBW 5A WG414309-02

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[	Mo	98	
[	Ag	107	
[	Cd	111	
[	Cd	114	
>	In	115	100.679
[	Sn	118	
[	Sb	123	
[	Ba	135	
[	Ce	140	
>	Tb	159	
[	Ho	165	
[	Tl	203	
[	Tl	205	
[	Pb	206	
[	Pb	207	
[	Pb	208	
[	U	238	
>	Bi	209	102.376
[	Na	23	
[	Mg	24	
[	K	39	
[	Ca	43	
[	Fe	54	
[	Fe	57	
>	Sc-1	45	
[	Cl	35	
[	Kr	83	
[	Br	81	
[	P	31	
[	S	34	
[	Sr	88	
[	C	12	
[	N	14	
[	Hg	202	

QC Out of Limits

Measurement Type	Analyte	Mass	Out of Limits Message

Sample ID: PBW 5A WG414309-02

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Method 6020 - Summary Report

Sample ID: LCSW 5A WG414309-03

Sample Date/Time: Sunday, November 18, 2012 09:11:43

Number of Replicates: 3

Autosampler Position: 302

Sample Description: 1

Method File: C:\NexIONData\Method\6020a.mth

Aliquot Volume (mL):

Diluted to Volume (mL):

User Name: JYH user

Cumulative Autodilution Factor: 1

Nexion-ICP 200.8\6020

Concentration Results

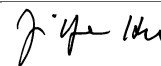
IS	Analyte	Mass	Intensity	RSD	Conc.	SD	RSD	Units	Blank Intens.	Mode
[	Li	7	9174.5	6.5	-375.5764	10.470	2.8	ug/L	8369	Standard
	Be	9	56938.6	4.7	27.2570	1.360	5.0	ug/L	18	Standard
	Al	27	2113.5	5.6	0.0150	0.001	6.8	ug/L	215	Standard
[>	Sc	45	53273.8	6.6				ug/L	53004	Standard
[	Ti	47	41.3	15.6	0.0171	0.010	60.4	ug/L	26	Standard
	V	51	308308.9	8.4	24.5414	1.173	4.8	ug/L	3223	Standard
	Cr	52	308053.0	9.3	25.8435	1.641	6.3	ug/L	10379	Standard
	Cr	53	36839.1	9.0	25.4191	1.514	6.0	ug/L	192	Standard
	Mn	55	478458.4	8.6	26.2385	1.543	5.9	ug/L	1840	Standard
	Co	59	362646.8	8.4	25.9305	1.275	4.9	ug/L	115	Standard
	Ni	60	78080.8	7.7	25.9494	1.198	4.6	ug/L	75	Standard
	Cu	65	76781.0	7.1	26.4180	1.103	4.2	ug/L	155	Standard
	Zn	66	38680.9	8.0	26.7583	1.432	5.4	ug/L	237	Standard
[>	Ge	72	433083.2	4.4				ug/L	413856	Standard
	As	75	38079.8	7.6	25.1943	1.238	4.9	ug/L	-197	Standard
	Se	82	3403.3	7.6	25.0856	1.188	4.7	ug/L	-5	Standard
[	Se-1	77	2636.9	5.8	24.7021	1.046	4.2	ug/L	105	Standard
[>	Ga	71	223.3	8.5				mg/L	225	Standard
[	Rb	85	38.3	19.9				ug/L	28	Standard
[	Y	89	328205.4	5.6				ug/L	322845	Standard
[>	Rh	103	96.7	16.6				ug/L	92	Standard
[	Mo	98	86.0	55.1	0.0100	0.010	101.1	ug/L	18	Standard
	Ag	107	215947.9	6.0	26.7951	0.936	3.5	ug/L	63	Standard
	Cd	111	91536.2	8.5	26.2246	1.607	6.1	mg/L	20	Standard
	Cd	114	233669.1	7.9	25.4400	1.388	5.5	ug/L	56	Standard
[>	In	115	667940.0	2.5				ug/L	657102	Standard
	Sn	118	448.3	8.0	-0.0051	0.003	65.4	ug/L	555	Standard
	Sb	123	204894.4	7.9	25.7128	1.400	5.4	ug/L	62	Standard
[	Ba	135	90158.1	8.5	26.0089	1.593	6.1	ug/L	19	Standard
[	Ce	140	56.7	16.4				ug/L	24	Standard
[>	Tb	159	936173.3	3.1				ug/L	910514	Standard
[	Ho	165	16.0	10.8				ug/L	7	Standard
	Tl	203	345124.2	6.0	26.2965	0.934	3.6	ug/L	13	Standard
	Tl	205	10449.6	5.8	26.1009	0.843	3.2	ug/L	1	Standard
	Pb	206	276525.4	8.5	26.2569	1.592	6.1	ug/L	342	Standard
	Pb	207	235244.1	8.0	26.2734	1.443	5.5	ug/L	284	Standard
	Pb	208	1088691.8	8.2	26.1897	1.522	5.8	ug/L	1363	Standard
	U	238	266051.0	7.5	25.8814	1.316	5.1	ug/L	2	Standard
[>	Bi	209	481559.2	2.6				ug/L	470592	Standard

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Na	23	0.0		0.0050	0.000	0.0	mg/L	2	Standard
Mg	24	13194.1	7.2	0.0035	0.000	8.4	mg/L	5586	Standard
K	39	11.7	137.8	0.1245	0.230	184.7	mg/L	5	Standard
Ca	43	30.0	28.9	-0.9610	0.362	37.6	mg/L	45	Standard
Fe	54	394.8	9.0	-0.0027	0.004	132.0	mg/L	350	Standard
Fe	57	80.0	33.1	-0.0045	0.033	736.4	mg/L	102	Standard
Sc-1	45	53273.8	6.6				mg/L	53004	Standard
Cl	35	4.3	13.3				ug/L	2	Standard
Kr	83	174.9	7.1				ug/L	157	Standard
Br	81	6.7	57.3				ug/L	3	Standard
P	31	97178.2	2.2				ug/L	91588	Standard
S	34	32730.3	1.9				ug/L	32556	Standard
Sr	88	66.7	15.6				ug/L	62	Standard
C	12	195.0	9.2				mg/L	133	Standard
N	14	0.0					mg/L	0	Standard
Hg	202	8.3	124.9				mg/L	7	Standard

QC Calculated Values

Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recovery
Li	7			
Be	9			
Al	27			
Sc	45			
Ti	47			
V	51			
Cr	52			
Cr	53			
Mn	55			
Co	59			
Ni	60			
Cu	65			
Zn	66			
Ge	72		104.646	
As	75			
Se	82			
Se-1	77			
Ga	71			
Rb	85			
Y	89			
Rh	103			

Sample ID: LCSW 5A WG414309-03

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[	Mo	98	
[	Ag	107	
[	Cd	111	
[	Cd	114	
>	In	115	101.649
[	Sn	118	
[	Sb	123	
[	Ba	135	
[	Ce	140	
>	Tb	159	
[	Ho	165	
[	Tl	203	
[	Tl	205	
[	Pb	206	
[	Pb	207	
[	Pb	208	
[	U	238	
>	Bi	209	102.331
[	Na	23	
[	Mg	24	
[	K	39	
[	Ca	43	
[	Fe	54	
[	Fe	57	
>	Sc-1	45	
[	Cl	35	
[	Kr	83	
[	Br	81	
[	P	31	
[	S	34	
[	Sr	88	
[	C	12	
[	N	14	
[	Hg	202	

QC Out of Limits

Measurement Type	Analyte	Mass	Out of Limits Message

Sample ID: LCSW 5A WG414309-03

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Method 6020 - Summary Report

Sample ID: L1211041108 WG414309-01

Sample Date/Time: Sunday, November 18, 2012 09:14:55

Number of Replicates: 3

Autosampler Position: 303

Sample Description: 1

Method File: C:\NexIONData\Method\6020a.mth

Aliquot Volume (mL):

Diluted to Volume (mL):

User Name: JYH user

Cumulative Autodilution Factor: 1

Nexion-ICP 200.8\6020

Concentration Results

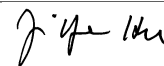
IS	Analyte	Mass	Intensity	RSD	Conc.	SD	RSD	Units	Blank Intens.	Mode
[	Li	7	36595.8	3.7	-12845.3788	734.201	5.7	ug/L	8369	Standard
	Be	9	66.7	49.9	0.0183	0.014	76.1	ug/L	18	Standard
	Al	27	5765903.6	6.7	40.6659	3.063	7.5	ug/L	215	Standard
[>	Sc	45	61193.3	0.9				ug/L	53004	Standard
[	Ti	47	4151.2	5.3	7.5768	0.329	4.3	ug/L	26	Standard
	V	51	35092.5	2.8	2.5320	0.075	3.0	ug/L	3223	Standard
	Cr	52	15151.2	2.8	0.3891	0.032	8.3	ug/L	10379	Standard
	Cr	53	1038.4	2.8	0.6036	0.020	3.3	ug/L	192	Standard
	Mn	55	854924.5	4.3	46.5275	1.569	3.4	ug/L	1840	Standard
	Co	59	10823.5	5.8	0.7518	0.034	4.5	ug/L	115	Standard
	Ni	60	2276.8	3.5	0.7153	0.015	2.1	ug/L	75	Standard
	Cu	65	7209.4	5.3	2.4049	0.097	4.0	ug/L	155	Standard
	Zn	66	8803.2	2.5	5.8806	0.145	2.5	ug/L	237	Standard
[>	Ge	72	437313.7	1.6				ug/L	413856	Standard
	As	75	-2.1	1166.4	0.1385	0.016	11.8	ug/L	-197	Standard
	Se	82	14.1	76.3	0.1072	0.076	71.0	ug/L	-5	Standard
[	Se-1	77	128.0	5.1	0.2566	0.082	31.8	ug/L	105	Standard
[>	Ga	71	1336.7	6.1				mg/L	225	Standard
[	Rb	85	4627.4	3.2				ug/L	28	Standard
[	Y	89	335990.9	2.4				ug/L	322845	Standard
[>	Rh	103	141.7	13.4				ug/L	92	Standard
[	Mo	98	711.7	8.8	0.1424	0.015	10.2	ug/L	18	Standard
	Ag	107	151.3	7.9	0.0104	0.002	15.5	ug/L	63	Standard
	Cd	111	55.8	20.7	0.0043	0.003	68.1	mg/L	20	Standard
	Cd	114	166.5	12.2	0.0081	0.002	26.2	ug/L	56	Standard
[>	In	115	687697.1	1.9				ug/L	657102	Standard
	Sn	118	591.3	4.0	0.0074	0.003	41.2	ug/L	555	Standard
	Sb	123	245.9	29.1	0.0271	0.009	32.3	ug/L	62	Standard
[	Ba	135	68704.9	4.3	19.2764	1.091	5.7	ug/L	19	Standard
[	Ce	140	176719.5	4.3				ug/L	24	Standard
[>	Tb	159	967497.1	2.3				ug/L	910514	Standard
[	Ho	165	744.0	5.1				ug/L	7	Standard
	Tl	203	298.0	3.0	0.0185	0.000	2.6	ug/L	13	Standard
	Tl	205	11.3	36.7	0.0290	0.011	36.8	ug/L	1	Standard
	Pb	206	3692.5	4.7	0.3098	0.019	6.1	ug/L	342	Standard
	Pb	207	2975.3	5.8	0.2887	0.021	7.4	ug/L	284	Standard
	Pb	208	14072.6	4.6	0.2965	0.019	6.3	ug/L	1363	Standard
	U	238	1921.8	3.6	0.1810	0.009	4.9	ug/L	2	Standard
[>	Bi	209	493987.1	1.7				ug/L	470592	Standard

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Na	23	120.0	39.7	9.4179	3.810	40.5	mg/L	2	Standard
Mg	24	15319239.7	3.3	6.5099	0.273	4.2	mg/L	5586	Standard
K	39	75.0	30.6	0.8437	0.277	32.8	mg/L	5	Standard
Ca	43	240.0	16.3	6.6116	1.386	21.0	mg/L	45	Standard
Fe	54	3023.8	4.4	0.8531	0.053	6.2	mg/L	350	Standard
Fe	57	866.7	11.0	1.0515	0.139	13.2	mg/L	102	Standard
Sc-1	45	61193.3	0.9				mg/L	53004	Standard
Cl	35	1.7	69.3				ug/L	2	Standard
Kr	83	202.0	5.6				ug/L	157	Standard
Br	81	2.5	100.0				ug/L	3	Standard
P	31	165452.6	0.6				ug/L	91588	Standard
S	34	27858.1	4.3				ug/L	32556	Standard
Sr	88	253.3	25.7				ug/L	62	Standard
C	12	153.3	21.2				mg/L	133	Standard
N	14	0.0					mg/L	0	Standard
Hg	202	26.7	65.8				mg/L	7	Standard

QC Calculated Values

Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recovery
Li	7			
Be	9			
Al	27			
Sc	45			
Ti	47			
V	51			
Cr	52			
Cr	53			
Mn	55			
Co	59			
Ni	60			
Cu	65			
Zn	66			
Ge	72		105.668	
As	75			
Se	82			
Se-1	77			
Ga	71			
Rb	85			
Y	89			
Rh	103			

Sample ID: L1211041108 WG414309-01

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[	Mo	98	
[	Ag	107	
[	Cd	111	
[	Cd	114	
>	In	115	104.656
[	Sn	118	
[	Sb	123	
[	Ba	135	
[	Ce	140	
>	Tb	159	
[	Ho	165	
[	Tl	203	
[	Tl	205	
[	Pb	206	
[	Pb	207	
[	Pb	208	
[	U	238	
>	Bi	209	104.971
[	Na	23	
[	Mg	24	
[	K	39	
[	Ca	43	
[	Fe	54	
[	Fe	57	
>	Sc-1	45	
[	Cl	35	
[	Kr	83	
[	Br	81	
[	P	31	
[	S	34	
[	Sr	88	
[	C	12	
[	N	14	
[	Hg	202	

QC Out of Limits

Measurement Type	Analyte	Mass	Out of Limits Message

Sample ID: L1211041108 WG414309-01

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Method 6020 - Summary Report

Sample ID: L1211041108S WG414309-04

Sample Date/Time: Sunday, November 18, 2012 09:18:07

Number of Replicates: 3

Autosampler Position: 304

Sample Description: 1

Method File: C:\NexIONData\Method\6020a.mth

Aliquot Volume (mL):

Diluted to Volume (mL):

User Name: JYH user

Cumulative Autodilution Factor: 1

Nexion-ICP 200.8\6020

Concentration Results

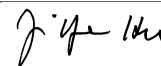
IS	Analyte	Mass	Intensity	RSD	Conc.	SD	RSD	Units	Blank Intens.	Mode
[	Li	7	34512.6	4.2	-12728.7566	489.199	3.8	ug/L	8369	Standard
	Be	9	55260.8	5.8	24.2350	1.514	6.2	ug/L	18	Standard
	Al	27	5760620.2	8.5	42.7456	2.600	6.1	ug/L	215	Standard
[>	Sc	45	58156.7	6.8				ug/L	53004	Standard
[	Ti	47	3519.1	16.0	6.5829	0.929	14.1	ug/L	26	Standard
	V	51	326073.7	6.5	26.4519	1.373	5.2	ug/L	3223	Standard
	Cr	52	290864.2	6.9	24.8210	1.590	6.4	ug/L	10379	Standard
	Cr	53	34977.2	8.0	24.5773	1.821	7.4	ug/L	192	Standard
	Mn	55	1248137.4	7.2	69.8490	4.636	6.6	ug/L	1840	Standard
	Co	59	347135.2	7.1	25.2751	1.489	5.9	ug/L	115	Standard
	Ni	60	73130.4	7.8	24.7400	1.677	6.8	ug/L	75	Standard
	Cu	65	78448.6	7.1	27.4765	1.626	5.9	ug/L	155	Standard
	Zn	66	42218.8	5.2	29.7555	1.146	3.9	ug/L	237	Standard
[>	Ge	72	425614.1	2.8				ug/L	413856	Standard
	As	75	36434.0	5.8	24.5461	1.266	5.2	ug/L	-197	Standard
	Se	82	3221.5	6.7	24.1740	1.380	5.7	ug/L	-5	Standard
[	Se-1	77	2577.9	2.9	24.5675	0.177	0.7	ug/L	105	Standard
[>	Ga	71	1066.7	5.2				mg/L	225	Standard
[	Rb	85	2346.8	3.2				ug/L	28	Standard
[	Y	89	328189.3	3.6				ug/L	322845	Standard
[>	Rh	103	153.3	27.7				ug/L	92	Standard
[	Mo	98	721.8	1.7	0.1495	0.008	5.2	ug/L	18	Standard
	Ag	107	205804.7	4.8	25.6093	1.013	4.0	ug/L	63	Standard
	Cd	111	87362.3	6.4	25.1106	1.466	5.8	mg/L	20	Standard
	Cd	114	225418.9	6.4	24.6227	1.523	6.2	ug/L	56	Standard
[>	In	115	666570.3	3.7				ug/L	657102	Standard
	Sn	118	595.3	4.5	0.0096	0.001	6.3	ug/L	555	Standard
	Sb	123	195605.6	7.0	24.6280	1.672	6.8	ug/L	62	Standard
[	Ba	135	150485.7	6.0	43.5769	2.581	5.9	ug/L	19	Standard
[	Ce	140	154053.3	6.8				ug/L	24	Standard
[>	Tb	159	951187.6	2.0				ug/L	910514	Standard
[	Ho	165	432.3	14.0				ug/L	7	Standard
	Tl	203	327944.9	5.1	25.0272	1.392	5.6	ug/L	13	Standard
	Tl	205	10166.1	3.4	25.4286	0.883	3.5	ug/L	1	Standard
	Pb	206	261300.3	6.8	24.8581	1.739	7.0	ug/L	342	Standard
	Pb	207	220604.8	6.3	24.6863	1.695	6.9	ug/L	284	Standard
	Pb	208	1026110.5	6.1	24.7311	1.613	6.5	ug/L	1363	Standard
	U	238	253752.9	9.1	24.7308	2.307	9.3	ug/L	2	Standard
[>	Bi	209	481254.6	2.4				ug/L	470592	Standard

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Na	23	105.0	20.8	8.7281	2.258	25.9	mg/L	2	Standard
Mg	24	15622732.0	4.4	7.0014	0.496	7.1	mg/L	5586	Standard
K	39	68.3	11.2	0.8043	0.052	6.5	mg/L	5	Standard
Ca	43	235.0	9.8	6.9452	1.396	20.1	mg/L	45	Standard
Fe	54	2709.7	3.7	0.7977	0.064	8.0	mg/L	350	Standard
Fe	57	806.7	5.3	1.0272	0.024	2.3	mg/L	102	Standard
Sc-1	45	58156.7	6.8				mg/L	53004	Standard
Cl	35	2.7	86.6				ug/L	2	Standard
Kr	83	198.9	2.5				ug/L	157	Standard
Br	81	4.2	34.6				ug/L	3	Standard
P	31	161279.5	6.4				ug/L	91588	Standard
S	34	23500.7	4.5				ug/L	32556	Standard
Sr	88	233.3	6.5				ug/L	62	Standard
C	12	168.3	13.4				mg/L	133	Standard
N	14	0.0					mg/L	0	Standard
Hg	202	11.7	99.0				mg/L	7	Standard

QC Calculated Values

Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recovery
Li	7			
Be	9			
Al	27			
Sc	45			
Ti	47			
V	51			
Cr	52			
Cr	53			
Mn	55			
Co	59			
Ni	60			
Cu	65			
Zn	66			
Ge	72		102.841	
As	75			
Se	82			
Se-1	77			
Ga	71			
Rb	85			
Y	89			
Rh	103			

Sample ID: L1211041108S WG414309-04

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[	Mo	98	
[	Ag	107	
[	Cd	111	
[	Cd	114	
>	In	115	101.441
[	Sn	118	
[	Sb	123	
[	Ba	135	
[	Ce	140	
>	Tb	159	
[	Ho	165	
[	Tl	203	
[	Tl	205	
[	Pb	206	
[	Pb	207	
[	Pb	208	
[	U	238	
>	Bi	209	102.266
[	Na	23	
[	Mg	24	
[	K	39	
[	Ca	43	
[	Fe	54	
[	Fe	57	
>	Sc-1	45	
[	Cl	35	
[	Kr	83	
[	Br	81	
[	P	31	
[	S	34	
[	Sr	88	
[	C	12	
[	N	14	
[	Hg	202	

QC Out of Limits

Measurement Type	Analyte	Mass	Out of Limits Message

Sample ID: L1211041108S WG414309-04

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Method 6020 - Summary Report

Sample ID: L1211041108SD WG414309-05

Sample Date/Time: Sunday, November 18, 2012 09:21:19

Number of Replicates: 3

Autosampler Position: 305

Sample Description: 1

Method File: C:\NexIONData\Method\6020a.mth

Aliquot Volume (mL):

Diluted to Volume (mL):

User Name: JYH user

Cumulative Autodilution Factor: 1

Nexion-ICP 200.8\6020

Concentration Results

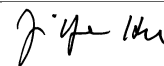
IS	Analyte	Mass	Intensity	RSD	Conc.	SD	RSD	Units	Blank Intens.	Mode
[	Li	7	33191.4	6.7	-12183.2349	1108.086	9.1	ug/L	8369	Standard
	Be	9	55285.8	4.2	24.4123	1.079	4.4	ug/L	18	Standard
	Al	27	5521384.7	5.6	41.3003	2.214	5.4	ug/L	215	Standard
[>	Sc	45	57683.0	2.8				ug/L	53004	Standard
[	Ti	47	3185.7	7.1	5.8673	0.416	7.1	ug/L	26	Standard
	V	51	320548.7	6.1	25.5916	1.615	6.3	ug/L	3223	Standard
	Cr	52	288622.4	5.3	24.2227	1.438	5.9	ug/L	10379	Standard
	Cr	53	34936.3	8.5	24.1623	2.127	8.8	ug/L	192	Standard
	Mn	55	1208340.0	5.1	66.5539	3.549	5.3	ug/L	1840	Standard
	Co	59	347720.9	5.0	24.9236	1.273	5.1	ug/L	115	Standard
	Ni	60	72625.7	5.5	24.1879	1.395	5.8	ug/L	75	Standard
	Cu	65	76593.1	5.1	26.4096	1.478	5.6	ug/L	155	Standard
	Zn	66	41059.7	5.0	28.4787	1.537	5.4	ug/L	237	Standard
[>	Ge	72	432477.1	1.0				ug/L	413856	Standard
	As	75	36073.6	4.6	23.9217	1.117	4.7	ug/L	-197	Standard
	Se	82	3231.3	4.3	23.8701	1.146	4.8	ug/L	-5	Standard
[	Se-1	77	2561.9	4.7	24.0080	1.222	5.1	ug/L	105	Standard
[>	Ga	71	885.0	5.6				mg/L	225	Standard
	Rb	85	1968.5	5.4				ug/L	28	Standard
[	Y	89	330949.3	1.7				ug/L	322845	Standard
[>	Rh	103	151.7	19.3				ug/L	92	Standard
[	Mo	98	689.2	10.2	0.1393	0.015	10.4	ug/L	18	Standard
	Ag	107	204768.9	4.0	24.9922	0.949	3.8	ug/L	63	Standard
	Cd	111	86648.5	6.1	24.4279	1.434	5.9	mg/L	20	Standard
	Cd	114	223217.1	6.3	23.9121	1.480	6.2	ug/L	56	Standard
[>	In	115	679411.3	0.9				ug/L	657102	Standard
	Sn	118	634.3	1.8	0.0123	0.001	10.5	ug/L	555	Standard
	Sb	123	191700.5	5.9	23.6711	1.363	5.8	ug/L	62	Standard
[	Ba	135	147640.0	5.7	41.9244	2.287	5.5	ug/L	19	Standard
[	Ce	140	149266.8	6.7				ug/L	24	Standard
[>	Tb	159	965281.2	0.6				ug/L	910514	Standard
[	Ho	165	436.0	9.0				ug/L	7	Standard
	Tl	203	325503.5	3.1	24.2692	0.640	2.6	ug/L	13	Standard
	Tl	205	10183.4	3.2	24.8882	0.580	2.3	ug/L	1	Standard
	Pb	206	259377.1	5.6	24.1046	1.183	4.9	ug/L	342	Standard
	Pb	207	222961.9	4.8	24.3711	1.003	4.1	ug/L	284	Standard
	Pb	208	1028373.9	5.3	24.2117	1.136	4.7	ug/L	1363	Standard
	U	238	253356.9	7.1	24.1201	1.581	6.6	ug/L	2	Standard
[>	Bi	209	492369.4	1.0				ug/L	470592	Standard

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Na	23	100.0	13.2	8.3063	1.054	12.7	mg/L	2	Standard
Mg	24	15014901.1	4.9	6.7694	0.342	5.1	mg/L	5586	Standard
K	39	73.3	7.9	0.8765	0.094	10.8	mg/L	5	Standard
Ca	43	241.7	4.3	7.2235	0.403	5.6	mg/L	45	Standard
Fe	54	2564.8	4.3	0.7521	0.036	4.8	mg/L	350	Standard
Fe	57	683.3	5.1	0.8588	0.069	8.0	mg/L	102	Standard
Sc-1	45	57683.0	2.8				mg/L	53004	Standard
Cl	35	1.0	173.2				ug/L	2	Standard
Kr	83	166.4	8.7				ug/L	157	Standard
Br	81	6.7	78.1				ug/L	3	Standard
P	31	159316.9	2.5				ug/L	91588	Standard
S	34	22903.1	2.1				ug/L	32556	Standard
Sr	88	273.3	18.5				ug/L	62	Standard
C	12	160.0	17.4				mg/L	133	Standard
N	14	0.0					mg/L	0	Standard
Hg	202	10.0	100.0				mg/L	7	Standard

QC Calculated Values

Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recovery
Li	7			
Be	9			
Al	27			
Sc	45			
Ti	47			
V	51			
Cr	52			
Cr	53			
Mn	55			
Co	59			
Ni	60			
Cu	65			
Zn	66			
Ge	72		104.499	
As	75			
Se	82			
Se-1	77			
Ga	71			
Rb	85			
Y	89			
Rh	103			

Sample ID: L1211041108SD WG414309-05

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[	Mo	98	
[	Ag	107	
[	Cd	111	
[	Cd	114	
>	In	115	103.395
[	Sn	118	
[	Sb	123	
[	Ba	135	
[	Ce	140	
>	Tb	159	
[	Ho	165	
[	Tl	203	
[	Tl	205	
[	Pb	206	
[	Pb	207	
[	Pb	208	
[	U	238	
>	Bi	209	104.628
[	Na	23	
[	Mg	24	
[	K	39	
[	Ca	43	
[	Fe	54	
[	Fe	57	
>	Sc-1	45	
[	Cl	35	
[	Kr	83	
[	Br	81	
[	P	31	
[	S	34	
[	Sr	88	
[	C	12	
[	N	14	
[	Hg	202	

QC Out of Limits

Measurement Type	Analyte	Mass	Out of Limits Message

Sample ID: L1211041108SD WG414309-05

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Method 6020 - Summary Report

Sample ID: L1211041101

Sample Date/Time: Sunday, November 18, 2012 09:24:32

Number of Replicates: 3

Autosampler Position: 306

Sample Description: 1

Method File: C:\NexIONData\Method\6020a.mth

Aliquot Volume (mL):

Diluted to Volume (mL):

User Name: JYH user

Cumulative Autodilution Factor: 1

Nexion-ICP 200.8\6020

Concentration Results

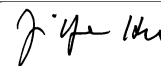
IS	Analyte	Mass	Intensity	RSD	Conc.	SD	RSD	Units	Blank Intens.	Mode
[	Li	7	31591.3	3.9	-7790.1421	462.489	5.9	ug/L	8369	Standard
	Be	9	2403.5	9.8	0.8140	0.060	7.3	ug/L	18	Standard
	Al	27	6036902.2	4.9	35.0621	1.243	3.5	ug/L	215	Standard
[>	Sc	45	74261.6	2.5				ug/L	53004	Standard
[	Ti	47	177575.9	7.3	320.4870	22.246	6.9	ug/L	26	Standard
	V	51	294922.2	6.6	22.8127	1.387	6.1	ug/L	3223	Standard
	Cr	52	124668.7	5.3	9.6180	0.510	5.3	ug/L	10379	Standard
	Cr	53	14583.7	3.3	9.7200	0.284	2.9	ug/L	192	Standard
	Mn	55	4376471.3	6.5	234.0706	14.172	6.1	ug/L	1840	Standard
	Co	59	88441.4	6.5	6.1388	0.381	6.2	ug/L	115	Standard
	Ni	60	29445.0	6.2	9.4918	0.544	5.7	ug/L	75	Standard
	Cu	65	83959.3	4.4	28.0879	1.114	4.0	ug/L	155	Standard
	Zn	66	91747.5	5.6	61.9656	3.159	5.1	ug/L	237	Standard
[>	Ge	72	445668.5	0.9				ug/L	413856	Standard
	As	75	-42.9	159.5	0.1127	0.043	38.6	ug/L	-197	Standard
	Se	82	85.7	9.8	0.6199	0.065	10.4	ug/L	-5	Standard
[	Se-1	77	240.7	9.9	1.2978	0.205	15.8	ug/L	105	Standard
[>	Ga	71	14907.4	6.8				mg/L	225	Standard
[	Rb	85	94283.0	5.6				ug/L	28	Standard
[	Y	89	772772.9	5.4				ug/L	322845	Standard
[>	Rh	103	125.0	14.4				ug/L	92	Standard
[	Mo	98	534.0	11.4	0.1035	0.011	10.7	ug/L	18	Standard
	Ag	107	546.3	7.2	0.0574	0.004	7.2	ug/L	63	Standard
	Cd	111	217.4	12.4	0.0488	0.007	14.1	mg/L	20	Standard
	Cd	114	553.0	14.8	0.0484	0.008	16.8	ug/L	56	Standard
[>	In	115	693557.7	1.6				ug/L	657102	Standard
	Sn	118	2585.9	8.6	0.1967	0.018	9.2	ug/L	555	Standard
	Sb	123	191.7	21.7	0.0202	0.005	23.5	ug/L	62	Standard
[	Ba	135	688909.6	5.2	191.6473	6.950	3.6	ug/L	19	Standard
[	Ce	140	2061088.3	8.5				ug/L	24	Standard
[>	Tb	159	1020036.0	1.0				ug/L	910514	Standard
[	Ho	165	44578.7	7.2				ug/L	7	Standard
	Tl	203	724.4	4.7	0.0499	0.002	4.3	ug/L	13	Standard
	Tl	205	20.3	10.2	0.0506	0.005	10.0	ug/L	1	Standard
	Pb	206	16264.1	6.7	1.4687	0.095	6.5	ug/L	342	Standard
	Pb	207	12974.6	6.4	1.3729	0.082	6.0	ug/L	284	Standard
	Pb	208	63016.7	5.9	1.4396	0.079	5.5	ug/L	1363	Standard
	U	238	2929.3	4.1	0.2752	0.011	4.0	ug/L	2	Standard
[>	Bi	209	496299.7	0.8				ug/L	470592	Standard

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Na	23	23.3	12.4	1.5098	0.182	12.1	mg/L	2	Standard
Mg	24	5836263.5	4.5	2.0406	0.050	2.5	mg/L	5586	Standard
K	39	123.3	23.8	1.1608	0.310	26.7	mg/L	5	Standard
Ca	43	120.0	26.0	1.4297	1.031	72.1	mg/L	45	Standard
Fe	54	22134.1	8.1	5.9133	0.417	7.1	mg/L	350	Standard
Fe	57	5349.3	6.1	5.8652	0.262	4.5	mg/L	102	Standard
Sc-1	45	74261.6	2.5				mg/L	53004	Standard
Cl	35	2.7	78.1				ug/L	2	Standard
Kr	83	228.2	2.6				ug/L	157	Standard
Br	81	1.7	86.6				ug/L	3	Standard
P	31	159843.8	3.9				ug/L	91588	Standard
S	34	19926.4	4.5				ug/L	32556	Standard
Sr	88	190.0	9.5				ug/L	62	Standard
C	12	233.3	18.5				mg/L	133	Standard
N	14	0.0					mg/L	0	Standard
Hg	202	2443.5	3.9				mg/L	7	Standard

QC Calculated Values

Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recovery
Li	7			
Be	9			
Al	27			
Sc	45			
Ti	47			
V	51			
Cr	52			
Cr	53			
Mn	55			
Co	59			
Ni	60			
Cu	65			
Zn	66			
Ge	72		107.687	
As	75			
Se	82			
Se-1	77			
Ga	71			
Rb	85			
Y	89			
Rh	103			

Sample ID: L1211041101

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[	Mo	98	
[	Ag	107	
[	Cd	111	
[	Cd	114	
>	In	115	105.548
[	Sn	118	
[	Sb	123	
[	Ba	135	
[	Ce	140	
>	Tb	159	
[	Ho	165	
[	Tl	203	
[	Tl	205	
[	Pb	206	
[	Pb	207	
[	Pb	208	
[	U	238	
>	Bi	209	105.463
[	Na	23	
[	Mg	24	
[	K	39	
[	Ca	43	
[	Fe	54	
[	Fe	57	
>	Sc-1	45	
[	Cl	35	
[	Kr	83	
[	Br	81	
[	P	31	
[	S	34	
[	Sr	88	
[	C	12	
[	N	14	
[	Hg	202	

QC Out of Limits

Measurement Type	Analyte	Mass	Out of Limits Message
Ti 47 Upper, S, EEE	Ti	47	
Mn 55 Upper, S, EEE	Mn	55	
Ba 135 Upper, S, EEE	Ba	135	

Sample ID: L1211041101

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Method 6020 - Summary Report

Sample ID: L1211041102

Sample Date/Time: Sunday, November 18, 2012 09:27:44

Number of Replicates: 3

Autosampler Position: 307

Sample Description: 1

Method File: C:\NexIONData\Method\6020a.mth

Aliquot Volume (mL):

Diluted to Volume (mL):

User Name: JYH user

Cumulative Autodilution Factor: 1

Nexion-ICP 200.8\6020

Concentration Results

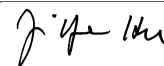
IS	Analyte	Mass	Intensity	RSD	Conc.	SD	RSD	Units	Blank Intens.	Mode
[	Li	7	12325.0	4.8	-1450.6910	164.311	11.3	ug/L	8369	Standard
	Be	9	18.3	41.7	-0.0015	0.003	227.7	ug/L	18	Standard
	Al	27	500653.4	8.1	3.6583	0.232	6.3	ug/L	215	Standard
[>	Sc	45	58964.5	2.2				ug/L	53004	Standard
	Ti	47	611.0	11.5	1.0645	0.107	10.1	ug/L	26	Standard
	V	51	16788.0	7.8	1.0724	0.083	7.7	ug/L	3223	Standard
	Cr	52	11944.4	3.4	0.1141	0.022	19.5	ug/L	10379	Standard
	Cr	53	554.2	9.5	0.2710	0.029	10.8	ug/L	192	Standard
	Mn	55	19401.1	5.2	0.9700	0.035	3.6	ug/L	1840	Standard
	Co	59	447.0	11.4	0.0162	0.003	18.6	ug/L	115	Standard
	Ni	60	1945.1	8.9	0.6062	0.045	7.4	ug/L	75	Standard
	Cu	65	3589.1	5.2	1.1697	0.040	3.4	ug/L	155	Standard
	Zn	66	5520.0	6.5	3.6151	0.174	4.8	ug/L	237	Standard
[>	Ge	72	436791.0	2.1				ug/L	413856	Standard
	As	75	-174.2	25.4	0.0264	0.027	103.6	ug/L	-197	Standard
	Se	82	-1.7	758.8	-0.0065	0.093	1434.9	ug/L	-5	Standard
[	Se-1	77	112.7	10.0	0.1095	0.109	99.5	ug/L	105	Standard
[>	Ga	71	233.3	17.5				mg/L	225	Standard
	Rb	85	2385.2	7.6				ug/L	28	Standard
	Y	89	318316.9	2.4				ug/L	322845	Standard
[>	Rh	103	125.0	31.7				ug/L	92	Standard
	Mo	98	212.5	6.8	0.0371	0.002	6.3	ug/L	18	Standard
	Ag	107	85.7	6.6	0.0026	0.001	33.5	ug/L	63	Standard
	Cd	111	58.7	10.2	0.0055	0.002	36.4	mg/L	20	Standard
	Cd	114	168.6	8.1	0.0086	0.002	20.3	ug/L	56	Standard
[>	In	115	676545.9	1.8				ug/L	657102	Standard
	Sn	118	3306.4	5.6	0.2732	0.012	4.5	ug/L	555	Standard
	Sb	123	99.3	10.9	0.0094	0.001	13.6	ug/L	62	Standard
[	Ba	135	22365.5	5.2	6.3589	0.219	3.4	ug/L	19	Standard
	Ce	140	688.0	7.9				ug/L	24	Standard
[>	Tb	159	961446.1	1.8				ug/L	910514	Standard
	Ho	165	18.7	46.8				ug/L	7	Standard
	Tl	203	197.3	8.0	0.0110	0.001	9.5	ug/L	13	Standard
	Tl	205	6.7	75.5	0.0173	0.012	69.0	ug/L	1	Standard
	Pb	206	916.4	4.3	0.0517	0.003	5.9	ug/L	342	Standard
	Pb	207	806.7	4.4	0.0515	0.004	7.3	ug/L	284	Standard
	Pb	208	3608.2	4.1	0.0500	0.003	5.5	ug/L	1363	Standard
	U	238	10.7	43.3	-0.0005	0.000	88.3	ug/L	2	Standard
[>	Bi	209	496289.4	1.4				ug/L	470592	Standard

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Na	23	33.3	34.6	2.6998	0.891	33.0	mg/L	2	Standard
Mg	24	11511923.8	5.1	5.0741	0.202	4.0	mg/L	5586	Standard
K	39	25.0	0.0	0.2643	0.007	2.5	mg/L	5	Standard
Ca	43	91.7	40.2	1.2865	1.430	111.2	mg/L	45	Standard
Fe	54	407.4	3.2	-0.0127	0.007	58.0	mg/L	350	Standard
Fe	57	105.0	33.3	0.0195	0.047	240.0	mg/L	102	Standard
Sc-1	45	58964.5	2.2				mg/L	53004	Standard
Cl	35	2.7	78.1				ug/L	2	Standard
Kr	83	164.6	5.9				ug/L	157	Standard
Br	81	3.3	43.3				ug/L	3	Standard
P	31	185135.9	3.4				ug/L	91588	Standard
S	34	18002.4	1.3				ug/L	32556	Standard
Sr	88	188.3	22.6				ug/L	62	Standard
C	12	160.0	10.8				mg/L	133	Standard
N	14	0.0					mg/L	0	Standard
Hg	202	78.3	40.5				mg/L	7	Standard

QC Calculated Values

Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recovery
Li	7			
Be	9			
Al	27			
Sc	45			
Ti	47			
V	51			
Cr	52			
Cr	53			
Mn	55			
Co	59			
Ni	60			
Cu	65			
Zn	66			
Ge	72		105.542	
As	75			
Se	82			
Se-1	77			
Ga	71			
Rb	85			
Y	89			
Rh	103			

Sample ID: L1211041102

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[	Mo	98	
[	Ag	107	
[	Cd	111	
[	Cd	114	
>	In	115	102.959
[	Sn	118	
[	Sb	123	
[	Ba	135	
[	Ce	140	
>	Tb	159	
[	Ho	165	
[	Tl	203	
[	Tl	205	
[	Pb	206	
[	Pb	207	
[	Pb	208	
[	U	238	
>	Bi	209	105.461
[	Na	23	
[	Mg	24	
[	K	39	
[	Ca	43	
[	Fe	54	
[	Fe	57	
>	Sc-1	45	
[	Cl	35	
[	Kr	83	
[	Br	81	
[	P	31	
[	S	34	
[	Sr	88	
[	C	12	
[	N	14	
[	Hg	202	

QC Out of Limits

Measurement Type	Analyte	Mass	Out of Limits Message

Sample ID: L1211041102

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Method 6020 - Summary Report

Sample ID: L1211041102PS WG414364-01

Sample Date/Time: Sunday, November 18, 2012 09:30:56

Number of Replicates: 3

Autosampler Position: 308

Sample Description: 1

Method File: C:\NexIONData\Method\6020a.mth

Aliquot Volume (mL):

Diluted to Volume (mL):

User Name: JYH user

Cumulative Autodilution Factor: 1

Nexion-ICP 200.8\6020

Concentration Results

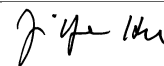
IS	Analyte	Mass	Intensity	RSD	Conc.	SD	RSD	Units	Blank Intens.	Mode
[	Li	7	13472.7	3.7	-1604.8080	122.669	7.6	ug/L	8369	Standard
	Be	9	121652.4	5.4	49.3018	3.223	6.5	ug/L	18	Standard
	Al	27	510044.0	7.0	3.5041	0.351	10.0	ug/L	215	Standard
[>	Sc	45	62929.0	5.1				ug/L	53004	Standard
[	Ti	47	650.7	6.8	1.0764	0.112	10.4	ug/L	26	Standard
	V	51	655396.4	7.0	49.3483	5.033	10.2	ug/L	3223	Standard
	Cr	52	620993.4	7.2	49.8436	5.301	10.6	ug/L	10379	Standard
	Cr	53	76864.2	6.9	49.9893	4.873	9.7	ug/L	192	Standard
	Mn	55	983045.2	6.2	50.7787	4.738	9.3	ug/L	1840	Standard
	Co	59	738443.3	5.0	49.6508	3.801	7.7	ug/L	115	Standard
	Ni	60	159776.7	5.5	49.9587	4.387	8.8	ug/L	75	Standard
	Cu	65	159587.2	5.2	51.6750	4.459	8.6	ug/L	155	Standard
	Zn	66	76071.5	5.2	49.6385	4.172	8.4	ug/L	237	Standard
[>	Ge	72	462005.2	4.5				ug/L	413856	Standard
	As	75	75747.3	4.3	46.9733	3.469	7.4	ug/L	-197	Standard
	Se	82	6570.2	5.0	45.5161	3.698	8.1	ug/L	-5	Standard
[	Se-1	77	5072.9	5.9	45.4533	4.407	9.7	ug/L	105	Standard
[>	Ga	71	381.7	14.5				mg/L	225	Standard
[	Rb	85	2550.2	3.1				ug/L	28	Standard
[	Y	89	349089.0	2.6				ug/L	322845	Standard
[>	Rh	103	140.0	16.4				ug/L	92	Standard
[	Mo	98	272.7	7.2	0.0466	0.006	12.6	ug/L	18	Standard
	Ag	107	434377.4	4.2	50.0456	3.687	7.4	ug/L	63	Standard
	Cd	111	182006.5	5.5	48.4549	4.192	8.7	mg/L	20	Standard
	Cd	114	464524.3	4.9	46.9820	3.767	8.0	ug/L	56	Standard
[>	In	115	721095.9	3.6				ug/L	657102	Standard
	Sn	118	3509.7	4.8	0.2726	0.026	9.4	ug/L	555	Standard
	Sb	123	409489.8	5.0	47.7397	3.956	8.3	ug/L	62	Standard
[	Ba	135	204734.5	4.1	54.8828	4.076	7.4	ug/L	19	Standard
[	Ce	140	728.4	6.6				ug/L	24	Standard
[>	Tb	159	1013037.7	5.6				ug/L	910514	Standard
[	Ho	165	99.7	14.6				ug/L	7	Standard
	Tl	203	692048.6	3.6	49.7088	3.923	7.9	ug/L	13	Standard
	Tl	205	21915.2	3.4	51.5975	4.027	7.8	ug/L	1	Standard
	Pb	206	557694.9	5.0	49.9798	4.481	9.0	ug/L	342	Standard
	Pb	207	472576.3	4.4	49.8132	4.295	8.6	ug/L	284	Standard
	Pb	208	2187345.3	5.1	49.6665	4.535	9.1	ug/L	1363	Standard
	U	238	554869.9	6.2	50.9279	5.206	10.2	ug/L	2	Standard
[>	Bi	209	512416.0	4.8				ug/L	470592	Standard

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Na	23	33.3	17.3	2.5614	0.583	22.8	mg/L	2	Standard
Mg	24	11661267.4	4.9	4.8250	0.329	6.8	mg/L	5586	Standard
K	39	13.3	21.7	0.1124	0.038	34.1	mg/L	5	Standard
Ca	43	103.3	24.8	1.4811	0.928	62.7	mg/L	45	Standard
Fe	54	518.9	16.5	0.0145	0.026	181.9	mg/L	350	Standard
Fe	57	141.7	32.0	0.0597	0.060	100.4	mg/L	102	Standard
Sc-1	45	62929.0	5.1				mg/L	53004	Standard
Cl	35	1.0	100.0				ug/L	2	Standard
Kr	83	410.5	20.2				ug/L	157	Standard
Br	81	2.5	100.0				ug/L	3	Standard
P	31	215984.5	3.2				ug/L	91588	Standard
S	34	16884.4	4.1				ug/L	32556	Standard
Sr	88	171.7	9.4				ug/L	62	Standard
C	12	180.0	25.5				mg/L	133	Standard
N	14	0.0					mg/L	0	Standard
Hg	202	38.3	37.7				mg/L	7	Standard

QC Calculated Values

Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recovery
Li	7			
Be	9			
Al	27			
Sc	45			
Ti	47			
V	51			
Cr	52			
Cr	53			
Mn	55			
Co	59			
Ni	60			
Cu	65			
Zn	66			
Ge	72		111.634	
As	75			
Se	82			
Se-1	77			
Ga	71			
Rb	85			
Y	89			
Rh	103			

Sample ID: L1211041102PS WG414364-01

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[	Mo	98	
[	Ag	107	
[	Cd	111	
[	Cd	114	
>	In	115	109.739
[	Sn	118	
[	Sb	123	
[	Ba	135	
[	Ce	140	
>	Tb	159	
[	Ho	165	
[	Tl	203	
[	Tl	205	
[	Pb	206	
[	Pb	207	
[	Pb	208	
[	U	238	
>	Bi	209	108.888
[	Na	23	
[	Mg	24	
[	K	39	
[	Ca	43	
[	Fe	54	
[	Fe	57	
>	Sc-1	45	
[	Cl	35	
[	Kr	83	
[	Br	81	
[	P	31	
[	S	34	
[	Sr	88	
[	C	12	
[	N	14	
[	Hg	202	

QC Out of Limits

Measurement Type	Analyte	Mass	Out of Limits Message

Sample ID: L1211041102PS WG414364-01

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Method 6020 - Summary Report

Sample ID: L1211041102SDL WG411364-02

Sample Date/Time: Sunday, November 18, 2012 09:34:08

Number of Replicates: 3

Autosampler Position: 309

Sample Description: 5

Method File: C:\NexIONData\Method\6020a.mth

Aliquot Volume (mL):

Diluted to Volume (mL):

User Name: JYH user

Cumulative Autodilution Factor: 1

Nexion-ICP 200.8\6020

Concentration Results

IS	Analyte	Mass	Intensity	RSD	Conc.	SD	RSD	Units	Blank Intens.	Mode
[	Li	7	9466.3	6.7	-629.3751	313.260	49.8	ug/L	8369	Standard
	Be	9	171.7	145.5	0.0737	0.121	163.9	ug/L	18	Standard
	Al	27	96309.1	5.8	0.7918	0.038	4.8	ug/L	215	Standard
[>	Sc	45	52315.2	1.2				ug/L	53004	Standard
[	Ti	47	122.3	17.7	0.1764	0.036	20.2	ug/L	26	Standard
	V	51	6243.3	22.7	0.2542	0.104	41.1	ug/L	3223	Standard
	Cr	52	10808.9	13.4	0.0610	0.105	172.2	ug/L	10379	Standard
	Cr	53	384.2	38.7	0.1659	0.099	59.6	ug/L	192	Standard
	Mn	55	7099.7	23.6	0.3171	0.089	28.0	ug/L	1840	Standard
	Co	59	1136.1	110.0	0.0678	0.090	132.6	ug/L	115	Standard
	Ni	60	766.7	39.7	0.2287	0.098	42.7	ug/L	75	Standard
	Cu	65	1062.7	26.8	0.3227	0.092	28.5	ug/L	155	Standard
	Zn	66	3167.7	6.4	2.0987	0.095	4.5	ug/L	237	Standard
[>	Ge	72	416053.0	2.6				ug/L	413856	Standard
	As	75	-101.3	137.1	0.0692	0.095	137.7	ug/L	-197	Standard
	Se	82	6.3	361.3	0.0524	0.174	331.3	ug/L	-5	Standard
[	Se-1	77	102.3	10.4	0.0574	0.084	145.8	ug/L	105	Standard
[>	Ga	71	193.3	10.5				mg/L	225	Standard
[	Rb	85	496.7	1.5				ug/L	28	Standard
[	Y	89	310800.7	1.3				ug/L	322845	Standard
[>	Rh	103	93.3	34.4				ug/L	92	Standard
[	Mo	98	117.1	11.0	0.0172	0.003	15.4	ug/L	18	Standard
	Ag	107	400.3	129.3	0.0419	0.064	152.3	ug/L	63	Standard
	Cd	111	223.2	144.2	0.0527	0.092	173.9	mg/L	20	Standard
	Cd	114	580.5	143.3	0.0536	0.090	167.9	ug/L	56	Standard
[>	In	115	659688.7	2.3				ug/L	657102	Standard
	Sn	118	987.4	5.5	0.0494	0.003	6.6	ug/L	555	Standard
	Sb	123	669.4	110.9	0.0813	0.092	113.6	ug/L	62	Standard
[	Ba	135	4678.1	11.4	1.3472	0.128	9.5	ug/L	19	Standard
[	Ce	140	210.3	3.1				ug/L	24	Standard
[>	Tb	159	935935.1	2.6				ug/L	910514	Standard
[	Ho	165	9.3	34.4				ug/L	7	Standard
	Tl	203	549.4	134.0	0.0377	0.055	145.8	ug/L	13	Standard
	Tl	205	21.7	103.2	0.0547	0.055	100.1	ug/L	1	Standard
	Pb	206	1147.7	83.0	0.0753	0.088	117.0	ug/L	342	Standard
	Pb	207	943.7	80.3	0.0686	0.082	120.0	ug/L	284	Standard
	Pb	208	4371.7	81.1	0.0700	0.083	118.6	ug/L	1363	Standard
	U	238	575.4	164.7	0.0535	0.090	169.0	ug/L	2	Standard
[>	Bi	209	481868.3	2.2				ug/L	470592	Standard

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Na	23	11.7	24.7	1.0723	0.259	24.1	mg/L	2	Standard
Mg	24	2279125.5	8.1	1.1297	0.082	7.3	mg/L	5586	Standard
K	39	6.7	114.6	0.0504	0.105	207.1	mg/L	5	Standard
Ca	43	45.0	40.1	-0.2893	0.777	268.5	mg/L	45	Standard
Fe	54	408.9	14.8	0.0056	0.023	403.2	mg/L	350	Standard
Fe	57	106.7	7.2	0.0416	0.014	34.2	mg/L	102	Standard
Sc-1	45	52315.2	1.2				mg/L	53004	Standard
Cl	35	1.7	34.6				ug/L	2	Standard
Kr	83	192.7	15.8				ug/L	157	Standard
Br	81	6.7	21.7				ug/L	3	Standard
P	31	103770.0	1.7				ug/L	91588	Standard
S	34	16313.8	1.6				ug/L	32556	Standard
Sr	88	66.7	24.1				ug/L	62	Standard
C	12	153.3	19.1				mg/L	133	Standard
N	14	1.7	173.2				mg/L	0	Standard
Hg	202	20.0	66.1				mg/L	7	Standard

QC Calculated Values

Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recovery
Li	7			
Be	9			
Al	27			
Sc	45			
Ti	47			
V	51			
Cr	52			
Cr	53			
Mn	55			
Co	59			
Ni	60			
Cu	65			
Zn	66			
Ge	72		100.531	
As	75			
Se	82			
Se-1	77			
Ga	71			
Rb	85			
Y	89			
Rh	103			

Sample ID: L1211041102SDL WG411364-02

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[	Mo	98	
[	Ag	107	
[	Cd	111	
[	Cd	114	
>	In	115	100.394
[	Sn	118	
[	Sb	123	
[	Ba	135	
[	Ce	140	
>	Tb	159	
[	Ho	165	
[	Tl	203	
[	Tl	205	
[	Pb	206	
[	Pb	207	
[	Pb	208	
[	U	238	
>	Bi	209	102.396
[	Na	23	
[	Mg	24	
[	K	39	
[	Ca	43	
[	Fe	54	
[	Fe	57	
>	Sc-1	45	
[	Cl	35	
[	Kr	83	
[	Br	81	
[	P	31	
[	S	34	
[	Sr	88	
[	C	12	
[	N	14	
[	Hg	202	

QC Out of Limits

Measurement Type	Analyte	Mass	Out of Limits Message

Sample ID: L1211041102SDL WG411364-02

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Method 6020 - Summary Report

Sample ID: QC Std 6

Sample Date/Time: Sunday, November 18, 2012 09:37:23

Number of Replicates: 3

Autosampler Position: 101

Sample Description:

Method File: C:\NexIONData\Method\6020a.mth

Aliquot Volume (mL):

Diluted to Volume (mL):

User Name: JYH user

Cumulative Autodilution Factor: 1

Nexion-ICP 200.8\6020

Concentration Results

IS	Analyte	Mass	Intensity	RSD	Conc.	SD	RSD	Units	Blank Intens.	Mode
[	Li	7	8900.9	1.7	-234.7477	162.473	69.2	ug/L	8369	Standard
	Be	9	112668.0	4.8	53.9560	2.610	4.8	ug/L	18	Standard
	Al	27	6534917.3	8.0	53.0297	4.639	8.7	ug/L	215	Standard
[>	Sc	45	53203.3	3.5				ug/L	53004	Standard
[	Ti	47	50524.7	6.8	96.4912	3.411	3.5	ug/L	26	Standard
	V	51	600716.3	6.8	49.5160	2.226	4.5	ug/L	3223	Standard
	Cr	52	563659.5	6.8	49.5048	1.935	3.9	ug/L	10379	Standard
	Cr	53	68388.0	8.4	48.6637	2.498	5.1	ug/L	192	Standard
	Mn	55	865061.7	6.7	48.9089	1.670	3.4	ug/L	1840	Standard
	Co	59	676014.6	6.4	49.7841	1.480	3.0	ug/L	115	Standard
	Ni	60	145791.6	7.4	49.8933	1.956	3.9	ug/L	75	Standard
	Cu	65	142411.5	6.7	50.4788	1.723	3.4	ug/L	155	Standard
	Zn	66	69274.0	5.6	49.5023	1.098	2.2	ug/L	237	Standard
[>	Ge	72	420747.3	3.6				ug/L	413856	Standard
	As	75	73315.3	5.5	49.7974	1.108	2.2	ug/L	-197	Standard
	Se	82	6513.8	5.5	49.4224	0.982	2.0	ug/L	-5	Standard
[	Se-1	77	5051.5	4.0	49.6536	0.245	0.5	ug/L	105	Standard
[>	Ga	71	210.0	15.6				mg/L	225	Standard
[	Rb	85	970.0	23.8				ug/L	28	Standard
[	Y	89	314378.3	4.2				ug/L	322845	Standard
[>	Rh	103	151.7	8.3				ug/L	92	Standard
[	Mo	98	440850.1	7.1	96.5169	4.344	4.5	ug/L	18	Standard
	Ag	107	411658.2	3.9	51.2595	0.593	1.2	ug/L	63	Standard
	Cd	111	176051.2	6.6	50.6172	2.004	4.0	mg/L	20	Standard
	Cd	114	458681.2	7.0	50.1058	2.208	4.4	ug/L	56	Standard
[>	In	115	665928.8	2.8				ug/L	657102	Standard
	Sn	118	503275.1	7.6	49.8109	2.551	5.1	ug/L	555	Standard
	Sb	123	396629.0	6.7	49.9376	2.020	4.0	ug/L	62	Standard
[	Ba	135	170988.0	5.5	49.5189	1.379	2.8	ug/L	19	Standard
[	Ce	140	723.7	4.8				ug/L	24	Standard
[>	Tb	159	941199.7	2.3				ug/L	910514	Standard
[	Ho	165	478.0	9.0				ug/L	7	Standard
	Tl	203	653615.2	4.2	50.4236	0.967	1.9	ug/L	13	Standard
	Tl	205	20732.5	4.7	52.4222	1.272	2.4	ug/L	1	Standard
	Pb	206	525229.2	6.1	50.5252	1.763	3.5	ug/L	342	Standard
	Pb	207	446041.6	6.9	50.4609	2.158	4.3	ug/L	284	Standard
	Pb	208	2053856.6	6.2	50.0528	1.759	3.5	ug/L	1363	Standard
	U	238	526023.6	7.6	51.7907	2.696	5.2	ug/L	2	Standard
[>	Bi	209	475835.9	3.0				ug/L	470592	Standard

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Na	23	51.7	40.3	4.7002	2.042	43.4	mg/L	2	Standard
Mg	24	10876295.4	5.5	5.3169	0.308	5.8	mg/L	5586	Standard
K	39	396.7	13.1	5.3238	0.553	10.4	mg/L	5	Standard
Ca	43	170.0	7.8	4.9712	0.310	6.2	mg/L	45	Standard
Fe	54	13875.6	7.6	5.1580	0.370	7.2	mg/L	350	Standard
Fe	57	3365.4	4.0	5.1416	0.286	5.6	mg/L	102	Standard
Sc-1	45	53203.3	3.5				mg/L	53004	Standard
Cl	35	1.3	114.6				ug/L	2	Standard
Kr	83	157.3	5.6				ug/L	157	Standard
Br	81	4.2	34.6				ug/L	3	Standard
P	31	85240.1	2.9				ug/L	91588	Standard
S	34	26252.4	17.8				ug/L	32556	Standard
Sr	88	61.7	23.4				ug/L	62	Standard
C	12	165.0	18.4				mg/L	133	Standard
N	14	0.0					mg/L	0	Standard
Hg	202	13.3	78.1				mg/L	7	Standard

QC Calculated Values

Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recovery
Li	7			
Be	9	107.912		
Al	27	106.059		
Sc	45			
Ti	47	96.491		
V	51	99.032		
Cr	52	99.010		
Cr	53			
Mn	55	97.818		
Co	59	99.568		
Ni	60	99.787		
Cu	65	100.958		
Zn	66	99.005		
Ge	72		101.665	
As	75	99.595		
Se	82	98.845		
Se-1	77			
Ga	71			
Rb	85			
Y	89			
Rh	103			

Sample ID: QC Std 6

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[	Mo	98	96.517	
[	Ag	107	102.519	
[	Cd	111	101.234	
[	Cd	114		
>	In	115		101.343
[	Sn	118	99.622	
[	Sb	123	99.875	
[	Ba	135	99.038	
[	Ce	140		
>	Tb	159		
[	Ho	165		
[	Tl	203	100.847	
[	Tl	205		
[	Pb	206	101.050	
[	Pb	207	100.922	
[	Pb	208	100.106	
[	U	238	103.581	
>	Bi	209		101.114
[	Na	23		
[	Mg	24		
[	K	39		
[	Ca	43		
[	Fe	54		
[	Fe	57		
>	Sc-1	45		
[	Cl	35		
[	Kr	83		
[	Br	81		
[	P	31		
[	S	34		
[	Sr	88		
[	C	12		
[	N	14		
[	Hg	202		

QC Out of Limits

Measurement Type	Analyte	Mass	Out of Limits Message

Sample ID: QC Std 6

Report Date/Time: Sunday, November 18, 2012 09:39:55

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Method 6020 - Summary Report

Sample ID: QC Std 7

Sample Date/Time: Sunday, November 18, 2012 09:40:35

Number of Replicates: 3

Autosampler Position: 102

Sample Description:

Method File: C:\NexIONData\Method\6020a.mth

Aliquot Volume (mL):

Diluted to Volume (mL):

User Name: JYH user

Cumulative Autodilution Factor: 1

Nexion-ICP 200.8\6020

Concentration Results

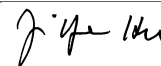
IS	Analyte	Mass	Intensity	RSD	Conc.	SD	RSD	Units	Blank Intens.	Mode
[	Li	7	8757.5	5.0	-274.1492	86.354	31.5	ug/L	8369	Standard
	Be	9	35.0	57.1	0.0080	0.010	131.4	ug/L	18	Standard
	Al	27	870.0	82.4	0.0052	0.006	121.5	ug/L	215	Standard
[>	Sc	45	51878.7	3.6				ug/L	53004	Standard
[	Ti	47	27.3	22.4	-0.0066	0.013	201.7	ug/L	26	Standard
	V	51	3176.8	3.6	-0.0008	0.020	2376.0	ug/L	3223	Standard
	Cr	52	10173.7	0.4	0.0054	0.036	652.3	ug/L	10379	Standard
	Cr	53	223.3	5.2	0.0517	0.014	27.4	ug/L	192	Standard
	Mn	55	1549.7	8.6	-0.0001	0.007	5495.7	ug/L	1840	Standard
	Co	59	150.7	40.1	-0.0042	0.005	115.3	ug/L	115	Standard
	Ni	60	89.3	11.4	-0.0045	0.005	104.1	ug/L	75	Standard
	Cu	65	155.0	6.5	-0.0018	0.005	266.8	ug/L	155	Standard
	Zn	66	263.7	17.7	-0.0087	0.028	323.8	ug/L	237	Standard
[>	Ge	72	416358.7	3.9				ug/L	413856	Standard
	As	75	-202.8	9.7	0.0013	0.008	660.3	ug/L	-197	Standard
	Se	82	0.7	623.2	0.0101	0.033	326.8	ug/L	-5	Standard
[	Se-1	77	107.3	7.1	0.1078	0.042	38.8	ug/L	105	Standard
[>	Ga	71	211.7	13.0				mg/L	225	Standard
[	Rb	85	20.0	75.0				ug/L	28	Standard
[	Y	89	312503.9	1.9				ug/L	322845	Standard
[>	Rh	103	95.0	9.1				ug/L	92	Standard
[	Mo	98	96.2	65.7	0.0123	0.013	105.4	ug/L	18	Standard
	Ag	107	123.7	47.2	0.0076	0.007	88.1	ug/L	63	Standard
	Cd	111	37.6	76.9	-0.0004	0.008	1925.6	mg/L	20	Standard
	Cd	114	110.0	62.9	0.0024	0.007	290.4	ug/L	56	Standard
[>	In	115	656816.4	3.9				ug/L	657102	Standard
	Sn	118	485.3	10.7	-0.0007	0.003	486.3	ug/L	555	Standard
	Sb	123	314.8	50.1	0.0368	0.018	49.8	ug/L	62	Standard
[	Ba	135	41.7	83.8	-0.0079	0.010	121.8	ug/L	19	Standard
[	Ce	140	56.7	85.0				ug/L	24	Standard
[>	Tb	159	919211.5	3.6				ug/L	910514	Standard
[	Ho	165	12.7	24.1				ug/L	7	Standard
	Tl	203	53.0	76.8	0.0004	0.003	763.6	ug/L	13	Standard
	Tl	205	3.7	103.3	0.0107	0.010	93.0	ug/L	1	Standard
	Pb	206	335.7	5.8	-0.0007	0.002	278.0	ug/L	342	Standard
	Pb	207	308.3	12.1	-0.0013	0.003	246.7	ug/L	284	Standard
	Pb	208	1402.4	8.6	-0.0003	0.002	703.5	ug/L	1363	Standard
	U	238	53.3	109.7	0.0038	0.006	156.9	ug/L	2	Standard
[>	Bi	209	476677.6	3.1				ug/L	470592	Standard

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Na	23	3.3	173.2	0.3028	0.516	170.3	mg/L	2	Standard
Mg	24	9294.6	18.7	0.0018	0.001	55.8	mg/L	5586	Standard
K	39	5.0	0.0	0.0282	0.003	9.0	mg/L	5	Standard
Ca	43	41.7	42.1	-0.4257	0.721	169.4	mg/L	45	Standard
Fe	54	352.1	10.7	-0.0154	0.013	81.2	mg/L	350	Standard
Fe	57	91.7	30.0	0.0184	0.042	228.6	mg/L	102	Standard
Sc-1	45	51878.7	3.6				mg/L	53004	Standard
Cl	35	3.3	17.3				ug/L	2	Standard
Kr	83	156.1	4.2				ug/L	157	Standard
Br	81	5.0	0.0				ug/L	3	Standard
P	31	89005.8	3.1				ug/L	91588	Standard
S	34	27484.9	4.0				ug/L	32556	Standard
Sr	88	55.0	9.1				ug/L	62	Standard
C	12	163.3	18.7				mg/L	133	Standard
N	14	0.0					mg/L	0	Standard
Hg	202	10.0	100.0				mg/L	7	Standard

QC Calculated Values

Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recovery
Li	7			
Be	9			
Al	27			
Sc	45			
Ti	47			
V	51			
Cr	52			
Cr	53			
Mn	55			
Co	59			
Ni	60			
Cu	65			
Zn	66			
Ge	72		100.605	
As	75			
Se	82			
Se-1	77			
Ga	71			
Rb	85			
Y	89			
Rh	103			

Sample ID: QC Std 7

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[	Mo	98	
[	Ag	107	
[	Cd	111	
[	Cd	114	
>	In	115	99.957
[	Sn	118	
[	Sb	123	
[	Ba	135	
[	Ce	140	
>	Tb	159	
[	Ho	165	
[	Tl	203	
[	Tl	205	
[	Pb	206	
[	Pb	207	
[	Pb	208	
[	U	238	
>	Bi	209	101.293
[	Na	23	
[	Mg	24	
[	K	39	
[	Ca	43	
[	Fe	54	
[	Fe	57	
>	Sc-1	45	
[	Cl	35	
[	Kr	83	
[	Br	81	
[	P	31	
[	S	34	
[	Sr	88	
[	C	12	
[	N	14	
[	Hg	202	

QC Out of Limits

Measurement Type	Analyte	Mass	Out of Limits Message

Sample ID: QC Std 7

Report Date/Time: Sunday, November 18, 2012 09:43:07

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Method 6020 - Summary Report

Sample ID: L1211041103

Sample Date/Time: Sunday, November 18, 2012 09:43:49

Number of Replicates: 3

Autosampler Position: 310

Sample Description: 1

Method File: C:\NexIONData\Method\6020a.mth

Aliquot Volume (mL):

Diluted to Volume (mL):

User Name: JYH user

Cumulative Autodilution Factor: 1

Nexion-ICP 200.8\6020

Concentration Results

IS	Analyte	Mass	Intensity	RSD	Conc.	SD	RSD	Units	Blank Intens.	Mode
[	Li	7	51827.0	5.6	-18690.4747	1343.030	7.2	ug/L	8369	Standard
	Be	9	140.0	31.7	0.0448	0.014	30.2	ug/L	18	Standard
	Al	27	8123223.0	7.5	53.8497	1.245	2.3	ug/L	215	Standard
[>	Sc	45	65078.3	7.3				ug/L	53004	Standard
[	Ti	47	10385.6	12.9	18.3096	1.696	9.3	ug/L	26	Standard
	V	51	58952.8	8.7	4.2583	0.236	5.6	ug/L	3223	Standard
	Cr	52	23968.3	4.1	1.0732	0.033	3.1	ug/L	10379	Standard
	Cr	53	2111.0	2.8	1.2887	0.060	4.6	ug/L	192	Standard
	Mn	55	818456.9	8.1	42.8704	1.857	4.3	ug/L	1840	Standard
	Co	59	6960.6	6.4	0.4598	0.012	2.7	ug/L	115	Standard
	Ni	60	13847.0	7.3	4.3610	0.165	3.8	ug/L	75	Standard
	Cu	65	3712.5	7.0	1.1637	0.046	4.0	ug/L	155	Standard
	Zn	66	84860.2	6.0	56.2403	1.325	2.4	ug/L	237	Standard
[>	Ge	72	453866.6	3.9				ug/L	413856	Standard
	As	75	128.6	38.2	0.2204	0.030	13.5	ug/L	-197	Standard
	Se	82	76.6	17.1	0.5453	0.098	18.0	ug/L	-5	Standard
[	Se-1	77	135.3	4.9	0.2799	0.072	25.8	ug/L	105	Standard
[>	Ga	71	3060.3	12.0				mg/L	225	Standard
	Rb	85	16298.8	3.7				ug/L	28	Standard
[	Y	89	359586.1	4.6				ug/L	322845	Standard
[>	Rh	103	125.0	28.0				ug/L	92	Standard
[	Mo	98	715.0	9.6	0.1397	0.009	6.6	ug/L	18	Standard
	Ag	107	179.3	9.1	0.0133	0.001	10.7	ug/L	63	Standard
	Cd	111	194.8	4.6	0.0420	0.003	6.0	mg/L	20	Standard
	Cd	114	504.4	6.4	0.0427	0.002	4.8	ug/L	56	Standard
[>	In	115	702184.9	3.3				ug/L	657102	Standard
	Sn	118	2668.9	5.8	0.2015	0.008	4.0	ug/L	555	Standard
	Sb	123	212.1	14.9	0.0224	0.003	14.9	ug/L	62	Standard
[	Ba	135	118424.8	6.2	32.5283	1.508	4.6	ug/L	19	Standard
[	Ce	140	438213.6	6.3				ug/L	24	Standard
[>	Tb	159	991130.0	1.7				ug/L	910514	Standard
[	Ho	165	2082.8	4.8				ug/L	7	Standard
	Tl	203	401.3	8.8	0.0256	0.002	8.6	ug/L	13	Standard
	Tl	205	14.0	7.1	0.0348	0.002	5.7	ug/L	1	Standard
	Pb	206	4735.7	6.0	0.3985	0.024	6.1	ug/L	342	Standard
	Pb	207	3715.1	3.4	0.3620	0.007	1.9	ug/L	284	Standard
	Pb	208	18039.9	5.0	0.3819	0.017	4.5	ug/L	1363	Standard
	U	238	1973.8	8.8	0.1824	0.014	7.8	ug/L	2	Standard
[>	Bi	209	502989.8	1.7				ug/L	470592	Standard

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Na	23	75.0	35.3	5.6254	2.229	39.6	mg/L	2	Standard
Mg	24	22482111.2	5.1	8.9921	0.223	2.5	mg/L	5586	Standard
K	39	81.7	3.5	0.8648	0.035	4.1	mg/L	5	Standard
Ca	43	248.3	16.3	6.3804	1.331	20.9	mg/L	45	Standard
Fe	54	2397.6	14.0	0.5948	0.064	10.8	mg/L	350	Standard
Fe	57	653.3	16.2	0.7044	0.086	12.1	mg/L	102	Standard
Sc-1	45	65078.3	7.3				mg/L	53004	Standard
Cl	35	2.0	86.6				ug/L	2	Standard
Kr	83	158.2	1.7				ug/L	157	Standard
Br	81	8.3	34.6				ug/L	3	Standard
P	31	201382.8	4.4				ug/L	91588	Standard
S	34	21327.5	0.8				ug/L	32556	Standard
Sr	88	283.3	8.3				ug/L	62	Standard
C	12	435.0	8.0				mg/L	133	Standard
N	14	0.0					mg/L	0	Standard
Hg	202	21.7	53.3				mg/L	7	Standard

QC Calculated Values

Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recovery
Li	7			
Be	9			
Al	27			
Sc	45			
Ti	47			
V	51			
Cr	52			
Cr	53			
Mn	55			
Co	59			
Ni	60			
Cu	65			
Zn	66			
Ge	72		109.668	
As	75			
Se	82			
Se-1	77			
Ga	71			
Rb	85			
Y	89			
Rh	103			

Sample ID: L1211041103

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[	Mo	98	
[	Ag	107	
[	Cd	111	
[	Cd	114	
>	In	115	106.861
[	Sn	118	
[	Sb	123	
[	Ba	135	
[	Ce	140	
>	Tb	159	
[	Ho	165	
[	Tl	203	
[	Tl	205	
[	Pb	206	
[	Pb	207	
[	Pb	208	
[	U	238	
>	Bi	209	106.885
[	Na	23	
[	Mg	24	
[	K	39	
[	Ca	43	
[	Fe	54	
[	Fe	57	
>	Sc-1	45	
[	Cl	35	
[	Kr	83	
[	Br	81	
[	P	31	
[	S	34	
[	Sr	88	
[	C	12	
[	N	14	
[	Hg	202	

QC Out of Limits

Measurement Type	Analyte	Mass	Out of Limits Message

Sample ID: L1211041103

Report Date/Time: Sunday, November 18, 2012 09:46:21

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Method 6020 - Summary Report

Sample ID: L1211041104

Sample Date/Time: Sunday, November 18, 2012 09:47:02

Number of Replicates: 3

Autosampler Position: 311

Sample Description: 1

Method File: C:\NexIONData\Method\6020a.mth

Aliquot Volume (mL):

Diluted to Volume (mL):

User Name: JYH user

Cumulative Autodilution Factor: 1

Nexion-ICP 200.8\6020

Concentration Results

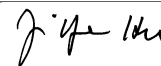
IS	Analyte	Mass	Intensity	RSD	Conc.	SD	RSD	Units	Blank Intens.	Mode
[	Li	7	10807.2	6.5	-888.0707	265.188	29.9	ug/L	8369	Standard
	Be	9	88.3	16.3	0.0300	0.006	20.6	ug/L	18	Standard
	Al	27	733083.5	5.3	5.5508	0.198	3.6	ug/L	215	Standard
[>	Sc	45	56931.8	1.9				ug/L	53004	Standard
[	Ti	47	2753.9	4.5	5.1887	0.329	6.3	ug/L	26	Standard
	V	51	22731.2	4.2	1.6105	0.111	6.9	ug/L	3223	Standard
	Cr	52	14048.5	3.3	0.3370	0.057	17.1	ug/L	10379	Standard
	Cr	53	929.2	10.7	0.5514	0.076	13.8	ug/L	192	Standard
	Mn	55	167418.8	5.1	9.3671	0.614	6.6	ug/L	1840	Standard
	Co	59	3877.5	5.7	0.2693	0.021	7.6	ug/L	115	Standard
	Ni	60	2444.5	4.1	0.7994	0.046	5.8	ug/L	75	Standard
	Cu	65	1893.8	9.2	0.6130	0.072	11.8	ug/L	155	Standard
	Zn	66	53744.6	4.0	38.2419	2.179	5.7	ug/L	237	Standard
[>	Ge	72	422539.2	1.9				ug/L	413856	Standard
	As	75	664.3	5.3	0.5882	0.023	3.9	ug/L	-197	Standard
	Se	82	10.4	74.9	0.0841	0.059	70.3	ug/L	-5	Standard
[	Se-1	77	112.7	5.8	0.1465	0.078	53.0	ug/L	105	Standard
[>	Ga	71	390.0	9.7				mg/L	225	Standard
[	Rb	85	4835.8	2.2				ug/L	28	Standard
[	Y	89	311194.4	2.3				ug/L	322845	Standard
[>	Rh	103	113.3	22.6				ug/L	92	Standard
[	Mo	98	867.1	8.0	0.1811	0.019	10.3	ug/L	18	Standard
	Ag	107	100.7	3.5	0.0046	0.001	12.7	ug/L	63	Standard
	Cd	111	45.0	13.3	0.0017	0.002	111.1	mg/L	20	Standard
	Cd	114	127.0	6.0	0.0043	0.001	25.7	ug/L	56	Standard
[>	In	115	667493.2	2.2				ug/L	657102	Standard
	Sn	118	1191.7	2.1	0.0685	0.003	4.8	ug/L	555	Standard
	Sb	123	1201.5	7.1	0.1483	0.014	9.2	ug/L	62	Standard
[	Ba	135	67620.8	4.4	19.5473	1.109	5.7	ug/L	19	Standard
[	Ce	140	7789.7	6.0				ug/L	24	Standard
[>	Tb	159	940468.2	0.9				ug/L	910514	Standard
[	Ho	165	105.0	10.1				ug/L	7	Standard
	Tl	203	291.7	2.1	0.0184	0.000	2.3	ug/L	13	Standard
	Tl	205	9.0	19.2	0.0236	0.004	18.1	ug/L	1	Standard
	Pb	206	5194.2	7.7	0.4566	0.040	8.8	ug/L	342	Standard
	Pb	207	4328.3	3.8	0.4436	0.021	4.7	ug/L	284	Standard
	Pb	208	20191.3	5.1	0.4476	0.027	6.1	ug/L	1363	Standard
	U	238	57.0	4.6	0.0040	0.000	6.5	ug/L	2	Standard
[>	Bi	209	486461.1	0.6				ug/L	470592	Standard

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Na	23	26.7	47.2	2.2451	1.035	46.1	mg/L	2	Standard
Mg	24	6919176.9	4.2	3.1572	0.073	2.3	mg/L	5586	Standard
K	39	16.7	34.6	0.1701	0.074	43.8	mg/L	5	Standard
Ca	43	98.3	28.0	1.6807	1.178	70.1	mg/L	45	Standard
Fe	54	856.2	4.7	0.1527	0.010	6.5	mg/L	350	Standard
Fe	57	226.7	22.3	0.2029	0.071	35.2	mg/L	102	Standard
Sc-1	45	56931.8	1.9				mg/L	53004	Standard
Cl	35	2.3	24.7				ug/L	2	Standard
Kr	83	160.1	2.6				ug/L	157	Standard
Br	81	6.7	78.1				ug/L	3	Standard
P	31	145545.1	2.2				ug/L	91588	Standard
S	34	19257.2	3.5				ug/L	32556	Standard
Sr	88	183.3	30.7				ug/L	62	Standard
C	12	153.3	10.0				mg/L	133	Standard
N	14	0.0					mg/L	0	Standard
Hg	202	11.7	65.5				mg/L	7	Standard

QC Calculated Values

Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recovery
Li	7			
Be	9			
Al	27			
Sc	45			
Ti	47			
V	51			
Cr	52			
Cr	53			
Mn	55			
Co	59			
Ni	60			
Cu	65			
Zn	66			
Ge	72		102.098	
As	75			
Se	82			
Se-1	77			
Ga	71			
Rb	85			
Y	89			
Rh	103			

Sample ID: L1211041104

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[	Mo	98	
[	Ag	107	
[	Cd	111	
[	Cd	114	
>	In	115	101.581
[	Sn	118	
[	Sb	123	
[	Ba	135	
[	Ce	140	
>	Tb	159	
[	Ho	165	
[	Tl	203	
[	Tl	205	
[	Pb	206	
[	Pb	207	
[	Pb	208	
[	U	238	
>	Bi	209	103.372
[	Na	23	
[	Mg	24	
[	K	39	
[	Ca	43	
[	Fe	54	
[	Fe	57	
>	Sc-1	45	
[	Cl	35	
[	Kr	83	
[	Br	81	
[	P	31	
[	S	34	
[	Sr	88	
[	C	12	
[	N	14	
[	Hg	202	

QC Out of Limits

Measurement Type	Analyte	Mass	Out of Limits Message

Sample ID: L1211041104

Report Date/Time: Sunday, November 18, 2012 09:49:34

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Method 6020 - Summary Report

Sample ID: L1211041105

Sample Date/Time: Sunday, November 18, 2012 09:50:14

Number of Replicates: 3

Autosampler Position: 312

Sample Description: 1

Method File: C:\NexIONData\Method\6020a.mth

Aliquot Volume (mL):

Diluted to Volume (mL):

User Name: JYH user

Cumulative Autodilution Factor: 1

Nexion-ICP 200.8\6020

Concentration Results

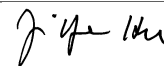
IS	Analyte	Mass	Intensity	RSD	Conc.	SD	RSD	Units	Blank Intens.	Mode
[	Li	7	21665.5	6.0	-6933.7627	736.955	10.6	ug/L	8369	Standard
	Be	9	68.3	78.9	0.0225	0.025	112.9	ug/L	18	Standard
	Al	27	8617217.1	5.8	67.9840	4.083	6.0	ug/L	215	Standard
[>	Sc	45	54688.5	0.5				ug/L	53004	Standard
[	Ti	47	5827.1	5.7	11.1911	0.369	3.3	ug/L	26	Standard
	V	51	9920.2	5.1	0.5630	0.022	3.9	ug/L	3223	Standard
	Cr	52	14583.4	2.3	0.4030	0.016	3.9	ug/L	10379	Standard
	Cr	53	1325.9	4.0	0.8467	0.037	4.4	ug/L	192	Standard
	Mn	55	2978659.5	5.4	170.3876	5.467	3.2	ug/L	1840	Standard
	Co	59	34011.9	6.7	2.5152	0.104	4.1	ug/L	115	Standard
	Ni	60	4093.9	3.9	1.3818	0.028	2.0	ug/L	75	Standard
	Cu	65	2681.6	7.7	0.9036	0.053	5.8	ug/L	155	Standard
	Zn	66	8365.3	7.7	5.8604	0.305	5.2	ug/L	237	Standard
[>	Ge	72	416550.7	2.9				ug/L	413856	Standard
	As	75	194.9	14.5	0.2737	0.022	8.2	ug/L	-197	Standard
	Se	82	109.5	13.1	0.8475	0.136	16.0	ug/L	-5	Standard
[	Se-1	77	129.3	8.5	0.3309	0.106	32.0	ug/L	105	Standard
[>	Ga	71	771.7	10.9				mg/L	225	Standard
[	Rb	85	11696.2	3.9				ug/L	28	Standard
[	Y	89	320081.7	2.2				ug/L	322845	Standard
[>	Rh	103	190.0	7.0				ug/L	92	Standard
[	Mo	98	337.9	5.8	0.0661	0.003	4.9	ug/L	18	Standard
	Ag	107	178.3	7.0	0.0145	0.001	8.7	ug/L	63	Standard
	Cd	111	290.6	11.5	0.0732	0.008	11.6	mg/L	20	Standard
	Cd	114	694.2	7.7	0.0671	0.005	7.6	ug/L	56	Standard
[>	In	115	659120.3	1.6				ug/L	657102	Standard
	Sn	118	812.4	3.5	0.0320	0.002	5.6	ug/L	555	Standard
	Sb	123	162.9	3.3	0.0178	0.001	2.9	ug/L	62	Standard
[	Ba	135	360940.3	4.8	105.6573	3.757	3.6	ug/L	19	Standard
[	Ce	140	82815.3	6.5				ug/L	24	Standard
[>	Tb	159	937172.7	1.8				ug/L	910514	Standard
[	Ho	165	901.4	7.4				ug/L	7	Standard
	Tl	203	482.3	4.3	0.0344	0.001	3.9	ug/L	13	Standard
	Tl	205	19.0	45.9	0.0504	0.022	44.6	ug/L	1	Standard
	Pb	206	3119.0	5.1	0.2742	0.013	4.7	ug/L	342	Standard
	Pb	207	2510.5	2.8	0.2547	0.005	2.0	ug/L	284	Standard
	Pb	208	11958.2	4.3	0.2639	0.010	3.8	ug/L	1363	Standard
	U	238	828.4	4.3	0.0819	0.003	3.3	ug/L	2	Standard
[>	Bi	209	465304.6	1.1				ug/L	470592	Standard

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Na	23	156.7	22.6	13.7188	3.066	22.4	mg/L	2	Standard
Mg	24	18926809.2	4.6	8.9995	0.434	4.8	mg/L	5586	Standard
K	39	38.3	49.4	0.4634	0.247	53.4	mg/L	5	Standard
Ca	43	396.7	12.7	14.1405	2.162	15.3	mg/L	45	Standard
Fe	54	2160.4	7.3	0.6512	0.063	9.7	mg/L	350	Standard
Fe	57	690.0	17.1	0.9224	0.183	19.8	mg/L	102	Standard
Sc-1	45	54688.5	0.5				mg/L	53004	Standard
Cl	35	5.0	0.0				ug/L	2	Standard
Kr	83	151.9	4.6				ug/L	157	Standard
Br	81	4.2	34.6				ug/L	3	Standard
P	31	151654.8	3.1				ug/L	91588	Standard
S	34	24370.5	6.2				ug/L	32556	Standard
Sr	88	701.7	24.0				ug/L	62	Standard
C	12	223.3	13.7				mg/L	133	Standard
N	14	1.7	173.2				mg/L	0	Standard
Hg	202	101.7	7.5				mg/L	7	Standard

QC Calculated Values

Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recovery
Li	7			
Be	9			
Al	27			
Sc	45			
Ti	47			
V	51			
Cr	52			
Cr	53			
Mn	55			
Co	59			
Ni	60			
Cu	65			
Zn	66			
Ge	72		100.651	
As	75			
Se	82			
Se-1	77			
Ga	71			
Rb	85			
Y	89			
Rh	103			

Sample ID: L1211041105

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[	Mo	98	
[	Ag	107	
[	Cd	111	
[	Cd	114	
>	In	115	100.307
[	Sn	118	
[	Sb	123	
[	Ba	135	
[	Ce	140	
>	Tb	159	
[	Ho	165	
[	Tl	203	
[	Tl	205	
[	Pb	206	
[	Pb	207	
[	Pb	208	
[	U	238	
>	Bi	209	98.876
[	Na	23	
[	Mg	24	
[	K	39	
[	Ca	43	
[	Fe	54	
[	Fe	57	
>	Sc-1	45	
[	Cl	35	
[	Kr	83	
[	Br	81	
[	P	31	
[	S	34	
[	Sr	88	
[	C	12	
[	N	14	
[	Hg	202	

QC Out of Limits

Measurement Type	Analyte	Mass	Out of Limits Message
Mn 55 Upper, S, EEE	Mn	55	
Ba 135 Upper, S, EEE	Ba	135	

Sample ID: L1211041105

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Method 6020 - Summary Report

Sample ID: L1211041106

Sample Date/Time: Sunday, November 18, 2012 09:53:26

Number of Replicates: 3

Autosampler Position: 313

Sample Description: 1

Method File: C:\NexIONData\Method\6020a.mth

Aliquot Volume (mL):

Diluted to Volume (mL):

User Name: JYH user

Cumulative Autodilution Factor: 1

Nexion-ICP 200.8\6020

Concentration Results

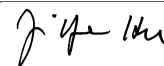
IS	Analyte	Mass	Intensity	RSD	Conc.	SD	RSD	Units	Blank Intens.	Mode
[	Li	7	34507.6	1.2	-13407.9006	802.589	6.0	ug/L	8369	Standard
	Be	9	28.3	20.4	0.0035	0.003	88.1	ug/L	18	Standard
	Al	27	5654374.7	4.6	43.6029	1.616	3.7	ug/L	215	Standard
[>	Sc	45	55949.8	3.2				ug/L	53004	Standard
[	Ti	47	1002.7	6.9	1.8594	0.123	6.6	ug/L	26	Standard
	V	51	14276.3	2.2	0.9172	0.019	2.1	ug/L	3223	Standard
	Cr	52	11192.8	0.7	0.0872	0.015	17.0	ug/L	10379	Standard
	Cr	53	560.0	5.4	0.2903	0.018	6.3	ug/L	192	Standard
	Mn	55	548777.1	4.3	31.0429	1.147	3.7	ug/L	1840	Standard
	Co	59	1487.4	4.2	0.0942	0.004	3.9	ug/L	115	Standard
	Ni	60	1794.4	5.1	0.5800	0.026	4.5	ug/L	75	Standard
	Cu	65	1054.4	2.0	0.3173	0.007	2.3	ug/L	155	Standard
	Zn	66	8512.7	3.4	5.9164	0.171	2.9	ug/L	237	Standard
[>	Ge	72	420345.3	0.9				ug/L	413856	Standard
	As	75	-57.2	13.6	0.1012	0.005	4.9	ug/L	-197	Standard
	Se	82	21.7	10.4	0.1704	0.017	9.8	ug/L	-5	Standard
[	Se-1	77	116.7	14.4	0.1926	0.176	91.2	ug/L	105	Standard
[>	Ga	71	393.3	12.1				mg/L	225	Standard
[	Rb	85	1755.1	3.6				ug/L	28	Standard
[	Y	89	310977.6	1.4				ug/L	322845	Standard
[>	Rh	103	121.7	20.7				ug/L	92	Standard
[	Mo	98	1462.4	4.6	0.3142	0.015	4.8	ug/L	18	Standard
	Ag	107	62.0	8.1	-0.0001	0.001	512.6	ug/L	63	Standard
	Cd	111	62.6	15.8	0.0069	0.003	39.6	mg/L	20	Standard
	Cd	114	170.4	3.1	0.0092	0.001	7.5	ug/L	56	Standard
[>	In	115	660838.3	1.0				ug/L	657102	Standard
	Sn	118	643.7	4.3	0.0149	0.002	16.6	ug/L	555	Standard
	Sb	123	88.1	10.4	0.0083	0.001	14.5	ug/L	62	Standard
[	Ba	135	51506.8	4.3	15.0243	0.587	3.9	ug/L	19	Standard
[	Ce	140	62517.9	4.1				ug/L	24	Standard
[>	Tb	159	942849.9	1.6				ug/L	910514	Standard
[	Ho	165	217.7	2.3				ug/L	7	Standard
	Tl	203	234.7	4.9	0.0143	0.001	4.4	ug/L	13	Standard
	Tl	205	7.0	24.7	0.0189	0.005	24.4	ug/L	1	Standard
	Pb	206	867.4	4.3	0.0499	0.004	7.3	ug/L	342	Standard
	Pb	207	712.0	2.4	0.0439	0.002	3.5	ug/L	284	Standard
	Pb	208	3336.8	1.6	0.0463	0.002	3.8	ug/L	1363	Standard
	U	238	1656.8	3.2	0.1603	0.007	4.1	ug/L	2	Standard
[>	Bi	209	480039.2	1.4				ug/L	470592	Standard

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Na	23	90.0	28.9	7.6677	2.024	26.4	mg/L	2	Standard
Mg	24	13710009.0	3.5	6.3741	0.273	4.3	mg/L	5586	Standard
K	39	73.3	3.9	0.9043	0.055	6.1	mg/L	5	Standard
Ca	43	291.7	4.9	9.5471	0.885	9.3	mg/L	45	Standard
Fe	54	553.4	6.3	0.0478	0.007	14.2	mg/L	350	Standard
Fe	57	236.7	5.3	0.2238	0.009	4.1	mg/L	102	Standard
Sc-1	45	55949.8	3.2				mg/L	53004	Standard
Cl	35	4.0	86.6				ug/L	2	Standard
Kr	83	139.6	8.8				ug/L	157	Standard
Br	81	6.7	78.1				ug/L	3	Standard
P	31	156562.6	2.7				ug/L	91588	Standard
S	34	26672.6	1.5				ug/L	32556	Standard
Sr	88	261.7	14.1				ug/L	62	Standard
C	12	161.7	22.4				mg/L	133	Standard
N	14	0.0					mg/L	0	Standard
Hg	202	11.7	24.7				mg/L	7	Standard

QC Calculated Values

Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recovery
Li	7			
Be	9			
Al	27			
Sc	45			
Ti	47			
V	51			
Cr	52			
Cr	53			
Mn	55			
Co	59			
Ni	60			
Cu	65			
Zn	66			
Ge	72		101.568	
As	75			
Se	82			
Se-1	77			
Ga	71			
Rb	85			
Y	89			
Rh	103			

Sample ID: L1211041106

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[	Mo	98	
[	Ag	107	
[	Cd	111	
[	Cd	114	
>	In	115	100.569
[	Sn	118	
[	Sb	123	
[	Ba	135	
[	Ce	140	
>	Tb	159	
[	Ho	165	
[	Tl	203	
[	Tl	205	
[	Pb	206	
[	Pb	207	
[	Pb	208	
[	U	238	
>	Bi	209	102.008
[	Na	23	
[	Mg	24	
[	K	39	
[	Ca	43	
[	Fe	54	
[	Fe	57	
>	Sc-1	45	
[	Cl	35	
[	Kr	83	
[	Br	81	
[	P	31	
[	S	34	
[	Sr	88	
[	C	12	
[	N	14	
[	Hg	202	

QC Out of Limits

Measurement Type	Analyte	Mass	Out of Limits Message

Sample ID: L1211041106

Report Date/Time: Sunday, November 18, 2012 09:55:59

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Method 6020 - Summary Report

Sample ID: L1211041107

Sample Date/Time: Sunday, November 18, 2012 09:57:17

Number of Replicates: 3

Autosampler Position: 314

Sample Description: 1

Method File: C:\NexIONData\Method\6020a.mth

Aliquot Volume (mL):

Diluted to Volume (mL):

User Name: JYH user

Cumulative Autodilution Factor: 1

Nexion-ICP 200.8\6020

Concentration Results

IS	Analyte	Mass	Intensity	RSD	Conc.	SD	RSD	Units	Blank Intens.	Mode
[	Li	7	21022.9	3.0	-5919.8305	250.120	4.2	ug/L	8369	Standard
	Be	9	145.0	28.2	0.0545	0.020	36.0	ug/L	18	Standard
	Al	27	4995612.0	3.3	37.0592	0.399	1.1	ug/L	215	Standard
[>	Sc	45	58169.9	4.3				ug/L	53004	Standard
[	Ti	47	20301.6	4.5	38.0572	1.796	4.7	ug/L	26	Standard
	V	51	43949.8	3.0	3.3104	0.136	4.1	ug/L	3223	Standard
	Cr	52	31314.7	2.3	1.8365	0.092	5.0	ug/L	10379	Standard
	Cr	53	3482.9	6.6	2.3306	0.140	6.0	ug/L	192	Standard
	Mn	55	17983579.6	4.2	1000.2365	25.323	2.5	ug/L	1840	Standard
	Co	59	37874.0	3.2	2.7253	0.087	3.2	ug/L	115	Standard
	Ni	60	8181.2	3.2	2.7178	0.098	3.6	ug/L	75	Standard
	Cu	65	18202.9	2.2	6.2877	0.087	1.4	ug/L	155	Standard
	Zn	66	67805.5	2.9	47.5762	1.036	2.2	ug/L	237	Standard
[>	Ge	72	428663.5	2.2				ug/L	413856	Standard
	As	75	415.3	4.8	0.4164	0.018	4.4	ug/L	-197	Standard
	Se	82	119.9	2.8	0.8985	0.033	3.7	ug/L	-5	Standard
[	Se-1	77	197.7	7.5	0.9661	0.139	14.4	ug/L	105	Standard
[>	Ga	71	4845.8	1.6				mg/L	225	Standard
	Rb	85	13566.1	2.4				ug/L	28	Standard
[	Y	89	365627.6	1.0				ug/L	322845	Standard
[>	Rh	103	163.3	17.7				ug/L	92	Standard
[	Mo	98	1472.4	4.9	0.3126	0.014	4.5	ug/L	18	Standard
	Ag	107	272.0	6.3	0.0259	0.002	7.0	ug/L	63	Standard
	Cd	111	142.6	5.4	0.0297	0.002	6.0	mg/L	20	Standard
	Cd	114	370.3	5.8	0.0308	0.003	8.7	ug/L	56	Standard
[>	In	115	668598.9	1.7				ug/L	657102	Standard
	Sn	118	3258.0	4.8	0.2725	0.018	6.5	ug/L	555	Standard
	Sb	123	695.8	3.8	0.0844	0.003	3.1	ug/L	62	Standard
[	Ba	135	160745.5	4.2	46.3990	2.110	4.5	ug/L	19	Standard
[	Ce	140	2399606.3	5.5				ug/L	24	Standard
[>	Tb	159	957412.8	0.9				ug/L	910514	Standard
[	Ho	165	4819.4	5.8				ug/L	7	Standard
	Tl	203	469.3	3.9	0.0324	0.002	5.1	ug/L	13	Standard
	Tl	205	16.0	39.0	0.0417	0.016	39.3	ug/L	1	Standard
	Pb	206	5701.4	4.1	0.5132	0.022	4.3	ug/L	342	Standard
	Pb	207	4513.0	4.9	0.4724	0.025	5.3	ug/L	284	Standard
	Pb	208	21991.0	3.4	0.4992	0.020	4.0	ug/L	1363	Standard
	U	238	3379.7	8.1	0.3297	0.027	8.2	ug/L	2	Standard
[>	Bi	209	478497.5	1.4				ug/L	470592	Standard

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Na	23	101.7	31.2	8.3772	2.617	31.2	mg/L	2	Standard
Mg	24	34494734.9	2.5	15.4287	0.278	1.8	mg/L	5586	Standard
K	39	158.3	10.2	1.9214	0.195	10.2	mg/L	5	Standard
Ca	43	223.3	7.2	6.4587	0.974	15.1	mg/L	45	Standard
Fe	54	11755.5	6.0	3.9639	0.240	6.1	mg/L	350	Standard
Fe	57	2885.3	2.6	4.0064	0.227	5.7	mg/L	102	Standard
Sc-1	45	58169.9	4.3				mg/L	53004	Standard
Cl	35	3.0	88.2				ug/L	2	Standard
Kr	83	151.9	4.1				ug/L	157	Standard
Br	81	10.8	13.3				ug/L	3	Standard
P	31	146752.4	1.6				ug/L	91588	Standard
S	34	26027.4	3.5				ug/L	32556	Standard
Sr	88	401.7	7.1				ug/L	62	Standard
C	12	303.3	19.8				mg/L	133	Standard
N	14	1.7	173.2				mg/L	0	Standard
Hg	202	20.0	50.0				mg/L	7	Standard

QC Calculated Values

Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recovery
Li	7			
Be	9			
Al	27			
Sc	45			
Ti	47			
V	51			
Cr	52			
Cr	53			
Mn	55			
Co	59			
Ni	60			
Cu	65			
Zn	66			
Ge	72		103.578	
As	75			
Se	82			
Se-1	77			
Ga	71			
Rb	85			
Y	89			
Rh	103			

Sample ID: L1211041107

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[	Mo	98	
[	Ag	107	
[	Cd	111	
[	Cd	114	
>	In	115	101.750
[	Sn	118	
[	Sb	123	
[	Ba	135	
[	Ce	140	
>	Tb	159	
[	Ho	165	
[	Tl	203	
[	Tl	205	
[	Pb	206	
[	Pb	207	
[	Pb	208	
[	U	238	
>	Bi	209	101.680
[	Na	23	
[	Mg	24	
[	K	39	
[	Ca	43	
[	Fe	54	
[	Fe	57	
>	Sc-1	45	
[	Cl	35	
[	Kr	83	
[	Br	81	
[	P	31	
[	S	34	
[	Sr	88	
[	C	12	
[	N	14	
[	Hg	202	

QC Out of Limits

Measurement Type	Analyte	Mass	Out of Limits Message
Mn 55 Upper, S, EEE	Mn	55	

Sample ID: L1211041107

Report Date/Time: Sunday, November 18, 2012 09:59:49

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Method 6020 - Summary Report

Sample ID: L1211041109

Sample Date/Time: Sunday, November 18, 2012 10:00:29

Number of Replicates: 3

Autosampler Position: 315

Sample Description: 1

Method File: C:\NexIONData\Method\6020a.mth

Aliquot Volume (mL):

Diluted to Volume (mL):

User Name: JYH user

Cumulative Autodilution Factor: 1

Nexion-ICP 200.8\6020

Concentration Results

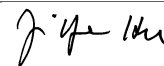
IS	Analyte	Mass	Intensity	RSD	Conc.	SD	RSD	Units	Blank Intens.	Mode
[	Li	7	16932.8	6.6	-4486.9222	506.151	11.3	ug/L	8369	Standard
	Be	9	86.7	8.8	0.0313	0.003	8.7	ug/L	18	Standard
	Al	27	4465771.5	7.9	35.5689	2.456	6.9	ug/L	215	Standard
[>	Sc	45	54146.6	2.1				ug/L	53004	Standard
[	Ti	47	35135.5	7.5	69.5497	3.025	4.3	ug/L	26	Standard
	V	51	51774.2	7.4	4.1793	0.174	4.2	ug/L	3223	Standard
	Cr	52	28095.1	5.2	1.6911	0.069	4.1	ug/L	10379	Standard
	Cr	53	4495.7	4.3	3.2179	0.047	1.5	ug/L	192	Standard
	Mn	55	7041909.3	6.9	413.4402	13.987	3.4	ug/L	1840	Standard
	Co	59	31799.1	7.9	2.4132	0.131	5.4	ug/L	115	Standard
	Ni	60	4908.1	8.4	1.7072	0.096	5.6	ug/L	75	Standard
	Cu	65	5385.0	8.5	1.9229	0.096	5.0	ug/L	155	Standard
	Zn	66	8171.9	8.3	5.8768	0.327	5.6	ug/L	237	Standard
[>	Ge	72	405825.6	3.8				ug/L	413856	Standard
	As	75	675.3	15.1	0.6132	0.055	9.0	ug/L	-197	Standard
	Se	82	294.3	10.4	2.3174	0.160	6.9	ug/L	-5	Standard
[	Se-1	77	194.0	3.6	1.0398	0.117	11.3	ug/L	105	Standard
[>	Ga	71	3247.0	11.0				mg/L	225	Standard
[	Rb	85	14742.2	6.5				ug/L	28	Standard
[	Y	89	321509.5	3.4				ug/L	322845	Standard
[>	Rh	103	170.0	29.0				ug/L	92	Standard
[	Mo	98	187.2	6.4	0.0334	0.002	7.1	ug/L	18	Standard
	Ag	107	106.7	7.6	0.0057	0.001	12.5	ug/L	63	Standard
	Cd	111	60.8	12.9	0.0068	0.002	33.4	mg/L	20	Standard
	Cd	114	156.9	3.0	0.0080	0.000	3.0	ug/L	56	Standard
[>	In	115	648756.0	2.3				ug/L	657102	Standard
	Sn	118	1459.1	6.3	0.0990	0.007	6.6	ug/L	555	Standard
	Sb	123	165.8	5.1	0.0185	0.001	7.6	ug/L	62	Standard
[	Ba	135	117979.3	5.1	35.0793	1.450	4.1	ug/L	19	Standard
[	Ce	140	149020.5	6.8				ug/L	24	Standard
[>	Tb	159	929369.9	2.3				ug/L	910514	Standard
[	Ho	165	1443.1	6.1				ug/L	7	Standard
	Tl	203	637.3	3.0	0.0466	0.001	2.4	ug/L	13	Standard
	Tl	205	20.3	17.3	0.0538	0.009	16.7	ug/L	1	Standard
	Pb	206	4259.9	6.8	0.3859	0.027	7.0	ug/L	342	Standard
	Pb	207	3504.4	2.9	0.3692	0.013	3.4	ug/L	284	Standard
	Pb	208	16473.5	5.1	0.3759	0.020	5.2	ug/L	1363	Standard
	U	238	439.3	9.8	0.0427	0.004	9.2	ug/L	2	Standard
[>	Bi	209	466093.6	1.1				ug/L	470592	Standard

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Na	23	171.7	36.9	15.1154	5.259	34.8	mg/L	2	Standard
Mg	24	23433366.5	5.4	11.2527	0.532	4.7	mg/L	5586	Standard
K	39	30.0	33.3	0.3572	0.131	36.6	mg/L	5	Standard
Ca	43	328.3	11.0	11.4728	1.784	15.5	mg/L	45	Standard
Fe	54	4505.0	10.7	1.5405	0.173	11.2	mg/L	350	Standard
Fe	57	1220.0	12.3	1.7462	0.211	12.1	mg/L	102	Standard
Sc-1	45	54146.6	2.1				mg/L	53004	Standard
Cl	35	3.7	31.5				ug/L	2	Standard
Kr	83	145.1	1.1				ug/L	157	Standard
Br	81	10.8	74.2				ug/L	3	Standard
P	31	171993.9	5.0				ug/L	91588	Standard
S	34	24155.1	2.5				ug/L	32556	Standard
Sr	88	776.7	8.1				ug/L	62	Standard
C	12	180.0	28.2				mg/L	133	Standard
N	14	0.0					mg/L	0	Standard
Hg	202	160.0	20.5				mg/L	7	Standard

QC Calculated Values

Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recovery
Li	7			
Be	9			
Al	27			
Sc	45			
Ti	47			
V	51			
Cr	52			
Cr	53			
Mn	55			
Co	59			
Ni	60			
Cu	65			
Zn	66			
Ge	72		98.060	
As	75			
Se	82			
Se-1	77			
Ga	71			
Rb	85			
Y	89			
Rh	103			

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[	Mo	98	
[	Ag	107	
[	Cd	111	
[	Cd	114	
>	In	115	98.730
[	Sn	118	
[	Sb	123	
[	Ba	135	
[	Ce	140	
>	Tb	159	
[	Ho	165	
[	Tl	203	
[	Tl	205	
[	Pb	206	
[	Pb	207	
[	Pb	208	
[	U	238	
>	Bi	209	99.044
[	Na	23	
[	Mg	24	
[	K	39	
[	Ca	43	
[	Fe	54	
[	Fe	57	
>	Sc-1	45	
[	Cl	35	
[	Kr	83	
[	Br	81	
[	P	31	
[	S	34	
[	Sr	88	
[	C	12	
[	N	14	
[	Hg	202	

QC Out of Limits

Measurement Type	Analyte	Mass	Out of Limits Message
Mn 55 Upper, S, EEE	Mn	55	

Sample ID: L1211041109

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Method 6020 - Summary Report

Sample ID: L1211041110

Sample Date/Time: Sunday, November 18, 2012 10:03:41

Number of Replicates: 3

Autosampler Position: 316

Sample Description: 1

Method File: C:\NexIONData\Method\6020a.mth

Aliquot Volume (mL):

Diluted to Volume (mL):

User Name: JYH user

Cumulative Autodilution Factor: 1

Nexion-ICP 200.8\6020

Concentration Results

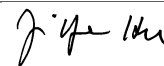
IS	Analyte	Mass	Intensity	RSD	Conc.	SD	RSD	Units	Blank Intens.	Mode
[	Li	7	34611.2	2.3	-12590.9234	93.115	0.7	ug/L	8369	Standard
	Be	9	60.0	22.0	0.0165	0.006	33.7	ug/L	18	Standard
	Al	27	3061201.8	3.9	22.4858	0.523	2.3	ug/L	215	Standard
[>	Sc	45	58715.2	1.8				ug/L	53004	Standard
[	Ti	47	6505.7	3.4	11.8224	0.673	5.7	ug/L	26	Standard
	V	51	42352.5	2.6	3.0856	0.160	5.2	ug/L	3223	Standard
	Cr	52	15842.3	2.0	0.4374	0.004	0.9	ug/L	10379	Standard
	Cr	53	1161.7	11.0	0.6831	0.102	14.9	ug/L	192	Standard
	Mn	55	1050601.3	1.7	56.7692	2.279	4.0	ug/L	1840	Standard
	Co	59	10077.7	2.2	0.6938	0.031	4.5	ug/L	115	Standard
	Ni	60	2674.2	4.7	0.8401	0.060	7.1	ug/L	75	Standard
	Cu	65	2072.5	2.8	0.6452	0.035	5.4	ug/L	155	Standard
	Zn	66	65885.0	2.3	44.9565	1.959	4.4	ug/L	237	Standard
[>	Ge	72	440946.8	2.3				ug/L	413856	Standard
	As	75	23.6	120.4	0.1550	0.018	11.6	ug/L	-197	Standard
	Se	82	44.7	13.0	0.3289	0.038	11.4	ug/L	-5	Standard
[	Se-1	77	136.7	7.0	0.3276	0.062	19.1	ug/L	105	Standard
[>	Ga	71	2076.8	5.3				mg/L	225	Standard
[	Rb	85	9097.7	2.7				ug/L	28	Standard
[	Y	89	338392.0	3.6				ug/L	322845	Standard
[>	Rh	103	156.7	19.5				ug/L	92	Standard
[	Mo	98	170.5	4.0	0.0271	0.002	8.0	ug/L	18	Standard
	Ag	107	179.7	4.5	0.0135	0.000	2.7	ug/L	63	Standard
	Cd	111	44.5	21.8	0.0010	0.002	231.4	mg/L	20	Standard
	Cd	114	114.4	20.5	0.0024	0.002	99.3	ug/L	56	Standard
[>	In	115	695061.2	2.8				ug/L	657102	Standard
	Sn	118	2073.5	2.3	0.1477	0.008	5.2	ug/L	555	Standard
	Sb	123	112.7	11.8	0.0107	0.002	17.3	ug/L	62	Standard
[	Ba	135	141875.9	3.1	39.4253	2.308	5.9	ug/L	19	Standard
[	Ce	140	431805.2	4.2				ug/L	24	Standard
[>	Tb	159	988192.3	2.1				ug/L	910514	Standard
[	Ho	165	1456.4	5.7				ug/L	7	Standard
	Tl	203	301.3	7.5	0.0185	0.002	11.3	ug/L	13	Standard
	Tl	205	14.0	7.1	0.0349	0.002	4.9	ug/L	1	Standard
	Pb	206	2872.3	3.0	0.2301	0.016	6.8	ug/L	342	Standard
	Pb	207	2351.5	1.0	0.2171	0.008	3.7	ug/L	284	Standard
	Pb	208	11066.9	1.5	0.2223	0.012	5.4	ug/L	1363	Standard
	U	238	1487.4	0.7	0.1378	0.005	3.6	ug/L	2	Standard
[>	Bi	209	501045.0	3.3				ug/L	470592	Standard

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Na	23	96.7	21.5	7.8907	1.707	21.6	mg/L	2	Standard
Mg	24	13228056.0	5.5	5.8548	0.242	4.1	mg/L	5586	Standard
K	39	58.3	35.7	0.6722	0.245	36.5	mg/L	5	Standard
Ca	43	161.7	13.9	3.9723	0.756	19.0	mg/L	45	Standard
Fe	54	3028.4	7.5	0.8969	0.078	8.7	mg/L	350	Standard
Fe	57	763.4	5.9	0.9535	0.045	4.7	mg/L	102	Standard
Sc-1	45	58715.2	1.8				mg/L	53004	Standard
Cl	35	3.3	17.3				ug/L	2	Standard
Kr	83	141.2	2.6				ug/L	157	Standard
Br	81	1.7	86.6				ug/L	3	Standard
P	31	172833.5	0.7				ug/L	91588	Standard
S	34	21003.7	3.0				ug/L	32556	Standard
Sr	88	395.0	27.8				ug/L	62	Standard
C	12	310.0	7.4				mg/L	133	Standard
N	14	0.0					mg/L	0	Standard
Hg	202	91.7	17.5				mg/L	7	Standard

QC Calculated Values

Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recovery
Li	7			
Be	9			
Al	27			
Sc	45			
Ti	47			
V	51			
Cr	52			
Cr	53			
Mn	55			
Co	59			
Ni	60			
Cu	65			
Zn	66			
Ge	72		106.546	
As	75			
Se	82			
Se-1	77			
Ga	71			
Rb	85			
Y	89			
Rh	103			

Sample ID: L1211041110

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[	Mo	98	
[	Ag	107	
[	Cd	111	
[	Cd	114	
>	In	115	105.777
[	Sn	118	
[	Sb	123	
[	Ba	135	
[	Ce	140	
>	Tb	159	
[	Ho	165	
[	Tl	203	
[	Tl	205	
[	Pb	206	
[	Pb	207	
[	Pb	208	
[	U	238	
>	Bi	209	106.471
[	Na	23	
[	Mg	24	
[	K	39	
[	Ca	43	
[	Fe	54	
[	Fe	57	
>	Sc-1	45	
[	Cl	35	
[	Kr	83	
[	Br	81	
[	P	31	
[	S	34	
[	Sr	88	
[	C	12	
[	N	14	
[	Hg	202	

QC Out of Limits

Measurement Type	Analyte	Mass	Out of Limits Message

Sample ID: L1211041110

Report Date/Time: Sunday, November 18, 2012 10:06:13

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Method 6020 - Summary Report

Sample ID: L1211041111

Sample Date/Time: Sunday, November 18, 2012 10:06:54

Number of Replicates: 3

Autosampler Position: 317

Sample Description: 1

Method File: C:\NexIONData\Method\6020a.mth

Aliquot Volume (mL):

Diluted to Volume (mL):

User Name: JYH user

Cumulative Autodilution Factor: 1

Nexion-ICP 200.8\6020

Concentration Results

IS	Analyte	Mass	Intensity	RSD	Conc.	SD	RSD	Units	Blank Intens.	Mode
[	Li	7	26545.0	6.4	-8552.3271	875.847	10.2	ug/L	8369	Standard
	Be	9	60.0	22.0	0.0164	0.005	30.2	ug/L	18	Standard
	Al	27	2389487.6	3.3	17.5355	0.777	4.4	ug/L	215	Standard
[>	Sc	45	58822.4	3.5				ug/L	53004	Standard
	Ti	47	44116.8	2.5	82.0198	1.395	1.7	ug/L	26	Standard
	V	51	62270.1	2.0	4.7554	0.047	1.0	ug/L	3223	Standard
	Cr	52	14542.7	4.3	0.3503	0.034	9.8	ug/L	10379	Standard
	Cr	53	980.9	13.6	0.5706	0.080	14.1	ug/L	192	Standard
	Mn	55	1263745.2	4.4	69.5784	1.851	2.7	ug/L	1840	Standard
	Co	59	19555.6	4.0	1.3866	0.032	2.3	ug/L	115	Standard
	Ni	60	6829.5	1.9	2.2421	0.023	1.0	ug/L	75	Standard
	Cu	65	2791.3	5.4	0.9065	0.041	4.5	ug/L	155	Standard
	Zn	66	10395.6	1.7	7.0606	0.082	1.2	ug/L	237	Standard
[>	Ge	72	432483.8	1.8				ug/L	413856	Standard
	As	75	-111.1	20.3	0.0666	0.016	23.6	ug/L	-197	Standard
	Se	82	14.6	36.1	0.1127	0.037	32.8	ug/L	-5	Standard
[	Se-1	77	111.0	7.0	0.1041	0.079	76.2	ug/L	105	Standard
[>	Ga	71	3238.7	1.7				mg/L	225	Standard
	Rb	85	19195.5	4.7				ug/L	28	Standard
	Y	89	329925.9	1.9				ug/L	322845	Standard
[>	Rh	103	138.3	7.5				ug/L	92	Standard
	Mo	98	208.8	4.4	0.0362	0.002	4.5	ug/L	18	Standard
	Ag	107	116.0	5.7	0.0063	0.001	15.5	ug/L	63	Standard
	Cd	111	76.4	7.9	0.0104	0.002	17.7	mg/L	20	Standard
	Cd	114	196.3	4.8	0.0115	0.001	6.2	ug/L	56	Standard
[>	In	115	678462.1	1.6				ug/L	657102	Standard
	Sn	118	770.4	0.9	0.0256	0.001	2.8	ug/L	555	Standard
	Sb	123	107.8	12.3	0.0104	0.001	13.7	ug/L	62	Standard
[	Ba	135	120535.3	3.5	34.2703	0.863	2.5	ug/L	19	Standard
	Ce	140	77650.6	2.8				ug/L	24	Standard
[>	Tb	159	969690.3	2.1				ug/L	910514	Standard
	Ho	165	771.0	4.1				ug/L	7	Standard
	Tl	203	338.0	2.6	0.0215	0.001	4.6	ug/L	13	Standard
	Tl	205	9.3	22.3	0.0241	0.005	21.7	ug/L	1	Standard
	Pb	206	1111.0	5.5	0.0702	0.005	6.8	ug/L	342	Standard
	Pb	207	856.0	3.8	0.0574	0.002	4.2	ug/L	284	Standard
	Pb	208	4097.9	3.6	0.0620	0.003	4.3	ug/L	1363	Standard
	U	238	206.7	5.6	0.0181	0.001	4.7	ug/L	2	Standard
[>	Bi	209	493398.1	1.3				ug/L	470592	Standard

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Na	23	56.7	22.2	4.6322	1.083	23.4	mg/L	2	Standard
Mg	24	17293008.2	1.6	7.6490	0.261	3.4	mg/L	5586	Standard
K	39	56.7	28.4	0.6493	0.172	26.4	mg/L	5	Standard
Ca	43	165.0	16.0	4.0804	0.794	19.5	mg/L	45	Standard
Fe	54	4171.8	5.2	1.2908	0.056	4.3	mg/L	350	Standard
Fe	57	1060.0	10.8	1.3724	0.161	11.8	mg/L	102	Standard
Sc-1	45	58822.4	3.5				mg/L	53004	Standard
Cl	35	1.3	86.6				ug/L	2	Standard
Kr	83	144.0	3.5				ug/L	157	Standard
Br	81	11.7	49.5				ug/L	3	Standard
P	31	189580.5	3.6				ug/L	91588	Standard
S	34	18848.4	4.7				ug/L	32556	Standard
Sr	88	268.3	6.5				ug/L	62	Standard
C	12	180.0	14.7				mg/L	133	Standard
N	14	0.0					mg/L	0	Standard
Hg	202	31.7	18.2				mg/L	7	Standard

QC Calculated Values

Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recovery
Li	7			
Be	9			
Al	27			
Sc	45			
Ti	47			
V	51			
Cr	52			
Cr	53			
Mn	55			
Co	59			
Ni	60			
Cu	65			
Zn	66			
Ge	72		104.501	
As	75			
Se	82			
Se-1	77			
Ga	71			
Rb	85			
Y	89			
Rh	103			

Sample ID: L1211041111

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[	Mo	98	
[	Ag	107	
[	Cd	111	
[	Cd	114	
>	In	115	103.251
[	Sn	118	
[	Sb	123	
[	Ba	135	
[	Ce	140	
>	Tb	159	
[	Ho	165	
[	Tl	203	
[	Tl	205	
[	Pb	206	
[	Pb	207	
[	Pb	208	
[	U	238	
>	Bi	209	104.846
[	Na	23	
[	Mg	24	
[	K	39	
[	Ca	43	
[	Fe	54	
[	Fe	57	
>	Sc-1	45	
[	Cl	35	
[	Kr	83	
[	Br	81	
[	P	31	
[	S	34	
[	Sr	88	
[	C	12	
[	N	14	
[	Hg	202	

QC Out of Limits

Measurement Type	Analyte	Mass	Out of Limits Message

Sample ID: L1211041111

Report Date/Time: Sunday, November 18, 2012 10:09:25

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Method 6020 - Summary Report

Sample ID: L1211041112

Sample Date/Time: Sunday, November 18, 2012 10:10:06

Number of Replicates: 3

Autosampler Position: 318

Sample Description: 1

Method File: C:\NexIONData\Method\6020a.mth

Aliquot Volume (mL):

Diluted to Volume (mL):

User Name: JYH user

Cumulative Autodilution Factor: 1

Nexion-ICP 200.8\6020

Concentration Results

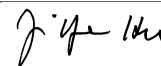
IS	Analyte	Mass	Intensity	RSD	Conc.	SD	RSD	Units	Blank Intens.	Mode
[	Li	7	29426.9	3.4	-10490.4783	503.665	4.8	ug/L	8369	Standard
	Be	9	95.0	13.9	0.0331	0.006	17.0	ug/L	18	Standard
	Al	27	1596297.0	5.4	12.1129	0.628	5.2	ug/L	215	Standard
[>	Sc	45	56843.1	1.1				ug/L	53004	Standard
[	Ti	47	33086.2	6.2	62.7252	4.025	6.4	ug/L	26	Standard
	V	51	33311.2	4.6	2.4727	0.124	5.0	ug/L	3223	Standard
	Cr	52	13226.8	2.5	0.2590	0.030	11.8	ug/L	10379	Standard
	Cr	53	745.9	9.6	0.4186	0.050	12.0	ug/L	192	Standard
	Mn	55	855446.3	2.8	48.0202	1.309	2.7	ug/L	1840	Standard
	Co	59	9087.4	6.6	0.6492	0.045	6.9	ug/L	115	Standard
	Ni	60	3187.7	4.5	1.0487	0.052	4.9	ug/L	75	Standard
	Cu	65	2395.2	4.2	0.7864	0.036	4.5	ug/L	155	Standard
	Zn	66	12812.8	5.0	8.9266	0.474	5.3	ug/L	237	Standard
[>	Ge	72	424075.0	0.7				ug/L	413856	Standard
	As	75	70.1	74.6	0.1870	0.035	18.7	ug/L	-197	Standard
	Se	82	10.1	105.6	0.0814	0.080	98.4	ug/L	-5	Standard
[	Se-1	77	105.3	11.3	0.0683	0.112	163.2	ug/L	105	Standard
[>	Ga	71	2898.6	6.0				mg/L	225	Standard
[	Rb	85	16709.2	1.8				ug/L	28	Standard
[	Y	89	332230.2	1.6				ug/L	322845	Standard
[>	Rh	103	126.7	14.9				ug/L	92	Standard
[	Mo	98	259.9	5.3	0.0473	0.003	7.0	ug/L	18	Standard
	Ag	107	102.7	16.1	0.0047	0.002	43.4	ug/L	63	Standard
	Cd	111	71.0	6.6	0.0089	0.001	16.3	mg/L	20	Standard
	Cd	114	200.0	8.2	0.0119	0.002	14.4	ug/L	56	Standard
[>	In	115	677047.9	0.6				ug/L	657102	Standard
	Sn	118	1378.7	4.7	0.0851	0.007	8.4	ug/L	555	Standard
	Sb	123	183.5	16.3	0.0198	0.004	19.0	ug/L	62	Standard
[	Ba	135	107669.5	5.1	30.6851	1.741	5.7	ug/L	19	Standard
[	Ce	140	177822.4	5.8				ug/L	24	Standard
[>	Tb	159	966337.1	1.1				ug/L	910514	Standard
[	Ho	165	1179.4	6.6				ug/L	7	Standard
	Tl	203	255.7	1.0	0.0153	0.000	2.2	ug/L	13	Standard
	Tl	205	7.3	34.3	0.0191	0.006	32.8	ug/L	1	Standard
	Pb	206	5426.3	2.2	0.4691	0.009	2.0	ug/L	342	Standard
	Pb	207	4281.6	5.7	0.4299	0.026	6.0	ug/L	284	Standard
	Pb	208	20649.2	4.0	0.4496	0.019	4.3	ug/L	1363	Standard
	U	238	1363.7	7.8	0.1276	0.010	7.7	ug/L	2	Standard
[>	Bi	209	495325.5	1.1				ug/L	470592	Standard

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Na	23	18.3	41.7	1.5542	0.656	42.2	mg/L	2	Standard
Mg	24	12465746.5	5.7	5.7010	0.321	5.6	mg/L	5586	Standard
K	39	80.0	33.1	0.9745	0.342	35.1	mg/L	5	Standard
Ca	43	93.3	12.4	1.4724	0.444	30.2	mg/L	45	Standard
Fe	54	3510.1	9.0	1.1035	0.105	9.5	mg/L	350	Standard
Fe	57	876.7	3.9	1.1559	0.059	5.1	mg/L	102	Standard
Sc-1	45	56843.1	1.1				mg/L	53004	Standard
Cl	35	1.0	173.2				ug/L	2	Standard
Kr	83	145.0	7.8				ug/L	157	Standard
Br	81	6.7	86.6				ug/L	3	Standard
P	31	185347.1	2.2				ug/L	91588	Standard
S	34	18059.9	1.7				ug/L	32556	Standard
Sr	88	216.7	16.2				ug/L	62	Standard
C	12	196.7	1.5				mg/L	133	Standard
N	14	0.0					mg/L	0	Standard
Hg	202	213.3	7.2				mg/L	7	Standard

QC Calculated Values

Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recovery
Li	7			
Be	9			
Al	27			
Sc	45			
Ti	47			
V	51			
Cr	52			
Cr	53			
Mn	55			
Co	59			
Ni	60			
Cu	65			
Zn	66			
Ge	72		102.469	
As	75			
Se	82			
Se-1	77			
Ga	71			
Rb	85			
Y	89			
Rh	103			

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[	Mo	98	
[	Ag	107	
[	Cd	111	
[	Cd	114	
>	In	115	103.036
[	Sn	118	
[	Sb	123	
[	Ba	135	
[	Ce	140	
>	Tb	159	
[	Ho	165	
[	Tl	203	
[	Tl	205	
[	Pb	206	
[	Pb	207	
[	Pb	208	
[	U	238	
>	Bi	209	105.256
[	Na	23	
[	Mg	24	
[	K	39	
[	Ca	43	
[	Fe	54	
[	Fe	57	
>	Sc-1	45	
[	Cl	35	
[	Kr	83	
[	Br	81	
[	P	31	
[	S	34	
[	Sr	88	
[	C	12	
[	N	14	
[	Hg	202	

QC Out of Limits

Measurement Type	Analyte	Mass	Out of Limits Message

Sample ID: L1211041112

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Method 6020 - Summary Report

Sample ID: L1211041113

Sample Date/Time: Sunday, November 18, 2012 10:13:18

Number of Replicates: 3

Autosampler Position: 319

Sample Description: 1

Method File: C:\NexIONData\Method\6020a.mth

Aliquot Volume (mL):

Diluted to Volume (mL):

User Name: JYH user

Cumulative Autodilution Factor: 1

Nexion-ICP 200.8\6020

Concentration Results

IS	Analyte	Mass	Intensity	RSD	Conc.	SD	RSD	Units	Blank Intens.	Mode
[	Li	7	22531.8	3.9	-7270.5516	314.521	4.3	ug/L	8369	Standard
	Be	9	15.0	0.0	-0.0025	0.000	3.6	ug/L	18	Standard
	Al	27	5528382.5	5.4	43.1581	1.985	4.6	ug/L	215	Standard
[>	Sc	45	55250.6	1.3				ug/L	53004	Standard
[	Ti	47	6362.3	8.3	11.8950	0.921	7.7	ug/L	26	Standard
	V	51	23879.2	6.5	1.6776	0.109	6.5	ug/L	3223	Standard
	Cr	52	15400.8	4.7	0.4388	0.053	12.1	ug/L	10379	Standard
	Cr	53	1127.5	8.2	0.6812	0.061	9.0	ug/L	192	Standard
	Mn	55	317975.3	6.0	17.6208	0.959	5.4	ug/L	1840	Standard
	Co	59	4658.1	5.0	0.3219	0.015	4.6	ug/L	115	Standard
	Ni	60	10890.6	6.1	3.6330	0.212	5.8	ug/L	75	Standard
	Cu	65	1493.1	8.6	0.4632	0.039	8.3	ug/L	155	Standard
	Zn	66	5833.8	6.1	3.9150	0.222	5.7	ug/L	237	Standard
[>	Ge	72	428165.8	1.9				ug/L	413856	Standard
	As	75	-84.8	52.4	0.0834	0.030	36.0	ug/L	-197	Standard
	Se	82	23.2	40.0	0.1777	0.068	38.5	ug/L	-5	Standard
[	Se-1	77	112.7	6.9	0.1316	0.084	63.8	ug/L	105	Standard
[>	Ga	71	698.3	7.3				mg/L	225	Standard
[	Rb	85	6839.9	3.5				ug/L	28	Standard
[	Y	89	314889.3	2.0				ug/L	322845	Standard
[>	Rh	103	105.0	28.6				ug/L	92	Standard
[	Mo	98	657.8	5.9	0.1344	0.004	3.2	ug/L	18	Standard
	Ag	107	124.0	62.3	0.0073	0.009	123.6	ug/L	63	Standard
	Cd	111	39.9	24.6	0.0002	0.002	1487.3	mg/L	20	Standard
	Cd	114	107.0	49.8	0.0019	0.005	276.6	ug/L	56	Standard
[>	In	115	670551.3	2.9				ug/L	657102	Standard
	Sn	118	1029.7	2.5	0.0520	0.002	3.5	ug/L	555	Standard
	Sb	123	79.5	51.6	0.0069	0.005	69.1	ug/L	62	Standard
[	Ba	135	188841.0	5.2	54.3297	1.913	3.5	ug/L	19	Standard
[	Ce	140	22112.5	7.8				ug/L	24	Standard
[>	Tb	159	953975.3	1.9				ug/L	910514	Standard
[	Ho	165	99.7	12.0				ug/L	7	Standard
	Tl	203	329.0	12.2	0.0210	0.003	14.5	ug/L	13	Standard
	Tl	205	10.0	43.6	0.0258	0.011	41.1	ug/L	1	Standard
	Pb	206	882.7	6.5	0.0497	0.005	9.8	ug/L	342	Standard
	Pb	207	735.4	4.7	0.0448	0.003	7.2	ug/L	284	Standard
	Pb	208	3441.2	5.5	0.0471	0.004	8.0	ug/L	1363	Standard
	U	238	176.7	16.6	0.0154	0.003	18.4	ug/L	2	Standard
[>	Bi	209	489695.9	1.1				ug/L	470592	Standard

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Na	23	40.0	37.5	3.4636	1.258	36.3	mg/L	2	Standard
Mg	24	13967946.6	4.5	6.5717	0.247	3.8	mg/L	5586	Standard
K	39	76.7	49.4	0.9621	0.505	52.5	mg/L	5	Standard
Ca	43	166.7	1.7	4.5760	0.174	3.8	mg/L	45	Standard
Fe	54	1006.3	11.6	0.2176	0.046	21.0	mg/L	350	Standard
Fe	57	345.0	20.4	0.3910	0.101	25.9	mg/L	102	Standard
Sc-1	45	55250.6	1.3				mg/L	53004	Standard
Cl	35	2.3	107.9				ug/L	2	Standard
Kr	83	142.4	8.8				ug/L	157	Standard
Br	81	5.0	50.0				ug/L	3	Standard
P	31	183591.5	4.9				ug/L	91588	Standard
S	34	16916.9	2.6				ug/L	32556	Standard
Sr	88	276.7	17.4				ug/L	62	Standard
C	12	135.0	41.2				mg/L	133	Standard
N	14	0.0					mg/L	0	Standard
Hg	202	6.7	173.2				mg/L	7	Standard

QC Calculated Values

Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recovery
Li	7			
Be	9			
Al	27			
Sc	45			
Ti	47			
V	51			
Cr	52			
Cr	53			
Mn	55			
Co	59			
Ni	60			
Cu	65			
Zn	66			
Ge	72		103.458	
As	75			
Se	82			
Se-1	77			
Ga	71			
Rb	85			
Y	89			
Rh	103			

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[	Mo	98	
[	Ag	107	
[	Cd	111	
[	Cd	114	
>	In	115	102.047
[	Sn	118	
[	Sb	123	
[	Ba	135	
[	Ce	140	
>	Tb	159	
[	Ho	165	
[	Tl	203	
[	Tl	205	
[	Pb	206	
[	Pb	207	
[	Pb	208	
[	U	238	
>	Bi	209	104.060
[	Na	23	
[	Mg	24	
[	K	39	
[	Ca	43	
[	Fe	54	
[	Fe	57	
>	Sc-1	45	
[	Cl	35	
[	Kr	83	
[	Br	81	
[	P	31	
[	S	34	
[	Sr	88	
[	C	12	
[	N	14	
[	Hg	202	

QC Out of Limits

Measurement Type	Analyte	Mass	Out of Limits Message

Sample ID: L1211041113

Report Date/Time: Sunday, November 18, 2012 10:15:50

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Method 6020 - Summary Report

Sample ID: QC Std 6

Sample Date/Time: Sunday, November 18, 2012 10:16:32

Number of Replicates: 3

Autosampler Position: 101

Sample Description:

Method File: C:\NexIONData\Method\6020a.mth

Aliquot Volume (mL):

Diluted to Volume (mL):

User Name: JYH user

Cumulative Autodilution Factor: 1

Nexion-ICP 200.8\6020

Concentration Results

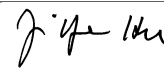
IS	Analyte	Mass	Intensity	RSD	Conc.	SD	RSD	Units	Blank Intens.	Mode
[	Li	7	8732.5	4.2	-655.9914	254.188	38.7	ug/L	8369	Standard
	Be	9	112154.0	4.1	59.4559	2.429	4.1	ug/L	18	Standard
	Al	27	6414037.1	3.7	57.5874	1.769	3.1	ug/L	215	Standard
[>	Sc	45	48044.4	1.1				ug/L	53004	Standard
[	Ti	47	47620.5	3.9	95.5798	3.377	3.5	ug/L	26	Standard
	V	51	563332.5	1.3	48.7897	0.812	1.7	ug/L	3223	Standard
	Cr	52	539517.1	3.4	49.8075	1.863	3.7	ug/L	10379	Standard
	Cr	53	65957.6	3.8	49.3506	1.828	3.7	ug/L	192	Standard
	Mn	55	837677.2	3.7	49.7863	2.086	4.2	ug/L	1840	Standard
	Co	59	650277.4	3.1	50.3324	1.647	3.3	ug/L	115	Standard
	Ni	60	136369.5	3.6	49.0528	1.424	2.9	ug/L	75	Standard
	Cu	65	135055.1	3.6	50.3159	1.897	3.8	ug/L	155	Standard
	Zn	66	67387.3	3.8	50.5944	1.467	2.9	ug/L	237	Standard
[>	Ge	72	400680.1	2.4				ug/L	413856	Standard
	As	75	70632.9	4.2	50.4058	2.058	4.1	ug/L	-197	Standard
	Se	82	6177.7	5.2	49.2459	2.352	4.8	ug/L	-5	Standard
[	Se-1	77	4723.7	5.3	48.7485	2.434	5.0	ug/L	105	Standard
[>	Ga	71	216.7	11.4				mg/L	225	Standard
[	Rb	85	896.7	3.4				ug/L	28	Standard
[	Y	89	303661.3	1.0				ug/L	322845	Standard
[>	Rh	103	131.7	29.5				ug/L	92	Standard
[	Mo	98	418979.2	3.7	95.7306	3.453	3.6	ug/L	18	Standard
	Ag	107	397752.1	3.6	51.6576	1.643	3.2	ug/L	63	Standard
	Cd	111	170750.0	4.7	51.2288	2.298	4.5	mg/L	20	Standard
	Cd	114	441885.6	3.8	50.3804	2.019	4.0	ug/L	56	Standard
[>	In	115	638598.7	1.3				ug/L	657102	Standard
	Sn	118	489943.9	5.3	50.6094	2.552	5.0	ug/L	555	Standard
	Sb	123	391835.8	3.9	51.4825	1.917	3.7	ug/L	62	Standard
[	Ba	135	167787.4	3.7	50.7011	1.850	3.6	ug/L	19	Standard
[	Ce	140	722.0	14.3				ug/L	24	Standard
[>	Tb	159	918078.5	1.6				ug/L	910514	Standard
[	Ho	165	438.7	9.8				ug/L	7	Standard
[	Tl	203	640473.1	3.0	50.0816	1.197	2.4	ug/L	13	Standard
	Tl	205	21005.2	3.5	53.8372	1.528	2.8	ug/L	1	Standard
	Pb	206	513715.7	5.0	50.1028	2.153	4.3	ug/L	342	Standard
	Pb	207	440343.2	4.3	50.5135	1.749	3.5	ug/L	284	Standard
	Pb	208	2018554.3	4.9	49.8736	1.994	4.0	ug/L	1363	Standard
	U	238	526593.7	5.4	52.5750	2.400	4.6	ug/L	2	Standard
[>	Bi	209	469509.2	1.3				ug/L	470592	Standard

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Na	23	51.7	34.0	5.1435	1.695	33.0	mg/L	2	Standard
Mg	24	10785257.8	4.0	5.8350	0.187	3.2	mg/L	5586	Standard
K	39	336.7	15.9	5.0045	0.757	15.1	mg/L	5	Standard
Ca	43	146.7	13.8	4.6523	0.906	19.5	mg/L	45	Standard
Fe	54	13376.2	4.5	5.5168	0.273	4.9	mg/L	350	Standard
Fe	57	3303.7	8.4	5.5932	0.430	7.7	mg/L	102	Standard
Sc-1	45	48044.4	1.1				mg/L	53004	Standard
Cl	35	5.0	60.0				ug/L	2	Standard
Kr	83	129.1	3.1				ug/L	157	Standard
Br	81	5.0	0.0				ug/L	3	Standard
P	31	82367.6	2.9				ug/L	91588	Standard
S	34	25549.3	14.9				ug/L	32556	Standard
Sr	88	45.0	29.4				ug/L	62	Standard
C	12	173.3	27.4				mg/L	133	Standard
N	14	1.7	173.2				mg/L	0	Standard
Hg	202	5.0	0.0				mg/L	7	Standard

QC Calculated Values

Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recovery
Li	7			
Be	9	118.912		
Al	27	115.175		
Sc	45			
Ti	47	95.580		
V	51	97.579		
Cr	52	99.615		
Cr	53			
Mn	55	99.573		
Co	59	100.665		
Ni	60	98.106		
Cu	65	100.632		
Zn	66	101.189		
Ge	72		96.816	
As	75	100.812		
Se	82	98.492		
Se-1	77			
Ga	71			
Rb	85			
Y	89			
Rh	103			

Sample ID: QC Std 6

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[	Mo	98	95.731	
[	Ag	107	103.315	
[	Cd	111	102.458	
[	Cd	114		
>	In	115		97.184
[	Sn	118	101.219	
[	Sb	123	102.965	
[	Ba	135	101.402	
[	Ce	140		
>	Tb	159		
[	Ho	165		
[	Tl	203	100.163	
[	Tl	205		
[	Pb	206	100.206	
[	Pb	207	101.027	
[	Pb	208	99.747	
[	U	238	105.150	
>	Bi	209		99.770
[	Na	23		
[	Mg	24		
[	K	39		
[	Ca	43		
[	Fe	54		
[	Fe	57		
>	Sc-1	45		
[	Cl	35		
[	Kr	83		
[	Br	81		
[	P	31		
[	S	34		
[	Sr	88		
[	C	12		
[	N	14		
[	Hg	202		

QC Out of Limits

Measurement Type	Analyte	Mass	Out of Limits Message
QC Std 6	Be	9	
QC Std 6	Al	27	

Sample ID: QC Std 6

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Method 6020 - Summary Report

Sample ID: QC Std 7

Sample Date/Time: Sunday, November 18, 2012 10:19:44

Number of Replicates: 3

Autosampler Position: 102

Sample Description:

Method File: C:\NexIONData\Method\6020a.mth

Aliquot Volume (mL):

Diluted to Volume (mL):

User Name: JYH user

Cumulative Autodilution Factor: 1

Nexion-ICP 200.8\6020

Concentration Results

IS	Analyte	Mass	Intensity	RSD	Conc.	SD	RSD	Units	Blank Intens.	Mode
[	Li	7	9084.4	3.6	-557.0214	75.637	13.6	ug/L	8369	Standard
	Be	9	28.3	10.2	0.0047	0.001	18.5	ug/L	18	Standard
	Al	27	921.7	86.3	0.0055	0.006	116.5	ug/L	215	Standard
[>	Sc	45	50928.9	4.3				ug/L	53004	Standard
[	Ti	47	21.3	21.1	-0.0180	0.008	42.4	ug/L	26	Standard
	V	51	2991.0	2.3	-0.0139	0.008	60.2	ug/L	3223	Standard
	Cr	52	9803.5	2.7	-0.0184	0.032	175.3	ug/L	10379	Standard
	Cr	53	225.8	2.8	0.0553	0.012	22.0	ug/L	192	Standard
	Mn	55	1698.1	7.8	0.0096	0.009	92.3	ug/L	1840	Standard
	Co	59	175.7	38.2	-0.0023	0.005	211.9	ug/L	115	Standard
	Ni	60	90.3	11.4	-0.0039	0.003	76.3	ug/L	75	Standard
	Cu	65	154.7	16.0	-0.0015	0.008	533.6	ug/L	155	Standard
	Zn	66	230.0	8.5	-0.0308	0.013	41.4	ug/L	237	Standard
[>	Ge	72	411819.3	4.6				ug/L	413856	Standard
	As	75	-165.7	14.2	0.0255	0.011	43.5	ug/L	-197	Standard
	Se	82	3.5	197.1	0.0319	0.054	169.9	ug/L	-5	Standard
[	Se-1	77	101.3	12.3	0.0643	0.172	267.1	ug/L	105	Standard
[>	Ga	71	213.3	12.0				mg/L	225	Standard
[	Rb	85	18.3	56.8				ug/L	28	Standard
[	Y	89	310396.1	3.3				ug/L	322845	Standard
[>	Rh	103	106.7	7.2				ug/L	92	Standard
[	Mo	98	64.1	31.8	0.0058	0.005	89.4	ug/L	18	Standard
	Ag	107	96.3	27.1	0.0045	0.004	87.6	ug/L	63	Standard
	Cd	111	52.9	54.9	0.0042	0.008	186.5	mg/L	20	Standard
	Cd	114	154.7	76.8	0.0073	0.012	165.4	ug/L	56	Standard
[>	In	115	653119.0	6.2				ug/L	657102	Standard
	Sn	118	532.7	36.5	0.0040	0.017	418.2	ug/L	555	Standard
	Sb	123	396.6	65.1	0.0472	0.030	63.6	ug/L	62	Standard
[	Ba	135	58.7	84.9	-0.0030	0.014	452.0	ug/L	19	Standard
[	Ce	140	36.0	28.2				ug/L	24	Standard
[>	Tb	159	931294.0	5.2				ug/L	910514	Standard
[	Ho	165	12.0	0.0				ug/L	7	Standard
	Tl	203	129.0	114.9	0.0060	0.011	180.8	ug/L	13	Standard
	Tl	205	3.7	128.9	0.0103	0.011	110.2	ug/L	1	Standard
	Pb	206	406.7	31.9	0.0055	0.011	200.9	ug/L	342	Standard
	Pb	207	318.3	34.5	-0.0007	0.011	1476.3	ug/L	284	Standard
	Pb	208	1540.7	28.1	0.0025	0.009	372.6	ug/L	1363	Standard
	U	238	52.3	146.7	0.0034	0.007	210.3	ug/L	2	Standard
[>	Bi	209	482480.6	4.3				ug/L	470592	Standard

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Na	23	0.0		0.0050	0.000	0.0	mg/L	2	Standard
Mg	24	9171.2	18.5	0.0018	0.001	43.5	mg/L	5586	Standard
K	39	3.3	86.6	0.0066	0.042	629.4	mg/L	5	Standard
Ca	43	41.7	61.6	-0.4044	1.091	269.9	mg/L	45	Standard
Fe	54	389.1	11.5	0.0021	0.016	761.4	mg/L	350	Standard
Fe	57	113.3	15.5	0.0579	0.036	61.7	mg/L	102	Standard
Sc-1	45	50928.9	4.3				mg/L	53004	Standard
Cl	35	2.0	50.0				ug/L	2	Standard
Kr	83	130.1	0.1				ug/L	157	Standard
Br	81	2.5	100.0				ug/L	3	Standard
P	31	87559.1	3.1				ug/L	91588	Standard
S	34	27313.8	3.1				ug/L	32556	Standard
Sr	88	51.7	29.6				ug/L	62	Standard
C	12	150.0	11.5				mg/L	133	Standard
N	14	0.0					mg/L	0	Standard
Hg	202	5.0	0.0				mg/L	7	Standard

QC Calculated Values

Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recovery
Li	7			
Be	9			
Al	27			
Sc	45			
Ti	47			
V	51			
Cr	52			
Cr	53			
Mn	55			
Co	59			
Ni	60			
Cu	65			
Zn	66			
Ge	72		99.508	
As	75			
Se	82			
Se-1	77			
Ga	71			
Rb	85			
Y	89			
Rh	103			

Sample ID: QC Std 7

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[	Mo	98	
[	Ag	107	
[	Cd	111	
[	Cd	114	
>	In	115	99.394
[	Sn	118	
[	Sb	123	
[	Ba	135	
[	Ce	140	
>	Tb	159	
[	Ho	165	
[	Tl	203	
[	Tl	205	
[	Pb	206	
[	Pb	207	
[	Pb	208	
[	U	238	
>	Bi	209	102.526
[	Na	23	
[	Mg	24	
[	K	39	
[	Ca	43	
[	Fe	54	
[	Fe	57	
>	Sc-1	45	
[	Cl	35	
[	Kr	83	
[	Br	81	
[	P	31	
[	S	34	
[	Sr	88	
[	C	12	
[	N	14	
[	Hg	202	

QC Out of Limits

Measurement Type	Analyte	Mass	Out of Limits Message

Sample ID: QC Std 7

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Method 6020 - Summary Report

Sample ID: L1211041114

Sample Date/Time: Sunday, November 18, 2012 10:22:59

Number of Replicates: 3

Autosampler Position: 320

Sample Description: 1

Method File: C:\NexIONData\Method\6020a.mth

Aliquot Volume (mL):

Diluted to Volume (mL):

User Name: JYH user

Cumulative Autodilution Factor: 1

Nexion-ICP 200.8\6020

Concentration Results

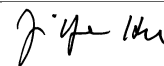
IS	Analyte	Mass	Intensity	RSD	Conc.	SD	RSD	Units	Blank Intens.	Mode
[	Li	7	37184.0	5.2	-15161.0876	1168.235	7.7	ug/L	8369	Standard
	Be	9	31.7	48.2	0.0053	0.007	140.7	ug/L	18	Standard
	Al	27	3612066.9	7.3	28.3701	2.030	7.2	ug/L	215	Standard
[>	Sc	45	54968.0	5.2				ug/L	53004	Standard
[	Ti	47	1175.7	16.4	2.1878	0.327	14.9	ug/L	26	Standard
	V	51	11278.0	4.7	0.6689	0.043	6.5	ug/L	3223	Standard
	Cr	52	10972.6	2.0	0.0678	0.016	24.3	ug/L	10379	Standard
	Cr	53	627.5	9.3	0.3383	0.030	8.8	ug/L	192	Standard
	Mn	55	26248.4	6.0	1.4007	0.083	5.9	ug/L	1840	Standard
	Co	59	539.3	11.4	0.0242	0.003	14.4	ug/L	115	Standard
	Ni	60	1478.1	5.0	0.4721	0.033	6.9	ug/L	75	Standard
	Cu	65	673.3	2.9	0.1820	0.010	5.4	ug/L	155	Standard
	Zn	66	3853.2	6.9	2.5712	0.212	8.2	ug/L	237	Standard
[>	Ge	72	420332.0	3.7				ug/L	413856	Standard
	As	75	-16.4	113.6	0.1291	0.012	9.4	ug/L	-197	Standard
	Se	82	39.1	9.7	0.3032	0.037	12.3	ug/L	-5	Standard
[	Se-1	77	115.0	8.0	0.1780	0.127	71.1	ug/L	105	Standard
[>	Ga	71	358.3	11.9				mg/L	225	Standard
[	Rb	85	3728.8	9.1				ug/L	28	Standard
[	Y	89	310305.4	0.6				ug/L	322845	Standard
[>	Rh	103	100.0	10.0				ug/L	92	Standard
[	Mo	98	325.0	14.5	0.0626	0.008	13.6	ug/L	18	Standard
	Ag	107	67.3	12.0	0.0005	0.001	156.5	ug/L	63	Standard
	Cd	111	41.3	14.9	0.0008	0.002	267.8	mg/L	20	Standard
	Cd	114	102.8	15.3	0.0017	0.002	108.4	ug/L	56	Standard
[>	In	115	663757.9	2.6				ug/L	657102	Standard
	Sn	118	627.7	8.3	0.0131	0.006	42.2	ug/L	555	Standard
	Sb	123	144.5	22.6	0.0153	0.004	23.9	ug/L	62	Standard
[	Ba	135	62434.3	5.5	18.1344	0.813	4.5	ug/L	19	Standard
[	Ce	140	12396.8	8.1				ug/L	24	Standard
[>	Tb	159	951713.4	2.1				ug/L	910514	Standard
[	Ho	165	98.0	1.0				ug/L	7	Standard
[	Tl	203	416.0	1.9	0.0279	0.001	4.9	ug/L	13	Standard
	Tl	205	14.0	42.9	0.0360	0.015	41.8	ug/L	1	Standard
	Pb	206	517.0	4.5	0.0159	0.001	6.7	ug/L	342	Standard
	Pb	207	450.0	4.7	0.0139	0.002	17.7	ug/L	284	Standard
	Pb	208	1991.7	5.6	0.0132	0.002	15.6	ug/L	1363	Standard
	U	238	102.7	14.2	0.0084	0.001	14.0	ug/L	2	Standard
[>	Bi	209	485199.3	2.7				ug/L	470592	Standard

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Na	23	46.7	16.4	4.0888	0.771	18.9	mg/L	2	Standard
Mg	24	21473697.5	5.6	10.1688	0.621	6.1	mg/L	5586	Standard
K	39	76.7	7.5	0.9637	0.050	5.2	mg/L	5	Standard
Ca	43	96.7	3.0	1.7443	0.247	14.2	mg/L	45	Standard
Fe	54	444.0	9.0	0.0115	0.020	174.8	mg/L	350	Standard
Fe	57	120.0	11.0	0.0532	0.013	24.4	mg/L	102	Standard
Sc-1	45	54968.0	5.2				mg/L	53004	Standard
Cl	35	2.3	99.0				ug/L	2	Standard
Kr	83	136.8	3.3				ug/L	157	Standard
Br	81	5.8	65.5				ug/L	3	Standard
P	31	163748.0	4.7				ug/L	91588	Standard
S	34	18494.6	4.7				ug/L	32556	Standard
Sr	88	213.3	12.9				ug/L	62	Standard
C	12	175.0	2.9				mg/L	133	Standard
N	14	1.7	173.2				mg/L	0	Standard
Hg	202	25.0	34.6				mg/L	7	Standard

QC Calculated Values

Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recovery
Li	7			
Be	9			
Al	27			
Sc	45			
Ti	47			
V	51			
Cr	52			
Cr	53			
Mn	55			
Co	59			
Ni	60			
Cu	65			
Zn	66			
Ge	72		101.565	
As	75			
Se	82			
Se-1	77			
Ga	71			
Rb	85			
Y	89			
Rh	103			

Sample ID: L1211041114

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[	Mo	98	
[	Ag	107	
[	Cd	111	
[	Cd	114	
>	In	115	101.013
[	Sn	118	
[	Sb	123	
[	Ba	135	
[	Ce	140	
>	Tb	159	
[	Ho	165	
[	Tl	203	
[	Tl	205	
[	Pb	206	
[	Pb	207	
[	Pb	208	
[	U	238	
>	Bi	209	103.104
[	Na	23	
[	Mg	24	
[	K	39	
[	Ca	43	
[	Fe	54	
[	Fe	57	
>	Sc-1	45	
[	Cl	35	
[	Kr	83	
[	Br	81	
[	P	31	
[	S	34	
[	Sr	88	
[	C	12	
[	N	14	
[	Hg	202	

QC Out of Limits

Measurement Type	Analyte	Mass	Out of Limits Message

Sample ID: L1211041114

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Method 6020 - Summary Report

Sample ID: L1211041115

Sample Date/Time: Sunday, November 18, 2012 10:26:11

Number of Replicates: 3

Autosampler Position: 321

Sample Description: 1

Method File: C:\NexIONData\Method\6020a.mth

Aliquot Volume (mL):

Diluted to Volume (mL):

User Name: JYH user

Cumulative Autodilution Factor: 1

Nexion-ICP 200.8\6020

Concentration Results

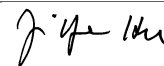
IS	Analyte	Mass	Intensity	RSD	Conc.	SD	RSD	Units	Blank Intens.	Mode
[	Li	7	55903.0	3.8	-25604.6458	892.757	3.5	ug/L	8369	Standard
	Be	9	10.0	50.0	-0.0047	0.002	50.4	ug/L	18	Standard
	Al	27	8095777.2	5.3	64.5965	3.093	4.8	ug/L	215	Standard
[>	Sc	45	54059.6	0.9				ug/L	53004	Standard
[	Ti	47	1292.1	16.3	2.4767	0.387	15.6	ug/L	26	Standard
	V	51	5000.9	4.7	0.1585	0.017	10.4	ug/L	3223	Standard
	Cr	52	11042.4	3.3	0.0999	0.022	22.2	ug/L	10379	Standard
	Cr	53	2831.9	7.2	1.9672	0.125	6.4	ug/L	192	Standard
	Mn	55	1494668.3	5.5	86.9487	3.758	4.3	ug/L	1840	Standard
	Co	59	1004.7	7.2	0.0606	0.005	7.7	ug/L	115	Standard
	Ni	60	2174.2	7.1	0.7300	0.047	6.4	ug/L	75	Standard
	Cu	65	935.0	5.7	0.2836	0.016	5.6	ug/L	155	Standard
	Zn	66	3597.8	6.3	2.4535	0.137	5.6	ug/L	237	Standard
[>	Ge	72	409414.6	1.2				ug/L	413856	Standard
	As	75	-52.8	78.5	0.1030	0.029	28.2	ug/L	-197	Standard
	Se	82	35.6	35.0	0.2825	0.095	33.8	ug/L	-5	Standard
[	Se-1	77	217.7	6.2	1.2637	0.136	10.8	ug/L	105	Standard
[>	Ga	71	486.7	11.0				mg/L	225	Standard
[	Rb	85	8023.8	3.1				ug/L	28	Standard
[	Y	89	312819.9	1.1				ug/L	322845	Standard
[>	Rh	103	123.3	6.2				ug/L	92	Standard
[	Mo	98	787.2	2.8	0.1654	0.004	2.1	ug/L	18	Standard
	Ag	107	59.0	5.9	-0.0005	0.000	81.2	ug/L	63	Standard
	Cd	111	33.4	41.9	-0.0015	0.004	265.8	mg/L	20	Standard
	Cd	114	100.1	40.6	0.0014	0.004	302.0	ug/L	56	Standard
[>	In	115	659613.3	0.9				ug/L	657102	Standard
	Sn	118	780.0	8.8	0.0287	0.006	21.7	ug/L	555	Standard
	Sb	123	89.7	43.7	0.0085	0.005	57.7	ug/L	62	Standard
[	Ba	135	32601.8	6.4	9.5183	0.550	5.8	ug/L	19	Standard
[	Ce	140	6408.0	5.5				ug/L	24	Standard
[>	Tb	159	946060.1	1.3				ug/L	910514	Standard
[	Ho	165	39.7	11.6				ug/L	7	Standard
	Tl	203	523.7	11.0	0.0367	0.004	11.4	ug/L	13	Standard
	Tl	205	16.0	6.3	0.0417	0.003	6.9	ug/L	1	Standard
	Pb	206	705.0	8.7	0.0349	0.005	15.7	ug/L	342	Standard
	Pb	207	597.7	2.1	0.0315	0.002	6.2	ug/L	284	Standard
	Pb	208	2810.8	5.0	0.0341	0.003	8.6	ug/L	1363	Standard
	U	238	860.7	9.3	0.0832	0.007	8.9	ug/L	2	Standard
[>	Bi	209	476333.3	0.9				ug/L	470592	Standard

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Na	23	261.7	12.7	23.2038	3.144	13.6	mg/L	2	Standard
Mg	24	16715728.8	6.0	8.0388	0.460	5.7	mg/L	5586	Standard
K	39	91.7	30.0	1.1822	0.375	31.8	mg/L	5	Standard
Ca	43	546.7	10.3	20.5754	2.220	10.8	mg/L	45	Standard
Fe	54	480.0	15.6	0.0272	0.027	99.4	mg/L	350	Standard
Fe	57	325.0	12.6	0.3721	0.062	16.6	mg/L	102	Standard
Sc-1	45	54059.6	0.9				mg/L	53004	Standard
Cl	35	3.7	78.7				ug/L	2	Standard
Kr	83	135.0	3.6				ug/L	157	Standard
Br	81	6.7	21.7				ug/L	3	Standard
P	31	168866.5	3.3				ug/L	91588	Standard
S	34	27308.0	5.2				ug/L	32556	Standard
Sr	88	268.3	7.5				ug/L	62	Standard
C	12	205.0	14.8				mg/L	133	Standard
N	14	1.7	173.2				mg/L	0	Standard
Hg	202	18.3	31.5				mg/L	7	Standard

QC Calculated Values

Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recovery
Li	7			
Be	9			
Al	27			
Sc	45			
Ti	47			
V	51			
Cr	52			
Cr	53			
Mn	55			
Co	59			
Ni	60			
Cu	65			
Zn	66			
Ge	72		98.927	
As	75			
Se	82			
Se-1	77			
Ga	71			
Rb	85			
Y	89			
Rh	103			

Sample ID: L1211041115

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[	Mo	98	
[	Ag	107	
[	Cd	111	
[	Cd	114	
>	In	115	100.382
[	Sn	118	
[	Sb	123	
[	Ba	135	
[	Ce	140	
>	Tb	159	
[	Ho	165	
[	Tl	203	
[	Tl	205	
[	Pb	206	
[	Pb	207	
[	Pb	208	
[	U	238	
>	Bi	209	101.220
[	Na	23	
[	Mg	24	
[	K	39	
[	Ca	43	
[	Fe	54	
[	Fe	57	
>	Sc-1	45	
[	Cl	35	
[	Kr	83	
[	Br	81	
[	P	31	
[	S	34	
[	Sr	88	
[	C	12	
[	N	14	
[	Hg	202	

QC Out of Limits

Measurement Type	Analyte	Mass	Out of Limits Message

Sample ID: L1211041115

Report Date/Time: Sunday, November 18, 2012 10:28:43

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Method 6020 - Summary Report

Sample ID: L1211041116

Sample Date/Time: Sunday, November 18, 2012 10:29:24

Number of Replicates: 3

Autosampler Position: 322

Sample Description: 1

Method File: C:\NexIONData\Method\6020a.mth

Aliquot Volume (mL):

Diluted to Volume (mL):

User Name: JYH user

Cumulative Autodilution Factor: 1

Nexion-ICP 200.8\6020

Concentration Results

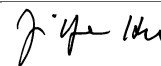
IS	Analyte	Mass	Intensity	RSD	Conc.	SD	RSD	Units	Blank Intens.	Mode
[	Li	7	9926.6	1.1	-1009.6384	303.308	30.0	ug/L	8369	Standard
	Be	9	20.0	50.0	0.0003	0.004	1426.9	ug/L	18	Standard
	Al	27	2403062.5	6.3	20.2053	0.509	2.5	ug/L	215	Standard
[>	Sc	45	51295.2	5.3				ug/L	53004	Standard
[	Ti	47	676.7	5.9	1.2691	0.057	4.5	ug/L	26	Standard
	V	51	6043.4	5.8	0.2468	0.017	7.0	ug/L	3223	Standard
	Cr	52	11309.6	3.0	0.1239	0.009	7.6	ug/L	10379	Standard
	Cr	53	957.5	10.1	0.5916	0.054	9.2	ug/L	192	Standard
	Mn	55	3718658.0	6.8	216.2875	10.691	4.9	ug/L	1840	Standard
	Co	59	9480.0	5.8	0.7021	0.033	4.7	ug/L	115	Standard
	Ni	60	1585.4	6.7	0.5224	0.026	5.0	ug/L	75	Standard
	Cu	65	1339.4	4.6	0.4309	0.015	3.5	ug/L	155	Standard
	Zn	66	5195.2	6.6	3.6285	0.169	4.7	ug/L	237	Standard
[>	Ge	72	409652.9	2.5				ug/L	413856	Standard
	As	75	78.4	38.1	0.1943	0.020	10.3	ug/L	-197	Standard
	Se	82	17.8	33.1	0.1439	0.047	32.4	ug/L	-5	Standard
[	Se-1	77	130.3	5.7	0.3629	0.060	16.6	ug/L	105	Standard
[>	Ga	71	291.7	15.4				mg/L	225	Standard
[	Rb	85	9262.8	0.4				ug/L	28	Standard
[	Y	89	309261.2	1.0				ug/L	322845	Standard
[>	Rh	103	130.0	19.2				ug/L	92	Standard
[	Mo	98	185.4	11.1	0.0322	0.005	14.6	ug/L	18	Standard
	Ag	107	52.3	4.4	-0.0013	0.000	10.1	ug/L	63	Standard
	Cd	111	37.8	17.4	-0.0003	0.002	649.9	mg/L	20	Standard
	Cd	114	103.6	12.7	0.0018	0.001	78.2	ug/L	56	Standard
[>	In	115	661250.6	2.4				ug/L	657102	Standard
	Sn	118	921.4	1.6	0.0426	0.001	2.6	ug/L	555	Standard
	Sb	123	146.0	4.3	0.0156	0.001	4.7	ug/L	62	Standard
[	Ba	135	66842.1	5.5	19.4892	0.863	4.4	ug/L	19	Standard
[	Ce	140	16537.4	7.5				ug/L	24	Standard
[>	Tb	159	945856.9	2.1				ug/L	910514	Standard
[	Ho	165	283.7	13.9				ug/L	7	Standard
	Tl	203	348.3	12.5	0.0229	0.003	14.0	ug/L	13	Standard
	Tl	205	16.0	16.5	0.0413	0.006	14.5	ug/L	1	Standard
	Pb	206	1335.7	3.5	0.0943	0.002	2.3	ug/L	342	Standard
	Pb	207	1143.7	3.9	0.0921	0.003	2.9	ug/L	284	Standard
	Pb	208	5238.7	5.2	0.0920	0.004	4.8	ug/L	1363	Standard
	U	238	47.7	15.9	0.0031	0.001	21.9	ug/L	2	Standard
[>	Bi	209	480929.7	1.8				ug/L	470592	Standard

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Na	23	55.0	59.6	5.0986	2.854	56.0	mg/L	2	Standard
Mg	24	9067375.7	4.7	4.5958	0.028	0.6	mg/L	5586	Standard
K	39	63.3	25.4	0.8423	0.185	22.0	mg/L	5	Standard
Ca	43	145.0	9.1	4.1661	0.785	18.8	mg/L	45	Standard
Fe	54	3576.2	7.3	1.2653	0.032	2.5	mg/L	350	Standard
Fe	57	921.7	8.4	1.3671	0.091	6.7	mg/L	102	Standard
Sc-1	45	51295.2	5.3				mg/L	53004	Standard
Cl	35	4.0	50.0				ug/L	2	Standard
Kr	83	135.7	4.5				ug/L	157	Standard
Br	81	10.0	25.0				ug/L	3	Standard
P	31	122638.8	3.1				ug/L	91588	Standard
S	34	26302.8	2.3				ug/L	32556	Standard
Sr	88	190.0	11.5				ug/L	62	Standard
C	12	161.7	9.4				mg/L	133	Standard
N	14	0.0					mg/L	0	Standard
Hg	202	8.3	34.6				mg/L	7	Standard

QC Calculated Values

Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recovery
Li	7			
Be	9			
Al	27			
Sc	45			
Ti	47			
V	51			
Cr	52			
Cr	53			
Mn	55			
Co	59			
Ni	60			
Cu	65			
Zn	66			
Ge	72		98.984	
As	75			
Se	82			
Se-1	77			
Ga	71			
Rb	85			
Y	89			
Rh	103			

Sample ID: L1211041116

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[	Mo	98	
[	Ag	107	
[	Cd	111	
[	Cd	114	
>	In	115	100.631
[	Sn	118	
[	Sb	123	
[	Ba	135	
[	Ce	140	
>	Tb	159	
[	Ho	165	
[	Tl	203	
[	Tl	205	
[	Pb	206	
[	Pb	207	
[	Pb	208	
[	U	238	
>	Bi	209	102.197
[	Na	23	
[	Mg	24	
[	K	39	
[	Ca	43	
[	Fe	54	
[	Fe	57	
>	Sc-1	45	
[	Cl	35	
[	Kr	83	
[	Br	81	
[	P	31	
[	S	34	
[	Sr	88	
[	C	12	
[	N	14	
[	Hg	202	

QC Out of Limits

Measurement Type	Analyte	Mass	Out of Limits Message
Mn 55 Upper, S, EEE	Mn	55	

Sample ID: L1211041116

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Method 6020 - Summary Report

Sample ID: L1211041117

Sample Date/Time: Sunday, November 18, 2012 10:32:37

Number of Replicates: 3

Autosampler Position: 323

Sample Description: 1

Method File: C:\NexIONData\Method\6020a.mth

Aliquot Volume (mL):

Diluted to Volume (mL):

User Name: JYH user

Cumulative Autodilution Factor: 1

Nexion-ICP 200.8\6020

Concentration Results

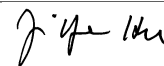
IS	Analyte	Mass	Intensity	RSD	Conc.	SD	RSD	Units	Blank Intens.	Mode
[	Li	7	14692.1	3.0	-3409.1875	127.212	3.7	ug/L	8369	Standard
	Be	9	21.7	53.3	0.0009	0.006	610.7	ug/L	18	Standard
	Al	27	7926488.8	5.7	64.1850	2.798	4.4	ug/L	215	Standard
[>	Sc	45	53256.8	1.5				ug/L	53004	Standard
[	Ti	47	732.0	8.5	1.3551	0.103	7.6	ug/L	26	Standard
	V	51	6138.1	3.5	0.2470	0.012	4.7	ug/L	3223	Standard
	Cr	52	10874.9	3.3	0.0684	0.007	11.0	ug/L	10379	Standard
	Cr	53	1202.5	13.4	0.7562	0.083	11.0	ug/L	192	Standard
	Mn	55	701378.6	5.4	40.0882	1.212	3.0	ug/L	1840	Standard
	Co	59	2010.8	3.5	0.1344	0.005	4.0	ug/L	115	Standard
	Ni	60	2951.6	4.5	0.9872	0.027	2.7	ug/L	75	Standard
	Cu	65	2035.5	8.4	0.6729	0.051	7.6	ug/L	155	Standard
	Zn	66	4018.2	6.0	2.7158	0.132	4.9	ug/L	237	Standard
[>	Ge	72	416229.5	3.6				ug/L	413856	Standard
	As	75	210.7	12.0	0.2848	0.022	7.8	ug/L	-197	Standard
	Se	82	111.2	2.7	0.8589	0.043	5.0	ug/L	-5	Standard
[	Se-1	77	163.3	8.5	0.6807	0.191	28.1	ug/L	105	Standard
[>	Ga	71	331.7	9.2				mg/L	225	Standard
	Rb	85	12992.2	4.3				ug/L	28	Standard
[	Y	89	305456.5	4.0				ug/L	322845	Standard
[>	Rh	103	160.0	16.2				ug/L	92	Standard
[	Mo	98	449.9	1.5	0.0908	0.003	2.9	ug/L	18	Standard
	Ag	107	117.3	9.8	0.0069	0.001	18.5	ug/L	63	Standard
	Cd	111	37.1	12.5	-0.0004	0.001	279.2	mg/L	20	Standard
	Cd	114	105.7	11.9	0.0021	0.001	55.6	ug/L	56	Standard
[>	In	115	660000.4	2.2				ug/L	657102	Standard
	Sn	118	1118.7	5.7	0.0625	0.005	7.2	ug/L	555	Standard
	Sb	123	331.7	3.7	0.0392	0.001	3.3	ug/L	62	Standard
[	Ba	135	116652.8	5.3	34.0838	1.141	3.3	ug/L	19	Standard
[	Ce	140	6587.1	6.4				ug/L	24	Standard
[>	Tb	159	942817.6	1.7				ug/L	910514	Standard
[	Ho	165	99.3	7.6				ug/L	7	Standard
	Tl	203	554.7	3.6	0.0394	0.002	4.9	ug/L	13	Standard
	Tl	205	18.3	19.2	0.0479	0.009	19.1	ug/L	1	Standard
	Pb	206	767.7	5.4	0.0414	0.004	9.2	ug/L	342	Standard
	Pb	207	606.3	7.5	0.0329	0.006	16.8	ug/L	284	Standard
	Pb	208	2872.8	3.0	0.0360	0.002	5.6	ug/L	1363	Standard
	U	238	2721.2	4.9	0.2679	0.012	4.5	ug/L	2	Standard
[>	Bi	209	473512.0	1.0				ug/L	470592	Standard

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Na	23	171.7	3.4	15.4499	0.729	4.7	mg/L	2	Standard
Mg	24	18065185.9	5.9	8.8160	0.396	4.5	mg/L	5586	Standard
K	39	130.0	21.4	1.7146	0.350	20.4	mg/L	5	Standard
Ca	43	405.0	8.9	14.9143	1.292	8.7	mg/L	45	Standard
Fe	54	715.7	9.5	0.1200	0.022	18.3	mg/L	350	Standard
Fe	57	348.3	19.5	0.4172	0.112	27.0	mg/L	102	Standard
Sc-1	45	53256.8	1.5				mg/L	53004	Standard
Cl	35	3.7	78.7				ug/L	2	Standard
Kr	83	131.4	2.1				ug/L	157	Standard
Br	81	10.0	66.1				ug/L	3	Standard
P	31	150870.2	2.4				ug/L	91588	Standard
S	34	29550.5	3.2				ug/L	32556	Standard
Sr	88	575.0	10.6				ug/L	62	Standard
C	12	196.7	9.6				mg/L	133	Standard
N	14	0.0					mg/L	0	Standard
Hg	202	10.0	100.0				mg/L	7	Standard

QC Calculated Values

Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recovery
Li	7			
Be	9			
Al	27			
Sc	45			
Ti	47			
V	51			
Cr	52			
Cr	53			
Mn	55			
Co	59			
Ni	60			
Cu	65			
Zn	66			
Ge	72		100.574	
As	75			
Se	82			
Se-1	77			
Ga	71			
Rb	85			
Y	89			
Rh	103			

Sample ID: L1211041117

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[	Mo	98	
[	Ag	107	
[	Cd	111	
[	Cd	114	
>	In	115	100.441
[	Sn	118	
[	Sb	123	
[	Ba	135	
[	Ce	140	
>	Tb	159	
[	Ho	165	
[	Tl	203	
[	Tl	205	
[	Pb	206	
[	Pb	207	
[	Pb	208	
[	U	238	
>	Bi	209	100.621
[	Na	23	
[	Mg	24	
[	K	39	
[	Ca	43	
[	Fe	54	
[	Fe	57	
>	Sc-1	45	
[	Cl	35	
[	Kr	83	
[	Br	81	
[	P	31	
[	S	34	
[	Sr	88	
[	C	12	
[	N	14	
[	Hg	202	

QC Out of Limits

Measurement Type	Analyte	Mass	Out of Limits Message

Sample ID: L1211041117

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Method 6020 - Summary Report

Sample ID: L1211041118

Sample Date/Time: Sunday, November 18, 2012 10:35:49

Number of Replicates: 3

Autosampler Position: 324

Sample Description: 1

Method File: C:\NexIONData\Method\6020a.mth

Aliquot Volume (mL):

Diluted to Volume (mL):

User Name: JYH user

Cumulative Autodilution Factor: 1

Nexion-ICP 200.8\6020

Concentration Results

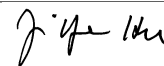
IS	Analyte	Mass	Intensity	RSD	Conc.	SD	RSD	Units	Blank Intens.	Mode
[	Li	7	22638.6	4.5	-5832.1646	397.345	6.8	ug/L	8369	Standard
	Be	9	203.3	14.8	0.0725	0.011	15.7	ug/L	18	Standard
	Al	27	10025652.0	4.8	68.5134	2.909	4.2	ug/L	215	Standard
[>	Sc	45	63122.9	1.4				ug/L	53004	Standard
[	Ti	47	40602.8	5.6	75.7520	2.120	2.8	ug/L	26	Standard
	V	51	117132.5	5.2	9.2152	0.213	2.3	ug/L	3223	Standard
	Cr	52	58020.4	4.9	4.1557	0.109	2.6	ug/L	10379	Standard
	Cr	53	7496.9	5.0	5.1184	0.194	3.8	ug/L	192	Standard
	Mn	55	122695336.9	5.7	6789.5980	171.596	2.5	ug/L	1840	Standard
	Co	59	227921.6	5.8	16.3870	0.421	2.6	ug/L	115	Standard
	Ni	60	23725.9	6.5	7.9050	0.345	4.4	ug/L	75	Standard
	Cu	65	50407.5	5.1	17.4248	0.583	3.3	ug/L	155	Standard
	Zn	66	115021.9	4.8	80.4300	1.844	2.3	ug/L	237	Standard
[>	Ge	72	430752.3	3.3				ug/L	413856	Standard
	As	75	1426.8	1.9	1.0850	0.035	3.2	ug/L	-197	Standard
	Se	82	127.2	8.7	0.9506	0.105	11.0	ug/L	-5	Standard
[	Se-1	77	216.3	6.6	1.1401	0.135	11.9	ug/L	105	Standard
[>	Ga	71	6436.4	10.4				mg/L	225	Standard
[	Rb	85	34440.8	4.8				ug/L	28	Standard
[	Y	89	365611.6	4.7				ug/L	322845	Standard
[>	Rh	103	210.0	25.2				ug/L	92	Standard
[	Mo	98	2551.9	6.5	0.5361	0.037	7.0	ug/L	18	Standard
	Ag	107	4157.6	3.6	0.4966	0.018	3.6	ug/L	63	Standard
	Cd	111	687.3	4.0	0.1815	0.007	4.0	mg/L	20	Standard
	Cd	114	1936.4	5.1	0.1966	0.009	4.7	ug/L	56	Standard
[>	In	115	683715.7	2.1				ug/L	657102	Standard
	Sn	118	60093.2	5.3	5.7555	0.321	5.6	ug/L	555	Standard
	Sb	123	5472.8	3.7	0.6688	0.026	3.9	ug/L	62	Standard
[	Ba	135	601323.0	3.7	169.7737	6.096	3.6	ug/L	19	Standard
[	Ce	140	338940.5	5.0				ug/L	24	Standard
[>	Tb	159	971481.9	0.9				ug/L	910514	Standard
[	Ho	165	4805.4	5.4				ug/L	7	Standard
	Tl	203	742.0	17.4	0.0397	0.008	20.3	ug/L	13	Standard
	Tl	205	27.7	16.3	0.0541	0.008	15.5	ug/L	1	Standard
	Pb	206	40726.1	4.1	2.9293	0.088	3.0	ug/L	342	Standard
	Pb	207	33400.8	4.2	2.8216	0.089	3.2	ug/L	284	Standard
	Pb	208	156781.6	4.0	2.8548	0.085	3.0	ug/L	1363	Standard
	U	238	5937.8	3.8	0.4404	0.012	2.8	ug/L	2	Standard
[>	Bi	209	629928.9	1.2				ug/L	470592	Standard

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Na	23	236.7	7.4	17.9519	1.080	6.0	mg/L	2	Standard
Mg	24	19267909.9	4.1	7.9364	0.305	3.8	mg/L	5586	Standard
K	39	173.3	21.7	1.9405	0.443	22.8	mg/L	5	Standard
Ca	43	506.7	10.4	15.8887	2.020	12.7	mg/L	45	Standard
Fe	54	23812.8	8.6	7.5285	0.647	8.6	mg/L	350	Standard
Fe	57	5947.8	4.3	7.7134	0.245	3.2	mg/L	102	Standard
Sc-1	45	63122.9	1.4				mg/L	53004	Standard
Cl	35	2.7	57.3				ug/L	2	Standard
Kr	83	145.8	3.8				ug/L	157	Standard
Br	81	5.0	100.0				ug/L	3	Standard
P	31	186896.1	4.2				ug/L	91588	Standard
S	34	30431.4	5.5				ug/L	32556	Standard
Sr	88	853.4	18.8				ug/L	62	Standard
C	12	426.7	10.6				mg/L	133	Standard
N	14	0.0					mg/L	0	Standard
Hg	202	175.0	17.4				mg/L	7	Standard

QC Calculated Values

Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recovery
Li	7			
Be	9			
Al	27			
Sc	45			
Ti	47			
V	51			
Cr	52			
Cr	53			
Mn	55			
Co	59			
Ni	60			
Cu	65			
Zn	66			
Ge	72		104.083	
As	75			
Se	82			
Se-1	77			
Ga	71			
Rb	85			
Y	89			
Rh	103			

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[	Mo	98	
[	Ag	107	
[	Cd	111	
[	Cd	114	
>	In	115	104.050
[	Sn	118	
[	Sb	123	
[	Ba	135	
[	Ce	140	
>	Tb	159	
[	Ho	165	
[	Tl	203	
[	Tl	205	
[	Pb	206	
[	Pb	207	
[	Pb	208	
[	U	238	
>	Bi	209	133.859
[	Na	23	
[	Mg	24	
[	K	39	
[	Ca	43	
[	Fe	54	
[	Fe	57	
>	Sc-1	45	
[	Cl	35	
[	Kr	83	
[	Br	81	
[	P	31	
[	S	34	
[	Sr	88	
[	C	12	
[	N	14	
[	Hg	202	

QC Out of Limits

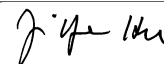
Measurement Type	Analyte	Mass	Out of Limits Message
Mn 55 Upper, S, EEE	Mn	55	
Ba 135 Upper, S, EEE	Ba	135	
Bi 209 Int Std for sample	Bi	209	Rerun sample

Sample ID: L1211041118

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Method 6020 - Summary Report

Sample ID: L1211041119

Sample Date/Time: Sunday, November 18, 2012 10:39:01

Number of Replicates: 3

Autosampler Position: 325

Sample Description: 1

Method File: C:\NexIONData\Method\6020a.mth

Aliquot Volume (mL):

Diluted to Volume (mL):

User Name: JYH user

Cumulative Autodilution Factor: 1

Nexion-ICP 200.8\6020

Concentration Results

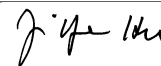
IS	Analyte	Mass	Intensity	RSD	Conc.	SD	RSD	Units	Blank Intens.	Mode
[	Li	7	10061.7	9.1	-1109.2503	357.547	32.2	ug/L	8369	Standard
	Be	9	36.7	28.4	0.0089	0.005	59.3	ug/L	18	Standard
	Al	27	3291849.8	7.3	27.8528	1.181	4.2	ug/L	215	Standard
[>	Sc	45	50940.5	3.1				ug/L	53004	Standard
[	Ti	47	1235.7	12.5	2.3435	0.204	8.7	ug/L	26	Standard
	V	51	13517.8	7.1	0.8742	0.049	5.6	ug/L	3223	Standard
	Cr	52	12207.3	4.8	0.1978	0.010	4.9	ug/L	10379	Standard
	Cr	53	735.0	15.6	0.4234	0.059	13.9	ug/L	192	Standard
	Mn	55	1345702.6	7.1	77.5999	2.722	3.5	ug/L	1840	Standard
	Co	59	5598.4	7.1	0.4048	0.017	4.2	ug/L	115	Standard
	Ni	60	2274.2	9.9	0.7579	0.049	6.5	ug/L	75	Standard
	Cu	65	3198.7	7.8	1.0990	0.039	3.5	ug/L	155	Standard
	Zn	66	5913.5	8.9	4.1219	0.228	5.5	ug/L	237	Standard
[>	Ge	72	412837.9	4.5				ug/L	413856	Standard
	As	75	216.9	11.6	0.2904	0.024	8.2	ug/L	-197	Standard
	Se	82	50.0	18.3	0.3937	0.085	21.6	ug/L	-5	Standard
[	Se-1	77	114.3	16.7	0.1853	0.148	79.8	ug/L	105	Standard
[>	Ga	71	451.7	25.7				mg/L	225	Standard
[	Rb	85	5004.2	7.3				ug/L	28	Standard
[	Y	89	312731.8	3.3				ug/L	322845	Standard
[>	Rh	103	118.3	14.8				ug/L	92	Standard
[	Mo	98	959.7	11.5	0.1997	0.017	8.5	ug/L	18	Standard
	Ag	107	130.3	9.7	0.0082	0.001	12.6	ug/L	63	Standard
	Cd	111	57.5	18.9	0.0052	0.003	52.3	mg/L	20	Standard
	Cd	114	166.4	10.9	0.0085	0.002	23.5	ug/L	56	Standard
[>	In	115	670816.9	3.4				ug/L	657102	Standard
	Sn	118	965.4	7.5	0.0457	0.008	17.0	ug/L	555	Standard
	Sb	123	808.1	13.3	0.0980	0.010	10.6	ug/L	62	Standard
[	Ba	135	50355.4	6.4	14.4631	0.561	3.9	ug/L	19	Standard
[	Ce	140	10627.1	6.1				ug/L	24	Standard
[>	Tb	159	951371.2	3.3				ug/L	910514	Standard
[	Ho	165	198.0	10.1				ug/L	7	Standard
	Tl	203	368.3	3.1	0.0242	0.001	2.6	ug/L	13	Standard
	Tl	205	11.3	22.2	0.0293	0.006	20.1	ug/L	1	Standard
	Pb	206	1486.4	8.7	0.1070	0.011	10.2	ug/L	342	Standard
	Pb	207	1185.0	9.6	0.0951	0.010	10.8	ug/L	284	Standard
	Pb	208	5555.7	6.5	0.0981	0.006	6.6	ug/L	1363	Standard
	U	238	159.3	15.5	0.0138	0.002	15.8	ug/L	2	Standard
[>	Bi	209	486454.6	1.8				ug/L	470592	Standard

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Na	23	63.3	19.9	5.9684	1.215	20.4	mg/L	2	Standard
Mg	24	9185278.6	6.0	4.6847	0.160	3.4	mg/L	5586	Standard
K	39	275.0	3.6	3.8525	0.193	5.0	mg/L	5	Standard
Ca	43	173.3	14.2	5.4283	0.876	16.1	mg/L	45	Standard
Fe	54	1290.4	10.2	0.3616	0.037	10.3	mg/L	350	Standard
Fe	57	363.3	3.2	0.4661	0.033	7.2	mg/L	102	Standard
Sc-1	45	50940.5	3.1				mg/L	53004	Standard
Cl	35	3.0	33.3				ug/L	2	Standard
Kr	83	139.2	5.0				ug/L	157	Standard
Br	81	4.2	91.7				ug/L	3	Standard
P	31	104868.3	5.9				ug/L	91588	Standard
S	34	29969.6	1.7				ug/L	32556	Standard
Sr	88	201.7	20.0				ug/L	62	Standard
C	12	213.3	15.6				mg/L	133	Standard
N	14	0.0					mg/L	0	Standard
Hg	202	8.3	34.6				mg/L	7	Standard

QC Calculated Values

Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recovery
Li	7			
Be	9			
Al	27			
Sc	45			
Ti	47			
V	51			
Cr	52			
Cr	53			
Mn	55			
Co	59			
Ni	60			
Cu	65			
Zn	66			
Ge	72		99.754	
As	75			
Se	82			
Se-1	77			
Ga	71			
Rb	85			
Y	89			
Rh	103			

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[	Mo	98	
[	Ag	107	
[	Cd	111	
[	Cd	114	
>	In	115	102.087
[	Sn	118	
[	Sb	123	
[	Ba	135	
[	Ce	140	
>	Tb	159	
[	Ho	165	
[	Tl	203	
[	Tl	205	
[	Pb	206	
[	Pb	207	
[	Pb	208	
[	U	238	
>	Bi	209	103.371
[	Na	23	
[	Mg	24	
[	K	39	
[	Ca	43	
[	Fe	54	
[	Fe	57	
>	Sc-1	45	
[	Cl	35	
[	Kr	83	
[	Br	81	
[	P	31	
[	S	34	
[	Sr	88	
[	C	12	
[	N	14	
[	Hg	202	

QC Out of Limits

Measurement Type	Analyte	Mass	Out of Limits Message

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Method 6020 - Summary Report

Sample ID: L1211039401

Sample Date/Time: Sunday, November 18, 2012 10:42:13

Number of Replicates: 3

Autosampler Position: 326

Sample Description: 1

Method File: C:\NexIONData\Method\6020a.mth

Aliquot Volume (mL):

Diluted to Volume (mL):

User Name: JYH user

Cumulative Autodilution Factor: 1

Nexion-ICP 200.8\6020

Concentration Results

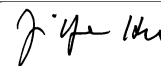
IS	Analyte	Mass	Intensity	RSD	Conc.	SD	RSD	Units	Blank Intens.	Mode
[	Li	7	687251.3	3.0	-409949.4085	22900.536	5.6	ug/L	8369	Standard
	Be	9	33.3	62.5	0.0083	0.011	136.3	ug/L	18	Standard
	Al	27	62183720.5	2.4	552.7105	25.883	4.7	ug/L	215	Standard
[>	Sc	45	48584.5	3.6				ug/L	53004	Standard
	Ti	47	1585.8	8.8	3.1967	0.244	7.6	ug/L	26	Standard
	V	51	9528.7	63.3	0.5789	0.532	91.9	ug/L	3223	Standard
	Cr	52	781882.2	6.6	74.2657	4.581	6.2	ug/L	10379	Standard
	Cr	53	100136.7	7.0	76.7006	5.150	6.7	ug/L	192	Standard
	Mn	55	568448.0	6.1	34.5243	1.912	5.5	ug/L	1840	Standard
	Co	59	15699.5	4.1	1.2278	0.043	3.5	ug/L	115	Standard
	Ni	60	112165.0	5.1	41.2680	1.851	4.5	ug/L	75	Standard
	Cu	65	4103.9	5.4	1.5082	0.079	5.2	ug/L	155	Standard
	Zn	66	30935.3	4.9	23.6581	1.106	4.7	ug/L	237	Standard
[>	Ge	72	391602.6	1.3				ug/L	413856	Standard
	As	75	54743.2	4.4	39.9923	1.597	4.0	ug/L	-197	Standard
	Se	82	200.0	1.9	1.6367	0.051	3.1	ug/L	-5	Standard
[	Se-1	77	625.3	4.6	5.7557	0.269	4.7	ug/L	105	Standard
[>	Ga	71	965.0	8.9				mg/L	225	Standard
	Rb	85	631111.6	1.7				ug/L	28	Standard
	Y	89	320939.8	2.4				ug/L	322845	Standard
[>	Rh	103	885.0	7.3				ug/L	92	Standard
	Mo	98	17724.9	5.4	4.1737	0.235	5.6	ug/L	18	Standard
	Ag	107	173.3	8.7	0.0154	0.002	13.5	ug/L	63	Standard
	Cd	111	448.1	9.3	0.1277	0.013	10.4	mg/L	20	Standard
	Cd	114	1145.5	3.8	0.1253	0.005	4.2	ug/L	56	Standard
[>	In	115	618458.5	0.2				ug/L	657102	Standard
	Sn	118	2367.2	2.3	0.2034	0.006	3.1	ug/L	555	Standard
	Sb	123	7686.5	4.9	1.0400	0.053	5.1	ug/L	62	Standard
[	Ba	135	981854.8	5.4	306.4627	17.249	5.6	ug/L	19	Standard
	Ce	140	11536.4	6.1				ug/L	24	Standard
[>	Tb	159	863894.0	0.7				ug/L	910514	Standard
	Ho	165	3095.7	5.4				ug/L	7	Standard
	Tl	203	233.7	27.8	0.0176	0.006	35.4	ug/L	13	Standard
	Tl	205	2.7	78.1	0.0093	0.006	68.3	ug/L	1	Standard
	Pb	206	2432.9	5.3	0.2430	0.018	7.6	ug/L	342	Standard
	Pb	207	1957.5	3.3	0.2250	0.012	5.5	ug/L	284	Standard
	Pb	208	9243.4	4.4	0.2311	0.015	6.6	ug/L	1363	Standard
	U	238	472.3	3.4	0.0533	0.002	4.0	ug/L	2	Standard
[>	Bi	209	404331.9	1.7				ug/L	470592	Standard

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Na	23	875.0	14.0	86.1305	9.972	11.6	mg/L	2	Standard
Mg	24	S	S	S	S	S	mg/L	5586	Standard
K	39	1833.4	6.7	27.1444	1.065	3.9	mg/L	5	Standard
Ca	43	1605.1	14.3	72.1238	7.947	11.0	mg/L	45	Standard
Fe	54	519.6	6.8	0.0643	0.014	22.0	mg/L	350	Standard
Fe	57	901.7	8.9	1.4167	0.128	9.0	mg/L	102	Standard
Sc-1	45	48584.5	3.6				mg/L	53004	Standard
Cl	35	6.7	37.7				ug/L	2	Standard
Kr	83	148.1	4.7				ug/L	157	Standard
Br	81	3.3	114.6				ug/L	3	Standard
P	31	130059.5	2.9				ug/L	91588	Standard
S	34	28475.9	3.3				ug/L	32556	Standard
Sr	88	6989.9	5.8				ug/L	62	Standard
C	12	3058.6	6.6				mg/L	133	Standard
N	14	0.0					mg/L	0	Standard
Hg	202	231.7	10.0				mg/L	7	Standard

QC Calculated Values

Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recovery
Li	7			
Be	9			
Al	27			
Sc	45			
Ti	47			
V	51			
Cr	52			
Cr	53			
Mn	55			
Co	59			
Ni	60			
Cu	65			
Zn	66			
Ge	72		94.623	
As	75			
Se	82			
Se-1	77			
Ga	71			
Rb	85			
Y	89			
Rh	103			

Sample ID: L1211039401

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[	Mo	98	
[	Ag	107	
[	Cd	111	
[	Cd	114	
>	In	115	94.119
[	Sn	118	
[	Sb	123	
[	Ba	135	
[	Ce	140	
>	Tb	159	
[	Ho	165	
[	Tl	203	
[	Tl	205	
[	Pb	206	
[	Pb	207	
[	Pb	208	
[	U	238	
>	Bi	209	85.920
[	Na	23	
[	Mg	24	
[	K	39	
[	Ca	43	
[	Fe	54	
[	Fe	57	
>	Sc-1	45	
[	Cl	35	
[	Kr	83	
[	Br	81	
[	P	31	
[	S	34	
[	Sr	88	
[	C	12	
[	N	14	
[	Hg	202	

QC Out of Limits

Measurement Type	Analyte	Mass	Out of Limits Message
Ba 135 Upper, S, EEE	Ba	135	

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Method 6020 - Summary Report

Sample ID: L1211039401

Sample Date/Time: Sunday, November 18, 2012 10:45:26

Number of Replicates: 3

Autosampler Position: 327

Sample Description: 50

Method File: C:\NexIONData\Method\6020a.mth

Aliquot Volume (mL):

Diluted to Volume (mL):

User Name: JYH user

Cumulative Autodilution Factor: 1

Nexion-ICP 200.8\6020

Concentration Results

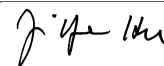
IS	Analyte	Mass	Intensity	RSD	Conc.	SD	RSD	Units	Blank Intens.	Mode
[	Li	7	25272.8	8.5	-10658.0276	842.139	7.9	ug/L	8369	Standard
	Be	9	18.3	31.5	0.0003	0.003	1150.9	ug/L	18	Standard
	Al	27	1246987.5	10.7	11.1300	0.741	6.7	ug/L	215	Standard
[>	Sc	45	48251.8	4.9				ug/L	53004	Standard
[	Ti	47	56.7	14.4	0.0503	0.011	21.4	ug/L	26	Standard
	V	51	3671.6	8.9	0.0416	0.013	32.4	ug/L	3223	Standard
	Cr	52	28198.3	7.7	1.6487	0.097	5.9	ug/L	10379	Standard
	Cr	53	2586.9	9.1	1.7659	0.086	4.9	ug/L	192	Standard
	Mn	55	13367.3	7.9	0.6809	0.031	4.5	ug/L	1840	Standard
	Co	59	433.0	2.8	0.0169	0.001	3.1	ug/L	115	Standard
	Ni	60	2858.9	7.1	0.9603	0.032	3.3	ug/L	75	Standard
	Cu	65	301.3	10.6	0.0513	0.012	22.7	ug/L	155	Standard
	Zn	66	3626.1	6.5	2.4462	0.084	3.4	ug/L	237	Standard
[>	Ge	72	413765.3	4.4				ug/L	413856	Standard
	As	75	905.6	5.0	0.7641	0.022	2.8	ug/L	-197	Standard
	Se	82	7.9	90.8	0.0676	0.057	83.9	ug/L	-5	Standard
[	Se-1	77	127.0	12.7	0.3171	0.173	54.4	ug/L	105	Standard
[>	Ga	71	213.3	23.5				mg/L	225	Standard
[	Rb	85	12952.2	6.7				ug/L	28	Standard
[	Y	89	310159.5	5.9				ug/L	322845	Standard
[>	Rh	103	95.0	19.0				ug/L	92	Standard
[	Mo	98	397.2	10.3	0.0768	0.006	8.2	ug/L	18	Standard
	Ag	107	51.0	8.5	-0.0016	0.000	25.9	ug/L	63	Standard
	Cd	111	22.5	11.6	-0.0048	0.001	14.8	mg/L	20	Standard
	Cd	114	78.2	13.1	-0.0012	0.001	72.3	ug/L	56	Standard
[>	In	115	676989.8	3.1				ug/L	657102	Standard
	Sn	118	427.3	5.8	-0.0077	0.003	38.5	ug/L	555	Standard
	Sb	123	184.8	8.6	0.0200	0.001	7.0	ug/L	62	Standard
[	Ba	135	21209.9	7.4	6.0229	0.281	4.7	ug/L	19	Standard
[	Ce	140	280.7	9.4				ug/L	24	Standard
[>	Tb	159	970501.9	3.3				ug/L	910514	Standard
[	Ho	165	73.3	4.8				ug/L	7	Standard
	Tl	203	91.3	10.2	0.0030	0.001	27.1	ug/L	13	Standard
	Tl	205	2.7	21.7	0.0076	0.001	17.4	ug/L	1	Standard
	Pb	206	434.0	2.6	0.0062	0.001	23.6	ug/L	342	Standard
	Pb	207	357.0	5.2	0.0017	0.001	59.1	ug/L	284	Standard
	Pb	208	1691.0	3.5	0.0041	0.001	17.2	ug/L	1363	Standard
	U	238	14.0	21.4	-0.0002	0.000	104.4	ug/L	2	Standard
[>	Bi	209	509155.7	2.6				ug/L	470592	Standard

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Na	23	21.7	35.3	2.1348	0.644	30.2	mg/L	2	Standard
Mg	24	8176119.0	5.7	4.4048	0.154	3.5	mg/L	5586	Standard
K	39	55.0	45.5	0.7788	0.377	48.4	mg/L	5	Standard
Ca	43	70.0	32.7	1.0611	1.174	110.7	mg/L	45	Standard
Fe	54	367.1	4.8	0.0015	0.004	273.0	mg/L	350	Standard
Fe	57	98.3	19.3	0.0419	0.035	84.3	mg/L	102	Standard
Sc-1	45	48251.8	4.9				mg/L	53004	Standard
Cl	35	2.3	65.5				ug/L	2	Standard
Kr	83	132.3	4.6				ug/L	157	Standard
Br	81	5.0	132.3				ug/L	3	Standard
P	31	90761.3	3.9				ug/L	91588	Standard
S	34	29255.7	0.9				ug/L	32556	Standard
Sr	88	146.7	15.7				ug/L	62	Standard
C	12	345.0	17.6				mg/L	133	Standard
N	14	0.0					mg/L	0	Standard
Hg	202	6.7	43.3				mg/L	7	Standard

QC Calculated Values

Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recovery
Li	7			
Be	9			
Al	27			
Sc	45			
Ti	47			
V	51			
Cr	52			
Cr	53			
Mn	55			
Co	59			
Ni	60			
Cu	65			
Zn	66			
Ge	72		99.978	
As	75			
Se	82			
Se-1	77			
Ga	71			
Rb	85			
Y	89			
Rh	103			

Sample ID: L1211039401

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[	Mo	98	
[	Ag	107	
[	Cd	111	
[	Cd	114	
>	In	115	103.027
[	Sn	118	
[	Sb	123	
[	Ba	135	
[	Ce	140	
>	Tb	159	
[	Ho	165	
[	Tl	203	
[	Tl	205	
[	Pb	206	
[	Pb	207	
[	Pb	208	
[	U	238	
>	Bi	209	108.195
[	Na	23	
[	Mg	24	
[	K	39	
[	Ca	43	
[	Fe	54	
[	Fe	57	
>	Sc-1	45	
[	Cl	35	
[	Kr	83	
[	Br	81	
[	P	31	
[	S	34	
[	Sr	88	
[	C	12	
[	N	14	
[	Hg	202	

QC Out of Limits

Measurement Type	Analyte	Mass	Out of Limits Message

Sample ID: L1211039401

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Method 6020 - Summary Report

Sample ID: L1211033718

Sample Date/Time: Sunday, November 18, 2012 10:48:38

Number of Replicates: 3

Autosampler Position: 328

Sample Description: 100

Method File: C:\NexIONData\Method\6020a.mth

Aliquot Volume (mL):

Diluted to Volume (mL):

User Name: JYH user

Cumulative Autodilution Factor: 1

Nexion-ICP 200.8\6020

Concentration Results

IS	Analyte	Mass	Intensity	RSD	Conc.	SD	RSD	Units	Blank Intens.	Mode
[	Li	7	12538.5	4.2	-2877.9488	232.709	8.1	ug/L	8369	Standard
	Be	9	26.7	96.2	0.0045	0.013	296.7	ug/L	18	Standard
	Al	27	117729.2	2.6	1.0420	0.029	2.8	ug/L	215	Standard
[>	Sc	45	48646.3	1.4				ug/L	53004	Standard
[	Ti	47	108.0	17.3	0.1524	0.036	23.4	ug/L	26	Standard
	V	51	5580.4	3.6	0.2078	0.021	10.0	ug/L	3223	Standard
	Cr	52	17528.5	2.7	0.6961	0.061	8.8	ug/L	10379	Standard
	Cr	53	1094.2	7.7	0.6936	0.077	11.1	ug/L	192	Standard
	Mn	55	48779.4	1.9	2.7515	0.093	3.4	ug/L	1840	Standard
	Co	59	1187.7	0.6	0.0744	0.002	3.1	ug/L	115	Standard
	Ni	60	837.4	2.7	0.2593	0.006	2.2	ug/L	75	Standard
	Cu	65	594.7	2.5	0.1595	0.010	6.4	ug/L	155	Standard
	Zn	66	4180.6	3.7	2.8839	0.156	5.4	ug/L	237	Standard
[>	Ge	72	409745.4	2.5				ug/L	413856	Standard
	As	75	-149.4	11.3	0.0359	0.013	36.2	ug/L	-197	Standard
	Se	82	-4.7	45.9	-0.0311	0.017	53.6	ug/L	-5	Standard
[	Se-1	77	94.7	10.8	-0.0037	0.111	2986.0	ug/L	105	Standard
[>	Ga	71	498.3	17.3				mg/L	225	Standard
[	Rb	85	2266.8	3.8				ug/L	28	Standard
[	Y	89	308821.1	1.8				ug/L	322845	Standard
[>	Rh	103	128.3	11.9				ug/L	92	Standard
[	Mo	98	58.2	12.3	0.0041	0.002	40.7	ug/L	18	Standard
	Ag	107	57.3	11.3	-0.0007	0.001	99.3	ug/L	63	Standard
	Cd	111	37.6	21.5	-0.0004	0.002	660.9	mg/L	20	Standard
	Cd	114	111.6	9.4	0.0026	0.001	38.4	ug/L	56	Standard
[>	In	115	665758.6	1.3				ug/L	657102	Standard
	Sn	118	450.7	2.4	-0.0047	0.002	33.5	ug/L	555	Standard
	Sb	123	34.8	4.8	0.0015	0.000	13.5	ug/L	62	Standard
[	Ba	135	3497.4	1.2	0.9942	0.012	1.2	ug/L	19	Standard
[	Ce	140	18592.1	5.1				ug/L	24	Standard
[>	Tb	159	956144.4	1.6				ug/L	910514	Standard
[	Ho	165	293.3	5.6				ug/L	7	Standard
	Tl	203	49.3	8.2	-0.0001	0.000	442.5	ug/L	13	Standard
	Tl	205	1.0	100.0	0.0037	0.002	64.2	ug/L	1	Standard
	Pb	206	424555.6	3.2	38.4660	1.572	4.1	ug/L	342	Standard
	Pb	207	340245.9	2.3	36.2597	1.395	3.8	ug/L	284	Standard
	Pb	208	1608296.3	2.9	36.9163	1.479	4.0	ug/L	1363	Standard
	U	238	71.7	3.5	0.0051	0.000	5.4	ug/L	2	Standard
[>	Bi	209	505556.1	1.8				ug/L	470592	Standard

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Na	23	1.7	173.2	0.1681	0.283	168.1	mg/L	2	Standard
Mg	24	29344.6	25.1	0.0127	0.004	29.5	mg/L	5586	Standard
K	39	5.0	100.0	0.0333	0.075	226.1	mg/L	5	Standard
Ca	43	33.3	22.9	-0.6846	0.353	51.6	mg/L	45	Standard
Fe	54	792.4	10.8	0.1780	0.032	18.2	mg/L	350	Standard
Fe	57	171.7	17.1	0.1660	0.054	32.8	mg/L	102	Standard
Sc-1	45	48646.3	1.4				mg/L	53004	Standard
Cl	35	4.3	35.3				ug/L	2	Standard
Kr	83	135.4	3.8				ug/L	157	Standard
Br	81	4.2	91.7				ug/L	3	Standard
P	31	91237.3	2.3				ug/L	91588	Standard
S	34	30772.1	1.8				ug/L	32556	Standard
Sr	88	63.3	16.4				ug/L	62	Standard
C	12	196.7	21.9				mg/L	133	Standard
N	14	0.0					mg/L	0	Standard
Hg	202	1.7	173.2				mg/L	7	Standard

QC Calculated Values

Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recovery
Li	7			
Be	9			
Al	27			
Sc	45			
Ti	47			
V	51			
Cr	52			
Cr	53			
Mn	55			
Co	59			
Ni	60			
Cu	65			
Zn	66			
Ge	72		99.007	
As	75			
Se	82			
Se-1	77			
Ga	71			
Rb	85			
Y	89			
Rh	103			

Sample ID: L1211033718

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[	Mo	98	
[	Ag	107	
[	Cd	111	
[	Cd	114	
>	In	115	101.317
[	Sn	118	
[	Sb	123	
[	Ba	135	
[	Ce	140	
>	Tb	159	
[	Ho	165	
[	Tl	203	
[	Tl	205	
[	Pb	206	
[	Pb	207	
[	Pb	208	
[	U	238	
>	Bi	209	107.430
[	Na	23	
[	Mg	24	
[	K	39	
[	Ca	43	
[	Fe	54	
[	Fe	57	
>	Sc-1	45	
[	Cl	35	
[	Kr	83	
[	Br	81	
[	P	31	
[	S	34	
[	Sr	88	
[	C	12	
[	N	14	
[	Hg	202	

QC Out of Limits

Measurement Type	Analyte	Mass	Out of Limits Message

Sample ID: L1211033718

Report Date/Time: Sunday, November 18, 2012 10:51:10

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Method 6020 - Summary Report

Sample ID: QC Std 6

Sample Date/Time: Sunday, November 18, 2012 10:51:51

Number of Replicates: 3

Autosampler Position: 101

Sample Description:

Method File: C:\NexIONData\Method\6020a.mth

Aliquot Volume (mL):

Diluted to Volume (mL):

User Name: JYH user

Cumulative Autodilution Factor: 1

Nexion-ICP 200.8\6020

Concentration Results

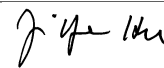
IS	Analyte	Mass	Intensity	RSD	Conc.	SD	RSD	Units	Blank Intens.	Mode
[	Li	7	9196.1	7.0	-886.1440	366.649	41.4	ug/L	8369	Standard
	Be	9	117264.5	5.1	61.5951	2.789	4.5	ug/L	18	Standard
	Al	27	7140128.6	5.9	63.5255	3.376	5.3	ug/L	215	Standard
[>	Sc	45	48479.1	0.7				ug/L	53004	Standard
[	Ti	47	47717.1	4.9	93.1890	4.077	4.4	ug/L	26	Standard
	V	51	576899.0	3.1	48.6139	1.278	2.6	ug/L	3223	Standard
	Cr	52	543848.5	3.8	48.8309	1.615	3.3	ug/L	10379	Standard
	Cr	53	68130.5	4.1	49.5998	1.771	3.6	ug/L	192	Standard
	Mn	55	851327.0	2.8	49.2255	1.101	2.2	ug/L	1840	Standard
	Co	59	666302.3	4.4	50.1771	1.936	3.9	ug/L	115	Standard
	Ni	60	142143.0	4.0	49.7562	1.722	3.5	ug/L	75	Standard
	Cu	65	140031.6	3.2	50.7605	1.350	2.7	ug/L	155	Standard
	Zn	66	69446.6	4.1	50.7419	1.819	3.6	ug/L	237	Standard
[>	Ge	72	411677.6	0.6				ug/L	413856	Standard
	As	75	72210.7	2.9	50.1431	1.188	2.4	ug/L	-197	Standard
	Se	82	6433.9	3.1	49.9097	1.277	2.6	ug/L	-5	Standard
[	Se-1	77	4963.5	3.0	49.8684	1.220	2.4	ug/L	105	Standard
[>	Ga	71	261.7	9.8				mg/L	225	Standard
[	Rb	85	966.7	8.8				ug/L	28	Standard
[	Y	89	313386.4	1.1				ug/L	322845	Standard
[>	Rh	103	111.7	44.9				ug/L	92	Standard
[	Mo	98	437213.1	3.6	94.5325	5.047	5.3	ug/L	18	Standard
	Ag	107	433846.1	1.7	53.3118	1.914	3.6	ug/L	63	Standard
	Cd	111	181677.8	3.3	51.5824	2.651	5.1	mg/L	20	Standard
	Cd	114	465047.9	3.1	50.1649	2.380	4.7	ug/L	56	Standard
[>	In	115	675267.5	2.0				ug/L	657102	Standard
	Sn	118	517507.0	4.6	50.5964	3.256	6.4	ug/L	555	Standard
	Sb	123	405393.7	3.0	50.4015	2.445	4.9	ug/L	62	Standard
[	Ba	135	173572.1	3.6	49.6319	2.704	5.4	ug/L	19	Standard
[	Ce	140	703.7	7.7				ug/L	24	Standard
[>	Tb	159	965513.9	1.5				ug/L	910514	Standard
[	Ho	165	457.7	5.7				ug/L	7	Standard
	Tl	203	690486.1	2.8	50.7331	1.291	2.5	ug/L	13	Standard
	Tl	205	22275.7	2.5	53.6484	1.230	2.3	ug/L	1	Standard
	Pb	206	553195.0	3.7	50.7011	1.788	3.5	ug/L	342	Standard
	Pb	207	471231.7	4.5	50.7982	2.196	4.3	ug/L	284	Standard
	Pb	208	2176028.4	3.9	50.5255	1.834	3.6	ug/L	1363	Standard
	U	238	569153.6	4.7	53.4004	2.411	4.5	ug/L	2	Standard
[>	Bi	209	499687.4	0.3				ug/L	470592	Standard

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Na	23	55.0	24.1	5.4383	1.307	24.0	mg/L	2	Standard
Mg	24	11385027.6	4.2	6.1043	0.219	3.6	mg/L	5586	Standard
K	39	311.7	31.5	4.5934	1.464	31.9	mg/L	5	Standard
Ca	43	121.7	6.3	3.4302	0.326	9.5	mg/L	45	Standard
Fe	54	13979.6	3.3	5.7184	0.179	3.1	mg/L	350	Standard
Fe	57	3400.4	5.1	5.7094	0.266	4.7	mg/L	102	Standard
Sc-1	45	48479.1	0.7				mg/L	53004	Standard
Cl	35	2.7	78.1				ug/L	2	Standard
Kr	83	133.1	1.9				ug/L	157	Standard
Br	81	3.3	43.3				ug/L	3	Standard
P	31	93283.9	2.9				ug/L	91588	Standard
S	34	33668.2	1.7				ug/L	32556	Standard
Sr	88	55.0	27.3				ug/L	62	Standard
C	12	173.3	16.4				mg/L	133	Standard
N	14	1.7	173.2				mg/L	0	Standard
Hg	202	3.3	173.2				mg/L	7	Standard

QC Calculated Values

Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recovery
Li	7			
Be	9	123.190		
Al	27	127.051		
Sc	45			
Ti	47	93.189		
V	51	97.228		
Cr	52	97.662		
Cr	53			
Mn	55	98.451		
Co	59	100.354		
Ni	60	99.512		
Cu	65	101.521		
Zn	66	101.484		
Ge	72		99.474	
As	75	100.286		
Se	82	99.819		
Se-1	77			
Ga	71			
Rb	85			
Y	89			
Rh	103			

Sample ID: QC Std 6

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[	Mo	98	94.533	
[	Ag	107	106.624	
[	Cd	111	103.165	
[	Cd	114		
>	In	115		102.765
[	Sn	118	101.193	
[	Sb	123	100.803	
[	Ba	135	99.264	
[	Ce	140		
>	Tb	159		
[	Ho	165		
[	Tl	203	101.466	
[	Tl	205		
[	Pb	206	101.402	
[	Pb	207	101.596	
[	Pb	208	101.051	
[	U	238	106.801	
>	Bi	209		106.183
[	Na	23		
[	Mg	24		
[	K	39		
[	Ca	43		
[	Fe	54		
[	Fe	57		
>	Sc-1	45		
[	Cl	35		
[	Kr	83		
[	Br	81		
[	P	31		
[	S	34		
[	Sr	88		
[	C	12		
[	N	14		
[	Hg	202		

QC Out of Limits

Measurement Type	Analyte	Mass	Out of Limits Message
QC Std 6	Be	9	
QC Std 6	Al	27	

Sample ID: QC Std 6

Report Date/Time: Sunday, November 18, 2012 10:54:23

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Method 6020 - Summary Report

Sample ID: QC Std 7

Sample Date/Time: Sunday, November 18, 2012 10:55:10

Number of Replicates: 3

Autosampler Position: 102

Sample Description:

Method File: C:\NexIONData\Method\6020a.mth

Aliquot Volume (mL):

Diluted to Volume (mL):

User Name: JYH user

Cumulative Autodilution Factor: 1

Nexion-ICP 200.8\6020

Concentration Results

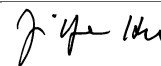
IS	Analyte	Mass	Intensity	RSD	Conc.	SD	RSD	Units	Blank Intens.	Mode
[	Li	7	8909.3	3.8	-774.3385	32.501	4.2	ug/L	8369	Standard
	Be	9	13.3	78.1	-0.0025	0.005	215.4	ug/L	18	Standard
	Al	27	828.4	48.6	0.0053	0.004	67.8	ug/L	215	Standard
[>	Sc	45	47934.1	3.2				ug/L	53004	Standard
[	Ti	47	22.0	20.8	-0.0160	0.010	62.1	ug/L	26	Standard
	V	51	2843.0	0.7	-0.0235	0.009	38.2	ug/L	3223	Standard
	Cr	52	9471.6	1.9	-0.0385	0.024	61.8	ug/L	10379	Standard
	Cr	53	250.0	1.7	0.0749	0.006	8.0	ug/L	192	Standard
	Mn	55	1640.1	3.5	0.0072	0.002	32.4	ug/L	1840	Standard
	Co	59	92.3	11.4	-0.0085	0.001	10.7	ug/L	115	Standard
	Ni	60	69.7	4.4	-0.0108	0.001	5.6	ug/L	75	Standard
	Cu	65	157.0	4.6	0.0001	0.001	707.1	ug/L	155	Standard
	Zn	66	241.0	5.8	-0.0205	0.011	53.5	ug/L	237	Standard
[>	Ge	72	406836.0	3.3				ug/L	413856	Standard
	As	75	-198.0	15.5	0.0010	0.024	2471.3	ug/L	-197	Standard
	Se	82	-4.1	169.0	-0.0270	0.055	204.8	ug/L	-5	Standard
[	Se-1	77	102.3	1.5	0.0832	0.049	58.6	ug/L	105	Standard
[>	Ga	71	218.3	23.8				mg/L	225	Standard
[	Rb	85	33.3	17.3				ug/L	28	Standard
[	Y	89	302660.0	3.2				ug/L	322845	Standard
[>	Rh	103	108.3	21.8				ug/L	92	Standard
[	Mo	98	37.7	29.5	-0.0005	0.002	446.1	ug/L	18	Standard
	Ag	107	74.0	29.1	0.0013	0.003	194.6	ug/L	63	Standard
	Cd	111	30.0	64.4	-0.0027	0.005	198.9	mg/L	20	Standard
	Cd	114	99.4	74.0	0.0011	0.008	668.5	ug/L	56	Standard
[>	In	115	667162.6	3.3				ug/L	657102	Standard
	Sn	118	495.3	17.4	-0.0005	0.007	1443.3	ug/L	555	Standard
	Sb	123	299.8	56.4	0.0345	0.020	58.1	ug/L	62	Standard
[	Ba	135	46.7	92.4	-0.0066	0.012	179.8	ug/L	19	Standard
[	Ce	140	28.0	16.4				ug/L	24	Standard
[>	Tb	159	942316.8	3.8				ug/L	910514	Standard
[	Ho	165	11.0	32.8				ug/L	7	Standard
	Tl	203	69.3	104.6	0.0014	0.005	368.4	ug/L	13	Standard
	Tl	205	2.0	100.0	0.0061	0.005	77.2	ug/L	1	Standard
	Pb	206	402.0	22.6	0.0042	0.007	169.4	ug/L	342	Standard
	Pb	207	319.7	16.9	-0.0014	0.005	335.2	ug/L	284	Standard
	Pb	208	1568.7	16.7	0.0023	0.005	208.0	ug/L	1363	Standard
	U	238	41.3	79.5	0.0023	0.003	128.2	ug/L	2	Standard
[>	Bi	209	494511.9	3.6				ug/L	470592	Standard

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Na	23	0.0		0.0050	0.000	0.0	mg/L	2	Standard
Mg	24	12016.5	11.7	0.0036	0.001	18.9	mg/L	5586	Standard
K	39	5.0	100.0	0.0332	0.073	220.0	mg/L	5	Standard
Ca	43	31.7	39.7	-0.7314	0.635	86.8	mg/L	45	Standard
Fe	54	378.7	14.0	0.0072	0.019	261.1	mg/L	350	Standard
Fe	57	86.7	14.5	0.0221	0.019	87.0	mg/L	102	Standard
Sc-1	45	47934.1	3.2				mg/L	53004	Standard
Cl	35	3.0	33.3				ug/L	2	Standard
Kr	83	134.9	1.1				ug/L	157	Standard
Br	81	5.0	50.0				ug/L	3	Standard
P	31	93180.3	4.8				ug/L	91588	Standard
S	34	34026.5	2.3				ug/L	32556	Standard
Sr	88	60.0	28.9				ug/L	62	Standard
C	12	161.7	10.9				mg/L	133	Standard
N	14	0.0					mg/L	0	Standard
Hg	202	1.7	173.2				mg/L	7	Standard

QC Calculated Values

Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recovery
Li	7			
Be	9			
Al	27			
Sc	45			
Ti	47			
V	51			
Cr	52			
Cr	53			
Mn	55			
Co	59			
Ni	60			
Cu	65			
Zn	66			
Ge	72		98.304	
As	75			
Se	82			
Se-1	77			
Ga	71			
Rb	85			
Y	89			
Rh	103			

Sample ID: QC Std 7

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[	Mo	98	
[	Ag	107	
[	Cd	111	
[	Cd	114	
>	In	115	101.531
[	Sn	118	
[	Sb	123	
[	Ba	135	
[	Ce	140	
>	Tb	159	
[	Ho	165	
[	Tl	203	
[	Tl	205	
[	Pb	206	
[	Pb	207	
[	Pb	208	
[	U	238	
>	Bi	209	105.083
[	Na	23	
[	Mg	24	
[	K	39	
[	Ca	43	
[	Fe	54	
[	Fe	57	
>	Sc-1	45	
[	Cl	35	
[	Kr	83	
[	Br	81	
[	P	31	
[	S	34	
[	Sr	88	
[	C	12	
[	N	14	
[	Hg	202	

QC Out of Limits

Measurement Type	Analyte	Mass	Out of Limits Message

Sample ID: QC Std 7

Report Date/Time: Sunday, November 18, 2012 10:57:42

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Method 6020 - Summary Report

Sample ID: QC Std 8

Sample Date/Time: Sunday, November 18, 2012 10:58:24

Number of Replicates: 3

Autosampler Position: 202

Sample Description:

Method File: C:\NexIONData\Method\6020a.mth

Aliquot Volume (mL):

Diluted to Volume (mL):

User Name: JYH user

Cumulative Autodilution Factor: 1

Nexion-ICP 200.8\6020

Concentration Results

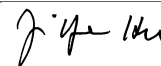
IS	Analyte	Mass	Intensity	RSD	Conc.	SD	RSD	Units	Blank Intens.	Mode
[	Li	7	8967.7	2.1	-859.9987	100.582	11.7	ug/L	8369	Standard
	Be	9	428.3	7.0	0.2200	0.009	4.0	ug/L	18	Standard
	Al	27	5365.7	150.1	0.0449	0.070	156.0	ug/L	215	Standard
[>	Sc	45	47524.5	3.6				ug/L	53004	Standard
[	Ti	47	23.0	56.5	-0.0133	0.026	192.2	ug/L	26	Standard
	V	51	6888.5	3.1	0.3359	0.016	4.8	ug/L	3223	Standard
	Cr	52	17023.6	2.8	0.6942	0.030	4.4	ug/L	10379	Standard
	Cr	53	1198.4	5.9	0.7942	0.051	6.4	ug/L	192	Standard
	Mn	55	11633.1	32.1	0.6063	0.215	35.4	ug/L	1840	Standard
	Co	59	5007.5	5.9	0.3744	0.020	5.3	ug/L	115	Standard
	Ni	60	4648.7	5.4	1.6478	0.074	4.5	ug/L	75	Standard
	Cu	65	2352.5	4.6	0.8251	0.036	4.4	ug/L	155	Standard
	Zn	66	8623.1	5.0	6.3397	0.277	4.4	ug/L	237	Standard
[>	Ge	72	398190.2	1.1				ug/L	413856	Standard
	As	75	377.3	8.6	0.4100	0.021	5.1	ug/L	-197	Standard
	Se	82	48.2	14.5	0.3918	0.052	13.4	ug/L	-5	Standard
[	Se-1	77	129.7	5.8	0.3945	0.074	18.6	ug/L	105	Standard
[>	Ga	71	211.7	5.9				mg/L	225	Standard
[	Rb	85	28.3	66.8				ug/L	28	Standard
[	Y	89	298744.7	2.9				ug/L	322845	Standard
[>	Rh	103	83.3	3.5				ug/L	92	Standard
[	Mo	98	29.1	62.3	-0.0022	0.004	177.6	ug/L	18	Standard
	Ag	107	3256.7	3.0	0.4054	0.008	1.9	ug/L	63	Standard
	Cd	111	806.3	4.6	0.2252	0.009	4.0	mg/L	20	Standard
	Cd	114	2102.4	5.3	0.2246	0.010	4.3	ug/L	56	Standard
[>	In	115	653579.5	1.2				ug/L	657102	Standard
	Sn	118	401.3	3.6	-0.0088	0.002	19.4	ug/L	555	Standard
	Sb	123	3116.8	7.0	0.3970	0.023	5.8	ug/L	62	Standard
[	Ba	135	2415.9	6.8	0.6933	0.040	5.8	ug/L	19	Standard
[	Ce	140	28.7	22.4				ug/L	24	Standard
[>	Tb	159	925552.7	1.3				ug/L	910514	Standard
[	Ho	165	9.0	58.8				ug/L	7	Standard
	Tl	203	1075.0	9.7	0.0777	0.007	8.7	ug/L	13	Standard
	Tl	205	37.7	19.9	0.0946	0.017	18.4	ug/L	1	Standard
	Pb	206	2452.2	3.7	0.1988	0.008	3.9	ug/L	342	Standard
	Pb	207	2056.8	6.5	0.1924	0.011	5.9	ug/L	284	Standard
	Pb	208	9594.2	5.9	0.1952	0.011	5.6	ug/L	1363	Standard
	U	238	4231.3	6.4	0.4074	0.019	4.6	ug/L	2	Standard
[>	Bi	209	484880.9	1.9				ug/L	470592	Standard

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Na	23	1.7	173.2	0.1770	0.298	168.3	mg/L	2	Standard
Mg	24	3647.5	118.5	-0.0010	0.002	229.8	mg/L	5586	Standard
K	39	1.7	173.2	-0.0155	0.045	290.1	mg/L	5	Standard
Ca	43	56.7	56.7	0.4965	1.590	320.1	mg/L	45	Standard
Fe	54	311.0	10.5	-0.0204	0.009	44.3	mg/L	350	Standard
Fe	57	53.3	21.7	-0.0342	0.023	67.5	mg/L	102	Standard
Sc-1	45	47524.5	3.6				mg/L	53004	Standard
Cl	35	3.3	17.3				ug/L	2	Standard
Kr	83	134.0	2.0				ug/L	157	Standard
Br	81	5.8	49.5				ug/L	3	Standard
P	31	113249.2	0.8				ug/L	91588	Standard
S	34	32253.5	0.1				ug/L	32556	Standard
Sr	88	68.3	23.5				ug/L	62	Standard
C	12	193.3	12.8				mg/L	133	Standard
N	14	0.0					mg/L	0	Standard
Hg	202	0.0					mg/L	7	Standard

QC Calculated Values

Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recovery
Li	7			
Be	9	109.980		
Al	27			
Sc	45			
Ti	47			
V	51	83.987		
Cr	52	86.777		
Cr	53			
Mn	55	121.251		
Co	59	93.603		
Ni	60	102.987		
Cu	65	103.140		
Zn	66	101.435		
Ge	72		96.215	
As	75	102.493		
Se	82	97.955		
Se-1	77			
Ga	71			
Rb	85			
Y	89			
Rh	103			

Sample ID: QC Std 8

Report Date/Time: Sunday, November 18, 2012 11:00:57

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[	Mo	98		
[	Ag	107	101.349	
[	Cd	111	93.832	
[	Cd	114		
>	In	115		99.464
[	Sn	118		
[	Sb	123	99.258	
[	Ba	135	92.435	
[	Ce	140		
>	Tb	159		
[	Ho	165		
[	Tl	203	97.134	
[	Tl	205		
[	Pb	206		
[	Pb	207		
[	Pb	208	97.613	
[	U	238	101.851	
>	Bi	209		103.036
[	Na	23		
[	Mg	24		
[	K	39		
[	Ca	43		
[	Fe	54		
[	Fe	57		
>	Sc-1	45		
[	Cl	35		
[	Kr	83		
[	Br	81		
[	P	31		
[	S	34		
[	Sr	88		
[	C	12		
[	N	14		
[	Hg	202		

QC Out of Limits

Measurement Type	Analyte	Mass	Out of Limits Message

Sample ID: QC Std 8

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Method 6020 - Summary Report

Sample ID: PBW 35 WG414324-03

Sample Date/Time: Sunday, November 18, 2012 11:01:44

Number of Replicates: 3

Autosampler Position: 205

Sample Description: 1

Method File: C:\NexIONData\Method\6020a.mth

Aliquot Volume (mL):

Diluted to Volume (mL):

User Name: JYH user

Cumulative Autodilution Factor: 1

Nexion-ICP 200.8\6020

Concentration Results

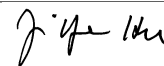
IS	Analyte	Mass	Intensity	RSD	Conc.	SD	RSD	Units	Blank Intens.	Mode
[	Li	7	8735.9	7.2	-946.4494	233.229	24.6	ug/L	8369	Standard
	Be	9	6.7	114.6	-0.0058	0.004	69.6	ug/L	18	Standard
	Al	27	360.0	13.2	0.0012	0.000	32.2	ug/L	215	Standard
[>	Sc	45	45536.7	4.0				ug/L	53004	Standard
[	Ti	47	20.3	27.1	-0.0171	0.012	71.4	ug/L	26	Standard
	V	51	2786.8	2.3	-0.0157	0.007	41.4	ug/L	3223	Standard
	Cr	52	8887.9	2.1	-0.0487	0.024	48.8	ug/L	10379	Standard
	Cr	53	206.7	18.4	0.0503	0.023	44.9	ug/L	192	Standard
	Mn	55	1539.1	2.6	0.0061	0.002	26.9	ug/L	1840	Standard
	Co	59	61.3	29.2	-0.0106	0.001	11.4	ug/L	115	Standard
	Ni	60	302.3	5.3	0.0773	0.001	1.8	ug/L	75	Standard
	Cu	65	273.0	4.0	0.0482	0.006	12.3	ug/L	155	Standard
	Zn	66	2126.8	7.4	1.4624	0.080	5.5	ug/L	237	Standard
[>	Ge	72	386352.7	4.3				ug/L	413856	Standard
	As	75	-199.1	16.9	-0.0074	0.028	380.3	ug/L	-197	Standard
	Se	82	-10.1	69.1	-0.0791	0.061	76.7	ug/L	-5	Standard
[	Se-1	77	92.0	12.2	0.0234	0.078	334.5	ug/L	105	Standard
[>	Ga	71	216.7	28.9				mg/L	225	Standard
[	Rb	85	36.7	20.8				ug/L	28	Standard
[	Y	89	292992.4	4.2				ug/L	322845	Standard
[>	Rh	103	93.3	45.6				ug/L	92	Standard
[	Mo	98	17.9	5.6	-0.0046	0.000	3.6	ug/L	18	Standard
	Ag	107	60.3	18.3	-0.0001	0.001	1047.2	ug/L	63	Standard
	Cd	111	17.3	44.9	-0.0061	0.002	35.2	mg/L	20	Standard
	Cd	114	56.7	26.3	-0.0032	0.002	50.3	ug/L	56	Standard
[>	In	115	642684.5	3.0				ug/L	657102	Standard
	Sn	118	322.7	2.0	-0.0162	0.001	8.2	ug/L	555	Standard
	Sb	123	53.5	34.6	0.0040	0.002	54.3	ug/L	62	Standard
[	Ba	135	21.7	22.8	-0.0134	0.001	10.6	ug/L	19	Standard
[	Ce	140	32.7	40.0				ug/L	24	Standard
[>	Tb	159	910959.2	3.7				ug/L	910514	Standard
[	Ho	165	8.7	17.6				ug/L	7	Standard
	Tl	203	27.0	12.8	-0.0016	0.000	18.2	ug/L	13	Standard
	Tl	205	0.7	173.2	0.0030	0.003	98.1	ug/L	1	Standard
	Pb	206	327.3	8.7	-0.0017	0.003	181.3	ug/L	342	Standard
	Pb	207	259.3	11.7	-0.0071	0.003	38.3	ug/L	284	Standard
	Pb	208	1283.4	3.8	-0.0035	0.001	20.0	ug/L	1363	Standard
	U	238	1.3	114.6	-0.0014	0.000	10.4	ug/L	2	Standard
[>	Bi	209	481154.7	2.3				ug/L	470592	Standard

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Na	23	0.0		0.0050	0.000	0.0	mg/L	2	Standard
Mg	24	1176.7	8.1	-0.0022	0.000	1.7	mg/L	5586	Standard
K	39	5.0	0.0	0.0379	0.003	8.3	mg/L	5	Standard
Ca	43	40.0	43.3	-0.2556	0.842	329.4	mg/L	45	Standard
Fe	54	340.2	1.6	-0.0012	0.005	435.8	mg/L	350	Standard
Fe	57	100.0	27.8	0.0535	0.043	80.8	mg/L	102	Standard
Sc-1	45	45536.7	4.0				mg/L	53004	Standard
Cl	35	3.3	45.8				ug/L	2	Standard
Kr	83	136.1	4.9				ug/L	157	Standard
Br	81	2.5	100.0				ug/L	3	Standard
P	31	109397.8	2.0				ug/L	91588	Standard
S	34	31152.8	2.2				ug/L	32556	Standard
Sr	88	53.3	47.2				ug/L	62	Standard
C	12	143.3	12.3				mg/L	133	Standard
N	14	1.7	173.2				mg/L	0	Standard
Hg	202	3.3	86.6				mg/L	7	Standard

QC Calculated Values

Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recovery
Li	7			
Be	9			
Al	27			
Sc	45			
Ti	47			
V	51			
Cr	52			
Cr	53			
Mn	55			
Co	59			
Ni	60			
Cu	65			
Zn	66			
Ge	72		93.354	
As	75			
Se	82			
Se-1	77			
Ga	71			
Rb	85			
Y	89			
Rh	103			

Sample ID: PBW 35 WG414324-03

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[	Mo	98	
[	Ag	107	
[	Cd	111	
[	Cd	114	
>	In	115	97.806
[	Sn	118	
[	Sb	123	
[	Ba	135	
[	Ce	140	
>	Tb	159	
[	Ho	165	
[	Tl	203	
[	Tl	205	
[	Pb	206	
[	Pb	207	
[	Pb	208	
[	U	238	
>	Bi	209	102.245
[	Na	23	
[	Mg	24	
[	K	39	
[	Ca	43	
[	Fe	54	
[	Fe	57	
>	Sc-1	45	
[	Cl	35	
[	Kr	83	
[	Br	81	
[	P	31	
[	S	34	
[	Sr	88	
[	C	12	
[	N	14	
[	Hg	202	

QC Out of Limits

Measurement Type	Analyte	Mass	Out of Limits Message

Sample ID: PBW 35 WG414324-03

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Method 6020 - Summary Report

Sample ID: LCSW 35 WG414324-04

Sample Date/Time: Sunday, November 18, 2012 11:04:56

Number of Replicates: 3

Autosampler Position: 206

Sample Description: 1

Method File: C:\NexIONData\Method\6020a.mth

Aliquot Volume (mL):

Diluted to Volume (mL):

User Name: JYH user

Cumulative Autodilution Factor: 1

Nexion-ICP 200.8\6020

Concentration Results

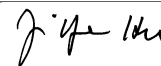
IS	Analyte	Mass	Intensity	RSD	Conc.	SD	RSD	Units	Blank Intens.	Mode
[	Li	7	8912.6	3.0	-945.1092	188.836	20.0	ug/L	8369	Standard
	Be	9	48086.4	6.8	26.2916	0.237	0.9	ug/L	18	Standard
	Al	27	5017.6	33.7	0.0449	0.018	40.9	ug/L	215	Standard
[>	Sc	45	46563.3	6.3				ug/L	53004	Standard
[	Ti	47	26.3	22.3	-0.0060	0.012	205.5	ug/L	26	Standard
	V	51	246866.3	6.2	21.4733	1.036	4.8	ug/L	3223	Standard
	Cr	52	245923.8	8.0	22.4566	1.422	6.3	ug/L	10379	Standard
	Cr	53	29441.2	7.3	22.2137	1.248	5.6	ug/L	192	Standard
	Mn	55	379055.3	7.7	22.7243	1.285	5.7	ug/L	1840	Standard
	Co	59	289767.9	6.9	22.6674	1.119	4.9	ug/L	115	Standard
	Ni	60	62162.8	5.2	22.5996	0.845	3.7	ug/L	75	Standard
	Cu	65	62513.9	5.2	23.5294	1.084	4.6	ug/L	155	Standard
	Zn	66	31383.2	6.6	23.7284	1.265	5.3	ug/L	237	Standard
[>	Ge	72	396029.9	3.0				ug/L	413856	Standard
	As	75	30931.3	6.4	22.4019	1.126	5.0	ug/L	-197	Standard
	Se	82	2714.2	5.0	21.8886	0.723	3.3	ug/L	-5	Standard
[	Se-1	77	2111.8	3.5	21.5200	0.851	4.0	ug/L	105	Standard
[>	Ga	71	215.0	6.2				mg/L	225	Standard
[	Rb	85	111.7	96.1				ug/L	28	Standard
[	Y	89	298244.6	2.5				ug/L	322845	Standard
[>	Rh	103	106.7	15.1				ug/L	92	Standard
[	Mo	98	86.7	120.0	0.0110	0.024	215.1	ug/L	18	Standard
	Ag	107	187775.4	4.2	24.1334	0.540	2.2	ug/L	63	Standard
	Cd	111	78791.1	4.1	23.3954	0.746	3.2	mg/L	20	Standard
	Cd	114	200638.0	6.2	22.6348	1.205	5.3	ug/L	56	Standard
[>	In	115	645118.0	2.8				ug/L	657102	Standard
	Sn	118	479.3	11.9	-0.0003	0.006	2027.3	ug/L	555	Standard
	Sb	123	176220.3	5.3	22.9164	0.980	4.3	ug/L	62	Standard
[	Ba	135	76642.1	5.8	22.9142	1.184	5.2	ug/L	19	Standard
[	Ce	140	75.0	13.9				ug/L	24	Standard
[>	Tb	159	915122.9	3.4				ug/L	910514	Standard
[	Ho	165	9.0	19.2				ug/L	7	Standard
	Tl	203	301795.2	4.4	22.9908	0.560	2.4	ug/L	13	Standard
	Tl	205	9762.5	4.7	24.3786	0.591	2.4	ug/L	1	Standard
	Pb	206	240638.4	5.6	22.8496	0.894	3.9	ug/L	342	Standard
	Pb	207	205442.4	5.7	22.9411	0.848	3.7	ug/L	284	Standard
	Pb	208	954755.5	5.4	22.9660	0.810	3.5	ug/L	1363	Standard
	U	238	235378.0	6.1	22.8968	1.048	4.6	ug/L	2	Standard
[>	Bi	209	481783.3	2.3				ug/L	470592	Standard

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Na	23	0.0		0.0050	0.000	0.0	mg/L	2	Standard
Mg	24	5139.2	8.3	-0.0000	0.000	720.2	mg/L	5586	Standard
K	39	5.0	173.2	0.0310	0.125	403.9	mg/L	5	Standard
Ca	43	46.7	6.2	0.0404	0.265	654.8	mg/L	45	Standard
Fe	54	325.3	1.8	-0.0109	0.008	69.2	mg/L	350	Standard
Fe	57	78.3	13.3	0.0129	0.027	208.4	mg/L	102	Standard
Sc-1	45	46563.3	6.3				mg/L	53004	Standard
Cl	35	3.0	57.7				ug/L	2	Standard
Kr	83	142.4	2.1				ug/L	157	Standard
Br	81	7.5	33.3				ug/L	3	Standard
P	31	109641.1	1.2				ug/L	91588	Standard
S	34	29892.0	2.0				ug/L	32556	Standard
Sr	88	51.7	5.6				ug/L	62	Standard
C	12	145.0	6.0				mg/L	133	Standard
N	14	0.0					mg/L	0	Standard
Hg	202	5.0	0.0				mg/L	7	Standard

QC Calculated Values

Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recovery
Li	7			
Be	9			
Al	27			
Sc	45			
Ti	47			
V	51			
Cr	52			
Cr	53			
Mn	55			
Co	59			
Ni	60			
Cu	65			
Zn	66			
Ge	72		95.693	
As	75			
Se	82			
Se-1	77			
Ga	71			
Rb	85			
Y	89			
Rh	103			

Sample ID: LCSW 35 WG414324-04

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[	Mo	98	
[	Ag	107	
[	Cd	111	
[	Cd	114	
>	In	115	98.176
[	Sn	118	
[	Sb	123	
[	Ba	135	
[	Ce	140	
>	Tb	159	
[	Ho	165	
[	Tl	203	
[	Tl	205	
[	Pb	206	
[	Pb	207	
[	Pb	208	
[	U	238	
>	Bi	209	102.378
[	Na	23	
[	Mg	24	
[	K	39	
[	Ca	43	
[	Fe	54	
[	Fe	57	
>	Sc-1	45	
[	Cl	35	
[	Kr	83	
[	Br	81	
[	P	31	
[	S	34	
[	Sr	88	
[	C	12	
[	N	14	
[	Hg	202	

QC Out of Limits

Measurement Type	Analyte	Mass	Out of Limits Message

Sample ID: LCSW 35 WG414324-04

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Method 6020 - Summary Report

Sample ID: L1211041122 WG414324-01

Sample Date/Time: Sunday, November 18, 2012 11:08:09

Number of Replicates: 3

Autosampler Position: 207

Sample Description: 1

Method File: C:\NexIONData\Method\6020a.mth

Aliquot Volume (mL):

Diluted to Volume (mL):

User Name: JYH user

Cumulative Autodilution Factor: 1

Nexion-ICP 200.8\6020

Concentration Results

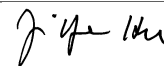
IS	Analyte	Mass	Intensity	RSD	Conc.	SD	RSD	Units	Blank Intens.	Mode
[	Li	7	13732.9	7.6	-2979.7360	507.667	17.0	ug/L	8369	Standard
	Be	9	35.0	42.9	0.0074	0.007	94.8	ug/L	18	Standard
	Al	27	1574419.2	6.8	12.9182	0.798	6.2	ug/L	215	Standard
[>	Sc	45	52559.3	1.2				ug/L	53004	Standard
[	Ti	47	2272.5	41.7	4.3124	1.840	42.7	ug/L	26	Standard
	V	51	12927.6	6.2	0.8097	0.052	6.4	ug/L	3223	Standard
	Cr	52	16723.9	6.1	0.5888	0.069	11.7	ug/L	10379	Standard
	Cr	53	920.0	8.4	0.5507	0.055	10.0	ug/L	192	Standard
	Mn	55	116246.3	5.9	6.5339	0.313	4.8	ug/L	1840	Standard
	Co	59	1446.1	9.3	0.0916	0.009	9.3	ug/L	115	Standard
	Ni	60	1529.1	8.3	0.4912	0.036	7.4	ug/L	75	Standard
	Cu	65	804.0	6.4	0.2294	0.015	6.6	ug/L	155	Standard
	Zn	66	4302.3	3.8	2.9054	0.097	3.3	ug/L	237	Standard
[>	Ge	72	418459.1	1.6				ug/L	413856	Standard
	As	75	-120.7	32.3	0.0580	0.025	43.3	ug/L	-197	Standard
	Se	82	11.7	60.3	0.0953	0.055	57.8	ug/L	-5	Standard
[	Se-1	77	116.7	7.8	0.1965	0.075	38.0	ug/L	105	Standard
[>	Ga	71	401.7	10.6				mg/L	225	Standard
[	Rb	85	1776.8	1.6				ug/L	28	Standard
[	Y	89	318124.2	3.4				ug/L	322845	Standard
[>	Rh	103	156.7	8.0				ug/L	92	Standard
[	Mo	98	136.7	12.0	0.0205	0.003	15.1	ug/L	18	Standard
	Ag	107	78.7	33.2	0.0017	0.003	188.5	ug/L	63	Standard
	Cd	111	84.2	17.0	0.0124	0.004	31.7	mg/L	20	Standard
	Cd	114	219.4	4.5	0.0138	0.001	5.7	ug/L	56	Standard
[>	In	115	682258.8	1.4				ug/L	657102	Standard
	Sn	118	1114.7	5.6	0.0585	0.005	8.5	ug/L	555	Standard
	Sb	123	204.2	33.2	0.0222	0.008	37.4	ug/L	62	Standard
[	Ba	135	20312.6	5.9	5.7255	0.284	5.0	ug/L	19	Standard
[	Ce	140	7976.4	7.2				ug/L	24	Standard
[>	Tb	159	959379.8	1.5				ug/L	910514	Standard
[	Ho	165	147.3	1.4				ug/L	7	Standard
	Tl	203	210.3	8.5	0.0118	0.001	11.1	ug/L	13	Standard
	Tl	205	6.3	24.1	0.0166	0.004	21.9	ug/L	1	Standard
	Pb	206	642.3	7.4	0.0261	0.005	17.4	ug/L	342	Standard
	Pb	207	505.7	10.2	0.0185	0.006	30.7	ug/L	284	Standard
	Pb	208	2427.4	5.7	0.0220	0.003	15.5	ug/L	1363	Standard
	U	238	91.7	23.2	0.0071	0.002	28.5	ug/L	2	Standard
[>	Bi	209	499136.1	0.5				ug/L	470592	Standard

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Na	23	0.0		0.0050	0.000	0.0	mg/L	2	Standard
Mg	24	405364.9	1.3	0.1977	0.001	0.5	mg/L	5586	Standard
K	39	6.7	114.6	0.0492	0.103	209.7	mg/L	5	Standard
Ca	43	180.0	15.5	5.4867	1.097	20.0	mg/L	45	Standard
Fe	54	691.6	3.0	0.1144	0.005	4.1	mg/L	350	Standard
Fe	57	250.0	17.1	0.2679	0.069	25.9	mg/L	102	Standard
Sc-1	45	52559.3	1.2				mg/L	53004	Standard
Cl	35	2.3	89.2				ug/L	2	Standard
Kr	83	141.7	3.7				ug/L	157	Standard
Br	81	6.7	57.3				ug/L	3	Standard
P	31	208877.9	3.7				ug/L	91588	Standard
S	34	25016.5	1.9				ug/L	32556	Standard
Sr	88	438.3	12.0				ug/L	62	Standard
C	12	1401.7	3.9				mg/L	133	Standard
N	14	0.0					mg/L	0	Standard
Hg	202	41.7	73.3				mg/L	7	Standard

QC Calculated Values

Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recovery
Li	7			
Be	9			
Al	27			
Sc	45			
Ti	47			
V	51			
Cr	52			
Cr	53			
Mn	55			
Co	59			
Ni	60			
Cu	65			
Zn	66			
Ge	72		101.112	
As	75			
Se	82			
Se-1	77			
Ga	71			
Rb	85			
Y	89			
Rh	103			

Sample ID: L1211041122 WG414324-01

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[	Mo	98	
[	Ag	107	
[	Cd	111	
[	Cd	114	
>	In	115	103.829
[	Sn	118	
[	Sb	123	
[	Ba	135	
[	Ce	140	
>	Tb	159	
[	Ho	165	
[	Tl	203	
[	Tl	205	
[	Pb	206	
[	Pb	207	
[	Pb	208	
[	U	238	
>	Bi	209	106.066
[	Na	23	
[	Mg	24	
[	K	39	
[	Ca	43	
[	Fe	54	
[	Fe	57	
>	Sc-1	45	
[	Cl	35	
[	Kr	83	
[	Br	81	
[	P	31	
[	S	34	
[	Sr	88	
[	C	12	
[	N	14	
[	Hg	202	

QC Out of Limits

Measurement Type	Analyte	Mass	Out of Limits Message

Sample ID: L1211041122 WG414324-01

Report Date/Time: Sunday, November 18, 2012 11:10:40

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Method 6020 - Summary Report

Sample ID: L1211041122S WG414324-05

Sample Date/Time: Sunday, November 18, 2012 11:11:21

Number of Replicates: 3

Autosampler Position: 208

Sample Description: 1

Method File: C:\NexIONData\Method\6020a.mth

Aliquot Volume (mL):

Diluted to Volume (mL):

User Name: JYH user

Cumulative Autodilution Factor: 1

Nexion-ICP 200.8\6020

Concentration Results

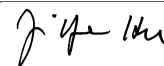
IS	Analyte	Mass	Intensity	RSD	Conc.	SD	RSD	Units	Blank Intens.	Mode
[	Li	7	13849.7	6.0	-3272.2290	248.094	7.6	ug/L	8369	Standard
	Be	9	49368.9	6.7	24.5969	0.238	1.0	ug/L	18	Standard
	Al	27	1513789.4	5.7	12.7954	0.748	5.8	ug/L	215	Standard
[>	Sc	45	51099.6	6.3				ug/L	53004	Standard
[	Ti	47	1605.1	12.5	3.0949	0.279	9.0	ug/L	26	Standard
	V	51	257016.7	5.4	21.6763	0.732	3.4	ug/L	3223	Standard
	Cr	52	253355.8	5.2	22.4330	0.463	2.1	ug/L	10379	Standard
	Cr	53	30550.1	7.6	22.3359	0.983	4.4	ug/L	192	Standard
	Mn	55	477170.1	6.3	27.7534	0.923	3.3	ug/L	1840	Standard
	Co	59	293393.8	6.9	22.2429	0.755	3.4	ug/L	115	Standard
	Ni	60	63428.5	6.6	22.3459	0.888	4.0	ug/L	75	Standard
	Cu	65	63634.7	6.7	23.1990	0.663	2.9	ug/L	155	Standard
	Zn	66	34440.2	5.5	25.2538	0.716	2.8	ug/L	237	Standard
[>	Ge	72	408550.7	4.0				ug/L	413856	Standard
	As	75	31952.2	5.8	22.4270	0.449	2.0	ug/L	-197	Standard
	Se	82	2825.1	4.1	22.0876	0.191	0.9	ug/L	-5	Standard
[	Se-1	77	2260.5	9.6	22.3246	1.323	5.9	ug/L	105	Standard
[>	Ga	71	398.3	29.8				mg/L	225	Standard
[	Rb	85	1666.8	6.6				ug/L	28	Standard
[	Y	89	312250.3	1.7				ug/L	322845	Standard
[>	Rh	103	165.0	21.2				ug/L	92	Standard
[	Mo	98	138.8	5.5	0.0218	0.001	5.4	ug/L	18	Standard
	Ag	107	188066.6	3.5	23.4465	0.029	0.1	ug/L	63	Standard
	Cd	111	78349.9	5.3	22.5593	0.774	3.4	mg/L	20	Standard
	Cd	114	202704.4	5.8	22.1722	0.718	3.2	ug/L	56	Standard
[>	In	115	665124.5	3.4				ug/L	657102	Standard
	Sn	118	827.4	6.7	0.0327	0.003	8.1	ug/L	555	Standard
	Sb	123	179686.1	5.7	22.6579	0.797	3.5	ug/L	62	Standard
[	Ba	135	96519.6	5.1	27.9878	0.898	3.2	ug/L	19	Standard
[	Ce	140	7965.4	6.0				ug/L	24	Standard
[>	Tb	159	952633.1	2.7				ug/L	910514	Standard
[	Ho	165	152.7	6.7				ug/L	7	Standard
	Tl	203	299417.1	4.5	22.4347	0.716	3.2	ug/L	13	Standard
	Tl	205	9737.5	3.4	23.9257	0.785	3.3	ug/L	1	Standard
	Pb	206	240185.7	5.9	22.4336	1.135	5.1	ug/L	342	Standard
	Pb	207	205589.3	5.3	22.5853	1.021	4.5	ug/L	284	Standard
	Pb	208	952332.6	5.2	22.5351	0.988	4.4	ug/L	1363	Standard
	U	238	236584.6	7.0	22.6395	1.440	6.4	ug/L	2	Standard
[>	Bi	209	489894.1	2.4				ug/L	470592	Standard

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Na	23	0.0		0.0050	0.000	0.0	mg/L	2	Standard
Mg	24	401021.3	2.4	0.2016	0.009	4.6	mg/L	5586	Standard
K	39	15.0	57.7	0.1744	0.135	77.5	mg/L	5	Standard
Ca	43	200.0	16.4	6.6572	1.789	26.9	mg/L	45	Standard
Fe	54	653.3	9.3	0.1082	0.036	33.1	mg/L	350	Standard
Fe	57	198.3	24.7	0.1926	0.059	30.4	mg/L	102	Standard
Sc-1	45	51099.6	6.3				mg/L	53004	Standard
Cl	35	1.7	34.6				ug/L	2	Standard
Kr	83	142.9	2.9				ug/L	157	Standard
Br	81	4.2	91.7				ug/L	3	Standard
P	31	208408.7	3.3				ug/L	91588	Standard
S	34	23192.7	3.2				ug/L	32556	Standard
Sr	88	436.7	4.0				ug/L	62	Standard
C	12	1576.7	8.4				mg/L	133	Standard
N	14	0.0					mg/L	0	Standard
Hg	202	40.0	12.5				mg/L	7	Standard

QC Calculated Values

Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recovery
Li	7			
Be	9			
Al	27			
Sc	45			
Ti	47			
V	51			
Cr	52			
Cr	53			
Mn	55			
Co	59			
Ni	60			
Cu	65			
Zn	66			
Ge	72		98.718	
As	75			
Se	82			
Se-1	77			
Ga	71			
Rb	85			
Y	89			
Rh	103			

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[	Mo	98	
[	Ag	107	
[	Cd	111	
[	Cd	114	
>	In	115	101.221
[	Sn	118	
[	Sb	123	
[	Ba	135	
[	Ce	140	
>	Tb	159	
[	Ho	165	
[	Tl	203	
[	Tl	205	
[	Pb	206	
[	Pb	207	
[	Pb	208	
[	U	238	
>	Bi	209	104.102
[	Na	23	
[	Mg	24	
[	K	39	
[	Ca	43	
[	Fe	54	
[	Fe	57	
>	Sc-1	45	
[	Cl	35	
[	Kr	83	
[	Br	81	
[	P	31	
[	S	34	
[	Sr	88	
[	C	12	
[	N	14	
[	Hg	202	

QC Out of Limits

Measurement Type	Analyte	Mass	Out of Limits Message

Sample ID: L1211041122S WG414324-05

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Method 6020 - Summary Report

Sample ID: L1211041122SD WG414324-06

Sample Date/Time: Sunday, November 18, 2012 11:14:33

Number of Replicates: 3

Autosampler Position: 209

Sample Description: 1

Method File: C:\NexIONData\Method\6020a.mth

Aliquot Volume (mL):

Diluted to Volume (mL):

User Name: JYH user

Cumulative Autodilution Factor: 1

Nexion-ICP 200.8\6020

Concentration Results

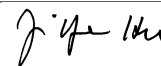
IS	Analyte	Mass	Intensity	RSD	Conc.	SD	RSD	Units	Blank Intens.	Mode
[	Li	7	13973.1	4.3	-3654.2617	127.516	3.5	ug/L	8369	Standard
	Be	9	49713.2	4.5	25.7721	1.487	5.8	ug/L	18	Standard
	Al	27	1568708.7	6.5	13.7718	0.920	6.7	ug/L	215	Standard
[>	Sc	45	49151.3	2.8				ug/L	53004	Standard
[	Ti	47	2116.8	6.7	4.1610	0.207	5.0	ug/L	26	Standard
	V	51	256045.1	4.0	21.8777	0.734	3.4	ug/L	3223	Standard
	Cr	52	246921.2	4.8	22.1351	0.806	3.6	ug/L	10379	Standard
	Cr	53	29821.1	7.6	22.0943	1.487	6.7	ug/L	192	Standard
	Mn	55	483618.7	5.3	28.4997	1.129	4.0	ug/L	1840	Standard
	Co	59	293189.4	6.3	22.5203	1.045	4.6	ug/L	115	Standard
	Ni	60	62675.4	6.2	22.3673	1.048	4.7	ug/L	75	Standard
	Cu	65	62188.0	5.9	22.9693	0.933	4.1	ug/L	155	Standard
	Zn	66	33326.0	5.3	24.7520	1.123	4.5	ug/L	237	Standard
[>	Ge	72	403368.5	2.6				ug/L	413856	Standard
	As	75	31591.4	4.2	22.4668	0.659	2.9	ug/L	-197	Standard
	Se	82	2797.0	5.1	22.1408	0.607	2.7	ug/L	-5	Standard
[	Se-1	77	2266.5	4.7	22.7151	0.676	3.0	ug/L	105	Standard
[>	Ga	71	676.7	23.2				mg/L	225	Standard
[	Rb	85	2271.8	6.7				ug/L	28	Standard
[	Y	89	305131.6	4.9				ug/L	322845	Standard
[>	Rh	103	158.3	4.8				ug/L	92	Standard
[	Mo	98	130.4	12.5	0.0202	0.003	15.6	ug/L	18	Standard
	Ag	107	183930.8	4.9	23.2092	0.774	3.3	ug/L	63	Standard
	Cd	111	77906.4	5.8	22.7061	0.968	4.3	mg/L	20	Standard
	Cd	114	199453.0	5.0	22.0899	0.757	3.4	ug/L	56	Standard
[>	In	115	656925.1	1.7				ug/L	657102	Standard
	Sn	118	792.7	5.0	0.0303	0.003	9.6	ug/L	555	Standard
	Sb	123	176890.6	5.4	22.5816	0.845	3.7	ug/L	62	Standard
[	Ba	135	97333.7	6.0	28.5675	1.269	4.4	ug/L	19	Standard
[	Ce	140	12394.7	6.0				ug/L	24	Standard
[>	Tb	159	942957.1	2.6				ug/L	910514	Standard
[	Ho	165	200.3	7.7				ug/L	7	Standard
	Tl	203	297167.6	2.3	22.8748	0.199	0.9	ug/L	13	Standard
	Tl	205	9670.1	4.6	24.3957	0.732	3.0	ug/L	1	Standard
	Pb	206	238136.1	5.2	22.8430	0.841	3.7	ug/L	342	Standard
	Pb	207	202312.7	4.7	22.8259	0.758	3.3	ug/L	284	Standard
	Pb	208	936323.8	4.3	22.7556	0.647	2.8	ug/L	1363	Standard
	U	238	233837.6	6.9	22.9760	1.245	5.4	ug/L	2	Standard
[>	Bi	209	476927.2	2.1				ug/L	470592	Standard

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Na	23	3.3	86.6	0.3343	0.285	85.3	mg/L	2	Standard
Mg	24	403218.3	2.3	0.2105	0.006	2.8	mg/L	5586	Standard
K	39	18.3	56.8	0.2258	0.145	64.4	mg/L	5	Standard
Ca	43	188.3	17.1	6.4205	1.501	23.4	mg/L	45	Standard
Fe	54	972.8	9.1	0.2504	0.047	18.9	mg/L	350	Standard
Fe	57	295.0	15.1	0.3714	0.074	20.0	mg/L	102	Standard
Sc-1	45	49151.3	2.8				mg/L	53004	Standard
Cl	35	3.0	33.3				ug/L	2	Standard
Kr	83	134.1	1.8				ug/L	157	Standard
Br	81	5.0	0.0				ug/L	3	Standard
P	31	204052.5	3.3				ug/L	91588	Standard
S	34	21893.3	2.8				ug/L	32556	Standard
Sr	88	428.3	2.7				ug/L	62	Standard
C	12	681.7	6.6				mg/L	133	Standard
N	14	0.0					mg/L	0	Standard
Hg	202	23.3	24.7				mg/L	7	Standard

QC Calculated Values

Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recovery
Li	7			
Be	9			
Al	27			
Sc	45			
Ti	47			
V	51			
Cr	52			
Cr	53			
Mn	55			
Co	59			
Ni	60			
Cu	65			
Zn	66			
Ge	72		97.466	
As	75			
Se	82			
Se-1	77			
Ga	71			
Rb	85			
Y	89			
Rh	103			

Sample ID: L1211041122SD WG414324-06

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[	Mo	98	
[	Ag	107	
[	Cd	111	
[	Cd	114	
>	In	115	99.973
[	Sn	118	
[	Sb	123	
[	Ba	135	
[	Ce	140	
>	Tb	159	
[	Ho	165	
[	Tl	203	
[	Tl	205	
[	Pb	206	
[	Pb	207	
[	Pb	208	
[	U	238	
>	Bi	209	101.346
[	Na	23	
[	Mg	24	
[	K	39	
[	Ca	43	
[	Fe	54	
[	Fe	57	
>	Sc-1	45	
[	Cl	35	
[	Kr	83	
[	Br	81	
[	P	31	
[	S	34	
[	Sr	88	
[	C	12	
[	N	14	
[	Hg	202	

QC Out of Limits

Measurement Type	Analyte	Mass	Out of Limits Message

Sample ID: L1211041122SD WG414324-06

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Method 6020 - Summary Report

Sample ID: L1211041120

Sample Date/Time: Sunday, November 18, 2012 11:17:45

Number of Replicates: 3

Autosampler Position: 210

Sample Description: 1

Method File: C:\NexIONData\Method\6020a.mth

Aliquot Volume (mL):

Diluted to Volume (mL):

User Name: JYH user

Cumulative Autodilution Factor: 1

Nexion-ICP 200.8\6020

Concentration Results

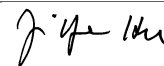
IS	Analyte	Mass	Intensity	RSD	Conc.	SD	RSD	Units	Blank Intens.	Mode
[	Li	7	27299.6	4.9	-9117.7955	59.178	0.6	ug/L	8369	Standard
	Be	9	158.3	30.7	0.0606	0.023	37.8	ug/L	18	Standard
	Al	27	4184471.0	6.2	31.1234	0.830	2.7	ug/L	215	Standard
[>	Sc	45	57977.5	4.5				ug/L	53004	Standard
[	Ti	47	28386.6	6.3	54.4895	2.020	3.7	ug/L	26	Standard
	V	51	256798.6	6.2	21.1266	0.726	3.4	ug/L	3223	Standard
	Cr	52	34685.1	5.1	2.2045	0.071	3.2	ug/L	10379	Standard
	Cr	53	3228.7	7.5	2.2060	0.113	5.1	ug/L	192	Standard
	Mn	55	3074766.9	5.8	175.0471	5.329	3.0	ug/L	1840	Standard
	Co	59	31089.9	4.1	2.2882	0.031	1.4	ug/L	115	Standard
	Ni	60	6276.0	5.2	2.1266	0.059	2.8	ug/L	75	Standard
	Cu	65	8438.0	6.6	2.9533	0.121	4.1	ug/L	155	Standard
	Zn	66	21840.8	5.3	15.5568	0.445	2.9	ug/L	237	Standard
[>	Ge	72	418468.0	2.8				ug/L	413856	Standard
	As	75	270.0	25.4	0.3244	0.049	15.0	ug/L	-197	Standard
	Se	82	31.5	28.4	0.2472	0.075	30.3	ug/L	-5	Standard
[	Se-1	77	126.0	9.0	0.2936	0.147	50.0	ug/L	105	Standard
[>	Ga	71	3083.6	6.9				mg/L	225	Standard
	Rb	85	25853.7	3.1				ug/L	28	Standard
[	Y	89	345453.5	2.3				ug/L	322845	Standard
[>	Rh	103	116.7	13.8				ug/L	92	Standard
[	Mo	98	316.4	7.4	0.0595	0.004	6.5	ug/L	18	Standard
	Ag	107	161.3	8.8	0.0119	0.002	17.2	ug/L	63	Standard
	Cd	111	66.6	13.1	0.0077	0.003	33.3	mg/L	20	Standard
	Cd	114	188.0	11.7	0.0107	0.003	25.4	ug/L	56	Standard
[>	In	115	676902.3	2.0				ug/L	657102	Standard
	Sn	118	1130.0	5.6	0.0608	0.004	6.6	ug/L	555	Standard
	Sb	123	286.8	9.3	0.0326	0.003	7.9	ug/L	62	Standard
[	Ba	135	253511.4	4.8	72.2614	2.691	3.7	ug/L	19	Standard
[	Ce	140	264472.8	5.5				ug/L	24	Standard
[>	Tb	159	960644.9	2.2				ug/L	910514	Standard
[	Ho	165	3034.0	6.9				ug/L	7	Standard
	Tl	203	300.7	4.3	0.0185	0.001	5.5	ug/L	13	Standard
	Tl	205	12.0	25.0	0.0303	0.007	24.1	ug/L	1	Standard
	Pb	206	20450.5	5.9	1.8486	0.090	4.9	ug/L	342	Standard
	Pb	207	16631.5	4.9	1.7641	0.074	4.2	ug/L	284	Standard
	Pb	208	78415.4	5.2	1.7935	0.078	4.3	ug/L	1363	Standard
	U	238	683.0	10.6	0.0628	0.007	10.6	ug/L	2	Standard
[>	Bi	209	497960.3	1.5				ug/L	470592	Standard

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Na	23	1.7	173.2	0.1368	0.228	166.9	mg/L	2	Standard
Mg	24	354331.0	1.6	0.1562	0.005	2.9	mg/L	5586	Standard
K	39	81.7	33.7	0.9834	0.372	37.8	mg/L	5	Standard
Ca	43	163.3	32.7	4.1332	2.087	50.5	mg/L	45	Standard
Fe	54	15835.8	7.4	5.4093	0.350	6.5	mg/L	350	Standard
Fe	57	3710.5	10.7	5.1936	0.436	8.4	mg/L	102	Standard
Sc-1	45	57977.5	4.5				mg/L	53004	Standard
Cl	35	2.7	43.3				ug/L	2	Standard
Kr	83	139.3	8.7				ug/L	157	Standard
Br	81	5.8	49.5				ug/L	3	Standard
P	31	269507.2	3.0				ug/L	91588	Standard
S	34	19772.1	4.6				ug/L	32556	Standard
Sr	88	270.0	11.3				ug/L	62	Standard
C	12	825.0	8.2				mg/L	133	Standard
N	14	0.0					mg/L	0	Standard
Hg	202	23.3	65.5				mg/L	7	Standard

QC Calculated Values

Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recovery
Li	7			
Be	9			
Al	27			
Sc	45			
Ti	47			
V	51			
Cr	52			
Cr	53			
Mn	55			
Co	59			
Ni	60			
Cu	65			
Zn	66			
Ge	72		101.114	
As	75			
Se	82			
Se-1	77			
Ga	71			
Rb	85			
Y	89			
Rh	103			

Sample ID: L1211041120

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[	Mo	98	
[	Ag	107	
[	Cd	111	
[	Cd	114	
>	In	115	103.013
[	Sn	118	
[	Sb	123	
[	Ba	135	
[	Ce	140	
>	Tb	159	
[	Ho	165	
[	Tl	203	
[	Tl	205	
[	Pb	206	
[	Pb	207	
[	Pb	208	
[	U	238	
>	Bi	209	105.816
[	Na	23	
[	Mg	24	
[	K	39	
[	Ca	43	
[	Fe	54	
[	Fe	57	
>	Sc-1	45	
[	Cl	35	
[	Kr	83	
[	Br	81	
[	P	31	
[	S	34	
[	Sr	88	
[	C	12	
[	N	14	
[	Hg	202	

QC Out of Limits

Measurement Type	Analyte	Mass	Out of Limits Message
Mn 55 Upper, S, EEE	Mn	55	

Sample ID: L1211041120

Report Date/Time: Sunday, November 18, 2012 11:20:17

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Method 6020 - Summary Report

Sample ID: L1211041121

Sample Date/Time: Sunday, November 18, 2012 11:20:58

Number of Replicates: 3

Autosampler Position: 211

Sample Description: 1

Method File: C:\NexIONData\Method\6020a.mth

Aliquot Volume (mL):

Diluted to Volume (mL):

User Name: JYH user

Cumulative Autodilution Factor: 1

Nexion-ICP 200.8\6020

Concentration Results

IS	Analyte	Mass	Intensity	RSD	Conc.	SD	RSD	Units	Blank Intens.	Mode
[	Li	7	18629.8	5.6	-5273.6195	194.792	3.7	ug/L	8369	Standard
	Be	9	155.0	11.6	0.0628	0.011	17.6	ug/L	18	Standard
	Al	27	1381470.3	3.4	10.8664	0.166	1.5	ug/L	215	Standard
[>	Sc	45	54850.9	4.0				ug/L	53004	Standard
[	Ti	47	31931.3	5.4	62.5718	2.594	4.1	ug/L	26	Standard
	V	51	41755.2	4.4	3.2834	0.100	3.0	ug/L	3223	Standard
	Cr	52	18567.0	3.5	0.7892	0.043	5.5	ug/L	10379	Standard
	Cr	53	1565.1	4.2	1.0363	0.025	2.4	ug/L	192	Standard
	Mn	55	527672.9	4.6	30.5894	0.996	3.3	ug/L	1840	Standard
	Co	59	9232.8	5.0	0.6826	0.027	4.0	ug/L	115	Standard
	Ni	60	2902.6	3.0	0.9852	0.017	1.7	ug/L	75	Standard
	Cu	65	4792.1	3.2	1.6882	0.034	2.0	ug/L	155	Standard
	Zn	66	9023.4	5.8	6.4428	0.278	4.3	ug/L	237	Standard
[>	Ge	72	410120.6	2.0				ug/L	413856	Standard
	As	75	-20.7	231.8	0.1258	0.033	26.6	ug/L	-197	Standard
	Se	82	42.3	40.0	0.3364	0.137	40.8	ug/L	-5	Standard
[	Se-1	77	124.3	12.0	0.3019	0.176	58.1	ug/L	105	Standard
[>	Ga	71	3737.1	10.1				mg/L	225	Standard
[	Rb	85	11694.5	2.3				ug/L	28	Standard
[	Y	89	313185.7	3.1				ug/L	322845	Standard
[>	Rh	103	131.7	15.3				ug/L	92	Standard
[	Mo	98	139.4	9.4	0.0220	0.003	13.1	ug/L	18	Standard
	Ag	107	110.0	22.1	0.0059	0.003	54.8	ug/L	63	Standard
	Cd	111	38.8	20.4	0.0001	0.002	3849.4	mg/L	20	Standard
	Cd	114	103.9	10.5	0.0019	0.001	72.3	ug/L	56	Standard
[>	In	115	662761.5	1.3				ug/L	657102	Standard
	Sn	118	1593.1	6.4	0.1093	0.009	8.7	ug/L	555	Standard
	Sb	123	101.7	26.1	0.0100	0.004	35.3	ug/L	62	Standard
[	Ba	135	43163.2	5.3	12.5533	0.691	5.5	ug/L	19	Standard
[	Ce	140	110025.5	5.6				ug/L	24	Standard
[>	Tb	159	951330.1	0.3				ug/L	910514	Standard
[	Ho	165	1370.4	4.9				ug/L	7	Standard
	Tl	203	304.7	6.2	0.0193	0.001	7.0	ug/L	13	Standard
	Tl	205	12.3	16.9	0.0317	0.005	16.0	ug/L	1	Standard
	Pb	206	4514.7	3.0	0.3911	0.015	3.7	ug/L	342	Standard
	Pb	207	2984.0	1.0	0.2935	0.004	1.4	ug/L	284	Standard
	Pb	208	15084.5	2.4	0.3245	0.010	3.1	ug/L	1363	Standard
	U	238	1261.4	4.2	0.1197	0.006	4.7	ug/L	2	Standard
[>	Bi	209	488038.5	0.4				ug/L	470592	Standard

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Na	23	1.7	173.2	0.1458	0.244	167.3	mg/L	2	Standard
Mg	24	342981.0	1.7	0.1599	0.006	3.8	mg/L	5586	Standard
K	39	16.7	45.8	0.1781	0.099	55.8	mg/L	5	Standard
Ca	43	105.0	26.5	2.0896	1.122	53.7	mg/L	45	Standard
Fe	54	4773.3	6.9	1.6173	0.054	3.3	mg/L	350	Standard
Fe	57	1166.7	4.8	1.6441	0.105	6.4	mg/L	102	Standard
Sc-1	45	54850.9	4.0				mg/L	53004	Standard
Cl	35	3.7	41.7				ug/L	2	Standard
Kr	83	134.4	5.4				ug/L	157	Standard
Br	81	1.7	86.6				ug/L	3	Standard
P	31	239815.1	2.0				ug/L	91588	Standard
S	34	17370.8	4.3				ug/L	32556	Standard
Sr	88	281.7	15.3				ug/L	62	Standard
C	12	460.0	9.7				mg/L	133	Standard
N	14	0.0					mg/L	0	Standard
Hg	202	11.7	24.7				mg/L	7	Standard

QC Calculated Values

Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recovery
Li	7			
Be	9			
Al	27			
Sc	45			
Ti	47			
V	51			
Cr	52			
Cr	53			
Mn	55			
Co	59			
Ni	60			
Cu	65			
Zn	66			
Ge	72		99.097	
As	75			
Se	82			
Se-1	77			
Ga	71			
Rb	85			
Y	89			
Rh	103			

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[	Mo	98	
[	Ag	107	
[	Cd	111	
[	Cd	114	
>	In	115	100.861
[	Sn	118	
[	Sb	123	
[	Ba	135	
[	Ce	140	
>	Tb	159	
[	Ho	165	
[	Tl	203	
[	Tl	205	
[	Pb	206	
[	Pb	207	
[	Pb	208	
[	U	238	
>	Bi	209	103.707
[	Na	23	
[	Mg	24	
[	K	39	
[	Ca	43	
[	Fe	54	
[	Fe	57	
>	Sc-1	45	
[	Cl	35	
[	Kr	83	
[	Br	81	
[	P	31	
[	S	34	
[	Sr	88	
[	C	12	
[	N	14	
[	Hg	202	

QC Out of Limits

Measurement Type	Analyte	Mass	Out of Limits Message

Sample ID: L1211041121

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Method 6020 - Summary Report

Sample ID: L1211041121PS WG414570-01

Sample Date/Time: Sunday, November 18, 2012 11:24:10

Number of Replicates: 3

Autosampler Position: 212

Sample Description: 1

Method File: C:\NexIONData\Method\6020a.mth

Aliquot Volume (mL):

Diluted to Volume (mL):

User Name: JYH user

Cumulative Autodilution Factor: 1

Nexion-ICP 200.8\6020

Concentration Results

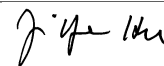
IS	Analyte	Mass	Intensity	RSD	Conc.	SD	RSD	Units	Blank Intens.	Mode
[	Li	7	21433.5	6.6	-5856.0628	556.773	9.5	ug/L	8369	Standard
	Be	9	115010.4	4.2	49.1309	1.681	3.4	ug/L	18	Standard
	Al	27	1520157.9	7.3	10.9950	0.675	6.1	ug/L	215	Standard
[>	Sc	45	59617.1	2.5				ug/L	53004	Standard
[	Ti	47	35475.3	7.6	65.4743	3.939	6.0	ug/L	26	Standard
	V	51	620273.0	6.5	49.4260	2.758	5.6	ug/L	3223	Standard
	Cr	52	574010.0	7.4	48.7308	3.258	6.7	ug/L	10379	Standard
	Cr	53	70566.1	6.7	48.5637	2.518	5.2	ug/L	192	Standard
	Mn	55	1457425.7	7.0	79.7427	5.156	6.5	ug/L	1840	Standard
	Co	59	689787.3	8.0	49.1124	3.476	7.1	ug/L	115	Standard
	Ni	60	147400.9	5.3	48.7956	2.342	4.8	ug/L	75	Standard
	Cu	65	148573.1	5.0	50.9398	2.498	4.9	ug/L	155	Standard
	Zn	66	75267.9	5.9	52.0159	2.818	5.4	ug/L	237	Standard
[>	Ge	72	435339.3	2.1				ug/L	413856	Standard
	As	75	69666.5	4.8	45.7632	1.966	4.3	ug/L	-197	Standard
	Se	82	5989.7	3.9	43.9426	1.432	3.3	ug/L	-5	Standard
[	Se-1	77	4627.7	5.0	43.8507	1.872	4.3	ug/L	105	Standard
[>	Ga	71	4303.9	3.0				mg/L	225	Standard
	Rb	85	12668.6	6.3				ug/L	28	Standard
[	Y	89	339348.0	3.6				ug/L	322845	Standard
[>	Rh	103	156.7	17.6				ug/L	92	Standard
[	Mo	98	180.3	22.0	0.0294	0.009	29.8	ug/L	18	Standard
	Ag	107	428422.6	4.4	51.4453	2.248	4.4	ug/L	63	Standard
	Cd	111	170999.5	6.3	47.4188	2.612	5.5	mg/L	20	Standard
	Cd	114	436536.8	5.7	45.9983	2.291	5.0	ug/L	56	Standard
[>	In	115	690811.0	2.3				ug/L	657102	Standard
	Sn	118	1853.4	9.0	0.1277	0.015	11.4	ug/L	555	Standard
	Sb	123	387639.6	5.5	47.0741	2.165	4.6	ug/L	62	Standard
[	Ba	135	216285.6	5.9	60.4052	2.904	4.8	ug/L	19	Standard
[	Ce	140	117447.0	5.5				ug/L	24	Standard
[>	Tb	159	984028.8	2.1				ug/L	910514	Standard
[	Ho	165	1529.7	7.7				ug/L	7	Standard
	Tl	203	663516.7	4.2	49.3491	2.001	4.1	ug/L	13	Standard
	Tl	205	21799.4	3.7	53.1481	2.068	3.9	ug/L	1	Standard
	Pb	206	537984.5	5.7	49.9145	2.892	5.8	ug/L	342	Standard
	Pb	207	454030.5	5.5	49.5484	2.806	5.7	ug/L	284	Standard
	Pb	208	2102899.3	5.6	49.4300	2.854	5.8	ug/L	1363	Standard
	U	238	532129.1	6.3	50.5386	3.098	6.1	ug/L	2	Standard
[>	Bi	209	493664.0	1.2				ug/L	470592	Standard

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Na	23	3.3	173.2	0.2780	0.473	170.1	mg/L	2	Standard
Mg	24	356864.7	1.9	0.1528	0.004	2.7	mg/L	5586	Standard
K	39	18.3	56.8	0.1784	0.119	66.8	mg/L	5	Standard
Ca	43	136.7	42.9	2.9266	2.164	73.9	mg/L	45	Standard
Fe	54	5179.3	6.8	1.6150	0.095	5.9	mg/L	350	Standard
Fe	57	1383.4	1.5	1.8040	0.047	2.6	mg/L	102	Standard
Sc-1	45	59617.1	2.5				mg/L	53004	Standard
Cl	35	1.3	86.6				ug/L	2	Standard
Kr	83	151.1	3.2				ug/L	157	Standard
Br	81	4.2	34.6				ug/L	3	Standard
P	31	295312.8	5.2				ug/L	91588	Standard
S	34	16065.2	5.1				ug/L	32556	Standard
Sr	88	326.7	26.2				ug/L	62	Standard
C	12	496.7	15.1				mg/L	133	Standard
N	14	3.3	173.2				mg/L	0	Standard
Hg	202	5.0	0.0				mg/L	7	Standard

QC Calculated Values

Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recovery
Li	7			
Be	9			
Al	27			
Sc	45			
Ti	47			
V	51			
Cr	52			
Cr	53			
Mn	55			
Co	59			
Ni	60			
Cu	65			
Zn	66			
Ge	72		105.191	
As	75			
Se	82			
Se-1	77			
Ga	71			
Rb	85			
Y	89			
Rh	103			

Sample ID: L1211041121PS WG414570-01

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[	Mo	98	
[	Ag	107	
[	Cd	111	
[	Cd	114	
>	In	115	105.130
[	Sn	118	
[	Sb	123	
[	Ba	135	
[	Ce	140	
>	Tb	159	
[	Ho	165	
[	Tl	203	
[	Tl	205	
[	Pb	206	
[	Pb	207	
[	Pb	208	
[	U	238	
>	Bi	209	104.903
[	Na	23	
[	Mg	24	
[	K	39	
[	Ca	43	
[	Fe	54	
[	Fe	57	
>	Sc-1	45	
[	Cl	35	
[	Kr	83	
[	Br	81	
[	P	31	
[	S	34	
[	Sr	88	
[	C	12	
[	N	14	
[	Hg	202	

QC Out of Limits

Measurement Type	Analyte	Mass	Out of Limits Message

Sample ID: L1211041121PS WG414570-01

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Method 6020 - Summary Report

Sample ID: L1211041121SDL WG411570-02

Sample Date/Time: Sunday, November 18, 2012 11:27:23

Number of Replicates: 3

Autosampler Position: 213

Sample Description: 5

Method File: C:\NexIONData\Method\6020a.mth

Aliquot Volume (mL):

Diluted to Volume (mL):

User Name: JYH user

Cumulative Autodilution Factor: 1

Nexion-ICP 200.8\6020

Concentration Results

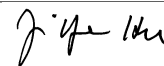
IS	Analyte	Mass	Intensity	RSD	Conc.	SD	RSD	Units	Blank Intens.	Mode
[	Li	7	11050.7	1.8	-1894.0750	234.903	12.4	ug/L	8369	Standard
	Be	9	41.7	30.2	0.0119	0.005	45.2	ug/L	18	Standard
	Al	27	277248.7	3.2	2.4230	0.098	4.0	ug/L	215	Standard
[>	Sc	45	49373.8	5.2				ug/L	53004	Standard
[	Ti	47	6313.0	6.6	12.5082	0.644	5.1	ug/L	26	Standard
	V	51	10394.6	2.8	0.6300	0.014	2.2	ug/L	3223	Standard
	Cr	52	10901.9	1.5	0.1007	0.012	12.4	ug/L	10379	Standard
	Cr	53	506.7	5.8	0.2668	0.015	5.7	ug/L	192	Standard
	Mn	55	106615.0	6.1	6.2027	0.303	4.9	ug/L	1840	Standard
	Co	59	2055.5	9.6	0.1424	0.016	11.4	ug/L	115	Standard
	Ni	60	964.0	6.8	0.3086	0.023	7.3	ug/L	75	Standard
	Cu	65	1247.7	4.8	0.4038	0.014	3.5	ug/L	155	Standard
	Zn	66	4515.3	4.5	3.1756	0.116	3.7	ug/L	237	Standard
[>	Ge	72	403992.6	1.9				ug/L	413856	Standard
	As	75	-153.8	26.7	0.0317	0.027	85.8	ug/L	-197	Standard
	Se	82	2.0	319.8	0.0215	0.051	235.7	ug/L	-5	Standard
[	Se-1	77	96.3	5.3	0.0278	0.070	251.7	ug/L	105	Standard
[>	Ga	71	831.7	5.4				mg/L	225	Standard
[	Rb	85	2231.8	2.6				ug/L	28	Standard
[	Y	89	304438.9	6.1				ug/L	322845	Standard
[>	Rh	103	125.0	28.0				ug/L	92	Standard
[	Mo	98	72.1	24.1	0.0072	0.003	47.9	ug/L	18	Standard
	Ag	107	87.7	11.3	0.0032	0.001	42.5	ug/L	63	Standard
	Cd	111	31.6	26.3	-0.0020	0.002	122.1	mg/L	20	Standard
	Cd	114	99.0	15.1	0.0014	0.002	136.7	ug/L	56	Standard
[>	In	115	658588.4	2.6				ug/L	657102	Standard
	Sn	118	821.4	8.2	0.0329	0.005	14.8	ug/L	555	Standard
	Sb	123	319.3	17.3	0.0377	0.007	17.9	ug/L	62	Standard
[	Ba	135	8642.8	4.6	2.5127	0.065	2.6	ug/L	19	Standard
[	Ce	140	21810.0	4.7				ug/L	24	Standard
[>	Tb	159	945069.2	1.9				ug/L	910514	Standard
[	Ho	165	274.0	10.1				ug/L	7	Standard
	Tl	203	371.7	57.1	0.0240	0.016	64.8	ug/L	13	Standard
	Tl	205	6.0	50.0	0.0159	0.007	44.1	ug/L	1	Standard
	Pb	206	1521.4	11.5	0.1091	0.013	11.9	ug/L	342	Standard
	Pb	207	1159.7	9.2	0.0913	0.009	10.3	ug/L	284	Standard
	Pb	208	5406.7	9.7	0.0935	0.009	10.1	ug/L	1363	Standard
	U	238	371.7	33.5	0.0339	0.011	33.3	ug/L	2	Standard
[>	Bi	209	490122.0	2.4				ug/L	470592	Standard

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Na	23	0.0		0.0050	0.000	0.0	mg/L	2	Standard
Mg	24	163159.7	4.0	0.0831	0.001	1.7	mg/L	5586	Standard
K	39	10.0	50.0	0.1036	0.068	65.4	mg/L	5	Standard
Ca	43	55.0	15.7	0.2749	0.279	101.4	mg/L	45	Standard
Fe	54	1195.3	15.4	0.3395	0.071	21.0	mg/L	350	Standard
Fe	57	313.3	15.3	0.3992	0.065	16.3	mg/L	102	Standard
Sc-1	45	49373.8	5.2				mg/L	53004	Standard
Cl	35	2.0	132.3				ug/L	2	Standard
Kr	83	137.2	4.7				ug/L	157	Standard
Br	81	4.2	34.6				ug/L	3	Standard
P	31	128352.3	1.7				ug/L	91588	Standard
S	34	16025.1	3.2				ug/L	32556	Standard
Sr	88	86.7	8.8				ug/L	62	Standard
C	12	206.7	24.8				mg/L	133	Standard
N	14	5.0	0.0				mg/L	0	Standard
Hg	202	3.3	86.6				mg/L	7	Standard

QC Calculated Values

Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recovery
Li	7			
Be	9			
Al	27			
Sc	45			
Ti	47			
V	51			
Cr	52			
Cr	53			
Mn	55			
Co	59			
Ni	60			
Cu	65			
Zn	66			
Ge	72		97.617	
As	75			
Se	82			
Se-1	77			
Ga	71			
Rb	85			
Y	89			
Rh	103			

Sample ID: L1211041121SDL WG411570-02

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[	Mo	98	
[	Ag	107	
[	Cd	111	
[	Cd	114	
>	In	115	100.226
[	Sn	118	
[	Sb	123	
[	Ba	135	
[	Ce	140	
>	Tb	159	
[	Ho	165	
[	Tl	203	
[	Tl	205	
[	Pb	206	
[	Pb	207	
[	Pb	208	
[	U	238	
>	Bi	209	104.150
[	Na	23	
[	Mg	24	
[	K	39	
[	Ca	43	
[	Fe	54	
[	Fe	57	
>	Sc-1	45	
[	Cl	35	
[	Kr	83	
[	Br	81	
[	P	31	
[	S	34	
[	Sr	88	
[	C	12	
[	N	14	
[	Hg	202	

QC Out of Limits

Measurement Type	Analyte	Mass	Out of Limits Message

Sample ID: L1211041121SDL WG411570-02

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Method 6020 - Summary Report

Sample ID: QC Std 6

Sample Date/Time: Sunday, November 18, 2012 11:30:38

Number of Replicates: 3

Autosampler Position: 101

Sample Description:

Method File: C:\NexIONData\Method\6020a.mth

Aliquot Volume (mL):

Diluted to Volume (mL):

User Name: JYH user

Cumulative Autodilution Factor: 1

Nexion-ICP 200.8\6020

Concentration Results

IS	Analyte	Mass	Intensity	RSD	Conc.	SD	RSD	Units	Blank Intens.	Mode
[	Li	7	9094.4	4.6	-879.4186	230.991	26.3	ug/L	8369	Standard
	Be	9	110502.7	6.8	58.6206	3.753	6.4	ug/L	18	Standard
	Al	27	6623863.0	7.7	59.5332	4.646	7.8	ug/L	215	Standard
[>	Sc	45	48007.6	1.8				ug/L	53004	Standard
	Ti	47	47035.4	6.5	93.7615	4.129	4.4	ug/L	26	Standard
	V	51	555717.7	6.9	47.7854	2.160	4.5	ug/L	3223	Standard
	Cr	52	530146.4	6.8	48.5809	2.441	5.0	ug/L	10379	Standard
	Cr	53	64581.9	6.7	47.9863	2.243	4.7	ug/L	192	Standard
	Mn	55	822425.1	7.6	48.5179	2.375	4.9	ug/L	1840	Standard
	Co	59	643478.7	6.2	49.4651	2.129	4.3	ug/L	115	Standard
	Ni	60	136178.2	6.9	48.6539	2.464	5.1	ug/L	75	Standard
	Cu	65	135196.7	6.9	50.0152	2.364	4.7	ug/L	155	Standard
	Zn	66	66055.3	5.6	49.2598	1.551	3.1	ug/L	237	Standard
[>	Ge	72	403211.0	3.3				ug/L	413856	Standard
	As	75	69612.6	5.2	49.3521	1.710	3.5	ug/L	-197	Standard
	Se	82	6106.0	5.3	48.3464	1.147	2.4	ug/L	-5	Standard
[	Se-1	77	4706.4	6.5	48.2240	1.880	3.9	ug/L	105	Standard
[>	Ga	71	231.7	20.1				mg/L	225	Standard
	Rb	85	893.4	4.2				ug/L	28	Standard
	Y	89	299722.9	1.9				ug/L	322845	Standard
[>	Rh	103	125.0	17.4				ug/L	92	Standard
	Mo	98	415542.6	6.6	92.0498	5.602	6.1	ug/L	18	Standard
	Ag	107	412325.5	6.0	51.9122	2.520	4.9	ug/L	63	Standard
	Cd	111	172200.9	5.9	50.0945	2.771	5.5	mg/L	20	Standard
	Cd	114	443717.5	5.9	49.0438	2.634	5.4	ug/L	56	Standard
[>	In	115	658559.0	1.5				ug/L	657102	Standard
	Sn	118	496472.9	5.7	49.7242	2.607	5.2	ug/L	555	Standard
	Sb	123	391174.7	5.5	49.8356	2.627	5.3	ug/L	62	Standard
[	Ba	135	168901.0	5.4	49.4840	2.472	5.0	ug/L	19	Standard
	Ce	140	702.3	2.4				ug/L	24	Standard
[>	Tb	159	923732.3	2.1				ug/L	910514	Standard
	Ho	165	421.3	13.2				ug/L	7	Standard
	Tl	203	643945.9	4.1	50.0650	1.713	3.4	ug/L	13	Standard
	Tl	205	21193.2	5.0	54.0074	2.338	4.3	ug/L	1	Standard
	Pb	206	522178.8	6.3	50.6390	2.895	5.7	ug/L	342	Standard
	Pb	207	443493.2	6.5	50.5797	2.816	5.6	ug/L	284	Standard
	Pb	208	2041103.0	6.4	50.1416	2.772	5.5	ug/L	1363	Standard
	U	238	524000.6	7.2	52.0154	3.317	6.4	ug/L	2	Standard
[>	Bi	209	472204.0	1.7				ug/L	470592	Standard

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Na	23	3.3	86.6	0.3385	0.289	85.4	mg/L	2	Standard
Mg	24	308810.0	2.7	0.1644	0.005	3.1	mg/L	5586	Standard
K	39	346.7	11.0	5.1589	0.505	9.8	mg/L	5	Standard
Ca	43	151.7	11.6	4.9077	0.953	19.4	mg/L	45	Standard
Fe	54	14198.2	4.7	5.8705	0.307	5.2	mg/L	350	Standard
Fe	57	3265.4	11.0	5.5362	0.650	11.7	mg/L	102	Standard
Sc-1	45	48007.6	1.8				mg/L	53004	Standard
Cl	35	2.7	78.1				ug/L	2	Standard
Kr	83	143.2	1.1				ug/L	157	Standard
Br	81	3.3	114.6				ug/L	3	Standard
P	31	104515.1	0.7				ug/L	91588	Standard
S	34	24332.3	14.9				ug/L	32556	Standard
Sr	88	46.7	22.3				ug/L	62	Standard
C	12	166.7	42.1				mg/L	133	Standard
N	14	0.0					mg/L	0	Standard
Hg	202	5.0	0.0				mg/L	7	Standard

QC Calculated Values

Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recovery
Li	7			
Be	9	117.241		
Al	27	119.066		
Sc	45			
Ti	47	93.762		
V	51	95.571		
Cr	52	97.162		
Cr	53			
Mn	55	97.036		
Co	59	98.930		
Ni	60	97.308		
Cu	65	100.030		
Zn	66	98.520		
Ge	72		97.428	
As	75	98.704		
Se	82	96.693		
Se-1	77			
Ga	71			
Rb	85			
Y	89			
Rh	103			

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[	Mo	98	92.050	
[	Ag	107	103.824	
[	Cd	111	100.189	
[	Cd	114		
>	In	115		100.222
[	Sn	118	99.448	
[	Sb	123	99.671	
[	Ba	135	98.968	
[	Ce	140		
>	Tb	159		
[	Ho	165		
[	Tl	203	100.130	
[	Tl	205		
[	Pb	206	101.278	
[	Pb	207	101.159	
[	Pb	208	100.283	
[	U	238	104.031	
>	Bi	209		100.343
[	Na	23		
[	Mg	24		
[	K	39		
[	Ca	43		
[	Fe	54		
[	Fe	57		
>	Sc-1	45		
[	Cl	35		
[	Kr	83		
[	Br	81		
[	P	31		
[	S	34		
[	Sr	88		
[	C	12		
[	N	14		
[	Hg	202		

QC Out of Limits

Measurement Type	Analyte	Mass	Out of Limits Message
QC Std 6	Be	9	
QC Std 6	Al	27	

Sample ID: QC Std 6

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Method 6020 - Summary Report

Sample ID: QC Std 7

Sample Date/Time: Sunday, November 18, 2012 11:33:50

Number of Replicates: 3

Autosampler Position: 102

Sample Description:

Method File: C:\NexIONData\Method\6020a.mth

Aliquot Volume (mL):

Diluted to Volume (mL):

User Name: JYH user

Cumulative Autodilution Factor: 1

Nexion-ICP 200.8\6020

Concentration Results

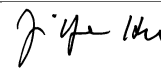
IS	Analyte	Mass	Intensity	RSD	Conc.	SD	RSD	Units	Blank Intens.	Mode
[	Li	7	8732.5	12.3	-785.7816	217.618	27.7	ug/L	8369	Standard
	Be	9	16.7	45.8	-0.0001	0.005	3979.4	ug/L	18	Standard
	Al	27	556.7	96.2	0.0030	0.005	166.5	ug/L	215	Standard
[>	Sc	45	46787.5	8.3				ug/L	53004	Standard
[	Ti	47	23.3	30.1	-0.0113	0.017	151.5	ug/L	26	Standard
	V	51	2866.7	1.5	-0.0139	0.015	105.3	ug/L	3223	Standard
	Cr	52	9186.1	3.3	-0.0390	0.035	88.5	ug/L	10379	Standard
	Cr	53	216.7	2.7	0.0553	0.010	17.5	ug/L	192	Standard
	Mn	55	1592.1	2.7	0.0073	0.005	61.5	ug/L	1840	Standard
	Co	59	115.7	6.4	-0.0064	0.001	14.7	ug/L	115	Standard
	Ni	60	68.0	10.6	-0.0107	0.002	16.1	ug/L	75	Standard
	Cu	65	131.3	12.0	-0.0079	0.005	57.8	ug/L	155	Standard
	Zn	66	220.0	7.1	-0.0305	0.022	70.8	ug/L	237	Standard
[>	Ge	72	395358.6	7.2				ug/L	413856	Standard
	As	75	-186.2	22.8	0.0039	0.038	977.2	ug/L	-197	Standard
	Se	82	-8.3	164.3	-0.0671	0.111	165.7	ug/L	-5	Standard
[	Se-1	77	93.3	4.5	0.0184	0.033	180.3	ug/L	105	Standard
[>	Ga	71	185.0	11.8				mg/L	225	Standard
[	Rb	85	25.0	40.0				ug/L	28	Standard
[	Y	89	299118.7	8.3				ug/L	322845	Standard
[>	Rh	103	111.7	18.6				ug/L	92	Standard
[	Mo	98	70.4	58.1	0.0073	0.009	129.4	ug/L	18	Standard
	Ag	107	93.0	68.2	0.0042	0.008	200.2	ug/L	63	Standard
	Cd	111	33.9	61.5	-0.0010	0.006	678.1	mg/L	20	Standard
	Cd	114	106.5	56.1	0.0026	0.007	271.4	ug/L	56	Standard
[>	In	115	641316.6	5.2				ug/L	657102	Standard
	Sn	118	427.0	10.3	-0.0054	0.005	90.4	ug/L	555	Standard
	Sb	123	307.5	39.0	0.0369	0.014	37.3	ug/L	62	Standard
[	Ba	135	34.0	65.0	-0.0097	0.007	70.9	ug/L	19	Standard
[	Ce	140	32.3	18.9				ug/L	24	Standard
[>	Tb	159	912392.0	4.6				ug/L	910514	Standard
[	Ho	165	8.7	13.3				ug/L	7	Standard
	Tl	203	72.3	103.8	0.0020	0.006	293.3	ug/L	13	Standard
	Tl	205	3.3	124.9	0.0098	0.011	110.7	ug/L	1	Standard
	Pb	206	375.7	15.3	0.0035	0.006	182.5	ug/L	342	Standard
	Pb	207	306.3	15.1	-0.0012	0.006	490.8	ug/L	284	Standard
	Pb	208	1452.4	14.6	0.0012	0.005	453.8	ug/L	1363	Standard
	U	238	37.7	111.1	0.0023	0.004	188.4	ug/L	2	Standard
[>	Bi	209	473595.2	4.6				ug/L	470592	Standard

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Na	23	0.0		0.0050	0.000	0.0	mg/L	2	Standard
Mg	24	993.4	2.8	-0.0024	0.000	1.3	mg/L	5586	Standard
K	39	5.0	0.0	0.0360	0.006	17.6	mg/L	5	Standard
Ca	43	36.7	20.8	-0.4606	0.362	78.6	mg/L	45	Standard
Fe	54	362.3	20.0	0.0032	0.019	589.3	mg/L	350	Standard
Fe	57	81.7	33.7	0.0153	0.041	266.5	mg/L	102	Standard
Sc-1	45	46787.5	8.3				mg/L	53004	Standard
Cl	35	3.7	83.3				ug/L	2	Standard
Kr	83	148.0	6.2				ug/L	157	Standard
Br	81	3.3	86.6				ug/L	3	Standard
P	31	107445.9	7.2				ug/L	91588	Standard
S	34	25090.8	5.7				ug/L	32556	Standard
Sr	88	66.7	30.3				ug/L	62	Standard
C	12	178.3	23.3				mg/L	133	Standard
N	14	1.7	173.2				mg/L	0	Standard
Hg	202	1.7	173.2				mg/L	7	Standard

QC Calculated Values

Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recovery
Li	7			
Be	9			
Al	27			
Sc	45			
Ti	47			
V	51			
Cr	52			
Cr	53			
Mn	55			
Co	59			
Ni	60			
Cu	65			
Zn	66			
Ge	72		95.531	
As	75			
Se	82			
Se-1	77			
Ga	71			
Rb	85			
Y	89			
Rh	103			

Sample ID: QC Std 7

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[	Mo	98	
[	Ag	107	
[	Cd	111	
[	Cd	114	
>	In	115	97.598
[	Sn	118	
[	Sb	123	
[	Ba	135	
[	Ce	140	
>	Tb	159	
[	Ho	165	
[	Tl	203	
[	Tl	205	
[	Pb	206	
[	Pb	207	
[	Pb	208	
[	U	238	
>	Bi	209	100.638
[	Na	23	
[	Mg	24	
[	K	39	
[	Ca	43	
[	Fe	54	
[	Fe	57	
>	Sc-1	45	
[	Cl	35	
[	Kr	83	
[	Br	81	
[	P	31	
[	S	34	
[	Sr	88	
[	C	12	
[	N	14	
[	Hg	202	

QC Out of Limits

Measurement Type	Analyte	Mass	Out of Limits Message

Sample ID: QC Std 7

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Method 6020 - Summary Report

Sample ID: L1211039301

Sample Date/Time: Sunday, November 18, 2012 11:37:04

Number of Replicates: 3

Autosampler Position: 214

Sample Description: 1

Method File: C:\NexIONData\Method\6020a.mth

Aliquot Volume (mL):

Diluted to Volume (mL):

User Name: JYH user

Cumulative Autodilution Factor: 1

Nexion-ICP 200.8\6020

Concentration Results

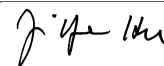
IS	Analyte	Mass	Intensity	RSD	Conc.	SD	RSD	Units	Blank Intens.	Mode
[	Li	7	719367.2	5.4	-425717.9389	23634.461	5.6	ug/L	8369	Standard
	Be	9	41.7	66.1	0.0121	0.014	116.4	ug/L	18	Standard
	Al	27	63721888.1	7.2	561.8142	41.776	7.4	ug/L	215	Standard
[>	Sc	45	48940.6	1.0				ug/L	53004	Standard
	Ti	47	1160.4	7.6	2.3627	0.150	6.4	ug/L	26	Standard
	V	51	10573.4	26.5	0.6877	0.240	34.8	ug/L	3223	Standard
	Cr	52	627836.6	6.5	60.4388	3.308	5.5	ug/L	10379	Standard
	Cr	53	79616.6	5.9	61.9510	2.800	4.5	ug/L	192	Standard
	Mn	55	359583.2	5.4	22.1643	0.900	4.1	ug/L	1840	Standard
	Co	59	15160.9	4.6	1.2048	0.043	3.5	ug/L	115	Standard
	Ni	60	117787.6	5.4	44.0495	1.910	4.3	ug/L	75	Standard
	Cu	65	3409.1	6.8	1.2642	0.076	6.0	ug/L	155	Standard
	Zn	66	27421.5	5.3	21.2926	0.908	4.3	ug/L	237	Standard
[>	Ge	72	385232.2	1.4				ug/L	413856	Standard
	As	75	60596.3	4.7	44.9753	1.655	3.7	ug/L	-197	Standard
	Se	82	192.1	4.2	1.5982	0.081	5.0	ug/L	-5	Standard
[	Se-1	77	596.3	1.3	5.5507	0.079	1.4	ug/L	105	Standard
[>	Ga	71	940.0	17.6				mg/L	225	Standard
	Rb	85	640611.8	5.6				ug/L	28	Standard
	Y	89	313621.3	1.4				ug/L	322845	Standard
[>	Rh	103	840.0	2.1				ug/L	92	Standard
	Mo	98	17512.5	3.8	4.1445	0.148	3.6	ug/L	18	Standard
	Ag	107	211.7	35.2	0.0207	0.010	49.1	ug/L	63	Standard
	Cd	111	213.3	19.1	0.0553	0.013	23.5	mg/L	20	Standard
	Cd	114	515.9	11.8	0.0515	0.007	13.9	ug/L	56	Standard
[>	In	115	615282.2	1.1				ug/L	657102	Standard
	Sn	118	2080.1	2.3	0.1739	0.006	3.2	ug/L	555	Standard
	Sb	123	7813.9	6.8	1.0627	0.072	6.8	ug/L	62	Standard
[	Ba	135	1077994.6	4.5	338.1748	14.737	4.4	ug/L	19	Standard
	Ce	140	3491.4	6.6				ug/L	24	Standard
[>	Tb	159	857831.8	0.5				ug/L	910514	Standard
	Ho	165	2994.6	2.9				ug/L	7	Standard
	Tl	203	199.0	12.6	0.0147	0.002	15.2	ug/L	13	Standard
	Tl	205	5.7	62.0	0.0184	0.011	58.0	ug/L	1	Standard
	Pb	206	628.3	5.6	0.0394	0.003	8.6	ug/L	342	Standard
	Pb	207	534.0	1.4	0.0362	0.000	0.8	ug/L	284	Standard
	Pb	208	2481.4	3.8	0.0379	0.002	5.3	ug/L	1363	Standard
	U	238	105.3	9.5	0.0109	0.001	9.9	ug/L	2	Standard
[>	Bi	209	397934.2	1.1				ug/L	470592	Standard

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Na	23	6.7	43.3	0.6570	0.281	42.7	mg/L	2	Standard
Mg	24	20104948.5	2.2	10.6821	0.218	2.0	mg/L	5586	Standard
K	39	1856.8	11.2	27.2996	2.963	10.9	mg/L	5	Standard
Ca	43	1678.4	3.1	75.1650	3.189	4.2	mg/L	45	Standard
Fe	54	386.1	19.0	0.0073	0.032	435.0	mg/L	350	Standard
Fe	57	945.0	7.8	1.4784	0.110	7.4	mg/L	102	Standard
Sc-1	45	48940.6	1.0				mg/L	53004	Standard
Cl	35	8.7	54.5				ug/L	2	Standard
Kr	83	163.3	1.7				ug/L	157	Standard
Br	81	6.7	57.3				ug/L	3	Standard
P	31	165713.6	3.2				ug/L	91588	Standard
S	34	28415.0	4.2				ug/L	32556	Standard
Sr	88	7440.2	4.4				ug/L	62	Standard
C	12	5957.8	8.5				mg/L	133	Standard
N	14	0.0					mg/L	0	Standard
Hg	202	225.0	15.6				mg/L	7	Standard

QC Calculated Values

Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recovery
Li	7			
Be	9			
Al	27			
Sc	45			
Ti	47			
V	51			
Cr	52			
Cr	53			
Mn	55			
Co	59			
Ni	60			
Cu	65			
Zn	66			
Ge	72		93.084	
As	75			
Se	82			
Se-1	77			
Ga	71			
Rb	85			
Y	89			
Rh	103			

Sample ID: L1211039301

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[	Mo	98	
[	Ag	107	
[	Cd	111	
[	Cd	114	
>	In	115	93.636
[	Sn	118	
[	Sb	123	
[	Ba	135	
[	Ce	140	
>	Tb	159	
[	Ho	165	
[	Tl	203	
[	Tl	205	
[	Pb	206	
[	Pb	207	
[	Pb	208	
[	U	238	
>	Bi	209	84.560
[	Na	23	
[	Mg	24	
[	K	39	
[	Ca	43	
[	Fe	54	
[	Fe	57	
>	Sc-1	45	
[	Cl	35	
[	Kr	83	
[	Br	81	
[	P	31	
[	S	34	
[	Sr	88	
[	C	12	
[	N	14	
[	Hg	202	

QC Out of Limits

Measurement Type	Analyte	Mass	Out of Limits Message
Ba 135 Upper, S, EEE	Ba	135	

Sample ID: L1211039301

Report Date/Time: Sunday, November 18, 2012 11:39:36

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Method 6020 - Summary Report

Sample ID: L1211039302

Sample Date/Time: Sunday, November 18, 2012 11:40:16

Number of Replicates: 3

Autosampler Position: 215

Sample Description: 1

Method File: C:\NexIONData\Method\6020a.mth

Aliquot Volume (mL):

Diluted to Volume (mL):

User Name: JYH user

Cumulative Autodilution Factor: 1

Nexion-ICP 200.8\6020

Concentration Results

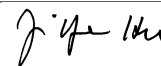
IS	Analyte	Mass	Intensity	RSD	Conc.	SD	RSD	Units	Blank Intens.	Mode
[	Li	7	771369.9	4.1	-466531.3393	22451.593	4.8	ug/L	8369	Standard
	Be	9	30.0	76.4	0.0064	0.012	184.9	ug/L	18	Standard
	Al	27	66459973.8	3.4	598.1633	22.927	3.8	ug/L	215	Standard
[>	Sc	45	47952.5	2.8				ug/L	53004	Standard
[	Ti	47	1092.7	6.9	2.1646	0.192	8.9	ug/L	26	Standard
	V	51	8374.6	52.7	0.4721	0.386	81.9	ug/L	3223	Standard
	Cr	52	665657.0	3.3	62.4771	3.267	5.2	ug/L	10379	Standard
	Cr	53	84949.3	2.8	64.3884	1.859	2.9	ug/L	192	Standard
	Mn	55	379646.9	3.5	22.7944	0.805	3.5	ug/L	1840	Standard
	Co	59	15989.4	2.1	1.2378	0.021	1.7	ug/L	115	Standard
	Ni	60	114022.5	1.9	41.5338	1.245	3.0	ug/L	75	Standard
	Cu	65	4043.5	3.8	1.4693	0.054	3.7	ug/L	155	Standard
	Zn	66	18912.8	3.6	14.2367	0.518	3.6	ug/L	237	Standard
[>	Ge	72	395785.4	2.9				ug/L	413856	Standard
	As	75	64944.8	3.2	46.9559	2.270	4.8	ug/L	-197	Standard
	Se	82	224.9	11.7	1.8245	0.259	14.2	ug/L	-5	Standard
[	Se-1	77	593.0	5.4	5.3387	0.206	3.9	ug/L	105	Standard
[>	Ga	71	980.0	7.7				mg/L	225	Standard
[	Rb	85	672779.3	2.7				ug/L	28	Standard
[	Y	89	316380.8	0.4				ug/L	322845	Standard
[>	Rh	103	853.4	5.9				ug/L	92	Standard
[	Mo	98	17864.1	4.4	4.2579	0.200	4.7	ug/L	18	Standard
	Ag	107	198.0	3.1	0.0190	0.001	5.0	ug/L	63	Standard
	Cd	111	42.9	4.6	0.0023	0.001	34.0	mg/L	20	Standard
	Cd	114	165.2	3.4	0.0101	0.001	5.7	ug/L	56	Standard
[>	In	115	611042.3	1.1				ug/L	657102	Standard
	Sn	118	6180.3	1.9	0.6185	0.011	1.7	ug/L	555	Standard
	Sb	123	8331.3	3.0	1.1413	0.039	3.4	ug/L	62	Standard
[	Ba	135	1103628.9	4.4	348.6569	15.925	4.6	ug/L	19	Standard
[	Ce	140	1838.4	5.8				ug/L	24	Standard
[>	Tb	159	856268.1	1.6				ug/L	910514	Standard
[	Ho	165	3076.0	4.7				ug/L	7	Standard
	Tl	203	125.0	2.4	0.0077	0.000	2.3	ug/L	13	Standard
	Tl	205	5.3	10.8	0.0172	0.002	8.9	ug/L	1	Standard
	Pb	206	869.7	5.6	0.0659	0.007	10.8	ug/L	342	Standard
	Pb	207	738.0	4.9	0.0625	0.007	10.7	ug/L	284	Standard
	Pb	208	3374.8	2.2	0.0627	0.004	6.2	ug/L	1363	Standard
	U	238	94.3	4.4	0.0094	0.001	7.4	ug/L	2	Standard
[>	Bi	209	403659.3	1.9				ug/L	470592	Standard

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Na	23	5.0	100.0	0.5042	0.491	97.4	mg/L	2	Standard
Mg	24	20199543.3	2.1	10.9554	0.160	1.5	mg/L	5586	Standard
K	39	1628.4	8.3	24.4284	1.760	7.2	mg/L	5	Standard
Ca	43	1681.8	6.4	76.9105	4.882	6.3	mg/L	45	Standard
Fe	54	326.2	11.8	-0.0146	0.020	137.7	mg/L	350	Standard
Fe	57	945.0	6.0	1.5138	0.122	8.0	mg/L	102	Standard
Sc-1	45	47952.5	2.8				mg/L	53004	Standard
Cl	35	11.3	18.4				ug/L	2	Standard
Kr	83	181.0	1.9				ug/L	157	Standard
Br	81	5.8	49.5				ug/L	3	Standard
P	31	168417.0	2.4				ug/L	91588	Standard
S	34	29056.2	2.8				ug/L	32556	Standard
Sr	88	7817.0	4.0				ug/L	62	Standard
C	12	6001.2	9.4				mg/L	133	Standard
N	14	3.3	173.2				mg/L	0	Standard
Hg	202	195.0	13.3				mg/L	7	Standard

QC Calculated Values

Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recovery
Li	7			
Be	9			
Al	27			
Sc	45			
Ti	47			
V	51			
Cr	52			
Cr	53			
Mn	55			
Co	59			
Ni	60			
Cu	65			
Zn	66			
Ge	72		95.634	
As	75			
Se	82			
Se-1	77			
Ga	71			
Rb	85			
Y	89			
Rh	103			

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[	Mo	98	
[	Ag	107	
[	Cd	111	
[	Cd	114	
>	In	115	92.991
[	Sn	118	
[	Sb	123	
[	Ba	135	
[	Ce	140	
>	Tb	159	
[	Ho	165	
[	Tl	203	
[	Tl	205	
[	Pb	206	
[	Pb	207	
[	Pb	208	
[	U	238	
>	Bi	209	85.777
[	Na	23	
[	Mg	24	
[	K	39	
[	Ca	43	
[	Fe	54	
[	Fe	57	
>	Sc-1	45	
[	Cl	35	
[	Kr	83	
[	Br	81	
[	P	31	
[	S	34	
[	Sr	88	
[	C	12	
[	N	14	
[	Hg	202	

QC Out of Limits

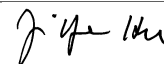
Measurement Type	Analyte	Mass	Out of Limits Message
Ba 135 Upper, S, EEE	Ba	135	

Sample ID: L1211039302

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Method 6020 - Summary Report

Sample ID: L1211039303

Sample Date/Time: Sunday, November 18, 2012 11:43:30

Number of Replicates: 3

Autosampler Position: 216

Sample Description: 1

Method File: C:\NexIONData\Method\6020a.mth

Aliquot Volume (mL):

Diluted to Volume (mL):

User Name: JYH user

Cumulative Autodilution Factor: 1

Nexion-ICP 200.8\6020

Concentration Results

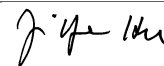
IS	Analyte	Mass	Intensity	RSD	Conc.	SD	RSD	Units	Blank Intens.	Mode
[	Li	7	733516.4	7.6	-446169.7514	22640.424	5.1	ug/L	8369	Standard
	Be	9	23.3	24.7	0.0031	0.003	111.1	ug/L	18	Standard
	Al	27	64832720.2	3.1	587.8492	19.958	3.4	ug/L	215	Standard
[>	Sc	45	47614.8	4.5				ug/L	53004	Standard
	Ti	47	1127.0	3.3	2.2561	0.038	1.7	ug/L	26	Standard
	V	51	14226.0	31.6	0.9957	0.377	37.8	ug/L	3223	Standard
	Cr	52	628269.3	7.0	59.4823	3.305	5.6	ug/L	10379	Standard
	Cr	53	79560.5	6.1	60.9046	2.733	4.5	ug/L	192	Standard
	Mn	55	362018.4	5.9	21.9530	0.964	4.4	ug/L	1840	Standard
	Co	59	15396.8	4.9	1.2037	0.040	3.3	ug/L	115	Standard
	Ni	60	120056.6	6.2	44.1662	1.967	4.5	ug/L	75	Standard
	Cu	65	3714.8	3.5	1.3598	0.026	1.9	ug/L	155	Standard
	Zn	66	29648.0	5.7	22.6611	0.974	4.3	ug/L	237	Standard
[>	Ge	72	391536.3	1.7				ug/L	413856	Standard
	As	75	60422.4	4.9	44.1206	1.441	3.3	ug/L	-197	Standard
	Se	82	219.2	7.0	1.7948	0.154	8.6	ug/L	-5	Standard
[	Se-1	77	597.0	4.3	5.4517	0.232	4.3	ug/L	105	Standard
[>	Ga	71	946.7	5.0				mg/L	225	Standard
	Rb	85	659090.7	5.7				ug/L	28	Standard
	Y	89	324079.6	3.0				ug/L	322845	Standard
[>	Rh	103	831.7	0.9				ug/L	92	Standard
	Mo	98	18242.5	4.0	4.2726	0.157	3.7	ug/L	18	Standard
	Ag	107	161.7	17.8	0.0137	0.004	26.2	ug/L	63	Standard
	Cd	111	52.1	10.4	0.0049	0.002	33.9	mg/L	20	Standard
	Cd	114	180.9	6.3	0.0116	0.001	9.8	ug/L	56	Standard
[>	In	115	621724.2	1.1				ug/L	657102	Standard
	Sn	118	2416.2	4.9	0.2072	0.010	4.8	ug/L	555	Standard
	Sb	123	7667.3	4.2	1.0318	0.038	3.7	ug/L	62	Standard
[	Ba	135	1080075.3	4.0	335.2895	11.434	3.4	ug/L	19	Standard
	Ce	140	1474.1	3.2				ug/L	24	Standard
[>	Tb	159	867654.8	1.2				ug/L	910514	Standard
	Ho	165	3049.0	5.3				ug/L	7	Standard
	Tl	203	94.3	5.8	0.0049	0.000	9.4	ug/L	13	Standard
	Tl	205	3.0	33.3	0.0102	0.003	28.9	ug/L	1	Standard
	Pb	206	704.0	3.4	0.0469	0.003	5.4	ug/L	342	Standard
	Pb	207	564.0	6.7	0.0391	0.005	12.0	ug/L	284	Standard
	Pb	208	2658.8	5.5	0.0419	0.004	9.3	ug/L	1363	Standard
	U	238	94.3	7.4	0.0094	0.001	8.2	ug/L	2	Standard
[>	Bi	209	404083.5	0.5				ug/L	470592	Standard

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Na	23	5.0	100.0	0.5213	0.516	99.0	mg/L	2	Standard
Mg	24	20122605.3	2.1	11.0103	0.706	6.4	mg/L	5586	Standard
K	39	1673.4	7.7	25.2708	0.996	3.9	mg/L	5	Standard
Ca	43	1478.4	6.9	67.9383	6.276	9.2	mg/L	45	Standard
Fe	54	363.3	10.0	0.0021	0.017	831.7	mg/L	350	Standard
Fe	57	923.4	6.2	1.4860	0.071	4.8	mg/L	102	Standard
Sc-1	45	47614.8	4.5				mg/L	53004	Standard
Cl	35	11.0	24.1				ug/L	2	Standard
Kr	83	176.6	7.2				ug/L	157	Standard
Br	81	7.5	0.0				ug/L	3	Standard
P	31	169005.8	1.3				ug/L	91588	Standard
S	34	28518.5	1.3				ug/L	32556	Standard
Sr	88	7540.2	5.4				ug/L	62	Standard
C	12	6246.3	3.2				mg/L	133	Standard
N	14	0.0					mg/L	0	Standard
Hg	202	178.3	21.4				mg/L	7	Standard

QC Calculated Values

Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recovery
Li	7			
Be	9			
Al	27			
Sc	45			
Ti	47			
V	51			
Cr	52			
Cr	53			
Mn	55			
Co	59			
Ni	60			
Cu	65			
Zn	66			
Ge	72		94.607	
As	75			
Se	82			
Se-1	77			
Ga	71			
Rb	85			
Y	89			
Rh	103			

Sample ID: L1211039303

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[	Mo	98	
[	Ag	107	
[	Cd	111	
[	Cd	114	
>	In	115	94.616
[	Sn	118	
[	Sb	123	
[	Ba	135	
[	Ce	140	
>	Tb	159	
[	Ho	165	
[	Tl	203	
[	Tl	205	
[	Pb	206	
[	Pb	207	
[	Pb	208	
[	U	238	
>	Bi	209	85.867
[	Na	23	
[	Mg	24	
[	K	39	
[	Ca	43	
[	Fe	54	
[	Fe	57	
>	Sc-1	45	
[	Cl	35	
[	Kr	83	
[	Br	81	
[	P	31	
[	S	34	
[	Sr	88	
[	C	12	
[	N	14	
[	Hg	202	

QC Out of Limits

Measurement Type	Analyte	Mass	Out of Limits Message
Ba 135 Upper, S, EEE	Ba	135	

Sample ID: L1211039303

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Method 6020 - Summary Report

Sample ID: L1211039304

Sample Date/Time: Sunday, November 18, 2012 11:46:42

Number of Replicates: 3

Autosampler Position: 217

Sample Description: 1

Method File: C:\NexIONData\Method\6020a.mth

Aliquot Volume (mL):

Diluted to Volume (mL):

User Name: JYH user

Cumulative Autodilution Factor: 1

Nexion-ICP 200.8\6020

Concentration Results

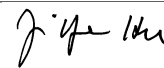
IS	Analyte	Mass	Intensity	RSD	Conc.	SD	RSD	Units	Blank Intens.	Mode
[	Li	7	771355.2	10.1	-478991.7645	28324.012	5.9	ug/L	8369	Standard
	Be	9	23.3	24.7	0.0032	0.003	79.5	ug/L	18	Standard
	Al	27	66713220.6	5.9	617.4442	28.548	4.6	ug/L	215	Standard
[>	Sc	45	46620.0	4.3				ug/L	53004	Standard
[	Ti	47	1173.7	6.1	2.3783	0.113	4.8	ug/L	26	Standard
	V	51	6745.8	20.4	0.3395	0.117	34.4	ug/L	3223	Standard
	Cr	52	673627.1	6.4	64.5707	3.289	5.1	ug/L	10379	Standard
	Cr	53	86836.1	5.5	67.2339	2.710	4.0	ug/L	192	Standard
	Mn	55	387138.3	6.1	23.7448	1.110	4.7	ug/L	1840	Standard
	Co	59	14938.7	4.4	1.1807	0.035	3.0	ug/L	115	Standard
	Ni	60	121609.7	5.4	45.2432	1.783	3.9	ug/L	75	Standard
	Cu	65	3813.1	7.6	1.4130	0.091	6.5	ug/L	155	Standard
	Zn	66	17274.5	6.0	13.2685	0.620	4.7	ug/L	237	Standard
[>	Ge	72	387213.1	1.5				ug/L	413856	Standard
	As	75	63185.7	5.0	46.6460	1.667	3.6	ug/L	-197	Standard
	Se	82	244.3	5.3	2.0215	0.137	6.8	ug/L	-5	Standard
[	Se-1	77	609.3	8.1	5.6551	0.459	8.1	ug/L	105	Standard
[>	Ga	71	1025.0	6.4				mg/L	225	Standard
[	Rb	85	675677.2	4.8				ug/L	28	Standard
[	Y	89	312471.4	1.6				ug/L	322845	Standard
[>	Rh	103	863.4	9.6				ug/L	92	Standard
[	Mo	98	15602.3	5.9	3.7183	0.185	5.0	ug/L	18	Standard
	Ag	107	206.3	42.0	0.0202	0.012	59.4	ug/L	63	Standard
	Cd	111	60.6	40.8	0.0079	0.008	100.7	mg/L	20	Standard
	Cd	114	215.9	34.4	0.0162	0.009	56.2	ug/L	56	Standard
[>	In	115	610681.2	1.3				ug/L	657102	Standard
	Sn	118	2053.8	5.1	0.1727	0.012	6.9	ug/L	555	Standard
	Sb	123	7866.7	4.1	1.0779	0.040	3.7	ug/L	62	Standard
[	Ba	135	1120690.3	4.4	354.1675	12.953	3.7	ug/L	19	Standard
[	Ce	140	1845.1	1.5				ug/L	24	Standard
[>	Tb	159	855287.9	0.7				ug/L	910514	Standard
[	Ho	165	3181.3	4.9				ug/L	7	Standard
	Tl	203	145.7	38.8	0.0099	0.005	53.7	ug/L	13	Standard
	Tl	205	3.0	33.3	0.0104	0.003	30.2	ug/L	1	Standard
	Pb	206	657.7	4.9	0.0433	0.004	9.2	ug/L	342	Standard
	Pb	207	532.3	5.3	0.0364	0.003	7.9	ug/L	284	Standard
	Pb	208	2472.4	3.2	0.0382	0.002	6.1	ug/L	1363	Standard
	U	238	132.0	21.4	0.0141	0.003	24.5	ug/L	2	Standard
[>	Bi	209	395452.7	1.3				ug/L	470592	Standard

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Na	23	10.0		1.0336	0.043	4.2	mg/L	2	Standard
Mg	24	19379487.3	0.9	10.8237	0.518	4.8	mg/L	5586	Standard
K	39	1771.8	2.0	27.3963	1.611	5.9	mg/L	5	Standard
Ca	43	1800.1	4.4	84.9182	3.205	3.8	mg/L	45	Standard
Fe	54	349.2	6.3	-0.0007	0.013	1933.7	mg/L	350	Standard
Fe	57	958.4	9.5	1.5827	0.144	9.1	mg/L	102	Standard
Sc-1	45	46620.0	4.3				mg/L	53004	Standard
Cl	35	9.7	15.8				ug/L	2	Standard
Kr	83	164.1	6.1				ug/L	157	Standard
Br	81	5.0	86.6				ug/L	3	Standard
P	31	170530.3	1.5				ug/L	91588	Standard
S	34	30132.4	1.7				ug/L	32556	Standard
Sr	88	7443.5	8.0				ug/L	62	Standard
C	12	5661.1	9.6				mg/L	133	Standard
N	14	0.0					mg/L	0	Standard
Hg	202	170.0	15.6				mg/L	7	Standard

QC Calculated Values

Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recovery
Li	7			
Be	9			
Al	27			
Sc	45			
Ti	47			
V	51			
Cr	52			
Cr	53			
Mn	55			
Co	59			
Ni	60			
Cu	65			
Zn	66			
Ge	72		93.562	
As	75			
Se	82			
Se-1	77			
Ga	71			
Rb	85			
Y	89			
Rh	103			

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[	Mo	98	
[	Ag	107	
[	Cd	111	
[	Cd	114	
>	In	115	92.936
[	Sn	118	
[	Sb	123	
[	Ba	135	
[	Ce	140	
>	Tb	159	
[	Ho	165	
[	Tl	203	
[	Tl	205	
[	Pb	206	
[	Pb	207	
[	Pb	208	
[	U	238	
>	Bi	209	84.033
[	Na	23	
[	Mg	24	
[	K	39	
[	Ca	43	
[	Fe	54	
[	Fe	57	
>	Sc-1	45	
[	Cl	35	
[	Kr	83	
[	Br	81	
[	P	31	
[	S	34	
[	Sr	88	
[	C	12	
[	N	14	
[	Hg	202	

QC Out of Limits

Measurement Type	Analyte	Mass	Out of Limits Message
Ba 135 Upper, S, EEE	Ba	135	

Sample ID: L1211039304

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Method 6020 - Summary Report

Sample ID: L1211041123

Sample Date/Time: Sunday, November 18, 2012 11:49:54

Number of Replicates: 3

Autosampler Position: 218

Sample Description: 1

Method File: C:\NexIONData\Method\6020a.mth

Aliquot Volume (mL):

Diluted to Volume (mL):

User Name: JYH user

Cumulative Autodilution Factor: 1

Nexion-ICP 200.8\6020

Concentration Results

IS	Analyte	Mass	Intensity	RSD	Conc.	SD	RSD	Units	Blank Intens.	Mode
[	Li	7	19325.7	3.0	-6472.4379	263.514	4.1	ug/L	8369	Standard
	Be	9	131.7	15.8	0.0564	0.009	15.6	ug/L	18	Standard
	Al	27	1173349.0	8.9	9.9488	0.567	5.7	ug/L	215	Standard
[>	Sc	45	50810.1	3.5				ug/L	53004	Standard
[	Ti	47	22202.0	7.2	44.8481	2.598	5.8	ug/L	26	Standard
	V	51	38875.6	5.8	3.1421	0.148	4.7	ug/L	3223	Standard
	Cr	52	28955.4	5.4	1.8258	0.101	5.5	ug/L	10379	Standard
	Cr	53	3232.8	9.9	2.3310	0.207	8.9	ug/L	192	Standard
	Mn	55	724075.8	5.4	43.3240	1.517	3.5	ug/L	1840	Standard
	Co	59	5849.8	3.9	0.4408	0.015	3.3	ug/L	115	Standard
	Ni	60	2650.6	4.8	0.9260	0.045	4.8	ug/L	75	Standard
	Cu	65	4129.2	4.3	1.4937	0.034	2.3	ug/L	155	Standard
	Zn	66	7375.1	6.0	5.3999	0.229	4.2	ug/L	237	Standard
[>	Ge	72	397610.0	2.1				ug/L	413856	Standard
	As	75	91.4	84.8	0.2051	0.055	26.9	ug/L	-197	Standard
	Se	82	73.8	24.8	0.5970	0.139	23.2	ug/L	-5	Standard
[	Se-1	77	148.7	16.6	0.5953	0.230	38.6	ug/L	105	Standard
[>	Ga	71	4682.4	5.4				mg/L	225	Standard
[	Rb	85	13531.1	7.8				ug/L	28	Standard
[	Y	89	314418.8	2.8				ug/L	322845	Standard
[>	Rh	103	135.0	9.8				ug/L	92	Standard
[	Mo	98	470.6	5.9	0.0961	0.007	7.1	ug/L	18	Standard
	Ag	107	81.7	5.8	0.0024	0.001	20.9	ug/L	63	Standard
	Cd	111	38.1	14.4	-0.0000	0.002	6488.1	mg/L	20	Standard
	Cd	114	110.0	11.3	0.0026	0.001	53.9	ug/L	56	Standard
[>	In	115	655629.0	1.8				ug/L	657102	Standard
	Sn	118	1204.7	2.9	0.0720	0.004	6.0	ug/L	555	Standard
	Sb	123	328.7	8.7	0.0391	0.004	9.1	ug/L	62	Standard
[	Ba	135	100882.8	5.6	29.6871	1.686	5.7	ug/L	19	Standard
[	Ce	140	145961.5	5.6				ug/L	24	Standard
[>	Tb	159	951014.0	2.0				ug/L	910514	Standard
[	Ho	165	1461.1	7.8				ug/L	7	Standard
	Tl	203	159.3	7.0	0.0083	0.001	12.4	ug/L	13	Standard
	Tl	205	3.3	45.8	0.0095	0.004	39.6	ug/L	1	Standard
	Pb	206	5686.4	5.1	0.4990	0.018	3.6	ug/L	342	Standard
	Pb	207	4696.4	5.4	0.4806	0.020	4.1	ug/L	284	Standard
	Pb	208	21851.1	5.5	0.4834	0.020	4.0	ug/L	1363	Standard
	U	238	2830.9	6.2	0.2694	0.013	4.9	ug/L	2	Standard
[>	Bi	209	489730.5	1.7				ug/L	470592	Standard

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Na	23	1.7	173.2	0.1594	0.267	167.8	mg/L	2	Standard
Mg	24	441507.1	2.1	0.2232	0.003	1.4	mg/L	5586	Standard
K	39	36.7	20.8	0.4774	0.097	20.2	mg/L	5	Standard
Ca	43	105.0	28.6	2.4070	1.198	49.8	mg/L	45	Standard
Fe	54	3299.8	8.5	1.1675	0.069	5.9	mg/L	350	Standard
Fe	57	786.7	3.7	1.1610	0.042	3.6	mg/L	102	Standard
Sc-1	45	50810.1	3.5				mg/L	53004	Standard
Cl	35	1.7	124.9				ug/L	2	Standard
Kr	83	154.2	6.0				ug/L	157	Standard
Br	81	9.2	31.5				ug/L	3	Standard
P	31	232497.8	3.8				ug/L	91588	Standard
S	34	20285.3	4.7				ug/L	32556	Standard
Sr	88	285.0	9.3				ug/L	62	Standard
C	12	1033.4	19.8				mg/L	133	Standard
N	14	3.3	86.6				mg/L	0	Standard
Hg	202	6.7	86.6				mg/L	7	Standard

QC Calculated Values

Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recovery
Li	7			
Be	9			
Al	27			
Sc	45			
Ti	47			
V	51			
Cr	52			
Cr	53			
Mn	55			
Co	59			
Ni	60			
Cu	65			
Zn	66			
Ge	72		96.075	
As	75			
Se	82			
Se-1	77			
Ga	71			
Rb	85			
Y	89			
Rh	103			

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[	Mo	98	
[	Ag	107	
[	Cd	111	
[	Cd	114	
>	In	115	99.776
[	Sn	118	
[	Sb	123	
[	Ba	135	
[	Ce	140	
>	Tb	159	
[	Ho	165	
[	Tl	203	
[	Tl	205	
[	Pb	206	
[	Pb	207	
[	Pb	208	
[	U	238	
>	Bi	209	104.067
[	Na	23	
[	Mg	24	
[	K	39	
[	Ca	43	
[	Fe	54	
[	Fe	57	
>	Sc-1	45	
[	Cl	35	
[	Kr	83	
[	Br	81	
[	P	31	
[	S	34	
[	Sr	88	
[	C	12	
[	N	14	
[	Hg	202	

QC Out of Limits

Measurement Type	Analyte	Mass	Out of Limits Message

Sample ID: L1211041123

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Method 6020 - Summary Report

Sample ID: L1211041124

Sample Date/Time: Sunday, November 18, 2012 11:53:06

Number of Replicates: 3

Autosampler Position: 219

Sample Description: 1

Method File: C:\NexIONData\Method\6020a.mth

Aliquot Volume (mL):

Diluted to Volume (mL):

User Name: JYH user

Cumulative Autodilution Factor: 1

Nexion-ICP 200.8\6020

Concentration Results

IS	Analyte	Mass	Intensity	RSD	Conc.	SD	RSD	Units	Blank Intens.	Mode
[	Li	7	29624.0	7.0	-12963.6361	859.716	6.6	ug/L	8369	Standard
	Be	9	25.0	34.6	0.0036	0.005	133.1	ug/L	18	Standard
	Al	27	1392422.5	9.1	12.2034	0.800	6.6	ug/L	215	Standard
[>	Sc	45	49164.7	2.9				ug/L	53004	Standard
[	Ti	47	2063.8	6.6	4.1141	0.167	4.1	ug/L	26	Standard
	V	51	7831.7	4.4	0.4195	0.020	4.7	ug/L	3223	Standard
	Cr	52	13624.8	2.9	0.3748	0.011	2.8	ug/L	10379	Standard
	Cr	53	1239.2	9.6	0.8256	0.071	8.6	ug/L	192	Standard
	Mn	55	66960.8	4.0	3.9264	0.053	1.4	ug/L	1840	Standard
	Co	59	851.0	2.9	0.0509	0.000	0.7	ug/L	115	Standard
	Ni	60	1335.7	7.8	0.4486	0.025	5.7	ug/L	75	Standard
	Cu	65	2341.2	7.2	0.8215	0.038	4.7	ug/L	155	Standard
	Zn	66	5008.8	14.9	3.5964	0.456	12.7	ug/L	237	Standard
[>	Ge	72	397624.6	2.9				ug/L	413856	Standard
	As	75	-94.8	29.0	0.0722	0.019	26.3	ug/L	-197	Standard
	Se	82	36.7	17.3	0.2992	0.045	15.0	ug/L	-5	Standard
[	Se-1	77	133.7	1.9	0.4402	0.062	14.0	ug/L	105	Standard
[>	Ga	71	441.7	19.1				mg/L	225	Standard
[	Rb	85	1320.1	5.0				ug/L	28	Standard
[	Y	89	304361.5	2.8				ug/L	322845	Standard
[>	Rh	103	106.7	25.8				ug/L	92	Standard
[	Mo	98	196.8	4.2	0.0352	0.001	3.5	ug/L	18	Standard
	Ag	107	197.0	3.5	0.0171	0.001	4.4	ug/L	63	Standard
	Cd	111	30.4	15.5	-0.0023	0.002	68.8	mg/L	20	Standard
	Cd	114	88.4	9.4	0.0003	0.001	413.2	ug/L	56	Standard
[>	In	115	654190.0	2.4				ug/L	657102	Standard
	Sn	118	1067.7	1.1	0.0584	0.004	6.5	ug/L	555	Standard
	Sb	123	64.4	8.9	0.0053	0.001	9.9	ug/L	62	Standard
[	Ba	135	51277.1	5.0	15.1050	0.435	2.9	ug/L	19	Standard
[	Ce	140	23043.2	4.8				ug/L	24	Standard
[>	Tb	159	950020.8	2.1				ug/L	910514	Standard
[	Ho	165	144.7	7.0				ug/L	7	Standard
	Tl	203	139.3	15.6	0.0069	0.002	26.8	ug/L	13	Standard
	Tl	205	5.0	40.0	0.0136	0.005	34.4	ug/L	1	Standard
	Pb	206	845.7	1.7	0.0467	0.001	2.9	ug/L	342	Standard
	Pb	207	652.3	7.5	0.0361	0.004	10.3	ug/L	284	Standard
	Pb	208	3232.1	3.6	0.0427	0.001	3.1	ug/L	1363	Standard
	U	238	69.3	7.9	0.0052	0.001	12.6	ug/L	2	Standard
[>	Bi	209	486541.7	2.3				ug/L	470592	Standard

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Na	23	0.0		0.0050	0.000	0.0	mg/L	2	Standard
Mg	24	397417.2	2.8	0.2073	0.001	0.6	mg/L	5586	Standard
K	39	46.7	16.4	0.6452	0.131	20.3	mg/L	5	Standard
Ca	43	93.3	18.8	2.0465	0.743	36.3	mg/L	45	Standard
Fe	54	654.8	11.6	0.1179	0.033	28.0	mg/L	350	Standard
Fe	57	195.0	11.8	0.2019	0.038	18.9	mg/L	102	Standard
Sc-1	45	49164.7	2.9				mg/L	53004	Standard
Cl	35	1.3	114.6				ug/L	2	Standard
Kr	83	148.9	2.1				ug/L	157	Standard
Br	81	5.8	49.5				ug/L	3	Standard
P	31	202894.4	5.2				ug/L	91588	Standard
S	34	19587.7	3.2				ug/L	32556	Standard
Sr	88	211.7	17.7				ug/L	62	Standard
C	12	690.0	18.6				mg/L	133	Standard
N	14	0.0					mg/L	0	Standard
Hg	202	80.0	10.8				mg/L	7	Standard

QC Calculated Values

Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recovery
Li	7			
Be	9			
Al	27			
Sc	45			
Ti	47			
V	51			
Cr	52			
Cr	53			
Mn	55			
Co	59			
Ni	60			
Cu	65			
Zn	66			
Ge	72		96.078	
As	75			
Se	82			
Se-1	77			
Ga	71			
Rb	85			
Y	89			
Rh	103			

Sample ID: L1211041124

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[	Mo	98	
[	Ag	107	
[	Cd	111	
[	Cd	114	
>	In	115	99.557
[	Sn	118	
[	Sb	123	
[	Ba	135	
[	Ce	140	
>	Tb	159	
[	Ho	165	
[	Tl	203	
[	Tl	205	
[	Pb	206	
[	Pb	207	
[	Pb	208	
[	U	238	
>	Bi	209	103.389
[	Na	23	
[	Mg	24	
[	K	39	
[	Ca	43	
[	Fe	54	
[	Fe	57	
>	Sc-1	45	
[	Cl	35	
[	Kr	83	
[	Br	81	
[	P	31	
[	S	34	
[	Sr	88	
[	C	12	
[	N	14	
[	Hg	202	

QC Out of Limits

Measurement Type	Analyte	Mass	Out of Limits Message

Sample ID: L1211041124

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Method 6020 - Summary Report

Sample ID: L1211041125

Sample Date/Time: Sunday, November 18, 2012 11:56:18

Number of Replicates: 3

Autosampler Position: 220

Sample Description: 1

Method File: C:\NexIONData\Method\6020a.mth

Aliquot Volume (mL):

Diluted to Volume (mL):

User Name: JYH user

Cumulative Autodilution Factor: 1

Nexion-ICP 200.8\6020

Concentration Results

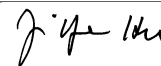
IS	Analyte	Mass	Intensity	RSD	Conc.	SD	RSD	Units	Blank Intens.	Mode
[	Li	7	9965.0	7.4	-1620.8254	256.483	15.8	ug/L	8369	Standard
	Be	9	28.3	56.7	0.0063	0.009	146.1	ug/L	18	Standard
	Al	27	3133346.5	5.4	29.1650	1.521	5.2	ug/L	215	Standard
[>	Sc	45	46360.9	3.4				ug/L	53004	Standard
[	Ti	47	345.0	20.2	0.6422	0.143	22.3	ug/L	26	Standard
	V	51	4201.0	3.0	0.1034	0.024	23.2	ug/L	3223	Standard
	Cr	52	11411.6	0.7	0.1710	0.033	19.0	ug/L	10379	Standard
	Cr	53	955.0	3.0	0.6153	0.004	0.7	ug/L	192	Standard
	Mn	55	2893189.4	8.0	174.1152	9.206	5.3	ug/L	1840	Standard
	Co	59	5742.1	7.0	0.4342	0.020	4.7	ug/L	115	Standard
	Ni	60	2393.5	3.7	0.8368	0.008	1.0	ug/L	75	Standard
	Cu	65	1482.1	5.1	0.5018	0.012	2.5	ug/L	155	Standard
	Zn	66	4721.1	6.6	3.4016	0.147	4.3	ug/L	237	Standard
[>	Ge	72	395758.3	3.6				ug/L	413856	Standard
	As	75	62.3	60.3	0.1842	0.025	13.8	ug/L	-197	Standard
	Se	82	45.4	32.6	0.3690	0.105	28.6	ug/L	-5	Standard
[	Se-1	77	120.0	11.3	0.3035	0.174	57.5	ug/L	105	Standard
[>	Ga	71	256.7	10.7				mg/L	225	Standard
[	Rb	85	16512.4	7.5				ug/L	28	Standard
[	Y	89	299885.8	4.4				ug/L	322845	Standard
[>	Rh	103	128.3	4.5				ug/L	92	Standard
[	Mo	98	307.5	8.1	0.0603	0.005	8.8	ug/L	18	Standard
	Ag	107	56.3	6.7	-0.0007	0.000	51.3	ug/L	63	Standard
	Cd	111	43.0	17.2	0.0015	0.002	141.4	mg/L	20	Standard
	Cd	114	99.1	7.1	0.0015	0.000	26.9	ug/L	56	Standard
[>	In	115	650770.4	3.8				ug/L	657102	Standard
	Sn	118	2393.9	7.4	0.1933	0.009	4.9	ug/L	555	Standard
	Sb	123	236.2	4.3	0.0275	0.000	1.2	ug/L	62	Standard
[	Ba	135	80924.2	5.1	23.9818	0.723	3.0	ug/L	19	Standard
[	Ce	140	20312.0	5.6				ug/L	24	Standard
[>	Tb	159	934930.0	2.6				ug/L	910514	Standard
[	Ho	165	267.0	4.3				ug/L	7	Standard
	Tl	203	208.3	2.5	0.0122	0.001	4.4	ug/L	13	Standard
	Tl	205	10.3	11.2	0.0271	0.003	11.9	ug/L	1	Standard
	Pb	206	958.4	6.9	0.0582	0.005	8.6	ug/L	342	Standard
	Pb	207	793.7	1.3	0.0527	0.002	4.7	ug/L	284	Standard
	Pb	208	3728.2	3.2	0.0554	0.001	2.5	ug/L	1363	Standard
	U	238	46.3	23.3	0.0030	0.001	35.5	ug/L	2	Standard
[>	Bi	209	481814.1	1.6				ug/L	470592	Standard

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Na	23	1.7	173.2	0.1712	0.288	168.1	mg/L	2	Standard
Mg	24	370984.5	1.9	0.2053	0.005	2.4	mg/L	5586	Standard
K	39	96.7	28.5	1.4626	0.434	29.7	mg/L	5	Standard
Ca	43	278.3	3.7	11.3228	0.631	5.6	mg/L	45	Standard
Fe	54	737.2	6.9	0.1706	0.026	15.0	mg/L	350	Standard
Fe	57	300.0	7.6	0.4118	0.059	14.3	mg/L	102	Standard
Sc-1	45	46360.9	3.4				mg/L	53004	Standard
Cl	35	2.7	57.3				ug/L	2	Standard
Kr	83	154.4	7.5				ug/L	157	Standard
Br	81	7.5	120.2				ug/L	3	Standard
P	31	141699.6	1.6				ug/L	91588	Standard
S	34	23266.2	2.0				ug/L	32556	Standard
Sr	88	308.3	12.0				ug/L	62	Standard
C	12	740.0	11.7				mg/L	133	Standard
N	14	0.0					mg/L	0	Standard
Hg	202	3.3	86.6				mg/L	7	Standard

QC Calculated Values

Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recovery
Li	7			
Be	9			
Al	27			
Sc	45			
Ti	47			
V	51			
Cr	52			
Cr	53			
Mn	55			
Co	59			
Ni	60			
Cu	65			
Zn	66			
Ge	72		95.627	
As	75			
Se	82			
Se-1	77			
Ga	71			
Rb	85			
Y	89			
Rh	103			

Sample ID: L1211041125

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[	Mo	98	
[	Ag	107	
[	Cd	111	
[	Cd	114	
>	In	115	99.036
[	Sn	118	
[	Sb	123	
[	Ba	135	
[	Ce	140	
>	Tb	159	
[	Ho	165	
[	Tl	203	
[	Tl	205	
[	Pb	206	
[	Pb	207	
[	Pb	208	
[	U	238	
>	Bi	209	102.385
[	Na	23	
[	Mg	24	
[	K	39	
[	Ca	43	
[	Fe	54	
[	Fe	57	
>	Sc-1	45	
[	Cl	35	
[	Kr	83	
[	Br	81	
[	P	31	
[	S	34	
[	Sr	88	
[	C	12	
[	N	14	
[	Hg	202	

QC Out of Limits

Measurement Type	Analyte	Mass	Out of Limits Message
Mn 55 Upper, S, EEE	Mn	55	

Sample ID: L1211041125

Report Date/Time: Sunday, November 18, 2012 11:58:50

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Method 6020 - Summary Report

Sample ID: L1211041126

Sample Date/Time: Sunday, November 18, 2012 11:59:30

Number of Replicates: 3

Autosampler Position: 221

Sample Description: 1

Method File: C:\NexIONData\Method\6020a.mth

Aliquot Volume (mL):

Diluted to Volume (mL):

User Name: JYH user

Cumulative Autodilution Factor: 1

Nexion-ICP 200.8\6020

Concentration Results

IS	Analyte	Mass	Intensity	RSD	Conc.	SD	RSD	Units	Blank Intens.	Mode
[	Li	7	13549.4	9.7	-3629.9104	633.669	17.5	ug/L	8369	Standard
	Be	9	18.3	41.7	0.0004	0.004	1127.0	ug/L	18	Standard
	Al	27	6242317.4	7.2	56.4072	4.402	7.8	ug/L	215	Standard
[>	Sc	45	47770.2	2.7				ug/L	53004	Standard
[	Ti	47	856.0	36.6	1.6991	0.669	39.4	ug/L	26	Standard
	V	51	6392.8	5.9	0.3003	0.020	6.5	ug/L	3223	Standard
	Cr	52	12950.2	3.8	0.3266	0.030	9.3	ug/L	10379	Standard
	Cr	53	1329.2	7.4	0.9077	0.078	8.6	ug/L	192	Standard
	Mn	55	210520.2	6.8	12.6918	0.554	4.4	ug/L	1840	Standard
	Co	59	1185.0	7.7	0.0780	0.004	5.6	ug/L	115	Standard
	Ni	60	1993.8	6.0	0.6965	0.023	3.3	ug/L	75	Standard
	Cu	65	1865.1	8.0	0.6517	0.039	6.0	ug/L	155	Standard
	Zn	66	2939.6	5.5	2.0616	0.092	4.5	ug/L	237	Standard
[>	Ge	72	392616.4	3.3				ug/L	413856	Standard
	As	75	54.8	38.5	0.1794	0.014	7.7	ug/L	-197	Standard
	Se	82	56.8	23.1	0.4657	0.093	19.9	ug/L	-5	Standard
[	Se-1	77	161.3	6.5	0.7560	0.133	17.6	ug/L	105	Standard
[>	Ga	71	250.0	15.1				mg/L	225	Standard
[	Rb	85	9086.1	2.6				ug/L	28	Standard
[	Y	89	304434.8	4.2				ug/L	322845	Standard
[>	Rh	103	118.3	9.8				ug/L	92	Standard
[	Mo	98	396.3	10.6	0.0798	0.009	11.0	ug/L	18	Standard
	Ag	107	69.7	4.4	0.0010	0.000	43.2	ug/L	63	Standard
	Cd	111	22.5	11.9	-0.0046	0.001	20.1	mg/L	20	Standard
	Cd	114	69.1	6.0	-0.0019	0.000	17.0	ug/L	56	Standard
[>	In	115	653027.7	2.2				ug/L	657102	Standard
	Sn	118	1028.4	13.1	0.0547	0.015	27.7	ug/L	555	Standard
	Sb	123	260.7	3.7	0.0306	0.002	6.3	ug/L	62	Standard
[	Ba	135	87496.9	6.2	25.8398	1.398	5.4	ug/L	19	Standard
[	Ce	140	2705.6	6.1				ug/L	24	Standard
[>	Tb	159	938223.8	2.4				ug/L	910514	Standard
[	Ho	165	78.0	9.0				ug/L	7	Standard
	Tl	203	280.0	5.7	0.0179	0.001	7.6	ug/L	13	Standard
	Tl	205	10.0	20.0	0.0264	0.005	19.1	ug/L	1	Standard
	Pb	206	682.0	5.5	0.0324	0.003	10.0	ug/L	342	Standard
	Pb	207	558.0	6.4	0.0268	0.004	14.3	ug/L	284	Standard
	Pb	208	2667.1	4.3	0.0303	0.003	8.3	ug/L	1363	Standard
	U	238	1705.4	6.5	0.1656	0.010	6.1	ug/L	2	Standard
[>	Bi	209	478379.8	0.6				ug/L	470592	Standard

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Na	23	1.7	173.2	0.1689	0.284	168.1	mg/L	2	Standard
Mg	24	358071.7	2.5	0.1921	0.007	3.6	mg/L	5586	Standard
K	39	103.3	14.0	1.5225	0.264	17.3	mg/L	5	Standard
Ca	43	323.3	19.6	13.0489	2.993	22.9	mg/L	45	Standard
Fe	54	589.8	10.6	0.0985	0.033	33.8	mg/L	350	Standard
Fe	57	263.3	19.5	0.3324	0.102	30.8	mg/L	102	Standard
Sc-1	45	47770.2	2.7				mg/L	53004	Standard
Cl	35	2.3	49.5				ug/L	2	Standard
Kr	83	157.3	1.9				ug/L	157	Standard
Br	81	6.7	43.3				ug/L	3	Standard
P	31	174433.4	1.2				ug/L	91588	Standard
S	34	26086.6	1.7				ug/L	32556	Standard
Sr	88	458.3	14.1				ug/L	62	Standard
C	12	1093.4	4.6				mg/L	133	Standard
N	14	1.7	173.2				mg/L	0	Standard
Hg	202	3.3	173.2				mg/L	7	Standard

QC Calculated Values

Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recovery
Li	7			
Be	9			
Al	27			
Sc	45			
Ti	47			
V	51			
Cr	52			
Cr	53			
Mn	55			
Co	59			
Ni	60			
Cu	65			
Zn	66			
Ge	72		94.868	
As	75			
Se	82			
Se-1	77			
Ga	71			
Rb	85			
Y	89			
Rh	103			

Sample ID: L1211041126

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[	Mo	98	
[	Ag	107	
[	Cd	111	
[	Cd	114	
>	In	115	99.380
[	Sn	118	
[	Sb	123	
[	Ba	135	
[	Ce	140	
>	Tb	159	
[	Ho	165	
[	Tl	203	
[	Tl	205	
[	Pb	206	
[	Pb	207	
[	Pb	208	
[	U	238	
>	Bi	209	101.655
[	Na	23	
[	Mg	24	
[	K	39	
[	Ca	43	
[	Fe	54	
[	Fe	57	
>	Sc-1	45	
[	Cl	35	
[	Kr	83	
[	Br	81	
[	P	31	
[	S	34	
[	Sr	88	
[	C	12	
[	N	14	
[	Hg	202	

QC Out of Limits

Measurement Type	Analyte	Mass	Out of Limits Message

Sample ID: L1211041126

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Method 6020 - Summary Report

Sample ID: L1211041127

Sample Date/Time: Sunday, November 18, 2012 12:02:43

Number of Replicates: 3

Autosampler Position: 222

Sample Description: 1

Method File: C:\NexIONData\Method\6020a.mth

Aliquot Volume (mL):

Diluted to Volume (mL):

User Name: JYH user

Cumulative Autodilution Factor: 1

Nexion-ICP 200.8\6020

Concentration Results

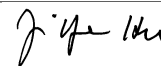
IS	Analyte	Mass	Intensity	RSD	Conc.	SD	RSD	Units	Blank Intens.	Mode
[	Li	7	14006.5	4.3	-3963.6207	335.324	8.5	ug/L	8369	Standard
	Be	9	31.7	18.2	0.0075	0.003	43.5	ug/L	18	Standard
	Al	27	8110910.6	4.1	73.6369	2.456	3.3	ug/L	215	Standard
[>	Sc	45	47512.7	1.2				ug/L	53004	Standard
[	Ti	47	756.0	11.9	1.4756	0.174	11.8	ug/L	26	Standard
	V	51	6452.2	3.7	0.3007	0.016	5.2	ug/L	3223	Standard
	Cr	52	13064.0	3.8	0.3262	0.036	11.1	ug/L	10379	Standard
	Cr	53	1557.6	2.8	1.0715	0.025	2.3	ug/L	192	Standard
	Mn	55	552865.9	6.1	33.1913	1.785	5.4	ug/L	1840	Standard
	Co	59	2062.1	5.8	0.1459	0.009	5.9	ug/L	115	Standard
	Ni	60	2448.9	6.6	0.8561	0.056	6.5	ug/L	75	Standard
	Cu	65	1907.5	4.6	0.6618	0.027	4.1	ug/L	155	Standard
	Zn	66	4113.2	4.9	2.9363	0.131	4.5	ug/L	237	Standard
[>	Ge	72	396091.5	0.9				ug/L	413856	Standard
	As	75	236.7	22.6	0.3104	0.039	12.5	ug/L	-197	Standard
	Se	82	124.1	23.4	1.0064	0.238	23.7	ug/L	-5	Standard
[	Se-1	77	172.0	2.3	0.8531	0.059	6.9	ug/L	105	Standard
[>	Ga	71	265.0	5.7				mg/L	225	Standard
[	Rb	85	12455.1	5.1				ug/L	28	Standard
[	Y	89	298044.2	2.7				ug/L	322845	Standard
[>	Rh	103	185.0	16.2				ug/L	92	Standard
[	Mo	98	430.7	11.4	0.0881	0.010	11.2	ug/L	18	Standard
	Ag	107	84.3	4.5	0.0029	0.001	23.2	ug/L	63	Standard
	Cd	111	19.5	27.0	-0.0054	0.002	30.5	mg/L	20	Standard
	Cd	114	79.2	20.3	-0.0007	0.002	292.8	ug/L	56	Standard
[>	In	115	648573.6	2.0				ug/L	657102	Standard
	Sn	118	1259.7	7.8	0.0788	0.008	10.5	ug/L	555	Standard
	Sb	123	318.6	3.5	0.0383	0.001	2.6	ug/L	62	Standard
[	Ba	135	112628.3	4.5	33.4946	1.100	3.3	ug/L	19	Standard
[	Ce	140	3804.5	4.6				ug/L	24	Standard
[>	Tb	159	937440.5	1.6				ug/L	910514	Standard
[	Ho	165	89.7	5.0				ug/L	7	Standard
	Tl	203	304.0	5.3	0.0195	0.002	8.6	ug/L	13	Standard
	Tl	205	13.0	7.7	0.0337	0.003	7.5	ug/L	1	Standard
	Pb	206	821.4	2.5	0.0450	0.000	0.8	ug/L	342	Standard
	Pb	207	705.0	1.6	0.0426	0.002	5.9	ug/L	284	Standard
	Pb	208	3246.1	1.4	0.0436	0.001	1.8	ug/L	1363	Standard
	U	238	2562.2	4.0	0.2473	0.008	3.2	ug/L	2	Standard
[>	Bi	209	482812.0	2.1				ug/L	470592	Standard

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Na	23	1.7	173.2	0.1706	0.287	168.1	mg/L	2	Standard
Mg	24	384312.2	1.8	0.2075	0.003	1.6	mg/L	5586	Standard
K	39	105.0	37.8	1.5527	0.610	39.3	mg/L	5	Standard
Ca	43	393.3	5.1	16.4552	1.162	7.1	mg/L	45	Standard
Fe	54	758.8	13.0	0.1717	0.041	24.0	mg/L	350	Standard
Fe	57	311.7	16.1	0.4175	0.084	20.2	mg/L	102	Standard
Sc-1	45	47512.7	1.2				mg/L	53004	Standard
Cl	35	1.7	34.6				ug/L	2	Standard
Kr	83	153.9	4.8				ug/L	157	Standard
Br	81	7.5	88.2				ug/L	3	Standard
P	31	187994.0	4.5				ug/L	91588	Standard
S	34	27805.5	1.4				ug/L	32556	Standard
Sr	88	575.0	4.3				ug/L	62	Standard
C	12	990.0	4.3				mg/L	133	Standard
N	14	0.0					mg/L	0	Standard
Hg	202	13.3	43.3				mg/L	7	Standard

QC Calculated Values

Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recovery
Li	7			
Be	9			
Al	27			
Sc	45			
Ti	47			
V	51			
Cr	52			
Cr	53			
Mn	55			
Co	59			
Ni	60			
Cu	65			
Zn	66			
Ge	72		95.708	
As	75			
Se	82			
Se-1	77			
Ga	71			
Rb	85			
Y	89			
Rh	103			

Sample ID: L1211041127

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[	Mo	98	
[	Ag	107	
[	Cd	111	
[	Cd	114	
>	In	115	98.702
[	Sn	118	
[	Sb	123	
[	Ba	135	
[	Ce	140	
>	Tb	159	
[	Ho	165	
[	Tl	203	
[	Tl	205	
[	Pb	206	
[	Pb	207	
[	Pb	208	
[	U	238	
>	Bi	209	102.597
[	Na	23	
[	Mg	24	
[	K	39	
[	Ca	43	
[	Fe	54	
[	Fe	57	
>	Sc-1	45	
[	Cl	35	
[	Kr	83	
[	Br	81	
[	P	31	
[	S	34	
[	Sr	88	
[	C	12	
[	N	14	
[	Hg	202	

QC Out of Limits

Measurement Type	Analyte	Mass	Out of Limits Message

Sample ID: L1211041127

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Method 6020 - Summary Report

Sample ID: L1211041128

Sample Date/Time: Sunday, November 18, 2012 12:05:56

Number of Replicates: 3

Autosampler Position: 223

Sample Description: 1

Method File: C:\NexIONData\Method\6020a.mth

Aliquot Volume (mL):

Diluted to Volume (mL):

User Name: JYH user

Cumulative Autodilution Factor: 1

Nexion-ICP 200.8\6020

Concentration Results

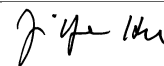
IS	Analyte	Mass	Intensity	RSD	Conc.	SD	RSD	Units	Blank Intens.	Mode
[	Li	7	10858.9	9.4	-2138.3544	548.034	25.6	ug/L	8369	Standard
	Be	9	21.7	13.3	0.0024	0.002	76.0	ug/L	18	Standard
	Al	27	1752649.7	8.0	16.1802	0.958	5.9	ug/L	215	Standard
[>	Sc	45	46695.2	2.8				ug/L	53004	Standard
[	Ti	47	1119.4	8.5	2.2105	0.170	7.7	ug/L	26	Standard
	V	51	7030.4	6.0	0.3506	0.024	6.9	ug/L	3223	Standard
	Cr	52	12094.2	4.1	0.2323	0.008	3.3	ug/L	10379	Standard
	Cr	53	960.9	4.8	0.6177	0.012	2.0	ug/L	192	Standard
	Mn	55	1083870.5	6.3	65.0360	1.969	3.0	ug/L	1840	Standard
	Co	59	3371.4	6.9	0.2479	0.009	3.7	ug/L	115	Standard
	Ni	60	1153.7	8.4	0.3835	0.023	5.9	ug/L	75	Standard
	Cu	65	1456.7	3.4	0.4912	0.010	2.0	ug/L	155	Standard
	Zn	66	6624.8	3.4	4.8446	0.016	0.3	ug/L	237	Standard
[>	Ge	72	396676.9	3.5				ug/L	413856	Standard
	As	75	41.5	173.3	0.1690	0.052	30.7	ug/L	-197	Standard
	Se	82	37.3	64.0	0.3022	0.187	61.8	ug/L	-5	Standard
[	Se-1	77	140.7	4.7	0.5196	0.119	22.9	ug/L	105	Standard
[>	Ga	71	420.0	8.3				mg/L	225	Standard
[	Rb	85	3245.3	2.4				ug/L	28	Standard
[	Y	89	303779.5	2.3				ug/L	322845	Standard
[>	Rh	103	115.0	19.9				ug/L	92	Standard
[	Mo	98	211.5	20.2	0.0381	0.008	21.1	ug/L	18	Standard
	Ag	107	85.3	5.9	0.0029	0.001	20.2	ug/L	63	Standard
	Cd	111	27.1	12.0	-0.0033	0.001	35.2	mg/L	20	Standard
	Cd	114	86.5	17.6	0.0000	0.002	6689.7	ug/L	56	Standard
[>	In	115	658060.3	2.9				ug/L	657102	Standard
	Sn	118	614.0	9.1	0.0122	0.004	31.4	ug/L	555	Standard
	Sb	123	562.2	9.7	0.0687	0.005	7.8	ug/L	62	Standard
[	Ba	135	48772.2	5.0	14.2811	0.315	2.2	ug/L	19	Standard
[	Ce	140	18573.4	6.2				ug/L	24	Standard
[>	Tb	159	929562.0	1.7				ug/L	910514	Standard
[	Ho	165	218.0	0.5				ug/L	7	Standard
	Tl	203	170.3	6.1	0.0095	0.001	6.8	ug/L	13	Standard
	Tl	205	4.0	25.0	0.0114	0.003	22.7	ug/L	1	Standard
	Pb	206	1155.7	8.8	0.0781	0.009	11.4	ug/L	342	Standard
	Pb	207	1011.0	4.7	0.0782	0.005	6.4	ug/L	284	Standard
	Pb	208	4595.6	6.7	0.0774	0.007	9.1	ug/L	1363	Standard
	U	238	65.0	15.2	0.0049	0.001	18.0	ug/L	2	Standard
[>	Bi	209	476939.5	1.4				ug/L	470592	Standard

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Na	23	1.7	173.2	0.1781	0.300	168.3	mg/L	2	Standard
Mg	24	290343.4	2.7	0.1588	0.001	0.5	mg/L	5586	Standard
K	39	60.0	22.0	0.8815	0.176	19.9	mg/L	5	Standard
Ca	43	113.3	25.5	3.2381	1.356	41.9	mg/L	45	Standard
Fe	54	1484.9	9.4	0.4945	0.067	13.5	mg/L	350	Standard
Fe	57	355.0	12.5	0.5035	0.061	12.1	mg/L	102	Standard
Sc-1	45	46695.2	2.8				mg/L	53004	Standard
Cl	35	2.0	0.0				ug/L	2	Standard
Kr	83	154.8	9.5				ug/L	157	Standard
Br	81	7.5	33.3				ug/L	3	Standard
P	31	154883.8	4.7				ug/L	91588	Standard
S	34	26354.6	2.2				ug/L	32556	Standard
Sr	88	176.7	5.9				ug/L	62	Standard
C	12	463.3	5.4				mg/L	133	Standard
N	14	0.0					mg/L	0	Standard
Hg	202	6.7	43.3				mg/L	7	Standard

QC Calculated Values

Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recovery
Li	7			
Be	9			
Al	27			
Sc	45			
Ti	47			
V	51			
Cr	52			
Cr	53			
Mn	55			
Co	59			
Ni	60			
Cu	65			
Zn	66			
Ge	72		95.849	
As	75			
Se	82			
Se-1	77			
Ga	71			
Rb	85			
Y	89			
Rh	103			

Sample ID: L1211041128

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[	Mo	98	
[	Ag	107	
[	Cd	111	
[	Cd	114	
>	In	115	100.146
[	Sn	118	
[	Sb	123	
[	Ba	135	
[	Ce	140	
>	Tb	159	
[	Ho	165	
[	Tl	203	
[	Tl	205	
[	Pb	206	
[	Pb	207	
[	Pb	208	
[	U	238	
>	Bi	209	101.349
[	Na	23	
[	Mg	24	
[	K	39	
[	Ca	43	
[	Fe	54	
[	Fe	57	
>	Sc-1	45	
[	Cl	35	
[	Kr	83	
[	Br	81	
[	P	31	
[	S	34	
[	Sr	88	
[	C	12	
[	N	14	
[	Hg	202	

QC Out of Limits

Measurement Type	Analyte	Mass	Out of Limits Message

Sample ID: L1211041128

Report Date/Time: Sunday, November 18, 2012 12:08:28

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Method 6020 - Summary Report

Sample ID: QC Std 6

Sample Date/Time: Sunday, November 18, 2012 12:09:11

Number of Replicates: 3

Autosampler Position: 101

Sample Description:

Method File: C:\NexIONData\Method\6020a.mth

Aliquot Volume (mL):

Diluted to Volume (mL):

User Name: JYH user

Cumulative Autodilution Factor: 1

Nexion-ICP 200.8\6020

Concentration Results

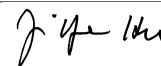
IS	Analyte	Mass	Intensity	RSD	Conc.	SD	RSD	Units	Blank Intens.	Mode
[	Li	7	8946.0	5.5	-1050.6978	38.833	3.7	ug/L	8369	Standard
	Be	9	109374.0	5.1	60.8339	1.948	3.2	ug/L	18	Standard
	Al	27	6850552.3	6.0	64.5152	1.778	2.8	ug/L	215	Standard
[>	Sc	45	45800.9	4.8				ug/L	53004	Standard
[	Ti	47	45055.8	7.6	92.3050	4.265	4.6	ug/L	26	Standard
	V	51	532547.6	7.4	47.0575	1.735	3.7	ug/L	3223	Standard
	Cr	52	512949.3	6.8	48.3124	1.992	4.1	ug/L	10379	Standard
	Cr	53	63945.0	6.5	48.8465	1.945	4.0	ug/L	192	Standard
	Mn	55	810577.1	7.9	49.1664	2.680	5.5	ug/L	1840	Standard
	Co	59	629116.3	5.6	49.7179	1.407	2.8	ug/L	115	Standard
	Ni	60	132896.6	6.5	48.8139	1.991	4.1	ug/L	75	Standard
	Cu	65	131288.2	7.7	49.9172	2.299	4.6	ug/L	155	Standard
	Zn	66	65391.1	6.1	50.1380	1.854	3.7	ug/L	237	Standard
[>	Ge	72	392259.8	4.2				ug/L	413856	Standard
	As	75	67567.5	6.4	49.2293	1.699	3.5	ug/L	-197	Standard
	Se	82	5894.9	6.8	47.9835	2.209	4.6	ug/L	-5	Standard
[	Se-1	77	4584.7	4.9	48.3114	0.865	1.8	ug/L	105	Standard
[>	Ga	71	226.7	7.1				mg/L	225	Standard
[	Rb	85	993.4	6.0				ug/L	28	Standard
[	Y	89	297824.4	2.1				ug/L	322845	Standard
[>	Rh	103	135.0	0.0				ug/L	92	Standard
[	Mo	98	406214.4	5.2	92.1522	2.479	2.7	ug/L	18	Standard
	Ag	107	396831.0	4.1	51.1855	1.090	2.1	ug/L	63	Standard
	Cd	111	168154.9	5.7	50.0899	1.758	3.5	mg/L	20	Standard
	Cd	114	437494.6	5.7	49.5159	1.674	3.4	ug/L	56	Standard
[>	In	115	642959.8	3.2				ug/L	657102	Standard
	Sn	118	487956.0	6.5	50.0349	1.962	3.9	ug/L	555	Standard
	Sb	123	383437.5	4.2	50.0316	1.118	2.2	ug/L	62	Standard
[	Ba	135	165420.6	6.1	49.6208	1.830	3.7	ug/L	19	Standard
[	Ce	140	693.0	4.1				ug/L	24	Standard
[>	Tb	159	918939.3	2.3				ug/L	910514	Standard
[	Ho	165	458.7	5.1				ug/L	7	Standard
[	Tl	203	645139.3	3.7	49.9973	1.177	2.4	ug/L	13	Standard
	Tl	205	21016.6	4.2	53.3854	1.557	2.9	ug/L	1	Standard
	Pb	206	519049.2	5.9	50.1672	2.312	4.6	ug/L	342	Standard
	Pb	207	444335.7	4.8	50.5183	1.758	3.5	ug/L	284	Standard
	Pb	208	2034638.6	5.0	49.8246	1.833	3.7	ug/L	1363	Standard
	U	238	529596.5	6.0	52.4020	2.494	4.8	ug/L	2	Standard
[>	Bi	209	473661.3	1.3				ug/L	470592	Standard

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Na	23	0.0		0.0050	0.000	0.0	mg/L	2	Standard
Mg	24	307470.2	3.0	0.1718	0.004	2.1	mg/L	5586	Standard
K	39	331.7	19.9	5.1626	0.880	17.0	mg/L	5	Standard
Ca	43	128.3	11.9	4.1062	0.894	21.8	mg/L	45	Standard
Fe	54	13394.1	4.1	5.8046	0.175	3.0	mg/L	350	Standard
Fe	57	3118.7	8.0	5.5368	0.287	5.2	mg/L	102	Standard
Sc-1	45	45800.9	4.8				mg/L	53004	Standard
Cl	35	2.7	43.3				ug/L	2	Standard
Kr	83	155.6	4.3				ug/L	157	Standard
Br	81	5.8	65.5				ug/L	3	Standard
P	31	116997.0	3.3				ug/L	91588	Standard
S	34	32432.2	2.3				ug/L	32556	Standard
Sr	88	55.0	18.2				ug/L	62	Standard
C	12	190.0	24.1				mg/L	133	Standard
N	14	0.0					mg/L	0	Standard
Hg	202	6.7	86.6				mg/L	7	Standard

QC Calculated Values

Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recovery
Li	7			
Be	9	121.668		
Al	27	129.030		
Sc	45			
Ti	47	92.305		
V	51	94.115		
Cr	52	96.625		
Cr	53			
Mn	55	98.333		
Co	59	99.436		
Ni	60	97.628		
Cu	65	99.834		
Zn	66	100.276		
Ge	72		94.782	
As	75	98.459		
Se	82	95.967		
Se-1	77			
Ga	71			
Rb	85			
Y	89			
Rh	103			

Sample ID: QC Std 6

Report Date/Time: Sunday, November 18, 2012 12:11:43

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[	Mo	98	92.152	
[	Ag	107	102.371	
[	Cd	111	100.180	
[	Cd	114		
>	In	115		97.848
[	Sn	118	100.070	
[	Sb	123	100.063	
[	Ba	135	99.242	
[	Ce	140		
>	Tb	159		
[	Ho	165		
[	Tl	203	99.995	
[	Tl	205		
[	Pb	206	100.334	
[	Pb	207	101.037	
[	Pb	208	99.649	
[	U	238	104.804	
>	Bi	209		100.652
[	Na	23		
[	Mg	24		
[	K	39		
[	Ca	43		
[	Fe	54		
[	Fe	57		
>	Sc-1	45		
[	Cl	35		
[	Kr	83		
[	Br	81		
[	P	31		
[	S	34		
[	Sr	88		
[	C	12		
[	N	14		
[	Hg	202		

QC Out of Limits

Measurement Type	Analyte	Mass	Out of Limits Message
QC Std 6	Be	9	
QC Std 6	Al	27	

Sample ID: QC Std 6

Report Date/Time: Sunday, November 18, 2012 12:11:43

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Method 6020 - Summary Report

Sample ID: QC Std 7

Sample Date/Time: Sunday, November 18, 2012 12:12:23

Number of Replicates: 3

Autosampler Position: 102

Sample Description:

Method File: C:\NexIONData\Method\6020a.mth

Aliquot Volume (mL):

Diluted to Volume (mL):

User Name: JYH user

Cumulative Autodilution Factor: 1

Nexion-ICP 200.8\6020

Concentration Results

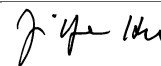
IS	Analyte	Mass	Intensity	RSD	Conc.	SD	RSD	Units	Blank Intens.	Mode
[	Li	7	8143.9	5.8	-835.8027	291.948	34.9	ug/L	8369	Standard
	Be	9	23.3	65.5	0.0042	0.009	210.5	ug/L	18	Standard
	Al	27	966.7	60.3	0.0074	0.006	76.8	ug/L	215	Standard
>	Sc	45	43326.9	1.3				ug/L	53004	Standard
[	Ti	47	25.0	30.2	-0.0055	0.016	291.6	ug/L	26	Standard
	V	51	2595.6	1.6	-0.0240	0.001	6.2	ug/L	3223	Standard
	Cr	52	8747.5	2.4	-0.0297	0.008	26.1	ug/L	10379	Standard
	Cr	53	295.8	11.3	0.1296	0.030	23.2	ug/L	192	Standard
	Mn	55	9309.5	3.2	0.5082	0.016	3.1	ug/L	1840	Standard
	Co	59	117.3	14.5	-0.0057	0.001	23.8	ug/L	115	Standard
	Ni	60	63.7	14.3	-0.0108	0.003	29.1	ug/L	75	Standard
	Cu	65	188.3	3.4	0.0182	0.004	19.6	ug/L	155	Standard
	Zn	66	244.0	11.9	-0.0014	0.021	1471.9	ug/L	237	Standard
>	Ge	72	371780.0	1.5				ug/L	413856	Standard
	As	75	-165.8	10.2	0.0129	0.011	88.5	ug/L	-197	Standard
	Se	82	2.7	101.1	0.0287	0.024	82.1	ug/L	-5	Standard
[	Se-1	77	94.7	9.8	0.0945	0.092	97.8	ug/L	105	Standard
>	Ga	71	190.0	25.4				mg/L	225	Standard
	Rb	85	33.3	8.7				ug/L	28	Standard
[	Y	89	276619.6	2.0				ug/L	322845	Standard
>	Rh	103	105.0	4.8				ug/L	92	Standard
[	Mo	98	94.8	82.3	0.0133	0.018	133.8	ug/L	18	Standard
	Ag	107	94.7	29.6	0.0046	0.004	75.5	ug/L	63	Standard
	Cd	111	29.6	47.6	-0.0022	0.004	192.0	mg/L	20	Standard
	Cd	114	97.8	48.8	0.0018	0.005	301.2	ug/L	56	Standard
>	In	115	624815.5	1.4				ug/L	657102	Standard
	Sn	118	515.3	9.2	0.0050	0.004	86.8	ug/L	555	Standard
	Sb	123	277.7	41.2	0.0342	0.015	43.2	ug/L	62	Standard
[	Ba	135	40.3	27.3	-0.0075	0.003	43.3	ug/L	19	Standard
[	Ce	140	27.7	34.2				ug/L	24	Standard
>	Tb	159	876993.7	1.1				ug/L	910514	Standard
[	Ho	165	8.3	27.7				ug/L	7	Standard
	Tl	203	66.7	52.8	0.0017	0.003	167.4	ug/L	13	Standard
	Tl	205	2.3	65.5	0.0074	0.004	53.0	ug/L	1	Standard
	Pb	206	401.7	21.5	0.0071	0.009	123.8	ug/L	342	Standard
	Pb	207	324.0	14.0	0.0019	0.006	292.3	ug/L	284	Standard
	Pb	208	1541.0	16.6	0.0045	0.007	148.2	ug/L	1363	Standard
	U	238	48.3	104.1	0.0034	0.005	151.6	ug/L	2	Standard
>	Bi	209	459910.4	1.3				ug/L	470592	Standard

Sample ID: QC Std 7

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Na	23	0.0		0.0050	0.000	0.0	mg/L	2	Standard
Mg	24	1373.4	6.2	-0.0021	0.000	2.0	mg/L	5586	Standard
K	39	1.7	173.2	-0.0137	0.048	348.3	mg/L	5	Standard
Ca	43	46.7	12.4	0.1969	0.273	138.5	mg/L	45	Standard
Fe	54	335.5	6.8	0.0042	0.010	243.4	mg/L	350	Standard
Fe	57	81.7	18.7	0.0287	0.029	101.7	mg/L	102	Standard
Sc-1	45	43326.9	1.3				mg/L	53004	Standard
Cl	35	1.3	173.2				ug/L	2	Standard
Kr	83	155.8	3.4				ug/L	157	Standard
Br	81	5.8	99.0				ug/L	3	Standard
P	31	109524.9	4.0				ug/L	91588	Standard
S	34	30883.1	1.2				ug/L	32556	Standard
Sr	88	48.3	6.0				ug/L	62	Standard
C	12	171.7	19.0				mg/L	133	Standard
N	14	0.0					mg/L	0	Standard
Hg	202	1.7	173.2				mg/L	7	Standard

QC Calculated Values

Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recovery
Li	7			
Be	9			
Al	27			
Sc	45			
Ti	47			
V	51			
Cr	52			
Cr	53			
Mn	55			
Co	59			
Ni	60			
Cu	65			
Zn	66			
Ge	72		89.833	
As	75			
Se	82			
Se-1	77			
Ga	71			
Rb	85			
Y	89			
Rh	103			

Sample ID: QC Std 7

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[	Mo	98	
[	Ag	107	
[	Cd	111	
[	Cd	114	
>	In	115	95.087
[	Sn	118	
[	Sb	123	
[	Ba	135	
[	Ce	140	
>	Tb	159	
[	Ho	165	
[	Tl	203	
[	Tl	205	
[	Pb	206	
[	Pb	207	
[	Pb	208	
[	U	238	
>	Bi	209	97.730
[	Na	23	
[	Mg	24	
[	K	39	
[	Ca	43	
[	Fe	54	
[	Fe	57	
>	Sc-1	45	
[	Cl	35	
[	Kr	83	
[	Br	81	
[	P	31	
[	S	34	
[	Sr	88	
[	C	12	
[	N	14	
[	Hg	202	

QC Out of Limits

Measurement Type	Analyte	Mass	Out of Limits Message
QC Std 7	Mn	55	

Sample ID: QC Std 7

Report Date/Time: Sunday, November 18, 2012 12:14:55

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Method 6020 - Summary Report

Sample ID: L1211041129

Sample Date/Time: Sunday, November 18, 2012 12:15:38

Number of Replicates: 3

Autosampler Position: 224

Sample Description: 1

Method File: C:\NexIONData\Method\6020a.mth

Aliquot Volume (mL):

Diluted to Volume (mL):

User Name: JYH user

Cumulative Autodilution Factor: 1

Nexion-ICP 200.8\6020

Concentration Results

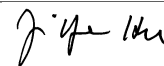
IS	Analyte	Mass	Intensity	RSD	Conc.	SD	RSD	Units	Blank Intens.	Mode
[	Li	7	21076.4	7.0	-8367.2055	884.218	10.6	ug/L	8369	Standard
	Be	9	63.3	12.1	0.0247	0.005	19.9	ug/L	18	Standard
	Al	27	36000864.3	4.9	328.4697	25.328	7.7	ug/L	215	Standard
[>	Sc	45	47390.8	5.5				ug/L	53004	Standard
[	Ti	47	11275.9	4.4	26.1162	1.217	4.7	ug/L	26	Standard
	V	51	57278.9	7.0	5.4943	0.338	6.2	ug/L	3223	Standard
	Cr	52	73432.4	7.1	7.0602	0.515	7.3	ug/L	10379	Standard
	Cr	53	13914.7	2.9	11.9607	0.734	6.1	ug/L	192	Standard
	Mn	55	6373748.9	5.0	438.4613	22.963	5.2	ug/L	1840	Standard
	Co	59	93279.9	7.3	8.3281	0.551	6.6	ug/L	115	Standard
	Ni	60	62006.9	5.3	25.7563	1.120	4.3	ug/L	75	Standard
	Cu	65	7962.8	5.5	3.3758	0.217	6.4	ug/L	155	Standard
	Zn	66	94922.3	3.4	82.5148	3.183	3.9	ug/L	237	Standard
[>	Ge	72	346786.7	3.6				ug/L	413856	Standard
	As	75	13898.9	3.2	11.5766	0.568	4.9	ug/L	-197	Standard
	Se	82	5061.7	3.1	46.6574	2.243	4.8	ug/L	-5	Standard
[	Se-1	77	755.4	5.0	8.2253	0.766	9.3	ug/L	105	Standard
[>	Ga	71	1576.7	5.9				mg/L	225	Standard
	Rb	85	185745.6	2.9				ug/L	28	Standard
[	Y	89	289146.0	2.9				ug/L	322845	Standard
[>	Rh	103	386.7	23.2				ug/L	92	Standard
[	Mo	98	6724.1	5.7	1.6970	0.090	5.3	ug/L	18	Standard
	Ag	107	132.0	16.1	0.0112	0.003	28.4	ug/L	63	Standard
	Cd	111	228.6	2.3	0.0650	0.001	2.3	mg/L	20	Standard
	Cd	114	608.2	5.1	0.0674	0.004	5.3	ug/L	56	Standard
[>	In	115	575156.5	0.5				ug/L	657102	Standard
	Sn	118	16779.3	5.1	1.8767	0.089	4.7	ug/L	555	Standard
	Sb	123	3657.4	4.9	0.5306	0.024	4.5	ug/L	62	Standard
[	Ba	135	832065.2	4.3	279.2007	10.674	3.8	ug/L	19	Standard
[	Ce	140	70998.5	3.9				ug/L	24	Standard
[>	Tb	159	837904.2	1.4				ug/L	910514	Standard
[	Ho	165	2242.8	3.3				ug/L	7	Standard
	Tl	203	138.0	6.9	0.0096	0.001	8.2	ug/L	13	Standard
	Tl	205	3.0	0.0	0.0107	0.000	1.3	ug/L	1	Standard
	Pb	206	7282.8	4.1	0.8381	0.027	3.2	ug/L	342	Standard
	Pb	207	5926.8	2.0	0.7980	0.021	2.6	ug/L	284	Standard
	Pb	208	27997.5	3.7	0.8140	0.025	3.1	ug/L	1363	Standard
	U	238	1069.4	5.2	0.1293	0.006	4.8	ug/L	2	Standard
[>	Bi	209	383110.5	1.5				ug/L	470592	Standard

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Na	23	1.7	173.2	0.1847	0.311	168.5	mg/L	2	Standard
Mg	24	19320507.2	1.4	10.6193	0.518	4.9	mg/L	5586	Standard
K	39	2265.2	1.7	34.4804	2.013	5.8	mg/L	5	Standard
Ca	43	760.0	2.6	34.0212	2.147	6.3	mg/L	45	Standard
Fe	54	12740.2	6.8	5.3395	0.590	11.0	mg/L	350	Standard
Fe	57	3467.1	4.6	5.9684	0.297	5.0	mg/L	102	Standard
Sc-1	45	47390.8	5.5				mg/L	53004	Standard
Cl	35	3.0	33.3				ug/L	2	Standard
Kr	83	239.8	8.1				ug/L	157	Standard
Br	81	88.3	23.6				ug/L	3	Standard
P	31	161747.2	4.0				ug/L	91588	Standard
S	34	24447.2	2.8				ug/L	32556	Standard
Sr	88	2213.5	6.8				ug/L	62	Standard
C	12	3288.7	12.6				mg/L	133	Standard
N	14	1.7	173.2				mg/L	0	Standard
Hg	202	38.3	45.8				mg/L	7	Standard

QC Calculated Values

Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recovery
Li	7			
Be	9			
Al	27			
Sc	45			
Ti	47			
V	51			
Cr	52			
Cr	53			
Mn	55			
Co	59			
Ni	60			
Cu	65			
Zn	66			
Ge	72		83.794	
As	75			
Se	82			
Se-1	77			
Ga	71			
Rb	85			
Y	89			
Rh	103			

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[	Mo	98	
[	Ag	107	
[	Cd	111	
[	Cd	114	
>	In	115	87.529
[	Sn	118	
[	Sb	123	
[	Ba	135	
[	Ce	140	
>	Tb	159	
[	Ho	165	
[	Tl	203	
[	Tl	205	
[	Pb	206	
[	Pb	207	
[	Pb	208	
[	U	238	
>	Bi	209	81.410
[	Na	23	
[	Mg	24	
[	K	39	
[	Ca	43	
[	Fe	54	
[	Fe	57	
>	Sc-1	45	
[	Cl	35	
[	Kr	83	
[	Br	81	
[	P	31	
[	S	34	
[	Sr	88	
[	C	12	
[	N	14	
[	Hg	202	

QC Out of Limits

Measurement Type	Analyte	Mass	Out of Limits Message
Mn 55 Upper, S, EEE	Mn	55	
Ba 135 Upper, S, EEE	Ba	135	

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Method 6020 - Summary Report

Sample ID: L1211041901

Sample Date/Time: Sunday, November 18, 2012 12:18:50

Number of Replicates: 3

Autosampler Position: 225

Sample Description: 5

Method File: C:\NexIONData\Method\6020a.mth

Aliquot Volume (mL):

Diluted to Volume (mL):

User Name: JYH user

Cumulative Autodilution Factor: 1

Nexion-ICP 200.8\6020

Concentration Results

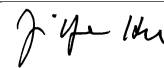
IS	Analyte	Mass	Intensity	RSD	Conc.	SD	RSD	Units	Blank Intens.	Mode
[	Li	7	13290.8	1.5	-4446.7628	59.517	1.3	ug/L	8369	Standard
	Be	9	11.7	107.9	-0.0024	0.008	312.8	ug/L	18	Standard
	Al	27	1704036.0	0.7	17.2178	0.266	1.5	ug/L	215	Standard
[>	Sc	45	42700.1	1.8				ug/L	53004	Standard
[	Ti	47	960.0	2.0	2.0849	0.025	1.2	ug/L	26	Standard
	V	51	3106.5	3.1	0.0333	0.005	14.5	ug/L	3223	Standard
	Cr	52	13351.5	1.2	0.4803	0.005	1.1	ug/L	10379	Standard
	Cr	53	2043.5	3.8	1.5947	0.066	4.1	ug/L	192	Standard
	Mn	55	2918195.0	3.9	193.0826	4.832	2.5	ug/L	1840	Standard
	Co	59	1476.7	5.1	0.1116	0.005	4.7	ug/L	115	Standard
	Ni	60	2035.5	2.8	0.7794	0.011	1.4	ug/L	75	Standard
	Cu	65	62959.9	0.8	26.0614	0.259	1.0	ug/L	155	Standard
	Zn	66	31889.2	2.9	26.5354	0.392	1.5	ug/L	237	Standard
[>	Ge	72	360196.8	1.5				ug/L	413856	Standard
	As	75	264.1	19.0	0.3487	0.037	10.7	ug/L	-197	Standard
	Se	82	52.8	47.9	0.4724	0.220	46.6	ug/L	-5	Standard
[	Se-1	77	188.3	3.1	1.2266	0.063	5.2	ug/L	105	Standard
[>	Ga	71	285.0	9.3				mg/L	225	Standard
[	Rb	85	11517.7	6.9				ug/L	28	Standard
[	Y	89	270041.0	2.2				ug/L	322845	Standard
[>	Rh	103	93.3	27.0				ug/L	92	Standard
[	Mo	98	2606.3	6.5	0.6289	0.032	5.0	ug/L	18	Standard
	Ag	107	374.0	4.2	0.0441	0.001	3.2	ug/L	63	Standard
	Cd	111	143.2	4.5	0.0348	0.002	4.9	mg/L	20	Standard
	Cd	114	391.0	2.3	0.0382	0.002	5.2	ug/L	56	Standard
[>	In	115	596235.6	1.9				ug/L	657102	Standard
	Sn	118	3106.7	7.0	0.2945	0.020	6.8	ug/L	555	Standard
	Sb	123	681.4	5.1	0.0929	0.003	3.4	ug/L	62	Standard
[	Ba	135	51309.8	2.9	16.5901	0.234	1.4	ug/L	19	Standard
[	Ce	140	5631.0	3.0				ug/L	24	Standard
[>	Tb	159	862531.6	2.0				ug/L	910514	Standard
[	Ho	165	117.3	6.0				ug/L	7	Standard
[	Tl	203	171.0	7.9	0.0091	0.001	11.3	ug/L	13	Standard
	Tl	205	6.0	16.7	0.0159	0.002	15.2	ug/L	1	Standard
	Pb	206	14171.3	2.4	1.2845	0.021	1.6	ug/L	342	Standard
	Pb	207	11961.4	2.5	1.2719	0.022	1.7	ug/L	284	Standard
	Pb	208	55794.0	1.7	1.2797	0.011	0.9	ug/L	1363	Standard
	U	238	394.7	3.9	0.0360	0.002	4.7	ug/L	2	Standard
[>	Bi	209	492917.3	0.9				ug/L	470592	Standard

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Na	23	5.0	100.0	0.5718	0.567	99.1	mg/L	2	Standard
Mg	24	406915.2	0.7	0.2450	0.005	2.0	mg/L	5586	Standard
K	39	105.0	21.8	1.7279	0.363	21.0	mg/L	5	Standard
Ca	43	236.7	21.7	10.2688	2.694	26.2	mg/L	45	Standard
Fe	54	543.2	11.2	0.1059	0.033	31.1	mg/L	350	Standard
Fe	57	258.3	16.5	0.3764	0.091	24.1	mg/L	102	Standard
Sc-1	45	42700.1	1.8				mg/L	53004	Standard
Cl	35	2.0	50.0				ug/L	2	Standard
Kr	83	159.8	2.6				ug/L	157	Standard
Br	81	5.0	50.0				ug/L	3	Standard
P	31	55234.7	0.8				ug/L	91588	Standard
S	34	27661.9	2.7				ug/L	32556	Standard
Sr	88	103.3	17.0				ug/L	62	Standard
C	12	538.3	3.5				mg/L	133	Standard
N	14	0.0					mg/L	0	Standard
Hg	202	91.7	11.4				mg/L	7	Standard

QC Calculated Values

Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recovery
Li	7			
Be	9			
Al	27			
Sc	45			
Ti	47			
V	51			
Cr	52			
Cr	53			
Mn	55			
Co	59			
Ni	60			
Cu	65			
Zn	66			
Ge	72		87.034	
As	75			
Se	82			
Se-1	77			
Ga	71			
Rb	85			
Y	89			
Rh	103			

Sample ID: L1211041901

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[	Mo	98	
[	Ag	107	
[	Cd	111	
[	Cd	114	
>	In	115	90.737
[	Sn	118	
[	Sb	123	
[	Ba	135	
[	Ce	140	
>	Tb	159	
[	Ho	165	
[	Tl	203	
[	Tl	205	
[	Pb	206	
[	Pb	207	
[	Pb	208	
[	U	238	
>	Bi	209	104.744
[	Na	23	
[	Mg	24	
[	K	39	
[	Ca	43	
[	Fe	54	
[	Fe	57	
>	Sc-1	45	
[	Cl	35	
[	Kr	83	
[	Br	81	
[	P	31	
[	S	34	
[	Sr	88	
[	C	12	
[	N	14	
[	Hg	202	

QC Out of Limits

Measurement Type	Analyte	Mass	Out of Limits Message
Mn 55 Upper, S, EEE	Mn	55	

Sample ID: L1211041901

Report Date/Time: Sunday, November 18, 2012 12:21:22

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Method 6020 - Summary Report

Sample ID: L1211041902 WG414324-02

Sample Date/Time: Sunday, November 18, 2012 12:22:02

Number of Replicates: 3

Autosampler Position: 226

Sample Description: 5

Method File: C:\NexIONData\Method\6020a.mth

Aliquot Volume (mL):

Diluted to Volume (mL):

User Name: JYH user

Cumulative Autodilution Factor: 1

Nexion-ICP 200.8\6020

Concentration Results

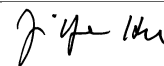
IS	Analyte	Mass	Intensity	RSD	Conc.	SD	RSD	Units	Blank Intens.	Mode
[	Li	7	13040.6	3.8	-4405.7794	173.254	3.9	ug/L	8369	Standard
	Be	9	10.0	50.0	-0.0034	0.003	84.6	ug/L	18	Standard
	Al	27	1419984.1	6.2	14.5525	0.694	4.8	ug/L	215	Standard
[>	Sc	45	42073.3	1.9				ug/L	53004	Standard
	Ti	47	154.0	6.9	0.2911	0.023	7.9	ug/L	26	Standard
	V	51	2100.4	8.3	-0.0600	0.020	33.4	ug/L	3223	Standard
	Cr	52	9333.2	4.3	0.0794	0.054	68.1	ug/L	10379	Standard
	Cr	53	1473.4	2.8	1.1427	0.019	1.7	ug/L	192	Standard
	Mn	55	23430.4	2.8	1.4923	0.023	1.6	ug/L	1840	Standard
	Co	59	302.7	3.5	0.0110	0.001	7.7	ug/L	115	Standard
	Ni	60	986.7	2.3	0.3673	0.012	3.2	ug/L	75	Standard
	Cu	65	3338.0	2.7	1.3538	0.025	1.9	ug/L	155	Standard
	Zn	66	9086.7	1.0	7.5673	0.027	0.4	ug/L	237	Standard
[>	Ge	72	353356.7	1.3				ug/L	413856	Standard
	As	75	-41.7	16.6	0.1063	0.006	5.4	ug/L	-197	Standard
	Se	82	16.8	30.7	0.1573	0.047	29.8	ug/L	-5	Standard
[	Se-1	77	153.3	9.1	0.8507	0.152	17.9	ug/L	105	Standard
[>	Ga	71	178.3	15.9				mg/L	225	Standard
	Rb	85	9679.8	2.1				ug/L	28	Standard
	Y	89	268223.5	0.9				ug/L	322845	Standard
[>	Rh	103	86.7	16.7				ug/L	92	Standard
	Mo	98	517.4	5.1	0.1169	0.007	5.9	ug/L	18	Standard
	Ag	107	50.0	31.4	-0.0010	0.002	221.5	ug/L	63	Standard
	Cd	111	50.7	13.9	0.0050	0.002	47.6	mg/L	20	Standard
	Cd	114	133.2	9.8	0.0066	0.001	21.5	ug/L	56	Standard
[>	In	115	601177.3	1.0				ug/L	657102	Standard
	Sn	118	1048.4	1.4	0.0658	0.003	4.2	ug/L	555	Standard
	Sb	123	244.7	6.5	0.0312	0.002	7.4	ug/L	62	Standard
[	Ba	135	9914.9	1.9	3.1638	0.066	2.1	ug/L	19	Standard
	Ce	140	81.0	13.1				ug/L	24	Standard
[>	Tb	159	859536.3	1.2				ug/L	910514	Standard
	Ho	165	24.3	13.2				ug/L	7	Standard
	Tl	203	206.7	7.6	0.0132	0.001	9.3	ug/L	13	Standard
	Tl	205	7.7	41.9	0.0217	0.009	39.3	ug/L	1	Standard
	Pb	206	1397.1	3.0	0.1091	0.003	3.0	ug/L	342	Standard
	Pb	207	1220.7	1.0	0.1099	0.002	2.2	ug/L	284	Standard
	Pb	208	5489.1	2.1	0.1069	0.002	2.0	ug/L	1363	Standard
	U	238	11.0	24.1	-0.0004	0.000	70.2	ug/L	2	Standard
[>	Bi	209	450748.3	0.7				ug/L	470592	Standard

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Na	23	0.0		0.0050	0.000	0.0	mg/L	2	Standard
Mg	24	373398.6	0.8	0.2280	0.004	1.9	mg/L	5586	Standard
K	39	71.7	14.5	1.1852	0.166	14.0	mg/L	5	Standard
Ca	43	181.7	3.2	7.5098	0.192	2.6	mg/L	45	Standard
Fe	54	150.7	17.1	-0.0805	0.013	16.1	mg/L	350	Standard
Fe	57	133.3	29.1	0.1364	0.080	58.5	mg/L	102	Standard
Sc-1	45	42073.3	1.9				mg/L	53004	Standard
Cl	35	2.7	57.3				ug/L	2	Standard
Kr	83	157.0	5.1				ug/L	157	Standard
Br	81	10.0	66.1				ug/L	3	Standard
P	31	53148.1	1.5				ug/L	91588	Standard
S	34	29697.4	2.5				ug/L	32556	Standard
Sr	88	138.3	18.5				ug/L	62	Standard
C	12	206.7	18.2				mg/L	133	Standard
N	14	1.7	173.2				mg/L	0	Standard
Hg	202	5.0	100.0				mg/L	7	Standard

QC Calculated Values

Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recovery
Li	7			
Be	9			
Al	27			
Sc	45			
Ti	47			
V	51			
Cr	52			
Cr	53			
Mn	55			
Co	59			
Ni	60			
Cu	65			
Zn	66			
Ge	72		85.382	
As	75			
Se	82			
Se-1	77			
Ga	71			
Rb	85			
Y	89			
Rh	103			

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[	Mo	98	
[	Ag	107	
[	Cd	111	
[	Cd	114	
>	In	115	91.489
[	Sn	118	
[	Sb	123	
[	Ba	135	
[	Ce	140	
>	Tb	159	
[	Ho	165	
[	Tl	203	
[	Tl	205	
[	Pb	206	
[	Pb	207	
[	Pb	208	
[	U	238	
>	Bi	209	95.783
[	Na	23	
[	Mg	24	
[	K	39	
[	Ca	43	
[	Fe	54	
[	Fe	57	
>	Sc-1	45	
[	Cl	35	
[	Kr	83	
[	Br	81	
[	P	31	
[	S	34	
[	Sr	88	
[	C	12	
[	N	14	
[	Hg	202	

QC Out of Limits

Measurement Type	Analyte	Mass	Out of Limits Message

Sample ID: L1211041902 WG414324-02

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Method 6020 - Summary Report

Sample ID: L1211041902DP WG414324-07

Sample Date/Time: Sunday, November 18, 2012 12:25:15

Number of Replicates: 3

Autosampler Position: 227

Sample Description: 5

Method File: C:\NexIONData\Method\6020a.mth

Aliquot Volume (mL):

Diluted to Volume (mL):

User Name: JYH user

Cumulative Autodilution Factor: 1

Nexion-ICP 200.8\6020

Concentration Results

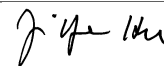
IS	Analyte	Mass	Intensity	RSD	Conc.	SD	RSD	Units	Blank Intens.	Mode
[	Li	7	12623.6	4.1	-4254.7459	146.291	3.4	ug/L	8369	Standard
	Be	9	1.7	173.2	-0.0084	0.002	21.4	ug/L	18	Standard
	Al	27	1535058.6	2.1	15.9890	0.050	0.3	ug/L	215	Standard
[>	Sc	45	41416.6	2.4				ug/L	53004	Standard
[	Ti	47	174.7	10.8	0.3402	0.042	12.5	ug/L	26	Standard
	V	51	2068.0	7.8	-0.0623	0.016	26.3	ug/L	3223	Standard
	Cr	52	9545.3	1.2	0.1070	0.015	14.0	ug/L	10379	Standard
	Cr	53	1464.2	6.8	1.1416	0.084	7.4	ug/L	192	Standard
	Mn	55	25028.7	1.4	1.6093	0.020	1.3	ug/L	1840	Standard
	Co	59	322.0	7.8	0.0129	0.002	16.6	ug/L	115	Standard
	Ni	60	938.4	1.3	0.3495	0.005	1.4	ug/L	75	Standard
	Cu	65	3625.4	2.2	1.4836	0.034	2.3	ug/L	155	Standard
	Zn	66	11878.7	6.2	10.0082	0.653	6.5	ug/L	237	Standard
[>	Ge	72	351494.0	0.3				ug/L	413856	Standard
	As	75	-81.7	11.2	0.0737	0.008	10.2	ug/L	-197	Standard
	Se	82	12.5	24.2	0.1191	0.027	23.0	ug/L	-5	Standard
[	Se-1	77	153.3	6.5	0.8612	0.121	14.0	ug/L	105	Standard
[>	Ga	71	175.0	20.0				mg/L	225	Standard
[	Rb	85	10760.5	0.9				ug/L	28	Standard
[	Y	89	259531.0	1.8				ug/L	322845	Standard
[>	Rh	103	88.3	18.2				ug/L	92	Standard
[	Mo	98	532.9	7.3	0.1233	0.009	7.0	ug/L	18	Standard
	Ag	107	44.3	10.2	-0.0016	0.001	37.2	ug/L	63	Standard
	Cd	111	48.4	8.9	0.0045	0.001	28.4	mg/L	20	Standard
	Cd	114	122.6	4.0	0.0056	0.001	12.8	ug/L	56	Standard
[>	In	115	588882.4	0.9				ug/L	657102	Standard
	Sn	118	1495.4	5.9	0.1183	0.009	7.4	ug/L	555	Standard
	Sb	123	248.8	4.0	0.0325	0.002	4.8	ug/L	62	Standard
[	Ba	135	10534.3	1.1	3.4335	0.060	1.7	ug/L	19	Standard
[	Ce	140	104.0	11.7				ug/L	24	Standard
[>	Tb	159	843011.9	1.5				ug/L	910514	Standard
[	Ho	165	22.7	14.2				ug/L	7	Standard
	Tl	203	225.3	2.1	0.0151	0.000	2.6	ug/L	13	Standard
	Tl	205	10.0	10.0	0.0285	0.003	9.1	ug/L	1	Standard
	Pb	206	1449.4	2.6	0.1174	0.005	3.9	ug/L	342	Standard
	Pb	207	1230.4	1.2	0.1140	0.002	1.9	ug/L	284	Standard
	Pb	208	5674.7	1.1	0.1146	0.002	2.1	ug/L	1363	Standard
	U	238	13.7	18.4	-0.0001	0.000	358.0	ug/L	2	Standard
[>	Bi	209	441965.5	0.5				ug/L	470592	Standard

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Na	23	1.7	173.2	0.2003	0.338	168.9	mg/L	2	Standard
Mg	24	386280.4	0.3	0.2398	0.006	2.4	mg/L	5586	Standard
K	39	88.3	3.3	1.4961	0.047	3.1	mg/L	5	Standard
Ca	43	180.0	10.0	7.5934	1.200	15.8	mg/L	45	Standard
Fe	54	140.4	2.2	-0.0844	0.003	3.3	mg/L	350	Standard
Fe	57	136.7	18.0	0.1471	0.054	36.7	mg/L	102	Standard
Sc-1	45	41416.6	2.4				mg/L	53004	Standard
Cl	35	4.0	66.1				ug/L	2	Standard
Kr	83	163.1	5.0				ug/L	157	Standard
Br	81	5.8	137.8				ug/L	3	Standard
P	31	54536.3	1.6				ug/L	91588	Standard
S	34	30708.6	1.0				ug/L	32556	Standard
Sr	88	135.0	7.4				ug/L	62	Standard
C	12	195.0	17.9				mg/L	133	Standard
N	14	1.7	173.2				mg/L	0	Standard
Hg	202	20.0	25.0				mg/L	7	Standard

QC Calculated Values

Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recovery
Li	7			
Be	9			
Al	27			
Sc	45			
Ti	47			
V	51			
Cr	52			
Cr	53			
Mn	55			
Co	59			
Ni	60			
Cu	65			
Zn	66			
Ge	72		84.932	
As	75			
Se	82			
Se-1	77			
Ga	71			
Rb	85			
Y	89			
Rh	103			

Sample ID: L1211041902DP WG414324-07

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[	Mo	98	
[	Ag	107	
[	Cd	111	
[	Cd	114	
>	In	115	89.618
[	Sn	118	
[	Sb	123	
[	Ba	135	
[	Ce	140	
>	Tb	159	
[	Ho	165	
[	Tl	203	
[	Tl	205	
[	Pb	206	
[	Pb	207	
[	Pb	208	
[	U	238	
>	Bi	209	93.917
[	Na	23	
[	Mg	24	
[	K	39	
[	Ca	43	
[	Fe	54	
[	Fe	57	
>	Sc-1	45	
[	Cl	35	
[	Kr	83	
[	Br	81	
[	P	31	
[	S	34	
[	Sr	88	
[	C	12	
[	N	14	
[	Hg	202	

QC Out of Limits

Measurement Type	Analyte	Mass	Out of Limits Message

Sample ID: L1211041902DP WG414324-07

Report Date/Time: Sunday, November 18, 2012 12:27:48

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Method 6020 - Summary Report

Sample ID: L1211042001

Sample Date/Time: Sunday, November 18, 2012 12:28:28

Number of Replicates: 3

Autosampler Position: 228

Sample Description: 5

Method File: C:\NexIONData\Method\6020a.mth

Aliquot Volume (mL):

Diluted to Volume (mL):

User Name: JYH user

Cumulative Autodilution Factor: 1

Nexion-ICP 200.8\6020

Concentration Results

IS	Analyte	Mass	Intensity	RSD	Conc.	SD	RSD	Units	Blank Intens.	Mode
[	Li	7	13149.0	4.4	-4577.6278	434.996	9.5	ug/L	8369	Standard
	Be	9	23.3	44.6	0.0047	0.006	128.7	ug/L	18	Standard
	Al	27	1776170.3	2.3	18.3985	0.541	2.9	ug/L	215	Standard
[>	Sc	45	41653.9	1.8				ug/L	53004	Standard
[	Ti	47	158.3	12.4	0.2987	0.041	13.6	ug/L	26	Standard
	V	51	7003.7	1.5	0.4202	0.017	4.1	ug/L	3223	Standard
	Cr	52	8695.5	3.6	0.0060	0.034	570.6	ug/L	10379	Standard
	Cr	53	778.4	3.5	0.5482	0.016	3.0	ug/L	192	Standard
	Mn	55	77968909.3	2.8	5232.4983	90.013	1.7	ug/L	1840	Standard
	Co	59	8768.2	1.6	0.7499	0.010	1.3	ug/L	115	Standard
	Ni	60	2826.3	2.1	1.1116	0.011	1.0	ug/L	75	Standard
	Cu	65	2373.5	4.8	0.9403	0.037	3.9	ug/L	155	Standard
	Zn	66	11488.0	1.4	9.5650	0.048	0.5	ug/L	237	Standard
[>	Ge	72	355323.1	1.1				ug/L	413856	Standard
	As	75	3026.0	4.6	2.5674	0.088	3.4	ug/L	-197	Standard
	Se	82	19.8	8.9	0.1828	0.014	7.7	ug/L	-5	Standard
[	Se-1	77	131.0	10.7	0.5752	0.149	26.0	ug/L	105	Standard
[>	Ga	71	648.3	7.1				mg/L	225	Standard
[	Rb	85	1916.8	4.0				ug/L	28	Standard
[	Y	89	270505.8	3.9				ug/L	322845	Standard
[>	Rh	103	96.7	20.9				ug/L	92	Standard
[	Mo	98	5211.7	2.2	1.2729	0.015	1.2	ug/L	18	Standard
	Ag	107	58.3	32.4	0.0003	0.003	981.1	ug/L	63	Standard
	Cd	111	341.4	3.3	0.0991	0.003	3.0	mg/L	20	Standard
	Cd	114	920.8	4.6	0.1034	0.005	4.7	ug/L	56	Standard
[>	In	115	593372.5	1.2				ug/L	657102	Standard
	Sn	118	1025.7	1.0	0.0648	0.002	2.8	ug/L	555	Standard
	Sb	123	108.4	12.2	0.0124	0.002	13.6	ug/L	62	Standard
[	Ba	135	307016.1	2.7	99.8523	2.041	2.0	ug/L	19	Standard
[	Ce	140	4854.1	3.8				ug/L	24	Standard
[>	Tb	159	851764.0	1.9				ug/L	910514	Standard
[	Ho	165	358.3	9.2				ug/L	7	Standard
	Tl	203	523.0	5.7	0.0387	0.003	8.0	ug/L	13	Standard
	Tl	205	16.3	39.8	0.0448	0.018	39.6	ug/L	1	Standard
	Pb	206	1919.1	3.6	0.1609	0.005	2.8	ug/L	342	Standard
	Pb	207	1599.8	1.2	0.1540	0.002	1.3	ug/L	284	Standard
	Pb	208	7485.7	2.6	0.1572	0.002	1.2	ug/L	1363	Standard
	U	238	412.0	7.8	0.0410	0.003	7.0	ug/L	2	Standard
[>	Bi	209	453612.1	1.8				ug/L	470592	Standard

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Na	23	1.7	173.2	0.1935	0.326	168.7	mg/L	2	Standard
Mg	24	334894.2	1.0	0.2063	0.006	2.8	mg/L	5586	Standard
K	39	16.7	75.5	0.2459	0.213	86.7	mg/L	5	Standard
Ca	43	191.7	14.4	8.1585	1.547	19.0	mg/L	45	Standard
Fe	54	1444.1	8.1	0.5528	0.062	11.3	mg/L	350	Standard
Fe	57	518.3	15.1	0.9063	0.143	15.8	mg/L	102	Standard
Sc-1	45	41653.9	1.8				mg/L	53004	Standard
Cl	35	3.0	88.2				ug/L	2	Standard
Kr	83	161.8	8.0				ug/L	157	Standard
Br	81	7.5	66.7				ug/L	3	Standard
P	31	58180.7	0.0				ug/L	91588	Standard
S	34	31973.7	1.3				ug/L	32556	Standard
Sr	88	118.3	25.5				ug/L	62	Standard
C	12	191.7	17.4				mg/L	133	Standard
N	14	0.0					mg/L	0	Standard
Hg	202	31.7	39.7				mg/L	7	Standard

QC Calculated Values

Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recovery
Li	7			
Be	9			
Al	27			
Sc	45			
Ti	47			
V	51			
Cr	52			
Cr	53			
Mn	55			
Co	59			
Ni	60			
Cu	65			
Zn	66			
Ge	72		85.857	
As	75			
Se	82			
Se-1	77			
Ga	71			
Rb	85			
Y	89			
Rh	103			

Sample ID: L1211042001

Report Date/Time: Sunday, November 18, 2012 12:31:00

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[	Mo	98	
[	Ag	107	
[	Cd	111	
[	Cd	114	
>	In	115	90.301
[	Sn	118	
[	Sb	123	
[	Ba	135	
[	Ce	140	
>	Tb	159	
[	Ho	165	
[	Tl	203	
[	Tl	205	
[	Pb	206	
[	Pb	207	
[	Pb	208	
[	U	238	
>	Bi	209	96.392
[	Na	23	
[	Mg	24	
[	K	39	
[	Ca	43	
[	Fe	54	
[	Fe	57	
>	Sc-1	45	
[	Cl	35	
[	Kr	83	
[	Br	81	
[	P	31	
[	S	34	
[	Sr	88	
[	C	12	
[	N	14	
[	Hg	202	

QC Out of Limits

Measurement Type	Analyte	Mass	Out of Limits Message
Mn 55 Upper, S, EEE	Mn	55	

Sample ID: L1211042001

Report Date/Time: Sunday, November 18, 2012 12:31:00

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Method 6020 - Summary Report

Sample ID: QC Std 6

Sample Date/Time: Sunday, November 18, 2012 12:32:51

Number of Replicates: 3

Autosampler Position: 101

Sample Description:

Method File: C:\NexIONData\Method\6020a.mth

Aliquot Volume (mL):

Diluted to Volume (mL):

User Name: JYH user

Cumulative Autodilution Factor: 1

Nexion-ICP 200.8\6020

Concentration Results

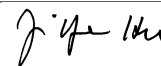
IS	Analyte	Mass	Intensity	RSD	Conc.	SD	RSD	Units	Blank Intens.	Mode
[	Li	7	8163.9	5.2	-445.7704	214.871	48.2	ug/L	8369	Standard
	Be	9	102049.9	5.8	55.5845	2.488	4.5	ug/L	18	Standard
	Al	27	6649002.2	3.5	61.3589	1.383	2.3	ug/L	215	Standard
[>	Sc	45	46740.3	1.4				ug/L	53004	Standard
[	Ti	47	45164.6	2.4	93.6151	0.771	0.8	ug/L	26	Standard
	V	51	538053.5	2.5	48.1144	0.333	0.7	ug/L	3223	Standard
	Cr	52	514691.2	3.7	49.0413	0.964	2.0	ug/L	10379	Standard
	Cr	53	63133.8	1.5	48.7845	0.442	0.9	ug/L	192	Standard
	Mn	55	807016.5	5.1	49.5014	1.437	2.9	ug/L	1840	Standard
	Co	59	621486.8	4.0	49.6594	0.934	1.9	ug/L	115	Standard
	Ni	60	134433.9	5.4	49.9192	1.532	3.1	ug/L	75	Standard
	Cu	65	131522.0	5.2	50.5749	1.447	2.9	ug/L	155	Standard
	Zn	66	65209.5	3.9	50.5578	1.100	2.2	ug/L	237	Standard
[>	Ge	72	387950.3	2.3				ug/L	413856	Standard
	As	75	67246.7	4.2	49.5475	1.238	2.5	ug/L	-197	Standard
	Se	82	5956.1	3.7	49.0250	0.746	1.5	ug/L	-5	Standard
[	Se-1	77	4607.7	3.2	49.1109	0.701	1.4	ug/L	105	Standard
[>	Ga	71	241.7	15.7				mg/L	225	Standard
[	Rb	85	1008.4	6.0				ug/L	28	Standard
[	Y	89	285309.1	6.0				ug/L	322845	Standard
[>	Rh	103	118.3	34.2				ug/L	92	Standard
[	Mo	98	406208.1	4.4	93.3732	4.053	4.3	ug/L	18	Standard
	Ag	107	385600.4	2.9	50.3795	1.118	2.2	ug/L	63	Standard
	Cd	111	167110.2	3.6	50.4472	2.025	4.0	mg/L	20	Standard
	Cd	114	438679.3	3.9	50.3172	2.122	4.2	ug/L	56	Standard
[>	In	115	634813.9	1.9				ug/L	657102	Standard
	Sn	118	486649.6	4.4	50.5752	2.160	4.3	ug/L	555	Standard
	Sb	123	383745.1	2.5	50.7349	1.737	3.4	ug/L	62	Standard
[	Ba	135	167520.2	3.7	50.9325	2.164	4.2	ug/L	19	Standard
[	Ce	140	648.7	7.2				ug/L	24	Standard
[>	Tb	159	902220.0	0.4				ug/L	910514	Standard
[	Ho	165	436.7	4.4				ug/L	7	Standard
[	Tl	203	634476.3	2.1	50.2897	0.920	1.8	ug/L	13	Standard
	Tl	205	19890.1	2.6	51.6751	1.211	2.3	ug/L	1	Standard
	Pb	206	509122.9	3.2	50.3380	1.530	3.0	ug/L	342	Standard
	Pb	207	434355.8	3.4	50.5112	1.570	3.1	ug/L	284	Standard
	Pb	208	2002338.1	2.9	50.1549	1.362	2.7	ug/L	1363	Standard
	U	238	509566.8	3.9	51.5750	1.876	3.6	ug/L	2	Standard
[>	Bi	209	463211.9	0.7				ug/L	470592	Standard

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Na	23	0.0		0.0050	0.000	0.0	mg/L	2	Standard
Mg	24	304806.3	2.2	0.1667	0.002	1.2	mg/L	5586	Standard
K	39	346.7	13.4	5.3016	0.684	12.9	mg/L	5	Standard
Ca	43	133.3	22.0	4.2012	1.385	33.0	mg/L	45	Standard
Fe	54	13044.9	3.3	5.5292	0.135	2.4	mg/L	350	Standard
Fe	57	3015.3	4.6	5.2407	0.199	3.8	mg/L	102	Standard
Sc-1	45	46740.3	1.4				mg/L	53004	Standard
Cl	35	3.3	69.3				ug/L	2	Standard
Kr	83	172.2	2.1				ug/L	157	Standard
Br	81	5.8	49.5				ug/L	3	Standard
P	31	114225.7	1.7				ug/L	91588	Standard
S	34	33818.5	0.8				ug/L	32556	Standard
Sr	88	75.0	37.1				ug/L	62	Standard
C	12	146.7	22.7				mg/L	133	Standard
N	14	1.7	173.2				mg/L	0	Standard
Hg	202	1.7	173.2				mg/L	7	Standard

QC Calculated Values

Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recovery
Li	7			
Be	9	111.169		
Al	27	122.718		
Sc	45			
Ti	47	93.615		
V	51	96.229		
Cr	52	98.083		
Cr	53			
Mn	55	99.003		
Co	59	99.319		
Ni	60	99.838		
Cu	65	101.150		
Zn	66	101.116		
Ge	72		93.740	
As	75	99.095		
Se	82	98.050		
Se-1	77			
Ga	71			
Rb	85			
Y	89			
Rh	103			

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[	Mo	98	93.373	
[	Ag	107	100.759	
[	Cd	111	100.894	
[	Cd	114		
>	In	115		96.608
[	Sn	118	101.150	
[	Sb	123	101.470	
[	Ba	135	101.865	
[	Ce	140		
>	Tb	159		
[	Ho	165		
[	Tl	203	100.579	
[	Tl	205		
[	Pb	206	100.676	
[	Pb	207	101.022	
[	Pb	208	100.310	
[	U	238	103.150	
>	Bi	209		98.432
[	Na	23		
[	Mg	24		
[	K	39		
[	Ca	43		
[	Fe	54		
[	Fe	57		
>	Sc-1	45		
[	Cl	35		
[	Kr	83		
[	Br	81		
[	P	31		
[	S	34		
[	Sr	88		
[	C	12		
[	N	14		
[	Hg	202		

QC Out of Limits

Measurement Type	Analyte	Mass	Out of Limits Message
QC Std 6	Be	9	
QC Std 6	Al	27	

Sample ID: QC Std 6

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Method 6020 - Summary Report

Sample ID: QC Std 7

Sample Date/Time: Sunday, November 18, 2012 12:36:04

Number of Replicates: 3

Autosampler Position: 102

Sample Description:

Method File: C:\NexIONData\Method\6020a.mth

Aliquot Volume (mL):

Diluted to Volume (mL):

User Name: JYH user

Cumulative Autodilution Factor: 1

Nexion-ICP 200.8\6020

Concentration Results

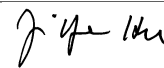
IS	Analyte	Mass	Intensity	RSD	Conc.	SD	RSD	Units	Blank Intens.	Mode
[	Li	7	8008.8	4.3	-741.5539	242.833	32.7	ug/L	8369	Standard
	Be	9	6.7	114.6	-0.0055	0.005	82.9	ug/L	18	Standard
	Al	27	1131.7	112.8	0.0092	0.013	140.8	ug/L	215	Standard
[>	Sc	45	43367.0	2.6				ug/L	53004	Standard
[	Ti	47	19.0	27.9	-0.0180	0.012	65.9	ug/L	26	Standard
	V	51	2595.2	0.4	-0.0213	0.004	17.5	ug/L	3223	Standard
	Cr	52	8769.5	0.6	-0.0176	0.012	68.3	ug/L	10379	Standard
	Cr	53	266.7	18.5	0.1078	0.038	35.1	ug/L	192	Standard
	Mn	55	10130.1	16.6	0.5689	0.117	20.6	ug/L	1840	Standard
	Co	59	107.7	29.5	-0.0064	0.003	42.7	ug/L	115	Standard
	Ni	60	78.7	0.7	-0.0047	0.001	12.6	ug/L	75	Standard
	Cu	65	182.7	2.3	0.0167	0.001	5.7	ug/L	155	Standard
	Zn	66	241.3	3.9	-0.0012	0.009	741.0	ug/L	237	Standard
[>	Ge	72	367756.4	1.3				ug/L	413856	Standard
	As	75	-149.2	20.2	0.0240	0.025	103.4	ug/L	-197	Standard
	Se	82	11.5	103.0	0.1040	0.102	97.7	ug/L	-5	Standard
[	Se-1	77	109.7	2.9	0.2794	0.051	18.2	ug/L	105	Standard
[>	Ga	71	173.3	26.2				mg/L	225	Standard
[	Rb	85	46.7	65.5				ug/L	28	Standard
[	Y	89	273592.0	3.8				ug/L	322845	Standard
[>	Rh	103	96.7	21.5				ug/L	92	Standard
[	Mo	98	152.4	119.5	0.0287	0.045	158.0	ug/L	18	Standard
	Ag	107	158.0	109.1	0.0141	0.024	173.0	ug/L	63	Standard
	Cd	111	63.8	125.9	0.0094	0.026	279.2	mg/L	20	Standard
	Cd	114	169.5	107.9	0.0111	0.023	204.4	ug/L	56	Standard
[>	In	115	605930.4	2.5				ug/L	657102	Standard
	Sn	118	616.7	25.5	0.0181	0.019	104.5	ug/L	555	Standard
	Sb	123	329.5	38.4	0.0429	0.018	42.9	ug/L	62	Standard
[	Ba	135	110.0	108.7	0.0157	0.039	250.8	ug/L	19	Standard
[	Ce	140	31.3	30.3				ug/L	24	Standard
[>	Tb	159	859941.5	1.8				ug/L	910514	Standard
[	Ho	165	10.3	22.3				ug/L	7	Standard
	Tl	203	98.3	100.1	0.0044	0.008	182.8	ug/L	13	Standard
	Tl	205	1.7	91.7	0.0057	0.004	71.4	ug/L	1	Standard
	Pb	206	377.0	15.1	0.0056	0.006	104.1	ug/L	342	Standard
	Pb	207	306.7	16.6	0.0007	0.006	792.2	ug/L	284	Standard
	Pb	208	1502.4	12.5	0.0045	0.005	109.0	ug/L	1363	Standard
	U	238	38.7	130.7	0.0025	0.005	209.9	ug/L	2	Standard
[>	Bi	209	448333.7	1.5				ug/L	470592	Standard

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Na	23	0.0		0.0050	0.000	0.0	mg/L	2	Standard
Mg	24	2193.5	33.2	-0.0016	0.000	28.4	mg/L	5586	Standard
K	39	8.3	91.7	0.0966	0.128	132.3	mg/L	5	Standard
Ca	43	41.7	48.5	-0.0463	1.089	2355.0	mg/L	45	Standard
Fe	54	317.0	29.3	-0.0039	0.047	1208.9	mg/L	350	Standard
Fe	57	96.7	7.9	0.0574	0.016	27.9	mg/L	102	Standard
Sc-1	45	43367.0	2.6				mg/L	53004	Standard
Cl	35	3.0	66.7				ug/L	2	Standard
Kr	83	169.9	1.1				ug/L	157	Standard
Br	81	4.2	69.3				ug/L	3	Standard
P	31	111381.0	4.7				ug/L	91588	Standard
S	34	32499.0	2.3				ug/L	32556	Standard
Sr	88	61.7	16.9				ug/L	62	Standard
C	12	145.0	27.4				mg/L	133	Standard
N	14	0.0					mg/L	0	Standard
Hg	202	1.7	173.2				mg/L	7	Standard

QC Calculated Values

Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recovery
Li	7			
Be	9			
Al	27			
Sc	45			
Ti	47			
V	51			
Cr	52			
Cr	53			
Mn	55			
Co	59			
Ni	60			
Cu	65			
Zn	66			
Ge	72		88.861	
As	75			
Se	82			
Se-1	77			
Ga	71			
Rb	85			
Y	89			
Rh	103			

Sample ID: QC Std 7

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[	Mo	98	
[	Ag	107	
[	Cd	111	
[	Cd	114	
>	In	115	92.213
[	Sn	118	
[	Sb	123	
[	Ba	135	
[	Ce	140	
>	Tb	159	
[	Ho	165	
[	Tl	203	
[	Tl	205	
[	Pb	206	
[	Pb	207	
[	Pb	208	
[	U	238	
>	Bi	209	95.270
[	Na	23	
[	Mg	24	
[	K	39	
[	Ca	43	
[	Fe	54	
[	Fe	57	
>	Sc-1	45	
[	Cl	35	
[	Kr	83	
[	Br	81	
[	P	31	
[	S	34	
[	Sr	88	
[	C	12	
[	N	14	
[	Hg	202	

QC Out of Limits

Measurement Type	Analyte	Mass	Out of Limits Message
QC Std 7	Mn	55	

Sample ID: QC Std 7

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Method 6020 - Summary Report

Sample ID: QC Std 4

Sample Date/Time: Sunday, November 18, 2012 12:40:39

Number of Replicates: 3

Autosampler Position: 203

Sample Description:

Method File: C:\NexIONData\Method\6020a.mth

Aliquot Volume (mL):

Diluted to Volume (mL):

User Name: JYH user

Cumulative Autodilution Factor: 1

Nexion-ICP 200.8\6020

Concentration Results

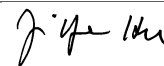
IS	Analyte	Mass	Intensity	RSD	Conc.	SD	RSD	Units	Blank Intens.	Mode
[	Li	7	8280.6	5.3	-713.0786	187.079	26.2	ug/L	8369	Standard
	Be	9	5.0	0.0	-0.0066	0.000	1.6	ug/L	18	Standard
	Al	27	5982930.0	5.5	57.3133	3.351	5.8	ug/L	215	Standard
[>	Sc	45	45060.3	3.8				ug/L	53004	Standard
[	Ti	47	43551.9	3.8	90.7706	2.089	2.3	ug/L	26	Standard
	V	51	1273.3	34.6	-0.1522	0.040	26.5	ug/L	3223	Standard
	Cr	52	9451.6	4.0	0.0069	0.027	383.4	ug/L	10379	Standard
	Cr	53	2448.5	2.4	1.7974	0.048	2.7	ug/L	192	Standard
	Mn	55	2920.6	11.7	0.0915	0.019	20.7	ug/L	1840	Standard
	Co	59	270.7	9.2	0.0063	0.002	34.4	ug/L	115	Standard
	Ni	60	849.4	9.2	0.2819	0.026	9.2	ug/L	75	Standard
	Cu	65	517.3	8.4	0.1428	0.015	10.7	ug/L	155	Standard
	Zn	66	1781.8	5.5	1.1948	0.047	3.9	ug/L	237	Standard
[>	Ge	72	385765.4	2.3				ug/L	413856	Standard
	As	75	-140.6	40.0	0.0360	0.041	114.1	ug/L	-197	Standard
	Se	82	1.7	472.7	0.0194	0.065	332.5	ug/L	-5	Standard
[	Se-1	77	317.7	2.1	2.4948	0.054	2.1	ug/L	105	Standard
[>	Ga	71	303.3	11.6				mg/L	225	Standard
[	Rb	85	2895.3	3.3				ug/L	28	Standard
[	Y	89	288577.7	1.7				ug/L	322845	Standard
[>	Rh	103	88.3	22.9				ug/L	92	Standard
[	Mo	98	365374.6	4.1	85.8216	2.718	3.2	ug/L	18	Standard
	Ag	107	96.7	39.7	0.0050	0.005	96.9	ug/L	63	Standard
	Cd	111	191.6	17.1	0.0478	0.009	18.5	mg/L	20	Standard
	Cd	114	1288.8	2.8	0.1415	0.002	1.3	ug/L	56	Standard
[>	In	115	621124.1	2.1				ug/L	657102	Standard
	Sn	118	419.3	4.1	-0.0048	0.001	19.3	ug/L	555	Standard
	Sb	123	327.5	6.5	0.0413	0.002	4.7	ug/L	62	Standard
[	Ba	135	181.7	15.6	0.0364	0.008	20.8	ug/L	19	Standard
[	Ce	140	1783.4	3.3				ug/L	24	Standard
[>	Tb	159	886949.9	1.3				ug/L	910514	Standard
[	Ho	165	12.0	0.0				ug/L	7	Standard
	Tl	203	177.0	5.7	0.0106	0.001	6.1	ug/L	13	Standard
	Tl	205	6.0	28.9	0.0171	0.004	25.5	ug/L	1	Standard
	Pb	206	586.0	5.2	0.0260	0.004	14.0	ug/L	342	Standard
	Pb	207	483.7	3.3	0.0211	0.002	9.6	ug/L	284	Standard
	Pb	208	2285.1	3.5	0.0238	0.002	10.2	ug/L	1363	Standard
	U	238	8.0	82.0	-0.0007	0.001	96.1	ug/L	2	Standard
[>	Bi	209	455661.2	1.3				ug/L	470592	Standard

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Na	23	0.0		0.0050	0.000	0.0	mg/L	2	Standard
Mg	24	428979.7	2.1	0.2448	0.006	2.3	mg/L	5586	Standard
K	39	325.0	4.1	5.1570	0.030	0.6	mg/L	5	Standard
Ca	43	300.0	6.0	12.8001	0.997	7.8	mg/L	45	Standard
Fe	54	27964.6	6.4	12.4836	0.648	5.2	mg/L	350	Standard
Fe	57	6813.2	8.2	12.4581	0.941	7.6	mg/L	102	Standard
Sc-1	45	45060.3	3.8				mg/L	53004	Standard
Cl	35	1.0	100.0				ug/L	2	Standard
Kr	83	186.0	4.2				ug/L	157	Standard
Br	81	3.3	114.6				ug/L	3	Standard
P	31	92392.7	3.5				ug/L	91588	Standard
S	34	30265.2	3.2				ug/L	32556	Standard
Sr	88	71.7	10.7				ug/L	62	Standard
C	12	293.3	8.6				mg/L	133	Standard
N	14	0.0					mg/L	0	Standard
Hg	202	3.3	173.2				mg/L	7	Standard

QC Calculated Values

Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recovery
Li	7			
Be	9			
Al	27	1.146		
Sc	45			
Ti	47	90.771		
V	51			
Cr	52			
Cr	53			
Mn	55			
Co	59			
Ni	60			
Cu	65			
Zn	66			
Ge	72		93.213	
As	75			
Se	82			
Se-1	77			
Ga	71			
Rb	85			
Y	89			
Rh	103			

Sample ID: QC Std 4

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[	Mo	98	85.822	
[	Ag	107		
[	Cd	111		
[	Cd	114		
>	In	115		94.525
[	Sn	118		
[	Sb	123		
[	Ba	135		
[	Ce	140		
>	Tb	159		
[	Ho	165		
[	Tl	203		
[	Tl	205		
[	Pb	206		
[	Pb	207		
[	Pb	208		
[	U	238		
>	Bi	209		96.827
[	Na	23	0.040	
[	Mg	24	4.896	
[	K	39	103.139	
[	Ca	43	85.334	
[	Fe	54	99.869	
[	Fe	57	99.665	
>	Sc-1	45		
[	Cl	35		
[	Kr	83		
[	Br	81		
[	P	31		
[	S	34		
[	Sr	88		
[	C	12		
[	N	14		
[	Hg	202		

QC Out of Limits

Measurement Type	Analyte	Mass	Out of Limits Message
QC Std 4	Al	27	
QC Std 4	Na	23	
QC Std 4	Mg	24	

Sample ID: QC Std 4

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Method 6020 - Summary Report

Sample ID: QC Std 5

Sample Date/Time: Sunday, November 18, 2012 12:43:50

Number of Replicates: 3

Autosampler Position: 204

Sample Description:

Method File: C:\NexIONData\Method\6020a.mth

Aliquot Volume (mL):

Diluted to Volume (mL):

User Name: JYH user

Cumulative Autodilution Factor: 1

Nexion-ICP 200.8\6020

Concentration Results

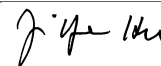
IS	Analyte	Mass	Intensity	RSD	Conc.	SD	RSD	Units	Blank Intens.	Mode
[	Li	7	8252.3	7.1	-850.9968	162.321	19.1	ug/L	8369	Standard
	Be	9	197088.1	7.4	114.7325	7.039	6.1	ug/L	18	Standard
	Al	27	5062940.8	5.2	49.9330	2.044	4.1	ug/L	215	Standard
[>	Sc	45	43756.5	4.5				ug/L	53004	Standard
[	Ti	47	36358.7	5.8	77.1233	3.109	4.0	ug/L	26	Standard
	V	51	949092.6	5.7	87.0907	3.797	4.4	ug/L	3223	Standard
	Cr	52	912961.0	5.2	89.7986	3.029	3.4	ug/L	10379	Standard
	Cr	53	115182.4	6.7	91.1748	4.673	5.1	ug/L	192	Standard
	Mn	55	1465008.9	5.8	92.0929	3.896	4.2	ug/L	1840	Standard
	Co	59	1125621.1	4.7	92.1076	2.923	3.2	ug/L	115	Standard
	Ni	60	240477.1	4.7	91.4763	2.595	2.8	ug/L	75	Standard
	Cu	65	240078.0	4.6	94.5889	2.518	2.7	ug/L	155	Standard
	Zn	66	120033.9	4.6	95.4570	2.711	2.8	ug/L	237	Standard
[>	Ge	72	378894.0	2.3				ug/L	413856	Standard
	As	75	125132.8	5.0	94.2640	2.950	3.1	ug/L	-197	Standard
	Se	82	10938.0	4.9	92.1742	3.169	3.4	ug/L	-5	Standard
[	Se-1	77	8624.8	5.4	94.9942	3.439	3.6	ug/L	105	Standard
[>	Ga	71	373.3	11.2				mg/L	225	Standard
[	Rb	85	2455.2	7.6				ug/L	28	Standard
[	Y	89	281708.3	1.2				ug/L	322845	Standard
[>	Rh	103	140.0	0.0				ug/L	92	Standard
[	Mo	98	310273.1	6.2	73.2433	4.974	6.8	ug/L	18	Standard
	Ag	107	699246.9	3.1	93.8405	4.099	4.4	ug/L	63	Standard
	Cd	111	304283.3	5.9	94.3427	6.372	6.8	mg/L	20	Standard
	Cd	114	790268.8	6.1	93.1000	6.490	7.0	ug/L	56	Standard
[>	In	115	618456.8	3.1				ug/L	657102	Standard
	Sn	118	697.0	4.9	0.0250	0.002	6.8	ug/L	555	Standard
	Sb	123	710261.6	4.9	96.4475	6.183	6.4	ug/L	62	Standard
[	Ba	135	304304.3	5.3	95.0418	6.278	6.6	ug/L	19	Standard
[	Ce	140	1539.7	9.2				ug/L	24	Standard
[>	Tb	159	883784.4	2.3				ug/L	910514	Standard
[	Ho	165	180.7	10.4				ug/L	7	Standard
	Tl	203	1176435.6	2.4	96.1918	2.425	2.5	ug/L	13	Standard
	Tl	205	37504.4	2.5	100.5227	3.189	3.2	ug/L	1	Standard
	Pb	206	937739.3	4.4	95.6656	4.094	4.3	ug/L	342	Standard
	Pb	207	807997.4	4.4	96.9627	4.329	4.5	ug/L	284	Standard
	Pb	208	3770010.5	6.8	97.3845	5.143	5.3	ug/L	1363	Standard
	U	238	920647.8	5.4	96.1013	4.410	4.6	ug/L	2	Standard
[>	Bi	209	449222.5	3.3				ug/L	470592	Standard

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Na	23	0.0		0.0050	0.000	0.0	mg/L	2	Standard
Mg	24	400216.9	2.3	0.2352	0.007	3.0	mg/L	5586	Standard
K	39	268.3	8.4	4.3819	0.384	8.8	mg/L	5	Standard
Ca	43	280.0	1.8	12.2193	0.474	3.9	mg/L	45	Standard
Fe	54	24314.0	3.8	11.1675	0.357	3.2	mg/L	350	Standard
Fe	57	5912.8	3.0	11.1353	0.620	5.6	mg/L	102	Standard
Sc-1	45	43756.5	4.5				mg/L	53004	Standard
Cl	35	2.3	49.5				ug/L	2	Standard
Kr	83	183.3	1.5				ug/L	157	Standard
Br	81	5.0	50.0				ug/L	3	Standard
P	31	98502.3	5.6				ug/L	91588	Standard
S	34	28046.8	1.2				ug/L	32556	Standard
Sr	88	50.0	10.0				ug/L	62	Standard
C	12	246.7	16.9				mg/L	133	Standard
N	14	1.7	173.2				mg/L	0	Standard
Hg	202	0.0					mg/L	7	Standard

QC Calculated Values

Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recovery
Li	7			
Be	9	114.732		
Al	27	0.999		
Sc	45			
Ti	47	77.123		
V	51	87.091		
Cr	52	89.799		
Cr	53			
Mn	55	92.093		
Co	59	92.108		
Ni	60	91.476		
Cu	65	94.589		
Zn	66	95.457		
Ge	72		91.552	
As	75	94.264		
Se	82	92.174		
Se-1	77			
Ga	71			
Rb	85			
Y	89			
Rh	103			

Sample ID: QC Std 5

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[	Mo	98	73.243	
[	Ag	107	93.841	
[	Cd	111	94.343	
[	Cd	114		
>	In	115		94.119
[	Sn	118		
[	Sb	123	96.447	
[	Ba	135	95.042	
[	Ce	140		
>	Tb	159		
[	Ho	165		
[	Tl	203	96.192	
[	Tl	205		
[	Pb	206	95.666	
[	Pb	207	96.963	
[	Pb	208	97.384	
[	U	238	96.101	
>	Bi	209		95.459
[	Na	23	0.040	
[	Mg	24	4.703	
[	K	39	87.639	
[	Ca	43	81.462	
[	Fe	54	89.340	
[	Fe	57	89.082	
>	Sc-1	45		
[	Cl	35		
[	Kr	83		
[	Br	81		
[	P	31		
[	S	34		
[	Sr	88		
[	C	12		
[	N	14		
[	Hg	202		

QC Out of Limits

Measurement Type	Analyte	Mass	Out of Limits Message
QC Std 5	Al	27	
QC Std 5	Ti	47	
QC Std 5	Mo	98	
QC Std 5	Na	23	
QC Std 5	Mg	24	

Sample ID: QC Std 5

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Method 6020 - Summary Report

Sample ID: QC Std 6

Sample Date/Time: Sunday, November 18, 2012 12:47:07

Number of Replicates: 3

Autosampler Position: 101

Sample Description:

Method File: C:\NexIONData\Method\6020a.mth

Aliquot Volume (mL):

Diluted to Volume (mL):

User Name: JYH user

Cumulative Autodilution Factor: 1

Nexion-ICP 200.8\6020

Concentration Results

IS	Analyte	Mass	Intensity	RSD	Conc.	SD	RSD	Units	Blank Intens.	Mode
[	Li	7	8243.9	4.9	-561.4093	80.440	14.3	ug/L	8369	Standard
	Be	9	101683.6	3.3	56.1160	0.323	0.6	ug/L	18	Standard
	Al	27	6550845.5	5.0	61.2228	1.514	2.5	ug/L	215	Standard
[>	Sc	45	46150.2	3.4				ug/L	53004	Standard
[	Ti	47	44255.0	4.8	93.4104	3.687	3.9	ug/L	26	Standard
	V	51	529866.9	4.4	48.2533	1.715	3.6	ug/L	3223	Standard
	Cr	52	502676.5	3.8	48.7813	1.498	3.1	ug/L	10379	Standard
	Cr	53	62105.6	5.4	48.8683	2.447	5.0	ug/L	192	Standard
	Mn	55	797450.0	3.4	49.8400	1.426	2.9	ug/L	1840	Standard
	Co	59	619221.0	4.1	50.4031	1.801	3.6	ug/L	115	Standard
	Ni	60	130757.1	5.2	49.4624	2.012	4.1	ug/L	75	Standard
	Cu	65	129901.1	4.2	50.8906	1.666	3.3	ug/L	155	Standard
	Zn	66	64375.3	4.5	50.8417	2.051	4.0	ug/L	237	Standard
[>	Ge	72	380891.4	1.4				ug/L	413856	Standard
	As	75	66673.5	3.8	50.0395	1.490	3.0	ug/L	-197	Standard
	Se	82	5843.5	4.3	48.9970	1.942	4.0	ug/L	-5	Standard
[	Se-1	77	4511.0	1.9	48.9729	0.649	1.3	ug/L	105	Standard
[>	Ga	71	175.0	22.7				mg/L	225	Standard
[	Rb	85	966.7	7.1				ug/L	28	Standard
[	Y	89	292906.5	2.0				ug/L	322845	Standard
[>	Rh	103	133.3	5.7				ug/L	92	Standard
[	Mo	98	409012.2	5.4	94.7872	3.736	3.9	ug/L	18	Standard
	Ag	107	386348.4	3.2	50.9060	0.840	1.6	ug/L	63	Standard
	Cd	111	166009.3	4.5	50.5249	1.591	3.1	mg/L	20	Standard
	Cd	114	430676.0	3.5	49.8098	1.096	2.2	ug/L	56	Standard
[>	In	115	629350.0	1.6				ug/L	657102	Standard
	Sn	118	482791.2	5.5	50.5857	2.039	4.0	ug/L	555	Standard
	Sb	123	384078.6	3.6	51.1932	1.097	2.1	ug/L	62	Standard
[	Ba	135	163892.9	3.9	50.2390	1.321	2.6	ug/L	19	Standard
[	Ce	140	638.3	4.9				ug/L	24	Standard
[>	Tb	159	887371.5	2.2				ug/L	910514	Standard
[	Ho	165	442.3	5.8				ug/L	7	Standard
[	Tl	203	631280.4	3.1	50.6853	0.877	1.7	ug/L	13	Standard
	Tl	205	19827.0	2.4	52.1898	1.165	2.2	ug/L	1	Standard
	Pb	206	503865.0	3.9	50.4629	1.398	2.8	ug/L	342	Standard
	Pb	207	431591.1	3.5	50.8430	1.265	2.5	ug/L	284	Standard
	Pb	208	1985765.7	4.0	50.3836	1.429	2.8	ug/L	1363	Standard
	U	238	508194.9	5.6	52.0910	2.092	4.0	ug/L	2	Standard
[>	Bi	209	457324.2	3.0				ug/L	470592	Standard

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Na	23	0.0		0.0050	0.000	0.0	mg/L	2	Standard
Mg	24	303554.3	1.3	0.1682	0.004	2.1	mg/L	5586	Standard
K	39	365.0	6.0	5.6577	0.235	4.1	mg/L	5	Standard
Ca	43	121.7	17.1	3.7223	1.056	28.4	mg/L	45	Standard
Fe	54	12784.4	4.3	5.4866	0.070	1.3	mg/L	350	Standard
Fe	57	3050.3	2.4	5.3749	0.064	1.2	mg/L	102	Standard
Sc-1	45	46150.2	3.4				mg/L	53004	Standard
Cl	35	4.3	13.3				ug/L	2	Standard
Kr	83	186.3	3.5				ug/L	157	Standard
Br	81	6.7	57.3				ug/L	3	Standard
P	31	106088.5	1.7				ug/L	91588	Standard
S	34	30906.5	2.2				ug/L	32556	Standard
Sr	88	91.7	27.5				ug/L	62	Standard
C	12	153.3	14.7				mg/L	133	Standard
N	14	1.7	173.2				mg/L	0	Standard
Hg	202	6.7	114.6				mg/L	7	Standard

QC Calculated Values

Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recovery
Li	7			
Be	9	112.232		
Al	27	122.446		
Sc	45			
Ti	47	93.410		
V	51	96.507		
Cr	52	97.563		
Cr	53			
Mn	55	99.680		
Co	59	100.806		
Ni	60	98.925		
Cu	65	101.781		
Zn	66	101.683		
Ge	72		92.035	
As	75	100.079		
Se	82	97.994		
Se-1	77			
Ga	71			
Rb	85			
Y	89			
Rh	103			

Sample ID: QC Std 6

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[	Mo	98	94.787	
[	Ag	107	101.812	
[	Cd	111	101.050	
[	Cd	114		
>	In	115		95.777
[	Sn	118	101.171	
[	Sb	123	102.386	
[	Ba	135	100.478	
[	Ce	140		
>	Tb	159		
[	Ho	165		
[	Tl	203	101.371	
[	Tl	205		
[	Pb	206	100.926	
[	Pb	207	101.686	
[	Pb	208	100.767	
[	U	238	104.182	
>	Bi	209		97.181
[	Na	23		
[	Mg	24		
[	K	39		
[	Ca	43		
[	Fe	54		
[	Fe	57		
>	Sc-1	45		
[	Cl	35		
[	Kr	83		
[	Br	81		
[	P	31		
[	S	34		
[	Sr	88		
[	C	12		
[	N	14		
[	Hg	202		

QC Out of Limits

Measurement Type	Analyte	Mass	Out of Limits Message
QC Std 6	Be	9	
QC Std 6	Al	27	

Sample ID: QC Std 6

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Method 6020 - Summary Report

Sample ID: QC Std 7

Sample Date/Time: Sunday, November 18, 2012 12:50:20

Number of Replicates: 3

Autosampler Position: 102

Sample Description:

Method File: C:\NexIONData\Method\6020a.mth

Aliquot Volume (mL):

Diluted to Volume (mL):

User Name: JYH user

Cumulative Autodilution Factor: 1

Nexion-ICP 200.8\6020

Concentration Results

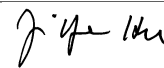
IS	Analyte	Mass	Intensity	RSD	Conc.	SD	RSD	Units	Blank Intens.	Mode
[	Li	7	7813.7	3.1	-665.7284	57.987	8.7	ug/L	8369	Standard
	Be	9	16.7	17.3	0.0005	0.002	421.4	ug/L	18	Standard
	Al	27	755.0	52.5	0.0055	0.004	76.2	ug/L	215	Standard
>	Sc	45	42914.1	4.3				ug/L	53004	Standard
[	Ti	47	27.3	22.4	0.0004	0.014	3785.6	ug/L	26	Standard
	V	51	2440.4	3.2	-0.0354	0.012	32.7	ug/L	3223	Standard
	Cr	52	8426.3	0.7	-0.0509	0.020	39.4	ug/L	10379	Standard
	Cr	53	314.2	0.9	0.1474	0.007	4.5	ug/L	192	Standard
	Mn	55	11016.8	25.1	0.6283	0.188	30.0	ug/L	1840	Standard
	Co	59	137.3	40.9	-0.0039	0.005	127.6	ug/L	115	Standard
	Ni	60	79.0	12.1	-0.0044	0.004	98.2	ug/L	75	Standard
	Cu	65	191.3	5.6	0.0204	0.006	28.7	ug/L	155	Standard
	Zn	66	243.3	4.6	0.0007	0.005	777.3	ug/L	237	Standard
>	Ge	72	367070.1	2.0				ug/L	413856	Standard
	As	75	-186.7	14.6	-0.0049	0.019	385.5	ug/L	-197	Standard
	Se	82	-3.8	153.7	-0.0268	0.049	183.2	ug/L	-5	Standard
[	Se-1	77	110.7	8.1	0.2919	0.080	27.6	ug/L	105	Standard
>	Ga	71	188.3	13.6				mg/L	225	Standard
[	Rb	85	30.0	16.7				ug/L	28	Standard
[	Y	89	269282.0	3.5				ug/L	322845	Standard
>	Rh	103	85.0	17.6				ug/L	92	Standard
[	Mo	98	50.7	25.8	0.0037	0.003	79.5	ug/L	18	Standard
	Ag	107	66.0	25.0	0.0013	0.002	170.9	ug/L	63	Standard
	Cd	111	26.6	15.2	-0.0026	0.001	55.9	mg/L	20	Standard
	Cd	114	67.0	16.1	-0.0014	0.001	101.5	ug/L	56	Standard
>	In	115	596224.8	2.1				ug/L	657102	Standard
	Sn	118	496.0	10.8	0.0055	0.005	90.2	ug/L	555	Standard
	Sb	123	378.9	21.0	0.0503	0.010	20.2	ug/L	62	Standard
[	Ba	135	33.3	28.5	-0.0091	0.003	33.7	ug/L	19	Standard
[	Ce	140	26.7	25.0				ug/L	24	Standard
>	Tb	159	852843.6	2.8				ug/L	910514	Standard
[	Ho	165	8.0	21.7				ug/L	7	Standard
	Tl	203	119.7	62.2	0.0064	0.006	99.9	ug/L	13	Standard
	Tl	205	2.7	94.4	0.0086	0.007	80.3	ug/L	1	Standard
	Pb	206	401.0	15.1	0.0087	0.007	80.5	ug/L	342	Standard
	Pb	207	359.0	19.9	0.0077	0.009	122.6	ug/L	284	Standard
	Pb	208	1586.0	16.2	0.0073	0.007	102.3	ug/L	1363	Standard
	U	238	61.3	90.5	0.0050	0.006	118.8	ug/L	2	Standard
>	Bi	209	442581.9	2.4				ug/L	470592	Standard

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Na	23	0.0		0.0050	0.000	0.0	mg/L	2	Standard
Mg	24	1706.8	0.6	-0.0019	0.000	2.6	mg/L	5586	Standard
K	39	5.0	100.0	0.0447	0.086	192.4	mg/L	5	Standard
Ca	43	46.7	27.0	0.2401	0.741	308.6	mg/L	45	Standard
Fe	54	343.8	11.6	0.0094	0.012	127.4	mg/L	350	Standard
Fe	57	80.0	6.3	0.0269	0.005	19.6	mg/L	102	Standard
Sc-1	45	42914.1	4.3				mg/L	53004	Standard
Cl	35	2.0	50.0				ug/L	2	Standard
Kr	83	184.1	4.2				ug/L	157	Standard
Br	81	6.7	78.1				ug/L	3	Standard
P	31	105599.3	2.0				ug/L	91588	Standard
S	34	30642.6	1.7				ug/L	32556	Standard
Sr	88	68.3	36.1				ug/L	62	Standard
C	12	150.0	28.5				mg/L	133	Standard
N	14	3.3	173.2				mg/L	0	Standard
Hg	202	0.0					mg/L	7	Standard

QC Calculated Values

Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recovery
Li	7			
Be	9			
Al	27			
Sc	45			
Ti	47			
V	51			
Cr	52			
Cr	53			
Mn	55			
Co	59			
Ni	60			
Cu	65			
Zn	66			
Ge	72		88.695	
As	75			
Se	82			
Se-1	77			
Ga	71			
Rb	85			
Y	89			
Rh	103			

Sample ID: QC Std 7

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[	Mo	98	
[	Ag	107	
[	Cd	111	
[	Cd	114	
>	In	115	90.736
[	Sn	118	
[	Sb	123	
[	Ba	135	
[	Ce	140	
>	Tb	159	
[	Ho	165	
[	Tl	203	
[	Tl	205	
[	Pb	206	
[	Pb	207	
[	Pb	208	
[	U	238	
>	Bi	209	94.048
[	Na	23	
[	Mg	24	
[	K	39	
[	Ca	43	
[	Fe	54	
[	Fe	57	
>	Sc-1	45	
[	Cl	35	
[	Kr	83	
[	Br	81	
[	P	31	
[	S	34	
[	Sr	88	
[	C	12	
[	N	14	
[	Hg	202	

QC Out of Limits

Measurement Type	Analyte	Mass	Out of Limits Message
QC Std 7	Mn	55	

Sample ID: QC Std 7

Report Date/Time: Sunday, November 18, 2012 12:52:52

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Method 6020 - Summary Report

Sample ID: QC Std 8

Sample Date/Time: Sunday, November 18, 2012 12:55:39

Number of Replicates: 3

Autosampler Position: 202

Sample Description:

Method File: C:\NexIONData\Method\6020a.mth

Aliquot Volume (mL):

Diluted to Volume (mL):

User Name: JYH user

Cumulative Autodilution Factor: 1

Nexion-ICP 200.8\6020

Concentration Results

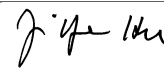
IS	Analyte	Mass	Intensity	RSD	Conc.	SD	RSD	Units	Blank Intens.	Mode
[	Li	7	7735.3	8.8	-465.5281	227.502	48.9	ug/L	8369	Standard
	Be	9	425.0	13.4	0.2354	0.019	8.2	ug/L	18	Standard
	Al	27	2285.4	154.6	0.0191	0.032	170.5	ug/L	215	Standard
[>	Sc	45	44097.6	5.9				ug/L	53004	Standard
[	Ti	47	20.7	22.9	-0.0147	0.009	59.2	ug/L	26	Standard
	V	51	6255.5	10.4	0.3230	0.045	14.0	ug/L	3223	Standard
	Cr	52	15545.7	6.3	0.6699	0.069	10.3	ug/L	10379	Standard
	Cr	53	1065.9	9.9	0.7565	0.057	7.5	ug/L	192	Standard
	Mn	55	8886.9	8.0	0.4848	0.029	6.1	ug/L	1840	Standard
	Co	59	4576.7	6.2	0.3689	0.017	4.5	ug/L	115	Standard
	Ni	60	4081.9	6.4	1.5584	0.050	3.2	ug/L	75	Standard
	Cu	65	2079.8	8.7	0.7837	0.053	6.8	ug/L	155	Standard
	Zn	66	7777.0	5.9	6.1632	0.287	4.7	ug/L	237	Standard
[>	Ge	72	369095.9	3.2				ug/L	413856	Standard
	As	75	345.0	22.7	0.4053	0.051	12.6	ug/L	-197	Standard
	Se	82	49.9	35.5	0.4343	0.137	31.5	ug/L	-5	Standard
[	Se-1	77	131.7	5.3	0.5254	0.047	9.0	ug/L	105	Standard
[>	Ga	71	180.0	15.5				mg/L	225	Standard
[	Rb	85	25.0	20.0				ug/L	28	Standard
[	Y	89	273008.7	4.1				ug/L	322845	Standard
[>	Rh	103	71.7	29.0				ug/L	92	Standard
[	Mo	98	124.7	148.4	0.0208	0.043	208.6	ug/L	18	Standard
	Ag	107	2898.6	9.1	0.3938	0.024	6.1	ug/L	63	Standard
	Cd	111	773.2	10.7	0.2363	0.020	8.3	mg/L	20	Standard
	Cd	114	2005.5	9.3	0.2344	0.016	6.9	ug/L	56	Standard
[>	In	115	597941.0	3.4				ug/L	657102	Standard
	Sn	118	360.0	8.9	-0.0097	0.002	22.3	ug/L	555	Standard
	Sb	123	2952.7	8.1	0.4110	0.020	4.9	ug/L	62	Standard
[	Ba	135	2313.5	6.5	0.7267	0.034	4.7	ug/L	19	Standard
[	Ce	140	22.0	4.5				ug/L	24	Standard
[>	Tb	159	857628.6	2.3				ug/L	910514	Standard
[	Ho	165	7.0	49.5				ug/L	7	Standard
	Tl	203	1217.4	37.6	0.0962	0.035	35.9	ug/L	13	Standard
	Tl	205	37.7	22.9	0.1029	0.021	20.4	ug/L	1	Standard
	Pb	206	2433.2	17.6	0.2171	0.038	17.3	ug/L	342	Standard
	Pb	207	1997.5	16.0	0.2054	0.033	16.1	ug/L	284	Standard
	Pb	208	9501.5	17.8	0.2129	0.037	17.6	ug/L	1363	Standard
	U	238	3807.5	10.4	0.3992	0.032	7.9	ug/L	2	Standard
[>	Bi	209	445057.3	3.3				ug/L	470592	Standard

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Na	23	5.0	100.0	0.5387	0.514	95.3	mg/L	2	Standard
Mg	24	1815.1	34.5	-0.0019	0.000	16.6	mg/L	5586	Standard
K	39	5.0	100.0	0.0390	0.077	198.3	mg/L	5	Standard
Ca	43	50.0	26.5	0.3536	0.823	232.6	mg/L	45	Standard
Fe	54	321.3	14.9	-0.0052	0.020	376.7	mg/L	350	Standard
Fe	57	93.3	11.2	0.0489	0.029	59.0	mg/L	102	Standard
Sc-1	45	44097.6	5.9				mg/L	53004	Standard
Cl	35	2.3	107.9				ug/L	2	Standard
Kr	83	168.7	8.6				ug/L	157	Standard
Br	81	5.0	86.6				ug/L	3	Standard
P	31	104141.4	4.7				ug/L	91588	Standard
S	34	32124.9	2.2				ug/L	32556	Standard
Sr	88	48.3	15.8				ug/L	62	Standard
C	12	158.3	19.0				mg/L	133	Standard
N	14	1.7	173.2				mg/L	0	Standard
Hg	202	1.7	173.2				mg/L	7	Standard

QC Calculated Values

Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recovery
Li	7			
Be	9	117.709		
Al	27			
Sc	45			
Ti	47			
V	51	80.752		
Cr	52	83.743		
Cr	53			
Mn	55	96.963		
Co	59	92.237		
Ni	60	97.402		
Cu	65	97.963		
Zn	66	98.611		
Ge	72		89.185	
As	75	101.334		
Se	82	108.576		
Se-1	77			
Ga	71			
Rb	85			
Y	89			
Rh	103			

Sample ID: QC Std 8

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[	Mo	98		
[	Ag	107	98.447	
[	Cd	111	98.462	
[	Cd	114		
>	In	115		90.997
[	Sn	118		
[	Sb	123	102.758	
[	Ba	135	96.895	
[	Ce	140		
>	Tb	159		
[	Ho	165		
[	Tl	203	120.230	
[	Tl	205		
[	Pb	206		
[	Pb	207		
[	Pb	208	106.440	
[	U	238	99.793	
>	Bi	209		94.574
[	Na	23		
[	Mg	24		
[	K	39		
[	Ca	43		
[	Fe	54		
[	Fe	57		
>	Sc-1	45		
[	Cl	35		
[	Kr	83		
[	Br	81		
[	P	31		
[	S	34		
[	Sr	88		
[	C	12		
[	N	14		
[	Hg	202		

QC Out of Limits

Measurement Type	Analyte	Mass	Out of Limits Message

Sample ID: QC Std 8

Report Date/Time: Sunday, November 18, 2012 12:58:11

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Method 6020 - Summary Report

Sample ID: PBW 63 WG414031-02

Sample Date/Time: Sunday, November 18, 2012 13:01:04

Number of Replicates: 3

Autosampler Position: 229

Sample Description: 1

Method File: C:\NexIONData\Method\6020a.mth

Aliquot Volume (mL):

Diluted to Volume (mL):

User Name: JYH user

Cumulative Autodilution Factor: 1

Nexion-ICP 200.8\6020

Concentration Results

IS	Analyte	Mass	Intensity	RSD	Conc.	SD	RSD	Units	Blank Intens.	Mode
[	Li	7	7668.6	8.3	-605.4855	279.871	46.2	ug/L	8369	Standard
	Be	9	8.3	34.6	-0.0045	0.002	36.9	ug/L	18	Standard
	Al	27	206.7	20.1	-0.0001	0.000	623.4	ug/L	215	Standard
[>	Sc	45	42541.3	3.0				ug/L	53004	Standard
	Ti	47	21.0	12.6	-0.0118	0.008	67.9	ug/L	26	Standard
	V	51	2610.4	3.1	-0.0110	0.005	48.8	ug/L	3223	Standard
	Cr	52	8306.9	1.2	-0.0339	0.035	104.1	ug/L	10379	Standard
	Cr	53	196.7	3.9	0.0567	0.008	13.8	ug/L	192	Standard
	Mn	55	1339.4	1.2	0.0011	0.004	318.4	ug/L	1840	Standard
	Co	59	73.3	14.2	-0.0091	0.001	13.4	ug/L	115	Standard
	Ni	60	196.0	3.5	0.0441	0.003	6.1	ug/L	75	Standard
	Cu	65	184.3	5.2	0.0202	0.007	36.5	ug/L	155	Standard
	Zn	66	1552.1	3.1	1.1209	0.023	2.1	ug/L	237	Standard
[>	Ge	72	355213.1	4.8				ug/L	413856	Standard
	As	75	-194.1	4.5	-0.0163	0.014	88.7	ug/L	-197	Standard
	Se	82	-3.9	189.9	-0.0278	0.065	234.5	ug/L	-5	Standard
[	Se-1	77	103.0	5.4	0.2444	0.040	16.2	ug/L	105	Standard
[>	Ga	71	168.3	4.5				mg/L	225	Standard
	Rb	85	15.0	0.0				ug/L	28	Standard
	Y	89	271119.5	1.5				ug/L	322845	Standard
[>	Rh	103	106.7	9.8				ug/L	92	Standard
	Mo	98	15.0	13.8	-0.0050	0.001	11.7	ug/L	18	Standard
	Ag	107	58.3	8.6	0.0003	0.001	259.5	ug/L	63	Standard
	Cd	111	20.3	15.8	-0.0046	0.001	18.9	mg/L	20	Standard
	Cd	114	64.8	23.4	-0.0016	0.002	122.1	ug/L	56	Standard
[>	In	115	592990.1	2.4				ug/L	657102	Standard
	Sn	118	293.3	4.5	-0.0167	0.001	4.6	ug/L	555	Standard
	Sb	123	68.3	15.7	0.0067	0.001	20.1	ug/L	62	Standard
[	Ba	135	19.0	45.6	-0.0137	0.003	21.2	ug/L	19	Standard
	Ce	140	15.7	7.4				ug/L	24	Standard
[>	Tb	159	849310.5	2.4				ug/L	910514	Standard
	Ho	165	7.3	28.4				ug/L	7	Standard
	Tl	203	31.3	14.4	-0.0010	0.000	41.8	ug/L	13	Standard
	Tl	205	1.3	43.3	0.0049	0.001	30.0	ug/L	1	Standard
	Pb	206	326.3	4.8	0.0014	0.002	115.3	ug/L	342	Standard
	Pb	207	262.0	7.1	-0.0037	0.002	60.4	ug/L	284	Standard
	Pb	208	1221.4	1.1	-0.0019	0.001	44.5	ug/L	1363	Standard
	U	238	12.3	89.3	-0.0002	0.001	685.0	ug/L	2	Standard
[>	Bi	209	435526.0	2.7				ug/L	470592	Standard

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Na	23	0.0		0.0050	0.000	0.0	mg/L	2	Standard
Mg	24	1323.4	2.1	-0.0021	0.000	1.9	mg/L	5586	Standard
K	39	5.0	100.0	0.0431	0.086	198.9	mg/L	5	Standard
Ca	43	35.0	28.6	-0.3835	0.477	124.4	mg/L	45	Standard
Fe	54	326.6	9.2	0.0031	0.017	545.3	mg/L	350	Standard
Fe	57	101.7	7.5	0.0711	0.020	28.5	mg/L	102	Standard
Sc-1	45	42541.3	3.0				mg/L	53004	Standard
Cl	35	1.0	100.0				ug/L	2	Standard
Kr	83	186.8	2.7				ug/L	157	Standard
Br	81	4.2	34.6				ug/L	3	Standard
P	31	100159.2	2.2				ug/L	91588	Standard
S	34	30064.0	1.0				ug/L	32556	Standard
Sr	88	78.3	9.8				ug/L	62	Standard
C	12	121.7	15.6				mg/L	133	Standard
N	14	0.0					mg/L	0	Standard
Hg	202	0.0					mg/L	7	Standard

QC Calculated Values

Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recovery
Li	7			
Be	9			
Al	27			
Sc	45			
Ti	47			
V	51			
Cr	52			
Cr	53			
Mn	55			
Co	59			
Ni	60			
Cu	65			
Zn	66			
Ge	72		85.830	
As	75			
Se	82			
Se-1	77			
Ga	71			
Rb	85			
Y	89			
Rh	103			

Sample ID: PBW 63 WG414031-02

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[	Mo	98	
[	Ag	107	
[	Cd	111	
[	Cd	114	
>	In	115	90.243
[	Sn	118	
[	Sb	123	
[	Ba	135	
[	Ce	140	
>	Tb	159	
[	Ho	165	
[	Tl	203	
[	Tl	205	
[	Pb	206	
[	Pb	207	
[	Pb	208	
[	U	238	
>	Bi	209	92.549
[	Na	23	
[	Mg	24	
[	K	39	
[	Ca	43	
[	Fe	54	
[	Fe	57	
>	Sc-1	45	
[	Cl	35	
[	Kr	83	
[	Br	81	
[	P	31	
[	S	34	
[	Sr	88	
[	C	12	
[	N	14	
[	Hg	202	

QC Out of Limits

Measurement Type	Analyte	Mass	Out of Limits Message

Sample ID: PBW 63 WG414031-02

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Method 6020 - Summary Report

Sample ID: LCSW 63 WG414031-03

Sample Date/Time: Sunday, November 18, 2012 13:04:16

Number of Replicates: 3

Autosampler Position: 230

Sample Description: 1

Method File: C:\NexIONData\Method\6020a.mth

Aliquot Volume (mL):

Diluted to Volume (mL):

User Name: JYH user

Cumulative Autodilution Factor: 1

Nexion-ICP 200.8\6020

Concentration Results

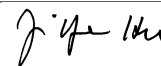
IS	Analyte	Mass	Intensity	RSD	Conc.	SD	RSD	Units	Blank Intens.	Mode
[	Li	7	7960.4	8.5	-524.5952	369.204	70.4	ug/L	8369	Standard
	Be	9	49383.8	4.7	28.0179	0.842	3.0	ug/L	18	Standard
	Al	27	14677.1	6.2	0.1389	0.007	5.0	ug/L	215	Standard
[>	Sc	45	44879.8	3.4				ug/L	53004	Standard
[	Ti	47	29.3	21.9	0.0026	0.012	456.1	ug/L	26	Standard
	V	51	254314.1	4.1	23.2020	0.493	2.1	ug/L	3223	Standard
	Cr	52	252909.0	5.6	24.2744	0.859	3.5	ug/L	10379	Standard
	Cr	53	30201.0	6.6	23.8704	0.556	2.3	ug/L	192	Standard
	Mn	55	390874.4	6.4	24.5519	0.492	2.0	ug/L	1840	Standard
	Co	59	300348.0	6.0	24.6100	0.281	1.1	ug/L	115	Standard
	Ni	60	64011.1	4.6	24.3811	0.219	0.9	ug/L	75	Standard
	Cu	65	64127.7	6.0	25.2719	0.341	1.3	ug/L	155	Standard
	Zn	66	34244.7	4.4	27.1554	0.197	0.7	ug/L	237	Standard
[>	Ge	72	378171.0	5.0				ug/L	413856	Standard
	As	75	31998.9	5.5	24.2601	0.143	0.6	ug/L	-197	Standard
	Se	82	2829.9	3.9	23.9123	0.298	1.2	ug/L	-5	Standard
[	Se-1	77	2259.2	6.6	24.2057	0.454	1.9	ug/L	105	Standard
[>	Ga	71	180.0	19.4				mg/L	225	Standard
[	Rb	85	51.7	22.3				ug/L	28	Standard
[	Y	89	283289.2	1.4				ug/L	322845	Standard
[>	Rh	103	108.3	25.4				ug/L	92	Standard
[	Mo	98	53.3	15.9	0.0041	0.002	45.4	ug/L	18	Standard
	Ag	107	190509.3	3.8	25.9942	0.235	0.9	ug/L	63	Standard
	Cd	111	80209.0	5.0	25.2752	0.632	2.5	mg/L	20	Standard
	Cd	114	207521.6	4.9	24.8479	0.573	2.3	ug/L	56	Standard
[>	In	115	607698.2	3.2				ug/L	657102	Standard
	Sn	118	407.7	5.7	-0.0051	0.001	25.9	ug/L	555	Standard
	Sb	123	183692.6	3.5	25.3600	0.366	1.4	ug/L	62	Standard
[	Ba	135	96730.9	4.8	30.7497	2.296	7.5	ug/L	19	Standard
[	Ce	140	142.3	22.3				ug/L	24	Standard
[>	Tb	159	866778.2	2.6				ug/L	910514	Standard
[	Ho	165	13.0	23.1				ug/L	7	Standard
	Tl	203	308390.0	4.0	25.3135	0.423	1.7	ug/L	13	Standard
	Tl	205	9522.0	2.2	25.6320	0.482	1.9	ug/L	1	Standard
	Pb	206	246906.3	4.4	25.2674	0.690	2.7	ug/L	342	Standard
	Pb	207	210341.5	3.6	25.3178	0.411	1.6	ug/L	284	Standard
	Pb	208	969739.3	4.2	25.1395	0.547	2.2	ug/L	1363	Standard
	U	238	237057.6	5.2	24.8437	0.631	2.5	ug/L	2	Standard
[>	Bi	209	447204.2	3.0				ug/L	470592	Standard

Sample ID: LCSW 63 WG414031-03

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Na	23	0.0		0.0050	0.000	0.0	mg/L	2	Standard
Mg	24	8896.0	8.7	0.0022	0.000	13.2	mg/L	5586	Standard
K	39	6.7	173.2	0.0643	0.183	284.6	mg/L	5	Standard
Ca	43	41.7	6.9	-0.1359	0.135	99.0	mg/L	45	Standard
Fe	54	352.1	15.0	0.0069	0.029	421.6	mg/L	350	Standard
Fe	57	85.0	25.6	0.0300	0.043	144.2	mg/L	102	Standard
Sc-1	45	44879.8	3.4				mg/L	53004	Standard
Cl	35	2.3	65.5				ug/L	2	Standard
Kr	83	175.1	9.1				ug/L	157	Standard
Br	81	4.2	91.7				ug/L	3	Standard
P	31	106284.0	0.8				ug/L	91588	Standard
S	34	29542.1	1.7				ug/L	32556	Standard
Sr	88	78.3	25.8				ug/L	62	Standard
C	12	120.0	14.4				mg/L	133	Standard
N	14	0.0					mg/L	0	Standard
Hg	202	1.7	173.2				mg/L	7	Standard

QC Calculated Values

Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recovery
Li	7			
Be	9			
Al	27			
Sc	45			
Ti	47			
V	51			
Cr	52			
Cr	53			
Mn	55			
Co	59			
Ni	60			
Cu	65			
Zn	66			
Ge	72		91.378	
As	75			
Se	82			
Se-1	77			
Ga	71			
Rb	85			
Y	89			
Rh	103			

Sample ID: LCSW 63 WG414031-03

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[	Mo	98	
[	Ag	107	
[	Cd	111	
[	Cd	114	
>	In	115	92.482
[	Sn	118	
[	Sb	123	
[	Ba	135	
[	Ce	140	
>	Tb	159	
[	Ho	165	
[	Tl	203	
[	Tl	205	
[	Pb	206	
[	Pb	207	
[	Pb	208	
[	U	238	
>	Bi	209	95.030
[	Na	23	
[	Mg	24	
[	K	39	
[	Ca	43	
[	Fe	54	
[	Fe	57	
>	Sc-1	45	
[	Cl	35	
[	Kr	83	
[	Br	81	
[	P	31	
[	S	34	
[	Sr	88	
[	C	12	
[	N	14	
[	Hg	202	

QC Out of Limits

Measurement Type	Analyte	Mass	Out of Limits Message

Sample ID: LCSW 63 WG414031-03

Report Date/Time: Sunday, November 18, 2012 13:06:49

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Method 6020 - Summary Report

Sample ID: L1211029402 WG414031-01

Sample Date/Time: Sunday, November 18, 2012 13:07:29

Number of Replicates: 3

Autosampler Position: 231

Sample Description: 1

Method File: C:\NexIONData\Method\6020a.mth

Aliquot Volume (mL):

Diluted to Volume (mL):

User Name: JYH user

Cumulative Autodilution Factor: 1

Nexion-ICP 200.8\6020

Concentration Results

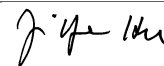
IS	Analyte	Mass	Intensity	RSD	Conc.	SD	RSD	Units	Blank Intens.	Mode
[	Li	7	11641.1	6.0	-2837.6067	254.097	9.0	ug/L	8369	Standard
	Be	9	20.0	43.3	0.0018	0.005	280.5	ug/L	18	Standard
	Al	27	2205665.3	12.6	20.9328	2.240	10.7	ug/L	215	Standard
[>	Sc	45	45391.3	2.6				ug/L	53004	Standard
[	Ti	47	153.7	12.2	0.2657	0.028	10.5	ug/L	26	Standard
	V	51	3064.0	4.1	0.0148	0.022	148.9	ug/L	3223	Standard
	Cr	52	17736.1	4.2	0.8449	0.003	0.3	ug/L	10379	Standard
	Cr	53	1268.4	6.1	0.8941	0.021	2.3	ug/L	192	Standard
	Mn	55	540787.8	7.9	33.8723	1.319	3.9	ug/L	1840	Standard
	Co	59	2424.2	7.3	0.1825	0.007	3.8	ug/L	115	Standard
	Ni	60	2573.2	7.0	0.9421	0.034	3.6	ug/L	75	Standard
	Cu	65	799.0	7.1	0.2569	0.010	3.8	ug/L	155	Standard
	Zn	66	17558.9	6.5	13.7701	0.344	2.5	ug/L	237	Standard
[>	Ge	72	379366.4	4.1				ug/L	413856	Standard
	As	75	185.5	16.5	0.2790	0.018	6.5	ug/L	-197	Standard
	Se	82	5.7	146.7	0.0516	0.069	132.8	ug/L	-5	Standard
[	Se-1	77	105.3	3.8	0.1943	0.081	41.9	ug/L	105	Standard
[>	Ga	71	238.3	12.3				mg/L	225	Standard
[	Rb	85	3558.8	4.6				ug/L	28	Standard
[	Y	89	295093.1	1.7				ug/L	322845	Standard
[>	Rh	103	80.0	21.7				ug/L	92	Standard
[	Mo	98	2239.2	7.0	0.5157	0.018	3.5	ug/L	18	Standard
	Ag	107	120.7	12.6	0.0082	0.002	24.3	ug/L	63	Standard
	Cd	111	32.3	32.1	-0.0013	0.003	244.9	mg/L	20	Standard
	Cd	114	103.7	31.6	0.0026	0.004	146.8	ug/L	56	Standard
[>	In	115	622627.6	3.6				ug/L	657102	Standard
	Sn	118	532.0	5.5	0.0070	0.001	17.7	ug/L	555	Standard
	Sb	123	285.8	24.5	0.0354	0.008	23.2	ug/L	62	Standard
[	Ba	135	48294.0	5.6	14.9455	0.321	2.1	ug/L	19	Standard
[	Ce	140	2718.9	7.4				ug/L	24	Standard
[>	Tb	159	890972.7	3.2				ug/L	910514	Standard
[	Ho	165	42.3	21.4				ug/L	7	Standard
	Tl	203	93.3	20.1	0.0038	0.001	35.5	ug/L	13	Standard
	Tl	205	4.0	43.3	0.0117	0.004	36.5	ug/L	1	Standard
	Pb	206	1173.4	8.4	0.0835	0.007	8.2	ug/L	342	Standard
	Pb	207	946.4	5.7	0.0744	0.003	4.0	ug/L	284	Standard
	Pb	208	4502.9	6.0	0.0788	0.004	4.6	ug/L	1363	Standard
	U	238	290.3	20.2	0.0279	0.005	18.6	ug/L	2	Standard
[>	Bi	209	461338.0	3.1				ug/L	470592	Standard

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Na	23	0.0		0.0050	0.000	0.0	mg/L	2	Standard
Mg	24	92159.5	1.3	0.0499	0.001	1.9	mg/L	5586	Standard
K	39	36.7	55.1	0.5361	0.308	57.4	mg/L	5	Standard
Ca	43	141.7	14.3	4.8174	1.061	22.0	mg/L	45	Standard
Fe	54	543.2	12.6	0.0907	0.035	38.2	mg/L	350	Standard
Fe	57	150.0	3.3	0.1469	0.010	6.7	mg/L	102	Standard
Sc-1	45	45391.3	2.6				mg/L	53004	Standard
Cl	35	3.0	88.2				ug/L	2	Standard
Kr	83	142.8	4.3				ug/L	157	Standard
Br	81	4.2	34.6				ug/L	3	Standard
P	31	116875.5	4.6				ug/L	91588	Standard
S	34	28029.3	3.1				ug/L	32556	Standard
Sr	88	113.3	5.1				ug/L	62	Standard
C	12	153.3	22.2				mg/L	133	Standard
N	14	0.0					mg/L	0	Standard
Hg	202	36.7	56.8				mg/L	7	Standard

QC Calculated Values

Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recovery
Li	7			
Be	9			
Al	27			
Sc	45			
Ti	47			
V	51			
Cr	52			
Cr	53			
Mn	55			
Co	59			
Ni	60			
Cu	65			
Zn	66			
Ge	72		91.666	
As	75			
Se	82			
Se-1	77			
Ga	71			
Rb	85			
Y	89			
Rh	103			

Sample ID: L1211029402 WG414031-01

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[	Mo	98	
[	Ag	107	
[	Cd	111	
[	Cd	114	
>	In	115	94.754
[	Sn	118	
[	Sb	123	
[	Ba	135	
[	Ce	140	
>	Tb	159	
[	Ho	165	
[	Tl	203	
[	Tl	205	
[	Pb	206	
[	Pb	207	
[	Pb	208	
[	U	238	
>	Bi	209	98.034
[	Na	23	
[	Mg	24	
[	K	39	
[	Ca	43	
[	Fe	54	
[	Fe	57	
>	Sc-1	45	
[	Cl	35	
[	Kr	83	
[	Br	81	
[	P	31	
[	S	34	
[	Sr	88	
[	C	12	
[	N	14	
[	Hg	202	

QC Out of Limits

Measurement Type	Analyte	Mass	Out of Limits Message

Sample ID: L1211029402 WG414031-01

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Method 6020 - Summary Report

Sample ID: L1211029402S WG414031-04

Sample Date/Time: Sunday, November 18, 2012 13:10:41

Number of Replicates: 3

Autosampler Position: 232

Sample Description: 1

Method File: C:\NexIONData\Method\6020a.mth

Aliquot Volume (mL):

Diluted to Volume (mL):

User Name: JYH user

Cumulative Autodilution Factor: 1

Nexion-ICP 200.8\6020

Concentration Results

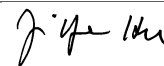
IS	Analyte	Mass	Intensity	RSD	Conc.	SD	RSD	Units	Blank Intens.	Mode
[	Li	7	11477.7	5.2	-2633.2859	394.182	15.0	ug/L	8369	Standard
	Be	9	52517.8	6.1	29.0365	1.389	4.8	ug/L	18	Standard
	Al	27	2164485.3	11.5	20.2919	2.465	12.1	ug/L	215	Standard
[>	Sc	45	46088.5	5.9				ug/L	53004	Standard
[	Ti	47	125.3	17.8	0.1960	0.032	16.3	ug/L	26	Standard
	V	51	262849.1	7.3	23.0601	0.567	2.5	ug/L	3223	Standard
	Cr	52	267370.5	7.7	24.7048	1.057	4.3	ug/L	10379	Standard
	Cr	53	32363.8	7.4	24.6265	0.785	3.2	ug/L	192	Standard
	Mn	55	949210.2	6.0	57.5320	1.318	2.3	ug/L	1840	Standard
	Co	59	312893.9	7.4	24.6743	0.747	3.0	ug/L	115	Standard
	Ni	60	68365.4	7.2	25.0541	0.869	3.5	ug/L	75	Standard
	Cu	65	65995.7	8.1	25.0230	0.849	3.4	ug/L	155	Standard
	Zn	66	48992.5	8.7	37.4295	1.511	4.0	ug/L	237	Standard
[>	Ge	72	392813.0	5.1				ug/L	413856	Standard
	As	75	34051.5	5.9	24.8521	0.665	2.7	ug/L	-197	Standard
	Se	82	2915.7	4.7	23.7131	0.283	1.2	ug/L	-5	Standard
[	Se-1	77	2334.5	5.7	24.0867	0.579	2.4	ug/L	105	Standard
[>	Ga	71	205.0	30.6				mg/L	225	Standard
[	Rb	85	3458.7	5.1				ug/L	28	Standard
[	Y	89	294661.4	6.2				ug/L	322845	Standard
[>	Rh	103	108.3	16.2				ug/L	92	Standard
[	Mo	98	2275.3	7.4	0.5109	0.011	2.2	ug/L	18	Standard
	Ag	107	195781.4	6.9	25.4160	0.661	2.6	ug/L	63	Standard
	Cd	111	82286.3	7.4	24.6730	0.875	3.5	mg/L	20	Standard
	Cd	114	213430.9	6.3	24.3284	0.836	3.4	ug/L	56	Standard
[>	In	115	638480.7	5.1				ug/L	657102	Standard
	Sn	118	1274.1	106.4	0.0780	0.130	166.6	ug/L	555	Standard
	Sb	123	191515.4	6.7	25.1580	0.802	3.2	ug/L	62	Standard
[	Ba	135	132190.9	5.4	39.9550	1.342	3.4	ug/L	19	Standard
[	Ce	140	1266.7	8.2				ug/L	24	Standard
[>	Tb	159	900320.1	3.5				ug/L	910514	Standard
[	Ho	165	25.3	23.8				ug/L	7	Standard
	Tl	203	317202.8	4.9	24.9645	0.701	2.8	ug/L	13	Standard
	Tl	205	9826.2	5.0	25.3490	0.608	2.4	ug/L	1	Standard
	Pb	206	253566.5	6.0	24.8745	0.966	3.9	ug/L	342	Standard
	Pb	207	217520.7	5.8	25.0983	0.941	3.7	ug/L	284	Standard
	Pb	208	1004254.2	5.8	24.9586	0.911	3.7	ug/L	1363	Standard
	U	238	247306.8	7.0	24.8496	1.256	5.1	ug/L	2	Standard
[>	Bi	209	466372.1	3.1				ug/L	470592	Standard

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Na	23	0.0		0.0050	0.000	0.0	mg/L	2	Standard
Mg	24	92017.0	2.8	0.0492	0.004	8.9	mg/L	5586	Standard
K	39	26.7	57.3	0.3736	0.228	61.1	mg/L	5	Standard
Ca	43	135.0	9.8	4.3687	0.328	7.5	mg/L	45	Standard
Fe	54	484.5	10.2	0.0609	0.023	38.2	mg/L	350	Standard
Fe	57	171.7	9.4	0.1817	0.018	9.9	mg/L	102	Standard
Sc-1	45	46088.5	5.9				mg/L	53004	Standard
Cl	35	4.0	25.0				ug/L	2	Standard
Kr	83	179.9	21.6				ug/L	157	Standard
Br	81	6.7	43.3				ug/L	3	Standard
P	31	121487.4	4.4				ug/L	91588	Standard
S	34	27938.3	3.2				ug/L	32556	Standard
Sr	88	113.3	34.3				ug/L	62	Standard
C	12	278.3	13.6				mg/L	133	Standard
N	14	1.7	173.2				mg/L	0	Standard
Hg	202	40.0	37.5				mg/L	7	Standard

QC Calculated Values

Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recovery
Li	7			
Be	9			
Al	27			
Sc	45			
Ti	47			
V	51			
Cr	52			
Cr	53			
Mn	55			
Co	59			
Ni	60			
Cu	65			
Zn	66			
Ge	72		94.915	
As	75			
Se	82			
Se-1	77			
Ga	71			
Rb	85			
Y	89			
Rh	103			

Sample ID: L1211029402S WG414031-04

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[	Mo	98	
[	Ag	107	
[	Cd	111	
[	Cd	114	
>	In	115	97.166
[	Sn	118	
[	Sb	123	
[	Ba	135	
[	Ce	140	
>	Tb	159	
[	Ho	165	
[	Tl	203	
[	Tl	205	
[	Pb	206	
[	Pb	207	
[	Pb	208	
[	U	238	
>	Bi	209	99.103
[	Na	23	
[	Mg	24	
[	K	39	
[	Ca	43	
[	Fe	54	
[	Fe	57	
>	Sc-1	45	
[	Cl	35	
[	Kr	83	
[	Br	81	
[	P	31	
[	S	34	
[	Sr	88	
[	C	12	
[	N	14	
[	Hg	202	

QC Out of Limits

Measurement Type	Analyte	Mass	Out of Limits Message

Sample ID: L1211029402S WG414031-04

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Method 6020 - Summary Report

Sample ID: L1211029402SD WG414031-05

Sample Date/Time: Sunday, November 18, 2012 13:13:55

Number of Replicates: 3

Autosampler Position: 233

Sample Description: 1

Method File: C:\NexIONData\Method\6020a.mth

Aliquot Volume (mL):

Diluted to Volume (mL):

User Name: JYH user

Cumulative Autodilution Factor: 1

Nexion-ICP 200.8\6020

Concentration Results

IS	Analyte	Mass	Intensity	RSD	Conc.	SD	RSD	Units	Blank Intens.	Mode
[	Li	7	12558.6	7.2	-2924.7682	375.088	12.8	ug/L	8369	Standard
	Be	9	51608.2	8.6	27.1281	1.766	6.5	ug/L	18	Standard
	Al	27	2404137.9	5.8	21.4221	0.988	4.6	ug/L	215	Standard
[>	Sc	45	48402.2	2.5				ug/L	53004	Standard
[	Ti	47	220.0	12.2	0.3785	0.044	11.7	ug/L	26	Standard
	V	51	272762.8	5.5	23.3066	0.819	3.5	ug/L	3223	Standard
	Cr	52	277848.3	6.5	25.0057	1.157	4.6	ug/L	10379	Standard
	Cr	53	33226.5	8.0	24.6107	1.469	6.0	ug/L	192	Standard
	Mn	55	992667.5	5.7	58.5636	2.242	3.8	ug/L	1840	Standard
	Co	59	318789.8	5.3	24.4815	0.769	3.1	ug/L	115	Standard
	Ni	60	70616.3	4.0	25.2021	0.465	1.8	ug/L	75	Standard
	Cu	65	68713.0	4.5	25.3814	0.602	2.4	ug/L	155	Standard
	Zn	66	51100.8	4.4	38.0425	0.887	2.3	ug/L	237	Standard
[>	Ge	72	403447.8	2.2				ug/L	413856	Standard
	As	75	34512.5	3.8	24.5227	0.417	1.7	ug/L	-197	Standard
	Se	82	2996.1	4.0	23.7143	0.442	1.9	ug/L	-5	Standard
[	Se-1	77	2416.5	7.9	24.2633	1.480	6.1	ug/L	105	Standard
[>	Ga	71	371.7	6.4				mg/L	225	Standard
[	Rb	85	4905.8	3.5				ug/L	28	Standard
[	Y	89	308871.8	1.2				ug/L	322845	Standard
[>	Rh	103	118.3	13.6				ug/L	92	Standard
[	Mo	98	2374.9	9.3	0.5246	0.044	8.4	ug/L	18	Standard
	Ag	107	198086.5	3.5	25.2867	0.500	2.0	ug/L	63	Standard
	Cd	111	83590.5	5.1	24.6450	0.932	3.8	mg/L	20	Standard
	Cd	114	218023.4	5.5	24.4198	0.853	3.5	ug/L	56	Standard
[>	In	115	649622.3	3.1				ug/L	657102	Standard
	Sn	118	537.3	4.9	0.0052	0.002	39.9	ug/L	555	Standard
	Sb	123	193976.6	5.6	25.0422	0.851	3.4	ug/L	62	Standard
[	Ba	135	136255.9	4.0	40.4647	0.871	2.2	ug/L	19	Standard
[	Ce	140	15838.0	7.0				ug/L	24	Standard
[>	Tb	159	913921.8	1.3				ug/L	910514	Standard
[	Ho	165	150.3	4.4				ug/L	7	Standard
	Tl	203	323405.6	3.1	25.3996	0.633	2.5	ug/L	13	Standard
	Tl	205	10005.6	3.5	25.7596	0.731	2.8	ug/L	1	Standard
	Pb	206	269877.8	4.0	26.4244	0.876	3.3	ug/L	342	Standard
	Pb	207	231086.7	4.3	26.6103	0.914	3.4	ug/L	284	Standard
	Pb	208	1065353.1	4.0	26.4274	0.945	3.6	ug/L	1363	Standard
	U	238	253640.1	6.4	25.4307	1.338	5.3	ug/L	2	Standard
[>	Bi	209	467502.6	2.6				ug/L	470592	Standard

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Na	23	3.3	86.6	0.3335	0.285	85.4	mg/L	2	Standard
Mg	24	95444.7	1.0	0.0484	0.001	2.3	mg/L	5586	Standard
K	39	28.3	36.7	0.3782	0.143	37.8	mg/L	5	Standard
Ca	43	163.3	12.4	5.3995	1.113	20.6	mg/L	45	Standard
Fe	54	593.9	16.0	0.0971	0.046	47.1	mg/L	350	Standard
Fe	57	178.3	38.1	0.1779	0.115	64.6	mg/L	102	Standard
Sc-1	45	48402.2	2.5				mg/L	53004	Standard
Cl	35	3.0	33.3				ug/L	2	Standard
Kr	83	304.8	38.0				ug/L	157	Standard
Br	81	4.2	69.3				ug/L	3	Standard
P	31	124882.6	5.0				ug/L	91588	Standard
S	34	27618.5	2.4				ug/L	32556	Standard
Sr	88	95.0	26.3				ug/L	62	Standard
C	12	175.0	14.8				mg/L	133	Standard
N	14	5.0	100.0				mg/L	0	Standard
Hg	202	43.3	24.0				mg/L	7	Standard

QC Calculated Values

Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recovery
Li	7			
Be	9			
Al	27			
Sc	45			
Ti	47			
V	51			
Cr	52			
Cr	53			
Mn	55			
Co	59			
Ni	60			
Cu	65			
Zn	66			
Ge	72		97.485	
As	75			
Se	82			
Se-1	77			
Ga	71			
Rb	85			
Y	89			
Rh	103			

Sample ID: L1211029402SD WG414031-05

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[	Mo	98	
[	Ag	107	
[	Cd	111	
[	Cd	114	
>	In	115	98.862
[	Sn	118	
[	Sb	123	
[	Ba	135	
[	Ce	140	
>	Tb	159	
[	Ho	165	
[	Tl	203	
[	Tl	205	
[	Pb	206	
[	Pb	207	
[	Pb	208	
[	U	238	
>	Bi	209	99.344
[	Na	23	
[	Mg	24	
[	K	39	
[	Ca	43	
[	Fe	54	
[	Fe	57	
>	Sc-1	45	
[	Cl	35	
[	Kr	83	
[	Br	81	
[	P	31	
[	S	34	
[	Sr	88	
[	C	12	
[	N	14	
[	Hg	202	

QC Out of Limits

Measurement Type	Analyte	Mass	Out of Limits Message

Sample ID: L1211029402SD WG414031-05

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Method 6020 - Summary Report

Sample ID: L1211024802

Sample Date/Time: Sunday, November 18, 2012 13:17:07

Number of Replicates: 3

Autosampler Position: 234

Sample Description: 1

Method File: C:\NexIONData\Method\6020a.mth

Aliquot Volume (mL):

Diluted to Volume (mL):

User Name: JYH user

Cumulative Autodilution Factor: 1

Nexion-ICP 200.8\6020

Concentration Results

IS	Analyte	Mass	Intensity	RSD	Conc.	SD	RSD	Units	Blank Intens.	Mode
[	Li	7	65760.0	9.9	-35843.7528	1418.490	4.0	ug/L	8369	Standard
	Be	9	21.7	13.3	0.0022	0.002	74.9	ug/L	18	Standard
	Al	27	3460062.7	8.6	31.4215	0.733	2.3	ug/L	215	Standard
[>	Sc	45	47462.8	6.6				ug/L	53004	Standard
[	Ti	47	232.0	9.5	0.4297	0.037	8.5	ug/L	26	Standard
	V	51	42416.9	8.6	3.6107	0.227	6.3	ug/L	3223	Standard
	Cr	52	12365.4	7.6	0.3050	0.056	18.2	ug/L	10379	Standard
	Cr	53	999.2	4.5	0.6775	0.014	2.0	ug/L	192	Standard
	Mn	55	78819.8	8.4	4.8376	0.264	5.5	ug/L	1840	Standard
	Co	59	1446.1	13.5	0.1020	0.014	13.7	ug/L	115	Standard
	Ni	60	2786.3	10.1	1.0169	0.063	6.2	ug/L	75	Standard
	Cu	65	3164.3	8.4	1.1817	0.069	5.8	ug/L	155	Standard
	Zn	66	26067.2	7.6	20.4409	1.091	5.3	ug/L	237	Standard
[>	Ge	72	381347.6	4.9				ug/L	413856	Standard
	As	75	518.6	7.8	0.5293	0.048	9.1	ug/L	-197	Standard
	Se	82	183.5	2.8	1.5447	0.098	6.3	ug/L	-5	Standard
[	Se-1	77	201.0	10.1	1.2407	0.111	9.0	ug/L	105	Standard
[>	Ga	71	225.0	5.9				mg/L	225	Standard
[	Rb	85	4202.3	12.7				ug/L	28	Standard
[	Y	89	285265.9	6.4				ug/L	322845	Standard
[>	Rh	103	120.0	39.7				ug/L	92	Standard
[	Mo	98	751.8	10.9	0.1704	0.020	11.8	ug/L	18	Standard
	Ag	107	130.7	82.0	0.0099	0.015	149.4	ug/L	63	Standard
	Cd	111	65.1	83.8	0.0092	0.017	187.9	mg/L	20	Standard
	Cd	114	190.4	75.2	0.0132	0.017	131.8	ug/L	56	Standard
[>	In	115	612732.1	3.3				ug/L	657102	Standard
	Sn	118	480.7	4.7	0.0025	0.003	125.0	ug/L	555	Standard
	Sb	123	377.7	34.8	0.0488	0.018	37.5	ug/L	62	Standard
[	Ba	135	136964.5	6.2	43.1068	1.523	3.5	ug/L	19	Standard
[	Ce	140	882.4	5.8				ug/L	24	Standard
[>	Tb	159	891269.7	3.1				ug/L	910514	Standard
[	Ho	165	30.7	10.0				ug/L	7	Standard
	Tl	203	454.7	28.5	0.0340	0.011	31.6	ug/L	13	Standard
	Tl	205	13.3	37.0	0.0375	0.013	36.0	ug/L	1	Standard
	Pb	206	663.3	13.4	0.0355	0.009	24.3	ug/L	342	Standard
	Pb	207	527.3	13.1	0.0279	0.008	29.7	ug/L	284	Standard
	Pb	208	2531.4	10.8	0.0317	0.007	21.2	ug/L	1363	Standard
	U	238	2990.0	8.8	0.3139	0.021	6.6	ug/L	2	Standard
[>	Bi	209	444046.1	3.1				ug/L	470592	Standard

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Na	23	6.7	114.6	0.6880	0.764	111.0	mg/L	2	Standard
Mg	24	520519.7	3.3	0.2827	0.009	3.3	mg/L	5586	Standard
K	39	51.7	11.2	0.7459	0.108	14.4	mg/L	5	Standard
Ca	43	918.4	10.7	41.3627	2.558	6.2	mg/L	45	Standard
Fe	54	329.6	2.2	-0.0117	0.008	67.8	mg/L	350	Standard
Fe	57	403.3	10.5	0.5792	0.061	10.5	mg/L	102	Standard
Sc-1	45	47462.8	6.6				mg/L	53004	Standard
Cl	35	1.7	124.9				ug/L	2	Standard
Kr	83	280.4	33.6				ug/L	157	Standard
Br	81	5.8	107.9				ug/L	3	Standard
P	31	156813.5	4.7				ug/L	91588	Standard
S	34	28297.2	1.9				ug/L	32556	Standard
Sr	88	330.0	5.2				ug/L	62	Standard
C	12	463.3	3.1				mg/L	133	Standard
N	14	0.0					mg/L	0	Standard
Hg	202	0.0					mg/L	7	Standard

QC Calculated Values

Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recovery
Li	7			
Be	9			
Al	27			
Sc	45			
Ti	47			
V	51			
Cr	52			
Cr	53			
Mn	55			
Co	59			
Ni	60			
Cu	65			
Zn	66			
Ge	72		92.145	
As	75			
Se	82			
Se-1	77			
Ga	71			
Rb	85			
Y	89			
Rh	103			

Sample ID: L1211024802

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[	Mo	98	
[	Ag	107	
[	Cd	111	
[	Cd	114	
>	In	115	93.248
[	Sn	118	
[	Sb	123	
[	Ba	135	
[	Ce	140	
>	Tb	159	
[	Ho	165	
[	Tl	203	
[	Tl	205	
[	Pb	206	
[	Pb	207	
[	Pb	208	
[	U	238	
>	Bi	209	94.359
[	Na	23	
[	Mg	24	
[	K	39	
[	Ca	43	
[	Fe	54	
[	Fe	57	
>	Sc-1	45	
[	Cl	35	
[	Kr	83	
[	Br	81	
[	P	31	
[	S	34	
[	Sr	88	
[	C	12	
[	N	14	
[	Hg	202	

QC Out of Limits

Measurement Type	Analyte	Mass	Out of Limits Message

Sample ID: L1211024802

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Method 6020 - Summary Report

Sample ID: L1211024802PS WG414510-03

Sample Date/Time: Sunday, November 18, 2012 13:20:19

Number of Replicates: 3

Autosampler Position: 235

Sample Description: 1

Method File: C:\NexIONData\Method\6020a.mth

Aliquot Volume (mL):

Diluted to Volume (mL):

User Name: JYH user

Cumulative Autodilution Factor: 1

Nexion-ICP 200.8\6020

Concentration Results

IS	Analyte	Mass	Intensity	RSD	Conc.	SD	RSD	Units	Blank Intens.	Mode
[	Li	7	73843.3	6.4	-38083.7681	593.479	1.6	ug/L	8369	Standard
	Be	9	97496.4	4.1	49.1535	1.639	3.3	ug/L	18	Standard
	Al	27	3836075.5	6.3	32.7236	0.445	1.4	ug/L	215	Standard
[>	Sc	45	50586.2	6.8				ug/L	53004	Standard
[	Ti	47	273.3	11.3	0.4995	0.057	11.4	ug/L	26	Standard
	V	51	565411.8	10.1	49.8082	3.426	6.9	ug/L	3223	Standard
	Cr	52	505024.2	8.9	47.3871	2.702	5.7	ug/L	10379	Standard
	Cr	53	61032.5	9.2	46.4480	2.729	5.9	ug/L	192	Standard
	Mn	55	856520.8	7.9	51.7974	2.405	4.6	ug/L	1840	Standard
	Co	59	593864.7	8.8	46.7609	2.557	5.5	ug/L	115	Standard
	Ni	60	128148.9	7.4	46.9173	1.911	4.1	ug/L	75	Standard
	Cu	65	127359.8	7.8	48.2833	2.219	4.6	ug/L	155	Standard
	Zn	66	86485.7	7.4	66.1582	2.749	4.2	ug/L	237	Standard
[>	Ge	72	393286.0	3.4				ug/L	413856	Standard
	As	75	63253.8	7.3	45.9552	1.881	4.1	ug/L	-197	Standard
	Se	82	5494.3	6.2	44.5911	1.300	2.9	ug/L	-5	Standard
[	Se-1	77	4323.0	9.3	45.3224	2.819	6.2	ug/L	105	Standard
[>	Ga	71	238.3	28.6				mg/L	225	Standard
[	Rb	85	4599.0	2.0				ug/L	28	Standard
[	Y	89	305855.7	2.4				ug/L	322845	Standard
[>	Rh	103	135.0	29.6				ug/L	92	Standard
[	Mo	98	975.1	10.4	0.2102	0.019	8.9	ug/L	18	Standard
	Ag	107	351200.3	4.9	44.8414	1.325	3.0	ug/L	63	Standard
	Cd	111	152037.0	7.1	44.8181	1.948	4.3	mg/L	20	Standard
	Cd	114	394811.6	7.1	44.2208	1.896	4.3	ug/L	56	Standard
[>	In	115	649498.9	3.5				ug/L	657102	Standard
	Sn	118	734.7	6.0	0.0253	0.002	8.6	ug/L	555	Standard
	Sb	123	354822.2	5.7	45.8225	1.576	3.4	ug/L	62	Standard
[	Ba	135	302171.7	5.7	89.7498	2.584	2.9	ug/L	19	Standard
[	Ce	140	964.7	6.7				ug/L	24	Standard
[>	Tb	159	922453.3	2.6				ug/L	910514	Standard
[	Ho	165	107.7	15.9				ug/L	7	Standard
	Tl	203	597292.7	4.6	48.2168	1.627	3.4	ug/L	13	Standard
	Tl	205	18615.8	4.4	49.2564	1.407	2.9	ug/L	1	Standard
	Pb	206	471268.1	5.8	47.4456	2.098	4.4	ug/L	342	Standard
	Pb	207	404275.0	5.6	47.8678	1.816	3.8	ug/L	284	Standard
	Pb	208	1863823.6	5.8	47.5364	2.001	4.2	ug/L	1363	Standard
	U	238	466684.0	8.0	48.0872	3.080	6.4	ug/L	2	Standard
[>	Bi	209	454741.1	2.1				ug/L	470592	Standard

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Na	23	3.3	86.6	0.3294	0.282	85.7	mg/L	2	Standard
Mg	24	545936.5	2.8	0.2783	0.012	4.5	mg/L	5586	Standard
K	39	76.7	39.3	1.0372	0.379	36.5	mg/L	5	Standard
Ca	43	928.4	2.5	39.2778	2.438	6.2	mg/L	45	Standard
Fe	54	494.4	10.4	0.0452	0.008	17.9	mg/L	350	Standard
Fe	57	426.7	12.9	0.5733	0.065	11.4	mg/L	102	Standard
Sc-1	45	50586.2	6.8				mg/L	53004	Standard
Cl	35	2.7	21.7				ug/L	2	Standard
Kr	83	153.4	6.5				ug/L	157	Standard
Br	81	6.7	21.7				ug/L	3	Standard
P	31	204897.1	4.4				ug/L	91588	Standard
S	34	28346.5	1.6				ug/L	32556	Standard
Sr	88	360.0	16.0				ug/L	62	Standard
C	12	541.7	9.3				mg/L	133	Standard
N	14	0.0					mg/L	0	Standard
Hg	202	10.0	100.0				mg/L	7	Standard

QC Calculated Values

Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recovery
Li	7			
Be	9			
Al	27			
Sc	45			
Ti	47			
V	51			
Cr	52			
Cr	53			
Mn	55			
Co	59			
Ni	60			
Cu	65			
Zn	66			
Ge	72		95.030	
As	75			
Se	82			
Se-1	77			
Ga	71			
Rb	85			
Y	89			
Rh	103			

Sample ID: L1211024802PS WG414510-03

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[	Mo	98	
[	Ag	107	
[	Cd	111	
[	Cd	114	
>	In	115	98.843
[	Sn	118	
[	Sb	123	
[	Ba	135	
[	Ce	140	
>	Tb	159	
[	Ho	165	
[	Tl	203	
[	Tl	205	
[	Pb	206	
[	Pb	207	
[	Pb	208	
[	U	238	
>	Bi	209	96.632
[	Na	23	
[	Mg	24	
[	K	39	
[	Ca	43	
[	Fe	54	
[	Fe	57	
>	Sc-1	45	
[	Cl	35	
[	Kr	83	
[	Br	81	
[	P	31	
[	S	34	
[	Sr	88	
[	C	12	
[	N	14	
[	Hg	202	

QC Out of Limits

Measurement Type	Analyte	Mass	Out of Limits Message

Sample ID: L1211024802PS WG414510-03

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Method 6020 - Summary Report

Sample ID: L1211024802SDL WG414510-04

Sample Date/Time: Sunday, November 18, 2012 13:23:31

Number of Replicates: 3

Autosampler Position: 236

Sample Description: 5

Method File: C:\NexIONData\Method\6020a.mth

Aliquot Volume (mL):

Diluted to Volume (mL):

User Name: JYH user

Cumulative Autodilution Factor: 1

Nexion-ICP 200.8\6020

Concentration Results

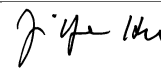
IS	Analyte	Mass	Intensity	RSD	Conc.	SD	RSD	Units	Blank Intens.	Mode
[	Li	7	19042.0	2.0	-7694.5500	239.152	3.1	ug/L	8369	Standard
	Be	9	235.0	160.3	0.1259	0.218	172.8	ug/L	18	Standard
	Al	27	654622.0	2.3	6.2636	0.302	4.8	ug/L	215	Standard
[>	Sc	45	45123.8	3.9				ug/L	53004	Standard
	Ti	47	62.3	11.3	0.0743	0.012	16.0	ug/L	26	Standard
	V	51	11426.7	17.5	0.8005	0.206	25.7	ug/L	3223	Standard
	Cr	52	10304.6	18.0	0.1242	0.206	166.1	ug/L	10379	Standard
	Cr	53	596.7	43.0	0.3722	0.217	58.3	ug/L	192	Standard
	Mn	55	19594.2	15.9	1.1635	0.225	19.3	ug/L	1840	Standard
	Co	59	1691.9	131.4	0.1271	0.189	148.5	ug/L	115	Standard
	Ni	60	1072.7	44.6	0.3804	0.194	50.9	ug/L	75	Standard
	Cu	65	1122.4	41.4	0.3931	0.196	49.8	ug/L	155	Standard
	Zn	66	8145.5	4.4	6.3840	0.422	6.6	ug/L	237	Standard
[>	Ge	72	374035.3	2.7				ug/L	413856	Standard
	As	75	114.7	158.9	0.2289	0.142	62.1	ug/L	-197	Standard
	Se	82	51.3	23.0	0.4434	0.105	23.6	ug/L	-5	Standard
[	Se-1	77	127.7	22.4	0.4645	0.347	74.8	ug/L	105	Standard
[>	Ga	71	166.7	1.7				mg/L	225	Standard
	Rb	85	788.4	10.3				ug/L	28	Standard
	Y	89	284015.7	0.8				ug/L	322845	Standard
[>	Rh	103	101.7	32.0				ug/L	92	Standard
	Mo	98	188.5	2.6	0.0363	0.001	3.3	ug/L	18	Standard
	Ag	107	639.4	135.7	0.0805	0.121	149.9	ug/L	63	Standard
	Cd	111	368.8	147.6	0.1067	0.175	163.7	mg/L	20	Standard
	Cd	114	938.5	147.3	0.1044	0.169	161.6	ug/L	56	Standard
[>	In	115	611712.7	2.3				ug/L	657102	Standard
	Sn	118	405.0	7.3	-0.0057	0.002	38.3	ug/L	555	Standard
	Sb	123	996.9	123.7	0.1362	0.174	127.7	ug/L	62	Standard
[	Ba	135	28233.3	4.8	8.8988	0.627	7.0	ug/L	19	Standard
	Ce	140	215.0	10.1				ug/L	24	Standard
[>	Tb	159	872875.3	2.3				ug/L	910514	Standard
	Ho	165	16.3	46.4				ug/L	7	Standard
	Tl	203	1004.4	133.7	0.0798	0.113	141.2	ug/L	13	Standard
	Tl	205	30.3	116.5	0.0837	0.097	116.3	ug/L	1	Standard
	Pb	206	1363.1	109.4	0.1079	0.157	145.3	ug/L	342	Standard
	Pb	207	1180.1	107.8	0.1072	0.157	146.7	ug/L	284	Standard
	Pb	208	5379.0	107.8	0.1063	0.154	145.2	ug/L	1363	Standard
	U	238	1621.8	104.1	0.1697	0.182	107.1	ug/L	2	Standard
[>	Bi	209	451774.1	2.9				ug/L	470592	Standard

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Na	23	1.7	173.2	0.1742	0.293	168.2	mg/L	2	Standard
Mg	24	253309.9	0.2	0.1432	0.006	4.1	mg/L	5586	Standard
K	39	18.3	31.5	0.2530	0.100	39.3	mg/L	5	Standard
Ca	43	201.7	5.7	7.8475	0.179	2.3	mg/L	45	Standard
Fe	54	363.8	11.9	0.0104	0.014	133.2	mg/L	350	Standard
Fe	57	170.0	14.7	0.1867	0.056	30.1	mg/L	102	Standard
Sc-1	45	45123.8	3.9				mg/L	53004	Standard
Cl	35	4.3	70.5				ug/L	2	Standard
Kr	83	143.7	7.4				ug/L	157	Standard
Br	81	9.2	15.7				ug/L	3	Standard
P	31	112653.3	2.6				ug/L	91588	Standard
S	34	28726.4	2.7				ug/L	32556	Standard
Sr	88	125.0	4.0				ug/L	62	Standard
C	12	158.3	9.6				mg/L	133	Standard
N	14	3.3	173.2				mg/L	0	Standard
Hg	202	5.0	173.2				mg/L	7	Standard

QC Calculated Values

Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recovery
Li	7			
Be	9			
Al	27			
Sc	45			
Ti	47			
V	51			
Cr	52			
Cr	53			
Mn	55			
Co	59			
Ni	60			
Cu	65			
Zn	66			
Ge	72		90.378	
As	75			
Se	82			
Se-1	77			
Ga	71			
Rb	85			
Y	89			
Rh	103			

Sample ID: L1211024802SDL WG414510-04

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[	Mo	98	
[	Ag	107	
[	Cd	111	
[	Cd	114	
>	In	115	93.093
[	Sn	118	
[	Sb	123	
[	Ba	135	
[	Ce	140	
>	Tb	159	
[	Ho	165	
[	Tl	203	
[	Tl	205	
[	Pb	206	
[	Pb	207	
[	Pb	208	
[	U	238	
>	Bi	209	96.001
[	Na	23	
[	Mg	24	
[	K	39	
[	Ca	43	
[	Fe	54	
[	Fe	57	
>	Sc-1	45	
[	Cl	35	
[	Kr	83	
[	Br	81	
[	P	31	
[	S	34	
[	Sr	88	
[	C	12	
[	N	14	
[	Hg	202	

QC Out of Limits

Measurement Type	Analyte	Mass	Out of Limits Message

Sample ID: L1211024802SDL WG414510-04

Report Date/Time: Sunday, November 18, 2012 13:26:03

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Method 6020 - Summary Report

Sample ID: QC Std 6

Sample Date/Time: Sunday, November 18, 2012 13:26:45

Number of Replicates: 3

Autosampler Position: 101

Sample Description:

Method File: C:\NexIONData\Method\6020a.mth

Aliquot Volume (mL):

Diluted to Volume (mL):

User Name: JYH user

Cumulative Autodilution Factor: 1

Nexion-ICP 200.8\6020

Concentration Results

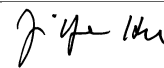
IS	Analyte	Mass	Intensity	RSD	Conc.	SD	RSD	Units	Blank Intens.	Mode
[	Li	7	7850.4	5.6	-451.8117	152.465	33.7	ug/L	8369	Standard
	Be	9	100515.2	7.5	56.9803	2.438	4.3	ug/L	18	Standard
	Al	27	6317844.2	5.4	60.7009	1.878	3.1	ug/L	215	Standard
[>	Sc	45	44886.4	3.2				ug/L	53004	Standard
[	Ti	47	44245.0	6.5	94.6873	3.225	3.4	ug/L	26	Standard
	V	51	529046.8	6.6	48.8483	1.614	3.3	ug/L	3223	Standard
	Cr	52	497866.1	6.0	48.9965	1.717	3.5	ug/L	10379	Standard
	Cr	53	62294.9	6.9	49.6882	1.726	3.5	ug/L	192	Standard
	Mn	55	780424.3	7.2	49.4377	2.035	4.1	ug/L	1840	Standard
	Co	59	606973.5	6.7	50.0912	2.057	4.1	ug/L	115	Standard
	Ni	60	128156.1	5.6	49.1657	1.203	2.4	ug/L	75	Standard
	Cu	65	128581.8	7.1	51.0634	1.891	3.7	ug/L	155	Standard
	Zn	66	63461.8	5.0	50.8295	1.232	2.4	ug/L	237	Standard
[>	Ge	72	375508.2	3.5				ug/L	413856	Standard
	As	75	65346.7	5.4	49.7321	1.083	2.2	ug/L	-197	Standard
	Se	82	5772.4	3.7	49.0957	0.539	1.1	ug/L	-5	Standard
[	Se-1	77	4515.0	4.5	49.7272	1.125	2.3	ug/L	105	Standard
[>	Ga	71	188.3	17.1				mg/L	225	Standard
[	Rb	85	956.7	15.0				ug/L	28	Standard
[	Y	89	284853.7	5.8				ug/L	322845	Standard
[>	Rh	103	121.7	6.3				ug/L	92	Standard
[	Mo	98	393221.3	4.0	94.0734	3.112	3.3	ug/L	18	Standard
	Ag	107	371318.0	4.2	50.4932	1.661	3.3	ug/L	63	Standard
	Cd	111	160383.1	5.3	50.3823	2.377	4.7	mg/L	20	Standard
	Cd	114	422538.5	5.5	50.4356	2.519	5.0	ug/L	56	Standard
[>	In	115	609875.2	2.1				ug/L	657102	Standard
	Sn	118	467197.3	5.3	50.5318	2.359	4.7	ug/L	555	Standard
	Sb	123	373399.2	3.7	51.3725	1.696	3.3	ug/L	62	Standard
[	Ba	135	161646.3	4.7	51.1455	2.240	4.4	ug/L	19	Standard
[	Ce	140	641.3	7.0				ug/L	24	Standard
[>	Tb	159	870165.5	2.9				ug/L	910514	Standard
[	Ho	165	441.7	4.5				ug/L	7	Standard
	Tl	203	617335.3	3.1	50.5927	0.526	1.0	ug/L	13	Standard
	Tl	205	19292.3	4.4	51.8190	1.420	2.7	ug/L	1	Standard
	Pb	206	496700.0	5.2	50.7670	1.792	3.5	ug/L	342	Standard
	Pb	207	424148.4	3.2	51.0025	0.914	1.8	ug/L	284	Standard
	Pb	208	1955233.3	3.9	50.6367	1.206	2.4	ug/L	1363	Standard
	U	238	495552.8	5.5	51.8500	1.977	3.8	ug/L	2	Standard
[>	Bi	209	447964.0	2.3				ug/L	470592	Standard

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Na	23	1.7	173.2	0.1768	0.297	168.3	mg/L	2	Standard
Mg	24	299715.5	0.9	0.1708	0.004	2.4	mg/L	5586	Standard
K	39	368.3	10.2	5.8688	0.494	8.4	mg/L	5	Standard
Ca	43	151.7	11.6	5.3835	0.710	13.2	mg/L	45	Standard
Fe	54	12749.7	2.6	5.6329	0.168	3.0	mg/L	350	Standard
Fe	57	3145.3	5.1	5.7024	0.116	2.0	mg/L	102	Standard
Sc-1	45	44886.4	3.2				mg/L	53004	Standard
Cl	35	3.0	57.7				ug/L	2	Standard
Kr	83	140.0	2.4				ug/L	157	Standard
Br	81	6.7	57.3				ug/L	3	Standard
P	31	114435.8	3.3				ug/L	91588	Standard
S	34	33380.1	1.2				ug/L	32556	Standard
Sr	88	70.0	31.1				ug/L	62	Standard
C	12	135.0	12.8				mg/L	133	Standard
N	14	0.0					mg/L	0	Standard
Hg	202	1.7	173.2				mg/L	7	Standard

QC Calculated Values

Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recovery
Li	7			
Be	9	113.961		
Al	27	121.402		
Sc	45			
Ti	47	94.687		
V	51	97.697		
Cr	52	97.993		
Cr	53			
Mn	55	98.875		
Co	59	100.182		
Ni	60	98.331		
Cu	65	102.127		
Zn	66	101.659		
Ge	72		90.734	
As	75	99.464		
Se	82	98.191		
Se-1	77			
Ga	71			
Rb	85			
Y	89			
Rh	103			

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[	Mo	98	94.073	
[	Ag	107	100.986	
[	Cd	111	100.765	
[	Cd	114		
>	In	115		92.813
[	Sn	118	101.064	
[	Sb	123	102.745	
[	Ba	135	102.291	
[	Ce	140		
>	Tb	159		
[	Ho	165		
[	Tl	203	101.185	
[	Tl	205		
[	Pb	206	101.534	
[	Pb	207	102.005	
[	Pb	208	101.273	
[	U	238	103.700	
>	Bi	209		95.192
[	Na	23		
[	Mg	24		
[	K	39		
[	Ca	43		
[	Fe	54		
[	Fe	57		
>	Sc-1	45		
[	Cl	35		
[	Kr	83		
[	Br	81		
[	P	31		
[	S	34		
[	Sr	88		
[	C	12		
[	N	14		
[	Hg	202		

QC Out of Limits

Measurement Type	Analyte	Mass	Out of Limits Message
QC Std 6	Be	9	
QC Std 6	Al	27	

Sample ID: QC Std 6

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Method 6020 - Summary Report

Sample ID: QC Std 7

Sample Date/Time: Sunday, November 18, 2012 13:29:57

Number of Replicates: 3

Autosampler Position: 102

Sample Description:

Method File: C:\NexIONData\Method\6020a.mth

Aliquot Volume (mL):

Diluted to Volume (mL):

User Name: JYH user

Cumulative Autodilution Factor: 1

Nexion-ICP 200.8\6020

Concentration Results

IS	Analyte	Mass	Intensity	RSD	Conc.	SD	RSD	Units	Blank Intens.	Mode
[	Li	7	7822.0	6.3	-651.4971	190.778	29.3	ug/L	8369	Standard
	Be	9	25.0	72.1	0.0051	0.010	206.0	ug/L	18	Standard
	Al	27	445.0	84.3	0.0022	0.003	158.9	ug/L	215	Standard
[>	Sc	45	43067.9	5.5				ug/L	53004	Standard
[	Ti	47	20.7	10.1	-0.0141	0.005	37.7	ug/L	26	Standard
	V	51	2599.4	2.6	-0.0198	0.004	21.8	ug/L	3223	Standard
	Cr	52	8016.1	2.9	-0.0912	0.011	12.4	ug/L	10379	Standard
	Cr	53	171.7	7.3	0.0314	0.015	48.1	ug/L	192	Standard
	Mn	55	1382.1	7.4	0.0012	0.008	678.7	ug/L	1840	Standard
	Co	59	139.0	64.9	-0.0037	0.008	214.8	ug/L	115	Standard
	Ni	60	65.0	20.0	-0.0100	0.005	47.3	ug/L	75	Standard
	Cu	65	198.0	10.4	0.0233	0.009	40.0	ug/L	155	Standard
	Zn	66	193.0	3.2	-0.0403	0.004	11.1	ug/L	237	Standard
[>	Ge	72	366310.8	4.3				ug/L	413856	Standard
	As	75	-160.9	15.3	0.0144	0.022	150.2	ug/L	-197	Standard
	Se	82	2.7	159.6	0.0278	0.036	128.7	ug/L	-5	Standard
[	Se-1	77	92.3	16.6	0.0906	0.217	239.7	ug/L	105	Standard
[>	Ga	71	155.0	17.1				mg/L	225	Standard
[	Rb	85	18.3	68.6				ug/L	28	Standard
[	Y	89	280053.7	3.9				ug/L	322845	Standard
[>	Rh	103	85.0	15.6				ug/L	92	Standard
[	Mo	98	87.8	92.3	0.0124	0.019	152.0	ug/L	18	Standard
	Ag	107	126.0	66.7	0.0094	0.011	116.2	ug/L	63	Standard
	Cd	111	40.2	68.0	0.0016	0.008	521.0	mg/L	20	Standard
	Cd	114	116.2	87.1	0.0044	0.012	267.3	ug/L	56	Standard
[>	In	115	595647.0	3.1				ug/L	657102	Standard
	Sn	118	352.0	21.9	-0.0105	0.007	68.5	ug/L	555	Standard
	Sb	123	327.8	48.5	0.0428	0.021	48.5	ug/L	62	Standard
[	Ba	135	31.7	45.4	-0.0098	0.004	43.8	ug/L	19	Standard
[	Ce	140	24.7	19.2				ug/L	24	Standard
[>	Tb	159	842547.9	3.5				ug/L	910514	Standard
[	Ho	165	6.7	31.2				ug/L	7	Standard
	Tl	203	64.0	87.3	0.0017	0.004	268.0	ug/L	13	Standard
	Tl	205	2.7	57.3	0.0088	0.004	49.8	ug/L	1	Standard
	Pb	206	329.3	16.5	0.0017	0.005	269.3	ug/L	342	Standard
	Pb	207	281.3	14.1	-0.0013	0.004	293.7	ug/L	284	Standard
	Pb	208	1287.4	11.9	-0.0001	0.003	2812.6	ug/L	1363	Standard
	U	238	26.3	99.1	0.0013	0.003	213.0	ug/L	2	Standard
[>	Bi	209	434609.7	3.1				ug/L	470592	Standard

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Na	23	0.0		0.0050	0.000	0.0	mg/L	2	Standard
Mg	24	1065.0	11.1	-0.0023	0.000	2.5	mg/L	5586	Standard
K	39	3.3	173.2	0.0145	0.097	667.8	mg/L	5	Standard
Ca	43	31.7	32.9	-0.5880	0.469	79.8	mg/L	45	Standard
Fe	54	347.5	13.8	0.0104	0.014	132.5	mg/L	350	Standard
Fe	57	76.7	3.8	0.0203	0.010	47.5	mg/L	102	Standard
Sc-1	45	43067.9	5.5				mg/L	53004	Standard
Cl	35	2.0	86.6				ug/L	2	Standard
Kr	83	132.9	0.8				ug/L	157	Standard
Br	81	5.8	49.5				ug/L	3	Standard
P	31	107058.6	1.7				ug/L	91588	Standard
S	34	33104.5	1.6				ug/L	32556	Standard
Sr	88	58.3	4.9				ug/L	62	Standard
C	12	111.7	15.7				mg/L	133	Standard
N	14	0.0					mg/L	0	Standard
Hg	202	3.3	86.6				mg/L	7	Standard

QC Calculated Values

Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recovery
Li	7			
Be	9			
Al	27			
Sc	45			
Ti	47			
V	51			
Cr	52			
Cr	53			
Mn	55			
Co	59			
Ni	60			
Cu	65			
Zn	66			
Ge	72		88.512	
As	75			
Se	82			
Se-1	77			
Ga	71			
Rb	85			
Y	89			
Rh	103			

Sample ID: QC Std 7

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[	Mo	98	
[	Ag	107	
[	Cd	111	
[	Cd	114	
>	In	115	90.648
[	Sn	118	
[	Sb	123	
[	Ba	135	
[	Ce	140	
>	Tb	159	
[	Ho	165	
[	Tl	203	
[	Tl	205	
[	Pb	206	
[	Pb	207	
[	Pb	208	
[	U	238	
>	Bi	209	92.354
[	Na	23	
[	Mg	24	
[	K	39	
[	Ca	43	
[	Fe	54	
[	Fe	57	
>	Sc-1	45	
[	Cl	35	
[	Kr	83	
[	Br	81	
[	P	31	
[	S	34	
[	Sr	88	
[	C	12	
[	N	14	
[	Hg	202	

QC Out of Limits

Measurement Type	Analyte	Mass	Out of Limits Message

Sample ID: QC Std 7

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Method 6020 - Summary Report

Sample ID: L1211024601

Sample Date/Time: Sunday, November 18, 2012 13:33:11

Number of Replicates: 3

Autosampler Position: 237

Sample Description: 10

Method File: C:\NexIONData\Method\6020a.mth

Aliquot Volume (mL):

Diluted to Volume (mL):

User Name: JYH user

Cumulative Autodilution Factor: 1

Nexion-ICP 200.8\6020

Concentration Results

IS	Analyte	Mass	Intensity	RSD	Conc.	SD	RSD	Units	Blank Intens.	Mode
[	Li	7	112439.1	1.5	-75152.9313	3414.174	4.5	ug/L	8369	Standard
	Be	9	3.3	86.6	-0.0074	0.002	23.6	ug/L	18	Standard
	Al	27	19730837.6	1.4	206.2842	2.988	1.4	ug/L	215	Standard
[>	Sc	45	41276.2	2.8				ug/L	53004	Standard
[	Ti	47	48.0	17.1	0.0504	0.021	40.7	ug/L	26	Standard
	V	51	2654.8	6.1	-0.0040	0.020	503.6	ug/L	3223	Standard
	Cr	52	9185.5	3.6	0.0685	0.047	69.0	ug/L	10379	Standard
	Cr	53	565.0	12.9	0.3725	0.056	15.0	ug/L	192	Standard
	Mn	55	1797.8	2.5	0.0330	0.003	9.1	ug/L	1840	Standard
	Co	59	383.7	5.1	0.0183	0.002	8.3	ug/L	115	Standard
	Ni	60	1382.4	4.9	0.5318	0.035	6.6	ug/L	75	Standard
	Cu	65	750.7	4.6	0.2614	0.011	4.2	ug/L	155	Standard
	Zn	66	6258.0	1.9	5.1770	0.165	3.2	ug/L	237	Standard
[>	Ge	72	351630.4	1.5				ug/L	413856	Standard
	As	75	-52.3	19.2	0.0976	0.008	7.8	ug/L	-197	Standard
	Se	82	127.3	4.9	1.1621	0.069	5.9	ug/L	-5	Standard
[	Se-1	77	180.0	4.9	1.1806	0.110	9.3	ug/L	105	Standard
[>	Ga	71	176.7	9.1				mg/L	225	Standard
[	Rb	85	1010.0	4.2				ug/L	28	Standard
[	Y	89	259992.1	1.7				ug/L	322845	Standard
[>	Rh	103	155.0	3.2				ug/L	92	Standard
[	Mo	98	123.3	12.2	0.0226	0.005	20.0	ug/L	18	Standard
	Ag	107	59.7	1.9	0.0007	0.000	53.0	ug/L	63	Standard
	Cd	111	19.9	48.0	-0.0046	0.003	67.6	mg/L	20	Standard
	Cd	114	62.6	16.0	-0.0017	0.001	78.1	ug/L	56	Standard
[>	In	115	576884.6	2.3				ug/L	657102	Standard
	Sn	118	314.3	1.9	-0.0134	0.001	5.1	ug/L	555	Standard
	Sb	123	104.8	4.4	0.0123	0.001	6.7	ug/L	62	Standard
[	Ba	135	1157.0	2.5	0.3672	0.003	0.7	ug/L	19	Standard
[	Ce	140	473.7	3.6				ug/L	24	Standard
[>	Tb	159	842693.0	3.1				ug/L	910514	Standard
[	Ho	165	14.7	14.2				ug/L	7	Standard
	Tl	203	276.0	12.1	0.0204	0.003	13.5	ug/L	13	Standard
	Tl	205	11.0	15.7	0.0327	0.005	15.0	ug/L	1	Standard
	Pb	206	394.7	3.9	0.0099	0.002	21.1	ug/L	342	Standard
	Pb	207	341.0	4.6	0.0075	0.003	34.0	ug/L	284	Standard
	Pb	208	1563.0	1.3	0.0086	0.001	13.1	ug/L	1363	Standard
	U	238	19289.9	1.0	2.1422	0.047	2.2	ug/L	2	Standard
[>	Bi	209	421981.5	1.3				ug/L	470592	Standard

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Na	23	1.7	173.2	0.1937	0.327	168.7	mg/L	2	Standard
Mg	24	875445.4	0.8	0.5490	0.014	2.5	mg/L	5586	Standard
K	39	38.3	27.2	0.6253	0.164	26.2	mg/L	5	Standard
Ca	43	390.0	10.5	19.1198	2.570	13.4	mg/L	45	Standard
Fe	54	142.2	11.0	-0.0834	0.006	7.0	mg/L	350	Standard
Fe	57	228.3	14.6	0.3327	0.070	21.0	mg/L	102	Standard
Sc-1	45	41276.2	2.8				mg/L	53004	Standard
Cl	35	4.3	48.0				ug/L	2	Standard
Kr	83	125.0	0.3				ug/L	157	Standard
Br	81	8.3	17.3				ug/L	3	Standard
P	31	42385.1	2.1				ug/L	91588	Standard
S	34	31357.4	1.3				ug/L	32556	Standard
Sr	88	793.4	10.1				ug/L	62	Standard
C	12	193.3	22.3				mg/L	133	Standard
N	14	1.7	173.2				mg/L	0	Standard
Hg	202	3.3	86.6				mg/L	7	Standard

QC Calculated Values

Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recovery
Li	7			
Be	9			
Al	27			
Sc	45			
Ti	47			
V	51			
Cr	52			
Cr	53			
Mn	55			
Co	59			
Ni	60			
Cu	65			
Zn	66			
Ge	72		84.964	
As	75			
Se	82			
Se-1	77			
Ga	71			
Rb	85			
Y	89			
Rh	103			

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[	Mo	98	
[	Ag	107	
[	Cd	111	
[	Cd	114	
>	In	115	87.792
[	Sn	118	
[	Sb	123	
[	Ba	135	
[	Ce	140	
>	Tb	159	
[	Ho	165	
[	Tl	203	
[	Tl	205	
[	Pb	206	
[	Pb	207	
[	Pb	208	
[	U	238	
>	Bi	209	89.670
[	Na	23	
[	Mg	24	
[	K	39	
[	Ca	43	
[	Fe	54	
[	Fe	57	
>	Sc-1	45	
[	Cl	35	
[	Kr	83	
[	Br	81	
[	P	31	
[	S	34	
[	Sr	88	
[	C	12	
[	N	14	
[	Hg	202	

QC Out of Limits

Measurement Type	Analyte	Mass	Out of Limits Message

Sample ID: L1211024601

Report Date/Time: Sunday, November 18, 2012 13:35:42

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Method 6020 - Summary Report

Sample ID: L1211024602

Sample Date/Time: Sunday, November 18, 2012 13:36:23

Number of Replicates: 3

Autosampler Position: 238

Sample Description: 10

Method File: C:\NexIONData\Method\6020a.mth

Aliquot Volume (mL):

Diluted to Volume (mL):

User Name: JYH user

Cumulative Autodilution Factor: 1

Nexion-ICP 200.8\6020

Concentration Results

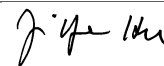
IS	Analyte	Mass	Intensity	RSD	Conc.	SD	RSD	Units	Blank Intens.	Mode
[	Li	7	155108.2	8.0	-115842.0539	10188.461	8.8	ug/L	8369	Standard
	Be	9	46.7	136.1	0.0242	0.047	194.5	ug/L	18	Standard
	Al	27	21832962.0	3.6	249.9423	12.219	4.9	ug/L	215	Standard
[>	Sc	45	37762.2	7.0				ug/L	53004	Standard
[	Ti	47	43.7	17.3	0.0490	0.022	44.9	ug/L	26	Standard
	V	51	2463.4	3.7	-0.0028	0.016	578.2	ug/L	3223	Standard
	Cr	52	10913.3	1.2	0.3501	0.048	13.8	ug/L	10379	Standard
	Cr	53	1143.4	9.8	0.9456	0.065	6.9	ug/L	192	Standard
	Mn	55	477942.8	4.6	34.9782	0.500	1.4	ug/L	1840	Standard
	Co	59	634.0	32.8	0.0453	0.021	46.1	ug/L	115	Standard
	Ni	60	1941.5	3.5	0.8262	0.010	1.2	ug/L	75	Standard
	Cu	65	1127.4	3.6	0.4610	0.018	4.0	ug/L	155	Standard
	Zn	66	2169.8	4.6	1.8190	0.124	6.8	ug/L	237	Standard
[>	Ge	72	324984.3	3.6				ug/L	413856	Standard
	As	75	136.4	42.0	0.2607	0.053	20.2	ug/L	-197	Standard
	Se	82	115.8	4.3	1.1456	0.088	7.7	ug/L	-5	Standard
[	Se-1	77	175.3	2.9	1.2982	0.084	6.5	ug/L	105	Standard
[>	Ga	71	178.3	15.4				mg/L	225	Standard
[	Rb	85	5644.4	7.1				ug/L	28	Standard
[	Y	89	244582.3	2.3				ug/L	322845	Standard
[>	Rh	103	203.3	12.4				ug/L	92	Standard
[	Mo	98	326.9	11.2	0.0789	0.008	10.0	ug/L	18	Standard
	Ag	107	92.0	22.3	0.0062	0.003	52.3	ug/L	63	Standard
	Cd	111	169.3	3.6	0.0485	0.002	3.3	mg/L	20	Standard
	Cd	114	430.0	9.2	0.0480	0.004	9.0	ug/L	56	Standard
[>	In	115	543841.0	2.4				ug/L	657102	Standard
	Sn	118	300.0	2.6	-0.0130	0.001	5.2	ug/L	555	Standard
	Sb	123	94.9	15.3	0.0117	0.002	16.7	ug/L	62	Standard
[	Ba	135	1556.1	2.9	0.5323	0.003	0.5	ug/L	19	Standard
[	Ce	140	537.3	8.9				ug/L	24	Standard
[>	Tb	159	797694.6	1.0				ug/L	910514	Standard
[	Ho	165	28.7	27.1				ug/L	7	Standard
	Tl	203	249.7	4.0	0.0194	0.001	6.2	ug/L	13	Standard
	Tl	205	12.7	68.1	0.0394	0.026	65.7	ug/L	1	Standard
	Pb	206	399.3	5.5	0.0130	0.002	17.7	ug/L	342	Standard
	Pb	207	357.3	2.0	0.0123	0.001	12.1	ug/L	284	Standard
	Pb	208	1744.4	18.8	0.0164	0.009	57.7	ug/L	1363	Standard
	U	238	8752.2	1.9	1.0284	0.015	1.5	ug/L	2	Standard
[>	Bi	209	398452.7	1.2				ug/L	470592	Standard

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Na	23	1.7	173.2	0.2088	0.353	169.1	mg/L	2	Standard
Mg	24	12962564.9	74.0	9.0976	6.823	75.0	mg/L	5586	Standard
K	39	26.7	39.0	0.4601	0.171	37.2	mg/L	5	Standard
Ca	43	300.0	15.3	15.8568	3.889	24.5	mg/L	45	Standard
Fe	54	153.6	24.6	-0.0705	0.019	27.6	mg/L	350	Standard
Fe	57	178.3	4.3	0.2654	0.013	4.8	mg/L	102	Standard
Sc-1	45	37762.2	7.0				mg/L	53004	Standard
Cl	35	6.0	28.9				ug/L	2	Standard
Kr	83	118.4	1.4				ug/L	157	Standard
Br	81	7.5	57.7				ug/L	3	Standard
P	31	39581.7	2.5				ug/L	91588	Standard
S	34	30308.6	3.0				ug/L	32556	Standard
Sr	88	910.0	7.1				ug/L	62	Standard
C	12	215.0	62.5				mg/L	133	Standard
N	14	0.0					mg/L	0	Standard
Hg	202	1.7	173.2				mg/L	7	Standard

QC Calculated Values

Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recovery
Li	7			
Be	9			
Al	27			
Sc	45			
Ti	47			
V	51			
Cr	52			
Cr	53			
Mn	55			
Co	59			
Ni	60			
Cu	65			
Zn	66			
Ge	72		78.526	
As	75			
Se	82			
Se-1	77			
Ga	71			
Rb	85			
Y	89			
Rh	103			

Sample ID: L1211024602

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[	Mo	98	
[	Ag	107	
[	Cd	111	
[	Cd	114	
>	In	115	82.764
[	Sn	118	
[	Sb	123	
[	Ba	135	
[	Ce	140	
>	Tb	159	
[	Ho	165	
[	Tl	203	
[	Tl	205	
[	Pb	206	
[	Pb	207	
[	Pb	208	
[	U	238	
>	Bi	209	84.671
[	Na	23	
[	Mg	24	
[	K	39	
[	Ca	43	
[	Fe	54	
[	Fe	57	
>	Sc-1	45	
[	Cl	35	
[	Kr	83	
[	Br	81	
[	P	31	
[	S	34	
[	Sr	88	
[	C	12	
[	N	14	
[	Hg	202	

QC Out of Limits

Measurement Type	Analyte	Mass	Out of Limits Message

Sample ID: L1211024602

Report Date/Time: Sunday, November 18, 2012 13:38:55

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Method 6020 - Summary Report

Sample ID: L1211024603

Sample Date/Time: Sunday, November 18, 2012 13:39:35

Number of Replicates: 3

Autosampler Position: 239

Sample Description: 10

Method File: C:\NexIONData\Method\6020a.mth

Aliquot Volume (mL):

Diluted to Volume (mL):

User Name: JYH user

Cumulative Autodilution Factor: 1

Nexion-ICP 200.8\6020

Concentration Results

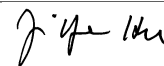
IS	Analyte	Mass	Intensity	RSD	Conc.	SD	RSD	Units	Blank Intens.	Mode
[	Li	7	132562.7	2.7	-95175.1063	3805.649	4.0	ug/L	8369	Standard
	Be	9	16.7	69.3	0.0013	0.007	547.8	ug/L	18	Standard
	Al	27	23774214.2	3.4	263.8179	10.320	3.9	ug/L	215	Standard
[>	Sc	45	38903.3	4.0				ug/L	53004	Standard
[	Ti	47	37.7	5.5	0.0342	0.003	9.4	ug/L	26	Standard
	V	51	2864.8	5.6	0.0419	0.008	18.0	ug/L	3223	Standard
	Cr	52	9426.6	1.8	0.1844	0.026	13.9	ug/L	10379	Standard
	Cr	53	515.8	13.5	0.3701	0.062	16.6	ug/L	192	Standard
	Mn	55	5099.2	4.2	0.2877	0.003	1.2	ug/L	1840	Standard
	Co	59	435.3	2.9	0.0263	0.000	1.6	ug/L	115	Standard
	Ni	60	1609.4	3.8	0.6840	0.037	5.4	ug/L	75	Standard
	Cu	65	816.0	1.2	0.3203	0.011	3.4	ug/L	155	Standard
	Zn	66	4401.3	6.2	3.9174	0.206	5.3	ug/L	237	Standard
[>	Ge	72	322883.7	3.6				ug/L	413856	Standard
	As	75	-29.8	60.7	0.1138	0.015	13.5	ug/L	-197	Standard
	Se	82	140.0	4.2	1.3920	0.096	6.9	ug/L	-5	Standard
[	Se-1	77	201.3	6.2	1.6496	0.069	4.2	ug/L	105	Standard
[>	Ga	71	133.3	27.6				mg/L	225	Standard
[	Rb	85	1136.7	6.7				ug/L	28	Standard
[	Y	89	248160.0	4.4				ug/L	322845	Standard
[>	Rh	103	211.7	15.7				ug/L	92	Standard
[	Mo	98	152.6	14.4	0.0307	0.007	22.3	ug/L	18	Standard
	Ag	107	58.7	16.8	0.0007	0.001	191.2	ug/L	63	Standard
	Cd	111	26.8	9.8	-0.0021	0.001	55.4	mg/L	20	Standard
	Cd	114	74.6	16.7	-0.0000	0.001	10488.3	ug/L	56	Standard
[>	In	115	567315.5	3.0				ug/L	657102	Standard
	Sn	118	289.3	6.7	-0.0157	0.003	18.5	ug/L	555	Standard
	Sb	123	66.0	17.0	0.0069	0.002	27.5	ug/L	62	Standard
[	Ba	135	1199.4	1.4	0.3885	0.018	4.5	ug/L	19	Standard
[	Ce	140	417.7	3.0				ug/L	24	Standard
[>	Tb	159	818383.4	0.9				ug/L	910514	Standard
[	Ho	165	13.0	13.3				ug/L	7	Standard
	Tl	203	298.7	1.4	0.0230	0.001	2.9	ug/L	13	Standard
	Tl	205	10.3	44.7	0.0317	0.014	43.8	ug/L	1	Standard
	Pb	206	385.0	1.8	0.0100	0.001	12.0	ug/L	342	Standard
	Pb	207	324.7	7.4	0.0064	0.003	42.4	ug/L	284	Standard
	Pb	208	1544.4	2.6	0.0091	0.000	4.6	ug/L	1363	Standard
	U	238	22015.3	1.9	2.5069	0.037	1.5	ug/L	2	Standard
[>	Bi	209	411531.6	1.7				ug/L	470592	Standard

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Na	23	3.3	173.2	0.4313	0.738	171.2	mg/L	2	Standard
Mg	24	969505.4	1.5	0.6458	0.019	3.0	mg/L	5586	Standard
K	39	26.7	60.3	0.4456	0.274	61.5	mg/L	5	Standard
Ca	43	363.3	11.5	18.8074	1.824	9.7	mg/L	45	Standard
Fe	54	122.3	19.7	-0.0891	0.015	17.0	mg/L	350	Standard
Fe	57	231.7	36.9	0.3634	0.161	44.4	mg/L	102	Standard
Sc-1	45	38903.3	4.0				mg/L	53004	Standard
Cl	35	4.0	25.0				ug/L	2	Standard
Kr	83	121.8	5.4				ug/L	157	Standard
Br	81	5.8	65.5				ug/L	3	Standard
P	31	43468.9	0.7				ug/L	91588	Standard
S	34	29320.8	1.1				ug/L	32556	Standard
Sr	88	826.7	5.1				ug/L	62	Standard
C	12	226.7	19.8				mg/L	133	Standard
N	14	0.0					mg/L	0	Standard
Hg	202	6.7	114.6				mg/L	7	Standard

QC Calculated Values

Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recovery
Li	7			
Be	9			
Al	27			
Sc	45			
Ti	47			
V	51			
Cr	52			
Cr	53			
Mn	55			
Co	59			
Ni	60			
Cu	65			
Zn	66			
Ge	72		78.018	
As	75			
Se	82			
Se-1	77			
Ga	71			
Rb	85			
Y	89			
Rh	103			

Sample ID: L1211024603

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[	Mo	98	
[	Ag	107	
[	Cd	111	
[	Cd	114	
>	In	115	86.336
[	Sn	118	
[	Sb	123	
[	Ba	135	
[	Ce	140	
>	Tb	159	
[	Ho	165	
[	Tl	203	
[	Tl	205	
[	Pb	206	
[	Pb	207	
[	Pb	208	
[	U	238	
>	Bi	209	87.450
[	Na	23	
[	Mg	24	
[	K	39	
[	Ca	43	
[	Fe	54	
[	Fe	57	
>	Sc-1	45	
[	Cl	35	
[	Kr	83	
[	Br	81	
[	P	31	
[	S	34	
[	Sr	88	
[	C	12	
[	N	14	
[	Hg	202	

QC Out of Limits

Measurement Type	Analyte	Mass	Out of Limits Message

Sample ID: L1211024603

Report Date/Time: Sunday, November 18, 2012 13:42:07

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Method 6020 - Summary Report

Sample ID: L1211024803

Sample Date/Time: Sunday, November 18, 2012 13:45:00

Number of Replicates: 3

Autosampler Position: 240

Sample Description: 1

Method File: C:\NexIONData\Method\6020a.mth

Aliquot Volume (mL):

Diluted to Volume (mL):

User Name: JYH user

Cumulative Autodilution Factor: 1

Nexion-ICP 200.8\6020

Concentration Results

IS	Analyte	Mass	Intensity	RSD	Conc.	SD	RSD	Units	Blank Intens.	Mode
[	Li	7	67803.3	5.3	-39417.0749	1780.892	4.5	ug/L	8369	Standard
	Be	9	13.3	57.3	-0.0019	0.004	237.5	ug/L	18	Standard
	Al	27	3521734.1	5.5	33.7286	1.023	3.0	ug/L	215	Standard
[>	Sc	45	45021.8	2.5				ug/L	53004	Standard
[	Ti	47	233.7	3.9	0.4430	0.002	0.5	ug/L	26	Standard
	V	51	42101.7	4.8	3.6582	0.082	2.2	ug/L	3223	Standard
	Cr	52	14027.5	5.8	0.4960	0.034	6.9	ug/L	10379	Standard
	Cr	53	1095.0	3.6	0.7713	0.065	8.4	ug/L	192	Standard
	Mn	55	44426.8	3.8	2.7436	0.033	1.2	ug/L	1840	Standard
	Co	59	905.7	5.4	0.0596	0.002	4.0	ug/L	115	Standard
	Ni	60	2949.0	8.8	1.1002	0.059	5.4	ug/L	75	Standard
	Cu	65	975.4	4.4	0.3321	0.013	3.8	ug/L	155	Standard
	Zn	66	2339.8	2.0	1.6906	0.043	2.5	ug/L	237	Standard
[>	Ge	72	374126.2	4.3				ug/L	413856	Standard
	As	75	602.6	12.2	0.5983	0.040	6.6	ug/L	-197	Standard
	Se	82	200.3	9.2	1.7129	0.082	4.8	ug/L	-5	Standard
[	Se-1	77	187.7	5.4	1.1374	0.092	8.1	ug/L	105	Standard
[>	Ga	71	201.7	5.2				mg/L	225	Standard
[	Rb	85	4240.6	5.8				ug/L	28	Standard
[	Y	89	282008.4	6.2				ug/L	322845	Standard
[>	Rh	103	111.7	6.8				ug/L	92	Standard
[	Mo	98	720.6	5.9	0.1617	0.007	4.5	ug/L	18	Standard
	Ag	107	72.0	52.1	0.0018	0.005	279.6	ug/L	63	Standard
	Cd	111	27.5	31.1	-0.0026	0.003	102.7	mg/L	20	Standard
	Cd	114	77.2	38.7	-0.0004	0.004	805.5	ug/L	56	Standard
[>	In	115	616808.6	2.8				ug/L	657102	Standard
	Sn	118	364.0	5.5	-0.0104	0.002	22.9	ug/L	555	Standard
	Sb	123	161.3	8.2	0.0190	0.001	7.1	ug/L	62	Standard
[	Ba	135	132093.6	4.2	41.3146	1.009	2.4	ug/L	19	Standard
[	Ce	140	1222.4	8.0				ug/L	24	Standard
[>	Tb	159	878848.5	3.2				ug/L	910514	Standard
[	Ho	165	23.0	19.0				ug/L	7	Standard
	Tl	203	388.7	4.5	0.0282	0.001	4.6	ug/L	13	Standard
	Tl	205	9.3	22.3	0.0264	0.006	21.8	ug/L	1	Standard
	Pb	206	586.7	4.7	0.0270	0.002	7.2	ug/L	342	Standard
	Pb	207	489.7	3.0	0.0228	0.002	8.0	ug/L	284	Standard
	Pb	208	2316.4	5.2	0.0255	0.002	8.8	ug/L	1363	Standard
	U	238	2947.6	5.4	0.3067	0.012	3.9	ug/L	2	Standard
[>	Bi	209	448236.8	1.9				ug/L	470592	Standard

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Na	23	3.3	86.6	0.3646	0.311	85.4	mg/L	2	Standard
Mg	24	519815.6	1.2	0.2975	0.004	1.4	mg/L	5586	Standard
K	39	65.0	55.5	0.9987	0.581	58.2	mg/L	5	Standard
Ca	43	818.4	5.8	38.8291	3.255	8.4	mg/L	45	Standard
Fe	54	363.6	5.0	0.0109	0.004	36.6	mg/L	350	Standard
Fe	57	375.0	5.8	0.5656	0.048	8.5	mg/L	102	Standard
Sc-1	45	45021.8	2.5				mg/L	53004	Standard
Cl	35	2.7	108.3				ug/L	2	Standard
Kr	83	124.6	7.9				ug/L	157	Standard
Br	81	7.5	88.2				ug/L	3	Standard
P	31	159148.7	3.3				ug/L	91588	Standard
S	34	28260.5	1.5				ug/L	32556	Standard
Sr	88	326.7	7.9				ug/L	62	Standard
C	12	1066.7	9.5				mg/L	133	Standard
N	14	0.0					mg/L	0	Standard
Hg	202	1.7	173.2				mg/L	7	Standard

QC Calculated Values

Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recovery
Li	7			
Be	9			
Al	27			
Sc	45			
Ti	47			
V	51			
Cr	52			
Cr	53			
Mn	55			
Co	59			
Ni	60			
Cu	65			
Zn	66			
Ge	72		90.400	
As	75			
Se	82			
Se-1	77			
Ga	71			
Rb	85			
Y	89			
Rh	103			

Sample ID: L1211024803

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[	Mo	98	
[	Ag	107	
[	Cd	111	
[	Cd	114	
>	In	115	93.868
[	Sn	118	
[	Sb	123	
[	Ba	135	
[	Ce	140	
>	Tb	159	
[	Ho	165	
[	Tl	203	
[	Tl	205	
[	Pb	206	
[	Pb	207	
[	Pb	208	
[	U	238	
>	Bi	209	95.250
[	Na	23	
[	Mg	24	
[	K	39	
[	Ca	43	
[	Fe	54	
[	Fe	57	
>	Sc-1	45	
[	Cl	35	
[	Kr	83	
[	Br	81	
[	P	31	
[	S	34	
[	Sr	88	
[	C	12	
[	N	14	
[	Hg	202	

QC Out of Limits

Measurement Type	Analyte	Mass	Out of Limits Message

Sample ID: L1211024803

Report Date/Time: Sunday, November 18, 2012 13:47:32

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Method 6020 - Summary Report

Sample ID: L1211024804

Sample Date/Time: Sunday, November 18, 2012 13:48:12

Number of Replicates: 3

Autosampler Position: 241

Sample Description: 1

Method File: C:\NexIONData\Method\6020a.mth

Aliquot Volume (mL):

Diluted to Volume (mL):

User Name: JYH user

Cumulative Autodilution Factor: 1

Nexion-ICP 200.8\6020

Concentration Results

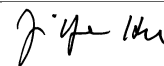
IS	Analyte	Mass	Intensity	RSD	Conc.	SD	RSD	Units	Blank Intens.	Mode
[	Li	7	64535.8	5.5	-35602.8697	736.280	2.1	ug/L	8369	Standard
	Be	9	13.3	57.3	-0.0021	0.004	208.4	ug/L	18	Standard
	Al	27	4791848.8	7.2	44.0432	1.741	4.0	ug/L	215	Standard
[>	Sc	45	46900.9	3.9				ug/L	53004	Standard
[	Ti	47	302.7	10.6	0.5766	0.044	7.7	ug/L	26	Standard
	V	51	4537.9	3.5	0.1469	0.013	8.7	ug/L	3223	Standard
	Cr	52	12129.5	3.9	0.2799	0.025	9.0	ug/L	10379	Standard
	Cr	53	837.5	2.9	0.5489	0.013	2.4	ug/L	192	Standard
	Mn	55	12200836.2	6.5	761.0064	28.532	3.7	ug/L	1840	Standard
	Co	59	5613.7	6.9	0.4398	0.017	3.8	ug/L	115	Standard
	Ni	60	67361.0	7.6	25.3694	1.195	4.7	ug/L	75	Standard
	Cu	65	11066.4	6.7	4.2667	0.147	3.4	ug/L	155	Standard
	Zn	66	15222.0	7.3	11.8234	0.531	4.5	ug/L	237	Standard
[>	Ge	72	382149.6	4.0				ug/L	413856	Standard
	As	75	4733.0	6.6	3.6696	0.143	3.9	ug/L	-197	Standard
	Se	82	211.3	3.5	1.7711	0.022	1.2	ug/L	-5	Standard
[	Se-1	77	154.7	3.6	0.7286	0.019	2.7	ug/L	105	Standard
[>	Ga	71	326.7	10.8				mg/L	225	Standard
[	Rb	85	9076.1	5.9				ug/L	28	Standard
[	Y	89	292739.7	6.2				ug/L	322845	Standard
[>	Rh	103	141.7	13.4				ug/L	92	Standard
[	Mo	98	2357.4	5.0	0.5504	0.015	2.7	ug/L	18	Standard
	Ag	107	66.7	14.6	0.0011	0.001	129.3	ug/L	63	Standard
	Cd	111	75.5	12.4	0.0123	0.002	19.3	mg/L	20	Standard
	Cd	114	195.8	10.5	0.0136	0.002	14.3	ug/L	56	Standard
[>	In	115	615061.0	2.4				ug/L	657102	Standard
	Sn	118	629.7	4.0	0.0182	0.001	6.2	ug/L	555	Standard
	Sb	123	286.7	11.8	0.0361	0.004	10.3	ug/L	62	Standard
[	Ba	135	482398.1	5.7	151.2985	5.074	3.4	ug/L	19	Standard
[	Ce	140	5425.6	6.9				ug/L	24	Standard
[>	Tb	159	884163.7	3.7				ug/L	910514	Standard
[	Ho	165	65.7	14.6				ug/L	7	Standard
	Tl	203	347.0	8.2	0.0248	0.002	6.6	ug/L	13	Standard
	Tl	205	14.0	14.3	0.0390	0.005	14.0	ug/L	1	Standard
	Pb	206	17219.1	5.8	1.7301	0.052	3.0	ug/L	342	Standard
	Pb	207	14147.6	4.3	1.6682	0.022	1.3	ug/L	284	Standard
	Pb	208	66282.7	5.2	1.6851	0.039	2.3	ug/L	1363	Standard
	U	238	1334.1	3.5	0.1383	0.004	3.1	ug/L	2	Standard
[>	Bi	209	447370.1	3.0				ug/L	470592	Standard

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Na	23	8.3	91.7	0.8366	0.757	90.5	mg/L	2	Standard
Mg	24	485838.4	3.8	0.2665	0.003	1.2	mg/L	5586	Standard
K	39	136.7	20.1	2.0504	0.354	17.2	mg/L	5	Standard
Ca	43	1133.4	4.7	52.2764	0.489	0.9	mg/L	45	Standard
Fe	54	1917.0	8.9	0.6778	0.043	6.3	mg/L	350	Standard
Fe	57	843.4	6.6	1.3683	0.070	5.2	mg/L	102	Standard
Sc-1	45	46900.9	3.9				mg/L	53004	Standard
Cl	35	3.3	96.4				ug/L	2	Standard
Kr	83	119.2	7.0				ug/L	157	Standard
Br	81	8.3	75.5				ug/L	3	Standard
P	31	153550.5	3.2				ug/L	91588	Standard
S	34	29177.2	2.8				ug/L	32556	Standard
Sr	88	380.0	1.3				ug/L	62	Standard
C	12	875.0	6.9				mg/L	133	Standard
N	14	1.7	173.2				mg/L	0	Standard
Hg	202	16.7	45.8				mg/L	7	Standard

QC Calculated Values

Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recovery
Li	7			
Be	9			
Al	27			
Sc	45			
Ti	47			
V	51			
Cr	52			
Cr	53			
Mn	55			
Co	59			
Ni	60			
Cu	65			
Zn	66			
Ge	72		92.339	
As	75			
Se	82			
Se-1	77			
Ga	71			
Rb	85			
Y	89			
Rh	103			

Sample ID: L1211024804

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[	Mo	98	
[	Ag	107	
[	Cd	111	
[	Cd	114	
>	In	115	93.602
[	Sn	118	
[	Sb	123	
[	Ba	135	
[	Ce	140	
>	Tb	159	
[	Ho	165	
[	Tl	203	
[	Tl	205	
[	Pb	206	
[	Pb	207	
[	Pb	208	
[	U	238	
>	Bi	209	95.065
[	Na	23	
[	Mg	24	
[	K	39	
[	Ca	43	
[	Fe	54	
[	Fe	57	
>	Sc-1	45	
[	Cl	35	
[	Kr	83	
[	Br	81	
[	P	31	
[	S	34	
[	Sr	88	
[	C	12	
[	N	14	
[	Hg	202	

QC Out of Limits

Measurement Type	Analyte	Mass	Out of Limits Message
Mn 55 Upper, S, EEE	Mn	55	
Ba 135 Upper, S, EEE	Ba	135	

Sample ID: L1211024804

Report Date/Time: Sunday, November 18, 2012 13:50:44

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Method 6020 - Summary Report

Sample ID: L1211024805

Sample Date/Time: Sunday, November 18, 2012 13:51:24

Number of Replicates: 3

Autosampler Position: 242

Sample Description: 1

Method File: C:\NexIONData\Method\6020a.mth

Aliquot Volume (mL):

Diluted to Volume (mL):

User Name: JYH user

Cumulative Autodilution Factor: 1

Nexion-ICP 200.8\6020

Concentration Results

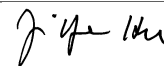
IS	Analyte	Mass	Intensity	RSD	Conc.	SD	RSD	Units	Blank Intens.	Mode
[	Li	7	32935.9	6.9	-16560.9078	749.965	4.5	ug/L	8369	Standard
	Be	9	16.7	62.4	0.0001	0.006	4418.6	ug/L	18	Standard
	Al	27	2153900.0	9.2	20.4470	1.318	6.4	ug/L	215	Standard
[>	Sc	45	45431.5	6.3				ug/L	53004	Standard
[	Ti	47	192.0	8.9	0.3561	0.026	7.4	ug/L	26	Standard
	V	51	7402.6	2.5	0.4282	0.019	4.5	ug/L	3223	Standard
	Cr	52	14060.2	3.7	0.5103	0.023	4.5	ug/L	10379	Standard
	Cr	53	1067.5	11.7	0.7517	0.062	8.3	ug/L	192	Standard
	Mn	55	14972268.4	6.6	960.7034	27.773	2.9	ug/L	1840	Standard
	Co	59	3045.0	8.1	0.2384	0.008	3.5	ug/L	115	Standard
	Ni	60	114503.0	5.9	44.4136	1.319	3.0	ug/L	75	Standard
	Cu	65	28986.1	6.4	11.5966	0.305	2.6	ug/L	155	Standard
	Zn	66	13846.0	5.2	11.0568	0.166	1.5	ug/L	237	Standard
[>	Ge	72	371488.9	4.9				ug/L	413856	Standard
	As	75	2249.6	6.1	1.8657	0.021	1.1	ug/L	-197	Standard
	Se	82	153.7	13.1	1.3238	0.113	8.5	ug/L	-5	Standard
[	Se-1	77	141.7	2.7	0.6334	0.117	18.4	ug/L	105	Standard
[>	Ga	71	483.3	11.6				mg/L	225	Standard
[	Rb	85	27940.8	3.8				ug/L	28	Standard
[	Y	89	279210.8	4.5				ug/L	322845	Standard
[>	Rh	103	123.3	13.0				ug/L	92	Standard
[	Mo	98	7277.6	5.4	1.7136	0.064	3.8	ug/L	18	Standard
	Ag	107	55.3	16.2	-0.0005	0.001	243.3	ug/L	63	Standard
	Cd	111	43.6	25.7	0.0024	0.004	152.1	mg/L	20	Standard
	Cd	114	137.3	19.2	0.0066	0.003	43.2	ug/L	56	Standard
[>	In	115	616345.4	1.7				ug/L	657102	Standard
	Sn	118	1332.4	4.7	0.0933	0.004	4.8	ug/L	555	Standard
	Sb	123	896.0	4.9	0.1190	0.004	3.6	ug/L	62	Standard
[	Ba	135	132020.2	4.7	41.3134	1.265	3.1	ug/L	19	Standard
[	Ce	140	1987.5	2.8				ug/L	24	Standard
[>	Tb	159	884209.0	2.0				ug/L	910514	Standard
[	Ho	165	36.7	23.5				ug/L	7	Standard
	Tl	203	794.7	1.7	0.0612	0.000	0.8	ug/L	13	Standard
	Tl	205	24.7	20.4	0.0672	0.013	19.5	ug/L	1	Standard
	Pb	206	69487.5	3.7	7.0469	0.114	1.6	ug/L	342	Standard
	Pb	207	57503.7	3.5	6.8558	0.107	1.6	ug/L	284	Standard
	Pb	208	269535.4	3.5	6.9233	0.101	1.5	ug/L	1363	Standard
	U	238	902.4	6.3	0.0925	0.004	4.6	ug/L	2	Standard
[>	Bi	209	449712.5	2.2				ug/L	470592	Standard

Sample ID: L1211024805

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Na	23	3.3	86.6	0.3695	0.316	85.4	mg/L	2	Standard
Mg	24	355115.5	1.3	0.2008	0.010	4.9	mg/L	5586	Standard
K	39	430.0	14.8	6.7944	1.098	16.2	mg/L	5	Standard
Ca	43	626.7	7.6	28.9826	3.309	11.4	mg/L	45	Standard
Fe	54	2695.0	5.1	1.0552	0.027	2.6	mg/L	350	Standard
Fe	57	868.4	3.7	1.4645	0.045	3.1	mg/L	102	Standard
Sc-1	45	45431.5	6.3				mg/L	53004	Standard
Cl	35	3.3	45.8				ug/L	2	Standard
Kr	83	116.4	6.7				ug/L	157	Standard
Br	81	6.7	57.3				ug/L	3	Standard
P	31	129905.1	4.2				ug/L	91588	Standard
S	34	29574.7	2.2				ug/L	32556	Standard
Sr	88	265.0	3.3				ug/L	62	Standard
C	12	623.3	17.4				mg/L	133	Standard
N	14	1.7	173.2				mg/L	0	Standard
Hg	202	20.0	50.0				mg/L	7	Standard

QC Calculated Values

Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recovery
Li	7			
Be	9			
Al	27			
Sc	45			
Ti	47			
V	51			
Cr	52			
Cr	53			
Mn	55			
Co	59			
Ni	60			
Cu	65			
Zn	66			
Ge	72		89.763	
As	75			
Se	82			
Se-1	77			
Ga	71			
Rb	85			
Y	89			
Rh	103			

Sample ID: L1211024805

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[	Mo	98	
[	Ag	107	
[	Cd	111	
[	Cd	114	
>	In	115	93.798
[	Sn	118	
[	Sb	123	
[	Ba	135	
[	Ce	140	
>	Tb	159	
[	Ho	165	
[	Tl	203	
[	Tl	205	
[	Pb	206	
[	Pb	207	
[	Pb	208	
[	U	238	
>	Bi	209	95.563
[	Na	23	
[	Mg	24	
[	K	39	
[	Ca	43	
[	Fe	54	
[	Fe	57	
>	Sc-1	45	
[	Cl	35	
[	Kr	83	
[	Br	81	
[	P	31	
[	S	34	
[	Sr	88	
[	C	12	
[	N	14	
[	Hg	202	

QC Out of Limits

Measurement Type	Analyte	Mass	Out of Limits Message
Mn 55 Upper, S, EEE	Mn	55	

Sample ID: L1211024805

Report Date/Time: Sunday, November 18, 2012 13:53:56

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Method 6020 - Summary Report

Sample ID: L1211024805

Sample Date/Time: Sunday, November 18, 2012 13:56:41

Number of Replicates: 3

Autosampler Position: 243

Sample Description: 50

Method File: C:\NexIONData\Method\6020a.mth

Aliquot Volume (mL):

Diluted to Volume (mL):

User Name: JYH user

Cumulative Autodilution Factor: 1

Nexion-ICP 200.8\6020

Concentration Results

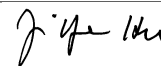
IS	Analyte	Mass	Intensity	RSD	Conc.	SD	RSD	Units	Blank Intens.	Mode
[	Li	7	6979.9	4.1	-943.6309	399.403	42.3	ug/L	8369	Standard
	Be	9	3.3	86.6	-0.0071	0.002	28.6	ug/L	18	Standard
	Al	27	35474.9	4.6	0.4174	0.015	3.6	ug/L	215	Standard
[>	Sc	45	36475.5	3.0				ug/L	53004	Standard
[	Ti	47	16.7	51.0	-0.0175	0.022	125.3	ug/L	26	Standard
	V	51	2396.0	1.4	-0.0058	0.006	111.3	ug/L	3223	Standard
	Cr	52	7282.4	1.6	-0.0569	0.023	40.6	ug/L	10379	Standard
	Cr	53	174.2	5.8	0.0541	0.010	19.3	ug/L	192	Standard
	Mn	55	233659.3	2.4	17.3576	0.369	2.1	ug/L	1840	Standard
	Co	59	126.7	8.5	-0.0032	0.001	37.4	ug/L	115	Standard
	Ni	60	2049.1	4.0	0.8899	0.041	4.6	ug/L	75	Standard
	Cu	65	650.7	3.4	0.2468	0.009	3.7	ug/L	155	Standard
	Zn	66	1531.4	4.2	1.2486	0.059	4.7	ug/L	237	Standard
[>	Ge	72	319409.3	1.2				ug/L	413856	Standard
	As	75	-64.5	77.0	0.0824	0.044	53.5	ug/L	-197	Standard
	Se	82	8.4	43.8	0.0894	0.037	40.9	ug/L	-5	Standard
[	Se-1	77	99.3	8.4	0.3322	0.095	28.5	ug/L	105	Standard
[>	Ga	71	190.0	16.0				mg/L	225	Standard
[	Rb	85	491.7	18.3				ug/L	28	Standard
[	Y	89	234326.6	1.4				ug/L	322845	Standard
[>	Rh	103	71.7	24.5				ug/L	92	Standard
[	Mo	98	136.0	4.8	0.0284	0.002	6.8	ug/L	18	Standard
	Ag	107	48.7	21.0	-0.0004	0.002	451.6	ug/L	63	Standard
	Cd	111	17.5	14.4	-0.0049	0.001	19.1	mg/L	20	Standard
	Cd	114	53.0	20.4	-0.0024	0.001	60.3	ug/L	56	Standard
[>	In	115	535798.1	0.6				ug/L	657102	Standard
	Sn	118	285.0	2.7	-0.0143	0.001	6.9	ug/L	555	Standard
	Sb	123	33.1	6.1	0.0023	0.000	15.3	ug/L	62	Standard
[	Ba	135	2466.9	7.0	0.8689	0.064	7.4	ug/L	19	Standard
[	Ce	140	57.3	7.3				ug/L	24	Standard
[>	Tb	159	771806.8	1.1				ug/L	910514	Standard
[	Ho	165	8.3	25.0				ug/L	7	Standard
	Tl	203	60.3	13.4	0.0016	0.001	45.7	ug/L	13	Standard
	Tl	205	2.3	49.5	0.0080	0.003	41.9	ug/L	1	Standard
	Pb	206	1549.1	4.2	0.1355	0.008	5.9	ug/L	342	Standard
	Pb	207	1302.1	4.4	0.1304	0.007	5.7	ug/L	284	Standard
	Pb	208	5964.5	2.8	0.1298	0.005	3.7	ug/L	1363	Standard
	U	238	18.3	19.2	0.0005	0.000	72.9	ug/L	2	Standard
[>	Bi	209	421605.6	0.8				ug/L	470592	Standard

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Na	23	1.7	173.2	0.2207	0.374	169.3	mg/L	2	Standard
Mg	24	24606.7	5.0	0.0146	0.001	5.3	mg/L	5586	Standard
K	39	20.0	50.0	0.3544	0.196	55.2	mg/L	5	Standard
Ca	43	56.7	13.5	1.2736	0.447	35.1	mg/L	45	Standard
Fe	54	172.4	9.4	-0.0570	0.011	19.2	mg/L	350	Standard
Fe	57	91.7	3.1	0.0812	0.013	16.0	mg/L	102	Standard
Sc-1	45	36475.5	3.0				mg/L	53004	Standard
Cl	35	1.7	34.6				ug/L	2	Standard
Kr	83	101.7	3.9				ug/L	157	Standard
Br	81	1.7	173.2				ug/L	3	Standard
P	31	37148.1	4.9				ug/L	91588	Standard
S	34	29588.9	1.0				ug/L	32556	Standard
Sr	88	73.3	14.2				ug/L	62	Standard
C	12	136.7	12.8				mg/L	133	Standard
N	14	1.7	173.2				mg/L	0	Standard
Hg	202	6.7	173.2				mg/L	7	Standard

QC Calculated Values

Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recovery
Li	7			
Be	9			
Al	27			
Sc	45			
Ti	47			
V	51			
Cr	52			
Cr	53			
Mn	55			
Co	59			
Ni	60			
Cu	65			
Zn	66			
Ge	72		77.179	
As	75			
Se	82			
Se-1	77			
Ga	71			
Rb	85			
Y	89			
Rh	103			

Sample ID: L1211024805

Report Date/Time: Sunday, November 18, 2012 13:59:13

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[	Mo	98	
[	Ag	107	
[	Cd	111	
[	Cd	114	
>	In	115	81.540
[	Sn	118	
[	Sb	123	
[	Ba	135	
[	Ce	140	
>	Tb	159	
[	Ho	165	
[	Tl	203	
[	Tl	205	
[	Pb	206	
[	Pb	207	
[	Pb	208	
[	U	238	
>	Bi	209	89.591
[	Na	23	
[	Mg	24	
[	K	39	
[	Ca	43	
[	Fe	54	
[	Fe	57	
>	Sc-1	45	
[	Cl	35	
[	Kr	83	
[	Br	81	
[	P	31	
[	S	34	
[	Sr	88	
[	C	12	
[	N	14	
[	Hg	202	

QC Out of Limits

Measurement Type	Analyte	Mass	Out of Limits Message

Sample ID: L1211024805

Report Date/Time: Sunday, November 18, 2012 13:59:13

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Method 6020 - Summary Report

Sample ID: QC Std 6

Sample Date/Time: Sunday, November 18, 2012 13:59:56

Number of Replicates: 3

Autosampler Position: 101

Sample Description:

Method File: C:\NexIONData\Method\6020a.mth

Aliquot Volume (mL):

Diluted to Volume (mL):

User Name: JYH user

Cumulative Autodilution Factor: 1

Nexion-ICP 200.8\6020

Concentration Results

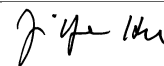
IS	Analyte	Mass	Intensity	RSD	Conc.	SD	RSD	Units	Blank Intens.	Mode
[	Li	7	7948.8	10.4	-521.7674	386.145	74.0	ug/L	8369	Standard
	Be	9	105379.2	5.3	59.9017	1.564	2.6	ug/L	18	Standard
	Al	27	6628289.3	4.2	63.8333	0.737	1.2	ug/L	215	Standard
[>	Sc	45	44786.1	3.0				ug/L	53004	Standard
[	Ti	47	44587.2	2.8	94.3548	0.783	0.8	ug/L	26	Standard
	V	51	529285.4	3.6	48.3159	0.528	1.1	ug/L	3223	Standard
	Cr	52	510099.8	3.8	49.6317	0.705	1.4	ug/L	10379	Standard
	Cr	53	62100.4	2.7	48.9865	0.471	1.0	ug/L	192	Standard
	Mn	55	786425.0	3.2	49.2661	0.560	1.1	ug/L	1840	Standard
	Co	59	612620.3	4.1	49.9760	0.801	1.6	ug/L	115	Standard
	Ni	60	130727.1	5.0	49.5631	1.192	2.4	ug/L	75	Standard
	Cu	65	128591.6	4.1	50.4937	0.773	1.5	ug/L	155	Standard
	Zn	66	63906.5	2.5	50.5957	0.034	0.1	ug/L	237	Standard
[>	Ge	72	379981.4	2.5				ug/L	413856	Standard
	As	75	66202.8	2.7	49.8116	0.496	1.0	ug/L	-197	Standard
	Se	82	5852.7	2.7	49.1925	0.220	0.4	ug/L	-5	Standard
[	Se-1	77	4593.7	2.2	50.0138	0.268	0.5	ug/L	105	Standard
[>	Ga	71	206.7	14.2				mg/L	225	Standard
[	Rb	85	970.0	8.5				ug/L	28	Standard
[	Y	89	281539.0	2.0				ug/L	322845	Standard
[>	Rh	103	116.7	17.3				ug/L	92	Standard
[	Mo	98	396885.8	4.5	93.4142	2.077	2.2	ug/L	18	Standard
	Ag	107	380691.2	4.1	50.9411	1.269	2.5	ug/L	63	Standard
	Cd	111	162386.6	3.2	50.2032	0.927	1.8	mg/L	20	Standard
	Cd	114	425979.8	3.4	50.0414	1.212	2.4	ug/L	56	Standard
[>	In	115	619704.6	2.4				ug/L	657102	Standard
	Sn	118	479882.3	3.4	51.0773	0.819	1.6	ug/L	555	Standard
	Sb	123	379289.0	2.2	51.3574	0.722	1.4	ug/L	62	Standard
[	Ba	135	161475.6	2.7	50.2775	0.479	1.0	ug/L	19	Standard
[	Ce	140	653.0	5.2				ug/L	24	Standard
[>	Tb	159	874130.0	1.7				ug/L	910514	Standard
[	Ho	165	432.0	3.7				ug/L	7	Standard
	Tl	203	627783.9	2.3	50.7033	0.754	1.5	ug/L	13	Standard
	Tl	205	19177.8	1.9	50.7727	0.721	1.4	ug/L	1	Standard
	Pb	206	507839.1	2.8	51.1613	0.979	1.9	ug/L	342	Standard
	Pb	207	431519.8	3.4	51.1316	1.320	2.6	ug/L	284	Standard
	Pb	208	1982484.3	3.4	50.5973	1.340	2.6	ug/L	1363	Standard
	U	238	508115.9	4.4	52.4006	1.904	3.6	ug/L	2	Standard
[>	Bi	209	454565.8	1.0				ug/L	470592	Standard

Sample ID: QC Std 6

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Na	23	3.3	86.6	0.3557	0.304	85.4	mg/L	2	Standard
Mg	24	301449.5	1.2	0.1722	0.003	1.9	mg/L	5586	Standard
K	39	331.7	10.6	5.2969	0.541	10.2	mg/L	5	Standard
Ca	43	106.7	22.2	3.1216	1.043	33.4	mg/L	45	Standard
Fe	54	12680.1	3.5	5.6115	0.060	1.1	mg/L	350	Standard
Fe	57	3030.3	5.1	5.5097	0.384	7.0	mg/L	102	Standard
Sc-1	45	44786.1	3.0				mg/L	53004	Standard
Cl	35	1.0	0.0				ug/L	2	Standard
Kr	83	109.6	2.8				ug/L	157	Standard
Br	81	9.2	41.7				ug/L	3	Standard
P	31	112207.3	1.2				ug/L	91588	Standard
S	34	33872.8	2.2				ug/L	32556	Standard
Sr	88	70.0	25.8				ug/L	62	Standard
C	12	151.7	15.6				mg/L	133	Standard
N	14	1.7	173.2				mg/L	0	Standard
Hg	202	6.7	86.6				mg/L	7	Standard

QC Calculated Values

Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recovery
Li	7			
Be	9	119.803		
Al	27	127.667		
Sc	45			
Ti	47	94.355		
V	51	96.632		
Cr	52	99.263		
Cr	53			
Mn	55	98.532		
Co	59	99.952		
Ni	60	99.126		
Cu	65	100.987		
Zn	66	101.191		
Ge	72		91.815	
As	75	99.623		
Se	82	98.385		
Se-1	77			
Ga	71			
Rb	85			
Y	89			
Rh	103			

Sample ID: QC Std 6

Report Date/Time: Sunday, November 18, 2012 14:02:28

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[	Mo	98	93.414	
[	Ag	107	101.882	
[	Cd	111	100.406	
[	Cd	114		
>	In	115		94.309
[	Sn	118	102.155	
[	Sb	123	102.715	
[	Ba	135	100.555	
[	Ce	140		
>	Tb	159		
[	Ho	165		
[	Tl	203	101.407	
[	Tl	205		
[	Pb	206	102.323	
[	Pb	207	102.263	
[	Pb	208	101.195	
[	U	238	104.801	
>	Bi	209		96.595
[	Na	23		
[	Mg	24		
[	K	39		
[	Ca	43		
[	Fe	54		
[	Fe	57		
>	Sc-1	45		
[	Cl	35		
[	Kr	83		
[	Br	81		
[	P	31		
[	S	34		
[	Sr	88		
[	C	12		
[	N	14		
[	Hg	202		

QC Out of Limits

Measurement Type	Analyte	Mass	Out of Limits Message
QC Std 6	Be	9	
QC Std 6	Al	27	

Sample ID: QC Std 6

Report Date/Time: Sunday, November 18, 2012 14:02:28

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Method 6020 - Summary Report

Sample ID: QC Std 7

Sample Date/Time: Sunday, November 18, 2012 14:03:08

Number of Replicates: 3

Autosampler Position: 102

Sample Description:

Method File: C:\NexIONData\Method\6020a.mth

Aliquot Volume (mL):

Diluted to Volume (mL):

User Name: JYH user

Cumulative Autodilution Factor: 1

Nexion-ICP 200.8\6020

Concentration Results

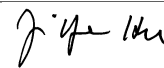
IS	Analyte	Mass	Intensity	RSD	Conc.	SD	RSD	Units	Blank Intens.	Mode
[	Li	7	8412.3	7.8	-939.3008	334.045	35.6	ug/L	8369	Standard
	Be	9	10.0	50.0	-0.0036	0.003	88.6	ug/L	18	Standard
	Al	27	275.0	17.3	0.0005	0.000	70.2	ug/L	215	Standard
[>	Sc	45	43925.3	4.2				ug/L	53004	Standard
[	Ti	47	16.0	16.5	-0.0252	0.006	21.9	ug/L	26	Standard
	V	51	2595.1	0.8	-0.0256	0.006	23.6	ug/L	3223	Standard
	Cr	52	8092.8	1.4	-0.1013	0.022	21.4	ug/L	10379	Standard
	Cr	53	160.0	11.3	0.0185	0.013	69.3	ug/L	192	Standard
	Mn	55	1372.7	3.1	-0.0015	0.002	150.9	ug/L	1840	Standard
	Co	59	72.0	16.4	-0.0096	0.001	9.1	ug/L	115	Standard
	Ni	60	59.0	17.9	-0.0128	0.004	28.5	ug/L	75	Standard
	Cu	65	193.7	11.6	0.0197	0.008	41.3	ug/L	155	Standard
	Zn	66	208.3	5.3	-0.0315	0.006	19.7	ug/L	237	Standard
[>	Ge	72	374348.7	1.8				ug/L	413856	Standard
	As	75	-156.1	7.3	0.0210	0.009	42.7	ug/L	-197	Standard
	Se	82	1.7	137.0	0.0198	0.020	100.8	ug/L	-5	Standard
[	Se-1	77	95.0	13.7	0.0929	0.159	171.3	ug/L	105	Standard
[>	Ga	71	158.3	14.2				mg/L	225	Standard
[	Rb	85	23.3	44.6				ug/L	28	Standard
[	Y	89	281165.3	1.8				ug/L	322845	Standard
[>	Rh	103	80.0	18.8				ug/L	92	Standard
[	Mo	98	35.9	57.3	-0.0003	0.004	1472.1	ug/L	18	Standard
	Ag	107	66.7	9.8	0.0011	0.001	87.6	ug/L	63	Standard
	Cd	111	21.0	23.8	-0.0047	0.001	28.5	mg/L	20	Standard
	Cd	114	59.0	25.7	-0.0026	0.002	57.2	ug/L	56	Standard
[>	In	115	615223.6	3.9				ug/L	657102	Standard
	Sn	118	335.3	2.5	-0.0133	0.002	14.6	ug/L	555	Standard
	Sb	123	261.2	37.9	0.0324	0.012	37.4	ug/L	62	Standard
[	Ba	135	19.0	13.9	-0.0140	0.001	5.9	ug/L	19	Standard
[	Ce	140	23.3	10.8				ug/L	24	Standard
[>	Tb	159	866021.7	3.3				ug/L	910514	Standard
[	Ho	165	8.7	26.6				ug/L	7	Standard
	Tl	203	26.0	10.2	-0.0016	0.000	12.8	ug/L	13	Standard
	Tl	205	1.3	114.6	0.0048	0.004	82.4	ug/L	1	Standard
	Pb	206	313.3	7.2	-0.0015	0.002	121.7	ug/L	342	Standard
	Pb	207	300.3	5.4	-0.0006	0.002	394.8	ug/L	284	Standard
	Pb	208	1277.4	3.7	-0.0020	0.001	31.4	ug/L	1363	Standard
	U	238	5.3	43.3	-0.0010	0.000	22.7	ug/L	2	Standard
[>	Bi	209	456561.1	2.2				ug/L	470592	Standard

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Na	23	0.0		0.0050	0.000	0.0	mg/L	2	Standard
Mg	24	1215.0	11.8	-0.0022	0.000	3.1	mg/L	5586	Standard
K	39	1.7	173.2	-0.0126	0.050	393.9	mg/L	5	Standard
Ca	43	43.3	43.7	0.0239	1.089	4553.6	mg/L	45	Standard
Fe	54	325.9	10.2	-0.0024	0.014	593.8	mg/L	350	Standard
Fe	57	93.3	12.4	0.0493	0.027	55.4	mg/L	102	Standard
Sc-1	45	43925.3	4.2				mg/L	53004	Standard
Cl	35	2.7	21.7				ug/L	2	Standard
Kr	83	108.4	1.8				ug/L	157	Standard
Br	81	6.7	21.7				ug/L	3	Standard
P	31	111339.4	1.9				ug/L	91588	Standard
S	34	33700.8	2.7				ug/L	32556	Standard
Sr	88	70.0	43.4				ug/L	62	Standard
C	12	106.7	9.8				mg/L	133	Standard
N	14	0.0					mg/L	0	Standard
Hg	202	1.7	173.2				mg/L	7	Standard

QC Calculated Values

Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recovery
Li	7			
Be	9			
Al	27			
Sc	45			
Ti	47			
V	51			
Cr	52			
Cr	53			
Mn	55			
Co	59			
Ni	60			
Cu	65			
Zn	66			
Ge	72		90.454	
As	75			
Se	82			
Se-1	77			
Ga	71			
Rb	85			
Y	89			
Rh	103			

Sample ID: QC Std 7

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[	Mo	98	
[	Ag	107	
[	Cd	111	
[	Cd	114	
>	In	115	93.627
[	Sn	118	
[	Sb	123	
[	Ba	135	
[	Ce	140	
>	Tb	159	
[	Ho	165	
[	Tl	203	
[	Tl	205	
[	Pb	206	
[	Pb	207	
[	Pb	208	
[	U	238	
>	Bi	209	97.019
[	Na	23	
[	Mg	24	
[	K	39	
[	Ca	43	
[	Fe	54	
[	Fe	57	
>	Sc-1	45	
[	Cl	35	
[	Kr	83	
[	Br	81	
[	P	31	
[	S	34	
[	Sr	88	
[	C	12	
[	N	14	
[	Hg	202	

QC Out of Limits

Measurement Type	Analyte	Mass	Out of Limits Message

Sample ID: QC Std 7

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Method 6020 - Summary Report

Sample ID: QC Std 8

Sample Date/Time: Sunday, November 18, 2012 14:06:22

Number of Replicates: 3

Autosampler Position: 202

Sample Description:

Method File: C:\NexIONData\Method\6020a.mth

Aliquot Volume (mL):

Diluted to Volume (mL):

User Name: JYH user

Cumulative Autodilution Factor: 1

Nexion-ICP 200.8\6020

Concentration Results

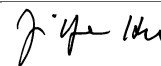
IS	Analyte	Mass	Intensity	RSD	Conc.	SD	RSD	Units	Blank Intens.	Mode
[	Li	7	8033.8	9.1	-679.0919	310.371	45.7	ug/L	8369	Standard
	Be	9	366.7	25.7	0.2043	0.062	30.2	ug/L	18	Standard
	Al	27	408.3	44.9	0.0018	0.002	97.8	ug/L	215	Standard
[>	Sc	45	43952.1	3.9				ug/L	53004	Standard
	Ti	47	22.0	13.6	-0.0121	0.005	37.5	ug/L	26	Standard
	V	51	6485.1	5.6	0.3406	0.010	2.9	ug/L	3223	Standard
	Cr	52	15516.6	3.5	0.6561	0.018	2.7	ug/L	10379	Standard
	Cr	53	1040.0	4.5	0.7309	0.037	5.1	ug/L	192	Standard
	Mn	55	8756.9	5.9	0.4724	0.010	2.2	ug/L	1840	Standard
	Co	59	4621.7	7.0	0.3697	0.014	3.7	ug/L	115	Standard
	Ni	60	4097.6	8.6	1.5518	0.072	4.6	ug/L	75	Standard
	Cu	65	2137.5	7.5	0.8005	0.029	3.7	ug/L	155	Standard
	Zn	66	7678.3	7.7	6.0309	0.229	3.8	ug/L	237	Standard
[>	Ge	72	371855.1	4.1				ug/L	413856	Standard
	As	75	322.6	21.9	0.3862	0.044	11.4	ug/L	-197	Standard
	Se	82	41.7	21.6	0.3613	0.062	17.2	ug/L	-5	Standard
[	Se-1	77	136.3	1.8	0.5697	0.079	13.8	ug/L	105	Standard
[>	Ga	71	181.7	6.9				mg/L	225	Standard
	Rb	85	20.0	25.0				ug/L	28	Standard
	Y	89	274288.9	4.6				ug/L	322845	Standard
[>	Rh	103	95.0	19.0				ug/L	92	Standard
	Mo	98	30.8	53.8	-0.0012	0.004	353.2	ug/L	18	Standard
	Ag	107	2965.3	4.4	0.4024	0.002	0.6	ug/L	63	Standard
	Cd	111	743.3	6.9	0.2263	0.007	3.2	mg/L	20	Standard
	Cd	114	2019.2	6.4	0.2355	0.006	2.7	ug/L	56	Standard
[>	In	115	599442.0	3.8				ug/L	657102	Standard
	Sn	118	346.3	5.4	-0.0112	0.003	24.9	ug/L	555	Standard
	Sb	123	2921.4	6.8	0.4057	0.014	3.5	ug/L	62	Standard
[	Ba	135	2256.5	8.5	0.7060	0.036	5.2	ug/L	19	Standard
	Ce	140	26.0	16.8				ug/L	24	Standard
[>	Tb	159	856211.9	4.3				ug/L	910514	Standard
	Ho	165	6.0	33.3				ug/L	7	Standard
	Tl	203	1002.0	6.5	0.0784	0.003	4.0	ug/L	13	Standard
	Tl	205	25.3	17.8	0.0691	0.010	14.5	ug/L	1	Standard
	Pb	206	2243.8	3.8	0.1964	0.003	1.7	ug/L	342	Standard
	Pb	207	1947.5	1.0	0.1982	0.005	2.5	ug/L	284	Standard
	Pb	208	8911.4	3.7	0.1963	0.003	1.3	ug/L	1363	Standard
	U	238	3764.8	7.1	0.3921	0.022	5.7	ug/L	2	Standard
[>	Bi	209	448309.8	3.0				ug/L	470592	Standard

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Na	23	0.0		0.0050	0.000	0.0	mg/L	2	Standard
Mg	24	1145.0	1.2	-0.0022	0.000	1.2	mg/L	5586	Standard
K	39	10.0	132.3	0.1260	0.225	178.7	mg/L	5	Standard
Ca	43	41.7	25.0	-0.1018	0.471	462.3	mg/L	45	Standard
Fe	54	309.0	7.9	-0.0104	0.006	60.7	mg/L	350	Standard
Fe	57	103.3	19.6	0.0669	0.032	48.0	mg/L	102	Standard
Sc-1	45	43952.1	3.9				mg/L	53004	Standard
Cl	35	3.0	88.2				ug/L	2	Standard
Kr	83	112.7	4.9				ug/L	157	Standard
Br	81	8.3	86.6				ug/L	3	Standard
P	31	109345.9	3.1				ug/L	91588	Standard
S	34	32514.9	1.7				ug/L	32556	Standard
Sr	88	85.0	11.8				ug/L	62	Standard
C	12	148.3	8.5				mg/L	133	Standard
N	14	0.0					mg/L	0	Standard
Hg	202	3.3	173.2				mg/L	7	Standard

QC Calculated Values

Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recovery
Li	7			
Be	9	102.164		
Al	27			
Sc	45			
Ti	47			
V	51	85.157		
Cr	52	82.011		
Cr	53			
Mn	55	94.484		
Co	59	92.425		
Ni	60	96.987		
Cu	65	100.067		
Zn	66	96.494		
Ge	72		89.851	
As	75	96.551		
Se	82	90.327		
Se-1	77			
Ga	71			
Rb	85			
Y	89			
Rh	103			

Sample ID: QC Std 8

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[	Mo	98		
[	Ag	107	100.598	
[	Cd	111	94.278	
[	Cd	114		
>	In	115		91.225
[	Sn	118		
[	Sb	123	101.433	
[	Ba	135	94.128	
[	Ce	140		
>	Tb	159		
[	Ho	165		
[	Tl	203	97.975	
[	Tl	205		
[	Pb	206		
[	Pb	207		
[	Pb	208	98.163	
[	U	238	98.019	
>	Bi	209		95.265
[	Na	23		
[	Mg	24		
[	K	39		
[	Ca	43		
[	Fe	54		
[	Fe	57		
>	Sc-1	45		
[	Cl	35		
[	Kr	83		
[	Br	81		
[	P	31		
[	S	34		
[	Sr	88		
[	C	12		
[	N	14		
[	Hg	202		

QC Out of Limits

Measurement Type	Analyte	Mass	Out of Limits Message

Sample ID: QC Std 8

Report Date/Time: Sunday, November 18, 2012 14:08:55

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Method 6020 - Summary Report

Sample ID: PBW 58 WG414119-03

Sample Date/Time: Sunday, November 18, 2012 14:09:37

Number of Replicates: 3

Autosampler Position: 301

Sample Description: 1

Method File: C:\NexIONData\Method\6020a.mth

Aliquot Volume (mL):

Diluted to Volume (mL):

User Name: JYH user

Cumulative Autodilution Factor: 1

Nexion-ICP 200.8\6020

Concentration Results

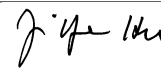
IS	Analyte	Mass	Intensity	RSD	Conc.	SD	RSD	Units	Blank Intens.	Mode
[	Li	7	7421.8	5.3	-791.5265	269.106	34.0	ug/L	8369	Standard
	Be	9	8.3	69.3	-0.0041	0.004	88.5	ug/L	18	Standard
	Al	27	206.7	44.4	0.0001	0.001	1286.3	ug/L	215	Standard
[>	Sc	45	39819.0	3.1				ug/L	53004	Standard
[	Ti	47	12.3	16.9	-0.0308	0.005	16.5	ug/L	26	Standard
	V	51	2357.7	3.2	-0.0294	0.005	17.3	ug/L	3223	Standard
	Cr	52	7417.1	2.0	-0.1069	0.015	13.6	ug/L	10379	Standard
	Cr	53	114.2	24.4	-0.0103	0.025	241.7	ug/L	192	Standard
	Mn	55	1082.4	4.2	-0.0142	0.003	22.0	ug/L	1840	Standard
	Co	59	79.7	33.0	-0.0083	0.002	29.6	ug/L	115	Standard
	Ni	60	165.7	2.1	0.0337	0.001	2.5	ug/L	75	Standard
	Cu	65	160.0	7.0	0.0117	0.005	41.3	ug/L	155	Standard
	Zn	66	1003.0	6.2	0.6781	0.064	9.4	ug/L	237	Standard
[>	Ge	72	345375.1	1.3				ug/L	413856	Standard
	As	75	-108.4	19.5	0.0506	0.016	32.4	ug/L	-197	Standard
	Se	82	11.8	19.8	0.1140	0.020	17.8	ug/L	-5	Standard
[	Se-1	77	95.0	3.2	0.1818	0.051	28.1	ug/L	105	Standard
[>	Ga	71	155.0	14.1				mg/L	225	Standard
[	Rb	85	21.7	74.2				ug/L	28	Standard
[	Y	89	254378.5	2.5				ug/L	322845	Standard
[>	Rh	103	90.0	16.7				ug/L	92	Standard
[	Mo	98	12.3	37.4	-0.0055	0.001	22.6	ug/L	18	Standard
	Ag	107	49.3	11.2	-0.0007	0.001	100.1	ug/L	63	Standard
	Cd	111	18.3	16.7	-0.0050	0.001	23.8	mg/L	20	Standard
	Cd	114	45.0	29.5	-0.0038	0.002	41.7	ug/L	56	Standard
[>	In	115	565503.1	3.0				ug/L	657102	Standard
	Sn	118	274.7	3.5	-0.0173	0.000	2.8	ug/L	555	Standard
	Sb	123	43.1	16.4	0.0035	0.001	35.8	ug/L	62	Standard
[	Ba	135	17.0	27.0	-0.0141	0.001	10.3	ug/L	19	Standard
[	Ce	140	15.7	13.3				ug/L	24	Standard
[>	Tb	159	804590.5	2.4				ug/L	910514	Standard
[	Ho	165	5.3	65.8				ug/L	7	Standard
	Tl	203	21.3	13.5	-0.0018	0.000	13.3	ug/L	13	Standard
	Tl	205	0.3	173.2	0.0022	0.002	73.7	ug/L	1	Standard
	Pb	206	301.3	5.8	-0.0003	0.002	715.3	ug/L	342	Standard
	Pb	207	250.7	2.0	-0.0042	0.001	14.8	ug/L	284	Standard
	Pb	208	1186.0	1.5	-0.0020	0.000	12.0	ug/L	1363	Standard
	U	238	3.7	78.7	-0.0011	0.000	27.4	ug/L	2	Standard
[>	Bi	209	424179.8	2.0				ug/L	470592	Standard

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Na	23	1.7	173.2	0.1999	0.337	168.9	mg/L	2	Standard
Mg	24	915.0	4.7	-0.0023	0.000	1.1	mg/L	5586	Standard
K	39	3.3	86.6	0.0192	0.052	273.6	mg/L	5	Standard
Ca	43	43.3	17.6	0.2301	0.478	207.9	mg/L	45	Standard
Fe	54	265.5	5.7	-0.0178	0.004	20.5	mg/L	350	Standard
Fe	57	108.3	29.3	0.0997	0.074	74.4	mg/L	102	Standard
Sc-1	45	39819.0	3.1				mg/L	53004	Standard
Cl	35	2.0	50.0				ug/L	2	Standard
Kr	83	99.1	4.5				ug/L	157	Standard
Br	81	10.0	43.3				ug/L	3	Standard
P	31	71916.1	1.9				ug/L	91588	Standard
S	34	31183.7	0.6				ug/L	32556	Standard
Sr	88	63.3	39.7				ug/L	62	Standard
C	12	103.3	19.6				mg/L	133	Standard
N	14	1.7	173.2				mg/L	0	Standard
Hg	202	1.7	173.2				mg/L	7	Standard

QC Calculated Values

Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recovery
Li	7			
Be	9			
Al	27			
Sc	45			
Ti	47			
V	51			
Cr	52			
Cr	53			
Mn	55			
Co	59			
Ni	60			
Cu	65			
Zn	66			
Ge	72		83.453	
As	75			
Se	82			
Se-1	77			
Ga	71			
Rb	85			
Y	89			
Rh	103			

Sample ID: PBW 58 WG414119-03

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[	Mo	98	
[	Ag	107	
[	Cd	111	
[	Cd	114	
>	In	115	86.060
[	Sn	118	
[	Sb	123	
[	Ba	135	
[	Ce	140	
>	Tb	159	
[	Ho	165	
[	Tl	203	
[	Tl	205	
[	Pb	206	
[	Pb	207	
[	Pb	208	
[	U	238	
>	Bi	209	90.138
[	Na	23	
[	Mg	24	
[	K	39	
[	Ca	43	
[	Fe	54	
[	Fe	57	
>	Sc-1	45	
[	Cl	35	
[	Kr	83	
[	Br	81	
[	P	31	
[	S	34	
[	Sr	88	
[	C	12	
[	N	14	
[	Hg	202	

QC Out of Limits

Measurement Type	Analyte	Mass	Out of Limits Message

Sample ID: PBW 58 WG414119-03

Report Date/Time: Sunday, November 18, 2012 14:12:09

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Method 6020 - Summary Report

Sample ID: LCSW 58 WG414119-04

Sample Date/Time: Sunday, November 18, 2012 14:12:49

Number of Replicates: 3

Autosampler Position: 302

Sample Description: 1

Method File: C:\NexIONData\Method\6020a.mth

Aliquot Volume (mL):

Diluted to Volume (mL):

User Name: JYH user

Cumulative Autodilution Factor: 1

Nexion-ICP 200.8\6020

Concentration Results

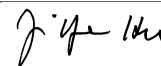
IS	Analyte	Mass	Intensity	RSD	Conc.	SD	RSD	Units	Blank Intens.	Mode
[	Li	7	8457.4	0.8	-687.7627	126.982	18.5	ug/L	8369	Standard
	Be	9	54648.5	4.6	30.0945	1.578	5.2	ug/L	18	Standard
	Al	27	2116.8	24.5	0.0175	0.005	26.0	ug/L	215	Standard
[>	Sc	45	46255.5	1.6				ug/L	53004	Standard
[	Ti	47	26.0	31.5	-0.0061	0.016	261.9	ug/L	26	Standard
	V	51	279102.9	1.9	24.7204	0.695	2.8	ug/L	3223	Standard
	Cr	52	275582.5	3.9	25.7182	1.097	4.3	ug/L	10379	Standard
	Cr	53	33664.9	3.7	25.8435	1.035	4.0	ug/L	192	Standard
	Mn	55	431750.0	3.3	26.3344	0.912	3.5	ug/L	1840	Standard
	Co	59	328174.5	2.9	26.1033	0.731	2.8	ug/L	115	Standard
	Ni	60	69943.9	3.8	25.8452	0.756	2.9	ug/L	75	Standard
	Cu	65	71033.3	4.4	27.1712	0.960	3.5	ug/L	155	Standard
	Zn	66	35325.2	3.8	27.1731	0.830	3.1	ug/L	237	Standard
[>	Ge	72	389743.8	1.8				ug/L	413856	Standard
	As	75	34961.4	3.9	25.7144	0.878	3.4	ug/L	-197	Standard
	Se	82	3093.1	3.7	25.3517	0.883	3.5	ug/L	-5	Standard
[	Se-1	77	2469.9	5.5	25.7573	1.596	6.2	ug/L	105	Standard
[>	Ga	71	208.3	3.7				mg/L	225	Standard
[	Rb	85	33.3	22.9				ug/L	28	Standard
[	Y	89	288305.5	0.5				ug/L	322845	Standard
[>	Rh	103	116.7	6.5				ug/L	92	Standard
[	Mo	98	35.0	73.7	-0.0007	0.006	870.6	ug/L	18	Standard
	Ag	107	204044.1	0.8	26.7357	0.252	0.9	ug/L	63	Standard
	Cd	111	86573.5	4.0	26.1943	0.657	2.5	mg/L	20	Standard
	Cd	114	222776.7	3.4	25.6136	0.512	2.0	ug/L	56	Standard
[>	In	115	632963.3	1.8				ug/L	657102	Standard
	Sn	118	393.3	4.4	-0.0084	0.001	15.0	ug/L	555	Standard
	Sb	123	199146.3	2.5	26.3950	0.336	1.3	ug/L	62	Standard
[	Ba	135	86396.4	2.7	26.3261	0.391	1.5	ug/L	19	Standard
[	Ce	140	112.3	16.0				ug/L	24	Standard
[>	Tb	159	886105.8	1.6				ug/L	910514	Standard
[	Ho	165	10.3	14.8				ug/L	7	Standard
	Tl	203	333520.3	1.4	26.6893	0.408	1.5	ug/L	13	Standard
	Tl	205	10259.8	2.0	26.9142	0.564	2.1	ug/L	1	Standard
	Pb	206	267616.2	3.8	26.7004	1.036	3.9	ug/L	342	Standard
	Pb	207	229958.7	2.7	26.9842	0.736	2.7	ug/L	284	Standard
	Pb	208	1056983.5	3.1	26.7157	0.860	3.2	ug/L	1363	Standard
	U	238	259141.9	4.0	26.4828	1.066	4.0	ug/L	2	Standard
[>	Bi	209	458792.0	0.4				ug/L	470592	Standard

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Na	23	1.7	173.2	0.1766	0.297	168.3	mg/L	2	Standard
Mg	24	1418.4	8.7	-0.0021	0.000	2.7	mg/L	5586	Standard
K	39	5.0	100.0	0.0364	0.077	211.4	mg/L	5	Standard
Ca	43	53.3	10.8	0.3689	0.254	68.9	mg/L	45	Standard
Fe	54	370.1	12.7	0.0095	0.021	222.6	mg/L	350	Standard
Fe	57	110.0	4.5	0.0699	0.012	17.3	mg/L	102	Standard
Sc-1	45	46255.5	1.6				mg/L	53004	Standard
Cl	35	3.7	41.7				ug/L	2	Standard
Kr	83	108.0	5.3				ug/L	157	Standard
Br	81	5.0	50.0				ug/L	3	Standard
P	31	120439.4	1.9				ug/L	91588	Standard
S	34	33055.2	0.9				ug/L	32556	Standard
Sr	88	65.0	30.8				ug/L	62	Standard
C	12	185.0	26.6				mg/L	133	Standard
N	14	0.0					mg/L	0	Standard
Hg	202	1.7	173.2				mg/L	7	Standard

QC Calculated Values

Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recovery
Li	7			
Be	9			
Al	27			
Sc	45			
Ti	47			
V	51			
Cr	52			
Cr	53			
Mn	55			
Co	59			
Ni	60			
Cu	65			
Zn	66			
Ge	72		94.174	
As	75			
Se	82			
Se-1	77			
Ga	71			
Rb	85			
Y	89			
Rh	103			

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[	Mo	98	
[	Ag	107	
[	Cd	111	
[	Cd	114	
>	In	115	96.327
[	Sn	118	
[	Sb	123	
[	Ba	135	
[	Ce	140	
>	Tb	159	
[	Ho	165	
[	Tl	203	
[	Tl	205	
[	Pb	206	
[	Pb	207	
[	Pb	208	
[	U	238	
>	Bi	209	97.493
[	Na	23	
[	Mg	24	
[	K	39	
[	Ca	43	
[	Fe	54	
[	Fe	57	
>	Sc-1	45	
[	Cl	35	
[	Kr	83	
[	Br	81	
[	P	31	
[	S	34	
[	Sr	88	
[	C	12	
[	N	14	
[	Hg	202	

QC Out of Limits

Measurement Type	Analyte	Mass	Out of Limits Message

Sample ID: LCSW 58 WG414119-04

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Method 6020 - Summary Report

Sample ID: L1211023001 WG414119-01

Sample Date/Time: Sunday, November 18, 2012 14:27:04

Number of Replicates: 3

Autosampler Position: 303

Sample Description: 1

Method File: C:\NexIONData\Method\6020a.mth

Aliquot Volume (mL):

Diluted to Volume (mL):

User Name: JYH user

Cumulative Autodilution Factor: 1

Nexion-ICP 200.8\6020

Concentration Results

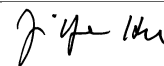
IS	Analyte	Mass	Intensity	RSD	Conc.	SD	RSD	Units	Blank Intens.	Mode
[	Li	7	30679.4	5.9	-14400.8148	158.605	1.1	ug/L	8369	Standard
	Be	9	25.0	40.0	0.0039	0.005	120.8	ug/L	18	Standard
	Al	27	5912733.5	5.1	54.1747	1.460	2.7	ug/L	215	Standard
[>	Sc	45	47098.2	5.3				ug/L	53004	Standard
[	Ti	47	753.7	7.9	1.5789	0.097	6.1	ug/L	26	Standard
	V	51	1807.1	26.4	-0.0980	0.039	39.9	ug/L	3223	Standard
	Cr	52	10454.3	3.0	0.1488	0.015	9.8	ug/L	10379	Standard
	Cr	53	2686.9	22.1	2.0848	0.551	26.4	ug/L	192	Standard
	Mn	55	292835.1	5.4	18.7853	0.534	2.8	ug/L	1840	Standard
	Co	59	908.4	2.7	0.0607	0.002	2.8	ug/L	115	Standard
	Ni	60	2432.9	2.8	0.9132	0.012	1.4	ug/L	75	Standard
	Cu	65	8804.9	4.9	3.4985	0.098	2.8	ug/L	155	Standard
	Zn	66	16112.9	6.1	12.9500	0.425	3.3	ug/L	237	Standard
[>	Ge	72	369895.0	3.4				ug/L	413856	Standard
	As	75	184.6	1.9	0.2824	0.007	2.3	ug/L	-197	Standard
	Se	82	75.9	8.6	0.6612	0.066	10.0	ug/L	-5	Standard
[	Se-1	77	308.0	7.4	2.5418	0.376	14.8	ug/L	105	Standard
[>	Ga	71	230.0	7.8				mg/L	225	Standard
[	Rb	85	35820.7	5.4				ug/L	28	Standard
[	Y	89	289098.0	2.4				ug/L	322845	Standard
[>	Rh	103	116.7	19.3				ug/L	92	Standard
[	Mo	98	576.6	5.0	0.1308	0.007	5.4	ug/L	18	Standard
	Ag	107	61.7	9.5	0.0006	0.001	94.9	ug/L	63	Standard
	Cd	111	99.3	8.9	0.0204	0.003	14.2	mg/L	20	Standard
	Cd	114	273.8	4.5	0.0235	0.001	4.7	ug/L	56	Standard
[>	In	115	603473.3	3.1				ug/L	657102	Standard
	Sn	118	827.7	1.4	0.0413	0.004	9.7	ug/L	555	Standard
	Sb	123	580.6	5.6	0.0778	0.002	3.0	ug/L	62	Standard
[	Ba	135	84046.0	3.9	26.8594	0.214	0.8	ug/L	19	Standard
[	Ce	140	445.3	8.9				ug/L	24	Standard
[>	Tb	159	871595.2	2.6				ug/L	910514	Standard
[	Ho	165	27.7	18.5				ug/L	7	Standard
	Tl	203	222.0	9.4	0.0153	0.002	15.1	ug/L	13	Standard
	Tl	205	8.0	33.1	0.0236	0.007	30.5	ug/L	1	Standard
	Pb	206	915.7	4.5	0.0646	0.002	3.0	ug/L	342	Standard
	Pb	207	731.4	3.5	0.0555	0.002	2.7	ug/L	284	Standard
	Pb	208	3502.2	4.8	0.0600	0.002	3.9	ug/L	1363	Standard
	U	238	372.0	0.8	0.0390	0.001	3.0	ug/L	2	Standard
[>	Bi	209	430282.2	2.6				ug/L	470592	Standard

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Na	23	3.3	173.2	0.3582	0.612	170.8	mg/L	2	Standard
Mg	24	880391.7	3.0	0.4836	0.011	2.3	mg/L	5586	Standard
K	39	310.0	3.2	4.7102	0.259	5.5	mg/L	5	Standard
Ca	43	811.7	7.5	36.6323	1.565	4.3	mg/L	45	Standard
Fe	54	351.8	4.2	-0.0010	0.013	1296.8	mg/L	350	Standard
Fe	57	368.3	13.3	0.5211	0.052	10.0	mg/L	102	Standard
Sc-1	45	47098.2	5.3				mg/L	53004	Standard
Cl	35	0.7	173.2				ug/L	2	Standard
Kr	83	113.0	6.3				ug/L	157	Standard
Br	81	5.0	86.6				ug/L	3	Standard
P	31	138702.2	2.5				ug/L	91588	Standard
S	34	29361.8	2.7				ug/L	32556	Standard
Sr	88	256.7	13.0				ug/L	62	Standard
C	12	345.0	4.3				mg/L	133	Standard
N	14	0.0					mg/L	0	Standard
Hg	202	3.3	86.6				mg/L	7	Standard

QC Calculated Values

Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recovery
Li	7			
Be	9			
Al	27			
Sc	45			
Ti	47			
V	51			
Cr	52			
Cr	53			
Mn	55			
Co	59			
Ni	60			
Cu	65			
Zn	66			
Ge	72		89.378	
As	75			
Se	82			
Se-1	77			
Ga	71			
Rb	85			
Y	89			
Rh	103			

Sample ID: L1211023001 WG414119-01

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[	Mo	98	
[	Ag	107	
[	Cd	111	
[	Cd	114	
>	In	115	91.839
[	Sn	118	
[	Sb	123	
[	Ba	135	
[	Ce	140	
>	Tb	159	
[	Ho	165	
[	Tl	203	
[	Tl	205	
[	Pb	206	
[	Pb	207	
[	Pb	208	
[	U	238	
>	Bi	209	91.434
[	Na	23	
[	Mg	24	
[	K	39	
[	Ca	43	
[	Fe	54	
[	Fe	57	
>	Sc-1	45	
[	Cl	35	
[	Kr	83	
[	Br	81	
[	P	31	
[	S	34	
[	Sr	88	
[	C	12	
[	N	14	
[	Hg	202	

QC Out of Limits

Measurement Type	Analyte	Mass	Out of Limits Message

Sample ID: L1211023001 WG414119-01

Report Date/Time: Sunday, November 18, 2012 14:29:36

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Method 6020 - Summary Report

Sample ID: L1211023001DP WG414119-05

Sample Date/Time: Sunday, November 18, 2012 14:30:16

Number of Replicates: 3

Autosampler Position: 304

Sample Description: 1

Method File: C:\NexIONData\Method\6020a.mth

Aliquot Volume (mL):

Diluted to Volume (mL):

User Name: JYH user

Cumulative Autodilution Factor: 1

Nexion-ICP 200.8\6020

Concentration Results

IS	Analyte	Mass	Intensity	RSD	Conc.	SD	RSD	Units	Blank Intens.	Mode
[	Li	7	31805.2	10.3	-15349.6058	1545.502	10.1	ug/L	8369	Standard
	Be	9	11.7	24.7	-0.0030	0.002	67.2	ug/L	18	Standard
	Al	27	6145781.6	3.5	57.0682	1.805	3.2	ug/L	215	Standard
[>	Sc	45	46506.4	5.7				ug/L	53004	Standard
[	Ti	47	684.0	5.7	1.3794	0.024	1.7	ug/L	26	Standard
	V	51	801.5	27.6	-0.1946	0.018	9.4	ug/L	3223	Standard
	Cr	52	11313.9	4.3	0.1995	0.049	24.4	ug/L	10379	Standard
	Cr	53	3991.4	5.4	3.0308	0.226	7.4	ug/L	192	Standard
	Mn	55	308277.4	5.9	19.1389	0.697	3.6	ug/L	1840	Standard
	Co	59	910.4	10.5	0.0582	0.006	9.8	ug/L	115	Standard
	Ni	60	2814.9	4.8	1.0263	0.020	1.9	ug/L	75	Standard
	Cu	65	9197.8	3.9	3.5389	0.126	3.6	ug/L	155	Standard
	Zn	66	16468.0	4.8	12.8099	0.310	2.4	ug/L	237	Standard
[>	Ge	72	382427.5	5.1				ug/L	413856	Standard
	As	75	261.7	6.4	0.3353	0.013	3.9	ug/L	-197	Standard
	Se	82	104.2	12.1	0.8771	0.110	12.6	ug/L	-5	Standard
[	Se-1	77	360.3	5.7	2.9947	0.052	1.7	ug/L	105	Standard
[>	Ga	71	223.3	10.1				mg/L	225	Standard
[	Rb	85	37571.7	7.8				ug/L	28	Standard
[	Y	89	295790.0	7.0				ug/L	322845	Standard
[>	Rh	103	121.7	18.5				ug/L	92	Standard
[	Mo	98	572.4	10.2	0.1271	0.011	8.7	ug/L	18	Standard
	Ag	107	50.3	20.3	-0.0011	0.001	111.5	ug/L	63	Standard
	Cd	111	98.3	23.2	0.0193	0.006	31.3	mg/L	20	Standard
	Cd	114	261.2	4.3	0.0214	0.000	0.4	ug/L	56	Standard
[>	In	115	614716.6	4.5				ug/L	657102	Standard
	Sn	118	739.0	5.3	0.0300	0.001	2.5	ug/L	555	Standard
	Sb	123	534.9	8.9	0.0700	0.004	5.2	ug/L	62	Standard
[	Ba	135	87145.8	3.6	27.3545	0.434	1.6	ug/L	19	Standard
[	Ce	140	225.3	12.9				ug/L	24	Standard
[>	Tb	159	890891.8	5.4				ug/L	910514	Standard
[	Ho	165	23.3	24.4				ug/L	7	Standard
	Tl	203	239.0	10.7	0.0164	0.001	8.7	ug/L	13	Standard
	Tl	205	5.7	27.0	0.0168	0.004	23.9	ug/L	1	Standard
	Pb	206	1090.4	7.6	0.0810	0.005	5.8	ug/L	342	Standard
	Pb	207	874.0	8.9	0.0713	0.006	8.1	ug/L	284	Standard
	Pb	208	4109.2	5.6	0.0744	0.002	3.4	ug/L	1363	Standard
	U	238	376.0	1.2	0.0388	0.002	4.9	ug/L	2	Standard
[>	Bi	209	438141.3	3.7				ug/L	470592	Standard

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Na	23	3.3	173.2	0.3356	0.573	170.6	mg/L	2	Standard
Mg	24	911433.5	3.4	0.5078	0.032	6.3	mg/L	5586	Standard
K	39	385.0	17.0	5.9036	0.748	12.7	mg/L	5	Standard
Ca	43	771.7	3.1	35.2436	1.031	2.9	mg/L	45	Standard
Fe	54	363.5	5.4	0.0058	0.004	65.1	mg/L	350	Standard
Fe	57	375.0	5.8	0.5437	0.037	6.8	mg/L	102	Standard
Sc-1	45	46506.4	5.7				mg/L	53004	Standard
Cl	35	3.3	62.4				ug/L	2	Standard
Kr	83	122.4	8.7				ug/L	157	Standard
Br	81	8.3	62.4				ug/L	3	Standard
P	31	141888.5	3.7				ug/L	91588	Standard
S	34	29222.3	2.3				ug/L	32556	Standard
Sr	88	310.0	0.0				ug/L	62	Standard
C	12	500.0	8.9				mg/L	133	Standard
N	14	0.0					mg/L	0	Standard
Hg	202	0.0					mg/L	7	Standard

QC Calculated Values

Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recovery
Li	7			
Be	9			
Al	27			
Sc	45			
Ti	47			
V	51			
Cr	52			
Cr	53			
Mn	55			
Co	59			
Ni	60			
Cu	65			
Zn	66			
Ge	72		92.406	
As	75			
Se	82			
Se-1	77			
Ga	71			
Rb	85			
Y	89			
Rh	103			

Sample ID: L1211023001DP WG414119-05

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[	Mo	98	
[	Ag	107	
[	Cd	111	
[	Cd	114	
>	In	115	93.550
[	Sn	118	
[	Sb	123	
[	Ba	135	
[	Ce	140	
>	Tb	159	
[	Ho	165	
[	Tl	203	
[	Tl	205	
[	Pb	206	
[	Pb	207	
[	Pb	208	
[	U	238	
>	Bi	209	93.104
[	Na	23	
[	Mg	24	
[	K	39	
[	Ca	43	
[	Fe	54	
[	Fe	57	
>	Sc-1	45	
[	Cl	35	
[	Kr	83	
[	Br	81	
[	P	31	
[	S	34	
[	Sr	88	
[	C	12	
[	N	14	
[	Hg	202	

QC Out of Limits

Measurement Type	Analyte	Mass	Out of Limits Message

Sample ID: L1211023001DP WG414119-05

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Method 6020 - Summary Report

Sample ID: L1211023001S WG414119-06

Sample Date/Time: Sunday, November 18, 2012 14:33:29

Number of Replicates: 3

Autosampler Position: 305

Sample Description: 1

Method File: C:\NexIONData\Method\6020a.mth

Aliquot Volume (mL):

Diluted to Volume (mL):

User Name: JYH user

Cumulative Autodilution Factor: 1

Nexion-ICP 200.8\6020

Concentration Results

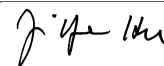
IS	Analyte	Mass	Intensity	RSD	Conc.	SD	RSD	Units	Blank Intens.	Mode
[	Li	7	31001.7	5.4	-14806.6884	961.612	6.5	ug/L	8369	Standard
	Be	9	52723.5	6.0	28.7981	1.463	5.1	ug/L	18	Standard
	Al	27	6018168.5	6.8	55.7103	3.803	6.8	ug/L	215	Standard
[>	Sc	45	46621.7	3.3				ug/L	53004	Standard
[	Ti	47	697.7	2.7	1.4583	0.006	0.4	ug/L	26	Standard
	V	51	260091.3	5.8	24.2533	0.827	3.4	ug/L	3223	Standard
	Cr	52	257108.3	6.4	25.2486	0.988	3.9	ug/L	10379	Standard
	Cr	53	34861.0	5.7	28.1957	1.050	3.7	ug/L	192	Standard
	Mn	55	689193.5	5.7	44.3373	1.671	3.8	ug/L	1840	Standard
	Co	59	301692.3	5.2	25.2737	0.630	2.5	ug/L	115	Standard
	Ni	60	66397.4	7.9	25.8324	1.345	5.2	ug/L	75	Standard
	Cu	65	72050.0	6.2	29.0333	1.074	3.7	ug/L	155	Standard
	Zn	66	47938.9	6.0	38.9263	1.339	3.4	ug/L	237	Standard
[>	Ge	72	369862.3	3.1				ug/L	413856	Standard
	As	75	34046.9	6.0	26.3709	0.924	3.5	ug/L	-197	Standard
	Se	82	3041.1	5.2	26.2555	0.793	3.0	ug/L	-5	Standard
[	Se-1	77	2622.2	6.4	28.9057	1.090	3.8	ug/L	105	Standard
[>	Ga	71	195.0	13.6				mg/L	225	Standard
[	Rb	85	37020.2	5.0				ug/L	28	Standard
[	Y	89	290150.1	3.0				ug/L	322845	Standard
[>	Rh	103	126.7	4.6				ug/L	92	Standard
[	Mo	98	589.2	13.0	0.1327	0.015	11.4	ug/L	18	Standard
	Ag	107	183791.5	2.7	25.1127	0.080	0.3	ug/L	63	Standard
	Cd	111	80680.3	5.3	25.4517	0.635	2.5	mg/L	20	Standard
	Cd	114	210563.7	6.6	25.2363	1.051	4.2	ug/L	56	Standard
[>	In	115	606935.3	3.0				ug/L	657102	Standard
	Sn	118	758.7	3.5	0.0331	0.001	3.6	ug/L	555	Standard
	Sb	123	190412.1	5.9	26.3068	0.864	3.3	ug/L	62	Standard
[	Ba	135	166491.0	5.7	52.9031	1.532	2.9	ug/L	19	Standard
[	Ce	140	720.7	2.7				ug/L	24	Standard
[>	Tb	159	875853.4	2.9				ug/L	910514	Standard
[	Ho	165	34.7	23.3				ug/L	7	Standard
	Tl	203	307932.4	3.7	26.1710	0.312	1.2	ug/L	13	Standard
	Tl	205	9668.8	5.2	26.9305	0.726	2.7	ug/L	1	Standard
	Pb	206	247379.3	5.1	26.2061	0.736	2.8	ug/L	342	Standard
	Pb	207	212293.8	4.0	26.4553	0.401	1.5	ug/L	284	Standard
	Pb	208	982047.9	4.8	26.3577	0.676	2.6	ug/L	1363	Standard
	U	238	245307.4	5.5	26.6192	0.947	3.6	ug/L	2	Standard
[>	Bi	209	431893.2	2.5				ug/L	470592	Standard

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Na	23	3.3	86.6	0.3414	0.291	85.3	mg/L	2	Standard
Mg	24	904881.0	3.5	0.5023	0.027	5.3	mg/L	5586	Standard
K	39	340.0	20.2	5.2314	1.176	22.5	mg/L	5	Standard
Ca	43	821.7	13.6	37.6080	6.079	16.2	mg/L	45	Standard
Fe	54	471.8	20.6	0.0526	0.042	79.0	mg/L	350	Standard
Fe	57	396.7	19.5	0.5827	0.158	27.1	mg/L	102	Standard
Sc-1	45	46621.7	3.3				mg/L	53004	Standard
Cl	35	3.0	66.7				ug/L	2	Standard
Kr	83	122.4	2.3				ug/L	157	Standard
Br	81	5.8	49.5				ug/L	3	Standard
P	31	137065.8	2.8				ug/L	91588	Standard
S	34	29721.6	1.5				ug/L	32556	Standard
Sr	88	281.7	5.7				ug/L	62	Standard
C	12	576.7	3.3				mg/L	133	Standard
N	14	1.7	173.2				mg/L	0	Standard
Hg	202	3.3	86.6				mg/L	7	Standard

QC Calculated Values

Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recovery
Li	7			
Be	9			
Al	27			
Sc	45			
Ti	47			
V	51			
Cr	52			
Cr	53			
Mn	55			
Co	59			
Ni	60			
Cu	65			
Zn	66			
Ge	72		89.370	
As	75			
Se	82			
Se-1	77			
Ga	71			
Rb	85			
Y	89			
Rh	103			

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[	Mo	98	
[	Ag	107	
[	Cd	111	
[	Cd	114	
>	In	115	92.366
[	Sn	118	
[	Sb	123	
[	Ba	135	
[	Ce	140	
>	Tb	159	
[	Ho	165	
[	Tl	203	
[	Tl	205	
[	Pb	206	
[	Pb	207	
[	Pb	208	
[	U	238	
>	Bi	209	91.777
[	Na	23	
[	Mg	24	
[	K	39	
[	Ca	43	
[	Fe	54	
[	Fe	57	
>	Sc-1	45	
[	Cl	35	
[	Kr	83	
[	Br	81	
[	P	31	
[	S	34	
[	Sr	88	
[	C	12	
[	N	14	
[	Hg	202	

QC Out of Limits

Measurement Type	Analyte	Mass	Out of Limits Message

Sample ID: L1211023001S WG414119-06

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Method 6020 - Summary Report

Sample ID: L1211025103

Sample Date/Time: Sunday, November 18, 2012 14:36:41

Number of Replicates: 3

Autosampler Position: 306

Sample Description: 1

Method File: C:\NexIONData\Method\6020a.mth

Aliquot Volume (mL):

Diluted to Volume (mL):

User Name: JYH user

Cumulative Autodilution Factor: 1

Nexion-ICP 200.8\6020

Concentration Results

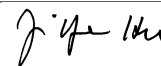
IS	Analyte	Mass	Intensity	RSD	Conc.	SD	RSD	Units	Blank Intens.	Mode
[	Li	7	10380.2	6.8	-1821.7867	458.825	25.2	ug/L	8369	Standard
	Be	9	16.7	121.2	-0.0003	0.011	3385.0	ug/L	18	Standard
	Al	27	645375.3	4.9	5.9475	0.425	7.1	ug/L	215	Standard
[>	Sc	45	46850.7	2.4				ug/L	53004	Standard
	Ti	47	51.3	9.6	0.0479	0.012	24.4	ug/L	26	Standard
	V	51	3134.8	3.2	0.0173	0.018	101.9	ug/L	3223	Standard
	Cr	52	10499.0	2.1	0.1129	0.017	15.2	ug/L	10379	Standard
	Cr	53	544.2	13.9	0.3146	0.047	15.0	ug/L	192	Standard
	Mn	55	32692.3	5.4	1.9379	0.045	2.3	ug/L	1840	Standard
	Co	59	141.7	13.7	-0.0041	0.002	41.4	ug/L	115	Standard
	Ni	60	1734.1	9.3	0.6142	0.042	6.9	ug/L	75	Standard
	Cu	65	505.7	7.3	0.1388	0.008	6.1	ug/L	155	Standard
	Zn	66	2413.5	3.4	1.6965	0.048	2.8	ug/L	237	Standard
[>	Ge	72	384510.2	3.1				ug/L	413856	Standard
	As	75	-132.1	4.4	0.0419	0.007	17.4	ug/L	-197	Standard
	Se	82	52.1	15.8	0.4369	0.055	12.6	ug/L	-5	Standard
[	Se-1	77	154.3	10.8	0.7151	0.189	26.4	ug/L	105	Standard
[>	Ga	71	213.3	14.3				mg/L	225	Standard
	Rb	85	761.7	7.6				ug/L	28	Standard
	Y	89	288283.8	4.6				ug/L	322845	Standard
[>	Rh	103	98.3	25.6				ug/L	92	Standard
	Mo	98	244.6	5.7	0.0477	0.004	9.4	ug/L	18	Standard
	Ag	107	71.3	9.9	0.0014	0.001	41.1	ug/L	63	Standard
	Cd	111	20.0	28.3	-0.0051	0.002	37.6	mg/L	20	Standard
	Cd	114	62.7	7.3	-0.0024	0.001	30.5	ug/L	56	Standard
[>	In	115	633963.8	3.6				ug/L	657102	Standard
	Sn	118	435.0	8.0	-0.0040	0.004	105.3	ug/L	555	Standard
	Sb	123	63.5	8.3	0.0055	0.000	7.7	ug/L	62	Standard
[	Ba	135	1237.1	4.9	0.3570	0.022	6.0	ug/L	19	Standard
	Ce	140	310.7	112.0				ug/L	24	Standard
[>	Tb	159	890773.8	2.5				ug/L	910514	Standard
	Ho	165	13.0	15.4				ug/L	7	Standard
	Tl	203	62.0	19.0	0.0013	0.001	63.4	ug/L	13	Standard
	Tl	205	4.0	90.1	0.0118	0.009	80.5	ug/L	1	Standard
	Pb	206	444.7	5.5	0.0111	0.001	13.4	ug/L	342	Standard
	Pb	207	362.7	8.8	0.0061	0.003	53.3	ug/L	284	Standard
	Pb	208	1728.7	3.8	0.0090	0.001	13.4	ug/L	1363	Standard
	U	238	147.0	36.0	0.0134	0.005	41.0	ug/L	2	Standard
[>	Bi	209	462571.5	2.6				ug/L	470592	Standard

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Na	23	1.7	173.2	0.1773	0.298	168.3	mg/L	2	Standard
Mg	24	75219.7	3.1	0.0389	0.002	5.7	mg/L	5586	Standard
K	39	16.7	17.3	0.2145	0.038	17.6	mg/L	5	Standard
Ca	43	63.3	27.7	0.8208	0.864	105.3	mg/L	45	Standard
Fe	54	370.1	8.3	0.0075	0.015	202.2	mg/L	350	Standard
Fe	57	93.3	17.2	0.0381	0.032	84.4	mg/L	102	Standard
Sc-1	45	46850.7	2.4				mg/L	53004	Standard
Cl	35	3.0	88.2				ug/L	2	Standard
Kr	83	125.0	5.7				ug/L	157	Standard
Br	81	4.2	34.6				ug/L	3	Standard
P	31	117359.4	0.6				ug/L	91588	Standard
S	34	31177.9	2.1				ug/L	32556	Standard
Sr	88	81.7	25.5				ug/L	62	Standard
C	12	201.7	7.6				mg/L	133	Standard
N	14	1.7	173.2				mg/L	0	Standard
Hg	202	6.7	86.6				mg/L	7	Standard

QC Calculated Values

Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recovery
Li	7			
Be	9			
Al	27			
Sc	45			
Ti	47			
V	51			
Cr	52			
Cr	53			
Mn	55			
Co	59			
Ni	60			
Cu	65			
Zn	66			
Ge	72		92.909	
As	75			
Se	82			
Se-1	77			
Ga	71			
Rb	85			
Y	89			
Rh	103			

Sample ID: L1211025103

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[	Mo	98	
[	Ag	107	
[	Cd	111	
[	Cd	114	
>	In	115	96.479
[	Sn	118	
[	Sb	123	
[	Ba	135	
[	Ce	140	
>	Tb	159	
[	Ho	165	
[	Tl	203	
[	Tl	205	
[	Pb	206	
[	Pb	207	
[	Pb	208	
[	U	238	
>	Bi	209	98.296
[	Na	23	
[	Mg	24	
[	K	39	
[	Ca	43	
[	Fe	54	
[	Fe	57	
>	Sc-1	45	
[	Cl	35	
[	Kr	83	
[	Br	81	
[	P	31	
[	S	34	
[	Sr	88	
[	C	12	
[	N	14	
[	Hg	202	

QC Out of Limits

Measurement Type	Analyte	Mass	Out of Limits Message

Sample ID: L1211025103

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Method 6020 - Summary Report

Sample ID: L1211025103PS WG414621-01

Sample Date/Time: Sunday, November 18, 2012 14:39:54

Number of Replicates: 3

Autosampler Position: 307

Sample Description: 1

Method File: C:\NexIONData\Method\6020a.mth

Aliquot Volume (mL):

Diluted to Volume (mL):

User Name: JYH user

Cumulative Autodilution Factor: 1

Nexion-ICP 200.8\6020

Concentration Results

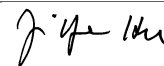
IS	Analyte	Mass	Intensity	RSD	Conc.	SD	RSD	Units	Blank Intens.	Mode
[	Li	7	11762.9	0.4	-1856.7391	253.592	13.7	ug/L	8369	Standard
	Be	9	103644.5	7.3	49.9015	1.551	3.1	ug/L	18	Standard
	Al	27	688174.2	4.3	5.6155	0.049	0.9	ug/L	215	Standard
[>	Sc	45	52850.5	4.2				ug/L	53004	Standard
	Ti	47	50.3	9.4	0.0343	0.009	25.7	ug/L	26	Standard
	V	51	531187.3	3.7	42.6999	1.102	2.6	ug/L	3223	Standard
	Cr	52	523799.7	3.9	44.8220	1.115	2.5	ug/L	10379	Standard
	Cr	53	64638.7	5.4	44.9008	1.588	3.5	ug/L	192	Standard
	Mn	55	850287.6	4.5	46.9288	1.598	3.4	ug/L	1840	Standard
	Co	59	620229.2	4.7	44.5760	1.060	2.4	ug/L	115	Standard
	Ni	60	134469.0	4.8	44.9223	1.318	2.9	ug/L	75	Standard
	Cu	65	131834.3	4.8	45.6150	1.796	3.9	ug/L	155	Standard
	Zn	66	63560.2	4.3	44.3005	0.808	1.8	ug/L	237	Standard
[>	Ge	72	431389.1	4.0				ug/L	413856	Standard
	As	75	63681.4	3.4	42.2428	1.238	2.9	ug/L	-197	Standard
	Se	82	5495.0	3.2	40.6974	0.954	2.3	ug/L	-5	Standard
[	Se-1	77	4445.3	5.3	42.4711	0.825	1.9	ug/L	105	Standard
[>	Ga	71	248.3	15.1				mg/L	225	Standard
	Rb	85	776.7	2.4				ug/L	28	Standard
	Y	89	323724.1	3.2				ug/L	322845	Standard
[>	Rh	103	136.7	11.8				ug/L	92	Standard
	Mo	98	306.4	4.7	0.0558	0.001	2.0	ug/L	18	Standard
	Ag	107	404409.1	5.5	48.4295	3.633	7.5	ug/L	63	Standard
	Cd	111	155114.0	3.9	42.8632	1.287	3.0	mg/L	20	Standard
	Cd	114	397265.4	4.2	41.7034	0.936	2.2	ug/L	56	Standard
[>	In	115	693456.4	3.5				ug/L	657102	Standard
	Sn	118	550.0	3.2	0.0030	0.000	9.1	ug/L	555	Standard
	Sb	123	356443.2	4.5	43.1226	0.954	2.2	ug/L	62	Standard
[	Ba	135	158694.9	3.9	44.1597	1.092	2.5	ug/L	19	Standard
	Ce	140	135.3	6.9				ug/L	24	Standard
[>	Tb	159	977456.0	3.3				ug/L	910514	Standard
	Ho	165	79.3	8.4				ug/L	7	Standard
	Tl	203	608594.7	2.4	44.9680	0.721	1.6	ug/L	13	Standard
	Tl	205	18934.5	3.3	45.8490	0.557	1.2	ug/L	1	Standard
	Pb	206	488574.8	3.6	45.0201	0.946	2.1	ug/L	342	Standard
	Pb	207	416790.6	3.5	45.1716	0.822	1.8	ug/L	284	Standard
	Pb	208	1925237.2	3.5	44.9428	0.825	1.8	ug/L	1363	Standard
	U	238	478326.8	5.4	45.1051	1.203	2.7	ug/L	2	Standard
[>	Bi	209	497118.8	4.1				ug/L	470592	Standard

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Na	23	1.7	173.2	0.1632	0.274	167.9	mg/L	2	Standard
Mg	24	78888.4	3.6	0.0359	0.001	1.6	mg/L	5586	Standard
K	39	18.3	78.7	0.2080	0.194	93.5	mg/L	5	Standard
Ca	43	60.0	36.3	0.3098	0.858	277.0	mg/L	45	Standard
Fe	54	465.4	3.4	0.0262	0.014	52.9	mg/L	350	Standard
Fe	57	111.7	10.3	0.0484	0.026	53.3	mg/L	102	Standard
Sc-1	45	52850.5	4.2				mg/L	53004	Standard
Cl	35	1.7	69.3				ug/L	2	Standard
Kr	83	131.7	3.7				ug/L	157	Standard
Br	81	5.0	50.0				ug/L	3	Standard
P	31	162512.0	1.4				ug/L	91588	Standard
S	34	32409.6	1.7				ug/L	32556	Standard
Sr	88	68.3	51.4				ug/L	62	Standard
C	12	166.7	29.4				mg/L	133	Standard
N	14	0.0					mg/L	0	Standard
Hg	202	5.0	100.0				mg/L	7	Standard

QC Calculated Values

Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recovery
Li	7			
Be	9			
Al	27			
Sc	45			
Ti	47			
V	51			
Cr	52			
Cr	53			
Mn	55			
Co	59			
Ni	60			
Cu	65			
Zn	66			
Ge	72		104.237	
As	75			
Se	82			
Se-1	77			
Ga	71			
Rb	85			
Y	89			
Rh	103			

Sample ID: L1211025103PS WG414621-01

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[	Mo	98	
[	Ag	107	
[	Cd	111	
[	Cd	114	
>	In	115	105.533
[	Sn	118	
[	Sb	123	
[	Ba	135	
[	Ce	140	
>	Tb	159	
[	Ho	165	
[	Tl	203	
[	Tl	205	
[	Pb	206	
[	Pb	207	
[	Pb	208	
[	U	238	
>	Bi	209	105.637
[	Na	23	
[	Mg	24	
[	K	39	
[	Ca	43	
[	Fe	54	
[	Fe	57	
>	Sc-1	45	
[	Cl	35	
[	Kr	83	
[	Br	81	
[	P	31	
[	S	34	
[	Sr	88	
[	C	12	
[	N	14	
[	Hg	202	

QC Out of Limits

Measurement Type	Analyte	Mass	Out of Limits Message

Sample ID: L1211025103PS WG414621-01

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Method 6020 - Summary Report

Sample ID: L1211025103SDL WG414621-02

Sample Date/Time: Sunday, November 18, 2012 14:43:06

Number of Replicates: 3

Autosampler Position: 308

Sample Description: 5

Method File: C:\NexIONData\Method\6020a.mth

Aliquot Volume (mL):

Diluted to Volume (mL):

User Name: JYH user

Cumulative Autodilution Factor: 1

Nexion-ICP 200.8\6020

Concentration Results

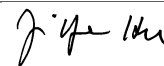
IS	Analyte	Mass	Intensity	RSD	Conc.	SD	RSD	Units	Blank Intens.	Mode
[	Li	7	8450.7	6.3	-881.5673	133.015	15.1	ug/L	8369	Standard
	Be	9	405.0	157.2	0.2109	0.344	163.1	ug/L	18	Standard
	Al	27	116106.1	10.0	1.1195	0.051	4.6	ug/L	215	Standard
[>	Sc	45	44587.3	5.5				ug/L	53004	Standard
	Ti	47	26.3	22.3	-0.0021	0.012	596.9	ug/L	26	Standard
	V	51	5110.0	67.6	0.2132	0.316	148.0	ug/L	3223	Standard
	Cr	52	11954.4	32.0	0.3038	0.365	120.2	ug/L	10379	Standard
	Cr	53	577.5	78.4	0.3575	0.357	100.0	ug/L	192	Standard
	Mn	55	10956.8	56.3	0.6167	0.383	62.1	ug/L	1840	Standard
	Co	59	2626.0	161.7	0.2016	0.351	173.9	ug/L	115	Standard
	Ni	60	1052.1	90.8	0.3725	0.363	97.5	ug/L	75	Standard
	Cu	65	880.7	106.3	0.2957	0.370	125.2	ug/L	155	Standard
	Zn	66	2679.2	22.7	1.9944	0.451	22.6	ug/L	237	Standard
[>	Ge	72	367806.2	2.5				ug/L	413856	Standard
	As	75	93.2	460.3	0.2078	0.328	158.1	ug/L	-197	Standard
	Se	82	24.0	99.4	0.2106	0.201	95.5	ug/L	-5	Standard
[	Se-1	77	125.3	21.9	0.4563	0.293	64.3	ug/L	105	Standard
[>	Ga	71	165.0	24.1				mg/L	225	Standard
	Rb	85	186.7	12.1				ug/L	28	Standard
	Y	89	271096.1	2.0				ug/L	322845	Standard
[>	Rh	103	83.3	3.5				ug/L	92	Standard
	Mo	98	110.8	16.9	0.0184	0.004	23.4	ug/L	18	Standard
	Ag	107	1437.8	148.9	0.1909	0.295	154.4	ug/L	63	Standard
	Cd	111	659.9	150.0	0.1994	0.315	157.9	mg/L	20	Standard
	Cd	114	1705.3	153.1	0.1972	0.316	160.1	ug/L	56	Standard
[>	In	115	597373.4	2.6				ug/L	657102	Standard
	Sn	118	421.3	3.2	-0.0028	0.002	63.5	ug/L	555	Standard
	Sb	123	1567.3	144.4	0.2160	0.315	146.1	ug/L	62	Standard
[	Ba	135	930.4	101.2	0.2794	0.301	107.8	ug/L	19	Standard
	Ce	140	52.0	20.3				ug/L	24	Standard
[>	Tb	159	846511.1	1.2				ug/L	910514	Standard
	Ho	165	7.3	56.8				ug/L	7	Standard
	Tl	203	1849.6	148.3	0.1476	0.224	151.5	ug/L	13	Standard
	Tl	205	45.7	161.8	0.1236	0.198	160.0	ug/L	1	Standard
	Pb	206	2315.4	122.5	0.2039	0.288	141.3	ug/L	342	Standard
	Pb	207	1912.2	123.2	0.1940	0.282	145.2	ug/L	284	Standard
	Pb	208	8992.5	124.0	0.1986	0.287	144.6	ug/L	1363	Standard
	U	238	1874.0	157.0	0.1940	0.307	158.0	ug/L	2	Standard
[>	Bi	209	443350.9	1.8				ug/L	470592	Standard

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Na	23	1.7	173.2	0.1839	0.310	168.5	mg/L	2	Standard
Mg	24	17633.6	3.3	0.0074	0.000	3.3	mg/L	5586	Standard
K	39	1.7	173.2	-0.0128	0.049	385.7	mg/L	5	Standard
Ca	43	53.3	27.1	0.4973	0.888	178.5	mg/L	45	Standard
Fe	54	351.6	14.5	0.0068	0.018	261.9	mg/L	350	Standard
Fe	57	111.7	22.1	0.0823	0.058	70.7	mg/L	102	Standard
Sc-1	45	44587.3	5.5				mg/L	53004	Standard
Cl	35	1.0	100.0				ug/L	2	Standard
Kr	83	127.7	0.9				ug/L	157	Standard
Br	81	2.5	0.0				ug/L	3	Standard
P	31	105615.6	4.0				ug/L	91588	Standard
S	34	31638.0	1.7				ug/L	32556	Standard
Sr	88	68.3	34.6				ug/L	62	Standard
C	12	118.3	8.8				mg/L	133	Standard
N	14	1.7	173.2				mg/L	0	Standard
Hg	202	8.3	34.6				mg/L	7	Standard

QC Calculated Values

Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recovery
Li	7			
Be	9			
Al	27			
Sc	45			
Ti	47			
V	51			
Cr	52			
Cr	53			
Mn	55			
Co	59			
Ni	60			
Cu	65			
Zn	66			
Ge	72		88.873	
As	75			
Se	82			
Se-1	77			
Ga	71			
Rb	85			
Y	89			
Rh	103			

Sample ID: L1211025103SDL WG414621-02

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[	Mo	98	
[	Ag	107	
[	Cd	111	
[	Cd	114	
>	In	115	90.910
[	Sn	118	
[	Sb	123	
[	Ba	135	
[	Ce	140	
>	Tb	159	
[	Ho	165	
[	Tl	203	
[	Tl	205	
[	Pb	206	
[	Pb	207	
[	Pb	208	
[	U	238	
>	Bi	209	94.211
[	Na	23	
[	Mg	24	
[	K	39	
[	Ca	43	
[	Fe	54	
[	Fe	57	
>	Sc-1	45	
[	Cl	35	
[	Kr	83	
[	Br	81	
[	P	31	
[	S	34	
[	Sr	88	
[	C	12	
[	N	14	
[	Hg	202	

QC Out of Limits

Measurement Type	Analyte	Mass	Out of Limits Message

Sample ID: L1211025103SDL WG414621-02

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Method 6020 - Summary Report

Sample ID: L1211025103

Sample Date/Time: Sunday, November 18, 2012 14:46:19

Number of Replicates: 3

Autosampler Position: 309

Sample Description: 25

Method File: C:\NexIONData\Method\6020a.mth

Aliquot Volume (mL):

Diluted to Volume (mL):

User Name: JYH user

Cumulative Autodilution Factor: 1

Nexion-ICP 200.8\6020

Concentration Results

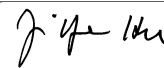
IS	Analyte	Mass	Intensity	RSD	Conc.	SD	RSD	Units	Blank Intens.	Mode
[	Li	7	6471.4	3.9	-378.2690	322.275	85.2	ug/L	8369	Standard
	Be	9	8.3	69.3	-0.0039	0.004	94.3	ug/L	18	Standard
	Al	27	21298.3	1.3	0.2424	0.010	4.0	ug/L	215	Standard
[>	Sc	45	37603.3	3.4				ug/L	53004	Standard
[	Ti	47	16.7	22.7	-0.0174	0.009	50.0	ug/L	26	Standard
	V	51	2530.4	2.3	0.0107	0.007	60.7	ug/L	3223	Standard
	Cr	52	7908.7	1.3	0.0236	0.033	142.1	ug/L	10379	Standard
	Cr	53	231.7	17.3	0.1098	0.039	35.7	ug/L	192	Standard
	Mn	55	2298.2	2.8	0.0840	0.009	10.6	ug/L	1840	Standard
	Co	59	80.7	10.7	-0.0076	0.001	9.4	ug/L	115	Standard
	Ni	60	240.3	6.3	0.0739	0.009	12.5	ug/L	75	Standard
	Cu	65	132.7	6.4	0.0050	0.005	92.2	ug/L	155	Standard
	Zn	66	1032.7	2.5	0.7836	0.017	2.2	ug/L	237	Standard
[>	Ge	72	317302.3	2.7				ug/L	413856	Standard
	As	75	-117.6	41.9	0.0340	0.045	131.5	ug/L	-197	Standard
	Se	82	5.9	200.4	0.0651	0.118	181.6	ug/L	-5	Standard
[	Se-1	77	91.7	5.5	0.2414	0.097	40.4	ug/L	105	Standard
[>	Ga	71	148.3	7.0				mg/L	225	Standard
[	Rb	85	50.0	10.0				ug/L	28	Standard
[	Y	89	241062.7	3.8				ug/L	322845	Standard
[>	Rh	103	71.7	22.4				ug/L	92	Standard
[	Mo	98	11.8	39.2	-0.0054	0.001	24.6	ug/L	18	Standard
	Ag	107	76.0	72.3	0.0041	0.008	205.2	ug/L	63	Standard
	Cd	111	27.7	61.5	-0.0011	0.006	519.2	mg/L	20	Standard
	Cd	114	87.6	61.2	0.0025	0.007	280.6	ug/L	56	Standard
[>	In	115	522409.7	3.0				ug/L	657102	Standard
	Sn	118	249.7	11.8	-0.0179	0.003	15.7	ug/L	555	Standard
	Sb	123	51.7	39.0	0.0053	0.003	56.5	ug/L	62	Standard
[	Ba	135	66.0	9.1	0.0044	0.002	40.8	ug/L	19	Standard
[	Ce	140	25.7	9.8				ug/L	24	Standard
[>	Tb	159	759552.0	2.2				ug/L	910514	Standard
[	Ho	165	9.3	16.4				ug/L	7	Standard
	Tl	203	59.7	25.7	0.0017	0.001	72.5	ug/L	13	Standard
	Tl	205	1.0	0.0	0.0042	0.000	1.7	ug/L	1	Standard
	Pb	206	285.3	11.3	-0.0009	0.003	321.0	ug/L	342	Standard
	Pb	207	259.3	9.8	-0.0018	0.003	141.2	ug/L	284	Standard
	Pb	208	1134.7	6.8	-0.0021	0.001	66.4	ug/L	1363	Standard
	U	238	11.0	32.8	-0.0003	0.000	152.9	ug/L	2	Standard
[>	Bi	209	407431.8	2.5				ug/L	470592	Standard

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Na	23	3.3	86.6	0.4375	0.375	85.6	mg/L	2	Standard
Mg	24	3795.5	8.1	-0.0003	0.000	80.8	mg/L	5586	Standard
K	39	5.0	100.0	0.0536	0.096	179.5	mg/L	5	Standard
Ca	43	43.3	26.6	0.3580	0.634	177.0	mg/L	45	Standard
Fe	54	109.0	21.3	-0.0945	0.012	13.1	mg/L	350	Standard
Fe	57	96.7	23.9	0.0870	0.057	65.5	mg/L	102	Standard
Sc-1	45	37603.3	3.4				mg/L	53004	Standard
Cl	35	1.7	69.3				ug/L	2	Standard
Kr	83	121.4	5.3				ug/L	157	Standard
Br	81	8.3	62.4				ug/L	3	Standard
P	31	36849.8	0.3				ug/L	91588	Standard
S	34	30888.1	1.7				ug/L	32556	Standard
Sr	88	80.0	10.8				ug/L	62	Standard
C	12	98.3	24.0				mg/L	133	Standard
N	14	0.0					mg/L	0	Standard
Hg	202	6.7	114.6				mg/L	7	Standard

QC Calculated Values

Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recovery
Li	7			
Be	9			
Al	27			
Sc	45			
Ti	47			
V	51			
Cr	52			
Cr	53			
Mn	55			
Co	59			
Ni	60			
Cu	65			
Zn	66			
Ge	72		76.670	
As	75			
Se	82			
Se-1	77			
Ga	71			
Rb	85			
Y	89			
Rh	103			

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[	Mo	98	
[	Ag	107	
[	Cd	111	
[	Cd	114	
>	In	115	79.502
[	Sn	118	
[	Sb	123	
[	Ba	135	
[	Ce	140	
>	Tb	159	
[	Ho	165	
[	Tl	203	
[	Tl	205	
[	Pb	206	
[	Pb	207	
[	Pb	208	
[	U	238	
>	Bi	209	86.579
[	Na	23	
[	Mg	24	
[	K	39	
[	Ca	43	
[	Fe	54	
[	Fe	57	
>	Sc-1	45	
[	Cl	35	
[	Kr	83	
[	Br	81	
[	P	31	
[	S	34	
[	Sr	88	
[	C	12	
[	N	14	
[	Hg	202	

QC Out of Limits

Measurement Type	Analyte	Mass	Out of Limits Message

Sample ID: L1211025103

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Method 6020 - Summary Report

Sample ID: QC Std 6

Sample Date/Time: Sunday, November 18, 2012 14:49:34

Number of Replicates: 3

Autosampler Position: 101

Sample Description:

Method File: C:\NexIONData\Method\6020a.mth

Aliquot Volume (mL):

Diluted to Volume (mL):

User Name: JYH user

Cumulative Autodilution Factor: 1

Nexion-ICP 200.8\6020

Concentration Results

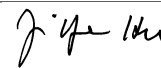
IS	Analyte	Mass	Intensity	RSD	Conc.	SD	RSD	Units	Blank Intens.	Mode
[	Li	7	8500.7	5.2	-621.7410	80.488	12.9	ug/L	8369	Standard
	Be	9	103750.6	8.1	56.0867	1.912	3.4	ug/L	18	Standard
	Al	27	6522199.6	7.9	59.7307	1.928	3.2	ug/L	215	Standard
[>	Sc	45	47093.3	6.7				ug/L	53004	Standard
[	Ti	47	45933.5	7.6	93.8515	3.706	3.9	ug/L	26	Standard
	V	51	544119.8	6.3	47.9781	1.127	2.3	ug/L	3223	Standard
	Cr	52	518016.1	7.9	48.6534	2.132	4.4	ug/L	10379	Standard
	Cr	53	61674.2	8.2	46.9593	2.140	4.6	ug/L	192	Standard
	Mn	55	804194.4	7.4	48.6458	1.813	3.7	ug/L	1840	Standard
	Co	59	621509.7	7.9	48.9595	2.037	4.2	ug/L	115	Standard
	Ni	60	131140.7	8.3	48.0129	2.176	4.5	ug/L	75	Standard
	Cu	65	130521.6	6.4	49.5117	1.435	2.9	ug/L	155	Standard
	Zn	66	65017.2	6.4	49.7136	1.554	3.1	ug/L	237	Standard
[>	Ge	72	393199.1	4.0				ug/L	413856	Standard
	As	75	67968.3	6.3	49.3936	1.283	2.6	ug/L	-197	Standard
	Se	82	6012.1	6.4	48.8046	1.262	2.6	ug/L	-5	Standard
[	Se-1	77	4656.4	5.2	48.9556	0.973	2.0	ug/L	105	Standard
[>	Ga	71	208.3	15.6				mg/L	225	Standard
[	Rb	85	1443.4	5.7				ug/L	28	Standard
[	Y	89	298132.4	2.5				ug/L	322845	Standard
[>	Rh	103	113.3	19.9				ug/L	92	Standard
[	Mo	98	411998.3	5.6	97.3126	1.631	1.7	ug/L	18	Standard
	Ag	107	376061.2	4.4	50.5076	0.360	0.7	ug/L	63	Standard
	Cd	111	163573.3	5.6	50.7335	0.815	1.6	mg/L	20	Standard
	Cd	114	425998.8	6.6	50.1886	1.224	2.4	ug/L	56	Standard
[>	In	115	617502.0	4.2				ug/L	657102	Standard
	Sn	118	481412.4	6.9	51.3898	1.446	2.8	ug/L	555	Standard
	Sb	123	377573.9	5.9	51.2795	1.027	2.0	ug/L	62	Standard
[	Ba	135	163792.8	6.7	51.1465	1.321	2.6	ug/L	19	Standard
[	Ce	140	522.0	9.6				ug/L	24	Standard
[>	Tb	159	883984.7	3.9				ug/L	910514	Standard
[	Ho	165	436.3	2.6				ug/L	7	Standard
	Tl	203	621901.9	5.3	50.0871	0.878	1.8	ug/L	13	Standard
	Tl	205	19179.5	4.7	50.6424	0.845	1.7	ug/L	1	Standard
	Pb	206	501251.6	5.9	50.3503	1.195	2.4	ug/L	342	Standard
	Pb	207	425721.0	6.3	50.2920	1.374	2.7	ug/L	284	Standard
	Pb	208	1966740.9	6.3	50.0441	1.371	2.7	ug/L	1363	Standard
	U	238	498934.4	7.6	51.2851	2.057	4.0	ug/L	2	Standard
[>	Bi	209	455696.7	3.6				ug/L	470592	Standard

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Na	23	1.7	173.2	0.1631	0.274	167.9	mg/L	2	Standard
Mg	24	301544.9	1.6	0.1640	0.009	5.2	mg/L	5586	Standard
K	39	380.0	8.6	5.8073	0.800	13.8	mg/L	5	Standard
Ca	43	130.0	23.1	4.0788	1.847	45.3	mg/L	45	Standard
Fe	54	12833.0	7.8	5.3969	0.280	5.2	mg/L	350	Standard
Fe	57	3242.0	9.0	5.6017	0.352	6.3	mg/L	102	Standard
Sc-1	45	47093.3	6.7				mg/L	53004	Standard
Cl	35	3.0	57.7				ug/L	2	Standard
Kr	83	142.3	1.6				ug/L	157	Standard
Br	81	6.7	57.3				ug/L	3	Standard
P	31	121191.2	2.1				ug/L	91588	Standard
S	34	36067.0	1.3				ug/L	32556	Standard
Sr	88	71.7	4.0				ug/L	62	Standard
C	12	110.0	24.1				mg/L	133	Standard
N	14	0.0					mg/L	0	Standard
Hg	202	5.0	100.0				mg/L	7	Standard

QC Calculated Values

Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recovery
Li	7			
Be	9	112.173		
Al	27	119.461		
Sc	45			
Ti	47	93.851		
V	51	95.956		
Cr	52	97.307		
Cr	53			
Mn	55	97.292		
Co	59	97.919		
Ni	60	96.026		
Cu	65	99.023		
Zn	66	99.427		
Ge	72		95.009	
As	75	98.787		
Se	82	97.609		
Se-1	77			
Ga	71			
Rb	85			
Y	89			
Rh	103			

Sample ID: QC Std 6

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[	Mo	98	97.313	
[	Ag	107	101.015	
[	Cd	111	101.467	
[	Cd	114		
>	In	115		93.974
[	Sn	118	102.780	
[	Sb	123	102.559	
[	Ba	135	102.293	
[	Ce	140		
>	Tb	159		
[	Ho	165		
[	Tl	203	100.174	
[	Tl	205		
[	Pb	206	100.701	
[	Pb	207	100.584	
[	Pb	208	100.088	
[	U	238	102.570	
>	Bi	209		96.835
[	Na	23		
[	Mg	24		
[	K	39		
[	Ca	43		
[	Fe	54		
[	Fe	57		
>	Sc-1	45		
[	Cl	35		
[	Kr	83		
[	Br	81		
[	P	31		
[	S	34		
[	Sr	88		
[	C	12		
[	N	14		
[	Hg	202		

QC Out of Limits

Measurement Type	Analyte	Mass	Out of Limits Message
QC Std 6	Be	9	
QC Std 6	Al	27	

Sample ID: QC Std 6

Report Date/Time: Sunday, November 18, 2012 14:52:06

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Method 6020 - Summary Report

Sample ID: QC Std 7

Sample Date/Time: Sunday, November 18, 2012 14:52:46

Number of Replicates: 3

Autosampler Position: 102

Sample Description:

Method File: C:\NexIONData\Method\6020a.mth

Aliquot Volume (mL):

Diluted to Volume (mL):

User Name: JYH user

Cumulative Autodilution Factor: 1

Nexion-ICP 200.8\6020

Concentration Results

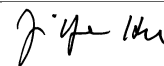
IS	Analyte	Mass	Intensity	RSD	Conc.	SD	RSD	Units	Blank Intens.	Mode
[	Li	7	8190.6	6.7	-804.8823	231.362	28.7	ug/L	8369	Standard
	Be	9	15.0	33.3	-0.0007	0.003	414.4	ug/L	18	Standard
	Al	27	403.3	53.2	0.0018	0.002	112.1	ug/L	215	Standard
[>	Sc	45	43806.6	3.5				ug/L	53004	Standard
[	Ti	47	18.7	21.7	-0.0198	0.009	44.6	ug/L	26	Standard
	V	51	2596.3	4.7	-0.0276	0.014	51.9	ug/L	3223	Standard
	Cr	52	8124.2	3.5	-0.1053	0.037	35.0	ug/L	10379	Standard
	Cr	53	168.3	6.0	0.0241	0.006	25.7	ug/L	192	Standard
	Mn	55	1329.1	1.6	-0.0050	0.003	58.9	ug/L	1840	Standard
	Co	59	108.7	24.4	-0.0066	0.002	35.4	ug/L	115	Standard
	Ni	60	65.3	6.2	-0.0106	0.002	15.1	ug/L	75	Standard
	Cu	65	183.3	5.1	0.0150	0.005	31.6	ug/L	155	Standard
	Zn	66	203.7	10.0	-0.0365	0.018	48.1	ug/L	237	Standard
[>	Ge	72	377693.2	2.1				ug/L	413856	Standard
	As	75	-158.0	24.9	0.0209	0.028	136.2	ug/L	-197	Standard
	Se	82	6.7	237.4	0.0624	0.136	217.6	ug/L	-5	Standard
[	Se-1	77	118.3	9.3	0.3441	0.141	41.1	ug/L	105	Standard
[>	Ga	71	183.3	19.2				mg/L	225	Standard
	Rb	85	21.7	58.1				ug/L	28	Standard
[	Y	89	279542.8	2.4				ug/L	322845	Standard
[>	Rh	103	90.0	11.1				ug/L	92	Standard
[	Mo	98	122.7	95.5	0.0208	0.028	134.1	ug/L	18	Standard
	Ag	107	132.7	84.1	0.0102	0.015	147.4	ug/L	63	Standard
	Cd	111	42.9	71.2	0.0023	0.010	407.0	mg/L	20	Standard
	Cd	114	131.3	62.1	0.0062	0.010	156.4	ug/L	56	Standard
[>	In	115	605923.2	1.8				ug/L	657102	Standard
	Sn	118	375.7	17.9	-0.0085	0.007	82.1	ug/L	555	Standard
	Sb	123	314.1	37.8	0.0404	0.016	39.4	ug/L	62	Standard
[	Ba	135	32.0	46.0	-0.0097	0.005	47.6	ug/L	19	Standard
[	Ce	140	27.7	5.5				ug/L	24	Standard
[>	Tb	159	852800.7	2.0				ug/L	910514	Standard
[	Ho	165	7.7	49.4				ug/L	7	Standard
	Tl	203	74.3	77.7	0.0024	0.005	189.4	ug/L	13	Standard
	Tl	205	0.7	86.6	0.0031	0.002	50.7	ug/L	1	Standard
	Pb	206	340.0	11.2	0.0020	0.003	161.2	ug/L	342	Standard
	Pb	207	262.7	11.9	-0.0044	0.003	71.2	ug/L	284	Standard
	Pb	208	1287.0	12.1	-0.0010	0.003	336.4	ug/L	1363	Standard
	U	238	24.0	98.0	0.0010	0.002	247.7	ug/L	2	Standard
[>	Bi	209	446005.4	2.1				ug/L	470592	Standard

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Na	23	0.0		0.0050	0.000	0.0	mg/L	2	Standard
Mg	24	1008.4	8.2	-0.0023	0.000	2.6	mg/L	5586	Standard
K	39	6.7	43.3	0.0682	0.046	68.1	mg/L	5	Standard
Ca	43	50.0	17.3	0.3565	0.544	152.6	mg/L	45	Standard
Fe	54	352.3	4.2	0.0104	0.008	75.2	mg/L	350	Standard
Fe	57	100.0	8.7	0.0617	0.012	19.7	mg/L	102	Standard
Sc-1	45	43806.6	3.5				mg/L	53004	Standard
Cl	35	2.3	24.7				ug/L	2	Standard
Kr	83	146.1	6.8				ug/L	157	Standard
Br	81	2.5	0.0				ug/L	3	Standard
P	31	111988.5	6.4				ug/L	91588	Standard
S	34	34541.0	2.4				ug/L	32556	Standard
Sr	88	73.3	20.8				ug/L	62	Standard
C	12	113.3	27.0				mg/L	133	Standard
N	14	3.3	86.6				mg/L	0	Standard
Hg	202	1.7	173.2				mg/L	7	Standard

QC Calculated Values

Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recovery
Li	7			
Be	9			
Al	27			
Sc	45			
Ti	47			
V	51			
Cr	52			
Cr	53			
Mn	55			
Co	59			
Ni	60			
Cu	65			
Zn	66			
Ge	72		91.262	
As	75			
Se	82			
Se-1	77			
Ga	71			
Rb	85			
Y	89			
Rh	103			

Sample ID: QC Std 7

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[	Mo	98	
[	Ag	107	
[	Cd	111	
[	Cd	114	
>	In	115	92.211
[	Sn	118	
[	Sb	123	
[	Ba	135	
[	Ce	140	
>	Tb	159	
[	Ho	165	
[	Tl	203	
[	Tl	205	
[	Pb	206	
[	Pb	207	
[	Pb	208	
[	U	238	
>	Bi	209	94.775
[	Na	23	
[	Mg	24	
[	K	39	
[	Ca	43	
[	Fe	54	
[	Fe	57	
>	Sc-1	45	
[	Cl	35	
[	Kr	83	
[	Br	81	
[	P	31	
[	S	34	
[	Sr	88	
[	C	12	
[	N	14	
[	Hg	202	

QC Out of Limits

Measurement Type	Analyte	Mass	Out of Limits Message

Sample ID: QC Std 7

Report Date/Time: Sunday, November 18, 2012 14:55:19

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Method 6020 - Summary Report

Sample ID: L1211025101 WG414119-02

Sample Date/Time: Sunday, November 18, 2012 14:56:02

Number of Replicates: 3

Autosampler Position: 310

Sample Description: 5

Method File: C:\NexIONData\Method\6020a.mth

Aliquot Volume (mL):

Diluted to Volume (mL):

User Name: JYH user

Cumulative Autodilution Factor: 1

Nexion-ICP 200.8\6020

Concentration Results

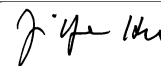
IS	Analyte	Mass	Intensity	RSD	Conc.	SD	RSD	Units	Blank Intens.	Mode
[	Li	7	13624.5	4.6	-4984.3026	257.567	5.2	ug/L	8369	Standard
	Be	9	13.3	57.3	-0.0013	0.005	348.0	ug/L	18	Standard
	Al	27	11292337.9	2.9	117.9032	1.846	1.6	ug/L	215	Standard
[>	Sc	45	41319.6	2.4				ug/L	53004	Standard
[	Ti	47	76.7	18.5	0.1149	0.026	22.8	ug/L	26	Standard
	V	51	3770.7	0.7	0.1060	0.012	11.1	ug/L	3223	Standard
	Cr	52	9218.8	1.5	0.0705	0.046	65.6	ug/L	10379	Standard
	Cr	53	280.0	11.4	0.1285	0.019	15.0	ug/L	192	Standard
	Mn	55	539424.6	2.7	36.4273	0.795	2.2	ug/L	1840	Standard
	Co	59	981.7	4.6	0.0709	0.004	5.5	ug/L	115	Standard
	Ni	60	30212.5	4.7	12.3283	0.359	2.9	ug/L	75	Standard
	Cu	65	688.7	0.7	0.2347	0.009	3.9	ug/L	155	Standard
	Zn	66	5785.8	4.5	4.7581	0.078	1.6	ug/L	237	Standard
[>	Ge	72	352394.0	3.3				ug/L	413856	Standard
	As	75	9.9	600.5	0.1477	0.049	32.9	ug/L	-197	Standard
	Se	82	531.1	7.5	4.8143	0.207	4.3	ug/L	-5	Standard
[	Se-1	77	491.7	6.0	4.9035	0.216	4.4	ug/L	105	Standard
[>	Ga	71	176.7	30.3				mg/L	225	Standard
[	Rb	85	1716.8	8.2				ug/L	28	Standard
[	Y	89	265165.2	3.3				ug/L	322845	Standard
[>	Rh	103	95.0	13.9				ug/L	92	Standard
[	Mo	98	1080.8	6.1	0.2630	0.012	4.5	ug/L	18	Standard
	Ag	107	58.7	12.9	0.0005	0.001	204.9	ug/L	63	Standard
	Cd	111	31.0	7.9	-0.0009	0.001	65.1	mg/L	20	Standard
	Cd	114	95.0	9.2	0.0024	0.001	46.9	ug/L	56	Standard
[>	In	115	580284.4	1.9				ug/L	657102	Standard
	Sn	118	321.3	12.0	-0.0128	0.005	37.1	ug/L	555	Standard
	Sb	123	147.5	4.0	0.0184	0.000	2.4	ug/L	62	Standard
[	Ba	135	14030.2	1.9	4.6472	0.012	0.3	ug/L	19	Standard
[	Ce	140	351.3	8.5				ug/L	24	Standard
[>	Tb	159	833608.8	3.1				ug/L	910514	Standard
[	Ho	165	26.3	9.6				ug/L	7	Standard
	Tl	203	181.3	1.8	0.0117	0.001	6.0	ug/L	13	Standard
	Tl	205	6.7	17.3	0.0199	0.004	18.8	ug/L	1	Standard
	Pb	206	423.7	7.0	0.0118	0.002	17.4	ug/L	342	Standard
	Pb	207	353.0	11.0	0.0077	0.004	51.5	ug/L	284	Standard
	Pb	208	1636.7	6.6	0.0094	0.002	21.7	ug/L	1363	Standard
	U	238	2545.2	2.4	0.2738	0.006	2.3	ug/L	2	Standard
[>	Bi	209	433622.0	2.9				ug/L	470592	Standard

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Na	23	6.7	114.6	0.7665	0.871	113.7	mg/L	2	Standard
Mg	24	156622.2	1.7	0.0957	0.002	2.2	mg/L	5586	Standard
K	39	25.0	40.0	0.3972	0.185	46.5	mg/L	5	Standard
Ca	43	515.0	6.1	25.8740	1.100	4.3	mg/L	45	Standard
Fe	54	179.2	7.2	-0.0652	0.006	8.9	mg/L	350	Standard
Fe	57	266.7	9.4	0.4084	0.039	9.6	mg/L	102	Standard
Sc-1	45	41319.6	2.4				mg/L	53004	Standard
Cl	35	4.0	66.1				ug/L	2	Standard
Kr	83	135.8	3.4				ug/L	157	Standard
Br	81	5.0	50.0				ug/L	3	Standard
P	31	52154.7	3.0				ug/L	91588	Standard
S	34	31880.2	0.8				ug/L	32556	Standard
Sr	88	220.0	8.2				ug/L	62	Standard
C	12	183.3	15.5				mg/L	133	Standard
N	14	0.0					mg/L	0	Standard
Hg	202	3.3	86.6				mg/L	7	Standard

QC Calculated Values

Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recovery
Li	7			
Be	9			
Al	27			
Sc	45			
Ti	47			
V	51			
Cr	52			
Cr	53			
Mn	55			
Co	59			
Ni	60			
Cu	65			
Zn	66			
Ge	72		85.149	
As	75			
Se	82			
Se-1	77			
Ga	71			
Rb	85			
Y	89			
Rh	103			

Sample ID: L1211025101 WG414119-02

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[	Mo	98	
[	Ag	107	
[	Cd	111	
[	Cd	114	
>	In	115	88.310
[	Sn	118	
[	Sb	123	
[	Ba	135	
[	Ce	140	
>	Tb	159	
[	Ho	165	
[	Tl	203	
[	Tl	205	
[	Pb	206	
[	Pb	207	
[	Pb	208	
[	U	238	
>	Bi	209	92.144
[	Na	23	
[	Mg	24	
[	K	39	
[	Ca	43	
[	Fe	54	
[	Fe	57	
>	Sc-1	45	
[	Cl	35	
[	Kr	83	
[	Br	81	
[	P	31	
[	S	34	
[	Sr	88	
[	C	12	
[	N	14	
[	Hg	202	

QC Out of Limits

Measurement Type	Analyte	Mass	Out of Limits Message

Sample ID: L1211025101 WG414119-02

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Method 6020 - Summary Report

Sample ID: L1211025101S WG414119-07

Sample Date/Time: Sunday, November 18, 2012 14:59:14

Number of Replicates: 3

Autosampler Position: 311

Sample Description: 5

Method File: C:\NexIONData\Method\6020a.mth

Aliquot Volume (mL):

Diluted to Volume (mL):

User Name: JYH user

Cumulative Autodilution Factor: 1

Nexion-ICP 200.8\6020

Concentration Results

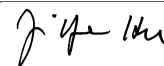
IS	Analyte	Mass	Intensity	RSD	Conc.	SD	RSD	Units	Blank Intens.	Mode
[	Li	7	14812.3	9.7	-5478.1855	673.967	12.3	ug/L	8369	Standard
	Be	9	10538.7	6.4	6.2750	0.232	3.7	ug/L	18	Standard
	Al	27	12255155.8	4.3	123.8229	2.365	1.9	ug/L	215	Standard
[>	Sc	45	42695.1	3.4				ug/L	53004	Standard
[	Ti	47	85.3	10.9	0.1335	0.022	16.6	ug/L	26	Standard
	V	51	53255.8	4.7	4.9547	0.102	2.1	ug/L	3223	Standard
	Cr	52	56770.6	4.3	5.0953	0.144	2.8	ug/L	10379	Standard
	Cr	53	6222.9	5.3	5.1462	0.214	4.2	ug/L	192	Standard
	Mn	55	668073.1	4.9	44.6949	0.837	1.9	ug/L	1840	Standard
	Co	59	58743.2	5.2	5.1049	0.082	1.6	ug/L	115	Standard
	Ni	60	46186.0	3.6	18.7000	0.666	3.6	ug/L	75	Standard
	Cu	65	13329.5	5.5	5.5392	0.105	1.9	ug/L	155	Standard
	Zn	66	13217.8	4.8	11.0215	0.214	1.9	ug/L	237	Standard
[>	Ge	72	356069.0	6.8				ug/L	413856	Standard
	As	75	7263.0	7.1	5.9553	0.129	2.2	ug/L	-197	Standard
	Se	82	1283.6	4.7	11.5284	0.237	2.1	ug/L	-5	Standard
[	Se-1	77	1068.0	7.1	11.6719	0.249	2.1	ug/L	105	Standard
[>	Ga	71	188.3	4.1				mg/L	225	Standard
[	Rb	85	1993.5	6.0				ug/L	28	Standard
[	Y	89	265398.0	6.0				ug/L	322845	Standard
[>	Rh	103	135.0	12.8				ug/L	92	Standard
[	Mo	98	1183.7	2.6	0.2890	0.007	2.4	ug/L	18	Standard
	Ag	107	36934.0	4.2	5.2707	0.103	2.0	ug/L	63	Standard
	Cd	111	17264.8	3.6	5.6898	0.081	1.4	mg/L	20	Standard
	Cd	114	45075.0	3.9	5.6452	0.076	1.3	ug/L	56	Standard
[>	In	115	580626.6	5.0				ug/L	657102	Standard
	Sn	118	350.0	2.3	-0.0095	0.001	14.1	ug/L	555	Standard
	Sb	123	39369.2	3.8	5.6886	0.070	1.2	ug/L	62	Standard
[	Ba	135	31016.4	3.7	10.2963	0.140	1.4	ug/L	19	Standard
[	Ce	140	653.3	7.6				ug/L	24	Standard
[>	Tb	159	831510.4	4.1				ug/L	910514	Standard
[	Ho	165	28.7	26.4				ug/L	7	Standard
	Tl	203	63208.4	4.5	5.2135	0.073	1.4	ug/L	13	Standard
	Tl	205	1996.1	1.6	5.4048	0.114	2.1	ug/L	1	Standard
	Pb	206	50830.2	4.3	5.2036	0.059	1.1	ug/L	342	Standard
	Pb	207	43813.0	3.6	5.2741	0.045	0.9	ug/L	284	Standard
	Pb	208	201727.9	3.7	5.2314	0.029	0.6	ug/L	1363	Standard
	U	238	51288.7	3.9	5.4050	0.074	1.4	ug/L	2	Standard
[>	Bi	209	444746.6	3.2				ug/L	470592	Standard

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Na	23	1.7	173.2	0.1897	0.320	168.6	mg/L	2	Standard
Mg	24	166836.9	0.7	0.0988	0.003	2.9	mg/L	5586	Standard
K	39	20.0	25.0	0.2970	0.086	28.9	mg/L	5	Standard
Ca	43	530.0	9.6	25.7454	1.962	7.6	mg/L	45	Standard
Fe	54	169.6	26.5	-0.0720	0.024	34.0	mg/L	350	Standard
Fe	57	286.7	2.0	0.4312	0.026	5.9	mg/L	102	Standard
Sc-1	45	42695.1	3.4				mg/L	53004	Standard
Cl	35	5.0	20.0				ug/L	2	Standard
Kr	83	147.9	3.5				ug/L	157	Standard
Br	81	3.3	43.3				ug/L	3	Standard
P	31	54312.2	3.4				ug/L	91588	Standard
S	34	33457.7	2.2				ug/L	32556	Standard
Sr	88	180.0	12.7				ug/L	62	Standard
C	12	225.0	8.0				mg/L	133	Standard
N	14	0.0					mg/L	0	Standard
Hg	202	6.7	43.3				mg/L	7	Standard

QC Calculated Values

Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recovery
Li	7			
Be	9			
Al	27			
Sc	45			
Ti	47			
V	51			
Cr	52			
Cr	53			
Mn	55			
Co	59			
Ni	60			
Cu	65			
Zn	66			
Ge	72		86.037	
As	75			
Se	82			
Se-1	77			
Ga	71			
Rb	85			
Y	89			
Rh	103			

Sample ID: L1211025101S WG414119-07

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[	Mo	98	
[	Ag	107	
[	Cd	111	
[	Cd	114	
>	In	115	88.362
[	Sn	118	
[	Sb	123	
[	Ba	135	
[	Ce	140	
>	Tb	159	
[	Ho	165	
[	Tl	203	
[	Tl	205	
[	Pb	206	
[	Pb	207	
[	Pb	208	
[	U	238	
>	Bi	209	94.508
[	Na	23	
[	Mg	24	
[	K	39	
[	Ca	43	
[	Fe	54	
[	Fe	57	
>	Sc-1	45	
[	Cl	35	
[	Kr	83	
[	Br	81	
[	P	31	
[	S	34	
[	Sr	88	
[	C	12	
[	N	14	
[	Hg	202	

QC Out of Limits

Measurement Type	Analyte	Mass	Out of Limits Message

Sample ID: L1211025101S WG414119-07

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Method 6020 - Summary Report

Sample ID: L1211025101SD WG414119-08

Sample Date/Time: Sunday, November 18, 2012 15:02:27

Number of Replicates: 3

Autosampler Position: 312

Sample Description: 5

Method File: C:\NexIONData\Method\6020a.mth

Aliquot Volume (mL):

Diluted to Volume (mL):

User Name: JYH user

Cumulative Autodilution Factor: 1

Nexion-ICP 200.8\6020

Concentration Results

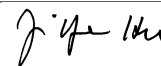
IS	Analyte	Mass	Intensity	RSD	Conc.	SD	RSD	Units	Blank Intens.	Mode
[	Li	7	15125.9	7.3	-6188.2310	543.048	8.8	ug/L	8369	Standard
	Be	9	10415.2	3.3	6.4973	0.045	0.7	ug/L	18	Standard
	Al	27	11988941.9	2.5	126.9147	4.117	3.2	ug/L	215	Standard
[>	Sc	45	40776.5	3.5				ug/L	53004	Standard
	Ti	47	82.3	8.6	0.1313	0.010	7.5	ug/L	26	Standard
	V	51	51370.5	2.7	4.9045	0.105	2.1	ug/L	3223	Standard
	Cr	52	55446.3	2.3	5.1121	0.176	3.4	ug/L	10379	Standard
	Cr	53	5837.8	5.5	4.9482	0.123	2.5	ug/L	192	Standard
	Mn	55	655278.2	3.5	45.0084	0.998	2.2	ug/L	1840	Standard
	Co	59	58503.1	1.9	5.2217	0.082	1.6	ug/L	115	Standard
	Ni	60	45072.6	2.5	18.7245	0.200	1.1	ug/L	75	Standard
	Cu	65	12966.5	2.4	5.5341	0.102	1.8	ug/L	155	Standard
	Zn	66	13048.6	1.2	11.1788	0.360	3.2	ug/L	237	Standard
[>	Ge	72	346593.8	3.5				ug/L	413856	Standard
	As	75	7021.2	4.5	5.9170	0.233	3.9	ug/L	-197	Standard
	Se	82	1236.9	5.6	11.4014	0.466	4.1	ug/L	-5	Standard
[	Se-1	77	1043.0	4.8	11.7178	0.562	4.8	ug/L	105	Standard
[>	Ga	71	185.0	18.7				mg/L	225	Standard
	Rb	85	1973.5	9.1				ug/L	28	Standard
	Y	89	259318.7	3.5				ug/L	322845	Standard
[>	Rh	103	106.7	17.7				ug/L	92	Standard
	Mo	98	1101.8	2.9	0.2694	0.008	2.8	ug/L	18	Standard
	Ag	107	36736.8	1.3	5.2637	0.068	1.3	ug/L	63	Standard
	Cd	111	17165.4	2.8	5.6784	0.099	1.7	mg/L	20	Standard
	Cd	114	44201.2	3.1	5.5563	0.065	1.2	ug/L	56	Standard
[>	In	115	578159.5	2.0				ug/L	657102	Standard
	Sn	118	345.0	7.0	-0.0100	0.003	27.4	ug/L	555	Standard
	Sb	123	39058.2	2.6	5.6655	0.091	1.6	ug/L	62	Standard
[	Ba	135	30998.0	2.8	10.3288	0.120	1.2	ug/L	19	Standard
	Ce	140	386.0	3.7				ug/L	24	Standard
[>	Tb	159	830563.2	1.7				ug/L	910514	Standard
	Ho	165	29.0	35.0				ug/L	7	Standard
	Tl	203	63859.7	1.9	5.3642	0.018	0.3	ug/L	13	Standard
	Tl	205	1996.5	4.0	5.5002	0.131	2.4	ug/L	1	Standard
	Pb	206	50828.8	2.0	5.2997	0.010	0.2	ug/L	342	Standard
	Pb	207	43016.0	2.4	5.2723	0.071	1.4	ug/L	284	Standard
	Pb	208	199917.9	1.9	5.2794	0.033	0.6	ug/L	1363	Standard
	U	238	50350.9	2.8	5.4027	0.084	1.6	ug/L	2	Standard
[>	Bi	209	436821.3	1.8				ug/L	470592	Standard

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Na	23	0.0		0.0050	0.000	0.0	mg/L	2	Standard
Mg	24	167465.4	0.7	0.1040	0.003	3.2	mg/L	5586	Standard
K	39	23.3	24.7	0.3738	0.118	31.7	mg/L	5	Standard
Ca	43	493.3	2.1	25.0994	1.511	6.0	mg/L	45	Standard
Fe	54	192.0	27.2	-0.0581	0.023	39.6	mg/L	350	Standard
Fe	57	296.7	2.6	0.4777	0.018	3.7	mg/L	102	Standard
Sc-1	45	40776.5	3.5				mg/L	53004	Standard
Cl	35	4.0	66.1				ug/L	2	Standard
Kr	83	150.3	11.0				ug/L	157	Standard
Br	81	5.0	50.0				ug/L	3	Standard
P	31	52035.0	1.4				ug/L	91588	Standard
S	34	33077.7	2.4				ug/L	32556	Standard
Sr	88	208.3	7.7				ug/L	62	Standard
C	12	181.7	18.3				mg/L	133	Standard
N	14	0.0					mg/L	0	Standard
Hg	202	1.7	173.2				mg/L	7	Standard

QC Calculated Values

Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recovery
Li	7			
Be	9			
Al	27			
Sc	45			
Ti	47			
V	51			
Cr	52			
Cr	53			
Mn	55			
Co	59			
Ni	60			
Cu	65			
Zn	66			
Ge	72		83.748	
As	75			
Se	82			
Se-1	77			
Ga	71			
Rb	85			
Y	89			
Rh	103			

Sample ID: L1211025101SD WG414119-08

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[	Mo	98	
[	Ag	107	
[	Cd	111	
[	Cd	114	
>	In	115	87.986
[	Sn	118	
[	Sb	123	
[	Ba	135	
[	Ce	140	
>	Tb	159	
[	Ho	165	
[	Tl	203	
[	Tl	205	
[	Pb	206	
[	Pb	207	
[	Pb	208	
[	U	238	
>	Bi	209	92.824
[	Na	23	
[	Mg	24	
[	K	39	
[	Ca	43	
[	Fe	54	
[	Fe	57	
>	Sc-1	45	
[	Cl	35	
[	Kr	83	
[	Br	81	
[	P	31	
[	S	34	
[	Sr	88	
[	C	12	
[	N	14	
[	Hg	202	

QC Out of Limits

Measurement Type	Analyte	Mass	Out of Limits Message

Sample ID: L1211025101SD WG414119-08

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Method 6020 - Summary Report

Sample ID: L1211025102

Sample Date/Time: Sunday, November 18, 2012 15:05:39

Number of Replicates: 3

Autosampler Position: 313

Sample Description: 1

Method File: C:\NexIONData\Method\6020a.mth

Aliquot Volume (mL):

Diluted to Volume (mL):

User Name: JYH user

Cumulative Autodilution Factor: 1

Nexion-ICP 200.8\6020

Concentration Results

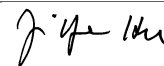
IS	Analyte	Mass	Intensity	RSD	Conc.	SD	RSD	Units	Blank Intens.	Mode
[	Li	7	50592.9	7.0	-29051.4565	1586.181	5.5	ug/L	8369	Standard
	Be	9	18.3	68.6	0.0013	0.008	565.7	ug/L	18	Standard
	Al	27	64714926.0	5.1	636.0635	31.372	4.9	ug/L	215	Standard
[>	Sc	45	43906.9	3.4				ug/L	53004	Standard
[	Ti	47	156.0	15.9	0.2896	0.055	18.8	ug/L	26	Standard
	V	51	7036.8	4.2	0.4154	0.021	5.0	ug/L	3223	Standard
	Cr	52	11083.1	3.0	0.2456	0.022	8.8	ug/L	10379	Standard
	Cr	53	385.8	8.8	0.2128	0.028	13.1	ug/L	192	Standard
	Mn	55	3285339.4	5.1	217.8782	8.568	3.9	ug/L	1840	Standard
	Co	59	5207.2	4.3	0.4338	0.016	3.7	ug/L	115	Standard
	Ni	60	169967.6	6.5	68.1522	3.666	5.4	ug/L	75	Standard
	Cu	65	2845.3	6.4	1.1251	0.066	5.8	ug/L	155	Standard
	Zn	66	21966.3	5.9	18.2553	0.877	4.8	ug/L	237	Standard
[>	Ge	72	359360.0	1.2				ug/L	413856	Standard
	As	75	471.7	4.8	0.5141	0.014	2.8	ug/L	-197	Standard
	Se	82	2681.3	3.8	23.8285	0.617	2.6	ug/L	-5	Standard
[	Se-1	77	2136.5	4.3	24.0941	0.943	3.9	ug/L	105	Standard
[>	Ga	71	191.7	10.9				mg/L	225	Standard
[	Rb	85	10051.7	3.4				ug/L	28	Standard
[	Y	89	272134.0	4.7				ug/L	322845	Standard
[>	Rh	103	190.0	21.5				ug/L	92	Standard
[	Mo	98	5160.0	4.5	1.2456	0.044	3.5	ug/L	18	Standard
	Ag	107	72.7	32.4	0.0021	0.003	150.4	ug/L	63	Standard
	Cd	111	72.8	19.2	0.0121	0.004	36.6	mg/L	20	Standard
	Cd	114	220.0	15.2	0.0171	0.004	24.0	ug/L	56	Standard
[>	In	115	600140.1	1.1				ug/L	657102	Standard
	Sn	118	635.0	5.5	0.0205	0.003	16.4	ug/L	555	Standard
	Sb	123	525.3	12.0	0.0705	0.008	11.3	ug/L	62	Standard
[	Ba	135	76727.4	4.7	24.6533	0.915	3.7	ug/L	19	Standard
[	Ce	140	121.7	5.0				ug/L	24	Standard
[>	Tb	159	864561.7	1.8				ug/L	910514	Standard
[	Ho	165	18.3	25.8				ug/L	7	Standard
	Tl	203	372.3	6.1	0.0281	0.002	6.1	ug/L	13	Standard
	Tl	205	12.0	33.3	0.0347	0.011	31.3	ug/L	1	Standard
	Pb	206	449.3	5.1	0.0148	0.002	16.6	ug/L	342	Standard
	Pb	207	379.0	3.8	0.0113	0.002	16.2	ug/L	284	Standard
	Pb	208	1731.4	1.8	0.0122	0.001	6.9	ug/L	1363	Standard
	U	238	14340.5	5.4	1.5573	0.077	5.0	ug/L	2	Standard
[>	Bi	209	431271.4	0.9				ug/L	470592	Standard

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Na	23	8.3	91.7	0.8997	0.809	89.9	mg/L	2	Standard
Mg	24	357292.8	1.7	0.2088	0.005	2.4	mg/L	5586	Standard
K	39	83.3	34.1	1.3293	0.483	36.4	mg/L	5	Standard
Ca	43	2241.8	6.5	112.9674	6.633	5.9	mg/L	45	Standard
Fe	54	346.6	7.9	0.0075	0.016	212.3	mg/L	350	Standard
Fe	57	990.0	11.5	1.7479	0.198	11.3	mg/L	102	Standard
Sc-1	45	43906.9	3.4				mg/L	53004	Standard
Cl	35	9.7	58.8				ug/L	2	Standard
Kr	83	176.3	0.8				ug/L	157	Standard
Br	81	4.2	69.3				ug/L	3	Standard
P	31	132056.7	5.7				ug/L	91588	Standard
S	34	33735.0	3.6				ug/L	32556	Standard
Sr	88	1000.0	7.8				ug/L	62	Standard
C	12	501.7	7.6				mg/L	133	Standard
N	14	0.0					mg/L	0	Standard
Hg	202	0.0					mg/L	7	Standard

QC Calculated Values

Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recovery
Li	7			
Be	9			
Al	27			
Sc	45			
Ti	47			
V	51			
Cr	52			
Cr	53			
Mn	55			
Co	59			
Ni	60			
Cu	65			
Zn	66			
Ge	72		86.832	
As	75			
Se	82			
Se-1	77			
Ga	71			
Rb	85			
Y	89			
Rh	103			

Sample ID: L1211025102

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[	Mo	98	
[	Ag	107	
[	Cd	111	
[	Cd	114	
>	In	115	91.331
[	Sn	118	
[	Sb	123	
[	Ba	135	
[	Ce	140	
>	Tb	159	
[	Ho	165	
[	Tl	203	
[	Tl	205	
[	Pb	206	
[	Pb	207	
[	Pb	208	
[	U	238	
>	Bi	209	91.644
[	Na	23	
[	Mg	24	
[	K	39	
[	Ca	43	
[	Fe	54	
[	Fe	57	
>	Sc-1	45	
[	Cl	35	
[	Kr	83	
[	Br	81	
[	P	31	
[	S	34	
[	Sr	88	
[	C	12	
[	N	14	
[	Hg	202	

QC Out of Limits

Measurement Type	Analyte	Mass	Out of Limits Message
Mn 55 Upper, S, EEE	Mn	55	

Sample ID: L1211025102

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Method 6020 - Summary Report

Sample ID: L1211025102

Sample Date/Time: Sunday, November 18, 2012 15:08:52

Number of Replicates: 3

Autosampler Position: 314

Sample Description: 5

Method File: C:\NexIONData\Method\6020a.mth

Aliquot Volume (mL):

Diluted to Volume (mL):

User Name: JYH user

Cumulative Autodilution Factor: 1

Nexion-ICP 200.8\6020

Concentration Results

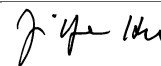
IS	Analyte	Mass	Intensity	RSD	Conc.	SD	RSD	Units	Blank Intens.	Mode
[	Li	7	14618.7	1.1	-6451.7569	547.079	8.5	ug/L	8369	Standard
	Be	9	10.0	100.0	-0.0027	0.007	243.0	ug/L	18	Standard
	Al	27	12098335.7	3.4	135.4737	4.258	3.1	ug/L	215	Standard
[>	Sc	45	38547.4	4.2				ug/L	53004	Standard
[	Ti	47	39.3	2.9	0.0335	0.002	7.1	ug/L	26	Standard
	V	51	3385.4	2.5	0.0800	0.014	16.9	ug/L	3223	Standard
	Cr	52	8747.5	1.8	0.0543	0.050	92.8	ug/L	10379	Standard
	Cr	53	218.3	17.3	0.0830	0.032	38.3	ug/L	192	Standard
	Mn	55	537009.6	1.1	37.5978	0.938	2.5	ug/L	1840	Standard
	Co	59	998.7	2.4	0.0756	0.003	3.9	ug/L	115	Standard
	Ni	60	31329.4	2.3	13.2587	0.316	2.4	ug/L	75	Standard
	Cu	65	709.7	8.4	0.2540	0.015	6.0	ug/L	155	Standard
	Zn	66	15562.3	23.3	13.5613	2.756	20.3	ug/L	237	Standard
[>	Ge	72	340037.6	3.6				ug/L	413856	Standard
	As	75	75.2	70.7	0.2020	0.043	21.1	ug/L	-197	Standard
	Se	82	551.1	6.7	5.1796	0.248	4.8	ug/L	-5	Standard
[	Se-1	77	511.7	2.0	5.3754	0.320	6.0	ug/L	105	Standard
[>	Ga	71	170.0	18.4				mg/L	225	Standard
[	Rb	85	1893.5	2.8				ug/L	28	Standard
[	Y	89	255876.4	4.0				ug/L	322845	Standard
[>	Rh	103	111.7	13.7				ug/L	92	Standard
[	Mo	98	982.3	0.5	0.2420	0.004	1.7	ug/L	18	Standard
	Ag	107	41.7	14.1	-0.0018	0.001	47.8	ug/L	63	Standard
	Cd	111	28.2	10.3	-0.0017	0.001	65.4	mg/L	20	Standard
	Cd	114	80.9	11.1	0.0007	0.001	154.0	ug/L	56	Standard
[>	In	115	571814.9	2.1				ug/L	657102	Standard
	Sn	118	339.3	11.2	-0.0102	0.005	46.1	ug/L	555	Standard
	Sb	123	119.3	13.5	0.0146	0.002	13.8	ug/L	62	Standard
[	Ba	135	14834.9	3.4	4.9877	0.121	2.4	ug/L	19	Standard
[	Ce	140	49.0	2.0				ug/L	24	Standard
[>	Tb	159	823460.0	1.2				ug/L	910514	Standard
[	Ho	165	10.3	14.8				ug/L	7	Standard
	Tl	203	164.3	10.6	0.0100	0.001	12.3	ug/L	13	Standard
	Tl	205	3.0	57.7	0.0095	0.005	50.6	ug/L	1	Standard
	Pb	206	348.3	7.3	0.0033	0.002	73.3	ug/L	342	Standard
	Pb	207	287.3	4.1	-0.0010	0.001	143.3	ug/L	284	Standard
	Pb	208	1300.4	3.8	-0.0002	0.001	701.8	ug/L	1363	Standard
	U	238	2758.3	4.4	0.2917	0.008	2.6	ug/L	2	Standard
[>	Bi	209	440959.3	1.8				ug/L	470592	Standard

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Na	23	3.3	173.2	0.4218	0.722	171.2	mg/L	2	Standard
Mg	24	167957.7	2.1	0.1105	0.002	2.3	mg/L	5586	Standard
K	39	33.3	31.2	0.5861	0.217	37.0	mg/L	5	Standard
Ca	43	546.7	6.6	29.8569	3.357	11.2	mg/L	45	Standard
Fe	54	165.0	10.6	-0.0664	0.007	10.9	mg/L	350	Standard
Fe	57	228.3	5.5	0.3656	0.039	10.7	mg/L	102	Standard
Sc-1	45	38547.4	4.2				mg/L	53004	Standard
Cl	35	5.0	52.9				ug/L	2	Standard
Kr	83	147.7	4.5				ug/L	157	Standard
Br	81	0.8	173.2				ug/L	3	Standard
P	31	49968.1	2.9				ug/L	91588	Standard
S	34	29569.7	0.9				ug/L	32556	Standard
Sr	88	213.3	4.9				ug/L	62	Standard
C	12	216.7	8.1				mg/L	133	Standard
N	14	3.3	86.6				mg/L	0	Standard
Hg	202	1.7	173.2				mg/L	7	Standard

QC Calculated Values

Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recovery
Li	7			
Be	9			
Al	27			
Sc	45			
Ti	47			
V	51			
Cr	52			
Cr	53			
Mn	55			
Co	59			
Ni	60			
Cu	65			
Zn	66			
Ge	72		82.163	
As	75			
Se	82			
Se-1	77			
Ga	71			
Rb	85			
Y	89			
Rh	103			

Sample ID: L1211025102

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[	Mo	98	
[	Ag	107	
[	Cd	111	
[	Cd	114	
>	In	115	87.021
[	Sn	118	
[	Sb	123	
[	Ba	135	
[	Ce	140	
>	Tb	159	
[	Ho	165	
[	Tl	203	
[	Tl	205	
[	Pb	206	
[	Pb	207	
[	Pb	208	
[	U	238	
>	Bi	209	93.703
[	Na	23	
[	Mg	24	
[	K	39	
[	Ca	43	
[	Fe	54	
[	Fe	57	
>	Sc-1	45	
[	Cl	35	
[	Kr	83	
[	Br	81	
[	P	31	
[	S	34	
[	Sr	88	
[	C	12	
[	N	14	
[	Hg	202	

QC Out of Limits

Measurement Type	Analyte	Mass	Out of Limits Message

Sample ID: L1211025102

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Method 6020 - Summary Report

Sample ID: L1211025104

Sample Date/Time: Sunday, November 18, 2012 15:12:04

Number of Replicates: 3

Autosampler Position: 315

Sample Description: 1

Method File: C:\NexIONData\Method\6020a.mth

Aliquot Volume (mL):

Diluted to Volume (mL):

User Name: JYH user

Cumulative Autodilution Factor: 1

Nexion-ICP 200.8\6020

Concentration Results

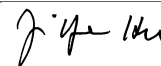
IS	Analyte	Mass	Intensity	RSD	Conc.	SD	RSD	Units	Blank Intens.	Mode
[	Li	7	11476.0	3.9	-2873.3403	305.473	10.6	ug/L	8369	Standard
	Be	9	10.0	86.6	-0.0036	0.005	148.0	ug/L	18	Standard
	Al	27	772097.0	5.2	7.4692	0.265	3.5	ug/L	215	Standard
[>	Sc	45	44599.0	4.9				ug/L	53004	Standard
[	Ti	47	250.3	3.1	0.4664	0.038	8.2	ug/L	26	Standard
	V	51	3910.5	3.1	0.0881	0.006	7.1	ug/L	3223	Standard
	Cr	52	11959.4	3.5	0.2584	0.018	6.8	ug/L	10379	Standard
	Cr	53	345.8	3.4	0.1611	0.010	6.1	ug/L	192	Standard
	Mn	55	57803.6	8.6	3.4991	0.145	4.1	ug/L	1840	Standard
	Co	59	313.0	11.7	0.0097	0.002	18.2	ug/L	115	Standard
	Ni	60	4116.9	7.5	1.5106	0.059	3.9	ug/L	75	Standard
	Cu	65	842.7	6.2	0.2705	0.011	4.1	ug/L	155	Standard
	Zn	66	6081.2	6.4	4.5837	0.073	1.6	ug/L	237	Standard
[>	Ge	72	383801.0	4.9				ug/L	413856	Standard
	As	75	-95.8	58.7	0.0694	0.041	58.5	ug/L	-197	Standard
	Se	82	69.9	14.0	0.5883	0.091	15.5	ug/L	-5	Standard
[	Se-1	77	170.7	5.4	0.9020	0.177	19.6	ug/L	105	Standard
[>	Ga	71	218.3	25.2				mg/L	225	Standard
[	Rb	85	1050.0	15.0				ug/L	28	Standard
[	Y	89	291146.1	6.9				ug/L	322845	Standard
[>	Rh	103	86.7	27.3				ug/L	92	Standard
[	Mo	98	313.9	5.0	0.0650	0.003	4.1	ug/L	18	Standard
	Ag	107	94.0	15.7	0.0047	0.002	47.0	ug/L	63	Standard
	Cd	111	68.0	8.9	0.0097	0.001	14.4	mg/L	20	Standard
	Cd	114	168.0	11.1	0.0101	0.001	14.4	ug/L	56	Standard
[>	In	115	621769.0	3.7				ug/L	657102	Standard
	Sn	118	570.7	2.0	0.0113	0.002	20.6	ug/L	555	Standard
	Sb	123	155.4	11.7	0.0180	0.002	9.6	ug/L	62	Standard
[	Ba	135	1639.1	6.7	0.4886	0.016	3.2	ug/L	19	Standard
[	Ce	140	401.3	11.4				ug/L	24	Standard
[>	Tb	159	887224.9	4.4				ug/L	910514	Standard
[	Ho	165	19.3	11.9				ug/L	7	Standard
	Tl	203	66.3	6.3	0.0016	0.000	10.5	ug/L	13	Standard
	Tl	205	1.7	173.2	0.0054	0.007	132.0	ug/L	1	Standard
	Pb	206	979.0	7.7	0.0629	0.004	6.6	ug/L	342	Standard
	Pb	207	797.4	7.5	0.0557	0.004	7.1	ug/L	284	Standard
	Pb	208	3743.2	5.6	0.0584	0.003	4.3	ug/L	1363	Standard
	U	238	134.3	17.4	0.0119	0.002	15.8	ug/L	2	Standard
[>	Bi	209	467813.9	3.3				ug/L	470592	Standard

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Na	23	0.0		0.0050	0.000	0.0	mg/L	2	Standard
Mg	24	92966.5	4.9	0.0513	0.003	5.0	mg/L	5586	Standard
K	39	23.3	49.5	0.3365	0.189	56.1	mg/L	5	Standard
Ca	43	53.3	10.8	0.4713	0.316	67.0	mg/L	45	Standard
Fe	54	418.7	13.8	0.0379	0.026	69.1	mg/L	350	Standard
Fe	57	115.0	32.8	0.0859	0.066	76.8	mg/L	102	Standard
Sc-1	45	44599.0	4.9				mg/L	53004	Standard
Cl	35	4.7	44.6				ug/L	2	Standard
Kr	83	168.6	7.1				ug/L	157	Standard
Br	81	5.0	100.0				ug/L	3	Standard
P	31	104386.8	1.9				ug/L	91588	Standard
S	34	30889.8	1.0				ug/L	32556	Standard
Sr	88	90.0	9.6				ug/L	62	Standard
C	12	215.0	27.4				mg/L	133	Standard
N	14	0.0					mg/L	0	Standard
Hg	202	10.0	86.6				mg/L	7	Standard

QC Calculated Values

Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recovery
Li	7			
Be	9			
Al	27			
Sc	45			
Ti	47			
V	51			
Cr	52			
Cr	53			
Mn	55			
Co	59			
Ni	60			
Cu	65			
Zn	66			
Ge	72		92.738	
As	75			
Se	82			
Se-1	77			
Ga	71			
Rb	85			
Y	89			
Rh	103			

Sample ID: L1211025104

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[	Mo	98	
[	Ag	107	
[	Cd	111	
[	Cd	114	
>	In	115	94.623
[	Sn	118	
[	Sb	123	
[	Ba	135	
[	Ce	140	
>	Tb	159	
[	Ho	165	
[	Tl	203	
[	Tl	205	
[	Pb	206	
[	Pb	207	
[	Pb	208	
[	U	238	
>	Bi	209	99.410
[	Na	23	
[	Mg	24	
[	K	39	
[	Ca	43	
[	Fe	54	
[	Fe	57	
>	Sc-1	45	
[	Cl	35	
[	Kr	83	
[	Br	81	
[	P	31	
[	S	34	
[	Sr	88	
[	C	12	
[	N	14	
[	Hg	202	

QC Out of Limits

Measurement Type	Analyte	Mass	Out of Limits Message

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Method 6020 - Summary Report

Sample ID: L1211025105

Sample Date/Time: Sunday, November 18, 2012 15:15:16

Number of Replicates: 3

Autosampler Position: 316

Sample Description: 1

Method File: C:\NexIONData\Method\6020a.mth

Aliquot Volume (mL):

Diluted to Volume (mL):

User Name: JYH user

Cumulative Autodilution Factor: 1

Nexion-ICP 200.8\6020

Concentration Results

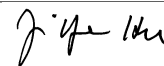
IS	Analyte	Mass	Intensity	RSD	Conc.	SD	RSD	Units	Blank Intens.	Mode
[	Li	7	63077.7	2.3	-37312.6569	554.656	1.5	ug/L	8369	Standard
	Be	9	25.0	60.0	0.0050	0.009	175.3	ug/L	18	Standard
	Al	27	81415249.3	5.1	798.4572	39.882	5.0	ug/L	215	Standard
[>	Sc	45	43993.8	2.0				ug/L	53004	Standard
[	Ti	47	521.3	3.8	1.0849	0.042	3.8	ug/L	26	Standard
	V	51	10236.4	1.6	0.7069	0.024	3.4	ug/L	3223	Standard
	Cr	52	13886.7	2.2	0.5111	0.018	3.6	ug/L	10379	Standard
	Cr	53	855.0	6.3	0.5911	0.045	7.6	ug/L	192	Standard
	Mn	55	4172483.0	3.1	271.4096	7.697	2.8	ug/L	1840	Standard
	Co	59	6396.0	0.3	0.5258	0.007	1.3	ug/L	115	Standard
	Ni	60	211537.0	1.4	83.2081	1.231	1.5	ug/L	75	Standard
	Cu	65	4140.6	0.7	1.6306	0.029	1.7	ug/L	155	Standard
	Zn	66	26934.9	3.4	21.9938	0.638	2.9	ug/L	237	Standard
[>	Ge	72	366517.7	1.0				ug/L	413856	Standard
	As	75	828.6	9.4	0.7849	0.067	8.6	ug/L	-197	Standard
	Se	82	3431.4	0.5	29.9049	0.236	0.8	ug/L	-5	Standard
[	Se-1	77	2637.6	3.2	29.3701	0.743	2.5	ug/L	105	Standard
[>	Ga	71	361.7	10.5				mg/L	225	Standard
[	Rb	85	13334.2	3.9				ug/L	28	Standard
[	Y	89	283183.8	1.2				ug/L	322845	Standard
[>	Rh	103	238.3	6.4				ug/L	92	Standard
[	Mo	98	6187.8	4.1	1.4859	0.055	3.7	ug/L	18	Standard
	Ag	107	98.0	19.4	0.0056	0.003	45.6	ug/L	63	Standard
	Cd	111	132.6	16.3	0.0308	0.006	21.0	mg/L	20	Standard
	Cd	114	381.6	2.8	0.0364	0.002	4.4	ug/L	56	Standard
[>	In	115	604089.4	1.0				ug/L	657102	Standard
	Sn	118	721.7	4.5	0.0295	0.003	10.2	ug/L	555	Standard
	Sb	123	545.8	7.3	0.0729	0.006	8.1	ug/L	62	Standard
[	Ba	135	93361.9	3.1	29.8116	0.783	2.6	ug/L	19	Standard
[	Ce	140	3774.1	3.6				ug/L	24	Standard
[>	Tb	159	877146.9	1.5				ug/L	910514	Standard
[	Ho	165	143.7	16.5				ug/L	7	Standard
	Tl	203	358.7	11.9	0.0267	0.004	14.6	ug/L	13	Standard
	Tl	205	12.3	16.9	0.0354	0.005	15.1	ug/L	1	Standard
	Pb	206	1209.7	2.0	0.0945	0.002	2.0	ug/L	342	Standard
	Pb	207	1010.4	5.0	0.0891	0.005	6.0	ug/L	284	Standard
	Pb	208	4744.0	2.6	0.0922	0.004	4.1	ug/L	1363	Standard
	U	238	17970.3	3.1	1.9358	0.077	4.0	ug/L	2	Standard
[>	Bi	209	435039.2	1.3				ug/L	470592	Standard

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Na	23	11.7	24.7	1.2774	0.329	25.7	mg/L	2	Standard
Mg	24	392837.6	0.7	0.2294	0.005	2.1	mg/L	5586	Standard
K	39	106.7	17.7	1.7052	0.302	17.7	mg/L	5	Standard
Ca	43	2845.3	5.9	143.6666	7.824	5.4	mg/L	45	Standard
Fe	54	543.7	5.6	0.0984	0.017	17.6	mg/L	350	Standard
Fe	57	1168.4	6.9	2.0813	0.113	5.4	mg/L	102	Standard
Sc-1	45	43993.8	2.0				mg/L	53004	Standard
Cl	35	6.3	32.9				ug/L	2	Standard
Kr	83	184.7	1.6				ug/L	157	Standard
Br	81	8.3	45.8				ug/L	3	Standard
P	31	138020.8	0.4				ug/L	91588	Standard
S	34	34394.0	4.1				ug/L	32556	Standard
Sr	88	1166.7	2.6				ug/L	62	Standard
C	12	440.0	2.3				mg/L	133	Standard
N	14	1.7	173.2				mg/L	0	Standard
Hg	202	6.7	86.6				mg/L	7	Standard

QC Calculated Values

Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recovery
Li	7			
Be	9			
Al	27			
Sc	45			
Ti	47			
V	51			
Cr	52			
Cr	53			
Mn	55			
Co	59			
Ni	60			
Cu	65			
Zn	66			
Ge	72		88.562	
As	75			
Se	82			
Se-1	77			
Ga	71			
Rb	85			
Y	89			
Rh	103			

Sample ID: L1211025105

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[	Mo	98	
[	Ag	107	
[	Cd	111	
[	Cd	114	
>	In	115	91.932
[	Sn	118	
[	Sb	123	
[	Ba	135	
[	Ce	140	
>	Tb	159	
[	Ho	165	
[	Tl	203	
[	Tl	205	
[	Pb	206	
[	Pb	207	
[	Pb	208	
[	U	238	
>	Bi	209	92.445
[	Na	23	
[	Mg	24	
[	K	39	
[	Ca	43	
[	Fe	54	
[	Fe	57	
>	Sc-1	45	
[	Cl	35	
[	Kr	83	
[	Br	81	
[	P	31	
[	S	34	
[	Sr	88	
[	C	12	
[	N	14	
[	Hg	202	

QC Out of Limits

Measurement Type	Analyte	Mass	Out of Limits Message
Mn 55 Upper, S, EEE	Mn	55	

Sample ID: L1211025105

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Method 6020 - Summary Report

Sample ID: L1211025104

Sample Date/Time: Sunday, November 18, 2012 15:18:28

Number of Replicates: 3

Autosampler Position: 317

Sample Description: 50

Method File: C:\NexIONData\Method\6020a.mth

Aliquot Volume (mL):

Diluted to Volume (mL):

User Name: JYH user

Cumulative Autodilution Factor: 1

Nexion-ICP 200.8\6020

Concentration Results

IS	Analyte	Mass	Intensity	RSD	Conc.	SD	RSD	Units	Blank Intens.	Mode
[	Li	7	7510.2	5.4	-1328.1281	369.027	27.8	ug/L	8369	Standard
	Be	9	11.7	107.9	-0.0012	0.009	743.9	ug/L	18	Standard
	Al	27	35248.3	45.8	0.4188	0.205	48.9	ug/L	215	Standard
[>	Sc	45	36719.5	5.1				ug/L	53004	Standard
	Ti	47	17.7	16.3	-0.0162	0.007	43.9	ug/L	26	Standard
	V	51	2914.5	2.5	0.0428	0.005	10.6	ug/L	3223	Standard
	Cr	52	8924.6	3.2	0.1102	0.027	24.8	ug/L	10379	Standard
	Cr	53	145.0	11.3	0.0233	0.016	67.9	ug/L	192	Standard
	Mn	55	2685.9	26.6	0.1064	0.050	47.1	ug/L	1840	Standard
	Co	59	81.7	29.4	-0.0078	0.002	30.6	ug/L	115	Standard
	Ni	60	296.0	13.0	0.0947	0.015	16.2	ug/L	75	Standard
	Cu	65	188.0	7.0	0.0282	0.006	21.1	ug/L	155	Standard
	Zn	66	1267.4	4.3	0.9692	0.057	5.9	ug/L	237	Standard
[>	Ge	72	327603.3	1.5				ug/L	413856	Standard
	As	75	-170.8	29.7	-0.0083	0.042	508.4	ug/L	-197	Standard
	Se	82	-4.2	479.1	-0.0335	0.195	581.3	ug/L	-5	Standard
[	Se-1	77	103.0	8.5	0.3485	0.131	37.6	ug/L	105	Standard
[>	Ga	71	126.7	9.1				mg/L	225	Standard
	Rb	85	48.3	48.9				ug/L	28	Standard
	Y	89	242612.1	0.9				ug/L	322845	Standard
[>	Rh	103	76.7	10.0				ug/L	92	Standard
	Mo	98	15.7	11.8	-0.0045	0.001	12.7	ug/L	18	Standard
	Ag	107	47.0	2.1	-0.0008	0.000	18.2	ug/L	63	Standard
	Cd	111	18.3	41.7	-0.0048	0.003	56.5	mg/L	20	Standard
	Cd	114	46.2	7.7	-0.0035	0.000	10.9	ug/L	56	Standard
[>	In	115	551655.5	2.0				ug/L	657102	Standard
	Sn	118	290.7	3.4	-0.0146	0.002	11.6	ug/L	555	Standard
	Sb	123	23.4	48.1	0.0006	0.002	266.9	ug/L	62	Standard
[	Ba	135	68.3	57.9	0.0040	0.014	347.4	ug/L	19	Standard
	Ce	140	25.3	36.7				ug/L	24	Standard
[>	Tb	159	787730.7	0.5				ug/L	910514	Standard
	Ho	165	7.0	24.7				ug/L	7	Standard
	Tl	203	35.0	13.1	-0.0007	0.000	59.9	ug/L	13	Standard
	Tl	205	1.0	173.2	0.0041	0.005	118.8	ug/L	1	Standard
	Pb	206	320.0	2.8	0.0012	0.001	82.3	ug/L	342	Standard
	Pb	207	255.3	4.5	-0.0041	0.002	36.9	ug/L	284	Standard
	Pb	208	1224.0	1.4	-0.0014	0.001	40.6	ug/L	1363	Standard
	U	238	11.3	91.8	-0.0003	0.001	402.6	ug/L	2	Standard
[>	Bi	209	429736.8	0.5				ug/L	470592	Standard

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Na	23	1.7	173.2	0.2107	0.356	169.1	mg/L	2	Standard
Mg	24	3165.3	8.7	-0.0007	0.000	41.0	mg/L	5586	Standard
K	39	5.0	100.0	0.0548	0.093	169.9	mg/L	5	Standard
Ca	43	45.0	19.2	0.5519	0.653	118.3	mg/L	45	Standard
Fe	54	145.6	22.4	-0.0732	0.014	19.1	mg/L	350	Standard
Fe	57	108.3	2.7	0.1177	0.013	11.0	mg/L	102	Standard
Sc-1	45	36719.5	5.1				mg/L	53004	Standard
Cl	35	2.7	57.3				ug/L	2	Standard
Kr	83	167.4	9.6				ug/L	157	Standard
Br	81	6.7	108.3				ug/L	3	Standard
P	31	36532.4	4.1				ug/L	91588	Standard
S	34	30010.6	6.2				ug/L	32556	Standard
Sr	88	75.0	24.0				ug/L	62	Standard
C	12	180.0	5.6				mg/L	133	Standard
N	14	0.0					mg/L	0	Standard
Hg	202	5.0	0.0				mg/L	7	Standard

QC Calculated Values

Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recovery
Li	7			
Be	9			
Al	27			
Sc	45			
Ti	47			
V	51			
Cr	52			
Cr	53			
Mn	55			
Co	59			
Ni	60			
Cu	65			
Zn	66			
Ge	72		79.159	
As	75			
Se	82			
Se-1	77			
Ga	71			
Rb	85			
Y	89			
Rh	103			

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[	Mo	98	
[	Ag	107	
[	Cd	111	
[	Cd	114	
>	In	115	83.953
[	Sn	118	
[	Sb	123	
[	Ba	135	
[	Ce	140	
>	Tb	159	
[	Ho	165	
[	Tl	203	
[	Tl	205	
[	Pb	206	
[	Pb	207	
[	Pb	208	
[	U	238	
>	Bi	209	91.318
[	Na	23	
[	Mg	24	
[	K	39	
[	Ca	43	
[	Fe	54	
[	Fe	57	
>	Sc-1	45	
[	Cl	35	
[	Kr	83	
[	Br	81	
[	P	31	
[	S	34	
[	Sr	88	
[	C	12	
[	N	14	
[	Hg	202	

QC Out of Limits

Measurement Type	Analyte	Mass	Out of Limits Message

Sample ID: L1211025104

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Method 6020 - Summary Report

Sample ID: L1211025105

Sample Date/Time: Sunday, November 18, 2012 15:21:40

Number of Replicates: 3

Autosampler Position: 318

Sample Description: 50

Method File: C:\NexIONData\Method\6020a.mth

Aliquot Volume (mL):

Diluted to Volume (mL):

User Name: JYH user

Cumulative Autodilution Factor: 1

Nexion-ICP 200.8\6020

Concentration Results

IS	Analyte	Mass	Intensity	RSD	Conc.	SD	RSD	Units	Blank Intens.	Mode
[	Li	7	8213.9	2.2	-1413.6492	146.267	10.3	ug/L	8369	Standard
	Be	9	15.0	88.2	0.0003	0.009	3270.2	ug/L	18	Standard
	Al	27	1514369.2	1.5	16.5149	0.019	0.1	ug/L	215	Standard
[>	Sc	45	39554.9	1.4				ug/L	53004	Standard
	Ti	47	27.0	35.3	0.0049	0.024	489.0	ug/L	26	Standard
	V	51	3000.1	4.4	0.0420	0.011	25.9	ug/L	3223	Standard
	Cr	52	9024.4	3.6	0.0895	0.036	40.4	ug/L	10379	Standard
	Cr	53	177.5	17.1	0.0476	0.023	48.7	ug/L	192	Standard
	Mn	55	76443.4	2.7	5.3034	0.147	2.8	ug/L	1840	Standard
	Co	59	221.3	10.4	0.0048	0.002	50.9	ug/L	115	Standard
	Ni	60	4489.0	5.5	1.8792	0.100	5.3	ug/L	75	Standard
	Cu	65	279.7	5.8	0.0660	0.005	7.1	ug/L	155	Standard
	Zn	66	2191.5	3.1	1.7584	0.070	4.0	ug/L	237	Standard
[>	Ge	72	338153.9	2.4				ug/L	413856	Standard
	As	75	-133.2	44.9	0.0284	0.048	167.8	ug/L	-197	Standard
	Se	82	76.6	11.4	0.7299	0.098	13.4	ug/L	-5	Standard
[	Se-1	77	158.0	4.4	0.9940	0.130	13.1	ug/L	105	Standard
[>	Ga	71	180.0	12.1				mg/L	225	Standard
[	Rb	85	260.0	3.3				ug/L	28	Standard
[	Y	89	251416.6	3.0				ug/L	322845	Standard
[>	Rh	103	85.0	15.6				ug/L	92	Standard
[	Mo	98	122.3	9.6	0.0232	0.003	11.9	ug/L	18	Standard
	Ag	107	51.7	14.8	-0.0002	0.001	433.8	ug/L	63	Standard
	Cd	111	19.2	25.7	-0.0046	0.002	36.9	mg/L	20	Standard
	Cd	114	58.8	10.2	-0.0019	0.001	39.8	ug/L	56	Standard
[>	In	115	559956.8	1.1				ug/L	657102	Standard
	Sn	118	281.0	6.3	-0.0162	0.002	13.4	ug/L	555	Standard
	Sb	123	32.1	26.0	0.0019	0.001	68.3	ug/L	62	Standard
[	Ba	135	2032.5	4.1	0.6810	0.036	5.3	ug/L	19	Standard
[	Ce	140	96.0	8.9				ug/L	24	Standard
[>	Tb	159	812257.1	1.0				ug/L	910514	Standard
[	Ho	165	10.0	43.6				ug/L	7	Standard
	Tl	203	56.0	4.7	0.0010	0.000	23.3	ug/L	13	Standard
	Tl	205	2.0	50.0	0.0068	0.003	41.0	ug/L	1	Standard
	Pb	206	425.3	5.6	0.0112	0.002	22.2	ug/L	342	Standard
	Pb	207	388.3	6.0	0.0113	0.003	22.7	ug/L	284	Standard
	Pb	208	1750.4	2.1	0.0116	0.001	4.9	ug/L	1363	Standard
	U	238	365.0	2.2	0.0372	0.001	3.3	ug/L	2	Standard
[>	Bi	209	441601.7	0.9				ug/L	470592	Standard

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Na	23	0.0		0.0050	0.000	0.0	mg/L	2	Standard
Mg	24	35521.6	2.5	0.0204	0.001	4.2	mg/L	5586	Standard
K	39	8.3	124.9	0.1094	0.187	170.8	mg/L	5	Standard
Ca	43	121.7	16.6	4.7083	1.143	24.3	mg/L	45	Standard
Fe	54	143.6	15.3	-0.0796	0.010	13.0	mg/L	350	Standard
Fe	57	126.7	4.6	0.1384	0.013	9.5	mg/L	102	Standard
Sc-1	45	39554.9	1.4				mg/L	53004	Standard
Cl	35	2.7	21.7				ug/L	2	Standard
Kr	83	159.4	3.2				ug/L	157	Standard
Br	81	5.0	50.0				ug/L	3	Standard
P	31	36547.4	1.4				ug/L	91588	Standard
S	34	32809.7	1.0				ug/L	32556	Standard
Sr	88	73.3	37.6				ug/L	62	Standard
C	12	138.3	7.5				mg/L	133	Standard
N	14	0.0					mg/L	0	Standard
Hg	202	3.3	86.6				mg/L	7	Standard

QC Calculated Values

Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recovery
Li	7			
Be	9			
Al	27			
Sc	45			
Ti	47			
V	51			
Cr	52			
Cr	53			
Mn	55			
Co	59			
Ni	60			
Cu	65			
Zn	66			
Ge	72		81.708	
As	75			
Se	82			
Se-1	77			
Ga	71			
Rb	85			
Y	89			
Rh	103			

Sample ID: L1211025105

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[	Mo	98	
[	Ag	107	
[	Cd	111	
[	Cd	114	
>	In	115	85.216
[	Sn	118	
[	Sb	123	
[	Ba	135	
[	Ce	140	
>	Tb	159	
[	Ho	165	
[	Tl	203	
[	Tl	205	
[	Pb	206	
[	Pb	207	
[	Pb	208	
[	U	238	
>	Bi	209	93.840
[	Na	23	
[	Mg	24	
[	K	39	
[	Ca	43	
[	Fe	54	
[	Fe	57	
>	Sc-1	45	
[	Cl	35	
[	Kr	83	
[	Br	81	
[	P	31	
[	S	34	
[	Sr	88	
[	C	12	
[	N	14	
[	Hg	202	

QC Out of Limits

Measurement Type	Analyte	Mass	Out of Limits Message

Sample ID: L1211025105

Report Date/Time: Sunday, November 18, 2012 15:24:12

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Method 6020 - Summary Report

Sample ID: QC Std 6

Sample Date/Time: Sunday, November 18, 2012 15:24:55

Number of Replicates: 3

Autosampler Position: 101

Sample Description:

Method File: C:\NexIONData\Method\6020a.mth

Aliquot Volume (mL):

Diluted to Volume (mL):

User Name: JYH user

Cumulative Autodilution Factor: 1

Nexion-ICP 200.8\6020

Concentration Results

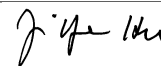
IS	Analyte	Mass	Intensity	RSD	Conc.	SD	RSD	Units	Blank Intens.	Mode
[	Li	7	9256.2	8.7	-1132.4981	350.666	31.0	ug/L	8369	Standard
	Be	9	107290.8	4.9	58.5045	0.928	1.6	ug/L	18	Standard
	Al	27	6738711.7	3.5	62.2643	0.633	1.0	ug/L	215	Standard
[>	Sc	45	46690.2	3.3				ug/L	53004	Standard
[	Ti	47	45185.0	3.4	92.9266	4.119	4.4	ug/L	26	Standard
	V	51	529471.8	1.8	46.9731	1.627	3.5	ug/L	3223	Standard
	Cr	52	508713.8	3.2	48.0849	2.112	4.4	ug/L	10379	Standard
	Cr	53	62974.8	1.7	48.2641	1.021	2.1	ug/L	192	Standard
	Mn	55	805091.3	2.1	49.0129	1.490	3.0	ug/L	1840	Standard
	Co	59	622546.0	2.9	49.4049	3.105	6.3	ug/L	115	Standard
	Ni	60	133084.3	1.4	49.0584	1.719	3.5	ug/L	75	Standard
	Cu	65	131479.4	1.7	50.1928	1.981	3.9	ug/L	155	Standard
	Zn	66	65777.6	3.1	50.6080	2.068	4.1	ug/L	237	Standard
[>	Ge	72	391276.7	3.6				ug/L	413856	Standard
	As	75	68200.0	2.7	49.8637	1.784	3.6	ug/L	-197	Standard
	Se	82	5928.6	4.1	48.4006	1.400	2.9	ug/L	-5	Standard
[	Se-1	77	4652.4	3.5	49.2033	2.115	4.3	ug/L	105	Standard
[>	Ga	71	196.7	22.2				mg/L	225	Standard
[	Rb	85	1571.7	9.6				ug/L	28	Standard
[	Y	89	294009.6	3.9				ug/L	322845	Standard
[>	Rh	103	115.0	7.5				ug/L	92	Standard
[	Mo	98	405933.4	2.5	93.8951	3.050	3.2	ug/L	18	Standard
	Ag	107	385089.9	3.1	50.6277	1.619	3.2	ug/L	63	Standard
	Cd	111	165218.1	2.4	50.1823	1.564	3.1	mg/L	20	Standard
	Cd	114	433089.6	2.9	49.9822	1.765	3.5	ug/L	56	Standard
[>	In	115	630961.7	1.9				ug/L	657102	Standard
	Sn	118	489610.5	4.9	51.1982	2.583	5.0	ug/L	555	Standard
	Sb	123	380543.8	2.2	50.6203	1.681	3.3	ug/L	62	Standard
[	Ba	135	162245.4	3.4	49.6364	2.193	4.4	ug/L	19	Standard
[	Ce	140	492.3	4.8				ug/L	24	Standard
[>	Tb	159	895766.3	2.2				ug/L	910514	Standard
[	Ho	165	436.7	4.8				ug/L	7	Standard
[	Tl	203	634836.6	2.2	49.8725	0.948	1.9	ug/L	13	Standard
	Tl	205	19704.1	1.5	50.7435	0.959	1.9	ug/L	1	Standard
	Pb	206	510550.4	3.0	50.0401	1.789	3.6	ug/L	342	Standard
	Pb	207	435772.8	2.7	50.2315	1.462	2.9	ug/L	284	Standard
	Pb	208	2007945.4	3.1	49.8573	1.787	3.6	ug/L	1363	Standard
	U	238	507427.9	3.5	50.9127	1.977	3.9	ug/L	2	Standard
[>	Bi	209	467362.9	1.1				ug/L	470592	Standard

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Na	23	1.7	173.2	0.1807	0.304	168.4	mg/L	2	Standard
Mg	24	303083.8	2.1	0.1660	0.002	1.3	mg/L	5586	Standard
K	39	323.3	2.4	4.9563	0.281	5.7	mg/L	5	Standard
Ca	43	126.7	12.7	3.8959	0.826	21.2	mg/L	45	Standard
Fe	54	12301.6	4.4	5.2130	0.213	4.1	mg/L	350	Standard
Fe	57	2970.3	5.3	5.1675	0.232	4.5	mg/L	102	Standard
Sc-1	45	46690.2	3.3				mg/L	53004	Standard
Cl	35	2.7	57.3				ug/L	2	Standard
Kr	83	184.2	5.1				ug/L	157	Standard
Br	81	4.2	69.3				ug/L	3	Standard
P	31	113844.5	1.1				ug/L	91588	Standard
S	34	35010.4	2.2				ug/L	32556	Standard
Sr	88	75.0	26.7				ug/L	62	Standard
C	12	161.7	3.6				mg/L	133	Standard
N	14	1.7	173.2				mg/L	0	Standard
Hg	202	5.0	0.0				mg/L	7	Standard

QC Calculated Values

Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recovery
Li	7			
Be	9	117.009		
Al	27	124.529		
Sc	45			
Ti	47	92.927		
V	51	93.946		
Cr	52	96.170		
Cr	53			
Mn	55	98.026		
Co	59	98.810		
Ni	60	98.117		
Cu	65	100.386		
Zn	66	101.216		
Ge	72		94.544	
As	75	99.727		
Se	82	96.801		
Se-1	77			
Ga	71			
Rb	85			
Y	89			
Rh	103			

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[	Mo	98	93.895	
[	Ag	107	101.255	
[	Cd	111	100.365	
[	Cd	114		
>	In	115		96.022
[	Sn	118	102.396	
[	Sb	123	101.241	
[	Ba	135	99.273	
[	Ce	140		
>	Tb	159		
[	Ho	165		
[	Tl	203	99.745	
[	Tl	205		
[	Pb	206	100.080	
[	Pb	207	100.463	
[	Pb	208	99.715	
[	U	238	101.825	
>	Bi	209		99.314
[	Na	23		
[	Mg	24		
[	K	39		
[	Ca	43		
[	Fe	54		
[	Fe	57		
>	Sc-1	45		
[	Cl	35		
[	Kr	83		
[	Br	81		
[	P	31		
[	S	34		
[	Sr	88		
[	C	12		
[	N	14		
[	Hg	202		

QC Out of Limits

Measurement Type	Analyte	Mass	Out of Limits Message
QC Std 6	Be	9	
QC Std 6	Al	27	

Sample ID: QC Std 6

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Method 6020 - Summary Report

Sample ID: QC Std 7

Sample Date/Time: Sunday, November 18, 2012 15:28:07

Number of Replicates: 3

Autosampler Position: 102

Sample Description:

Method File: C:\NexIONData\Method\6020a.mth

Aliquot Volume (mL):

Diluted to Volume (mL):

User Name: JYH user

Cumulative Autodilution Factor: 1

Nexion-ICP 200.8\6020

Concentration Results

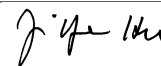
IS	Analyte	Mass	Intensity	RSD	Conc.	SD	RSD	Units	Blank Intens.	Mode
[	Li	7	8150.5	5.6	-732.0396	447.940	61.2	ug/L	8369	Standard
	Be	9	16.7	91.7	0.0000	0.009795866.2		ug/L	18	Standard
	Al	27	1650.2	139.9	0.0134	0.021	160.3	ug/L	215	Standard
[>	Sc	45	44276.3	3.9				ug/L	53004	Standard
[	Ti	47	15.7	54.3	-0.0266	0.017	64.5	ug/L	26	Standard
	V	51	2610.6	1.3	-0.0276	0.004	15.0	ug/L	3223	Standard
	Cr	52	8229.9	2.2	-0.0994	0.006	6.3	ug/L	10379	Standard
	Cr	53	128.3	27.7	-0.0085	0.027	315.3	ug/L	192	Standard
	Mn	55	1391.1	7.3	-0.0016	0.004	230.8	ug/L	1840	Standard
	Co	59	95.7	36.6	-0.0078	0.003	33.4	ug/L	115	Standard
	Ni	60	83.0	48.4	-0.0042	0.014	333.1	ug/L	75	Standard
	Cu	65	244.7	21.2	0.0384	0.017	45.1	ug/L	155	Standard
	Zn	66	256.3	12.4	0.0040	0.019	474.3	ug/L	237	Standard
[>	Ge	72	379751.4	2.9				ug/L	413856	Standard
	As	75	-164.9	8.6	0.0163	0.008	50.9	ug/L	-197	Standard
	Se	82	2.9	305.4	0.0309	0.074	240.7	ug/L	-5	Standard
[	Se-1	77	107.0	4.7	0.2111	0.083	39.5	ug/L	105	Standard
[>	Ga	71	190.0	20.9				mg/L	225	Standard
[	Rb	85	30.0	76.4				ug/L	28	Standard
[	Y	89	281341.1	2.9				ug/L	322845	Standard
[>	Rh	103	106.7	10.8				ug/L	92	Standard
[	Mo	98	65.5	94.2	0.0070	0.014	207.4	ug/L	18	Standard
	Ag	107	118.7	90.9	0.0082	0.014	173.8	ug/L	63	Standard
	Cd	111	55.6	125.0	0.0062	0.021	347.2	mg/L	20	Standard
	Cd	114	123.4	100.0	0.0051	0.014	281.3	ug/L	56	Standard
[>	In	115	602931.3	2.1				ug/L	657102	Standard
	Sn	118	432.3	34.6	-0.0023	0.015	673.8	ug/L	555	Standard
	Sb	123	309.6	60.6	0.0398	0.025	62.6	ug/L	62	Standard
[	Ba	135	35.0	94.1	-0.0089	0.010	114.8	ug/L	19	Standard
[	Ce	140	24.7	12.4				ug/L	24	Standard
[>	Tb	159	856401.5	2.1				ug/L	910514	Standard
[	Ho	165	8.7	6.7				ug/L	7	Standard
	Tl	203	78.0	127.8	0.0025	0.008	307.0	ug/L	13	Standard
	Tl	205	3.7	78.7	0.0109	0.007	67.1	ug/L	1	Standard
	Pb	206	366.0	20.1	0.0039	0.007	168.0	ug/L	342	Standard
	Pb	207	303.3	18.4	-0.0002	0.006	3429.7	ug/L	284	Standard
	Pb	208	1394.7	18.1	0.0011	0.005	480.5	ug/L	1363	Standard
	U	238	29.3	134.9	0.0014	0.004	274.9	ug/L	2	Standard
[>	Bi	209	453918.1	2.5				ug/L	470592	Standard

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Na	23	0.0		0.0050	0.000	0.0	mg/L	2	Standard
Mg	24	861.7	17.8	-0.0024	0.000	2.9	mg/L	5586	Standard
K	39	6.7	173.2	0.0626	0.180	287.6	mg/L	5	Standard
Ca	43	33.3	45.8	-0.5231	0.823	157.3	mg/L	45	Standard
Fe	54	347.2	13.1	0.0067	0.025	379.9	mg/L	350	Standard
Fe	57	103.3	14.8	0.0662	0.030	45.3	mg/L	102	Standard
Sc-1	45	44276.3	3.9				mg/L	53004	Standard
Cl	35	3.3	69.3				ug/L	2	Standard
Kr	83	182.4	2.4				ug/L	157	Standard
Br	81	7.5	33.3				ug/L	3	Standard
P	31	106792.0	3.2				ug/L	91588	Standard
S	34	32926.6	1.2				ug/L	32556	Standard
Sr	88	61.7	16.9				ug/L	62	Standard
C	12	130.0	17.6				mg/L	133	Standard
N	14	0.0					mg/L	0	Standard
Hg	202	1.7	173.2				mg/L	7	Standard

QC Calculated Values

Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recovery
Li	7			
Be	9			
Al	27			
Sc	45			
Ti	47			
V	51			
Cr	52			
Cr	53			
Mn	55			
Co	59			
Ni	60			
Cu	65			
Zn	66			
Ge	72		91.759	
As	75			
Se	82			
Se-1	77			
Ga	71			
Rb	85			
Y	89			
Rh	103			

Sample ID: QC Std 7

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[	Mo	98	
[	Ag	107	
[	Cd	111	
[	Cd	114	
>	In	115	91.756
[	Sn	118	
[	Sb	123	
[	Ba	135	
[	Ce	140	
>	Tb	159	
[	Ho	165	
[	Tl	203	
[	Tl	205	
[	Pb	206	
[	Pb	207	
[	Pb	208	
[	U	238	
>	Bi	209	96.457
[	Na	23	
[	Mg	24	
[	K	39	
[	Ca	43	
[	Fe	54	
[	Fe	57	
>	Sc-1	45	
[	Cl	35	
[	Kr	83	
[	Br	81	
[	P	31	
[	S	34	
[	Sr	88	
[	C	12	
[	N	14	
[	Hg	202	

QC Out of Limits

Measurement Type	Analyte	Mass	Out of Limits Message

Sample ID: QC Std 7

Report Date/Time: Sunday, November 18, 2012 15:30:39

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Method 6020 - Summary Report

Sample ID: L1211025106

Sample Date/Time: Sunday, November 18, 2012 15:31:21

Number of Replicates: 3

Autosampler Position: 319

Sample Description: 1

Method File: C:\NexIONData\Method\6020a.mth

Aliquot Volume (mL):

Diluted to Volume (mL):

User Name: JYH user

Cumulative Autodilution Factor: 1

Nexion-ICP 200.8\6020

Concentration Results

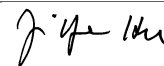
IS	Analyte	Mass	Intensity	RSD	Conc.	SD	RSD	Units	Blank Intens.	Mode
[	Li	7	59177.0	1.9	-35566.7951	1457.241	4.1	ug/L	8369	Standard
	Be	9	23.3	137.8	0.0044	0.019	432.3	ug/L	18	Standard
	Al	27	79422674.5	2.5	795.8967	38.663	4.9	ug/L	215	Standard
[>	Sc	45	43086.2	2.5				ug/L	53004	Standard
[	Ti	47	229.7	16.4	0.4620	0.072	15.7	ug/L	26	Standard
	V	51	8058.0	1.5	0.5282	0.022	4.1	ug/L	3223	Standard
	Cr	52	11188.5	2.5	0.2770	0.037	13.3	ug/L	10379	Standard
	Cr	53	466.7	4.8	0.2869	0.015	5.2	ug/L	192	Standard
	Mn	55	3908596.6	2.5	263.7359	6.967	2.6	ug/L	1840	Standard
	Co	59	6167.3	1.5	0.5259	0.010	1.9	ug/L	115	Standard
	Ni	60	204622.7	3.1	83.4670	1.311	1.6	ug/L	75	Standard
	Cu	65	3176.3	0.9	1.2859	0.033	2.6	ug/L	155	Standard
	Zn	66	23108.3	2.8	19.5477	0.078	0.4	ug/L	237	Standard
[>	Ge	72	353421.3	2.7				ug/L	413856	Standard
	As	75	771.4	5.8	0.7619	0.022	2.9	ug/L	-197	Standard
	Se	82	3281.8	2.6	29.6601	0.119	0.4	ug/L	-5	Standard
[	Se-1	77	2532.5	2.2	29.2474	0.158	0.5	ug/L	105	Standard
[>	Ga	71	255.0	17.1				mg/L	225	Standard
[	Rb	85	12094.8	1.4				ug/L	28	Standard
[	Y	89	267321.0	0.6				ug/L	322845	Standard
[>	Rh	103	203.3	30.5				ug/L	92	Standard
[	Mo	98	5570.3	2.2	1.3757	0.021	1.5	ug/L	18	Standard
	Ag	107	48.7	8.3	-0.0010	0.001	51.0	ug/L	63	Standard
	Cd	111	68.0	19.0	0.0110	0.004	36.9	mg/L	20	Standard
	Cd	114	196.1	7.4	0.0147	0.002	11.5	ug/L	56	Standard
[>	In	115	587073.8	0.8				ug/L	657102	Standard
	Sn	118	383.0	8.4	-0.0063	0.003	52.5	ug/L	555	Standard
	Sb	123	585.5	7.8	0.0807	0.006	7.4	ug/L	62	Standard
[	Ba	135	92694.1	1.6	30.4570	0.251	0.8	ug/L	19	Standard
[	Ce	140	1348.7	1.1				ug/L	24	Standard
[>	Tb	159	859437.3	1.8				ug/L	910514	Standard
[	Ho	165	34.0	17.6				ug/L	7	Standard
	Tl	203	519.7	35.9	0.0421	0.017	39.6	ug/L	13	Standard
	Tl	205	13.0	15.4	0.0388	0.006	15.8	ug/L	1	Standard
	Pb	206	1584.1	12.3	0.1411	0.022	15.9	ug/L	342	Standard
	Pb	207	1321.4	9.6	0.1346	0.017	12.7	ug/L	284	Standard
	Pb	208	6142.2	10.1	0.1365	0.018	13.2	ug/L	1363	Standard
	U	238	17319.9	2.3	1.9437	0.020	1.1	ug/L	2	Standard
[>	Bi	209	417439.9	1.3				ug/L	470592	Standard

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Na	23	6.7	43.3	0.7417	0.301	40.6	mg/L	2	Standard
Mg	24	387622.3	0.2	0.2312	0.006	2.7	mg/L	5586	Standard
K	39	85.0	11.8	1.3784	0.132	9.6	mg/L	5	Standard
Ca	43	2957.0	9.7	152.9122	18.754	12.3	mg/L	45	Standard
Fe	54	365.0	1.5	0.0191	0.005	25.4	mg/L	350	Standard
Fe	57	1218.4	6.9	2.2258	0.155	7.0	mg/L	102	Standard
Sc-1	45	43086.2	2.5				mg/L	53004	Standard
Cl	35	6.0	16.7				ug/L	2	Standard
Kr	83	187.4	4.1				ug/L	157	Standard
Br	81	4.2	34.6				ug/L	3	Standard
P	31	131675.7	2.0				ug/L	91588	Standard
S	34	33365.9	2.1				ug/L	32556	Standard
Sr	88	1290.1	4.4				ug/L	62	Standard
C	12	598.3	8.4				mg/L	133	Standard
N	14	0.0					mg/L	0	Standard
Hg	202	5.0	0.0				mg/L	7	Standard

QC Calculated Values

Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recovery
Li	7			
Be	9			
Al	27			
Sc	45			
Ti	47			
V	51			
Cr	52			
Cr	53			
Mn	55			
Co	59			
Ni	60			
Cu	65			
Zn	66			
Ge	72		85.397	
As	75			
Se	82			
Se-1	77			
Ga	71			
Rb	85			
Y	89			
Rh	103			

Sample ID: L1211025106

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[	Mo	98	
[	Ag	107	
[	Cd	111	
[	Cd	114	
>	In	115	89.343
[	Sn	118	
[	Sb	123	
[	Ba	135	
[	Ce	140	
>	Tb	159	
[	Ho	165	
[	Tl	203	
[	Tl	205	
[	Pb	206	
[	Pb	207	
[	Pb	208	
[	U	238	
>	Bi	209	88.705
[	Na	23	
[	Mg	24	
[	K	39	
[	Ca	43	
[	Fe	54	
[	Fe	57	
>	Sc-1	45	
[	Cl	35	
[	Kr	83	
[	Br	81	
[	P	31	
[	S	34	
[	Sr	88	
[	C	12	
[	N	14	
[	Hg	202	

QC Out of Limits

Measurement Type	Analyte	Mass	Out of Limits Message
Mn 55 Upper, S, EEE	Mn	55	

Sample ID: L1211025106

Report Date/Time: Sunday, November 18, 2012 15:33:52

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Method 6020 - Summary Report

Sample ID: L1211025107

Sample Date/Time: Sunday, November 18, 2012 15:34:33

Number of Replicates: 3

Autosampler Position: 320

Sample Description: 1

Method File: C:\NexIONData\Method\6020a.mth

Aliquot Volume (mL):

Diluted to Volume (mL):

User Name: JYH user

Cumulative Autodilution Factor: 1

Nexion-ICP 200.8\6020

Concentration Results

IS	Analyte	Mass	Intensity	RSD	Conc.	SD	RSD	Units	Blank Intens.	Mode
[	Li	7	48877.3	7.6	-28820.0119	2071.856	7.2	ug/L	8369	Standard
	Be	9	28.3	10.2	0.0074	0.002	23.0	ug/L	18	Standard
	Al	27	62712407.7	8.9	632.4966	34.831	5.5	ug/L	215	Standard
[>	Sc	45	42805.7	8.6				ug/L	53004	Standard
[	Ti	47	641.0	7.2	1.3335	0.058	4.3	ug/L	26	Standard
	V	51	11368.1	7.6	0.8036	0.050	6.2	ug/L	3223	Standard
	Cr	52	14123.6	4.6	0.5220	0.040	7.6	ug/L	10379	Standard
	Cr	53	676.7	12.3	0.4385	0.046	10.5	ug/L	192	Standard
	Mn	55	3152010.3	7.2	202.9343	7.587	3.7	ug/L	1840	Standard
	Co	59	5233.9	7.9	0.4229	0.021	5.1	ug/L	115	Standard
	Ni	60	163525.1	7.7	63.6566	2.854	4.5	ug/L	75	Standard
	Cu	65	5549.4	7.4	2.1820	0.103	4.7	ug/L	155	Standard
	Zn	66	36733.3	6.1	29.7744	0.998	3.4	ug/L	237	Standard
[>	Ge	72	369979.9	3.8				ug/L	413856	Standard
	As	75	656.2	21.1	0.6448	0.102	15.8	ug/L	-197	Standard
	Se	82	2554.3	7.8	22.0359	1.071	4.9	ug/L	-5	Standard
[	Se-1	77	2073.5	5.6	22.6483	0.429	1.9	ug/L	105	Standard
[>	Ga	71	313.3	11.3				mg/L	225	Standard
[	Rb	85	10535.4	9.8				ug/L	28	Standard
[	Y	89	284037.7	0.6				ug/L	322845	Standard
[>	Rh	103	183.3	10.3				ug/L	92	Standard
[	Mo	98	3373.8	8.8	0.8150	0.045	5.5	ug/L	18	Standard
	Ag	107	1100.7	1.0	0.1452	0.004	2.9	ug/L	63	Standard
	Cd	111	267.3	5.7	0.0747	0.006	8.6	mg/L	20	Standard
	Cd	114	718.0	10.1	0.0779	0.006	7.9	ug/L	56	Standard
[>	In	115	597012.3	3.7				ug/L	657102	Standard
	Sn	118	573.7	3.2	0.0141	0.002	12.0	ug/L	555	Standard
	Sb	123	611.1	10.6	0.0828	0.006	7.4	ug/L	62	Standard
[	Ba	135	60292.0	5.4	19.4661	0.339	1.7	ug/L	19	Standard
[	Ce	140	4979.2	6.2				ug/L	24	Standard
[>	Tb	159	875432.6	2.5				ug/L	910514	Standard
[	Ho	165	300.0	0.9				ug/L	7	Standard
	Tl	203	354.3	5.9	0.0262	0.002	5.8	ug/L	13	Standard
	Tl	205	14.7	10.4	0.0417	0.004	8.9	ug/L	1	Standard
	Pb	206	2616.9	3.8	0.2418	0.006	2.3	ug/L	342	Standard
	Pb	207	2180.8	2.8	0.2333	0.008	3.3	ug/L	284	Standard
	Pb	208	10144.7	3.6	0.2354	0.005	2.0	ug/L	1363	Standard
	U	238	14179.0	7.2	1.5210	0.082	5.4	ug/L	2	Standard
[>	Bi	209	436371.0	1.9				ug/L	470592	Standard

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Na	23	11.7	89.2	1.3779	1.224	88.8	mg/L	2	Standard
Mg	24	348325.7	3.0	0.2094	0.012	5.7	mg/L	5586	Standard
K	39	66.7	4.3	1.0879	0.125	11.5	mg/L	5	Standard
Ca	43	2223.5	4.4	115.2659	5.935	5.1	mg/L	45	Standard
Fe	54	985.0	8.7	0.3176	0.061	19.2	mg/L	350	Standard
Fe	57	1113.4	3.2	2.0506	0.241	11.7	mg/L	102	Standard
Sc-1	45	42805.7	8.6				mg/L	53004	Standard
Cl	35	6.0	16.7				ug/L	2	Standard
Kr	83	200.7	2.6				ug/L	157	Standard
Br	81	3.3	114.6				ug/L	3	Standard
P	31	123339.9	4.9				ug/L	91588	Standard
S	34	31677.3	3.5				ug/L	32556	Standard
Sr	88	906.7	8.6				ug/L	62	Standard
C	12	665.0	7.3				mg/L	133	Standard
N	14	0.0					mg/L	0	Standard
Hg	202	3.3	173.2				mg/L	7	Standard

QC Calculated Values

Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recovery
Li	7			
Be	9			
Al	27			
Sc	45			
Ti	47			
V	51			
Cr	52			
Cr	53			
Mn	55			
Co	59			
Ni	60			
Cu	65			
Zn	66			
Ge	72		89.398	
As	75			
Se	82			
Se-1	77			
Ga	71			
Rb	85			
Y	89			
Rh	103			

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[	Mo	98	
[	Ag	107	
[	Cd	111	
[	Cd	114	
>	In	115	90.855
[	Sn	118	
[	Sb	123	
[	Ba	135	
[	Ce	140	
>	Tb	159	
[	Ho	165	
[	Tl	203	
[	Tl	205	
[	Pb	206	
[	Pb	207	
[	Pb	208	
[	U	238	
>	Bi	209	92.728
[	Na	23	
[	Mg	24	
[	K	39	
[	Ca	43	
[	Fe	54	
[	Fe	57	
>	Sc-1	45	
[	Cl	35	
[	Kr	83	
[	Br	81	
[	P	31	
[	S	34	
[	Sr	88	
[	C	12	
[	N	14	
[	Hg	202	

QC Out of Limits

Measurement Type	Analyte	Mass	Out of Limits Message
Mn 55 Upper, S, EEE	Mn	55	

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Method 6020 - Summary Report

Sample ID: L1211025108

Sample Date/Time: Sunday, November 18, 2012 15:37:46

Number of Replicates: 3

Autosampler Position: 321

Sample Description: 1

Method File: C:\NexIONData\Method\6020a.mth

Aliquot Volume (mL):

Diluted to Volume (mL):

User Name: JYH user

Cumulative Autodilution Factor: 1

Nexion-ICP 200.8\6020

Concentration Results

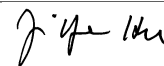
IS	Analyte	Mass	Intensity	RSD	Conc.	SD	RSD	Units	Blank Intens.	Mode
[	Li	7	56016.9	5.1	-31319.0274	2615.663	8.4	ug/L	8369	Standard
	Be	9	21.7	26.6	0.0026	0.003	118.1	ug/L	18	Standard
	Al	27	70406378.2	2.1	666.4858	36.501	5.5	ug/L	215	Standard
[>	Sc	45	45652.1	5.1				ug/L	53004	Standard
[	Ti	47	225.0	8.0	0.4204	0.032	7.6	ug/L	26	Standard
	V	51	8421.4	2.3	0.5120	0.026	5.1	ug/L	3223	Standard
	Cr	52	11291.9	2.4	0.2124	0.026	12.0	ug/L	10379	Standard
	Cr	53	420.8	6.2	0.2257	0.023	10.4	ug/L	192	Standard
	Mn	55	3352533.1	2.1	212.0560	6.761	3.2	ug/L	1840	Standard
	Co	59	6685.8	3.4	0.5347	0.023	4.3	ug/L	115	Standard
	Ni	60	185169.6	2.9	70.8186	2.444	3.5	ug/L	75	Standard
	Cu	65	3150.3	2.8	1.1912	0.038	3.2	ug/L	155	Standard
	Zn	66	19061.7	2.0	15.0752	0.462	3.1	ug/L	237	Standard
[>	Ge	72	376983.8	1.3				ug/L	413856	Standard
	As	75	613.2	20.5	0.6030	0.089	14.8	ug/L	-197	Standard
	Se	82	2961.1	2.3	25.0918	0.666	2.7	ug/L	-5	Standard
[	Se-1	77	2321.5	3.6	24.9974	0.994	4.0	ug/L	105	Standard
[>	Ga	71	251.7	18.0				mg/L	225	Standard
[	Rb	85	10743.8	3.5				ug/L	28	Standard
[	Y	89	282489.6	1.8				ug/L	322845	Standard
[>	Rh	103	220.0	8.2				ug/L	92	Standard
[	Mo	98	3733.2	2.3	0.8909	0.031	3.4	ug/L	18	Standard
	Ag	107	74.3	4.7	0.0023	0.000	19.4	ug/L	63	Standard
	Cd	111	61.9	11.1	0.0084	0.002	24.1	mg/L	20	Standard
	Cd	114	192.8	13.4	0.0136	0.003	23.9	ug/L	56	Standard
[>	In	115	605688.0	1.2				ug/L	657102	Standard
	Sn	118	552.7	5.7	0.0109	0.004	35.0	ug/L	555	Standard
	Sb	123	490.0	4.9	0.0650	0.004	5.4	ug/L	62	Standard
[	Ba	135	62638.9	2.8	19.9488	0.775	3.9	ug/L	19	Standard
[	Ce	140	160.0	7.4				ug/L	24	Standard
[>	Tb	159	881939.3	1.6				ug/L	910514	Standard
[	Ho	165	19.0	27.9				ug/L	7	Standard
	Tl	203	331.7	8.5	0.0243	0.003	12.4	ug/L	13	Standard
	Tl	205	11.7	30.1	0.0333	0.009	27.6	ug/L	1	Standard
	Pb	206	404.7	6.8	0.0095	0.002	22.1	ug/L	342	Standard
	Pb	207	339.7	4.2	0.0058	0.002	27.9	ug/L	284	Standard
	Pb	208	1558.7	5.4	0.0069	0.001	17.6	ug/L	1363	Standard
	U	238	15823.3	1.8	1.6970	0.068	4.0	ug/L	2	Standard
[>	Bi	209	437070.9	2.5				ug/L	470592	Standard

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Na	23	11.7	49.5	1.2224	0.592	48.5	mg/L	2	Standard
Mg	24	371759.2	1.1	0.2093	0.012	5.9	mg/L	5586	Standard
K	39	96.7	21.5	1.4896	0.358	24.1	mg/L	5	Standard
Ca	43	2553.5	2.3	124.0974	4.298	3.5	mg/L	45	Standard
Fe	54	330.4	6.1	-0.0061	0.006	101.3	mg/L	350	Standard
Fe	57	998.4	8.0	1.6975	0.207	12.2	mg/L	102	Standard
Sc-1	45	45652.1	5.1				mg/L	53004	Standard
Cl	35	8.3	34.6				ug/L	2	Standard
Kr	83	201.2	11.0				ug/L	157	Standard
Br	81	6.7	108.3				ug/L	3	Standard
P	31	133320.8	2.2				ug/L	91588	Standard
S	34	33686.6	1.2				ug/L	32556	Standard
Sr	88	1015.0	14.3				ug/L	62	Standard
C	12	496.7	7.8				mg/L	133	Standard
N	14	1.7	173.2				mg/L	0	Standard
Hg	202	1.7	173.2				mg/L	7	Standard

QC Calculated Values

Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recovery
Li	7			
Be	9			
Al	27			
Sc	45			
Ti	47			
V	51			
Cr	52			
Cr	53			
Mn	55			
Co	59			
Ni	60			
Cu	65			
Zn	66			
Ge	72		91.091	
As	75			
Se	82			
Se-1	77			
Ga	71			
Rb	85			
Y	89			
Rh	103			

Sample ID: L1211025108

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[	Mo	98	
[	Ag	107	
[	Cd	111	
[	Cd	114	
>	In	115	92.176
[	Sn	118	
[	Sb	123	
[	Ba	135	
[	Ce	140	
>	Tb	159	
[	Ho	165	
[	Tl	203	
[	Tl	205	
[	Pb	206	
[	Pb	207	
[	Pb	208	
[	U	238	
>	Bi	209	92.877
[	Na	23	
[	Mg	24	
[	K	39	
[	Ca	43	
[	Fe	54	
[	Fe	57	
>	Sc-1	45	
[	Cl	35	
[	Kr	83	
[	Br	81	
[	P	31	
[	S	34	
[	Sr	88	
[	C	12	
[	N	14	
[	Hg	202	

QC Out of Limits

Measurement Type	Analyte	Mass	Out of Limits Message
Mn 55 Upper, S, EEE	Mn	55	

Sample ID: L1211025108

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Method 6020 - Summary Report

Sample ID: L1211025109

Sample Date/Time: Sunday, November 18, 2012 15:40:58

Number of Replicates: 3

Autosampler Position: 322

Sample Description: 1

Method File: C:\NexIONData\Method\6020a.mth

Aliquot Volume (mL):

Diluted to Volume (mL):

User Name: JYH user

Cumulative Autodilution Factor: 1

Nexion-ICP 200.8\6020

Concentration Results

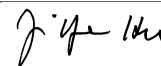
IS	Analyte	Mass	Intensity	RSD	Conc.	SD	RSD	Units	Blank Intens.	Mode
[	Li	7	12229.9	2.3	-2907.6309	112.680	3.9	ug/L	8369	Standard
	Be	9	11.7	107.9	-0.0031	0.007	220.1	ug/L	18	Standard
	Al	27	1172055.0	7.2	10.6924	0.709	6.6	ug/L	215	Standard
[>	Sc	45	47272.0	1.5				ug/L	53004	Standard
[	Ti	47	145.3	13.5	0.2292	0.032	14.0	ug/L	26	Standard
	V	51	4251.6	5.0	0.0991	0.006	6.4	ug/L	3223	Standard
	Cr	52	12995.6	3.8	0.2944	0.007	2.3	ug/L	10379	Standard
	Cr	53	488.3	5.9	0.2529	0.015	5.8	ug/L	192	Standard
	Mn	55	72643.2	6.6	4.1922	0.155	3.7	ug/L	1840	Standard
	Co	59	327.3	11.4	0.0095	0.002	22.3	ug/L	115	Standard
	Ni	60	3733.8	5.1	1.2956	0.025	2.0	ug/L	75	Standard
	Cu	65	1108.7	6.5	0.3519	0.015	4.3	ug/L	155	Standard
	Zn	66	5464.7	5.0	3.8812	0.136	3.5	ug/L	237	Standard
[>	Ge	72	404396.6	3.3				ug/L	413856	Standard
	As	75	-157.0	16.1	0.0288	0.021	73.4	ug/L	-197	Standard
	Se	82	86.7	6.7	0.6914	0.063	9.1	ug/L	-5	Standard
[	Se-1	77	181.0	1.5	0.9108	0.084	9.3	ug/L	105	Standard
[>	Ga	71	213.3	22.3				mg/L	225	Standard
[	Rb	85	1211.7	6.4				ug/L	28	Standard
[	Y	89	296664.6	4.3				ug/L	322845	Standard
[>	Rh	103	95.0	22.9				ug/L	92	Standard
[	Mo	98	244.4	15.6	0.0465	0.008	17.0	ug/L	18	Standard
	Ag	107	876.7	6.6	0.1047	0.006	6.0	ug/L	63	Standard
	Cd	111	59.4	27.7	0.0064	0.005	74.0	mg/L	20	Standard
	Cd	114	129.8	19.6	0.0050	0.003	53.8	ug/L	56	Standard
[>	In	115	645972.6	2.0				ug/L	657102	Standard
	Sn	118	714.0	4.0	0.0236	0.003	13.7	ug/L	555	Standard
	Sb	123	94.8	18.8	0.0094	0.002	24.6	ug/L	62	Standard
[	Ba	135	1870.8	6.5	0.5388	0.026	4.8	ug/L	19	Standard
[	Ce	140	979.4	6.5				ug/L	24	Standard
[>	Tb	159	924682.2	2.5				ug/L	910514	Standard
[	Ho	165	36.3	22.2				ug/L	7	Standard
	Tl	203	134.0	12.7	0.0065	0.001	17.9	ug/L	13	Standard
	Tl	205	6.3	32.9	0.0169	0.005	28.9	ug/L	1	Standard
	Pb	206	699.0	5.0	0.0330	0.002	7.3	ug/L	342	Standard
	Pb	207	546.7	3.0	0.0245	0.001	4.5	ug/L	284	Standard
	Pb	208	2655.1	4.4	0.0290	0.002	5.3	ug/L	1363	Standard
	U	238	288.0	10.8	0.0262	0.002	9.4	ug/L	2	Standard
[>	Bi	209	485967.5	2.0				ug/L	470592	Standard

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Na	23	1.7	173.2	0.1757	0.296	168.3	mg/L	2	Standard
Mg	24	98358.4	9.4	0.0512	0.005	9.4	mg/L	5586	Standard
K	39	20.0	25.0	0.2644	0.080	30.3	mg/L	5	Standard
Ca	43	93.3	34.9	2.2367	1.598	71.4	mg/L	45	Standard
Fe	54	403.5	3.4	0.0203	0.004	21.6	mg/L	350	Standard
Fe	57	135.0	9.8	0.1097	0.025	23.1	mg/L	102	Standard
Sc-1	45	47272.0	1.5				mg/L	53004	Standard
Cl	35	1.3	114.6				ug/L	2	Standard
Kr	83	190.9	5.0				ug/L	157	Standard
Br	81	3.3	86.6				ug/L	3	Standard
P	31	117337.2	4.0				ug/L	91588	Standard
S	34	32776.3	1.7				ug/L	32556	Standard
Sr	88	86.7	12.0				ug/L	62	Standard
C	12	235.0	3.7				mg/L	133	Standard
N	14	0.0					mg/L	0	Standard
Hg	202	3.3	86.6				mg/L	7	Standard

QC Calculated Values

Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recovery
Li	7			
Be	9			
Al	27			
Sc	45			
Ti	47			
V	51			
Cr	52			
Cr	53			
Mn	55			
Co	59			
Ni	60			
Cu	65			
Zn	66			
Ge	72		97.714	
As	75			
Se	82			
Se-1	77			
Ga	71			
Rb	85			
Y	89			
Rh	103			

Sample ID: L1211025109

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[	Mo	98	
[	Ag	107	
[	Cd	111	
[	Cd	114	
>	In	115	98.306
[	Sn	118	
[	Sb	123	
[	Ba	135	
[	Ce	140	
>	Tb	159	
[	Ho	165	
[	Tl	203	
[	Tl	205	
[	Pb	206	
[	Pb	207	
[	Pb	208	
[	U	238	
>	Bi	209	103.267
[	Na	23	
[	Mg	24	
[	K	39	
[	Ca	43	
[	Fe	54	
[	Fe	57	
>	Sc-1	45	
[	Cl	35	
[	Kr	83	
[	Br	81	
[	P	31	
[	S	34	
[	Sr	88	
[	C	12	
[	N	14	
[	Hg	202	

QC Out of Limits

Measurement Type	Analyte	Mass	Out of Limits Message

Sample ID: L1211025109

Report Date/Time: Sunday, November 18, 2012 15:43:30

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Method 6020 - Summary Report

Sample ID: L1211025110

Sample Date/Time: Sunday, November 18, 2012 15:44:10

Number of Replicates: 3

Autosampler Position: 323

Sample Description: 1

Method File: C:\NexIONData\Method\6020a.mth

Aliquot Volume (mL):

Diluted to Volume (mL):

User Name: JYH user

Cumulative Autodilution Factor: 1

Nexion-ICP 200.8\6020

Concentration Results

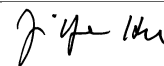
IS	Analyte	Mass	Intensity	RSD	Conc.	SD	RSD	Units	Blank Intens.	Mode
[	Li	7	12223.3	9.2	-2937.5838	342.136	11.6	ug/L	8369	Standard
	Be	9	13.3	108.3	-0.0025	0.007	298.5	ug/L	18	Standard
	Al	27	1479387.2	5.5	13.5743	0.126	0.9	ug/L	215	Standard
[>	Sc	45	46997.9	4.6				ug/L	53004	Standard
[	Ti	47	220.3	6.3	0.3944	0.016	4.0	ug/L	26	Standard
	V	51	3883.9	4.3	0.0796	0.006	7.5	ug/L	3223	Standard
	Cr	52	12175.6	2.4	0.2593	0.010	4.0	ug/L	10379	Standard
	Cr	53	356.7	6.7	0.1652	0.025	14.9	ug/L	192	Standard
	Mn	55	82211.0	6.4	4.9310	0.156	3.2	ug/L	1840	Standard
	Co	59	656.7	2.9	0.0367	0.001	2.5	ug/L	115	Standard
	Ni	60	4880.5	8.7	1.7658	0.100	5.7	ug/L	75	Standard
	Cu	65	907.4	5.7	0.2899	0.019	6.5	ug/L	155	Standard
	Zn	66	4993.8	4.1	3.6646	0.095	2.6	ug/L	237	Standard
[>	Ge	72	390311.5	3.3				ug/L	413856	Standard
	As	75	-178.7	5.0	0.0094	0.004	37.1	ug/L	-197	Standard
	Se	82	80.0	7.4	0.6596	0.029	4.4	ug/L	-5	Standard
[	Se-1	77	184.0	10.4	1.0066	0.140	13.9	ug/L	105	Standard
[>	Ga	71	170.0	20.6				mg/L	225	Standard
[	Rb	85	1090.0	13.5				ug/L	28	Standard
[	Y	89	288630.2	4.5				ug/L	322845	Standard
[>	Rh	103	120.0	35.6				ug/L	92	Standard
[	Mo	98	334.4	5.1	0.0682	0.002	2.4	ug/L	18	Standard
	Ag	107	152.7	7.3	0.0121	0.001	9.6	ug/L	63	Standard
	Cd	111	38.3	28.7	0.0004	0.004	861.9	mg/L	20	Standard
	Cd	114	100.4	13.4	0.0019	0.001	74.1	ug/L	56	Standard
[>	In	115	634391.1	4.0				ug/L	657102	Standard
	Sn	118	692.3	6.3	0.0226	0.002	7.9	ug/L	555	Standard
	Sb	123	134.1	17.3	0.0148	0.003	21.8	ug/L	62	Standard
[	Ba	135	1833.1	7.2	0.5374	0.021	3.9	ug/L	19	Standard
[	Ce	140	113.0	14.9				ug/L	24	Standard
[>	Tb	159	894937.6	2.9				ug/L	910514	Standard
[	Ho	165	12.0	14.4				ug/L	7	Standard
	Tl	203	68.7	22.8	0.0018	0.001	64.8	ug/L	13	Standard
	Tl	205	2.0	100.0	0.0065	0.005	79.5	ug/L	1	Standard
	Pb	206	416.7	8.3	0.0080	0.002	29.3	ug/L	342	Standard
	Pb	207	336.0	9.5	0.0028	0.003	120.8	ug/L	284	Standard
	Pb	208	1611.0	2.9	0.0057	0.001	21.2	ug/L	1363	Standard
	U	238	235.3	3.5	0.0222	0.001	3.2	ug/L	2	Standard
[>	Bi	209	465760.9	3.5				ug/L	470592	Standard

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Na	23	3.3	86.6	0.3390	0.290	85.5	mg/L	2	Standard
Mg	24	106968.6	5.3	0.0563	0.001	1.7	mg/L	5586	Standard
K	39	46.7	48.3	0.6786	0.367	54.0	mg/L	5	Standard
Ca	43	98.3	7.8	2.5052	0.548	21.9	mg/L	45	Standard
Fe	54	423.5	14.8	0.0295	0.020	66.5	mg/L	350	Standard
Fe	57	133.3	17.7	0.1070	0.030	28.4	mg/L	102	Standard
Sc-1	45	46997.9	4.6				mg/L	53004	Standard
Cl	35	3.0	33.3				ug/L	2	Standard
Kr	83	193.2	6.4				ug/L	157	Standard
Br	81	6.7	94.4				ug/L	3	Standard
P	31	113970.4	0.1				ug/L	91588	Standard
S	34	33828.6	2.0				ug/L	32556	Standard
Sr	88	105.0	14.3				ug/L	62	Standard
C	12	213.3	19.5				mg/L	133	Standard
N	14	0.0					mg/L	0	Standard
Hg	202	1.7	173.2				mg/L	7	Standard

QC Calculated Values

Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recovery
Li	7			
Be	9			
Al	27			
Sc	45			
Ti	47			
V	51			
Cr	52			
Cr	53			
Mn	55			
Co	59			
Ni	60			
Cu	65			
Zn	66			
Ge	72		94.311	
As	75			
Se	82			
Se-1	77			
Ga	71			
Rb	85			
Y	89			
Rh	103			

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[	Mo	98	
[	Ag	107	
[	Cd	111	
[	Cd	114	
>	In	115	96.544
[	Sn	118	
[	Sb	123	
[	Ba	135	
[	Ce	140	
>	Tb	159	
[	Ho	165	
[	Tl	203	
[	Tl	205	
[	Pb	206	
[	Pb	207	
[	Pb	208	
[	U	238	
>	Bi	209	98.973
[	Na	23	
[	Mg	24	
[	K	39	
[	Ca	43	
[	Fe	54	
[	Fe	57	
>	Sc-1	45	
[	Cl	35	
[	Kr	83	
[	Br	81	
[	P	31	
[	S	34	
[	Sr	88	
[	C	12	
[	N	14	
[	Hg	202	

QC Out of Limits

Measurement Type	Analyte	Mass	Out of Limits Message

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Method 6020 - Summary Report

Sample ID: L1211025111

Sample Date/Time: Sunday, November 18, 2012 15:47:23

Number of Replicates: 3

Autosampler Position: 324

Sample Description: 1

Method File: C:\NexIONData\Method\6020a.mth

Aliquot Volume (mL):

Diluted to Volume (mL):

User Name: JYH user

Cumulative Autodilution Factor: 1

Nexion-ICP 200.8\6020

Concentration Results

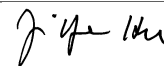
IS	Analyte	Mass	Intensity	RSD	Conc.	SD	RSD	Units	Blank Intens.	Mode
[	Li	7	67238.9	1.7	-39898.1767	1456.342	3.7	ug/L	8369	Standard
	Be	9	41.7	42.1	0.0145	0.010	66.9	ug/L	18	Standard
	Al	27	93267398.4	1.2	911.2589	42.543	4.7	ug/L	215	Standard
[>	Sc	45	44207.8	3.8				ug/L	53004	Standard
[	Ti	47	1628.4	0.6	3.7592	0.076	2.0	ug/L	26	Standard
	V	51	20943.4	2.7	1.8611	0.023	1.2	ug/L	3223	Standard
	Cr	52	20019.2	3.6	1.2806	0.036	2.8	ug/L	10379	Standard
	Cr	53	1647.6	5.2	1.3320	0.055	4.1	ug/L	192	Standard
	Mn	55	5207200.1	4.7	361.6299	9.984	2.8	ug/L	1840	Standard
	Co	59	8651.5	3.9	0.7662	0.021	2.7	ug/L	115	Standard
	Ni	60	256560.7	4.7	107.7448	3.074	2.9	ug/L	75	Standard
	Cu	65	16610.1	4.1	7.1720	0.169	2.4	ug/L	155	Standard
	Zn	66	85895.9	2.7	75.3893	1.427	1.9	ug/L	237	Standard
[>	Ge	72	343202.1	2.0				ug/L	413856	Standard
	As	75	1187.1	19.6	1.1285	0.212	18.8	ug/L	-197	Standard
	Se	82	3735.0	1.4	34.7617	0.212	0.6	ug/L	-5	Standard
[	Se-1	77	2940.3	2.4	35.1547	0.390	1.1	ug/L	105	Standard
[>	Ga	71	430.0	16.1				mg/L	225	Standard
[	Rb	85	17022.9	4.6				ug/L	28	Standard
[	Y	89	283019.1	1.3				ug/L	322845	Standard
[>	Rh	103	265.0	1.9				ug/L	92	Standard
[	Mo	98	4857.9	3.9	1.2275	0.036	2.9	ug/L	18	Standard
	Ag	107	1651.4	3.5	0.2310	0.006	2.6	ug/L	63	Standard
	Cd	111	866.2	4.7	0.2783	0.011	3.9	mg/L	20	Standard
	Cd	114	2186.7	3.1	0.2681	0.006	2.3	ug/L	56	Standard
[>	In	115	573320.6	1.0				ug/L	657102	Standard
	Sn	118	1035.7	2.1	0.0699	0.001	1.8	ug/L	555	Standard
	Sb	123	813.8	8.3	0.1161	0.009	7.6	ug/L	62	Standard
[	Ba	135	100052.4	2.4	33.6640	0.505	1.5	ug/L	19	Standard
[	Ce	140	12140.5	2.8				ug/L	24	Standard
[>	Tb	159	837500.1	0.6				ug/L	910514	Standard
[	Ho	165	718.7	1.8				ug/L	7	Standard
	Tl	203	517.0	3.8	0.0426	0.002	3.7	ug/L	13	Standard
	Tl	205	17.0	29.4	0.0513	0.015	29.5	ug/L	1	Standard
	Pb	206	7559.6	2.0	0.8116	0.022	2.7	ug/L	342	Standard
	Pb	207	6317.3	2.4	0.7940	0.020	2.6	ug/L	284	Standard
	Pb	208	29265.7	1.4	0.7939	0.013	1.7	ug/L	1363	Standard
	U	238	21420.8	3.1	2.4464	0.061	2.5	ug/L	2	Standard
[>	Bi	209	410257.1	1.0				ug/L	470592	Standard

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Na	23	10.0		1.0894	0.042	3.9	mg/L	2	Standard
Mg	24	419780.7	2.1	0.2442	0.004	1.8	mg/L	5586	Standard
K	39	111.7	31.4	1.7849	0.583	32.6	mg/L	5	Standard
Ca	43	3285.4	5.5	165.3719	3.509	2.1	mg/L	45	Standard
Fe	54	2626.5	6.7	1.0556	0.041	3.9	mg/L	350	Standard
Fe	57	1918.5	4.5	3.4843	0.093	2.7	mg/L	102	Standard
Sc-1	45	44207.8	3.8				mg/L	53004	Standard
Cl	35	7.3	20.8				ug/L	2	Standard
Kr	83	195.2	4.5				ug/L	157	Standard
Br	81	9.2	41.7				ug/L	3	Standard
P	31	134428.9	2.0				ug/L	91588	Standard
S	34	35199.2	2.0				ug/L	32556	Standard
Sr	88	1343.4	2.5				ug/L	62	Standard
C	12	748.4	5.2				mg/L	133	Standard
N	14	1.7	173.2				mg/L	0	Standard
Hg	202	15.0	33.3				mg/L	7	Standard

QC Calculated Values

Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recovery
Li	7			
Be	9			
Al	27			
Sc	45			
Ti	47			
V	51			
Cr	52			
Cr	53			
Mn	55			
Co	59			
Ni	60			
Cu	65			
Zn	66			
Ge	72		82.928	
As	75			
Se	82			
Se-1	77			
Ga	71			
Rb	85			
Y	89			
Rh	103			

Sample ID: L1211025111

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[	Mo	98	
[	Ag	107	
[	Cd	111	
[	Cd	114	
>	In	115	87.250
[	Sn	118	
[	Sb	123	
[	Ba	135	
[	Ce	140	
>	Tb	159	
[	Ho	165	
[	Tl	203	
[	Tl	205	
[	Pb	206	
[	Pb	207	
[	Pb	208	
[	U	238	
>	Bi	209	87.179
[	Na	23	
[	Mg	24	
[	K	39	
[	Ca	43	
[	Fe	54	
[	Fe	57	
>	Sc-1	45	
[	Cl	35	
[	Kr	83	
[	Br	81	
[	P	31	
[	S	34	
[	Sr	88	
[	C	12	
[	N	14	
[	Hg	202	

QC Out of Limits

Measurement Type	Analyte	Mass	Out of Limits Message
Mn 55 Upper, S, EEE	Mn	55	
Ni 60 Upper, S, EEE	Ni	60	

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Method 6020 - Summary Report

Sample ID: L1211025112

Sample Date/Time: Sunday, November 18, 2012 15:50:35

Number of Replicates: 3

Autosampler Position: 325

Sample Description: 1

Method File: C:\NexIONData\Method\6020a.mth

Aliquot Volume (mL):

Diluted to Volume (mL):

User Name: JYH user

Cumulative Autodilution Factor: 1

Nexion-ICP 200.8\6020

Concentration Results

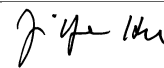
IS	Analyte	Mass	Intensity	RSD	Conc.	SD	RSD	Units	Blank Intens.	Mode
[	Li	7	54317.4	5.7	-31666.5059	1483.246	4.7	ug/L	8369	Standard
	Be	9	20.0	43.3	0.0021	0.005	221.0	ug/L	18	Standard
	Al	27	72462946.6	4.8	714.1330	10.291	1.4	ug/L	215	Standard
[>	Sc	45	43764.8	3.6				ug/L	53004	Standard
[	Ti	47	194.0	6.9	0.3652	0.025	6.9	ug/L	26	Standard
	V	51	8145.9	3.0	0.5062	0.026	5.2	ug/L	3223	Standard
	Cr	52	11193.5	2.2	0.2322	0.035	14.9	ug/L	10379	Standard
	Cr	53	451.7	11.9	0.2591	0.035	13.6	ug/L	192	Standard
	Mn	55	3435273.9	3.6	222.9287	6.003	2.7	ug/L	1840	Standard
	Co	59	6706.8	4.1	0.5507	0.016	2.9	ug/L	115	Standard
	Ni	60	192536.3	5.4	75.5563	3.756	5.0	ug/L	75	Standard
	Cu	65	3035.0	3.6	1.1768	0.026	2.2	ug/L	155	Standard
	Zn	66	14383.2	3.7	11.6249	0.292	2.5	ug/L	237	Standard
[>	Ge	72	367349.7	2.3				ug/L	413856	Standard
	As	75	642.5	30.6	0.6374	0.146	23.0	ug/L	-197	Standard
	Se	82	3095.3	5.4	26.9094	1.172	4.4	ug/L	-5	Standard
[	Se-1	77	2449.5	5.1	27.1369	0.958	3.5	ug/L	105	Standard
[>	Ga	71	243.3	6.6				mg/L	225	Standard
[	Rb	85	11199.1	3.1				ug/L	28	Standard
[	Y	89	282493.1	1.9				ug/L	322845	Standard
[>	Rh	103	221.7	7.3				ug/L	92	Standard
[	Mo	98	3693.3	2.9	0.8789	0.008	0.9	ug/L	18	Standard
	Ag	107	75.7	7.3	0.0025	0.001	27.1	ug/L	63	Standard
	Cd	111	45.6	13.5	0.0032	0.002	65.3	mg/L	20	Standard
	Cd	114	142.0	7.0	0.0074	0.001	12.6	ug/L	56	Standard
[>	In	115	607091.3	2.2				ug/L	657102	Standard
	Sn	118	660.3	4.3	0.0224	0.003	13.3	ug/L	555	Standard
	Sb	123	547.3	7.3	0.0727	0.005	6.6	ug/L	62	Standard
[	Ba	135	66925.3	3.8	21.2559	0.423	2.0	ug/L	19	Standard
[	Ce	140	216.7	15.0				ug/L	24	Standard
[>	Tb	159	879193.9	1.7				ug/L	910514	Standard
[	Ho	165	16.3	12.7				ug/L	7	Standard
	Tl	203	372.0	27.0	0.0277	0.008	30.5	ug/L	13	Standard
	Tl	205	13.3	48.8	0.0381	0.018	47.4	ug/L	1	Standard
	Pb	206	433.0	15.8	0.0125	0.007	56.8	ug/L	342	Standard
	Pb	207	356.0	9.0	0.0079	0.004	50.6	ug/L	284	Standard
	Pb	208	1681.4	11.1	0.0103	0.005	48.0	ug/L	1363	Standard
	U	238	16440.3	4.5	1.7653	0.082	4.6	ug/L	2	Standard
[>	Bi	209	436312.7	0.3				ug/L	470592	Standard

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Na	23	8.3	69.3	0.9160	0.627	68.5	mg/L	2	Standard
Mg	24	375064.6	1.6	0.2201	0.005	2.1	mg/L	5586	Standard
K	39	83.3	15.1	1.3348	0.240	18.0	mg/L	5	Standard
Ca	43	2675.2	12.7	135.5084	14.834	10.9	mg/L	45	Standard
Fe	54	421.3	6.1	0.0429	0.018	42.0	mg/L	350	Standard
Fe	57	1078.4	8.6	1.9214	0.124	6.5	mg/L	102	Standard
Sc-1	45	43764.8	3.6				mg/L	53004	Standard
Cl	35	5.7	10.2				ug/L	2	Standard
Kr	83	205.4	3.1				ug/L	157	Standard
Br	81	5.8	107.9				ug/L	3	Standard
P	31	127976.8	2.6				ug/L	91588	Standard
S	34	34313.8	1.5				ug/L	32556	Standard
Sr	88	1083.4	9.4				ug/L	62	Standard
C	12	536.7	10.3				mg/L	133	Standard
N	14	0.0					mg/L	0	Standard
Hg	202	1.7	173.2				mg/L	7	Standard

QC Calculated Values

Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recovery
Li	7			
Be	9			
Al	27			
Sc	45			
Ti	47			
V	51			
Cr	52			
Cr	53			
Mn	55			
Co	59			
Ni	60			
Cu	65			
Zn	66			
Ge	72		88.763	
As	75			
Se	82			
Se-1	77			
Ga	71			
Rb	85			
Y	89			
Rh	103			

Sample ID: L1211025112

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[	Mo	98	
[	Ag	107	
[	Cd	111	
[	Cd	114	
>	In	115	92.389
[	Sn	118	
[	Sb	123	
[	Ba	135	
[	Ce	140	
>	Tb	159	
[	Ho	165	
[	Tl	203	
[	Tl	205	
[	Pb	206	
[	Pb	207	
[	Pb	208	
[	U	238	
>	Bi	209	92.716
[	Na	23	
[	Mg	24	
[	K	39	
[	Ca	43	
[	Fe	54	
[	Fe	57	
>	Sc-1	45	
[	Cl	35	
[	Kr	83	
[	Br	81	
[	P	31	
[	S	34	
[	Sr	88	
[	C	12	
[	N	14	
[	Hg	202	

QC Out of Limits

Measurement Type	Analyte	Mass	Out of Limits Message
Mn 55 Upper, S, EEE	Mn	55	

Sample ID: L1211025112

Report Date/Time: Sunday, November 18, 2012 15:53:07

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Method 6020 - Summary Report

Sample ID: L1211033218

Sample Date/Time: Sunday, November 18, 2012 15:53:47

Number of Replicates: 3

Autosampler Position: 326

Sample Description: 1

Method File: C:\NexIONData\Method\6020a.mth

Aliquot Volume (mL):

Diluted to Volume (mL):

User Name: JYH user

Cumulative Autodilution Factor: 1

Nexion-ICP 200.8\6020

Concentration Results

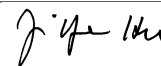
IS	Analyte	Mass	Intensity	RSD	Conc.	SD	RSD	Units	Blank Intens.	Mode
[	Li	7	8399.0	8.4	-1036.5904	580.124	56.0	ug/L	8369	Standard
	Be	9	10.0	100.0	-0.0035	0.006	170.4	ug/L	18	Standard
	Al	27	15758.8	34.2	0.1562	0.058	36.9	ug/L	215	Standard
[>	Sc	45	43171.4	2.7				ug/L	53004	Standard
[	Ti	47	80.0	22.7	0.1157	0.043	37.3	ug/L	26	Standard
	V	51	3716.0	1.6	0.0845	0.007	8.9	ug/L	3223	Standard
	Cr	52	11626.8	3.1	0.2728	0.008	2.9	ug/L	10379	Standard
	Cr	53	263.3	6.3	0.1052	0.018	17.2	ug/L	192	Standard
	Mn	55	7322.1	4.0	0.3850	0.010	2.5	ug/L	1840	Standard
	Co	59	154.0	4.5	-0.0025	0.001	34.1	ug/L	115	Standard
	Ni	60	237.3	11.9	0.0572	0.009	14.9	ug/L	75	Standard
	Cu	65	1011.7	1.7	0.3530	0.011	3.2	ug/L	155	Standard
	Zn	66	2449.5	6.0	1.8075	0.065	3.6	ug/L	237	Standard
[>	Ge	72	368471.7	3.8				ug/L	413856	Standard
	As	75	-178.2	20.1	0.0021	0.028	1316.6	ug/L	-197	Standard
	Se	82	1.9	660.2	0.0227	0.110	483.8	ug/L	-5	Standard
[	Se-1	77	115.3	19.7	0.3414	0.261	76.4	ug/L	105	Standard
[>	Ga	71	208.3	23.1				mg/L	225	Standard
[	Rb	85	256.7	20.8				ug/L	28	Standard
[	Y	89	276049.5	2.2				ug/L	322845	Standard
[>	Rh	103	91.7	22.0				ug/L	92	Standard
[	Mo	98	387.8	5.7	0.0855	0.003	4.0	ug/L	18	Standard
	Ag	107	68.0	11.1	0.0015	0.001	66.3	ug/L	63	Standard
	Cd	111	23.9	20.8	-0.0036	0.002	48.3	mg/L	20	Standard
	Cd	114	70.0	14.2	-0.0011	0.001	98.7	ug/L	56	Standard
[>	In	115	600682.9	2.0				ug/L	657102	Standard
	Sn	118	458.7	4.6	0.0010	0.002	187.2	ug/L	555	Standard
	Sb	123	393.8	7.4	0.0520	0.003	5.9	ug/L	62	Standard
[	Ba	135	358.3	13.6	0.0951	0.013	14.2	ug/L	19	Standard
[	Ce	140	415.7	5.3				ug/L	24	Standard
[>	Tb	159	864677.2	2.1				ug/L	910514	Standard
[	Ho	165	15.3	27.2				ug/L	7	Standard
	Tl	203	40.7	17.4	-0.0003	0.001	187.0	ug/L	13	Standard
	Tl	205	1.7	91.7	0.0058	0.004	71.0	ug/L	1	Standard
	Pb	206	1149.4	5.0	0.0841	0.004	4.9	ug/L	342	Standard
	Pb	207	980.0	5.4	0.0813	0.006	7.2	ug/L	284	Standard
	Pb	208	4463.9	4.5	0.0808	0.004	4.4	ug/L	1363	Standard
	U	238	21.3	15.1	0.0007	0.000	43.6	ug/L	2	Standard
[>	Bi	209	449769.0	1.5				ug/L	470592	Standard

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Na	23	0.0		0.0050	0.000	0.0	mg/L	2	Standard
Mg	24	20145.1	9.7	0.0092	0.001	16.0	mg/L	5586	Standard
K	39	11.7	89.2	0.1519	0.174	114.4	mg/L	5	Standard
Ca	43	41.7	61.6	-0.0541	1.353	2500.3	mg/L	45	Standard
Fe	54	390.8	3.9	0.0311	0.011	36.7	mg/L	350	Standard
Fe	57	155.0	11.6	0.1705	0.032	18.8	mg/L	102	Standard
Sc-1	45	43171.4	2.7				mg/L	53004	Standard
Cl	35	3.0	33.3				ug/L	2	Standard
Kr	83	197.0	4.4				ug/L	157	Standard
Br	81	8.3	34.6				ug/L	3	Standard
P	31	104333.9	1.7				ug/L	91588	Standard
S	34	30756.2	0.8				ug/L	32556	Standard
Sr	88	66.7	11.5				ug/L	62	Standard
C	12	183.3	18.2				mg/L	133	Standard
N	14	1.7	173.2				mg/L	0	Standard
Hg	202	5.0	100.0				mg/L	7	Standard

QC Calculated Values

Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recovery
Li	7			
Be	9			
Al	27			
Sc	45			
Ti	47			
V	51			
Cr	52			
Cr	53			
Mn	55			
Co	59			
Ni	60			
Cu	65			
Zn	66			
Ge	72		89.034	
As	75			
Se	82			
Se-1	77			
Ga	71			
Rb	85			
Y	89			
Rh	103			

Sample ID: L1211033218

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[	Mo	98	
[	Ag	107	
[	Cd	111	
[	Cd	114	
>	In	115	91.414
[	Sn	118	
[	Sb	123	
[	Ba	135	
[	Ce	140	
>	Tb	159	
[	Ho	165	
[	Tl	203	
[	Tl	205	
[	Pb	206	
[	Pb	207	
[	Pb	208	
[	U	238	
>	Bi	209	95.575
[	Na	23	
[	Mg	24	
[	K	39	
[	Ca	43	
[	Fe	54	
[	Fe	57	
>	Sc-1	45	
[	Cl	35	
[	Kr	83	
[	Br	81	
[	P	31	
[	S	34	
[	Sr	88	
[	C	12	
[	N	14	
[	Hg	202	

QC Out of Limits

Measurement Type	Analyte	Mass	Out of Limits Message

Sample ID: L1211033218

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Method 6020 - Summary Report

Sample ID: L1211033219

Sample Date/Time: Sunday, November 18, 2012 15:56:59

Number of Replicates: 3

Autosampler Position: 327

Sample Description: 1

Method File: C:\NexIONData\Method\6020a.mth

Aliquot Volume (mL):

Diluted to Volume (mL):

User Name: JYH user

Cumulative Autodilution Factor: 1

Nexion-ICP 200.8\6020

Concentration Results

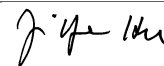
IS	Analyte	Mass	Intensity	RSD	Conc.	SD	RSD	Units	Blank Intens.	Mode
[	Li	7	8757.5	2.6	-857.0957	66.062	7.7	ug/L	8369	Standard
	Be	9	10.0	132.3	-0.0041	0.007	175.8	ug/L	18	Standard
	Al	27	37986.1	8.3	0.3505	0.020	5.6	ug/L	215	Standard
[>	Sc	45	46431.1	3.7				ug/L	53004	Standard
[	Ti	47	115.7	8.4	0.1876	0.027	14.3	ug/L	26	Standard
	V	51	3692.8	6.4	0.0738	0.014	19.1	ug/L	3223	Standard
	Cr	52	11873.3	2.5	0.2700	0.014	5.1	ug/L	10379	Standard
	Cr	53	285.0	8.4	0.1171	0.016	13.7	ug/L	192	Standard
	Mn	55	6270.0	4.3	0.3074	0.006	2.1	ug/L	1840	Standard
	Co	59	135.0	11.1	-0.0044	0.001	19.6	ug/L	115	Standard
	Ni	60	393.0	5.3	0.1147	0.004	3.3	ug/L	75	Standard
	Cu	65	1750.4	5.1	0.6356	0.018	2.8	ug/L	155	Standard
	Zn	66	2991.0	6.5	2.1938	0.079	3.6	ug/L	237	Standard
[>	Ge	72	377188.6	3.2				ug/L	413856	Standard
	As	75	-170.5	5.6	0.0110	0.008	68.5	ug/L	-197	Standard
	Se	82	8.0	158.8	0.0708	0.106	149.2	ug/L	-5	Standard
[	Se-1	77	107.7	18.1	0.2305	0.255	110.6	ug/L	105	Standard
[>	Ga	71	166.7	9.6				mg/L	225	Standard
[	Rb	85	341.7	14.7				ug/L	28	Standard
[	Y	89	288899.8	5.2				ug/L	322845	Standard
[>	Rh	103	83.3	34.1				ug/L	92	Standard
[	Mo	98	285.0	6.0	0.0591	0.004	6.8	ug/L	18	Standard
	Ag	107	73.7	11.5	0.0021	0.001	40.2	ug/L	63	Standard
	Cd	111	26.7	13.5	-0.0029	0.001	30.1	mg/L	20	Standard
	Cd	114	63.1	12.1	-0.0021	0.001	30.7	ug/L	56	Standard
[>	In	115	613187.7	3.6				ug/L	657102	Standard
	Sn	118	743.7	11.2	0.0307	0.009	28.6	ug/L	555	Standard
	Sb	123	340.9	8.4	0.0437	0.004	8.9	ug/L	62	Standard
[	Ba	135	559.3	8.2	0.1560	0.008	5.4	ug/L	19	Standard
[	Ce	140	126.0	9.2				ug/L	24	Standard
[>	Tb	159	880743.0	4.2				ug/L	910514	Standard
[	Ho	165	9.3	22.3				ug/L	7	Standard
	Tl	203	24.0	20.8	-0.0017	0.000	20.1	ug/L	13	Standard
	Tl	205	1.3	173.2	0.0049	0.006	127.9	ug/L	1	Standard
	Pb	206	517.7	6.8	0.0189	0.002	10.9	ug/L	342	Standard
	Pb	207	448.7	9.6	0.0168	0.004	23.4	ug/L	284	Standard
	Pb	208	2060.4	5.0	0.0179	0.001	3.6	ug/L	1363	Standard
	U	238	4.0	50.0	-0.0011	0.000	19.2	ug/L	2	Standard
[>	Bi	209	457253.0	4.3				ug/L	470592	Standard

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Na	23	0.0		0.0050	0.000	0.0	mg/L	2	Standard
Mg	24	32184.2	5.8	0.0151	0.001	4.2	mg/L	5586	Standard
K	39	10.0	100.0	0.1171	0.162	138.5	mg/L	5	Standard
Ca	43	41.7	38.6	-0.1855	0.873	470.6	mg/L	45	Standard
Fe	54	371.6	1.7	0.0096	0.005	50.6	mg/L	350	Standard
Fe	57	105.0	40.7	0.0583	0.071	121.2	mg/L	102	Standard
Sc-1	45	46431.1	3.7				mg/L	53004	Standard
Cl	35	4.0	50.0				ug/L	2	Standard
Kr	83	199.6	3.9				ug/L	157	Standard
Br	81	2.5	100.0				ug/L	3	Standard
P	31	108780.5	4.6				ug/L	91588	Standard
S	34	32357.9	1.2				ug/L	32556	Standard
Sr	88	85.0	38.6				ug/L	62	Standard
C	12	183.3	9.6				mg/L	133	Standard
N	14	0.0					mg/L	0	Standard
Hg	202	0.0					mg/L	7	Standard

QC Calculated Values

Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recovery
Li	7			
Be	9			
Al	27			
Sc	45			
Ti	47			
V	51			
Cr	52			
Cr	53			
Mn	55			
Co	59			
Ni	60			
Cu	65			
Zn	66			
Ge	72		91.140	
As	75			
Se	82			
Se-1	77			
Ga	71			
Rb	85			
Y	89			
Rh	103			

Sample ID: L1211033219

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[	Mo	98	
[	Ag	107	
[	Cd	111	
[	Cd	114	
>	In	115	93.317
[	Sn	118	
[	Sb	123	
[	Ba	135	
[	Ce	140	
>	Tb	159	
[	Ho	165	
[	Tl	203	
[	Tl	205	
[	Pb	206	
[	Pb	207	
[	Pb	208	
[	U	238	
>	Bi	209	97.166
[	Na	23	
[	Mg	24	
[	K	39	
[	Ca	43	
[	Fe	54	
[	Fe	57	
>	Sc-1	45	
[	Cl	35	
[	Kr	83	
[	Br	81	
[	P	31	
[	S	34	
[	Sr	88	
[	C	12	
[	N	14	
[	Hg	202	

QC Out of Limits

Measurement Type	Analyte	Mass	Out of Limits Message

Sample ID: L1211033219

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Method 6020 - Summary Report

Sample ID: L1211033220

Sample Date/Time: Sunday, November 18, 2012 16:00:11

Number of Replicates: 3

Autosampler Position: 328

Sample Description: 1

Method File: C:\NexIONData\Method\6020a.mth

Aliquot Volume (mL):

Diluted to Volume (mL):

User Name: JYH user

Cumulative Autodilution Factor: 1

Nexion-ICP 200.8\6020

Concentration Results

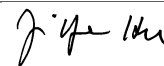
IS	Analyte	Mass	Intensity	RSD	Conc.	SD	RSD	Units	Blank Intens.	Mode
[	Li	7	8939.3	6.5	-890.8538	276.295	31.0	ug/L	8369	Standard
	Be	9	15.0	66.7	-0.0013	0.005	421.4	ug/L	18	Standard
	Al	27	59132.7	10.4	0.5393	0.048	8.9	ug/L	215	Standard
[>	Sc	45	47069.7	1.6				ug/L	53004	Standard
[	Ti	47	354.3	3.0	0.6870	0.044	6.4	ug/L	26	Standard
	V	51	4160.5	1.8	0.1123	0.012	10.3	ug/L	3223	Standard
	Cr	52	18660.5	4.6	0.9223	0.066	7.2	ug/L	10379	Standard
	Cr	53	1153.4	4.8	0.7978	0.070	8.8	ug/L	192	Standard
	Mn	55	22444.6	4.1	1.3109	0.034	2.6	ug/L	1840	Standard
	Co	59	362.7	3.2	0.0139	0.002	11.5	ug/L	115	Standard
	Ni	60	774.0	8.3	0.2561	0.015	5.9	ug/L	75	Standard
	Cu	65	982.0	9.2	0.3259	0.028	8.6	ug/L	155	Standard
	Zn	66	3470.1	4.0	2.5421	0.104	4.1	ug/L	237	Standard
[>	Ge	72	382364.3	3.1				ug/L	413856	Standard
	As	75	-164.2	15.7	0.0175	0.020	113.4	ug/L	-197	Standard
	Se	82	12.0	80.7	0.1045	0.078	74.6	ug/L	-5	Standard
[	Se-1	77	117.0	3.7	0.3117	0.014	4.6	ug/L	105	Standard
[>	Ga	71	251.7	3.0				mg/L	225	Standard
[	Rb	85	926.7	0.6				ug/L	28	Standard
[	Y	89	283440.1	1.1				ug/L	322845	Standard
[>	Rh	103	101.7	5.7				ug/L	92	Standard
[	Mo	98	1605.5	5.0	0.3660	0.007	2.0	ug/L	18	Standard
	Ag	107	57.7	24.9	-0.0003	0.002	623.4	ug/L	63	Standard
	Cd	111	44.1	20.4	0.0024	0.003	126.7	mg/L	20	Standard
	Cd	114	121.6	6.5	0.0046	0.001	14.3	ug/L	56	Standard
[>	In	115	625014.4	3.4				ug/L	657102	Standard
	Sn	118	573.7	7.2	0.0112	0.003	28.2	ug/L	555	Standard
	Sb	123	49.8	18.1	0.0038	0.001	35.7	ug/L	62	Standard
[	Ba	135	1244.4	7.2	0.3641	0.015	4.0	ug/L	19	Standard
[	Ce	140	9429.3	8.3				ug/L	24	Standard
[>	Tb	159	877370.4	2.8				ug/L	910514	Standard
[	Ho	165	47.0	12.9				ug/L	7	Standard
	Tl	203	48.0	7.5	0.0002	0.000	215.9	ug/L	13	Standard
	Tl	205	1.7	69.3	0.0056	0.003	51.1	ug/L	1	Standard
	Pb	206	2616.2	4.2	0.2249	0.009	4.2	ug/L	342	Standard
	Pb	207	2210.8	7.1	0.2201	0.013	6.1	ug/L	284	Standard
	Pb	208	10252.4	4.3	0.2215	0.006	2.5	ug/L	1363	Standard
	U	238	26.0	23.4	0.0011	0.001	55.6	ug/L	2	Standard
[>	Bi	209	464998.2	2.8				ug/L	470592	Standard

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Na	23	0.0		0.0050	0.000	0.0	mg/L	2	Standard
Mg	24	8865.9	4.8	0.0020	0.000	8.1	mg/L	5586	Standard
K	39	6.7	114.6	0.0615	0.118	191.2	mg/L	5	Standard
Ca	43	30.0	28.9	-0.7955	0.403	50.7	mg/L	45	Standard
Fe	54	547.7	14.6	0.0838	0.038	45.3	mg/L	350	Standard
Fe	57	133.3	13.2	0.1077	0.032	29.7	mg/L	102	Standard
Sc-1	45	47069.7	1.6				mg/L	53004	Standard
Cl	35	2.0	0.0				ug/L	2	Standard
Kr	83	195.1	4.6				ug/L	157	Standard
Br	81	3.3	114.6				ug/L	3	Standard
P	31	110505.9	2.8				ug/L	91588	Standard
S	34	33425.2	1.6				ug/L	32556	Standard
Sr	88	66.7	11.5				ug/L	62	Standard
C	12	173.3	28.5				mg/L	133	Standard
N	14	0.0					mg/L	0	Standard
Hg	202	6.7	114.6				mg/L	7	Standard

QC Calculated Values

Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recovery
Li	7			
Be	9			
Al	27			
Sc	45			
Ti	47			
V	51			
Cr	52			
Cr	53			
Mn	55			
Co	59			
Ni	60			
Cu	65			
Zn	66			
Ge	72		92.391	
As	75			
Se	82			
Se-1	77			
Ga	71			
Rb	85			
Y	89			
Rh	103			

Sample ID: L1211033220

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[	Mo	98	
[	Ag	107	
[	Cd	111	
[	Cd	114	
>	In	115	95.117
[	Sn	118	
[	Sb	123	
[	Ba	135	
[	Ce	140	
>	Tb	159	
[	Ho	165	
[	Tl	203	
[	Tl	205	
[	Pb	206	
[	Pb	207	
[	Pb	208	
[	U	238	
>	Bi	209	98.811
[	Na	23	
[	Mg	24	
[	K	39	
[	Ca	43	
[	Fe	54	
[	Fe	57	
>	Sc-1	45	
[	Cl	35	
[	Kr	83	
[	Br	81	
[	P	31	
[	S	34	
[	Sr	88	
[	C	12	
[	N	14	
[	Hg	202	

QC Out of Limits

Measurement Type	Analyte	Mass	Out of Limits Message

Sample ID: L1211033220

Report Date/Time: Sunday, November 18, 2012 16:02:43

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Method 6020 - Summary Report

Sample ID: QC Std 6

Sample Date/Time: Sunday, November 18, 2012 16:03:25

Number of Replicates: 3

Autosampler Position: 101

Sample Description:

Method File: C:\NexIONData\Method\6020a.mth

Aliquot Volume (mL):

Diluted to Volume (mL):

User Name: JYH user

Cumulative Autodilution Factor: 1

Nexion-ICP 200.8\6020

Concentration Results

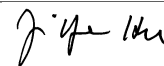
IS	Analyte	Mass	Intensity	RSD	Conc.	SD	RSD	Units	Blank Intens.	Mode
[	Li	7	8394.0	2.1	-358.4798	28.977	8.1	ug/L	8369	Standard
	Be	9	105596.1	6.5	54.9767	3.009	5.5	ug/L	18	Standard
	Al	27	6777269.9	4.5	59.7736	1.902	3.2	ug/L	215	Standard
[>	Sc	45	48907.2	2.4				ug/L	53004	Standard
[	Ti	47	47682.1	5.6	97.0135	2.493	2.6	ug/L	26	Standard
	V	51	544912.9	4.1	47.8462	0.720	1.5	ug/L	3223	Standard
	Cr	52	518796.0	4.9	48.5274	0.890	1.8	ug/L	10379	Standard
	Cr	53	65523.1	2.9	49.7270	0.942	1.9	ug/L	192	Standard
	Mn	55	822960.2	5.2	49.5733	1.035	2.1	ug/L	1840	Standard
	Co	59	629979.7	5.0	49.4272	0.777	1.6	ug/L	115	Standard
	Ni	60	133702.6	2.8	48.7856	0.711	1.5	ug/L	75	Standard
	Cu	65	133542.1	5.5	50.4275	1.151	2.3	ug/L	155	Standard
	Zn	66	65949.8	5.3	50.2039	1.350	2.7	ug/L	237	Standard
[>	Ge	72	395057.9	3.4				ug/L	413856	Standard
	As	75	68779.7	4.2	49.7697	0.724	1.5	ug/L	-197	Standard
	Se	82	6068.4	3.6	49.0576	0.121	0.2	ug/L	-5	Standard
[	Se-1	77	4824.8	1.2	50.5585	1.222	2.4	ug/L	105	Standard
[>	Ga	71	220.0	8.2				mg/L	225	Standard
[	Rb	85	1540.1	8.5				ug/L	28	Standard
[	Y	89	295766.5	3.8				ug/L	322845	Standard
[>	Rh	103	101.7	30.0				ug/L	92	Standard
[	Mo	98	413817.5	4.4	95.3655	2.756	2.9	ug/L	18	Standard
	Ag	107	384648.1	3.5	50.3940	1.119	2.2	ug/L	63	Standard
	Cd	111	168626.6	4.3	51.0292	1.456	2.9	mg/L	20	Standard
	Cd	114	434761.1	3.2	49.9947	0.741	1.5	ug/L	56	Standard
[>	In	115	632965.4	1.7				ug/L	657102	Standard
	Sn	118	487576.0	4.4	50.7986	1.401	2.8	ug/L	555	Standard
	Sb	123	385006.4	3.7	51.0231	1.028	2.0	ug/L	62	Standard
[	Ba	135	166819.3	4.0	50.8422	1.280	2.5	ug/L	19	Standard
[	Ce	140	511.0	3.9				ug/L	24	Standard
[>	Tb	159	912480.9	2.0				ug/L	910514	Standard
[	Ho	165	447.3	6.6				ug/L	7	Standard
[	Tl	203	641154.4	3.3	50.8129	0.213	0.4	ug/L	13	Standard
	Tl	205	19982.5	2.8	51.9161	0.324	0.6	ug/L	1	Standard
	Pb	206	515221.1	4.1	50.9276	0.623	1.2	ug/L	342	Standard
	Pb	207	442927.2	4.0	51.4976	0.680	1.3	ug/L	284	Standard
	Pb	208	2032235.1	4.3	50.8900	0.808	1.6	ug/L	1363	Standard
	U	238	511193.2	4.2	51.7275	0.642	1.2	ug/L	2	Standard
[>	Bi	209	463237.7	2.9				ug/L	470592	Standard

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Na	23	1.7	173.2	0.1642	0.276	167.9	mg/L	2	Standard
Mg	24	304192.1	1.6	0.1589	0.001	0.8	mg/L	5586	Standard
K	39	368.3	17.1	5.3745	0.795	14.8	mg/L	5	Standard
Ca	43	138.3	27.1	4.1260	1.583	38.4	mg/L	45	Standard
Fe	54	12713.0	5.6	5.1392	0.245	4.8	mg/L	350	Standard
Fe	57	3285.4	3.6	5.4634	0.144	2.6	mg/L	102	Standard
Sc-1	45	48907.2	2.4				mg/L	53004	Standard
Cl	35	1.3	114.6				ug/L	2	Standard
Kr	83	210.0	2.4				ug/L	157	Standard
Br	81	3.3	43.3				ug/L	3	Standard
P	31	114852.1	1.7				ug/L	91588	Standard
S	34	36243.3	2.4				ug/L	32556	Standard
Sr	88	73.3	14.2				ug/L	62	Standard
C	12	155.0	19.6				mg/L	133	Standard
N	14	1.7	173.2				mg/L	0	Standard
Hg	202	11.7	65.5				mg/L	7	Standard

QC Calculated Values

Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recovery
Li	7			
Be	9	109.953		
Al	27	119.547		
Sc	45			
Ti	47	97.014		
V	51	95.692		
Cr	52	97.055		
Cr	53			
Mn	55	99.147		
Co	59	98.854		
Ni	60	97.571		
Cu	65	100.855		
Zn	66	100.408		
Ge	72		95.458	
As	75	99.539		
Se	82	98.115		
Se-1	77			
Ga	71			
Rb	85			
Y	89			
Rh	103			

Sample ID: QC Std 6

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[	Mo	98	95.366	
[	Ag	107	100.788	
[	Cd	111	102.058	
[	Cd	114		
>	In	115		96.327
[	Sn	118	101.597	
[	Sb	123	102.046	
[	Ba	135	101.684	
[	Ce	140		
>	Tb	159		
[	Ho	165		
[	Tl	203	101.626	
[	Tl	205		
[	Pb	206	101.855	
[	Pb	207	102.995	
[	Pb	208	101.780	
[	U	238	103.455	
>	Bi	209		98.437
[	Na	23		
[	Mg	24		
[	K	39		
[	Ca	43		
[	Fe	54		
[	Fe	57		
>	Sc-1	45		
[	Cl	35		
[	Kr	83		
[	Br	81		
[	P	31		
[	S	34		
[	Sr	88		
[	C	12		
[	N	14		
[	Hg	202		

QC Out of Limits

Measurement Type	Analyte	Mass	Out of Limits Message
QC Std 6	Al	27	

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Method 6020 - Summary Report

Sample ID: QC Std 7

Sample Date/Time: Sunday, November 18, 2012 16:06:38

Number of Replicates: 3

Autosampler Position: 102

Sample Description:

Method File: C:\NexIONData\Method\6020a.mth

Aliquot Volume (mL):

Diluted to Volume (mL):

User Name: JYH user

Cumulative Autodilution Factor: 1

Nexion-ICP 200.8\6020

Concentration Results

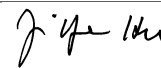
IS	Analyte	Mass	Intensity	RSD	Conc.	SD	RSD	Units	Blank Intens.	Mode
[	Li	7	7842.0	9.0	-274.5793	289.964	105.6	ug/L	8369	Standard
	Be	9	15.0	115.5	-0.0014	0.009	651.7	ug/L	18	Standard
	Al	27	1890.2	80.8	0.0152	0.013	88.9	ug/L	215	Standard
[>	Sc	45	46412.7	3.5				ug/L	53004	Standard
	Ti	47	22.7	39.8	-0.0115	0.017	151.4	ug/L	26	Standard
	V	51	2727.9	7.9	-0.0147	0.010	70.9	ug/L	3223	Standard
	Cr	52	8545.4	4.5	-0.0600	0.011	18.7	ug/L	10379	Standard
	Cr	53	157.5	20.8	0.0155	0.020	130.3	ug/L	192	Standard
	Mn	55	1545.4	7.7	0.0090	0.004	43.1	ug/L	1840	Standard
	Co	59	123.0	49.3	-0.0055	0.004	79.9	ug/L	115	Standard
	Ni	60	69.7	28.1	-0.0090	0.006	68.3	ug/L	75	Standard
	Cu	65	225.3	13.8	0.0318	0.009	28.8	ug/L	155	Standard
	Zn	66	245.0	11.0	-0.0031	0.012	391.1	ug/L	237	Standard
[>	Ge	72	376149.9	5.0				ug/L	413856	Standard
	As	75	-163.7	33.7	0.0170	0.035	205.7	ug/L	-197	Standard
	Se	82	10.4	102.3	0.0966	0.094	96.8	ug/L	-5	Standard
[	Se-1	77	109.3	10.1	0.2495	0.141	56.5	ug/L	105	Standard
[>	Ga	71	168.3	20.9				mg/L	225	Standard
	Rb	85	8.3	69.3				ug/L	28	Standard
	Y	89	286376.5	5.6				ug/L	322845	Standard
[>	Rh	103	70.0	12.4				ug/L	92	Standard
	Mo	98	39.4	55.9	0.0005	0.005	1039.0	ug/L	18	Standard
	Ag	107	95.7	54.6	0.0048	0.006	133.9	ug/L	63	Standard
	Cd	111	43.0	91.6	0.0018	0.012	632.6	mg/L	20	Standard
	Cd	114	131.9	88.2	0.0057	0.013	227.7	ug/L	56	Standard
[>	In	115	618357.2	5.1				ug/L	657102	Standard
	Sn	118	450.3	40.2	-0.0017	0.017	1016.6	ug/L	555	Standard
	Sb	123	312.6	73.0	0.0387	0.029	74.7	ug/L	62	Standard
[	Ba	135	44.7	103.6	-0.0063	0.014	217.6	ug/L	19	Standard
	Ce	140	22.3	22.5				ug/L	24	Standard
[>	Tb	159	876370.3	3.6				ug/L	910514	Standard
	Ho	165	8.3	36.7				ug/L	7	Standard
	Tl	203	90.7	117.1	0.0035	0.008	233.2	ug/L	13	Standard
	Tl	205	3.0	173.2	0.0089	0.013	148.2	ug/L	1	Standard
	Pb	206	383.0	26.3	0.0056	0.009	151.8	ug/L	342	Standard
	Pb	207	299.3	26.5	-0.0006	0.008	1270.3	ug/L	284	Standard
	Pb	208	1463.0	29.2	0.0029	0.009	326.8	ug/L	1363	Standard
	U	238	91.0	165.6	0.0075	0.015	198.4	ug/L	2	Standard
[>	Bi	209	452559.6	4.3				ug/L	470592	Standard

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Na	23	0.0		0.0050	0.000	0.0	mg/L	2	Standard
Mg	24	796.7	34.8	-0.0025	0.000	5.7	mg/L	5586	Standard
K	39	3.3	173.2	0.0102	0.089	874.0	mg/L	5	Standard
Ca	43	31.7	48.2	-0.6738	0.791	117.4	mg/L	45	Standard
Fe	54	317.2	15.7	-0.0146	0.018	124.9	mg/L	350	Standard
Fe	57	105.0	37.2	0.0589	0.064	108.0	mg/L	102	Standard
Sc-1	45	46412.7	3.5				mg/L	53004	Standard
Cl	35	4.0	43.3				ug/L	2	Standard
Kr	83	203.6	1.4				ug/L	157	Standard
Br	81	7.5	33.3				ug/L	3	Standard
P	31	109701.3	4.6				ug/L	91588	Standard
S	34	35238.4	2.5				ug/L	32556	Standard
Sr	88	68.3	18.4				ug/L	62	Standard
C	12	128.3	12.5				mg/L	133	Standard
N	14	0.0					mg/L	0	Standard
Hg	202	3.3	173.2				mg/L	7	Standard

QC Calculated Values

Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recovery
Li	7			
Be	9			
Al	27			
Sc	45			
Ti	47			
V	51			
Cr	52			
Cr	53			
Mn	55			
Co	59			
Ni	60			
Cu	65			
Zn	66			
Ge	72		90.889	
As	75			
Se	82			
Se-1	77			
Ga	71			
Rb	85			
Y	89			
Rh	103			

Sample ID: QC Std 7

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[	Mo	98	
[	Ag	107	
[	Cd	111	
[	Cd	114	
>	In	115	94.104
[	Sn	118	
[	Sb	123	
[	Ba	135	
[	Ce	140	
>	Tb	159	
[	Ho	165	
[	Tl	203	
[	Tl	205	
[	Pb	206	
[	Pb	207	
[	Pb	208	
[	U	238	
>	Bi	209	96.168
[	Na	23	
[	Mg	24	
[	K	39	
[	Ca	43	
[	Fe	54	
[	Fe	57	
>	Sc-1	45	
[	Cl	35	
[	Kr	83	
[	Br	81	
[	P	31	
[	S	34	
[	Sr	88	
[	C	12	
[	N	14	
[	Hg	202	

QC Out of Limits

Measurement Type	Analyte	Mass	Out of Limits Message

Sample ID: QC Std 7

Report Date/Time: Sunday, November 18, 2012 16:09:10

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Method 6020 - Summary Report

Sample ID: QC Std 8

Sample Date/Time: Sunday, November 18, 2012 16:09:52

Number of Replicates: 3

Autosampler Position: 202

Sample Description:

Method File: C:\NexIONData\Method\6020a.mth

Aliquot Volume (mL):

Diluted to Volume (mL):

User Name: JYH user

Cumulative Autodilution Factor: 1

Nexion-ICP 200.8\6020

Concentration Results

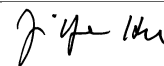
IS	Analyte	Mass	Intensity	RSD	Conc.	SD	RSD	Units	Blank Intens.	Mode
[	Li	7	7847.1	13.1	-464.6233	429.164	92.4	ug/L	8369	Standard
	Be	9	398.3	4.8	0.2181	0.016	7.2	ug/L	18	Standard
	Al	27	1115.1	58.2	0.0086	0.006	74.5	ug/L	215	Standard
[>	Sc	45	44660.8	4.6				ug/L	53004	Standard
[	Ti	47	17.7	14.2	-0.0216	0.004	20.5	ug/L	26	Standard
	V	51	6345.9	5.9	0.3259	0.026	8.0	ug/L	3223	Standard
	Cr	52	15739.5	2.4	0.6741	0.027	4.1	ug/L	10379	Standard
	Cr	53	1010.9	5.8	0.7042	0.028	3.9	ug/L	192	Standard
	Mn	55	8716.5	6.8	0.4680	0.019	4.0	ug/L	1840	Standard
	Co	59	4552.0	5.8	0.3628	0.010	2.8	ug/L	115	Standard
	Ni	60	3873.8	6.2	1.4618	0.053	3.6	ug/L	75	Standard
	Cu	65	2115.8	6.0	0.7899	0.037	4.6	ug/L	155	Standard
	Zn	66	7506.5	3.6	5.8790	0.034	0.6	ug/L	237	Standard
[>	Ge	72	372953.9	3.3				ug/L	413856	Standard
	As	75	284.5	27.1	0.3564	0.052	14.6	ug/L	-197	Standard
	Se	82	40.5	33.6	0.3496	0.105	30.0	ug/L	-5	Standard
[	Se-1	77	144.0	3.0	0.6504	0.054	8.2	ug/L	105	Standard
[>	Ga	71	188.3	16.0				mg/L	225	Standard
[	Rb	85	18.3	31.5				ug/L	28	Standard
[	Y	89	281091.6	3.0				ug/L	322845	Standard
[>	Rh	103	70.0	44.6				ug/L	92	Standard
[	Mo	98	20.8	8.4	-0.0037	0.000	7.7	ug/L	18	Standard
	Ag	107	2750.2	4.7	0.3677	0.005	1.4	ug/L	63	Standard
	Cd	111	727.3	2.1	0.2185	0.009	4.2	mg/L	20	Standard
	Cd	114	1975.1	4.9	0.2273	0.011	4.7	ug/L	56	Standard
[>	In	115	607295.8	3.7				ug/L	657102	Standard
	Sn	118	374.3	25.9	-0.0088	0.009	107.8	ug/L	555	Standard
	Sb	123	2954.7	8.8	0.4050	0.026	6.4	ug/L	62	Standard
[	Ba	135	2248.2	8.1	0.6947	0.052	7.4	ug/L	19	Standard
[	Ce	140	22.0	43.8				ug/L	24	Standard
[>	Tb	159	858896.8	3.6				ug/L	910514	Standard
[	Ho	165	6.0	60.1				ug/L	7	Standard
	Tl	203	1023.0	10.6	0.0803	0.007	8.5	ug/L	13	Standard
	Tl	205	34.0	20.6	0.0930	0.021	22.2	ug/L	1	Standard
	Pb	206	2330.5	7.5	0.2058	0.014	6.7	ug/L	342	Standard
	Pb	207	1864.1	9.3	0.1885	0.019	9.9	ug/L	284	Standard
	Pb	208	8918.4	7.9	0.1970	0.016	8.1	ug/L	1363	Standard
	U	238	3710.1	7.9	0.3873	0.026	6.7	ug/L	2	Standard
[>	Bi	209	447204.6	2.6				ug/L	470592	Standard

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Na	23	0.0		0.0050	0.000	0.0	mg/L	2	Standard
Mg	24	758.4	20.4	-0.0025	0.000	4.2	mg/L	5586	Standard
K	39	10.0	100.0	0.1169	0.154	131.5	mg/L	5	Standard
Ca	43	53.3	37.9	0.4801	1.106	230.4	mg/L	45	Standard
Fe	54	311.9	20.8	-0.0102	0.036	351.2	mg/L	350	Standard
Fe	57	93.3	24.7	0.0447	0.034	77.0	mg/L	102	Standard
Sc-1	45	44660.8	4.6				mg/L	53004	Standard
Cl	35	2.0	0.0				ug/L	2	Standard
Kr	83	207.8	4.6				ug/L	157	Standard
Br	81	2.5	100.0				ug/L	3	Standard
P	31	104127.2	5.2				ug/L	91588	Standard
S	34	33062.7	3.8				ug/L	32556	Standard
Sr	88	76.7	33.5				ug/L	62	Standard
C	12	135.0	13.4				mg/L	133	Standard
N	14	1.7	173.2				mg/L	0	Standard
Hg	202	3.3	173.2				mg/L	7	Standard

QC Calculated Values

Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recovery
Li	7			
Be	9	109.045		
Al	27			
Sc	45			
Ti	47			
V	51	81.487		
Cr	52	84.262		
Cr	53			
Mn	55	93.610		
Co	59	90.711		
Ni	60	91.364		
Cu	65	98.739		
Zn	66	94.064		
Ge	72		90.117	
As	75	89.092		
Se	82	87.410		
Se-1	77			
Ga	71			
Rb	85			
Y	89			
Rh	103			

Sample ID: QC Std 8

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[	Mo	98		
[	Ag	107	91.926	
[	Cd	111	91.052	
[	Cd	114		
>	In	115		92.420
[	Sn	118		
[	Sb	123	101.253	
[	Ba	135	92.629	
[	Ce	140		
>	Tb	159		
[	Ho	165		
[	Tl	203	100.316	
[	Tl	205		
[	Pb	206		
[	Pb	207		
[	Pb	208	98.524	
[	U	238	96.828	
>	Bi	209		95.030
[	Na	23		
[	Mg	24		
[	K	39		
[	Ca	43		
[	Fe	54		
[	Fe	57		
>	Sc-1	45		
[	Cl	35		
[	Kr	83		
[	Br	81		
[	P	31		
[	S	34		
[	Sr	88		
[	C	12		
[	N	14		
[	Hg	202		

QC Out of Limits

Measurement Type	Analyte	Mass	Out of Limits Message

Sample ID: QC Std 8

Report Date/Time: Sunday, November 18, 2012 16:12:24

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Method 6020 - Summary Report

Sample ID: L1211045613

Sample Date/Time: Sunday, November 18, 2012 16:13:06

Number of Replicates: 3

Autosampler Position: 329

Sample Description: 1

Method File: C:\NexIONData\Method\6020a.mth

Aliquot Volume (mL):

Diluted to Volume (mL):

User Name: JYH user

Cumulative Autodilution Factor: 1

Nexion-ICP 200.8\6020

Concentration Results

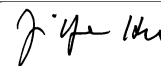
IS	Analyte	Mass	Intensity	RSD	Conc.	SD	RSD	Units	Blank Intens.	Mode
[	Li	7	8502.4	4.0	-636.2479	100.244	15.8	ug/L	8369	Standard
	Be	9	25.0	72.1	0.0040	0.010	237.2	ug/L	18	Standard
	Al	27	58882.5	1.4	0.5394	0.018	3.3	ug/L	215	Standard
[>	Sc	45	46934.3	2.8				ug/L	53004	Standard
[	Ti	47	449.7	25.3	0.8893	0.253	28.5	ug/L	26	Standard
	V	51	4173.4	2.3	0.1134	0.009	8.3	ug/L	3223	Standard
	Cr	52	10237.1	1.6	0.0932	0.031	33.6	ug/L	10379	Standard
	Cr	53	338.3	10.8	0.1558	0.024	15.4	ug/L	192	Standard
	Mn	55	24574.9	1.3	1.4447	0.041	2.9	ug/L	1840	Standard
	Co	59	498.0	2.7	0.0249	0.001	2.8	ug/L	115	Standard
	Ni	60	536.7	3.6	0.1669	0.004	2.5	ug/L	75	Standard
	Cu	65	1094.0	2.5	0.3701	0.010	2.6	ug/L	155	Standard
	Zn	66	3528.1	0.9	2.5889	0.075	2.9	ug/L	237	Standard
[>	Ge	72	382260.3	1.8				ug/L	413856	Standard
	As	75	-160.2	29.3	0.0203	0.036	176.8	ug/L	-197	Standard
	Se	82	7.0	122.8	0.0639	0.071	111.6	ug/L	-5	Standard
[	Se-1	77	115.3	8.7	0.2953	0.133	45.0	ug/L	105	Standard
[>	Ga	71	323.3	11.4				mg/L	225	Standard
[	Rb	85	1365.1	8.4				ug/L	28	Standard
[	Y	89	291685.3	3.9				ug/L	322845	Standard
[>	Rh	103	93.3	67.8				ug/L	92	Standard
[	Mo	98	1340.1	2.9	0.3048	0.013	4.3	ug/L	18	Standard
	Ag	107	221.7	2.3	0.0216	0.001	2.9	ug/L	63	Standard
	Cd	111	48.1	7.8	0.0036	0.001	37.3	mg/L	20	Standard
	Cd	114	131.5	0.8	0.0058	0.000	4.7	ug/L	56	Standard
[>	In	115	624006.5	1.4				ug/L	657102	Standard
	Sn	118	479.3	3.9	0.0013	0.002	132.4	ug/L	555	Standard
	Sb	123	420.8	4.9	0.0537	0.003	5.6	ug/L	62	Standard
[	Ba	135	4298.9	0.6	1.3101	0.024	1.8	ug/L	19	Standard
[	Ce	140	6203.3	4.7				ug/L	24	Standard
[>	Tb	159	887203.2	1.7				ug/L	910514	Standard
[	Ho	165	101.7	4.0				ug/L	7	Standard
	Tl	203	125.3	2.4	0.0064	0.000	2.9	ug/L	13	Standard
	Tl	205	4.7	32.7	0.0135	0.004	29.2	ug/L	1	Standard
	Pb	206	1004.4	0.9	0.0671	0.002	2.9	ug/L	342	Standard
	Pb	207	817.7	3.6	0.0597	0.002	4.1	ug/L	284	Standard
	Pb	208	3870.9	0.4	0.0633	0.001	1.6	ug/L	1363	Standard
	U	238	122.7	4.1	0.0110	0.001	5.9	ug/L	2	Standard
[>	Bi	209	460068.6	1.1				ug/L	470592	Standard

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Na	23	1.7	173.2	0.1701	0.286	168.1	mg/L	2	Standard
Mg	24	11067.4	6.7	0.0032	0.000	9.1	mg/L	5586	Standard
K	39	3.3	86.6	0.0092	0.044	474.6	mg/L	5	Standard
Ca	43	45.0	19.2	-0.0727	0.377	518.7	mg/L	45	Standard
Fe	54	425.3	11.1	0.0315	0.025	80.8	mg/L	350	Standard
Fe	57	165.0	13.2	0.1646	0.040	24.2	mg/L	102	Standard
Sc-1	45	46934.3	2.8				mg/L	53004	Standard
Cl	35	0.7	86.6				ug/L	2	Standard
Kr	83	208.1	2.8				ug/L	157	Standard
Br	81	9.2	78.7				ug/L	3	Standard
P	31	105793.2	2.1				ug/L	91588	Standard
S	34	31947.0	1.9				ug/L	32556	Standard
Sr	88	71.7	21.3				ug/L	62	Standard
C	12	160.0	11.3				mg/L	133	Standard
N	14	1.7	173.2				mg/L	0	Standard
Hg	202	6.7	114.6				mg/L	7	Standard

QC Calculated Values

Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recovery
Li	7			
Be	9			
Al	27			
Sc	45			
Ti	47			
V	51			
Cr	52			
Cr	53			
Mn	55			
Co	59			
Ni	60			
Cu	65			
Zn	66			
Ge	72		92.366	
As	75			
Se	82			
Se-1	77			
Ga	71			
Rb	85			
Y	89			
Rh	103			

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[	Mo	98	
[	Ag	107	
[	Cd	111	
[	Cd	114	
>	In	115	94.963
[	Sn	118	
[	Sb	123	
[	Ba	135	
[	Ce	140	
>	Tb	159	
[	Ho	165	
[	Tl	203	
[	Tl	205	
[	Pb	206	
[	Pb	207	
[	Pb	208	
[	U	238	
>	Bi	209	97.764
[	Na	23	
[	Mg	24	
[	K	39	
[	Ca	43	
[	Fe	54	
[	Fe	57	
>	Sc-1	45	
[	Cl	35	
[	Kr	83	
[	Br	81	
[	P	31	
[	S	34	
[	Sr	88	
[	C	12	
[	N	14	
[	Hg	202	

QC Out of Limits

Measurement Type	Analyte	Mass	Out of Limits Message

Sample ID: L1211045613

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Method 6020 - Summary Report

Sample ID: L1211045803

Sample Date/Time: Sunday, November 18, 2012 16:16:18

Number of Replicates: 3

Autosampler Position: 330

Sample Description: 1

Method File: C:\NexIONData\Method\6020a.mth

Aliquot Volume (mL):

Diluted to Volume (mL):

User Name: JYH user

Cumulative Autodilution Factor: 1

Nexion-ICP 200.8\6020

Concentration Results

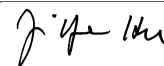
IS	Analyte	Mass	Intensity	RSD	Conc.	SD	RSD	Units	Blank Intens.	Mode
[	Li	7	212954.7	7.4	-92570.4929	6113.551	6.6	ug/L	8369	Standard
	Be	9	2603.6	9.9	1.0222	0.039	3.8	ug/L	18	Standard
	Al	27	72817623.0	6.0	489.6348	11.249	2.3	ug/L	215	Standard
[>	Sc	45	64211.3	7.4				ug/L	53004	Standard
[	Ti	47	32814.0	8.8	73.0788	3.456	4.7	ug/L	26	Standard
	V	51	393330.3	7.4	37.7563	1.263	3.3	ug/L	3223	Standard
	Cr	52	110354.4	7.0	10.6029	0.328	3.1	ug/L	10379	Standard
	Cr	53	12206.6	5.8	10.0570	0.191	1.9	ug/L	192	Standard
	Mn	55	32689703.2	6.8	2160.7478	57.636	2.7	ug/L	1840	Standard
	Co	59	124302.2	7.1	10.6691	0.325	3.0	ug/L	115	Standard
	Ni	60	60216.5	6.9	24.0354	0.697	2.9	ug/L	75	Standard
	Cu	65	32524.3	6.4	13.4129	0.302	2.3	ug/L	155	Standard
	Zn	66	296945.9	6.9	248.3614	6.892	2.8	ug/L	237	Standard
[>	Ge	72	360534.7	4.2				ug/L	413856	Standard
	As	75	8584.7	6.9	6.9232	0.185	2.7	ug/L	-197	Standard
	Se	82	134.7	6.4	1.1985	0.062	5.2	ug/L	-5	Standard
[	Se-1	77	263.0	11.2	2.0920	0.226	10.8	ug/L	105	Standard
[>	Ga	71	15312.8	6.8				mg/L	225	Standard
[	Rb	85	170760.4	5.4				ug/L	28	Standard
[	Y	89	604231.2	6.7				ug/L	322845	Standard
[>	Rh	103	320.0	8.3				ug/L	92	Standard
[	Mo	98	4273.5	7.2	1.0490	0.039	3.7	ug/L	18	Standard
	Ag	107	281.3	3.7	0.0318	0.002	6.5	ug/L	63	Standard
	Cd	111	1317.6	7.9	0.4170	0.018	4.4	mg/L	20	Standard
	Cd	114	3497.4	4.1	0.4227	0.003	0.7	ug/L	56	Standard
[>	In	115	589104.3	3.7				ug/L	657102	Standard
	Sn	118	4699.7	7.6	0.4769	0.021	4.4	ug/L	555	Standard
	Sb	123	822.4	8.4	0.1141	0.006	5.0	ug/L	62	Standard
[	Ba	135	1569403.9	5.2	514.0529	9.173	1.8	ug/L	19	Standard
[	Ce	140	2212173.6	11.3				ug/L	24	Standard
[>	Tb	159	901083.1	2.4				ug/L	910514	Standard
[	Ho	165	38918.0	4.8				ug/L	7	Standard
	Tl	203	1239.1	7.1	0.1105	0.006	5.0	ug/L	13	Standard
	Tl	205	40.7	8.6	0.1244	0.013	10.7	ug/L	1	Standard
	Pb	206	90214.9	5.3	10.3436	0.326	3.2	ug/L	342	Standard
	Pb	207	71945.8	5.5	9.6975	0.337	3.5	ug/L	284	Standard
	Pb	208	343714.2	5.5	9.9812	0.330	3.3	ug/L	1363	Standard
	U	238	13742.2	5.9	1.6155	0.061	3.8	ug/L	2	Standard
[>	Bi	209	398265.8	2.2				ug/L	470592	Standard

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Na	23	20.0	0.0	1.5024	0.114	7.6	mg/L	2	Standard
Mg	24	428150.5	2.3	0.1710	0.010	6.0	mg/L	5586	Standard
K	39	160.0	25.6	1.7412	0.366	21.0	mg/L	5	Standard
Ca	43	5487.7	1.6	191.1600	11.805	6.2	mg/L	45	Standard
Fe	54	20749.5	6.7	6.4373	0.388	6.0	mg/L	350	Standard
Fe	57	6958.3	7.1	8.9015	0.458	5.1	mg/L	102	Standard
Sc-1	45	64211.3	7.4				mg/L	53004	Standard
Cl	35	4.3	81.0				ug/L	2	Standard
Kr	83	257.1	3.0				ug/L	157	Standard
Br	81	8.3	34.6				ug/L	3	Standard
P	31	273800.3	4.1				ug/L	91588	Standard
S	34	29525.4	2.4				ug/L	32556	Standard
Sr	88	1840.1	11.6				ug/L	62	Standard
C	12	1340.1	11.3				mg/L	133	Standard
N	14	1.7	173.2				mg/L	0	Standard
Hg	202	43.3	26.6				mg/L	7	Standard

QC Calculated Values

Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recovery
Li	7			
Be	9			
Al	27			
Sc	45			
Ti	47			
V	51			
Cr	52			
Cr	53			
Mn	55			
Co	59			
Ni	60			
Cu	65			
Zn	66			
Ge	72		87.116	
As	75			
Se	82			
Se-1	77			
Ga	71			
Rb	85			
Y	89			
Rh	103			

Sample ID: L1211045803

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[	Mo	98	
[	Ag	107	
[	Cd	111	
[	Cd	114	
>	In	115	89.652
[	Sn	118	
[	Sb	123	
[	Ba	135	
[	Ce	140	
>	Tb	159	
[	Ho	165	
[	Tl	203	
[	Tl	205	
[	Pb	206	
[	Pb	207	
[	Pb	208	
[	U	238	
>	Bi	209	84.631
[	Na	23	
[	Mg	24	
[	K	39	
[	Ca	43	
[	Fe	54	
[	Fe	57	
>	Sc-1	45	
[	Cl	35	
[	Kr	83	
[	Br	81	
[	P	31	
[	S	34	
[	Sr	88	
[	C	12	
[	N	14	
[	Hg	202	

QC Out of Limits

Measurement Type	Analyte	Mass	Out of Limits Message
Mn 55 Upper, S, EEE	Mn	55	
Zn 66 Upper, S, EEE	Zn	66	
Ba 135 Upper, S, EEE	Ba	135	

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Method 6020 - Summary Report

Sample ID: L1211045804

Sample Date/Time: Sunday, November 18, 2012 16:19:31

Number of Replicates: 3

Autosampler Position: 331

Sample Description: 1

Method File: C:\NexIONData\Method\6020a.mth

Aliquot Volume (mL):

Diluted to Volume (mL):

User Name: JYH user

Cumulative Autodilution Factor: 1

Nexion-ICP 200.8\6020

Concentration Results

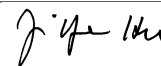
IS	Analyte	Mass	Intensity	RSD	Conc.	SD	RSD	Units	Blank Intens.	Mode
[	Li	7	82062.2	6.2	-43429.1073	2434.736	5.6	ug/L	8369	Standard
	Be	9	26.7	57.3	0.0041	0.008	187.0	ug/L	18	Standard
	Al	27	36999263.5	5.4	319.5938	14.839	4.6	ug/L	215	Standard
[>	Sc	45	49938.8	1.7				ug/L	53004	Standard
[	Ti	47	410.3	11.9	0.8241	0.126	15.2	ug/L	26	Standard
	V	51	19570.5	2.8	1.5556	0.039	2.5	ug/L	3223	Standard
	Cr	52	14880.3	1.9	0.5809	0.029	4.9	ug/L	10379	Standard
	Cr	53	367.5	9.9	0.1859	0.039	21.0	ug/L	192	Standard
	Mn	55	4935455.2	5.5	313.9848	6.514	2.1	ug/L	1840	Standard
	Co	59	8348.6	4.3	0.6756	0.006	0.8	ug/L	115	Standard
	Ni	60	7951.1	4.5	3.0250	0.029	1.0	ug/L	75	Standard
	Cu	65	1264.7	4.0	0.4469	0.010	2.2	ug/L	155	Standard
	Zn	66	3999.9	6.3	3.0233	0.086	2.8	ug/L	237	Standard
[>	Ge	72	374604.1	3.6				ug/L	413856	Standard
	As	75	228.6	15.7	0.3134	0.021	6.6	ug/L	-197	Standard
	Se	82	77.0	17.3	0.6596	0.090	13.6	ug/L	-5	Standard
[	Se-1	77	134.0	7.8	0.5287	0.067	12.7	ug/L	105	Standard
[>	Ga	71	250.0	10.6				mg/L	225	Standard
[	Rb	85	4277.3	3.8				ug/L	28	Standard
[	Y	89	283295.3	2.9				ug/L	322845	Standard
[>	Rh	103	175.0	8.6				ug/L	92	Standard
[	Mo	98	17629.9	6.8	4.2300	0.165	3.9	ug/L	18	Standard
	Ag	107	50.7	8.9	-0.0009	0.001	88.2	ug/L	63	Standard
	Cd	111	39.5	12.7	0.0013	0.001	111.0	mg/L	20	Standard
	Cd	114	149.1	14.0	0.0083	0.003	30.2	ug/L	56	Standard
[>	In	115	606492.8	3.3				ug/L	657102	Standard
	Sn	118	1700.1	8.8	0.1355	0.010	7.6	ug/L	555	Standard
	Sb	123	580.2	10.2	0.0772	0.006	7.2	ug/L	62	Standard
[	Ba	135	193335.4	4.6	61.5005	1.280	2.1	ug/L	19	Standard
[	Ce	140	3892.5	2.3				ug/L	24	Standard
[>	Tb	159	883734.3	4.0				ug/L	910514	Standard
[	Ho	165	94.0	18.1				ug/L	7	Standard
	Tl	203	232.7	1.6	0.0160	0.000	1.2	ug/L	13	Standard
	Tl	205	8.7	24.0	0.0253	0.006	23.6	ug/L	1	Standard
	Pb	206	687.3	6.4	0.0394	0.003	7.7	ug/L	342	Standard
	Pb	207	567.0	7.3	0.0341	0.004	11.3	ug/L	284	Standard
	Pb	208	2640.1	2.5	0.0360	0.001	1.5	ug/L	1363	Standard
	U	238	11501.0	5.2	1.2375	0.048	3.9	ug/L	2	Standard
[>	Bi	209	435120.9	2.1				ug/L	470592	Standard

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Na	23	5.0	100.0	0.4828	0.481	99.7	mg/L	2	Standard
Mg	24	426979.9	2.4	0.2195	0.005	2.1	mg/L	5586	Standard
K	39	26.7	21.7	0.3434	0.083	24.1	mg/L	5	Standard
Ca	43	741.7	4.3	31.2977	1.964	6.3	mg/L	45	Standard
Fe	54	385.0	19.3	0.0034	0.029	854.3	mg/L	350	Standard
Fe	57	396.7	16.7	0.5329	0.109	20.5	mg/L	102	Standard
Sc-1	45	49938.8	1.7				mg/L	53004	Standard
Cl	35	3.7	56.8				ug/L	2	Standard
Kr	83	199.8	1.4				ug/L	157	Standard
Br	81	5.0	50.0				ug/L	3	Standard
P	31	152773.2	1.9				ug/L	91588	Standard
S	34	31558.7	3.4				ug/L	32556	Standard
Sr	88	651.7	9.7				ug/L	62	Standard
C	12	1163.4	8.8				mg/L	133	Standard
N	14	1.7	173.2				mg/L	0	Standard
Hg	202	5.0	0.0				mg/L	7	Standard

QC Calculated Values

Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recovery
Li	7			
Be	9			
Al	27			
Sc	45			
Ti	47			
V	51			
Cr	52			
Cr	53			
Mn	55			
Co	59			
Ni	60			
Cu	65			
Zn	66			
Ge	72		90.516	
As	75			
Se	82			
Se-1	77			
Ga	71			
Rb	85			
Y	89			
Rh	103			

Sample ID: L1211045804

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[	Mo	98	
[	Ag	107	
[	Cd	111	
[	Cd	114	
>	In	115	92.298
[	Sn	118	
[	Sb	123	
[	Ba	135	
[	Ce	140	
>	Tb	159	
[	Ho	165	
[	Tl	203	
[	Tl	205	
[	Pb	206	
[	Pb	207	
[	Pb	208	
[	U	238	
>	Bi	209	92.463
[	Na	23	
[	Mg	24	
[	K	39	
[	Ca	43	
[	Fe	54	
[	Fe	57	
>	Sc-1	45	
[	Cl	35	
[	Kr	83	
[	Br	81	
[	P	31	
[	S	34	
[	Sr	88	
[	C	12	
[	N	14	
[	Hg	202	

QC Out of Limits

Measurement Type	Analyte	Mass	Out of Limits Message
Mn 55 Upper, S, EEE	Mn	55	

Sample ID: L1211045804

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Method 6020 - Summary Report

Sample ID: L1211045824

Sample Date/Time: Sunday, November 18, 2012 16:22:43

Number of Replicates: 3

Autosampler Position: 332

Sample Description: 1

Method File: C:\NexIONData\Method\6020a.mth

Aliquot Volume (mL):

Diluted to Volume (mL):

User Name: JYH user

Cumulative Autodilution Factor: 1

Nexion-ICP 200.8\6020

Concentration Results

IS	Analyte	Mass	Intensity	RSD	Conc.	SD	RSD	Units	Blank Intens.	Mode
[	Li	7	8405.7	8.4	-327.6484	263.146	80.3	ug/L	8369	Standard
	Be	9	15.0	33.3	-0.0018	0.002	128.5	ug/L	18	Standard
	Al	27	75291.5	11.4	0.6562	0.046	7.0	ug/L	215	Standard
[>	Sc	45	49260.1	5.7				ug/L	53004	Standard
[	Ti	47	117.0	9.5	0.1867	0.016	8.3	ug/L	26	Standard
	V	51	3854.7	4.6	0.0847	0.011	12.7	ug/L	3223	Standard
	Cr	52	12428.1	4.0	0.3103	0.024	7.9	ug/L	10379	Standard
	Cr	53	605.8	8.0	0.3677	0.048	13.0	ug/L	192	Standard
	Mn	55	19770.8	18.4	1.1417	0.179	15.6	ug/L	1840	Standard
	Co	59	408.0	12.5	0.0175	0.003	16.3	ug/L	115	Standard
	Ni	60	469.0	17.5	0.1411	0.024	17.1	ug/L	75	Standard
	Cu	65	730.0	13.1	0.2275	0.027	11.8	ug/L	155	Standard
	Zn	66	3841.2	10.6	2.8341	0.207	7.3	ug/L	237	Standard
[>	Ge	72	381786.2	3.7				ug/L	413856	Standard
	As	75	-167.7	14.4	0.0142	0.023	158.7	ug/L	-197	Standard
	Se	82	5.7	90.1	0.0524	0.041	78.9	ug/L	-5	Standard
[	Se-1	77	134.3	1.1	0.5068	0.065	12.7	ug/L	105	Standard
[>	Ga	71	270.0	27.3				mg/L	225	Standard
[	Rb	85	755.0	10.2				ug/L	28	Standard
[	Y	89	289699.8	5.2				ug/L	322845	Standard
[>	Rh	103	95.0	19.0				ug/L	92	Standard
[	Mo	98	367.5	9.5	0.0784	0.005	5.9	ug/L	18	Standard
	Ag	107	58.7	27.1	-0.0000	0.002	8891.3	ug/L	63	Standard
	Cd	111	28.6	19.4	-0.0023	0.001	61.5	mg/L	20	Standard
	Cd	114	84.9	23.1	0.0004	0.002	438.4	ug/L	56	Standard
[>	In	115	614962.0	4.2				ug/L	657102	Standard
	Sn	118	885.4	8.2	0.0456	0.004	8.6	ug/L	555	Standard
	Sb	123	85.7	17.5	0.0087	0.002	17.6	ug/L	62	Standard
[	Ba	135	1603.1	9.2	0.4826	0.026	5.4	ug/L	19	Standard
[	Ce	140	4115.6	7.0				ug/L	24	Standard
[>	Tb	159	897206.1	3.0				ug/L	910514	Standard
[	Ho	165	64.3	20.5				ug/L	7	Standard
	Tl	203	194.3	15.1	0.0116	0.002	16.3	ug/L	13	Standard
	Tl	205	8.0	33.1	0.0219	0.007	30.0	ug/L	1	Standard
	Pb	206	1761.1	6.4	0.1403	0.008	6.0	ug/L	342	Standard
	Pb	207	1424.1	6.4	0.1286	0.007	5.1	ug/L	284	Standard
	Pb	208	6693.6	4.1	0.1324	0.004	2.9	ug/L	1363	Standard
	U	238	30.7	21.0	0.0016	0.001	36.2	ug/L	2	Standard
[>	Bi	209	465750.3	2.5				ug/L	470592	Standard

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Na	23	0.0		0.0050	0.000	0.0	mg/L	2	Standard
Mg	24	12743.7	5.4	0.0038	0.000	6.1	mg/L	5586	Standard
K	39	8.3	34.6	0.0797	0.039	48.8	mg/L	5	Standard
Ca	43	63.3	19.9	0.6679	0.556	83.3	mg/L	45	Standard
Fe	54	461.9	10.5	0.0375	0.017	45.0	mg/L	350	Standard
Fe	57	160.0	13.6	0.1440	0.050	34.8	mg/L	102	Standard
Sc-1	45	49260.1	5.7				mg/L	53004	Standard
Cl	35	3.3	75.5				ug/L	2	Standard
Kr	83	204.7	4.7				ug/L	157	Standard
Br	81	4.2	34.6				ug/L	3	Standard
P	31	110445.3	1.0				ug/L	91588	Standard
S	34	35348.7	1.4				ug/L	32556	Standard
Sr	88	75.0	13.3				ug/L	62	Standard
C	12	185.0	31.9				mg/L	133	Standard
N	14	0.0					mg/L	0	Standard
Hg	202	1.7	173.2				mg/L	7	Standard

QC Calculated Values

Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recovery
Li	7			
Be	9			
Al	27			
Sc	45			
Ti	47			
V	51			
Cr	52			
Cr	53			
Mn	55			
Co	59			
Ni	60			
Cu	65			
Zn	66			
Ge	72		92.251	
As	75			
Se	82			
Se-1	77			
Ga	71			
Rb	85			
Y	89			
Rh	103			

Sample ID: L1211045824

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[	Mo	98	
[	Ag	107	
[	Cd	111	
[	Cd	114	
>	In	115	93.587
[	Sn	118	
[	Sb	123	
[	Ba	135	
[	Ce	140	
>	Tb	159	
[	Ho	165	
[	Tl	203	
[	Tl	205	
[	Pb	206	
[	Pb	207	
[	Pb	208	
[	U	238	
>	Bi	209	98.971
[	Na	23	
[	Mg	24	
[	K	39	
[	Ca	43	
[	Fe	54	
[	Fe	57	
>	Sc-1	45	
[	Cl	35	
[	Kr	83	
[	Br	81	
[	P	31	
[	S	34	
[	Sr	88	
[	C	12	
[	N	14	
[	Hg	202	

QC Out of Limits

Measurement Type	Analyte	Mass	Out of Limits Message

Sample ID: L1211045824

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Method 6020 - Summary Report

Sample ID: L1211044714

Sample Date/Time: Sunday, November 18, 2012 16:25:55

Number of Replicates: 3

Autosampler Position: 333

Sample Description: 1

Method File: C:\NexIONData\Method\6020a.mth

Aliquot Volume (mL):

Diluted to Volume (mL):

User Name: JYH user

Cumulative Autodilution Factor: 1

Nexion-ICP 200.8\6020

Concentration Results

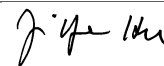
IS	Analyte	Mass	Intensity	RSD	Conc.	SD	RSD	Units	Blank Intens.	Mode
[	Li	7	11541.1	5.1	-2106.5664	241.819	11.5	ug/L	8369	Standard
	Be	9	26.7	57.3	0.0041	0.008	192.1	ug/L	18	Standard
	Al	27	519141.7	7.2	4.4828	0.125	2.8	ug/L	215	Standard
[>	Sc	45	49920.6	5.9				ug/L	53004	Standard
[	Ti	47	797.7	15.1	1.6522	0.211	12.8	ug/L	26	Standard
	V	51	4682.4	9.9	0.1685	0.030	17.9	ug/L	3223	Standard
	Cr	52	11349.9	6.0	0.2262	0.034	15.1	ug/L	10379	Standard
	Cr	53	589.2	10.3	0.3629	0.041	11.2	ug/L	192	Standard
	Mn	55	98294.7	6.6	6.1727	0.221	3.6	ug/L	1840	Standard
	Co	59	928.0	8.1	0.0614	0.005	8.4	ug/L	115	Standard
	Ni	60	910.0	13.0	0.3148	0.037	11.8	ug/L	75	Standard
	Cu	65	1070.7	3.2	0.3703	0.017	4.6	ug/L	155	Standard
	Zn	66	4119.9	4.1	3.1269	0.116	3.7	ug/L	237	Standard
[>	Ge	72	374169.8	3.7				ug/L	413856	Standard
	As	75	-139.0	28.6	0.0337	0.032	96.2	ug/L	-197	Standard
	Se	82	-1.6	1244.7	-0.0118	0.167	1418.8	ug/L	-5	Standard
[	Se-1	77	121.7	12.6	0.3967	0.208	52.5	ug/L	105	Standard
[>	Ga	71	333.3	28.8				mg/L	225	Standard
[	Rb	85	4685.7	7.0				ug/L	28	Standard
[	Y	89	282360.6	3.6				ug/L	322845	Standard
[>	Rh	103	83.3	15.1				ug/L	92	Standard
[	Mo	98	59.5	12.9	0.0057	0.002	29.1	ug/L	18	Standard
	Ag	107	54.7	26.5	-0.0004	0.002	534.8	ug/L	63	Standard
	Cd	111	25.6	23.9	-0.0030	0.002	71.4	mg/L	20	Standard
	Cd	114	58.9	11.6	-0.0025	0.001	40.8	ug/L	56	Standard
[>	In	115	603166.4	3.4				ug/L	657102	Standard
	Sn	118	1048.7	8.1	0.0653	0.006	8.9	ug/L	555	Standard
	Sb	123	77.7	20.0	0.0079	0.002	30.5	ug/L	62	Standard
[	Ba	135	14498.3	5.8	4.6193	0.195	4.2	ug/L	19	Standard
[	Ce	140	11482.7	5.0				ug/L	24	Standard
[>	Tb	159	876519.8	3.1				ug/L	910514	Standard
[	Ho	165	201.7	4.0				ug/L	7	Standard
	Tl	203	132.0	5.7	0.0070	0.001	10.4	ug/L	13	Standard
	Tl	205	5.3	65.8	0.0152	0.009	58.8	ug/L	1	Standard
	Pb	206	1006.7	4.3	0.0680	0.003	4.8	ug/L	342	Standard
	Pb	207	844.0	3.2	0.0635	0.002	3.8	ug/L	284	Standard
	Pb	208	3986.2	2.6	0.0669	0.001	1.4	ug/L	1363	Standard
	U	238	60.7	1.0	0.0047	0.000	2.6	ug/L	2	Standard
[>	Bi	209	456865.5	1.9				ug/L	470592	Standard

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Na	23	0.0		0.0050	0.000	0.0	mg/L	2	Standard
Mg	24	114640.9	4.1	0.0569	0.002	2.9	mg/L	5586	Standard
K	39	36.7	20.8	0.4891	0.116	23.8	mg/L	5	Standard
Ca	43	50.0	10.0	0.0275	0.156	568.2	mg/L	45	Standard
Fe	54	716.9	3.9	0.1399	0.026	18.9	mg/L	350	Standard
Fe	57	221.7	10.2	0.2408	0.018	7.4	mg/L	102	Standard
Sc-1	45	49920.6	5.9				mg/L	53004	Standard
Cl	35	3.0	0.0				ug/L	2	Standard
Kr	83	200.6	1.9				ug/L	157	Standard
Br	81	4.2	124.9				ug/L	3	Standard
P	31	125139.7	5.1				ug/L	91588	Standard
S	34	34091.7	2.5				ug/L	32556	Standard
Sr	88	73.3	28.4				ug/L	62	Standard
C	12	218.3	4.8				mg/L	133	Standard
N	14	1.7	173.2				mg/L	0	Standard
Hg	202	3.3	86.6				mg/L	7	Standard

QC Calculated Values

Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recovery
Li	7			
Be	9			
Al	27			
Sc	45			
Ti	47			
V	51			
Cr	52			
Cr	53			
Mn	55			
Co	59			
Ni	60			
Cu	65			
Zn	66			
Ge	72		90.411	
As	75			
Se	82			
Se-1	77			
Ga	71			
Rb	85			
Y	89			
Rh	103			

Sample ID: L1211044714

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[	Mo	98	
[	Ag	107	
[	Cd	111	
[	Cd	114	
>	In	115	91.792
[	Sn	118	
[	Sb	123	
[	Ba	135	
[	Ce	140	
>	Tb	159	
[	Ho	165	
[	Tl	203	
[	Tl	205	
[	Pb	206	
[	Pb	207	
[	Pb	208	
[	U	238	
>	Bi	209	97.083
[	Na	23	
[	Mg	24	
[	K	39	
[	Ca	43	
[	Fe	54	
[	Fe	57	
>	Sc-1	45	
[	Cl	35	
[	Kr	83	
[	Br	81	
[	P	31	
[	S	34	
[	Sr	88	
[	C	12	
[	N	14	
[	Hg	202	

QC Out of Limits

Measurement Type	Analyte	Mass	Out of Limits Message

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Method 6020 - Summary Report

Sample ID: L1211044717

Sample Date/Time: Sunday, November 18, 2012 16:29:08

Number of Replicates: 3

Autosampler Position: 334

Sample Description: 1

Method File: C:\NexIONData\Method\6020a.mth

Aliquot Volume (mL):

Diluted to Volume (mL):

User Name: JYH user

Cumulative Autodilution Factor: 1

Nexion-ICP 200.8\6020

Concentration Results

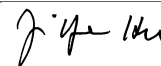
IS	Analyte	Mass	Intensity	RSD	Conc.	SD	RSD	Units	Blank Intens.	Mode
[	Li	7	11744.6	3.3	-2729.3821	294.040	10.8	ug/L	8369	Standard
	Be	9	36.7	20.8	0.0105	0.003	28.7	ug/L	18	Standard
	Al	27	510554.0	5.7	4.7302	0.085	1.8	ug/L	215	Standard
[>	Sc	45	46580.1	7.3				ug/L	53004	Standard
[	Ti	47	795.0	9.4	1.6928	0.204	12.0	ug/L	26	Standard
	V	51	4260.1	6.2	0.1385	0.010	7.2	ug/L	3223	Standard
	Cr	52	10380.2	3.6	0.1533	0.028	18.4	ug/L	10379	Standard
	Cr	53	550.8	7.4	0.3444	0.056	16.3	ug/L	192	Standard
	Mn	55	95429.3	4.5	6.1324	0.109	1.8	ug/L	1840	Standard
	Co	59	901.7	4.3	0.0609	0.001	2.4	ug/L	115	Standard
	Ni	60	929.7	9.9	0.3304	0.019	5.7	ug/L	75	Standard
	Cu	65	1405.1	4.3	0.5165	0.018	3.5	ug/L	155	Standard
	Zn	66	2651.9	2.9	1.9914	0.077	3.8	ug/L	237	Standard
[>	Ge	72	366017.9	5.7				ug/L	413856	Standard
	As	75	-61.8	52.7	0.0907	0.028	30.6	ug/L	-197	Standard
	Se	82	15.4	71.5	0.1371	0.093	67.9	ug/L	-5	Standard
[	Se-1	77	120.7	20.0	0.4251	0.353	82.9	ug/L	105	Standard
[>	Ga	71	318.3	10.5				mg/L	225	Standard
[	Rb	85	4742.4	4.7				ug/L	28	Standard
[	Y	89	277907.9	3.8				ug/L	322845	Standard
[>	Rh	103	106.7	10.8				ug/L	92	Standard
[	Mo	98	50.5	19.8	0.0036	0.002	55.5	ug/L	18	Standard
	Ag	107	56.0	17.0	-0.0001	0.001	875.3	ug/L	63	Standard
	Cd	111	22.3	11.3	-0.0040	0.001	13.9	mg/L	20	Standard
	Cd	114	59.3	14.0	-0.0023	0.001	55.8	ug/L	56	Standard
[>	In	115	597225.1	4.3				ug/L	657102	Standard
	Sn	118	411.0	2.7	-0.0039	0.001	37.5	ug/L	555	Standard
	Sb	123	66.2	5.8	0.0064	0.000	4.8	ug/L	62	Standard
[	Ba	135	14214.3	2.1	4.5771	0.096	2.1	ug/L	19	Standard
[	Ce	140	11212.5	3.4				ug/L	24	Standard
[>	Tb	159	871328.6	4.1				ug/L	910514	Standard
[	Ho	165	207.7	12.0				ug/L	7	Standard
	Tl	203	139.3	7.9	0.0077	0.001	8.9	ug/L	13	Standard
	Tl	205	5.7	44.4	0.0165	0.007	42.3	ug/L	1	Standard
	Pb	206	916.4	2.3	0.0601	0.001	1.3	ug/L	342	Standard
	Pb	207	802.0	3.3	0.0597	0.002	4.0	ug/L	284	Standard
	Pb	208	3730.5	2.8	0.0615	0.003	5.2	ug/L	1363	Standard
	U	238	63.3	10.3	0.0050	0.001	10.5	ug/L	2	Standard
[>	Bi	209	451482.8	2.7				ug/L	470592	Standard

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Na	23	0.0		0.0050	0.000	0.0	mg/L	2	Standard
Mg	24	110516.7	1.9	0.0590	0.003	5.7	mg/L	5586	Standard
K	39	28.3	44.4	0.3899	0.167	42.9	mg/L	5	Standard
Ca	43	78.3	24.2	1.6036	1.139	71.1	mg/L	45	Standard
Fe	54	623.6	3.0	0.1204	0.026	21.8	mg/L	350	Standard
Fe	57	223.3	16.8	0.2715	0.069	25.2	mg/L	102	Standard
Sc-1	45	46580.1	7.3				mg/L	53004	Standard
Cl	35	4.3	13.3				ug/L	2	Standard
Kr	83	180.0	3.4				ug/L	157	Standard
Br	81	9.2	41.7				ug/L	3	Standard
P	31	118395.1	5.7				ug/L	91588	Standard
S	34	32276.9	3.3				ug/L	32556	Standard
Sr	88	111.7	9.3				ug/L	62	Standard
C	12	190.0	13.2				mg/L	133	Standard
N	14	0.0					mg/L	0	Standard
Hg	202	6.7	43.3				mg/L	7	Standard

QC Calculated Values

Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recovery
Li	7			
Be	9			
Al	27			
Sc	45			
Ti	47			
V	51			
Cr	52			
Cr	53			
Mn	55			
Co	59			
Ni	60			
Cu	65			
Zn	66			
Ge	72		88.441	
As	75			
Se	82			
Se-1	77			
Ga	71			
Rb	85			
Y	89			
Rh	103			

Sample ID: L1211044717

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[	Mo	98	
[	Ag	107	
[	Cd	111	
[	Cd	114	
>	In	115	90.888
[	Sn	118	
[	Sb	123	
[	Ba	135	
[	Ce	140	
>	Tb	159	
[	Ho	165	
[	Tl	203	
[	Tl	205	
[	Pb	206	
[	Pb	207	
[	Pb	208	
[	U	238	
>	Bi	209	95.939
[	Na	23	
[	Mg	24	
[	K	39	
[	Ca	43	
[	Fe	54	
[	Fe	57	
>	Sc-1	45	
[	Cl	35	
[	Kr	83	
[	Br	81	
[	P	31	
[	S	34	
[	Sr	88	
[	C	12	
[	N	14	
[	Hg	202	

QC Out of Limits

Measurement Type	Analyte	Mass	Out of Limits Message

Sample ID: L1211044717

Report Date/Time: Sunday, November 18, 2012 16:31:41

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Method 6020 - Summary Report

Sample ID: L1211044720

Sample Date/Time: Sunday, November 18, 2012 16:32:21

Number of Replicates: 3

Autosampler Position: 335

Sample Description: 1

Method File: C:\NexIONData\Method\6020a.mth

Aliquot Volume (mL):

Diluted to Volume (mL):

User Name: JYH user

Cumulative Autodilution Factor: 1

Nexion-ICP 200.8\6020

Concentration Results

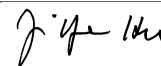
IS	Analyte	Mass	Intensity	RSD	Conc.	SD	RSD	Units	Blank Intens.	Mode
[	Li	7	7720.3	2.2	-275.2937	169.350	61.5	ug/L	8369	Standard
	Be	9	20.0	25.0	0.0017	0.003	159.0	ug/L	18	Standard
	Al	27	23721.9	5.3	0.2218	0.018	8.3	ug/L	215	Standard
[>	Sc	45	45780.8	4.6				ug/L	53004	Standard
[	Ti	47	73.7	16.2	0.1030	0.026	25.5	ug/L	26	Standard
	V	51	2761.6	4.2	-0.0033	0.009	264.7	ug/L	3223	Standard
	Cr	52	9021.7	0.9	0.0165	0.015	89.4	ug/L	10379	Standard
	Cr	53	464.2	5.9	0.2730	0.028	10.2	ug/L	192	Standard
	Mn	55	5493.6	61.3	0.2683	0.213	79.4	ug/L	1840	Standard
	Co	59	110.3	11.7	-0.0061	0.001	15.5	ug/L	115	Standard
	Ni	60	292.3	12.3	0.0802	0.015	18.1	ug/L	75	Standard
	Cu	65	776.7	1.9	0.2609	0.008	2.9	ug/L	155	Standard
	Zn	66	3784.1	2.1	2.9365	0.085	2.9	ug/L	237	Standard
[>	Ge	72	364508.2	1.6				ug/L	413856	Standard
	As	75	-143.7	40.8	0.0279	0.045	160.4	ug/L	-197	Standard
	Se	82	12.7	139.0	0.1176	0.156	132.7	ug/L	-5	Standard
[	Se-1	77	125.7	9.6	0.4745	0.122	25.8	ug/L	105	Standard
[>	Ga	71	181.7	4.2				mg/L	225	Standard
[	Rb	85	186.7	5.6				ug/L	28	Standard
[	Y	89	276056.2	5.0				ug/L	322845	Standard
[>	Rh	103	76.7	43.4				ug/L	92	Standard
[	Mo	98	25.7	14.1	-0.0025	0.001	29.0	ug/L	18	Standard
	Ag	107	61.0	12.8	0.0005	0.001	191.0	ug/L	63	Standard
	Cd	111	17.3	18.6	-0.0057	0.001	20.3	mg/L	20	Standard
	Cd	114	63.2	23.2	-0.0020	0.002	81.5	ug/L	56	Standard
[>	In	115	605223.9	2.4				ug/L	657102	Standard
	Sn	118	488.3	6.3	0.0040	0.005	114.2	ug/L	555	Standard
	Sb	123	42.4	5.1	0.0030	0.000	5.4	ug/L	62	Standard
[	Ba	135	1063.4	2.1	0.3192	0.001	0.4	ug/L	19	Standard
[	Ce	140	481.3	4.4				ug/L	24	Standard
[>	Tb	159	874802.4	2.2				ug/L	910514	Standard
[	Ho	165	16.3	7.1				ug/L	7	Standard
	Tl	203	141.7	10.8	0.0080	0.001	16.1	ug/L	13	Standard
	Tl	205	4.0	86.6	0.0121	0.010	78.6	ug/L	1	Standard
	Pb	206	447.0	3.1	0.0127	0.001	11.2	ug/L	342	Standard
	Pb	207	398.3	2.9	0.0117	0.001	8.5	ug/L	284	Standard
	Pb	208	1779.4	1.8	0.0116	0.001	5.3	ug/L	1363	Standard
	U	238	5.3	28.6	-0.0010	0.000	15.9	ug/L	2	Standard
[>	Bi	209	448712.5	1.4				ug/L	470592	Standard

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Na	23	0.0		0.0050	0.000	0.0	mg/L	2	Standard
Mg	24	59725.9	3.7	0.0310	0.001	3.2	mg/L	5586	Standard
K	39	0.0		-0.0413	0.000	0.0	mg/L	5	Standard
Ca	43	51.7	14.8	0.3195	0.391	122.3	mg/L	45	Standard
Fe	54	352.3	7.8	0.0037	0.018	495.1	mg/L	350	Standard
Fe	57	108.3	20.8	0.0688	0.040	57.6	mg/L	102	Standard
Sc-1	45	45780.8	4.6				mg/L	53004	Standard
Cl	35	3.0	33.3				ug/L	2	Standard
Kr	83	185.8	6.4				ug/L	157	Standard
Br	81	7.5	0.0				ug/L	3	Standard
P	31	107331.6	3.6				ug/L	91588	Standard
S	34	32596.7	0.8				ug/L	32556	Standard
Sr	88	68.3	22.4				ug/L	62	Standard
C	12	166.7	17.1				mg/L	133	Standard
N	14	3.3	86.6				mg/L	0	Standard
Hg	202	6.7	114.6				mg/L	7	Standard

QC Calculated Values

Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recovery
Li	7			
Be	9			
Al	27			
Sc	45			
Ti	47			
V	51			
Cr	52			
Cr	53			
Mn	55			
Co	59			
Ni	60			
Cu	65			
Zn	66			
Ge	72		88.076	
As	75			
Se	82			
Se-1	77			
Ga	71			
Rb	85			
Y	89			
Rh	103			

Sample ID: L1211044720

Report Date/Time: Sunday, November 18, 2012 16:34:54

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[	Mo	98	
[	Ag	107	
[	Cd	111	
[	Cd	114	
>	In	115	92.105
[	Sn	118	
[	Sb	123	
[	Ba	135	
[	Ce	140	
>	Tb	159	
[	Ho	165	
[	Tl	203	
[	Tl	205	
[	Pb	206	
[	Pb	207	
[	Pb	208	
[	U	238	
>	Bi	209	95.351
[	Na	23	
[	Mg	24	
[	K	39	
[	Ca	43	
[	Fe	54	
[	Fe	57	
>	Sc-1	45	
[	Cl	35	
[	Kr	83	
[	Br	81	
[	P	31	
[	S	34	
[	Sr	88	
[	C	12	
[	N	14	
[	Hg	202	

QC Out of Limits

Measurement Type	Analyte	Mass	Out of Limits Message

Sample ID: L1211044720

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Method 6020 - Summary Report

Sample ID: L1211044723

Sample Date/Time: Sunday, November 18, 2012 16:35:35

Number of Replicates: 3

Autosampler Position: 336

Sample Description: 1

Method File: C:\NexIONData\Method\6020a.mth

Aliquot Volume (mL):

Diluted to Volume (mL):

User Name: JYH user

Cumulative Autodilution Factor: 1

Nexion-ICP 200.8\6020

Concentration Results

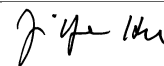
IS	Analyte	Mass	Intensity	RSD	Conc.	SD	RSD	Units	Blank Intens.	Mode
[	Li	7	8098.8	8.7	-437.4059	283.759	64.9	ug/L	8369	Standard
	Be	9	20.0	25.0	0.0015	0.003	175.2	ug/L	18	Standard
	Al	27	33691.0	9.4	0.3104	0.013	4.3	ug/L	215	Standard
[>	Sc	45	46442.9	5.9				ug/L	53004	Standard
[	Ti	47	47.3	8.8	0.0423	0.010	22.7	ug/L	26	Standard
	V	51	2829.3	4.6	-0.0038	0.003	82.5	ug/L	3223	Standard
	Cr	52	12560.9	5.6	0.3478	0.012	3.5	ug/L	10379	Standard
	Cr	53	668.3	6.0	0.4264	0.006	1.5	ug/L	192	Standard
	Mn	55	8704.2	7.0	0.4654	0.019	4.1	ug/L	1840	Standard
	Co	59	107.0	7.3	-0.0067	0.000	5.5	ug/L	115	Standard
	Ni	60	291.3	1.7	0.0769	0.004	5.2	ug/L	75	Standard
	Cu	65	1234.4	5.8	0.4351	0.009	2.0	ug/L	155	Standard
	Zn	66	3232.0	1.0	2.4124	0.125	5.2	ug/L	237	Standard
[>	Ge	72	374329.0	5.1				ug/L	413856	Standard
	As	75	-158.4	27.5	0.0200	0.030	149.1	ug/L	-197	Standard
	Se	82	6.8	226.0	0.0668	0.136	203.9	ug/L	-5	Standard
[	Se-1	77	107.3	19.4	0.2320	0.238	102.7	ug/L	105	Standard
[>	Ga	71	201.7	13.7				mg/L	225	Standard
[	Rb	85	168.3	21.9				ug/L	28	Standard
[	Y	89	279878.5	1.8				ug/L	322845	Standard
[>	Rh	103	88.3	17.3				ug/L	92	Standard
[	Mo	98	21.1	23.8	-0.0036	0.001	37.2	ug/L	18	Standard
	Ag	107	71.7	21.4	0.0020	0.002	126.3	ug/L	63	Standard
	Cd	111	17.6	37.8	-0.0057	0.002	35.9	mg/L	20	Standard
	Cd	114	60.0	22.0	-0.0024	0.001	56.5	ug/L	56	Standard
[>	In	115	608907.2	4.6				ug/L	657102	Standard
	Sn	118	621.7	6.2	0.0180	0.001	7.5	ug/L	555	Standard
	Sb	123	46.7	15.0	0.0035	0.001	24.9	ug/L	62	Standard
[	Ba	135	1280.7	3.7	0.3862	0.004	1.0	ug/L	19	Standard
[	Ce	140	691.3	13.5				ug/L	24	Standard
[>	Tb	159	868269.0	3.2				ug/L	910514	Standard
[	Ho	165	16.3	24.7				ug/L	7	Standard
	Tl	203	44.0	8.2	-0.0000	0.000	1028.2	ug/L	13	Standard
	Tl	205	1.3	114.6	0.0049	0.004	84.4	ug/L	1	Standard
	Pb	206	456.7	7.7	0.0135	0.002	18.0	ug/L	342	Standard
	Pb	207	400.0	1.7	0.0118	0.002	20.1	ug/L	284	Standard
	Pb	208	1811.0	4.1	0.0123	0.000	2.5	ug/L	1363	Standard
	U	238	6.3	39.7	-0.0009	0.000	26.9	ug/L	2	Standard
[>	Bi	209	450267.6	4.1				ug/L	470592	Standard

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Na	23	0.0		0.0050	0.000	0.0	mg/L	2	Standard
Mg	24	67006.3	3.3	0.0346	0.001	3.3	mg/L	5586	Standard
K	39	6.7	43.3	0.0625	0.046	73.0	mg/L	5	Standard
Ca	43	36.7	20.8	-0.4316	0.477	110.5	mg/L	45	Standard
Fe	54	358.8	22.9	0.0041	0.037	899.3	mg/L	350	Standard
Fe	57	141.7	14.7	0.1277	0.052	40.8	mg/L	102	Standard
Sc-1	45	46442.9	5.9				mg/L	53004	Standard
Cl	35	2.3	99.0				ug/L	2	Standard
Kr	83	174.4	5.1				ug/L	157	Standard
Br	81	4.2	34.6				ug/L	3	Standard
P	31	108015.3	5.6				ug/L	91588	Standard
S	34	32567.5	1.7				ug/L	32556	Standard
Sr	88	66.7	38.5				ug/L	62	Standard
C	12	155.0	16.1				mg/L	133	Standard
N	14	0.0					mg/L	0	Standard
Hg	202	5.0	0.0				mg/L	7	Standard

QC Calculated Values

Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recovery
Li	7			
Be	9			
Al	27			
Sc	45			
Ti	47			
V	51			
Cr	52			
Cr	53			
Mn	55			
Co	59			
Ni	60			
Cu	65			
Zn	66			
Ge	72		90.449	
As	75			
Se	82			
Se-1	77			
Ga	71			
Rb	85			
Y	89			
Rh	103			

Sample ID: L1211044723

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[	Mo	98	
[	Ag	107	
[	Cd	111	
[	Cd	114	
>	In	115	92.666
[	Sn	118	
[	Sb	123	
[	Ba	135	
[	Ce	140	
>	Tb	159	
[	Ho	165	
[	Tl	203	
[	Tl	205	
[	Pb	206	
[	Pb	207	
[	Pb	208	
[	U	238	
>	Bi	209	95.681
[	Na	23	
[	Mg	24	
[	K	39	
[	Ca	43	
[	Fe	54	
[	Fe	57	
>	Sc-1	45	
[	Cl	35	
[	Kr	83	
[	Br	81	
[	P	31	
[	S	34	
[	Sr	88	
[	C	12	
[	N	14	
[	Hg	202	

QC Out of Limits

Measurement Type	Analyte	Mass	Out of Limits Message

Sample ID: L1211044723

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Method 6020 - Summary Report

Sample ID: QC Std 6

Sample Date/Time: Sunday, November 18, 2012 16:38:48

Number of Replicates: 3

Autosampler Position: 101

Sample Description:

Method File: C:\NexIONData\Method\6020a.mth

Aliquot Volume (mL):

Diluted to Volume (mL):

User Name: JYH user

Cumulative Autodilution Factor: 1

Nexion-ICP 200.8\6020

Concentration Results

IS	Analyte	Mass	Intensity	RSD	Conc.	SD	RSD	Units	Blank Intens.	Mode
[	Li	7	8277.3	2.1	-41.9122	70.581	168.4	ug/L	8369	Standard
	Be	9	106800.1	1.6	52.8513	0.659	1.2	ug/L	18	Standard
	Al	27	6701213.3	3.0	56.1698	1.373	2.4	ug/L	215	Standard
[>	Sc	45	51463.9	0.6				ug/L	53004	Standard
[	Ti	47	48454.7	3.3	98.2887	1.745	1.8	ug/L	26	Standard
	V	51	555475.8	4.5	48.6067	1.426	2.9	ug/L	3223	Standard
	Cr	52	528605.6	4.2	49.2941	1.155	2.3	ug/L	10379	Standard
	Cr	53	63761.6	4.5	48.1975	1.213	2.5	ug/L	192	Standard
	Mn	55	824487.4	3.9	49.5063	0.986	2.0	ug/L	1840	Standard
	Co	59	628452.5	3.9	49.1475	0.929	1.9	ug/L	115	Standard
	Ni	60	135027.6	4.9	49.0759	1.402	2.9	ug/L	75	Standard
	Cu	65	133071.5	4.1	50.0931	1.284	2.6	ug/L	155	Standard
	Zn	66	65928.9	3.6	50.0243	0.795	1.6	ug/L	237	Standard
[>	Ge	72	396381.4	2.1				ug/L	413856	Standard
	As	75	68544.6	3.2	49.4333	0.586	1.2	ug/L	-197	Standard
	Se	82	6094.2	3.2	49.0968	0.587	1.2	ug/L	-5	Standard
[	Se-1	77	4802.4	2.5	50.1193	0.417	0.8	ug/L	105	Standard
[>	Ga	71	168.3	17.9				mg/L	225	Standard
[	Rb	85	1576.7	7.9				ug/L	28	Standard
[	Y	89	305152.7	1.5				ug/L	322845	Standard
[>	Rh	103	125.0	10.6				ug/L	92	Standard
[	Mo	98	411687.2	4.9	93.6163	3.024	3.2	ug/L	18	Standard
	Ag	107	376672.6	3.8	48.6972	1.195	2.5	ug/L	63	Standard
	Cd	111	166078.7	4.9	49.5964	1.823	3.7	mg/L	20	Standard
	Cd	114	433100.9	4.7	49.1442	1.687	3.4	ug/L	56	Standard
[>	In	115	641406.0	1.7				ug/L	657102	Standard
	Sn	118	489085.4	4.4	50.2889	1.574	3.1	ug/L	555	Standard
	Sb	123	384602.1	4.4	50.2996	1.628	3.2	ug/L	62	Standard
[	Ba	135	167769.7	4.1	50.4597	1.385	2.7	ug/L	19	Standard
[	Ce	140	521.0	4.9				ug/L	24	Standard
[>	Tb	159	917121.7	1.2				ug/L	910514	Standard
[	Ho	165	454.7	4.5				ug/L	7	Standard
	Tl	203	635280.4	1.1	49.7897	0.518	1.0	ug/L	13	Standard
	Tl	205	19795.6	2.9	50.8503	1.202	2.4	ug/L	1	Standard
	Pb	206	512207.1	3.9	50.0663	1.549	3.1	ug/L	342	Standard
	Pb	207	433292.1	3.9	49.8146	1.522	3.1	ug/L	284	Standard
	Pb	208	2001198.9	3.9	49.5556	1.534	3.1	ug/L	1363	Standard
	U	238	498822.0	4.8	49.9128	1.985	4.0	ug/L	2	Standard
[>	Bi	209	468485.2	1.2				ug/L	470592	Standard

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Na	23	1.7	173.2	0.1593	0.267	167.8	mg/L	2	Standard
Mg	24	305072.4	0.4	0.1513	0.001	0.7	mg/L	5586	Standard
K	39	393.3	3.7	5.4670	0.177	3.2	mg/L	5	Standard
Ca	43	148.3	15.2	4.2692	0.964	22.6	mg/L	45	Standard
Fe	54	13492.0	5.3	5.1844	0.259	5.0	mg/L	350	Standard
Fe	57	3280.4	7.9	5.1764	0.395	7.6	mg/L	102	Standard
Sc-1	45	51463.9	0.6				mg/L	53004	Standard
Cl	35	4.0	25.0				ug/L	2	Standard
Kr	83	181.4	5.0				ug/L	157	Standard
Br	81	9.2	41.7				ug/L	3	Standard
P	31	129578.4	0.7				ug/L	91588	Standard
S	34	38425.3	2.0				ug/L	32556	Standard
Sr	88	70.0	35.7				ug/L	62	Standard
C	12	121.7	12.6				mg/L	133	Standard
N	14	0.0					mg/L	0	Standard
Hg	202	6.7	86.6				mg/L	7	Standard

QC Calculated Values

Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recovery
Li	7			
Be	9	105.703		
Al	27	112.340		
Sc	45			
Ti	47	98.289		
V	51	97.213		
Cr	52	98.588		
Cr	53			
Mn	55	99.013		
Co	59	98.295		
Ni	60	98.152		
Cu	65	100.186		
Zn	66	100.049		
Ge	72		95.778	
As	75	98.867		
Se	82	98.194		
Se-1	77			
Ga	71			
Rb	85			
Y	89			
Rh	103			

Sample ID: QC Std 6

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[	Mo	98	93.616	
[	Ag	107	97.394	
[	Cd	111	99.193	
[	Cd	114		
>	In	115		97.611
[	Sn	118	100.578	
[	Sb	123	100.599	
[	Ba	135	100.919	
[	Ce	140		
>	Tb	159		
[	Ho	165		
[	Tl	203	99.579	
[	Tl	205		
[	Pb	206	100.133	
[	Pb	207	99.629	
[	Pb	208	99.111	
[	U	238	99.826	
>	Bi	209		99.552
[	Na	23		
[	Mg	24		
[	K	39		
[	Ca	43		
[	Fe	54		
[	Fe	57		
>	Sc-1	45		
[	Cl	35		
[	Kr	83		
[	Br	81		
[	P	31		
[	S	34		
[	Sr	88		
[	C	12		
[	N	14		
[	Hg	202		

QC Out of Limits

Measurement Type	Analyte	Mass	Out of Limits Message
QC Std 6	Al	27	

Sample ID: QC Std 6

Report Date/Time: Sunday, November 18, 2012 16:41:19

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Method 6020 - Summary Report

Sample ID: QC Std 7

Sample Date/Time: Sunday, November 18, 2012 16:42:00

Number of Replicates: 3

Autosampler Position: 102

Sample Description:

Method File: C:\NexIONData\Method\6020a.mth

Aliquot Volume (mL):

Diluted to Volume (mL):

User Name: JYH user

Cumulative Autodilution Factor: 1

Nexion-ICP 200.8\6020

Concentration Results

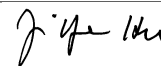
IS	Analyte	Mass	Intensity	RSD	Conc.	SD	RSD	Units	Blank Intens.	Mode
[	Li	7	7638.6	6.2	146.7196	127.851	87.1	ug/L	8369	Standard
	Be	9	30.0	44.1	0.0061	0.007	115.0	ug/L	18	Standard
	Al	27	1421.8	94.1	0.0102	0.011	112.5	ug/L	215	Standard
[>	Sc	45	49452.3	4.0				ug/L	53004	Standard
	Ti	47	25.7	44.8	-0.0066	0.022	334.3	ug/L	26	Standard
	V	51	2832.8	3.3	-0.0114	0.007	62.8	ug/L	3223	Standard
	Cr	52	8779.2	2.6	-0.0587	0.030	51.1	ug/L	10379	Standard
	Cr	53	135.0	4.9	-0.0046	0.007	141.0	ug/L	192	Standard
	Mn	55	1552.4	8.3	0.0069	0.004	65.2	ug/L	1840	Standard
	Co	59	98.3	49.0	-0.0077	0.003	44.8	ug/L	115	Standard
	Ni	60	76.0	4.7	-0.0071	0.001	8.5	ug/L	75	Standard
	Cu	65	202.0	14.2	0.0206	0.010	50.0	ug/L	155	Standard
	Zn	66	238.7	6.6	-0.0128	0.008	60.7	ug/L	237	Standard
[>	Ge	72	386104.1	4.5				ug/L	413856	Standard
	As	75	-191.3	5.4	-0.0017	0.014	793.3	ug/L	-197	Standard
	Se	82	-5.7	68.8	-0.0412	0.030	73.6	ug/L	-5	Standard
[	Se-1	77	101.7	11.0	0.1367	0.166	121.2	ug/L	105	Standard
[>	Ga	71	198.3	14.3				mg/L	225	Standard
	Rb	85	21.7	48.0				ug/L	28	Standard
	Y	89	284203.3	5.0				ug/L	322845	Standard
[>	Rh	103	96.7	10.8				ug/L	92	Standard
	Mo	98	215.8	89.9	0.0415	0.044	106.1	ug/L	18	Standard
	Ag	107	207.3	60.8	0.0197	0.016	82.1	ug/L	63	Standard
	Cd	111	76.1	79.8	0.0121	0.018	149.2	mg/L	20	Standard
	Cd	114	179.1	66.4	0.0113	0.013	118.1	ug/L	56	Standard
[>	In	115	616962.8	2.9				ug/L	657102	Standard
	Sn	118	466.7	23.7	0.0004	0.010	2832.8	ug/L	555	Standard
	Sb	123	336.4	40.2	0.0425	0.017	39.6	ug/L	62	Standard
[	Ba	135	49.7	52.6	-0.0045	0.008	167.7	ug/L	19	Standard
	Ce	140	19.7	26.1				ug/L	24	Standard
[>	Tb	159	891197.0	2.9				ug/L	910514	Standard
	Ho	165	8.7	29.0				ug/L	7	Standard
	Tl	203	189.0	112.2	0.0112	0.016	146.0	ug/L	13	Standard
	Tl	205	4.7	101.3	0.0133	0.012	89.5	ug/L	1	Standard
	Pb	206	425.7	35.9	0.0093	0.014	151.5	ug/L	342	Standard
	Pb	207	388.7	28.4	0.0093	0.012	126.1	ug/L	284	Standard
	Pb	208	1677.4	31.4	0.0077	0.012	157.1	ug/L	1363	Standard
	U	238	85.7	129.3	0.0070	0.011	155.2	ug/L	2	Standard
[>	Bi	209	459795.2	2.6				ug/L	470592	Standard

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Na	23	0.0		0.0050	0.000	0.0	mg/L	2	Standard
Mg	24	818.4	19.8	-0.0025	0.000	3.2	mg/L	5586	Standard
K	39	8.3	91.7	0.0813	0.111	136.2	mg/L	5	Standard
Ca	43	28.3	53.9	-0.9486	0.671	70.7	mg/L	45	Standard
Fe	54	342.3	6.0	-0.0124	0.010	82.1	mg/L	350	Standard
Fe	57	116.7	43.1	0.0677	0.081	119.4	mg/L	102	Standard
Sc-1	45	49452.3	4.0				mg/L	53004	Standard
Cl	35	4.0	43.3				ug/L	2	Standard
Kr	83	176.9	6.1				ug/L	157	Standard
Br	81	5.0	86.6				ug/L	3	Standard
P	31	124416.4	2.1				ug/L	91588	Standard
S	34	40175.7	2.0				ug/L	32556	Standard
Sr	88	56.7	45.3				ug/L	62	Standard
C	12	123.3	4.7				mg/L	133	Standard
N	14	0.0					mg/L	0	Standard
Hg	202	0.0					mg/L	7	Standard

QC Calculated Values

Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recovery
Li	7			
Be	9			
Al	27			
Sc	45			
Ti	47			
V	51			
Cr	52			
Cr	53			
Mn	55			
Co	59			
Ni	60			
Cu	65			
Zn	66			
Ge	72		93.294	
As	75			
Se	82			
Se-1	77			
Ga	71			
Rb	85			
Y	89			
Rh	103			

Sample ID: QC Std 7

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[	Mo	98	
[	Ag	107	
[	Cd	111	
[	Cd	114	
>	In	115	93.892
[	Sn	118	
[	Sb	123	
[	Ba	135	
[	Ce	140	
>	Tb	159	
[	Ho	165	
[	Tl	203	
[	Tl	205	
[	Pb	206	
[	Pb	207	
[	Pb	208	
[	U	238	
>	Bi	209	97.706
[	Na	23	
[	Mg	24	
[	K	39	
[	Ca	43	
[	Fe	54	
[	Fe	57	
>	Sc-1	45	
[	Cl	35	
[	Kr	83	
[	Br	81	
[	P	31	
[	S	34	
[	Sr	88	
[	C	12	
[	N	14	
[	Hg	202	

QC Out of Limits

Measurement Type	Analyte	Mass	Out of Limits Message

Sample ID: QC Std 7

Report Date/Time: Sunday, November 18, 2012 16:44:32

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Method 6020 - Summary Report

Sample ID: PBW 44 WG413848-02

Sample Date/Time: Sunday, November 18, 2012 16:45:13

Number of Replicates: 3

Autosampler Position: 337

Sample Description: 1

Method File: C:\NexIONData\Method\6020a.mth

Aliquot Volume (mL):

Diluted to Volume (mL):

User Name: JYH user

Cumulative Autodilution Factor: 1

Nexion-ICP 200.8\6020

Concentration Results

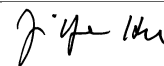
IS	Analyte	Mass	Intensity	RSD	Conc.	SD	RSD	Units	Blank Intens.	Mode
[	Li	7	6926.6	10.4	84.6122	325.618	384.8	ug/L	8369	Standard
	Be	9	16.7	69.3	-0.0000	0.006	35563.5	ug/L	18	Standard
	Al	27	600.0	95.3	0.0036	0.005	147.3	ug/L	215	Standard
[>	Sc	45	44197.8	4.0				ug/L	53004	Standard
	Ti	47	17.0	27.0	-0.0210	0.009	43.4	ug/L	26	Standard
	V	51	2565.1	3.3	-0.0136	0.004	27.3	ug/L	3223	Standard
	Cr	52	7860.4	2.6	-0.0755	0.017	23.1	ug/L	10379	Standard
	Cr	53	116.7	6.5	-0.0102	0.009	87.4	ug/L	192	Standard
	Mn	55	1296.1	3.6	-0.0012	0.002	207.4	ug/L	1840	Standard
	Co	59	89.0	19.2	-0.0077	0.001	17.9	ug/L	115	Standard
	Ni	60	836.7	5.6	0.3067	0.009	2.9	ug/L	75	Standard
	Cu	65	151.7	14.2	0.0067	0.008	126.5	ug/L	155	Standard
	Zn	66	1862.8	6.6	1.3957	0.053	3.8	ug/L	237	Standard
[>	Ge	72	352439.8	3.3				ug/L	413856	Standard
	As	75	-158.0	48.6	0.0109	0.067	613.1	ug/L	-197	Standard
	Se	82	-0.3	5943.0	0.0015	0.178	11897.8	ug/L	-5	Standard
[	Se-1	77	114.0	0.9	0.3863	0.039	10.1	ug/L	105	Standard
[>	Ga	71	175.0	15.9				mg/L	225	Standard
	Rb	85	10.0					ug/L	28	Standard
	Y	89	259159.0	4.6				ug/L	322845	Standard
[>	Rh	103	73.3	7.9				ug/L	92	Standard
	Mo	98	12.1	27.7	-0.0056	0.001	12.9	ug/L	18	Standard
	Ag	107	42.7	7.5	-0.0017	0.000	24.8	ug/L	63	Standard
	Cd	111	21.0	4.8	-0.0041	0.001	13.6	mg/L	20	Standard
	Cd	114	54.7	20.2	-0.0026	0.001	56.8	ug/L	56	Standard
[>	In	115	569171.4	3.8				ug/L	657102	Standard
	Sn	118	322.3	12.7	-0.0121	0.003	27.5	ug/L	555	Standard
	Sb	123	63.7	1.4	0.0065	0.000	5.4	ug/L	62	Standard
[	Ba	135	15.0	37.1	-0.0149	0.002	11.4	ug/L	19	Standard
	Ce	140	22.0	20.8				ug/L	24	Standard
[>	Tb	159	830801.3	3.9				ug/L	910514	Standard
	Ho	165	10.3	53.3				ug/L	7	Standard
	Tl	203	69.3	102.0	0.0022	0.006	265.5	ug/L	13	Standard
	Tl	205	2.0	132.3	0.0068	0.007	106.1	ug/L	1	Standard
	Pb	206	366.3	21.9	0.0061	0.008	125.2	ug/L	342	Standard
	Pb	207	289.0	24.1	0.0001	0.008	12952.6	ug/L	284	Standard
	Pb	208	1335.7	21.4	0.0016	0.007	434.1	ug/L	1363	Standard
	U	238	29.0	155.3	0.0016	0.005	304.8	ug/L	2	Standard
[>	Bi	209	429393.9	2.3				ug/L	470592	Standard

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Na	23	0.0		0.0050	0.000	0.0	mg/L	2	Standard
Mg	24	673.3	17.4	-0.0025	0.000	2.1	mg/L	5586	Standard
K	39	5.0	100.0	0.0401	0.083	207.6	mg/L	5	Standard
Ca	43	45.0	38.5	0.0458	0.777	1697.6	mg/L	45	Standard
Fe	54	265.4	4.6	-0.0312	0.003	9.4	mg/L	350	Standard
Fe	57	106.7	16.5	0.0736	0.040	54.1	mg/L	102	Standard
Sc-1	45	44197.8	4.0				mg/L	53004	Standard
Cl	35	3.0	66.7				ug/L	2	Standard
Kr	83	135.0	12.3				ug/L	157	Standard
Br	81	4.2	124.9				ug/L	3	Standard
P	31	81430.9	3.4				ug/L	91588	Standard
S	34	36689.4	1.6				ug/L	32556	Standard
Sr	88	56.7	22.2				ug/L	62	Standard
C	12	93.3	11.2				mg/L	133	Standard
N	14	1.7	173.2				mg/L	0	Standard
Hg	202	3.3	173.2				mg/L	7	Standard

QC Calculated Values

Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recovery
Li	7			
Be	9			
Al	27			
Sc	45			
Ti	47			
V	51			
Cr	52			
Cr	53			
Mn	55			
Co	59			
Ni	60			
Cu	65			
Zn	66			
Ge	72		85.160	
As	75			
Se	82			
Se-1	77			
Ga	71			
Rb	85			
Y	89			
Rh	103			

Sample ID: PBW 44 WG413848-02

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[	Mo	98	
[	Ag	107	
[	Cd	111	
[	Cd	114	
>	In	115	86.618
[	Sn	118	
[	Sb	123	
[	Ba	135	
[	Ce	140	
>	Tb	159	
[	Ho	165	
[	Tl	203	
[	Tl	205	
[	Pb	206	
[	Pb	207	
[	Pb	208	
[	U	238	
>	Bi	209	91.246
[	Na	23	
[	Mg	24	
[	K	39	
[	Ca	43	
[	Fe	54	
[	Fe	57	
>	Sc-1	45	
[	Cl	35	
[	Kr	83	
[	Br	81	
[	P	31	
[	S	34	
[	Sr	88	
[	C	12	
[	N	14	
[	Hg	202	

QC Out of Limits

Measurement Type	Analyte	Mass	Out of Limits Message

Sample ID: PBW 44 WG413848-02

Report Date/Time: Sunday, November 18, 2012 16:47:45

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Method 6020 - Summary Report

Sample ID: LCSW 44 WG413848-03

Sample Date/Time: Sunday, November 18, 2012 16:48:25

Number of Replicates: 3

Autosampler Position: 338

Sample Description: 1

Method File: C:\NexIONData\Method\6020a.mth

Aliquot Volume (mL):

Diluted to Volume (mL):

User Name: JYH user

Cumulative Autodilution Factor: 1

Nexion-ICP 200.8\6020

Concentration Results

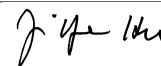
IS	Analyte	Mass	Intensity	RSD	Conc.	SD	RSD	Units	Blank Intens.	Mode
[	Li	7	7546.9	4.4	22.0002	110.132	500.6	ug/L	8369	Standard
	Be	9	47758.8	8.1	25.5351	1.078	4.2	ug/L	18	Standard
	Al	27	1078.4	13.5	0.0076	0.001	12.3	ug/L	215	Standard
[>	Sc	45	47586.4	4.8				ug/L	53004	Standard
[	Ti	47	20.0	31.2	-0.0179	0.013	73.3	ug/L	26	Standard
	V	51	254801.1	6.9	22.7451	0.800	3.5	ug/L	3223	Standard
	Cr	52	251058.8	6.2	23.5682	0.755	3.2	ug/L	10379	Standard
	Cr	53	30206.0	7.0	23.3839	0.926	4.0	ug/L	192	Standard
	Mn	55	386432.8	6.1	23.7771	0.717	3.0	ug/L	1840	Standard
	Co	59	291189.1	5.3	23.3765	0.515	2.2	ug/L	115	Standard
	Ni	60	62630.9	6.4	23.3544	0.743	3.2	ug/L	75	Standard
	Cu	65	63677.6	6.4	24.5776	0.718	2.9	ug/L	155	Standard
	Zn	66	32184.9	5.6	24.9738	0.548	2.2	ug/L	237	Standard
[>	Ge	72	385956.9	3.5				ug/L	413856	Standard
	As	75	31539.8	4.8	23.4311	0.383	1.6	ug/L	-197	Standard
	Se	82	2807.7	5.1	23.2295	0.508	2.2	ug/L	-5	Standard
[	Se-1	77	2278.5	8.4	23.8930	1.226	5.1	ug/L	105	Standard
[>	Ga	71	188.3	15.3				mg/L	225	Standard
[	Rb	85	25.0	34.6				ug/L	28	Standard
[	Y	89	292864.2	4.8				ug/L	322845	Standard
[>	Rh	103	118.3	6.5				ug/L	92	Standard
[	Mo	98	33.8	13.0	-0.0008	0.001	108.1	ug/L	18	Standard
	Ag	107	176564.5	5.4	23.5955	0.329	1.4	ug/L	63	Standard
	Cd	111	76165.3	5.7	23.5117	0.574	2.4	mg/L	20	Standard
	Cd	114	199288.7	6.4	23.3735	0.789	3.4	ug/L	56	Standard
[>	In	115	620309.2	4.2				ug/L	657102	Standard
	Sn	118	495.7	4.3	0.0034	0.000	5.3	ug/L	555	Standard
	Sb	123	176184.6	5.6	23.8197	0.366	1.5	ug/L	62	Standard
[	Ba	135	78062.9	5.1	24.2677	0.443	1.8	ug/L	19	Standard
[	Ce	140	96.0	9.5				ug/L	24	Standard
[>	Tb	159	895357.7	4.7				ug/L	910514	Standard
[	Ho	165	12.3	41.6				ug/L	7	Standard
	Tl	203	300191.8	5.3	23.9375	0.320	1.3	ug/L	13	Standard
	Tl	205	9127.4	3.9	23.8689	0.174	0.7	ug/L	1	Standard
	Pb	206	238908.4	6.3	23.7416	0.534	2.2	ug/L	342	Standard
	Pb	207	205771.5	5.4	24.0568	0.399	1.7	ug/L	284	Standard
	Pb	208	948987.8	5.8	23.8945	0.439	1.8	ug/L	1363	Standard
	U	238	224277.2	6.7	22.8332	0.777	3.4	ug/L	2	Standard
[>	Bi	209	460276.4	4.3				ug/L	470592	Standard

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Na	23	1.7	173.2	0.1695	0.285	168.1	mg/L	2	Standard
Mg	24	1533.4	6.4	-0.0021	0.000	3.2	mg/L	5586	Standard
K	39	0.0		-0.0413	0.000	0.0	mg/L	5	Standard
Ca	43	31.7	50.8	-0.7022	0.857	122.0	mg/L	45	Standard
Fe	54	319.4	16.0	-0.0171	0.018	103.1	mg/L	350	Standard
Fe	57	93.3	16.4	0.0361	0.035	96.4	mg/L	102	Standard
Sc-1	45	47586.4	4.8				mg/L	53004	Standard
Cl	35	2.0	50.0				ug/L	2	Standard
Kr	83	168.4	20.3				ug/L	157	Standard
Br	81	2.5	0.0				ug/L	3	Standard
P	31	115552.2	5.1				ug/L	91588	Standard
S	34	35330.3	3.7				ug/L	32556	Standard
Sr	88	73.3	46.4				ug/L	62	Standard
C	12	126.7	12.1				mg/L	133	Standard
N	14	0.0					mg/L	0	Standard
Hg	202	0.0					mg/L	7	Standard

QC Calculated Values

Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recovery
Li	7			
Be	9			
Al	27			
Sc	45			
Ti	47			
V	51			
Cr	52			
Cr	53			
Mn	55			
Co	59			
Ni	60			
Cu	65			
Zn	66			
Ge	72		93.259	
As	75			
Se	82			
Se-1	77			
Ga	71			
Rb	85			
Y	89			
Rh	103			

Sample ID: LCSW 44 WG413848-03

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[	Mo	98	
[	Ag	107	
[	Cd	111	
[	Cd	114	
>	In	115	94.401
[	Sn	118	
[	Sb	123	
[	Ba	135	
[	Ce	140	
>	Tb	159	
[	Ho	165	
[	Tl	203	
[	Tl	205	
[	Pb	206	
[	Pb	207	
[	Pb	208	
[	U	238	
>	Bi	209	97.808
[	Na	23	
[	Mg	24	
[	K	39	
[	Ca	43	
[	Fe	54	
[	Fe	57	
>	Sc-1	45	
[	Cl	35	
[	Kr	83	
[	Br	81	
[	P	31	
[	S	34	
[	Sr	88	
[	C	12	
[	N	14	
[	Hg	202	

QC Out of Limits

Measurement Type	Analyte	Mass	Out of Limits Message

Sample ID: LCSW 44 WG413848-03

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Method 6020 - Summary Report

Sample ID: L1211020101 WG413848-01

Sample Date/Time: Sunday, November 18, 2012 16:51:37

Number of Replicates: 3

Autosampler Position: 339

Sample Description: 1

Method File: C:\NexIONData\Method\6020a.mth

Aliquot Volume (mL):

Diluted to Volume (mL):

User Name: JYH user

Cumulative Autodilution Factor: 1

Nexion-ICP 200.8\6020

Concentration Results

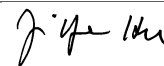
IS	Analyte	Mass	Intensity	RSD	Conc.	SD	RSD	Units	Blank Intens.	Mode
[	Li	7	772370.5	0.3	-532130.8314	8031.191	1.5	ug/L	8369	Standard
	Be	9	16.7	34.6	0.0007	0.004	553.9	ug/L	18	Standard
	Al	27	170629358.9	2.7	1747.2979	47.714	2.7	ug/L	215	Standard
[>	Sc	45	42133.5	1.6				ug/L	53004	Standard
[	Ti	47	174.0	15.4	0.3771	0.063	16.6	ug/L	26	Standard
	V	51	3294.7	19.9	0.0919	0.075	81.9	ug/L	3223	Standard
	Cr	52	13943.4	3.5	0.7242	0.074	10.2	ug/L	10379	Standard
	Cr	53	2224.3	14.2	1.9744	0.273	13.8	ug/L	192	Standard
	Mn	55	427310.7	3.2	31.7233	0.724	2.3	ug/L	1840	Standard
	Co	59	3592.1	4.3	0.3322	0.012	3.7	ug/L	115	Standard
	Ni	60	11622.5	3.9	5.1971	0.172	3.3	ug/L	75	Standard
	Cu	65	4334.3	4.6	1.9641	0.083	4.2	ug/L	155	Standard
	Zn	66	9454.0	3.0	8.7161	0.317	3.6	ug/L	237	Standard
[>	Ge	72	320314.5	1.3				ug/L	413856	Standard
	As	75	781.7	9.9	0.8363	0.078	9.3	ug/L	-197	Standard
	Se	82	554.6	5.3	5.5374	0.365	6.6	ug/L	-5	Standard
[	Se-1	77	521.7	5.8	5.8896	0.368	6.3	ug/L	105	Standard
[>	Ga	71	165.0	10.5				mg/L	225	Standard
[	Rb	85	11409.3	4.2				ug/L	28	Standard
[	Y	89	252476.6	1.8				ug/L	322845	Standard
[>	Rh	103	938.4	10.8				ug/L	92	Standard
[	Mo	98	1207.8	6.1	0.3251	0.017	5.2	ug/L	18	Standard
	Ag	107	105.3	70.1	0.0087	0.012	134.3	ug/L	63	Standard
	Cd	111	85.5	45.6	0.0199	0.014	71.8	mg/L	20	Standard
	Cd	114	203.4	34.2	0.0185	0.010	52.4	ug/L	56	Standard
[>	In	115	527787.8	1.2				ug/L	657102	Standard
	Sn	118	384.3	3.4	-0.0013	0.001	106.7	ug/L	555	Standard
	Sb	123	317.5	6.7	0.0475	0.003	7.1	ug/L	62	Standard
[	Ba	135	10639.1	3.3	3.8707	0.093	2.4	ug/L	19	Standard
[	Ce	140	698.3	4.8				ug/L	24	Standard
[>	Tb	159	750917.0	0.2				ug/L	910514	Standard
[	Ho	165	53.3	18.8				ug/L	7	Standard
	Tl	203	410.0	26.3	0.0418	0.012	28.2	ug/L	13	Standard
	Tl	205	11.0	18.2	0.0412	0.007	16.6	ug/L	1	Standard
	Pb	206	473.3	17.2	0.0325	0.011	33.3	ug/L	342	Standard
	Pb	207	398.7	23.6	0.0287	0.015	51.2	ug/L	284	Standard
	Pb	208	1790.0	19.4	0.0283	0.012	41.6	ug/L	1363	Standard
	U	238	193573.3	2.8	27.4171	0.998	3.6	ug/L	2	Standard
[>	Bi	209	331098.2	1.2				ug/L	470592	Standard

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Na	23	100.0	5.0	11.3791	0.723	6.4	mg/L	2	Standard
Mg	24	19005138.5	1.5	11.7294	0.016	0.1	mg/L	5586	Standard
K	39	165.0	8.0	2.7794	0.181	6.5	mg/L	5	Standard
Ca	43	2113.5	6.2	110.9731	7.673	6.9	mg/L	45	Standard
Fe	54	265.0	4.7	-0.0253	0.008	30.4	mg/L	350	Standard
Fe	57	1093.4	3.1	2.0320	0.065	3.2	mg/L	102	Standard
Sc-1	45	42133.5	1.6				mg/L	53004	Standard
Cl	35	15.3	13.6				ug/L	2	Standard
Kr	83	359.8	35.9				ug/L	157	Standard
Br	81	5.8	65.5				ug/L	3	Standard
P	31	88419.8	2.4				ug/L	91588	Standard
S	34	34515.2	4.5				ug/L	32556	Standard
Sr	88	7495.2	3.0				ug/L	62	Standard
C	12	1266.7	12.5				mg/L	133	Standard
N	14	1.7	173.2				mg/L	0	Standard
Hg	202	5.0	173.2				mg/L	7	Standard

QC Calculated Values

Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recovery
Li	7			
Be	9			
Al	27			
Sc	45			
Ti	47			
V	51			
Cr	52			
Cr	53			
Mn	55			
Co	59			
Ni	60			
Cu	65			
Zn	66			
Ge	72		77.398	
As	75			
Se	82			
Se-1	77			
Ga	71			
Rb	85			
Y	89			
Rh	103			

Sample ID: L1211020101 WG413848-01

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[	Mo	98	
[	Ag	107	
[	Cd	111	
[	Cd	114	
>	In	115	80.321
[	Sn	118	
[	Sb	123	
[	Ba	135	
[	Ce	140	
>	Tb	159	
[	Ho	165	
[	Tl	203	
[	Tl	205	
[	Pb	206	
[	Pb	207	
[	Pb	208	
[	U	238	
>	Bi	209	70.358
[	Na	23	
[	Mg	24	
[	K	39	
[	Ca	43	
[	Fe	54	
[	Fe	57	
>	Sc-1	45	
[	Cl	35	
[	Kr	83	
[	Br	81	
[	P	31	
[	S	34	
[	Sr	88	
[	C	12	
[	N	14	
[	Hg	202	

QC Out of Limits

Measurement Type	Analyte	Mass	Out of Limits Message

Sample ID: L1211020101 WG413848-01

Report Date/Time: Sunday, November 18, 2012 16:54:10

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Method 6020 - Summary Report

Sample ID: L1211020101S WG413848-04

Sample Date/Time: Sunday, November 18, 2012 16:54:51

Number of Replicates: 3

Autosampler Position: 340

Sample Description: 1

Method File: C:\NexIONData\Method\6020a.mth

Aliquot Volume (mL):

Diluted to Volume (mL):

User Name: JYH user

Cumulative Autodilution Factor: 1

Nexion-ICP 200.8\6020

Concentration Results

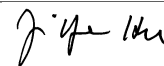
IS	Analyte	Mass	Intensity	RSD	Conc.	SD	RSD	Units	Blank Intens.	Mode
[	Li	7	814545.4	1.2	-555948.6482	5100.368	0.9	ug/L	8369	Standard
	Be	9	44622.3	4.0	26.7195	1.348	5.0	ug/L	18	Standard
	Al	27	185912971.5	3.0	1885.7953	68.404	3.6	ug/L	215	Standard
[>	Sc	45	42541.3	1.3				ug/L	53004	Standard
[	Ti	47	171.3	4.7	0.3642	0.013	3.6	ug/L	26	Standard
	V	51	228801.3	3.5	24.2733	0.527	2.2	ug/L	3223	Standard
	Cr	52	218595.1	4.2	24.3925	0.603	2.5	ug/L	10379	Standard
	Cr	53	27953.3	5.6	25.7022	0.986	3.8	ug/L	192	Standard
	Mn	55	763322.6	2.4	55.8924	0.978	1.8	ug/L	1840	Standard
	Co	59	253194.9	4.3	24.1255	0.556	2.3	ug/L	115	Standard
	Ni	60	63517.0	3.9	28.1358	1.025	3.6	ug/L	75	Standard
	Cu	65	53562.0	4.6	24.5444	0.725	3.0	ug/L	155	Standard
	Zn	66	33679.8	4.6	31.0697	0.881	2.8	ug/L	237	Standard
[>	Ge	72	325226.8	2.5				ug/L	413856	Standard
	As	75	30826.7	3.8	27.1594	0.562	2.1	ug/L	-197	Standard
	Se	82	3712.0	4.4	36.4463	0.942	2.6	ug/L	-5	Standard
[	Se-1	77	2744.2	5.4	34.6041	1.485	4.3	ug/L	105	Standard
[>	Ga	71	186.7	5.6				mg/L	225	Standard
[	Rb	85	11817.9	3.4				ug/L	28	Standard
[	Y	89	255581.0	0.8				ug/L	322845	Standard
[>	Rh	103	1046.7	5.7				ug/L	92	Standard
[	Mo	98	1242.4	5.8	0.3300	0.013	3.9	ug/L	18	Standard
	Ag	107	115270.9	1.4	17.8665	0.173	1.0	ug/L	63	Standard
	Cd	111	66918.7	3.3	23.9609	0.747	3.1	mg/L	20	Standard
	Cd	114	170581.2	2.8	23.2079	0.568	2.4	ug/L	56	Standard
[>	In	115	535019.5	2.2				ug/L	657102	Standard
	Sn	118	420.0	1.9	0.0025	0.001	52.0	ug/L	555	Standard
	Sb	123	160388.2	3.6	25.1498	0.663	2.6	ug/L	62	Standard
[	Ba	135	78444.0	2.7	28.2856	0.679	2.4	ug/L	19	Standard
[	Ce	140	739.4	5.6				ug/L	24	Standard
[>	Tb	159	763423.6	1.0				ug/L	910514	Standard
[	Ho	165	50.0	20.3				ug/L	7	Standard
[	Tl	203	241662.1	1.8	26.4758	0.533	2.0	ug/L	13	Standard
	Tl	205	8421.7	0.3	30.2457	0.296	1.0	ug/L	1	Standard
	Pb	206	188795.1	2.5	25.7879	0.744	2.9	ug/L	342	Standard
	Pb	207	159226.2	2.1	25.5784	0.602	2.4	ug/L	284	Standard
	Pb	208	744624.7	2.5	25.7669	0.754	2.9	ug/L	1363	Standard
	U	238	365115.7	2.8	51.0890	1.685	3.3	ug/L	2	Standard
[>	Bi	209	335124.9	1.0				ug/L	470592	Standard

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Na	23	103.3	5.6	11.6355	0.539	4.6	mg/L	2	Standard
Mg	24	19583106.4	1.3	11.9728	0.308	2.6	mg/L	5586	Standard
K	39	146.7	7.1	2.4448	0.196	8.0	mg/L	5	Standard
Ca	43	2015.1	3.9	104.6217	3.114	3.0	mg/L	45	Standard
Fe	54	247.7	2.9	-0.0349	0.002	5.7	mg/L	350	Standard
Fe	57	1198.4	5.9	2.2163	0.126	5.7	mg/L	102	Standard
Sc-1	45	42541.3	1.3				mg/L	53004	Standard
Cl	35	20.3	27.1				ug/L	2	Standard
Kr	83	270.3	27.8				ug/L	157	Standard
Br	81	8.3	34.6				ug/L	3	Standard
P	31	94129.2	2.9				ug/L	91588	Standard
S	34	34125.9	1.6				ug/L	32556	Standard
Sr	88	7940.4	3.3				ug/L	62	Standard
C	12	695.0	16.2				mg/L	133	Standard
N	14	0.0					mg/L	0	Standard
Hg	202	11.7	65.5				mg/L	7	Standard

QC Calculated Values

Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recovery
Li	7			
Be	9			
Al	27			
Sc	45			
Ti	47			
V	51			
Cr	52			
Cr	53			
Mn	55			
Co	59			
Ni	60			
Cu	65			
Zn	66			
Ge	72		78.585	
As	75			
Se	82			
Se-1	77			
Ga	71			
Rb	85			
Y	89			
Rh	103			

Sample ID: L1211020101S WG413848-04

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[	Mo	98	
[	Ag	107	
[	Cd	111	
[	Cd	114	
>	In	115	81.421
[	Sn	118	
[	Sb	123	
[	Ba	135	
[	Ce	140	
>	Tb	159	
[	Ho	165	
[	Tl	203	
[	Tl	205	
[	Pb	206	
[	Pb	207	
[	Pb	208	
[	U	238	
>	Bi	209	71.214
[	Na	23	
[	Mg	24	
[	K	39	
[	Ca	43	
[	Fe	54	
[	Fe	57	
>	Sc-1	45	
[	Cl	35	
[	Kr	83	
[	Br	81	
[	P	31	
[	S	34	
[	Sr	88	
[	C	12	
[	N	14	
[	Hg	202	

QC Out of Limits

Measurement Type	Analyte	Mass	Out of Limits Message

Sample ID: L1211020101S WG413848-04

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Method 6020 - Summary Report

Sample ID: L1211020101SD WG413848-05

Sample Date/Time: Sunday, November 18, 2012 16:58:03

Number of Replicates: 3

Autosampler Position: 341

Sample Description: 1

Method File: C:\NexIONData\Method\6020a.mth

Aliquot Volume (mL):

Diluted to Volume (mL):

User Name: JYH user

Cumulative Autodilution Factor: 1

Nexion-ICP 200.8\6020

Concentration Results

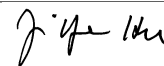
IS	Analyte	Mass	Intensity	RSD	Conc.	SD	RSD	Units	Blank Intens.	Mode
[	Li	7	829870.0	4.4	-552438.4841	8755.496	1.6	ug/L	8369	Standard
	Be	9	45474.9	4.3	26.5503	0.265	1.0	ug/L	18	Standard
	Al	27	183328074.4	2.4	1814.4106	32.481	1.8	ug/L	215	Standard
[>	Sc	45	43612.7	4.1				ug/L	53004	Standard
[	Ti	47	167.7	1.2	0.3493	0.002	0.6	ug/L	26	Standard
	V	51	226850.4	2.6	23.7166	0.621	2.6	ug/L	3223	Standard
	Cr	52	218057.3	3.7	23.9708	0.819	3.4	ug/L	10379	Standard
	Cr	53	28031.8	3.8	25.4137	1.040	4.1	ug/L	192	Standard
	Mn	55	762042.4	2.2	54.9952	1.478	2.7	ug/L	1840	Standard
	Co	59	252621.0	3.9	23.7274	0.779	3.3	ug/L	115	Standard
	Ni	60	63750.9	3.4	27.8259	0.705	2.5	ug/L	75	Standard
	Cu	65	54654.4	2.7	24.6888	0.466	1.9	ug/L	155	Standard
	Zn	66	33953.4	3.2	30.8793	1.011	3.3	ug/L	237	Standard
[>	Ge	72	329985.6	1.6				ug/L	413856	Standard
	As	75	30799.4	3.4	26.7518	0.909	3.4	ug/L	-197	Standard
	Se	82	3717.8	2.1	35.9875	0.694	1.9	ug/L	-5	Standard
[	Se-1	77	2790.9	4.8	34.7040	1.934	5.6	ug/L	105	Standard
[>	Ga	71	191.7	4.0				mg/L	225	Standard
[	Rb	85	11637.8	5.1				ug/L	28	Standard
[	Y	89	263045.7	1.4				ug/L	322845	Standard
[>	Rh	103	1000.0	4.0				ug/L	92	Standard
[	Mo	98	1231.6	3.8	0.3218	0.011	3.4	ug/L	18	Standard
	Ag	107	110940.1	1.8	16.9165	0.091	0.5	ug/L	63	Standard
	Cd	111	65969.0	4.0	23.2352	0.685	2.9	mg/L	20	Standard
	Cd	114	168743.7	3.6	22.5840	0.563	2.5	ug/L	56	Standard
[>	In	115	543740.9	1.5				ug/L	657102	Standard
	Sn	118	459.0	5.9	0.0064	0.004	57.1	ug/L	555	Standard
	Sb	123	158983.8	3.3	24.5276	0.561	2.3	ug/L	62	Standard
[	Ba	135	77135.3	3.1	27.3609	0.543	2.0	ug/L	19	Standard
[	Ce	140	703.3	2.5				ug/L	24	Standard
[>	Tb	159	777140.7	0.8				ug/L	910514	Standard
[	Ho	165	48.7	17.7				ug/L	7	Standard
	Tl	203	240516.8	1.1	26.1694	0.413	1.6	ug/L	13	Standard
	Tl	205	8327.6	2.1	29.7010	0.608	2.0	ug/L	1	Standard
	Pb	206	189051.7	2.7	25.6449	0.787	3.1	ug/L	342	Standard
	Pb	207	159139.6	2.0	25.3886	0.587	2.3	ug/L	284	Standard
	Pb	208	740145.5	2.6	25.4349	0.752	3.0	ug/L	1363	Standard
	U	238	360423.0	4.3	50.0868	2.398	4.8	ug/L	2	Standard
[>	Bi	209	337443.1	0.8				ug/L	470592	Standard

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Na	23	88.3	8.6	9.7152	0.901	9.3	mg/L	2	Standard
Mg	24	19075450.0	1.9	11.3862	0.516	4.5	mg/L	5586	Standard
K	39	170.0	25.1	2.7519	0.598	21.7	mg/L	5	Standard
Ca	43	2070.1	2.9	104.8960	1.471	1.4	mg/L	45	Standard
Fe	54	281.2	17.2	-0.0218	0.024	112.2	mg/L	350	Standard
Fe	57	1213.4	6.5	2.1875	0.108	4.9	mg/L	102	Standard
Sc-1	45	43612.7	4.1				mg/L	53004	Standard
Cl	35	20.0	8.7				ug/L	2	Standard
Kr	83	184.7	0.7				ug/L	157	Standard
Br	81	11.7	12.4				ug/L	3	Standard
P	31	95545.4	2.3				ug/L	91588	Standard
S	34	35069.7	1.0				ug/L	32556	Standard
Sr	88	7860.4	5.2				ug/L	62	Standard
C	12	1018.4	6.0				mg/L	133	Standard
N	14	1.7	173.2				mg/L	0	Standard
Hg	202	6.7	43.3				mg/L	7	Standard

QC Calculated Values

Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recovery
Li	7			
Be	9			
Al	27			
Sc	45			
Ti	47			
V	51			
Cr	52			
Cr	53			
Mn	55			
Co	59			
Ni	60			
Cu	65			
Zn	66			
Ge	72		79.734	
As	75			
Se	82			
Se-1	77			
Ga	71			
Rb	85			
Y	89			
Rh	103			

Sample ID: L1211020101SD WG413848-05

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[	Mo	98	
[	Ag	107	
[	Cd	111	
[	Cd	114	
>	In	115	82.748
[	Sn	118	
[	Sb	123	
[	Ba	135	
[	Ce	140	
>	Tb	159	
[	Ho	165	
[	Tl	203	
[	Tl	205	
[	Pb	206	
[	Pb	207	
[	Pb	208	
[	U	238	
>	Bi	209	71.706
[	Na	23	
[	Mg	24	
[	K	39	
[	Ca	43	
[	Fe	54	
[	Fe	57	
>	Sc-1	45	
[	Cl	35	
[	Kr	83	
[	Br	81	
[	P	31	
[	S	34	
[	Sr	88	
[	C	12	
[	N	14	
[	Hg	202	

QC Out of Limits

Measurement Type	Analyte	Mass	Out of Limits Message

Sample ID: L1211020101SD WG413848-05

Report Date/Time: Sunday, November 18, 2012 17:00:35

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Method 6020 - Summary Report

Sample ID: L1211020002

Sample Date/Time: Sunday, November 18, 2012 17:01:15

Number of Replicates: 3

Autosampler Position: 342

Sample Description: 1

Method File: C:\NexIONData\Method\6020a.mth

Aliquot Volume (mL):

Diluted to Volume (mL):

User Name: JYH user

Cumulative Autodilution Factor: 1

Nexion-ICP 200.8\6020

Concentration Results

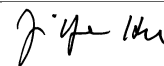
IS	Analyte	Mass	Intensity	RSD	Conc.	SD	RSD	Units	Blank Intens.	Mode
[	Li	7	99761.1	4.4	-54742.2471	1088.454	2.0	ug/L	8369	Standard
	Be	9	20.0	50.0	0.0010	0.005	547.2	ug/L	18	Standard
	Al	27	7853970.1	4.7	68.9138	1.599	2.3	ug/L	215	Standard
[>	Sc	45	49151.3	2.7				ug/L	53004	Standard
[	Ti	47	239.0	11.2	0.4508	0.052	11.4	ug/L	26	Standard
	V	51	5373.9	5.9	0.2303	0.027	11.7	ug/L	3223	Standard
	Cr	52	16902.8	3.3	0.7749	0.044	5.7	ug/L	10379	Standard
	Cr	53	1812.6	0.8	1.3368	0.030	2.2	ug/L	192	Standard
	Mn	55	660288.5	4.5	41.7270	1.461	3.5	ug/L	1840	Standard
	Co	59	2602.2	4.5	0.1988	0.008	3.9	ug/L	115	Standard
	Ni	60	5540.7	5.8	2.0863	0.100	4.8	ug/L	75	Standard
	Cu	65	1663.1	7.5	0.6022	0.044	7.3	ug/L	155	Standard
	Zn	66	6982.6	6.5	5.4001	0.314	5.8	ug/L	237	Standard
[>	Ge	72	376499.9	1.2				ug/L	413856	Standard
	As	75	2434.4	4.8	1.9831	0.076	3.8	ug/L	-197	Standard
	Se	82	154.4	6.3	1.3148	0.075	5.7	ug/L	-5	Standard
[	Se-1	77	190.3	2.6	1.1539	0.071	6.1	ug/L	105	Standard
[>	Ga	71	215.0	23.6				mg/L	225	Standard
[	Rb	85	6471.4	1.4				ug/L	28	Standard
[	Y	89	293495.9	1.7				ug/L	322845	Standard
[>	Rh	103	163.3	8.8				ug/L	92	Standard
[	Mo	98	3597.6	4.9	0.8329	0.035	4.3	ug/L	18	Standard
	Ag	107	82.0	8.5	0.0030	0.001	34.2	ug/L	63	Standard
	Cd	111	31.0	13.3	-0.0016	0.001	82.5	mg/L	20	Standard
	Cd	114	151.0	21.7	0.0081	0.004	48.6	ug/L	56	Standard
[>	In	115	623656.1	1.3				ug/L	657102	Standard
	Sn	118	19770.3	5.9	2.0433	0.106	5.2	ug/L	555	Standard
	Sb	123	291.2	8.6	0.0362	0.003	8.0	ug/L	62	Standard
[	Ba	135	191938.1	4.1	59.3813	2.027	3.4	ug/L	19	Standard
[	Ce	140	259.0	2.7				ug/L	24	Standard
[>	Tb	159	916661.0	0.8				ug/L	910514	Standard
[	Ho	165	17.7	16.3				ug/L	7	Standard
	Tl	203	391.3	7.5	0.0275	0.002	7.9	ug/L	13	Standard
	Tl	205	16.3	33.7	0.0438	0.014	31.0	ug/L	1	Standard
	Pb	206	627.7	1.3	0.0295	0.002	5.4	ug/L	342	Standard
	Pb	207	534.0	5.3	0.0264	0.002	8.2	ug/L	284	Standard
	Pb	208	2481.1	1.0	0.0281	0.001	2.6	ug/L	1363	Standard
	U	238	4244.6	5.4	0.4304	0.017	4.0	ug/L	2	Standard
[>	Bi	209	460637.7	2.0				ug/L	470592	Standard

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Na	23	3.3	173.2	0.3223	0.550	170.5	mg/L	2	Standard
Mg	24	579645.3	2.4	0.3038	0.001	0.3	mg/L	5586	Standard
K	39	85.0	32.8	1.1999	0.388	32.3	mg/L	5	Standard
Ca	43	865.0	10.5	37.4188	3.087	8.2	mg/L	45	Standard
Fe	54	628.1	2.1	0.1069	0.011	10.0	mg/L	350	Standard
Fe	57	490.0	7.4	0.7015	0.052	7.4	mg/L	102	Standard
Sc-1	45	49151.3	2.7				mg/L	53004	Standard
Cl	35	4.7	44.6				ug/L	2	Standard
Kr	83	151.7	4.2				ug/L	157	Standard
Br	81	8.3	17.3				ug/L	3	Standard
P	31	150896.4	2.7				ug/L	91588	Standard
S	34	28095.2	2.0				ug/L	32556	Standard
Sr	88	610.0	2.5				ug/L	62	Standard
C	12	585.0	14.1				mg/L	133	Standard
N	14	1.7	173.2				mg/L	0	Standard
Hg	202	3.3	86.6				mg/L	7	Standard

QC Calculated Values

Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recovery
Li	7			
Be	9			
Al	27			
Sc	45			
Ti	47			
V	51			
Cr	52			
Cr	53			
Mn	55			
Co	59			
Ni	60			
Cu	65			
Zn	66			
Ge	72		90.974	
As	75			
Se	82			
Se-1	77			
Ga	71			
Rb	85			
Y	89			
Rh	103			

Sample ID: L1211020002

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[	Mo	98	
[	Ag	107	
[	Cd	111	
[	Cd	114	
>	In	115	94.910
[	Sn	118	
[	Sb	123	
[	Ba	135	
[	Ce	140	
>	Tb	159	
[	Ho	165	
[	Tl	203	
[	Tl	205	
[	Pb	206	
[	Pb	207	
[	Pb	208	
[	U	238	
>	Bi	209	97.885
[	Na	23	
[	Mg	24	
[	K	39	
[	Ca	43	
[	Fe	54	
[	Fe	57	
>	Sc-1	45	
[	Cl	35	
[	Kr	83	
[	Br	81	
[	P	31	
[	S	34	
[	Sr	88	
[	C	12	
[	N	14	
[	Hg	202	

QC Out of Limits

Measurement Type	Analyte	Mass	Out of Limits Message

Sample ID: L1211020002

Report Date/Time: Sunday, November 18, 2012 17:03:47

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Method 6020 - Summary Report

Sample ID: L1211020003

Sample Date/Time: Sunday, November 18, 2012 17:04:27

Number of Replicates: 3

Autosampler Position: 343

Sample Description: 1

Method File: C:\NexIONData\Method\6020a.mth

Aliquot Volume (mL):

Diluted to Volume (mL):

User Name: JYH user

Cumulative Autodilution Factor: 1

Nexion-ICP 200.8\6020

Concentration Results

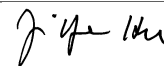
IS	Analyte	Mass	Intensity	RSD	Conc.	SD	RSD	Units	Blank Intens.	Mode
[	Li	7	89404.5	23.7	-45597.1214	13346.556	29.3	ug/L	8369	Standard
	Be	9	11.7	49.5	-0.0037	0.003	79.8	ug/L	18	Standard
	Al	27	7397084.7	20.9	61.2656	14.781	24.1	ug/L	215	Standard
[>	Sc	45	52422.3	4.2				ug/L	53004	Standard
[	Ti	47	222.7	22.5	0.4074	0.089	21.9	ug/L	26	Standard
	V	51	4507.2	19.2	0.1427	0.064	45.0	ug/L	3223	Standard
	Cr	52	14203.4	15.4	0.4814	0.167	34.6	ug/L	10379	Standard
	Cr	53	1704.3	21.6	1.2253	0.243	19.9	ug/L	192	Standard
	Mn	55	535815.4	25.3	33.2012	7.364	22.2	ug/L	1840	Standard
	Co	59	2269.8	25.3	0.1679	0.041	24.3	ug/L	115	Standard
	Ni	60	4764.8	25.9	1.7545	0.407	23.2	ug/L	75	Standard
	Cu	65	1710.1	23.2	0.6085	0.134	21.9	ug/L	155	Standard
	Zn	66	3445.7	25.9	2.5112	0.615	24.5	ug/L	237	Standard
[>	Ge	72	381725.3	4.0				ug/L	413856	Standard
	As	75	2071.4	31.8	1.6758	0.443	26.5	ug/L	-197	Standard
	Se	82	111.1	20.0	0.9310	0.157	16.8	ug/L	-5	Standard
[	Se-1	77	181.0	14.4	1.0157	0.215	21.2	ug/L	105	Standard
[>	Ga	71	195.0	11.2				mg/L	225	Standard
[	Rb	85	5564.4	30.1				ug/L	28	Standard
[	Y	89	298264.0	1.1				ug/L	322845	Standard
[>	Rh	103	168.3	22.5				ug/L	92	Standard
[	Mo	98	3349.6	25.5	0.7454	0.241	32.3	ug/L	18	Standard
	Ag	107	72.7	12.3	0.0012	0.000	29.4	ug/L	63	Standard
	Cd	111	27.6	2.3	-0.0031	0.001	24.8	mg/L	20	Standard
	Cd	114	175.3	31.7	0.0102	0.007	72.7	ug/L	56	Standard
[>	In	115	660082.2	8.5				ug/L	657102	Standard
	Sn	118	21672.0	23.1	2.1557	0.656	30.4	ug/L	555	Standard
	Sb	123	292.9	18.9	0.0348	0.010	27.5	ug/L	62	Standard
[	Ba	135	176456.1	23.4	52.4730	15.754	30.0	ug/L	19	Standard
[	Ce	140	232.3	27.8				ug/L	24	Standard
[>	Tb	159	980036.0	10.5				ug/L	910514	Standard
[	Ho	165	15.7	19.5				ug/L	7	Standard
	Tl	203	354.3	7.9	0.0230	0.005	20.2	ug/L	13	Standard
	Tl	205	12.7	25.4	0.0321	0.008	23.8	ug/L	1	Standard
	Pb	206	848.7	10.6	0.0467	0.016	33.5	ug/L	342	Standard
	Pb	207	699.7	7.3	0.0409	0.012	30.3	ug/L	284	Standard
	Pb	208	3222.1	9.3	0.0421	0.014	33.4	ug/L	1363	Standard
	U	238	3949.5	22.4	0.3808	0.117	30.8	ug/L	2	Standard
[>	Bi	209	495208.7	10.7				ug/L	470592	Standard

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Na	23	1.7	173.2	0.1507	0.252	167.5	mg/L	2	Standard
Mg	24	529057.2	19.1	0.2612	0.059	22.7	mg/L	5586	Standard
K	39	56.7	10.2	0.7407	0.108	14.6	mg/L	5	Standard
Ca	43	763.4	9.0	30.7400	4.267	13.9	mg/L	45	Standard
Fe	54	658.2	11.0	0.1029	0.034	33.5	mg/L	350	Standard
Fe	57	443.3	10.7	0.5779	0.095	16.4	mg/L	102	Standard
Sc-1	45	52422.3	4.2				mg/L	53004	Standard
Cl	35	0.3	173.2				ug/L	2	Standard
Kr	83	176.2	24.0				ug/L	157	Standard
Br	81	5.8	99.0				ug/L	3	Standard
P	31	154753.0	4.2				ug/L	91588	Standard
S	34	28464.5	12.7				ug/L	32556	Standard
Sr	88	600.0	29.5				ug/L	62	Standard
C	12	253.3	14.0				mg/L	133	Standard
N	14	0.0					mg/L	0	Standard
Hg	202	11.7	24.7				mg/L	7	Standard

QC Calculated Values

Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recovery
Li	7			
Be	9			
Al	27			
Sc	45			
Ti	47			
V	51			
Cr	52			
Cr	53			
Mn	55			
Co	59			
Ni	60			
Cu	65			
Zn	66			
Ge	72		92.236	
As	75			
Se	82			
Se-1	77			
Ga	71			
Rb	85			
Y	89			
Rh	103			

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[	Mo	98	
[	Ag	107	
[	Cd	111	
[	Cd	114	
>	In	115	100.454
[	Sn	118	
[	Sb	123	
[	Ba	135	
[	Ce	140	
>	Tb	159	
[	Ho	165	
[	Tl	203	
[	Tl	205	
[	Pb	206	
[	Pb	207	
[	Pb	208	
[	U	238	
>	Bi	209	105.231
[	Na	23	
[	Mg	24	
[	K	39	
[	Ca	43	
[	Fe	54	
[	Fe	57	
>	Sc-1	45	
[	Cl	35	
[	Kr	83	
[	Br	81	
[	P	31	
[	S	34	
[	Sr	88	
[	C	12	
[	N	14	
[	Hg	202	

QC Out of Limits

Measurement Type	Analyte	Mass	Out of Limits Message

Sample ID: L1211020003

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Method 6020 - Summary Report

Sample ID: L1211020003PS WG414163-01

Sample Date/Time: Sunday, November 18, 2012 17:07:39

Number of Replicates: 3

Autosampler Position: 344

Sample Description: 1

Method File: C:\NexIONData\Method\6020a.mth

Aliquot Volume (mL):

Diluted to Volume (mL):

User Name: JYH user

Cumulative Autodilution Factor: 1

Nexion-ICP 200.8\6020

Concentration Results

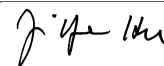
IS	Analyte	Mass	Intensity	RSD	Conc.	SD	RSD	Units	Blank Intens.	Mode
[	Li	7	114196.5	9.9	-55588.5283	3305.254	5.9	ug/L	8369	Standard
	Be	9	113999.1	8.0	52.3469	1.822	3.5	ug/L	18	Standard
	Al	27	8449440.5	6.7	65.7480	1.326	2.0	ug/L	215	Standard
[>	Sc	45	55407.9	4.7				ug/L	53004	Standard
[	Ti	47	283.3	5.8	0.4921	0.030	6.1	ug/L	26	Standard
	V	51	576081.7	7.1	48.3057	1.604	3.3	ug/L	3223	Standard
	Cr	52	554374.0	8.4	49.5305	2.360	4.8	ug/L	10379	Standard
	Cr	53	69059.2	6.8	50.0375	1.611	3.2	ug/L	192	Standard
	Mn	55	1523477.7	6.4	87.7451	2.351	2.7	ug/L	1840	Standard
	Co	59	658751.5	7.3	49.3698	1.983	4.0	ug/L	115	Standard
	Ni	60	143914.4	6.9	50.1346	1.562	3.1	ug/L	75	Standard
	Cu	65	137148.7	6.6	49.4773	1.426	2.9	ug/L	155	Standard
	Zn	66	70272.3	6.0	51.1162	1.483	2.9	ug/L	237	Standard
[>	Ge	72	413394.5	3.8				ug/L	413856	Standard
	As	75	73256.0	6.0	50.6324	1.126	2.2	ug/L	-197	Standard
	Se	82	6295.1	5.5	48.6146	0.861	1.8	ug/L	-5	Standard
[	Se-1	77	4825.1	5.3	48.2331	0.879	1.8	ug/L	105	Standard
[>	Ga	71	250.0	8.0				mg/L	225	Standard
[	Rb	85	7071.7	5.1				ug/L	28	Standard
[	Y	89	314088.3	3.7				ug/L	322845	Standard
[>	Rh	103	215.0	8.4				ug/L	92	Standard
[	Mo	98	4090.1	4.8	0.8958	0.024	2.7	ug/L	18	Standard
	Ag	107	355640.7	6.0	44.6876	1.427	3.2	ug/L	63	Standard
	Cd	111	168368.0	6.0	48.8745	1.615	3.3	mg/L	20	Standard
	Cd	114	434954.3	5.6	47.9786	1.529	3.2	ug/L	56	Standard
[>	In	115	659871.4	4.2				ug/L	657102	Standard
	Sn	118	25156.9	5.8	2.4680	0.105	4.2	ug/L	555	Standard
	Sb	123	387650.3	5.1	49.3028	2.007	4.1	ug/L	62	Standard
[	Ba	135	379601.7	6.2	110.9971	3.977	3.6	ug/L	19	Standard
[	Ce	140	234.7	12.4				ug/L	24	Standard
[>	Tb	159	967148.1	4.6				ug/L	910514	Standard
[	Ho	165	82.0	12.9				ug/L	7	Standard
	Tl	203	665622.5	4.6	51.4147	0.661	1.3	ug/L	13	Standard
	Tl	205	20721.8	3.8	52.4824	1.153	2.2	ug/L	1	Standard
	Pb	206	531240.2	4.9	51.1879	1.119	2.2	ug/L	342	Standard
	Pb	207	452668.6	5.6	51.2968	1.572	3.1	ug/L	284	Standard
	Pb	208	2086594.7	5.2	50.9326	1.336	2.6	ug/L	1363	Standard
	U	238	519570.3	6.5	51.2359	1.954	3.8	ug/L	2	Standard
[>	Bi	209	475201.7	3.4				ug/L	470592	Standard

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Na	23	8.3	34.6	0.7334	0.275	37.5	mg/L	2	Standard
Mg	24	601798.8	3.4	0.2797	0.004	1.3	mg/L	5586	Standard
K	39	85.0	32.8	1.0722	0.403	37.6	mg/L	5	Standard
Ca	43	786.7	10.9	29.7474	2.266	7.6	mg/L	45	Standard
Fe	54	698.8	17.9	0.1029	0.042	40.7	mg/L	350	Standard
Fe	57	476.7	10.5	0.5879	0.068	11.6	mg/L	102	Standard
Sc-1	45	55407.9	4.7				mg/L	53004	Standard
Cl	35	4.3	35.3				ug/L	2	Standard
Kr	83	141.8	7.4				ug/L	157	Standard
Br	81	2.5	173.2				ug/L	3	Standard
P	31	202814.6	4.8				ug/L	91588	Standard
S	34	32098.1	1.6				ug/L	32556	Standard
Sr	88	708.4	11.9				ug/L	62	Standard
C	12	351.7	12.9				mg/L	133	Standard
N	14	1.7	173.2				mg/L	0	Standard
Hg	202	11.7	24.7				mg/L	7	Standard

QC Calculated Values

Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recovery
Li	7			
Be	9			
Al	27			
Sc	45			
Ti	47			
V	51			
Cr	52			
Cr	53			
Mn	55			
Co	59			
Ni	60			
Cu	65			
Zn	66			
Ge	72		99.889	
As	75			
Se	82			
Se-1	77			
Ga	71			
Rb	85			
Y	89			
Rh	103			

Sample ID: L1211020003PS WG414163-01

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[	Mo	98	
[	Ag	107	
[	Cd	111	
[	Cd	114	
>	In	115	100.422
[	Sn	118	
[	Sb	123	
[	Ba	135	
[	Ce	140	
>	Tb	159	
[	Ho	165	
[	Tl	203	
[	Tl	205	
[	Pb	206	
[	Pb	207	
[	Pb	208	
[	U	238	
>	Bi	209	100.980
[	Na	23	
[	Mg	24	
[	K	39	
[	Ca	43	
[	Fe	54	
[	Fe	57	
>	Sc-1	45	
[	Cl	35	
[	Kr	83	
[	Br	81	
[	P	31	
[	S	34	
[	Sr	88	
[	C	12	
[	N	14	
[	Hg	202	

QC Out of Limits

Measurement Type	Analyte	Mass	Out of Limits Message
Ba 135 Upper, S, EEE	Ba	135	

Sample ID: L1211020003PS WG414163-01

Report Date/Time: Sunday, November 18, 2012 17:10:12

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Method 6020 - Summary Report

Sample ID: L1211020003SDL WG414163-02

Sample Date/Time: Sunday, November 18, 2012 17:10:52

Number of Replicates: 3

Autosampler Position: 345

Sample Description: 5

Method File: C:\NexIONData\Method\6020a.mth

Aliquot Volume (mL):

Diluted to Volume (mL):

User Name: JYH user

Cumulative Autodilution Factor: 1

Nexion-ICP 200.8\6020

Concentration Results

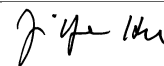
IS	Analyte	Mass	Intensity	RSD	Conc.	SD	RSD	Units	Blank Intens.	Mode
[	Li	7	26424.7	3.9	-10552.9254	1965.679	18.6	ug/L	8369	Standard
	Be	9	23.3	49.5	0.0019	0.005	271.7	ug/L	18	Standard
	Al	27	1408936.1	5.3	11.9608	1.649	13.8	ug/L	215	Standard
[>	Sc	45	51257.1	9.7				ug/L	53004	Standard
[	Ti	47	74.3	13.2	0.0871	0.034	38.8	ug/L	26	Standard
	V	51	3196.3	1.1	0.0036	0.032	910.3	ug/L	3223	Standard
	Cr	52	10502.3	3.4	0.0473	0.134	283.2	ug/L	10379	Standard
	Cr	53	674.2	8.6	0.3828	0.075	19.5	ug/L	192	Standard
	Mn	55	120653.9	8.1	6.9411	1.286	18.5	ug/L	1840	Standard
	Co	59	625.0	5.8	0.0314	0.004	13.0	ug/L	115	Standard
	Ni	60	1313.1	4.9	0.4257	0.067	15.7	ug/L	75	Standard
	Cu	65	655.3	6.3	0.1808	0.035	19.3	ug/L	155	Standard
	Zn	66	4140.9	8.3	2.8569	0.569	19.9	ug/L	237	Standard
[>	Ge	72	415153.1	11.6				ug/L	413856	Standard
	As	75	344.9	15.8	0.3815	0.061	16.0	ug/L	-197	Standard
	Se	82	38.6	18.8	0.3089	0.085	27.5	ug/L	-5	Standard
[	Se-1	77	133.0	10.7	0.3945	0.286	72.5	ug/L	105	Standard
[>	Ga	71	185.0	8.1				mg/L	225	Standard
[	Rb	85	1335.1	3.7				ug/L	28	Standard
[	Y	89	299838.8	3.7				ug/L	322845	Standard
[>	Rh	103	123.3	27.0				ug/L	92	Standard
[	Mo	98	722.6	2.3	0.1554	0.008	5.0	ug/L	18	Standard
	Ag	107	334.7	9.7	0.0353	0.004	11.2	ug/L	63	Standard
	Cd	111	36.8	31.8	-0.0003	0.003	1267.8	mg/L	20	Standard
	Cd	114	111.2	30.8	0.0030	0.004	126.6	ug/L	56	Standard
[>	In	115	642909.8	2.4				ug/L	657102	Standard
	Sn	118	4963.5	5.9	0.4607	0.035	7.5	ug/L	555	Standard
	Sb	123	300.9	27.0	0.0362	0.010	27.0	ug/L	62	Standard
[	Ba	135	38308.9	8.1	11.4953	1.105	9.6	ug/L	19	Standard
[	Ce	140	75.0	34.9				ug/L	24	Standard
[>	Tb	159	904165.5	2.0				ug/L	910514	Standard
[	Ho	165	8.3	45.4				ug/L	7	Standard
	Tl	203	214.0	6.9	0.0131	0.001	9.0	ug/L	13	Standard
	Tl	205	6.0	50.0	0.0166	0.008	46.0	ug/L	1	Standard
	Pb	206	628.3	1.7	0.0283	0.001	3.5	ug/L	342	Standard
	Pb	207	506.7	4.4	0.0220	0.003	11.9	ug/L	284	Standard
	Pb	208	2334.4	2.6	0.0232	0.002	6.6	ug/L	1363	Standard
	U	238	907.0	4.6	0.0889	0.004	4.9	ug/L	2	Standard
[>	Bi	209	470419.1	0.1				ug/L	470592	Standard

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Na	23	1.7	173.2	0.1592	0.267	167.8	mg/L	2	Standard
Mg	24	269092.5	5.1	0.1349	0.019	14.3	mg/L	5586	Standard
K	39	16.7	45.8	0.1913	0.102	53.1	mg/L	5	Standard
Ca	43	225.0	28.4	7.8392	3.315	42.3	mg/L	45	Standard
Fe	54	432.2	11.8	0.0182	0.011	61.9	mg/L	350	Standard
Fe	57	190.0	7.9	0.1807	0.006	3.5	mg/L	102	Standard
Sc-1	45	51257.1	9.7				mg/L	53004	Standard
Cl	35	3.0	100.0				ug/L	2	Standard
Kr	83	153.4	23.2				ug/L	157	Standard
Br	81	2.5	0.0				ug/L	3	Standard
P	31	117458.5	0.9				ug/L	91588	Standard
S	34	33221.5	6.6				ug/L	32556	Standard
Sr	88	178.3	11.3				ug/L	62	Standard
C	12	151.7	38.6				mg/L	133	Standard
N	14	1.7	173.2				mg/L	0	Standard
Hg	202	10.0					mg/L	7	Standard

QC Calculated Values

Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recovery
Li	7			
Be	9			
Al	27			
Sc	45			
Ti	47			
V	51			
Cr	52			
Cr	53			
Mn	55			
Co	59			
Ni	60			
Cu	65			
Zn	66			
Ge	72		100.314	
As	75			
Se	82			
Se-1	77			
Ga	71			
Rb	85			
Y	89			
Rh	103			

Sample ID: L1211020003SDL WG414163-02

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[	Mo	98	
[	Ag	107	
[	Cd	111	
[	Cd	114	
>	In	115	97.840
[	Sn	118	
[	Sb	123	
[	Ba	135	
[	Ce	140	
>	Tb	159	
[	Ho	165	
[	Tl	203	
[	Tl	205	
[	Pb	206	
[	Pb	207	
[	Pb	208	
[	U	238	
>	Bi	209	99.963
[	Na	23	
[	Mg	24	
[	K	39	
[	Ca	43	
[	Fe	54	
[	Fe	57	
>	Sc-1	45	
[	Cl	35	
[	Kr	83	
[	Br	81	
[	P	31	
[	S	34	
[	Sr	88	
[	C	12	
[	N	14	
[	Hg	202	

QC Out of Limits

Measurement Type	Analyte	Mass	Out of Limits Message

Sample ID: L1211020003SDL WG414163-02

Report Date/Time: Sunday, November 18, 2012 17:13:25

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Method 6020 - Summary Report

Sample ID: L1211020003

Sample Date/Time: Sunday, November 18, 2012 17:14:05

Number of Replicates: 3

Autosampler Position: 346

Sample Description: 25

Method File: C:\NexIONData\Method\6020a.mth

Aliquot Volume (mL):

Diluted to Volume (mL):

User Name: JYH user

Cumulative Autodilution Factor: 1

Nexion-ICP 200.8\6020

Concentration Results

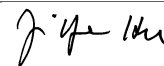
IS	Analyte	Mass	Intensity	RSD	Conc.	SD	RSD	Units	Blank Intens.	Mode
[	Li	7	9613.1	4.3	-1287.2231	366.714	28.5	ug/L	8369	Standard
	Be	9	20.0	66.1	0.0015	0.007	500.0	ug/L	18	Standard
	Al	27	148755.9	35.6	1.3677	0.537	39.3	ug/L	215	Standard
[>	Sc	45	47327.2	3.9				ug/L	53004	Standard
[	Ti	47	24.0	11.0	-0.0082	0.006	74.1	ug/L	26	Standard
	V	51	3054.7	6.9	0.0160	0.017	104.7	ug/L	3223	Standard
	Cr	52	9516.7	7.4	0.0379	0.062	165.1	ug/L	10379	Standard
	Cr	53	302.5	12.5	0.1320	0.029	21.6	ug/L	192	Standard
	Mn	55	12229.3	9.5	0.6869	0.066	9.7	ug/L	1840	Standard
	Co	59	184.3	29.2	-0.0003	0.005	1571.2	ug/L	115	Standard
	Ni	60	321.7	11.0	0.0879	0.012	14.0	ug/L	75	Standard
	Cu	65	340.7	6.5	0.0779	0.007	9.6	ug/L	155	Standard
	Zn	66	2891.9	12.3	2.1237	0.267	12.6	ug/L	237	Standard
[>	Ge	72	375708.8	1.0				ug/L	413856	Standard
	As	75	-137.2	12.0	0.0358	0.013	35.8	ug/L	-197	Standard
	Se	82	-0.8	896.7	-0.0016	0.061	3712.6	ug/L	-5	Standard
[	Se-1	77	117.7	9.1	0.3415	0.107	31.4	ug/L	105	Standard
[>	Ga	71	203.3	10.2				mg/L	225	Standard
[	Rb	85	136.7	20.1				ug/L	28	Standard
[	Y	89	309263.3	8.7				ug/L	322845	Standard
[>	Rh	103	86.7	28.5				ug/L	92	Standard
[	Mo	98	88.1	15.3	0.0110	0.005	44.9	ug/L	18	Standard
	Ag	107	167.3	10.7	0.0132	0.004	31.2	ug/L	63	Standard
	Cd	111	32.2	17.1	-0.0019	0.002	80.8	mg/L	20	Standard
	Cd	114	94.2	10.3	0.0008	0.001	142.0	ug/L	56	Standard
[>	In	115	666934.2	11.6				ug/L	657102	Standard
	Sn	118	725.0	3.4	0.0229	0.007	30.2	ug/L	555	Standard
	Sb	123	119.0	36.6	0.0122	0.006	51.4	ug/L	62	Standard
[	Ba	135	2818.3	11.4	0.8088	0.176	21.8	ug/L	19	Standard
[	Ce	140	39.0	22.4				ug/L	24	Standard
[>	Tb	159	918145.9	5.0				ug/L	910514	Standard
[	Ho	165	9.7	6.0				ug/L	7	Standard
	Tl	203	177.7	93.2	0.0103	0.013	127.3	ug/L	13	Standard
	Tl	205	8.7	107.2	0.0233	0.023	100.3	ug/L	1	Standard
	Pb	206	816.0	17.6	0.0467	0.015	31.5	ug/L	342	Standard
	Pb	207	691.7	17.7	0.0432	0.014	32.5	ug/L	284	Standard
	Pb	208	3223.1	14.8	0.0452	0.012	26.1	ug/L	1363	Standard
	U	238	286.3	78.8	0.0269	0.022	82.1	ug/L	2	Standard
[>	Bi	209	470172.8	1.3				ug/L	470592	Standard

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Na	23	0.0		0.0050	0.000	0.0	mg/L	2	Standard
Mg	24	57803.8	7.9	0.0289	0.004	12.3	mg/L	5586	Standard
K	39	8.3	124.9	0.0885	0.166	187.2	mg/L	5	Standard
Ca	43	48.3	11.9	0.0691	0.193	279.4	mg/L	45	Standard
Fe	54	368.6	9.5	0.0050	0.011	217.8	mg/L	350	Standard
Fe	57	123.3	22.3	0.0883	0.046	51.9	mg/L	102	Standard
Sc-1	45	47327.2	3.9				mg/L	53004	Standard
Cl	35	3.0	115.5				ug/L	2	Standard
Kr	83	162.3	22.2				ug/L	157	Standard
Br	81	5.0	50.0				ug/L	3	Standard
P	31	106989.0	2.1				ug/L	91588	Standard
S	34	33062.0	7.4				ug/L	32556	Standard
Sr	88	78.3	55.0				ug/L	62	Standard
C	12	123.3	13.0				mg/L	133	Standard
N	14	1.7	173.2				mg/L	0	Standard
Hg	202	8.3	91.7				mg/L	7	Standard

QC Calculated Values

Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recovery
Li	7			
Be	9			
Al	27			
Sc	45			
Ti	47			
V	51			
Cr	52			
Cr	53			
Mn	55			
Co	59			
Ni	60			
Cu	65			
Zn	66			
Ge	72		90.783	
As	75			
Se	82			
Se-1	77			
Ga	71			
Rb	85			
Y	89			
Rh	103			

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[	Mo	98	
[	Ag	107	
[	Cd	111	
[	Cd	114	
>	In	115	101.496
[	Sn	118	
[	Sb	123	
[	Ba	135	
[	Ce	140	
>	Tb	159	
[	Ho	165	
[	Tl	203	
[	Tl	205	
[	Pb	206	
[	Pb	207	
[	Pb	208	
[	U	238	
>	Bi	209	99.911
[	Na	23	
[	Mg	24	
[	K	39	
[	Ca	43	
[	Fe	54	
[	Fe	57	
>	Sc-1	45	
[	Cl	35	
[	Kr	83	
[	Br	81	
[	P	31	
[	S	34	
[	Sr	88	
[	C	12	
[	N	14	
[	Hg	202	

QC Out of Limits

Measurement Type	Analyte	Mass	Out of Limits Message

Sample ID: L1211020003

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Method 6020 - Summary Report

Sample ID: QC Std 6

Sample Date/Time: Sunday, November 18, 2012 17:17:20

Number of Replicates: 3

Autosampler Position: 101

Sample Description:

Method File: C:\NexIONData\Method\6020a.mth

Aliquot Volume (mL):

Diluted to Volume (mL):

User Name: JYH user

Cumulative Autodilution Factor: 1

Nexion-ICP 200.8\6020

Concentration Results

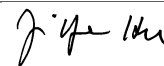
IS	Analyte	Mass	Intensity	RSD	Conc.	SD	RSD	Units	Blank Intens.	Mode
[	Li	7	8884.3	2.1	-530.2854	237.598	44.8	ug/L	8369	Standard
	Be	9	110995.6	4.4	56.4351	1.835	3.3	ug/L	18	Standard
	Al	27	7093668.6	5.7	61.1071	3.353	5.5	ug/L	215	Standard
[>	Sc	45	50089.4	2.7				ug/L	53004	Standard
[	Ti	47	49593.7	3.0	98.2272	2.328	2.4	ug/L	26	Standard
	V	51	569908.6	3.3	48.6996	1.289	2.6	ug/L	3223	Standard
	Cr	52	536983.6	2.7	48.8946	0.961	2.0	ug/L	10379	Standard
	Cr	53	67180.4	4.2	49.5973	1.825	3.7	ug/L	192	Standard
	Mn	55	845073.4	2.2	49.5543	0.936	1.9	ug/L	1840	Standard
	Co	59	653766.9	3.2	49.9271	1.310	2.6	ug/L	115	Standard
	Ni	60	137869.7	2.4	48.9397	0.724	1.5	ug/L	75	Standard
	Cu	65	138454.0	2.7	50.8972	1.180	2.3	ug/L	155	Standard
	Zn	66	67497.1	2.7	50.0133	1.213	2.4	ug/L	237	Standard
[>	Ge	72	405972.9	0.9				ug/L	413856	Standard
	As	75	71243.1	1.8	50.1709	0.772	1.5	ug/L	-197	Standard
	Se	82	6360.7	0.7	50.0414	0.218	0.4	ug/L	-5	Standard
[	Se-1	77	4882.5	3.6	49.7501	1.967	4.0	ug/L	105	Standard
[>	Ga	71	220.0	18.2				mg/L	225	Standard
[	Rb	85	1578.4	2.0				ug/L	28	Standard
[	Y	89	310666.3	3.1				ug/L	322845	Standard
[>	Rh	103	151.7	6.9				ug/L	92	Standard
[	Mo	98	430145.9	2.7	96.3986	2.034	2.1	ug/L	18	Standard
	Ag	107	389660.8	1.2	49.6439	0.652	1.3	ug/L	63	Standard
	Cd	111	171326.9	2.6	50.4226	1.286	2.6	mg/L	20	Standard
	Cd	114	446055.0	2.7	49.8779	1.163	2.3	ug/L	56	Standard
[>	In	115	651035.8	1.3				ug/L	657102	Standard
	Sn	118	499979.9	3.8	50.6621	1.892	3.7	ug/L	555	Standard
	Sb	123	392513.5	2.3	50.5900	1.279	2.5	ug/L	62	Standard
[	Ba	135	172755.0	2.6	51.2048	1.311	2.6	ug/L	19	Standard
[	Ce	140	550.0	3.8				ug/L	24	Standard
[>	Tb	159	943254.8	1.2				ug/L	910514	Standard
[	Ho	165	473.7	4.7				ug/L	7	Standard
	Tl	203	664391.5	2.0	50.4098	0.749	1.5	ug/L	13	Standard
	Tl	205	20785.6	0.9	51.6997	0.821	1.6	ug/L	1	Standard
	Pb	206	540199.0	2.8	51.1286	1.312	2.6	ug/L	342	Standard
	Pb	207	458119.7	2.5	51.0002	1.144	2.2	ug/L	284	Standard
	Pb	208	2109563.3	2.8	50.5844	1.327	2.6	ug/L	1363	Standard
	U	238	527156.6	3.8	51.0828	2.083	4.1	ug/L	2	Standard
[>	Bi	209	483899.8	1.2				ug/L	470592	Standard

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Na	23	0.0		0.0050	0.000	0.0	mg/L	2	Standard
Mg	24	310818.1	1.9	0.1585	0.004	2.4	mg/L	5586	Standard
K	39	376.7	11.1	5.3859	0.677	12.6	mg/L	5	Standard
Ca	43	165.0	10.9	5.2128	0.928	17.8	mg/L	45	Standard
Fe	54	13176.6	4.1	5.2080	0.322	6.2	mg/L	350	Standard
Fe	57	3160.3	2.8	5.1250	0.147	2.9	mg/L	102	Standard
Sc-1	45	50089.4	2.7				mg/L	53004	Standard
Cl	35	4.0	66.1				ug/L	2	Standard
Kr	83	135.1	2.9				ug/L	157	Standard
Br	81	10.0					ug/L	3	Standard
P	31	127703.6	2.1				ug/L	91588	Standard
S	34	38269.1	0.5				ug/L	32556	Standard
Sr	88	66.7	37.7				ug/L	62	Standard
C	12	121.7	14.4				mg/L	133	Standard
N	14	1.7	173.2				mg/L	0	Standard
Hg	202	5.0	100.0				mg/L	7	Standard

QC Calculated Values

Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recovery
Li	7			
Be	9	112.870		
Al	27	122.214		
Sc	45			
Ti	47	98.227		
V	51	97.399		
Cr	52	97.789		
Cr	53			
Mn	55	99.109		
Co	59	99.854		
Ni	60	97.879		
Cu	65	101.794		
Zn	66	100.027		
Ge	72		98.095	
As	75	100.342		
Se	82	100.083		
Se-1	77			
Ga	71			
Rb	85			
Y	89			
Rh	103			

Sample ID: QC Std 6

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[	Mo	98	96.399	
[	Ag	107	99.288	
[	Cd	111	100.845	
[	Cd	114		
>	In	115		99.077
[	Sn	118	101.324	
[	Sb	123	101.180	
[	Ba	135	102.410	
[	Ce	140		
>	Tb	159		
[	Ho	165		
[	Tl	203	100.820	
[	Tl	205		
[	Pb	206	102.257	
[	Pb	207	102.000	
[	Pb	208	101.169	
[	U	238	102.166	
>	Bi	209		102.828
[	Na	23		
[	Mg	24		
[	K	39		
[	Ca	43		
[	Fe	54		
[	Fe	57		
>	Sc-1	45		
[	Cl	35		
[	Kr	83		
[	Br	81		
[	P	31		
[	S	34		
[	Sr	88		
[	C	12		
[	N	14		
[	Hg	202		

QC Out of Limits

Measurement Type	Analyte	Mass	Out of Limits Message
QC Std 6	Be	9	
QC Std 6	Al	27	

Sample ID: QC Std 6

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Method 6020 - Summary Report

Sample ID: QC Std 7

Sample Date/Time: Sunday, November 18, 2012 17:20:33

Number of Replicates: 3

Autosampler Position: 102

Sample Description:

Method File: C:\NexIONData\Method\6020a.mth

Aliquot Volume (mL):

Diluted to Volume (mL):

User Name: JYH user

Cumulative Autodilution Factor: 1

Nexion-ICP 200.8\6020

Concentration Results

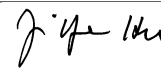
IS	Analyte	Mass	Intensity	RSD	Conc.	SD	RSD	Units	Blank Intens.	Mode
[	Li	7	8697.5	5.2	-345.7115	222.313	64.3	ug/L	8369	Standard
	Be	9	20.0	66.1	0.0004	0.006	1423.8	ug/L	18	Standard
	Al	27	1275.1	107.2	0.0084	0.011	130.5	ug/L	215	Standard
[>	Sc	45	50816.8	4.2				ug/L	53004	Standard
[	Ti	47	17.3	17.6	-0.0252	0.005	21.4	ug/L	26	Standard
	V	51	2806.7	2.8	-0.0254	0.009	35.9	ug/L	3223	Standard
	Cr	52	8973.0	1.1	-0.0800	0.023	28.6	ug/L	10379	Standard
	Cr	53	195.0	11.2	0.0347	0.011	31.0	ug/L	192	Standard
	Mn	55	1545.4	3.6	0.0022	0.000	2.1	ug/L	1840	Standard
	Co	59	91.7	20.9	-0.0085	0.001	14.3	ug/L	115	Standard
	Ni	60	66.7	14.6	-0.0118	0.003	28.1	ug/L	75	Standard
	Cu	65	257.0	8.0	0.0373	0.005	12.4	ug/L	155	Standard
	Zn	66	284.3	2.4	0.0128	0.003	19.7	ug/L	237	Standard
[>	Ge	72	404633.0	3.6				ug/L	413856	Standard
	As	75	-160.0	31.6	0.0280	0.031	112.1	ug/L	-197	Standard
	Se	82	6.0	178.0	0.0544	0.086	157.6	ug/L	-5	Standard
[	Se-1	77	123.7	11.0	0.3148	0.185	58.9	ug/L	105	Standard
[>	Ga	71	180.0	10.0				mg/L	225	Standard
[	Rb	85	30.0	57.7				ug/L	28	Standard
[	Y	89	303377.9	3.5				ug/L	322845	Standard
[>	Rh	103	93.3	31.4				ug/L	92	Standard
[	Mo	98	83.1	105.8	0.0096	0.019	196.5	ug/L	18	Standard
	Ag	107	222.3	32.2	0.0204	0.008	40.6	ug/L	63	Standard
	Cd	111	43.6	89.9	0.0015	0.011	749.7	mg/L	20	Standard
	Cd	114	113.2	92.3	0.0029	0.011	384.2	ug/L	56	Standard
[>	In	115	648719.7	2.9				ug/L	657102	Standard
	Sn	118	403.7	14.2	-0.0084	0.005	54.4	ug/L	555	Standard
	Sb	123	323.4	55.2	0.0385	0.022	56.0	ug/L	62	Standard
[	Ba	135	42.0	99.0	-0.0077	0.012	154.0	ug/L	19	Standard
[	Ce	140	21.7	14.8				ug/L	24	Standard
[>	Tb	159	928928.8	3.6				ug/L	910514	Standard
[	Ho	165	9.7	72.7				ug/L	7	Standard
[	Tl	203	60.7	87.0	0.0009	0.004	436.7	ug/L	13	Standard
	Tl	205	0.3	173.2	0.0021	0.001	68.7	ug/L	1	Standard
	Pb	206	369.0	20.7	0.0017	0.006	366.1	ug/L	342	Standard
	Pb	207	318.3	12.2	-0.0009	0.003	373.6	ug/L	284	Standard
	Pb	208	1467.4	14.7	0.0005	0.004	882.2	ug/L	1363	Standard
	U	238	30.0	68.1	0.0013	0.002	140.0	ug/L	2	Standard
[>	Bi	209	487008.8	2.9				ug/L	470592	Standard

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Na	23	0.0		0.0050	0.000	0.0	mg/L	2	Standard
Mg	24	2251.8	23.4	-0.0018	0.000	12.3	mg/L	5586	Standard
K	39	3.3	173.2	0.0038	0.078	2077.6	mg/L	5	Standard
Ca	43	41.7	36.7	-0.3611	0.740	204.8	mg/L	45	Standard
Fe	54	367.2	10.2	-0.0064	0.014	215.8	mg/L	350	Standard
Fe	57	151.7	6.9	0.1202	0.013	11.0	mg/L	102	Standard
Sc-1	45	50816.8	4.2				mg/L	53004	Standard
Cl	35	1.7	69.3				ug/L	2	Standard
Kr	83	135.9	4.4				ug/L	157	Standard
Br	81	4.2	34.6				ug/L	3	Standard
P	31	123849.7	4.0				ug/L	91588	Standard
S	34	38459.6	0.8				ug/L	32556	Standard
Sr	88	65.0	35.3				ug/L	62	Standard
C	12	108.3	23.7				mg/L	133	Standard
N	14	5.0	0.0				mg/L	0	Standard
Hg	202	5.0	100.0				mg/L	7	Standard

QC Calculated Values

Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recovery
Li	7			
Be	9			
Al	27			
Sc	45			
Ti	47			
V	51			
Cr	52			
Cr	53			
Mn	55			
Co	59			
Ni	60			
Cu	65			
Zn	66			
Ge	72		97.772	
As	75			
Se	82			
Se-1	77			
Ga	71			
Rb	85			
Y	89			
Rh	103			

Sample ID: QC Std 7

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[	Mo	98	
[	Ag	107	
[	Cd	111	
[	Cd	114	
>	In	115	98.724
[	Sn	118	
[	Sb	123	
[	Ba	135	
[	Ce	140	
>	Tb	159	
[	Ho	165	
[	Tl	203	
[	Tl	205	
[	Pb	206	
[	Pb	207	
[	Pb	208	
[	U	238	
>	Bi	209	103.489
[	Na	23	
[	Mg	24	
[	K	39	
[	Ca	43	
[	Fe	54	
[	Fe	57	
>	Sc-1	45	
[	Cl	35	
[	Kr	83	
[	Br	81	
[	P	31	
[	S	34	
[	Sr	88	
[	C	12	
[	N	14	
[	Hg	202	

QC Out of Limits

Measurement Type	Analyte	Mass	Out of Limits Message

Sample ID: QC Std 7

Report Date/Time: Sunday, November 18, 2012 17:23:05

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Method 6020 - Summary Report

Sample ID: L1211020004

Sample Date/Time: Sunday, November 18, 2012 17:23:47

Number of Replicates: 3

Autosampler Position: 347

Sample Description: 1

Method File: C:\NexIONData\Method\6020a.mth

Aliquot Volume (mL):

Diluted to Volume (mL):

User Name: JYH user

Cumulative Autodilution Factor: 1

Nexion-ICP 200.8\6020

Concentration Results

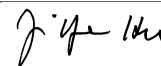
IS	Analyte	Mass	Intensity	RSD	Conc.	SD	RSD	Units	Blank Intens.	Mode
[	Li	7	98387.2	4.8	-48948.3603	1430.278	2.9	ug/L	8369	Standard
	Be	9	15.0	120.2	-0.0025	0.008	336.5	ug/L	18	Standard
	Al	27	7879997.6	4.1	63.2738	0.837	1.3	ug/L	215	Standard
[>	Sc	45	53716.8	3.1				ug/L	53004	Standard
[	Ti	47	285.3	7.0	0.5172	0.033	6.3	ug/L	26	Standard
	V	51	7252.1	5.6	0.3681	0.028	7.5	ug/L	3223	Standard
	Cr	52	17125.3	2.8	0.7051	0.027	3.9	ug/L	10379	Standard
	Cr	53	1820.9	6.9	1.2661	0.113	8.9	ug/L	192	Standard
	Mn	55	429781.2	4.6	25.6637	0.819	3.2	ug/L	1840	Standard
	Co	59	1809.8	6.3	0.1255	0.007	5.4	ug/L	115	Standard
	Ni	60	4006.5	1.5	1.4168	0.005	0.3	ug/L	75	Standard
	Cu	65	864.4	4.9	0.2671	0.016	5.8	ug/L	155	Standard
	Zn	66	5283.6	5.1	3.8101	0.164	4.3	ug/L	237	Standard
[>	Ge	72	397899.2	1.7				ug/L	413856	Standard
	As	75	2799.5	6.4	2.1451	0.105	4.9	ug/L	-197	Standard
	Se	82	132.1	10.1	1.0653	0.104	9.8	ug/L	-5	Standard
[	Se-1	77	193.3	7.3	1.0697	0.128	11.9	ug/L	105	Standard
[>	Ga	71	465.0	13.0				mg/L	225	Standard
[	Rb	85	8212.2	2.0				ug/L	28	Standard
[	Y	89	303584.6	0.6				ug/L	322845	Standard
[>	Rh	103	180.0	10.0				ug/L	92	Standard
[	Mo	98	5173.8	5.6	1.1682	0.059	5.0	ug/L	18	Standard
	Ag	107	213.0	10.5	0.0197	0.003	15.6	ug/L	63	Standard
	Cd	111	36.8	9.4	-0.0002	0.001	494.7	mg/L	20	Standard
	Cd	114	117.5	25.6	0.0037	0.003	88.5	ug/L	56	Standard
[>	In	115	641386.0	0.7				ug/L	657102	Standard
	Sn	118	4293.9	6.3	0.3926	0.026	6.5	ug/L	555	Standard
	Sb	123	417.6	9.4	0.0517	0.005	9.4	ug/L	62	Standard
[	Ba	135	203510.2	3.8	61.2213	1.956	3.2	ug/L	19	Standard
[	Ce	140	538.3	4.1				ug/L	24	Standard
[>	Tb	159	925683.1	2.1				ug/L	910514	Standard
[	Ho	165	25.7	34.9				ug/L	7	Standard
	Tl	203	479.0	6.0	0.0344	0.002	5.8	ug/L	13	Standard
	Tl	205	14.0	31.1	0.0378	0.012	30.7	ug/L	1	Standard
	Pb	206	509.0	6.4	0.0175	0.003	16.4	ug/L	342	Standard
	Pb	207	439.7	1.3	0.0152	0.001	3.9	ug/L	284	Standard
	Pb	208	2029.4	4.1	0.0165	0.002	10.4	ug/L	1363	Standard
	U	238	3006.0	5.0	0.3033	0.013	4.3	ug/L	2	Standard
[>	Bi	209	462351.4	0.9				ug/L	470592	Standard

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Na	23	1.7	173.2	0.1533	0.257	167.6	mg/L	2	Standard
Mg	24	579150.6	2.5	0.2775	0.002	0.6	mg/L	5586	Standard
K	39	95.0	10.5	1.2326	0.118	9.6	mg/L	5	Standard
Ca	43	790.0	11.1	30.8959	2.668	8.6	mg/L	45	Standard
Fe	54	371.5	9.6	-0.0125	0.016	128.7	mg/L	350	Standard
Fe	57	400.0	3.3	0.4921	0.029	5.9	mg/L	102	Standard
Sc-1	45	53716.8	3.1				mg/L	53004	Standard
Cl	35	2.7	94.4				ug/L	2	Standard
Kr	83	138.3	5.8				ug/L	157	Standard
Br	81	3.3	43.3				ug/L	3	Standard
P	31	161610.2	2.6				ug/L	91588	Standard
S	34	34619.5	2.5				ug/L	32556	Standard
Sr	88	656.7	4.5				ug/L	62	Standard
C	12	383.3	6.0				mg/L	133	Standard
N	14	0.0					mg/L	0	Standard
Hg	202	6.7	114.6				mg/L	7	Standard

QC Calculated Values

Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recovery
Li	7			
Be	9			
Al	27			
Sc	45			
Ti	47			
V	51			
Cr	52			
Cr	53			
Mn	55			
Co	59			
Ni	60			
Cu	65			
Zn	66			
Ge	72		96.144	
As	75			
Se	82			
Se-1	77			
Ga	71			
Rb	85			
Y	89			
Rh	103			

Sample ID: L1211020004

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[	Mo	98	
[	Ag	107	
[	Cd	111	
[	Cd	114	
>	In	115	97.608
[	Sn	118	
[	Sb	123	
[	Ba	135	
[	Ce	140	
>	Tb	159	
[	Ho	165	
[	Tl	203	
[	Tl	205	
[	Pb	206	
[	Pb	207	
[	Pb	208	
[	U	238	
>	Bi	209	98.249
[	Na	23	
[	Mg	24	
[	K	39	
[	Ca	43	
[	Fe	54	
[	Fe	57	
>	Sc-1	45	
[	Cl	35	
[	Kr	83	
[	Br	81	
[	P	31	
[	S	34	
[	Sr	88	
[	C	12	
[	N	14	
[	Hg	202	

QC Out of Limits

Measurement Type	Analyte	Mass	Out of Limits Message

Sample ID: L1211020004

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Method 6020 - Summary Report

Sample ID: L1211020006

Sample Date/Time: Sunday, November 18, 2012 17:26:59

Number of Replicates: 3

Autosampler Position: 348

Sample Description: 1

Method File: C:\NexIONData\Method\6020a.mth

Aliquot Volume (mL):

Diluted to Volume (mL):

User Name: JYH user

Cumulative Autodilution Factor: 1

Nexion-ICP 200.8\6020

Concentration Results

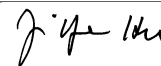
IS	Analyte	Mass	Intensity	RSD	Conc.	SD	RSD	Units	Blank Intens.	Mode
[	Li	7	96193.6	6.5	-50729.1504	1195.904	2.4	ug/L	8369	Standard
	Be	9	8.3	69.3	-0.0052	0.003	59.6	ug/L	18	Standard
	Al	27	7847486.5	4.6	66.6261	0.264	0.4	ug/L	215	Standard
[>	Sc	45	50813.5	4.6				ug/L	53004	Standard
[	Ti	47	293.3	3.4	0.5461	0.017	3.2	ug/L	26	Standard
	V	51	5794.8	5.2	0.2514	0.028	11.1	ug/L	3223	Standard
	Cr	52	13830.3	1.9	0.4213	0.031	7.3	ug/L	10379	Standard
	Cr	53	1445.9	5.9	1.0054	0.074	7.4	ug/L	192	Standard
	Mn	55	1162855.9	3.6	71.0919	2.492	3.5	ug/L	1840	Standard
	Co	59	3032.3	7.0	0.2258	0.016	7.2	ug/L	115	Standard
	Ni	60	5693.4	7.1	2.0723	0.155	7.5	ug/L	75	Standard
	Cu	65	2002.1	2.2	0.7103	0.015	2.1	ug/L	155	Standard
	Zn	66	6594.4	3.3	4.9122	0.156	3.2	ug/L	237	Standard
[>	Ge	72	389616.0	0.8				ug/L	413856	Standard
	As	75	3017.7	3.6	2.3481	0.077	3.3	ug/L	-197	Standard
	Se	82	174.3	2.2	1.4337	0.021	1.4	ug/L	-5	Standard
[	Se-1	77	193.3	1.6	1.1141	0.023	2.1	ug/L	105	Standard
[>	Ga	71	198.3	2.9				mg/L	225	Standard
[	Rb	85	6559.8	5.9				ug/L	28	Standard
[	Y	89	299338.0	3.0				ug/L	322845	Standard
[>	Rh	103	156.7	17.6				ug/L	92	Standard
[	Mo	98	3616.1	3.2	0.8327	0.022	2.7	ug/L	18	Standard
	Ag	107	146.7	25.2	0.0115	0.005	43.6	ug/L	63	Standard
	Cd	111	26.7	15.8	-0.0030	0.001	41.0	mg/L	20	Standard
	Cd	114	102.7	20.0	0.0024	0.002	102.6	ug/L	56	Standard
[>	In	115	627090.1	0.7				ug/L	657102	Standard
	Sn	118	681.0	7.3	0.0223	0.005	21.4	ug/L	555	Standard
	Sb	123	337.9	5.8	0.0423	0.002	5.5	ug/L	62	Standard
[	Ba	135	210644.5	3.8	64.8123	2.020	3.1	ug/L	19	Standard
[	Ce	140	289.3	14.0				ug/L	24	Standard
[>	Tb	159	911002.4	1.9				ug/L	910514	Standard
[	Ho	165	19.0	9.1				ug/L	7	Standard
	Tl	203	445.7	1.9	0.0325	0.001	2.9	ug/L	13	Standard
	Tl	205	15.3	16.4	0.0420	0.007	16.0	ug/L	1	Standard
	Pb	206	2157.8	3.5	0.1853	0.006	3.2	ug/L	342	Standard
	Pb	207	1790.4	3.9	0.1769	0.007	3.7	ug/L	284	Standard
	Pb	208	8230.9	4.0	0.1764	0.007	3.8	ug/L	1363	Standard
	U	238	4290.6	3.6	0.4424	0.013	2.9	ug/L	2	Standard
[>	Bi	209	453116.9	0.9				ug/L	470592	Standard

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Na	23	1.7	173.2	0.1636	0.275	167.9	mg/L	2	Standard
Mg	24	582334.4	2.0	0.2954	0.008	2.6	mg/L	5586	Standard
K	39	68.3	36.1	0.9395	0.385	41.0	mg/L	5	Standard
Ca	43	900.0	11.2	37.7896	4.871	12.9	mg/L	45	Standard
Fe	54	845.1	5.7	0.1862	0.034	18.5	mg/L	350	Standard
Fe	57	655.0	6.2	0.9460	0.077	8.1	mg/L	102	Standard
Sc-1	45	50813.5	4.6				mg/L	53004	Standard
Cl	35	2.3	89.2				ug/L	2	Standard
Kr	83	140.9	4.1				ug/L	157	Standard
Br	81	9.2	31.5				ug/L	3	Standard
P	31	160437.0	4.7				ug/L	91588	Standard
S	34	34328.0	2.6				ug/L	32556	Standard
Sr	88	645.0	5.1				ug/L	62	Standard
C	12	591.7	21.0				mg/L	133	Standard
N	14	0.0					mg/L	0	Standard
Hg	202	15.0	57.7				mg/L	7	Standard

QC Calculated Values

Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recovery
Li	7			
Be	9			
Al	27			
Sc	45			
Ti	47			
V	51			
Cr	52			
Cr	53			
Mn	55			
Co	59			
Ni	60			
Cu	65			
Zn	66			
Ge	72		94.143	
As	75			
Se	82			
Se-1	77			
Ga	71			
Rb	85			
Y	89			
Rh	103			

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[	Mo	98	
[	Ag	107	
[	Cd	111	
[	Cd	114	
>	In	115	95.433
[	Sn	118	
[	Sb	123	
[	Ba	135	
[	Ce	140	
>	Tb	159	
[	Ho	165	
[	Tl	203	
[	Tl	205	
[	Pb	206	
[	Pb	207	
[	Pb	208	
[	U	238	
>	Bi	209	96.287
[	Na	23	
[	Mg	24	
[	K	39	
[	Ca	43	
[	Fe	54	
[	Fe	57	
>	Sc-1	45	
[	Cl	35	
[	Kr	83	
[	Br	81	
[	P	31	
[	S	34	
[	Sr	88	
[	C	12	
[	N	14	
[	Hg	202	

QC Out of Limits

Measurement Type	Analyte	Mass	Out of Limits Message

Sample ID: L1211020006

Report Date/Time: Sunday, November 18, 2012 17:29:31

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Method 6020 - Summary Report

Sample ID: QC Std 6

Sample Date/Time: Sunday, November 18, 2012 17:30:12

Number of Replicates: 3

Autosampler Position: 101

Sample Description:

Method File: C:\NexIONData\Method\6020a.mth

Aliquot Volume (mL):

Diluted to Volume (mL):

User Name: JYH user

Cumulative Autodilution Factor: 1

Nexion-ICP 200.8\6020

Concentration Results

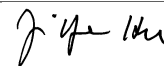
IS	Analyte	Mass	Intensity	RSD	Conc.	SD	RSD	Units	Blank Intens.	Mode
[	Li	7	8424.0	4.1	-254.6335	217.892	85.6	ug/L	8369	Standard
	Be	9	106736.7	4.0	54.2541	2.753	5.1	ug/L	18	Standard
	Al	27	6832426.5	4.3	58.8294	3.167	5.4	ug/L	215	Standard
[>	Sc	45	50124.5	1.4				ug/L	53004	Standard
[	Ti	47	48262.8	3.9	97.5225	4.516	4.6	ug/L	26	Standard
	V	51	558220.4	4.1	48.6757	2.667	5.5	ug/L	3223	Standard
	Cr	52	524467.8	1.5	48.7223	1.736	3.6	ug/L	10379	Standard
	Cr	53	65026.0	3.7	48.9942	2.736	5.6	ug/L	192	Standard
	Mn	55	816930.6	2.7	48.8809	2.291	4.7	ug/L	1840	Standard
	Co	59	621211.9	3.0	48.4025	2.021	4.2	ug/L	115	Standard
	Ni	60	133536.3	3.4	48.3580	1.998	4.1	ug/L	75	Standard
	Cu	65	132434.4	1.7	49.6783	2.107	4.2	ug/L	155	Standard
	Zn	66	65175.3	2.5	49.2621	1.740	3.5	ug/L	237	Standard
[>	Ge	72	398220.1	3.5				ug/L	413856	Standard
	As	75	68934.2	3.2	49.5295	2.224	4.5	ug/L	-197	Standard
	Se	82	6080.8	2.8	48.8000	1.809	3.7	ug/L	-5	Standard
[	Se-1	77	4814.1	4.6	50.0382	2.545	5.1	ug/L	105	Standard
[>	Ga	71	175.0	4.9				mg/L	225	Standard
[	Rb	85	1483.4	5.8				ug/L	28	Standard
[	Y	89	304838.4	1.9				ug/L	322845	Standard
[>	Rh	103	116.7	10.8				ug/L	92	Standard
[	Mo	98	410006.1	3.0	93.8345	3.310	3.5	ug/L	18	Standard
	Ag	107	378790.0	2.7	49.2785	1.650	3.3	ug/L	63	Standard
	Cd	111	167395.5	2.9	50.3070	1.745	3.5	mg/L	20	Standard
	Cd	114	438091.2	3.9	50.0219	2.039	4.1	ug/L	56	Standard
[>	In	115	637644.7	1.3				ug/L	657102	Standard
	Sn	118	492045.9	4.1	50.9102	2.163	4.2	ug/L	555	Standard
	Sb	123	383271.1	2.6	50.4391	1.571	3.1	ug/L	62	Standard
[	Ba	135	167981.7	2.1	50.8405	1.381	2.7	ug/L	19	Standard
[	Ce	140	530.7	4.3				ug/L	24	Standard
[>	Tb	159	918369.2	1.7				ug/L	910514	Standard
[	Ho	165	449.3	3.4				ug/L	7	Standard
	Tl	203	645192.5	2.1	49.8848	1.462	2.9	ug/L	13	Standard
	Tl	205	20076.0	2.2	50.8789	1.486	2.9	ug/L	1	Standard
	Pb	206	521565.8	2.3	50.3008	1.430	2.8	ug/L	342	Standard
	Pb	207	445643.7	2.8	50.5548	1.779	3.5	ug/L	284	Standard
	Pb	208	2042518.2	2.6	49.9068	1.660	3.3	ug/L	1363	Standard
	U	238	519081.9	4.5	51.2623	2.814	5.5	ug/L	2	Standard
[>	Bi	209	474980.2	1.7				ug/L	470592	Standard

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Na	23	3.3	173.2	0.3285	0.560	170.6	mg/L	2	Standard
Mg	24	304279.0	2.0	0.1550	0.005	3.2	mg/L	5586	Standard
K	39	426.7	11.1	6.1013	0.771	12.6	mg/L	5	Standard
Ca	43	141.7	11.3	4.1440	0.696	16.8	mg/L	45	Standard
Fe	54	12727.2	4.1	5.0181	0.234	4.7	mg/L	350	Standard
Fe	57	3105.3	4.6	5.0300	0.267	5.3	mg/L	102	Standard
Sc-1	45	50124.5	1.4				mg/L	53004	Standard
Cl	35	2.3	89.2				ug/L	2	Standard
Kr	83	142.9	3.8				ug/L	157	Standard
Br	81	3.3	86.6				ug/L	3	Standard
P	31	123681.1	1.0				ug/L	91588	Standard
S	34	38352.6	0.7				ug/L	32556	Standard
Sr	88	60.0	22.0				ug/L	62	Standard
C	12	101.7	31.6				mg/L	133	Standard
N	14	0.0					mg/L	0	Standard
Hg	202	11.7	89.2				mg/L	7	Standard

QC Calculated Values

Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recovery
Li	7			
Be	9	108.508		
Al	27	117.659		
Sc	45			
Ti	47	97.522		
V	51	97.351		
Cr	52	97.445		
Cr	53			
Mn	55	97.762		
Co	59	96.805		
Ni	60	96.716		
Cu	65	99.357		
Zn	66	98.524		
Ge	72		96.222	
As	75	99.059		
Se	82	97.600		
Se-1	77			
Ga	71			
Rb	85			
Y	89			
Rh	103			

Sample ID: QC Std 6

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[	Mo	98	93.834	
[	Ag	107	98.557	
[	Cd	111	100.614	
[	Cd	114		
>	In	115		97.039
[	Sn	118	101.820	
[	Sb	123	100.878	
[	Ba	135	101.681	
[	Ce	140		
>	Tb	159		
[	Ho	165		
[	Tl	203	99.770	
[	Tl	205		
[	Pb	206	100.602	
[	Pb	207	101.110	
[	Pb	208	99.814	
[	U	238	102.525	
>	Bi	209		100.933
[	Na	23		
[	Mg	24		
[	K	39		
[	Ca	43		
[	Fe	54		
[	Fe	57		
>	Sc-1	45		
[	Cl	35		
[	Kr	83		
[	Br	81		
[	P	31		
[	S	34		
[	Sr	88		
[	C	12		
[	N	14		
[	Hg	202		

QC Out of Limits

Measurement Type	Analyte	Mass	Out of Limits Message
QC Std 6	Al	27	

Sample ID: QC Std 6

Report Date/Time: Sunday, November 18, 2012 17:32:45

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Method 6020 - Summary Report

Sample ID: QC Std 7

Sample Date/Time: Sunday, November 18, 2012 17:33:26

Number of Replicates: 3

Autosampler Position: 102

Sample Description:

Method File: C:\NexIONData\Method\6020a.mth

Aliquot Volume (mL):

Diluted to Volume (mL):

User Name: JYH user

Cumulative Autodilution Factor: 1

Nexion-ICP 200.8\6020

Concentration Results

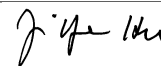
IS	Analyte	Mass	Intensity	RSD	Conc.	SD	RSD	Units	Blank Intens.	Mode
[	Li	7	8033.8	6.2	-90.4121	101.197	111.9	ug/L	8369	Standard
	Be	9	23.3	86.6	0.0025	0.010	402.2	ug/L	18	Standard
	Al	27	808.4	69.3	0.0049	0.005	96.9	ug/L	215	Standard
[>	Sc	45	49418.9	4.4				ug/L	53004	Standard
[	Ti	47	24.7	11.7	-0.0087	0.005	57.7	ug/L	26	Standard
	V	51	2723.8	1.2	-0.0234	0.005	22.8	ug/L	3223	Standard
	Cr	52	8562.8	1.2	-0.0873	0.021	23.7	ug/L	10379	Standard
	Cr	53	185.0	15.3	0.0329	0.021	65.1	ug/L	192	Standard
	Mn	55	1568.7	2.1	0.0072	0.000	4.6	ug/L	1840	Standard
	Co	59	100.7	29.9	-0.0075	0.002	30.0	ug/L	115	Standard
	Ni	60	78.7	18.1	-0.0064	0.005	73.2	ug/L	75	Standard
	Cu	65	239.0	14.2	0.0341	0.012	33.8	ug/L	155	Standard
	Zn	66	273.7	14.0	0.0126	0.027	213.9	ug/L	237	Standard
[>	Ge	72	389356.6	1.8				ug/L	413856	Standard
	As	75	-145.4	15.0	0.0334	0.017	50.1	ug/L	-197	Standard
	Se	82	6.1	20.3	0.0550	0.011	19.7	ug/L	-5	Standard
[	Se-1	77	124.3	6.6	0.3679	0.081	22.0	ug/L	105	Standard
[>	Ga	71	185.0	14.0				mg/L	225	Standard
[	Rb	85	30.0	76.4				ug/L	28	Standard
[	Y	89	295981.4	4.3				ug/L	322845	Standard
[>	Rh	103	106.7	17.7				ug/L	92	Standard
[	Mo	98	177.4	93.7	0.0318	0.038	118.5	ug/L	18	Standard
	Ag	107	259.3	37.3	0.0258	0.012	48.0	ug/L	63	Standard
	Cd	111	58.8	89.9	0.0065	0.016	243.6	mg/L	20	Standard
	Cd	114	176.0	79.0	0.0105	0.016	149.6	ug/L	56	Standard
[>	In	115	637072.2	0.9				ug/L	657102	Standard
	Sn	118	459.0	25.5	-0.0018	0.012	650.3	ug/L	555	Standard
	Sb	123	332.3	48.2	0.0408	0.021	51.1	ug/L	62	Standard
[	Ba	135	50.3	59.6	-0.0047	0.009	190.7	ug/L	19	Standard
[	Ce	140	20.0	27.8				ug/L	24	Standard
[>	Tb	159	904530.3	2.0				ug/L	910514	Standard
[	Ho	165	7.3	39.4				ug/L	7	Standard
	Tl	203	86.3	89.4	0.0030	0.006	193.0	ug/L	13	Standard
	Tl	205	0.7	86.6	0.0030	0.001	49.0	ug/L	1	Standard
	Pb	206	388.3	19.5	0.0048	0.007	146.6	ug/L	342	Standard
	Pb	207	326.0	11.1	0.0012	0.004	349.6	ug/L	284	Standard
	Pb	208	1513.0	14.8	0.0028	0.005	184.3	ug/L	1363	Standard
	U	238	40.3	98.0	0.0025	0.004	156.1	ug/L	2	Standard
[>	Bi	209	471442.4	2.2				ug/L	470592	Standard

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Na	23	0.0		0.0050	0.000	0.0	mg/L	2	Standard
Mg	24	1985.1	8.2	-0.0019	0.000	5.2	mg/L	5586	Standard
K	39	5.0	100.0	0.0296	0.071	238.5	mg/L	5	Standard
Ca	43	36.7	39.4	-0.5745	0.602	104.8	mg/L	45	Standard
Fe	54	320.7	11.9	-0.0216	0.010	47.0	mg/L	350	Standard
Fe	57	131.7	35.3	0.0917	0.071	77.6	mg/L	102	Standard
Sc-1	45	49418.9	4.4				mg/L	53004	Standard
Cl	35	4.3	13.3				ug/L	2	Standard
Kr	83	142.4	3.3				ug/L	157	Standard
Br	81	9.2	87.7				ug/L	3	Standard
P	31	119273.5	1.3				ug/L	91588	Standard
S	34	38960.0	1.6				ug/L	32556	Standard
Sr	88	50.0	50.0				ug/L	62	Standard
C	12	93.3	56.8				mg/L	133	Standard
N	14	1.7	173.2				mg/L	0	Standard
Hg	202	6.7	86.6				mg/L	7	Standard

QC Calculated Values

Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recovery
Li	7			
Be	9			
Al	27			
Sc	45			
Ti	47			
V	51			
Cr	52			
Cr	53			
Mn	55			
Co	59			
Ni	60			
Cu	65			
Zn	66			
Ge	72		94.080	
As	75			
Se	82			
Se-1	77			
Ga	71			
Rb	85			
Y	89			
Rh	103			

Sample ID: QC Std 7

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[	Mo	98	
[	Ag	107	
[	Cd	111	
[	Cd	114	
>	In	115	96.952
[	Sn	118	
[	Sb	123	
[	Ba	135	
[	Ce	140	
>	Tb	159	
[	Ho	165	
[	Tl	203	
[	Tl	205	
[	Pb	206	
[	Pb	207	
[	Pb	208	
[	U	238	
>	Bi	209	100.181
[	Na	23	
[	Mg	24	
[	K	39	
[	Ca	43	
[	Fe	54	
[	Fe	57	
>	Sc-1	45	
[	Cl	35	
[	Kr	83	
[	Br	81	
[	P	31	
[	S	34	
[	Sr	88	
[	C	12	
[	N	14	
[	Hg	202	

QC Out of Limits

Measurement Type	Analyte	Mass	Out of Limits Message

Sample ID: QC Std 7

Report Date/Time: Sunday, November 18, 2012 17:35:57

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Method 6020 - Summary Report

Sample ID: QC Std 8

Sample Date/Time: Sunday, November 18, 2012 17:36:39

Number of Replicates: 3

Autosampler Position: 202

Sample Description:

Method File: C:\NexIONData\Method\6020a.mth

Aliquot Volume (mL):

Diluted to Volume (mL):

User Name: JYH user

Cumulative Autodilution Factor: 1

Nexion-ICP 200.8\6020

Concentration Results

IS	Analyte	Mass	Intensity	RSD	Conc.	SD	RSD	Units	Blank Intens.	Mode
[	Li	7	8123.8	4.5	2.8296	161.176	5696.1	ug/L	8369	Standard
	Be	9	423.3	12.6	0.2021	0.027	13.3	ug/L	18	Standard
	Al	27	273.3	9.2	0.0001	0.000	53.6	ug/L	215	Standard
[>	Sc	45	51049.4	6.2				ug/L	53004	Standard
[	Ti	47	18.7	34.4	-0.0213	0.014	66.5	ug/L	26	Standard
	V	51	6800.6	4.6	0.3330	0.009	2.8	ug/L	3223	Standard
	Cr	52	16923.5	4.3	0.6976	0.020	2.9	ug/L	10379	Standard
	Cr	53	1139.2	9.1	0.7564	0.069	9.2	ug/L	192	Standard
	Mn	55	9306.5	8.2	0.4724	0.029	6.1	ug/L	1840	Standard
	Co	59	4880.1	5.8	0.3675	0.012	3.4	ug/L	115	Standard
	Ni	60	4222.6	3.1	1.5065	0.018	1.2	ug/L	75	Standard
	Cu	65	2281.5	7.1	0.8049	0.036	4.4	ug/L	155	Standard
	Zn	66	8275.9	5.3	6.1257	0.109	1.8	ug/L	237	Standard
[>	Ge	72	395008.8	3.6				ug/L	413856	Standard
	As	75	401.3	15.8	0.4291	0.039	9.2	ug/L	-197	Standard
	Se	82	57.5	17.6	0.4697	0.078	16.6	ug/L	-5	Standard
[	Se-1	77	155.0	3.9	0.6769	0.062	9.1	ug/L	105	Standard
[>	Ga	71	175.0	10.3				mg/L	225	Standard
[	Rb	85	25.0	52.9				ug/L	28	Standard
[	Y	89	299101.2	2.5				ug/L	322845	Standard
[>	Rh	103	95.0	27.3				ug/L	92	Standard
[	Mo	98	20.1	25.6	-0.0040	0.001	31.1	ug/L	18	Standard
	Ag	107	2952.3	1.8	0.3816	0.012	3.1	ug/L	63	Standard
	Cd	111	787.7	0.6	0.2290	0.009	4.1	mg/L	20	Standard
	Cd	114	2066.9	3.7	0.2298	0.008	3.6	ug/L	56	Standard
[>	In	115	629053.0	3.4				ug/L	657102	Standard
	Sn	118	367.7	1.1	-0.0108	0.001	9.2	ug/L	555	Standard
	Sb	123	3060.3	3.5	0.4054	0.010	2.6	ug/L	62	Standard
[	Ba	135	2427.9	3.7	0.7252	0.017	2.4	ug/L	19	Standard
[	Ce	140	28.3	15.9				ug/L	24	Standard
[>	Tb	159	905656.7	3.8				ug/L	910514	Standard
[	Ho	165	9.3	48.3				ug/L	7	Standard
	Tl	203	1028.0	3.9	0.0765	0.001	1.7	ug/L	13	Standard
	Tl	205	27.3	11.2	0.0710	0.006	8.4	ug/L	1	Standard
	Pb	206	2372.2	6.3	0.1977	0.009	4.7	ug/L	342	Standard
	Pb	207	1971.5	2.9	0.1895	0.007	3.6	ug/L	284	Standard
	Pb	208	9256.1	4.5	0.1937	0.008	4.2	ug/L	1363	Standard
	U	238	3929.8	5.3	0.3895	0.017	4.3	ug/L	2	Standard
[>	Bi	209	471172.3	2.7				ug/L	470592	Standard

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Na	23	3.3	86.6	0.3082	0.263	85.3	mg/L	2	Standard
Mg	24	1630.1	2.7	-0.0021	0.000	1.7	mg/L	5586	Standard
K	39	6.7	86.6	0.0534	0.083	154.5	mg/L	5	Standard
Ca	43	46.7	12.4	-0.1729	0.156	90.3	mg/L	45	Standard
Fe	54	329.6	3.0	-0.0218	0.004	19.6	mg/L	350	Standard
Fe	57	121.7	9.5	0.0706	0.021	29.6	mg/L	102	Standard
Sc-1	45	51049.4	6.2				mg/L	53004	Standard
Cl	35	3.3	45.8				ug/L	2	Standard
Kr	83	131.4	1.7				ug/L	157	Standard
Br	81	11.7	68.9				ug/L	3	Standard
P	31	118753.0	3.1				ug/L	91588	Standard
S	34	40161.5	0.7				ug/L	32556	Standard
Sr	88	96.7	15.8				ug/L	62	Standard
C	12	138.3	19.9				mg/L	133	Standard
N	14	1.7	173.2				mg/L	0	Standard
Hg	202	3.3	173.2				mg/L	7	Standard

QC Calculated Values

Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recovery
Li	7			
Be	9	101.038		
Al	27			
Sc	45			
Ti	47			
V	51	83.241		
Cr	52	87.197		
Cr	53			
Mn	55	94.486		
Co	59	91.881		
Ni	60	94.156		
Cu	65	100.609		
Zn	66	98.011		
Ge	72		95.446	
As	75	107.281		
Se	82	117.418		
Se-1	77			
Ga	71			
Rb	85			
Y	89			
Rh	103			

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[	Mo	98		
[	Ag	107	95.412	
[	Cd	111	95.410	
[	Cd	114		
>	In	115		95.731
[	Sn	118		
[	Sb	123	101.339	
[	Ba	135	96.689	
[	Ce	140		
>	Tb	159		
[	Ho	165		
[	Tl	203	95.572	
[	Tl	205		
[	Pb	206		
[	Pb	207		
[	Pb	208	96.828	
[	U	238	97.381	
>	Bi	209		100.123
[	Na	23		
[	Mg	24		
[	K	39		
[	Ca	43		
[	Fe	54		
[	Fe	57		
>	Sc-1	45		
[	Cl	35		
[	Kr	83		
[	Br	81		
[	P	31		
[	S	34		
[	Sr	88		
[	C	12		
[	N	14		
[	Hg	202		

QC Out of Limits

Measurement Type	Analyte	Mass	Out of Limits Message

Sample ID: QC Std 8

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Method 6020 - Summary Report

Sample ID: PBS 86 WG414134-02

Sample Date/Time: Sunday, November 18, 2012 17:39:53

Number of Replicates: 3

Autosampler Position: 401

Sample Description: 1

Method File: C:\NexIONData\Method\6020a.mth

Aliquot Volume (mL):

Diluted to Volume (mL):

User Name: JYH user

Cumulative Autodilution Factor: 1

Nexion-ICP 200.8\6020

Concentration Results

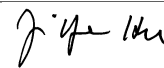
IS	Analyte	Mass	Intensity	RSD	Conc.	SD	RSD	Units	Blank Intens.	Mode
[	Li	7	7845.4	11.4	108.3935	342.995	316.4	ug/L	8369	Standard
	Be	9	6.7	114.6	-0.0062	0.004	59.9	ug/L	18	Standard
	Al	27	8179.5	126.0	0.0659	0.084	127.6	ug/L	215	Standard
[>	Sc	45	50296.8	3.7				ug/L	53004	Standard
	Ti	47	35.3	9.9	0.0142	0.004	31.1	ug/L	26	Standard
	V	51	2837.3	4.4	-0.0101	0.007	67.9	ug/L	3223	Standard
	Cr	52	9156.8	2.9	-0.0185	0.027	145.8	ug/L	10379	Standard
	Cr	53	236.7	11.3	0.0746	0.010	13.3	ug/L	192	Standard
	Mn	55	4097.2	8.9	0.1648	0.011	6.6	ug/L	1840	Standard
	Co	59	132.7	15.2	-0.0049	0.001	23.0	ug/L	115	Standard
	Ni	60	398.3	1.5	0.1140	0.007	6.0	ug/L	75	Standard
	Cu	65	524.0	12.5	0.1455	0.015	10.2	ug/L	155	Standard
	Zn	66	2491.2	4.0	1.7575	0.062	3.5	ug/L	237	Standard
[>	Ge	72	384837.9	6.0				ug/L	413856	Standard
	As	75	-165.1	11.8	0.0176	0.014	78.8	ug/L	-197	Standard
	Se	82	7.1	96.3	0.0650	0.060	92.0	ug/L	-5	Standard
[	Se-1	77	125.3	23.4	0.4088	0.392	95.9	ug/L	105	Standard
[>	Ga	71	193.3	23.5				mg/L	225	Standard
	Rb	85	28.3	10.2				ug/L	28	Standard
	Y	89	292964.3	3.6				ug/L	322845	Standard
[>	Rh	103	63.3	29.9				ug/L	92	Standard
	Mo	98	37.2	16.7	0.0000	0.002	23353.8	ug/L	18	Standard
	Ag	107	129.7	9.6	0.0093	0.002	21.4	ug/L	63	Standard
	Cd	111	42.6	68.4	0.0017	0.008	494.8	mg/L	20	Standard
	Cd	114	157.5	105.3	0.0083	0.018	219.5	ug/L	56	Standard
[>	In	115	625442.6	3.7				ug/L	657102	Standard
	Sn	118	615.3	35.7	0.0151	0.020	135.3	ug/L	555	Standard
	Sb	123	173.7	107.2	0.0198	0.024	119.5	ug/L	62	Standard
[	Ba	135	209.3	78.1	0.0435	0.047	108.2	ug/L	19	Standard
	Ce	140	104.3	37.4				ug/L	24	Standard
[>	Tb	159	900206.1	3.8				ug/L	910514	Standard
	Ho	165	10.7	32.9				ug/L	7	Standard
	Tl	203	116.7	133.1	0.0052	0.012	222.2	ug/L	13	Standard
	Tl	205	1.7	124.9	0.0054	0.005	93.0	ug/L	1	Standard
	Pb	206	3313.0	10.2	0.2911	0.023	8.0	ug/L	342	Standard
	Pb	207	2443.2	6.7	0.2452	0.011	4.3	ug/L	284	Standard
	Pb	208	11963.5	9.2	0.2621	0.018	7.0	ug/L	1363	Standard
	U	238	50.7	157.8	0.0033	0.008	228.5	ug/L	2	Standard
[>	Bi	209	468091.7	4.4				ug/L	470592	Standard

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Na	23	1.7	173.2	0.1665	0.280	168.0	mg/L	2	Standard
Mg	24	3817.3	76.4	-0.0010	0.001	143.3	mg/L	5586	Standard
K	39	3.3	86.6	0.0059	0.041	698.0	mg/L	5	Standard
Ca	43	48.3	51.0	-0.0748	1.087	1453.3	mg/L	45	Standard
Fe	54	359.0	9.2	-0.0077	0.018	231.7	mg/L	350	Standard
Fe	57	120.0	15.0	0.0705	0.030	43.2	mg/L	102	Standard
Sc-1	45	50296.8	3.7				mg/L	53004	Standard
Cl	35	2.3	49.5				ug/L	2	Standard
Kr	83	133.9	3.1				ug/L	157	Standard
Br	81	6.7	21.7				ug/L	3	Standard
P	31	119380.4	3.2				ug/L	91588	Standard
S	34	38966.8	4.6				ug/L	32556	Standard
Sr	88	65.0	33.5				ug/L	62	Standard
C	12	145.0	3.4				mg/L	133	Standard
N	14	0.0					mg/L	0	Standard
Hg	202	1.7	173.2				mg/L	7	Standard

QC Calculated Values

Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recovery
Li	7			
Be	9			
Al	27			
Sc	45			
Ti	47			
V	51			
Cr	52			
Cr	53			
Mn	55			
Co	59			
Ni	60			
Cu	65			
Zn	66			
Ge	72		92.988	
As	75			
Se	82			
Se-1	77			
Ga	71			
Rb	85			
Y	89			
Rh	103			

Sample ID: PBS 86 WG414134-02

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[	Mo	98	
[	Ag	107	
[	Cd	111	
[	Cd	114	
>	In	115	95.182
[	Sn	118	
[	Sb	123	
[	Ba	135	
[	Ce	140	
>	Tb	159	
[	Ho	165	
[	Tl	203	
[	Tl	205	
[	Pb	206	
[	Pb	207	
[	Pb	208	
[	U	238	
>	Bi	209	99.469
[	Na	23	
[	Mg	24	
[	K	39	
[	Ca	43	
[	Fe	54	
[	Fe	57	
>	Sc-1	45	
[	Cl	35	
[	Kr	83	
[	Br	81	
[	P	31	
[	S	34	
[	Sr	88	
[	C	12	
[	N	14	
[	Hg	202	

QC Out of Limits

Measurement Type	Analyte	Mass	Out of Limits Message

Sample ID: PBS 86 WG414134-02

Report Date/Time: Sunday, November 18, 2012 17:42:25

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Method 6020 - Summary Report

Sample ID: LCSS 86 WG414134-03

Sample Date/Time: Sunday, November 18, 2012 17:43:06

Number of Replicates: 3

Autosampler Position: 402

Sample Description: 1

Method File: C:\NexIONData\Method\6020a.mth

Aliquot Volume (mL):

Diluted to Volume (mL):

User Name: JYH user

Cumulative Autodilution Factor: 1

Nexion-ICP 200.8\6020

Concentration Results

IS	Analyte	Mass	Intensity	RSD	Conc.	SD	RSD	Units	Blank Intens.	Mode
[	Li	7	8415.7	3.0	-100.4312	126.629	126.1	ug/L	8369	Standard
	Be	9	52502.6	4.6	25.8555	0.702	2.7	ug/L	18	Standard
	Al	27	1733.4	18.6	0.0123	0.003	24.7	ug/L	215	Standard
[>	Sc	45	51691.4	2.4				ug/L	53004	Standard
[	Ti	47	31.3	8.0	0.0033	0.004	128.3	ug/L	26	Standard
	V	51	277880.4	4.4	23.9107	0.603	2.5	ug/L	3223	Standard
	Cr	52	274272.8	4.9	24.8458	0.778	3.1	ug/L	10379	Standard
	Cr	53	33258.2	5.6	24.8059	0.916	3.7	ug/L	192	Standard
	Mn	55	428061.3	4.1	25.3754	0.574	2.3	ug/L	1840	Standard
	Co	59	323595.4	4.8	25.0164	0.710	2.8	ug/L	115	Standard
	Ni	60	69378.6	3.9	24.9234	0.484	1.9	ug/L	75	Standard
	Cu	65	69698.9	5.1	25.9146	0.813	3.1	ug/L	155	Standard
	Zn	66	35086.3	5.0	26.2288	0.810	3.1	ug/L	237	Standard
[>	Ge	72	400805.4	2.0				ug/L	413856	Standard
	As	75	35170.7	3.2	25.1535	0.328	1.3	ug/L	-197	Standard
	Se	82	3113.2	3.6	24.8047	0.410	1.7	ug/L	-5	Standard
[	Se-1	77	2458.9	2.1	24.8960	0.111	0.4	ug/L	105	Standard
[>	Ga	71	218.3	13.4				mg/L	225	Standard
[	Rb	85	38.3	19.9				ug/L	28	Standard
[	Y	89	299782.4	2.0				ug/L	322845	Standard
[>	Rh	103	126.7	6.0				ug/L	92	Standard
[	Mo	98	65.3	80.0	0.0062	0.012	196.3	ug/L	18	Standard
	Ag	107	189111.5	3.0	24.2481	0.313	1.3	ug/L	63	Standard
	Cd	111	83359.7	5.1	24.6835	0.846	3.4	mg/L	20	Standard
	Cd	114	217602.2	3.8	24.4866	0.508	2.1	ug/L	56	Standard
[>	In	115	646647.1	1.8				ug/L	657102	Standard
	Sn	118	430.0	6.5	-0.0054	0.004	67.2	ug/L	555	Standard
	Sb	123	194898.0	4.2	25.2799	0.654	2.6	ug/L	62	Standard
[	Ba	135	85537.6	3.5	25.5096	0.491	1.9	ug/L	19	Standard
[	Ce	140	62.7	6.0				ug/L	24	Standard
[>	Tb	159	926760.1	2.0				ug/L	910514	Standard
[	Ho	165	11.0	24.1				ug/L	7	Standard
	Tl	203	330689.3	3.7	25.1329	1.072	4.3	ug/L	13	Standard
	Tl	205	10035.3	1.7	25.0011	0.596	2.4	ug/L	1	Standard
	Pb	206	264213.2	5.0	25.0331	1.342	5.4	ug/L	342	Standard
	Pb	207	226079.0	3.6	25.1912	0.969	3.8	ug/L	284	Standard
	Pb	208	1041422.7	4.3	24.9956	1.139	4.6	ug/L	1363	Standard
	U	238	252209.8	5.6	24.4760	1.391	5.7	ug/L	2	Standard
[>	Bi	209	483142.0	1.0				ug/L	470592	Standard

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Na	23	3.3	86.6	0.3099	0.264	85.2	mg/L	2	Standard
Mg	24	2111.8	4.5	-0.0019	0.000	3.9	mg/L	5586	Standard
K	39	5.0	173.2	0.0281	0.120	428.4	mg/L	5	Standard
Ca	43	43.3	17.6	-0.3363	0.360	107.2	mg/L	45	Standard
Fe	54	417.9	13.4	0.0111	0.021	190.6	mg/L	350	Standard
Fe	57	136.7	11.8	0.0919	0.026	28.4	mg/L	102	Standard
Sc-1	45	51691.4	2.4				mg/L	53004	Standard
Cl	35	4.3	113.8				ug/L	2	Standard
Kr	83	130.3	1.4				ug/L	157	Standard
Br	81	5.0	50.0				ug/L	3	Standard
P	31	121293.6	0.9				ug/L	91588	Standard
S	34	36678.5	0.3				ug/L	32556	Standard
Sr	88	76.7	19.9				ug/L	62	Standard
C	12	393.3	14.8				mg/L	133	Standard
N	14	0.0					mg/L	0	Standard
Hg	202	5.0	173.2				mg/L	7	Standard

QC Calculated Values

Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recovery
Li	7			
Be	9			
Al	27			
Sc	45			
Ti	47			
V	51			
Cr	52			
Cr	53			
Mn	55			
Co	59			
Ni	60			
Cu	65			
Zn	66			
Ge	72		96.847	
As	75			
Se	82			
Se-1	77			
Ga	71			
Rb	85			
Y	89			
Rh	103			

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[	Mo	98	
[	Ag	107	
[	Cd	111	
[	Cd	114	
>	In	115	98.409
[	Sn	118	
[	Sb	123	
[	Ba	135	
[	Ce	140	
>	Tb	159	
[	Ho	165	
[	Tl	203	
[	Tl	205	
[	Pb	206	
[	Pb	207	
[	Pb	208	
[	U	238	
>	Bi	209	102.667
[	Na	23	
[	Mg	24	
[	K	39	
[	Ca	43	
[	Fe	54	
[	Fe	57	
>	Sc-1	45	
[	Cl	35	
[	Kr	83	
[	Br	81	
[	P	31	
[	S	34	
[	Sr	88	
[	C	12	
[	N	14	
[	Hg	202	

QC Out of Limits

Measurement Type	Analyte	Mass	Out of Limits Message

Sample ID: LCSS 86 WG414134-03

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Method 6020 - Summary Report

Sample ID: L1211033209S WG414134-04

Sample Date/Time: Sunday, November 18, 2012 17:46:18

Number of Replicates: 3

Autosampler Position: 403

Sample Description: 20

Method File: C:\NexIONData\Method\6020a.mth

Aliquot Volume (mL):

Diluted to Volume (mL):

User Name: JYH user

Cumulative Autodilution Factor: 1

Nexion-ICP 200.8\6020

Concentration Results

IS	Analyte	Mass	Intensity	RSD	Conc.	SD	RSD	Units	Blank Intens.	Mode
[	Li	7	14949.0	1.9	-5137.5025	306.410	6.0	ug/L	8369	Standard
	Be	9	2501.9	2.7	1.4186	0.070	4.9	ug/L	18	Standard
	Al	27	311217.0	2.8	3.0068	0.155	5.2	ug/L	215	Standard
[>	Sc	45	44659.1	2.4				ug/L	53004	Standard
[	Ti	47	247.3	7.8	0.5152	0.054	10.4	ug/L	26	Standard
	V	51	28529.9	1.3	2.6046	0.025	0.9	ug/L	3223	Standard
	Cr	52	24626.7	1.3	1.7606	0.013	0.7	ug/L	10379	Standard
	Cr	53	2343.5	1.2	1.9222	0.049	2.5	ug/L	192	Standard
	Mn	55	1132499.3	2.4	77.8434	0.922	1.2	ug/L	1840	Standard
	Co	59	21584.4	0.4	1.9165	0.025	1.3	ug/L	115	Standard
	Ni	60	5853.8	1.6	2.4007	0.008	0.3	ug/L	75	Standard
	Cu	65	4410.0	1.3	1.8441	0.035	1.9	ug/L	155	Standard
	Zn	66	5744.1	1.7	4.8075	0.123	2.6	ug/L	237	Standard
[>	Ge	72	346549.6	1.5				ug/L	413856	Standard
	As	75	1893.3	1.5	1.6975	0.010	0.6	ug/L	-197	Standard
	Se	82	100.7	5.9	0.9335	0.066	7.0	ug/L	-5	Standard
[	Se-1	77	193.0	6.5	1.3691	0.119	8.7	ug/L	105	Standard
[>	Ga	71	1418.4	1.8				mg/L	225	Standard
[	Rb	85	7563.6	4.0				ug/L	28	Standard
[	Y	89	282215.9	0.9				ug/L	322845	Standard
[>	Rh	103	80.0	10.8				ug/L	92	Standard
[	Mo	98	42.7	2.7	0.0022	0.000	14.1	ug/L	18	Standard
	Ag	107	7355.8	0.5	1.0597	0.006	0.6	ug/L	63	Standard
	Cd	111	3712.1	2.0	1.2334	0.023	1.9	mg/L	20	Standard
	Cd	114	9722.3	1.1	1.2290	0.015	1.2	ug/L	56	Standard
[>	In	115	571548.2	0.2				ug/L	657102	Standard
	Sn	118	314.7	3.2	-0.0130	0.001	8.5	ug/L	555	Standard
	Sb	123	473.3	4.3	0.0666	0.003	4.6	ug/L	62	Standard
[	Ba	135	37254.4	0.4	12.5623	0.057	0.5	ug/L	19	Standard
[	Ce	140	226088.8	1.0				ug/L	24	Standard
[>	Tb	159	842342.5	0.6				ug/L	910514	Standard
[	Ho	165	2299.8	1.5				ug/L	7	Standard
	Tl	203	13410.6	2.5	1.0982	0.028	2.6	ug/L	13	Standard
	Tl	205	426.0	1.9	1.1484	0.015	1.3	ug/L	1	Standard
	Pb	206	20280.2	1.9	2.0468	0.041	2.0	ug/L	342	Standard
	Pb	207	17135.0	1.6	2.0309	0.039	1.9	ug/L	284	Standard
	Pb	208	79284.7	1.5	2.0254	0.027	1.3	ug/L	1363	Standard
	U	238	10777.2	2.0	1.1291	0.018	1.6	ug/L	2	Standard
[>	Bi	209	446901.2	0.7				ug/L	470592	Standard

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Na	23	1.7	173.2	0.1799	0.303	168.4	mg/L	2	Standard
Mg	24	2240.2	4.5	-0.0016	0.000	4.7	mg/L	5586	Standard
K	39	11.7	65.5	0.1485	0.128	86.5	mg/L	5	Standard
Ca	43	46.7	48.3	0.1331	1.144	859.4	mg/L	45	Standard
Fe	54	2758.8	3.5	1.1051	0.060	5.5	mg/L	350	Standard
Fe	57	756.7	9.9	1.2806	0.110	8.6	mg/L	102	Standard
Sc-1	45	44659.1	2.4				mg/L	53004	Standard
Cl	35	2.7	57.3				ug/L	2	Standard
Kr	83	123.1	4.9				ug/L	157	Standard
Br	81	5.0	100.0				ug/L	3	Standard
P	31	41645.5	2.0				ug/L	91588	Standard
S	34	36298.5	3.6				ug/L	32556	Standard
Sr	88	90.0	19.2				ug/L	62	Standard
C	12	103.3	7.4				mg/L	133	Standard
N	14	0.0					mg/L	0	Standard
Hg	202	3.3	86.6				mg/L	7	Standard

QC Calculated Values

Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recovery
Li	7			
Be	9			
Al	27			
Sc	45			
Ti	47			
V	51			
Cr	52			
Cr	53			
Mn	55			
Co	59			
Ni	60			
Cu	65			
Zn	66			
Ge	72		83.737	
As	75			
Se	82			
Se-1	77			
Ga	71			
Rb	85			
Y	89			
Rh	103			

Sample ID: L1211033209S WG414134-04

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[	Mo	98	
[	Ag	107	
[	Cd	111	
[	Cd	114	
>	In	115	86.980
[	Sn	118	
[	Sb	123	
[	Ba	135	
[	Ce	140	
>	Tb	159	
[	Ho	165	
[	Tl	203	
[	Tl	205	
[	Pb	206	
[	Pb	207	
[	Pb	208	
[	U	238	
>	Bi	209	94.966
[	Na	23	
[	Mg	24	
[	K	39	
[	Ca	43	
[	Fe	54	
[	Fe	57	
>	Sc-1	45	
[	Cl	35	
[	Kr	83	
[	Br	81	
[	P	31	
[	S	34	
[	Sr	88	
[	C	12	
[	N	14	
[	Hg	202	

QC Out of Limits

Measurement Type	Analyte	Mass	Out of Limits Message

Sample ID: L1211033209S WG414134-04

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Method 6020 - Summary Report

Sample ID: L1211033210SD WG414134-05

Sample Date/Time: Sunday, November 18, 2012 17:49:31

Number of Replicates: 3

Autosampler Position: 404

Sample Description: 20

Method File: C:\NexIONData\Method\6020a.mth

Aliquot Volume (mL):

Diluted to Volume (mL):

User Name: JYH user

Cumulative Autodilution Factor: 1

Nexion-ICP 200.8\6020

Concentration Results

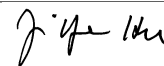
IS	Analyte	Mass	Intensity	RSD	Conc.	SD	RSD	Units	Blank Intens.	Mode
[	Li	7	23341.3	6.2	-10105.1645	703.901	7.0	ug/L	8369	Standard
	Be	9	2686.9	6.6	1.4718	0.119	8.1	ug/L	18	Standard
	Al	27	944249.1	3.8	8.8080	0.329	3.7	ug/L	215	Standard
[>	Sc	45	46242.1	1.5				ug/L	53004	Standard
	Ti	47	246.0	8.4	0.4880	0.040	8.3	ug/L	26	Standard
	V	51	27694.0	1.3	2.4065	0.021	0.9	ug/L	3223	Standard
	Cr	52	31534.5	2.6	2.3712	0.060	2.5	ug/L	10379	Standard
	Cr	53	3122.8	1.7	2.4873	0.069	2.8	ug/L	192	Standard
	Mn	55	554000.7	2.9	36.4763	0.665	1.8	ug/L	1840	Standard
	Co	59	24022.7	1.7	2.0467	0.013	0.6	ug/L	115	Standard
	Ni	60	8152.2	3.3	3.2183	0.073	2.3	ug/L	75	Standard
	Cu	65	6787.2	3.9	2.7488	0.082	3.0	ug/L	155	Standard
	Zn	66	10377.6	2.9	8.4748	0.181	2.1	ug/L	237	Standard
[>	Ge	72	361291.4	1.1				ug/L	413856	Standard
	As	75	1828.5	2.9	1.5831	0.051	3.2	ug/L	-197	Standard
	Se	82	134.7	10.4	1.1966	0.131	11.0	ug/L	-5	Standard
[	Se-1	77	218.3	2.3	1.5707	0.084	5.4	ug/L	105	Standard
[>	Ga	71	2213.5	2.1				mg/L	225	Standard
	Rb	85	19494.2	4.1				ug/L	28	Standard
	Y	89	288884.9	1.1				ug/L	322845	Standard
[>	Rh	103	98.3	17.9				ug/L	92	Standard
	Mo	98	21.6	15.8	-0.0032	0.001	28.0	ug/L	18	Standard
	Ag	107	7780.0	2.4	1.1091	0.036	3.2	ug/L	63	Standard
	Cd	111	3961.5	2.1	1.3027	0.035	2.7	mg/L	20	Standard
	Cd	114	10443.3	1.9	1.3066	0.038	2.9	ug/L	56	Standard
[>	In	115	577863.1	1.0				ug/L	657102	Standard
	Sn	118	311.0	10.2	-0.0139	0.003	24.9	ug/L	555	Standard
	Sb	123	2671.1	4.7	0.3850	0.020	5.3	ug/L	62	Standard
[	Ba	135	66473.2	2.4	22.1882	0.664	3.0	ug/L	19	Standard
	Ce	140	179262.9	2.2				ug/L	24	Standard
[>	Tb	159	853566.4	0.5				ug/L	910514	Standard
	Ho	165	2508.2	4.2				ug/L	7	Standard
	Tl	203	14256.7	3.9	1.1519	0.052	4.5	ug/L	13	Standard
	Tl	205	445.7	1.3	1.1850	0.007	0.6	ug/L	1	Standard
	Pb	206	56135.5	1.4	5.6455	0.107	1.9	ug/L	342	Standard
	Pb	207	46193.3	1.8	5.4601	0.110	2.0	ug/L	284	Standard
	Pb	208	215707.0	2.4	5.4938	0.154	2.8	ug/L	1363	Standard
	U	238	11291.5	1.0	1.1670	0.011	1.0	ug/L	2	Standard
[>	Bi	209	453086.0	0.8				ug/L	470592	Standard

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Na	23	3.3	86.6	0.3497	0.299	85.4	mg/L	2	Standard
Mg	24	3050.3	18.0	-0.0012	0.000	25.8	mg/L	5586	Standard
K	39	15.0	57.7	0.1938	0.137	70.8	mg/L	5	Standard
Ca	43	45.0	11.1	-0.0367	0.222	605.2	mg/L	45	Standard
Fe	54	3179.0	1.4	1.2465	0.016	1.3	mg/L	350	Standard
Fe	57	878.4	4.8	1.4539	0.100	6.9	mg/L	102	Standard
Sc-1	45	46242.1	1.5				mg/L	53004	Standard
Cl	35	3.7	31.5				ug/L	2	Standard
Kr	83	118.2	4.7				ug/L	157	Standard
Br	81	3.3	43.3				ug/L	3	Standard
P	31	43168.1	3.8				ug/L	91588	Standard
S	34	36843.1	2.2				ug/L	32556	Standard
Sr	88	96.7	19.6				ug/L	62	Standard
C	12	148.3	42.7				mg/L	133	Standard
N	14	0.0					mg/L	0	Standard
Hg	202	13.3	57.3				mg/L	7	Standard

QC Calculated Values

Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recovery
Li	7			
Be	9			
Al	27			
Sc	45			
Ti	47			
V	51			
Cr	52			
Cr	53			
Mn	55			
Co	59			
Ni	60			
Cu	65			
Zn	66			
Ge	72		87.299	
As	75			
Se	82			
Se-1	77			
Ga	71			
Rb	85			
Y	89			
Rh	103			

Sample ID: L1211033210SD WG414134-05

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[	Mo	98	
[	Ag	107	
[	Cd	111	
[	Cd	114	
>	In	115	87.941
[	Sn	118	
[	Sb	123	
[	Ba	135	
[	Ce	140	
>	Tb	159	
[	Ho	165	
[	Tl	203	
[	Tl	205	
[	Pb	206	
[	Pb	207	
[	Pb	208	
[	U	238	
>	Bi	209	96.280
[	Na	23	
[	Mg	24	
[	K	39	
[	Ca	43	
[	Fe	54	
[	Fe	57	
>	Sc-1	45	
[	Cl	35	
[	Kr	83	
[	Br	81	
[	P	31	
[	S	34	
[	Sr	88	
[	C	12	
[	N	14	
[	Hg	202	

QC Out of Limits

Measurement Type	Analyte	Mass	Out of Limits Message

Sample ID: L1211033210SD WG414134-05

Report Date/Time: Sunday, November 18, 2012 17:52:03

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Method 6020 - Summary Report

Sample ID: L1211033221 WG414134-01

Sample Date/Time: Sunday, November 18, 2012 17:52:44

Number of Replicates: 3

Autosampler Position: 405

Sample Description: 20

Method File: C:\NexIONData\Method\6020a.mth

Aliquot Volume (mL):

Diluted to Volume (mL):

User Name: JYH user

Cumulative Autodilution Factor: 1

Nexion-ICP 200.8\6020

Concentration Results

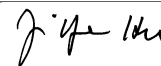
IS	Analyte	Mass	Intensity	RSD	Conc.	SD	RSD	Units	Blank Intens.	Mode
[	Li	7	21959.3	4.9	-9352.6890	673.042	7.2	ug/L	8369	Standard
	Be	9	145.0	21.0	0.0711	0.017	23.6	ug/L	18	Standard
	Al	27	663203.5	1.8	6.2374	0.127	2.0	ug/L	215	Standard
[>	Sc	45	45857.6	0.3				ug/L	53004	Standard
[	Ti	47	314.0	3.2	0.6414	0.026	4.0	ug/L	26	Standard
	V	51	13598.0	2.1	1.0484	0.004	0.4	ug/L	3223	Standard
	Cr	52	19071.7	1.1	1.0773	0.049	4.6	ug/L	10379	Standard
	Cr	53	1500.9	4.8	1.1410	0.058	5.0	ug/L	192	Standard
	Mn	55	346178.6	3.2	22.8222	0.976	4.3	ug/L	1840	Standard
	Co	59	7719.0	3.1	0.6486	0.017	2.7	ug/L	115	Standard
	Ni	60	4065.2	1.8	1.5910	0.020	1.3	ug/L	75	Standard
	Cu	65	2754.3	1.9	1.0845	0.039	3.6	ug/L	155	Standard
	Zn	66	7538.2	2.7	6.1171	0.184	3.0	ug/L	237	Standard
[>	Ge	72	360490.4	1.9				ug/L	413856	Standard
	As	75	216.1	6.3	0.3109	0.012	3.9	ug/L	-197	Standard
	Se	82	6.9	76.4	0.0662	0.047	71.2	ug/L	-5	Standard
[	Se-1	77	116.0	4.3	0.3795	0.082	21.6	ug/L	105	Standard
[>	Ga	71	1943.5	4.2				mg/L	225	Standard
[	Rb	85	15584.7	4.3				ug/L	28	Standard
[	Y	89	289590.5	2.3				ug/L	322845	Standard
[>	Rh	103	81.7	25.5				ug/L	92	Standard
[	Mo	98	20.7	13.6	-0.0035	0.001	19.5	ug/L	18	Standard
	Ag	107	127.7	14.8	0.0104	0.003	27.1	ug/L	63	Standard
	Cd	111	49.6	10.1	0.0052	0.002	32.0	mg/L	20	Standard
	Cd	114	149.1	8.8	0.0091	0.002	17.2	ug/L	56	Standard
[>	In	115	579611.2	1.0				ug/L	657102	Standard
	Sn	118	370.3	9.7	-0.0072	0.004	57.0	ug/L	555	Standard
	Sb	123	43.6	11.0	0.0034	0.001	19.3	ug/L	62	Standard
[	Ba	135	47372.6	2.3	15.7601	0.508	3.2	ug/L	19	Standard
[	Ce	140	141267.0	3.3				ug/L	24	Standard
[>	Tb	159	848686.4	2.1				ug/L	910514	Standard
[	Ho	165	2248.5	1.8				ug/L	7	Standard
	Tl	203	145.3	5.6	0.0082	0.001	10.7	ug/L	13	Standard
	Tl	205	5.0	40.0	0.0146	0.005	36.3	ug/L	1	Standard
	Pb	206	14225.0	1.0	1.4099	0.017	1.2	ug/L	342	Standard
	Pb	207	11346.2	2.8	1.3174	0.021	1.6	ug/L	284	Standard
	Pb	208	54215.3	2.2	1.3585	0.008	0.6	ug/L	1363	Standard
	U	238	638.0	6.4	0.0646	0.003	4.6	ug/L	2	Standard
[>	Bi	209	451888.7	2.0				ug/L	470592	Standard

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Na	23	0.0		0.0050	0.000	0.0	mg/L	2	Standard
Mg	24	2540.2	6.1	-0.0015	0.000	5.8	mg/L	5586	Standard
K	39	6.7	114.6	0.0632	0.120	189.1	mg/L	5	Standard
Ca	43	58.3	13.1	0.6385	0.370	58.0	mg/L	45	Standard
Fe	54	2771.4	2.4	1.0772	0.026	2.4	mg/L	350	Standard
Fe	57	833.4	9.3	1.3843	0.137	9.9	mg/L	102	Standard
Sc-1	45	45857.6	0.3				mg/L	53004	Standard
Cl	35	2.3	65.5				ug/L	2	Standard
Kr	83	127.1	3.0				ug/L	157	Standard
Br	81	7.5	57.7				ug/L	3	Standard
P	31	42530.5	1.8				ug/L	91588	Standard
S	34	36378.6	1.8				ug/L	32556	Standard
Sr	88	66.7	31.2				ug/L	62	Standard
C	12	90.0	11.1				mg/L	133	Standard
N	14	0.0					mg/L	0	Standard
Hg	202	3.3	86.6				mg/L	7	Standard

QC Calculated Values

Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recovery
Li	7			
Be	9			
Al	27			
Sc	45			
Ti	47			
V	51			
Cr	52			
Cr	53			
Mn	55			
Co	59			
Ni	60			
Cu	65			
Zn	66			
Ge	72		87.105	
As	75			
Se	82			
Se-1	77			
Ga	71			
Rb	85			
Y	89			
Rh	103			

Sample ID: L1211033221 WG414134-01

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[	Mo	98	
[	Ag	107	
[	Cd	111	
[	Cd	114	
>	In	115	88.207
[	Sn	118	
[	Sb	123	
[	Ba	135	
[	Ce	140	
>	Tb	159	
[	Ho	165	
[	Tl	203	
[	Tl	205	
[	Pb	206	
[	Pb	207	
[	Pb	208	
[	U	238	
>	Bi	209	96.026
[	Na	23	
[	Mg	24	
[	K	39	
[	Ca	43	
[	Fe	54	
[	Fe	57	
>	Sc-1	45	
[	Cl	35	
[	Kr	83	
[	Br	81	
[	P	31	
[	S	34	
[	Sr	88	
[	C	12	
[	N	14	
[	Hg	202	

QC Out of Limits

Measurement Type	Analyte	Mass	Out of Limits Message

Sample ID: L1211033221 WG414134-01

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Method 6020 - Summary Report

Sample ID: L1211033201

Sample Date/Time: Sunday, November 18, 2012 17:55:56

Number of Replicates: 3

Autosampler Position: 406

Sample Description: 20

Method File: C:\NexIONData\Method\6020a.mth

Aliquot Volume (mL):

Diluted to Volume (mL):

User Name: JYH user

Cumulative Autodilution Factor: 1

Nexion-ICP 200.8\6020

Concentration Results

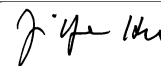
IS	Analyte	Mass	Intensity	RSD	Conc.	SD	RSD	Units	Blank Intens.	Mode
[	Li	7	18179.3	5.8	-7390.7559	690.708	9.3	ug/L	8369	Standard
	Be	9	118.3	8.8	0.0588	0.006	10.1	ug/L	18	Standard
	Al	27	838239.9	3.2	8.1903	0.261	3.2	ug/L	215	Standard
[>	Sc	45	44142.5	0.5				ug/L	53004	Standard
[	Ti	47	425.0	11.6	0.9065	0.081	9.0	ug/L	26	Standard
	V	51	11656.4	2.9	0.8833	0.015	1.7	ug/L	3223	Standard
	Cr	52	14962.4	2.7	0.6791	0.017	2.6	ug/L	10379	Standard
	Cr	53	1115.0	4.4	0.8381	0.026	3.0	ug/L	192	Standard
	Mn	55	372232.5	5.0	25.0239	0.491	2.0	ug/L	1840	Standard
	Co	59	5610.4	3.3	0.4769	0.004	0.8	ug/L	115	Standard
	Ni	60	3005.6	3.4	1.1912	0.019	1.6	ug/L	75	Standard
	Cu	65	1864.8	5.1	0.7306	0.016	2.2	ug/L	155	Standard
	Zn	66	10513.3	4.2	8.7846	0.149	1.7	ug/L	237	Standard
[>	Ge	72	353368.0	3.1				ug/L	413856	Standard
	As	75	175.7	6.4	0.2818	0.010	3.4	ug/L	-197	Standard
	Se	82	7.3	141.5	0.0725	0.096	132.1	ug/L	-5	Standard
[	Se-1	77	128.0	4.3	0.5510	0.105	19.1	ug/L	105	Standard
[>	Ga	71	1326.7	11.0				mg/L	225	Standard
[	Rb	85	10425.3	6.3				ug/L	28	Standard
[	Y	89	277521.5	4.3				ug/L	322845	Standard
[>	Rh	103	98.3	24.0				ug/L	92	Standard
[	Mo	98	47.7	53.4	0.0032	0.006	182.0	ug/L	18	Standard
	Ag	107	106.0	26.1	0.0073	0.004	49.5	ug/L	63	Standard
	Cd	111	64.3	14.5	0.0102	0.003	27.4	mg/L	20	Standard
	Cd	114	159.0	12.4	0.0105	0.002	16.6	ug/L	56	Standard
[>	In	115	576365.0	4.0				ug/L	657102	Standard
	Sn	118	322.0	6.8	-0.0125	0.001	8.3	ug/L	555	Standard
	Sb	123	35.5	37.6	0.0022	0.002	79.4	ug/L	62	Standard
[	Ba	135	24327.9	3.8	8.1281	0.035	0.4	ug/L	19	Standard
[	Ce	140	115297.2	2.7				ug/L	24	Standard
[>	Tb	159	836713.4	1.9				ug/L	910514	Standard
[	Ho	165	1634.4	3.5				ug/L	7	Standard
	Tl	203	121.7	9.7	0.0064	0.001	14.9	ug/L	13	Standard
	Tl	205	3.7	15.7	0.0112	0.001	13.0	ug/L	1	Standard
	Pb	206	128387.4	3.3	13.2175	0.171	1.3	ug/L	342	Standard
	Pb	207	103899.2	3.1	12.5775	0.140	1.1	ug/L	284	Standard
	Pb	208	488681.6	3.0	12.7439	0.126	1.0	ug/L	1363	Standard
	U	238	293.3	4.4	0.0295	0.001	3.9	ug/L	2	Standard
[>	Bi	209	443976.2	2.0				ug/L	470592	Standard

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Na	23	1.7	173.2	0.1848	0.311	168.5	mg/L	2	Standard
Mg	24	4417.3	11.1	-0.0003	0.000	90.3	mg/L	5586	Standard
K	39	13.3	21.7	0.1765	0.048	27.2	mg/L	5	Standard
Ca	43	63.3	36.5	1.0022	1.161	115.8	mg/L	45	Standard
Fe	54	1898.8	9.1	0.7226	0.081	11.2	mg/L	350	Standard
Fe	57	601.7	12.1	1.0061	0.133	13.2	mg/L	102	Standard
Sc-1	45	44142.5	0.5				mg/L	53004	Standard
Cl	35	1.3	114.6				ug/L	2	Standard
Kr	83	123.7	5.8				ug/L	157	Standard
Br	81	8.3	69.3				ug/L	3	Standard
P	31	40686.4	6.1				ug/L	91588	Standard
S	34	34515.1	2.1				ug/L	32556	Standard
Sr	88	78.3	13.3				ug/L	62	Standard
C	12	96.7	46.6				mg/L	133	Standard
N	14	0.0					mg/L	0	Standard
Hg	202	3.3	86.6				mg/L	7	Standard

QC Calculated Values

Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recovery
Li	7			
Be	9			
Al	27			
Sc	45			
Ti	47			
V	51			
Cr	52			
Cr	53			
Mn	55			
Co	59			
Ni	60			
Cu	65			
Zn	66			
Ge	72		85.384	
As	75			
Se	82			
Se-1	77			
Ga	71			
Rb	85			
Y	89			
Rh	103			

Sample ID: L1211033201

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[	Mo	98	
[	Ag	107	
[	Cd	111	
[	Cd	114	
>	In	115	87.713
[	Sn	118	
[	Sb	123	
[	Ba	135	
[	Ce	140	
>	Tb	159	
[	Ho	165	
[	Tl	203	
[	Tl	205	
[	Pb	206	
[	Pb	207	
[	Pb	208	
[	U	238	
>	Bi	209	94.344
[	Na	23	
[	Mg	24	
[	K	39	
[	Ca	43	
[	Fe	54	
[	Fe	57	
>	Sc-1	45	
[	Cl	35	
[	Kr	83	
[	Br	81	
[	P	31	
[	S	34	
[	Sr	88	
[	C	12	
[	N	14	
[	Hg	202	

QC Out of Limits

Measurement Type	Analyte	Mass	Out of Limits Message

Sample ID: L1211033201

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Method 6020 - Summary Report

Sample ID: L1211033202

Sample Date/Time: Sunday, November 18, 2012 17:59:08

Number of Replicates: 3

Autosampler Position: 407

Sample Description: 20

Method File: C:\NexIONData\Method\6020a.mth

Aliquot Volume (mL):

Diluted to Volume (mL):

User Name: JYH user

Cumulative Autodilution Factor: 1

Nexion-ICP 200.8\6020

Concentration Results

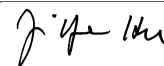
IS	Analyte	Mass	Intensity	RSD	Conc.	SD	RSD	Units	Blank Intens.	Mode
[	Li	7	21113.0	2.7	-8531.3956	333.684	3.9	ug/L	8369	Standard
	Be	9	138.3	33.4	0.0653	0.023	35.9	ug/L	18	Standard
	Al	27	554933.0	0.1	5.1114	0.160	3.1	ug/L	215	Standard
[>	Sc	45	46849.0	3.1				ug/L	53004	Standard
[	Ti	47	353.3	3.0	0.7106	0.030	4.3	ug/L	26	Standard
	V	51	15456.4	2.2	1.1928	0.020	1.7	ug/L	3223	Standard
	Cr	52	19507.6	0.6	1.0743	0.030	2.8	ug/L	10379	Standard
	Cr	53	1604.3	5.7	1.1950	0.058	4.8	ug/L	192	Standard
	Mn	55	498220.4	2.2	32.0912	0.419	1.3	ug/L	1840	Standard
	Co	59	8458.4	0.9	0.6951	0.007	1.1	ug/L	115	Standard
	Ni	60	3982.2	2.4	1.5204	0.051	3.3	ug/L	75	Standard
	Cu	65	3030.0	1.2	1.1690	0.035	3.0	ug/L	155	Standard
	Zn	66	8677.5	3.1	6.8991	0.221	3.2	ug/L	237	Standard
[>	Ge	72	369241.1	1.9				ug/L	413856	Standard
	As	75	310.0	14.0	0.3791	0.031	8.2	ug/L	-197	Standard
	Se	82	17.7	21.3	0.1587	0.035	22.2	ug/L	-5	Standard
[	Se-1	77	115.7	1.3	0.3430	0.041	11.8	ug/L	105	Standard
[>	Ga	71	1915.1	6.4				mg/L	225	Standard
[	Rb	85	16555.7	1.3				ug/L	28	Standard
[	Y	89	296279.9	3.9				ug/L	322845	Standard
[>	Rh	103	88.3	46.1				ug/L	92	Standard
[	Mo	98	73.2	18.6	0.0094	0.004	39.6	ug/L	18	Standard
	Ag	107	121.7	17.3	0.0092	0.003	35.2	ug/L	63	Standard
	Cd	111	72.9	7.2	0.0124	0.002	17.8	mg/L	20	Standard
	Cd	114	232.7	11.8	0.0189	0.003	14.3	ug/L	56	Standard
[>	In	115	593696.9	2.3				ug/L	657102	Standard
	Sn	118	347.0	2.9	-0.0108	0.000	4.5	ug/L	555	Standard
	Sb	123	37.4	16.9	0.0024	0.001	40.7	ug/L	62	Standard
[	Ba	135	53417.3	1.1	17.3527	0.357	2.1	ug/L	19	Standard
[	Ce	140	140290.2	1.1				ug/L	24	Standard
[>	Tb	159	868066.8	0.9				ug/L	910514	Standard
[	Ho	165	1822.4	4.5				ug/L	7	Standard
[	Tl	203	154.0	6.3	0.0088	0.001	9.9	ug/L	13	Standard
	Tl	205	5.7	10.2	0.0162	0.002	9.6	ug/L	1	Standard
	Pb	206	65651.3	2.1	6.5593	0.163	2.5	ug/L	342	Standard
	Pb	207	53052.7	1.7	6.2300	0.126	2.0	ug/L	284	Standard
	Pb	208	249672.1	1.9	6.3172	0.148	2.3	ug/L	1363	Standard
	U	238	786.4	2.6	0.0793	0.002	2.7	ug/L	2	Standard
[>	Bi	209	456442.4	0.7				ug/L	470592	Standard

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Na	23	0.0		0.0050	0.000	0.0	mg/L	2	Standard
Mg	24	2700.2	6.3	-0.0014	0.000	5.7	mg/L	5586	Standard
K	39	26.7	43.3	0.3689	0.177	48.0	mg/L	5	Standard
Ca	43	41.7	13.9	-0.2282	0.229	100.4	mg/L	45	Standard
Fe	54	2779.9	4.3	1.0546	0.024	2.3	mg/L	350	Standard
Fe	57	778.4	8.3	1.2577	0.153	12.2	mg/L	102	Standard
Sc-1	45	46849.0	3.1				mg/L	53004	Standard
Cl	35	3.0	0.0				ug/L	2	Standard
Kr	83	121.4	2.4				ug/L	157	Standard
Br	81	6.7	43.3				ug/L	3	Standard
P	31	42872.2	0.7				ug/L	91588	Standard
S	34	34788.2	0.4				ug/L	32556	Standard
Sr	88	81.7	3.5				ug/L	62	Standard
C	12	111.7	25.5				mg/L	133	Standard
N	14	0.0					mg/L	0	Standard
Hg	202	16.7	17.3				mg/L	7	Standard

QC Calculated Values

Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recovery
Li	7			
Be	9			
Al	27			
Sc	45			
Ti	47			
V	51			
Cr	52			
Cr	53			
Mn	55			
Co	59			
Ni	60			
Cu	65			
Zn	66			
Ge	72		89.220	
As	75			
Se	82			
Se-1	77			
Ga	71			
Rb	85			
Y	89			
Rh	103			

Sample ID: L1211033202

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[	Mo	98	
[	Ag	107	
[	Cd	111	
[	Cd	114	
>	In	115	90.351
[	Sn	118	
[	Sb	123	
[	Ba	135	
[	Ce	140	
>	Tb	159	
[	Ho	165	
[	Tl	203	
[	Tl	205	
[	Pb	206	
[	Pb	207	
[	Pb	208	
[	U	238	
>	Bi	209	96.993
[	Na	23	
[	Mg	24	
[	K	39	
[	Ca	43	
[	Fe	54	
[	Fe	57	
>	Sc-1	45	
[	Cl	35	
[	Kr	83	
[	Br	81	
[	P	31	
[	S	34	
[	Sr	88	
[	C	12	
[	N	14	
[	Hg	202	

QC Out of Limits

Measurement Type	Analyte	Mass	Out of Limits Message

Sample ID: L1211033202

Report Date/Time: Sunday, November 18, 2012 18:01:40

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Method 6020 - Summary Report

Sample ID: L1211033202PS WG414439-01

Sample Date/Time: Sunday, November 18, 2012 18:02:20

Number of Replicates: 3

Autosampler Position: 408

Sample Description: 20

Method File: C:\NexIONData\Method\6020a.mth

Aliquot Volume (mL):

Diluted to Volume (mL):

User Name: JYH user

Cumulative Autodilution Factor: 1

Nexion-ICP 200.8\6020

Concentration Results

IS	Analyte	Mass	Intensity	RSD	Conc.	SD	RSD	Units	Blank Intens.	Mode
[	Li	7	25322.9	6.0	-8817.7488	275.000	3.1	ug/L	8369	Standard
	Be	9	108476.8	7.8	50.2074	1.142	2.3	ug/L	18	Standard
	Al	27	630106.6	9.9	4.9357	0.275	5.6	ug/L	215	Standard
[>	Sc	45	55001.6	6.6				ug/L	53004	Standard
[	Ti	47	386.7	16.2	0.6730	0.076	11.2	ug/L	26	Standard
	V	51	581550.7	8.4	47.6461	1.498	3.1	ug/L	3223	Standard
	Cr	52	565270.4	8.4	49.3628	1.594	3.2	ug/L	10379	Standard
	Cr	53	69136.4	8.1	48.9489	1.411	2.9	ug/L	192	Standard
	Mn	55	1433024.6	7.3	80.6555	1.295	1.6	ug/L	1840	Standard
	Co	59	679110.6	7.5	49.7471	1.058	2.1	ug/L	115	Standard
	Ni	60	146347.0	8.0	49.8195	1.116	2.2	ug/L	75	Standard
	Cu	65	143859.6	8.0	50.7168	1.460	2.9	ug/L	155	Standard
	Zn	66	76895.0	7.2	54.6734	1.103	2.0	ug/L	237	Standard
[>	Ge	72	423025.9	5.8				ug/L	413856	Standard
	As	75	72978.2	6.3	49.3174	0.883	1.8	ug/L	-197	Standard
	Se	82	6534.1	6.5	49.3313	1.451	2.9	ug/L	-5	Standard
[	Se-1	77	5097.5	6.1	49.8406	0.506	1.0	ug/L	105	Standard
[>	Ga	71	2141.8	12.3				mg/L	225	Standard
	Rb	85	18996.9	4.7				ug/L	28	Standard
[	Y	89	337913.2	3.7				ug/L	322845	Standard
[>	Rh	103	140.0	29.2				ug/L	92	Standard
[	Mo	98	144.5	3.5	0.0233	0.001	3.9	ug/L	18	Standard
	Ag	107	387596.6	6.5	48.6619	1.401	2.9	ug/L	63	Standard
	Cd	111	171105.0	7.4	49.6178	2.047	4.1	mg/L	20	Standard
	Cd	114	448265.2	8.1	49.3819	2.265	4.6	ug/L	56	Standard
[>	In	115	660386.8	5.0				ug/L	657102	Standard
	Sn	118	1178.0	8.9	0.0683	0.006	8.5	ug/L	555	Standard
	Sb	123	389858.2	6.5	49.5138	1.352	2.7	ug/L	62	Standard
[	Ba	135	228611.8	5.4	66.8141	2.147	3.2	ug/L	19	Standard
[	Ce	140	147444.6	7.0				ug/L	24	Standard
[>	Tb	159	938249.9	4.7				ug/L	910514	Standard
[	Ho	165	2037.8	6.8				ug/L	7	Standard
	Tl	203	660339.1	4.9	49.9227	0.675	1.4	ug/L	13	Standard
	Tl	205	19792.6	3.0	49.0695	0.384	0.8	ug/L	1	Standard
	Pb	206	592453.2	6.7	55.8470	1.647	2.9	ug/L	342	Standard
	Pb	207	507602.9	6.0	56.2908	1.252	2.2	ug/L	284	Standard
	Pb	208	2336126.2	6.5	55.7935	1.512	2.7	ug/L	1363	Standard
	U	238	502811.0	7.9	48.5039	2.011	4.1	ug/L	2	Standard
[>	Bi	209	485527.5	3.8				ug/L	470592	Standard

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Na	23	0.0		0.0050	0.000	0.0	mg/L	2	Standard
Mg	24	3905.5	4.2	-0.0011	0.000	12.5	mg/L	5586	Standard
K	39	11.7	65.5	0.1077	0.088	82.1	mg/L	5	Standard
Ca	43	50.0	20.0	-0.1698	0.477	281.1	mg/L	45	Standard
Fe	54	3148.8	4.2	1.0136	0.033	3.2	mg/L	350	Standard
Fe	57	858.4	4.2	1.1750	0.108	9.2	mg/L	102	Standard
Sc-1	45	55001.6	6.6				mg/L	53004	Standard
Cl	35	4.0	50.0				ug/L	2	Standard
Kr	83	138.8	1.6				ug/L	157	Standard
Br	81	4.2	34.6				ug/L	3	Standard
P	31	119670.4	6.5				ug/L	91588	Standard
S	34	35149.9	3.0				ug/L	32556	Standard
Sr	88	93.3	40.2				ug/L	62	Standard
C	12	123.3	8.4				mg/L	133	Standard
N	14	3.3	86.6				mg/L	0	Standard
Hg	202	6.7	43.3				mg/L	7	Standard

QC Calculated Values

Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recovery
Li	7			
Be	9			
Al	27			
Sc	45			
Ti	47			
V	51			
Cr	52			
Cr	53			
Mn	55			
Co	59			
Ni	60			
Cu	65			
Zn	66			
Ge	72		102.216	
As	75			
Se	82			
Se-1	77			
Ga	71			
Rb	85			
Y	89			
Rh	103			

Sample ID: L1211033202PS WG414439-01

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[	Mo	98	
[	Ag	107	
[	Cd	111	
[	Cd	114	
>	In	115	100.500
[	Sn	118	
[	Sb	123	
[	Ba	135	
[	Ce	140	
>	Tb	159	
[	Ho	165	
[	Tl	203	
[	Tl	205	
[	Pb	206	
[	Pb	207	
[	Pb	208	
[	U	238	
>	Bi	209	103.174
[	Na	23	
[	Mg	24	
[	K	39	
[	Ca	43	
[	Fe	54	
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[	Cl	35	
[	Kr	83	
[	Br	81	
[	P	31	
[	S	34	
[	Sr	88	
[	C	12	
[	N	14	
[	Hg	202	

QC Out of Limits

Measurement Type	Analyte	Mass	Out of Limits Message

Sample ID: L1211033202PS WG414439-01

Report Date/Time: Sunday, November 18, 2012 18:04:52

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Method 6020 - Summary Report

Sample ID: L1211033202SDL WG414439-02

Sample Date/Time: Sunday, November 18, 2012 18:05:33

Number of Replicates: 3

Autosampler Position: 409

Sample Description: 100

Method File: C:\NexIONData\Method\6020a.mth

Aliquot Volume (mL):

Diluted to Volume (mL):

User Name: JYH user

Cumulative Autodilution Factor: 1

Nexion-ICP 200.8\6020

Concentration Results

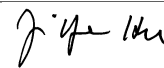
IS	Analyte	Mass	Intensity	RSD	Conc.	SD	RSD	Units	Blank Intens.	Mode
[	Li	7	11224.2	2.8	-1475.1735	117.174	7.9	ug/L	8369	Standard
	Be	9	56.7	60.1	0.0178	0.017	96.6	ug/L	18	Standard
	Al	27	123370.3	1.7	0.9932	0.040	4.0	ug/L	215	Standard
[>	Sc	45	53512.7	3.0				ug/L	53004	Standard
[	Ti	47	88.7	10.7	0.1131	0.015	13.4	ug/L	26	Standard
	V	51	5823.3	2.8	0.2249	0.017	7.8	ug/L	3223	Standard
	Cr	52	11764.9	1.9	0.1586	0.048	30.2	ug/L	10379	Standard
	Cr	53	497.5	7.6	0.2526	0.031	12.2	ug/L	192	Standard
	Mn	55	114019.9	2.0	6.5012	0.155	2.4	ug/L	1840	Standard
	Co	59	2042.8	4.4	0.1381	0.010	7.3	ug/L	115	Standard
	Ni	60	1121.0	2.0	0.3565	0.018	5.0	ug/L	75	Standard
	Cu	65	917.4	6.3	0.2744	0.013	4.7	ug/L	155	Standard
	Zn	66	4326.3	0.3	2.9676	0.076	2.5	ug/L	237	Standard
[>	Ge	72	412743.5	2.7				ug/L	413856	Standard
	As	75	-88.0	40.8	0.0793	0.025	31.1	ug/L	-197	Standard
	Se	82	0.4	2102.1	0.0090	0.070	785.1	ug/L	-5	Standard
[	Se-1	77	122.3	4.5	0.2716	0.057	20.9	ug/L	105	Standard
[>	Ga	71	608.3	8.4				mg/L	225	Standard
[	Rb	85	3577.1	7.6				ug/L	28	Standard
[	Y	89	305207.2	1.6				ug/L	322845	Standard
[>	Rh	103	93.3	18.8				ug/L	92	Standard
[	Mo	98	97.1	5.0	0.0133	0.001	9.4	ug/L	18	Standard
	Ag	107	146.0	17.8	0.0110	0.004	34.4	ug/L	63	Standard
	Cd	111	37.5	13.7	-0.0000	0.001	11189.7	mg/L	20	Standard
	Cd	114	122.9	7.7	0.0043	0.001	29.6	ug/L	56	Standard
[>	In	115	643678.1	2.3				ug/L	657102	Standard
	Sn	118	997.4	1.9	0.0529	0.002	3.3	ug/L	555	Standard
	Sb	123	317.4	23.4	0.0383	0.009	23.1	ug/L	62	Standard
[	Ba	135	11482.7	1.8	3.4239	0.019	0.6	ug/L	19	Standard
[	Ce	140	29624.6	1.2				ug/L	24	Standard
[>	Tb	159	924029.2	1.2				ug/L	910514	Standard
[	Ho	165	394.7	6.3				ug/L	7	Standard
	Tl	203	122.7	84.4	0.0057	0.008	138.1	ug/L	13	Standard
	Tl	205	6.7	45.8	0.0179	0.008	42.4	ug/L	1	Standard
	Pb	206	14222.0	1.7	1.3205	0.007	0.5	ug/L	342	Standard
	Pb	207	11518.7	2.9	1.2531	0.016	1.3	ug/L	284	Standard
	Pb	208	54486.0	1.8	1.2792	0.004	0.3	ug/L	1363	Standard
	U	238	228.0	34.6	0.0207	0.008	37.4	ug/L	2	Standard
[>	Bi	209	481573.9	1.7				ug/L	470592	Standard

Sample ID: L1211033202SDL WG414439-02

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Na	23	0.0		0.0050	0.000	0.0	mg/L	2	Standard
Mg	24	2063.5	2.1	-0.0019	0.000	0.9	mg/L	5586	Standard
K	39	6.7	43.3	0.0479	0.036	76.1	mg/L	5	Standard
Ca	43	30.0	57.7	-0.9513	0.779	81.9	mg/L	45	Standard
Fe	54	888.8	7.0	0.1845	0.016	8.7	mg/L	350	Standard
Fe	57	260.0	10.2	0.2765	0.043	15.7	mg/L	102	Standard
Sc-1	45	53512.7	3.0				mg/L	53004	Standard
Cl	35	5.0	40.0				ug/L	2	Standard
Kr	83	137.6	2.4				ug/L	157	Standard
Br	81	6.7	21.7				ug/L	3	Standard
P	31	99574.5	1.0				ug/L	91588	Standard
S	34	35642.7	1.4				ug/L	32556	Standard
Sr	88	76.7	26.4				ug/L	62	Standard
C	12	100.0	26.5				mg/L	133	Standard
N	14	0.0					mg/L	0	Standard
Hg	202	3.3	86.6				mg/L	7	Standard

QC Calculated Values

Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recovery
Li	7			
Be	9			
Al	27			
Sc	45			
Ti	47			
V	51			
Cr	52			
Cr	53			
Mn	55			
Co	59			
Ni	60			
Cu	65			
Zn	66			
Ge	72		99.731	
As	75			
Se	82			
Se-1	77			
Ga	71			
Rb	85			
Y	89			
Rh	103			

Sample ID: L1211033202SDL WG414439-02

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[	Mo	98	
[	Ag	107	
[	Cd	111	
[	Cd	114	
>	In	115	97.957
[	Sn	118	
[	Sb	123	
[	Ba	135	
[	Ce	140	
>	Tb	159	
[	Ho	165	
[	Tl	203	
[	Tl	205	
[	Pb	206	
[	Pb	207	
[	Pb	208	
[	U	238	
>	Bi	209	102.334
[	Na	23	
[	Mg	24	
[	K	39	
[	Ca	43	
[	Fe	54	
[	Fe	57	
>	Sc-1	45	
[	Cl	35	
[	Kr	83	
[	Br	81	
[	P	31	
[	S	34	
[	Sr	88	
[	C	12	
[	N	14	
[	Hg	202	

QC Out of Limits

Measurement Type	Analyte	Mass	Out of Limits Message

Sample ID: L1211033202SDL WG414439-02

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Method 6020 - Summary Report

Sample ID: QC Std 6

Sample Date/Time: Sunday, November 18, 2012 18:08:47

Number of Replicates: 3

Autosampler Position: 101

Sample Description:

Method File: C:\NexIONData\Method\6020a.mth

Aliquot Volume (mL):

Diluted to Volume (mL):

User Name: JYH user

Cumulative Autodilution Factor: 1

Nexion-ICP 200.8\6020

Concentration Results

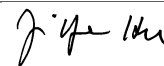
IS	Analyte	Mass	Intensity	RSD	Conc.	SD	RSD	Units	Blank Intens.	Mode
[	Li	7	8010.5	2.8	-6.8054	64.785	952.0	ug/L	8369	Standard
	Be	9	105900.7	3.4	53.7451	1.149	2.1	ug/L	18	Standard
	Al	27	6924115.3	2.2	59.5294	0.325	0.5	ug/L	215	Standard
[>	Sc	45	50176.3	1.6				ug/L	53004	Standard
[	Ti	47	49939.9	3.0	99.8752	1.541	1.5	ug/L	26	Standard
	V	51	569528.0	2.4	49.1459	0.326	0.7	ug/L	3223	Standard
	Cr	52	541859.9	1.9	49.8439	0.638	1.3	ug/L	10379	Standard
	Cr	53	66423.7	2.4	49.5177	0.178	0.4	ug/L	192	Standard
	Mn	55	848158.0	1.1	50.2282	0.536	1.1	ug/L	1840	Standard
	Co	59	654570.4	2.8	50.4743	0.342	0.7	ug/L	115	Standard
	Ni	60	138023.3	3.6	49.4659	0.805	1.6	ug/L	75	Standard
	Cu	65	136255.7	3.4	50.5707	0.855	1.7	ug/L	155	Standard
	Zn	66	68214.6	1.7	51.0447	0.245	0.5	ug/L	237	Standard
[>	Ge	72	402067.4	2.1				ug/L	413856	Standard
	As	75	71265.7	3.0	50.6702	0.798	1.6	ug/L	-197	Standard
	Se	82	6347.3	3.2	50.4152	0.821	1.6	ug/L	-5	Standard
[	Se-1	77	4980.8	1.4	51.2763	0.452	0.9	ug/L	105	Standard
[>	Ga	71	223.3	20.3				mg/L	225	Standard
[	Rb	85	1651.8	3.5				ug/L	28	Standard
[	Y	89	299609.8	2.8				ug/L	322845	Standard
[>	Rh	103	143.3	14.5				ug/L	92	Standard
[	Mo	98	430658.6	2.3	98.7942	1.533	1.6	ug/L	18	Standard
	Ag	107	380873.4	2.1	49.6666	0.702	1.4	ug/L	63	Standard
	Cd	111	169467.8	1.2	51.0536	0.465	0.9	mg/L	20	Standard
	Cd	114	445782.2	1.0	51.0311	0.801	1.6	ug/L	56	Standard
[>	In	115	636001.7	1.2				ug/L	657102	Standard
	Sn	118	497107.0	1.0	51.5622	0.160	0.3	ug/L	555	Standard
	Sb	123	393215.8	0.5	51.8778	0.534	1.0	ug/L	62	Standard
[	Ba	135	170052.6	0.2	51.5986	0.728	1.4	ug/L	19	Standard
[	Ce	140	577.0	2.6				ug/L	24	Standard
[>	Tb	159	907520.4	0.5				ug/L	910514	Standard
[	Ho	165	456.3	3.3				ug/L	7	Standard
[	Tl	203	641710.7	0.9	50.6491	0.227	0.4	ug/L	13	Standard
	Tl	205	19677.1	1.2	50.9080	0.544	1.1	ug/L	1	Standard
	Pb	206	523563.3	1.3	51.5468	0.234	0.5	ug/L	342	Standard
	Pb	207	447149.8	1.2	51.7808	0.095	0.2	ug/L	284	Standard
	Pb	208	2050035.3	0.8	51.1349	0.206	0.4	ug/L	1363	Standard
	U	238	518509.5	1.0	52.2610	0.231	0.4	ug/L	2	Standard
[>	Bi	209	465188.5	1.2				ug/L	470592	Standard

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Na	23	0.0		0.0050	0.000	0.0	mg/L	2	Standard
Mg	24	306662.3	0.1	0.1561	0.003	1.7	mg/L	5586	Standard
K	39	360.0	4.8	5.1288	0.191	3.7	mg/L	5	Standard
Ca	43	186.7	21.7	6.1443	1.676	27.3	mg/L	45	Standard
Fe	54	13538.0	3.1	5.3399	0.083	1.5	mg/L	350	Standard
Fe	57	3312.0	2.2	5.3662	0.063	1.2	mg/L	102	Standard
Sc-1	45	50176.3	1.6				mg/L	53004	Standard
Cl	35	2.0	50.0				ug/L	2	Standard
Kr	83	141.9	5.5				ug/L	157	Standard
Br	81	5.8	65.5				ug/L	3	Standard
P	31	120389.0	2.2				ug/L	91588	Standard
S	34	40677.1	2.8				ug/L	32556	Standard
Sr	88	58.3	26.2				ug/L	62	Standard
C	12	130.0	30.5				mg/L	133	Standard
N	14	0.0					mg/L	0	Standard
Hg	202	11.7	49.5				mg/L	7	Standard

QC Calculated Values

Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recovery
Li	7			
Be	9	107.490		
Al	27	119.059		
Sc	45			
Ti	47	99.875		
V	51	98.292		
Cr	52	99.688		
Cr	53			
Mn	55	100.456		
Co	59	100.949		
Ni	60	98.932		
Cu	65	101.141		
Zn	66	102.089		
Ge	72		97.152	
As	75	101.340		
Se	82	100.830		
Se-1	77			
Ga	71			
Rb	85			
Y	89			
Rh	103			

Sample ID: QC Std 6

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[	Mo	98	98.794	
[	Ag	107	99.333	
[	Cd	111	102.107	
[	Cd	114		
>	In	115		96.789
[	Sn	118	103.124	
[	Sb	123	103.756	
[	Ba	135	103.197	
[	Ce	140		
>	Tb	159		
[	Ho	165		
[	Tl	203	101.298	
[	Tl	205		
[	Pb	206	103.094	
[	Pb	207	103.562	
[	Pb	208	102.270	
[	U	238	104.522	
>	Bi	209		98.852
[	Na	23		
[	Mg	24		
[	K	39		
[	Ca	43		
[	Fe	54		
[	Fe	57		
>	Sc-1	45		
[	Cl	35		
[	Kr	83		
[	Br	81		
[	P	31		
[	S	34		
[	Sr	88		
[	C	12		
[	N	14		
[	Hg	202		

QC Out of Limits

Measurement Type	Analyte	Mass	Out of Limits Message
QC Std 6	Al	27	

Sample ID: QC Std 6

Report Date/Time: Sunday, November 18, 2012 18:11:19

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Method 6020 - Summary Report

Sample ID: QC Std 7

Sample Date/Time: Sunday, November 18, 2012 18:12:00

Number of Replicates: 3

Autosampler Position: 102

Sample Description:

Method File: C:\NexIONData\Method\6020a.mth

Aliquot Volume (mL):

Diluted to Volume (mL):

User Name: JYH user

Cumulative Autodilution Factor: 1

Nexion-ICP 200.8\6020

Concentration Results

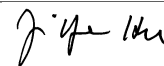
IS	Analyte	Mass	Intensity	RSD	Conc.	SD	RSD	Units	Blank Intens.	Mode
[	Li	7	8113.8	1.0	11.0987	211.054	1901.6	ug/L	8369	Standard
	Be	9	20.0	109.0	0.0004	0.011	2604.1	ug/L	18	Standard
	Al	27	1561.8	108.4	0.0107	0.014	128.9	ug/L	215	Standard
[>	Sc	45	51099.5	4.9				ug/L	53004	Standard
[	Ti	47	23.0	15.1	-0.0140	0.007	49.4	ug/L	26	Standard
	V	51	2719.5	6.3	-0.0332	0.022	65.9	ug/L	3223	Standard
	Cr	52	8874.9	1.0	-0.0912	0.032	35.2	ug/L	10379	Standard
	Cr	53	145.0	9.1	-0.0025	0.007	288.3	ug/L	192	Standard
	Mn	55	3928.9	103.7	0.1373	0.229	166.5	ug/L	1840	Standard
	Co	59	484.7	122.1	0.0206	0.043	210.9	ug/L	115	Standard
	Ni	60	225.7	116.2	0.0429	0.089	208.3	ug/L	75	Standard
	Cu	65	313.3	45.7	0.0568	0.048	85.2	ug/L	155	Standard
	Zn	66	312.0	23.7	0.0318	0.047	147.8	ug/L	237	Standard
[>	Ge	72	405750.6	3.6				ug/L	413856	Standard
	As	75	-147.2	18.6	0.0360	0.023	63.3	ug/L	-197	Standard
	Se	82	7.9	89.9	0.0660	0.055	82.8	ug/L	-5	Standard
[	Se-1	77	114.0	3.5	0.2079	0.076	36.4	ug/L	105	Standard
[>	Ga	71	196.7	9.6				mg/L	225	Standard
[	Rb	85	35.0	37.8				ug/L	28	Standard
[	Y	89	302076.6	3.0				ug/L	322845	Standard
[>	Rh	103	101.7	31.6				ug/L	92	Standard
[	Mo	98	102.3	98.4	0.0142	0.022	154.9	ug/L	18	Standard
	Ag	107	154.3	46.4	0.0120	0.009	72.4	ug/L	63	Standard
	Cd	111	43.5	86.0	0.0017	0.011	640.3	mg/L	20	Standard
	Cd	114	115.2	67.3	0.0034	0.008	247.4	ug/L	56	Standard
[>	In	115	640208.7	2.8				ug/L	657102	Standard
	Sn	118	414.0	13.9	-0.0068	0.005	69.7	ug/L	555	Standard
	Sb	123	374.8	37.8	0.0459	0.017	37.2	ug/L	62	Standard
[	Ba	135	65.3	69.8	-0.0004	0.014	3493.8	ug/L	19	Standard
[	Ce	140	41.3	58.4				ug/L	24	Standard
[>	Tb	159	902397.2	1.5				ug/L	910514	Standard
[	Ho	165	12.3	23.4				ug/L	7	Standard
	Tl	203	129.3	91.6	0.0064	0.009	143.5	ug/L	13	Standard
	Tl	205	0.7	86.6	0.0030	0.001	49.2	ug/L	1	Standard
	Pb	206	426.3	26.9	0.0085	0.011	130.2	ug/L	342	Standard
	Pb	207	341.0	16.8	0.0029	0.006	224.3	ug/L	284	Standard
	Pb	208	1638.7	20.8	0.0059	0.008	140.8	ug/L	1363	Standard
	U	238	56.7	91.1	0.0041	0.005	124.9	ug/L	2	Standard
[>	Bi	209	471357.3	0.3				ug/L	470592	Standard

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Na	23	3.3	173.2	0.3361	0.573	170.6	mg/L	2	Standard
Mg	24	1268.4	19.9	-0.0023	0.000	4.6	mg/L	5586	Standard
K	39	5.0	0.0	0.0293	0.004	12.1	mg/L	5	Standard
Ca	43	50.0	26.5	-0.0058	0.667	11408.0	mg/L	45	Standard
Fe	54	325.7	6.9	-0.0235	0.010	42.5	mg/L	350	Standard
Fe	57	136.7	16.9	0.0955	0.045	46.6	mg/L	102	Standard
Sc-1	45	51099.5	4.9				mg/L	53004	Standard
Cl	35	3.3	75.5				ug/L	2	Standard
Kr	83	138.3	4.1				ug/L	157	Standard
Br	81	5.0	50.0				ug/L	3	Standard
P	31	119481.0	2.0				ug/L	91588	Standard
S	34	39316.0	1.5				ug/L	32556	Standard
Sr	88	71.7	33.0				ug/L	62	Standard
C	12	106.7	16.5				mg/L	133	Standard
N	14	0.0					mg/L	0	Standard
Hg	202	1.7	173.2				mg/L	7	Standard

QC Calculated Values

Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recovery
Li	7			
Be	9			
Al	27			
Sc	45			
Ti	47			
V	51			
Cr	52			
Cr	53			
Mn	55			
Co	59			
Ni	60			
Cu	65			
Zn	66			
Ge	72		98.042	
As	75			
Se	82			
Se-1	77			
Ga	71			
Rb	85			
Y	89			
Rh	103			

Sample ID: QC Std 7

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[	Mo	98	
[	Ag	107	
[	Cd	111	
[	Cd	114	
>	In	115	97.429
[	Sn	118	
[	Sb	123	
[	Ba	135	
[	Ce	140	
>	Tb	159	
[	Ho	165	
[	Tl	203	
[	Tl	205	
[	Pb	206	
[	Pb	207	
[	Pb	208	
[	U	238	
>	Bi	209	100.163
[	Na	23	
[	Mg	24	
[	K	39	
[	Ca	43	
[	Fe	54	
[	Fe	57	
>	Sc-1	45	
[	Cl	35	
[	Kr	83	
[	Br	81	
[	P	31	
[	S	34	
[	Sr	88	
[	C	12	
[	N	14	
[	Hg	202	

QC Out of Limits

Measurement Type	Analyte	Mass	Out of Limits Message

Sample ID: QC Std 7

Report Date/Time: Sunday, November 18, 2012 18:14:32

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Method 6020 - Summary Report

Sample ID: L1211033203

Sample Date/Time: Sunday, November 18, 2012 18:15:14

Number of Replicates: 3

Autosampler Position: 410

Sample Description: 20

Method File: C:\NexIONData\Method\6020a.mth

Aliquot Volume (mL):

Diluted to Volume (mL):

User Name: JYH user

Cumulative Autodilution Factor: 1

Nexion-ICP 200.8\6020

Concentration Results

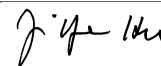
IS	Analyte	Mass	Intensity	RSD	Conc.	SD	RSD	Units	Blank Intens.	Mode
[	Li	7	14496.9	1.2	-4410.3845	239.077	5.4	ug/L	8369	Standard
	Be	9	168.3	11.2	0.0824	0.012	14.8	ug/L	18	Standard
	Al	27	425972.1	1.1	3.9273	0.036	0.9	ug/L	215	Standard
[>	Sc	45	46773.8	1.9				ug/L	53004	Standard
[	Ti	47	144.7	8.2	0.2626	0.030	11.3	ug/L	26	Standard
	V	51	14806.4	1.5	1.1617	0.050	4.3	ug/L	3223	Standard
	Cr	52	19205.5	2.4	1.0857	0.081	7.4	ug/L	10379	Standard
	Cr	53	1599.3	2.9	1.2202	0.076	6.2	ug/L	192	Standard
	Mn	55	320255.4	1.5	21.0486	0.879	4.2	ug/L	1840	Standard
	Co	59	5349.9	1.6	0.4437	0.021	4.7	ug/L	115	Standard
	Ni	60	2772.3	2.4	1.0712	0.055	5.2	ug/L	75	Standard
	Cu	65	2621.6	1.3	1.0263	0.037	3.6	ug/L	155	Standard
	Zn	66	5774.4	3.0	4.6243	0.124	2.7	ug/L	237	Standard
[>	Ge	72	361627.5	3.0				ug/L	413856	Standard
	As	75	180.4	23.3	0.2822	0.033	11.6	ug/L	-197	Standard
	Se	82	11.9	59.6	0.1105	0.063	56.7	ug/L	-5	Standard
[	Se-1	77	120.0	4.2	0.4229	0.101	23.8	ug/L	105	Standard
[>	Ga	71	1165.0	6.0				mg/L	225	Standard
[	Rb	85	9504.6	1.0				ug/L	28	Standard
[	Y	89	284361.4	2.5				ug/L	322845	Standard
[>	Rh	103	86.7	31.8				ug/L	92	Standard
[	Mo	98	56.4	74.3	0.0054	0.011	195.9	ug/L	18	Standard
	Ag	107	177.7	9.4	0.0173	0.003	15.2	ug/L	63	Standard
	Cd	111	75.9	19.1	0.0136	0.005	35.6	mg/L	20	Standard
	Cd	114	208.1	13.7	0.0163	0.004	22.6	ug/L	56	Standard
[>	In	115	586258.3	1.1				ug/L	657102	Standard
	Sn	118	369.7	6.5	-0.0077	0.003	40.4	ug/L	555	Standard
	Sb	123	90.7	29.5	0.0101	0.004	39.3	ug/L	62	Standard
[	Ba	135	125395.1	1.0	41.2711	0.597	1.4	ug/L	19	Standard
[	Ce	140	118759.0	0.9				ug/L	24	Standard
[>	Tb	159	855674.1	1.0				ug/L	910514	Standard
[	Ho	165	1749.4	1.3				ug/L	7	Standard
	Tl	203	112.7	28.5	0.0054	0.003	49.7	ug/L	13	Standard
	Tl	205	3.7	87.7	0.0110	0.008	77.2	ug/L	1	Standard
	Pb	206	41257.1	0.5	4.0933	0.027	0.7	ug/L	342	Standard
	Pb	207	33518.0	1.3	3.9073	0.080	2.0	ug/L	284	Standard
	Pb	208	158014.8	0.5	3.9695	0.047	1.2	ug/L	1363	Standard
	U	238	657.3	1.8	0.0657	0.001	2.1	ug/L	2	Standard
[>	Bi	209	458251.4	1.1				ug/L	470592	Standard

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Na	23	1.7	173.2	0.1739	0.292	168.2	mg/L	2	Standard
Mg	24	2273.5	5.7	-0.0017	0.000	3.0	mg/L	5586	Standard
K	39	11.7	24.7	0.1391	0.049	34.9	mg/L	5	Standard
Ca	43	80.0	39.0	1.6229	1.471	90.6	mg/L	45	Standard
Fe	54	1644.5	5.4	0.5623	0.029	5.1	mg/L	350	Standard
Fe	57	555.0	9.0	0.8608	0.107	12.4	mg/L	102	Standard
Sc-1	45	46773.8	1.9				mg/L	53004	Standard
Cl	35	2.0	86.6				ug/L	2	Standard
Kr	83	126.2	3.9				ug/L	157	Standard
Br	81	8.3	96.4				ug/L	3	Standard
P	31	43423.9	4.1				ug/L	91588	Standard
S	34	38759.5	3.3				ug/L	32556	Standard
Sr	88	100.0	18.0				ug/L	62	Standard
C	12	88.3	22.9				mg/L	133	Standard
N	14	0.0					mg/L	0	Standard
Hg	202	6.7	43.3				mg/L	7	Standard

QC Calculated Values

Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recovery
Li	7			
Be	9			
Al	27			
Sc	45			
Ti	47			
V	51			
Cr	52			
Cr	53			
Mn	55			
Co	59			
Ni	60			
Cu	65			
Zn	66			
Ge	72		87.380	
As	75			
Se	82			
Se-1	77			
Ga	71			
Rb	85			
Y	89			
Rh	103			

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[	Mo	98	
[	Ag	107	
[	Cd	111	
[	Cd	114	
>	In	115	89.219
[	Sn	118	
[	Sb	123	
[	Ba	135	
[	Ce	140	
>	Tb	159	
[	Ho	165	
[	Tl	203	
[	Tl	205	
[	Pb	206	
[	Pb	207	
[	Pb	208	
[	U	238	
>	Bi	209	97.378
[	Na	23	
[	Mg	24	
[	K	39	
[	Ca	43	
[	Fe	54	
[	Fe	57	
>	Sc-1	45	
[	Cl	35	
[	Kr	83	
[	Br	81	
[	P	31	
[	S	34	
[	Sr	88	
[	C	12	
[	N	14	
[	Hg	202	

QC Out of Limits

Measurement Type	Analyte	Mass	Out of Limits Message

Sample ID: L1211033203

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Method 6020 - Summary Report

Sample ID: L1211033204

Sample Date/Time: Sunday, November 18, 2012 18:18:26

Number of Replicates: 3

Autosampler Position: 411

Sample Description: 20

Method File: C:\NexIONData\Method\6020a.mth

Aliquot Volume (mL):

Diluted to Volume (mL):

User Name: JYH user

Cumulative Autodilution Factor: 1

Nexion-ICP 200.8\6020

Concentration Results

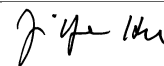
IS	Analyte	Mass	Intensity	RSD	Conc.	SD	RSD	Units	Blank Intens.	Mode
[	Li	7	31731.6	3.8	-14795.8993	462.536	3.1	ug/L	8369	Standard
	Be	9	233.3	8.1	0.1151	0.009	8.1	ug/L	18	Standard
	Al	27	1121918.4	0.6	10.1440	0.317	3.1	ug/L	215	Standard
[>	Sc	45	47730.1	2.5				ug/L	53004	Standard
[	Ti	47	308.0	8.8	0.5965	0.055	9.2	ug/L	26	Standard
	V	51	18649.8	0.4	1.4553	0.022	1.5	ug/L	3223	Standard
	Cr	52	24268.8	0.6	1.5046	0.042	2.8	ug/L	10379	Standard
	Cr	53	2166.0	4.2	1.6137	0.092	5.7	ug/L	192	Standard
	Mn	55	682381.8	0.5	43.0070	0.751	1.7	ug/L	1840	Standard
	Co	59	12492.5	1.1	1.0105	0.013	1.3	ug/L	115	Standard
	Ni	60	6485.7	1.6	2.4415	0.054	2.2	ug/L	75	Standard
	Cu	65	4366.6	2.5	1.6704	0.061	3.6	ug/L	155	Standard
	Zn	66	11359.9	0.9	8.8862	0.185	2.1	ug/L	237	Standard
[>	Ge	72	377682.5	1.3				ug/L	413856	Standard
	As	75	329.1	2.4	0.3884	0.008	2.1	ug/L	-197	Standard
	Se	82	2.2	378.3	0.0235	0.070	298.6	ug/L	-5	Standard
[	Se-1	77	133.3	5.5	0.5107	0.092	18.1	ug/L	105	Standard
[>	Ga	71	2781.9	6.3				mg/L	225	Standard
[	Rb	85	26421.4	3.9				ug/L	28	Standard
[	Y	89	298700.3	2.7				ug/L	322845	Standard
[>	Rh	103	93.3	36.5				ug/L	92	Standard
[	Mo	98	25.1	11.3	-0.0025	0.001	30.9	ug/L	18	Standard
	Ag	107	122.0	15.2	0.0092	0.003	30.1	ug/L	63	Standard
	Cd	111	81.6	3.7	0.0153	0.001	4.1	mg/L	20	Standard
	Cd	114	215.5	6.1	0.0170	0.001	8.0	ug/L	56	Standard
[>	In	115	591510.8	1.5				ug/L	657102	Standard
	Sn	118	327.7	3.1	-0.0128	0.002	12.6	ug/L	555	Standard
	Sb	123	46.4	17.9	0.0037	0.001	34.9	ug/L	62	Standard
[	Ba	135	60410.9	1.2	19.6955	0.138	0.7	ug/L	19	Standard
[	Ce	140	200695.2	0.8				ug/L	24	Standard
[>	Tb	159	868472.0	1.4				ug/L	910514	Standard
[	Ho	165	2727.6	4.3				ug/L	7	Standard
	Tl	203	200.7	3.3	0.0125	0.001	5.4	ug/L	13	Standard
	Tl	205	5.7	36.7	0.0163	0.006	33.9	ug/L	1	Standard
	Pb	206	22868.9	0.9	2.2677	0.035	1.6	ug/L	342	Standard
	Pb	207	18497.3	2.3	2.1529	0.068	3.2	ug/L	284	Standard
	Pb	208	87207.1	1.7	2.1883	0.056	2.5	ug/L	1363	Standard
	U	238	1327.7	1.7	0.1351	0.002	1.6	ug/L	2	Standard
[>	Bi	209	455598.0	0.9				ug/L	470592	Standard

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Na	23	0.0		0.0050	0.000	0.0	mg/L	2	Standard
Mg	24	3990.5	2.7	-0.0007	0.000	3.2	mg/L	5586	Standard
K	39	13.3	57.3	0.1612	0.119	73.9	mg/L	5	Standard
Ca	43	50.0	17.3	0.1354	0.429	316.8	mg/L	45	Standard
Fe	54	3716.0	3.9	1.4322	0.057	4.0	mg/L	350	Standard
Fe	57	1040.0	8.1	1.6850	0.126	7.5	mg/L	102	Standard
Sc-1	45	47730.1	2.5				mg/L	53004	Standard
Cl	35	1.7	69.3				ug/L	2	Standard
Kr	83	139.2	2.6				ug/L	157	Standard
Br	81	7.5	33.3				ug/L	3	Standard
P	31	42995.1	1.2				ug/L	91588	Standard
S	34	37656.7	1.4				ug/L	32556	Standard
Sr	88	100.0	21.8				ug/L	62	Standard
C	12	101.7	15.8				mg/L	133	Standard
N	14	3.3	173.2				mg/L	0	Standard
Hg	202	8.3	34.6				mg/L	7	Standard

QC Calculated Values

Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recovery
Li	7			
Be	9			
Al	27			
Sc	45			
Ti	47			
V	51			
Cr	52			
Cr	53			
Mn	55			
Co	59			
Ni	60			
Cu	65			
Zn	66			
Ge	72		91.259	
As	75			
Se	82			
Se-1	77			
Ga	71			
Rb	85			
Y	89			
Rh	103			

Sample ID: L1211033204

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[	Mo	98	
[	Ag	107	
[	Cd	111	
[	Cd	114	
>	In	115	90.018
[	Sn	118	
[	Sb	123	
[	Ba	135	
[	Ce	140	
>	Tb	159	
[	Ho	165	
[	Tl	203	
[	Tl	205	
[	Pb	206	
[	Pb	207	
[	Pb	208	
[	U	238	
>	Bi	209	96.814
[	Na	23	
[	Mg	24	
[	K	39	
[	Ca	43	
[	Fe	54	
[	Fe	57	
>	Sc-1	45	
[	Cl	35	
[	Kr	83	
[	Br	81	
[	P	31	
[	S	34	
[	Sr	88	
[	C	12	
[	N	14	
[	Hg	202	

QC Out of Limits

Measurement Type	Analyte	Mass	Out of Limits Message

Sample ID: L1211033204

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Method 6020 - Summary Report

Sample ID: L1211033205

Sample Date/Time: Sunday, November 18, 2012 18:21:40

Number of Replicates: 3

Autosampler Position: 412

Sample Description: 20

Method File: C:\NexIONData\Method\6020a.mth

Aliquot Volume (mL):

Diluted to Volume (mL):

User Name: JYH user

Cumulative Autodilution Factor: 1

Nexion-ICP 200.8\6020

Concentration Results

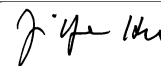
IS	Analyte	Mass	Intensity	RSD	Conc.	SD	RSD	Units	Blank Intens.	Mode
[	Li	7	17603.6	0.8	-6358.1877	333.060	5.2	ug/L	8369	Standard
	Be	9	150.0	20.8	0.0720	0.015	21.1	ug/L	18	Standard
	Al	27	577314.1	2.0	5.3242	0.107	2.0	ug/L	215	Standard
[>	Sc	45	46772.1	2.6				ug/L	53004	Standard
[	Ti	47	146.3	7.2	0.2538	0.027	10.5	ug/L	26	Standard
	V	51	12027.8	3.9	0.8486	0.051	6.0	ug/L	3223	Standard
	Cr	52	15677.8	0.9	0.6548	0.035	5.4	ug/L	10379	Standard
	Cr	53	1162.5	6.5	0.8188	0.054	6.5	ug/L	192	Standard
	Mn	55	302308.8	0.1	19.0870	0.236	1.2	ug/L	1840	Standard
	Co	59	5788.8	1.0	0.4621	0.011	2.4	ug/L	115	Standard
	Ni	60	3078.6	1.2	1.1454	0.010	0.9	ug/L	75	Standard
	Cu	65	2381.9	4.3	0.8887	0.029	3.3	ug/L	155	Standard
	Zn	66	6132.2	1.6	4.7271	0.137	2.9	ug/L	237	Standard
[>	Ge	72	376021.3	1.3				ug/L	413856	Standard
	As	75	158.8	19.4	0.2602	0.022	8.5	ug/L	-197	Standard
	Se	82	11.5	54.5	0.1026	0.052	50.8	ug/L	-5	Standard
[	Se-1	77	121.3	10.8	0.3835	0.164	42.7	ug/L	105	Standard
[>	Ga	71	1350.1	7.7				mg/L	225	Standard
[	Rb	85	10682.1	1.7				ug/L	28	Standard
[	Y	89	300436.5	3.3				ug/L	322845	Standard
[>	Rh	103	78.3	7.4				ug/L	92	Standard
[	Mo	98	17.4	29.9	-0.0044	0.001	29.4	ug/L	18	Standard
	Ag	107	102.3	19.6	0.0063	0.003	43.4	ug/L	63	Standard
	Cd	111	52.0	11.7	0.0054	0.002	34.1	mg/L	20	Standard
	Cd	114	139.1	5.9	0.0073	0.001	9.9	ug/L	56	Standard
[>	In	115	599759.4	1.8				ug/L	657102	Standard
	Sn	118	380.0	5.8	-0.0076	0.002	25.4	ug/L	555	Standard
	Sb	123	48.5	17.0	0.0039	0.001	30.8	ug/L	62	Standard
[	Ba	135	29697.7	1.0	9.5397	0.147	1.5	ug/L	19	Standard
[	Ce	140	119095.3	1.5				ug/L	24	Standard
[>	Tb	159	865612.8	2.2				ug/L	910514	Standard
[	Ho	165	1805.8	1.4				ug/L	7	Standard
	Tl	203	130.0	11.9	0.0067	0.001	20.5	ug/L	13	Standard
	Tl	205	3.3	45.8	0.0100	0.004	38.5	ug/L	1	Standard
	Pb	206	13420.6	1.5	1.3013	0.031	2.4	ug/L	342	Standard
	Pb	207	10789.2	0.8	1.2257	0.029	2.3	ug/L	284	Standard
	Pb	208	50785.7	1.0	1.2448	0.030	2.4	ug/L	1363	Standard
	U	238	864.7	5.9	0.0864	0.004	4.9	ug/L	2	Standard
[>	Bi	209	461054.8	1.6				ug/L	470592	Standard

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Na	23	1.7	173.2	0.1809	0.305	168.4	mg/L	2	Standard
Mg	24	2556.9	8.1	-0.0015	0.000	7.9	mg/L	5586	Standard
K	39	11.7	65.5	0.1381	0.115	83.5	mg/L	5	Standard
Ca	43	55.0	45.5	0.4416	1.277	289.2	mg/L	45	Standard
Fe	54	1969.9	3.9	0.7045	0.036	5.1	mg/L	350	Standard
Fe	57	565.0	13.0	0.8782	0.136	15.5	mg/L	102	Standard
Sc-1	45	46772.1	2.6				mg/L	53004	Standard
Cl	35	3.3	62.4				ug/L	2	Standard
Kr	83	130.7	3.3				ug/L	157	Standard
Br	81	5.0	50.0				ug/L	3	Standard
P	31	42583.9	1.4				ug/L	91588	Standard
S	34	36381.1	0.8				ug/L	32556	Standard
Sr	88	76.7	29.4				ug/L	62	Standard
C	12	118.3	25.5				mg/L	133	Standard
N	14	0.0					mg/L	0	Standard
Hg	202	16.7	17.3				mg/L	7	Standard

QC Calculated Values

Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recovery
Li	7			
Be	9			
Al	27			
Sc	45			
Ti	47			
V	51			
Cr	52			
Cr	53			
Mn	55			
Co	59			
Ni	60			
Cu	65			
Zn	66			
Ge	72		90.858	
As	75			
Se	82			
Se-1	77			
Ga	71			
Rb	85			
Y	89			
Rh	103			

Sample ID: L1211033205

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[	Mo	98	
[	Ag	107	
[	Cd	111	
[	Cd	114	
>	In	115	91.273
[	Sn	118	
[	Sb	123	
[	Ba	135	
[	Ce	140	
>	Tb	159	
[	Ho	165	
[	Tl	203	
[	Tl	205	
[	Pb	206	
[	Pb	207	
[	Pb	208	
[	U	238	
>	Bi	209	97.973
[	Na	23	
[	Mg	24	
[	K	39	
[	Ca	43	
[	Fe	54	
[	Fe	57	
>	Sc-1	45	
[	Cl	35	
[	Kr	83	
[	Br	81	
[	P	31	
[	S	34	
[	Sr	88	
[	C	12	
[	N	14	
[	Hg	202	

QC Out of Limits

Measurement Type	Analyte	Mass	Out of Limits Message

Sample ID: L1211033205

Report Date/Time: Sunday, November 18, 2012 18:24:12

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Method 6020 - Summary Report

Sample ID: L1211033206

Sample Date/Time: Sunday, November 18, 2012 18:24:52

Number of Replicates: 3

Autosampler Position: 413

Sample Description: 20

Method File: C:\NexIONData\Method\6020a.mth

Aliquot Volume (mL):

Diluted to Volume (mL):

User Name: JYH user

Cumulative Autodilution Factor: 1

Nexion-ICP 200.8\6020

Concentration Results

IS	Analyte	Mass	Intensity	RSD	Conc.	SD	RSD	Units	Blank Intens.	Mode
[	Li	7	19140.4	2.3	-7583.6464	114.515	1.5	ug/L	8369	Standard
	Be	9	126.7	2.3	0.0611	0.001	1.8	ug/L	18	Standard
	Al	27	620058.8	0.9	5.8483	0.182	3.1	ug/L	215	Standard
[>	Sc	45	45745.6	2.2				ug/L	53004	Standard
[	Ti	47	268.7	5.8	0.5385	0.045	8.3	ug/L	26	Standard
	V	51	13296.8	3.5	1.0144	0.017	1.6	ug/L	3223	Standard
	Cr	52	17917.6	3.0	0.9492	0.015	1.6	ug/L	10379	Standard
	Cr	53	1464.2	12.6	1.1042	0.129	11.6	ug/L	192	Standard
	Mn	55	365145.0	2.0	23.9831	0.209	0.9	ug/L	1840	Standard
	Co	59	6767.8	5.0	0.5644	0.016	2.9	ug/L	115	Standard
	Ni	60	3421.7	1.8	1.3287	0.015	1.2	ug/L	75	Standard
	Cu	65	2509.9	2.9	0.9790	0.013	1.3	ug/L	155	Standard
	Zn	66	6812.5	0.8	5.4890	0.092	1.7	ug/L	237	Standard
[>	Ge	72	361785.4	2.2				ug/L	413856	Standard
	As	75	198.0	17.2	0.2957	0.024	8.0	ug/L	-197	Standard
	Se	82	5.1	262.5	0.0492	0.116	235.7	ug/L	-5	Standard
[	Se-1	77	126.0	5.2	0.4901	0.064	13.1	ug/L	105	Standard
[>	Ga	71	1610.1	5.1				mg/L	225	Standard
	Rb	85	13120.7	2.2				ug/L	28	Standard
[	Y	89	289853.9	2.4				ug/L	322845	Standard
[>	Rh	103	85.0	36.7				ug/L	92	Standard
[	Mo	98	41.4	15.8	0.0020	0.002	96.8	ug/L	18	Standard
	Ag	107	89.3	8.4	0.0052	0.001	26.7	ug/L	63	Standard
	Cd	111	56.3	25.9	0.0079	0.005	68.8	mg/L	20	Standard
	Cd	114	150.0	10.4	0.0096	0.002	17.0	ug/L	56	Standard
[>	In	115	568518.8	2.3				ug/L	657102	Standard
	Sn	118	323.3	7.0	-0.0118	0.003	28.7	ug/L	555	Standard
	Sb	123	33.4	12.1	0.0020	0.001	29.1	ug/L	62	Standard
[	Ba	135	46665.4	2.4	15.8274	0.369	2.3	ug/L	19	Standard
[	Ce	140	125596.3	2.3				ug/L	24	Standard
[>	Tb	159	836108.4	2.2				ug/L	910514	Standard
[	Ho	165	1738.4	2.4				ug/L	7	Standard
	Tl	203	122.0	9.3	0.0065	0.001	15.3	ug/L	13	Standard
	Tl	205	5.0	0.0	0.0149	0.000	0.5	ug/L	1	Standard
	Pb	206	133687.1	2.5	13.8449	0.299	2.2	ug/L	342	Standard
	Pb	207	107402.5	2.7	13.0781	0.294	2.2	ug/L	284	Standard
	Pb	208	509026.4	2.4	13.3529	0.271	2.0	ug/L	1363	Standard
	U	238	518.3	5.0	0.0535	0.003	5.2	ug/L	2	Standard
[>	Bi	209	441460.4	0.5				ug/L	470592	Standard

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Na	23	1.7	173.2	0.1838	0.310	168.5	mg/L	2	Standard
Mg	24	1981.8	3.6	-0.0018	0.000	1.0	mg/L	5586	Standard
K	39	18.3	31.5	0.2466	0.085	34.6	mg/L	5	Standard
Ca	43	41.7	18.3	-0.1746	0.381	218.1	mg/L	45	Standard
Fe	54	2209.4	3.7	0.8303	0.039	4.7	mg/L	350	Standard
Fe	57	611.7	13.5	0.9837	0.136	13.9	mg/L	102	Standard
Sc-1	45	45745.6	2.2				mg/L	53004	Standard
Cl	35	2.0	50.0				ug/L	2	Standard
Kr	83	138.0	4.4				ug/L	157	Standard
Br	81	1.7	86.6				ug/L	3	Standard
P	31	41145.9	4.2				ug/L	91588	Standard
S	34	32815.5	0.5				ug/L	32556	Standard
Sr	88	75.0	0.0				ug/L	62	Standard
C	12	98.3	19.3				mg/L	133	Standard
N	14	0.0					mg/L	0	Standard
Hg	202	21.7	58.1				mg/L	7	Standard

QC Calculated Values

Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recovery
Li	7			
Be	9			
Al	27			
Sc	45			
Ti	47			
V	51			
Cr	52			
Cr	53			
Mn	55			
Co	59			
Ni	60			
Cu	65			
Zn	66			
Ge	72		87.418	
As	75			
Se	82			
Se-1	77			
Ga	71			
Rb	85			
Y	89			
Rh	103			

Sample ID: L1211033206

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[	Mo	98	
[	Ag	107	
[	Cd	111	
[	Cd	114	
>	In	115	86.519
[	Sn	118	
[	Sb	123	
[	Ba	135	
[	Ce	140	
>	Tb	159	
[	Ho	165	
[	Tl	203	
[	Tl	205	
[	Pb	206	
[	Pb	207	
[	Pb	208	
[	U	238	
>	Bi	209	93.810
[	Na	23	
[	Mg	24	
[	K	39	
[	Ca	43	
[	Fe	54	
[	Fe	57	
>	Sc-1	45	
[	Cl	35	
[	Kr	83	
[	Br	81	
[	P	31	
[	S	34	
[	Sr	88	
[	C	12	
[	N	14	
[	Hg	202	

QC Out of Limits

Measurement Type	Analyte	Mass	Out of Limits Message

Sample ID: L1211033206

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Method 6020 - Summary Report

Sample ID: L1211033207

Sample Date/Time: Sunday, November 18, 2012 18:28:05

Number of Replicates: 3

Autosampler Position: 414

Sample Description: 20

Method File: C:\NexIONData\Method\6020a.mth

Aliquot Volume (mL):

Diluted to Volume (mL):

User Name: JYH user

Cumulative Autodilution Factor: 1

Nexion-ICP 200.8\6020

Concentration Results

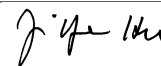
IS	Analyte	Mass	Intensity	RSD	Conc.	SD	RSD	Units	Blank Intens.	Mode
[	Li	7	16490.6	2.5	-5590.8222	540.136	9.7	ug/L	8369	Standard
	Be	9	130.0	17.6	0.0610	0.014	23.3	ug/L	18	Standard
	Al	27	467705.3	3.2	4.2810	0.101	2.4	ug/L	215	Standard
[>	Sc	45	47114.8	2.8				ug/L	53004	Standard
[	Ti	47	125.3	4.9	0.2158	0.013	6.0	ug/L	26	Standard
	V	51	9053.4	2.1	0.5949	0.018	2.9	ug/L	3223	Standard
	Cr	52	16848.7	2.0	0.8170	0.038	4.7	ug/L	10379	Standard
	Cr	53	1222.5	2.6	0.8931	0.028	3.1	ug/L	192	Standard
	Mn	55	178597.5	0.9	11.5423	0.138	1.2	ug/L	1840	Standard
	Co	59	4329.3	2.3	0.3512	0.010	2.7	ug/L	115	Standard
	Ni	60	2682.2	3.9	1.0209	0.045	4.4	ug/L	75	Standard
	Cu	65	1927.5	3.7	0.7289	0.032	4.3	ug/L	155	Standard
	Zn	66	5291.3	2.0	4.1645	0.095	2.3	ug/L	237	Standard
[>	Ge	72	366210.8	0.3				ug/L	413856	Standard
	As	75	64.0	82.8	0.1898	0.041	21.8	ug/L	-197	Standard
	Se	82	9.6	191.1	0.0893	0.160	179.3	ug/L	-5	Standard
[	Se-1	77	118.7	4.2	0.3881	0.062	16.0	ug/L	105	Standard
[>	Ga	71	1151.7	6.8				mg/L	225	Standard
[	Rb	85	8389.0	5.1				ug/L	28	Standard
[	Y	89	289565.5	2.7				ug/L	322845	Standard
[>	Rh	103	88.3	16.3				ug/L	92	Standard
[	Mo	98	18.1	17.1	-0.0042	0.001	18.5	ug/L	18	Standard
	Ag	107	93.3	22.6	0.0053	0.003	55.5	ug/L	63	Standard
	Cd	111	46.0	26.5	0.0039	0.004	100.5	mg/L	20	Standard
	Cd	114	129.5	3.7	0.0066	0.001	11.8	ug/L	56	Standard
[>	In	115	585018.5	1.5				ug/L	657102	Standard
	Sn	118	316.7	2.1	-0.0136	0.000	3.2	ug/L	555	Standard
	Sb	123	27.8	3.8	0.0011	0.000	15.5	ug/L	62	Standard
[	Ba	135	77467.6	1.1	25.5464	0.575	2.3	ug/L	19	Standard
[	Ce	140	80626.7	1.8				ug/L	24	Standard
[>	Tb	159	848622.9	1.3				ug/L	910514	Standard
[	Ho	165	1387.4	0.2				ug/L	7	Standard
	Tl	203	95.7	4.2	0.0041	0.000	8.0	ug/L	13	Standard
	Tl	205	5.3	71.0	0.0155	0.010	65.4	ug/L	1	Standard
	Pb	206	17371.0	2.3	1.7248	0.027	1.6	ug/L	342	Standard
	Pb	207	14237.0	2.2	1.6584	0.027	1.7	ug/L	284	Standard
	Pb	208	66450.0	2.2	1.6691	0.029	1.7	ug/L	1363	Standard
	U	238	400.0	1.1	0.0399	0.000	1.1	ug/L	2	Standard
[>	Bi	209	452895.3	1.2				ug/L	470592	Standard

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Na	23	1.7	173.2	0.1798	0.303	168.4	mg/L	2	Standard
Mg	24	1871.8	0.9	-0.0019	0.000	1.1	mg/L	5586	Standard
K	39	10.0	50.0	0.1127	0.080	71.4	mg/L	5	Standard
Ca	43	66.7	31.2	0.9547	0.963	100.9	mg/L	45	Standard
Fe	54	1548.1	2.6	0.5160	0.026	5.1	mg/L	350	Standard
Fe	57	520.0	9.3	0.7926	0.112	14.1	mg/L	102	Standard
Sc-1	45	47114.8	2.8				mg/L	53004	Standard
Cl	35	2.7	94.4				ug/L	2	Standard
Kr	83	143.2	10.5				ug/L	157	Standard
Br	81	4.2	69.3				ug/L	3	Standard
P	31	41526.9	3.7				ug/L	91588	Standard
S	34	35819.9	4.8				ug/L	32556	Standard
Sr	88	131.7	24.4				ug/L	62	Standard
C	12	121.7	16.6				mg/L	133	Standard
N	14	1.7	173.2				mg/L	0	Standard
Hg	202	0.0					mg/L	7	Standard

QC Calculated Values

Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recovery
Li	7			
Be	9			
Al	27			
Sc	45			
Ti	47			
V	51			
Cr	52			
Cr	53			
Mn	55			
Co	59			
Ni	60			
Cu	65			
Zn	66			
Ge	72		88.488	
As	75			
Se	82			
Se-1	77			
Ga	71			
Rb	85			
Y	89			
Rh	103			

Sample ID: L1211033207

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[	Mo	98	
[	Ag	107	
[	Cd	111	
[	Cd	114	
>	In	115	89.030
[	Sn	118	
[	Sb	123	
[	Ba	135	
[	Ce	140	
>	Tb	159	
[	Ho	165	
[	Tl	203	
[	Tl	205	
[	Pb	206	
[	Pb	207	
[	Pb	208	
[	U	238	
>	Bi	209	96.240
[	Na	23	
[	Mg	24	
[	K	39	
[	Ca	43	
[	Fe	54	
[	Fe	57	
>	Sc-1	45	
[	Cl	35	
[	Kr	83	
[	Br	81	
[	P	31	
[	S	34	
[	Sr	88	
[	C	12	
[	N	14	
[	Hg	202	

QC Out of Limits

Measurement Type	Analyte	Mass	Out of Limits Message

Sample ID: L1211033207

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Method 6020 - Summary Report

Sample ID: L1211033211

Sample Date/Time: Sunday, November 18, 2012 18:31:17

Number of Replicates: 3

Autosampler Position: 415

Sample Description: 20

Method File: C:\NexIONData\Method\6020a.mth

Aliquot Volume (mL):

Diluted to Volume (mL):

User Name: JYH user

Cumulative Autodilution Factor: 1

Nexion-ICP 200.8\6020

Concentration Results

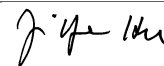
IS	Analyte	Mass	Intensity	RSD	Conc.	SD	RSD	Units	Blank Intens.	Mode
[	Li	7	7356.9	29.6	69.8783	489.576	700.6	ug/L	8369	Standard
	Be	9	5.0	0.0	-0.0066	0.001	7.6	ug/L	18	Standard
	Al	27	496.7	87.9	0.0029	0.005	173.6	ug/L	215	Standard
[>	Sc	45	46300.8	19.7				ug/L	53004	Standard
[	Ti	47	13.0	15.4	-0.0300	0.010	32.9	ug/L	26	Standard
	V	51	1339.7	16.7	-0.1372	0.036	26.6	ug/L	3223	Standard
	Cr	52	4292.3	19.0	-0.4666	0.122	26.1	ug/L	10379	Standard
	Cr	53	91.7	27.6	-0.0355	0.014	39.0	ug/L	192	Standard
	Mn	55	1390.4	30.6	0.0001	0.019	15747.3	ug/L	1840	Standard
	Co	59	88.0	15.9	-0.0079	0.002	28.0	ug/L	115	Standard
	Ni	60	69.0	29.3	-0.0085	0.006	75.2	ug/L	75	Standard
	Cu	65	111.7	23.9	-0.0122	0.009	72.3	ug/L	155	Standard
	Zn	66	202.0	32.8	-0.0371	0.023	62.1	ug/L	237	Standard
[>	Ge	72	387813.6	40.6				ug/L	413856	Standard
	As	75	-217.6	57.8	-0.0117	0.031	265.1	ug/L	-197	Standard
	Se	82	-20.8	121.9	-0.1311	0.139	105.8	ug/L	-5	Standard
[	Se-1	77	86.3	11.4	0.0519	0.340	655.7	ug/L	105	Standard
[>	Ga	71	225.0	42.9				mg/L	225	Standard
[	Rb	85	38.3	27.2				ug/L	28	Standard
[	Y	89	278509.6	40.5				ug/L	322845	Standard
[>	Rh	103	66.7	41.3				ug/L	92	Standard
[	Mo	98	5.9	36.1	-0.0069	0.001	10.1	ug/L	18	Standard
	Ag	107	53.0	42.7	0.0005	0.002	377.0	ug/L	63	Standard
	Cd	111	14.3	56.0	-0.0057	0.003	51.9	mg/L	20	Standard
	Cd	114	52.7	30.8	-0.0020	0.001	62.2	ug/L	56	Standard
[>	In	115	521645.3	40.7				ug/L	657102	Standard
	Sn	118	248.3	39.3	-0.0178	0.001	6.9	ug/L	555	Standard
	Sb	123	35.2	65.8	0.0025	0.002	62.6	ug/L	62	Standard
[	Ba	135	37.7	8.1	-0.0048	0.005	97.3	ug/L	19	Standard
[	Ce	140	75.7	47.6				ug/L	24	Standard
[>	Tb	159	704465.7	36.4				ug/L	910514	Standard
[	Ho	165	5.0	20.0				ug/L	7	Standard
	Tl	203	70.3	14.6	0.0034	0.003	79.9	ug/L	13	Standard
	Tl	205	3.7	68.6	0.0145	0.010	67.2	ug/L	1	Standard
	Pb	206	323.7	36.1	0.0045	0.003	76.5	ug/L	342	Standard
	Pb	207	275.0	35.1	0.0014	0.002	164.2	ug/L	284	Standard
	Pb	208	1283.7	34.7	0.0033	0.003	81.2	ug/L	1363	Standard
	U	238	6.7	62.4	-0.0008	0.000	49.6	ug/L	2	Standard
[>	Bi	209	395257.4	35.0				ug/L	470592	Standard

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Na	23	0.0		0.0050	0.000	0.0	mg/L	2	Standard
Mg	24	735.0	9.6	-0.0025	0.000	1.8	mg/L	5586	Standard
K	39	3.3	86.6	0.0172	0.051	294.9	mg/L	5	Standard
Ca	43	43.3	29.0	0.0040	0.967	24438.3	mg/L	45	Standard
Fe	54	330.9	58.5	-0.0129	0.071	554.9	mg/L	350	Standard
Fe	57	100.0	0.0	0.0559	0.033	58.9	mg/L	102	Standard
Sc-1	45	46300.8	19.7				mg/L	53004	Standard
Cl	35	1.3	43.3				ug/L	2	Standard
Kr	83	326.6	54.0				ug/L	157	Standard
Br	81	5.8	65.5				ug/L	3	Standard
P	31	76487.9	58.4				ug/L	91588	Standard
S	34	13037.4	15.0				ug/L	32556	Standard
Sr	88	80.0	43.8				ug/L	62	Standard
C	12	95.0	50.2				mg/L	133	Standard
N	14	1.7	173.2				mg/L	0	Standard
Hg	202	1.7	173.2				mg/L	7	Standard

QC Calculated Values

Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recovery
Li	7			
Be	9			
Al	27			
Sc	45			
Ti	47			
V	51			
Cr	52			
Cr	53			
Mn	55			
Co	59			
Ni	60			
Cu	65			
Zn	66			
Ge	72		93.707	
As	75			
Se	82			
Se-1	77			
Ga	71			
Rb	85			
Y	89			
Rh	103			

Sample ID: L1211033211

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[	Mo	98	
[	Ag	107	
[	Cd	111	
[	Cd	114	
>	In	115	79.386
[	Sn	118	
[	Sb	123	
[	Ba	135	
[	Ce	140	
>	Tb	159	
[	Ho	165	
[	Tl	203	
[	Tl	205	
[	Pb	206	
[	Pb	207	
[	Pb	208	
[	U	238	
>	Bi	209	83.992
[	Na	23	
[	Mg	24	
[	K	39	
[	Ca	43	
[	Fe	54	
[	Fe	57	
>	Sc-1	45	
[	Cl	35	
[	Kr	83	
[	Br	81	
[	P	31	
[	S	34	
[	Sr	88	
[	C	12	
[	N	14	
[	Hg	202	

QC Out of Limits

Measurement Type	Analyte	Mass	Out of Limits Message
Cr 52 Lower	Cr	52	

Sample ID: L1211033211

Report Date/Time: Sunday, November 18, 2012 18:33:49

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Method 6020 - Summary Report

Sample ID: L1211033212

Sample Date/Time: Sunday, November 18, 2012 18:34:30

Number of Replicates: 3

Autosampler Position: 416

Sample Description: 20

Method File: C:\NexIONData\Method\6020a.mth

Aliquot Volume (mL):

Diluted to Volume (mL):

User Name: JYH user

Cumulative Autodilution Factor: 1

Nexion-ICP 200.8\6020

Concentration Results

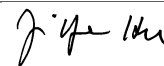
IS	Analyte	Mass	Intensity	RSD	Conc.	SD	RSD	Units	Blank Intens.	Mode
[	Li	7	30006.4	3.3	-13124.2572	633.000	4.8	ug/L	8369	Standard
	Be	9	261.7	25.9	0.1255	0.035	27.8	ug/L	18	Standard
	Al	27	1151273.4	0.2	10.0557	0.050	0.5	ug/L	215	Standard
[>	Sc	45	49383.7	0.4				ug/L	53004	Standard
[	Ti	47	220.3	8.9	0.4181	0.041	9.7	ug/L	26	Standard
	V	51	18862.7	0.7	1.5058	0.017	1.1	ug/L	3223	Standard
	Cr	52	21304.3	1.2	1.2466	0.030	2.4	ug/L	10379	Standard
	Cr	53	1788.4	5.6	1.3381	0.079	5.9	ug/L	192	Standard
	Mn	55	2081386.4	7.1	133.6499	8.747	6.5	ug/L	1840	Standard
	Co	59	17224.1	1.4	1.4242	0.019	1.3	ug/L	115	Standard
	Ni	60	6768.5	1.5	2.5954	0.054	2.1	ug/L	75	Standard
	Cu	65	5225.9	1.2	2.0468	0.028	1.4	ug/L	155	Standard
	Zn	66	7667.6	1.2	6.0413	0.071	1.2	ug/L	237	Standard
[>	Ge	72	371079.4	1.0				ug/L	413856	Standard
	As	75	1267.4	0.9	1.1137	0.005	0.5	ug/L	-197	Standard
	Se	82	10.7	27.3	0.0969	0.025	25.4	ug/L	-5	Standard
[	Se-1	77	126.3	10.5	0.4580	0.161	35.1	ug/L	105	Standard
[>	Ga	71	2253.5	0.3				mg/L	225	Standard
[	Rb	85	16892.7	2.5				ug/L	28	Standard
[	Y	89	300570.8	1.5				ug/L	322845	Standard
[>	Rh	103	86.7	13.3				ug/L	92	Standard
[	Mo	98	44.1	8.2	0.0022	0.001	36.9	ug/L	18	Standard
	Ag	107	92.3	19.4	0.0051	0.003	51.7	ug/L	63	Standard
	Cd	111	71.3	3.2	0.0120	0.001	8.5	mg/L	20	Standard
	Cd	114	211.9	8.0	0.0166	0.002	11.1	ug/L	56	Standard
[>	In	115	589118.8	1.3				ug/L	657102	Standard
	Sn	118	340.7	7.7	-0.0112	0.002	22.1	ug/L	555	Standard
	Sb	123	28.9	20.9	0.0012	0.001	69.1	ug/L	62	Standard
[	Ba	135	64976.0	1.4	21.2705	0.151	0.7	ug/L	19	Standard
[	Ce	140	192192.1	1.5				ug/L	24	Standard
[>	Tb	159	856384.2	1.9				ug/L	910514	Standard
[	Ho	165	2505.5	5.0				ug/L	7	Standard
	Tl	203	161.0	4.1	0.0092	0.001	6.7	ug/L	13	Standard
	Tl	205	6.0	44.1	0.0170	0.007	41.3	ug/L	1	Standard
	Pb	206	26429.7	2.2	2.6025	0.048	1.9	ug/L	342	Standard
	Pb	207	21644.1	0.7	2.5028	0.025	1.0	ug/L	284	Standard
	Pb	208	101753.1	1.2	2.5362	0.016	0.6	ug/L	1363	Standard
	U	238	996.4	2.0	0.1001	0.003	2.7	ug/L	2	Standard
[>	Bi	209	459579.5	0.8				ug/L	470592	Standard

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Na	23	1.7	173.2	0.1674	0.281	168.0	mg/L	2	Standard
Mg	24	3105.3	4.4	-0.0013	0.000	5.8	mg/L	5586	Standard
K	39	20.0	75.0	0.2509	0.220	87.7	mg/L	5	Standard
Ca	43	51.7	29.6	0.1314	0.707	538.0	mg/L	45	Standard
Fe	54	4709.7	1.6	1.7886	0.029	1.6	mg/L	350	Standard
Fe	57	1260.1	4.7	1.9958	0.101	5.1	mg/L	102	Standard
Sc-1	45	49383.7	0.4				mg/L	53004	Standard
Cl	35	3.0	57.7				ug/L	2	Standard
Kr	83	149.9	1.3				ug/L	157	Standard
Br	81	3.3	114.6				ug/L	3	Standard
P	31	43072.8	1.3				ug/L	91588	Standard
S	34	35876.6	1.2				ug/L	32556	Standard
Sr	88	90.0	34.7				ug/L	62	Standard
C	12	90.0	14.7				mg/L	133	Standard
N	14	1.7	173.2				mg/L	0	Standard
Hg	202	6.7	43.3				mg/L	7	Standard

QC Calculated Values

Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recovery
Li	7			
Be	9			
Al	27			
Sc	45			
Ti	47			
V	51			
Cr	52			
Cr	53			
Mn	55			
Co	59			
Ni	60			
Cu	65			
Zn	66			
Ge	72		89.664	
As	75			
Se	82			
Se-1	77			
Ga	71			
Rb	85			
Y	89			
Rh	103			

Sample ID: L1211033212

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[	Mo	98	
[	Ag	107	
[	Cd	111	
[	Cd	114	
>	In	115	89.654
[	Sn	118	
[	Sb	123	
[	Ba	135	
[	Ce	140	
>	Tb	159	
[	Ho	165	
[	Tl	203	
[	Tl	205	
[	Pb	206	
[	Pb	207	
[	Pb	208	
[	U	238	
>	Bi	209	97.660
[	Na	23	
[	Mg	24	
[	K	39	
[	Ca	43	
[	Fe	54	
[	Fe	57	
>	Sc-1	45	
[	Cl	35	
[	Kr	83	
[	Br	81	
[	P	31	
[	S	34	
[	Sr	88	
[	C	12	
[	N	14	
[	Hg	202	

QC Out of Limits

Measurement Type	Analyte	Mass	Out of Limits Message
Mn 55 Upper, S, EEE	Mn	55	

Sample ID: L1211033212

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Method 6020 - Summary Report

Sample ID: L1211033213

Sample Date/Time: Sunday, November 18, 2012 18:37:42

Number of Replicates: 3

Autosampler Position: 417

Sample Description: 20

Method File: C:\NexIONData\Method\6020a.mth

Aliquot Volume (mL):

Diluted to Volume (mL):

User Name: JYH user

Cumulative Autodilution Factor: 1

Nexion-ICP 200.8\6020

Concentration Results

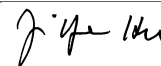
IS	Analyte	Mass	Intensity	RSD	Conc.	SD	RSD	Units	Blank Intens.	Mode
[	Li	7	18644.8	6.5	-7161.3024	866.857	12.1	ug/L	8369	Standard
	Be	9	141.7	13.4	0.0687	0.010	14.6	ug/L	18	Standard
	Al	27	445230.5	0.8	4.1592	0.101	2.4	ug/L	215	Standard
[>	Sc	45	46183.7	3.3				ug/L	53004	Standard
[	Ti	47	267.0	7.3	0.5271	0.046	8.8	ug/L	26	Standard
	V	51	12384.5	1.4	0.9119	0.009	1.0	ug/L	3223	Standard
	Cr	52	17469.4	1.8	0.8806	0.041	4.6	ug/L	10379	Standard
	Cr	53	1307.6	5.2	0.9630	0.066	6.9	ug/L	192	Standard
	Mn	55	612182.3	2.8	39.7682	0.998	2.5	ug/L	1840	Standard
	Co	59	6442.0	0.3	0.5300	0.006	1.1	ug/L	115	Standard
	Ni	60	3447.7	1.3	1.3220	0.015	1.1	ug/L	75	Standard
	Cu	65	2482.5	6.3	0.9547	0.053	5.6	ug/L	155	Standard
	Zn	66	5209.6	3.0	4.0954	0.094	2.3	ug/L	237	Standard
[>	Ge	72	366308.3	1.3				ug/L	413856	Standard
	As	75	103.1	34.1	0.2201	0.027	12.3	ug/L	-197	Standard
	Se	82	0.2	1067.3	0.0067	0.017	247.3	ug/L	-5	Standard
[	Se-1	77	119.0	16.0	0.3928	0.229	58.3	ug/L	105	Standard
[>	Ga	71	1603.4	5.3				mg/L	225	Standard
[	Rb	85	11901.3	3.3				ug/L	28	Standard
[	Y	89	287234.3	3.6				ug/L	322845	Standard
[>	Rh	103	85.0	27.0				ug/L	92	Standard
[	Mo	98	26.8	4.1	-0.0020	0.000	8.5	ug/L	18	Standard
	Ag	107	75.3	10.7	0.0028	0.001	39.9	ug/L	63	Standard
	Cd	111	41.3	17.5	0.0024	0.003	106.6	mg/L	20	Standard
	Cd	114	108.3	6.3	0.0039	0.001	16.2	ug/L	56	Standard
[>	In	115	585469.9	1.9				ug/L	657102	Standard
	Sn	118	312.3	2.9	-0.0142	0.000	2.5	ug/L	555	Standard
	Sb	123	26.1	8.9	0.0008	0.000	36.1	ug/L	62	Standard
[	Ba	135	31659.4	2.0	10.4184	0.062	0.6	ug/L	19	Standard
[	Ce	140	122609.7	2.7				ug/L	24	Standard
[>	Tb	159	853111.3	0.8				ug/L	910514	Standard
[	Ho	165	1733.8	2.3				ug/L	7	Standard
	Tl	203	124.7	6.7	0.0064	0.001	9.7	ug/L	13	Standard
	Tl	205	4.0	25.0	0.0119	0.003	22.8	ug/L	1	Standard
	Pb	206	10750.8	1.7	1.0505	0.024	2.3	ug/L	342	Standard
	Pb	207	8816.2	2.5	1.0090	0.031	3.1	ug/L	284	Standard
	Pb	208	41404.4	1.6	1.0227	0.022	2.1	ug/L	1363	Standard
	U	238	418.0	4.9	0.0416	0.002	5.4	ug/L	2	Standard
[>	Bi	209	454787.3	0.6				ug/L	470592	Standard

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Na	23	3.3	173.2	0.3579	0.611	170.8	mg/L	2	Standard
Mg	24	2541.9	4.4	-0.0015	0.000	3.2	mg/L	5586	Standard
K	39	15.0	57.7	0.1900	0.125	65.9	mg/L	5	Standard
Ca	43	50.0	10.0	0.2089	0.182	87.0	mg/L	45	Standard
Fe	54	2261.4	8.3	0.8454	0.106	12.5	mg/L	350	Standard
Fe	57	631.7	3.6	1.0118	0.073	7.2	mg/L	102	Standard
Sc-1	45	46183.7	3.3				mg/L	53004	Standard
Cl	35	2.3	65.5				ug/L	2	Standard
Kr	83	153.1	2.6				ug/L	157	Standard
Br	81	5.8	65.5				ug/L	3	Standard
P	31	41067.2	0.6				ug/L	91588	Standard
S	34	33162.1	2.6				ug/L	32556	Standard
Sr	88	88.3	28.5				ug/L	62	Standard
C	12	110.0	35.5				mg/L	133	Standard
N	14	3.3	86.6				mg/L	0	Standard
Hg	202	3.3	86.6				mg/L	7	Standard

QC Calculated Values

Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recovery
Li	7			
Be	9			
Al	27			
Sc	45			
Ti	47			
V	51			
Cr	52			
Cr	53			
Mn	55			
Co	59			
Ni	60			
Cu	65			
Zn	66			
Ge	72		88.511	
As	75			
Se	82			
Se-1	77			
Ga	71			
Rb	85			
Y	89			
Rh	103			

Sample ID: L1211033213

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[	Mo	98	
[	Ag	107	
[	Cd	111	
[	Cd	114	
>	In	115	89.099
[	Sn	118	
[	Sb	123	
[	Ba	135	
[	Ce	140	
>	Tb	159	
[	Ho	165	
[	Tl	203	
[	Tl	205	
[	Pb	206	
[	Pb	207	
[	Pb	208	
[	U	238	
>	Bi	209	96.642
[	Na	23	
[	Mg	24	
[	K	39	
[	Ca	43	
[	Fe	54	
[	Fe	57	
>	Sc-1	45	
[	Cl	35	
[	Kr	83	
[	Br	81	
[	P	31	
[	S	34	
[	Sr	88	
[	C	12	
[	N	14	
[	Hg	202	

QC Out of Limits

Measurement Type	Analyte	Mass	Out of Limits Message

Sample ID: L1211033213

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Method 6020 - Summary Report

Sample ID: L1211033214

Sample Date/Time: Sunday, November 18, 2012 18:40:55

Number of Replicates: 3

Autosampler Position: 418

Sample Description: 20

Method File: C:\NexIONData\Method\6020a.mth

Aliquot Volume (mL):

Diluted to Volume (mL):

User Name: JYH user

Cumulative Autodilution Factor: 1

Nexion-ICP 200.8\6020

Concentration Results

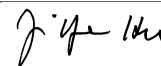
IS	Analyte	Mass	Intensity	RSD	Conc.	SD	RSD	Units	Blank Intens.	Mode
[	Li	7	20014.9	4.0	-8157.3065	383.338	4.7	ug/L	8369	Standard
	Be	9	153.3	10.5	0.0761	0.010	13.2	ug/L	18	Standard
	Al	27	509113.5	3.8	4.8041	0.107	2.2	ug/L	215	Standard
[>	Sc	45	45690.5	2.0				ug/L	53004	Standard
[	Ti	47	227.3	8.4	0.4547	0.043	9.4	ug/L	26	Standard
	V	51	12685.3	2.7	0.9766	0.032	3.3	ug/L	3223	Standard
	Cr	52	18043.7	0.7	0.9948	0.014	1.4	ug/L	10379	Standard
	Cr	53	1425.1	3.2	1.0939	0.041	3.8	ug/L	192	Standard
	Mn	55	377110.4	1.6	25.1972	0.457	1.8	ug/L	1840	Standard
	Co	59	6866.9	1.3	0.5833	0.008	1.3	ug/L	115	Standard
	Ni	60	3591.8	0.5	1.4209	0.011	0.8	ug/L	75	Standard
	Cu	65	2526.9	1.9	1.0040	0.022	2.1	ug/L	155	Standard
	Zn	66	6364.7	1.7	5.2050	0.102	2.0	ug/L	237	Standard
[>	Ge	72	355688.6	0.2				ug/L	413856	Standard
	As	75	136.0	5.3	0.2490	0.006	2.4	ug/L	-197	Standard
	Se	82	7.8	114.9	0.0757	0.081	107.0	ug/L	-5	Standard
[	Se-1	77	127.0	4.8	0.5273	0.074	14.0	ug/L	105	Standard
[>	Ga	71	1723.4	7.2				mg/L	225	Standard
	Rb	85	12378.4	2.7				ug/L	28	Standard
[	Y	89	285823.3	2.3				ug/L	322845	Standard
[>	Rh	103	75.0	13.3				ug/L	92	Standard
[	Mo	98	27.5	20.8	-0.0017	0.001	82.1	ug/L	18	Standard
	Ag	107	80.3	4.0	0.0038	0.001	13.5	ug/L	63	Standard
	Cd	111	40.6	11.1	0.0025	0.002	69.6	mg/L	20	Standard
	Cd	114	143.2	8.2	0.0087	0.002	20.6	ug/L	56	Standard
[>	In	115	570255.3	1.6				ug/L	657102	Standard
	Sn	118	304.3	2.6	-0.0141	0.001	6.3	ug/L	555	Standard
	Sb	123	32.8	17.6	0.0019	0.001	42.5	ug/L	62	Standard
[	Ba	135	38650.9	1.0	13.0647	0.143	1.1	ug/L	19	Standard
[	Ce	140	121864.9	1.5				ug/L	24	Standard
[>	Tb	159	836725.3	1.0				ug/L	910514	Standard
[	Ho	165	1886.1	3.3				ug/L	7	Standard
	Tl	203	120.7	12.1	0.0063	0.001	16.2	ug/L	13	Standard
	Tl	205	4.0	66.1	0.0121	0.007	59.7	ug/L	1	Standard
	Pb	206	29755.2	1.3	3.0280	0.018	0.6	ug/L	342	Standard
	Pb	207	24194.6	1.4	2.8916	0.032	1.1	ug/L	284	Standard
	Pb	208	113878.5	1.6	2.9334	0.021	0.7	ug/L	1363	Standard
	U	238	640.3	2.3	0.0659	0.002	2.6	ug/L	2	Standard
[>	Bi	209	445532.4	1.9				ug/L	470592	Standard

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Na	23	1.7	173.2	0.1776	0.299	168.3	mg/L	2	Standard
Mg	24	1918.5	6.8	-0.0018	0.000	5.2	mg/L	5586	Standard
K	39	13.3	43.3	0.1684	0.088	52.5	mg/L	5	Standard
Ca	43	58.3	4.9	0.6511	0.176	27.0	mg/L	45	Standard
Fe	54	2469.5	4.3	0.9476	0.057	6.0	mg/L	350	Standard
Fe	57	670.0	5.4	1.0919	0.043	4.0	mg/L	102	Standard
Sc-1	45	45690.5	2.0				mg/L	53004	Standard
Cl	35	2.0	86.6				ug/L	2	Standard
Kr	83	153.8	0.9				ug/L	157	Standard
Br	81	5.8	24.7				ug/L	3	Standard
P	31	39754.6	1.9				ug/L	91588	Standard
S	34	31282.3	1.3				ug/L	32556	Standard
Sr	88	81.7	31.4				ug/L	62	Standard
C	12	98.3	34.6				mg/L	133	Standard
N	14	0.0					mg/L	0	Standard
Hg	202	3.3	86.6				mg/L	7	Standard

QC Calculated Values

Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recovery
Li	7			
Be	9			
Al	27			
Sc	45			
Ti	47			
V	51			
Cr	52			
Cr	53			
Mn	55			
Co	59			
Ni	60			
Cu	65			
Zn	66			
Ge	72		85.945	
As	75			
Se	82			
Se-1	77			
Ga	71			
Rb	85			
Y	89			
Rh	103			

Sample ID: L1211033214

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[	Mo	98	
[	Ag	107	
[	Cd	111	
[	Cd	114	
>	In	115	86.783
[	Sn	118	
[	Sb	123	
[	Ba	135	
[	Ce	140	
>	Tb	159	
[	Ho	165	
[	Tl	203	
[	Tl	205	
[	Pb	206	
[	Pb	207	
[	Pb	208	
[	U	238	
>	Bi	209	94.675
[	Na	23	
[	Mg	24	
[	K	39	
[	Ca	43	
[	Fe	54	
[	Fe	57	
>	Sc-1	45	
[	Cl	35	
[	Kr	83	
[	Br	81	
[	P	31	
[	S	34	
[	Sr	88	
[	C	12	
[	N	14	
[	Hg	202	

QC Out of Limits

Measurement Type	Analyte	Mass	Out of Limits Message

Sample ID: L1211033214

Report Date/Time: Sunday, November 18, 2012 18:43:28

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Method 6020 - Summary Report

Sample ID: L1211033215

Sample Date/Time: Sunday, November 18, 2012 18:44:08

Number of Replicates: 3

Autosampler Position: 419

Sample Description: 20

Method File: C:\NexIONData\Method\6020a.mth

Aliquot Volume (mL):

Diluted to Volume (mL):

User Name: JYH user

Cumulative Autodilution Factor: 1

Nexion-ICP 200.8\6020

Concentration Results

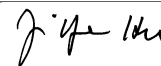
IS	Analyte	Mass	Intensity	RSD	Conc.	SD	RSD	Units	Blank Intens.	Mode
[	Li	7	15232.7	6.2	-4794.1272	721.436	15.0	ug/L	8369	Standard
	Be	9	131.7	25.8	0.0615	0.018	28.9	ug/L	18	Standard
	Al	27	404624.0	1.5	3.6983	0.035	0.9	ug/L	215	Standard
[>	Sc	45	47180.0	2.2				ug/L	53004	Standard
[	Ti	47	116.0	11.9	0.1998	0.028	13.9	ug/L	26	Standard
	V	51	11161.1	1.7	0.8158	0.031	3.7	ug/L	3223	Standard
	Cr	52	14504.9	0.2	0.6042	0.036	6.0	ug/L	10379	Standard
	Cr	53	977.5	1.4	0.7072	0.016	2.3	ug/L	192	Standard
	Mn	55	599789.5	0.9	39.7138	1.200	3.0	ug/L	1840	Standard
	Co	59	6419.4	1.5	0.5383	0.005	0.9	ug/L	115	Standard
	Ni	60	2922.9	2.7	1.1374	0.044	3.9	ug/L	75	Standard
	Cu	65	2124.8	1.8	0.8258	0.028	3.3	ug/L	155	Standard
	Zn	66	4261.3	1.3	3.3814	0.104	3.1	ug/L	237	Standard
[>	Ge	72	359544.0	2.2				ug/L	413856	Standard
	As	75	133.9	1.5	0.2462	0.004	1.6	ug/L	-197	Standard
	Se	82	14.2	50.4	0.1322	0.066	49.9	ug/L	-5	Standard
[	Se-1	77	135.3	15.4	0.6110	0.262	42.8	ug/L	105	Standard
[>	Ga	71	1148.4	11.8				mg/L	225	Standard
	Rb	85	8005.4	2.5				ug/L	28	Standard
[	Y	89	284537.0	0.8				ug/L	322845	Standard
[>	Rh	103	108.3	11.6				ug/L	92	Standard
[	Mo	98	24.0	14.0	-0.0026	0.001	28.4	ug/L	18	Standard
	Ag	107	76.3	6.5	0.0032	0.001	25.6	ug/L	63	Standard
	Cd	111	54.0	1.9	0.0069	0.001	7.7	mg/L	20	Standard
	Cd	114	139.8	11.6	0.0083	0.002	25.6	ug/L	56	Standard
[>	In	115	571328.1	2.1				ug/L	657102	Standard
	Sn	118	292.0	5.0	-0.0156	0.002	12.2	ug/L	555	Standard
	Sb	123	24.9	35.3	0.0007	0.001	180.4	ug/L	62	Standard
[	Ba	135	32631.1	1.2	11.0063	0.093	0.8	ug/L	19	Standard
[	Ce	140	111118.0	0.5				ug/L	24	Standard
[>	Tb	159	829907.9	1.9				ug/L	910514	Standard
[	Ho	165	1669.8	1.4				ug/L	7	Standard
	Tl	203	88.7	4.7	0.0037	0.000	10.7	ug/L	13	Standard
	Tl	205	3.7	68.6	0.0113	0.007	61.5	ug/L	1	Standard
	Pb	206	14732.2	1.6	1.4882	0.040	2.7	ug/L	342	Standard
	Pb	207	11868.0	0.7	1.4051	0.011	0.8	ug/L	284	Standard
	Pb	208	56265.5	0.6	1.4373	0.025	1.8	ug/L	1363	Standard
	U	238	662.0	5.1	0.0684	0.004	5.5	ug/L	2	Standard
[>	Bi	209	443950.1	1.3				ug/L	470592	Standard

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Na	23	0.0		0.0050	0.000	0.0	mg/L	2	Standard
Mg	24	1671.8	5.2	-0.0020	0.000	1.5	mg/L	5586	Standard
K	39	11.7	65.5	0.1360	0.115	84.7	mg/L	5	Standard
Ca	43	65.0	7.7	0.8749	0.172	19.7	mg/L	45	Standard
Fe	54	1727.7	6.5	0.5931	0.064	10.8	mg/L	350	Standard
Fe	57	513.3	16.5	0.7777	0.148	19.1	mg/L	102	Standard
Sc-1	45	47180.0	2.2				mg/L	53004	Standard
Cl	35	1.7	34.6				ug/L	2	Standard
Kr	83	151.9	1.5				ug/L	157	Standard
Br	81	8.3	17.3				ug/L	3	Standard
P	31	39946.8	3.0				ug/L	91588	Standard
S	34	30954.9	2.3				ug/L	32556	Standard
Sr	88	85.0	10.2				ug/L	62	Standard
C	12	130.0	17.6				mg/L	133	Standard
N	14	0.0					mg/L	0	Standard
Hg	202	6.7	43.3				mg/L	7	Standard

QC Calculated Values

Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recovery
Li	7			
Be	9			
Al	27			
Sc	45			
Ti	47			
V	51			
Cr	52			
Cr	53			
Mn	55			
Co	59			
Ni	60			
Cu	65			
Zn	66			
Ge	72		86.877	
As	75			
Se	82			
Se-1	77			
Ga	71			
Rb	85			
Y	89			
Rh	103			

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[	Mo	98	
[	Ag	107	
[	Cd	111	
[	Cd	114	
>	In	115	86.947
[	Sn	118	
[	Sb	123	
[	Ba	135	
[	Ce	140	
>	Tb	159	
[	Ho	165	
[	Tl	203	
[	Tl	205	
[	Pb	206	
[	Pb	207	
[	Pb	208	
[	U	238	
>	Bi	209	94.339
[	Na	23	
[	Mg	24	
[	K	39	
[	Ca	43	
[	Fe	54	
[	Fe	57	
>	Sc-1	45	
[	Cl	35	
[	Kr	83	
[	Br	81	
[	P	31	
[	S	34	
[	Sr	88	
[	C	12	
[	N	14	
[	Hg	202	

QC Out of Limits

Measurement Type	Analyte	Mass	Out of Limits Message

Sample ID: L1211033215

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Method 6020 - Summary Report

Sample ID: QC Std 6

Sample Date/Time: Sunday, November 18, 2012 18:47:23

Number of Replicates: 3

Autosampler Position: 101

Sample Description:

Method File: C:\NexIONData\Method\6020a.mth

Aliquot Volume (mL):

Diluted to Volume (mL):

User Name: JYH user

Cumulative Autodilution Factor: 1

Nexion-ICP 200.8\6020

Concentration Results

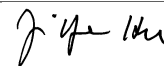
IS	Analyte	Mass	Intensity	RSD	Conc.	SD	RSD	Units	Blank Intens.	Mode
[	Li	7	8640.8	7.8	128.0500	139.270	108.8	ug/L	8369	Standard
	Be	9	111973.0	5.2	51.2718	3.367	6.6	ug/L	18	Standard
	Al	27	7118309.1	2.5	55.1900	1.662	3.0	ug/L	215	Standard
[>	Sc	45	55695.7	5.1				ug/L	53004	Standard
[	Ti	47	54152.4	3.8	101.7896	4.151	4.1	ug/L	26	Standard
	V	51	613527.8	4.5	49.7473	1.855	3.7	ug/L	3223	Standard
	Cr	52	580087.5	5.0	50.1335	2.081	4.2	ug/L	10379	Standard
	Cr	53	70430.2	4.0	49.3295	1.363	2.8	ug/L	192	Standard
	Mn	55	907561.6	3.7	50.4845	0.950	1.9	ug/L	1840	Standard
	Co	59	700713.2	5.5	50.7507	1.694	3.3	ug/L	115	Standard
	Ni	60	149556.7	4.2	50.3666	1.529	3.0	ug/L	75	Standard
	Cu	65	145744.6	3.8	50.8315	1.549	3.0	ug/L	155	Standard
	Zn	66	72986.6	4.1	51.3082	1.429	2.8	ug/L	237	Standard
[>	Ge	72	427935.7	2.6				ug/L	413856	Standard
	As	75	74962.6	3.2	50.0892	1.447	2.9	ug/L	-197	Standard
	Se	82	6758.5	2.7	50.4445	0.842	1.7	ug/L	-5	Standard
[	Se-1	77	5149.2	4.3	49.7755	1.905	3.8	ug/L	105	Standard
[>	Ga	71	205.0	6.5				mg/L	225	Standard
[	Rb	85	1686.8	4.3				ug/L	28	Standard
[	Y	89	323949.5	2.4				ug/L	322845	Standard
[>	Rh	103	118.3	17.1				ug/L	92	Standard
[	Mo	98	447506.9	3.9	99.1723	2.329	2.3	ug/L	18	Standard
	Ag	107	393982.9	3.6	49.6321	1.052	2.1	ug/L	63	Standard
	Cd	111	174791.4	4.7	50.8607	1.640	3.2	mg/L	20	Standard
	Cd	114	456614.5	4.4	50.4860	1.501	3.0	ug/L	56	Standard
[>	In	115	658234.1	1.5				ug/L	657102	Standard
	Sn	118	510786.1	4.6	51.1744	1.615	3.2	ug/L	555	Standard
	Sb	123	401334.2	4.9	51.1402	1.806	3.5	ug/L	62	Standard
[	Ba	135	174566.7	4.2	51.1606	1.418	2.8	ug/L	19	Standard
[	Ce	140	587.3	6.9				ug/L	24	Standard
[>	Tb	159	931307.3	1.4				ug/L	910514	Standard
[	Ho	165	457.0	4.9				ug/L	7	Standard
	Tl	203	662077.3	2.1	51.1299	0.563	1.1	ug/L	13	Standard
	Tl	205	19805.9	2.3	50.1346	0.532	1.1	ug/L	1	Standard
	Pb	206	529935.7	3.1	51.0468	1.016	2.0	ug/L	342	Standard
	Pb	207	455144.0	3.7	51.5652	1.354	2.6	ug/L	284	Standard
	Pb	208	2085152.6	3.3	50.8843	1.089	2.1	ug/L	1363	Standard
	U	238	522942.4	4.3	51.5629	1.657	3.2	ug/L	2	Standard
[>	Bi	209	475398.7	1.2				ug/L	470592	Standard

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Na	23	0.0		0.0050	0.000	0.0	mg/L	2	Standard
Mg	24	310317.5	1.2	0.1422	0.007	4.6	mg/L	5586	Standard
K	39	366.7	10.6	4.6955	0.265	5.6	mg/L	5	Standard
Ca	43	176.7	11.4	4.9154	0.571	11.6	mg/L	45	Standard
Fe	54	13451.9	4.6	4.7705	0.269	5.6	mg/L	350	Standard
Fe	57	3382.0	5.1	4.9380	0.421	8.5	mg/L	102	Standard
Sc-1	45	55695.7	5.1				mg/L	53004	Standard
Cl	35	1.3	114.6				ug/L	2	Standard
Kr	83	182.9	3.5				ug/L	157	Standard
Br	81	5.0	86.6				ug/L	3	Standard
P	31	129225.5	1.8				ug/L	91588	Standard
S	34	42133.5	0.8				ug/L	32556	Standard
Sr	88	95.0	21.1				ug/L	62	Standard
C	12	125.0	22.3				mg/L	133	Standard
N	14	1.7	173.2				mg/L	0	Standard
Hg	202	0.0					mg/L	7	Standard

QC Calculated Values

Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recovery
Li	7			
Be	9	102.544		
Al	27	110.380		
Sc	45			
Ti	47	101.790		
V	51	99.495		
Cr	52	100.267		
Cr	53			
Mn	55	100.969		
Co	59	101.501		
Ni	60	100.733		
Cu	65	101.663		
Zn	66	102.616		
Ge	72		103.402	
As	75	100.178		
Se	82	100.889		
Se-1	77			
Ga	71			
Rb	85			
Y	89			
Rh	103			

Sample ID: QC Std 6

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[	Mo	98	99.172	
[	Ag	107	99.264	
[	Cd	111	101.721	
[	Cd	114		
>	In	115		100.172
[	Sn	118	102.349	
[	Sb	123	102.280	
[	Ba	135	102.321	
[	Ce	140		
>	Tb	159		
[	Ho	165		
[	Tl	203	102.260	
[	Tl	205		
[	Pb	206	102.094	
[	Pb	207	103.130	
[	Pb	208	101.769	
[	U	238	103.126	
>	Bi	209		101.021
[	Na	23		
[	Mg	24		
[	K	39		
[	Ca	43		
[	Fe	54		
[	Fe	57		
>	Sc-1	45		
[	Cl	35		
[	Kr	83		
[	Br	81		
[	P	31		
[	S	34		
[	Sr	88		
[	C	12		
[	N	14		
[	Hg	202		

QC Out of Limits

Measurement Type	Analyte	Mass	Out of Limits Message
QC Std 6	Al	27	

Sample ID: QC Std 6

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Method 6020 - Summary Report

Sample ID: QC Std 7

Sample Date/Time: Sunday, November 18, 2012 18:50:35

Number of Replicates: 3

Autosampler Position: 102

Sample Description:

Method File: C:\NexIONData\Method\6020a.mth

Aliquot Volume (mL):

Diluted to Volume (mL):

User Name: JYH user

Cumulative Autodilution Factor: 1

Nexion-ICP 200.8\6020

Concentration Results

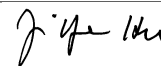
IS	Analyte	Mass	Intensity	RSD	Conc.	SD	RSD	Units	Blank Intens.	Mode
[	Li	7	8402.3	3.4	49.3778	33.016	66.9	ug/L	8369	Standard
	Be	9	25.0	40.0	0.0026	0.005	198.8	ug/L	18	Standard
	Al	27	491.7	46.5	0.0018	0.002	97.5	ug/L	215	Standard
[>	Sc	45	53276.9	3.2				ug/L	53004	Standard
[	Ti	47	18.7	8.2	-0.0237	0.004	15.7	ug/L	26	Standard
	V	51	3142.8	2.0	-0.0056	0.007	123.6	ug/L	3223	Standard
	Cr	52	9651.7	2.2	-0.0476	0.018	38.8	ug/L	10379	Standard
	Cr	53	168.3	8.2	0.0110	0.010	89.5	ug/L	192	Standard
	Mn	55	1902.5	26.2	0.0199	0.031	157.5	ug/L	1840	Standard
	Co	59	169.3	72.8	-0.0028	0.010	335.4	ug/L	115	Standard
	Ni	60	92.3	22.3	-0.0036	0.008	222.4	ug/L	75	Standard
	Cu	65	220.0	7.1	0.0210	0.006	29.3	ug/L	155	Standard
	Zn	66	260.0	4.7	-0.0117	0.014	117.7	ug/L	237	Standard
[>	Ge	72	418815.0	2.9				ug/L	413856	Standard
	As	75	-181.4	20.8	0.0169	0.022	129.3	ug/L	-197	Standard
	Se	82	13.5	117.8	0.1094	0.125	113.9	ug/L	-5	Standard
[	Se-1	77	127.7	1.8	0.3076	0.042	13.7	ug/L	105	Standard
[>	Ga	71	186.7	8.6				mg/L	225	Standard
[	Rb	85	40.0	12.5				ug/L	28	Standard
[	Y	89	311049.7	2.2				ug/L	322845	Standard
[>	Rh	103	85.0	27.0				ug/L	92	Standard
[	Mo	98	117.0	72.5	0.0173	0.018	104.6	ug/L	18	Standard
	Ag	107	147.0	42.9	0.0108	0.007	67.9	ug/L	63	Standard
	Cd	111	44.9	68.9	0.0019	0.009	444.4	mg/L	20	Standard
	Cd	114	119.3	55.6	0.0037	0.007	184.4	ug/L	56	Standard
[>	In	115	644744.9	4.1				ug/L	657102	Standard
	Sn	118	434.3	16.6	-0.0051	0.006	110.0	ug/L	555	Standard
	Sb	123	326.5	42.3	0.0391	0.016	41.3	ug/L	62	Standard
[	Ba	135	44.7	34.4	-0.0067	0.004	63.9	ug/L	19	Standard
[	Ce	140	34.0	60.8				ug/L	24	Standard
[>	Tb	159	911885.3	5.0				ug/L	910514	Standard
[	Ho	165	7.3	20.8				ug/L	7	Standard
	Tl	203	53.3	75.8	0.0004	0.003	682.9	ug/L	13	Standard
	Tl	205	0.3	173.2	0.0021	0.001	67.6	ug/L	1	Standard
	Pb	206	354.7	14.3	0.0013	0.004	304.0	ug/L	342	Standard
	Pb	207	330.3	12.3	0.0014	0.004	258.4	ug/L	284	Standard
	Pb	208	1407.7	10.4	0.0000	0.003249284.6		ug/L	1363	Standard
	U	238	23.0	74.2	0.0007	0.002	223.9	ug/L	2	Standard
[>	Bi	209	473875.1	2.8				ug/L	470592	Standard

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Na	23	0.0		0.0050	0.000	0.0	mg/L	2	Standard
Mg	24	970.0	20.0	-0.0024	0.000	3.2	mg/L	5586	Standard
K	39	5.0	100.0	0.0257	0.066	255.6	mg/L	5	Standard
Ca	43	31.7	48.2	-0.8802	0.663	75.4	mg/L	45	Standard
Fe	54	325.5	9.3	-0.0291	0.009	32.3	mg/L	350	Standard
Fe	57	120.0	4.2	0.0596	0.014	23.3	mg/L	102	Standard
Sc-1	45	53276.9	3.2				mg/L	53004	Standard
Cl	35	2.7	43.3				ug/L	2	Standard
Kr	83	187.3	5.6				ug/L	157	Standard
Br	81	3.3	114.6				ug/L	3	Standard
P	31	122406.3	4.0				ug/L	91588	Standard
S	34	42154.4	1.5				ug/L	32556	Standard
Sr	88	60.0	14.4				ug/L	62	Standard
C	12	103.3	24.8				mg/L	133	Standard
N	14	1.7	173.2				mg/L	0	Standard
Hg	202	3.3	86.6				mg/L	7	Standard

QC Calculated Values

Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recovery
Li	7			
Be	9			
Al	27			
Sc	45			
Ti	47			
V	51			
Cr	52			
Cr	53			
Mn	55			
Co	59			
Ni	60			
Cu	65			
Zn	66			
Ge	72		101.198	
As	75			
Se	82			
Se-1	77			
Ga	71			
Rb	85			
Y	89			
Rh	103			

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[	Mo	98	
[	Ag	107	
[	Cd	111	
[	Cd	114	
>	In	115	98.120
[	Sn	118	
[	Sb	123	
[	Ba	135	
[	Ce	140	
>	Tb	159	
[	Ho	165	
[	Tl	203	
[	Tl	205	
[	Pb	206	
[	Pb	207	
[	Pb	208	
[	U	238	
>	Bi	209	100.698
[	Na	23	
[	Mg	24	
[	K	39	
[	Ca	43	
[	Fe	54	
[	Fe	57	
>	Sc-1	45	
[	Cl	35	
[	Kr	83	
[	Br	81	
[	P	31	
[	S	34	
[	Sr	88	
[	C	12	
[	N	14	
[	Hg	202	

QC Out of Limits

Measurement Type	Analyte	Mass	Out of Limits Message

Sample ID: QC Std 7

Report Date/Time: Sunday, November 18, 2012 18:53:07

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Method 6020 - Summary Report

Sample ID: L1211033216

Sample Date/Time: Sunday, November 18, 2012 18:53:49

Number of Replicates: 3

Autosampler Position: 420

Sample Description: 20

Method File: C:\NexIONData\Method\6020a.mth

Aliquot Volume (mL):

Diluted to Volume (mL):

User Name: JYH user

Cumulative Autodilution Factor: 1

Nexion-ICP 200.8\6020

Concentration Results

IS	Analyte	Mass	Intensity	RSD	Conc.	SD	RSD	Units	Blank Intens.	Mode
[	Li	7	20266.9	6.0	-8423.3724	419.341	5.0	ug/L	8369	Standard
	Be	9	138.3	14.6	0.0688	0.016	22.5	ug/L	18	Standard
	Al	27	617432.0	1.9	5.8840	0.308	5.2	ug/L	215	Standard
[>	Sc	45	45339.5	5.7				ug/L	53004	Standard
[	Ti	47	284.0	2.5	0.5829	0.042	7.1	ug/L	26	Standard
	V	51	16007.5	1.1	1.3020	0.079	6.0	ug/L	3223	Standard
	Cr	52	22192.9	2.2	1.4314	0.042	2.9	ug/L	10379	Standard
	Cr	53	2005.1	3.3	1.5818	0.049	3.1	ug/L	192	Standard
	Mn	55	520213.5	2.2	34.7536	0.732	2.1	ug/L	1840	Standard
	Co	59	7760.3	1.2	0.6606	0.022	3.3	ug/L	115	Standard
	Ni	60	3992.9	2.4	1.5817	0.034	2.1	ug/L	75	Standard
	Cu	65	3150.3	0.5	1.2649	0.046	3.6	ug/L	155	Standard
	Zn	66	8678.8	0.7	7.1645	0.246	3.4	ug/L	237	Standard
[>	Ge	72	356254.3	3.9				ug/L	413856	Standard
	As	75	246.3	26.4	0.3379	0.055	16.3	ug/L	-197	Standard
	Se	82	-3.2	239.7	-0.0235	0.068	289.2	ug/L	-5	Standard
[	Se-1	77	116.3	7.0	0.4019	0.142	35.3	ug/L	105	Standard
[>	Ga	71	1843.4	11.4				mg/L	225	Standard
	Rb	85	17261.5	2.3				ug/L	28	Standard
[	Y	89	281542.6	7.4				ug/L	322845	Standard
[>	Rh	103	86.7	24.0				ug/L	92	Standard
[	Mo	98	86.4	5.6	0.0136	0.002	13.9	ug/L	18	Standard
	Ag	107	97.7	6.2	0.0064	0.001	8.7	ug/L	63	Standard
	Cd	111	63.6	20.5	0.0102	0.004	35.4	mg/L	20	Standard
	Cd	114	181.0	11.7	0.0138	0.004	25.4	ug/L	56	Standard
[>	In	115	565729.1	4.3				ug/L	657102	Standard
	Sn	118	335.7	1.9	-0.0102	0.002	18.5	ug/L	555	Standard
	Sb	123	83.7	8.6	0.0095	0.001	15.2	ug/L	62	Standard
[	Ba	135	35786.9	1.9	12.2033	0.469	3.8	ug/L	19	Standard
[	Ce	140	138656.0	1.3				ug/L	24	Standard
[>	Tb	159	823249.2	4.7				ug/L	910514	Standard
[	Ho	165	1916.5	2.2				ug/L	7	Standard
	Tl	203	148.3	5.1	0.0089	0.001	14.2	ug/L	13	Standard
	Tl	205	3.0	66.7	0.0095	0.005	55.8	ug/L	1	Standard
	Pb	206	212726.8	1.6	22.3337	1.218	5.5	ug/L	342	Standard
	Pb	207	170929.4	0.5	21.1020	1.052	5.0	ug/L	284	Standard
	Pb	208	806713.4	1.1	21.4570	1.207	5.6	ug/L	1363	Standard
	U	238	719.7	7.7	0.0760	0.009	11.4	ug/L	2	Standard
[>	Bi	209	436622.1	4.9				ug/L	470592	Standard

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Na	23	3.3	86.6	0.3605	0.309	85.8	mg/L	2	Standard
Mg	24	2023.5	5.1	-0.0018	0.000	7.1	mg/L	5586	Standard
K	39	16.7	17.3	0.2229	0.035	15.7	mg/L	5	Standard
Ca	43	55.0	18.2	0.4932	0.349	70.7	mg/L	45	Standard
Fe	54	2511.1	5.1	0.9753	0.049	5.0	mg/L	350	Standard
Fe	57	751.7	3.3	1.2564	0.124	9.9	mg/L	102	Standard
Sc-1	45	45339.5	5.7				mg/L	53004	Standard
Cl	35	1.0	100.0				ug/L	2	Standard
Kr	83	173.8	3.7				ug/L	157	Standard
Br	81	7.5	115.5				ug/L	3	Standard
P	31	40927.7	0.8				ug/L	91588	Standard
S	34	38238.2	1.9				ug/L	32556	Standard
Sr	88	81.7	41.7				ug/L	62	Standard
C	12	161.7	3.6				mg/L	133	Standard
N	14	0.0					mg/L	0	Standard
Hg	202	6.7	114.6				mg/L	7	Standard

QC Calculated Values

Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recovery
Li	7			
Be	9			
Al	27			
Sc	45			
Ti	47			
V	51			
Cr	52			
Cr	53			
Mn	55			
Co	59			
Ni	60			
Cu	65			
Zn	66			
Ge	72		86.082	
As	75			
Se	82			
Se-1	77			
Ga	71			
Rb	85			
Y	89			
Rh	103			

Sample ID: L1211033216

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[	Mo	98	
[	Ag	107	
[	Cd	111	
[	Cd	114	
>	In	115	86.095
[	Sn	118	
[	Sb	123	
[	Ba	135	
[	Ce	140	
>	Tb	159	
[	Ho	165	
[	Tl	203	
[	Tl	205	
[	Pb	206	
[	Pb	207	
[	Pb	208	
[	U	238	
>	Bi	209	92.782
[	Na	23	
[	Mg	24	
[	K	39	
[	Ca	43	
[	Fe	54	
[	Fe	57	
>	Sc-1	45	
[	Cl	35	
[	Kr	83	
[	Br	81	
[	P	31	
[	S	34	
[	Sr	88	
[	C	12	
[	N	14	
[	Hg	202	

QC Out of Limits

Measurement Type	Analyte	Mass	Out of Limits Message

Sample ID: L1211033216

Report Date/Time: Sunday, November 18, 2012 18:56:21

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Method 6020 - Summary Report

Sample ID: L1211033217

Sample Date/Time: Sunday, November 18, 2012 18:57:02

Number of Replicates: 3

Autosampler Position: 421

Sample Description: 20

Method File: C:\NexIONData\Method\6020a.mth

Aliquot Volume (mL):

Diluted to Volume (mL):

User Name: JYH user

Cumulative Autodilution Factor: 1

Nexion-ICP 200.8\6020

Concentration Results

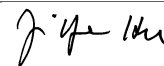
IS	Analyte	Mass	Intensity	RSD	Conc.	SD	RSD	Units	Blank Intens.	Mode
[	Li	7	23294.6	1.6	-9374.1400	254.074	2.7	ug/L	8369	Standard
	Be	9	168.3	23.1	0.0788	0.020	25.3	ug/L	18	Standard
	Al	27	690190.5	2.7	6.1276	0.156	2.5	ug/L	215	Standard
[>	Sc	45	48577.8	1.2				ug/L	53004	Standard
	Ti	47	261.3	9.8	0.5075	0.062	12.3	ug/L	26	Standard
	V	51	13976.3	3.0	1.0462	0.042	4.0	ug/L	3223	Standard
	Cr	52	19721.5	3.5	1.0857	0.077	7.1	ug/L	10379	Standard
	Cr	53	1638.4	8.0	1.2170	0.117	9.6	ug/L	192	Standard
	Mn	55	299864.6	2.3	19.1816	0.546	2.8	ug/L	1840	Standard
	Co	59	7408.8	2.7	0.6037	0.021	3.5	ug/L	115	Standard
	Ni	60	4214.6	4.6	1.6027	0.088	5.5	ug/L	75	Standard
	Cu	65	3369.4	3.6	1.2994	0.066	5.0	ug/L	155	Standard
	Zn	66	7040.3	1.9	5.5298	0.121	2.2	ug/L	237	Standard
[>	Ge	72	371178.7	1.7				ug/L	413856	Standard
	As	75	193.3	38.0	0.2890	0.058	20.1	ug/L	-197	Standard
	Se	82	1.8	1751.4	0.0234	0.272	1159.7	ug/L	-5	Standard
[	Se-1	77	133.3	5.7	0.5363	0.081	15.1	ug/L	105	Standard
[>	Ga	71	1941.8	3.5				mg/L	225	Standard
	Rb	85	17596.9	3.5				ug/L	28	Standard
	Y	89	292034.8	1.8				ug/L	322845	Standard
[>	Rh	103	70.0	25.8				ug/L	92	Standard
	Mo	98	26.2	28.3	-0.0021	0.002	90.2	ug/L	18	Standard
	Ag	107	87.7	11.7	0.0046	0.002	35.4	ug/L	63	Standard
	Cd	111	51.6	3.0	0.0058	0.000	6.3	mg/L	20	Standard
	Cd	114	118.8	13.2	0.0053	0.002	37.8	ug/L	56	Standard
[>	In	115	582648.7	1.3				ug/L	657102	Standard
	Sn	118	319.3	2.5	-0.0132	0.001	8.4	ug/L	555	Standard
	Sb	123	59.0	50.9	0.0056	0.004	77.2	ug/L	62	Standard
[	Ba	135	34374.6	1.4	11.3685	0.081	0.7	ug/L	19	Standard
	Ce	140	137427.6	2.0				ug/L	24	Standard
[>	Tb	159	852374.7	0.2				ug/L	910514	Standard
	Ho	165	2059.5	3.0				ug/L	7	Standard
	Tl	203	211.3	48.7	0.0135	0.008	62.2	ug/L	13	Standard
	Tl	205	5.3	28.6	0.0155	0.004	26.8	ug/L	1	Standard
	Pb	206	36697.1	1.7	3.6813	0.037	1.0	ug/L	342	Standard
	Pb	207	29609.2	1.8	3.4890	0.040	1.2	ug/L	284	Standard
	Pb	208	140510.7	2.3	3.5685	0.059	1.7	ug/L	1363	Standard
	U	238	967.4	4.2	0.0987	0.004	4.5	ug/L	2	Standard
[>	Bi	209	452778.2	0.7				ug/L	470592	Standard

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Na	23	0.0		0.0050	0.000	0.0	mg/L	2	Standard
Mg	24	2158.5	9.8	-0.0018	0.000	7.1	mg/L	5586	Standard
K	39	15.0	115.5	0.1793	0.253	141.0	mg/L	5	Standard
Ca	43	60.0	30.0	0.5506	0.805	146.2	mg/L	45	Standard
Fe	54	2806.2	3.1	1.0227	0.024	2.3	mg/L	350	Standard
Fe	57	818.4	8.5	1.2735	0.105	8.3	mg/L	102	Standard
Sc-1	45	48577.8	1.2				mg/L	53004	Standard
Cl	35	3.0	66.7				ug/L	2	Standard
Kr	83	156.2	12.1				ug/L	157	Standard
Br	81	3.3	43.3				ug/L	3	Standard
P	31	40324.4	1.9				ug/L	91588	Standard
S	34	33805.2	0.4				ug/L	32556	Standard
Sr	88	80.0	38.0				ug/L	62	Standard
C	12	103.3	7.4				mg/L	133	Standard
N	14	1.7	173.2				mg/L	0	Standard
Hg	202	11.7	24.7				mg/L	7	Standard

QC Calculated Values

Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recovery
Li	7			
Be	9			
Al	27			
Sc	45			
Ti	47			
V	51			
Cr	52			
Cr	53			
Mn	55			
Co	59			
Ni	60			
Cu	65			
Zn	66			
Ge	72		89.688	
As	75			
Se	82			
Se-1	77			
Ga	71			
Rb	85			
Y	89			
Rh	103			

Sample ID: L1211033217

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[	Mo	98	
[	Ag	107	
[	Cd	111	
[	Cd	114	
>	In	115	88.670
[	Sn	118	
[	Sb	123	
[	Ba	135	
[	Ce	140	
>	Tb	159	
[	Ho	165	
[	Tl	203	
[	Tl	205	
[	Pb	206	
[	Pb	207	
[	Pb	208	
[	U	238	
>	Bi	209	96.215
[	Na	23	
[	Mg	24	
[	K	39	
[	Ca	43	
[	Fe	54	
[	Fe	57	
>	Sc-1	45	
[	Cl	35	
[	Kr	83	
[	Br	81	
[	P	31	
[	S	34	
[	Sr	88	
[	C	12	
[	N	14	
[	Hg	202	

QC Out of Limits

Measurement Type	Analyte	Mass	Out of Limits Message

Sample ID: L1211033217

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Method 6020 - Summary Report

Sample ID: L1211033701

Sample Date/Time: Sunday, November 18, 2012 19:00:14

Number of Replicates: 3

Autosampler Position: 422

Sample Description: 20

Method File: C:\NexIONData\Method\6020a.mth

Aliquot Volume (mL):

Diluted to Volume (mL):

User Name: JYH user

Cumulative Autodilution Factor: 1

Nexion-ICP 200.8\6020

Concentration Results

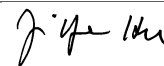
IS	Analyte	Mass	Intensity	RSD	Conc.	SD	RSD	Units	Blank Intens.	Mode
[	Li	7	18893.4	0.4	-6916.2481	305.878	4.4	ug/L	8369	Standard
	Be	9	130.0	13.3	0.0597	0.008	12.8	ug/L	18	Standard
	Al	27	491692.5	1.9	4.4415	0.208	4.7	ug/L	215	Standard
[>	Sc	45	47781.9	3.0				ug/L	53004	Standard
[	Ti	47	260.0	3.1	0.5061	0.017	3.4	ug/L	26	Standard
	V	51	14128.5	2.3	1.0652	0.029	2.7	ug/L	3223	Standard
	Cr	52	34703.4	1.8	2.6184	0.061	2.3	ug/L	10379	Standard
	Cr	53	3422.1	2.1	2.6700	0.052	1.9	ug/L	192	Standard
	Mn	55	307171.2	0.7	19.7203	0.142	0.7	ug/L	1840	Standard
	Co	59	7888.7	1.3	0.6461	0.008	1.2	ug/L	115	Standard
	Ni	60	3567.1	1.8	1.3557	0.028	2.1	ug/L	75	Standard
	Cu	65	2449.2	0.4	0.9320	0.002	0.2	ug/L	155	Standard
	Zn	66	8402.7	2.2	6.6631	0.168	2.5	ug/L	237	Standard
[>	Ge	72	369815.1	0.3				ug/L	413856	Standard
	As	75	74.8	71.7	0.1977	0.041	21.0	ug/L	-197	Standard
	Se	82	-0.7	2123.6	-0.0002	0.121	58737.6	ug/L	-5	Standard
[	Se-1	77	120.0	8.8	0.3900	0.122	31.3	ug/L	105	Standard
[>	Ga	71	1558.4	2.3				mg/L	225	Standard
	Rb	85	12888.8	1.4				ug/L	28	Standard
[	Y	89	284599.3	2.7				ug/L	322845	Standard
[>	Rh	103	101.7	14.2				ug/L	92	Standard
[	Mo	98	113.1	3.6	0.0199	0.001	5.7	ug/L	18	Standard
	Ag	107	70.7	14.2	0.0023	0.001	60.8	ug/L	63	Standard
	Cd	111	44.5	14.9	0.0036	0.002	58.1	mg/L	20	Standard
	Cd	114	120.1	2.5	0.0056	0.000	3.7	ug/L	56	Standard
[>	In	115	577109.0	1.2				ug/L	657102	Standard
	Sn	118	344.7	5.6	-0.0100	0.002	17.2	ug/L	555	Standard
	Sb	123	45.0	20.1	0.0036	0.001	35.4	ug/L	62	Standard
[	Ba	135	28594.3	0.6	9.5448	0.056	0.6	ug/L	19	Standard
[	Ce	140	126098.6	0.7				ug/L	24	Standard
[>	Tb	159	844456.2	1.5				ug/L	910514	Standard
[	Ho	165	1849.1	2.3				ug/L	7	Standard
	Tl	203	129.3	6.2	0.0070	0.001	9.0	ug/L	13	Standard
	Tl	205	4.0	66.1	0.0121	0.007	58.7	ug/L	1	Standard
	Pb	206	745143.8	0.5	76.6041	0.278	0.4	ug/L	342	Standard
	Pb	207	609021.5	1.0	73.6421	0.675	0.9	ug/L	284	Standard
	Pb	208	2850582.1	0.6	74.2429	0.338	0.5	ug/L	1363	Standard
	U	238	463.3	9.0	0.0472	0.004	8.9	ug/L	2	Standard
[>	Bi	209	445598.2	0.5				ug/L	470592	Standard

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Na	23	0.0		0.0050	0.000	0.0	mg/L	2	Standard
Mg	24	2545.2	5.3	-0.0015	0.000	5.3	mg/L	5586	Standard
K	39	23.3	81.1	0.3063	0.272	89.0	mg/L	5	Standard
Ca	43	51.7	27.9	0.2221	0.737	331.9	mg/L	45	Standard
Fe	54	2366.3	5.6	0.8551	0.050	5.9	mg/L	350	Standard
Fe	57	621.7	5.4	0.9543	0.028	2.9	mg/L	102	Standard
Sc-1	45	47781.9	3.0				mg/L	53004	Standard
Cl	35	2.7	114.6				ug/L	2	Standard
Kr	83	184.7	2.2				ug/L	157	Standard
Br	81	5.0	50.0				ug/L	3	Standard
P	31	40115.5	1.9				ug/L	91588	Standard
S	34	32482.3	2.4				ug/L	32556	Standard
Sr	88	101.7	20.5				ug/L	62	Standard
C	12	90.0	20.0				mg/L	133	Standard
N	14	0.0					mg/L	0	Standard
Hg	202	10.0	86.6				mg/L	7	Standard

QC Calculated Values

Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recovery
Li	7			
Be	9			
Al	27			
Sc	45			
Ti	47			
V	51			
Cr	52			
Cr	53			
Mn	55			
Co	59			
Ni	60			
Cu	65			
Zn	66			
Ge	72		89.358	
As	75			
Se	82			
Se-1	77			
Ga	71			
Rb	85			
Y	89			
Rh	103			

Sample ID: L1211033701

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[	Mo	98	
[	Ag	107	
[	Cd	111	
[	Cd	114	
>	In	115	87.826
[	Sn	118	
[	Sb	123	
[	Ba	135	
[	Ce	140	
>	Tb	159	
[	Ho	165	
[	Tl	203	
[	Tl	205	
[	Pb	206	
[	Pb	207	
[	Pb	208	
[	U	238	
>	Bi	209	94.689
[	Na	23	
[	Mg	24	
[	K	39	
[	Ca	43	
[	Fe	54	
[	Fe	57	
>	Sc-1	45	
[	Cl	35	
[	Kr	83	
[	Br	81	
[	P	31	
[	S	34	
[	Sr	88	
[	C	12	
[	N	14	
[	Hg	202	

QC Out of Limits

Measurement Type	Analyte	Mass	Out of Limits Message

Sample ID: L1211033701

Report Date/Time: Sunday, November 18, 2012 19:02:47

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Method 6020 - Summary Report

Sample ID: L1211033702

Sample Date/Time: Sunday, November 18, 2012 19:03:27

Number of Replicates: 3

Autosampler Position: 423

Sample Description: 20

Method File: C:\NexIONData\Method\6020a.mth

Aliquot Volume (mL):

Diluted to Volume (mL):

User Name: JYH user

Cumulative Autodilution Factor: 1

Nexion-ICP 200.8\6020

Concentration Results

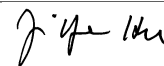
IS	Analyte	Mass	Intensity	RSD	Conc.	SD	RSD	Units	Blank Intens.	Mode
[	Li	7	11554.4	1.8	-2290.3855	273.030	11.9	ug/L	8369	Standard
	Be	9	60.0	30.0	0.0219	0.009	42.2	ug/L	18	Standard
	Al	27	326358.3	2.1	2.8938	0.128	4.4	ug/L	215	Standard
[>	Sc	45	48653.0	2.4				ug/L	53004	Standard
[	Ti	47	287.0	2.5	0.5515	0.022	4.0	ug/L	26	Standard
	V	51	7807.1	2.8	0.4530	0.012	2.7	ug/L	3223	Standard
	Cr	52	12812.7	1.5	0.3610	0.013	3.7	ug/L	10379	Standard
	Cr	53	714.2	8.0	0.4576	0.039	8.6	ug/L	192	Standard
	Mn	55	119374.4	0.9	7.4442	0.126	1.7	ug/L	1840	Standard
	Co	59	2688.6	0.3	0.2051	0.002	0.8	ug/L	115	Standard
	Ni	60	1521.1	3.0	0.5450	0.023	4.1	ug/L	75	Standard
	Cu	65	850.0	3.2	0.2785	0.009	3.2	ug/L	155	Standard
	Zn	66	4307.9	3.3	3.2439	0.149	4.6	ug/L	237	Standard
[>	Ge	72	377968.0	1.1				ug/L	413856	Standard
	As	75	-59.6	54.7	0.0950	0.025	26.0	ug/L	-197	Standard
	Se	82	0.4	2840.1	0.0091	0.100	1096.8	ug/L	-5	Standard
[	Se-1	77	115.7	1.3	0.3122	0.029	9.3	ug/L	105	Standard
[>	Ga	71	731.7	1.7				mg/L	225	Standard
[	Rb	85	4195.6	4.2				ug/L	28	Standard
[	Y	89	283835.3	2.8				ug/L	322845	Standard
[>	Rh	103	78.3	41.5				ug/L	92	Standard
[	Mo	98	23.8	7.8	-0.0028	0.000	15.1	ug/L	18	Standard
	Ag	107	68.7	10.9	0.0017	0.001	58.2	ug/L	63	Standard
	Cd	111	34.3	21.1	-0.0001	0.002	2455.2	mg/L	20	Standard
	Cd	114	90.9	4.2	0.0016	0.001	32.4	ug/L	56	Standard
[>	In	115	592222.3	0.5				ug/L	657102	Standard
	Sn	118	327.7	7.6	-0.0129	0.003	20.4	ug/L	555	Standard
	Sb	123	26.8	30.8	0.0009	0.001	132.9	ug/L	62	Standard
[	Ba	135	7919.4	2.0	2.5616	0.066	2.6	ug/L	19	Standard
[	Ce	140	53539.8	0.3				ug/L	24	Standard
[>	Tb	159	859580.5	0.2				ug/L	910514	Standard
[	Ho	165	773.4	1.2				ug/L	7	Standard
	Tl	203	68.7	9.7	0.0019	0.001	28.6	ug/L	13	Standard
	Tl	205	2.0	100.0	0.0066	0.005	80.7	ug/L	1	Standard
	Pb	206	60737.9	1.8	6.0953	0.082	1.3	ug/L	342	Standard
	Pb	207	48836.3	1.2	5.7599	0.044	0.8	ug/L	284	Standard
	Pb	208	231292.4	0.9	5.8780	0.029	0.5	ug/L	1363	Standard
	U	238	151.7	10.7	0.0141	0.002	11.7	ug/L	2	Standard
[>	Bi	209	454205.2	0.5				ug/L	470592	Standard

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Na	23	0.0		0.0050	0.000	0.0	mg/L	2	Standard
Mg	24	1311.7	3.9	-0.0022	0.000	2.0	mg/L	5586	Standard
K	39	8.3	69.3	0.0816	0.084	102.8	mg/L	5	Standard
Ca	43	58.3	32.5	0.4678	0.843	180.3	mg/L	45	Standard
Fe	54	895.7	7.7	0.2211	0.020	9.2	mg/L	350	Standard
Fe	57	295.0	12.8	0.3776	0.075	20.0	mg/L	102	Standard
Sc-1	45	48653.0	2.4				mg/L	53004	Standard
Cl	35	3.7	41.7				ug/L	2	Standard
Kr	83	175.8	6.2				ug/L	157	Standard
Br	81	6.7	86.6				ug/L	3	Standard
P	31	41034.7	1.8				ug/L	91588	Standard
S	34	33313.3	1.2				ug/L	32556	Standard
Sr	88	65.0	40.7				ug/L	62	Standard
C	12	98.3	12.8				mg/L	133	Standard
N	14	0.0					mg/L	0	Standard
Hg	202	1.7	173.2				mg/L	7	Standard

QC Calculated Values

Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recovery
Li	7			
Be	9			
Al	27			
Sc	45			
Ti	47			
V	51			
Cr	52			
Cr	53			
Mn	55			
Co	59			
Ni	60			
Cu	65			
Zn	66			
Ge	72		91.328	
As	75			
Se	82			
Se-1	77			
Ga	71			
Rb	85			
Y	89			
Rh	103			

Sample ID: L1211033702

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[	Mo	98	
[	Ag	107	
[	Cd	111	
[	Cd	114	
>	In	115	90.126
[	Sn	118	
[	Sb	123	
[	Ba	135	
[	Ce	140	
>	Tb	159	
[	Ho	165	
[	Tl	203	
[	Tl	205	
[	Pb	206	
[	Pb	207	
[	Pb	208	
[	U	238	
>	Bi	209	96.518
[	Na	23	
[	Mg	24	
[	K	39	
[	Ca	43	
[	Fe	54	
[	Fe	57	
>	Sc-1	45	
[	Cl	35	
[	Kr	83	
[	Br	81	
[	P	31	
[	S	34	
[	Sr	88	
[	C	12	
[	N	14	
[	Hg	202	

QC Out of Limits

Measurement Type	Analyte	Mass	Out of Limits Message

Sample ID: L1211033702

Report Date/Time: Sunday, November 18, 2012 19:05:59

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Method 6020 - Summary Report

Sample ID: L1211033703

Sample Date/Time: Sunday, November 18, 2012 19:06:39

Number of Replicates: 3

Autosampler Position: 424

Sample Description: 20

Method File: C:\NexIONData\Method\6020a.mth

Aliquot Volume (mL):

Diluted to Volume (mL):

User Name: JYH user

Cumulative Autodilution Factor: 1

Nexion-ICP 200.8\6020

Concentration Results

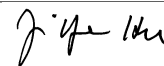
IS	Analyte	Mass	Intensity	RSD	Conc.	SD	RSD	Units	Blank Intens.	Mode
[	Li	7	20216.8	2.5	-7431.5356	233.426	3.1	ug/L	8369	Standard
	Be	9	130.0	16.8	0.0582	0.011	18.6	ug/L	18	Standard
	Al	27	579039.2	0.9	5.1048	0.101	2.0	ug/L	215	Standard
[>	Sc	45	48932.3	2.6				ug/L	53004	Standard
[	Ti	47	216.7	6.8	0.4014	0.035	8.6	ug/L	26	Standard
	V	51	12006.2	2.7	0.8394	0.013	1.5	ug/L	3223	Standard
	Cr	52	17214.8	1.4	0.7979	0.011	1.4	ug/L	10379	Standard
	Cr	53	1211.7	3.7	0.8521	0.019	2.2	ug/L	192	Standard
	Mn	55	570407.8	0.4	35.8734	0.676	1.9	ug/L	1840	Standard
	Co	59	7015.3	1.0	0.5597	0.015	2.7	ug/L	115	Standard
	Ni	60	3635.8	2.0	1.3504	0.004	0.3	ug/L	75	Standard
	Cu	65	2329.8	1.9	0.8625	0.006	0.7	ug/L	155	Standard
	Zn	66	5003.8	2.1	3.7950	0.073	1.9	ug/L	237	Standard
[>	Ge	72	378360.9	1.8				ug/L	413856	Standard
	As	75	192.2	16.0	0.2850	0.025	8.7	ug/L	-197	Standard
	Se	82	3.3	175.6	0.0335	0.049	146.0	ug/L	-5	Standard
[	Se-1	77	126.3	10.1	0.4283	0.119	27.7	ug/L	105	Standard
[>	Ga	71	1381.7	9.3				mg/L	225	Standard
	Rb	85	8889.3	2.3				ug/L	28	Standard
[	Y	89	288003.5	1.4				ug/L	322845	Standard
[>	Rh	103	75.0	24.0				ug/L	92	Standard
[	Mo	98	32.5	25.7	-0.0007	0.002	300.1	ug/L	18	Standard
	Ag	107	74.7	12.9	0.0026	0.001	46.8	ug/L	63	Standard
	Cd	111	38.6	23.3	0.0014	0.003	228.2	mg/L	20	Standard
	Cd	114	118.2	14.3	0.0050	0.002	39.4	ug/L	56	Standard
[>	In	115	591702.4	1.5				ug/L	657102	Standard
	Sn	118	327.0	10.3	-0.0129	0.004	32.9	ug/L	555	Standard
	Sb	123	26.0	30.3	0.0008	0.001	148.8	ug/L	62	Standard
[	Ba	135	31748.9	1.0	10.3402	0.259	2.5	ug/L	19	Standard
[	Ce	140	112403.1	1.7				ug/L	24	Standard
[>	Tb	159	868519.6	0.8				ug/L	910514	Standard
[	Ho	165	1727.1	3.5				ug/L	7	Standard
	Tl	203	113.3	29.1	0.0054	0.003	48.2	ug/L	13	Standard
	Tl	205	1.7	34.6	0.0057	0.002	27.1	ug/L	1	Standard
	Pb	206	8725.5	3.8	0.8398	0.036	4.2	ug/L	342	Standard
	Pb	207	7008.6	4.1	0.7884	0.033	4.2	ug/L	284	Standard
	Pb	208	33161.5	3.5	0.8059	0.030	3.7	ug/L	1363	Standard
	U	238	579.3	6.3	0.0577	0.003	5.2	ug/L	2	Standard
[>	Bi	209	458239.7	1.3				ug/L	470592	Standard

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Na	23	0.0		0.0050	0.000	0.0	mg/L	2	Standard
Mg	24	2900.3	4.0	-0.0014	0.000	5.4	mg/L	5586	Standard
K	39	8.3	69.3	0.0800	0.081	100.9	mg/L	5	Standard
Ca	43	51.7	36.6	0.1404	0.832	592.7	mg/L	45	Standard
Fe	54	2560.1	5.9	0.9133	0.087	9.5	mg/L	350	Standard
Fe	57	683.3	15.5	1.0359	0.195	18.9	mg/L	102	Standard
Sc-1	45	48932.3	2.6				mg/L	53004	Standard
Cl	35	3.0	33.3				ug/L	2	Standard
Kr	83	179.3	4.4				ug/L	157	Standard
Br	81	5.8	99.0				ug/L	3	Standard
P	31	42828.0	2.3				ug/L	91588	Standard
S	34	34452.5	2.0				ug/L	32556	Standard
Sr	88	80.0	27.2				ug/L	62	Standard
C	12	91.7	15.7				mg/L	133	Standard
N	14	0.0					mg/L	0	Standard
Hg	202	5.0	100.0				mg/L	7	Standard

QC Calculated Values

Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recovery
Li	7			
Be	9			
Al	27			
Sc	45			
Ti	47			
V	51			
Cr	52			
Cr	53			
Mn	55			
Co	59			
Ni	60			
Cu	65			
Zn	66			
Ge	72		91.423	
As	75			
Se	82			
Se-1	77			
Ga	71			
Rb	85			
Y	89			
Rh	103			

Sample ID: L1211033703

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[	Mo	98	
[	Ag	107	
[	Cd	111	
[	Cd	114	
>	In	115	90.047
[	Sn	118	
[	Sb	123	
[	Ba	135	
[	Ce	140	
>	Tb	159	
[	Ho	165	
[	Tl	203	
[	Tl	205	
[	Pb	206	
[	Pb	207	
[	Pb	208	
[	U	238	
>	Bi	209	97.375
[	Na	23	
[	Mg	24	
[	K	39	
[	Ca	43	
[	Fe	54	
[	Fe	57	
>	Sc-1	45	
[	Cl	35	
[	Kr	83	
[	Br	81	
[	P	31	
[	S	34	
[	Sr	88	
[	C	12	
[	N	14	
[	Hg	202	

QC Out of Limits

Measurement Type	Analyte	Mass	Out of Limits Message

Sample ID: L1211033703

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Method 6020 - Summary Report

Sample ID: L1211033704

Sample Date/Time: Sunday, November 18, 2012 19:09:52

Number of Replicates: 3

Autosampler Position: 425

Sample Description: 20

Method File: C:\NexIONData\Method\6020a.mth

Aliquot Volume (mL):

Diluted to Volume (mL):

User Name: JYH user

Cumulative Autodilution Factor: 1

Nexion-ICP 200.8\6020

Concentration Results

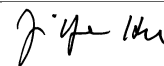
IS	Analyte	Mass	Intensity	RSD	Conc.	SD	RSD	Units	Blank Intens.	Mode
[	Li	7	18801.7	7.9	-6788.0323	438.573	6.5	ug/L	8369	Standard
	Be	9	148.3	20.3	0.0696	0.019	27.0	ug/L	18	Standard
	Al	27	575066.4	2.1	5.1706	0.197	3.8	ug/L	215	Standard
[>	Sc	45	48012.7	4.6				ug/L	53004	Standard
[	Ti	47	224.0	4.3	0.4188	0.014	3.4	ug/L	26	Standard
	V	51	10876.8	10.3	0.7405	0.113	15.2	ug/L	3223	Standard
	Cr	52	73988.0	3.8	6.4839	0.324	5.0	ug/L	10379	Standard
	Cr	53	8086.3	3.5	6.3425	0.312	4.9	ug/L	192	Standard
	Mn	55	326443.6	2.2	20.5859	0.662	3.2	ug/L	1840	Standard
	Co	59	6891.2	3.9	0.5520	0.025	4.5	ug/L	115	Standard
	Ni	60	3509.4	2.3	1.3084	0.033	2.5	ug/L	75	Standard
	Cu	65	2610.9	1.7	0.9784	0.026	2.7	ug/L	155	Standard
	Zn	66	10543.3	1.9	8.2565	0.239	2.9	ug/L	237	Standard
[>	Ge	72	376654.4	1.3				ug/L	413856	Standard
	As	75	68.7	37.0	0.1919	0.019	9.9	ug/L	-197	Standard
	Se	82	5.8	91.6	0.0546	0.045	82.3	ug/L	-5	Standard
[	Se-1	77	118.3	6.6	0.3461	0.078	22.6	ug/L	105	Standard
[>	Ga	71	1503.4	5.8				mg/L	225	Standard
[	Rb	85	11846.3	1.8				ug/L	28	Standard
[	Y	89	288140.3	2.7				ug/L	322845	Standard
[>	Rh	103	113.3	22.2				ug/L	92	Standard
[	Mo	98	1014.8	5.2	0.2388	0.007	3.1	ug/L	18	Standard
	Ag	107	84.3	13.3	0.0038	0.001	38.4	ug/L	63	Standard
	Cd	111	71.8	5.6	0.0118	0.002	13.8	mg/L	20	Standard
	Cd	114	195.1	8.7	0.0142	0.002	14.7	ug/L	56	Standard
[>	In	115	598139.8	2.5				ug/L	657102	Standard
	Sn	118	319.3	6.6	-0.0141	0.003	22.5	ug/L	555	Standard
	Sb	123	120.3	13.1	0.0140	0.002	16.5	ug/L	62	Standard
[	Ba	135	30105.9	1.5	9.7022	0.385	4.0	ug/L	19	Standard
[	Ce	140	121353.4	0.2				ug/L	24	Standard
[>	Tb	159	859293.4	1.4				ug/L	910514	Standard
[	Ho	165	1821.1	1.3				ug/L	7	Standard
	Tl	203	115.3	8.6	0.0058	0.001	13.3	ug/L	13	Standard
	Tl	205	2.3	24.7	0.0075	0.001	19.9	ug/L	1	Standard
	Pb	206	944580.7	1.7	96.1514	1.891	2.0	ug/L	342	Standard
	Pb	207	782028.4	2.3	93.6354	2.437	2.6	ug/L	284	Standard
	Pb	208	3622841.1	1.6	93.4296	1.849	2.0	ug/L	1363	Standard
	U	238	475.0	5.7	0.0479	0.002	5.2	ug/L	2	Standard
[>	Bi	209	450084.7	0.7				ug/L	470592	Standard

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Na	23	0.0		0.0050	0.000	0.0	mg/L	2	Standard
Mg	24	2890.3	2.5	-0.0014	0.000	8.3	mg/L	5586	Standard
K	39	16.7	45.8	0.2069	0.105	50.5	mg/L	5	Standard
Ca	43	46.7	49.5	-0.0638	1.026	1607.2	mg/L	45	Standard
Fe	54	2070.5	6.4	0.7245	0.033	4.6	mg/L	350	Standard
Fe	57	628.3	10.7	0.9599	0.080	8.3	mg/L	102	Standard
Sc-1	45	48012.7	4.6				mg/L	53004	Standard
Cl	35	3.3	69.3				ug/L	2	Standard
Kr	83	145.8	4.8				ug/L	157	Standard
Br	81	5.0	86.6				ug/L	3	Standard
P	31	40848.3	1.5				ug/L	91588	Standard
S	34	33449.4	2.1				ug/L	32556	Standard
Sr	88	93.3	8.2				ug/L	62	Standard
C	12	103.3	10.1				mg/L	133	Standard
N	14	0.0					mg/L	0	Standard
Hg	202	6.7	86.6				mg/L	7	Standard

QC Calculated Values

Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recovery
Li	7			
Be	9			
Al	27			
Sc	45			
Ti	47			
V	51			
Cr	52			
Cr	53			
Mn	55			
Co	59			
Ni	60			
Cu	65			
Zn	66			
Ge	72		91.011	
As	75			
Se	82			
Se-1	77			
Ga	71			
Rb	85			
Y	89			
Rh	103			

Sample ID: L1211033704

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[	Mo	98	
[	Ag	107	
[	Cd	111	
[	Cd	114	
>	In	115	91.027
[	Sn	118	
[	Sb	123	
[	Ba	135	
[	Ce	140	
>	Tb	159	
[	Ho	165	
[	Tl	203	
[	Tl	205	
[	Pb	206	
[	Pb	207	
[	Pb	208	
[	U	238	
>	Bi	209	95.642
[	Na	23	
[	Mg	24	
[	K	39	
[	Ca	43	
[	Fe	54	
[	Fe	57	
>	Sc-1	45	
[	Cl	35	
[	Kr	83	
[	Br	81	
[	P	31	
[	S	34	
[	Sr	88	
[	C	12	
[	N	14	
[	Hg	202	

QC Out of Limits

Measurement Type	Analyte	Mass	Out of Limits Message

Sample ID: L1211033704

Report Date/Time: Sunday, November 18, 2012 19:12:23

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Method 6020 - Summary Report

Sample ID: L1211033705

Sample Date/Time: Sunday, November 18, 2012 19:13:04

Number of Replicates: 3

Autosampler Position: 426

Sample Description: 20

Method File: C:\NexIONData\Method\6020a.mth

Aliquot Volume (mL):

Diluted to Volume (mL):

User Name: JYH user

Cumulative Autodilution Factor: 1

Nexion-ICP 200.8\6020

Concentration Results

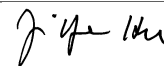
IS	Analyte	Mass	Intensity	RSD	Conc.	SD	RSD	Units	Blank Intens.	Mode
[	Li	7	15806.6	0.6	-5425.1797	180.090	3.3	ug/L	8369	Standard
	Be	9	151.7	6.9	0.0748	0.007	9.2	ug/L	18	Standard
	Al	27	536189.3	2.4	5.0415	0.092	1.8	ug/L	215	Standard
[>	Sc	45	45866.0	1.8				ug/L	53004	Standard
[	Ti	47	102.7	15.2	0.1662	0.036	21.4	ug/L	26	Standard
	V	51	11428.8	0.8	0.8217	0.011	1.4	ug/L	3223	Standard
	Cr	52	15890.3	1.8	0.7190	0.017	2.3	ug/L	10379	Standard
	Cr	53	1126.7	1.2	0.8150	0.024	2.9	ug/L	192	Standard
	Mn	55	415506.4	2.9	26.9775	0.496	1.8	ug/L	1840	Standard
	Co	59	6456.7	4.7	0.5313	0.017	3.1	ug/L	115	Standard
	Ni	60	2968.3	3.1	1.1337	0.018	1.6	ug/L	75	Standard
	Cu	65	2569.6	3.8	0.9912	0.036	3.7	ug/L	155	Standard
	Zn	66	5879.5	4.4	4.6503	0.163	3.5	ug/L	237	Standard
[>	Ge	72	366087.0	1.7				ug/L	413856	Standard
	As	75	73.1	11.3	0.1968	0.006	2.8	ug/L	-197	Standard
	Se	82	2.7	310.9	0.0287	0.073	253.6	ug/L	-5	Standard
[	Se-1	77	128.3	7.7	0.4994	0.104	20.8	ug/L	105	Standard
[>	Ga	71	1223.4	2.7				mg/L	225	Standard
[	Rb	85	7910.4	4.1				ug/L	28	Standard
[	Y	89	287057.2	0.8				ug/L	322845	Standard
[>	Rh	103	76.7	3.8				ug/L	92	Standard
[	Mo	98	30.4	12.5	-0.0009	0.001	100.6	ug/L	18	Standard
	Ag	107	72.7	3.5	0.0027	0.000	15.2	ug/L	63	Standard
	Cd	111	61.3	15.2	0.0094	0.003	34.0	mg/L	20	Standard
	Cd	114	152.4	8.4	0.0099	0.002	17.1	ug/L	56	Standard
[>	In	115	570559.2	0.9				ug/L	657102	Standard
	Sn	118	308.3	2.8	-0.0137	0.001	9.4	ug/L	555	Standard
	Sb	123	22.6	5.4	0.0004	0.000	52.8	ug/L	62	Standard
[	Ba	135	37423.5	2.2	12.6409	0.220	1.7	ug/L	19	Standard
[	Ce	140	130451.9	1.6				ug/L	24	Standard
[>	Tb	159	819930.5	0.8				ug/L	910514	Standard
[	Ho	165	2052.1	0.6				ug/L	7	Standard
	Tl	203	96.0	11.6	0.0045	0.001	18.9	ug/L	13	Standard
	Tl	205	2.0	0.0	0.0069	0.000	1.0	ug/L	1	Standard
	Pb	206	48859.0	1.6	5.1479	0.028	0.5	ug/L	342	Standard
	Pb	207	39945.3	2.8	4.9458	0.084	1.7	ug/L	284	Standard
	Pb	208	187683.6	2.2	5.0075	0.057	1.1	ug/L	1363	Standard
	U	238	911.7	4.1	0.0974	0.003	3.4	ug/L	2	Standard
[>	Bi	209	432183.0	1.2				ug/L	470592	Standard

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Na	23	0.0		0.0050	0.000	0.0	mg/L	2	Standard
Mg	24	2611.9	8.1	-0.0014	0.000	6.5	mg/L	5586	Standard
K	39	21.7	74.2	0.2998	0.253	84.5	mg/L	5	Standard
Ca	43	65.0	26.6	0.9587	0.813	84.8	mg/L	45	Standard
Fe	54	1694.8	1.0	0.5991	0.014	2.4	mg/L	350	Standard
Fe	57	530.0	10.9	0.8335	0.101	12.1	mg/L	102	Standard
Sc-1	45	45866.0	1.8				mg/L	53004	Standard
Cl	35	2.3	49.5				ug/L	2	Standard
Kr	83	173.4	9.8				ug/L	157	Standard
Br	81	3.3	114.6				ug/L	3	Standard
P	31	39493.1	3.1				ug/L	91588	Standard
S	34	31744.1	2.1				ug/L	32556	Standard
Sr	88	63.3	22.8				ug/L	62	Standard
C	12	98.3	46.1				mg/L	133	Standard
N	14	0.0					mg/L	0	Standard
Hg	202	8.3	34.6				mg/L	7	Standard

QC Calculated Values

Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recovery
Li	7			
Be	9			
Al	27			
Sc	45			
Ti	47			
V	51			
Cr	52			
Cr	53			
Mn	55			
Co	59			
Ni	60			
Cu	65			
Zn	66			
Ge	72		88.458	
As	75			
Se	82			
Se-1	77			
Ga	71			
Rb	85			
Y	89			
Rh	103			

Sample ID: L1211033705

Report Date/Time: Sunday, November 18, 2012 19:15:36

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[	Mo	98	
[	Ag	107	
[	Cd	111	
[	Cd	114	
>	In	115	86.830
[	Sn	118	
[	Sb	123	
[	Ba	135	
[	Ce	140	
>	Tb	159	
[	Ho	165	
[	Tl	203	
[	Tl	205	
[	Pb	206	
[	Pb	207	
[	Pb	208	
[	U	238	
>	Bi	209	91.838
[	Na	23	
[	Mg	24	
[	K	39	
[	Ca	43	
[	Fe	54	
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[	Cl	35	
[	Kr	83	
[	Br	81	
[	P	31	
[	S	34	
[	Sr	88	
[	C	12	
[	N	14	
[	Hg	202	

QC Out of Limits

Measurement Type	Analyte	Mass	Out of Limits Message

Sample ID: L1211033705

Report Date/Time: Sunday, November 18, 2012 19:15:36

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Method 6020 - Summary Report

Sample ID: QC Std 6

Sample Date/Time: Sunday, November 18, 2012 19:16:18

Number of Replicates: 3

Autosampler Position: 101

Sample Description:

Method File: C:\NexIONData\Method\6020a.mth

Aliquot Volume (mL):

Diluted to Volume (mL):

User Name: JYH user

Cumulative Autodilution Factor: 1

Nexion-ICP 200.8\6020

Concentration Results

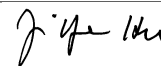
IS	Analyte	Mass	Intensity	RSD	Conc.	SD	RSD	Units	Blank Intens.	Mode
[	Li	7	9069.4	4.3	-32.2642	51.796	160.5	ug/L	8369	Standard
	Be	9	113492.2	3.6	51.1588	0.536	1.0	ug/L	18	Standard
	Al	27	7248166.5	2.8	55.3537	0.425	0.8	ug/L	215	Standard
[>	Sc	45	56495.2	3.2				ug/L	53004	Standard
	Ti	47	55314.9	4.7	102.0657	4.580	4.5	ug/L	26	Standard
	V	51	636956.9	3.7	50.7181	1.787	3.5	ug/L	3223	Standard
	Cr	52	601106.6	3.3	51.0295	1.580	3.1	ug/L	10379	Standard
	Cr	53	72656.4	3.1	49.9735	1.430	2.9	ug/L	192	Standard
	Mn	55	946433.6	3.8	51.7026	1.861	3.6	ug/L	1840	Standard
	Co	59	715041.8	4.7	50.8715	2.290	4.5	ug/L	115	Standard
	Ni	60	151983.8	3.6	50.2610	1.714	3.4	ug/L	75	Standard
	Cu	65	149961.0	5.0	51.3543	2.445	4.8	ug/L	155	Standard
	Zn	66	73980.6	3.2	51.0697	1.526	3.0	ug/L	237	Standard
[>	Ge	72	435792.7	0.2				ug/L	413856	Standard
	As	75	76710.8	3.9	50.3218	1.828	3.6	ug/L	-197	Standard
	Se	82	6939.1	4.3	50.8516	2.069	4.1	ug/L	-5	Standard
[	Se-1	77	5388.3	2.7	51.1687	1.311	2.6	ug/L	105	Standard
[>	Ga	71	231.7	19.9				mg/L	225	Standard
	Rb	85	1720.1	1.9				ug/L	28	Standard
	Y	89	325712.3	2.9				ug/L	322845	Standard
[>	Rh	103	158.3	11.1				ug/L	92	Standard
	Mo	98	459580.4	4.9	101.1613	3.680	3.6	ug/L	18	Standard
	Ag	107	401807.1	2.6	50.2821	0.387	0.8	ug/L	63	Standard
	Cd	111	177176.8	3.8	51.2140	1.210	2.4	mg/L	20	Standard
	Cd	114	464977.5	3.7	51.0694	1.155	2.3	ug/L	56	Standard
[>	In	115	662751.5	2.4				ug/L	657102	Standard
	Sn	118	521122.4	4.1	51.8713	1.781	3.4	ug/L	555	Standard
	Sb	123	406338.9	3.7	51.4381	1.281	2.5	ug/L	62	Standard
[	Ba	135	176708.8	3.1	51.4454	0.829	1.6	ug/L	19	Standard
	Ce	140	621.3	17.6				ug/L	24	Standard
[>	Tb	159	951543.9	1.5				ug/L	910514	Standard
	Ho	165	452.3	2.8				ug/L	7	Standard
	Tl	203	665437.5	1.3	50.8397	0.650	1.3	ug/L	13	Standard
	Tl	205	19988.9	2.8	50.0587	1.474	2.9	ug/L	1	Standard
	Pb	206	534449.6	3.7	50.9326	1.812	3.6	ug/L	342	Standard
	Pb	207	458626.6	2.7	51.4097	1.369	2.7	ug/L	284	Standard
	Pb	208	2104317.6	3.4	50.8062	1.676	3.3	ug/L	1363	Standard
	U	238	526965.7	4.5	51.4126	2.307	4.5	ug/L	2	Standard
[>	Bi	209	480581.0	0.9				ug/L	470592	Standard

Sample ID: QC Std 6

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Na	23	1.7	173.2	0.1419	0.237	167.1	mg/L	2	Standard
Mg	24	308882.1	1.5	0.1393	0.002	1.8	mg/L	5586	Standard
K	39	348.3	6.5	4.4119	0.429	9.7	mg/L	5	Standard
Ca	43	170.0	8.8	4.5559	0.526	11.5	mg/L	45	Standard
Fe	54	13965.1	5.2	4.8782	0.113	2.3	mg/L	350	Standard
Fe	57	3485.4	4.1	5.0080	0.172	3.4	mg/L	102	Standard
Sc-1	45	56495.2	3.2				mg/L	53004	Standard
Cl	35	4.0	66.1				ug/L	2	Standard
Kr	83	179.1	24.2				ug/L	157	Standard
Br	81	5.8	99.0				ug/L	3	Standard
P	31	130815.0	2.1				ug/L	91588	Standard
S	34	41807.6	1.0				ug/L	32556	Standard
Sr	88	61.7	24.8				ug/L	62	Standard
C	12	133.3	9.4				mg/L	133	Standard
N	14	0.0					mg/L	0	Standard
Hg	202	5.0	0.0				mg/L	7	Standard

QC Calculated Values

Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recovery
Li	7			
Be	9	102.318		
Al	27	110.707		
Sc	45			
Ti	47	102.066		
V	51	101.436		
Cr	52	102.059		
Cr	53			
Mn	55	103.405		
Co	59	101.743		
Ni	60	100.522		
Cu	65	102.709		
Zn	66	102.139		
Ge	72		105.301	
As	75	100.644		
Se	82	101.703		
Se-1	77			
Ga	71			
Rb	85			
Y	89			
Rh	103			

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[	Mo	98	101.161	
[	Ag	107	100.564	
[	Cd	111	102.428	
[	Cd	114		
>	In	115		100.860
[	Sn	118	103.743	
[	Sb	123	102.876	
[	Ba	135	102.891	
[	Ce	140		
>	Tb	159		
[	Ho	165		
[	Tl	203	101.679	
[	Tl	205		
[	Pb	206	101.865	
[	Pb	207	102.819	
[	Pb	208	101.612	
[	U	238	102.825	
>	Bi	209		102.123
[	Na	23		
[	Mg	24		
[	K	39		
[	Ca	43		
[	Fe	54		
[	Fe	57		
>	Sc-1	45		
[	Cl	35		
[	Kr	83		
[	Br	81		
[	P	31		
[	S	34		
[	Sr	88		
[	C	12		
[	N	14		
[	Hg	202		

QC Out of Limits

Measurement Type	Analyte	Mass	Out of Limits Message
QC Std 6	Al	27	

Sample ID: QC Std 6

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Method 6020 - Summary Report

Sample ID: QC Std 7

Sample Date/Time: Sunday, November 18, 2012 19:19:30

Number of Replicates: 3

Autosampler Position: 102

Sample Description:

Method File: C:\NexIONData\Method\6020a.mth

Aliquot Volume (mL):

Diluted to Volume (mL):

User Name: JYH user

Cumulative Autodilution Factor: 1

Nexion-ICP 200.8\6020

Concentration Results

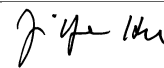
IS	Analyte	Mass	Intensity	RSD	Conc.	SD	RSD	Units	Blank Intens.	Mode
[	Li	7	8617.5	5.9	34.2392	158.495	462.9	ug/L	8369	Standard
	Be	9	13.3	21.7	-0.0032	0.001	41.4	ug/L	18	Standard
	Al	27	535.0	103.6	0.0021	0.005	212.0	ug/L	215	Standard
[>	Sc	45	54432.6	2.4				ug/L	53004	Standard
[	Ti	47	23.7	27.2	-0.0159	0.011	67.6	ug/L	26	Standard
	V	51	3149.9	0.9	-0.0143	0.006	42.4	ug/L	3223	Standard
	Cr	52	9899.9	0.7	-0.0565	0.022	39.5	ug/L	10379	Standard
	Cr	53	153.3	10.9	-0.0037	0.011	313.6	ug/L	192	Standard
	Mn	55	1594.8	1.9	-0.0013	0.002	127.3	ug/L	1840	Standard
	Co	59	110.0	11.8	-0.0077	0.001	14.4	ug/L	115	Standard
	Ni	60	78.0	21.6	-0.0097	0.005	50.2	ug/L	75	Standard
	Cu	65	209.7	7.7	0.0148	0.007	50.7	ug/L	155	Standard
	Zn	66	239.7	9.7	-0.0324	0.020	60.4	ug/L	237	Standard
[>	Ge	72	434181.6	3.1				ug/L	413856	Standard
	As	75	-259.6	20.3	-0.0311	0.038	121.7	ug/L	-197	Standard
	Se	82	7.2	217.2	0.0577	0.113	196.5	ug/L	-5	Standard
[	Se-1	77	128.0	6.4	0.2651	0.080	30.1	ug/L	105	Standard
[>	Ga	71	240.0	13.0				mg/L	225	Standard
[	Rb	85	25.0	40.0				ug/L	28	Standard
[	Y	89	325145.3	1.0				ug/L	322845	Standard
[>	Rh	103	100.0	31.2				ug/L	92	Standard
[	Mo	98	128.6	122.2	0.0198	0.035	176.7	ug/L	18	Standard
	Ag	107	151.0	102.3	0.0111	0.020	176.5	ug/L	63	Standard
	Cd	111	47.8	88.4	0.0027	0.012	459.2	mg/L	20	Standard
	Cd	114	161.1	99.7	0.0082	0.018	217.4	ug/L	56	Standard
[>	In	115	663588.9	1.9				ug/L	657102	Standard
	Sn	118	469.0	35.6	-0.0027	0.017	638.1	ug/L	555	Standard
	Sb	123	348.2	39.0	0.0410	0.017	41.4	ug/L	62	Standard
[	Ba	135	45.3	84.0	-0.0067	0.011	168.6	ug/L	19	Standard
[	Ce	140	31.7	21.5				ug/L	24	Standard
[>	Tb	159	941516.0	1.9				ug/L	910514	Standard
[	Ho	165	8.0	43.3				ug/L	7	Standard
	Tl	203	85.0	125.3	0.0029	0.008	286.4	ug/L	13	Standard
	Tl	205	1.7	34.6	0.0054	0.001	25.2	ug/L	1	Standard
	Pb	206	427.3	12.6	0.0074	0.006	81.6	ug/L	342	Standard
	Pb	207	348.7	18.4	0.0025	0.008	300.2	ug/L	284	Standard
	Pb	208	1627.4	14.0	0.0044	0.006	139.6	ug/L	1363	Standard
	U	238	36.3	142.4	0.0020	0.005	250.6	ug/L	2	Standard
[>	Bi	209	487159.3	3.2				ug/L	470592	Standard

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Na	23	5.0	100.0	0.4473	0.449	100.5	mg/L	2	Standard
Mg	24	1060.0	5.8	-0.0024	0.000	1.6	mg/L	5586	Standard
K	39	10.0	50.0	0.0908	0.066	72.9	mg/L	5	Standard
Ca	43	46.7	16.4	-0.3000	0.277	92.2	mg/L	45	Standard
Fe	54	348.7	11.5	-0.0232	0.012	50.4	mg/L	350	Standard
Fe	57	141.7	11.3	0.0887	0.027	30.3	mg/L	102	Standard
Sc-1	45	54432.6	2.4				mg/L	53004	Standard
Cl	35	3.0	33.3				ug/L	2	Standard
Kr	83	436.3	14.5				ug/L	157	Standard
Br	81	4.2	69.3				ug/L	3	Standard
P	31	125438.1	2.3				ug/L	91588	Standard
S	34	41724.9	0.7				ug/L	32556	Standard
Sr	88	66.7	22.9				ug/L	62	Standard
C	12	113.3	43.3				mg/L	133	Standard
N	14	3.3	86.6				mg/L	0	Standard
Hg	202	6.7	114.6				mg/L	7	Standard

QC Calculated Values

Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recovery
Li	7			
Be	9			
Al	27			
Sc	45			
Ti	47			
V	51			
Cr	52			
Cr	53			
Mn	55			
Co	59			
Ni	60			
Cu	65			
Zn	66			
Ge	72		104.911	
As	75			
Se	82			
Se-1	77			
Ga	71			
Rb	85			
Y	89			
Rh	103			

Sample ID: QC Std 7

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[	Mo	98	
[	Ag	107	
[	Cd	111	
[	Cd	114	
>	In	115	100.987
[	Sn	118	
[	Sb	123	
[	Ba	135	
[	Ce	140	
>	Tb	159	
[	Ho	165	
[	Tl	203	
[	Tl	205	
[	Pb	206	
[	Pb	207	
[	Pb	208	
[	U	238	
>	Bi	209	103.521
[	Na	23	
[	Mg	24	
[	K	39	
[	Ca	43	
[	Fe	54	
[	Fe	57	
>	Sc-1	45	
[	Cl	35	
[	Kr	83	
[	Br	81	
[	P	31	
[	S	34	
[	Sr	88	
[	C	12	
[	N	14	
[	Hg	202	

QC Out of Limits

Measurement Type	Analyte	Mass	Out of Limits Message

Sample ID: QC Std 7

Report Date/Time: Sunday, November 18, 2012 19:22:02

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Method 6020 - Summary Report

Sample ID: PBS B5 WG414371-02

Sample Date/Time: Sunday, November 18, 2012 19:22:44

Number of Replicates: 3

Autosampler Position: 427

Sample Description: 1

Method File: C:\NexIONData\Method\6020a.mth

Aliquot Volume (mL):

Diluted to Volume (mL):

User Name: JYH user

Cumulative Autodilution Factor: 1

Nexion-ICP 200.8\6020

Concentration Results

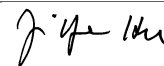
IS	Analyte	Mass	Intensity	RSD	Conc.	SD	RSD	Units	Blank Intens.	Mode
[	Li	7	8449.0	11.5	30.9472	324.464	1048.4	ug/L	8369	Standard
	Be	9	23.3	12.4	0.0017	0.001	76.2	ug/L	18	Standard
	Al	27	2823.7	58.7	0.0210	0.014	68.1	ug/L	215	Standard
[>	Sc	45	53258.6	4.8				ug/L	53004	Standard
[	Ti	47	25.7	22.5	-0.0099	0.010	103.0	ug/L	26	Standard
	V	51	3018.6	2.6	-0.0130	0.002	17.6	ug/L	3223	Standard
	Cr	52	9941.6	1.7	-0.0107	0.015	142.4	ug/L	10379	Standard
	Cr	53	201.7	8.0	0.0365	0.008	22.8	ug/L	192	Standard
	Mn	55	2567.2	10.0	0.0591	0.015	25.9	ug/L	1840	Standard
	Co	59	155.0	10.4	-0.0039	0.001	36.8	ug/L	115	Standard
	Ni	60	267.3	5.8	0.0576	0.003	4.5	ug/L	75	Standard
	Cu	65	351.7	5.5	0.0695	0.008	11.7	ug/L	155	Standard
	Zn	66	2403.2	3.1	1.5544	0.014	0.9	ug/L	237	Standard
[>	Ge	72	413834.4	3.0				ug/L	413856	Standard
	As	75	-196.1	15.7	0.0052	0.017	332.1	ug/L	-197	Standard
	Se	82	3.8	15.5	0.0346	0.005	13.3	ug/L	-5	Standard
[	Se-1	77	129.0	3.6	0.3378	0.086	25.5	ug/L	105	Standard
[>	Ga	71	188.3	9.3				mg/L	225	Standard
[	Rb	85	41.7	13.9				ug/L	28	Standard
[	Y	89	316763.8	5.7				ug/L	322845	Standard
[>	Rh	103	98.3	2.9				ug/L	92	Standard
[	Mo	98	25.6	13.0	-0.0028	0.001	31.6	ug/L	18	Standard
	Ag	107	66.0	13.5	0.0007	0.001	141.6	ug/L	63	Standard
	Cd	111	25.6	19.6	-0.0035	0.001	41.2	mg/L	20	Standard
	Cd	114	67.0	12.7	-0.0019	0.001	41.9	ug/L	56	Standard
[>	In	115	635948.6	2.4				ug/L	657102	Standard
	Sn	118	486.3	31.3	0.0011	0.016	1426.1	ug/L	555	Standard
	Sb	123	176.2	84.1	0.0202	0.019	95.9	ug/L	62	Standard
[	Ba	135	131.3	100.0	0.0198	0.040	200.0	ug/L	19	Standard
[	Ce	140	202.7	116.0				ug/L	24	Standard
[>	Tb	159	914888.8	3.0				ug/L	910514	Standard
[	Ho	165	14.0	43.4				ug/L	7	Standard
	Tl	203	137.0	134.2	0.0071	0.014	202.8	ug/L	13	Standard
	Tl	205	2.3	107.9	0.0072	0.006	89.3	ug/L	1	Standard
	Pb	206	694.0	71.2	0.0349	0.048	138.5	ug/L	342	Standard
	Pb	207	539.0	59.0	0.0258	0.037	141.7	ug/L	284	Standard
	Pb	208	2476.8	60.4	0.0269	0.037	138.1	ug/L	1363	Standard
	U	238	73.3	115.2	0.0058	0.008	144.4	ug/L	2	Standard
[>	Bi	209	469538.3	2.2				ug/L	470592	Standard

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Na	23	1.7	173.2	0.1599	0.268	167.8	mg/L	2	Standard
Mg	24	1428.4	15.9	-0.0022	0.000	6.1	mg/L	5586	Standard
K	39	0.0		-0.0413	0.000	0.0	mg/L	5	Standard
Ca	43	58.3	9.9	0.2363	0.124	52.6	mg/L	45	Standard
Fe	54	388.6	8.1	-0.0046	0.015	327.4	mg/L	350	Standard
Fe	57	140.0	34.1	0.0917	0.080	86.8	mg/L	102	Standard
Sc-1	45	53258.6	4.8				mg/L	53004	Standard
Cl	35	3.3	75.5				ug/L	2	Standard
Kr	83	183.4	11.3				ug/L	157	Standard
Br	81	7.5	33.3				ug/L	3	Standard
P	31	117305.8	1.9				ug/L	91588	Standard
S	34	40257.6	0.9				ug/L	32556	Standard
Sr	88	83.3	19.3				ug/L	62	Standard
C	12	160.0	16.5				mg/L	133	Standard
N	14	0.0					mg/L	0	Standard
Hg	202	6.7	43.3				mg/L	7	Standard

QC Calculated Values

Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recovery
Li	7			
Be	9			
Al	27			
Sc	45			
Ti	47			
V	51			
Cr	52			
Cr	53			
Mn	55			
Co	59			
Ni	60			
Cu	65			
Zn	66			
Ge	72		99.995	
As	75			
Se	82			
Se-1	77			
Ga	71			
Rb	85			
Y	89			
Rh	103			

Sample ID: PBS B5 WG414371-02

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[	Mo	98	
[	Ag	107	
[	Cd	111	
[	Cd	114	
>	In	115	96.781
[	Sn	118	
[	Sb	123	
[	Ba	135	
[	Ce	140	
>	Tb	159	
[	Ho	165	
[	Tl	203	
[	Tl	205	
[	Pb	206	
[	Pb	207	
[	Pb	208	
[	U	238	
>	Bi	209	99.776
[	Na	23	
[	Mg	24	
[	K	39	
[	Ca	43	
[	Fe	54	
[	Fe	57	
>	Sc-1	45	
[	Cl	35	
[	Kr	83	
[	Br	81	
[	P	31	
[	S	34	
[	Sr	88	
[	C	12	
[	N	14	
[	Hg	202	

QC Out of Limits

Measurement Type	Analyte	Mass	Out of Limits Message

Sample ID: PBS B5 WG414371-02

Report Date/Time: Sunday, November 18, 2012 19:25:16

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Method 6020 - Summary Report

Sample ID: LCSS B5 WG414371-03

Sample Date/Time: Sunday, November 18, 2012 19:25:56

Number of Replicates: 3

Autosampler Position: 428

Sample Description: 1

Method File: C:\NexIONData\Method\6020a.mth

Aliquot Volume (mL):

Diluted to Volume (mL):

User Name: JYH user

Cumulative Autodilution Factor: 1

Nexion-ICP 200.8\6020

Concentration Results

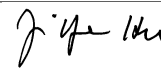
IS	Analyte	Mass	Intensity	RSD	Conc.	SD	RSD	Units	Blank Intens.	Mode
[	Li	7	8110.5	5.5	192.4442	168.572	87.6	ug/L	8369	Standard
	Be	9	50935.5	2.2	24.4473	0.120	0.5	ug/L	18	Standard
	Al	27	1530.1	5.9	0.0103	0.001	8.2	ug/L	215	Standard
[>	Sc	45	53054.4	2.5				ug/L	53004	Standard
	Ti	47	19.0	9.1	-0.0223	0.003	14.4	ug/L	26	Standard
	V	51	279717.8	0.8	23.5544	0.398	1.7	ug/L	3223	Standard
	Cr	52	276634.6	2.1	24.5163	0.522	2.1	ug/L	10379	Standard
	Cr	53	33729.2	4.2	24.6144	0.544	2.2	ug/L	192	Standard
	Mn	55	427088.0	2.8	24.7730	0.558	2.3	ug/L	1840	Standard
	Co	59	327246.4	1.5	24.7624	0.485	2.0	ug/L	115	Standard
	Ni	60	70576.8	3.0	24.8091	0.567	2.3	ug/L	75	Standard
	Cu	65	69572.4	2.0	25.3174	0.479	1.9	ug/L	155	Standard
	Zn	66	35100.6	2.8	25.6727	0.241	0.9	ug/L	237	Standard
[>	Ge	72	409732.6	2.4				ug/L	413856	Standard
	As	75	35396.6	0.9	24.7775	0.544	2.2	ug/L	-197	Standard
	Se	82	3176.7	0.5	24.7762	0.701	2.8	ug/L	-5	Standard
[	Se-1	77	2524.5	3.3	25.0056	0.343	1.4	ug/L	105	Standard
[>	Ga	71	186.7	20.5				mg/L	225	Standard
	Rb	85	30.0	33.3				ug/L	28	Standard
	Y	89	308127.0	4.3				ug/L	322845	Standard
[>	Rh	103	120.0	22.0				ug/L	92	Standard
	Mo	98	33.3	9.9	-0.0011	0.001	63.3	ug/L	18	Standard
	Ag	107	187562.9	2.3	24.3642	0.135	0.6	ug/L	63	Standard
	Cd	111	83615.1	1.7	25.0925	0.333	1.3	mg/L	20	Standard
	Cd	114	215852.7	1.7	24.6129	0.237	1.0	ug/L	56	Standard
[>	In	115	638409.8	2.5				ug/L	657102	Standard
	Sn	118	475.7	6.0	-0.0002	0.002	863.0	ug/L	555	Standard
	Sb	123	189017.2	2.7	24.8397	0.219	0.9	ug/L	62	Standard
[	Ba	135	82241.6	1.2	24.8527	0.351	1.4	ug/L	19	Standard
	Ce	140	95.7	13.9				ug/L	24	Standard
[>	Tb	159	899759.2	2.1				ug/L	910514	Standard
	Ho	165	13.0	30.8				ug/L	7	Standard
	Tl	203	310801.4	1.3	24.5022	0.422	1.7	ug/L	13	Standard
	Tl	205	9502.0	0.6	24.5610	0.647	2.6	ug/L	1	Standard
	Pb	206	252333.0	1.8	24.7983	0.451	1.8	ug/L	342	Standard
	Pb	207	215790.2	2.0	24.9395	0.185	0.7	ug/L	284	Standard
	Pb	208	993000.3	1.6	24.7216	0.286	1.2	ug/L	1363	Standard
	U	238	239680.5	1.6	24.1286	0.296	1.2	ug/L	2	Standard
[>	Bi	209	465825.5	2.8				ug/L	470592	Standard

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Na	23	0.0		0.0050	0.000	0.0	mg/L	2	Standard
Mg	24	1255.1	0.4	-0.0023	0.000	0.7	mg/L	5586	Standard
K	39	0.0		-0.0413	0.000	0.0	mg/L	5	Standard
Ca	43	51.7	24.4	-0.0409	0.482	1178.7	mg/L	45	Standard
Fe	54	331.1	8.5	-0.0263	0.013	49.2	mg/L	350	Standard
Fe	57	161.7	11.7	0.1254	0.028	22.7	mg/L	102	Standard
Sc-1	45	53054.4	2.5				mg/L	53004	Standard
Cl	35	4.7	53.9				ug/L	2	Standard
Kr	83	158.6	3.5				ug/L	157	Standard
Br	81	2.5	100.0				ug/L	3	Standard
P	31	115754.0	2.8				ug/L	91588	Standard
S	34	38617.5	2.6				ug/L	32556	Standard
Sr	88	68.3	8.4				ug/L	62	Standard
C	12	118.3	14.8				mg/L	133	Standard
N	14	0.0					mg/L	0	Standard
Hg	202	6.7	173.2				mg/L	7	Standard

QC Calculated Values

Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recovery
Li	7			
Be	9			
Al	27			
Sc	45			
Ti	47			
V	51			
Cr	52			
Cr	53			
Mn	55			
Co	59			
Ni	60			
Cu	65			
Zn	66			
Ge	72		99.004	
As	75			
Se	82			
Se-1	77			
Ga	71			
Rb	85			
Y	89			
Rh	103			

Sample ID: LCSS B5 WG414371-03

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[	Mo	98	
[	Ag	107	
[	Cd	111	
[	Cd	114	
>	In	115	97.155
[	Sn	118	
[	Sb	123	
[	Ba	135	
[	Ce	140	
>	Tb	159	
[	Ho	165	
[	Tl	203	
[	Tl	205	
[	Pb	206	
[	Pb	207	
[	Pb	208	
[	U	238	
>	Bi	209	98.987
[	Na	23	
[	Mg	24	
[	K	39	
[	Ca	43	
[	Fe	54	
[	Fe	57	
>	Sc-1	45	
[	Cl	35	
[	Kr	83	
[	Br	81	
[	P	31	
[	S	34	
[	Sr	88	
[	C	12	
[	N	14	
[	Hg	202	

QC Out of Limits

Measurement Type	Analyte	Mass	Out of Limits Message

Sample ID: LCSS B5 WG414371-03

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Method 6020 - Summary Report

Sample ID: L1211033813 WG414371-01

Sample Date/Time: Sunday, November 18, 2012 19:29:09

Number of Replicates: 3

Autosampler Position: 429

Sample Description: 20

Method File: C:\NexIONData\Method\6020a.mth

Aliquot Volume (mL):

Diluted to Volume (mL):

User Name: JYH user

Cumulative Autodilution Factor: 1

Nexion-ICP 200.8\6020

Concentration Results

IS	Analyte	Mass	Intensity	RSD	Conc.	SD	RSD	Units	Blank Intens.	Mode
[	Li	7	26686.9	8.4	-12241.2872	718.189	5.9	ug/L	8369	Standard
	Be	9	216.7	33.8	0.1091	0.035	32.2	ug/L	18	Standard
	Al	27	961111.6	1.1	8.9888	0.287	3.2	ug/L	215	Standard
[>	Sc	45	46158.6	4.2				ug/L	53004	Standard
[	Ti	47	209.0	6.6	0.4050	0.029	7.1	ug/L	26	Standard
	V	51	15291.4	1.3	1.2070	0.049	4.0	ug/L	3223	Standard
	Cr	52	20555.6	0.7	1.2241	0.066	5.4	ug/L	10379	Standard
	Cr	53	1854.3	3.8	1.4295	0.055	3.9	ug/L	192	Standard
	Mn	55	282941.8	0.6	18.5605	0.416	2.2	ug/L	1840	Standard
	Co	59	10482.0	3.1	0.8831	0.036	4.1	ug/L	115	Standard
	Ni	60	5414.3	1.2	2.1226	0.049	2.3	ug/L	75	Standard
	Cu	65	3290.7	1.9	1.3011	0.026	2.0	ug/L	155	Standard
	Zn	66	9230.8	4.4	7.5005	0.156	2.1	ug/L	237	Standard
[>	Ge	72	361981.2	2.8				ug/L	413856	Standard
	As	75	-2.9	1681.9	0.1384	0.039	28.0	ug/L	-197	Standard
	Se	82	10.6	51.0	0.0998	0.051	51.2	ug/L	-5	Standard
[	Se-1	77	126.3	4.0	0.4931	0.033	6.6	ug/L	105	Standard
[>	Ga	71	2113.5	3.1				mg/L	225	Standard
[	Rb	85	16695.9	0.4				ug/L	28	Standard
[	Y	89	293504.1	3.2				ug/L	322845	Standard
[>	Rh	103	83.3	15.1				ug/L	92	Standard
[	Mo	98	22.0	36.2	-0.0031	0.002	61.0	ug/L	18	Standard
	Ag	107	97.7	21.2	0.0061	0.002	40.5	ug/L	63	Standard
	Cd	111	65.3	17.4	0.0104	0.003	28.3	mg/L	20	Standard
	Cd	114	174.2	22.5	0.0123	0.004	32.7	ug/L	56	Standard
[>	In	115	576763.0	3.8				ug/L	657102	Standard
	Sn	118	317.3	4.9	-0.0130	0.002	15.8	ug/L	555	Standard
	Sb	123	57.8	56.9	0.0054	0.004	81.4	ug/L	62	Standard
[	Ba	135	32373.9	1.1	10.8232	0.330	3.1	ug/L	19	Standard
[	Ce	140	172649.5	1.0				ug/L	24	Standard
[>	Tb	159	845157.4	3.8				ug/L	910514	Standard
[	Ho	165	2340.8	4.0				ug/L	7	Standard
	Tl	203	244.0	51.3	0.0164	0.010	59.2	ug/L	13	Standard
	Tl	205	7.7	27.2	0.0220	0.005	22.8	ug/L	1	Standard
	Pb	206	21132.7	2.2	2.1482	0.019	0.9	ug/L	342	Standard
	Pb	207	17134.7	2.5	2.0440	0.008	0.4	ug/L	284	Standard
	Pb	208	80739.9	1.6	2.0771	0.033	1.6	ug/L	1363	Standard
	U	238	1714.4	4.5	0.1794	0.004	2.0	ug/L	2	Standard
[>	Bi	209	444095.6	2.8				ug/L	470592	Standard

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Na	23	1.7	173.2	0.1792	0.302	168.4	mg/L	2	Standard
Mg	24	2893.6	9.4	-0.0013	0.000	6.6	mg/L	5586	Standard
K	39	18.3	68.6	0.2425	0.188	77.6	mg/L	5	Standard
Ca	43	46.7	6.2	0.0491	0.062	126.7	mg/L	45	Standard
Fe	54	2485.9	1.4	0.9449	0.061	6.4	mg/L	350	Standard
Fe	57	725.0	4.8	1.1791	0.016	1.4	mg/L	102	Standard
Sc-1	45	46158.6	4.2				mg/L	53004	Standard
Cl	35	2.0	50.0				ug/L	2	Standard
Kr	83	142.7	4.9				ug/L	157	Standard
Br	81	4.2	91.7				ug/L	3	Standard
P	31	39585.0	2.3				ug/L	91588	Standard
S	34	34399.9	3.8				ug/L	32556	Standard
Sr	88	63.3	19.9				ug/L	62	Standard
C	12	103.3	20.1				mg/L	133	Standard
N	14	1.7	173.2				mg/L	0	Standard
Hg	202	10.0					mg/L	7	Standard

QC Calculated Values

Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recovery
Li	7			
Be	9			
Al	27			
Sc	45			
Ti	47			
V	51			
Cr	52			
Cr	53			
Mn	55			
Co	59			
Ni	60			
Cu	65			
Zn	66			
Ge	72		87.466	
As	75			
Se	82			
Se-1	77			
Ga	71			
Rb	85			
Y	89			
Rh	103			

Sample ID: L1211033813 WG414371-01

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[	Mo	98	
[	Ag	107	
[	Cd	111	
[	Cd	114	
>	In	115	87.774
[	Sn	118	
[	Sb	123	
[	Ba	135	
[	Ce	140	
>	Tb	159	
[	Ho	165	
[	Tl	203	
[	Tl	205	
[	Pb	206	
[	Pb	207	
[	Pb	208	
[	U	238	
>	Bi	209	94.370
[	Na	23	
[	Mg	24	
[	K	39	
[	Ca	43	
[	Fe	54	
[	Fe	57	
>	Sc-1	45	
[	Cl	35	
[	Kr	83	
[	Br	81	
[	P	31	
[	S	34	
[	Sr	88	
[	C	12	
[	N	14	
[	Hg	202	

QC Out of Limits

Measurement Type	Analyte	Mass	Out of Limits Message

Sample ID: L1211033813 WG414371-01

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Method 6020 - Summary Report

Sample ID: L1211033814S WG414371-04

Sample Date/Time: Sunday, November 18, 2012 19:32:23

Number of Replicates: 3

Autosampler Position: 430

Sample Description: 20

Method File: C:\NexIONData\Method\6020a.mth

Aliquot Volume (mL):

Diluted to Volume (mL):

User Name: JYH user

Cumulative Autodilution Factor: 1

Nexion-ICP 200.8\6020

Concentration Results

IS	Analyte	Mass	Intensity	RSD	Conc.	SD	RSD	Units	Blank Intens.	Mode
[	Li	7	15032.5	1.0	-4829.6937	180.069	3.7	ug/L	8369	Standard
	Be	9	2225.2	9.3	1.2140	0.122	10.1	ug/L	18	Standard
	Al	27	535910.6	3.2	4.9866	0.181	3.6	ug/L	215	Standard
[>	Sc	45	46362.5	2.9				ug/L	53004	Standard
[	Ti	47	133.3	8.9	0.2291	0.022	9.8	ug/L	26	Standard
	V	51	22646.0	2.3	1.8597	0.024	1.3	ug/L	3223	Standard
	Cr	52	24265.4	2.2	1.5450	0.030	1.9	ug/L	10379	Standard
	Cr	53	2207.7	3.8	1.6759	0.053	3.2	ug/L	192	Standard
	Mn	55	439578.9	3.9	28.1359	0.771	2.7	ug/L	1840	Standard
	Co	59	17957.3	4.0	1.4840	0.043	2.9	ug/L	115	Standard
	Ni	60	5285.3	2.9	2.0170	0.044	2.2	ug/L	75	Standard
	Cu	65	4727.1	3.4	1.8441	0.044	2.4	ug/L	155	Standard
	Zn	66	9367.9	1.2	7.4203	0.146	2.0	ug/L	237	Standard
[>	Ge	72	371352.8	1.2				ug/L	413856	Standard
	As	75	1404.0	4.0	1.2182	0.054	4.4	ug/L	-197	Standard
	Se	82	136.7	1.8	1.1811	0.035	3.0	ug/L	-5	Standard
[	Se-1	77	212.0	9.7	1.4306	0.252	17.6	ug/L	105	Standard
[>	Ga	71	1185.0	7.7				mg/L	225	Standard
[	Rb	85	9142.8	3.9				ug/L	28	Standard
[	Y	89	291787.7	2.9				ug/L	322845	Standard
[>	Rh	103	70.0	46.8				ug/L	92	Standard
[	Mo	98	19.3	21.6	-0.0038	0.001	28.2	ug/L	18	Standard
	Ag	107	7160.0	5.2	1.0240	0.047	4.6	ug/L	63	Standard
	Cd	111	3475.0	5.5	1.1458	0.057	5.0	mg/L	20	Standard
	Cd	114	9276.2	5.3	1.1639	0.055	4.8	ug/L	56	Standard
[>	In	115	575469.2	0.6				ug/L	657102	Standard
	Sn	118	310.7	2.5	-0.0137	0.001	7.8	ug/L	555	Standard
	Sb	123	3152.9	2.9	0.4568	0.011	2.3	ug/L	62	Standard
[	Ba	135	91760.9	3.1	30.7570	0.787	2.6	ug/L	19	Standard
[	Ce	140	133786.4	3.1				ug/L	24	Standard
[>	Tb	159	839412.4	0.6				ug/L	910514	Standard
[	Ho	165	1896.8	4.3				ug/L	7	Standard
	Tl	203	12658.0	3.3	1.0476	0.028	2.7	ug/L	13	Standard
	Tl	205	395.0	5.7	1.0767	0.062	5.8	ug/L	1	Standard
	Pb	206	35082.2	1.7	3.6039	0.044	1.2	ug/L	342	Standard
	Pb	207	28958.3	2.0	3.4949	0.044	1.3	ug/L	284	Standard
	Pb	208	136130.7	1.9	3.5408	0.045	1.3	ug/L	1363	Standard
	U	238	10353.9	1.8	1.0966	0.013	1.2	ug/L	2	Standard
[>	Bi	209	442068.9	0.8				ug/L	470592	Standard

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Na	23	0.0		0.0050	0.000	0.0	mg/L	2	Standard
Mg	24	2026.8	2.7	-0.0018	0.000	1.5	mg/L	5586	Standard
K	39	8.3	34.6	0.0876	0.043	48.6	mg/L	5	Standard
Ca	43	78.3	9.8	1.5848	0.418	26.4	mg/L	45	Standard
Fe	54	1685.1	5.3	0.5863	0.019	3.2	mg/L	350	Standard
Fe	57	561.7	15.3	0.8814	0.163	18.4	mg/L	102	Standard
Sc-1	45	46362.5	2.9				mg/L	53004	Standard
Cl	35	3.7	15.7				ug/L	2	Standard
Kr	83	145.1	0.4				ug/L	157	Standard
Br	81	9.2	63.0				ug/L	3	Standard
P	31	39891.7	4.1				ug/L	91588	Standard
S	34	35006.3	5.0				ug/L	32556	Standard
Sr	88	98.3	5.9				ug/L	62	Standard
C	12	100.0	21.8				mg/L	133	Standard
N	14	0.0					mg/L	0	Standard
Hg	202	8.3	124.9				mg/L	7	Standard

QC Calculated Values

Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recovery
Li	7			
Be	9			
Al	27			
Sc	45			
Ti	47			
V	51			
Cr	52			
Cr	53			
Mn	55			
Co	59			
Ni	60			
Cu	65			
Zn	66			
Ge	72		89.730	
As	75			
Se	82			
Se-1	77			
Ga	71			
Rb	85			
Y	89			
Rh	103			

Sample ID: L1211033814S WG414371-04

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[	Mo	98	
[	Ag	107	
[	Cd	111	
[	Cd	114	
>	In	115	87.577
[	Sn	118	
[	Sb	123	
[	Ba	135	
[	Ce	140	
>	Tb	159	
[	Ho	165	
[	Tl	203	
[	Tl	205	
[	Pb	206	
[	Pb	207	
[	Pb	208	
[	U	238	
>	Bi	209	93.939
[	Na	23	
[	Mg	24	
[	K	39	
[	Ca	43	
[	Fe	54	
[	Fe	57	
>	Sc-1	45	
[	Cl	35	
[	Kr	83	
[	Br	81	
[	P	31	
[	S	34	
[	Sr	88	
[	C	12	
[	N	14	
[	Hg	202	

QC Out of Limits

Measurement Type	Analyte	Mass	Out of Limits Message

Sample ID: L1211033814S WG414371-04

Report Date/Time: Sunday, November 18, 2012 19:34:55

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Method 6020 - Summary Report

Sample ID: L1211033815SD WG414371-05

Sample Date/Time: Sunday, November 18, 2012 19:35:36

Number of Replicates: 3

Autosampler Position: 431

Sample Description: 20

Method File: C:\NexIONData\Method\6020a.mth

Aliquot Volume (mL):

Diluted to Volume (mL):

User Name: JYH user

Cumulative Autodilution Factor: 1

Nexion-ICP 200.8\6020

Concentration Results

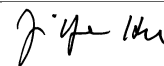
IS	Analyte	Mass	Intensity	RSD	Conc.	SD	RSD	Units	Blank Intens.	Mode
[	Li	7	29189.8	5.4	-12942.2326	783.374	6.1	ug/L	8369	Standard
	Be	9	2336.8	0.6	1.2175	0.019	1.6	ug/L	18	Standard
	Al	27	1049687.4	1.0	9.3334	0.237	2.5	ug/L	215	Standard
[>	Sc	45	48522.6	1.7				ug/L	53004	Standard
[	Ti	47	268.0	2.6	0.5186	0.014	2.7	ug/L	26	Standard
	V	51	29214.1	0.7	2.4653	0.008	0.3	ug/L	3223	Standard
	Cr	52	33895.9	2.0	2.5074	0.067	2.7	ug/L	10379	Standard
	Cr	53	3327.9	2.2	2.5710	0.053	2.1	ug/L	192	Standard
	Mn	55	303177.0	0.8	19.2998	0.104	0.5	ug/L	1840	Standard
	Co	59	24968.6	1.3	2.0611	0.025	1.2	ug/L	115	Standard
	Ni	60	8962.7	2.4	3.4306	0.072	2.1	ug/L	75	Standard
	Cu	65	6171.6	3.2	2.4150	0.069	2.9	ug/L	155	Standard
	Zn	66	10001.3	2.9	7.9001	0.213	2.7	ug/L	237	Standard
[>	Ge	72	372919.2	0.4				ug/L	413856	Standard
	As	75	1496.8	3.8	1.2843	0.045	3.5	ug/L	-197	Standard
	Se	82	109.4	3.7	0.9424	0.033	3.5	ug/L	-5	Standard
[	Se-1	77	202.3	11.1	1.3098	0.254	19.4	ug/L	105	Standard
[>	Ga	71	2568.6	2.0				mg/L	225	Standard
	Rb	85	20487.2	5.1				ug/L	28	Standard
[	Y	89	296694.0	1.8				ug/L	322845	Standard
[>	Rh	103	95.0	9.1				ug/L	92	Standard
[	Mo	98	37.7	28.4	0.0008	0.003	341.0	ug/L	18	Standard
	Ag	107	7533.9	0.8	1.0689	0.015	1.4	ug/L	63	Standard
	Cd	111	3679.1	1.4	1.2036	0.016	1.4	mg/L	20	Standard
	Cd	114	9675.6	1.5	1.2044	0.029	2.4	ug/L	56	Standard
[>	In	115	580411.6	0.9				ug/L	657102	Standard
	Sn	118	318.3	7.0	-0.0132	0.002	18.9	ug/L	555	Standard
	Sb	123	1470.2	5.6	0.2096	0.011	5.5	ug/L	62	Standard
[	Ba	135	45883.4	0.3	15.2407	0.148	1.0	ug/L	19	Standard
[	Ce	140	187907.1	1.1				ug/L	24	Standard
[>	Tb	159	845931.7	2.6				ug/L	910514	Standard
[	Ho	165	2546.9	2.7				ug/L	7	Standard
	Tl	203	13339.9	2.2	1.0957	0.054	4.9	ug/L	13	Standard
	Tl	205	415.3	4.4	1.1231	0.068	6.0	ug/L	1	Standard
	Pb	206	33358.0	2.0	3.3982	0.162	4.8	ug/L	342	Standard
	Pb	207	27895.3	0.5	3.3380	0.105	3.1	ug/L	284	Standard
	Pb	208	129700.6	1.2	3.3450	0.132	3.9	ug/L	1363	Standard
	U	238	11385.3	1.7	1.1960	0.030	2.5	ug/L	2	Standard
[>	Bi	209	445930.4	2.7				ug/L	470592	Standard

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Na	23	0.0		0.0050	0.000	0.0	mg/L	2	Standard
Mg	24	2850.3	2.7	-0.0014	0.000	3.2	mg/L	5586	Standard
K	39	23.3	24.7	0.3044	0.079	26.1	mg/L	5	Standard
Ca	43	61.7	32.8	0.6370	0.950	149.1	mg/L	45	Standard
Fe	54	3319.3	0.8	1.2399	0.030	2.4	mg/L	350	Standard
Fe	57	853.4	1.4	1.3359	0.025	1.9	mg/L	102	Standard
Sc-1	45	48522.6	1.7				mg/L	53004	Standard
Cl	35	2.7	57.3				ug/L	2	Standard
Kr	83	137.2	5.5				ug/L	157	Standard
Br	81	5.0	0.0				ug/L	3	Standard
P	31	40057.9	0.7				ug/L	91588	Standard
S	34	34177.7	3.1				ug/L	32556	Standard
Sr	88	103.3	27.5				ug/L	62	Standard
C	12	123.3	34.0				mg/L	133	Standard
N	14	0.0					mg/L	0	Standard
Hg	202	6.7	43.3				mg/L	7	Standard

QC Calculated Values

Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recovery
Li	7			
Be	9			
Al	27			
Sc	45			
Ti	47			
V	51			
Cr	52			
Cr	53			
Mn	55			
Co	59			
Ni	60			
Cu	65			
Zn	66			
Ge	72		90.109	
As	75			
Se	82			
Se-1	77			
Ga	71			
Rb	85			
Y	89			
Rh	103			

Sample ID: L1211033815SD WG414371-05

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[	Mo	98	
[	Ag	107	
[	Cd	111	
[	Cd	114	
>	In	115	88.329
[	Sn	118	
[	Sb	123	
[	Ba	135	
[	Ce	140	
>	Tb	159	
[	Ho	165	
[	Tl	203	
[	Tl	205	
[	Pb	206	
[	Pb	207	
[	Pb	208	
[	U	238	
>	Bi	209	94.760
[	Na	23	
[	Mg	24	
[	K	39	
[	Ca	43	
[	Fe	54	
[	Fe	57	
>	Sc-1	45	
[	Cl	35	
[	Kr	83	
[	Br	81	
[	P	31	
[	S	34	
[	Sr	88	
[	C	12	
[	N	14	
[	Hg	202	

QC Out of Limits

Measurement Type	Analyte	Mass	Out of Limits Message

Sample ID: L1211033815SD WG414371-05

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Method 6020 - Summary Report

Sample ID: L1211033808

Sample Date/Time: Sunday, November 18, 2012 19:38:48

Number of Replicates: 3

Autosampler Position: 432

Sample Description: 20

Method File: C:\NexIONData\Method\6020a.mth

Aliquot Volume (mL):

Diluted to Volume (mL):

User Name: JYH user

Cumulative Autodilution Factor: 1

Nexion-ICP 200.8\6020

Concentration Results

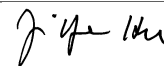
IS	Analyte	Mass	Intensity	RSD	Conc.	SD	RSD	Units	Blank Intens.	Mode
[	Li	7	27266.2	2.7	-11433.1261	196.542	1.7	ug/L	8369	Standard
	Be	9	223.3	5.2	0.1054	0.008	7.4	ug/L	18	Standard
	Al	27	934100.6	2.7	8.1251	0.071	0.9	ug/L	215	Standard
[>	Sc	45	49581.0	2.0				ug/L	53004	Standard
[	Ti	47	155.7	6.6	0.2717	0.018	6.7	ug/L	26	Standard
	V	51	11404.6	2.0	0.7852	0.018	2.3	ug/L	3223	Standard
	Cr	52	20515.6	2.2	1.1290	0.066	5.8	ug/L	10379	Standard
	Cr	53	1605.9	3.3	1.1667	0.039	3.3	ug/L	192	Standard
	Mn	55	544449.9	1.9	34.2707	0.807	2.4	ug/L	1840	Standard
	Co	59	9589.4	1.6	0.7714	0.008	1.0	ug/L	115	Standard
	Ni	60	5389.6	0.4	2.0214	0.031	1.6	ug/L	75	Standard
	Cu	65	4451.7	1.7	1.7026	0.042	2.5	ug/L	155	Standard
	Zn	66	10814.9	1.5	8.4429	0.102	1.2	ug/L	237	Standard
[>	Ge	72	377967.2	1.7				ug/L	413856	Standard
	As	75	192.5	17.4	0.2849	0.023	8.0	ug/L	-197	Standard
	Se	82	1.7	634.4	0.0192	0.091	474.5	ug/L	-5	Standard
[	Se-1	77	132.3	4.4	0.4986	0.078	15.7	ug/L	105	Standard
[>	Ga	71	1941.8	6.5				mg/L	225	Standard
	Rb	85	16874.4	3.6				ug/L	28	Standard
[	Y	89	298728.4	1.8				ug/L	322845	Standard
[>	Rh	103	86.7	14.5				ug/L	92	Standard
[	Mo	98	24.4	13.0	-0.0025	0.001	32.6	ug/L	18	Standard
	Ag	107	84.7	18.7	0.0042	0.002	50.5	ug/L	63	Standard
	Cd	111	48.6	19.1	0.0049	0.003	61.7	mg/L	20	Standard
	Cd	114	131.1	5.2	0.0069	0.001	9.5	ug/L	56	Standard
[>	In	115	579136.7	1.5				ug/L	657102	Standard
	Sn	118	381.3	3.8	-0.0059	0.001	17.9	ug/L	555	Standard
	Sb	123	24.8	11.2	0.0007	0.000	59.8	ug/L	62	Standard
[	Ba	135	34198.6	1.0	11.3798	0.132	1.2	ug/L	19	Standard
[	Ce	140	153526.7	1.5				ug/L	24	Standard
[>	Tb	159	848054.3	1.1				ug/L	910514	Standard
[	Ho	165	2246.2	3.9				ug/L	7	Standard
	Tl	203	161.3	5.3	0.0094	0.001	8.3	ug/L	13	Standard
	Tl	205	6.7	60.6	0.0188	0.010	55.8	ug/L	1	Standard
	Pb	206	14523.6	1.4	1.4281	0.019	1.3	ug/L	342	Standard
	Pb	207	12006.4	3.2	1.3843	0.024	1.7	ug/L	284	Standard
	Pb	208	56086.9	2.0	1.3949	0.013	1.0	ug/L	1363	Standard
	U	238	949.7	2.2	0.0962	0.002	1.6	ug/L	2	Standard
[>	Bi	209	455617.2	1.7				ug/L	470592	Standard

Sample ID: L1211033808

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Na	23	0.0		0.0050	0.000	0.0	mg/L	2	Standard
Mg	24	3102.0	7.0	-0.0013	0.000	6.4	mg/L	5586	Standard
K	39	11.7	65.5	0.1276	0.110	86.3	mg/L	5	Standard
Ca	43	60.0	28.9	0.4919	0.740	150.4	mg/L	45	Standard
Fe	54	2769.5	3.7	0.9840	0.037	3.8	mg/L	350	Standard
Fe	57	796.7	3.2	1.2095	0.044	3.6	mg/L	102	Standard
Sc-1	45	49581.0	2.0				mg/L	53004	Standard
Cl	35	3.0	33.3				ug/L	2	Standard
Kr	83	145.3	4.1				ug/L	157	Standard
Br	81	6.7	78.1				ug/L	3	Standard
P	31	40809.1	2.5				ug/L	91588	Standard
S	34	33367.5	0.4				ug/L	32556	Standard
Sr	88	83.3	25.0				ug/L	62	Standard
C	12	98.3	2.9				mg/L	133	Standard
N	14	0.0					mg/L	0	Standard
Hg	202	3.3	86.6				mg/L	7	Standard

QC Calculated Values

Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recovery
Li	7			
Be	9			
Al	27			
Sc	45			
Ti	47			
V	51			
Cr	52			
Cr	53			
Mn	55			
Co	59			
Ni	60			
Cu	65			
Zn	66			
Ge	72		91.328	
As	75			
Se	82			
Se-1	77			
Ga	71			
Rb	85			
Y	89			
Rh	103			

Sample ID: L1211033808

Report Date/Time: Sunday, November 18, 2012 19:41:21

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[	Mo	98	
[	Ag	107	
[	Cd	111	
[	Cd	114	
>	In	115	88.135
[	Sn	118	
[	Sb	123	
[	Ba	135	
[	Ce	140	
>	Tb	159	
[	Ho	165	
[	Tl	203	
[	Tl	205	
[	Pb	206	
[	Pb	207	
[	Pb	208	
[	U	238	
>	Bi	209	96.818
[	Na	23	
[	Mg	24	
[	K	39	
[	Ca	43	
[	Fe	54	
[	Fe	57	
>	Sc-1	45	
[	Cl	35	
[	Kr	83	
[	Br	81	
[	P	31	
[	S	34	
[	Sr	88	
[	C	12	
[	N	14	
[	Hg	202	

QC Out of Limits

Measurement Type	Analyte	Mass	Out of Limits Message

Sample ID: L1211033808

Report Date/Time: Sunday, November 18, 2012 19:41:21

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Method 6020 - Summary Report

Sample ID: L1211033809

Sample Date/Time: Sunday, November 18, 2012 19:42:01

Number of Replicates: 3

Autosampler Position: 433

Sample Description: 20

Method File: C:\NexIONData\Method\6020a.mth

Aliquot Volume (mL):

Diluted to Volume (mL):

User Name: JYH user

Cumulative Autodilution Factor: 1

Nexion-ICP 200.8\6020

Concentration Results

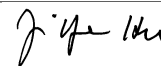
IS	Analyte	Mass	Intensity	RSD	Conc.	SD	RSD	Units	Blank Intens.	Mode
[	Li	7	25980.6	1.2	-11030.1868	58.538	0.5	ug/L	8369	Standard
	Be	9	268.3	16.1	0.1314	0.021	15.7	ug/L	18	Standard
	Al	27	841588.5	1.6	7.4900	0.026	0.3	ug/L	215	Standard
[>	Sc	45	48460.7	1.4				ug/L	53004	Standard
[	Ti	47	276.0	5.3	0.5307	0.033	6.2	ug/L	26	Standard
	V	51	17012.9	0.9	1.3100	0.029	2.2	ug/L	3223	Standard
	Cr	52	24274.1	2.0	1.5142	0.064	4.2	ug/L	10379	Standard
	Cr	53	2195.2	3.2	1.6433	0.075	4.5	ug/L	192	Standard
	Mn	55	543272.5	1.0	34.3480	0.527	1.5	ug/L	1840	Standard
	Co	59	10516.6	2.1	0.8514	0.021	2.4	ug/L	115	Standard
	Ni	60	5490.7	2.2	2.0689	0.026	1.2	ug/L	75	Standard
	Cu	65	3710.5	0.4	1.4159	0.013	0.9	ug/L	155	Standard
	Zn	66	10958.6	1.3	8.5981	0.208	2.4	ug/L	237	Standard
[>	Ge	72	376269.8	1.0				ug/L	413856	Standard
	As	75	214.1	14.0	0.3020	0.021	7.0	ug/L	-197	Standard
	Se	82	2.6	300.8	0.0271	0.067	247.1	ug/L	-5	Standard
[	Se-1	77	126.7	8.4	0.4417	0.128	29.0	ug/L	105	Standard
[>	Ga	71	2320.2	2.4				mg/L	225	Standard
[	Rb	85	20505.5	2.4				ug/L	28	Standard
[	Y	89	303704.9	2.6				ug/L	322845	Standard
[>	Rh	103	96.7	43.4				ug/L	92	Standard
[	Mo	98	35.8	22.0	0.0002	0.002	835.3	ug/L	18	Standard
	Ag	107	87.7	7.8	0.0045	0.001	21.6	ug/L	63	Standard
	Cd	111	253.6	3.9	0.0718	0.002	3.0	mg/L	20	Standard
	Cd	114	738.7	3.0	0.0823	0.002	2.8	ug/L	56	Standard
[>	In	115	585463.4	1.3				ug/L	657102	Standard
	Sn	118	395.3	4.2	-0.0048	0.002	43.3	ug/L	555	Standard
	Sb	123	31.5	30.8	0.0016	0.001	86.5	ug/L	62	Standard
[	Ba	135	62949.5	0.8	20.7374	0.322	1.6	ug/L	19	Standard
[	Ce	140	177334.1	0.9				ug/L	24	Standard
[>	Tb	159	852699.8	0.9				ug/L	910514	Standard
[	Ho	165	2513.5	1.8				ug/L	7	Standard
	Tl	203	300.3	5.7	0.0208	0.001	6.2	ug/L	13	Standard
	Tl	205	9.0	48.4	0.0253	0.012	45.6	ug/L	1	Standard
	Pb	206	75147.9	1.0	7.5974	0.106	1.4	ug/L	342	Standard
	Pb	207	60555.8	1.3	7.1964	0.119	1.7	ug/L	284	Standard
	Pb	208	285729.8	0.7	7.3158	0.084	1.1	ug/L	1363	Standard
	U	238	679.0	2.6	0.0690	0.002	2.3	ug/L	2	Standard
[>	Bi	209	451371.4	0.5				ug/L	470592	Standard

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Na	23	1.7	173.2	0.1722	0.290	168.2	mg/L	2	Standard
Mg	24	2957.0	5.9	-0.0013	0.000	5.9	mg/L	5586	Standard
K	39	30.0	72.6	0.4051	0.324	79.9	mg/L	5	Standard
Ca	43	41.7	18.3	-0.2922	0.347	118.8	mg/L	45	Standard
Fe	54	3384.6	4.6	1.2695	0.085	6.7	mg/L	350	Standard
Fe	57	1033.4	6.1	1.6463	0.094	5.7	mg/L	102	Standard
Sc-1	45	48460.7	1.4				mg/L	53004	Standard
Cl	35	3.7	68.6				ug/L	2	Standard
Kr	83	141.4	6.2				ug/L	157	Standard
Br	81	4.2	69.3				ug/L	3	Standard
P	31	41283.7	1.2				ug/L	91588	Standard
S	34	33338.3	2.1				ug/L	32556	Standard
Sr	88	88.3	34.1				ug/L	62	Standard
C	12	113.3	35.7				mg/L	133	Standard
N	14	0.0					mg/L	0	Standard
Hg	202	8.3	69.3				mg/L	7	Standard

QC Calculated Values

Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recovery
Li	7			
Be	9			
Al	27			
Sc	45			
Ti	47			
V	51			
Cr	52			
Cr	53			
Mn	55			
Co	59			
Ni	60			
Cu	65			
Zn	66			
Ge	72		90.918	
As	75			
Se	82			
Se-1	77			
Ga	71			
Rb	85			
Y	89			
Rh	103			

Sample ID: L1211033809

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[	Mo	98	
[	Ag	107	
[	Cd	111	
[	Cd	114	
>	In	115	89.098
[	Sn	118	
[	Sb	123	
[	Ba	135	
[	Ce	140	
>	Tb	159	
[	Ho	165	
[	Tl	203	
[	Tl	205	
[	Pb	206	
[	Pb	207	
[	Pb	208	
[	U	238	
>	Bi	209	95.916
[	Na	23	
[	Mg	24	
[	K	39	
[	Ca	43	
[	Fe	54	
[	Fe	57	
>	Sc-1	45	
[	Cl	35	
[	Kr	83	
[	Br	81	
[	P	31	
[	S	34	
[	Sr	88	
[	C	12	
[	N	14	
[	Hg	202	

QC Out of Limits

Measurement Type	Analyte	Mass	Out of Limits Message

Sample ID: L1211033809

Report Date/Time: Sunday, November 18, 2012 19:44:34

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Method 6020 - Summary Report

Sample ID: L1211033809PS WG414623-01

Sample Date/Time: Sunday, November 18, 2012 19:45:14

Number of Replicates: 3

Autosampler Position: 434

Sample Description: 20

Method File: C:\NexIONData\Method\6020a.mth

Aliquot Volume (mL):

Diluted to Volume (mL):

User Name: JYH user

Cumulative Autodilution Factor: 1

Nexion-ICP 200.8\6020

Concentration Results

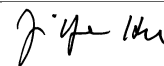
IS	Analyte	Mass	Intensity	RSD	Conc.	SD	RSD	Units	Blank Intens.	Mode
[	Li	7	31821.7	1.6	-12400.6715	407.335	3.3	ug/L	8369	Standard
	Be	9	110276.7	2.6	51.4493	1.601	3.1	ug/L	18	Standard
	Al	27	945110.6	2.6	7.4677	0.250	3.3	ug/L	215	Standard
[>	Sc	45	54594.9	0.8				ug/L	53004	Standard
[	Ti	47	313.7	5.8	0.5303	0.030	5.6	ug/L	26	Standard
	V	51	609114.5	2.6	49.4005	0.567	1.1	ug/L	3223	Standard
	Cr	52	597141.1	3.2	51.6477	0.931	1.8	ug/L	10379	Standard
	Cr	53	73408.6	5.8	51.4196	2.157	4.2	ug/L	192	Standard
	Mn	55	1542907.6	3.2	85.9157	1.413	1.6	ug/L	1840	Standard
	Co	59	702894.2	3.2	50.9401	0.882	1.7	ug/L	115	Standard
	Ni	60	153708.8	3.8	51.7759	1.174	2.3	ug/L	75	Standard
	Cu	65	148194.5	2.3	51.7008	0.457	0.9	ug/L	155	Standard
	Zn	66	82508.7	4.4	58.0379	1.714	3.0	ug/L	237	Standard
[>	Ge	72	427775.6	1.6				ug/L	413856	Standard
	As	75	75375.0	3.2	50.3661	0.823	1.6	ug/L	-197	Standard
	Se	82	6696.5	3.8	49.9860	1.146	2.3	ug/L	-5	Standard
[	Se-1	77	5241.2	4.0	50.6854	1.251	2.5	ug/L	105	Standard
[>	Ga	71	2788.6	4.0				mg/L	225	Standard
[	Rb	85	23479.9	5.2				ug/L	28	Standard
[	Y	89	342471.5	4.9				ug/L	322845	Standard
[>	Rh	103	135.0	9.8				ug/L	92	Standard
[	Mo	98	95.7	15.2	0.0129	0.003	23.4	ug/L	18	Standard
	Ag	107	382873.3	1.6	49.0803	0.211	0.4	ug/L	63	Standard
	Cd	111	170764.6	2.7	50.5640	0.810	1.6	mg/L	20	Standard
	Cd	114	447529.5	2.6	50.3510	0.689	1.4	ug/L	56	Standard
[>	In	115	646980.5	1.2				ug/L	657102	Standard
	Sn	118	1042.0	3.8	0.0569	0.003	5.0	ug/L	555	Standard
	Sb	123	388593.1	2.0	50.3909	0.461	0.9	ug/L	62	Standard
[	Ba	135	239893.9	2.3	71.5484	0.840	1.2	ug/L	19	Standard
[	Ce	140	189116.4	3.1				ug/L	24	Standard
[>	Tb	159	928220.6	0.8				ug/L	910514	Standard
[	Ho	165	2753.9	3.3				ug/L	7	Standard
	Tl	203	652508.9	1.9	50.3605	0.634	1.3	ug/L	13	Standard
	Tl	205	19717.8	0.6	49.8900	0.857	1.7	ug/L	1	Standard
	Pb	206	600281.1	1.9	57.7988	0.983	1.7	ug/L	342	Standard
	Pb	207	512147.1	2.0	57.9980	0.658	1.1	ug/L	284	Standard
	Pb	208	2362935.2	1.8	57.6389	0.771	1.3	ug/L	1363	Standard
	U	238	498484.6	1.7	49.1331	0.858	1.7	ug/L	2	Standard
[>	Bi	209	475727.3	1.6				ug/L	470592	Standard

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Na	23	1.7	173.2	0.1499	0.251	167.4	mg/L	2	Standard
Mg	24	4425.6	5.2	-0.0008	0.000	15.1	mg/L	5586	Standard
K	39	26.7	65.8	0.3096	0.229	73.8	mg/L	5	Standard
Ca	43	41.7	13.9	-0.5077	0.251	49.5	mg/L	45	Standard
Fe	54	4076.8	8.1	1.3677	0.132	9.7	mg/L	350	Standard
Fe	57	1055.0	8.4	1.4807	0.140	9.5	mg/L	102	Standard
Sc-1	45	54594.9	0.8				mg/L	53004	Standard
Cl	35	1.3	86.6				ug/L	2	Standard
Kr	83	150.6	1.4				ug/L	157	Standard
Br	81	2.5	100.0				ug/L	3	Standard
P	31	115856.4	2.4				ug/L	91588	Standard
S	34	32107.4	4.1				ug/L	32556	Standard
Sr	88	80.0	6.3				ug/L	62	Standard
C	12	133.3	9.4				mg/L	133	Standard
N	14	0.0					mg/L	0	Standard
Hg	202	15.0	88.2				mg/L	7	Standard

QC Calculated Values

Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recovery
Li	7			
Be	9			
Al	27			
Sc	45			
Ti	47			
V	51			
Cr	52			
Cr	53			
Mn	55			
Co	59			
Ni	60			
Cu	65			
Zn	66			
Ge	72		103.363	
As	75			
Se	82			
Se-1	77			
Ga	71			
Rb	85			
Y	89			
Rh	103			

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[	Mo	98	
[	Ag	107	
[	Cd	111	
[	Cd	114	
>	In	115	98.460
[	Sn	118	
[	Sb	123	
[	Ba	135	
[	Ce	140	
>	Tb	159	
[	Ho	165	
[	Tl	203	
[	Tl	205	
[	Pb	206	
[	Pb	207	
[	Pb	208	
[	U	238	
>	Bi	209	101.091
[	Na	23	
[	Mg	24	
[	K	39	
[	Ca	43	
[	Fe	54	
[	Fe	57	
>	Sc-1	45	
[	Cl	35	
[	Kr	83	
[	Br	81	
[	P	31	
[	S	34	
[	Sr	88	
[	C	12	
[	N	14	
[	Hg	202	

QC Out of Limits

Measurement Type	Analyte	Mass	Out of Limits Message

Sample ID: L1211033809PS WG414623-01

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Method 6020 - Summary Report

Sample ID: L1211033809SDL WG414623-02

Sample Date/Time: Sunday, November 18, 2012 19:48:28

Number of Replicates: 3

Autosampler Position: 435

Sample Description: 100

Method File: C:\NexIONData\Method\6020a.mth

Aliquot Volume (mL):

Diluted to Volume (mL):

User Name: JYH user

Cumulative Autodilution Factor: 1

Nexion-ICP 200.8\6020

Concentration Results

IS	Analyte	Mass	Intensity	RSD	Conc.	SD	RSD	Units	Blank Intens.	Mode
[	Li	7	12593.6	4.3	-2361.8916	98.860	4.2	ug/L	8369	Standard
	Be	9	58.3	17.8	0.0189	0.005	25.7	ug/L	18	Standard
	Al	27	185603.2	4.7	1.5267	0.113	7.4	ug/L	215	Standard
[>	Sc	45	52450.7	3.4				ug/L	53004	Standard
[	Ti	47	72.0	21.0	0.0765	0.031	40.3	ug/L	26	Standard
	V	51	6534.9	4.0	0.2667	0.024	9.2	ug/L	3223	Standard
	Cr	52	13293.2	1.4	0.2573	0.029	11.5	ug/L	10379	Standard
	Cr	53	580.0	15.1	0.2993	0.069	23.0	ug/L	192	Standard
	Mn	55	125512.5	4.8	6.9302	0.492	7.1	ug/L	1840	Standard
	Co	59	2558.2	2.9	0.1705	0.010	5.7	ug/L	115	Standard
	Ni	60	1505.1	2.4	0.4729	0.004	0.8	ug/L	75	Standard
	Cu	65	1041.0	2.1	0.3070	0.015	5.0	ug/L	155	Standard
	Zn	66	4585.4	3.2	3.0466	0.163	5.4	ug/L	237	Standard
[>	Ge	72	426979.5	3.0				ug/L	413856	Standard
	As	75	-93.3	48.8	0.0770	0.032	41.5	ug/L	-197	Standard
	Se	82	5.9	300.9	0.0471	0.132	280.1	ug/L	-5	Standard
[	Se-1	77	118.7	5.1	0.1954	0.096	48.9	ug/L	105	Standard
[>	Ga	71	688.3	1.8				mg/L	225	Standard
[	Rb	85	4584.0	3.7				ug/L	28	Standard
[	Y	89	328872.1	5.2				ug/L	322845	Standard
[>	Rh	103	80.0	22.5				ug/L	92	Standard
[	Mo	98	40.0	9.8	0.0003	0.001	291.1	ug/L	18	Standard
	Ag	107	85.7	12.3	0.0031	0.001	39.0	ug/L	63	Standard
	Cd	111	82.3	1.9	0.0131	0.001	5.3	mg/L	20	Standard
	Cd	114	196.6	5.8	0.0125	0.001	7.7	ug/L	56	Standard
[>	In	115	648890.7	1.4				ug/L	657102	Standard
	Sn	118	523.0	4.4	0.0038	0.002	54.1	ug/L	555	Standard
	Sb	123	281.7	28.0	0.0334	0.010	29.0	ug/L	62	Standard
[	Ba	135	13499.3	2.9	3.9956	0.085	2.1	ug/L	19	Standard
[	Ce	140	37714.2	3.3				ug/L	24	Standard
[>	Tb	159	929365.8	2.3				ug/L	910514	Standard
[	Ho	165	546.0	5.2				ug/L	7	Standard
	Tl	203	123.0	2.9	0.0057	0.000	3.0	ug/L	13	Standard
	Tl	205	3.7	83.3	0.0104	0.007	72.3	ug/L	1	Standard
	Pb	206	16328.8	3.4	1.5179	0.047	3.1	ug/L	342	Standard
	Pb	207	13339.2	2.8	1.4541	0.035	2.4	ug/L	284	Standard
	Pb	208	62498.6	3.1	1.4695	0.045	3.0	ug/L	1363	Standard
	U	238	216.7	50.1	0.0194	0.010	52.7	ug/L	2	Standard
[>	Bi	209	482545.7	1.7				ug/L	470592	Standard

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Na	23	0.0		0.0050	0.000	0.0	mg/L	2	Standard
Mg	24	2270.2	9.6	-0.0018	0.000	4.3	mg/L	5586	Standard
K	39	13.3	21.7	0.1411	0.034	24.2	mg/L	5	Standard
Ca	43	41.7	18.3	-0.4299	0.394	91.7	mg/L	45	Standard
Fe	54	1061.8	2.4	0.2592	0.022	8.6	mg/L	350	Standard
Fe	57	311.7	2.5	0.3671	0.029	7.9	mg/L	102	Standard
Sc-1	45	52450.7	3.4				mg/L	53004	Standard
Cl	35	2.7	57.3				ug/L	2	Standard
Kr	83	143.6	9.4				ug/L	157	Standard
Br	81	3.3	114.6				ug/L	3	Standard
P	31	98204.0	1.7				ug/L	91588	Standard
S	34	30725.3	1.1				ug/L	32556	Standard
Sr	88	73.3	34.3				ug/L	62	Standard
C	12	110.0	18.2				mg/L	133	Standard
N	14	1.7	173.2				mg/L	0	Standard
Hg	202	1.7	173.2				mg/L	7	Standard

QC Calculated Values

Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recovery
Li	7			
Be	9			
Al	27			
Sc	45			
Ti	47			
V	51			
Cr	52			
Cr	53			
Mn	55			
Co	59			
Ni	60			
Cu	65			
Zn	66			
Ge	72		103.171	
As	75			
Se	82			
Se-1	77			
Ga	71			
Rb	85			
Y	89			
Rh	103			

Sample ID: L1211033809SDL WG414623-02

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[	Mo	98	
[	Ag	107	
[	Cd	111	
[	Cd	114	
>	In	115	98.750
[	Sn	118	
[	Sb	123	
[	Ba	135	
[	Ce	140	
>	Tb	159	
[	Ho	165	
[	Tl	203	
[	Tl	205	
[	Pb	206	
[	Pb	207	
[	Pb	208	
[	U	238	
>	Bi	209	102.540
[	Na	23	
[	Mg	24	
[	K	39	
[	Ca	43	
[	Fe	54	
[	Fe	57	
>	Sc-1	45	
[	Cl	35	
[	Kr	83	
[	Br	81	
[	P	31	
[	S	34	
[	Sr	88	
[	C	12	
[	N	14	
[	Hg	202	

QC Out of Limits

Measurement Type	Analyte	Mass	Out of Limits Message

Sample ID: L1211033809SDL WG414623-02

Report Date/Time: Sunday, November 18, 2012 19:51:00

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Method 6020 - Summary Report

Sample ID: QC Std 6

Sample Date/Time: Sunday, November 18, 2012 19:51:43

Number of Replicates: 3

Autosampler Position: 101

Sample Description:

Method File: C:\NexIONData\Method\6020a.mth

Aliquot Volume (mL):

Diluted to Volume (mL):

User Name: JYH user

Cumulative Autodilution Factor: 1

Nexion-ICP 200.8\6020

Concentration Results

IS	Analyte	Mass	Intensity	RSD	Conc.	SD	RSD	Units	Blank Intens.	Mode
[	Li	7	8899.3	7.2	-132.2047	206.160	155.9	ug/L	8369	Standard
	Be	9	110497.4	5.9	51.8548	1.925	3.7	ug/L	18	Standard
	Al	27	6927466.2	3.5	55.0847	0.601	1.1	ug/L	215	Standard
[>	Sc	45	54252.0	3.2				ug/L	53004	Standard
[	Ti	47	54299.9	4.6	101.6181	1.909	1.9	ug/L	26	Standard
	V	51	612036.3	5.9	49.4104	1.708	3.5	ug/L	3223	Standard
	Cr	52	578603.7	4.3	49.7981	0.744	1.5	ug/L	10379	Standard
	Cr	53	72826.5	4.1	50.8083	0.780	1.5	ug/L	192	Standard
	Mn	55	906749.6	5.1	50.2304	1.145	2.3	ug/L	1840	Standard
	Co	59	697573.1	3.8	50.3420	0.458	0.9	ug/L	115	Standard
	Ni	60	149157.5	5.1	50.0214	1.133	2.3	ug/L	75	Standard
	Cu	65	146951.1	4.3	51.0407	0.764	1.5	ug/L	155	Standard
	Zn	66	72545.8	4.0	50.7971	0.786	1.5	ug/L	237	Standard
[>	Ge	72	429572.7	2.9				ug/L	413856	Standard
	As	75	76344.8	5.0	50.7875	1.079	2.1	ug/L	-197	Standard
	Se	82	6801.2	4.1	50.5547	0.617	1.2	ug/L	-5	Standard
[	Se-1	77	5190.9	6.6	49.9641	2.348	4.7	ug/L	105	Standard
[>	Ga	71	225.0	8.0				mg/L	225	Standard
[	Rb	85	1695.1	3.2				ug/L	28	Standard
[	Y	89	317639.8	4.7				ug/L	322845	Standard
[>	Rh	103	110.0	9.1				ug/L	92	Standard
[	Mo	98	448973.3	3.8	101.2299	1.581	1.6	ug/L	18	Standard
	Ag	107	394355.0	2.9	50.5495	0.355	0.7	ug/L	63	Standard
	Cd	111	172373.2	3.8	51.0354	0.756	1.5	mg/L	20	Standard
	Cd	114	454564.5	3.7	51.1385	0.710	1.4	ug/L	56	Standard
[>	In	115	646973.5	2.3				ug/L	657102	Standard
	Sn	118	505690.0	5.2	51.5385	1.520	2.9	ug/L	555	Standard
	Sb	123	397913.8	3.4	51.5948	0.648	1.3	ug/L	62	Standard
[	Ba	135	174541.6	3.9	52.0455	0.916	1.8	ug/L	19	Standard
[	Ce	140	552.7	3.2				ug/L	24	Standard
[>	Tb	159	925792.5	2.1				ug/L	910514	Standard
[	Ho	165	447.3	5.8				ug/L	7	Standard
	Tl	203	657184.6	3.8	51.2710	1.044	2.0	ug/L	13	Standard
	Tl	205	19748.2	3.9	50.4961	0.814	1.6	ug/L	1	Standard
	Pb	206	525962.8	4.3	51.1776	1.048	2.0	ug/L	342	Standard
	Pb	207	449657.7	4.6	51.4605	1.171	2.3	ug/L	284	Standard
	Pb	208	2065180.8	4.4	50.9082	1.073	2.1	ug/L	1363	Standard
	U	238	518402.5	4.4	51.6384	1.111	2.2	ug/L	2	Standard
[>	Bi	209	470543.4	2.3				ug/L	470592	Standard

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Na	23	0.0		0.0050	0.000	0.0	mg/L	2	Standard
Mg	24	307926.7	2.1	0.1447	0.002	1.3	mg/L	5586	Standard
K	39	418.3	17.0	5.5162	0.914	16.6	mg/L	5	Standard
Ca	43	176.7	27.5	5.1032	1.898	37.2	mg/L	45	Standard
Fe	54	14041.2	6.6	5.1130	0.184	3.6	mg/L	350	Standard
Fe	57	3372.0	9.3	5.0404	0.347	6.9	mg/L	102	Standard
Sc-1	45	54252.0	3.2				mg/L	53004	Standard
Cl	35	1.3	114.6				ug/L	2	Standard
Kr	83	150.2	6.4				ug/L	157	Standard
Br	81	4.2	91.7				ug/L	3	Standard
P	31	124462.8	3.2				ug/L	91588	Standard
S	34	41082.3	0.6				ug/L	32556	Standard
Sr	88	66.7	11.5				ug/L	62	Standard
C	12	116.7	17.3				mg/L	133	Standard
N	14	1.7	173.2				mg/L	0	Standard
Hg	202	3.3	86.6				mg/L	7	Standard

QC Calculated Values

Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recovery
Li	7			
Be	9	103.710		
Al	27	110.169		
Sc	45			
Ti	47	101.618		
V	51	98.821		
Cr	52	99.596		
Cr	53			
Mn	55	100.461		
Co	59	100.684		
Ni	60	100.043		
Cu	65	102.081		
Zn	66	101.594		
Ge	72		103.798	
As	75	101.575		
Se	82	101.109		
Se-1	77			
Ga	71			
Rb	85			
Y	89			
Rh	103			

Sample ID: QC Std 6

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[	Mo	98	101.230	
[	Ag	107	101.099	
[	Cd	111	102.071	
[	Cd	114		
>	In	115		98.459
[	Sn	118	103.077	
[	Sb	123	103.190	
[	Ba	135	104.091	
[	Ce	140		
>	Tb	159		
[	Ho	165		
[	Tl	203	102.542	
[	Tl	205		
[	Pb	206	102.355	
[	Pb	207	102.921	
[	Pb	208	101.816	
[	U	238	103.277	
>	Bi	209		99.990
[	Na	23		
[	Mg	24		
[	K	39		
[	Ca	43		
[	Fe	54		
[	Fe	57		
>	Sc-1	45		
[	Cl	35		
[	Kr	83		
[	Br	81		
[	P	31		
[	S	34		
[	Sr	88		
[	C	12		
[	N	14		
[	Hg	202		

QC Out of Limits

Measurement Type	Analyte	Mass	Out of Limits Message
QC Std 6	Al	27	

Sample ID: QC Std 6

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Method 6020 - Summary Report

Sample ID: QC Std 7

Sample Date/Time: Sunday, November 18, 2012 19:54:56

Number of Replicates: 3

Autosampler Position: 102

Sample Description:

Method File: C:\NexIONData\Method\6020a.mth

Aliquot Volume (mL):

Diluted to Volume (mL):

User Name: JYH user

Cumulative Autodilution Factor: 1

Nexion-ICP 200.8\6020

Concentration Results

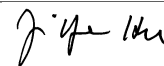
IS	Analyte	Mass	Intensity	RSD	Conc.	SD	RSD	Units	Blank Intens.	Mode
[	Li	7	8202.2	2.0	294.6668	93.224	31.6	ug/L	8369	Standard
	Be	9	10.0	50.0	-0.0048	0.002	46.9	ug/L	18	Standard
	Al	27	490.0	105.3	0.0016	0.004	242.4	ug/L	215	Standard
[>	Sc	45	54942.8	2.9				ug/L	53004	Standard
[	Ti	47	21.3	15.1	-0.0190	0.008	40.3	ug/L	26	Standard
	V	51	3100.2	0.3	-0.0126	0.009	75.2	ug/L	3223	Standard
	Cr	52	9727.1	0.4	-0.0521	0.033	63.4	ug/L	10379	Standard
	Cr	53	142.5	18.6	-0.0093	0.016	172.3	ug/L	192	Standard
	Mn	55	1799.8	25.2	0.0122	0.025	205.2	ug/L	1840	Standard
	Co	59	225.3	94.1	0.0009	0.015	1750.7	ug/L	115	Standard
	Ni	60	107.3	53.8	0.0009	0.019	2240.9	ug/L	75	Standard
	Cu	65	244.3	18.7	0.0285	0.016	55.2	ug/L	155	Standard
	Zn	66	261.0	12.2	-0.0141	0.018	129.7	ug/L	237	Standard
[>	Ge	72	424572.7	3.6				ug/L	413856	Standard
	As	75	-185.9	20.9	0.0156	0.023	147.8	ug/L	-197	Standard
	Se	82	-2.4	875.0	-0.0108	0.158	1461.3	ug/L	-5	Standard
[	Se-1	77	132.7	12.3	0.3386	0.147	43.5	ug/L	105	Standard
[>	Ga	71	170.0	7.8				mg/L	225	Standard
[	Rb	85	28.3	27.0				ug/L	28	Standard
[	Y	89	316788.3	3.4				ug/L	322845	Standard
[>	Rh	103	110.0	13.6				ug/L	92	Standard
[	Mo	98	120.4	127.5	0.0184	0.035	188.1	ug/L	18	Standard
	Ag	107	189.3	123.4	0.0163	0.030	182.9	ug/L	63	Standard
	Cd	111	71.5	116.6	0.0099	0.025	247.9	mg/L	20	Standard
	Cd	114	185.0	112.6	0.0112	0.023	208.4	ug/L	56	Standard
[>	In	115	647152.4	4.0				ug/L	657102	Standard
	Sn	118	448.7	26.2	-0.0036	0.012	323.6	ug/L	555	Standard
	Sb	123	387.2	24.3	0.0470	0.011	22.9	ug/L	62	Standard
[	Ba	135	62.7	115.2	-0.0013	0.022	1698.9	ug/L	19	Standard
[	Ce	140	67.0	107.3				ug/L	24	Standard
[>	Tb	159	929424.2	2.6				ug/L	910514	Standard
[	Ho	165	10.7	32.9				ug/L	7	Standard
	Tl	203	101.0	112.3	0.0041	0.009	209.8	ug/L	13	Standard
	Tl	205	2.7	108.3	0.0080	0.007	89.6	ug/L	1	Standard
	Pb	206	422.3	23.1	0.0078	0.009	111.8	ug/L	342	Standard
	Pb	207	357.3	22.0	0.0045	0.008	184.5	ug/L	284	Standard
	Pb	208	1622.0	23.3	0.0052	0.009	163.7	ug/L	1363	Standard
	U	238	36.7	130.8	0.0020	0.005	226.6	ug/L	2	Standard
[>	Bi	209	474096.6	3.2				ug/L	470592	Standard

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Na	23	1.7	173.2	0.1486	0.249	167.4	mg/L	2	Standard
Mg	24	920.0	5.2	-0.0025	0.000	0.5	mg/L	5586	Standard
K	39	10.0	50.0	0.0909	0.069	76.3	mg/L	5	Standard
Ca	43	35.0	51.5	-0.7811	0.775	99.2	mg/L	45	Standard
Fe	54	368.7	3.5	-0.0168	0.005	27.6	mg/L	350	Standard
Fe	57	143.3	16.1	0.0888	0.033	37.1	mg/L	102	Standard
Sc-1	45	54942.8	2.9				mg/L	53004	Standard
Cl	35	3.0	33.3				ug/L	2	Standard
Kr	83	154.0	8.8				ug/L	157	Standard
Br	81	3.3	86.6				ug/L	3	Standard
P	31	125075.1	2.4				ug/L	91588	Standard
S	34	41673.1	0.8				ug/L	32556	Standard
Sr	88	48.3	23.9				ug/L	62	Standard
C	12	133.3	12.1				mg/L	133	Standard
N	14	0.0					mg/L	0	Standard
Hg	202	3.3	86.6				mg/L	7	Standard

QC Calculated Values

Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recovery
Li	7			
Be	9			
Al	27			
Sc	45			
Ti	47			
V	51			
Cr	52			
Cr	53			
Mn	55			
Co	59			
Ni	60			
Cu	65			
Zn	66			
Ge	72		102.590	
As	75			
Se	82			
Se-1	77			
Ga	71			
Rb	85			
Y	89			
Rh	103			

Sample ID: QC Std 7

Report Date/Time: Sunday, November 18, 2012 19:57:28

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[	Mo	98	
[	Ag	107	
[	Cd	111	
[	Cd	114	
>	In	115	98.486
[	Sn	118	
[	Sb	123	
[	Ba	135	
[	Ce	140	
>	Tb	159	
[	Ho	165	
[	Tl	203	
[	Tl	205	
[	Pb	206	
[	Pb	207	
[	Pb	208	
[	U	238	
>	Bi	209	100.745
[	Na	23	
[	Mg	24	
[	K	39	
[	Ca	43	
[	Fe	54	
[	Fe	57	
>	Sc-1	45	
[	Cl	35	
[	Kr	83	
[	Br	81	
[	P	31	
[	S	34	
[	Sr	88	
[	C	12	
[	N	14	
[	Hg	202	

QC Out of Limits

Measurement Type	Analyte	Mass	Out of Limits Message

Sample ID: QC Std 7

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Method 6020 - Summary Report

Sample ID: L1211033810

Sample Date/Time: Sunday, November 18, 2012 19:58:11

Number of Replicates: 3

Autosampler Position: 436

Sample Description: 20

Method File: C:\NexIONData\Method\6020a.mth

Aliquot Volume (mL):

Diluted to Volume (mL):

User Name: JYH user

Cumulative Autodilution Factor: 1

Nexion-ICP 200.8\6020

Concentration Results

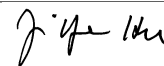
IS	Analyte	Mass	Intensity	RSD	Conc.	SD	RSD	Units	Blank Intens.	Mode
[	Li	7	19522.6	2.5	-7391.0965	627.267	8.5	ug/L	8369	Standard
	Be	9	183.3	5.7	0.0891	0.008	8.6	ug/L	18	Standard
	Al	27	545689.2	2.2	4.9645	0.258	5.2	ug/L	215	Standard
[>	Sc	45	47450.9	3.0				ug/L	53004	Standard
[	Ti	47	181.7	2.5	0.3364	0.013	3.9	ug/L	26	Standard
	V	51	14362.0	0.9	1.0897	0.025	2.3	ug/L	3223	Standard
	Cr	52	18135.2	2.6	0.9346	0.065	6.9	ug/L	10379	Standard
	Cr	53	1392.6	8.1	1.0232	0.087	8.5	ug/L	192	Standard
	Mn	55	327724.9	2.3	21.0846	0.629	3.0	ug/L	1840	Standard
	Co	59	7825.7	3.9	0.6422	0.035	5.5	ug/L	115	Standard
	Ni	60	3907.8	5.6	1.4914	0.093	6.2	ug/L	75	Standard
	Cu	65	2649.9	4.5	1.0146	0.035	3.5	ug/L	155	Standard
	Zn	66	6146.6	1.7	4.8292	0.107	2.2	ug/L	237	Standard
[>	Ge	72	369216.9	1.6				ug/L	413856	Standard
	As	75	154.9	22.7	0.2593	0.025	9.8	ug/L	-197	Standard
	Se	82	2.4	431.4	0.0252	0.088	349.1	ug/L	-5	Standard
[	Se-1	77	122.3	3.1	0.4193	0.063	14.9	ug/L	105	Standard
[>	Ga	71	1758.4	1.3				mg/L	225	Standard
[	Rb	85	14111.6	5.8				ug/L	28	Standard
[	Y	89	288010.6	1.9				ug/L	322845	Standard
[>	Rh	103	75.0	6.7				ug/L	92	Standard
[	Mo	98	30.7	36.1	-0.0010	0.003	255.6	ug/L	18	Standard
	Ag	107	86.7	12.1	0.0045	0.001	33.3	ug/L	63	Standard
	Cd	111	52.0	13.9	0.0060	0.003	45.9	mg/L	20	Standard
	Cd	114	149.6	5.9	0.0092	0.001	7.2	ug/L	56	Standard
[>	In	115	580878.8	2.6				ug/L	657102	Standard
	Sn	118	387.3	2.9	-0.0054	0.001	17.2	ug/L	555	Standard
	Sb	123	61.1	34.8	0.0058	0.003	49.1	ug/L	62	Standard
[	Ba	135	30651.0	3.2	10.1765	0.609	6.0	ug/L	19	Standard
[	Ce	140	137088.3	2.6				ug/L	24	Standard
[>	Tb	159	845293.6	0.9				ug/L	910514	Standard
[	Ho	165	2017.1	5.8				ug/L	7	Standard
	Tl	203	154.3	27.3	0.0092	0.003	36.6	ug/L	13	Standard
	Tl	205	3.7	41.7	0.0113	0.004	37.5	ug/L	1	Standard
	Pb	206	32599.0	2.1	3.3591	0.107	3.2	ug/L	342	Standard
	Pb	207	26206.3	2.2	3.1714	0.107	3.4	ug/L	284	Standard
	Pb	208	124275.6	3.0	3.2419	0.134	4.1	ug/L	1363	Standard
	U	238	359.7	10.4	0.0367	0.004	9.8	ug/L	2	Standard
[>	Bi	209	440543.7	1.1				ug/L	470592	Standard

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Na	23	0.0		0.0050	0.000	0.0	mg/L	2	Standard
Mg	24	2143.5	2.8	-0.0017	0.000	2.6	mg/L	5586	Standard
K	39	15.0	33.3	0.1881	0.082	43.6	mg/L	5	Standard
Ca	43	56.7	22.2	0.4645	0.609	131.2	mg/L	45	Standard
Fe	54	2734.8	8.4	1.0219	0.122	11.9	mg/L	350	Standard
Fe	57	776.7	0.4	1.2350	0.036	2.9	mg/L	102	Standard
Sc-1	45	47450.9	3.0				mg/L	53004	Standard
Cl	35	0.3	173.2				ug/L	2	Standard
Kr	83	131.1	4.1				ug/L	157	Standard
Br	81	4.2	69.3				ug/L	3	Standard
P	31	42047.5	2.7				ug/L	91588	Standard
S	34	37951.6	0.7				ug/L	32556	Standard
Sr	88	95.0	32.9				ug/L	62	Standard
C	12	68.3	30.5				mg/L	133	Standard
N	14	1.7	173.2				mg/L	0	Standard
Hg	202	3.3	86.6				mg/L	7	Standard

QC Calculated Values

Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recovery
Li	7			
Be	9			
Al	27			
Sc	45			
Ti	47			
V	51			
Cr	52			
Cr	53			
Mn	55			
Co	59			
Ni	60			
Cu	65			
Zn	66			
Ge	72		89.214	
As	75			
Se	82			
Se-1	77			
Ga	71			
Rb	85			
Y	89			
Rh	103			

Sample ID: L1211033810

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[	Mo	98	
[	Ag	107	
[	Cd	111	
[	Cd	114	
>	In	115	88.400
[	Sn	118	
[	Sb	123	
[	Ba	135	
[	Ce	140	
>	Tb	159	
[	Ho	165	
[	Tl	203	
[	Tl	205	
[	Pb	206	
[	Pb	207	
[	Pb	208	
[	U	238	
>	Bi	209	93.615
[	Na	23	
[	Mg	24	
[	K	39	
[	Ca	43	
[	Fe	54	
[	Fe	57	
>	Sc-1	45	
[	Cl	35	
[	Kr	83	
[	Br	81	
[	P	31	
[	S	34	
[	Sr	88	
[	C	12	
[	N	14	
[	Hg	202	

QC Out of Limits

Measurement Type	Analyte	Mass	Out of Limits Message

Sample ID: L1211033810

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Method 6020 - Summary Report

Sample ID: L1211033811

Sample Date/Time: Sunday, November 18, 2012 20:01:24

Number of Replicates: 3

Autosampler Position: 437

Sample Description: 20

Method File: C:\NexIONData\Method\6020a.mth

Aliquot Volume (mL):

Diluted to Volume (mL):

User Name: JYH user

Cumulative Autodilution Factor: 1

Nexion-ICP 200.8\6020

Concentration Results

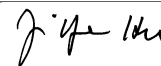
IS	Analyte	Mass	Intensity	RSD	Conc.	SD	RSD	Units	Blank Intens.	Mode
[	Li	7	21189.8	1.9	-8772.0703	257.912	2.9	ug/L	8369	Standard
	Be	9	158.3	18.0	0.0779	0.016	20.5	ug/L	18	Standard
	Al	27	609506.6	3.1	5.6943	0.192	3.4	ug/L	215	Standard
[>	Sc	45	46165.2	0.5				ug/L	53004	Standard
[	Ti	47	233.3	9.5	0.4623	0.052	11.3	ug/L	26	Standard
	V	51	14747.8	1.7	1.1622	0.032	2.8	ug/L	3223	Standard
	Cr	52	44629.0	2.3	3.7547	0.110	2.9	ug/L	10379	Standard
	Cr	53	4613.2	1.9	3.7422	0.134	3.6	ug/L	192	Standard
	Mn	55	921284.6	2.0	60.9569	0.468	0.8	ug/L	1840	Standard
	Co	59	8362.6	2.2	0.7052	0.016	2.3	ug/L	115	Standard
	Ni	60	4052.5	2.5	1.5886	0.039	2.5	ug/L	75	Standard
	Cu	65	2994.0	1.3	1.1854	0.005	0.5	ug/L	155	Standard
	Zn	66	8014.5	0.2	6.5270	0.106	1.6	ug/L	237	Standard
[>	Ge	72	359910.5	1.6				ug/L	413856	Standard
	As	75	471.8	7.1	0.5140	0.033	6.3	ug/L	-197	Standard
	Se	82	13.9	94.3	0.1292	0.117	90.3	ug/L	-5	Standard
[	Se-1	77	128.3	6.1	0.5254	0.092	17.6	ug/L	105	Standard
[>	Ga	71	1801.8	2.5				mg/L	225	Standard
[	Rb	85	15024.1	2.1				ug/L	28	Standard
[	Y	89	285772.1	1.9				ug/L	322845	Standard
[>	Rh	103	136.7	11.2				ug/L	92	Standard
[	Mo	98	44.2	12.7	0.0028	0.001	46.1	ug/L	18	Standard
	Ag	107	81.3	2.6	0.0041	0.000	7.6	ug/L	63	Standard
	Cd	111	27.9	10.8	-0.0016	0.001	71.2	mg/L	20	Standard
	Cd	114	90.6	6.9	0.0022	0.001	44.5	ug/L	56	Standard
[>	In	115	561851.8	1.9				ug/L	657102	Standard
	Sn	118	311.7	4.5	-0.0127	0.002	17.9	ug/L	555	Standard
	Sb	123	40.5	7.2	0.0031	0.001	16.4	ug/L	62	Standard
[	Ba	135	57167.6	0.6	19.6248	0.335	1.7	ug/L	19	Standard
[	Ce	140	142459.0	1.2				ug/L	24	Standard
[>	Tb	159	822941.5	0.9				ug/L	910514	Standard
[	Ho	165	1906.8	2.2				ug/L	7	Standard
	Tl	203	140.3	8.7	0.0082	0.001	12.7	ug/L	13	Standard
	Tl	205	2.3	49.5	0.0078	0.003	41.1	ug/L	1	Standard
	Pb	206	1528895.4	0.8	161.6557	1.553	1.0	ug/L	342	Standard
	Pb	207	1247340.8	1.7	155.1230	2.126	1.4	ug/L	284	Standard
	Pb	208	6168794.2	0.9	165.2461	1.387	0.8	ug/L	1363	Standard
	U	238	973.4	1.7	0.1038	0.002	2.0	ug/L	2	Standard
[>	Bi	209	433355.7	0.4				ug/L	470592	Standard

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Na	23	0.0		0.0050	0.000	0.0	mg/L	2	Standard
Mg	24	2065.1	4.5	-0.0018	0.000	3.3	mg/L	5586	Standard
K	39	13.3	57.3	0.1671	0.120	71.6	mg/L	5	Standard
Ca	43	50.0	20.0	0.2137	0.495	231.8	mg/L	45	Standard
Fe	54	2726.9	3.5	1.0493	0.037	3.6	mg/L	350	Standard
Fe	57	721.7	7.7	1.1728	0.094	8.0	mg/L	102	Standard
Sc-1	45	46165.2	0.5				mg/L	53004	Standard
Cl	35	3.0	33.3				ug/L	2	Standard
Kr	83	131.0	4.2				ug/L	157	Standard
Br	81	5.8	65.5				ug/L	3	Standard
P	31	39186.5	2.4				ug/L	91588	Standard
S	34	34941.1	2.6				ug/L	32556	Standard
Sr	88	100.0	17.3				ug/L	62	Standard
C	12	86.7	20.3				mg/L	133	Standard
N	14	1.7	173.2				mg/L	0	Standard
Hg	202	5.0	100.0				mg/L	7	Standard

QC Calculated Values

Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recovery
Li	7			
Be	9			
Al	27			
Sc	45			
Ti	47			
V	51			
Cr	52			
Cr	53			
Mn	55			
Co	59			
Ni	60			
Cu	65			
Zn	66			
Ge	72		86.965	
As	75			
Se	82			
Se-1	77			
Ga	71			
Rb	85			
Y	89			
Rh	103			

Sample ID: L1211033811

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[	Mo	98	
[	Ag	107	
[	Cd	111	
[	Cd	114	
>	In	115	85.505
[	Sn	118	
[	Sb	123	
[	Ba	135	
[	Ce	140	
>	Tb	159	
[	Ho	165	
[	Tl	203	
[	Tl	205	
[	Pb	206	
[	Pb	207	
[	Pb	208	
[	U	238	
>	Bi	209	92.087
[	Na	23	
[	Mg	24	
[	K	39	
[	Ca	43	
[	Fe	54	
[	Fe	57	
>	Sc-1	45	
[	Cl	35	
[	Kr	83	
[	Br	81	
[	P	31	
[	S	34	
[	Sr	88	
[	C	12	
[	N	14	
[	Hg	202	

QC Out of Limits

Measurement Type	Analyte	Mass	Out of Limits Message
Pb 206 Upper, S, EEE	Pb	206	
Pb 207 Upper, S, EEE	Pb	207	
Pb 208 Upper, S, EEE	Pb	208	

Sample ID: L1211033811

Report Date/Time: Sunday, November 18, 2012 20:03:56

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Method 6020 - Summary Report

Sample ID: L1211033812

Sample Date/Time: Sunday, November 18, 2012 20:04:36

Number of Replicates: 3

Autosampler Position: 438

Sample Description: 20

Method File: C:\NexIONData\Method\6020a.mth

Aliquot Volume (mL):

Diluted to Volume (mL):

User Name: JYH user

Cumulative Autodilution Factor: 1

Nexion-ICP 200.8\6020

Concentration Results

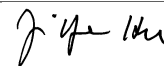
IS	Analyte	Mass	Intensity	RSD	Conc.	SD	RSD	Units	Blank Intens.	Mode
[	Li	7	29498.7	4.9	-14006.5210	988.796	7.1	ug/L	8369	Standard
	Be	9	266.7	21.3	0.1378	0.034	24.9	ug/L	18	Standard
	Al	27	1102217.4	2.4	10.2774	0.198	1.9	ug/L	215	Standard
[>	Sc	45	46268.9	2.9				ug/L	53004	Standard
[	Ti	47	250.7	11.8	0.4958	0.074	14.9	ug/L	26	Standard
	V	51	17320.1	3.7	1.3937	0.032	2.3	ug/L	3223	Standard
	Cr	52	23462.2	3.9	1.5143	0.088	5.8	ug/L	10379	Standard
	Cr	53	2107.6	4.8	1.6308	0.053	3.3	ug/L	192	Standard
	Mn	55	354896.3	3.3	23.1833	0.459	2.0	ug/L	1840	Standard
	Co	59	12176.6	4.0	1.0231	0.039	3.8	ug/L	115	Standard
	Ni	60	6557.8	3.9	2.5659	0.110	4.3	ug/L	75	Standard
	Cu	65	3254.7	2.2	1.2797	0.010	0.8	ug/L	155	Standard
	Zn	66	9159.1	3.4	7.4090	0.282	3.8	ug/L	237	Standard
[>	Ge	72	363647.1	1.9				ug/L	413856	Standard
	As	75	121.2	15.4	0.2352	0.016	7.0	ug/L	-197	Standard
	Se	82	10.0	16.8	0.0931	0.016	17.0	ug/L	-5	Standard
[	Se-1	77	117.0	7.8	0.3781	0.099	26.1	ug/L	105	Standard
[>	Ga	71	2553.5	1.1				mg/L	225	Standard
	Rb	85	20435.5	3.9				ug/L	28	Standard
[	Y	89	298977.7	3.0				ug/L	322845	Standard
[>	Rh	103	96.7	13.0				ug/L	92	Standard
[	Mo	98	24.4	3.4	-0.0023	0.000	5.5	ug/L	18	Standard
	Ag	107	71.0	22.4	0.0027	0.003	95.7	ug/L	63	Standard
	Cd	111	61.0	17.3	0.0097	0.004	40.6	mg/L	20	Standard
	Cd	114	166.3	14.1	0.0121	0.003	24.4	ug/L	56	Standard
[>	In	115	559737.9	1.7				ug/L	657102	Standard
	Sn	118	311.3	5.0	-0.0127	0.002	15.2	ug/L	555	Standard
	Sb	123	32.9	10.2	0.0020	0.001	26.7	ug/L	62	Standard
[	Ba	135	41318.9	1.9	14.2322	0.360	2.5	ug/L	19	Standard
[	Ce	140	184522.4	3.0				ug/L	24	Standard
[>	Tb	159	818298.1	0.8				ug/L	910514	Standard
[	Ho	165	2605.9	3.4				ug/L	7	Standard
	Tl	203	175.0	13.6	0.0111	0.002	17.4	ug/L	13	Standard
	Tl	205	7.3	20.8	0.0215	0.004	20.0	ug/L	1	Standard
	Pb	206	19388.4	2.2	2.0036	0.050	2.5	ug/L	342	Standard
	Pb	207	15730.5	3.2	1.9075	0.068	3.6	ug/L	284	Standard
	Pb	208	74389.4	2.1	1.9452	0.047	2.4	ug/L	1363	Standard
	U	238	1216.4	2.8	0.1292	0.004	2.9	ug/L	2	Standard
[>	Bi	209	436326.5	0.5				ug/L	470592	Standard

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Na	23	0.0		0.0050	0.000	0.0	mg/L	2	Standard
Mg	24	3182.0	7.4	-0.0011	0.000	9.2	mg/L	5586	Standard
K	39	20.0	50.0	0.2714	0.161	59.5	mg/L	5	Standard
Ca	43	58.3	24.7	0.6252	0.776	124.1	mg/L	45	Standard
Fe	54	3322.3	4.1	1.3084	0.021	1.6	mg/L	350	Standard
Fe	57	895.0	7.5	1.4827	0.127	8.6	mg/L	102	Standard
Sc-1	45	46268.9	2.9				mg/L	53004	Standard
Cl	35	2.3	99.0				ug/L	2	Standard
Kr	83	137.6	5.4				ug/L	157	Standard
Br	81	6.7	21.7				ug/L	3	Standard
P	31	38524.8	2.4				ug/L	91588	Standard
S	34	31177.0	0.5				ug/L	32556	Standard
Sr	88	103.3	2.8				ug/L	62	Standard
C	12	105.0	25.2				mg/L	133	Standard
N	14	0.0					mg/L	0	Standard
Hg	202	6.7	86.6				mg/L	7	Standard

QC Calculated Values

Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recovery
Li	7			
Be	9			
Al	27			
Sc	45			
Ti	47			
V	51			
Cr	52			
Cr	53			
Mn	55			
Co	59			
Ni	60			
Cu	65			
Zn	66			
Ge	72		87.868	
As	75			
Se	82			
Se-1	77			
Ga	71			
Rb	85			
Y	89			
Rh	103			

Sample ID: L1211033812

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[	Mo	98	
[	Ag	107	
[	Cd	111	
[	Cd	114	
>	In	115	85.183
[	Sn	118	
[	Sb	123	
[	Ba	135	
[	Ce	140	
>	Tb	159	
[	Ho	165	
[	Tl	203	
[	Tl	205	
[	Pb	206	
[	Pb	207	
[	Pb	208	
[	U	238	
>	Bi	209	92.719
[	Na	23	
[	Mg	24	
[	K	39	
[	Ca	43	
[	Fe	54	
[	Fe	57	
>	Sc-1	45	
[	Cl	35	
[	Kr	83	
[	Br	81	
[	P	31	
[	S	34	
[	Sr	88	
[	C	12	
[	N	14	
[	Hg	202	

QC Out of Limits

Measurement Type	Analyte	Mass	Out of Limits Message

Sample ID: L1211033812

Report Date/Time: Sunday, November 18, 2012 20:07:08

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Method 6020 - Summary Report

Sample ID: L1211033816

Sample Date/Time: Sunday, November 18, 2012 20:07:48

Number of Replicates: 3

Autosampler Position: 439

Sample Description: 20

Method File: C:\NexIONData\Method\6020a.mth

Aliquot Volume (mL):

Diluted to Volume (mL):

User Name: JYH user

Cumulative Autodilution Factor: 1

Nexion-ICP 200.8\6020

Concentration Results

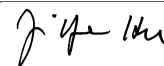
IS	Analyte	Mass	Intensity	RSD	Conc.	SD	RSD	Units	Blank Intens.	Mode
[	Li	7	13254.1	4.7	-3334.1247	510.404	15.3	ug/L	8369	Standard
	Be	9	88.3	23.6	0.0368	0.010	27.6	ug/L	18	Standard
	Al	27	267848.1	2.9	2.3799	0.108	4.5	ug/L	215	Standard
[>	Sc	45	48542.7	2.7				ug/L	53004	Standard
[	Ti	47	322.0	3.4	0.6213	0.012	2.0	ug/L	26	Standard
	V	51	10296.7	4.9	0.6760	0.018	2.6	ug/L	3223	Standard
	Cr	52	48637.3	2.1	3.9008	0.178	4.6	ug/L	10379	Standard
	Cr	53	5108.4	3.7	3.9239	0.140	3.6	ug/L	192	Standard
	Mn	55	218360.9	2.5	13.6109	0.734	5.4	ug/L	1840	Standard
	Co	59	4252.3	1.8	0.3314	0.018	5.4	ug/L	115	Standard
	Ni	60	2352.2	3.3	0.8561	0.019	2.2	ug/L	75	Standard
	Cu	65	2065.8	2.1	0.7543	0.038	5.0	ug/L	155	Standard
	Zn	66	14891.3	0.2	11.6276	0.403	3.5	ug/L	237	Standard
[>	Ge	72	380573.8	3.5				ug/L	413856	Standard
	As	75	150.8	38.5	0.2520	0.039	15.4	ug/L	-197	Standard
	Se	82	5.2	268.1	0.0470	0.116	246.3	ug/L	-5	Standard
[	Se-1	77	140.0	5.0	0.5730	0.063	10.9	ug/L	105	Standard
[>	Ga	71	1145.0	11.7				mg/L	225	Standard
[	Rb	85	9556.3	3.1				ug/L	28	Standard
[	Y	89	290827.1	2.2				ug/L	322845	Standard
[>	Rh	103	93.3	12.4				ug/L	92	Standard
[	Mo	98	439.8	5.2	0.0990	0.006	6.5	ug/L	18	Standard
	Ag	107	64.0	6.8	0.0010	0.001	69.2	ug/L	63	Standard
	Cd	111	122.8	8.7	0.0283	0.004	14.0	mg/L	20	Standard
	Cd	114	322.7	6.1	0.0299	0.003	8.4	ug/L	56	Standard
[>	In	115	595889.7	1.4				ug/L	657102	Standard
	Sn	118	460.3	4.1	0.0016	0.002	135.6	ug/L	555	Standard
	Sb	123	52.5	15.8	0.0045	0.001	28.0	ug/L	62	Standard
[	Ba	135	46531.4	1.9	15.0556	0.375	2.5	ug/L	19	Standard
[	Ce	140	79162.6	1.8				ug/L	24	Standard
[>	Tb	159	862201.3	1.1				ug/L	910514	Standard
[	Ho	165	1030.0	1.4				ug/L	7	Standard
	Tl	203	114.0	8.0	0.0056	0.001	15.9	ug/L	13	Standard
	Tl	205	5.3	39.0	0.0154	0.006	35.6	ug/L	1	Standard
	Pb	206	598459.5	1.8	60.5739	1.822	3.0	ug/L	342	Standard
	Pb	207	496601.7	1.8	59.1229	1.898	3.2	ug/L	284	Standard
	Pb	208	2297468.4	2.0	58.9139	1.940	3.3	ug/L	1363	Standard
	U	238	364.0	9.8	0.0362	0.004	11.3	ug/L	2	Standard
[>	Bi	209	452671.9	1.8				ug/L	470592	Standard

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Na	23	0.0		0.0050	0.000	0.0	mg/L	2	Standard
Mg	24	1511.7	5.0	-0.0021	0.000	2.5	mg/L	5586	Standard
K	39	15.0	33.3	0.1823	0.079	43.3	mg/L	5	Standard
Ca	43	63.3	25.4	0.7173	0.774	107.9	mg/L	45	Standard
Fe	54	1533.4	6.6	0.4903	0.050	10.2	mg/L	350	Standard
Fe	57	523.3	19.6	0.7727	0.199	25.7	mg/L	102	Standard
Sc-1	45	48542.7	2.7				mg/L	53004	Standard
Cl	35	2.7	108.3				ug/L	2	Standard
Kr	83	146.3	3.6				ug/L	157	Standard
Br	81	5.0	50.0				ug/L	3	Standard
P	31	39744.6	1.6				ug/L	91588	Standard
S	34	32013.8	2.3				ug/L	32556	Standard
Sr	88	85.0	25.6				ug/L	62	Standard
C	12	105.0	12.6				mg/L	133	Standard
N	14	1.7	173.2				mg/L	0	Standard
Hg	202	3.3	86.6				mg/L	7	Standard

QC Calculated Values

Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recovery
Li	7			
Be	9			
Al	27			
Sc	45			
Ti	47			
V	51			
Cr	52			
Cr	53			
Mn	55			
Co	59			
Ni	60			
Cu	65			
Zn	66			
Ge	72		91.958	
As	75			
Se	82			
Se-1	77			
Ga	71			
Rb	85			
Y	89			
Rh	103			

Sample ID: L1211033816

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[	Mo	98	
[	Ag	107	
[	Cd	111	
[	Cd	114	
>	In	115	90.685
[	Sn	118	
[	Sb	123	
[	Ba	135	
[	Ce	140	
>	Tb	159	
[	Ho	165	
[	Tl	203	
[	Tl	205	
[	Pb	206	
[	Pb	207	
[	Pb	208	
[	U	238	
>	Bi	209	96.192
[	Na	23	
[	Mg	24	
[	K	39	
[	Ca	43	
[	Fe	54	
[	Fe	57	
>	Sc-1	45	
[	Cl	35	
[	Kr	83	
[	Br	81	
[	P	31	
[	S	34	
[	Sr	88	
[	C	12	
[	N	14	
[	Hg	202	

QC Out of Limits

Measurement Type	Analyte	Mass	Out of Limits Message

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Method 6020 - Summary Report

Sample ID: L1211033817

Sample Date/Time: Sunday, November 18, 2012 20:11:01

Number of Replicates: 3

Autosampler Position: 440

Sample Description: 20

Method File: C:\NexIONData\Method\6020a.mth

Aliquot Volume (mL):

Diluted to Volume (mL):

User Name: JYH user

Cumulative Autodilution Factor: 1

Nexion-ICP 200.8\6020

Concentration Results

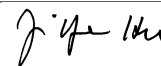
IS	Analyte	Mass	Intensity	RSD	Conc.	SD	RSD	Units	Blank Intens.	Mode
[	Li	7	11280.9	4.5	-2296.3789	99.807	4.3	ug/L	8369	Standard
	Be	9	75.0	20.0	0.0310	0.009	30.3	ug/L	18	Standard
	Al	27	199316.1	2.1	1.8128	0.085	4.7	ug/L	215	Standard
[>	Sc	45	47420.8	3.2				ug/L	53004	Standard
[	Ti	47	247.3	7.0	0.4722	0.031	6.6	ug/L	26	Standard
	V	51	12321.7	1.4	0.8819	0.032	3.6	ug/L	3223	Standard
	Cr	52	18508.0	0.4	0.9479	0.032	3.4	ug/L	10379	Standard
	Cr	53	1425.1	2.3	1.0346	0.018	1.7	ug/L	192	Standard
	Mn	55	342986.3	2.5	21.7862	0.863	4.0	ug/L	1840	Standard
	Co	59	4447.0	1.3	0.3533	0.010	2.8	ug/L	115	Standard
	Ni	60	1940.1	2.5	0.7127	0.027	3.8	ug/L	75	Standard
	Cu	65	1581.4	2.3	0.5741	0.012	2.1	ug/L	155	Standard
	Zn	66	5780.1	1.1	4.4679	0.090	2.0	ug/L	237	Standard
[>	Ge	72	374077.5	1.4				ug/L	413856	Standard
	As	75	149.3	15.0	0.2539	0.019	7.3	ug/L	-197	Standard
	Se	82	1.8	380.5	0.0210	0.060	285.1	ug/L	-5	Standard
[	Se-1	77	130.7	10.4	0.4934	0.134	27.3	ug/L	105	Standard
[>	Ga	71	1336.7	12.2				mg/L	225	Standard
[	Rb	85	10505.3	1.9				ug/L	28	Standard
[	Y	89	288002.1	1.9				ug/L	322845	Standard
[>	Rh	103	88.3	33.2				ug/L	92	Standard
[	Mo	98	131.4	9.4	0.0249	0.004	14.6	ug/L	18	Standard
	Ag	107	71.7	16.1	0.0025	0.002	63.3	ug/L	63	Standard
	Cd	111	57.5	18.4	0.0081	0.003	42.9	mg/L	20	Standard
	Cd	114	173.8	24.2	0.0125	0.005	41.1	ug/L	56	Standard
[>	In	115	572104.7	1.4				ug/L	657102	Standard
	Sn	118	330.0	9.4	-0.0113	0.003	27.4	ug/L	555	Standard
	Sb	123	72.7	98.3	0.0077	0.010	134.8	ug/L	62	Standard
[	Ba	135	58327.4	2.1	19.6590	0.196	1.0	ug/L	19	Standard
[	Ce	140	90048.9	2.5				ug/L	24	Standard
[>	Tb	159	830894.0	1.5				ug/L	910514	Standard
[	Ho	165	1016.0	1.4				ug/L	7	Standard
	Tl	203	156.0	37.3	0.0093	0.005	54.3	ug/L	13	Standard
	Tl	205	4.3	35.3	0.0131	0.004	33.3	ug/L	1	Standard
	Pb	206	102586.8	1.6	10.5531	0.298	2.8	ug/L	342	Standard
	Pb	207	84569.1	1.9	10.2295	0.340	3.3	ug/L	284	Standard
	Pb	208	395086.3	1.8	10.2950	0.331	3.2	ug/L	1363	Standard
	U	238	402.7	9.2	0.0410	0.005	11.1	ug/L	2	Standard
[>	Bi	209	444238.1	1.6				ug/L	470592	Standard

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Na	23	0.0		0.0050	0.000	0.0	mg/L	2	Standard
Mg	24	1410.1	9.6	-0.0021	0.000	4.0	mg/L	5586	Standard
K	39	10.0	86.6	0.1102	0.130	118.3	mg/L	5	Standard
Ca	43	40.0	25.0	-0.3299	0.452	136.9	mg/L	45	Standard
Fe	54	1913.1	8.8	0.6683	0.071	10.6	mg/L	350	Standard
Fe	57	543.3	13.4	0.8282	0.154	18.6	mg/L	102	Standard
Sc-1	45	47420.8	3.2				mg/L	53004	Standard
Cl	35	1.7	34.6				ug/L	2	Standard
Kr	83	142.6	3.2				ug/L	157	Standard
Br	81	11.7	32.7				ug/L	3	Standard
P	31	39653.5	2.0				ug/L	91588	Standard
S	34	31709.0	1.6				ug/L	32556	Standard
Sr	88	76.7	22.9				ug/L	62	Standard
C	12	78.3	7.4				mg/L	133	Standard
N	14	0.0					mg/L	0	Standard
Hg	202	15.0	66.7				mg/L	7	Standard

QC Calculated Values

Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recovery
Li	7			
Be	9			
Al	27			
Sc	45			
Ti	47			
V	51			
Cr	52			
Cr	53			
Mn	55			
Co	59			
Ni	60			
Cu	65			
Zn	66			
Ge	72		90.388	
As	75			
Se	82			
Se-1	77			
Ga	71			
Rb	85			
Y	89			
Rh	103			

Sample ID: L1211033817

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[	Mo	98	
[	Ag	107	
[	Cd	111	
[	Cd	114	
>	In	115	87.065
[	Sn	118	
[	Sb	123	
[	Ba	135	
[	Ce	140	
>	Tb	159	
[	Ho	165	
[	Tl	203	
[	Tl	205	
[	Pb	206	
[	Pb	207	
[	Pb	208	
[	U	238	
>	Bi	209	94.400
[	Na	23	
[	Mg	24	
[	K	39	
[	Ca	43	
[	Fe	54	
[	Fe	57	
>	Sc-1	45	
[	Cl	35	
[	Kr	83	
[	Br	81	
[	P	31	
[	S	34	
[	Sr	88	
[	C	12	
[	N	14	
[	Hg	202	

QC Out of Limits

Measurement Type	Analyte	Mass	Out of Limits Message

Sample ID: L1211033817

Report Date/Time: Sunday, November 18, 2012 20:13:33

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Method 6020 - Summary Report

Sample ID: L1211033818

Sample Date/Time: Sunday, November 18, 2012 20:14:13

Number of Replicates: 3

Autosampler Position: 441

Sample Description: 20

Method File: C:\NexIONData\Method\6020a.mth

Aliquot Volume (mL):

Diluted to Volume (mL):

User Name: JYH user

Cumulative Autodilution Factor: 1

Nexion-ICP 200.8\6020

Concentration Results

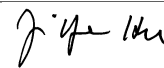
IS	Analyte	Mass	Intensity	RSD	Conc.	SD	RSD	Units	Blank Intens.	Mode
[	Li	7	23910.6	7.4	-9829.1431	255.555	2.6	ug/L	8369	Standard
	Be	9	156.7	27.1	0.0726	0.017	23.8	ug/L	18	Standard
	Al	27	763084.3	1.3	6.8367	0.464	6.8	ug/L	215	Standard
[>	Sc	45	48263.6	5.7				ug/L	53004	Standard
[	Ti	47	229.0	5.5	0.4328	0.020	4.7	ug/L	26	Standard
	V	51	16876.7	2.4	1.3068	0.051	3.9	ug/L	3223	Standard
	Cr	52	20362.7	0.3	1.1347	0.025	2.2	ug/L	10379	Standard
	Cr	53	1590.1	4.5	1.1675	0.061	5.3	ug/L	192	Standard
	Mn	55	512632.7	1.4	32.5988	0.561	1.7	ug/L	1840	Standard
	Co	59	10837.9	1.6	0.8831	0.007	0.8	ug/L	115	Standard
	Ni	60	4919.5	2.5	1.8615	0.051	2.7	ug/L	75	Standard
	Cu	65	2928.3	1.5	1.1123	0.020	1.8	ug/L	155	Standard
	Zn	66	6656.8	1.8	5.1756	0.080	1.5	ug/L	237	Standard
[>	Ge	72	374059.8	1.6				ug/L	413856	Standard
	As	75	347.7	14.6	0.4053	0.042	10.3	ug/L	-197	Standard
	Se	82	13.7	133.1	0.1242	0.158	126.8	ug/L	-5	Standard
[	Se-1	77	120.7	12.4	0.3803	0.148	38.9	ug/L	105	Standard
[>	Ga	71	2056.8	2.4				mg/L	225	Standard
	Rb	85	16128.6	0.8				ug/L	28	Standard
[	Y	89	306436.8	3.4				ug/L	322845	Standard
[>	Rh	103	98.3	33.9				ug/L	92	Standard
[	Mo	98	25.1	24.1	-0.0024	0.002	64.7	ug/L	18	Standard
	Ag	107	82.7	12.4	0.0038	0.001	36.1	ug/L	63	Standard
	Cd	111	41.3	7.0	0.0024	0.001	41.4	mg/L	20	Standard
	Cd	114	128.4	8.3	0.0064	0.001	18.2	ug/L	56	Standard
[>	In	115	584573.2	1.0				ug/L	657102	Standard
	Sn	118	319.7	5.6	-0.0133	0.002	18.0	ug/L	555	Standard
	Sb	123	22.5	40.4	0.0003	0.001	431.0	ug/L	62	Standard
[	Ba	135	37931.4	1.8	12.5072	0.323	2.6	ug/L	19	Standard
[	Ce	140	164962.9	1.1				ug/L	24	Standard
[>	Tb	159	844745.7	1.1				ug/L	910514	Standard
[	Ho	165	2264.2	1.1				ug/L	7	Standard
	Tl	203	134.7	13.8	0.0074	0.002	21.6	ug/L	13	Standard
	Tl	205	2.7	78.1	0.0084	0.006	65.4	ug/L	1	Standard
	Pb	206	11254.8	0.5	1.1230	0.018	1.6	ug/L	342	Standard
	Pb	207	9189.1	0.3	1.0739	0.013	1.2	ug/L	284	Standard
	Pb	208	43403.3	0.6	1.0949	0.018	1.6	ug/L	1363	Standard
	U	238	690.3	2.2	0.0710	0.001	1.3	ug/L	2	Standard
[>	Bi	209	446284.0	1.0				ug/L	470592	Standard

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Na	23	1.7	173.2	0.1746	0.294	168.2	mg/L	2	Standard
Mg	24	2513.5	7.6	-0.0016	0.000	8.6	mg/L	5586	Standard
K	39	16.7	62.4	0.2057	0.155	75.5	mg/L	5	Standard
Ca	43	48.3	21.5	0.0357	0.529	1481.9	mg/L	45	Standard
Fe	54	3056.5	7.2	1.1358	0.040	3.5	mg/L	350	Standard
Fe	57	885.0	4.8	1.4016	0.117	8.4	mg/L	102	Standard
Sc-1	45	48263.6	5.7				mg/L	53004	Standard
Cl	35	1.7	91.7				ug/L	2	Standard
Kr	83	139.7	6.2				ug/L	157	Standard
Br	81	4.2	91.7				ug/L	3	Standard
P	31	39903.3	1.0				ug/L	91588	Standard
S	34	32206.7	0.5				ug/L	32556	Standard
Sr	88	95.0	21.1				ug/L	62	Standard
C	12	86.7	46.6				mg/L	133	Standard
N	14	0.0					mg/L	0	Standard
Hg	202	8.3	91.7				mg/L	7	Standard

QC Calculated Values

Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recovery
Li	7			
Be	9			
Al	27			
Sc	45			
Ti	47			
V	51			
Cr	52			
Cr	53			
Mn	55			
Co	59			
Ni	60			
Cu	65			
Zn	66			
Ge	72		90.384	
As	75			
Se	82			
Se-1	77			
Ga	71			
Rb	85			
Y	89			
Rh	103			

Sample ID: L1211033818

Report Date/Time: Sunday, November 18, 2012 20:16:45

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[	Mo	98	
[	Ag	107	
[	Cd	111	
[	Cd	114	
>	In	115	88.962
[	Sn	118	
[	Sb	123	
[	Ba	135	
[	Ce	140	
>	Tb	159	
[	Ho	165	
[	Tl	203	
[	Tl	205	
[	Pb	206	
[	Pb	207	
[	Pb	208	
[	U	238	
>	Bi	209	94.835
[	Na	23	
[	Mg	24	
[	K	39	
[	Ca	43	
[	Fe	54	
[	Fe	57	
>	Sc-1	45	
[	Cl	35	
[	Kr	83	
[	Br	81	
[	P	31	
[	S	34	
[	Sr	88	
[	C	12	
[	N	14	
[	Hg	202	

QC Out of Limits

Measurement Type	Analyte	Mass	Out of Limits Message

Sample ID: L1211033818

Report Date/Time: Sunday, November 18, 2012 20:16:45

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Method 6020 - Summary Report

Sample ID: L1211033819

Sample Date/Time: Sunday, November 18, 2012 20:17:25

Number of Replicates: 3

Autosampler Position: 442

Sample Description: 20

Method File: C:\NexIONData\Method\6020a.mth

Aliquot Volume (mL):

Diluted to Volume (mL):

User Name: JYH user

Cumulative Autodilution Factor: 1

Nexion-ICP 200.8\6020

Concentration Results

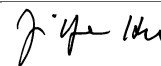
IS	Analyte	Mass	Intensity	RSD	Conc.	SD	RSD	Units	Blank Intens.	Mode
[	Li	7	7345.3	34.7	730.6417	515.527	70.6	ug/L	8369	Standard
	Be	9	5.0	0.0	-0.0069	0.001	13.7	ug/L	18	Standard
	Al	27	173.3	55.4	-0.0009	0.000	43.6	ug/L	215	Standard
[>	Sc	45	54493.4	33.3				ug/L	53004	Standard
	Ti	47	11.3	58.7	-0.0365	0.005	12.9	ug/L	26	Standard
	V	51	1470.2	24.9	-0.1268	0.024	19.2	ug/L	3223	Standard
	Cr	52	4586.1	23.5	-0.4398	0.089	20.3	ug/L	10379	Standard
	Cr	53	65.8	12.2	-0.0520	0.022	42.1	ug/L	192	Standard
	Mn	55	1460.7	50.0	-0.0004	0.021	4790.7	ug/L	1840	Standard
	Co	59	90.0	16.8	-0.0077	0.002	25.8	ug/L	115	Standard
	Ni	60	58.3	25.8	-0.0123	0.005	44.7	ug/L	75	Standard
	Cu	65	90.3	34.4	-0.0213	0.004	20.1	ug/L	155	Standard
	Zn	66	198.3	46.7	-0.0424	0.026	60.9	ug/L	237	Standard
[>	Ge	72	383099.0	42.5				ug/L	413856	Standard
	As	75	-111.3	63.3	0.0554	0.054	97.7	ug/L	-197	Standard
	Se	82	11.3	117.3	0.0771	0.086	111.7	ug/L	-5	Standard
[	Se-1	77	90.3	16.9	0.1015	0.311	305.9	ug/L	105	Standard
[>	Ga	71	201.7	51.7				mg/L	225	Standard
	Rb	85	36.7	41.7				ug/L	28	Standard
	Y	89	315630.4	46.6				ug/L	322845	Standard
[>	Rh	103	95.0	45.6				ug/L	92	Standard
	Mo	98	8.2	51.3	-0.0067	0.001	9.1	ug/L	18	Standard
	Ag	107	53.0	36.8	-0.0003	0.000	30.8	ug/L	63	Standard
	Cd	111	23.7	52.5	-0.0034	0.002	57.9	mg/L	20	Standard
	Cd	114	55.5	41.1	-0.0027	0.000	11.0	ug/L	56	Standard
[>	In	115	581890.8	37.7				ug/L	657102	Standard
	Sn	118	243.7	26.9	-0.0206	0.005	25.7	ug/L	555	Standard
	Sb	123	41.0	66.0	0.0027	0.002	66.0	ug/L	62	Standard
[	Ba	135	25.0	30.2	-0.0114	0.001	9.4	ug/L	19	Standard
	Ce	140	33.3	20.0				ug/L	24	Standard
[>	Tb	159	858293.9	31.6				ug/L	910514	Standard
	Ho	165	10.3	20.1				ug/L	7	Standard
	Tl	203	60.3	16.7	0.0015	0.001	82.9	ug/L	13	Standard
	Tl	205	4.0	43.3	0.0137	0.008	61.7	ug/L	1	Standard
	Pb	206	403.7	32.1	0.0086	0.006	70.2	ug/L	342	Standard
	Pb	207	354.0	35.8	0.0060	0.004	65.9	ug/L	284	Standard
	Pb	208	1599.4	32.7	0.0069	0.004	54.4	ug/L	1363	Standard
	U	238	3.3	45.8	-0.0012	0.000	14.1	ug/L	2	Standard
[>	Bi	209	451975.2	32.4				ug/L	470592	Standard

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Na	23	1.7	173.2	0.2311	0.392	169.5	mg/L	2	Standard
Mg	24	565.0	24.5	-0.0026	0.000	1.3	mg/L	5586	Standard
K	39	1.7	173.2	-0.0073	0.059	805.3	mg/L	5	Standard
Ca	43	50.0	17.3	-0.0444	0.599	1349.6	mg/L	45	Standard
Fe	54	354.4	66.2	-0.0330	0.060	181.4	mg/L	350	Standard
Fe	57	151.7	5.0	0.1272	0.109	85.3	mg/L	102	Standard
Sc-1	45	54493.4	33.3				mg/L	53004	Standard
Cl	35	0.7	86.6				ug/L	2	Standard
Kr	83	302.3	50.2				ug/L	157	Standard
Br	81	2.5	100.0				ug/L	3	Standard
P	31	73048.4	58.7				ug/L	91588	Standard
S	34	11443.5	5.8				ug/L	32556	Standard
Sr	88	105.0	12.6				ug/L	62	Standard
C	12	108.3	57.7				mg/L	133	Standard
N	14	3.3	173.2				mg/L	0	Standard
Hg	202	1.7	173.2				mg/L	7	Standard

QC Calculated Values

Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recovery
Li	7			
Be	9			
Al	27			
Sc	45			
Ti	47			
V	51			
Cr	52			
Cr	53			
Mn	55			
Co	59			
Ni	60			
Cu	65			
Zn	66			
Ge	72		92.568	
As	75			
Se	82			
Se-1	77			
Ga	71			
Rb	85			
Y	89			
Rh	103			

Sample ID: L1211033819

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[	Mo	98	
[	Ag	107	
[	Cd	111	
[	Cd	114	
>	In	115	88.554
[	Sn	118	
[	Sb	123	
[	Ba	135	
[	Ce	140	
>	Tb	159	
[	Ho	165	
[	Tl	203	
[	Tl	205	
[	Pb	206	
[	Pb	207	
[	Pb	208	
[	U	238	
>	Bi	209	96.044
[	Na	23	
[	Mg	24	
[	K	39	
[	Ca	43	
[	Fe	54	
[	Fe	57	
>	Sc-1	45	
[	Cl	35	
[	Kr	83	
[	Br	81	
[	P	31	
[	S	34	
[	Sr	88	
[	C	12	
[	N	14	
[	Hg	202	

QC Out of Limits

Measurement Type	Analyte	Mass	Out of Limits Message
Cr 52 Lower	Cr	52	

Sample ID: L1211033819

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Method 6020 - Summary Report

Sample ID: L1211033820

Sample Date/Time: Sunday, November 18, 2012 20:20:38

Number of Replicates: 3

Autosampler Position: 443

Sample Description: 20

Method File: C:\NexIONData\Method\6020a.mth

Aliquot Volume (mL):

Diluted to Volume (mL):

User Name: JYH user

Cumulative Autodilution Factor: 1

Nexion-ICP 200.8\6020

Concentration Results

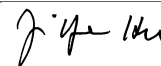
IS	Analyte	Mass	Intensity	RSD	Conc.	SD	RSD	Units	Blank Intens.	Mode
[	Li	7	12351.7	3.5	-3133.5947	169.211	5.4	ug/L	8369	Standard
	Be	9	81.7	25.5	0.0355	0.012	33.6	ug/L	18	Standard
	Al	27	253456.3	5.3	2.3595	0.184	7.8	ug/L	215	Standard
[>	Sc	45	46367.6	3.4				ug/L	53004	Standard
[	Ti	47	120.3	10.3	0.2069	0.025	12.2	ug/L	26	Standard
	V	51	8670.6	3.9	0.5652	0.019	3.4	ug/L	3223	Standard
	Cr	52	18104.2	3.3	0.9614	0.029	3.0	ug/L	10379	Standard
	Cr	53	1465.9	6.3	1.1028	0.072	6.5	ug/L	192	Standard
	Mn	55	395224.0	4.6	25.8566	0.732	2.8	ug/L	1840	Standard
	Co	59	5004.2	3.9	0.4118	0.014	3.4	ug/L	115	Standard
	Ni	60	2013.1	6.8	0.7635	0.042	5.4	ug/L	75	Standard
	Cu	65	1369.4	3.1	0.5059	0.015	3.0	ug/L	155	Standard
	Zn	66	5542.0	4.0	4.4082	0.104	2.4	ug/L	237	Standard
[>	Ge	72	363165.4	1.8				ug/L	413856	Standard
	As	75	-9.3	410.4	0.1328	0.030	22.5	ug/L	-197	Standard
	Se	82	2.8	224.3	0.0296	0.055	184.0	ug/L	-5	Standard
[	Se-1	77	124.3	5.5	0.4664	0.104	22.3	ug/L	105	Standard
[>	Ga	71	971.7	11.2				mg/L	225	Standard
[	Rb	85	7236.7	3.5				ug/L	28	Standard
[	Y	89	285800.2	3.0				ug/L	322845	Standard
[>	Rh	103	120.0	33.3				ug/L	92	Standard
[	Mo	98	24.0	35.4	-0.0025	0.002	91.5	ug/L	18	Standard
	Ag	107	61.0	18.6	0.0010	0.002	150.6	ug/L	63	Standard
	Cd	111	28.0	7.2	-0.0017	0.001	34.1	mg/L	20	Standard
	Cd	114	79.4	6.1	0.0007	0.001	91.4	ug/L	56	Standard
[>	In	115	565624.4	1.1				ug/L	657102	Standard
	Sn	118	319.0	5.3	-0.0122	0.002	14.8	ug/L	555	Standard
	Sb	123	20.8	16.5	0.0002	0.001	313.9	ug/L	62	Standard
[	Ba	135	22633.2	2.1	7.7038	0.098	1.3	ug/L	19	Standard
[	Ce	140	84384.5	3.3				ug/L	24	Standard
[>	Tb	159	833855.9	1.5				ug/L	910514	Standard
[	Ho	165	1354.1	3.8				ug/L	7	Standard
	Tl	203	102.3	6.5	0.0049	0.000	8.2	ug/L	13	Standard
	Tl	205	5.0	40.0	0.0150	0.006	38.0	ug/L	1	Standard
	Pb	206	1153829.2	3.6	119.9604	3.661	3.1	ug/L	342	Standard
	Pb	207	942207.7	3.8	115.2215	3.802	3.3	ug/L	284	Standard
	Pb	208	4690427.1	3.0	123.5460	2.954	2.4	ug/L	1363	Standard
	U	238	393.0	9.5	0.0403	0.003	8.1	ug/L	2	Standard
[>	Bi	209	440700.6	2.2				ug/L	470592	Standard

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Na	23	1.7	173.2	0.1779	0.299	168.3	mg/L	2	Standard
Mg	24	2166.8	5.0	-0.0017	0.000	2.5	mg/L	5586	Standard
K	39	10.0		0.1142	0.005	4.7	mg/L	5	Standard
Ca	43	55.0	18.2	0.4363	0.395	90.6	mg/L	45	Standard
Fe	54	1470.0	6.7	0.4931	0.058	11.8	mg/L	350	Standard
Fe	57	455.0	8.7	0.6894	0.080	11.6	mg/L	102	Standard
Sc-1	45	46367.6	3.4				mg/L	53004	Standard
Cl	35	3.0	33.3				ug/L	2	Standard
Kr	83	145.2	0.5				ug/L	157	Standard
Br	81	5.0	50.0				ug/L	3	Standard
P	31	38084.5	3.0				ug/L	91588	Standard
S	34	28879.2	1.6				ug/L	32556	Standard
Sr	88	91.7	11.4				ug/L	62	Standard
C	12	93.3	18.8				mg/L	133	Standard
N	14	1.7	173.2				mg/L	0	Standard
Hg	202	10.0					mg/L	7	Standard

QC Calculated Values

Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recovery
Li	7			
Be	9			
Al	27			
Sc	45			
Ti	47			
V	51			
Cr	52			
Cr	53			
Mn	55			
Co	59			
Ni	60			
Cu	65			
Zn	66			
Ge	72		87.752	
As	75			
Se	82			
Se-1	77			
Ga	71			
Rb	85			
Y	89			
Rh	103			

Sample ID: L1211033820

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[	Mo	98	
[	Ag	107	
[	Cd	111	
[	Cd	114	
>	In	115	86.079
[	Sn	118	
[	Sb	123	
[	Ba	135	
[	Ce	140	
>	Tb	159	
[	Ho	165	
[	Tl	203	
[	Tl	205	
[	Pb	206	
[	Pb	207	
[	Pb	208	
[	U	238	
>	Bi	209	93.648
[	Na	23	
[	Mg	24	
[	K	39	
[	Ca	43	
[	Fe	54	
[	Fe	57	
>	Sc-1	45	
[	Cl	35	
[	Kr	83	
[	Br	81	
[	P	31	
[	S	34	
[	Sr	88	
[	C	12	
[	N	14	
[	Hg	202	

QC Out of Limits

Measurement Type	Analyte	Mass	Out of Limits Message
Pb 206 Upper, S, EEE	Pb	206	
Pb 207 Upper, S, EEE	Pb	207	
Pb 208 Upper, S, EEE	Pb	208	

Sample ID: L1211033820

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Method 6020 - Summary Report

Sample ID: L1211034001

Sample Date/Time: Sunday, November 18, 2012 20:23:50

Number of Replicates: 3

Autosampler Position: 444

Sample Description: 20

Method File: C:\NexIONData\Method\6020a.mth

Aliquot Volume (mL):

Diluted to Volume (mL):

User Name: JYH user

Cumulative Autodilution Factor: 1

Nexion-ICP 200.8\6020

Concentration Results

IS	Analyte	Mass	Intensity	RSD	Conc.	SD	RSD	Units	Blank Intens.	Mode
[	Li	7	18105.8	3.1	-6618.9737	121.544	1.8	ug/L	8369	Standard
	Be	9	216.7	5.8	0.1082	0.009	8.3	ug/L	18	Standard
	Al	27	758022.8	0.6	6.9625	0.097	1.4	ug/L	215	Standard
[>	Sc	45	46964.4	2.0				ug/L	53004	Standard
[	Ti	47	161.0	8.7	0.2838	0.034	12.0	ug/L	26	Standard
	V	51	18242.7	3.8	1.4177	0.041	2.9	ug/L	3223	Standard
	Cr	52	19476.2	2.9	1.0268	0.033	3.2	ug/L	10379	Standard
	Cr	53	1585.1	2.5	1.1518	0.046	4.0	ug/L	192	Standard
	Mn	55	600923.6	1.0	37.8717	0.343	0.9	ug/L	1840	Standard
	Co	59	8934.0	1.4	0.7185	0.015	2.1	ug/L	115	Standard
	Ni	60	4703.4	2.6	1.7610	0.025	1.4	ug/L	75	Standard
	Cu	65	3447.1	1.2	1.3069	0.035	2.7	ug/L	155	Standard
	Zn	66	10106.4	2.2	7.8859	0.201	2.5	ug/L	237	Standard
[>	Ge	72	377557.8	1.4				ug/L	413856	Standard
	As	75	483.8	6.6	0.5055	0.029	5.7	ug/L	-197	Standard
	Se	82	10.7	30.5	0.0956	0.027	28.6	ug/L	-5	Standard
[	Se-1	77	132.0	9.7	0.4974	0.164	32.9	ug/L	105	Standard
[>	Ga	71	1661.8	6.9				mg/L	225	Standard
[	Rb	85	17114.7	4.1				ug/L	28	Standard
[	Y	89	297476.2	3.8				ug/L	322845	Standard
[>	Rh	103	95.0	27.9				ug/L	92	Standard
[	Mo	98	47.2	9.5	0.0033	0.001	34.1	ug/L	18	Standard
	Ag	107	70.3	16.0	0.0023	0.002	71.0	ug/L	63	Standard
	Cd	111	79.9	7.0	0.0156	0.002	12.1	mg/L	20	Standard
	Cd	114	227.0	4.2	0.0193	0.001	6.3	ug/L	56	Standard
[>	In	115	572579.3	0.1				ug/L	657102	Standard
	Sn	118	299.3	3.3	-0.0149	0.001	8.0	ug/L	555	Standard
	Sb	123	42.6	18.8	0.0033	0.001	35.5	ug/L	62	Standard
[	Ba	135	43499.7	0.9	14.6450	0.126	0.9	ug/L	19	Standard
[	Ce	140	177215.8	1.0				ug/L	24	Standard
[>	Tb	159	841679.2	0.5				ug/L	910514	Standard
[	Ho	165	2489.5	0.7				ug/L	7	Standard
	Tl	203	127.0	7.5	0.0069	0.001	11.5	ug/L	13	Standard
	Tl	205	6.0	44.1	0.0175	0.007	40.6	ug/L	1	Standard
	Pb	206	107966.3	0.4	11.1159	0.026	0.2	ug/L	342	Standard
	Pb	207	86993.4	0.6	10.5304	0.036	0.3	ug/L	284	Standard
	Pb	208	412096.9	0.7	10.7466	0.044	0.4	ug/L	1363	Standard
	U	238	1135.0	6.9	0.1184	0.008	6.7	ug/L	2	Standard
[>	Bi	209	443813.9	0.3				ug/L	470592	Standard

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Na	23	0.0		0.0050	0.000	0.0	mg/L	2	Standard
Mg	24	1876.8	7.7	-0.0019	0.000	3.3	mg/L	5586	Standard
K	39	16.7	34.6	0.2150	0.090	42.0	mg/L	5	Standard
Ca	43	36.7	20.8	-0.4706	0.352	74.9	mg/L	45	Standard
Fe	54	2606.6	9.4	0.9757	0.084	8.6	mg/L	350	Standard
Fe	57	760.0	2.9	1.2194	0.053	4.3	mg/L	102	Standard
Sc-1	45	46964.4	2.0				mg/L	53004	Standard
Cl	35	1.7	91.7				ug/L	2	Standard
Kr	83	146.6	6.0				ug/L	157	Standard
Br	81	4.2	69.3				ug/L	3	Standard
P	31	38904.1	2.0				ug/L	91588	Standard
S	34	29582.2	1.8				ug/L	32556	Standard
Sr	88	71.7	10.7				ug/L	62	Standard
C	12	100.0	5.0				mg/L	133	Standard
N	14	0.0					mg/L	0	Standard
Hg	202	3.3	86.6				mg/L	7	Standard

QC Calculated Values

Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recovery
Li	7			
Be	9			
Al	27			
Sc	45			
Ti	47			
V	51			
Cr	52			
Cr	53			
Mn	55			
Co	59			
Ni	60			
Cu	65			
Zn	66			
Ge	72		91.229	
As	75			
Se	82			
Se-1	77			
Ga	71			
Rb	85			
Y	89			
Rh	103			

Sample ID: L1211034001

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[	Mo	98	
[	Ag	107	
[	Cd	111	
[	Cd	114	
>	In	115	87.137
[	Sn	118	
[	Sb	123	
[	Ba	135	
[	Ce	140	
>	Tb	159	
[	Ho	165	
[	Tl	203	
[	Tl	205	
[	Pb	206	
[	Pb	207	
[	Pb	208	
[	U	238	
>	Bi	209	94.310
[	Na	23	
[	Mg	24	
[	K	39	
[	Ca	43	
[	Fe	54	
[	Fe	57	
>	Sc-1	45	
[	Cl	35	
[	Kr	83	
[	Br	81	
[	P	31	
[	S	34	
[	Sr	88	
[	C	12	
[	N	14	
[	Hg	202	

QC Out of Limits

Measurement Type	Analyte	Mass	Out of Limits Message

Sample ID: L1211034001

Report Date/Time: Sunday, November 18, 2012 20:26:22

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Method 6020 - Summary Report

Sample ID: L1211034002

Sample Date/Time: Sunday, November 18, 2012 20:27:02

Number of Replicates: 3

Autosampler Position: 445

Sample Description: 20

Method File: C:\NexIONData\Method\6020a.mth

Aliquot Volume (mL):

Diluted to Volume (mL):

User Name: JYH user

Cumulative Autodilution Factor: 1

Nexion-ICP 200.8\6020

Concentration Results

IS	Analyte	Mass	Intensity	RSD	Conc.	SD	RSD	Units	Blank Intens.	Mode
[	Li	7	28249.6	1.4	-11976.2568	522.515	4.4	ug/L	8369	Standard
	Be	9	236.7	12.0	0.1122	0.019	16.7	ug/L	18	Standard
	Al	27	1083509.3	0.8	9.4065	0.380	4.0	ug/L	215	Standard
[>	Sc	45	49736.6	4.1				ug/L	53004	Standard
[	Ti	47	148.7	5.6	0.2571	0.023	9.0	ug/L	26	Standard
	V	51	15151.8	0.5	1.1309	0.028	2.5	ug/L	3223	Standard
	Cr	52	21665.5	2.6	1.2436	0.094	7.6	ug/L	10379	Standard
	Cr	53	1795.1	4.9	1.3177	0.096	7.3	ug/L	192	Standard
	Mn	55	1497936.4	1.6	94.4444	3.340	3.5	ug/L	1840	Standard
	Co	59	17227.5	1.3	1.3984	0.047	3.3	ug/L	115	Standard
	Ni	60	7262.7	2.5	2.7361	0.103	3.8	ug/L	75	Standard
	Cu	65	3263.0	3.5	1.2326	0.060	4.9	ug/L	155	Standard
	Zn	66	7693.0	1.3	5.9471	0.118	2.0	ug/L	237	Standard
[>	Ge	72	378080.3	2.0				ug/L	413856	Standard
	As	75	313.4	10.2	0.3760	0.019	5.2	ug/L	-197	Standard
	Se	82	9.2	34.5	0.0825	0.025	30.6	ug/L	-5	Standard
[	Se-1	77	127.7	3.7	0.4466	0.082	18.4	ug/L	105	Standard
[>	Ga	71	2370.2	7.4				mg/L	225	Standard
[	Rb	85	16946.1	2.6				ug/L	28	Standard
[	Y	89	298819.5	2.9				ug/L	322845	Standard
[>	Rh	103	98.3	15.5				ug/L	92	Standard
[	Mo	98	27.9	20.0	-0.0018	0.001	79.7	ug/L	18	Standard
	Ag	107	79.0	18.7	0.0033	0.002	67.5	ug/L	63	Standard
	Cd	111	98.0	12.7	0.0208	0.004	19.1	mg/L	20	Standard
	Cd	114	246.3	7.6	0.0210	0.002	9.5	ug/L	56	Standard
[>	In	115	586715.4	1.1				ug/L	657102	Standard
	Sn	118	310.3	9.6	-0.0145	0.003	23.6	ug/L	555	Standard
	Sb	123	25.0	18.3	0.0007	0.001	102.0	ug/L	62	Standard
[	Ba	135	55092.3	0.3	18.1069	0.149	0.8	ug/L	19	Standard
[	Ce	140	213332.5	1.1				ug/L	24	Standard
[>	Tb	159	845253.0	2.4				ug/L	910514	Standard
[	Ho	165	2540.9	0.9				ug/L	7	Standard
	Tl	203	160.7	6.8	0.0095	0.001	7.0	ug/L	13	Standard
	Tl	205	3.7	41.7	0.0111	0.004	35.9	ug/L	1	Standard
	Pb	206	16271.7	0.8	1.6273	0.056	3.4	ug/L	342	Standard
	Pb	207	13162.4	1.3	1.5432	0.036	2.3	ug/L	284	Standard
	Pb	208	62032.8	0.8	1.5690	0.051	3.3	ug/L	1363	Standard
	U	238	1081.7	1.6	0.1114	0.002	1.6	ug/L	2	Standard
[>	Bi	209	449431.4	2.6				ug/L	470592	Standard

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Na	23	0.0		0.0050	0.000	0.0	mg/L	2	Standard
Mg	24	2566.9	3.9	-0.0016	0.000	3.6	mg/L	5586	Standard
K	39	8.3	91.7	0.0786	0.112	142.3	mg/L	5	Standard
Ca	43	60.0	25.0	0.4797	0.593	123.6	mg/L	45	Standard
Fe	54	3309.2	1.2	1.2028	0.053	4.4	mg/L	350	Standard
Fe	57	865.0	4.7	1.3227	0.121	9.2	mg/L	102	Standard
Sc-1	45	49736.6	4.1				mg/L	53004	Standard
Cl	35	2.0	100.0				ug/L	2	Standard
Kr	83	141.3	1.2				ug/L	157	Standard
Br	81	4.2	69.3				ug/L	3	Standard
P	31	40239.2	0.6				ug/L	91588	Standard
S	34	30395.5	2.7				ug/L	32556	Standard
Sr	88	93.3	29.5				ug/L	62	Standard
C	12	105.0	23.8				mg/L	133	Standard
N	14	0.0					mg/L	0	Standard
Hg	202	5.0	0.0				mg/L	7	Standard

QC Calculated Values

Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recovery
Li	7			
Be	9			
Al	27			
Sc	45			
Ti	47			
V	51			
Cr	52			
Cr	53			
Mn	55			
Co	59			
Ni	60			
Cu	65			
Zn	66			
Ge	72		91.356	
As	75			
Se	82			
Se-1	77			
Ga	71			
Rb	85			
Y	89			
Rh	103			

Sample ID: L1211034002

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[	Mo	98	
[	Ag	107	
[	Cd	111	
[	Cd	114	
>	In	115	89.288
[	Sn	118	
[	Sb	123	
[	Ba	135	
[	Ce	140	
>	Tb	159	
[	Ho	165	
[	Tl	203	
[	Tl	205	
[	Pb	206	
[	Pb	207	
[	Pb	208	
[	U	238	
>	Bi	209	95.503
[	Na	23	
[	Mg	24	
[	K	39	
[	Ca	43	
[	Fe	54	
[	Fe	57	
>	Sc-1	45	
[	Cl	35	
[	Kr	83	
[	Br	81	
[	P	31	
[	S	34	
[	Sr	88	
[	C	12	
[	N	14	
[	Hg	202	

QC Out of Limits

Measurement Type	Analyte	Mass	Out of Limits Message

Sample ID: L1211034002

Report Date/Time: Sunday, November 18, 2012 20:29:34

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Method 6020 - Summary Report

Sample ID: QC Std 6

Sample Date/Time: Sunday, November 18, 2012 20:30:17

Number of Replicates: 3

Autosampler Position: 101

Sample Description:

Method File: C:\NexIONData\Method\6020a.mth

Aliquot Volume (mL):

Diluted to Volume (mL):

User Name: JYH user

Cumulative Autodilution Factor: 1

Nexion-ICP 200.8\6020

Concentration Results

IS	Analyte	Mass	Intensity	RSD	Conc.	SD	RSD	Units	Blank Intens.	Mode
[	Li	7	9127.7	1.0	32.8903	76.916	233.9	ug/L	8369	Standard
	Be	9	116251.1	2.3	51.3249	0.024	0.0	ug/L	18	Standard
	Al	27	7208751.0	4.4	53.8948	1.172	2.2	ug/L	215	Standard
[>	Sc	45	57684.6	2.3				ug/L	53004	Standard
[	Ti	47	56866.9	2.2	103.6265	1.634	1.6	ug/L	26	Standard
	V	51	643588.5	3.8	50.5964	1.084	2.1	ug/L	3223	Standard
	Cr	52	611773.0	3.5	51.2801	0.658	1.3	ug/L	10379	Standard
	Cr	53	74136.8	2.4	50.3559	0.742	1.5	ug/L	192	Standard
	Mn	55	964996.4	4.0	52.0458	1.013	1.9	ug/L	1840	Standard
	Co	59	725649.4	3.0	50.9814	1.071	2.1	ug/L	115	Standard
	Ni	60	156625.3	4.9	51.1353	1.706	3.3	ug/L	75	Standard
	Cu	65	150931.0	2.4	51.0418	0.673	1.3	ug/L	155	Standard
	Zn	66	75776.7	2.2	51.6603	0.750	1.5	ug/L	237	Standard
[>	Ge	72	441348.0	2.4				ug/L	413856	Standard
	As	75	79117.5	2.1	51.2518	0.592	1.2	ug/L	-197	Standard
	Se	82	7078.3	2.3	51.2252	0.634	1.2	ug/L	-5	Standard
[	Se-1	77	5521.7	1.4	51.8042	1.186	2.3	ug/L	105	Standard
[>	Ga	71	206.7	13.3				mg/L	225	Standard
[	Rb	85	1735.1	5.2				ug/L	28	Standard
[	Y	89	332814.6	1.8				ug/L	322845	Standard
[>	Rh	103	95.0	13.9				ug/L	92	Standard
[	Mo	98	460504.3	2.4	100.0277	3.031	3.0	ug/L	18	Standard
	Ag	107	404586.7	3.5	49.9544	1.912	3.8	ug/L	63	Standard
	Cd	111	176763.0	2.6	50.4159	1.466	2.9	mg/L	20	Standard
	Cd	114	469104.7	2.5	50.8400	1.535	3.0	ug/L	56	Standard
[>	In	115	671835.8	1.3				ug/L	657102	Standard
	Sn	118	522743.3	3.6	51.3418	2.228	4.3	ug/L	555	Standard
	Sb	123	407212.0	2.6	50.8649	1.660	3.3	ug/L	62	Standard
[	Ba	135	178322.4	2.8	51.2299	1.924	3.8	ug/L	19	Standard
[	Ce	140	585.0	6.0				ug/L	24	Standard
[>	Tb	159	942766.5	0.5				ug/L	910514	Standard
[	Ho	165	466.7	11.1				ug/L	7	Standard
	Tl	203	665328.8	1.8	51.3144	1.055	2.1	ug/L	13	Standard
	Tl	205	19956.1	0.8	50.4496	0.570	1.1	ug/L	1	Standard
	Pb	206	534027.9	2.4	51.3787	1.383	2.7	ug/L	342	Standard
	Pb	207	454351.5	2.7	51.4157	1.529	3.0	ug/L	284	Standard
	Pb	208	2101360.4	2.3	51.2189	1.346	2.6	ug/L	1363	Standard
	U	238	523466.2	2.9	51.5576	1.645	3.2	ug/L	2	Standard
[>	Bi	209	476065.1	0.3				ug/L	470592	Standard

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Na	23	1.7	173.2	0.1466	0.245	167.3	mg/L	2	Standard
Mg	24	309351.4	1.2	0.1366	0.002	1.5	mg/L	5586	Standard
K	39	433.3	7.3	5.3803	0.512	9.5	mg/L	5	Standard
Ca	43	178.3	18.7	4.7454	1.304	27.5	mg/L	45	Standard
Fe	54	14408.1	6.0	4.9313	0.241	4.9	mg/L	350	Standard
Fe	57	3703.8	4.4	5.2197	0.301	5.8	mg/L	102	Standard
Sc-1	45	57684.6	2.3				mg/L	53004	Standard
Cl	35	2.7	21.7				ug/L	2	Standard
Kr	83	147.6	4.4				ug/L	157	Standard
Br	81	3.3	86.6				ug/L	3	Standard
P	31	129552.4	1.4				ug/L	91588	Standard
S	34	43263.3	0.8				ug/L	32556	Standard
Sr	88	80.0	16.5				ug/L	62	Standard
C	12	141.7	30.0				mg/L	133	Standard
N	14	0.0					mg/L	0	Standard
Hg	202	1.7	173.2				mg/L	7	Standard

QC Calculated Values

Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recovery
Li	7			
Be	9	102.650		
Al	27	107.790		
Sc	45			
Ti	47	103.626		
V	51	101.193		
Cr	52	102.560		
Cr	53			
Mn	55	104.092		
Co	59	101.963		
Ni	60	102.271		
Cu	65	102.084		
Zn	66	103.321		
Ge	72		106.643	
As	75	102.504		
Se	82	102.450		
Se-1	77			
Ga	71			
Rb	85			
Y	89			
Rh	103			

Sample ID: QC Std 6

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[	Mo	98	100.028	
[	Ag	107	99.909	
[	Cd	111	100.832	
[	Cd	114		
>	In	115		102.242
[	Sn	118	102.684	
[	Sb	123	101.730	
[	Ba	135	102.460	
[	Ce	140		
>	Tb	159		
[	Ho	165		
[	Tl	203	102.629	
[	Tl	205		
[	Pb	206	102.757	
[	Pb	207	102.831	
[	Pb	208	102.438	
[	U	238	103.115	
>	Bi	209		101.163
[	Na	23		
[	Mg	24		
[	K	39		
[	Ca	43		
[	Fe	54		
[	Fe	57		
>	Sc-1	45		
[	Cl	35		
[	Kr	83		
[	Br	81		
[	P	31		
[	S	34		
[	Sr	88		
[	C	12		
[	N	14		
[	Hg	202		

QC Out of Limits

Measurement Type	Analyte	Mass	Out of Limits Message

Sample ID: QC Std 6

Report Date/Time: Sunday, November 18, 2012 20:32:49

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Method 6020 - Summary Report

Sample ID: QC Std 7

Sample Date/Time: Sunday, November 18, 2012 20:33:29

Number of Replicates: 3

Autosampler Position: 102

Sample Description:

Method File: C:\NexIONData\Method\6020a.mth

Aliquot Volume (mL):

Diluted to Volume (mL):

User Name: JYH user

Cumulative Autodilution Factor: 1

Nexion-ICP 200.8\6020

Concentration Results

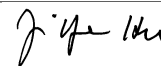
IS	Analyte	Mass	Intensity	RSD	Conc.	SD	RSD	Units	Blank Intens.	Mode
[	Li	7	8437.3	2.5	359.1900	123.787	34.5	ug/L	8369	Standard
	Be	9	25.0	60.0	0.0018	0.007	383.4	ug/L	18	Standard
	Al	27	995.0	51.9	0.0055	0.004	78.8	ug/L	215	Standard
[>	Sc	45	57403.7	5.2				ug/L	53004	Standard
[	Ti	47	31.3	41.0	-0.0019	0.024	1258.6	ug/L	26	Standard
	V	51	3377.1	3.8	0.0020	0.015	745.7	ug/L	3223	Standard
	Cr	52	10163.7	0.6	-0.0403	0.026	64.1	ug/L	10379	Standard
	Cr	53	141.7	24.3	-0.0128	0.022	173.2	ug/L	192	Standard
	Mn	55	1690.8	7.2	0.0032	0.006	185.1	ug/L	1840	Standard
	Co	59	145.3	47.0	-0.0052	0.005	94.1	ug/L	115	Standard
	Ni	60	79.7	8.2	-0.0092	0.003	27.6	ug/L	75	Standard
	Cu	65	219.0	11.7	0.0172	0.008	46.6	ug/L	155	Standard
	Zn	66	255.3	3.9	-0.0232	0.002	10.2	ug/L	237	Standard
[>	Ge	72	437460.2	2.6				ug/L	413856	Standard
	As	75	-169.9	12.3	0.0290	0.016	56.1	ug/L	-197	Standard
	Se	82	8.3	99.6	0.0654	0.059	90.2	ug/L	-5	Standard
[	Se-1	77	117.3	6.3	0.1542	0.099	64.4	ug/L	105	Standard
[>	Ga	71	186.7	11.2				mg/L	225	Standard
[	Rb	85	15.0	57.7				ug/L	28	Standard
[	Y	89	327026.8	2.9				ug/L	322845	Standard
[>	Rh	103	126.7	16.4				ug/L	92	Standard
[	Mo	98	84.0	91.3	0.0103	0.018	175.1	ug/L	18	Standard
	Ag	107	134.0	97.2	0.0093	0.017	185.4	ug/L	63	Standard
	Cd	111	49.2	98.2	0.0034	0.015	431.1	mg/L	20	Standard
	Cd	114	159.2	89.0	0.0083	0.017	198.8	ug/L	56	Standard
[>	In	115	661797.7	3.8				ug/L	657102	Standard
	Sn	118	439.7	25.8	-0.0052	0.013	253.0	ug/L	555	Standard
	Sb	123	364.7	26.8	0.0432	0.012	26.7	ug/L	62	Standard
[	Ba	135	46.0	46.8	-0.0064	0.007	105.2	ug/L	19	Standard
[	Ce	140	27.7	10.4				ug/L	24	Standard
[>	Tb	159	930045.8	3.2				ug/L	910514	Standard
[	Ho	165	10.3	14.8				ug/L	7	Standard
	Tl	203	89.7	66.0	0.0033	0.005	143.1	ug/L	13	Standard
	Tl	205	2.7	108.3	0.0080	0.007	91.2	ug/L	1	Standard
	Pb	206	406.0	14.5	0.0061	0.005	87.7	ug/L	342	Standard
	Pb	207	351.0	3.3	0.0036	0.002	52.6	ug/L	284	Standard
	Pb	208	1572.7	8.2	0.0039	0.003	75.9	ug/L	1363	Standard
	U	238	58.0	24.4	0.0042	0.002	37.3	ug/L	2	Standard
[>	Bi	209	476619.1	3.1				ug/L	470592	Standard

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Na	23	0.0		0.0050	0.000	0.0	mg/L	2	Standard
Mg	24	925.0	26.8	-0.0025	0.000	5.2	mg/L	5586	Standard
K	39	6.7	43.3	0.0414	0.031	75.8	mg/L	5	Standard
Ca	43	56.7	13.5	-0.0074	0.222	3021.4	mg/L	45	Standard
Fe	54	357.3	14.3	-0.0271	0.011	41.9	mg/L	350	Standard
Fe	57	118.3	10.6	0.0431	0.010	23.2	mg/L	102	Standard
Sc-1	45	57403.7	5.2				mg/L	53004	Standard
Cl	35	2.7	21.7				ug/L	2	Standard
Kr	83	153.6	4.8				ug/L	157	Standard
Br	81	2.5	173.2				ug/L	3	Standard
P	31	126142.5	3.4				ug/L	91588	Standard
S	34	42677.5	2.5				ug/L	32556	Standard
Sr	88	76.7	35.9				ug/L	62	Standard
C	12	135.0	13.4				mg/L	133	Standard
N	14	0.0					mg/L	0	Standard
Hg	202	0.0					mg/L	7	Standard

QC Calculated Values

Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recovery
Li	7			
Be	9			
Al	27			
Sc	45			
Ti	47			
V	51			
Cr	52			
Cr	53			
Mn	55			
Co	59			
Ni	60			
Cu	65			
Zn	66			
Ge	72		105.704	
As	75			
Se	82			
Se-1	77			
Ga	71			
Rb	85			
Y	89			
Rh	103			

Sample ID: QC Std 7

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[	Mo	98	
[	Ag	107	
[	Cd	111	
[	Cd	114	
>	In	115	100.715
[	Sn	118	
[	Sb	123	
[	Ba	135	
[	Ce	140	
>	Tb	159	
[	Ho	165	
[	Tl	203	
[	Tl	205	
[	Pb	206	
[	Pb	207	
[	Pb	208	
[	U	238	
>	Bi	209	101.281
[	Na	23	
[	Mg	24	
[	K	39	
[	Ca	43	
[	Fe	54	
[	Fe	57	
>	Sc-1	45	
[	Cl	35	
[	Kr	83	
[	Br	81	
[	P	31	
[	S	34	
[	Sr	88	
[	C	12	
[	N	14	
[	Hg	202	

QC Out of Limits

Measurement Type	Analyte	Mass	Out of Limits Message

Sample ID: QC Std 7

Report Date/Time: Sunday, November 18, 2012 20:36:01

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Method 6020 - Summary Report

Sample ID: L1211034003

Sample Date/Time: Sunday, November 18, 2012 20:36:44

Number of Replicates: 3

Autosampler Position: 446

Sample Description: 20

Method File: C:\NexIONData\Method\6020a.mth

Aliquot Volume (mL):

Diluted to Volume (mL):

User Name: JYH user

Cumulative Autodilution Factor: 1

Nexion-ICP 200.8\6020

Concentration Results

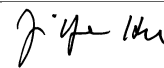
IS	Analyte	Mass	Intensity	RSD	Conc.	SD	RSD	Units	Blank Intens.	Mode
[	Li	7	20048.3	5.0	-7173.9106	281.963	3.9	ug/L	8369	Standard
	Be	9	175.0	10.3	0.0806	0.011	13.3	ug/L	18	Standard
	Al	27	489583.5	1.5	4.2613	0.063	1.5	ug/L	215	Standard
[>	Sc	45	49556.0	3.0				ug/L	53004	Standard
[	Ti	47	298.7	4.2	0.5685	0.019	3.3	ug/L	26	Standard
	V	51	15642.9	1.2	1.1592	0.024	2.1	ug/L	3223	Standard
	Cr	52	19811.9	1.3	1.0348	0.012	1.2	ug/L	10379	Standard
	Cr	53	1555.9	7.2	1.1116	0.075	6.8	ug/L	192	Standard
	Mn	55	193185.2	1.1	11.9552	0.038	0.3	ug/L	1840	Standard
	Co	59	5712.1	2.1	0.4476	0.004	0.9	ug/L	115	Standard
	Ni	60	3992.5	2.5	1.4696	0.020	1.4	ug/L	75	Standard
	Cu	65	2526.5	0.7	0.9294	0.013	1.4	ug/L	155	Standard
	Zn	66	8384.0	3.4	6.4190	0.174	2.7	ug/L	237	Standard
[>	Ge	72	382543.5	1.3				ug/L	413856	Standard
	As	75	77.6	28.8	0.1978	0.016	8.3	ug/L	-197	Standard
	Se	82	1.0	2022.1	0.0132	0.161	1222.4	ug/L	-5	Standard
[	Se-1	77	117.7	6.0	0.3191	0.089	28.0	ug/L	105	Standard
[>	Ga	71	1756.8	4.6				mg/L	225	Standard
[	Rb	85	14812.2	3.2				ug/L	28	Standard
[	Y	89	297168.1	1.8				ug/L	322845	Standard
[>	Rh	103	60.0	41.7				ug/L	92	Standard
[	Mo	98	46.7	2.1	0.0029	0.000	3.3	ug/L	18	Standard
	Ag	107	76.0	6.0	0.0028	0.001	27.6	ug/L	63	Standard
	Cd	111	30.6	8.2	-0.0012	0.001	72.1	mg/L	20	Standard
	Cd	114	84.1	9.9	0.0008	0.001	137.6	ug/L	56	Standard
[>	In	115	588525.9	2.5				ug/L	657102	Standard
	Sn	118	357.0	4.9	-0.0093	0.002	18.7	ug/L	555	Standard
	Sb	123	52.1	5.8	0.0045	0.001	13.4	ug/L	62	Standard
[	Ba	135	32374.9	3.4	10.5998	0.296	2.8	ug/L	19	Standard
[	Ce	140	140322.9	1.6				ug/L	24	Standard
[>	Tb	159	851769.1	2.7				ug/L	910514	Standard
[	Ho	165	1949.8	3.8				ug/L	7	Standard
	Tl	203	140.3	16.4	0.0079	0.002	26.4	ug/L	13	Standard
	Tl	205	7.3	55.1	0.0210	0.011	50.6	ug/L	1	Standard
	Pb	206	10915.9	2.5	1.0887	0.020	1.8	ug/L	342	Standard
	Pb	207	8897.6	1.4	1.0394	0.006	0.6	ug/L	284	Standard
	Pb	208	41721.0	1.7	1.0517	0.014	1.4	ug/L	1363	Standard
	U	238	780.0	2.3	0.0805	0.003	4.3	ug/L	2	Standard
[>	Bi	209	446014.9	1.9				ug/L	470592	Standard

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Na	23	1.7	173.2	0.1681	0.282	168.1	mg/L	2	Standard
Mg	24	1698.4	2.9	-0.0020	0.000	2.3	mg/L	5586	Standard
K	39	21.7	53.3	0.2751	0.172	62.7	mg/L	5	Standard
Ca	43	66.7	30.3	0.7938	0.858	108.1	mg/L	45	Standard
Fe	54	2554.7	6.4	0.8982	0.097	10.7	mg/L	350	Standard
Fe	57	723.4	14.7	1.0840	0.140	12.9	mg/L	102	Standard
Sc-1	45	49556.0	3.0				mg/L	53004	Standard
Cl	35	2.0	50.0				ug/L	2	Standard
Kr	83	152.7	4.2				ug/L	157	Standard
Br	81	5.8	24.7				ug/L	3	Standard
P	31	42645.0	5.0				ug/L	91588	Standard
S	34	37851.4	4.0				ug/L	32556	Standard
Sr	88	90.0	5.6				ug/L	62	Standard
C	12	76.7	26.4				mg/L	133	Standard
N	14	0.0					mg/L	0	Standard
Hg	202	5.0	100.0				mg/L	7	Standard

QC Calculated Values

Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recovery
Li	7			
Be	9			
Al	27			
Sc	45			
Ti	47			
V	51			
Cr	52			
Cr	53			
Mn	55			
Co	59			
Ni	60			
Cu	65			
Zn	66			
Ge	72		92.434	
As	75			
Se	82			
Se-1	77			
Ga	71			
Rb	85			
Y	89			
Rh	103			

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[	Mo	98	
[	Ag	107	
[	Cd	111	
[	Cd	114	
>	In	115	89.564
[	Sn	118	
[	Sb	123	
[	Ba	135	
[	Ce	140	
>	Tb	159	
[	Ho	165	
[	Tl	203	
[	Tl	205	
[	Pb	206	
[	Pb	207	
[	Pb	208	
[	U	238	
>	Bi	209	94.777
[	Na	23	
[	Mg	24	
[	K	39	
[	Ca	43	
[	Fe	54	
[	Fe	57	
>	Sc-1	45	
[	Cl	35	
[	Kr	83	
[	Br	81	
[	P	31	
[	S	34	
[	Sr	88	
[	C	12	
[	N	14	
[	Hg	202	

QC Out of Limits

Measurement Type	Analyte	Mass	Out of Limits Message

Sample ID: L1211034003

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Method 6020 - Summary Report

Sample ID: L1211034004

Sample Date/Time: Sunday, November 18, 2012 20:39:57

Number of Replicates: 3

Autosampler Position: 447

Sample Description: 20

Method File: C:\NexIONData\Method\6020a.mth

Aliquot Volume (mL):

Diluted to Volume (mL):

User Name: JYH user

Cumulative Autodilution Factor: 1

Nexion-ICP 200.8\6020

Concentration Results

IS	Analyte	Mass	Intensity	RSD	Conc.	SD	RSD	Units	Blank Intens.	Mode
[	Li	7	17742.1	5.8	-6420.8028	530.841	8.3	ug/L	8369	Standard
	Be	9	178.3	19.7	0.0874	0.018	20.5	ug/L	18	Standard
	Al	27	605796.2	2.5	5.5776	0.066	1.2	ug/L	215	Standard
[>	Sc	45	46835.6	1.3				ug/L	53004	Standard
[	Ti	47	161.0	1.2	0.2869	0.006	2.1	ug/L	26	Standard
	V	51	18255.2	0.9	1.4361	0.031	2.1	ug/L	3223	Standard
	Cr	52	17129.3	1.1	0.8101	0.032	4.0	ug/L	10379	Standard
	Cr	53	1310.1	7.0	0.9429	0.072	7.6	ug/L	192	Standard
	Mn	55	529124.9	0.3	33.6726	0.757	2.2	ug/L	1840	Standard
	Co	59	7801.7	2.4	0.6321	0.030	4.8	ug/L	115	Standard
	Ni	60	3853.2	2.7	1.4520	0.075	5.2	ug/L	75	Standard
	Cu	65	3352.4	1.6	1.2829	0.052	4.1	ug/L	155	Standard
	Zn	66	7903.1	3.4	6.1895	0.349	5.6	ug/L	237	Standard
[>	Ge	72	373908.5	2.4				ug/L	413856	Standard
	As	75	694.5	8.6	0.6699	0.050	7.5	ug/L	-197	Standard
	Se	82	12.2	61.0	0.1102	0.066	59.4	ug/L	-5	Standard
[	Se-1	77	130.3	7.3	0.4929	0.129	26.2	ug/L	105	Standard
[>	Ga	71	1546.7	4.9				mg/L	225	Standard
	Rb	85	14445.2	2.2				ug/L	28	Standard
[	Y	89	292722.4	1.0				ug/L	322845	Standard
[>	Rh	103	78.3	9.8				ug/L	92	Standard
[	Mo	98	67.7	7.1	0.0087	0.001	13.9	ug/L	18	Standard
	Ag	107	83.7	10.2	0.0044	0.001	29.6	ug/L	63	Standard
	Cd	111	76.6	4.0	0.0147	0.001	8.9	mg/L	20	Standard
	Cd	114	254.1	3.1	0.0231	0.001	6.0	ug/L	56	Standard
[>	In	115	566108.7	1.1				ug/L	657102	Standard
	Sn	118	344.7	7.2	-0.0092	0.003	28.6	ug/L	555	Standard
	Sb	123	57.2	5.4	0.0056	0.000	8.2	ug/L	62	Standard
[	Ba	135	45253.5	1.3	15.4131	0.355	2.3	ug/L	19	Standard
[	Ce	140	169516.5	1.5				ug/L	24	Standard
[>	Tb	159	842656.2	1.9				ug/L	910514	Standard
[	Ho	165	2394.9	3.5				ug/L	7	Standard
	Tl	203	123.3	3.1	0.0067	0.001	8.5	ug/L	13	Standard
	Tl	205	2.7	78.1	0.0085	0.005	64.2	ug/L	1	Standard
	Pb	206	93400.4	1.4	9.7160	0.216	2.2	ug/L	342	Standard
	Pb	207	74384.2	2.0	9.0960	0.207	2.3	ug/L	284	Standard
	Pb	208	350964.2	1.2	9.2468	0.208	2.3	ug/L	1363	Standard
	U	238	1049.4	2.6	0.1105	0.000	0.4	ug/L	2	Standard
[>	Bi	209	439205.8	2.5				ug/L	470592	Standard

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Na	23	0.0		0.0050	0.000	0.0	mg/L	2	Standard
Mg	24	1465.1	8.2	-0.0021	0.000	2.7	mg/L	5586	Standard
K	39	15.0	88.2	0.1913	0.208	108.6	mg/L	5	Standard
Ca	43	48.3	11.9	0.0999	0.309	309.5	mg/L	45	Standard
Fe	54	3359.9	0.2	1.3076	0.022	1.7	mg/L	350	Standard
Fe	57	920.0	4.2	1.5070	0.067	4.4	mg/L	102	Standard
Sc-1	45	46835.6	1.3				mg/L	53004	Standard
Cl	35	0.7	86.6				ug/L	2	Standard
Kr	83	145.8	7.1				ug/L	157	Standard
Br	81	4.2	91.7				ug/L	3	Standard
P	31	39176.4	1.4				ug/L	91588	Standard
S	34	32959.2	2.6				ug/L	32556	Standard
Sr	88	90.0	11.1				ug/L	62	Standard
C	12	101.7	19.9				mg/L	133	Standard
N	14	0.0					mg/L	0	Standard
Hg	202	11.7	49.5				mg/L	7	Standard

QC Calculated Values

Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recovery
Li	7			
Be	9			
Al	27			
Sc	45			
Ti	47			
V	51			
Cr	52			
Cr	53			
Mn	55			
Co	59			
Ni	60			
Cu	65			
Zn	66			
Ge	72		90.348	
As	75			
Se	82			
Se-1	77			
Ga	71			
Rb	85			
Y	89			
Rh	103			

Sample ID: L1211034004

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[	Mo	98	
[	Ag	107	
[	Cd	111	
[	Cd	114	
>	In	115	86.152
[	Sn	118	
[	Sb	123	
[	Ba	135	
[	Ce	140	
>	Tb	159	
[	Ho	165	
[	Tl	203	
[	Tl	205	
[	Pb	206	
[	Pb	207	
[	Pb	208	
[	U	238	
>	Bi	209	93.331
[	Na	23	
[	Mg	24	
[	K	39	
[	Ca	43	
[	Fe	54	
[	Fe	57	
>	Sc-1	45	
[	Cl	35	
[	Kr	83	
[	Br	81	
[	P	31	
[	S	34	
[	Sr	88	
[	C	12	
[	N	14	
[	Hg	202	

QC Out of Limits

Measurement Type	Analyte	Mass	Out of Limits Message

Sample ID: L1211034004

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Method 6020 - Summary Report

Sample ID: L1211034005

Sample Date/Time: Sunday, November 18, 2012 20:43:10

Number of Replicates: 3

Autosampler Position: 448

Sample Description: 20

Method File: C:\NexIONData\Method\6020a.mth

Aliquot Volume (mL):

Diluted to Volume (mL):

User Name: JYH user

Cumulative Autodilution Factor: 1

Nexion-ICP 200.8\6020

Concentration Results

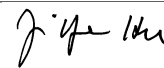
IS	Analyte	Mass	Intensity	RSD	Conc.	SD	RSD	Units	Blank Intens.	Mode
[	Li	7	26777.0	2.2	-11341.9959	1166.090	10.3	ug/L	8369	Standard
	Be	9	220.0	14.2	0.1054	0.022	21.2	ug/L	18	Standard
	Al	27	1014511.3	0.3	8.9296	0.476	5.3	ug/L	215	Standard
[>	Sc	45	49089.5	4.9				ug/L	53004	Standard
	Ti	47	197.7	1.1	0.3542	0.009	2.5	ug/L	26	Standard
	V	51	15572.9	1.3	1.1460	0.038	3.3	ug/L	3223	Standard
	Cr	52	21547.3	2.7	1.1962	0.094	7.8	ug/L	10379	Standard
	Cr	53	1795.9	2.0	1.2942	0.050	3.9	ug/L	192	Standard
	Mn	55	204392.6	1.5	12.5949	0.380	3.0	ug/L	1840	Standard
	Co	59	11060.4	2.8	0.8772	0.037	4.2	ug/L	115	Standard
	Ni	60	5573.4	0.8	2.0559	0.051	2.5	ug/L	75	Standard
	Cu	65	3399.4	1.9	1.2642	0.048	3.8	ug/L	155	Standard
	Zn	66	7689.0	2.0	5.8438	0.230	3.9	ug/L	237	Standard
[>	Ge	72	384443.5	1.8				ug/L	413856	Standard
	As	75	431.9	7.2	0.4602	0.021	4.6	ug/L	-197	Standard
	Se	82	13.0	29.3	0.1128	0.030	26.2	ug/L	-5	Standard
[	Se-1	77	143.7	9.5	0.5992	0.172	28.8	ug/L	105	Standard
[>	Ga	71	2170.2	7.9				mg/L	225	Standard
	Rb	85	17400.0	3.6				ug/L	28	Standard
	Y	89	305917.1	2.6				ug/L	322845	Standard
[>	Rh	103	93.3	15.5				ug/L	92	Standard
	Mo	98	26.6	15.3	-0.0020	0.001	54.4	ug/L	18	Standard
	Ag	107	77.7	15.5	0.0032	0.002	55.6	ug/L	63	Standard
	Cd	111	47.3	22.0	0.0044	0.004	80.6	mg/L	20	Standard
	Cd	114	131.6	1.6	0.0069	0.000	4.2	ug/L	56	Standard
[>	In	115	580531.8	1.4				ug/L	657102	Standard
	Sn	118	302.0	6.9	-0.0150	0.003	18.8	ug/L	555	Standard
	Sb	123	38.0	16.0	0.0026	0.001	36.9	ug/L	62	Standard
[	Ba	135	43957.3	0.5	14.5984	0.237	1.6	ug/L	19	Standard
	Ce	140	182391.3	0.5				ug/L	24	Standard
[>	Tb	159	848008.7	2.5				ug/L	910514	Standard
	Ho	165	2535.2	1.8				ug/L	7	Standard
	Tl	203	155.7	12.7	0.0092	0.001	15.8	ug/L	13	Standard
	Tl	205	5.3	43.3	0.0157	0.006	40.7	ug/L	1	Standard
	Pb	206	23367.0	0.8	2.3699	0.046	1.9	ug/L	342	Standard
	Pb	207	18895.4	2.0	2.2495	0.063	2.8	ug/L	284	Standard
	Pb	208	89578.2	1.5	2.2992	0.045	2.0	ug/L	1363	Standard
	U	238	1279.4	2.7	0.1331	0.005	4.0	ug/L	2	Standard
[>	Bi	209	445741.7	1.4				ug/L	470592	Standard

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Na	23	3.3	86.6	0.3372	0.288	85.5	mg/L	2	Standard
Mg	24	1936.8	7.5	-0.0019	0.000	1.6	mg/L	5586	Standard
K	39	21.7	13.3	0.2787	0.059	21.3	mg/L	5	Standard
Ca	43	58.3	13.1	0.4542	0.368	81.0	mg/L	45	Standard
Fe	54	2839.4	2.9	1.0261	0.062	6.0	mg/L	350	Standard
Fe	57	785.0	13.0	1.1999	0.120	10.0	mg/L	102	Standard
Sc-1	45	49089.5	4.9				mg/L	53004	Standard
Cl	35	3.3	45.8				ug/L	2	Standard
Kr	83	150.4	3.8				ug/L	157	Standard
Br	81	5.8	24.7				ug/L	3	Standard
P	31	40244.2	0.7				ug/L	91588	Standard
S	34	31572.0	1.4				ug/L	32556	Standard
Sr	88	100.0	17.3				ug/L	62	Standard
C	12	96.7	24.4				mg/L	133	Standard
N	14	0.0					mg/L	0	Standard
Hg	202	6.7	43.3				mg/L	7	Standard

QC Calculated Values

Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recovery
Li	7			
Be	9			
Al	27			
Sc	45			
Ti	47			
V	51			
Cr	52			
Cr	53			
Mn	55			
Co	59			
Ni	60			
Cu	65			
Zn	66			
Ge	72		92.893	
As	75			
Se	82			
Se-1	77			
Ga	71			
Rb	85			
Y	89			
Rh	103			

Sample ID: L1211034005

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[	Mo	98	
[	Ag	107	
[	Cd	111	
[	Cd	114	
>	In	115	88.347
[	Sn	118	
[	Sb	123	
[	Ba	135	
[	Ce	140	
>	Tb	159	
[	Ho	165	
[	Tl	203	
[	Tl	205	
[	Pb	206	
[	Pb	207	
[	Pb	208	
[	U	238	
>	Bi	209	94.719
[	Na	23	
[	Mg	24	
[	K	39	
[	Ca	43	
[	Fe	54	
[	Fe	57	
>	Sc-1	45	
[	Cl	35	
[	Kr	83	
[	Br	81	
[	P	31	
[	S	34	
[	Sr	88	
[	C	12	
[	N	14	
[	Hg	202	

QC Out of Limits

Measurement Type	Analyte	Mass	Out of Limits Message

Sample ID: L1211034005

Report Date/Time: Sunday, November 18, 2012 20:45:42

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Method 6020 - Summary Report

Sample ID: L1211034006

Sample Date/Time: Sunday, November 18, 2012 20:46:22

Number of Replicates: 3

Autosampler Position: 449

Sample Description: 20

Method File: C:\NexIONData\Method\6020a.mth

Aliquot Volume (mL):

Diluted to Volume (mL):

User Name: JYH user

Cumulative Autodilution Factor: 1

Nexion-ICP 200.8\6020

Concentration Results

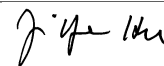
IS	Analyte	Mass	Intensity	RSD	Conc.	SD	RSD	Units	Blank Intens.	Mode
[	Li	7	25561.5	1.9	-10293.8886	615.070	6.0	ug/L	8369	Standard
	Be	9	206.7	1.4	0.0958	0.004	4.1	ug/L	18	Standard
	Al	27	829001.5	3.3	7.1424	0.113	1.6	ug/L	215	Standard
[>	Sc	45	50064.3	3.3				ug/L	53004	Standard
[	Ti	47	267.3	9.3	0.4923	0.044	8.8	ug/L	26	Standard
	V	51	21243.1	1.3	1.6352	0.013	0.8	ug/L	3223	Standard
	Cr	52	22140.5	2.0	1.2255	0.057	4.7	ug/L	10379	Standard
	Cr	53	1822.6	4.7	1.2967	0.083	6.4	ug/L	192	Standard
	Mn	55	752886.5	1.4	46.0217	1.170	2.5	ug/L	1840	Standard
	Co	59	10703.4	1.1	0.8369	0.009	1.0	ug/L	115	Standard
	Ni	60	6112.2	1.3	2.2281	0.039	1.7	ug/L	75	Standard
	Cu	65	2983.0	1.4	1.0868	0.005	0.4	ug/L	155	Standard
	Zn	66	7429.5	2.1	5.5613	0.050	0.9	ug/L	237	Standard
[>	Ge	72	389484.8	1.4				ug/L	413856	Standard
	As	75	430.0	12.3	0.4550	0.041	9.1	ug/L	-197	Standard
	Se	82	13.4	63.7	0.1154	0.071	61.5	ug/L	-5	Standard
[	Se-1	77	116.3	12.8	0.2808	0.159	56.5	ug/L	105	Standard
[>	Ga	71	2145.2	2.8				mg/L	225	Standard
	Rb	85	17693.7	4.0				ug/L	28	Standard
[	Y	89	306478.1	2.4				ug/L	322845	Standard
[>	Rh	103	95.0	9.1				ug/L	92	Standard
[	Mo	98	88.8	80.7	0.0137	0.019	134.8	ug/L	18	Standard
	Ag	107	107.0	53.0	0.0074	0.008	113.4	ug/L	63	Standard
	Cd	111	75.2	25.1	0.0136	0.007	49.3	mg/L	20	Standard
	Cd	114	177.9	32.2	0.0127	0.008	60.1	ug/L	56	Standard
[>	In	115	583488.9	1.9				ug/L	657102	Standard
	Sn	118	365.0	8.6	-0.0080	0.004	53.7	ug/L	555	Standard
	Sb	123	47.9	54.0	0.0040	0.004	96.5	ug/L	62	Standard
[	Ba	135	48903.8	1.1	16.1638	0.427	2.6	ug/L	19	Standard
[	Ce	140	177060.8	1.9				ug/L	24	Standard
[>	Tb	159	865946.4	1.6				ug/L	910514	Standard
[	Ho	165	2344.5	0.9				ug/L	7	Standard
	Tl	203	174.3	12.8	0.0106	0.002	18.1	ug/L	13	Standard
	Tl	205	5.7	44.4	0.0166	0.007	42.4	ug/L	1	Standard
	Pb	206	20323.3	1.2	2.0396	0.054	2.6	ug/L	342	Standard
	Pb	207	16405.9	2.0	1.9317	0.053	2.8	ug/L	284	Standard
	Pb	208	77864.6	1.1	1.9772	0.047	2.4	ug/L	1363	Standard
	U	238	1118.0	1.3	0.1151	0.004	3.5	ug/L	2	Standard
[>	Bi	209	449546.8	2.1				ug/L	470592	Standard

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Na	23	0.0		0.0050	0.000	0.0	mg/L	2	Standard
Mg	24	1870.1	7.2	-0.0020	0.000	2.2	mg/L	5586	Standard
K	39	16.7	17.3	0.1995	0.049	24.4	mg/L	5	Standard
Ca	43	50.0	26.5	0.0368	0.662	1797.1	mg/L	45	Standard
Fe	54	3896.4	3.6	1.4328	0.087	6.1	mg/L	350	Standard
Fe	57	998.4	9.8	1.5299	0.118	7.7	mg/L	102	Standard
Sc-1	45	50064.3	3.3				mg/L	53004	Standard
Cl	35	3.7	41.7				ug/L	2	Standard
Kr	83	155.6	1.7				ug/L	157	Standard
Br	81	6.7	57.3				ug/L	3	Standard
P	31	39570.8	3.9				ug/L	91588	Standard
S	34	31499.4	1.9				ug/L	32556	Standard
Sr	88	85.0	5.9				ug/L	62	Standard
C	12	123.3	33.0				mg/L	133	Standard
N	14	0.0					mg/L	0	Standard
Hg	202	5.0	0.0				mg/L	7	Standard

QC Calculated Values

Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recovery
Li	7			
Be	9			
Al	27			
Sc	45			
Ti	47			
V	51			
Cr	52			
Cr	53			
Mn	55			
Co	59			
Ni	60			
Cu	65			
Zn	66			
Ge	72		94.111	
As	75			
Se	82			
Se-1	77			
Ga	71			
Rb	85			
Y	89			
Rh	103			

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[	Mo	98	
[	Ag	107	
[	Cd	111	
[	Cd	114	
>	In	115	88.797
[	Sn	118	
[	Sb	123	
[	Ba	135	
[	Ce	140	
>	Tb	159	
[	Ho	165	
[	Tl	203	
[	Tl	205	
[	Pb	206	
[	Pb	207	
[	Pb	208	
[	U	238	
>	Bi	209	95.528
[	Na	23	
[	Mg	24	
[	K	39	
[	Ca	43	
[	Fe	54	
[	Fe	57	
>	Sc-1	45	
[	Cl	35	
[	Kr	83	
[	Br	81	
[	P	31	
[	S	34	
[	Sr	88	
[	C	12	
[	N	14	
[	Hg	202	

QC Out of Limits

Measurement Type	Analyte	Mass	Out of Limits Message

Sample ID: L1211034006

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Method 6020 - Summary Report

Sample ID: L1211034007

Sample Date/Time: Sunday, November 18, 2012 20:49:34

Number of Replicates: 3

Autosampler Position: 450

Sample Description: 20

Method File: C:\NexIONData\Method\6020a.mth

Aliquot Volume (mL):

Diluted to Volume (mL):

User Name: JYH user

Cumulative Autodilution Factor: 1

Nexion-ICP 200.8\6020

Concentration Results

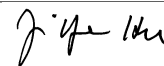
IS	Analyte	Mass	Intensity	RSD	Conc.	SD	RSD	Units	Blank Intens.	Mode
[	Li	7	19312.3	2.4	-6864.4717	211.698	3.1	ug/L	8369	Standard
	Be	9	188.3	5.5	0.0884	0.007	7.6	ug/L	18	Standard
	Al	27	728518.6	0.6	6.4085	0.087	1.4	ug/L	215	Standard
[>	Sc	45	49034.2	1.5				ug/L	53004	Standard
[	Ti	47	121.3	10.7	0.1984	0.026	13.1	ug/L	26	Standard
	V	51	12117.5	2.4	0.8498	0.016	1.9	ug/L	3223	Standard
	Cr	52	17662.6	0.5	0.8428	0.027	3.2	ug/L	10379	Standard
	Cr	53	1315.9	4.1	0.9350	0.033	3.5	ug/L	192	Standard
	Mn	55	136660.9	0.7	8.5276	0.157	1.8	ug/L	1840	Standard
	Co	59	8109.5	1.3	0.6493	0.002	0.4	ug/L	115	Standard
	Ni	60	4263.3	1.0	1.5899	0.024	1.5	ug/L	75	Standard
	Cu	65	2346.5	2.4	0.8692	0.014	1.6	ug/L	155	Standard
	Zn	66	6551.4	1.2	5.0308	0.009	0.2	ug/L	237	Standard
[>	Ge	72	378308.7	1.1				ug/L	413856	Standard
	As	75	-39.0	24.5	0.1106	0.007	6.2	ug/L	-197	Standard
	Se	82	1.3	342.3	0.0159	0.037	229.9	ug/L	-5	Standard
[	Se-1	77	136.7	6.6	0.5458	0.118	21.7	ug/L	105	Standard
[>	Ga	71	1615.1	8.7				mg/L	225	Standard
[	Rb	85	11377.6	3.0				ug/L	28	Standard
[	Y	89	296440.4	1.2				ug/L	322845	Standard
[>	Rh	103	95.0	27.9				ug/L	92	Standard
[	Mo	98	14.1	26.7	-0.0052	0.001	18.1	ug/L	18	Standard
	Ag	107	74.7	5.6	0.0027	0.001	25.4	ug/L	63	Standard
	Cd	111	36.0	16.7	0.0006	0.002	318.5	mg/L	20	Standard
	Cd	114	96.5	25.3	0.0024	0.003	122.3	ug/L	56	Standard
[>	In	115	585305.8	1.0				ug/L	657102	Standard
	Sn	118	317.3	10.6	-0.0136	0.004	28.7	ug/L	555	Standard
	Sb	123	25.3	14.4	0.0007	0.001	78.9	ug/L	62	Standard
[	Ba	135	39254.5	0.9	12.9263	0.035	0.3	ug/L	19	Standard
[	Ce	140	142767.2	1.3				ug/L	24	Standard
[>	Tb	159	850013.9	0.9				ug/L	910514	Standard
[	Ho	165	2078.5	3.2				ug/L	7	Standard
	Tl	203	109.7	8.3	0.0054	0.001	15.5	ug/L	13	Standard
	Tl	205	4.0	75.0	0.0121	0.008	67.6	ug/L	1	Standard
	Pb	206	10545.0	1.0	1.0492	0.018	1.7	ug/L	342	Standard
	Pb	207	8577.1	0.7	0.9992	0.012	1.2	ug/L	284	Standard
	Pb	208	40314.6	0.2	1.0136	0.012	1.1	ug/L	1363	Standard
	U	238	688.0	7.5	0.0707	0.005	6.9	ug/L	2	Standard
[>	Bi	209	446645.6	0.9				ug/L	470592	Standard

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Na	23	3.3	86.6	0.3312	0.283	85.3	mg/L	2	Standard
Mg	24	1613.4	1.0	-0.0021	0.000	1.0	mg/L	5586	Standard
K	39	16.7	34.6	0.2043	0.087	42.6	mg/L	5	Standard
Ca	43	36.7	55.1	-0.5455	0.923	169.2	mg/L	45	Standard
Fe	54	1734.8	9.8	0.5667	0.065	11.5	mg/L	350	Standard
Fe	57	556.7	2.3	0.8168	0.017	2.1	mg/L	102	Standard
Sc-1	45	49034.2	1.5				mg/L	53004	Standard
Cl	35	1.7	91.7				ug/L	2	Standard
Kr	83	155.4	2.6				ug/L	157	Standard
Br	81	5.8	107.9				ug/L	3	Standard
P	31	39442.1	1.9				ug/L	91588	Standard
S	34	31553.7	0.6				ug/L	32556	Standard
Sr	88	81.7	30.2				ug/L	62	Standard
C	12	98.3	28.9				mg/L	133	Standard
N	14	1.7	173.2				mg/L	0	Standard
Hg	202	6.7	86.6				mg/L	7	Standard

QC Calculated Values

Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recovery
Li	7			
Be	9			
Al	27			
Sc	45			
Ti	47			
V	51			
Cr	52			
Cr	53			
Mn	55			
Co	59			
Ni	60			
Cu	65			
Zn	66			
Ge	72		91.411	
As	75			
Se	82			
Se-1	77			
Ga	71			
Rb	85			
Y	89			
Rh	103			

Sample ID: L1211034007

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[	Mo	98	
[	Ag	107	
[	Cd	111	
[	Cd	114	
>	In	115	89.074
[	Sn	118	
[	Sb	123	
[	Ba	135	
[	Ce	140	
>	Tb	159	
[	Ho	165	
[	Tl	203	
[	Tl	205	
[	Pb	206	
[	Pb	207	
[	Pb	208	
[	U	238	
>	Bi	209	94.911
[	Na	23	
[	Mg	24	
[	K	39	
[	Ca	43	
[	Fe	54	
[	Fe	57	
>	Sc-1	45	
[	Cl	35	
[	Kr	83	
[	Br	81	
[	P	31	
[	S	34	
[	Sr	88	
[	C	12	
[	N	14	
[	Hg	202	

QC Out of Limits

Measurement Type	Analyte	Mass	Out of Limits Message

Sample ID: L1211034007

Report Date/Time: Sunday, November 18, 2012 20:52:06

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Method 6020 - Summary Report

Sample ID: L1211034008

Sample Date/Time: Sunday, November 18, 2012 20:52:46

Number of Replicates: 3

Autosampler Position: 451

Sample Description: 20

Method File: C:\NexIONData\Method\6020a.mth

Aliquot Volume (mL):

Diluted to Volume (mL):

User Name: JYH user

Cumulative Autodilution Factor: 1

Nexion-ICP 200.8\6020

Concentration Results

IS	Analyte	Mass	Intensity	RSD	Conc.	SD	RSD	Units	Blank Intens.	Mode
[	Li	7	13944.8	3.3	-3569.1535	202.996	5.7	ug/L	8369	Standard
	Be	9	105.0	17.2	0.0445	0.009	20.7	ug/L	18	Standard
	Al	27	292467.6	1.1	2.5435	0.024	1.0	ug/L	215	Standard
[>	Sc	45	49565.9	0.8				ug/L	53004	Standard
[	Ti	47	241.7	2.9	0.4470	0.015	3.3	ug/L	26	Standard
	V	51	11226.9	1.0	0.7530	0.025	3.3	ug/L	3223	Standard
	Cr	52	15150.6	1.6	0.5708	0.023	4.0	ug/L	10379	Standard
	Cr	53	940.9	4.5	0.6262	0.019	3.1	ug/L	192	Standard
	Mn	55	279372.4	2.8	17.2707	0.575	3.3	ug/L	1840	Standard
	Co	59	4666.7	1.4	0.3617	0.014	3.8	ug/L	115	Standard
	Ni	60	2908.6	2.2	1.0574	0.028	2.6	ug/L	75	Standard
	Cu	65	1947.8	3.1	0.7005	0.011	1.5	ug/L	155	Standard
	Zn	66	6703.1	2.9	5.0749	0.158	3.1	ug/L	237	Standard
[>	Ge	72	383916.4	2.3				ug/L	413856	Standard
	As	75	113.7	7.4	0.2244	0.006	2.6	ug/L	-197	Standard
	Se	82	10.8	48.6	0.0949	0.043	45.2	ug/L	-5	Standard
[	Se-1	77	136.0	10.8	0.5168	0.176	34.1	ug/L	105	Standard
[>	Ga	71	1096.7	9.8				mg/L	225	Standard
[	Rb	85	10263.5	1.6				ug/L	28	Standard
[	Y	89	294010.9	1.9				ug/L	322845	Standard
[>	Rh	103	91.7	17.5				ug/L	92	Standard
[	Mo	98	72.8	23.4	0.0094	0.004	45.0	ug/L	18	Standard
	Ag	107	109.3	63.2	0.0075	0.010	129.6	ug/L	63	Standard
	Cd	111	51.6	71.3	0.0056	0.012	213.4	mg/L	20	Standard
	Cd	114	197.3	74.6	0.0149	0.018	122.7	ug/L	56	Standard
[>	In	115	588340.0	0.1				ug/L	657102	Standard
	Sn	118	385.0	20.7	-0.0062	0.009	145.6	ug/L	555	Standard
	Sb	123	76.3	106.1	0.0080	0.012	145.1	ug/L	62	Standard
[	Ba	135	17190.7	1.7	5.6204	0.099	1.8	ug/L	19	Standard
[	Ce	140	84547.0	2.0				ug/L	24	Standard
[>	Tb	159	853853.9	0.1				ug/L	910514	Standard
[	Ho	165	1102.4	5.6				ug/L	7	Standard
	Tl	203	146.7	53.9	0.0083	0.006	76.3	ug/L	13	Standard
	Tl	205	5.3	75.8	0.0156	0.011	68.8	ug/L	1	Standard
	Pb	206	50110.1	0.6	5.0921	0.026	0.5	ug/L	342	Standard
	Pb	207	41043.5	1.8	4.9018	0.106	2.2	ug/L	284	Standard
	Pb	208	192011.5	0.9	4.9411	0.070	1.4	ug/L	1363	Standard
	U	238	450.7	4.7	0.0456	0.002	4.8	ug/L	2	Standard
[>	Bi	209	448105.0	0.7				ug/L	470592	Standard

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Na	23	1.7	173.2	0.1662	0.279	168.0	mg/L	2	Standard
Mg	24	1115.0	3.5	-0.0023	0.000	1.1	mg/L	5586	Standard
K	39	5.0	0.0	0.0314	0.001	1.9	mg/L	5	Standard
Ca	43	51.7	14.8	0.1220	0.361	295.6	mg/L	45	Standard
Fe	54	1444.9	9.4	0.4399	0.052	11.8	mg/L	350	Standard
Fe	57	431.7	22.0	0.5973	0.163	27.2	mg/L	102	Standard
Sc-1	45	49565.9	0.8				mg/L	53004	Standard
Cl	35	2.3	65.5				ug/L	2	Standard
Kr	83	154.3	4.6				ug/L	157	Standard
Br	81	5.8	49.5				ug/L	3	Standard
P	31	40687.9	1.4				ug/L	91588	Standard
S	34	31313.2	3.1				ug/L	32556	Standard
Sr	88	80.0	6.3				ug/L	62	Standard
C	12	111.7	31.4				mg/L	133	Standard
N	14	3.3	173.2				mg/L	0	Standard
Hg	202	5.0	100.0				mg/L	7	Standard

QC Calculated Values

Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recovery
Li	7			
Be	9			
Al	27			
Sc	45			
Ti	47			
V	51			
Cr	52			
Cr	53			
Mn	55			
Co	59			
Ni	60			
Cu	65			
Zn	66			
Ge	72		92.766	
As	75			
Se	82			
Se-1	77			
Ga	71			
Rb	85			
Y	89			
Rh	103			

Sample ID: L1211034008

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[	Mo	98	
[	Ag	107	
[	Cd	111	
[	Cd	114	
>	In	115	89.536
[	Sn	118	
[	Sb	123	
[	Ba	135	
[	Ce	140	
>	Tb	159	
[	Ho	165	
[	Tl	203	
[	Tl	205	
[	Pb	206	
[	Pb	207	
[	Pb	208	
[	U	238	
>	Bi	209	95.222
[	Na	23	
[	Mg	24	
[	K	39	
[	Ca	43	
[	Fe	54	
[	Fe	57	
>	Sc-1	45	
[	Cl	35	
[	Kr	83	
[	Br	81	
[	P	31	
[	S	34	
[	Sr	88	
[	C	12	
[	N	14	
[	Hg	202	

QC Out of Limits

Measurement Type	Analyte	Mass	Out of Limits Message

Sample ID: L1211034008

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Method 6020 - Summary Report

Sample ID: L1211034101

Sample Date/Time: Sunday, November 18, 2012 20:55:58

Number of Replicates: 3

Autosampler Position: 452

Sample Description: 20

Method File: C:\NexIONData\Method\6020a.mth

Aliquot Volume (mL):

Diluted to Volume (mL):

User Name: JYH user

Cumulative Autodilution Factor: 1

Nexion-ICP 200.8\6020

Concentration Results

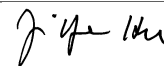
IS	Analyte	Mass	Intensity	RSD	Conc.	SD	RSD	Units	Blank Intens.	Mode
[	Li	7	27493.3	2.4	-11849.6920	724.539	6.1	ug/L	8369	Standard
	Be	9	245.0	28.1	0.1195	0.040	33.7	ug/L	18	Standard
	Al	27	962279.9	3.0	8.5161	0.402	4.7	ug/L	215	Standard
[>	Sc	45	48780.1	3.7				ug/L	53004	Standard
[	Ti	47	263.0	5.7	0.4958	0.025	5.1	ug/L	26	Standard
	V	51	21144.4	1.9	1.6691	0.014	0.9	ug/L	3223	Standard
	Cr	52	24713.2	4.5	1.5274	0.082	5.4	ug/L	10379	Standard
	Cr	53	2187.7	6.0	1.6154	0.092	5.7	ug/L	192	Standard
	Mn	55	818454.9	2.2	51.1591	0.547	1.1	ug/L	1840	Standard
	Co	59	12485.5	3.1	1.0011	0.019	1.9	ug/L	115	Standard
	Ni	60	6422.0	4.0	2.3960	0.072	3.0	ug/L	75	Standard
	Cu	65	3770.5	2.8	1.4215	0.026	1.8	ug/L	155	Standard
	Zn	66	10444.9	2.4	8.0831	0.147	1.8	ug/L	237	Standard
[>	Ge	72	380852.3	1.2				ug/L	413856	Standard
	As	75	454.9	2.5	0.4805	0.010	2.1	ug/L	-197	Standard
	Se	82	3.8	182.9	0.0369	0.059	158.7	ug/L	-5	Standard
[	Se-1	77	146.3	9.4	0.6417	0.150	23.4	ug/L	105	Standard
[>	Ga	71	2408.5	2.3				mg/L	225	Standard
[	Rb	85	22793.9	7.1				ug/L	28	Standard
[	Y	89	305730.9	1.6				ug/L	322845	Standard
[>	Rh	103	75.0	17.6				ug/L	92	Standard
[	Mo	98	48.8	7.4	0.0035	0.001	24.7	ug/L	18	Standard
	Ag	107	82.7	2.8	0.0038	0.000	8.1	ug/L	63	Standard
	Cd	111	82.9	1.2	0.0160	0.001	3.5	mg/L	20	Standard
	Cd	114	219.8	1.6	0.0178	0.001	4.8	ug/L	56	Standard
[>	In	115	585492.8	1.8				ug/L	657102	Standard
	Sn	118	329.0	6.6	-0.0123	0.003	22.6	ug/L	555	Standard
	Sb	123	27.6	15.4	0.0010	0.001	62.3	ug/L	62	Standard
[	Ba	135	43608.3	1.2	14.3595	0.231	1.6	ug/L	19	Standard
[	Ce	140	188846.3	2.2				ug/L	24	Standard
[>	Tb	159	854259.9	1.7				ug/L	910514	Standard
[	Ho	165	2502.9	1.4				ug/L	7	Standard
	Tl	203	158.0	15.5	0.0092	0.002	20.3	ug/L	13	Standard
	Tl	205	4.0	25.0	0.0120	0.002	20.8	ug/L	1	Standard
	Pb	206	64040.1	2.6	6.4859	0.165	2.5	ug/L	342	Standard
	Pb	207	52340.3	2.0	6.2318	0.176	2.8	ug/L	284	Standard
	Pb	208	244610.6	2.3	6.2742	0.159	2.5	ug/L	1363	Standard
	U	238	998.4	3.6	0.1024	0.002	1.8	ug/L	2	Standard
[>	Bi	209	450266.8	1.8				ug/L	470592	Standard

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Na	23	1.7	173.2	0.1622	0.272	167.9	mg/L	2	Standard
Mg	24	3367.0	3.5	-0.0011	0.000	11.3	mg/L	5586	Standard
K	39	13.3	21.7	0.1551	0.038	24.8	mg/L	5	Standard
Ca	43	41.7	42.1	-0.3166	0.749	236.5	mg/L	45	Standard
Fe	54	3746.4	3.8	1.4123	0.095	6.8	mg/L	350	Standard
Fe	57	1036.7	6.1	1.6430	0.138	8.4	mg/L	102	Standard
Sc-1	45	48780.1	3.7				mg/L	53004	Standard
Cl	35	3.7	68.6				ug/L	2	Standard
Kr	83	156.8	3.1				ug/L	157	Standard
Br	81	7.5	66.7				ug/L	3	Standard
P	31	41162.6	4.6				ug/L	91588	Standard
S	34	31928.6	1.5				ug/L	32556	Standard
Sr	88	90.0	33.3				ug/L	62	Standard
C	12	105.0	28.6				mg/L	133	Standard
N	14	0.0					mg/L	0	Standard
Hg	202	10.0	50.0				mg/L	7	Standard

QC Calculated Values

Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recovery
Li	7			
Be	9			
Al	27			
Sc	45			
Ti	47			
V	51			
Cr	52			
Cr	53			
Mn	55			
Co	59			
Ni	60			
Cu	65			
Zn	66			
Ge	72		92.025	
As	75			
Se	82			
Se-1	77			
Ga	71			
Rb	85			
Y	89			
Rh	103			

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[	Mo	98	
[	Ag	107	
[	Cd	111	
[	Cd	114	
>	In	115	89.102
[	Sn	118	
[	Sb	123	
[	Ba	135	
[	Ce	140	
>	Tb	159	
[	Ho	165	
[	Tl	203	
[	Tl	205	
[	Pb	206	
[	Pb	207	
[	Pb	208	
[	U	238	
>	Bi	209	95.681
[	Na	23	
[	Mg	24	
[	K	39	
[	Ca	43	
[	Fe	54	
[	Fe	57	
>	Sc-1	45	
[	Cl	35	
[	Kr	83	
[	Br	81	
[	P	31	
[	S	34	
[	Sr	88	
[	C	12	
[	N	14	
[	Hg	202	

QC Out of Limits

Measurement Type	Analyte	Mass	Out of Limits Message

Sample ID: L1211034101

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Method 6020 - Summary Report

Sample ID: QC Std 6

Sample Date/Time: Sunday, November 18, 2012 20:59:13

Number of Replicates: 3

Autosampler Position: 101

Sample Description:

Method File: C:\NexIONData\Method\6020a.mth

Aliquot Volume (mL):

Diluted to Volume (mL):

User Name: JYH user

Cumulative Autodilution Factor: 1

Nexion-ICP 200.8\6020

Concentration Results

IS	Analyte	Mass	Intensity	RSD	Conc.	SD	RSD	Units	Blank Intens.	Mode
[	Li	7	7063.6	48.0	420.3061	605.657	144.1	ug/L	8369	Standard
	Be	9	80.0	87.5	0.0495	0.058	116.5	ug/L	18	Standard
	Al	27	4853.0	107.6	0.0511	0.050	97.0	ug/L	215	Standard
[>	Sc	45	47553.2	41.9				ug/L	53004	Standard
	Ti	47	59.7	43.8	0.1108	0.100	89.8	ug/L	26	Standard
	V	51	1827.6	17.4	-0.0537	0.070	131.2	ug/L	3223	Standard
	Cr	52	4718.1	18.5	-0.3366	0.118	35.2	ug/L	10379	Standard
	Cr	53	130.8	13.4	0.0265	0.061	230.4	ug/L	192	Standard
	Mn	55	2042.5	28.9	0.0687	0.038	55.8	ug/L	1840	Standard
	Co	59	583.7	72.7	0.0514	0.052	101.2	ug/L	115	Standard
	Ni	60	170.0	58.8	0.0497	0.051	103.0	ug/L	75	Standard
	Cu	65	180.7	49.9	0.0368	0.054	145.8	ug/L	155	Standard
	Zn	66	218.3	15.7	0.0209	0.069	329.1	ug/L	237	Standard
[>	Ge	72	322271.4	35.2				ug/L	413856	Standard
	As	75	-65.9	136.8	0.0959	0.064	66.8	ug/L	-197	Standard
	Se	82	16.7	54.1	0.1725	0.071	41.1	ug/L	-5	Standard
[	Se-1	77	105.7	7.6	0.5406	0.581	107.5	ug/L	105	Standard
[>	Ga	71	166.7	25.5				mg/L	225	Standard
	Rb	85	18.3	83.3				ug/L	28	Standard
	Y	89	281563.8	26.8				ug/L	322845	Standard
[>	Rh	103	81.7	34.8				ug/L	92	Standard
	Mo	98	338.3	105.3	0.0757	0.075	99.1	ug/L	18	Standard
	Ag	107	328.0	93.6	0.0391	0.037	93.9	ug/L	63	Standard
	Cd	111	135.9	88.1	0.0353	0.037	104.5	mg/L	20	Standard
	Cd	114	380.1	92.3	0.0381	0.037	96.0	ug/L	56	Standard
[>	In	115	568018.4	25.6				ug/L	657102	Standard
	Sn	118	704.0	80.5	0.0292	0.048	163.7	ug/L	555	Standard
	Sb	123	386.5	105.0	0.0510	0.046	90.5	ug/L	62	Standard
[	Ba	135	174.7	90.0	0.0390	0.045	116.4	ug/L	19	Standard
	Ce	140	34.0	32.8				ug/L	24	Standard
[>	Tb	159	826067.0	20.1				ug/L	910514	Standard
	Ho	165	9.3	12.4				ug/L	7	Standard
	Tl	203	588.4	88.9	0.0493	0.041	83.2	ug/L	13	Standard
	Tl	205	17.0	66.3	0.0546	0.037	68.2	ug/L	1	Standard
	Pb	206	733.4	69.5	0.0503	0.046	90.8	ug/L	342	Standard
	Pb	207	626.0	66.4	0.0480	0.045	93.3	ug/L	284	Standard
	Pb	208	2880.5	68.0	0.0486	0.045	92.1	ug/L	1363	Standard
	U	238	398.0	107.7	0.0432	0.043	99.6	ug/L	2	Standard
[>	Bi	209	386363.7	17.8				ug/L	470592	Standard

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Na	23	0.0		0.0050	0.000	0.0	mg/L	2	Standard
Mg	24	1145.1	64.5	-0.0022	0.001	24.9	mg/L	5586	Standard
K	39	13.3	21.7	0.1983	0.135	68.2	mg/L	5	Standard
Ca	43	50.0	60.8	0.1149	0.744	647.7	mg/L	45	Standard
Fe	54	379.3	68.6	0.0014	0.102	7411.3	mg/L	350	Standard
Fe	57	145.0	10.3	0.1506	0.092	60.8	mg/L	102	Standard
Sc-1	45	47553.2	41.9				mg/L	53004	Standard
Cl	35	2.3	49.5				ug/L	2	Standard
Kr	83	309.7	57.8				ug/L	157	Standard
Br	81	4.2	124.9				ug/L	3	Standard
P	31	80412.9	59.1				ug/L	91588	Standard
S	34	9384.6	5.9				ug/L	32556	Standard
Sr	88	81.7	25.5				ug/L	62	Standard
C	12	66.7	53.2				mg/L	133	Standard
N	14	0.0					mg/L	0	Standard
Hg	202	5.0	100.0				mg/L	7	Standard

QC Calculated Values

Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recovery
Li	7			
Be	9	0.099		
Al	27	0.102		
Sc	45			
Ti	47	0.111		
V	51	-0.107		
Cr	52	-0.673		
Cr	53			
Mn	55	0.137		
Co	59	0.103		
Ni	60	0.099		
Cu	65	0.074		
Zn	66	0.042		
Ge	72		77.870	
As	75	0.192		
Se	82	0.345		
Se-1	77			
Ga	71			
Rb	85			
Y	89			
Rh	103			

Sample ID: QC Std 6

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[	Mo	98	0.076	
[	Ag	107	0.078	
[	Cd	111	0.071	
[	Cd	114		
>	In	115		86.443
[	Sn	118	0.058	
[	Sb	123	0.102	
[	Ba	135	0.078	
[	Ce	140		
>	Tb	159		
[	Ho	165		
[	Tl	203	0.099	
[	Tl	205		
[	Pb	206	0.101	
[	Pb	207	0.096	
[	Pb	208	0.097	
[	U	238	0.086	
>	Bi	209		82.102
[	Na	23		
[	Mg	24		
[	K	39		
[	Ca	43		
[	Fe	54		
[	Fe	57		
>	Sc-1	45		
[	Cl	35		
[	Kr	83		
[	Br	81		
[	P	31		
[	S	34		
[	Sr	88		
[	C	12		
[	N	14		
[	Hg	202		

QC Out of Limits

Measurement Type	Analyte	Mass	Out of Limits Message
QC Std 6	Be	9	
QC Std 6	Al	27	
QC Std 6	Ti	47	
QC Std 6	V	51	
QC Std 6	Cr	52	
QC Std 6	Mn	55	
QC Std 6	Co	59	
QC Std 6	Ni	60	
QC Std 6	Cu	65	
QC Std 6	Zn	66	

Sample ID: QC Std 6

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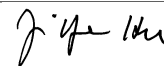
Ge 72 Int Std for QC Std	Ge	72	Rerun sample
QC Std 6	As	75	
QC Std 6	Se	82	
QC Std 6	Mo	98	
QC Std 6	Ag	107	
QC Std 6	Cd	111	
QC Std 6	Sn	118	
QC Std 6	Sb	123	
QC Std 6	Ba	135	
QC Std 6	Tl	203	
QC Std 6	Pb	206	
QC Std 6	Pb	207	
QC Std 6	Pb	208	
QC Std 6	U	238	

Sample ID: QC Std 6

Report Date/Time: Sunday, November 18, 2012 21:01:46

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Method 6020 - Summary Report

Sample ID: QC Std 7

Sample Date/Time: Sunday, November 18, 2012 21:02:26

Number of Replicates: 3

Autosampler Position: 102

Sample Description:

Method File: C:\NexIONData\Method\6020a.mth

Aliquot Volume (mL):

Diluted to Volume (mL):

User Name: JYH user

Cumulative Autodilution Factor: 1

Nexion-ICP 200.8\6020

Concentration Results

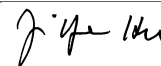
IS	Analyte	Mass	Intensity	RSD	Conc.	SD	RSD	Units	Blank Intens.	Mode
[	Li	7	7160.3	45.6	703.3670	463.396	65.9	ug/L	8369	Standard
	Be	9	3.3	86.6	-0.0073	0.002	29.7	ug/L	18	Standard
	Al	27	290.0	98.4	0.0014	0.005	331.5	ug/L	215	Standard
[>	Sc	45	51475.4	37.4				ug/L	53004	Standard
[	Ti	47	18.0	11.1	-0.0189	0.027	141.2	ug/L	26	Standard
	V	51	1444.3	22.3	-0.1419	0.036	25.7	ug/L	3223	Standard
	Cr	52	4616.4	24.7	-0.4864	0.111	22.7	ug/L	10379	Standard
	Cr	53	74.2	34.4	-0.0569	0.007	11.7	ug/L	192	Standard
	Mn	55	1544.7	22.5	0.0031	0.027	880.6	ug/L	1840	Standard
	Co	59	93.7	17.4	-0.0081	0.003	32.3	ug/L	115	Standard
	Ni	60	75.0	45.6	-0.0111	0.001	12.7	ug/L	75	Standard
	Cu	65	96.0	44.3	-0.0248	0.004	15.5	ug/L	155	Standard
	Zn	66	209.0	37.4	-0.0503	0.021	41.4	ug/L	237	Standard
[>	Ge	72	437641.3	43.5				ug/L	413856	Standard
	As	75	-283.0	96.4	-0.0236	0.106	450.0	ug/L	-197	Standard
	Se	82	-40.1	213.5	-0.2103	0.465	221.2	ug/L	-5	Standard
[	Se-1	77	93.7	8.3	0.0640	0.485	757.0	ug/L	105	Standard
[>	Ga	71	215.0	46.5				mg/L	225	Standard
[	Rb	85	26.7	47.2				ug/L	28	Standard
[	Y	89	291657.8	32.4				ug/L	322845	Standard
[>	Rh	103	78.3	47.0				ug/L	92	Standard
[	Mo	98	6.5	13.0	-0.0065	0.001	7.8	ug/L	18	Standard
	Ag	107	40.3	41.3	-0.0008	0.001	76.6	ug/L	63	Standard
	Cd	111	10.3	5.6	-0.0065	0.002	24.6	mg/L	20	Standard
	Cd	114	41.3	48.6	-0.0033	0.001	24.2	ug/L	56	Standard
[>	In	115	463968.1	36.6				ug/L	657102	Standard
	Sn	118	189.3	33.1	-0.0222	0.001	3.8	ug/L	555	Standard
	Sb	123	23.2	54.0	0.0011	0.001	60.6	ug/L	62	Standard
[	Ba	135	19.3	24.4	-0.0113	0.004	32.2	ug/L	19	Standard
[	Ce	140	36.0	38.9				ug/L	24	Standard
[>	Tb	159	682094.3	38.0				ug/L	910514	Standard
[	Ho	165	10.3	43.6				ug/L	7	Standard
	Tl	203	62.3	31.9	0.0025	0.000	14.7	ug/L	13	Standard
	Tl	205	3.7	78.7	0.0120	0.004	36.9	ug/L	1	Standard
	Pb	206	281.7	30.0	0.0024	0.008	324.9	ug/L	342	Standard
	Pb	207	224.0	30.2	-0.0034	0.003	102.9	ug/L	284	Standard
	Pb	208	1107.7	31.9	0.0005	0.006	1258.9	ug/L	1363	Standard
	U	238	2.0	100.0	-0.0012	0.000	29.5	ug/L	2	Standard
[>	Bi	209	376364.4	37.4				ug/L	470592	Standard

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Na	23	0.0		0.0050	0.000	0.0	mg/L	2	Standard
Mg	24	498.3	25.5	-0.0027	0.000	2.9	mg/L	5586	Standard
K	39	6.7	114.6	0.0999	0.198	198.7	mg/L	5	Standard
Ca	43	43.3	24.0	-0.1319	0.895	678.2	mg/L	45	Standard
Fe	54	269.3	80.8	-0.0576	0.056	96.5	mg/L	350	Standard
Fe	57	151.7	1.9	0.1491	0.128	86.1	mg/L	102	Standard
Sc-1	45	51475.4	37.4				mg/L	53004	Standard
Cl	35	1.3	114.6				ug/L	2	Standard
Kr	83	427.7	67.6				ug/L	157	Standard
Br	81	5.8	49.5				ug/L	3	Standard
P	31	62453.4	67.0				ug/L	91588	Standard
S	34	9694.0	14.0				ug/L	32556	Standard
Sr	88	75.0	24.0				ug/L	62	Standard
C	12	63.3	75.0				mg/L	133	Standard
N	14	0.0					mg/L	0	Standard
Hg	202	1.7	173.2				mg/L	7	Standard

QC Calculated Values

Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recovery
Li	7			
Be	9			
Al	27			
Sc	45			
Ti	47			
V	51			
Cr	52			
Cr	53			
Mn	55			
Co	59			
Ni	60			
Cu	65			
Zn	66			
Ge	72		105.747	
As	75			
Se	82			
Se-1	77			
Ga	71			
Rb	85			
Y	89			
Rh	103			

Sample ID: QC Std 7

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[	Mo	98	
[	Ag	107	
[	Cd	111	
[	Cd	114	
>	In	115	70.608
[	Sn	118	
[	Sb	123	
[	Ba	135	
[	Ce	140	
>	Tb	159	
[	Ho	165	
[	Tl	203	
[	Tl	205	
[	Pb	206	
[	Pb	207	
[	Pb	208	
[	U	238	
>	Bi	209	79.977
[	Na	23	
[	Mg	24	
[	K	39	
[	Ca	43	
[	Fe	54	
[	Fe	57	
>	Sc-1	45	
[	Cl	35	
[	Kr	83	
[	Br	81	
[	P	31	
[	S	34	
[	Sr	88	
[	C	12	
[	N	14	
[	Hg	202	

QC Out of Limits

Measurement Type	Analyte	Mass	Out of Limits Message
In 115 Int Std for QC Std	In	115	Rerun sample
Bi 209 Int Std for QC Std	Bi	209	Rerun sample

Sample ID: QC Std 7

Report Date/Time: Sunday, November 18, 2012 21:04:59

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Method 6020 - Summary Report

Sample ID: QC Std 8

Sample Date/Time: Sunday, November 18, 2012 21:05:41

Number of Replicates: 3

Autosampler Position: 202

Sample Description:

Method File: C:\NexIONData\Method\6020a.mth

Aliquot Volume (mL):

Diluted to Volume (mL):

User Name: JYH user

Cumulative Autodilution Factor: 1

Nexion-ICP 200.8\6020

Concentration Results

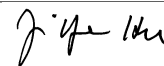
IS	Analyte	Mass	Intensity	RSD	Conc.	SD	RSD	Units	Blank Intens.	Mode
[	Li	7	8155.5	2.1	205.7960	194.357	94.4	ug/L	8369	Standard
	Be	9	421.7	9.9	0.1908	0.015	7.6	ug/L	18	Standard
	Al	27	245.0	19.5	-0.0002	0.000	239.7	ug/L	215	Standard
[>	Sc	45	53564.6	2.7				ug/L	53004	Standard
[	Ti	47	22.7	42.4	-0.0162	0.018	110.9	ug/L	26	Standard
	V	51	7464.5	3.0	0.3554	0.033	9.2	ug/L	3223	Standard
	Cr	52	18685.9	3.5	0.7673	0.081	10.6	ug/L	10379	Standard
	Cr	53	1224.2	5.5	0.7695	0.049	6.4	ug/L	192	Standard
	Mn	55	10598.0	3.3	0.5154	0.021	4.1	ug/L	1840	Standard
	Co	59	5334.6	3.3	0.3803	0.022	5.8	ug/L	115	Standard
	Ni	60	4619.4	2.3	1.5578	0.065	4.2	ug/L	75	Standard
	Cu	65	2379.9	2.8	0.7925	0.017	2.2	ug/L	155	Standard
	Zn	66	8606.1	2.6	6.0170	0.273	4.5	ug/L	237	Standard
[>	Ge	72	418358.6	2.2				ug/L	413856	Standard
	As	75	359.8	3.3	0.3851	0.004	1.1	ug/L	-197	Standard
	Se	82	55.1	5.3	0.4258	0.026	6.1	ug/L	-5	Standard
[	Se-1	77	159.0	8.5	0.6246	0.135	21.7	ug/L	105	Standard
[>	Ga	71	205.0	17.6				mg/L	225	Standard
[	Rb	85	30.0	0.0				ug/L	28	Standard
[	Y	89	312516.1	2.2				ug/L	322845	Standard
[>	Rh	103	96.7	19.6				ug/L	92	Standard
[	Mo	98	14.4	38.7	-0.0053	0.001	25.7	ug/L	18	Standard
	Ag	107	2956.0	3.8	0.3841	0.012	3.0	ug/L	63	Standard
	Cd	111	804.7	3.0	0.2354	0.009	3.7	mg/L	20	Standard
	Cd	114	2075.2	4.6	0.2319	0.007	3.0	ug/L	56	Standard
[>	In	115	625558.7	1.8				ug/L	657102	Standard
	Sn	118	359.0	3.1	-0.0115	0.002	15.2	ug/L	555	Standard
	Sb	123	2970.3	2.9	0.3955	0.009	2.3	ug/L	62	Standard
[	Ba	135	2381.2	4.6	0.7149	0.034	4.8	ug/L	19	Standard
[	Ce	140	32.7	22.6				ug/L	24	Standard
[>	Tb	159	897928.2	1.8				ug/L	910514	Standard
[	Ho	165	7.7	15.1				ug/L	7	Standard
	Tl	203	1006.0	1.8	0.0766	0.002	2.0	ug/L	13	Standard
	Tl	205	31.0	14.1	0.0824	0.011	14.0	ug/L	1	Standard
	Pb	206	2321.2	3.7	0.1982	0.007	3.5	ug/L	342	Standard
	Pb	207	1944.5	2.4	0.1916	0.003	1.4	ug/L	284	Standard
	Pb	208	9068.1	2.4	0.1943	0.003	1.8	ug/L	1363	Standard
	U	238	3747.8	5.0	0.3802	0.014	3.7	ug/L	2	Standard
[>	Bi	209	460220.1	1.4				ug/L	470592	Standard

Sample ID: QC Std 8

Report Date/Time: Sunday, November 18, 2012 21:08:13

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Approved: November 19, 2012



Na	23	0.0		0.0050	0.000	0.0	mg/L	2	Standard
Mg	24	731.7	22.1	-0.0026	0.000	3.5	mg/L	5586	Standard
K	39	11.7	65.5	0.1140	0.099	86.6	mg/L	5	Standard
Ca	43	38.3	45.8	-0.6110	0.744	121.8	mg/L	45	Standard
Fe	54	405.9	9.8	0.0007	0.011	1695.8	mg/L	350	Standard
Fe	57	148.3	22.4	0.1031	0.056	54.5	mg/L	102	Standard
Sc-1	45	53564.6	2.7				mg/L	53004	Standard
Cl	35	2.7	57.3				ug/L	2	Standard
Kr	83	178.9	2.5				ug/L	157	Standard
Br	81	8.3	105.4				ug/L	3	Standard
P	31	107576.5	2.3				ug/L	91588	Standard
S	34	28503.5	0.3				ug/L	32556	Standard
Sr	88	70.0	14.3				ug/L	62	Standard
C	12	110.0	16.4				mg/L	133	Standard
N	14	0.0					mg/L	0	Standard
Hg	202	1.7	173.2				mg/L	7	Standard

QC Calculated Values

Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recovery
Li	7			
Be	9	95.402		
Al	27			
Sc	45			
Ti	47			
V	51	88.846		
Cr	52	95.911		
Cr	53			
Mn	55	103.074		
Co	59	95.071		
Ni	60	97.364		
Cu	65	99.057		
Zn	66	96.271		
Ge	72		101.088	
As	75	96.278		
Se	82	106.442		
Se-1	77			
Ga	71			
Rb	85			
Y	89			
Rh	103			

Sample ID: QC Std 8

Report Date/Time: Sunday, November 18, 2012 21:08:13

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Approved: November 19, 2012



[	Mo	98		
[	Ag	107	96.014	
[	Cd	111	98.074	
[	Cd	114		
>	In	115		95.200
[	Sn	118		
[	Sb	123	98.870	
[	Ba	135	95.324	
[	Ce	140		
>	Tb	159		
[	Ho	165		
[	Tl	203	95.788	
[	Tl	205		
[	Pb	206		
[	Pb	207		
[	Pb	208	97.162	
[	U	238	95.044	
>	Bi	209		97.796
[	Na	23		
[	Mg	24		
[	K	39		
[	Ca	43		
[	Fe	54		
[	Fe	57		
>	Sc-1	45		
[	Cl	35		
[	Kr	83		
[	Br	81		
[	P	31		
[	S	34		
[	Sr	88		
[	C	12		
[	N	14		
[	Hg	202		

QC Out of Limits

Measurement Type	Analyte	Mass	Out of Limits Message

Sample ID: QC Std 8

Report Date/Time: Sunday, November 18, 2012 21:08:13

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Approved: November 19, 2012



2.2.3 Metals CVAA Data (Mercury)

2.2.3.1 Summary Data



Login Number: L12110393
Department: Metals - AA
Analyst: Pierce Morris

METHOD

Preparation: SW-846 7470

Analysis: SW-846 7470

HOLDING TIMES

Sample Preparation: All holding times were met.

Sample Analysis: All holding times were met.

PREPARATION

Sample preparation proceeded normally.

CALIBRATION

Initial Calibration: All acceptance criteria were met.

Alternate Source Standards: All acceptance criteria were met.

Interference Check Standards: All acceptance criteria were met.

Continuing Calibration Verification: All acceptance criteria were met.

Continuing Calibration Blank: All acceptance criteria were met.

BATCH QA/QC

Method Blank: All acceptance criteria were met.

Laboratory Control Sample: All acceptance criteria were met.

Serial Dilution/Post Digestion Spikes: WG414893 - All acceptance criteria were met.

Matrix Spikes: All acceptance criteria were met.

SAMPLES

Samples: All acceptance criteria were met.

Narrative ID: 56367

Approved By: Sheri Pfalzgraf

A handwritten signature in black ink, appearing to read "Sheri L. Pfalzgraf", is written over the printed name.

Certificate of Analysis

Certificate of Analysis

Sample #: L12110393-01	PrePrep Method: N/A	Instrument: HYDRA
Client ID: BLDG 4-PIT-SSP1-GW-11082012	Prep Method: 7470A	Prep Date: 11/20/2012 09:08
Matrix: Water	Analytical Method: 7470A	Cal Date: 11/21/2012 08:45
Workgroup #: WG414893	Analyst: PDM	Run Date: 11/21/2012 09:20
Collect Date: 11/08/2012 14:11	Dilution: 1	File ID: HY.112112.092010
Sample Tag: 01	Units: mg/L	

Analyte	CAS #	Result	Qual	RL	MDL
Mercury	7439-97-6		U	0.000200	0.000100
U	Not detected at or above adjusted sample detection limit.				

Sample #: L12110393-02	PrePrep Method: N/A	Instrument: HYDRA
Client ID: BLDG 4-PIT-SSP1-GW-11082012	Prep Method: 7470A	Prep Date: 11/20/2012 09:08
Matrix: Water	Analytical Method: 7470A	Cal Date: 11/21/2012 08:45
Workgroup #: WG414893	Analyst: PDM	Run Date: 11/21/2012 09:23
Collect Date: 11/08/2012 14:11	Dilution: 1	File ID: HY.112112.092347
Sample Tag: 01	Units: mg/L	

Analyte	CAS #	Result	Qual	RL	MDL
Mercury, Dissolved	7439-97-6		U	0.000200	0.000100
U	Not detected at or above adjusted sample detection limit.				

Sample #: L12110393-03	PrePrep Method: N/A	Instrument: HYDRA
Client ID: DUP-GW-110812	Prep Method: 7470A	Prep Date: 11/20/2012 09:08
Matrix: Water	Analytical Method: 7470A	Cal Date: 11/21/2012 08:45
Workgroup #: WG414893	Analyst: PDM	Run Date: 11/21/2012 09:25
Collect Date: 11/08/2012 00:01	Dilution: 1	File ID: HY.112112.092526
Sample Tag: 01	Units: mg/L	

Analyte	CAS #	Result	Qual	RL	MDL
Mercury	7439-97-6	0.000172	J	0.000200	0.000100
J	The analyte was positively identified, but the quantitation was below the RL.				

Sample #: L12110393-04	PrePrep Method: N/A	Instrument: HYDRA
Client ID: DUP-GW-110812	Prep Method: 7470A	Prep Date: 11/20/2012 09:08
Matrix: Water	Analytical Method: 7470A	Cal Date: 11/21/2012 08:45
Workgroup #: WG414893	Analyst: PDM	Run Date: 11/21/2012 09:27
Collect Date: 11/08/2012 00:01	Dilution: 1	File ID: HY.112112.092713
Sample Tag: 01	Units: mg/L	

Certificate of Analysis

Analyte	CAS #	Result	Qual	RL	MDL
Mercury, Dissolved	7439-97-6	0.000151	J	0.000200	0.000100
J	The analyte was positively identified, but the quantitation was below the RL.				

2.2.3.2 QC Summary

Example Cold Vapor Mercury Calculations

Hydra AA Mercury Analyzer

1.0 Initial Calibration (ICAL) Parameters

The system performs linear regression from data consisting of a blank and five standards.

2.0 Calculating the concentration (C) of an element in water using data from run log and quantitation report (note: the data system performs this calculation automatically when correction factors have been entered):

$$Cx = Cs \times \frac{Vf}{Vi} \times D$$

Where:

Cs = Concentration computed by the data system (ug/L)

Vf = Diluted to Volume (mL)

Vi = Aliquot Volume (mL)

D = Manual dilution factor, if required (10X = 10)

Cx = Concentration of element in ppb (ug/L)

Example:

0.1

40

40

1

0.1

3.0 Calculating the concentration (C) of an element in soil using data from prep log and quantitation report (note: the data system performs this calculation automatically when correction factors have been entered):

$$Cx = Cs \times \frac{Vf}{Ws} \times D$$

Where:

Cs = Concentration computed by the data system (ug/L)

Vf = Diluted to volume (mL)

Ws = Aliquot weight (g)

D = Manual dilution factor

Cx = Concentration of element in ug/kg

Example:

0.1

40

0.6

1

6.67

4.0 Adjusting the concentration to dry weight:

$$Cdry = \frac{Cx \times 100}{Px}$$

Cx = Concentration calculated as received (wet basis)

Px = Percent solids of sample (%wt)

$Cdry$ = Concentration calculated as dry weight (ug/kg)

6.67

80

8.33

8.33 ug/kg = 0.00833 mg/kg

TCLP Non-Volatile

Analyst(s):

Date: 11-19-12

Filter Lot #: 5365538

Microbac SOP: TCLP01 Rev #: 09

Analyst / Date		Analyst / Date	
RUC 11-19-12		RUC 11-20-12	
Time On	Temp On °C	Time Off	Temp Off °C
1600	24	800	23

Agitator Speed 30 ± 2 rpm ☒

Jug #	Sample #	Tests	Method	Fluid #	Matrix *	% Solid	Pretest pH		Int. Wt. (g)	Fluid Vol. (mL)	Final extract pH
							Initial	Final			
D	11-50301	ME	1311	F7885	S/S	100	7	2	100.03	2000	5
	02						7	2	100.07		5
	03	(SpK)					7	2	100.09		5
	11-51501			F2301	S		14	13	25.01	500	12
	11-52401*			F7885	S		8	2	100.07	2000	9
N/A	FBL(1)				N/A	N/A	N/A	N/A	N/A		N/A
	FBL(2)			F2301							
<i>Rwc 11-19-12</i>											

*Matrix Code: (S = solid, sand, soil or sludge) (P = paint) (O = organic) (W = water or aqueous waste)

D = Disposable plastic jug

TCLP Pretest weight will be 5.0 g (± 0.1) unless otherwise noted.

Temperature shall be maintained at $23^{\circ} \pm 2$ for 18 ± 2 hours unless otherwise noted.

Comments: *SK is METAL SHAVINGS - expecting high METAL content - Cu

Peer Review By:

**Microbac Laboratories Inc.
Metals Digest Log**

Workgroup: WG414772
Analyst: REK
Spike Analyst: REK
Method: 7470A
Run Date: 11/20/2012 09:08
Hotblock Start Temp: 93.2 @ 09:00
Hotblock End Temp: 93 @ 11:00
Instrument: HB5

SOP: ME404 Revision 13
Spike Solution: STD55017
Spike Witness: ERP
Digestion Tubes Lot #: COA16400
H2S04 Lot #: COA16424
HN03 Lot #: COA16520
K2S208 1:1 Lot #: RGT16987
KMn04 1:1 Lot #: RGT17980
Mercury Water ICV Lot #: STD55019
HG H2O STDS 10PPM Lot #: STD55025

	SAMPLE #	Type	Matrix	Initial Amount	Final Volume	Spike Amount	Due Date
1	WG414772-03	BLANK	1	40 mL	40 mL		
2	WG414736-01	FBLK1	17	4 mL	40 mL		
3	WG414736-02	FBLK2	17	4 mL	40 mL		
4	WG414772-04	LCS	1	40 mL	40 mL	4 mL	
5	L12110393-01	SAMP	1	40 mL	40 mL		11/27/12
6	L12110393-02	SAMP	1	40 mL	40 mL		11/27/12
7	L12110393-03	SAMP	1	40 mL	40 mL		11/27/12
8	L12110393-04	SAMP	1	40 mL	40 mL		11/27/12
9	L12110492-01	SAMP	1	40 mL	40 mL		11/27/12
10	WG414772-01	REF	1	40 mL	40 mL		
11	L12110492-02	RS01	1	40 mL	40 mL		11/27/12
12	L12110492-03	SAMP	1	40 mL	40 mL		11/27/12
13	WG414772-05	MS	1	36 mL	40 mL	4 mL	
14	L12110492-05	MS01	1	36 mL	40 mL	4 mL	11/27/12
15	WG414772-06	MSD	1	36 mL	40 mL	4 mL	
16	L12110492-06	SD01	1	36 mL	40 mL	4 mL	11/27/12
17	L12110497-01	SAMP	1	40 mL	40 mL		11/27/12
18	WG414772-02	REF	2	40 mL	40 mL		
19	L12110500-11	SAMP	2	40 mL	40 mL		12/14/12
20	L12110503-01	SAMP	17	4 mL	40 mL		11/26/12
21	L12110503-02	SAMP	17	4 mL	40 mL		11/26/12
22	L12110503-03	SAMP	17	4 mL	40 mL		11/26/12
23	L12110515-01	SAMP	17	4 mL	40 mL		11/21/12
24	L12110523-01	SAMP	1	40 mL	40 mL		11/30/12
25	L12110524-01	SAMP	17	4 mL	40 mL		11/21/12
26	WG414772-07	DUP	1	40 mL	40 mL		

Analyst: 

Reviewer: 

HB_DIG - Modified 07/26/2012
PDF ID: 2671514
Report generated: 11/28/2012 13:02



Microbac Laboratories Inc. **Instrument Run Log**

Instrument: HYDRA Dataset: 112112A.PRN
 Analyst1: PDM Analyst2: N/A
 Method: 7470A/245.1 SOP: ME404 Rev: 13
 Maintenance Log ID: 44066

Calibration Std: STD55025 ICV Std: STD55019 Post Spike: STD55025
 ICSA: N/A ICSAB: N/A Int. Std: _____
 CCV: _____ LLCCV: _____

414893

Workgroups:

Comments:

Seq.	File ID	Sample	ID	Prep	Dil	Reference	Date/Time
1	HY.112112.083610	WG414929-01	Calibration Point		1		11/21/12 08:36
2	HY.112112.083800	WG414929-02	Calibration Point		1		11/21/12 08:38
3	HY.112112.083937	WG414929-03	Calibration Point		1		11/21/12 08:39
4	HY.112112.084117	WG414929-04	Calibration Point		1		11/21/12 08:41
5	HY.112112.084255	WG414929-05	Calibration Point		1		11/21/12 08:42
6	HY.112112.084523	WG414929-06	Calibration Point		1		11/21/12 08:45
7	HY.112112.084748	WG414929-07	Initial Calibration Verification		1		11/21/12 08:47
8	HY.112112.084935	WG414929-08	Initial Calib Blank		1		11/21/12 08:49
9	HY.112112.085134	WG414929-09	CCV		1		11/21/12 08:51
10	HY.112112.085332	WG414929-10	CCB		1		11/21/12 08:53
11	HY.112112.090028	WG414772-03	Method/Prep Blank		1		11/21/12 09:00
12	HY.112112.091250	WG414772-03	Method/Prep Blank	40/40	1		11/21/12 09:12
13	HY.112112.091447	WG414772-04	Laboratory Control S	40/40	1		11/21/12 09:14
14	HY.112112.091646	WG414736-01	TCLP Fluid Blank 1		1		11/21/12 09:16
15	HY.112112.091834	WG414736-02	TCLP Fluid Blank 2		1		11/21/12 09:18
16	HY.112112.092010	L12110393-01	BLDG 4-PIT-SSP1-GW-1108	40/40	1		11/21/12 09:20
17	HY.112112.092159	WG414893-01	Post Digestion Spike		1	L12110393-01	11/21/12 09:21
18	HY.112112.092347	L12110393-02	BLDG 4-PIT-SSP1-GW-1108	40/40	1		11/21/12 09:23
19	HY.112112.092526	L12110393-03	DUP-GW-110812	40/40	1		11/21/12 09:25
20	HY.112112.092713	L12110393-04	DUP-GW-110812	40/40	1		11/21/12 09:27
21	HY.112112.092901	WG414929-11	CCV		1		11/21/12 09:29
22	HY.112112.093038	WG414929-12	CCB		1		11/21/12 09:30
23	HY.112112.093216	L12110492-01	MW-1001	40/40	1		11/21/12 09:32
24	HY.112112.093419	WG414772-01	Reference Sample	40/40	1	L12110492-02	11/21/12 09:34
25	HY.112112.093619	L12110492-03	MW-0901FD	40/40	1		11/21/12 09:36
26	HY.112112.093817	L12110492-05	MW-0901MS	36/40	1	WG414772-05	11/21/12 09:38
27	HY.112112.093958	L12110492-06	MW-0901MSD	36/40	1	WG414772-06	11/21/12 09:39
28	HY.112112.094148	L12110497-01	LF30/31-EWTS-EFFLUENT-	40/40	1		11/21/12 09:41
29	HY.112112.094327	L12110500-11	P214-514		1	WG414772-02	11/21/12 09:43
30	HY.112112.094507	WG414772-07	Duplicate		1	L12110500-11	11/21/12 09:45
31	HY.112112.094644	L12110503-01	STP-10		1		11/21/12 09:46
32	HY.112112.095051	L12110503-01	STP-10	4/40	1		11/21/12 09:50
33	HY.112112.095243	WG414929-13	CCV		1		11/21/12 09:52
34	HY.112112.095421	WG414929-14	CCB		1		11/21/12 09:54

Page: 1 Approved: November 21, 2012

Maren Beery



Microbac Laboratories Inc.
Instrument Run Log

Instrument: HYDRA Dataset: 112112A.PRN
 Analyst1: PDM Analyst2: N/A
 Method: 7470A/245.1 SOP: ME404 Rev: 13
 Maintenance Log ID: 44066

Calibration Std: STD55025 ICV Std: STD55019 Post Spike: STD55025
 ICSA: N/A ICSAB: N/A Int. Std: _____
 CCV: _____ LLCCV: _____

414893

Workgroups:

Comments:

Seq.	File ID	Sample	ID	Prep	Dil	Reference	Date/Time
35	HY.112112.095609	WG414893-02	Post Digestion Spike		1	L12110503-01	11/21/12 09:56
36	HY.112112.095748	L12110503-02	STP-11	4/40	1		11/21/12 09:57
37	HY.112112.095948	L12110503-03	STP-12	4/40	1		11/21/12 09:59
38	HY.112112.100127	L12110515-01	NOVELIS BLUE	4/40	1		11/21/12 10:01
39	HY.112112.100318	L12110523-01	MW-0901ER	40/40	1		11/21/12 10:03
40	HY.112112.100459	L12110524-01	GT120062	4/40	1		11/21/12 10:04
41	HY.112112.100647	WG414772-02	Reference Sample		2	L12110500-11	11/21/12 10:06
42	HY.112112.100826	WG414893-03	Serial Dilution		10	L12110500-11	11/21/12 10:08
43	HY.112112.104005	WG414929-15	CCV		1		11/21/12 10:40
44	HY.112112.104142	WG414929-16	CCB		1		11/21/12 10:41
45	HY.112112.104731	WG414772-07	Duplicate		2	L12110500-11	11/21/12 10:47
46	HY.112112.104912	WG414929-17	CCV		1		11/21/12 10:49
47	HY.112112.105101	WG414929-18	CCB		1		11/21/12 10:51

Comments

Seq.	Rerun	Dil.	Reason	Analytes
29			Reanalyzed at a dilution	
30			Reanalyzed at a dilution	
31			Reanalyzed due to low recovery.	
41			Not reported due to noncompliant CCV results	
42			Not reported due to noncompliant CCV results	
45			Not reported due to noncompliant CCV results	

Page: 2 Approved: November 21, 2012

Maren Beery



Microbac Laboratories Inc.

Data Checklist

Date: 21-NOV-2012

Analyst: PDM

Analyst: NA

Method: 7471A/245.1

Instrument: HYDRA

Curve Workgroup: 414929

Runlog ID: 50150

Analytical Workgroups: 414893

Calibration/Linearity	X
ICV/CCV	X
ICV RSD <= 3% (EPA 200.7 only)	
ICB/CCB	X
ICSA/ICSAB	
CRI	
Blank/LCS	X
MS/MSD	X
Post Spike/Serial Dilution	X
Upload Results	X
Data Qualifiers	
Generate PDF Instrument Data	X
Sign/Annotate PDF Data	X
Upload Curve Data	X
Workgroup Forms	X
Case Narrative	0393,0492,0497,0523
Client Forms	
Level X	
Level 3	
Level 4	0393,0492,0497,0523
Check for compliance with method and project specific requirements	X
Check the completeness of reported information	X
Check the information for the report narrative	X
Primary Reviewer	PDM
Secondary Reviewer	MMB
Comments	

Primary Reviewer:
21-NOV-2012

Secondary Reviewer:
28-NOV-2012

Pierre Morris *Maren Berry*

CHECKLIST1 - Modified 03/05/2008

Generated: NOV-28-2012 13:07:57



Microbac Laboratories Inc.
HOLDING TIMES
EQUIVALENT TO AFCEE FORM 9

Analytical Method: 7470A

AAB#: WG414893

Login Number: L12110393

Client ID	ID	Date Collected	TCLP Date	Time Held	Max Hold	Q	Extract Date	Time Held	Max Hold	Q	Run Date	Time Held	Max Hold	Q
BLDG 4-PIT-SSP1-GW-11082	01	11/08/12					11/20/2012	11.8	28		11/21/12	12.8	28	
DUP-GW-110812	03	11/08/12					11/20/2012	12.4	28		11/21/12	13.4	28	

* = SEE PROJECT QAPP REQUIREMENTS

HOLD_TIMES - Modified 03/06/2008
PDF File ID: 2673086
Report generated 11/21/2012 11:29



METHOD BLANK SUMMARY

Login Number: L12110393
 Blank File ID: HY.112112.091250
 Prep Date: 11/20/12 09:08
 Analyzed Date: 11/21/12 09:12
 Analyst: PDM

Work Group: WG414893
 Blank Sample ID: WG414772-03
 Instrument ID: HYDRA
 Method: 7470A

This Method Blank Applies To The Following Samples:

Client ID	Lab Sample ID	Lab File ID	Time Analyzed	TAG
LCS	WG414772-04	HY.112112.091447	11/21/12 09:14	01
BLDG 4-PIT-SSP1-GW-11082012	L12110393-01	HY.112112.092010	11/21/12 09:20	01
BLDG 4-PIT-SSP1-GW-11082012	L12110393-02	HY.112112.092347	11/21/12 09:23	01
DUP-GW-110812	L12110393-03	HY.112112.092526	11/21/12 09:25	01
DUP-GW-110812	L12110393-04	HY.112112.092713	11/21/12 09:27	01
DUP	WG414772-07	HY.112112.104731	11/21/12 10:47	DL01

Report Name: BLANK_SUMMARY
 PDF File ID: 2673087
 Report generated 11/21/2012 11:29



Microbac Laboratories Inc.
METHOD BLANK REPORT

Login Number: L12110393 Prep Date: 11/20/12 09:08 Sample ID: WG414772-03
Instrument ID: HYDRA Run Date: 11/21/12 09:12 Prep Method: 7470A
File ID: HY.112112.091250 Analyst: PDM Method: 7470A
Workgroup (AAB#): WG414893 Matrix: Water Units: mg/L
Contract #: _____ Cal ID: HYDRA - 21-NOV-12

Analytes	MDL	RL	Concentration	Dilution	Qualifier
Mercury	0.000100	0.000200	0.000122	1	J

MDL Method Detection Limit

RL Reporting/Practical Quantitation Limit

ND Analyte Not detected at or above reporting limit

* |Analyte concentration| > RL

Report Name: BLANK

PDF ID: 2673088

21-NOV-2012 11:29



Microbac Laboratories Inc.
LABORATORY CONTROL SAMPLE (LCS)

Login Number: L12110393 Run Date: 11/21/2012 Sample ID: WG414772-04
Instrument ID: HYDRA Run Time: 09:14 Prep Method: 7470A
File ID: HY.112112.091447 Analyst: PDM Method: 7470A
Workgroup (AAB#): WG414893 Matrix: Water Units: mg/L
QC Key: WATERLOO Lot#: STD55017 Cal ID: HYDRA - 21-NOV-12

Analytes	Expected	Found	% Rec	LCS Limits	Q
Mercury	0.00400	0.00409	102	85 - 115	

LCS - Modified 03/06/2008
PDF File ID: 2673089
Report generated: 11/21/2012 11:29



MATRIX SPIKE AND MATRIX SPIKE DUP (MS/MSD)

Loginnum: L12110393 Cal ID: HYDRA - Worknum: WG414893
 Instrument ID: HYDRA Contract #: _____ Method: 7470A
 Parent ID: WG414772-01 File ID: HY.112112.093419 Dil: 1 Matrix: WATER
 Sample ID: WG414772-05 MS File ID: HY.112112.093817 Dil: 1 Units: mg/L
 Sample ID: WG414772-06 MSD File ID: HY.112112.093958 Dil: 1

Analyte	Parent	MS Spiked	MS Found	MS %Rec	MSD Spiked	MSD Found	MSD %Rec	%RPD	%Rec Limits	RPD Limit	Q
Mercury	ND	0.00444	0.00437	98.2	0.00444	0.00439	98.7	0.508	85 - 115	20	

* FAILS %REC LIMIT

FAILS RPD LIMIT

NOTE: This is an internal quality control sample.

MATRIX SPIKE AND MATRIX SPIKE DUP (MS/MSD)

Loginnum: L12110393 Cal ID: HYDRA - Worknum: WG414893
 Instrument ID: HYDRA Contract #: _____ Method: 7470A
 Parent ID: WG414772-01 File ID: HY.112112.093419 Dil: 1 Matrix: WATER
 Sample ID: WG414772-05 MS File ID: HY.112112.093817 Dil: 1 Units: mg/L
 Sample ID: WG414772-06 MSD File ID: HY.112112.093958 Dil: 1

Analyte	Parent	MS Spiked	MS Found	MS %Rec	MSD Spiked	MSD Found	MSD %Rec	%RPD	%Rec Limits	RPD Limit	Q
Mercury, Dissolved	ND	0.00444	0.00437	98.2	0.00444	0.00439	98.7	0.508	85 - 115	20	

* FAILS %REC LIMIT

FAILS RPD LIMIT

NOTE: This is an internal quality control sample.

Microbac Laboratories Inc.
POST SPIKE REPORT

Sample Login ID: L12110393

Worknum: WG414893

Instrument ID: HYDRA

Method: 7470A

Post Spike ID: WG414893-01

File ID: HY.112112.092159

Dil: 1

Units: ug/L

Sample ID: L12110393-01

File ID: HY.112112.092010

Dil: 1

Matrix: Water

Analyte	Post Spike Result	C	Sample Result	C	Spike Added(SA)	% R	Control Limit %R	Q
MERCURY	0.883		0	U	1	88.3	85 - 115	

N = % Recovery exceeds control limits

F = Result is between MDL and RL

U = Sample result is below MDL. A value of zero is used in the calculation

POST_SPIKE - Modified 03/06/2008
PDF File ID: 2673085
Report generated: 11/21/2012 11:29



Login Number: L12110393
Analytical Method: 7470A
ICAL Worknum: WG414929

Workgroup (AAB#): WG414893
Instrument ID: HYDRA
Initial Calibration Date: 11/21/2012 08:45

Analyte	WG414929-01		WG414929-02		WG414929-03		WG414929-04		WG414929-05		WG414929-06	
	STD	INT	STD	INT	STD	INT	STD	INT	STD	INT	STD	INT
Mercury	0	2800	0.200	7221	1.00	50385	2.00	130149	5.00	302954	10.0	607711

INT = Instrument intensity
R = Coefficient of correlation
Q = Data Qualifier
* = Out of Compliance; R < 0.995

INT_CAL_HG_FU - Modified 03/06/2008
PDF File ID: 2673090
Report generated 11/21/2012 11:29



Login Number: L12110393
Analytical Method: 7470A
ICAL Worknum: WG414929

Workgroup (AAB#): WG414893
Instrument ID: HYDRA
Initial Calibration Date: 11/21/2012 08:45

Analyte	R	Q
Mercury	0.9995	

INT = Instrument intensity
R = Coefficient of correlation
Q = Data Qualifier
* = Out of Compliance; $R < 0.995$

INT_CAL_HG_FU - Modified 03/06/2008
PDF File ID: 2673090
Report generated 11/21/2012 11:29



Microbac Laboratories Inc.
INITIAL CALIBRATION BLANK (ICB)

Login Number: L12110393 Run Date: 11/21/2012 Sample ID: WG414929-08
Instrument ID: HYDRA Run Time: 08:49 Method: 7470A
File ID: HY.112112.084935 Analyst: PDM Units: ug/L
Workgroup (AAB#): WG414893 Cal ID: HYDRA - 21-NOV-12
Matrix: WATER

Analytes	MDL	RDL	Concentration	Qualifier
MERCURY	.1	.2	.1	U

ICB - Modified 07/14/2009
PDF File ID: 2673092
Report generated 11/21/2012 11:29



Microbac Laboratories Inc.
CONTINUING CALIBRATION BLANK (CCB)

Login Number: L12110393 Run Date: 11/21/2012 Sample ID: WG414929-10
Instrument ID: HYDRA Run Time: 08:53 Method: 7470A
File ID: HY.112112.085332 Analyst: PDM Units: ug/L
Workgroup (AAB#): WG414893 Cal ID: HYDRA - 21-NOV-12
Matrix: WATER QAPP: WATERLOO

Analytes	MDL	RDL	Concentration	Qualifier
Mercury	0.100	0.200	0.100	U

U = Result is less than MDL.
F = Result is between MDL and RL.
* = Result is above RL.

CCB - Modified 03/05/2008
PDF File ID: 2673094
Report generated 11/21/2012 11:29



Microbac Laboratories Inc.
CONTINUING CALIBRATION BLANK (CCB)

Login Number: L12110393 Run Date: 11/21/2012 Sample ID: WG414929-12
Instrument ID: HYDRA Run Time: 09:30 Method: 7470A
File ID: HY.112112.093038 Analyst: PDM Units: ug/L
Workgroup (AAB#): WG414893 Cal ID: HYDRA - 21-NOV-12
Matrix: WATER QAPP: WATERLOO

Analytes	MDL	RDL	Concentration	Qualifier
Mercury	0.100	0.200	-0.113	F

U = Result is less than MDL.
F = Result is between MDL and RL.
* = Result is above RL.

CCB - Modified 03/05/2008
PDF File ID: 2673094
Report generated 11/21/2012 11:29



Microbac Laboratories Inc.
CONTINUING CALIBRATION BLANK (CCB)

Login Number: L12110393 Run Date: 11/21/2012 Sample ID: WG414929-14
Instrument ID: HYDRA Run Time: 09:54 Method: 7470A
File ID: HY.112112.095421 Analyst: PDM Units: ug/L
Workgroup (AAB#): WG414893 Cal ID: HYDRA - 21-NOV-12
Matrix: WATER QAPP: WATERLOO

Analytes	MDL	RDL	Concentration	Qualifier
Mercury	0.100	0.200	0.100	U

U = Result is less than MDL.
F = Result is between MDL and RL.
* = Result is above RL.

CCB - Modified 03/05/2008
PDF File ID: 2673094
Report generated 11/21/2012 11:29



Microbac Laboratories Inc.
CONTINUING CALIBRATION BLANK (CCB)

Login Number: L12110393 Run Date: 11/21/2012 Sample ID: WG414929-16
Instrument ID: HYDRA Run Time: 10:41 Method: 7470A
File ID: HY.112112.104142 Analyst: PDM Units: ug/L
Workgroup (AAB#): WG414893 Cal ID: HYDRA - 21-NOV-12
Matrix: WATER QAPP: WATERLOO

Analytes	MDL	RDL	Concentration	Qualifier
Mercury	0.100	0.200	0.143	F

U = Result is less than MDL.
F = Result is between MDL and RL.
* = Result is above RL.

CCB - Modified 03/05/2008
PDF File ID: 2673094
Report generated 11/21/2012 11:29



Microbac Laboratories Inc.
INITIAL CALIBRATION VERIFICATION (ICV)
(Alternate Source)

Login Number: L12110393 Run Date: 11/21/2012 Sample ID: WG414929-07
Instrument ID: HYDRA Run Time: 08:47 Method: 7470A
File ID: HY.112112.084748 Analyst: PDM Units: ug/L
Workgroup (AAB#): WG414893 Cal ID: HYDRA - 21-NOV-12
QC Key: WATERL00

Analyte	Expected	Found	%REC	LIMITS	Q
Mercury	2	2.10	105	90 - 110	

* Exceeds LIMITS Limit

ICV - Modified 03/06/2008
PDF File ID: 2673091
Report generated 11/21/2012 11:29



Microbac Laboratories Inc.
CONTINUING CALIBRATION VERIFICATION (CCV)

Login Number: L12110393 Run Date: 11/21/2012 Sample ID: WG414929-09
Instrument ID: HYDRA Run Time: 08:51 Method: 7470A
File ID: HY.112112.085134 Analyst: PDM QC Key: WATERL00
Workgroup (AAB#): WG414893 Cal ID: HYDRA - 21-NOV-12
Matrix: WATER

Analyte		Expected	Found	UNITS	%REC	LIMITS		Q
Mercury, Total		0.00200	0.00195	mg/L	97.5	80 - 120		

* Exceeds LIMITS Criteria

CCV - Modified 03/05/2008
PDF File ID: 2673093
Report generated 11/21/2012 11:29



Microbac Laboratories Inc.
CONTINUING CALIBRATION VERIFICATION (CCV)

Login Number: L12110393 Run Date: 11/21/2012 Sample ID: WG414929-11
Instrument ID: HYDRA Run Time: 09:29 Method: 7470A
File ID: HY.112112.092901 Analyst: PDM QC Key: WATERL00
Workgroup (AAB#): WG414893 Cal ID: HYDRA - 21-NOV-12
Matrix: WATER

Analyte		Expected	Found	UNITS	%REC	LIMITS		Q
Mercury, Total		0.00200	0.00199	mg/L	99.5	80 - 120		

* Exceeds LIMITS Criteria

CCV - Modified 03/05/2008
PDF File ID: 2673093
Report generated 11/21/2012 11:29



Microbac Laboratories Inc.
CONTINUING CALIBRATION VERIFICATION (CCV)

Login Number: L12110393 Run Date: 11/21/2012 Sample ID: WG414929-13
Instrument ID: HYDRA Run Time: 09:52 Method: 7470A
File ID: HY.112112.095243 Analyst: PDM QC Key: WATERL00
Workgroup (AAB#): WG414893 Cal ID: HYDRA - 21-NOV-12
Matrix: WATER

Analyte		Expected	Found	UNITS	%REC	LIMITS		Q
Mercury, Total		0.00200	0.00216	mg/L	108	80 - 120		

* Exceeds LIMITS Criteria

CCV - Modified 03/05/2008
PDF File ID: 2673093
Report generated 11/21/2012 11:29



Microbac Laboratories Inc.
CONTINUING CALIBRATION VERIFICATION (CCV)

Login Number: L12110393 Run Date: 11/21/2012 Sample ID: WG414929-15
Instrument ID: HYDRA Run Time: 10:40 Method: 7470A
File ID: HY.112112.104005 Analyst: PDM QC Key: WATERL00
Workgroup (AAB#): WG414893 Cal ID: HYDRA - 21-NOV-12
Matrix: WATER

Analyte		Expected	Found	UNITS	%REC	LIMITS		Q
Mercury, Total		0.00200	0.00236	mg/L	118	80 - 120		

* Exceeds LIMITS Criteria

CCV - Modified 03/05/2008
PDF File ID: 2673093
Report generated 11/21/2012 11:29



2.2.3.3 Raw Data

Line	Conc.	Units	SD/RSD	1	2	3	4	5

*** Standard: 1 Rep: 1				Seq: 11		08:36:10	21 Nov 12	HG
Hg	.000	ppb	2800					
*** Standard: 2 Rep: 1				Seq: 12		08:38:00	21 Nov 12	HG
Hg	.200	ppb	7221					
*** Standard: 3 Rep: 1				Seq: 13		08:39:37	21 Nov 12	HG
Hg	1.00	ppb	50385					
*** Standard: 4 Rep: 1				Seq: 14		08:41:17	21 Nov 12	HG
Hg	2.00	ppb	130149					
*** Standard: 5 Rep: 1				Seq: 15		08:42:55	21 Nov 12	HG
Hg	5.00	ppb	302954					
*** Standard: 6 Rep: 1				Seq: 16		08:45:23	21 Nov 12	HG
Hg	10.0	ppb	607711					
*** Check Standard: 2 Ck2ICV				Seq: 17		08:47:48	21 Nov 12	HG
Line Flag %Rcv. Found True Units						SD/RSD		
Hg		105.	2.10	2.00	ppb	.000		
*** Check Standard: 3 Ck3ICB				Seq: 18		08:49:35	21 Nov 12	HG
Line Flag %Rcv. Found True Units						SD/RSD		
Hg		5.48	.011	.200	ppb	.000		
*** Check Standard: 4 Ck4CCV				Seq: 19		08:51:34	21 Nov 12	HG
Line Flag %Rcv. Found True Units						SD/RSD		
Hg		97.4	1.95	2.00	ppb	.000		
*** Check Standard: 5 Ck5CCB				Seq: 20		08:53:32	21 Nov 12	HG
Line Flag %Rcv. Found True Units						SD/RSD		
Hg		-4.66	-.009	.200	ppb	.000		
*** Sample ID: WG41477203				Seq: 21		09:00:28	21 Nov 12	HG
			PBW 32					
Hg	-.109	ppb	.000	-.109				
*** Sample ID: WG41477203 112112A				Seq: 22		09:12:50	21 Nov 12	HG
			PBW 32					
Hg	.122	ppb	.000	.122				
=====								

Approved: 11/21/2012 12:50

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Line	Conc.	Units	SD/RSD	1	2	3	4	5
*** Sample ID: WG41477204 112112A Seq: 23 09:14:47 21 Nov 12 HG								
LCSW 32								
Hg	4.09	ppb	.000	4.09				
=====								
*** Sample ID: WG41473601 112112A Seq: 24 09:16:46 21 Nov 12 HG								
TCLP BLANK								
Hg	-.029	ppb	.000	-.029				
=====								
*** Sample ID: WG41473602 112112A Seq: 25 09:18:34 21 Nov 12 HG								
TCLP BLANK								
Hg	-.019	ppb	.000	-.019				
=====								
*** Sample ID: 1211039301 112112A Seq: 26 09:20:10 21 Nov 12 HG								
Hg	-.028	ppb	.000	-.028				
=====								
*** Sample ID: WG41489301 112112A Seq: 27 09:21:59 21 Nov 12 HG								
1211039301PS.9								
Hg	.883	ppb	.000	.883				
=====								
*** Sample ID: 1211039302 112112A Seq: 28 09:23:47 21 Nov 12 HG								
Hg	.061	ppb	.000	.061				
=====								
*** Sample ID: 1211039303 112112A Seq: 29 09:25:26 21 Nov 12 HG								
Hg	.172	ppb	.000	.172				
=====								
*** Sample ID: 1211039304 112112A Seq: 30 09:27:13 21 Nov 12 HG								
Hg	.151	ppb	.000	.151				
=====								
*** Check Standard: 4 Ck4CCV Seq: 31 09:29:01 21 Nov 12 HG								
Line	Flag	%Rcv.	Found	True	Units	SD/RSD		
Hg		99.6	1.99	2.00	ppb	.000		
=====								
*** Check Standard: 5 Ck5CCB Seq: 32 09:30:38 21 Nov 12 HG								
Line	Flag	%Rcv.	Found	True	Units	SD/RSD		
Hg		-56.3	-.113	.200	ppb	.000		
=====								

Approved: 11/21/2012 12:50

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Line	Conc.	Units	SD/RSD	1	2	3	4	5
*** Sample ID: 1211049201 112112A Seq: 33 09:32:16 21 Nov 12 HG								
Hg	-.105	ppb	.000	-.105				=
=====								
*** Sample ID: 1211049202 112112A Seq: 34 09:34:19 21 Nov 12 HG								
			WG41477201					
Hg	.018	ppb	.000	.018				=
=====								
*** Sample ID: 1211049203 112112A Seq: 35 09:36:19 21 Nov 12 HG								
Hg	-.059	ppb	.000	-.059				=
=====								
*** Sample ID: WG41477205 112112A Seq: 36 09:38:17 21 Nov 12 HG								
			1211049205S					
Hg	3.93	ppb	.000	3.93				=
=====								
*** Sample ID: WG41477206 112112A Seq: 37 09:39:58 21 Nov 12 HG								
			1211049206SD					
Hg	3.95	ppb	.000	3.95				=
=====								
*** Sample ID: 1211049701 112112A Seq: 38 09:41:48 21 Nov 12 HG								
Hg	.155	ppb	.000	.155				=
=====								
*** Sample ID: 1211050011 112112A Seq: 39 09:43:27 21 Nov 12 HG								
			WG41477202					
Hg	10.9	H ppb	.000	10.9				=
=====								
*** Sample ID: WG41477207 112112A Seq: 40 09:45:07 21 Nov 12 HG								
			1211050011D					
Hg	10.6	H ppb	.000	10.6				=
=====								
*** Sample ID: 1211050301 112112A Seq: 41 09:46:44 21 Nov 12 HG								
Hg	-.253	ppb	.000	-.253				=
=====								
*** Sample ID: 1211050301 112112A Seq: 42 09:50:51 21 Nov 12 HG								
Hg	.151	ppb	.000	.151				=
=====								

Reanalyzed at
a dilution.reanalyzed
due to high
recovery in
the
preceding
sample.

Approved: 11/21/2012 12:50

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Line	Conc.	Units	SD/RSD	1	2	3	4	5
*** Check Standard: 4 Ck4CCV Seq: 43 09:52:43 21 Nov 12 HG								
Line	Flag	%Rcv.	Found	True	Units	SD/RSD		
Hg		108.	2.16	2.00	ppb	.000		=
*** Check Standard: 5 Ck5CCB Seq: 44 09:54:21 21 Nov 12 HG								
Line	Flag	%Rcv.	Found	True	Units	SD/RSD		
Hg		-21.0	-.042	.200	ppb	.000		=
*** Sample ID: WG41489302 112112A Seq: 45 09:56:09 21 Nov 12 HG								
1211050301PS.9								
Hg	1.01	ppb	.000	1.01				=
*** Sample ID: 1211050302 112112A Seq: 46 09:57:48 21 Nov 12 HG								
Hg	-.086	ppb	.000	-.086				=
*** Sample ID: 1211050303 112112A Seq: 47 09:59:48 21 Nov 12 HG								
Hg	.151	ppb	.000	.151				=
*** Sample ID: 1211051501 112112A Seq: 48 10:01:27 21 Nov 12 HG								
Hg	.117	ppb	.000	.117				=
*** Sample ID: 1211052301 112112A Seq: 49 10:03:18 21 Nov 12 HG								
Hg	-.158	ppb	.000	-.158				=
*** Sample ID: 1211052401 112112A Seq: 50 10:04:59 21 Nov 12 HG								
Hg	-.002	ppb	.000	-.002				=
*** Sample ID: 1211050011 112112A Seq: 51 10:06:47 21 Nov 12 HG								
WG41472202 DL0.5								
Hg	6.06	ppb	.000	6.06				=
*** Sample ID: WG41489303 112112A Seq: 52 10:08:26 21 Nov 12 HG								
1211050011DL0.04								
Hg	1.32	ppb	.000	1.32				=

Not reported
due to CCV
noncompliance

Approved: 11/21/2012 12:50

Pierce Morris

POST-RUN REPORT

Line	Conc.	Units	SD/RSD	1	2	3	4	5
*** Check Standard: 4 Ck4CCV Seq: 53 10:40:05 21 Nov 12 HG								
Line	Flag	%Rcv.	Found	True	Units	SD/RSD		
Hg		118.	2.36	2.00	ppb	.000		=
*** Check Standard: 5 Ck5CCB Seq: 54 10:41:42 21 Nov 12 HG								
Line	Flag	%Rcv.	Found	True	Units	SD/RSD		
Hg		71.6	.143	.200	ppb	.000		=
*** Sample ID: WG41477207 112112A Seq: 55 10:47:31 21 Nov 12 HG								
~~1211050011D DL0.5~~								
~~Hg 6.23 ppb .000 6.23~~								
*** Check Standard: 4 Ck4CCV Seq: 56 10:49:12 21 Nov 12 HG								
Line	Flag	%Rcv.	Found	True	Units	SD/RSD		
Hg		97.1	1.94	2.00	ppb	.000		=
*** Check Standard: 5 Ck5CCB Seq: 57 10:51:01 21 Nov 12 HG								
Line	Flag	%Rcv.	Found	True	Units	SD/RSD		
Hg		2.16	.004	.200	ppb	.000		=

Not reported
due to CCV
noncompliance

Approved: 11/21/2012 12:50

Pierce Morris

3.0 Attachments

Microbac Laboratories Inc.
Ohio Valley Division Analyst List
November 28, 2012

ADC - ANTHONY D. CANTER	AJF - AMANDA J. FICKIESEN	AML - TONY M. LONG
AZH - AFTER HOURS	BAF - BRICE A. FENTON	BLG - BRENDA L. GREENWALT
BRG - BRENDA R. GREGORY	CAA - CASSIE A. AUGENSTEIN	CAF - CHERYL A. FLOWERS
CEB - CHAD E. BARNES	CLC - CHRYS L. CRAWFORD	CLS - CARA L. STRICKLER
CLW - CHARISSA L. WINTERS	CPD - CHAD P. DAVIS	CSH - CHRIS S. HILL
CTB - CHRIS T. BUCINA	DDE - DEBRA D. ELLIOTT	DEV - DAVID E. VANDENBERG
DGB - DOUGLAS G. BUTCHER	DIH - DEANNA I. HESSON	DLB - DAVID L. BUMGARNER
DLP - DOROTHY L. PAYNE	DLR - DIANNA L. RAUCH	DSM - DAVID S. MOSSOR
ECL - ERIC C. LAWSON	EDL - ERIN D. LONG	ERP - ERIN R. PORTER
FJB - FRANCES J. BOLDEN	HAV - HEMA VILASAGAR	HJR - HOLLY J. REED
JBK - JEREMY B. KINNEY	JDH - JUSTIN D. HESSON	JKS - JANE K. SCHAAD
JLL - JOHN L. LENT	JWR - JOHN W. RICHARDS	JWS - JACK W. SHEAVES
JYH - JI Y. HU	KEB - KATIE E. BARNES	KHR - KIM H. RHODES
KRA - KATHY R. ALBERTSON	LKN - LINDA K. NEDEFF	LSB - LESLIE S. BUCINA
MDA - MIKE D. ALBERTSON	MDC - MIKE D. COCHRAN	MES - MARY E. SCHILLING
MMB - MAREN M. BEERY	MRT - MICHELLE R. TAYLOR	MSW - MATT S. WILSON
PDM - PIERCE D. MORRIS	QX - QIN XU	RAH - ROY A. HALSTEAD
REK - BOB E. KYER	RLB - BOB BUCHANAN	RS - ROSEMARY SCOTT
RWC - RODNEY W. CAMPBELL	SEP - SUZANNE J. PAUGH	SLM - STEPHANIE L. MOSSBURG
SLP - SHERI L. PFALZGRAF	TIP - TAE I. PARRISH	TMB - TIFFANY M. BAILEY
TMM - TAMMY M. MORRIS	VC - VICKI COLLIER	WJB - WILL J. BEASLEY
WTD - WADE T. DELONG	XXX - UNAVAILABLE OR SUBCONTRACT	

Microbac Laboratories Inc.

List of Valid Qualifiers

November 28, 2012

Qualkey: WATERLOO

<u>Qualifier</u>	<u>Description</u>
*	Surrogate or spike compound out of range
+	Correlation coefficient for the MSA is less than 0.995
<	Result is less than the associated numerical value.
>	Result is greater than the associated numerical value.
A	See the report narrative
B	Analyte detected in the method blank
B1	Target analyte detected in method blank at or above the method reporting limit
B3	Target analyte detected in calibration blank at or above the method reporting limit
B4	The BOD unseeded dilution water blank exceeded 0.2 mg/L
C	Confirmed by GC/MS
CG	Confluent growth
DL	Surrogate or spike compound was diluted out
E	Estimated concentration due to interference.
E	Semiquantitative result (out of calibration range)
EDL	Elevated sample reporting limits, presence of non-target analytes
EMPC	Estimated Maximum Possible Concentration
F, S	Estimated result below quantitation limit; method of standard additions(MSA)
FL	Free Liquid
H1	Sample analysis performed past holding time.
I	Semiquantitative result (out of instrument calibration range)
J	Estimated concentration.
J	The analyte was positively identified, but the quantitation was below the RL.
J,B	Analyte detected in both the method blank and sample above the MDL.
J,P	Estimate; columns don't agree to within 40%
J,S	Estimated concentration; analyzed by method of standard addition (MSA)
L	Sample reporting limits elevated due to matrix interference
L1	The associated blank spike (LCS) recovery was above the laboratory acceptance limits.
L2	The associated blank spike (LCS) recovery was below the laboratory acceptance limits.
M	Matrix effect; the concentration is an estimate due to matrix effect.
N	Tentatively identified compound(TIC)
NA	Not applicable
ND	Not detected at or above the reporting limit (RL).
ND, L	Not detected; sample reporting limit (RL) elevated due to interference
ND, S	Not detected; analyzed by method of standard addition (MSA)
NF	Not found by library search
NFL	No free liquid
NI	Non-ignitable
NR	Analyte is not required to be analyzed
NS	Not spiked
P	Concentrations >40% difference between the two GC columns
Q	One or more quality control criteria failed. See narrative.
QNS	Quantity of sample not sufficient to perform analysis
RA	Reanalysis confirms reported results
RE	Reanalysis confirms sample matrix interference
S	Analyzed by method of standard addition (MSA)
SMI	Sample matrix interference on surrogate
SP	Reported results are for spike compounds only
TIC	Library Search Compound
TNTC	Too numerous to count
U	Not detected at or above adjusted sample detection limit.
UJ	Undetected; the MDL and RL are estimated due to quality control discrepancies.
UJ	Undetected; the analyte was analyzed for, but not detected.
UQ	Undetected; the analyte was analyzed for, but not detected.
W	Post-digestion spike for furnace AA out of control limits
X	Exceeds regulatory limit
X, S	Exceeds regulatory limit; method of standard additions (MSA)
Z	Cannot be resolved from isomer - see below



Marietta, OH 45750

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Microbac

CHAIN-OF-CUSTODY RECORD

[illegible]

*Water (W), Soil (S), Solid Waste (SD), Unknown (X)

Internal Chain of Custody Report

Login: L12110393

Account: 2736

Project: 2736.127

Samples: 5

Due Date: 27-NOV-2012

<u>Samplenum</u>	<u>Container ID</u>	<u>Products</u>
L12110393-01	127454	826-SPE

Bottle: 1

Seq.	Purpose	From	To	Date/Time	Accept	Relinquish	pH
1	LOGIN	COOLER	V1	14-NOV-2012 10:40	CLS		<2
2	ANALYZ	V1	ORG4	14-NOV-2012 12:17	FJB	JKS	
3	STORE	ORG4	A2	27-NOV-2012 08:15	JKS	MRT	

Bottle: 2

Seq.	Purpose	From	To	Date/Time	Accept	Relinquish	pH
1	LOGIN	COOLER	V1	14-NOV-2012 10:40	CLS		<2
2	ANALYZ	V1	ORG4	14-NOV-2012 12:17	FJB	JKS	
3	STORE	ORG4	A2	27-NOV-2012 08:15	JKS	MRT	

Bottle: 3

Seq.	Purpose	From	To	Date/Time	Accept	Relinquish	pH
1	LOGIN	COOLER	V1	14-NOV-2012 10:40	CLS		<2
2	ANALYZ	V1	ORG4	14-NOV-2012 12:17	FJB	JKS	
3	STORE	ORG4	A2	27-NOV-2012 08:15	JKS	MRT	

<u>Samplenum</u>	<u>Container ID</u>	<u>Products</u>
L12110393-01	127455	AG AL AS-MS BA BE-AX CA CD-AX CO CR-AX CU FE F

Bottle: 1

Seq.	Purpose	From	To	Date/Time	Accept	Relinquish	pH
1	LOGIN	COOLER	W1	14-NOV-2012 10:40	CLS		
2	PREP	W1	DIG	15-NOV-2012 04:54	REK	AZH	
3	ANALYZ*	DIG	METALS	16-NOV-2012 12:03	KHR	REK	
4	STORE	DIG	A2	20-NOV-2012 14:23	RS	ERP	

**Sample extract/digestate/leachate*

<u>Samplenum</u>	<u>Container ID</u>	<u>Products</u>
L12110393-02	127456	AG-D AL-D AS-MSD BA-D BE-AXD CA-D CD-AXD CO-D

Bottle: 1

Seq.	Purpose	From	To	Date/Time	Accept	Relinquish	pH
1	LOGIN	COOLER	W1	14-NOV-2012 10:40	CLS		
2	PREP	W1	DIG	15-NOV-2012 04:54	REK	AZH	
3	ANALYZ*	DIG	METALS	16-NOV-2012 12:03	KHR	REK	
4	STORE	DIG	A2	20-NOV-2012 14:23	RS	ERP	

**Sample extract/digestate/leachate*

A1 - Sample Archive (COLD)
 A2 - Sample Archive (AMBIENT)
 F1 - Volatiles Freezer in Login
 V1 - Volatiles Refrigerator in Login
 W1 - Walkin Cooler in Login



Internal Chain of Custody Report

Login: L12110393

Account: 2736

Project: 2736.127

Samples: 5

Due Date: 27-NOV-2012

Samplenum	Container ID	Products
L12110393-03	127457	826-SPE

Bottle: 1

Seq.	Purpose	From	To	Date/Time	Accept	Relinquish	pH
1	LOGIN	COOLER	V1	14-NOV-2012 10:40	CLS		<2
2	ANALYZ	V1	ORG4	14-NOV-2012 12:17	FJB	JKS	
3	STORE	ORG4	A2	27-NOV-2012 08:15	JKS	MRT	

Bottle: 2

Seq.	Purpose	From	To	Date/Time	Accept	Relinquish	pH
1	LOGIN	COOLER	V1	14-NOV-2012 10:40	CLS		<2
2	ANALYZ	V1	ORG4	14-NOV-2012 12:17	FJB	JKS	
3	STORE	ORG4	A2	27-NOV-2012 08:15	JKS	MRT	

Bottle: 3

Seq.	Purpose	From	To	Date/Time	Accept	Relinquish	pH
1	LOGIN	COOLER	V1	14-NOV-2012 10:40	CLS		<2
2	ANALYZ	V1	ORG4	14-NOV-2012 12:17	FJB	JKS	
3	STORE	ORG4	A2	27-NOV-2012 08:15	JKS	MRT	

Samplenum	Container ID	Products
L12110393-03	127458	AG AL AS-MS BA BE-AX CA CD-AX CO CR-AX CU FE F

Bottle: 1

Seq.	Purpose	From	To	Date/Time	Accept	Relinquish	pH
1	LOGIN	COOLER	W1	14-NOV-2012 10:40	CLS		
2	PREP	W1	DIG	15-NOV-2012 04:54	REK	AZH	
3	ANALYZ*	DIG	METALS	16-NOV-2012 12:03	KHR	REK	
4	STORE	DIG	A2	20-NOV-2012 14:23	RS	ERP	

**Sample extract/digestate/leachate*

Samplenum	Container ID	Products
L12110393-04	127459	AG-D AL-D AS-MSD BA-D BE-AXD CA-D CD-AXD CO-D

Bottle: 1

Seq.	Purpose	From	To	Date/Time	Accept	Relinquish	pH
1	LOGIN	COOLER	W1	14-NOV-2012 10:40	CLS		
2	PREP	W1	DIG	15-NOV-2012 04:54	REK	AZH	
3	ANALYZ*	DIG	METALS	16-NOV-2012 12:03	KHR	REK	
4	STORE	DIG	A2	20-NOV-2012 14:23	RS	ERP	

**Sample extract/digestate/leachate*

A1 - Sample Archive (COLD)
 A2 - Sample Archive (AMBIENT)
 F1 - Volatiles Freezer in Login
 V1 - Volatiles Refrigerator in Login
 W1 - Walkin Cooler in Login



Internal Chain of Custody Report

Login: L12110393**Account:** 2736**Project:** 2736.127**Samples:** 5**Due Date:** 27-NOV-2012

<u>Samplenum</u>	<u>Container ID</u>	<u>Products</u>
L12110393-05	127460	826-SPE

Bottle: 1

Seq.	Purpose	From	To	Date/Time	Accept	Relinquish	pH
1	LOGIN	COOLER	V1	14-NOV-2012 10:40	CLS		<2
2	ANALYZ	V1	ORG4	14-NOV-2012 12:17	FJB	JKS	
3	STORE	ORG4	A2	27-NOV-2012 08:15	JKS	MRT	

Bottle: 2

Seq.	Purpose	From	To	Date/Time	Accept	Relinquish	pH
1	LOGIN	COOLER	V1	14-NOV-2012 10:40	CLS		<2
2	ANALYZ	V1	ORG4	14-NOV-2012 12:17	FJB	JKS	
3	STORE	ORG4	A2	27-NOV-2012 08:15	JKS	MRT	

A1 - Sample Archive (COLD)
 A2 - Sample Archive (AMBIENT)
 F1 - Volatiles Freezer in Login
 V1 - Volatiles Refrigerator in Login
 W1 - Walkin Cooler in Login



NELAP Addendum - March 4, 2011

Non-NELAP LIMS Product and Description

The following is a list of those tests that are not included in the Microbac – OVL NELAP Scope of Accreditation:

Heat of Combustion (BTU)
Total Halide by Bomb Combustion (TX)
Particle Sizing - 200 Mesh (PS200)
Sulfate (SO₄) - 9038
Specific Gravity/Density (SPGRAV)
Total Residual Chlorine (CL-TRL)
Total Volatile Solids (all forms) (TVS)
Total Coliform Bacteria (all methods)
Fecal Coliform Bacteria (all methods)
Sulfite (SO₃)
Thiodiglycol (TDG-LCMS)

NELAP Accreditation by Laboratory SOP

NONPOTABLE WATER

OVL HPLC02/HPLC-UV

Nitroglycerin
Nitroguanidine
Acetic acid
Butyric acid
Lactic acid
Propionic acid
Pyruvic acid

OVL KNITRO-C-WUV-VIS

Nitrocellulose

OVL MSS01/GC-MS

1,4-Phenylenediamine
1-Methylnaphthalene
1,4-Dioxane
Atrazine
Benzaldehyde
Biphenyl
Caprolactam
Hexamethylphosphoramide (HMPA)
Pentachlorobenzene
Pentachloroethane

NELAP Accreditation by Laboratory SOP

NONPOTABLE WATER

OVL MSV01/GC-MS

1, 1, 2-Trichloro-1,2,2-trifluoroethane
1,3-Butadiene
Cyclohexane
Cyclohexanone
Dimethyl disulfide
Dimethylsulfide
Ethyl-t-butylether (ETBE)
Isoprene
Methylacetate
Methylcyclohexane
T-amylmethylether (TAME)
Tetrahydrofuran (THF)

OVL RSK01/GC-FID

Isobutane
n-Butane
Propane
Propylene
Propyne

OVL HPLC07/HPLC-MS-MS

Hexamethylphosphoramide (XMPA-LCMS)

SOLID AND HAZARDOUS CHEMICALS

OVL HPLCOS-HPLC-UV

Nitroguanidine

OVL KNITRO-C-S/UV-VIS

Nitrocellulose

OVL MSS01/GC-MS

1-Methylnaphthalene
Benzaldehyde
Biphenyl
Caprolactam
Pentachloroethane

NELAP Accreditation by Laboratory SOP

SOLID AND HAZARDOUS CHEMICALS

OVL MSV01/GC-MS

1.3-Butadiene
Cyclohexane
Cyclohexanone
Dimethyl disulfide
Dimethylsulfide
Ethyl-t-butylether (ETBE)
Isoprene
Methylacetate
Methylcyclohexane
n-Hexane
T-amylmethylether (TAME)